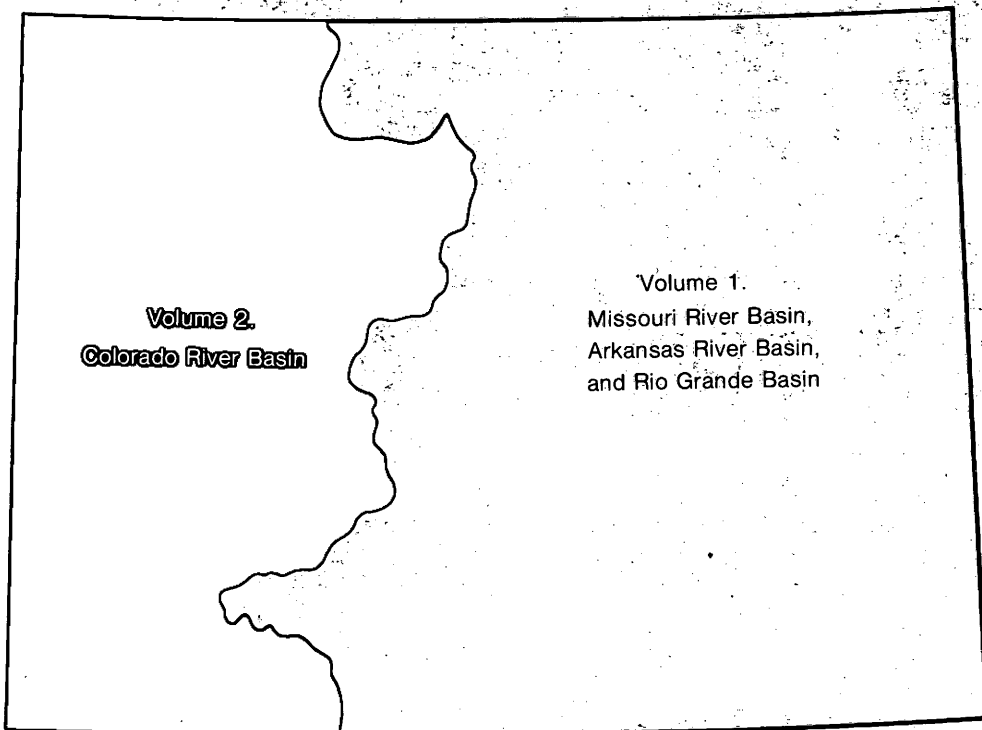




Water Resources Data Colorado Water Year 1986

Volume 2. Colorado River Basin



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT CO-86-2
Prepared in cooperation with the State of Colorado
and with other agencies

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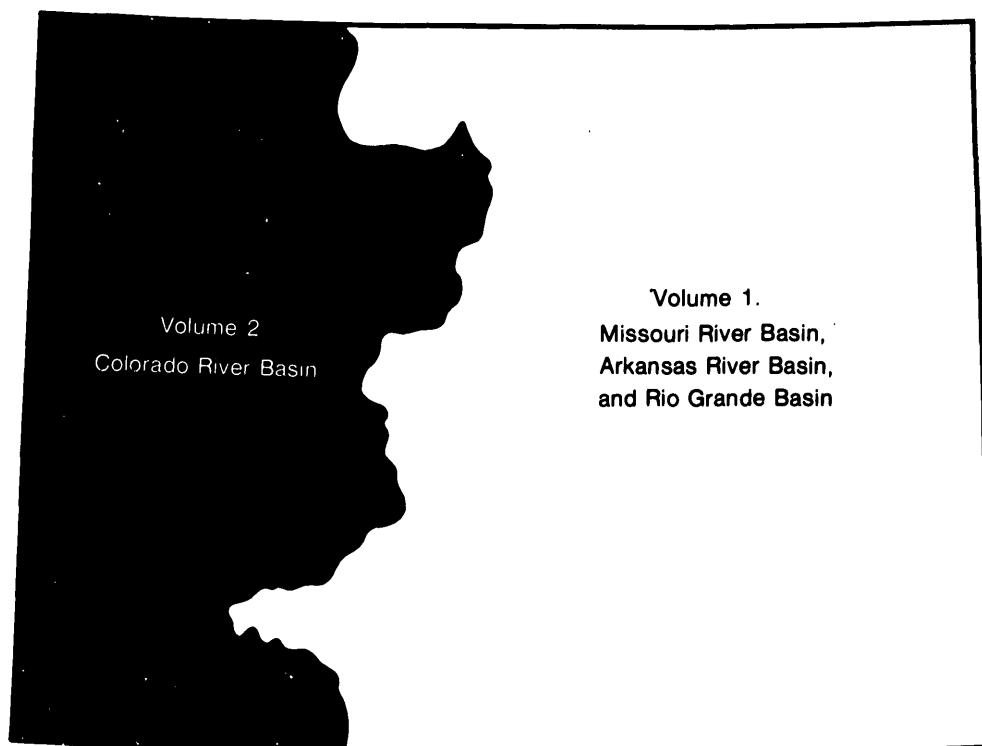
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Water Resources Data Colorado Water Year 1986

Volume 2. Colorado River Basin

by R.C. Ugland, J.T. Steinheimer, R.G. Kretschman, E.A. Wilson, and J.D. Bennett



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT CO-86-2
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

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U.S. Geological Survey
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Denver Federal Center
Lakewood, Co 80225

1987

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 two volumes:

- Volume 1. Missouri River, Arkansas River, and Rio Grande
basins in Colorado,
- Volume 2. Colorado River basin.

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 C. A. Pascale, District Chief, Colorado.

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WATER RESOURCES DATA FOR COLORADO, 1986

VOLUME 2: COLORADO RIVER BASIN

By R.C. Ugland, J. T. Steinheimer, R. G. Kretschman, E. A. Wilson, and J. D. Bennett

INTRODUCTION

Water-resources data for the 1986 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, and 2) contains discharge records for 374 streamflow-gaging stations, stage and contents of 24 lakes and reservoirs, low-flow data for 5 partial-record stations, peak flow information for 34 crest-stage partial-record stations and 1 miscellaneous site; water-quality data for 118 streamflow-gaging stations and 256 miscellaneous sites; and water levels for 44 observation wells. Locations of lake- and streamflow-gaging stations and water-quality stations are shown in figure 1, and locations of crest-stage partial-record stations are shown in figure 2. 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 the U.S. Geological Survey, Books and Open-File Reports, Federal Center, Building 41, Box 25425, Denver, CO 80225.

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-86-2." 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.

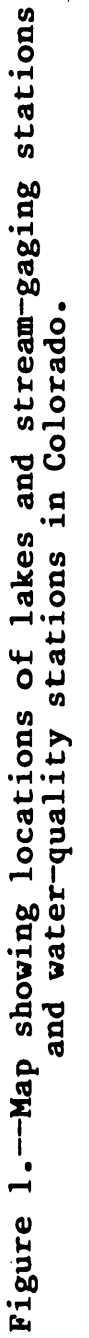


Figure 1.---Map showing locations of lakes and stream-gaging stations and water-quality stations in Colorado.

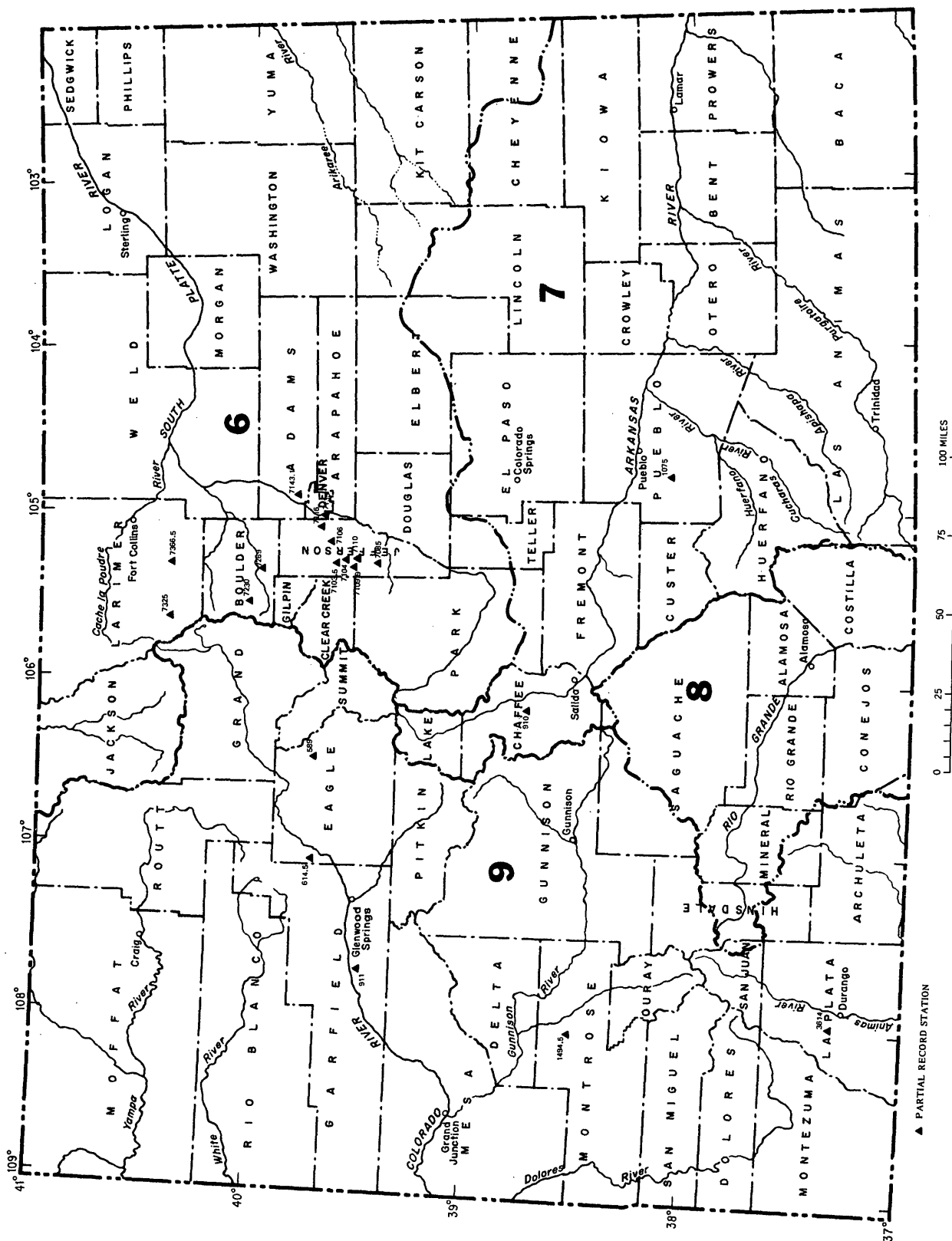


Figure 2.--Map showing locations of crest-stage partial-record stations in Colorado.

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.
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City of Aurora, Thomas Griswold, acting Director of Utilities.
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City of Glendale, Robert Taylor.
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City of Longmont, Linn Folsom.
City of Thornton, Joseph E. Vigil, Chairman, Utilities Board.
City of Steamboat Springs, J. Zimmerman.
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Colorado Department of Natural Resources, David H. Getches, Executive Director.
Colorado Division of Water Resources, J. A. Danielson, State Engineer.
Colorado Division of Mined Land Reclamation, David Shelton, Director.
Colorado Geological Survey, John Rold, State Geologist.
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Dolores Water Conservation District, Bruce C. McAfee, President.
Douglas County Planning Department, Julio Iturreria, Director.
Eagle County Board of Commissioners, D. E. Mott, Commissioner.
Evergreen Metropolitan District, G. C. Schulte, General Manager.
Fountain Valley Authority, Ed Bailey, Secretary.
Garfield County, Rodger Ludwig, Director of Administrative Services.
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Mineral County, Charles Steele, Planning Officer.
Moffat County, Richard Gibbons, Director.
North Kiowa-Bijou Ground Water Management District, Donald F. McClary, Attorney.
North LaJunta Water Conservation District, Mark Korbitz.
Northern Colorado Water Conservancy District, L. Simpson, Secretary.
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Pueblo Board of Water Works, Alan Hamel, Executive Director.
Pueblo Civil Defense, Betty Jo Höpper, Director.
Pueblo West Metro Water District, William Metropulos, Manager.

COOPERATION

Purgatoire River Water Conservancy District, C. Latuda, President.
Rio Blanco County Board of County Commissioners, A. J. Jones.
Rio Grande Water Conservation District, Ralph Curtis, Manager.
Southeastern Colorado Water Conservancy District, C. L. Thomson, General Manager.
Southwestern Water Conservation District, Edward Searle, Manager.
St. Charles Mesa Water Association, Lee Simpson, Manager.
Town of Breckenridge, Gary Roberts, Town Manager.
Town of Castle Rock, Tom Gallier, Director of Utilities.
Trinchera Water Conservancy District, G. Wisecamp, President.
Uncompahgre Valley Water Users Association, James Herbit, Manager.
Upper Yampa Water Conservancy District, J. Fetcher.
Upper Arkansas River Water Conservancy District, K. Baker, General Manager.
Urban Drainage and Flood Control District, L. Scott Tucker, Executive Director.
Water Users No. 1,.
Yellow Jacket Water Conservancy District, F. G. Cooley, Secretary-Council.

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OVERVIEW OF WATER YEAR 1986
[West of the Continental Divide]

Prepared by Harold E. Petsch, Jr.

Precipitation data for water year 1986, that were obtained from published reports of the U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Weather Service, for the National Weather Service Division in Colorado west of the Continental Divide, are shown in table 1. Precipitation and departure from normal are shown for the first 6 months of the water year when precipitation is predominately snow, and then for the remaining 6 months when precipitation is predominately rain. Also shown are the precipitation and departures from normal precipitation for the entire water year.

The Colorado Drainage Basin Division had 16 percent greater than normal precipitation during the first 6 months of the water year and 32 percent greater than normal precipitation during the last 6 months; accordingly, there was 26 percent greater than normal precipitation during the entire water year. Graphs of normal monthly precipitation and monthly precipitation for the water year, at selected weather stations, are shown in figure 3.

Table 1.--Precipitation during water year 1986 and departures from normal precipitation (water years 1951-80), in inches

National Weather Service Division	October - March		April - September		Water year 1986	
	Precipitation	Departure from normal	Precipitation	Departure from normal	Precipitation	Departure from normal
Colorado Drainage Basin	9.11	1.50	11.52	3.77	20.63	5.27

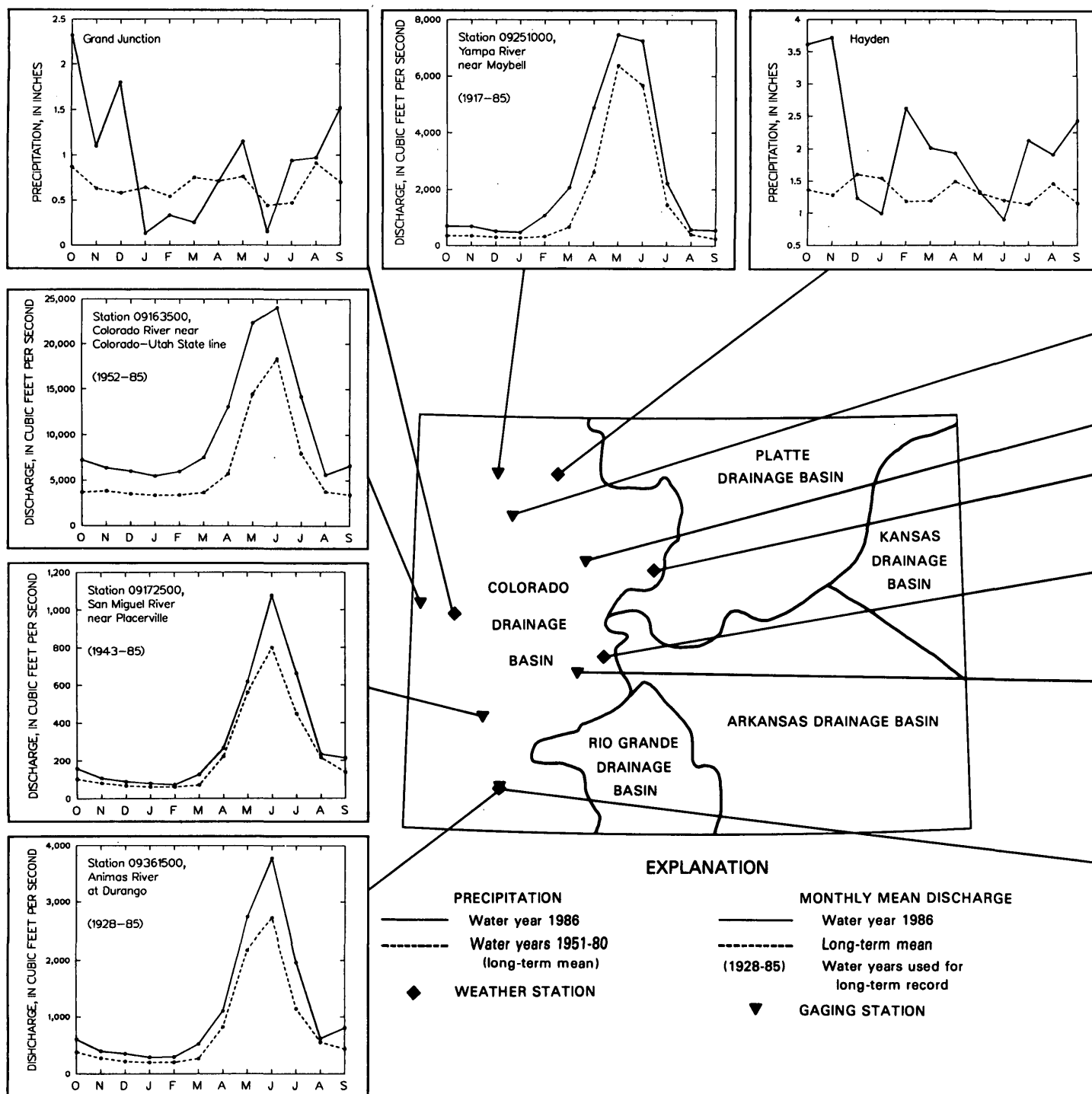


Figure 3.--Comparison of precipitation and streamflow during water year 1986 to long-term means.

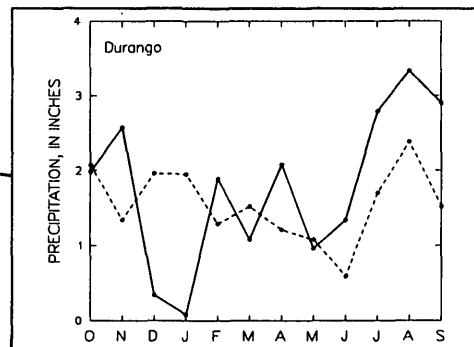
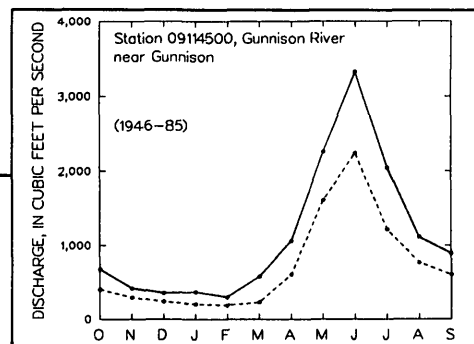
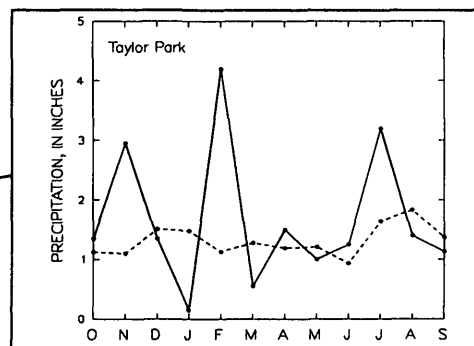
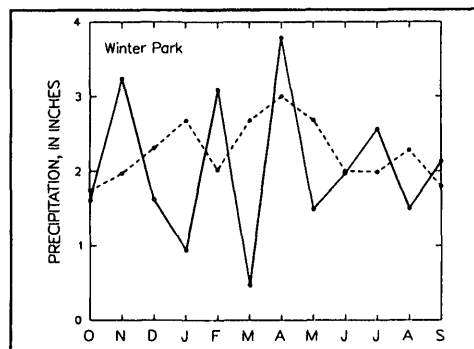
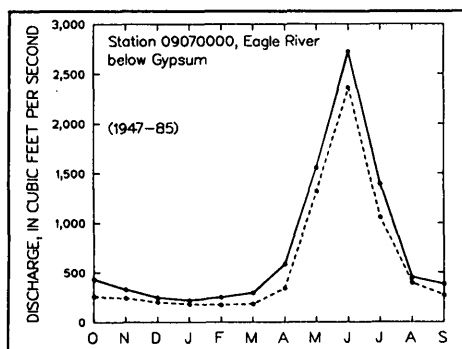
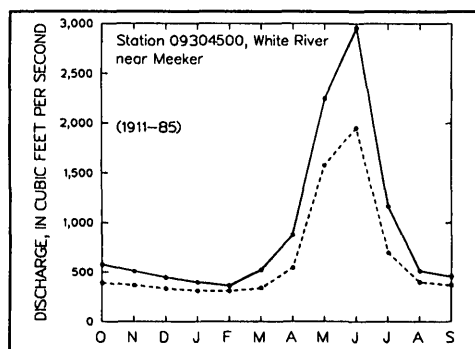


Figure 3.--(continued).

Streamflow

Monthly mean discharge during water year 1986 at representative gaging stations is plotted against long-term monthly mean discharge in figure 3. Individual graphs demonstrate the varied streamflow conditions west of the Continental Divide during the water year. The graphs for the stations indicate that streamflow during the water year had the same general trend as long-term streamflow, but remained greater than normal throughout the water year. At the start of the water year, streamflow was from 50 to 100 percent greater than the long-term mean at each station.

Streamflow has been greater than normal for 5 consecutive years at stations 09070000, Eagle River below Gypsum; 09163500, Colorado River near Colorado-Utah State line; 09172500, San Miguel River near Placerville; 09251000, Yampa River near Maybell; 09304500, White River near Meeker; and 09361500 Animas River at Durango. Streamflow has been greater than normal for 4 consecutive years at station 09114500, Gunnison River near Gunnison. A comparison of the annual mean discharge for water year 1986 with the discharge at the beginning of the water year indicates that streamflow is decreasing toward normal at these stations.

Peak discharge during water year 1986 and for the period of record for selected streamflow-gaging stations is shown in table 2. The peak discharge at a majority of those stations was greater than the median and reflects the generally greater than average runoff. At no station was peak discharge less than 25th-percentile values. Peak discharge at stations 09132500, North Fork Gunnison River near Somerset; 09304500, White River near Meeker; and 09346400, San Juan River near Caracas was greater than 75th-percentile values, but was substantially less than the record maximum.

Table 2.--Peak discharges for the 1986 water year and for the period of record at selected gaging stations
 [mi² = square miles; ft³/s = cubic feet per second]

Station identification	Drainage area (mi ²)	Period of record (water years)	Peak discharge Water year 1986 ft ³ /s	Date	Peak discharge period of record ft ³ /s	Date	Remarks on 1986 peak
09034500 Colorado River at Hot Sulphur Springs	825	1905-86	1,740	6-20	10,300	6-15-21	Less than median
09070000 Eagle River below Gypsum	944	1947-86	4,070	6-7	7,020	5-25-84	At median
09070500 Colorado River near Dotsero	4,394	1941-86	11,000	6-7	22,200	5-25-84	At median
09085000 Roaring Fork River at Glenwood Springs	1,451	1906-9, 1911-86	7,670	6-7	19,000	7-1-57	Less than median
09085100 Colorado River below Glenwood Springs	6,013	1967-86	20,200	6-7	31,500	5-25-84	At 75th percentile
09095500 Colorado River near Cameo	8,050	1934-86	23,200	6-7	39,300	5-26-84	Greater than median
09114500 Gunnison River near Gunnison	1,012	1911-27, 1945-86	4,970	6-7	11,400	6-13-18	Greater than median
09132500 North Fork Gunnison River near Somerset	526	1933-86	4,000	5-24	9,220	5-24-84	Greater than 75th percentile
09149500 Uncompahgre River at Delta	1,129	1903-31, 1939-86	1,800	5-5	5,800	5-15-84	Greater than median
09152500 Gunnison River near Grand Junction	7,928	1897-99, 1902-6, 1917-86	10,600	5-5	35,700	5-23-20	Less than median
09163500 Colorado River near Colorado-Utah State line	17,843	1951-86	33,800	6-8	69,800	5-27-84	Greater than median
09166500 Dolores River at Dolores	504	1896-1903, 1911-12, 1922-86	4,820	5-4	10,000	10-5-11	Greater than median
09171100 Dolores River near Bedrock	2,145	1972-86	5,620	5-6	9,500	4-30-73	At median
09239500 Yampa River at Steamboat Springs	604	1904-6, 1910-86	3,640	6-6	6,820	6-14-21	Less than median
09251000 Yampa River near Maybell	3,410	1904-5, 1916-86	11,000	6-8	25,100	5-17-84	Greater than median
09304500 White River near Meeker	755	1901-5, 1910-86	4,570	6-8	6,950	5-25-84	Greater than 75th percentile
09346400 San Juan River near Carracas	1,230	1962-86	6,840	4-2	9,730	6-6-70	Greater than 75th percentile
09361500 Animas River at Durango	692	1912-86	6,160	6-7	25,000	10-5-11	Greater than median

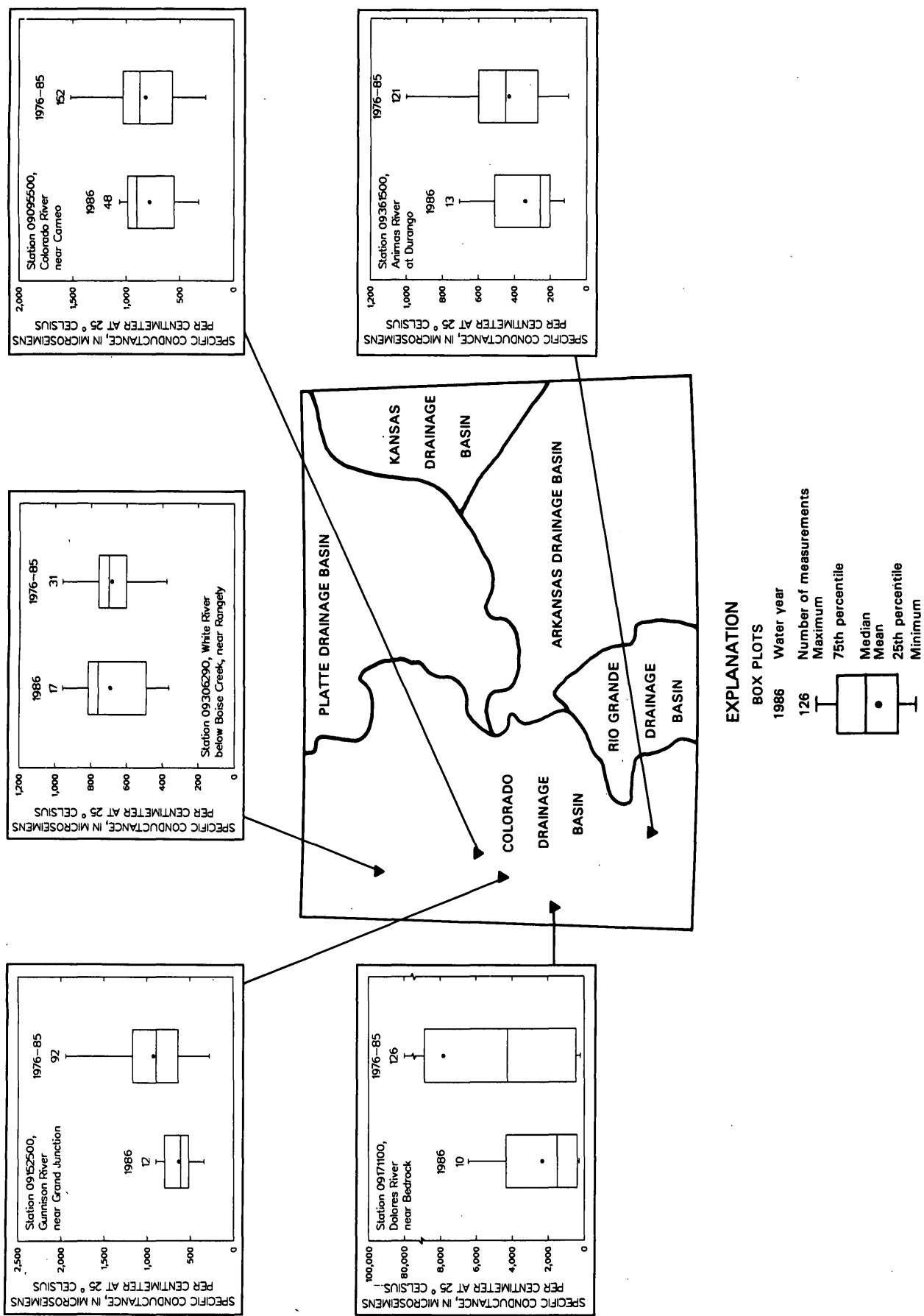
Chemical Quality of Streamflow

To determine whether significant changes are occurring in the chemical quality of streamflow in Colorado, an analysis was made of specific conductance measured approximately weekly or monthly at stations on five representative streams. Each station is either the most downstream station on that stream or is representative of a major part of the drainage area of that stream. A comparison of the range and distribution of the specific conductance for the water year to long-term values for each station for which data were analyzed is shown in figure 4.

Specific conductance can be used to estimate the dissolved-solids concentration in water, because specific conductance is related to the concentrations and types of ions in water. To determine whether significant differences in specific conductance occurred between the 1986 water year and the period of record used for comparison, a statistical technique called the t-test was used.

The t-test technique requires proving or disproving a hypothesis that the mean specific conductance for water year 1986 was equal to the mean for the period of record. The procedure for doing this requires computing a "t" statistic and comparing it to a value obtained from a Student's "t" table. If the absolute value of the computed "t" value (t_c) is less than the tabular "t" value (t_{tab}), the hypothesis that the means are equal is accepted. If the absolute value of t_c is greater than t_{tab} , the hypothesis is rejected and the means are considered to be not equal. In terms of specific conductance, a rejection of the hypotheses indicates that there is a difference in water quality at a particular site between water year 1986 and the period of record. A 95-percent level of significance ($\alpha = 0.05$) was used for each t-test, and it was assumed that the data were normally distributed.

Results of the the t-tests for the five stations are given in table 3. For three of the stations, 09095500, Colorado River near Cameo; 09306290, White River below Boise Creek, near Rangely; and 09361500, Animas River at Durango, comparisons of mean for water year 1986 to that for the period of record indicate that the means are not statistically different.



▼ WATER - QUALITY STATION

Figure 4.--Comparison of range and distribution of specific conductance measured during water year 1986 to long-term values.

Table 3.--Results of t-tests comparing mean specific conductance of streamflow for the 1986 water year with mean for the period of record at selected gaging stations
 [Specific conductance, in microsiemens per centimeter at 25 degrees Celsius; A = accepted; R = rejected]

Station identification	Specific Conductance					t-test		
	Water year 1986		Period of record		Period used (water year)	t _{tab}	t _c	Hypothesis
	Number of values	Mean	Standard deviation	Number of values				
09095500 Colorado River near Cameo-----	48	783	247	151	816	302	1976-85 ± 1.99	-0.78 A
09152500 Gunnison River near Grand Junction-----	12	635	178	92	926	380	1976-85 ± 2.05	-4.49 R
09171100 Dolores River near Bedrock-----	10	2,332	2,253	126	7,818	11,867	1976-85 ± 2.00	-4.30 R
09306290 White River below Boise Creek, near Rangely-----	17	693	193	31	683	147	1983-85 ± 2.06	.19 A
09361500 Animas River at Durango-----	13	340	178	121	431	197	1976-85 ± 2.13	-1.73 A

The mean specific conductance for water year 1986 for station 09152500, Gunnison River near Grand Junction, was substantially less than the mean specific conductance for the 10-year period of record 1976-85. Published records of specific conductance and coincident water discharge for the station indicate an inverse relation exists between the two parameters. For water year 1986, mean water discharge at the station exceeded the 10-year mean by 39 percent. It follows therefore, that the mean specific conductance for water year 1986 would be substantially less than the mean specific conductance for the period of record.

The mean specific conductance for water year 1986 for station 09171100, Dolores River near Bedrock, also was substantially less than the mean specific conductance for the 10-year period of record 1976-85. Published records of specific conductance and coincident water discharge for the station indicate an inverse relation exists between the two parameters. For water year 1986, however, mean water discharge at the station was virtually equal to the 10-year mean. The much lesser mean specific conductance for water year 1986 probably is the result of the test operations of the Paradox Valley Unit of the Colorado River Salinity Control Program, located a few miles upstream.

Table 4.-- Factors for conversion of chemical constituents in milligrams or micrograms per liter to milliequivalents per liter

Ion	Multi- ply by	Ion	Multi- ply 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
Chromium (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 5.--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	Di- vide by	Range of concentration in 1000 mg/L	Di- vide by	Range of concentration in 1000 mg/L	Di- vide by	Range of concentration in 1000 mg/L	Di- vide 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:

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

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 \pm 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 \pm 0.2°C 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 $35^{\circ}\text{C} \pm 1.0^{\circ}\text{C}$ on M-enterococcus 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), necessary 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, ft³/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 and 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 of 1929): A geodetic datum derived from a general adjustment of the first-order level nets of both the United States and Canada, formerly called "Mean Sea Level."

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-accumulation 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).

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. A microsiemen is equal to one millionth of a mho.

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 1976.

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 1976.

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 indentation, each indentation 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 (ft³/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 $1 \text{ ft}^3/\text{s}$; to tenths between 1.0 and $10 \text{ ft}^3/\text{s}$; to whole numbers between 10 and $1,000 \text{ ft}^3/\text{s}$; and to 3 significant figures above $1,000 \text{ ft}^3/\text{s}$. 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 following 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 pages 40, and 41.

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 ($^{\circ}\text{F}$). 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 ($^{\circ}\text{C}$). 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 6.

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 6.--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 $5/9(^{\circ}\text{F}-32^{\circ})$ or °F equals $9/5(^{\circ}\text{C})+32^{\circ}$.

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 4 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 7.--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	----

¹Annual series, "Quality of Surface Waters for Irrigation, Western States."

²In preparation.

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.
- Cain, D. L., 1984, Quality of the Arkansas River and irrigation-return flows in the lower Arkansas River Valley of Colorado: Water-Resources Investigation Report 84-4273, 91 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.
- Crouch, T. M., and others, 1984, Water-Resources Appraisal of the upper Arkansas River basin from Leadville to Pueblo, Colorado: Water-Resources Investigation Report 82-4114, 123p.
- 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.
- Spahr, N. E., Blakely, S. R., and Hammond, S. E., 1985, Selected Hydrologic Data for the South Platte River through Denver, Colorado: U. S. Geological Survey open file report 84-703, 225 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.

The U.S. Geological Survey publishes a series of manuals describing procedures for planning and conducting 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) pertains to 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, Books and Open-File Reports Section, Federal Center, Box 25425, Denver, Colorado 80225 (authorized agent of the Superintendent of Documents, Government Printing Office). Prepayment is required. Remittance should be sent by check or money order payable to the U.S. Geological Survey. Prices are not included because they are subject to change. Current prices can be obtained by writing to the above address. When ordering or inquiring about prices for 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-A10. *Discharge ratings at gaging stations*, by E. J. Kennedy: USGS--TWRI Book 3, Chapter A10. 1984. 59 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-A13. *Computation of continuous records of streamflow*, by E. J. Kennedy: USGS--TWRI Book 3, Chapter A13. 1983. 53 pages.
- 3-A14. *Use of flumes in measuring discharge*, by F. A. Kilpatrick and V. R. Schneider: USGS--TWRI Book 3, Chapter A14. 1983. 46 pages.
- 3-A15. *Computation of water-surface profiles in open channels*, by Jacob Davidian: USGS--TWRI Book 3, Chapter A15. 1984. 48 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 programmed 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. Greenson, T. A. Ehle, G. A. Irwin, B. W. Lium, and K. V. Stack: 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-A6. *Quality assurance practices for the chemical and biological analyses of water and fluvial sediments*, by L. C. Friedman and D. E. Erdmann: USGS--TWRI Book 5, Chapter A6. 1982. 181 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-A2. *Installation and service manual for U.S. Geological Survey manometers* by J. D. Craig: USGS--TWRI Book 8, Chapter A2. 1983. 57 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 mi².

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

REVISED RECORDS.--WSP 2124: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 8,750 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 9 to Apr. 16, Apr. 19, and June 17 to 24. Records good except for estimated daily discharges, which are poor. Transmountain diversion upstream from 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.--33 years, 65.0 ft³/s; 47,090 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 976 ft³/s, June 30, 1957, gage height, 7.19 ft; maximum gage height, 7.30 ft, June 25, 1971; minimum daily discharge, 3.0 ft³/s, Jan. 13, 1963.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 656 ft³/s at 1600 June 9, gage height, 6.69 ft; minimum daily, 8.0 ft³/s, Feb. 15-23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	22	12	10	9.0	9.6	20	109	412	379	55	36
2	22	24	12	10	9.0	9.6	22	139	441	359	52	40
3	23	24	12	10	9.0	9.6	24	174	533	330	51	43
4	21	23	12	10	9.0	9.6	26	216	583	328	51	40
5	20	23	12	10	9.0	9.6	28	243	569	394	49	40
6	21	23	12	10	9.0	9.6	30	188	585	348	44	34
7	30	21	12	10	9.0	9.6	30	156	610	294	44	37
8	32	21	12	10	9.0	9.6	30	135	611	259	41	44
9	35	20	12	10	9.0	9.6	30	112	632	228	44	41
10	34	20	12	10	9.0	9.6	30	108	526	213	42	40
11	43	19	12	9.8	8.8	9.6	30	130	404	191	36	41
12	36	19	12	9.8	8.6	9.4	30	147	393	180	46	40
13	36	19	12	9.8	8.4	9.4	30	166	401	174	47	36
14	31	19	12	9.8	8.2	9.4	30	173	392	166	38	33
15	28	19	12	9.8	8.0	9.0	30	155	421	150	33	31
16	29	17	11	9.8	8.0	9.0	30	145	458	156	31	29
17	29	17	11	9.8	8.0	9.0	31	132	480	145	28	28
18	29	17	11	9.8	8.0	9.0	29	139	520	135	27	27
19	27	17	11	9.8	8.0	9.0	30	157	530	131	26	27
20	28	17	11	9.8	8.0	9.0	25	193	540	125	28	26
21	28	15	11	9.4	8.0	9.6	26	255	550	115	47	24
22	28	15	11	9.4	8.0	9.8	38	322	500	104	46	24
23	26	15	11	9.4	8.0	10	56	301	480	99	34	32
24	26	15	11	9.4	8.4	11	61	280	470	103	31	32
25	25	15	11	9.4	8.8	12	64	296	464	108	33	36
26	26	13	11	9.4	9.0	13	59	351	459	97	33	40
27	26	13	11	9.4	9.4	14	49	386	465	89	28	39
28	27	13	11	9.4	9.4	15	44	415	465	76	26	42
29	27	13	11	9.4	---	16	54	416	465	68	28	41
30	26	13	11	9.4	---	17	83	374	432	63	40	38
31	27	---	11	9.4	---	18	---	389	---	59	35	---
TOTAL	867	541	356	301.4	241.0	333.2	1099	6902	14791	5666	1194	1061
MEAN	28.0	18.0	11.5	9.72	8.61	10.7	36.6	223	493	183	38.5	35.4
MAX	43	24	12	10	9.4	18	83	416	632	394	55	44
MIN	20	13	11	9.4	8.0	9.0	20	108	392	59	26	24
AC-FT	1720	1070	706	598	478	661	2180	13690	29340	11240	2370	2100
CAL YR 1985	TOTAL	24107		MEAN	66.0	MAX	643	MIN	10	AC-FT	47820	
WTR YR 1986	TOTAL	33352.6		MEAN	91.4	MAX	632	MIN	8.0	AC-FT	66150	

COLORADO RIVER MAIN STEM

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 September 1986 (discontinued). 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. Elevation of gage is 8,380 ft above National Geodetic Vertical Datum of 1929, 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.--Estimated daily discharges: Nov. 10-22, 26, 27, Dec. 4-14, 21-23, 25, 26, 29, 31, Jan. 1, 3-5, 8, 12-14, 19-22, 25-28, Feb. 4, 6, 7, 9, 10, 20, 28, Mar. 1-6, 16, 18, 19, 21-24, 26-28, Mar. 30 to Apr. 4. Records good except for estimated daily discharges, which are poor. Diversions upstream from station for irrigation of about 200 acres of hay meadows upstream from station and about 2,000 acres downstream from station. Transmountain diversion upstream from 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.--67 years (water years 1905-18, 1934-86), 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, 710 ft³/s at 1600 June 9, gage height, 6.10 ft; minimum daily, 14 ft³/s, Feb. 16, 21-24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32	35	26	20	19	21	42	217	517	358	70	51
2	34	35	23	20	19	21	45	259	512	324	67	53
3	34	36	23	20	19	21	47	323	566	295	64	56
4	33	32	23	20	19	21	50	375	624	279	64	48
5	30	35	23	20	19	21	52	404	614	329	66	50
6	31	29	23	20	19	22	61	328	606	306	61	42
7	43	31	23	21	19	22	52	266	638	252	59	41
8	56	33	23	21	18	22	58	236	654	223	58	56
9	58	31	23	20	19	23	58	192	689	169	60	56
10	59	30	23	20	19	22	58	168	653	150	60	52
11	66	30	23	20	18	22	57	198	490	131	54	53
12	65	30	23	19	18	22	59	246	422	111	56	52
13	59	30	23	19	18	25	62	244	434	97	64	47
14	53	30	23	19	17	21	58	290	419	93	56	43
15	45	30	24	19	16	21	55	250	427	65	48	39
16	47	28	23	19	14	20	58	253	484	62	43	38
17	45	28	23	19	15	20	60	215	535	58	40	37
18	46	28	23	19	15	20	54	213	547	64	38	36
19	43	28	23	19	16	20	51	233	561	84	37	37
20	42	28	22	19	16	19	48	280	579	57	37	37
21	43	28	22	19	14	21	51	346	589	48	49	35
22	43	28	22	19	14	24	68	431	554	53	69	34
23	39	26	22	19	14	26	99	421	515	44	50	39
24	41	26	21	19	14	30	117	395	501	47	44	44
25	37	25	22	19	15	30	126	393	470	73	45	52
26	39	25	22	19	18	31	117	444	448	95	47	56
27	37	25	23	19	21	31	96	488	466	117	41	57
28	38	25	21	19	21	32	90	513	454	100	37	64
29	40	24	21	18	---	32	109	530	446	90	36	66
30	38	25	20	19	---	36	164	480	410	84	52	63
31	39	---	20	19	---	40	---	486	---	77	51	---
TOTAL	1355	874	699	601	483	759	2122	10117	15824	4335	1623	1434
MEAN	43.7	29.1	22.5	19.4	17.3	24.5	70.7	326	527	140	52.4	47.8
MAX	66	36	26	21	21	40	164	530	689	358	70	66
MIN	30	24	20	18	14	19	42	168	410	44	36	34
AC-FT	2690	1730	1390	1190	958	1510	4210	20070	31390	8600	3220	2840
CAL YR 1985	TOTAL	26453.4		MEAN	72.5	MAX	587	MIN	6.7	AC-FT	52470	
WTR YR 1986	TOTAL	40226		MEAN	110	MAX	689	MIN	14	AC-FT	79790	

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. Elevation 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.--No estimated daily discharges. Records good. 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.--40 years, 278 ft³/s; 201,400 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 592 ft³/s June 30, 1962; no flow at times in most years.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	248	225	419	404	355	364	546	548	546	380	373	356
2	190	170	423	406	404	377	548	547	530	546	200	360
3	228	178	406	408	402	400	548	546	443	545	204	286
4	240	224	406	406	402	415	546	544	291	547	364	200
5	172	224	406	404	404	487	548	543	202	546	282	199
6	172	229	415	394	400	400	548	541	202	466	357	199
7	221	224	415	398	402	415	546	544	200	546	369	199
8	223	229	415	383	404	435	548	547	202	545	365	199
9	229	211	415	383	402	413	547	550	200	545	202	199
10	224	178	433	383	425	400	549	550	200	544	199	199
11	257	227	404	404	325	402	549	552	220	544	355	199
12	155	231	377	387	487	413	549	552	340	546	359	199
13	153	231	389	291	439	413	549	550	204	547	358	199
14	134	227	404	377	435	413	546	548	202	542	359	199
15	243	226	415	408	340	383	546	550	202	542	364	199
16	226	175	412	406	413	385	546	545	131	543	204	199
17	364	174	385	404	417	381	549	545	104	541	313	199
18	346	227	381	404	387	387	546	549	340	543	481	199
19	94	400	379	406	419	404	546	548	403	546	361	199
20	168	332	353	404	410	404	546	550	277	548	288	200
21	.00	406	352	439	412	404	549	235	254	546	160	200
22	.00	404	402	300	413	408	548	472	473	549	163	198
23	.00	402	406	402	410	402	549	547	548	544	35	198
24	.00	408	449	406	413	404	548	543	521	544	200	200
25	22	406	300	404	412	400	548	545	482	548	318	199
26	154	404	350	404	355	400	548	547	500	548	317	199
27	152	406	406	404	307	542	547	546	418	545	311	199
28	225	404	412	404	353	548	549	546	486	545	322	199
29	229	404	406	402	---	548	549	547	459	545	432	199
30	218	413	408	350	---	546	546	548	376	546	388	199
31	223	---	404	353	---	548	---	548	---	486	358	---
TOTAL	5510.00	8599	12347	12128	11147	13241	16427	16573	9956	16598	9361	6377
MEAN	178	287	398	391	398	427	548	535	332	535	302	213
MAX	364	413	449	439	487	548	549	552	548	549	481	360
MIN	.00	170	300	291	307	364	546	235	104	380	35	198
AC-FT	10930	17060	24490	24060	22110	26260	32580	32870	19750	32920	18570	12650
CAL YR 1985	TOTAL	145950.00	MEAN	400	MAX	561	MIN	.00	AC-FT	289500		
WTR YR 1986	TOTAL	138264.00	MEAN	379	MAX	552	MIN	.00	AC-FT	274200		

GRAND LAKE OUTLET BASIN

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 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	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)
NOV										
27...	14:15	404	58	7.6	4.0	8.2	18	5.4	1.2	2.0
DEC										
19...	15:20	381	48	8.2	3.0	9.2	20	6.0	1.1	2.0
JAN										
08...	10:15	381	60	7.8	1.0	--	21	6.3	1.3	2.4
FEB										
05...	10:45	410	60	6.6	3.0	9.3	22	6.6	1.4	2.2
MAR										
03...	11:15	412	55	8.1	3.0	13.4	22	6.8	1.3	2.2
APR										
01...	10:15	555	52	8.7	4.0	10.4	21	6.3	1.2	1.9
MAY										
07...	11:40	548	56	7.3	5.0	7.3	20	6.2	1.2	2.1
JUN										
02...	12:00	559	43	7.8	8.0	8.8	15	4.6	0.9	1.7
JUL										
31...	10:30	553	28	7.6	15.0	7.5	10	3.1	0.6	1.1
AUG										
21...	14:00	242	31	8.0	17.5	6.7	15	4.4	0.9	1.4
SEP										
25...	08:30	198	36	7.9	11.0	8.6	13	3.9	0.89	1.3

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 DAY)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)
NOV										
27...	0.2	--	16	5.0	0.5	0.2	4.1	--	--	<0.10
DEC										
19...	0.2	0.5	19	5.3	0.6	0.1	4.0	31	32	<0.10
JAN										
08...	0.2	0.7	31	6.7	2.7	0.2	3.7	43	44	<0.10
FEB										
05...	0.2	1.1	21	4.8	0.6	<0.1	3.9	--	--	<0.10
MAR										
03...	0.2	1.0	21	4.7	0.7	0.1	4.1	34	37	--
APR										
01...	0.2	0.7	21	5.4	0.5	0.1	4.3	33	50	<0.10
MAY										
07...	0.2	1.2	22	5.8	0.9	<0.1	4.3	35	52	<0.10
JUN										
02...	0.2	0.7	16	5.3	0.6	0.1	4.8	28	43	<0.10
JUL										
31...	0.2	0.3	11	3.6	0.2	0.1	3.4	19	28	<0.10
AUG										
21...	0.2	0.6	--	--	--	--	3.6	--	--	<0.10
SEP										
25...	0.2	0.6	15	5.6	0.6	0.1	3.3	25	14	<0.10

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC 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)
NOV 27...	<0.10	0.3	--	--	39	--	5	--	--
DEC 19...	<0.10	0.8	--	--	34	--	1	--	--
JAN 08...	0.14	0.3	--	--	32	--	<1	--	--
FEB 05...	<0.10	--	--	--	39	--	3	--	--
MAR 03...	<0.10	0.2	--	--	46	--	3	--	--
APR 01...	<0.10	0.2	<1	2	49	<1	1	1	6
MAY 07...	<0.10	0.4	--	--	83	--	3	--	--
JUN 02...	<0.10	0.3	--	--	100	--	5	--	--
JUL 31...	<0.10	0.3	<1	1	56	<5	2	<1	5
AUG 21...	--	0.4	<1	1	44	<5	<1	<1	3
SEP 25...	<0.10	0.4	--	--	25	--	<1	--	--

* The minimum reporting level for Lead was changed from <1 to <5 during June, 1986.

COLORADO RIVER MAIN STEM

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 mi².

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 above National Geodetic Vertical Datum of 1929. 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 provided 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, 17,610 acre-ft, Nov. 25, elevation, 8,366.89 ft; minimum, 16,100 acre-ft, June 8, elevation, 8,365.92 ft.

MONTHEND ELEVATION IN FEET NGVD AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

Date	Elevation	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.	8,366.80	17,500	-
Oct. 31.	8,366.71	17,330	-170
Nov. 30.	8,366.77	17,400	+70
Dec. 31.	8,366.71	17,300	-100
CAL YR 1985			+110
Jan. 31.	8,366.68	17,260	-40
Feb. 28.	8,366.70	17,290	+30
Mar. 31.	8,366.69	17,250	-40
Apr. 30.	8,366.71	17,310	+60
May 31.	8,366.44	16,810	-500
June 30.	8,366.39	16,850	+40
July 31.	8,366.66	17,260	+410
Aug. 31.	8,366.65	17,230	-30
Sept. 30.	8,366.71	17,370	+140
WTR YR 1986			-130

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 Oct., Feb., May, and June of 1986 water year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	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)
NOV								
27...	0630	746	45	7.6	4.0	8.5	K<1	K<1
DEC								
19...	0620	750	48	7.5	3.0	8.8	K<1	K1
JAN								
28...	0740	720	50	7.3	3.0	8.5	K<1	K<1
MAR								
26...	0700	700	52	7.3	3.0	8.2	K<1	K<1
APR								
23...	0645	365	53	7.0	3.5	8.8	K1	K1
JUL								
18...	0640	770	53	7.0	7.0	5.8	K3	K<1
AUG								
28...	0630	404	49	6.9	7.0	4.5	--	K<1

DATE	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	CADMIUM DIS- SOLVED (UG/L AS CD)	COPPER, DIS- SOLVED (UG/L AS CU)	*LEAD, DIS- SOLVED (UG/L AS PB)	NICKEL, DIS- SOLVED (UG/L AS NI)	ZINC, DIS- SOLVED (UG/L AS ZN)
NOV								
27...	--	0.3	0.03	<1	3	<1	2	<10
DEC								
19...	--	0.9	0.02	--	--	--	--	--
JAN								
28...	--	0.5	<0.01	<1	1	1	<1	10
MAR								
26...	--	0.3	0.01	<1	4	2	1	20
APR								
23...	<0.10	0.3	0.01	--	--	--	--	--
JUL								
18...	<0.10	0.4	0.02	<1	3	<5	<1	<10
AUG								
28...	<0.10	0.3	0.04	<1	2	<5	1	20

K Based on non-ideal colony count.

* The minimum reporting level for Lead was changed from <1 to <5 during June, 1986.

COLORADO RIVER MAIN STEM

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 mi².

RESERVOIR ELEVATIONS AND CONTENTS RECORDS

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 above National Geodetic Vertical Datum of 1929. 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 usable storage began June 14, 1950, while dam was under construction. Usable capacity, 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 provided 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 acre-ft, Apr. 16, 1978, elevation, 8,190.93 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 464,500 acre-ft, July 15, 17, elevation, 8,279.85 ft; minimum, 296,600 acre-ft, Apr. 29, elevation, 8,254.66 ft.

MONTHEND ELEVATION AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.	8,272.22	410,400	-
Oct. 31.	8,271.56	405,800	-4,600
Nov. 30.	8,270.00	395,100	-10,700
Dec. 31.	8,266.76	373,200	-21,900
CAL YR 1985	-	-	-58,100
Jan. 31.	8,263.37	351,000	-22,200
Feb. 28.	8,260.56	333,100	-17,900
Mar. 31.	8,256.96	310,600	-22,500
Apr. 30.	8,254.67	296,600	-14,000
May 31.	8,260.50	332,700	+36,100
June 30.	8,278.04	451,400	+118,700
July 31.	8,279.45	461,600	+10,200
Aug. 31.	8,278.39	453,900	-7,700
Sept. 30.	8,277.74	449,300	-4,600
WTR YR 1986	-	-	+38,900

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, June 1984, July 1985, and July 1986.

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

COOPERATION.--Records provided by the U. S. Bureau of Reclamation.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	SAM- PLING DEPTH (FEET)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)
JUL				
01...	0955	0.1	17.0	6.9
01...	0956	5.0	16.0	6.9
01...	0957	10.0	16.0	7.0
01...	0958	20.0	15.5	6.9
01...	0959	25.0	14.0	6.7
01...	1000	30.0	12.0	6.4
01...	1001	40.0	11.0	6.2
01...	1002	50.0	9.0	6.1
01...	1003	60.0	7.0	5.9
01...	1004	70.0	6.0	5.7
01...	1005	75.0	5.5	5.5
01...	1006	80.0	5.5	5.4
01...	1007	90.0	5.5	5.3
01...	1008	100	5.5	5.4
01...	1009	110	5.5	5.4
01...	1010	120	5.0	5.3
01...	1011	125	5.5	5.4
01...	1012	130	5.0	5.3
01...	1013	140	5.0	5.3
01...	1014	150	5.0	5.0

DATE	TIME	SAM- PLING DEPTH (FEET)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)
JUL								
01...	1025	0.1	48	8.1	17.0	6.9	<0.10	0.3
01...	1035	150	49	8.3	5.0	5.4	<0.10	0.3

DATE	PHOS- PHORUS, TOTAL (MG/L AS P)	CADMIUM DIS- SOLVED (UG/L AS CD)	COPPER, DIS- SOLVED (UG/L AS CU)	*LEAD, DIS- SOLVED (UG/L AS PB)	NICKEL, DIS- SOLVED (UG/L AS NI)	ZINC, DIS- SOLVED (UG/L AS ZN)	ALGAL GROWTH POTEN- TIAL, BOTTLE TEST (MG/L)	PHYTO- PLANK- TON, TOTAL (CELLS PER ML)
JUL								
01...	0.01	<1	4	<5	1	10	50	20900
01...	0.01	<1	3	<5	<1	20	--	--

* The minimum reporting level for Lead was changed from <1 to <5 during June, 1986.

COLORADO RIVER MAIN STEM

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 mi².

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. Elevation of gage is 7,960 ft above National Geodetic Vertical Datum of 1929, 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.--No estimated daily discharges: Records good. Flow regulated by Lake Granby (station 09018500) since Sept. 13, 1949. Several diversions for irrigation of hay meadows upstream from station. Transmountain diversions upstream from 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 ft³/s, July 11, 1983, gage height, 5.39 ft; minimum daily, 9.6 ft³/s, Sept. 21, 1981.

EXTREMES FOR PERIOD OF CONTINUOUS RECORD.--Maximum discharge observed, 4,100 ft³/s, June 20, 1909, gage height, 5.5 ft, site and datum then in use; minimum daily, 6.6 ft³/s, Jan. 29, 1950; minimum observed prior to starting construction of Shadow Mountain Lake, 20 ft³/s, Apr. 6, 1936 (discharge measurement).

EXTREMES FOR CURRENT SEASON.--Maximum discharge, 460 ft³/s at 0700 July 2, gage height, 2.46 ft; minimum daily, 16 ft³/s, Sept. 12-18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1							---	83	75	451	63	32
2							---	78	75	456	47	37
3							---	73	72	372	47	23
4							---	73	72	272	47	18
5							---	72	70	269	47	18
6							---	72	69	269	47	19
7							---	78	70	305	47	19
8							---	83	72	361	47	19
9							---	73	76	271	48	19
10							---	70	70	130	47	19
11							40	67	66	122	47	18
12							41	66	75	211	47	16
13							40	70	81	211	48	16
14							38	81	69	208	47	16
15							34	81	66	258	47	16
16							37	89	70	305	47	16
17							37	83	78	305	47	16
18							33	83	75	285	47	16
19							32	75	70	250	47	17
20							32	78	73	250	47	21
21							36	78	64	250	48	21
22							50	76	64	194	48	22
23							56	81	66	106	47	21
24							52	86	70	95	47	20
25							52	86	70	82	48	19
26							44	86	76	83	51	19
27							40	75	72	84	51	19
28							39	66	69	89	47	20
29							56	70	70	94	37	20
30							71	75	173	86	36	21
31							---	75	---	84	37	---
TOTAL							---	2382	2238	6808	1455	593
MEAN							---	76.8	74.6	220	46.9	19.8
MAX							---	89	173	456	63	37
MIN							---	66	64	82	36	16
AC-FT							---	4720	4440	13500	2890	1180

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 above National Geodetic Vertical Datum of 1929.

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 provided 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 50 acre-ft, Dec. 4, 1985 to Jan. 17, 1986, drawdown for maintenance, elevation, 8,077.50 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 8,420 acre-ft, Aug. 28, elevation, 8,127.79 ft; minimum, 50 acre-ft, Dec. 4, to Jan. 17, drawdown for maintenance, elevation, 8,077.50 ft.

MONTHEND ELEVATION IN FEET NGVD AND CONTENTS, AT 0800, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

Date	Elevation	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.	8,117.80	5,910	-
Oct. 31.	8,123.57	7,280	+1,370
Nov. 30.	8,079.85	290	-6,990
Dec. 31.	8,077.50	50	-240
CAL YR 1985			-7,200
Jan. 31.	8,080.10	320	+270
Feb. 28.	8,084.66	820	+500
Mar. 31.	8,099.20	2,670	+1,850
Apr. 30.	8,113.60	5,050	+2,380
May 31.	8,122.93	7,120	+2,060
June 30.	8,125.97	7,910	+800
July 31.	8,122.85	7,100	-820
Aug. 31.	8,124.67	7,560	+470
Sept. 30.	8,125.60	7,810	+250
WTR YR 1986			+1,900

FRASER RIVER BASIN

09022000 FRASER RIVER AT UPPER STATION, NEAR WINTER PARK

LOCATION.--Lat 39°50'45", long 105°45'05", in Sec.26, T.2 S., R.75 W., Grand County, Hydrologic Unit 14010001, on left bank 0.8 mi upstream from Parsenn Creek and 2.5 mi south of Winter Park.

DRAINAGE AREA.--10.5 mi².

PERIOD OF RECORD.--May to September 1908, July to November 1909 (published as "at upper station near Fraser"), October 1968 to September 1973, Aug. 21, 1984 to current year. January to September 1911, gage heights only (published as "near Fraser"). Records for August to December 1910, published in WSP 289 as "near Fraser" are unreliable and should not be used.

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 9,520 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Oct. 1, 1968, nonrecording gage at site 0.9 mi upstream at different datum. Since Oct. 1, 1968, supplementary water-stage recorder and Parshall flume on Berthoud Pass ditch.

REMARKS.--Estimated daily discharges: Oct. 15, 25, Nov. 1, 2, 4, 14, Nov. 22, Dec. 14, Feb. 11-13, 24-27, Mar. 1-16, 19, Mar. 21 to Apr. 2, 4-9, 15, 16. Records good, except for period May 19 to Aug. 25 which is fair, and for estimated daily discharges, which are poor. Transmountain diversions upstream from station through Berthoud Pass ditch to Moffat water 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.--7 years, 15.2 ft³/s; 11,010 acre-ft/year.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 181 ft³/s, June 5, 1972, gage height 2.15 ft; minimum daily, 1.3 ft³/s, Feb. 20, 1971.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 108 ft³/s at 2100 June 7; maximum gage height 1.82 ft at 2100, June 7; minimum daily discharge, 1.7 ft³/s, Feb. 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.2	6.4	3.7	2.8	2.4	2.0	2.8	11	66	72	22	11
2	7.5	6.4	3.7	2.7	2.4	2.1	2.8	15	66	66	23	10
3	8.0	6.4	3.7	2.8	2.1	2.3	2.6	17	71	65	19	10
4	7.8	6.4	3.7	2.7	2.4	2.3	3.0	21	83	68	19	9.6
5	7.8	6.0	3.7	2.5	2.2	2.4	3.5	22	83	81	22	9.3
6	7.8	6.0	3.7	2.6	2.2	2.4	3.7	19	83	59	22	9.6
7	8.0	5.8	3.7	2.6	2.1	2.4	4.0	17	94	50	18	11
8	7.8	5.6	3.7	2.5	2.0	2.4	4.1	16	96	44	17	9.3
9	7.8	5.0	3.7	2.4	1.9	2.4	4.2	14	96	41	16	9.3
10	7.8	5.6	3.7	2.4	1.9	2.3	4.3	14	88	41	16	9.3
11	8.0	5.8	3.7	2.4	2.0	2.2	4.2	14	83	35	14	8.8
12	7.8	5.5	3.7	2.4	2.0	2.1	4.5	16	79	33	14	8.2
13	7.8	5.5	3.7	2.6	2.0	2.0	4.3	16	81	33	13	8.2
14	7.8	5.3	3.7	2.5	2.0	2.0	3.9	19	88	33	12	8.0
15	7.8	5.3	3.7	2.5	2.0	2.1	3.9	17	92	31	11	8.0
16	7.5	5.5	3.7	2.5	1.9	2.1	3.9	16	94	31	11	7.8
17	7.3	5.5	3.7	2.4	1.9	2.1	4.0	16	96	30	11	7.8
18	7.1	5.5	3.7	2.4	1.9	2.1	4.0	16	98	33	11	7.8
19	7.1	5.2	3.6	2.2	1.9	2.1	3.9	18	88	30	13	7.8
20	6.9	4.5	3.6	2.2	1.7	1.8	3.9	23	90	29	17	7.8
21	6.9	3.4	3.4	2.4	1.8	1.9	3.9	27	94	26	14	7.8
22	6.6	3.4	3.1	2.2	1.9	2.0	4.5	32	92	29	16	7.8
23	6.6	3.4	3.1	2.2	1.9	2.2	5.7	33	96	29	12	7.8
24	6.6	3.4	3.1	2.2	1.9	2.4	6.2	33	96	27	13	7.8
25	6.6	3.4	3.1	2.1	1.9	2.5	6.6	36	90	29	12	7.8
26	6.6	3.7	3.0	2.1	1.9	2.6	6.2	39	86	27	11	7.5
27	6.4	3.7	3.1	2.1	1.9	2.6	5.7	40	81	26	11	7.5
28	6.4	3.7	3.1	2.2	1.8	2.8	6.0	49	79	26	11	7.1
29	6.4	3.7	3.1	2.2	---	2.8	7.1	55	79	24	10	7.8
30	6.4	3.7	3.1	2.4	---	2.8	9.3	55	76	23	11	7.1
31	6.4	---	2.8	2.4	---	2.8	---	65	---	22	11	---
TOTAL	225.5	148.7	107.8	74.6	55.9	71.0	136.7	801	2584	1193	453	254.6
MEAN	7.27	4.96	3.48	2.41	2.00	2.29	4.56	25.8	86.1	38.5	14.6	8.49
MAX	8.2	6.4	3.7	2.8	2.4	2.8	9.3	65	98	81	23	11
MIN	6.4	3.4	2.8	2.1	1.7	1.8	2.6	11	66	22	10	7.1
AC-FT	447	295	214	148	111	141	271	1590	5130	2370	899	505
CAL YR 1985	TOTAL	4979.6		MEAN	13.6	MAX	112	MIN	1.4	AC-FT	9880	
WTR YR 1986	TOTAL	6105.8		MEAN	16.7	MAX	98	MIN	1.7	AC-FT	12110	

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.--Estimated daily discharges: Nov. 6, 8-24, Dec. 22, 23, Jan. 1-23, Jan. 25 to Feb. 13, 20-22, Feb. 25 to Mar. 2, 4, 6-11, 14-16, 19, 22, Mar. 27 to Apr. 4, 12-15. Records good except for estimated daily discharges, which are poor. Transmountain diversions upstream from 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, 2.0 ft³/s, Mar. 30, Apr. 9, 1912, Jan 23, 1915.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 301 ft³/s at 2200 June 19, gage height, 2.11 ft; minimum daily, 2.9 ft³/s, Feb. 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.3	6.2	4.1	3.7	3.5	3.8	6.0	16	26	40	11	17
2	4.1	5.5	4.4	3.7	3.5	3.8	6.0	16	27	36	16	17
3	4.6	5.0	4.5	3.7	3.5	3.8	6.0	18	25	33	16	17
4	4.7	4.9	4.1	3.7	3.5	3.8	6.0	22	23	38	16	16
5	5.7	5.4	4.6	3.7	3.5	3.8	6.0	18	25	41	15	16
6	6.7	4.8	4.4	3.7	3.7	3.9	8.2	17	33	50	15	16
7	12	4.6	4.0	3.7	3.7	3.9	7.6	16	31	63	16	18
8	13	4.6	4.1	3.7	3.7	3.9	8.6	16	31	52	17	17
9	11	4.6	4.1	3.7	3.7	3.9	7.9	14	36	36	17	17
10	9.5	4.6	3.7	3.7	3.7	3.9	6.4	15	54	17	17	17
11	11	4.6	3.9	3.7	4.0	3.9	5.9	17	67	17	17	15
12	9.8	4.6	4.1	3.7	4.0	3.9	6.2	16	169	17	18	15
13	9.6	4.6	4.1	3.7	4.0	3.6	6.2	17	232	17	17	11
14	9.8	4.6	4.0	3.7	4.1	3.7	6.2	17	199	16	17	8.7
15	8.0	4.6	4.0	3.7	4.1	3.7	6.2	17	192	12	17	8.5
16	8.1	4.3	4.0	3.7	4.2	3.7	6.2	18	156	13	15	7.6
17	7.7	4.3	4.0	3.7	4.1	3.7	5.8	17	161	11	17	5.3
18	7.3	4.3	4.0	3.7	4.1	3.7	5.1	16	128	16	20	5.1
19	7.1	4.3	4.0	3.7	4.2	4.0	4.6	18	158	8.3	17	5.2
20	6.6	4.3	3.9	3.7	4.0	4.3	4.6	20	212	8.0	17	4.9
21	6.5	4.3	3.8	3.7	3.5	4.5	5.8	22	160	25	17	4.9
22	6.4	4.3	3.8	3.7	3.2	4.5	9.9	22	100	46	17	4.9
23	6.0	4.3	3.8	3.7	2.9	4.5	12	20	99	58	18	5.0
24	6.0	4.3	3.9	3.5	3.0	4.5	13	20	129	49	15	7.8
25	6.0	4.3	3.8	3.5	3.6	4.3	13	24	82	46	16	9.0
26	6.0	4.0	4.3	3.5	3.8	5.0	9.8	24	68	30	16	7.9
27	5.9	4.0	3.8	3.5	3.8	5.6	7.6	24	54	9.7	16	7.5
28	5.5	4.1	3.7	3.5	3.8	5.8	9.3	24	45	8.7	17	7.3
29	5.4	4.3	3.8	3.5	---	6.0	14	23	44	8.5	17	7.7
30	5.4	4.2	3.8	3.5	---	6.0	17	23	43	8.1	17	9.5
31	5.6	---	3.7	3.5	---	6.0	---	25	---	9.2	17	---
TOTAL	225.3	136.8	124.2	113.1	104.4	133.4	237.1	592	2809	839.5	511	325.8
MEAN	7.27	4.56	4.01	3.65	3.73	4.30	7.90	19.1	93.6	27.1	16.5	10.9
MAX	13	6.2	4.6	3.7	4.2	6.0	17	25	232	63	20	18
MIN	4.1	4.0	3.7	3.5	2.9	3.6	4.6	14	23	8.0	11	4.9
AC-FT	447	271	246	224	207	265	470	1170	5570	1670	1010	646
CAL YR 1985	TOTAL	4372.1		MEAN	12.0	MAX	189	MIN	2.1	AC-FT	8670	
WTR YR 1986	TOTAL	6151.6		MEAN	16.9	MAX	232	MIN	2.9	AC-FT	12200	

FRASER RIVER BASIN

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 mi².

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 above 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.--Estimated daily discharges: Nov. 10 to Jan. 30, Feb. 6-10, 22, Feb. 26 to Mar. 3, 14-19. Records good except for estimated daily discharges, which are poor. Transmountain diversions upstream from 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 ft³/s, June 27, 1983, gage height, 4.14 ft, from rating curve extended above 286 ft³/s; no flow at times in 1944, 1946, 1956, 1960, 1966.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 193 ft³/s at 2400 June 19, gage height, 2.95 ft; minimum daily, 1.3 ft³/s, Dec. 17-30, Jan. 5-12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.1	3.5	6.5	1.4	2.1	3.1	5.7	14	14	21	9.0	9.3
2	3.9	5.0	6.5	1.4	2.3	3.7	5.5	16	14	14	9.0	9.0
3	4.1	4.0	6.5	1.4	2.4	3.1	2.9	19	14	11	8.5	8.5
4	4.1	4.8	6.6	1.4	2.3	2.0	4.2	23	14	33	7.8	8.5
5	3.7	5.9	6.9	1.3	2.1	2.3	3.9	24	18	40	7.8	8.6
6	3.8	5.6	6.9	1.3	2.2	2.0	3.8	21	15	52	7.8	8.6
7	6.0	6.3	6.9	1.3	2.4	2.1	4.2	19	11	63	6.8	9.2
8	6.4	6.0	6.9	1.3	2.8	2.3	5.0	15	11	54	7.2	9.4
9	5.4	3.6	6.9	1.3	3.3	2.3	4.7	13	12	60	7.3	8.6
10	4.9	4.1	6.9	1.3	2.5	2.1	4.2	13	13	55	7.0	9.0
11	5.7	4.7	6.9	1.3	2.0	2.1	3.7	14	15	43	7.0	8.8
12	5.1	4.6	6.9	1.3	1.9	2.1	3.8	14	69	25	6.7	8.4
13	4.9	9.5	6.9	1.8	1.8	2.0	3.8	14	80	17	7.9	8.3
14	4.9	10	6.9	2.0	2.0	2.4	3.7	14	85	11	7.2	8.5
15	4.8	8.6	6.3	2.4	2.0	2.4	4.2	17	93	9.5	7.0	7.9
16	4.6	7.5	4.5	2.3	2.0	2.9	4.0	19	84	8.7	5.9	4.4
17	4.7	4.6	1.3	2.3	2.0	2.7	3.8	17	89	9.4	6.7	4.2
18	4.4	5.1	1.3	2.4	1.9	2.3	3.8	17	88	11	6.6	3.9
19	4.3	3.9	1.3	2.5	2.2	2.3	3.6	18	127	10	5.7	4.1
20	4.1	4.4	1.3	2.6	1.6	2.1	3.5	19	173	11	6.6	4.0
21	4.0	5.9	1.3	2.6	1.8	2.5	3.9	18	163	24	7.3	4.1
22	3.9	6.5	1.3	2.5	2.1	3.1	5.5	18	152	26	7.1	4.4
23	3.9	4.7	1.3	2.8	1.8	3.5	7.2	18	122	9.5	7.6	4.4
24	3.8	4.7	1.3	2.7	1.9	3.7	8.1	18	96	11	7.4	4.7
25	3.9	4.7	1.3	2.4	2.3	3.9	8.8	18	56	10	7.4	4.7
26	3.8	4.7	1.3	2.5	2.6	4.0	8.1	17	53	10	8.2	4.8
27	3.8	4.6	1.3	2.5	2.6	4.2	6.9	17	44	9.5	8.9	4.5
28	3.9	12	1.3	2.4	3.3	4.3	7.3	17	40	9.3	8.5	4.6
29	3.8	7.4	1.3	2.3	---	5.4	10	17	36	9.4	8.7	5.0
30	3.8	6.5	1.3	2.2	---	6.4	13	16	28	9.6	8.9	4.8
31	4.0	---	1.4	2.1	---	6.3	---	15	---	9.3	9.1	---
TOTAL	137.5	173.4	125.5	61.3	62.2	95.6	160.8	529	1829	696.2	234.6	197.2
MEAN	4.44	5.78	4.05	1.98	2.22	3.08	5.36	17.1	61.0	22.5	7.57	6.57
MAX	6.4	12	6.9	2.8	3.3	6.4	13	24	173	63	9.1	9.4
MIN	3.7	3.5	1.3	1.3	1.6	2.0	2.9	13	11	8.7	5.7	3.9
AC-FT	273	344	249	122	123	190	319	1050	3630	1380	465	391
CAL YR 1985	TOTAL	3776.3		MEAN	10.3	MAX	194	MIN	1.3	AC-FT	7490	
WTR YR 1986	TOTAL	4302.3		MEAN	11.8	MAX	173	MIN	1.3	AC-FT	8530	

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 mi².

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

GAGE.--Water-stage recorder. Elevation of gage is 8,805 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 2, 3, Oct. 28 to Nov. 22, Dec. 19 to Mar. 4, Apr. 3-6, 8, 9, 11-17. Records good except for estimated daily discharges, which are poor. Transmountain diversions upstream from station to Moffat water tunnel. Diversions for irrigation of about 100 acres of hay meadows upstream from 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 ft³/s, May 24, 1984, gage height, 3.13 ft; minimum daily, 0.10 ft³/s, Jan. 13, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 22 ft³/s at 2300 June 19, gage height, 2.16 ft; minimum daily, 0.37 ft³/s, Nov. 26, Feb. 6-15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.54	.44	.41	.41	.39	.42	1.0	7.0	3.6	10	1.9	1.3
2	.55	.44	.40	.41	.39	.42	1.1	7.8	3.6	9.0	1.7	.79
3	.56	.44	.40	.41	.39	.45	1.2	8.5	3.7	8.3	1.6	.84
4	.52	.44	.40	.41	.39	.47	1.2	11	2.9	9.4	1.3	.85
5	.48	.44	.40	.41	.39	.50	1.3	12	2.9	8.8	1.3	.85
6	.46	.44	.40	.41	.37	.52	1.3	9.7	2.8	7.8	1.2	.82
7	.75	.44	.40	.41	.37	.53	1.3	8.4	2.7	7.3	1.2	.95
8	.81	.44	.40	.43	.37	.55	1.3	8.5	2.5	7.1	1.1	1.0
9	.58	.44	.40	.43	.37	.54	1.3	7.7	2.8	6.0	1.1	.90
10	.51	.43	.40	.43	.37	.54	1.3	7.6	3.2	5.9	1.1	.86
11	.81	.42	.40	.43	.37	.54	1.3	7.8	2.8	5.4	1.0	1.0
12	.65	.41	.42	.43	.37	.52	1.3	7.8	8.2	4.7	1.1	1.0
13	.61	.40	.42	.43	.37	.53	1.3	7.9	15	4.4	1.1	1.0
14	.63	.40	.42	.43	.37	.53	1.3	7.9	15	5.1	1.1	1.0
15	.58	.40	.42	.43	.37	.53	1.3	8.2	15	4.4	1.1	.98
16	.54	.40	.42	.43	.39	.53	1.3	9.3	16	4.6	1.2	.98
17	.53	.40	.42	.43	.39	.54	1.3	8.5	18	4.9	1.1	.91
18	.54	.40	.42	.43	.39	.54	1.3	8.0	17	6.3	1.2	.91
19	.56	.38	.42	.43	.39	.53	1.3	8.0	20	6.1	1.2	.92
20	.52	.38	.41	.43	.39	.54	1.1	8.2	21	4.4	1.3	.83
21	.48	.38	.41	.43	.39	.54	1.8	8.3	19	3.6	1.4	.54
22	.46	.38	.41	.43	.39	.57	3.7	8.1	17	3.4	1.3	.52
23	.50	.38	.41	.43	.39	.59	4.1	7.6	15	3.3	1.4	.54
24	.46	.38	.41	.43	.39	.59	4.7	7.2	16	2.7	1.5	.61
25	.52	.38	.41	.43	.39	.59	4.5	6.6	15	2.4	1.3	.71
26	.49	.37	.41	.42	.42	.62	3.4	6.0	16	2.1	1.3	.81
27	.46	.38	.41	.41	.42	.69	2.7	5.1	14	1.9	1.3	.77
28	.45	.38	.41	.39	.42	.78	3.7	4.7	13	2.3	1.1	.76
29	.44	.40	.41	.39	---	.85	5.8	4.5	12	2.2	1.2	.95
30	.44	.40	.41	.39	---	.96	7.1	4.1	11	2.1	1.2	.82
31	.44	---	.41	.39	---	1.0	---	3.6	---	2.0	1.4	---
TOTAL	16.87	12.21	12.69	13.00	10.81	18.05	66.6	235.6	326.7	157.9	39.3	25.72
MEAN	.54	.41	.41	.42	.39	.58	2.22	7.60	10.9	5.09	1.27	.86
MAX	.81	.44	.42	.43	.42	1.0	7.1	12	21	10	1.9	1.3
MIN	.44	.37	.40	.39	.37	.42	1.0	3.6	2.5	1.9	1.0	.52
AC-FT	33	24	25	26	21	36	132	467	648	313	78	51
CAL YR 1985	TOTAL	1026.86		MEAN	2.81	MAX	27	MIN	.24	AC-FT	2040	
WTR YR 1986	TOTAL	935.45		MEAN	2.56	MAX	21	MIN	.37	AC-FT	1860	

FRASER RIVER BASIN

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 mi².

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 above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Nov. 6-25, Dec. 4 to Mar. 28, Apr. 3-7, 14, 15. Records good except for estimated daily discharges, which are poor. Transmountain diversions upstream from 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 ft³/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, 265 ft³/s at 2100 June 19, gage height, 2.31 ft; minimum daily, 5.8 ft³/s, Mar. 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.6	8.5	8.1	7.6	6.8	6.6	8.5	15	39	78	18	18
2	7.8	8.3	8.4	7.6	6.8	6.6	9.0	17	36	73	18	17
3	8.7	8.8	8.5	7.6	6.8	6.6	9.5	19	36	71	17	17
4	8.6	7.8	8.5	7.6	6.8	6.4	9.5	21	38	85	17	17
5	7.6	7.4	8.5	7.6	6.8	6.4	9.5	21	41	111	17	16
6	8.0	8.0	8.5	7.6	6.6	6.4	9.5	19	48	108	17	16
7	11	8.0	8.5	7.6	6.6	6.4	9.5	19	49	119	19	18
8	11	8.0	8.5	7.6	6.6	6.4	9.5	18	47	110	19	23
9	9.8	8.0	8.5	7.6	6.6	6.4	9.2	16	50	70	19	18
10	9.3	8.0	8.5	7.6	6.6	6.4	8.6	16	69	40	19	19
11	11	8.0	8.5	7.6	6.4	6.4	8.0	18	90	28	18	19
12	9.7	8.0	8.5	7.6	6.4	6.4	8.1	18	127	27	19	17
13	9.4	8.0	8.5	7.6	6.4	6.4	8.2	19	134	27	19	17
14	9.2	8.0	8.5	7.6	6.4	6.4	8.4	19	137	26	19	16
15	8.6	8.0	8.5	7.6	6.4	6.2	8.4	22	145	22	18	14
16	8.0	8.0	8.5	7.4	6.6	6.2	8.1	28	138	21	19	9.9
17	8.0	8.0	8.5	7.4	6.6	6.2	8.3	29	162	23	19	9.6
18	9.1	8.0	8.5	7.4	6.6	6.0	8.3	28	153	25	18	9.3
19	8.4	8.0	8.5	7.4	6.6	6.0	8.0	30	200	22	18	9.3
20	8.1	8.0	8.5	7.4	6.6	6.0	8.0	34	242	22	20	9.3
21	8.0	8.0	8.0	7.4	6.6	5.8	8.8	35	221	21	22	9.0
22	8.1	8.0	8.0	7.4	6.6	6.0	10	34	209	27	21	8.5
23	8.1	8.0	8.0	7.4	6.6	6.2	11	35	185	34	21	8.5
24	8.7	8.0	8.0	7.4	6.6	6.2	11	36	162	33	19	8.8
25	8.3	8.0	8.0	7.4	6.6	6.2	12	36	127	33	18	8.9
26	8.5	8.3	8.0	7.0	6.6	6.0	11	36	118	32	18	9.3
27	8.6	8.3	8.0	7.0	6.6	6.5	10	36	112	31	17	9.4
28	8.4	8.3	7.6	7.0	6.6	7.5	10	37	110	27	17	9.6
29	9.1	8.3	7.6	7.0	---	8.2	12	38	102	18	17	11
30	8.7	8.3	7.6	7.0	---	8.7	14	36	84	17	18	10
31	9.1	---	7.6	7.0	---	8.9	---	35	---	18	18	---
TOTAL	273.5	242.3	255.9	230.0	184.8	203.0	283.9	820	3411	1399	573	402.4
MEAN	8.82	8.08	8.25	7.42	6.60	6.55	9.46	26.5	114	45.1	18.5	13.4
MAX	11	8.8	8.5	7.6	6.8	8.9	14	38	242	119	22	23
MIN	7.6	7.4	7.6	7.0	6.4	5.8	8.0	15	36	17	17	8.5
AC-FT	542	481	508	456	367	403	563	1630	6770	2770	1140	798
CAL YR 1985	TOTAL	8424.6		MEAN	23.1	MAX	272	MIN	6.0	AC-FT	16710	
WTR YR 1986	TOTAL	8278.8		MEAN	22.7	MAX	242	MIN	5.8	AC-FT	16420	

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. Elevation of gage is 8,685 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 1, 2, 4, 6, 7, 9-12, Dec. 4, 5, Feb. 19-28, Mar. 16, Apr. 3-9, 13-15. Records good except for estimated daily discharges, which are poor. Diversion upstream from station for irrigation of hay meadows along Fraser River. Transmountain diversion upstream from station to Moffat water tunnel. 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, 145 ft³/s at 2100 June 19, gage height, 2.55 ft; minimum daily, 1.6 ft³/s, Mar. 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.5	3.7	3.1	2.8	2.2	2.2	2.7	12	26	17	5.3	5.3
2	5.4	3.7	3.1	2.8	2.2	2.2	3.0	15	25	15	5.2	5.0
3	4.4	3.7	3.1	2.8	2.1	2.1	3.0	18	24	14	5.2	4.5
4	4.4	3.7	3.1	2.8	2.1	2.1	3.0	22	22	16	5.2	4.3
5	4.1	3.7	3.1	2.7	2.1	2.1	3.0	22	22	33	5.1	4.1
6	4.0	3.7	3.1	2.7	2.0	2.1	3.0	20	19	49	5.2	4.0
7	5.2	3.6	3.2	2.7	2.0	2.1	3.0	20	21	42	5.3	4.5
8	6.0	3.5	3.2	2.6	2.0	2.1	3.0	19	23	36	5.2	6.1
9	5.3	3.6	3.1	2.6	2.0	2.1	3.0	17	14	24	5.3	4.6
10	5.1	3.6	3.0	2.5	1.8	2.1	2.9	17	14	11	5.2	5.1
11	5.9	3.6	3.0	2.5	2.0	2.1	2.8	18	21	9.8	5.3	5.0
12	5.4	3.6	3.1	2.5	2.0	2.1	3.0	18	75	8.8	5.4	4.5
13	5.2	3.7	3.1	2.5	2.0	2.1	3.0	18	77	7.9	5.6	4.3
14	5.0	3.6	3.1	2.4	2.0	2.1	3.0	15	76	7.7	5.4	4.1
15	5.9	3.7	3.1	2.4	2.0	1.9	3.0	17	81	5.8	5.2	4.0
16	4.8	3.5	3.1	2.4	2.1	2.0	3.0	20	86	3.3	5.0	3.9
17	4.5	3.4	3.0	2.4	2.0	2.0	2.9	18	87	3.1	4.9	3.7
18	4.4	3.2	3.1	2.4	2.0	2.0	3.1	18	87	3.2	4.8	3.7
19	4.3	3.1	2.9	2.4	2.0	1.8	2.9	19	110	2.9	4.9	3.8
20	4.2	3.1	2.9	2.4	2.0	1.7	2.7	20	133	2.7	5.1	3.7
21	4.2	3.1	2.9	2.4	2.0	1.6	2.9	22	124	5.0	6.1	3.7
22	4.1	3.1	2.9	2.3	2.1	1.7	3.9	24	113	12	5.3	3.7
23	4.1	2.9	2.9	2.4	2.1	1.8	4.9	24	90	15	5.5	3.8
24	4.0	2.9	2.9	2.4	2.1	1.9	5.6	23	81	12	5.7	4.1
25	3.9	2.9	2.8	2.4	2.1	1.9	5.7	25	70	11	5.2	4.2
26	4.0	3.1	2.8	2.2	2.2	1.8	5.0	28	66	13	5.1	4.3
27	3.8	3.1	2.8	2.3	2.2	2.0	4.6	30	59	15	4.9	4.2
28	3.7	3.1	2.8	2.4	2.2	2.3	4.5	31	52	13	4.7	4.1
29	3.7	3.1	2.8	2.4	---	2.6	7.5	25	46	6.0	4.8	4.8
30	3.7	3.1	2.8	2.4	---	2.8	10	23	38	5.3	5.1	4.7
31	3.7	---	2.8	2.4	---	2.9	---	24	---	5.2	5.3	---
TOTAL	144.9	101.4	92.7	77.3	57.6	64.3	113.6	642	1782	424.7	161.5	129.8
MEAN	4.67	3.38	2.99	2.49	2.06	2.07	3.79	20.7	59.4	13.7	5.21	4.33
MAX	8.5	3.7	3.2	2.8	2.2	2.9	10	31	133	49	6.1	6.1
MIN	3.7	2.9	2.8	2.2	1.8	1.6	2.7	12	14	2.7	4.7	3.7
AC-FT	287	201	184	153	114	128	225	1270	3530	842	320	257
CAL YR 1985	TOTAL	4196.2		MEAN	11.5	MAX	192	MIN	2.1	AC-FT	8320	
WTR YR 1986	TOTAL	3791.8		MEAN	10.4	MAX	133	MIN	1.6	AC-FT	7520	

FRASER RIVER BASIN

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 mi².

PERIOD OF RECORD.--October 1983 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 9,560 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 1, 2, and Nov. 4 to May 22. Records good except for estimated daily discharges, which are poor. Transmountain diversion upstream from station to Moffat water tunnel. 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 ft³/s June 13, 1984, gage height, 2.37 ft; minimum daily, 0.04 ft³/s May 7, 1985.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 71 ft³/s at 2000 June 7, gage height, 1.83 ft; minimum daily, 1.00 ft³/s Feb. 17, 18, 24-28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.8	3.5	2.1	1.9	1.3	1.1	1.5	3.2	10	23	6.8	3.9
2	4.6	3.5	2.1	1.9	1.3	1.1	1.5	3.6	18	21	6.6	3.5
3	4.8	3.3	2.1	1.9	1.3	1.1	1.5	3.6	16	20	6.4	3.3
4	4.6	3.2	2.1	1.8	1.3	1.1	1.6	3.6	21	21	6.1	3.1
5	4.4	3.2	2.1	1.8	1.3	1.2	1.7	3.2	26	22	5.9	3.1
6	4.4	3.3	2.2	1.8	1.3	1.2	1.8	3.2	39	26	5.8	3.0
7	5.3	3.3	2.2	1.8	1.3	1.1	1.9	3.0	50	22	5.5	3.9
8	5.4	3.3	2.2	1.8	1.2	1.1	2.0	3.0	51	18	5.4	4.9
9	5.2	3.2	2.2	1.8	1.2	1.1	2.0	3.4	55	16	5.2	3.5
10	5.5	3.2	2.2	1.7	1.2	1.3	1.7	3.4	56	16	4.7	4.1
11	6.3	3.2	2.2	1.7	1.1	1.4	1.7	3.1	43	15	4.5	4.2
12	5.5	3.2	2.2	1.7	1.1	1.4	1.7	3.1	42	14	4.7	3.7
13	5.3	2.9	2.2	1.7	1.1	1.4	1.9	3.1	44	13	4.6	3.4
14	4.5	2.9	2.3	1.7	1.1	1.5	2.1	3.1	44	13	4.4	3.3
15	5.2	3.0	2.3	1.7	1.1	1.5	2.3	3.1	46	12	4.1	3.3
16	5.1	3.0	2.3	1.5	1.1	1.5	2.5	3.3	47	12	3.9	3.2
17	4.7	3.0	2.3	1.5	1.0	1.5	2.7	3.3	46	12	3.8	3.0
18	4.4	3.0	2.3	1.5	1.0	1.5	2.9	3.3	44	13	3.7	3.1
19	4.2	3.0	2.0	1.5	1.1	1.5	3.1	3.3	44	11	3.6	3.1
20	4.2	3.1	2.0	1.4	1.1	1.5	3.3	3.0	44	10	4.0	3.0
21	4.2	2.9	2.0	1.4	1.1	1.5	3.5	3.0	41	9.9	3.5	3.0
22	4.0	2.7	2.1	1.4	1.1	1.4	3.7	3.0	38	11	3.5	3.0
23	3.7	2.7	2.1	1.4	1.1	1.4	3.8	3.9	36	13	3.5	2.9
24	3.7	2.5	2.1	1.4	1.0	1.4	3.8	3.2	35	10	3.3	3.1
25	3.8	2.3	2.1	1.4	1.0	1.5	3.8	7.3	32	9.8	3.5	3.3
26	3.8	2.3	1.9	1.4	1.0	1.5	3.6	9.4	33	9.4	4.0	3.5
27	3.7	2.3	1.9	1.4	1.0	1.5	3.5	13	30	8.6	3.4	3.5
28	3.7	2.3	2.0	1.4	1.0	1.6	3.5	9.7	28	8.3	3.3	3.4
29	3.6	2.3	2.0	1.4	---	1.6	3.5	1.9	26	7.9	3.4	4.1
30	3.6	2.3	1.9	1.4	---	1.5	3.2	3.6	25	7.4	3.6	3.8
31	3.6	---	1.9	1.4	---	1.4	---	6.5	---	7.0	3.6	---
TOTAL	140.8	87.9	65.6	49.5	31.8	42.4	77.3	129.4	1110	432.3	138.3	103.2
MEAN	4.54	2.93	2.12	1.60	1.14	1.37	2.58	4.17	37.0	13.9	4.46	3.44
MAX	6.3	3.5	2.3	1.9	1.3	1.6	3.8	13	56	26	6.8	4.9
MIN	3.6	2.3	1.9	1.4	1.0	1.1	1.5	1.9	10	7.0	3.3	2.9
AC-FT	279	174	130	98	63	84	153	257	2200	857	274	205
CAL YR 1985	TOTAL	1781.23		MEAN	4.88	MAX	65	MIN	.04	AC-FT	3530	
WTR YR 1986	TOTAL	2408.5		MEAN	6.60	MAX	56	MIN	1.0	AC-FT	4780	

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 mi².

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

GAGE.--Water-stage recorder. Elevation of gage is 7,790 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Dec. 4 to Mar. 17. Records good except for estimated daily discharges, 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 ft³/s, May 25, 1984, gage height, 7.34 ft; minimum daily, 42 ft³/s, Oct. 11, 2, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,730 ft³/s at 0800 June 20, gage height, 4.86 ft; minimum daily, 61 ft³/s, Sept. 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	103	100	194	90	85	85	345	907	1260	1020	177	125
2	109	100	181	90	85	85	378	1050	1220	979	157	123
3	106	103	169	90	85	85	362	1240	1220	836	151	116
4	103	106	120	90	85	85	271	1380	1250	746	150	106
5	100	106	85	90	85	85	232	1500	1360	763	145	90
6	97	106	95	90	85	85	245	1420	1330	855	142	75
7	109	106	95	90	85	85	284	1220	1350	965	142	76
8	164	106	95	90	85	85	307	1220	1340	1010	140	97
9	164	112	95	90	85	85	400	1160	1330	845	143	108
10	133	168	95	90	85	85	360	1050	1360	555	143	100
11	128	202	95	90	85	90	331	1020	1280	508	136	105
12	156	221	95	90	85	90	343	982	1260	527	134	98
13	135	216	95	90	85	90	379	897	1280	490	137	92
14	128	221	95	90	85	90	295	920	1250	487	139	87
15	125	221	95	90	85	90	362	940	1280	505	134	82
16	115	235	95	90	85	90	392	1100	1300	576	130	80
17	109	240	95	90	80	90	399	1160	1280	566	128	78
18	106	245	95	90	80	92	349	1090	1290	596	127	76
19	106	235	95	90	80	94	359	1050	1330	532	107	67
20	103	226	95	90	80	94	343	1030	1490	492	92	61
21	103	230	95	90	80	95	364	1010	1470	504	121	64
22	115	230	95	90	80	98	539	1110	1300	540	124	69
23	112	240	95	90	80	101	662	1350	1230	482	122	77
24	112	245	95	90	85	120	707	1470	1070	421	123	79
25	109	245	95	90	85	159	796	1390	1000	360	119	81
26	103	245	95	90	85	194	799	1290	969	354	125	89
27	91	240	95	90	85	215	700	1350	892	282	123	94
28	91	204	95	90	85	238	653	1450	781	287	119	89
29	94	198	95	90	---	265	716	1470	785	216	116	95
30	91	194	95	90	---	303	829	1430	816	198	120	110
31	94	---	95	90	---	337	---	1400	---	196	122	---
TOTAL	3514	5646	3219	2790	2345	3885	13501	37056	36373	17693	4088	2689
MEAN	113	188	104	90.0	83.8	125	450	1195	1212	571	132	89.6
MAX	164	245	194	90	85	337	829	1500	1490	1020	177	125
MIN	91	100	85	90	80	85	232	897	781	196	92	61
AC-FT	6970	11200	6380	5530	4650	7710	26780	73500	72150	35090	8110	5330
CAL YR 1985	TOTAL	97287		MEAN	267	MAX	1790	MIN	64	AC-FT	193000	
WTR YR 1986	TOTAL	132799		MEAN	364	MAX	1500	MIN	61	AC-FT	263400	

COLORADO RIVER MAIN STEM

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 mi².

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. Elevation 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.--Estimated daily discharges: Dec. 7 to Mar. 17, May 10-21. Records good except for estimated daily discharges, which are poor. Flow affected by transmountain diversions, storage reservoirs, and diversions upstream from station for irrigation of about 13,000 acres.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 10,300 ft³/s, June 15, 1921, gage height, 8.7 ft, site and datum then in use; minimum daily, 33 ft³/s, Sept. 27, 1956.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,740 ft³/s at 0900 June 20, gage height, 2.78 ft; minimum daily, 64 ft³/s, Sept. 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	95	105	199	110	100	100	396	902	1310	986	190	131
2	101	111	190	110	100	100	425	1050	1270	950	167	130
3	99	116	157	110	100	100	421	1260	1270	823	161	122
4	96	124	123	110	100	100	328	1430	1300	730	161	109
5	97	128	93	110	100	100	279	1590	1420	744	157	96
6	97	130	109	110	100	100	295	1520	1390	822	152	80
7	102	130	110	110	100	100	334	1290	1400	932	153	81
8	149	130	110	110	100	100	356	1280	1390	974	153	101
9	155	131	110	110	100	100	436	1190	1380	847	153	115
10	134	178	110	110	100	100	414	1120	1410	577	155	105
11	133	185	110	110	100	100	388	1020	1320	520	150	113
12	149	212	110	110	100	100	400	1000	1270	544	144	106
13	136	208	110	110	100	100	428	930	1300	510	151	97
14	136	243	110	110	100	100	349	940	1260	510	153	94
15	133	221	110	110	100	100	410	960	1290	523	150	90
16	131	252	115	105	100	100	436	1100	1300	592	144	87
17	129	280	115	105	100	100	441	1160	1270	574	144	86
18	125	240	115	105	96	93	407	1110	1290	600	145	81
19	124	251	115	105	90	94	413	1070	1310	539	126	76
20	122	269	115	105	90	96	399	1040	1500	497	104	69
21	118	299	115	105	92	93	407	1080	1470	500	136	64
22	122	286	115	105	94	98	538	1190	1290	534	140	70
23	126	272	115	105	98	102	669	1450	1200	488	136	77
24	124	244	115	105	100	123	712	1570	1040	441	135	80
25	123	234	115	105	100	163	793	1490	977	392	127	85
26	114	235	115	105	100	212	801	1370	935	387	127	97
27	93	246	115	105	100	240	708	1430	869	320	126	106
28	91	201	115	105	100	270	658	1530	759	313	123	95
29	90	180	115	105	---	302	693	1540	768	242	120	101
30	94	179	115	105	---	343	814	1500	784	213	124	120
31	100	---	115	105	---	383	---	1480	---	210	129	---
TOTAL	3638	6020	3701	3330	2760	4312	14548	38592	36742	17834	4436	2864
MEAN	117	201	119	107	98.6	139	485	1245	1225	575	143	95.5
MAX	155	299	199	110	100	383	814	1590	1500	986	190	131
MIN	90	105	93	105	90	93	279	902	759	210	104	64
AC-FT	7220	11940	7340	6610	5470	8550	28860	76550	72880	35370	8800	5680
CAL YR 1985	TOTAL	104403		MEAN	286	MAX	1780	MIN	65	AC-FT	207100	
WTR YR 1986	TOTAL	138777		MEAN	380	MAX	1590	MIN	64	AC-FT	275300	

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.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 420 microsiemens Dec. 7, 1985; minimum daily, 48 microsiemens 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, 420 microsiemens Dec. 7; minimum daily, 74 microsiemens June 17.

WATER TEMPERATURES: Maximum, 24°C Aug. 18; minimum, freezing point on many days during winter months.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	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)	SODIUM AD- SORP- TION RATIO
DEC 19...	1000	117	136	7.8	0.0	11.7	61	19	3.4	7.1	0.4
MAR 27...	0840	230	160	8.1	1.5	11.4	65	20	3.7	8.6	0.5
JUN 12...	1615	1320	88	8.9	13.5	8.7	36	11	2.0	3.7	0.3
AUG 27...	0815	127	119	7.2	14.0	8.2	51	16	2.7	5.6	0.4

DATE	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 19...	0.9	63	9.5	1.6	0.2	12	92	0.12	29	0.20	0.20
MAR 27...	2.3	73	10	2.6	0.2	12	100	0.14	64	0.20	0.17
JUN 12...	0.8	38	6.8	0.8	0.1	12	60	0.08	214	<0.10	<0.10
AUG 27...	1.3	58	6.8	1.5	0.2	9.9	79	0.11	27	<0.10	<0.10

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)	ANTI- MONY, DIS- SOLVED (UG/L AS SB)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)
DEC 19...	0.5	0.3	0.7	0.04	0.02	<1	<1	<1	29	<0.5
MAR 27...	0.6	0.4	0.8	0.09	0.04	<1	<1	<1	23	<0.5
JUN 12...	0.4	0.3	--	0.06	0.02	<1	<1	<1	17	<0.5
AUG 27...	0.3	0.2	--	0.05	0.03	<1	<1	<1	23	<0.5

DATE	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)	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)
DEC 19...	<1	<1	5	<1	2	2	78	1	<1	32
MAR 27...	<1	<1	8	<1	2	1	59	5	2	59
JUN 12...	<1	<1	8	<1	3	4	51	<5	<5	19
AUG 27...	<1	<1	5	<1	1	2	120	<5	<5	11

* The minimum reporting level for Lead was changed from <1 to <5 during June, 1986.

COLORADO RIVER MAIN STEM

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY DIS- SOLVED (UG/L AS HG)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, TOTAL (UG/L AS SE)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG)	SILVER, DIS- SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, DIS- SOLVED (UG/L AS ZN)
DEC 19...	--	--	4	<1	<1	<1	<1	<1	10	11
MAR 27...	--	--	1	<1	<1	<1	<1	<1	20	4
JUN 12...	--	--	2	5	<1	<1	<1	<1	10	6
AUG 27...	<0.1	<0.1	1	3	<1	<1	<1	<1	<10	5

SPECIFIC CONDUCTANCE, (MICROSIEMENS PER CENTIMETER AT 25 DEG. C), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
ONCE DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	152	148	134	179	135	157	155	113	82	88	126	131
2	152	146	136	189	138	187	162	109	84	88	126	137
3	149	147	134	157	141	154	158	107	84	93	128	135
4	149	148	136	147	142	161	165	106	85	98	127	138
5	148	146	284	153	139	154	171	100	83	98	127	152
6	147	145	247	159	141	161	173	96	84	93	128	145
7	144	144	420	152	153	156	177	94	83	90	128	142
8	145	145	134	152	138	167	174	94	84	89	124	---
9	149	140	362	162	138	164	172	102	89	92	125	143
10	155	131	271	157	129	168	165	99	89	106	129	145
11	166	134	145	159	145	167	166	98	89	117	127	146
12	160	132	178	153	141	170	170	97	85	114	125	141
13	160	134	160	168	143	170	164	95	83	112	125	143
14	158	130	157	147	140	167	164	97	84	113	125	147
15	156	133	151	147	136	166	166	96	79	112	122	150
16	171	133	142	146	136	168	161	100	81	112	124	153
17	153	133	154	141	133	170	158	97	74	110	120	148
18	152	131	146	141	138	170	161	93	79	111	116	152
19	150	133	153	140	134	165	165	95	81	116	123	159
20	156	140	142	140	142	166	166	96	75	116	120	166
21	150	130	166	140	144	162	165	91	76	117	122	163
22	152	136	154	140	120	158	163	92	80	114	126	156
23	150	138	154	143	115	159	149	90	77	118	124	157
24	151	137	165	138	141	190	126	85	80	115	123	133
25	148	139	169	137	162	170	122	84	88	122	124	164
26	150	140	167	139	193	174	125	82	94	119	124	164
27	147	134	185	136	197	175	126	82	94	123	121	158
28	147	135	164	150	196	173	129	85	97	122	124	162
29	148	133	163	141	---	169	128	90	100	126	124	166
30	149	136	159	140	---	166	119	94	100	124	132	164
31	148	---	196	137	---	160	---	81	---	127	133	---
MEAN	152	138	182	149	145	167	156	95	85	110	125	150
WTR YR 1986	MEAN	138	MAX	420	MIN	74						

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

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
ONCE DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.0	6.0	.0	.0	.0	.0	6.0	8.0	12.0	17.0	18.0	18.0
2	10.0	4.0	.0	.0	.0	.0	6.0	11.0	13.0	19.0	12.0	16.0
3	10.0	7.0	.0	.0	.0	.0	4.0	10.0	13.0	17.0	18.0	18.0
4	10.0	4.0	.0	.0	.0	.0	5.0	10.0	12.0	17.0	19.0	19.0
5	10.0	3.0	.0	.0	.0	.0	8.0	8.0	12.0	17.0	16.0	18.0
6	11.0	3.0	.0	.0	.0	.0	10.0	8.0	9.0	16.0	20.0	16.0
7	7.0	3.0	.0	.0	.0	.0	7.0	8.0	13.0	16.0	18.0	16.0
8	6.0	2.0	.0	.0	.0	.0	6.0	7.0	12.0	15.0	17.0	---
9	5.0	.0	.0	.0	.0	1.0	6.0	6.0	12.0	14.0	21.0	16.0
10	7.0	1.0	.0	.0	.0	1.0	6.0	9.0	10.0	14.0	20.0	14.0
11	7.0	5.0	.0	.0	.0	1.0	8.0	9.0	13.0	14.0	18.0	13.0
12	11.0	4.0	.0	.0	.0	.0	8.0	8.0	14.0	14.0	17.0	15.0
13	7.0	1.0	.0	.0	.0	.0	5.0	8.0	12.0	14.0	15.0	15.0
14	9.0	.0	.0	.0	.0	2.0	8.0	9.0	12.0	17.0	16.0	16.0
15	5.0	2.0	.0	.0	.0	2.0	7.0	8.0	13.0	16.0	20.0	15.0
16	9.0	.0	.0	.0	.0	2.0	6.0	7.0	14.0	14.0	19.0	14.0
17	9.0	.0	.0	.0	.0	4.0	5.0	9.0	13.0	15.0	23.0	15.0
18	10.0	2.0	.0	.0	.0	3.0	6.0	11.0	14.0	14.0	24.0	12.0
19	10.0	.0	.0	.0	.0	3.0	7.0	12.0	13.0	14.0	21.0	14.0
20	12.0	.0	.0	.0	.0	4.0	7.0	10.0	13.0	14.0	20.0	12.0
21	9.0	.0	.0	.0	.0	9.0	10.0	11.0	14.0	15.0	19.0	13.0
22	4.0	.0	.0	.0	.0	8.0	7.0	9.0	15.0	15.0	18.0	13.0
23	7.0	.0	.0	.0	.0	11.0	9.0	7.0	14.0	15.0	18.0	12.0
24	5.0	.0	.0	.0	.0	1.0	8.0	10.0	13.0	14.0	21.0	8.0
25	9.0	.0	.0	.0	.0	5.0	8.0	11.0	13.0	15.0	18.0	7.0
26	4.0	.0	.0	.0	.0	7.0	5.0	12.0	13.0	17.0	19.0	8.0
27	9.0	.0	.0	.0	.0	6.0	6.0	12.0	15.0	18.0	20.0	11.0
28	8.0	.0	.0	.0	.0	2.0	6.0	12.0	16.0	17.0	19.0	9.0
29	9.0	.0	.0	.0	---	7.0	7.0	11.0	16.0	16.0	20.0	11.0
30	8.0	.0	.0	.0	---	9.0	8.0	11.0	16.0	21.0	16.0	9.0
31	4.0	---	.0	.0	---	7.0	---	12.0	---	18.0	16.0	---
MEAN	8.0	1.5	.0	.0	.0	3.0	7.0	9.5	13.0	16.0	18.5	13.5
WTR YR 1986	MEAN	7.5	MAX	24.0	MIN	.0						

WILLIAMS FORK BASIN

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 mi².

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

GAGE.--Water-stage recorder. Elevation of gage is 10,430 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 16 to May 14, July 19 to Aug. 22. Records good except for estimated daily discharges, which are poor. No diversion upstream from station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--21 years, 10.4 ft³/s; 7,530 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 199 ft³/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 ft³/s, Feb. 11, 1972.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 90 ft³/s, and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
June 7	1830	127	4.38	June 19	1930	*156	*4.55

Minimum daily discharge, 0.96 ft³/s, Jan. 20 to Feb. 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.4	2.9	1.3	1.0	.96	.98	.98	2.2	41	72	20	7.8
2	2.7	2.9	1.3	1.0	.96	.98	.98	2.3	43	66	19	7.4
3	2.2	2.8	1.3	1.0	.96	.98	.98	2.4	57	72	18	6.1
4	1.9	2.7	1.3	1.0	.96	.98	.98	2.5	57	82	17	5.9
5	3.3	2.6	1.2	1.0	.96	.98	.98	2.6	68	88	16	5.7
6	2.6	2.6	1.2	1.0	.96	.98	.98	2.8	88	73	14	5.7
7	1.9	2.5	1.2	1.0	.96	.98	.98	2.5	95	72	14	6.4
8	5.3	2.4	1.2	1.0	.96	.98	.98	2.3	92	55	13	8.9
9	1.9	2.3	1.2	1.0	.96	.98	.98	2.2	85	52	13	6.1
10	2.4	2.3	1.2	1.0	.96	.98	.98	2.1	63	51	12	7.8
11	1.9	2.3	1.2	1.0	.96	.98	.98	3.5	53	43	10	6.9
12	1.9	2.3	1.2	1.0	.96	.98	.98	4.1	61	41	9.2	6.4
13	2.2	2.2	1.2	1.0	.96	.98	.98	5.7	72	39	8.4	5.9
14	2.4	2.1	1.2	1.0	.96	.98	.98	7.1	75	39	10	5.7
15	4.5	2.0	1.2	1.0	.96	.98	1.0	6.4	88	39	8.8	5.3
16	4.8	1.9	1.2	1.0	.96	.98	1.1	6.6	88	37	8.2	5.3
17	4.7	1.8	1.2	1.0	.96	.98	1.1	4.8	108	39	7.2	4.8
18	4.5	1.7	1.2	1.0	.96	.98	1.2	5.7	103	38	7.0	4.8
19	4.3	1.6	1.2	1.0	.96	.98	1.2	8.3	109	33	6.5	4.6
20	4.2	1.6	1.2	.96	.98	.98	1.3	14	109	31	6.0	4.4
21	4.1	1.6	1.1	.96	.98	.98	1.3	21	101	37	6.6	4.0
22	3.9	1.6	1.1	.96	.98	.98	1.4	24	95	37	7.0	4.2
23	3.7	1.5	1.1	.96	.98	.98	1.4	24	91	35	8.1	3.8
24	3.6	1.5	1.1	.96	.98	.98	1.5	23	96	40	7.6	4.2
25	3.5	1.5	1.1	.96	.98	.98	1.6	26	83	36	8.1	4.2
26	3.4	1.5	1.1	.96	.98	.98	1.6	32	94	32	9.9	4.0
27	3.3	1.5	1.1	.96	.98	.98	1.7	33	88	30	7.8	4.6
28	3.2	1.4	1.0	.96	.98	.98	1.8	40	89	27	6.9	4.2
29	3.1	1.4	1.0	.96	---	.98	1.9	43	84	25	7.8	4.4
30	3.0	1.4	1.0	.96	---	.98	2.0	43	83	23	7.4	4.2
31	2.9	---	1.0	.96	---	.98	---	44	---	23	8.9	---
TOTAL	99.7	60.4	36.1	30.52	27.06	30.38	36.82	443.1	2459	1407	323.4	163.7
MEAN	3.22	2.01	1.16	.98	.97	.98	1.23	14.3	82.0	45.4	10.4	5.46
MAX	5.3	2.9	1.3	1.0	.98	.98	2.0	44	109	88	20	8.9
MIN	1.9	1.4	1.0	.96	.96	.98	.98	2.1	41	23	6.0	3.8
AC-FT	198	120	72	61	54	60	73	879	4880	2790	641	325
CAL YR 1985	TOTAL	3373.62		MEAN	9.24	MAX	117	MIN	.60	AC-FT	6690	
WTR YR 1986	TOTAL	5117.18		MEAN	14.0	MAX	109	MIN	.96	AC-FT	10150	

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. Elevation of gage is 9,800 ft above National Geodetic Vertical Datum of 1929, 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.--Estimated daily discharges: Oct. 16 to May 14 and July 29 to Aug. 22. Records fair except for estimated daily discharges, which are poor. Transmountain diversions upstream from 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.--29 years, 26.5 ft³/s; 19,200 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, 236 ft³/s at 2000 June 7, gage height, 5.15 ft; minimum daily, 0.66 ft³/s, Sept. 21-23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	1.3	.90	.86	.80	.90	1.4	2.8	15	151	2.7	1.9
2	8.1	1.5	.90	.86	.80	.90	1.4	3.2	43	138	2.6	1.2
3	8.1	1.1	.86	.86	.80	.90	1.5	3.8	32	141	2.5	1.1
4	5.8	1.3	.86	.86	.80	.90	1.6	4.4	3.8	163	2.6	1.0
5	1.1	1.4	.86	.86	.80	.90	1.5	5.0	43	163	2.5	.90
6	.90	1.2	.86	.86	.80	.90	1.6	4.6	120	147	2.5	.90
7	2.3	1.0	.86	.86	.80	.90	1.7	4.3	180	141	2.6	1.1
8	1.1	.95	.86	.86	.80	.90	1.8	4.1	170	117	2.4	2.0
9	1.0	.88	.86	.86	.80	.90	1.7	3.8	177	109	2.3	1.1
10	1.0	.90	.86	.86	.80	.90	1.6	3.6	163	109	2.2	1.6
11	1.1	.92	.86	.86	.90	.90	1.6	4.6	141	90	2.1	1.2
12	1.0	.94	.86	.86	.90	.90	1.5	5.8	141	83	2.3	1.0
13	1.1	1.0	.86	.86	.90	.90	1.5	7.0	153	82	2.1	.96
14	1.1	.98	.86	.86	.90	.90	1.6	9.0	159	79	2.0	.84
15	1.3	.96	.86	.86	.90	.90	1.5	5.1	175	78	1.8	.78
16	1.0	.96	.86	.86	.90	.90	1.4	4.5	181	73	1.8	.78
17	1.0	.96	.86	.86	.90	.90	1.3	4.3	189	45	1.7	.72
18	1.0	.96	.86	.86	.90	.90	1.2	4.5	200	5.3	1.6	.72
19	1.0	.96	.86	.86	.90	.92	1.2	5.9	205	4.5	1.6	.72
20	1.0	.96	.86	.86	.90	.94	1.2	12	203	31	1.6	.72
21	1.1	.96	.86	.86	.90	.96	1.2	18	189	68	1.6	.66
22	1.2	.96	.86	.86	.90	.98	1.6	8.9	177	61	1.5	.66
23	1.1	.96	.86	.86	.90	1.0	2.1	17	177	67	1.2	.66
24	1.1	.94	.86	.86	.90	1.1	2.4	11	177	62	1.1	.78
25	1.3	.94	.86	.86	.90	1.2	2.8	12	167	56	1.1	3.7
26	1.2	.94	.86	.86	.90	1.3	2.3	13	175	52	1.1	3.4
27	1.1	.94	.86	.86	.90	1.4	2.1	31	169	48	.90	.78
28	1.1	.94	.86	.86	.90	1.5	1.8	13	171	32	.78	.72
29	1.1	.94	.86	.86	---	1.6	2.6	27	165	3.2	.84	5.9
30	1.1	.90	.86	.86	---	1.7	2.6	25	159	3.0	.90	4.7
31	1.2	---	.86	.86	---	1.6	---	15	---	2.8	2.0	---
TOTAL	62.60	30.55	26.74	26.66	24.20	32.40	51.3	293.2	4419.8	2404.8	56.52	43.20
MEAN	2.02	1.02	.86	.86	.86	1.05	1.71	9.46	147	77.6	1.82	1.44
MAX	10	1.5	.90	.86	.90	1.7	2.8	31	205	163	2.7	5.9
MIN	.90	.88	.86	.86	.80	.90	1.2	2.8	3.8	2.8	.78	.66
AC-FT	124	61	53	53	48	64	102	582	8770	4770	112	86
CAL YR 1985	TOTAL	6223.33		MEAN	17.1	MAX	218	MIN	.29	AC-FT	12340	
WTR YR 1986	TOTAL	7471.97		MEAN	20.5	MAX	205	MIN	.66	AC-FT	14820	

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. Elevation of gage is 8,970 ft above National Geodetic Vertical Datum of 1929, 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.--Estimated daily discharges: Nov. 10-11, Nov. 14 to Mar. 29. Records fair except for estimated daily discharges, which are poor. Transmountain diversion upstream from 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.--21 years, 38.7 ft³/s; 28,040 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, 378 ft³/s at 2200 June 19, gage height, 4.93 ft; minimum daily, 5.8 ft³/s, Feb. 9-15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	10	7.0	6.8	6.0	6.6	11	23	93	260	41	44
2	18	14	7.0	6.8	6.0	6.6	12	28	129	247	41	42
3	18	8.9	7.0	6.8	6.0	6.6	12	31	130	247	40	41
4	18	10	7.0	6.8	6.0	6.6	13	37	129	278	43	40
5	10	11	7.0	6.8	6.0	6.6	12	38	165	276	42	39
6	9.5	8.8	7.0	6.6	6.0	6.6	13	34	244	249	41	39
7	13	8.3	7.0	6.6	6.0	6.6	14	30	321	246	44	42
8	13	7.3	7.0	6.6	6.0	6.6	15	27	315	215	41	46
9	11	6.9	7.0	6.6	5.8	6.6	14	25	327	203	41	42
10	10	7.0	7.0	6.6	5.8	6.6	13	23	296	203	40	44
11	12	7.2	6.8	6.6	5.8	6.6	12	26	260	178	39	43
12	10	7.4	6.8	6.4	5.8	6.6	12	30	256	167	42	42
13	10	7.8	6.8	6.4	5.8	6.6	12	32	271	160	41	42
14	9.9	7.6	6.8	6.4	5.8	6.6	13	52	278	156	39	41
15	9.9	7.6	6.8	6.4	5.8	6.8	12	32	299	149	39	40
16	9.7	7.4	6.8	6.4	6.0	6.8	12	31	314	145	38	40
17	8.8	7.4	6.8	6.4	6.2	6.9	11	28	331	119	37	40
18	8.4	7.4	6.8	6.4	6.4	7.0	11	28	332	63	37	39
19	8.1	7.4	6.8	6.4	6.6	7.4	10	31	340	55	37	39
20	8.1	7.4	6.8	6.2	6.6	7.6	10	42	340	82	39	39
21	9.0	7.4	6.8	6.2	6.6	7.8	10	60	329	146	40	39
22	9.4	7.4	6.8	6.2	6.6	8.0	12	57	319	128	40	39
23	9.3	7.4	6.8	6.2	6.6	8.2	15	66	312	135	41	41
24	9.0	7.4	6.8	6.2	6.6	8.4	18	56	314	125	40	41
25	10	7.2	6.8	6.2	6.6	8.8	21	59	295	113	40	44
26	9.3	7.2	6.8	6.2	6.6	9.5	16	69	309	104	42	46
27	8.9	7.2	6.8	6.2	6.6	10	15	95	295	95	38	43
28	8.9	7.2	6.8	6.2	6.6	11	14	77	293	79	38	43
29	8.8	7.2	6.8	6.2	---	12	19	96	286	46	39	48
30	8.7	7.0	6.8	6.2	---	12	20	109	276	42	40	47
31	8.8	---	6.8	6.0	---	12	---	92	---	42	43	---
TOTAL	334.5	239.4	212.8	199.0	173.2	242.6	404	1464	8198	4753	1243	1255
MEAN	10.8	7.98	6.86	6.42	6.19	7.83	13.5	47.2	273	153	40.1	41.8
MAX	19	14	7.0	6.8	6.6	12	21	109	340	278	44	48
MIN	8.1	6.9	6.8	6.0	5.8	6.6	10	23	93	42	37	39
AC-FT	663	475	422	395	344	481	801	2900	16260	9430	2470	2490
CAL YR 1985	TOTAL	13385.4		MEAN	36.7	MAX	353	MIN	6.7	AC-FT	26550	
WTR YR 1986	TOTAL	18718.5		MEAN	51.3	MAX	340	MIN	5.8	AC-FT	37130	

09035800 DARLING CREEK NEAR LEAL, CO

LOCATION.--Lat 39°48'20", long 106°01'05", in NE¼SW¼ sec.9, T.3 S., R.77 W., 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. Elevation of gage is 9,090 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 1-21, Nov. 10 to Mar. 25. Records good except for period of estimated daily discharge, which are poor. No diversion upstream from station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--21 years, 9.97 ft³/s; 7,220 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, 104 ft³/s at 1900 June 7, gage height, 3.67; minimum daily, 2.2 ft³/s, Mar. 12-20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.0	4.2	2.9	2.6	2.5	2.3	3.5	6.1	41	47	9.0	4.9
2	5.0	4.8	2.9	2.6	2.5	2.3	3.5	8.3	46	43	8.7	4.8
3	5.0	4.9	2.9	2.6	2.5	2.3	3.4	10	54	43	8.7	4.5
4	5.0	4.7	2.9	2.6	2.5	2.3	3.4	14	64	44	8.5	4.3
5	5.0	4.7	2.9	2.6	2.4	2.3	3.3	16	63	43	8.1	4.2
6	5.0	4.4	2.9	2.6	2.4	2.3	3.4	13	70	38	7.7	4.0
7	5.0	4.4	2.9	2.6	2.4	2.3	3.9	12	79	35	7.5	4.9
8	5.0	4.3	2.8	2.6	2.4	2.3	4.0	10	79	32	7.2	6.6
9	5.0	3.2	2.8	2.6	2.4	2.3	3.9	9.3	77	31	6.7	4.5
10	5.0	3.2	2.8	2.6	2.4	2.3	3.7	9.0	66	30	6.0	6.0
11	5.0	3.1	2.8	2.6	2.4	2.3	3.6	10	58	27	5.7	5.7
12	5.0	3.1	2.8	2.6	2.4	2.2	3.5	11	59	26	6.5	4.9
13	5.0	3.1	2.8	2.6	2.4	2.2	3.5	12	59	24	6.0	4.4
14	5.0	3.1	2.8	2.6	2.4	2.2	3.5	14	62	24	5.6	4.2
15	5.0	3.1	2.8	2.6	2.4	2.2	3.6	13	67	22	5.2	4.0
16	5.0	3.1	2.8	2.6	2.4	2.2	3.6	12	67	21	4.9	3.9
17	5.0	3.1	2.7	2.5	2.4	2.2	3.5	12	67	22	4.7	3.8
18	5.0	3.1	2.7	2.5	2.4	2.2	3.4	12	67	22	4.5	3.8
19	5.0	3.0	2.7	2.5	2.4	2.2	3.4	14	68	19	4.7	3.8
20	5.0	3.0	2.7	2.5	2.4	2.2	3.3	18	67	19	6.3	3.7
21	5.0	3.0	2.7	2.5	2.4	2.5	3.4	26	64	17	6.2	3.6
22	5.1	3.0	2.7	2.5	2.3	2.9	3.8	31	62	16	5.1	3.7
23	5.1	3.0	2.7	2.5	2.3	3.2	4.5	31	61	16	5.8	3.7
24	5.0	3.0	2.7	2.5	2.3	3.5	4.5	30	60	16	5.3	4.0
25	5.0	3.0	2.7	2.5	2.3	4.1	4.5	32	57	14	5.2	4.2
26	5.1	3.0	2.7	2.5	2.3	3.4	4.2	35	59	13	5.4	4.3
27	5.0	3.0	2.7	2.5	2.3	3.2	4.0	37	55	13	4.8	4.3
28	5.1	2.9	2.6	2.5	2.3	3.2	4.0	40	55	11	4.5	4.5
29	5.0	2.9	2.6	2.5	---	3.3	4.3	41	53	11	4.7	5.0
30	5.0	2.9	2.6	2.5	---	3.5	5.2	41	51	10	5.4	4.5
31	4.9	---	2.6	2.5	---	3.7	---	42	---	9.5	5.3	---
TOTAL	155.3	103.3	85.6	79.1	66.9	81.6	113.3	621.7	1857	758.5	189.9	132.7
MEAN	5.01	3.44	2.76	2.55	2.39	2.63	3.78	20.1	61.9	24.5	6.13	4.42
MAX	5.1	4.9	2.9	2.6	2.5	4.1	5.2	42	79	47	9.0	6.6
MIN	4.9	2.9	2.6	2.5	2.3	2.2	3.3	6.1	41	9.5	4.5	3.6
AC-FT	308	205	170	157	133	162	225	1230	3680	1500	377	263
CAL YR 1985	TOTAL	3792.6		MEAN	10.4	MAX	104	MIN	2.6	AC-FT	7520	
WTR YR 1986	TOTAL	4244.9		MEAN	11.6	MAX	79	MIN	2.2	AC-FT	8420	

WILLIAMS FORK BASIN

09035820 SOUTH FORK OF WILLIAMS FORK AT UPPER STATION NEAR PTARMIGAN PASS, CO

LOCATION.--Lat 39°42'30", long 105°56'49", in Grand County, Hydrologic Unit 14010001, on left bank 3.5 mi upstream from Short Creek, 3.4 mi northeast of Ptarmigan Pass.

DRAINAGE AREA.--2.78 mi².

PERIOD OF RECORD.--October 1984 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 10,820 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 1-3, 5-6, 8, 10, 13-17, Oct. 19 to Nov. 6, Nov. 8 to May 4. Records good except for estimated daily discharges, which are poor. Several observations of specific conductance and water temperatures were obtained and are published elsewhere in this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 77 ft³/s, June 8, 1985, gage height 1.36 ft; minimum daily 0.49 ft³/s, Feb. 12 to Apr. 4, 1985.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 61 ft³/s at 1900 June 19, gage height, 1.17 ft; minimum daily, 0.50 ft³/s, Feb. 11-19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.6	1.2	.92	.68	.52	.52	.56	2.1	21	31	7.1	2.9
2	1.5	1.2	.92	.68	.52	.52	.58	2.2	25	30	6.7	2.9
3	1.5	1.2	.92	.68	.52	.52	.60	2.4	28	31	6.6	2.6
4	1.4	1.2	.90	.68	.52	.52	.62	2.4	30	31	6.2	2.6
5	1.4	1.2	.90	.66	.52	.52	.66	2.9	32	30	5.5	2.4
6	1.3	1.1	.88	.66	.52	.52	.70	2.3	38	28	5.2	2.3
7	1.2	1.1	.88	.66	.52	.52	.72	2.0	42	26	5.3	2.7
8	1.4	1.1	.86	.64	.52	.52	.74	1.9	40	22	5.0	3.3
9	1.3	1.1	.86	.64	.52	.52	.78	1.8	35	20	4.7	2.7
10	1.6	1.1	.84	.64	.52	.52	.82	2.0	27	20	4.1	3.1
11	1.6	1.1	.84	.62	.50	.52	.84	3.2	23	18	3.7	2.8
12	1.5	1.1	.82	.62	.50	.52	.90	3.7	24	16	4.5	2.5
13	1.5	1.1	.82	.62	.50	.52	.94	4.9	27	15	4.0	2.3
14	1.5	1.1	.80	.62	.50	.52	.98	5.3	32	14	3.8	2.2
15	1.4	1.1	.80	.62	.50	.52	1.0	4.1	38	14	3.4	2.1
16	1.4	1.0	.80	.60	.50	.52	1.1	3.6	40	14	3.1	2.0
17	1.4	1.0	.80	.60	.50	.52	1.1	3.3	44	15	3.0	1.8
18	1.4	1.0	.78	.60	.50	.52	1.2	3.9	44	14	2.8	1.8
19	1.4	1.0	.78	.60	.50	.52	1.2	5.5	46	13	3.0	1.8
20	1.4	1.0	.76	.58	.52	.52	1.3	8.2	46	14	3.1	1.8
21	1.4	1.0	.76	.58	.52	.52	1.3	11	46	14	3.3	1.8
22	1.4	1.0	.76	.58	.52	.52	1.4	12	44	13	5.2	1.7
23	1.4	1.0	.76	.58	.52	.52	1.5	12	42	15	4.6	1.8
24	1.4	1.0	.74	.56	.52	.52	1.5	12	41	13	3.8	1.9
25	1.3	.98	.74	.56	.52	.52	1.6	14	39	12	3.8	1.9
26	1.3	.98	.72	.56	.52	.52	1.6	16	41	11	3.6	1.9
27	1.3	.96	.72	.56	.52	.52	1.7	18	40	10	3.1	2.1
28	1.3	.96	.70	.54	.52	.52	1.8	20	40	9.4	2.9	1.9
29	1.3	.94	.70	.54	---	.52	1.9	21	37	8.4	3.0	2.1
30	1.3	.94	.68	.54	---	.52	2.0	22	35	8.4	2.9	2.0
31	1.3	---	.68	.54	---	.54	---	25	---	7.8	2.9	---
TOTAL	43.4	31.76	24.84	18.84	14.38	16.14	33.64	250.7	1087	538.0	129.9	67.7
MEAN	1.40	1.06	.80	.61	.51	.52	1.12	8.09	36.2	17.4	4.19	2.26
MAX	1.6	1.2	.92	.68	.52	.54	2.0	25	46	31	7.1	3.3
MIN	1.2	.94	.68	.54	.50	.52	.56	1.8	21	7.8	2.8	1.7
AC-FT	86	63	49	37	29	32	67	497	2160	1070	258	134
CAL YR 1985	TOTAL	1881.26		MEAN	5.15	MAX	50	MIN	.49	AC-FT	3730	
WTR YR 1986	TOTAL	2256.30		MEAN	6.18	MAX	46	MIN	.50	AC-FT	4480	

09035830 SOUTH FORK OF WILLIAMS FORK NEAR PTARMIGAN PASS, CO.

LOCATION.--Lat 39°42'15", long 105°57'43", in Grand County, Hydrologic Unit 14010001, on right bank 2.6 mi upstream from Short Creek, 2.5 mi northeast of Ptarmigan Pass.

DRAINAGE AREA.--4.01 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1984 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 10,590 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharge: Oct. 1, 2, 5, 6, 14-17, Oct. 19 to Mar. 27. Records good except for estimated daily discharges, which are poor. No diversion upstream from station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 192 ft³/s, June 8, 1985, gage height, 2.82 ft; minimum daily, 0.68 ft³/s, Feb. 14 to Apr. 3, 1985.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 103 ft³/s at 1330 June 19, gage height, 2.48 ft; minimum daily, 0.88 ft³/s, Feb. 12-19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.9	1.6	1.2	.98	.98	.94	1.7	4.1	31	41	9.7	4.0
2	2.9	1.6	1.2	.98	.98	.94	1.7	5.2	35	40	9.2	3.9
3	2.8	1.6	1.2	.98	.98	.94	1.7	6.3	38	44	9.4	3.9
4	2.8	1.5	1.2	.98	.98	.94	1.7	8.3	41	43	9.3	3.4
5	2.9	1.5	1.1	.98	.98	.94	1.7	7.2	44	43	8.2	3.6
6	2.9	1.5	1.1	.98	.98	.94	1.7	6.2	55	39	7.9	3.2
7	2.9	1.5	1.1	.98	.98	.94	2.0	5.2	59	34	7.1	3.1
8	2.8	1.5	1.1	.98	.98	.94	2.2	4.7	54	30	7.0	3.6
9	2.8	1.5	1.1	.98	.98	.94	2.0	4.3	46	29	6.5	4.0
10	2.8	1.5	1.1	.98	.98	.94	1.9	3.9	38	28	6.1	3.4
11	2.7	1.4	1.1	.98	.93	.94	1.8	4.9	35	24	5.9	3.8
12	2.6	1.4	1.1	.98	.88	.94	1.8	6.4	36	23	6.9	3.5
13	2.6	1.4	1.1	.98	.88	.94	1.8	7.7	39	22	5.9	3.2
14	2.5	1.4	1.0	.98	.88	.94	1.7	8.2	45	21	5.5	3.0
15	2.4	1.4	1.0	.98	.88	.94	1.7	6.8	54	20	5.1	2.9
16	2.3	1.4	1.0	.98	.88	.94	1.7	6.1	56	19	4.9	2.6
17	2.2	1.4	1.0	.98	.88	.94	1.7	5.8	64	22	4.7	2.5
18	2.0	1.4	1.0	.98	.88	.94	1.7	6.7	65	20	4.5	2.5
19	2.0	1.3	.98	.98	.88	.94	1.6	8.8	71	19	4.7	2.4
20	2.0	1.3	.98	.98	.94	.94	1.6	12	69	22	4.9	2.4
21	2.0	1.3	.98	.98	.94	.94	1.6	16	66	21	4.8	2.4
22	1.9	1.3	.98	.98	.94	.94	1.9	18	62	21	4.8	2.1
23	1.9	1.3	.98	.98	.94	.94	2.3	17	62	20	7.1	2.1
24	1.9	1.3	.98	.98	.94	.94	2.2	17	58	18	5.8	2.1
25	1.9	1.3	.98	.98	.94	.98	2.1	19	52	16	5.1	2.2
26	1.8	1.3	.98	.98	.94	1.1	2.1	23	60	15	5.1	2.5
27	1.8	1.2	.98	.98	.94	1.2	2.0	25	56	14	4.5	2.4
28	1.8	1.2	.98	.98	.94	1.4	2.0	28	55	13	4.1	2.8
29	1.8	1.2	.98	.98	---	1.5	2.5	30	49	12	3.9	2.3
30	1.7	1.2	.98	.98	---	1.6	3.3	30	46	11	4.2	2.4
31	1.7	---	.98	.98	---	1.7	---	33	---	11	4.0	---
TOTAL	72.0	41.7	32.44	30.38	26.23	32.04	57.4	384.8	1541	755	186.8	88.2
MEAN	2.32	1.39	1.05	.98	.94	1.03	1.91	12.4	51.4	24.4	6.03	2.94
MAX	2.9	1.6	1.2	.98	.98	1.7	3.3	33	71	44	9.7	4.0
MIN	1.7	1.2	.98	.98	.88	.94	1.6	3.9	31	11	3.9	2.1
AC-FT	143	83	64	60	52	64	114	763	3060	1500	371	175
CAL YR 1985 TOTAL	2486.13			MEAN	6.81	MAX	120	MIN	.68	AC-FT	4930	
WTR YR 1986 TOTAL	3247.99			MEAN	8.90	MAX	71	MIN	.88	AC-FT	6440	

WILLIAMS FORK BASIN

09035830 SOUTH FORK OF WILLIAMS FORK NEAR PTARMIGAN PASS, CO--Continued

PERIOD OF RECORD.--October 1984 to August 1986 (discontinued).

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	SPECIFIC CONDUCTANCE (US/CM)	PH (STANDARD UNITS)	TEMPERATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNESIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTASSIUM, DIS-SOLVED (MG/L AS K)	ALKALINITY LAB (MG/L AS CAC03)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLORIDE, DIS-SOLVED (MG/L AS CL)
OCT 18...	0855	63	7.0	6.0	--	8.8	1.4	1.0	0.4	23	7.0	0.2
MAR 25...	1010	75	7.7	0.5	12.6	10	1.8	1.2	0.6	31	5.9	0.2
AUG 25...	1120	55	8.1	7.5	8.3	8.8	1.5	1.1	0.4	26	5.8	0.2

DATE	FLUORIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L)	NITROGEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITROGEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITROGEN, DIS-SOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS-SOLVED (MG/L AS N)	NITROGEN, AMMONIA DIS-SOLVED (MG/L AS NH4)	NITROGEN, NITRITE DIS-SOLVED (MG/L AS N)	PHOSPHORUS, DIS-SOLVED (MG/L AS P)	PHOSPHORUS, ORTHO, DIS-SOLVED (MG/L AS P)
OCT 18...	0.3	4.8	38	0.09	0.27	0.87	0.6	0.12	<0.01	<0.01	0.01
MAR 25...	0.2	4.8	43	<0.01	0.52	--	0.4	--	<0.01	<0.01	<0.01
AUG 25...	0.3	4.3	38	<0.01	0.14	--	0.3	--	<0.01	<0.01	--

DATE	TIME	ALUMINUM, DIS-SOLVED (UG/L AS AL)	IRON, DIS-SOLVED (UG/L AS FE)	MANGANESE, DIS-SOLVED (UG/L AS MN)	ZINC, DIS-SOLVED (UG/L AS ZN)
OCT 18...	0855	20	30	9	<3
MAR 25...	1010	20	35	3	6
AUG 25...	1120	30	45	2	5

09035840 SOUTH FORK OF WILLIAMS FORK ABOVE TRIBUTARY NEAR PTARMIGAN PASS, CO

LOCATION.--Lat 39°42'13", long 105°58'54", in Grand County, Hydrologic Unit 14010001, on right bank, 1.5 mi upstream from Short Creek, 1.7 mi northeast of Ptarmigan Pass.

DRAINAGE AREA.--5.53 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1984 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 10,360 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 1-6, 8-11, 13-17, Oct. 19 to Mar. 31, Apr. 3-6, 12, 13, 16, 27, May 5. Records, good except for estimated daily discharges, which are poor. No diversion upstream from station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 182 ft³/s, June 8, 1985, gage height, 2.17 ft; maximum gage height, 2.56 ft, May 1, 1985 (backwater from ice); minimum daily discharge, 1.1 ft³/s, Feb. 13-19, 1986.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 123 ft³/s at 1930 June 19, gage height, 1.91 ft; 1.1 ft³/s, Feb. 13-19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.8	2.9	2.3	1.9	1.7	1.2	3.2	8.1	39	59	17	7.6
2	3.8	2.8	2.3	1.9	1.7	1.2	3.3	9.8	45	56	16	7.4
3	3.8	2.8	2.2	1.9	1.7	1.2	3.3	12	54	58	15	7.3
4	3.8	2.8	2.2	1.9	1.7	1.2	3.3	15	56	59	15	6.7
5	3.8	2.8	2.2	1.9	1.6	1.2	3.6	15	59	59	14	7.0
6	3.8	2.8	2.2	1.9	1.6	1.2	4.0	12	69	55	14	5.9
7	3.9	2.8	2.2	1.9	1.6	1.2	4.2	9.8	76	55	13	6.1
8	3.9	2.7	2.1	1.9	1.6	1.2	4.3	9.1	74	46	12	7.8
9	3.8	2.7	2.1	1.9	1.6	1.2	3.5	8.4	67	43	12	6.7
10	3.8	2.7	2.1	1.9	1.6	1.2	3.3	12	58	42	12	6.6
11	3.8	2.7	2.1	1.8	1.5	1.2	3.0	11	52	35	11	7.0
12	3.8	2.7	2.1	1.8	1.2	1.2	2.9	11	52	32	12	6.3
13	3.8	2.6	2.1	1.8	1.1	1.2	2.9	13	56	30	11	5.7
14	3.7	2.6	2.1	1.8	1.1	1.2	2.8	14	62	29	10	5.5
15	3.6	2.6	2.1	1.8	1.1	1.2	2.7	12	71	28	9.7	5.0
16	3.5	2.6	2.0	1.8	1.1	1.2	2.7	10	74	27	9.3	4.8
17	3.4	2.5	2.0	1.8	1.1	1.2	2.7	12	81	32	9.0	4.8
18	3.2	2.5	2.0	1.8	1.1	1.2	2.7	12	83	30	8.6	4.6
19	3.2	2.5	2.0	1.8	1.1	1.2	2.7	15	87	27	8.9	4.5
20	3.1	2.5	2.0	1.8	1.2	1.2	2.7	18	88	33	9.0	4.3
21	3.1	2.5	2.0	1.8	1.2	1.2	2.7	21	82	33	9.2	4.2
22	3.1	2.4	2.0	1.8	1.2	1.2	3.0	24	79	30	11	4.1
23	3.1	2.4	2.0	1.7	1.2	1.2	4.1	23	77	30	11	4.2
24	3.0	2.4	2.0	1.7	1.2	1.2	4.0	21	75	27	9.8	4.0
25	3.0	2.4	2.0	1.7	1.2	1.3	4.0	24	68	25	9.7	4.4
26	3.0	2.4	1.9	1.7	1.2	1.5	3.6	28	74	24	9.2	4.6
27	3.0	2.4	1.9	1.7	1.2	1.7	3.5	30	71	22	8.5	4.9
28	3.0	2.3	1.9	1.7	1.2	1.9	3.5	35	69	21	7.9	4.3
29	2.9	2.3	1.9	1.7	---	2.2	4.5	37	64	20	7.9	4.4
30	2.9	2.3	1.9	1.7	---	2.5	6.4	37	62	19	7.7	4.5
31	2.9	---	1.9	1.7	---	2.9	---	42	---	18	7.7	---
TOTAL	106.3	77.4	63.8	55.9	37.6	42.8	103.1	561.2	2024	1104	338.1	165.2
MEAN	3.43	2.58	2.06	1.80	1.34	1.38	3.44	18.1	67.5	35.6	10.9	5.51
MAX	3.9	2.9	2.3	1.9	1.7	2.9	6.4	42	88	59	17	7.8
MIN	2.9	2.3	1.9	1.7	1.1	1.2	2.7	8.1	39	18	7.7	4.0
AC-FT	211	154	127	111	75	85	204	1110	4010	2190	671	328
CAL YR 1985	TOTAL	3243.9		MEAN	8.89	MAX	107	MIN	1.2	AC-FT	6430	
WTR YR 1986	TOTAL	4679.4		MEAN	12.8	MAX	88	MIN	1.1	AC-FT	9280	

WILLIAMS FORK BASIN

09035840 SOUTH FORK OF WILLIAMS FORK ABOVE TRIB NEAR PTARMIGAN PASS, CO--Continued

PERIOD OF RECORD.--October 1984 to August 1986 (discontinued).

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY LAB (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)
OCT 18...	0915	72	7.2	3.0	--	10	2.2	1.4	0.6	28	8.3
MAR 25...	1100	84	8.3	0.5	13.0	11	2.6	1.4	0.7	36	5.0
JUN 05...	0945	48	7.6	2.5	10.2	6.6	1.3	0.8	0.4	20	5.0
AUG 25...	1240	65	7.5	8.5	8.2	10	2.0	1.2	0.6	31	6.0

DATE	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)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)
OCT 18...	0.7	0.3	5.4	46	0.03	0.18	<0.2	0.04	<0.01	<0.01	0.01
MAR 25...	0.3	0.3	5.8	49	<0.01	0.17	0.3	--	<0.01	<0.01	<0.01
JUN 05...	0.2	0.2	4.4	31	0.09	0.28	0.6	0.12	<0.01	<0.01	--
AUG 25...	0.1	0.3	4.9	45	0.01	0.11	<0.2	0.01	<0.01	0.02	--

DATE	TIME	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	ZINC, DIS- SOLVED (UG/L AS ZN)
OCT 18...	0915	20	49	5	5
MAR 25...	1100	20	78	9	4
JUN 05...	0945	40	34	1	<3
AUG 25...	1240	20	56	3	<3

09035845 SOUTH FORK OF WILLIAMS FORK TRIBUTARY NEAR PTARMIGAN PASS, CO

LOCATION.--Lat 39°42'10", long 105°59'06", Grand County, Hydrologic Unit 14010001, on right bank 1.3 mi upstream from Short Creek, 1.5 mi northeast of Ptarmigan Pass.

DRAINAGE AREA.--0.60 mi².

PERIOD OF RECORD.--October 1984 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 10,240 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 10, 16, Nov. 4, 9-11, 15-28, Dec. 4, 9-20, Dec. 24 to Jan. 21, 28, 29, Jan. 31 to Feb. 15. Records good except for estimated daily discharges, which are poor. No diversion upstream from station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5.7 ft³/s, June 8, 1985 gage height 1.97 ft; minimum daily, 0.02 ft³/s, Feb. 16-19, 1986.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4.3 ft³/s at 1930 June 6, gage height 1.84 ft; minimum daily, 0.02 ft³/s, Feb. 14-19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.07	.07	.06	.06	.06	.03	.05	.07	1.6	.86	.10	.09
2	.07	.07	.06	.06	.06	.03	.05	.08	2.3	.77	.09	.09
3	.07	.07	.06	.06	.06	.03	.06	.08	2.6	.90	.09	.09
4	.07	.07	.06	.06	.06	.03	.07	.12	2.4	.92	.09	.09
5	.07	.07	.06	.06	.06	.03	.07	.13	2.3	.92	.09	.09
6	.07	.07	.06	.06	.06	.04	.06	.11	3.0	.72	.09	.08
7	.07	.07	.06	.06	.06	.04	.06	.09	3.2	.68	.09	.08
8	.07	.06	.06	.06	.06	.04	.06	.08	2.7	.41	.09	.09
9	.07	.06	.06	.06	.06	.04	.06	.07	2.1	.36	.09	.08
10	.07	.06	.06	.06	.06	.04	.06	.06	1.3	.35	.09	.09
11	.07	.06	.06	.06	.05	.04	.05	.09	.88	.27	.07	.08
12	.07	.06	.06	.06	.04	.04	.05	.11	.87	.24	.08	.08
13	.07	.06	.06	.06	.03	.04	.04	.13	.98	.23	.08	.08
14	.07	.06	.06	.06	.02	.04	.04	.15	1.4	.21	.08	.08
15	.07	.06	.06	.06	.02	.04	.05	.14	2.1	.20	.08	.08
16	.07	.06	.06	.06	.02	.04	.05	.18	2.6	.19	.08	.08
17	.07	.06	.06	.06	.02	.04	.04	.15	2.9	.26	.08	.08
18	.07	.06	.06	.06	.02	.04	.04	.15	2.9	.24	.08	.07
19	.07	.06	.06	.06	.02	.04	.04	.18	3.0	.20	.09	.07
20	.07	.06	.06	.06	.03	.05	.04	.30	3.0	.26	.08	.07
21	.07	.06	.06	.06	.03	.05	.04	.50	2.7	.28	.09	.07
22	.07	.06	.06	.06	.03	.04	.05	.64	2.5	.23	.10	.07
23	.07	.06	.06	.06	.03	.04	.05	.70	2.4	.26	.09	.07
24	.07	.06	.06	.06	.03	.04	.06	.61	2.3	.22	.09	.08
25	.07	.06	.06	.06	.03	.04	.06	.75	1.9	.19	.09	.08
26	.07	.06	.06	.06	.03	.05	.06	.96	2.2	.16	.09	.08
27	.07	.06	.06	.06	.03	.05	.06	1.0	2.0	.15	.09	.08
28	.07	.06	.06	.06	.03	.05	.06	1.2	1.9	.13	.09	.07
29	.07	.06	.06	.06	---	.05	.06	1.3	1.6	.12	.09	.07
30	.07	.06	.06	.06	---	.05	.06	1.4	1.3	.11	.09	.07
31	.07	---	.06	.06	---	.05	---	1.8	---	.11	.09	---
TOTAL	2.17	1.87	1.86	1.86	1.11	1.27	1.60	13.33	64.93	11.15	2.71	2.38
MEAN	.07	.06	.06	.06	.04	.04	.05	.43	2.16	.36	.09	.08
MAX	.07	.07	.06	.06	.06	.05	.07	1.8	3.2	.92	.10	.09
MIN	.07	.06	.06	.06	.02	.03	.04	.06	.87	.11	.07	.07
AC-FT	4.3	3.7	3.7	3.7	2.2	2.5	3.2	26	129	22	5.4	4.7
CAL YR 1985	TOTAL		83.90	MEAN		.23	MAX	3.9	MIN	.04	AC-FT	166
WTR YR 1986	TOTAL		106.24	MEAN		.29	MAX	3.2	MIN	.02	AC-FT	211

WILLIAMS FORM BASIN

09035845 SOUTH FORK OF WILLIAMS FORK TRIB NEAR PTARMIGAN PASS, CO--Continued

PERIOD OF RECORD.--October 1985 to August 1986 (discontinued).

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LITY LAB (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)
OCT 18...	0925	82	7.1	4.5	--	11	2.7	1.5	0.7	36	6.0
JUN 05...	0930	43	7.7	1.0	10.2	5.9	0.94	0.7	0.3	17	4.6
AUG 25...	1300	72	7.5	9.0	7.7	11	2.8	1.3	0.7	37	4.4

DATE	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 CONSTITU- ENTS, DIS- SOLVED (MG/L)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)
OCT 18...	0.2	0.4	5.7	51	0.02	0.20	<0.2	0.03	<0.01	<0.01	0.01
JUN 05...	0.5	0.2	4.0	28	0.02	0.24	0.3	0.03	<0.01	<0.01	<0.01
AUG 25...	0.1	0.4	6.1	49	<0.01	0.15	<0.2	--	<0.01	<0.01	--

DATE	TIME	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	ZINC, DIS- SOLVED (UG/L AS ZN)
OCT 18...	0925	20	19	2	5
JUN 05...	0930	40	49	1	<3
AUG 25...	1300	<10	11	<1	<3

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DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.0	3.7	2.9	2.3	2.1	1.5	4.4	9.3	49	65	18	9.0
2	3.8	3.7	2.9	2.3	2.1	1.5	4.5	11	56	63	18	9.0
3	3.9	3.7	2.8	2.3	2.1	1.5	4.6	14	68	62	17	8.8
4	3.9	3.7	2.8	2.3	2.1	1.5	4.7	16	70	66	17	8.2
5	3.8	3.6	2.8	2.3	2.0	1.5	5.0	16	73	65	15	8.3
6	3.8	3.6	2.8	2.3	2.0	1.5	5.2	13	85	60	15	7.5
7	4.0	3.6	2.7	2.3	2.0	1.5	5.4	11	94	61	14	7.6
8	4.0	3.5	2.7	2.3	2.0	1.5	4.6	9.7	91	53	14	9.6
9	3.9	3.5	2.7	2.3	2.0	1.5	4.3	8.3	83	51	13	7.9
10	4.3	3.5	2.7	2.3	2.0	1.5	3.9	8.6	72	50	13	8.0
11	4.8	3.4	2.6	2.2	1.6	1.5	3.9	11	64	43	12	8.3
12	4.6	3.4	2.6	2.2	1.4	1.5	3.8	12	63	39	13	7.4
13	4.5	3.4	2.6	2.2	1.3	1.5	3.6	14	67	37	13	6.9
14	4.4	3.4	2.6	2.2	1.3	1.5	3.4	14	72	35	12	6.6
15	5.0	3.3	2.5	2.2	1.3	1.5	3.3	12	81	33	11	6.4
16	4.7	3.3	2.5	2.2	1.3	1.5	3.3	11	84	32	10	6.2
17	4.5	3.3	2.5	2.2	1.3	1.5	3.3	10	91	36	9.6	6.0
18	4.2	3.2	2.4	2.2	1.3	1.5	3.3	11	95	36	9.4	5.8
19	4.3	3.2	2.4	2.2	1.3	1.5	3.3	15	99	32	9.7	5.8
20	4.3	3.2	2.4	2.2	1.5	1.5	3.2	20	98	36	9.8	5.7
21	4.2	3.1	2.4	2.2	1.5	1.5	3.3	26	92	40	10	5.5
22	4.0	3.1	2.4	2.2	1.5	1.5	3.7	30	86	34	12	5.4
23	4.0	3.1	2.4	2.1	1.5	1.5	4.6	28	82	36	12	5.3
24	4.1	3.1	2.4	2.1	1.5	1.5	4.6	27	80	32	11	5.3
25	4.1	3.0	2.4	2.1	1.5	1.5	4.6	32	74	30	11	5.4
26	4.0	3.0	2.3	2.1	1.5	1.6	4.3	38	79	28	12	5.6
27	4.0	3.0	2.3	2.1	1.5	1.8	4.3	40	77	26	9.9	5.3
28	4.0	3.0	2.3	2.1	1.5	2.2	4.3	45	76	23	9.5	5.4
29	3.9	2.9	2.3	2.1	---	2.7	4.9	48	73	22	9.4	5.4
30	3.9	2.9	2.3	2.1	---	3.3	6.9	49	70	21	9.4	5.5
31	3.8	---	2.3	2.1	---	3.8	---	53	---	20	9.2	---
TOTAL	128.7	99.4	78.7	68.3	46.0	52.9	126.5	662.9	2344	1267	378.9	203.1
MEAN	4.15	3.31	2.54	2.20	1.64	1.71	4.22	21.4	78.1	40.9	12.2	6.77
MAX	5.0	3.7	2.9	2.3	2.1	3.8	6.9	53	99	66	18	9.6
MIN	3.8	2.9	2.3	2.1	1.3	1.5	3.2	8.3	49	20	9.2	5.3
AC-FT	255	197	156	135	91	105	251	1310	4650	2510	752	403
CAL YR 1985	TOTAL	3897.1		MEAN	10.7	MAX	110	MIN	2.3	AC-FT	7730	
WTR YR 1986	TOTAL	5456.4		MEAN	14.9	MAX	99	MIN	1.3	AC-FT	10820	

WILLIAMS FORK BASIN

09035850 SOUTH FORK OF WILLIAMS FORK ABOVE SHORT CREEK NEAR PTARMIGAN PASS, CO--Continued

PERIOD OF RECORD.--October 1984 to August 1986 (discontinued).

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	SPECIFIC CONDUCTANCE (US/CM)	PH (STANDARD UNITS)	TEMPERATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNESIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTASSIUM, DIS-SOLVED (MG/L AS K)	ALKALINITY LAB (MG/L AS CaCO3)	SULFATE DIS-SOLVED (MG/L AS SO4)
OCT 18...	09:20	73	7.2	3.0	--	9.7	2.1	1.5	0.6	29	8.4
JUN 05...	10:10	49	7.8	3.0	9.8	6.5	1.4	0.9	0.4	20	4.9
AUG 25...	13:30	66	7.9	9.0	8.2	10	2.1	1.1	0.6	32	6.1

DATE	CHLORIDE, DIS-SOLVED (MG/L AS CL)	FLUORIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L)	NITROGEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITROGEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS-SOLVED (MG/L AS N)	NITROGEN, AMMONIA DIS-SOLVED (MG/L AS NH4)	NITROGEN, NITRITE DIS-SOLVED (MG/L AS N)	PHOSPHORUS, DIS-SOLVED (MG/L AS P)	PHOSPHORUS, ORTHO, DIS-SOLVED (MG/L AS P)
OCT 18...	<0.2	0.3	5.2	--	0.02	0.17	<0.2	0.03	<0.01	<0.01	0.01
JUN 05...	<0.2	0.2	4.5	31	0.06	0.27	0.6	0.08	<0.01	<0.01	--
AUG 25...	0.2	0.3	5.0	45	<0.01	0.10	<0.2	--	<0.01	<0.01	--

DATE	TIME	ALUMINUM, DIS-SOLVED (UG/L AS AL)	IRON, DIS-SOLVED (UG/L AS FE)	MANGANESE, DIS-SOLVED (UG/L AS MN)	ZINC, DIS-SOLVED (UG/L AS ZN)
OCT 18...	09:20	40	71	6	4
JUN 05...	10:10	40	40	2	3
AUG 25...	13:30	20	74	4	<3

09035870 SOUTH FORK OF WILLIAMS FORK BELOW SHORT CREEK NEAR PTARMIGAN PASS, CO

LOCATION.--Lat 39°44'57", long 106°01'53", in Grand County, Hydrologic Unit 14010001 on left bank 3.25 mi downstream from Short Creek, 4.5 mi northwest of Ptarmigan Pass.

DRAINAGE AREA.--20.0 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1984 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 9,360 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 11 to Apr. 10. Records good except for estimated daily discharges, which are poor. No diversions upstream from station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 302 ft³/s, June 8, 1985, gage height, 2.51 ft; minimum daily, 4.6 ft³/s, Feb. 12-19, 1986.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 229 ft³/s at 1900 June 19, gage height, 2.32 ft; minimum daily, 4.6 ft³/s, Feb. 12-19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.4	11	7.0	5.4	5.4	5.0	9.0	24	106	128	39	22
2	9.3	10	7.0	5.4	5.4	5.0	9.2	29	114	121	38	21
3	9.8	10	7.0	5.4	5.4	5.0	9.2	36	138	122	37	20
4	10	10	6.8	5.4	5.4	5.0	9.2	43	147	133	36	19
5	8.9	10	6.8	5.4	5.4	5.0	9.6	44	156	132	35	19
6	9.5	10	6.8	5.4	5.4	5.0	10	39	176	119	33	17
7	13	9.8	6.6	5.4	5.4	5.0	11	34	183	119	32	20
8	12	9.8	6.6	5.4	5.4	5.0	12	32	186	101	31	26
9	12	9.4	6.6	5.4	5.4	5.0	10	28	175	97	30	20
10	12	9.0	6.6	5.4	5.4	5.0	10	27	151	97	28	23
11	12	9.0	6.2	5.4	5.0	5.0	10	32	131	85	28	21
12	12	8.6	6.2	5.4	4.6	5.0	9.8	37	130	79	33	19
13	12	8.6	6.2	5.4	4.6	5.0	9.6	41	140	75	30	18
14	12	8.4	6.2	5.4	4.6	5.0	10	44	149	71	27	17
15	12	8.4	6.2	5.4	4.6	5.0	10	41	161	68	25	16
16	12	8.2	6.2	5.4	4.6	5.0	9.6	38	170	66	24	16
17	12	8.2	6.2	5.4	4.6	5.0	9.3	36	180	73	22	15
18	12	8.0	6.0	5.4	4.6	5.0	8.9	37	180	71	22	15
19	12	8.0	6.0	5.4	4.6	5.0	8.8	44	187	66	22	15
20	12	7.6	6.0	5.4	5.0	5.0	8.5	53	194	69	23	15
21	12	7.6	5.8	5.4	5.0	5.0	8.6	68	190	73	24	14
22	12	7.6	5.8	5.4	5.0	5.0	9.7	74	180	64	25	14
23	12	7.4	5.8	5.4	5.0	5.0	13	73	175	64	26	15
24	12	7.4	5.6	5.4	5.0	5.0	13	69	172	60	26	15
25	12	7.4	5.6	5.4	5.0	5.5	14	74	159	56	24	16
26	12	7.2	5.6	5.4	5.0	6.2	13	84	169	53	24	16
27	12	7.2	5.4	5.4	5.0	6.7	12	87	161	50	21	15
28	12	7.2	5.4	5.4	5.0	7.2	12	93	157	47	20	16
29	12	7.2	5.4	5.4	---	7.6	14	98	149	45	21	18
30	12	7.0	5.4	5.4	---	8.2	19	101	141	43	21	16
31	11	---	5.4	5.4	---	8.6	---	109	---	41	21	---
TOTAL	356.9	255.2	190.4	167.4	140.8	170.0	322.0	1669	4807	2488	848	529
MEAN	11.5	8.51	6.14	5.40	5.03	5.48	10.7	53.8	160	80.3	27.4	17.6
MAX	13	11	7.0	5.4	5.4	8.6	19	109	194	133	39	26
MIN	8.9	7.0	5.4	5.4	4.6	5.0	8.5	24	106	41	20	14
AC-FT	708	506	378	332	279	337	639	3310	9530	4930	1680	1050
CAL YR 1985	TOTAL	10264.1		MEAN	28.1	MAX	247	MIN	5.1	AC-FT	20360	
WTR YR 1986	TOTAL	11943.7		MEAN	32.7	MAX	194	MIN	4.6	AC-FT	23690	

WILLIAMS FORK BASIN

09035870 SOUTH FORK OF WILLIAMS FORK BELOW SHORT CREEK NEAR PTARMIGAN PASS, CO--Continued

PERIOD OF RECORD.--October 1984 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY LAB (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)
OCT 18...	0905	73	7.3	5.0	--	9.2	2.1	1.7	0.8	29	7.7
MAR 25...	1400	81	7.5	0.5	13.0	10	2.4	1.8	0.7	36	6.6
JUN 05...	1050	46	7.8	3.5	10.2	6.1	1.3	1.4	0.7	19	5.1
JUL 11...	0945	53	7.6	--	--	6.5	1.4	1.2	0.6	22	4.7
AUG 25...	1015	62	8.2	8.0	8.2	9.0	2.0	1.4	0.8	31	5.3

DATE	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)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS NH4)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)
OCT 18...	0.3	0.3	5.9	46	0.02	0.12	<0.2	0.03	<0.01	<0.01	0.01
MAR 25...	0.2	0.4	4.4	48	<0.01	0.12	0.3	--	<0.01	<0.01	<0.01
JUN 05...	0.2	0.3	4.9	32	0.03	0.12	0.2	0.04	<0.01	<0.10	<0.01
JUL 11...	0.3	0.3	5.0	33	<0.01	0.12	0.3	--	<0.01	<0.01	<0.01
AUG 25...	0.2	0.3	5.7	43	0.01	<0.10	<0.2	0.01	<0.01	0.01	--

DATE	TIME	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, DIS- SOLVED (UG/L AS ZN)
OCT 18...	0905	--	20	--	25	--	1	--	<3
MAR 25...	1400	--	30	--	320	--	9	--	6
JUN 05...	1050	--	60	--	54	--	2	--	7
JUL 11...	0945	50	30	60	21	<10	3	20	17
AUG 25...	1015	--	10	--	23	--	<1	--	<3

09035880 SOUTH FORK OF WILLIAMS FORK BELOW OLD BALDY MOUNTAIN, NEAR LEAL, CO

LOCATION.--Lat 39°45'32", long 106°02'08", in Grand County, Hydrologic Unit 14010001, on right bank 5.3 mi northwest of Ptarmigan Pass, and 3.6 mi south of Leal.

DRAINAGE AREA.--21.8 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1985 to September 1986.

GAGE.--Water-stage recorder. Elevation of gage is 9,330 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges, Oct. 1 to Apr. 12, Apr. 1¹-15. Records good except for estimated daily discharges, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 285 ft³/s, June 19, 1986, gage height, 3.37 ft; minimum daily, 5.6 ft³/s, Feb. 12-19, 1986.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 285 ft³/s at 2100 June 19, 1986, gage height, 3.37 ft; minimum daily, 5.6 ft³/s, Feb. 12-19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	12	8.4	6.6	6.4	6.2	9.4	25	130	158	43	21
2	10	12	8.2	6.6	6.4	6.2	9.6	31	137	147	41	20
3	10	12	8.2	6.6	6.4	6.2	10	39	164	146	40	19
4	11	12	8.2	6.6	6.4	6.2	10	49	172	164	39	18
5	10	11	8.0	6.6	6.4	6.2	10	54	180	161	37	18
6	11	11	8.0	6.6	6.4	6.2	10	44	205	142	35	17
7	12	11	8.0	6.6	6.4	6.2	11	39	227	143	34	19
8	12	10	8.0	6.6	6.4	6.2	12	36	229	119	32	27
9	13	10	7.8	6.6	6.4	6.2	10	31	218	113	32	19
10	13	10	7.8	6.6	6.4	6.2	10	31	194	114	29	22
11	13	10	7.6	6.6	6.0	6.2	10	35	162	98	28	21
12	12	9.8	7.6	6.6	5.6	6.2	10	42	158	91	35	19
13	12	9.8	7.6	6.6	5.6	6.2	9.8	46	171	86	32	18
14	12	9.8	7.6	6.6	5.6	6.2	10	51	180	83	27	17
15	12	9.8	7.4	6.6	5.6	6.2	10	46	202	79	25	16
16	12	9.6	7.4	6.6	5.6	6.2	10	44	216	77	24	15
17	12	9.6	7.4	6.6	5.6	6.2	9.9	41	229	85	22	15
18	12	9.4	7.2	6.6	5.6	6.2	9.7	43	237	83	22	15
19	12	9.4	7.2	6.6	5.6	6.2	9.1	50	245	76	22	14
20	12	9.0	7.2	6.6	6.2	6.2	8.7	62	242	79	23	14
21	12	9.0	7.2	6.6	6.2	6.2	8.9	78	234	85	24	13
22	12	9.0	7.0	6.6	6.2	6.2	10	88	222	73	25	13
23	12	8.8	7.0	6.6	6.2	6.2	13	89	213	73	26	14
24	12	8.8	7.0	6.6	6.2	6.2	14	84	212	69	26	15
25	12	8.8	6.8	6.6	6.2	6.2	14	90	197	63	23	15
26	12	8.6	6.8	6.6	6.2	6.4	13	101	208	61	24	16
27	12	8.6	6.6	6.6	6.2	6.8	13	106	198	56	20	15
28	12	8.6	6.6	6.6	6.2	7.4	12	113	193	53	19	15
29	12	8.4	6.6	6.6	---	7.8	15	121	184	50	20	17
30	12	8.4	6.6	6.6	---	8.4	20	125	174	47	20	16
31	12	---	6.6	6.6	---	8.8	---	131	---	45	21	---
TOTAL	365	294.2	229.6	204.6	170.6	200.6	332.1	1965	5933	2919	870	513
MEAN	11.8	9.81	7.41	6.60	6.09	6.47	11.1	63.4	198	94.2	28.1	17.1
MAX	13	12	8.4	6.6	6.4	8.8	20	131	245	164	43	27
MIN	10	8.4	6.6	6.6	5.6	6.2	8.7	25	130	45	19	13
AC-FT	724	584	455	406	338	398	659	3900	11770	5790	1730	1020
WTR YR 1986	TOTAL	13996.7		MEAN	38.3	MAX	245	MIN	5.6	AC-FT	27760	

WILLIAMS FORK BASIN

09035880 SOUTH FORK OF WILLIAMS FORK BELOW OLD BALDY MT NEAR LEAL, CO--Continued

PERIOD OF RECORD.--October 1985 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	SPECIFIC CONDUCTANCE (US/CM)	PH (STANDARD UNITS)	TEMPERATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNESIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTASSIUM, DIS-SOLVED (MG/L AS K)	ALKALINITY LAB (MG/L AS CaCO3)	SULFATE DIS-SOLVED (MG/L AS SO4)
MAR 25...	1040	85	8.2	1.5	8.9	10	2.5	1.9	0.9	37	6.1
JUN 05...	1145	48	7.4	4.5	10.0	5.7	1.2	1.3	0.7	20	5.1
JUL 11...	1100	54	7.7	7.5	8.9	6.7	1.5	1.3	0.6	22	4.7
AUG 25...	0840	63	8.1	7.5	8.0	9.2	2.1	1.5	0.8	32	5.1

DATE	CHLORIDE, DIS-SOLVED (MG/L AS CL)	FLUORIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L)	NITROGEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITROGEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS-SOLVED (MG/L AS N)	NITROGEN, AMMONIA DIS-SOLVED (MG/L AS NH4)	NITROGEN, NITRITE DIS-SOLVED (MG/L AS N)	PHOSPHORUS, DIS-SOLVED (MG/L AS P)	PHOSPHORUS, ORTHO, DIS-SOLVED (MG/L AS P)
MAR 25...	0.6	0.3	6.5	51	0.01	0.14	0.3	0.01	<0.01	<0.01	<0.01
JUN 05...	0.2	0.2	4.9	31	0.03	0.12	<0.2	0.04	<0.01	<0.01	--
JUL 11...	0.5	0.3	5.1	34	<0.01	0.12	<0.2	--	<0.01	0.01	<0.01
AUG 25...	0.2	0.3	5.9	44	<0.01	<0.10	<0.2	--	<0.01	<0.01	<0.01

DATE	TIME	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)	ALUMINUM, DIS-SOLVED (UG/L AS AL)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DIS-SOLVED (UG/L AS MN)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
MAR 25...	1040	--	30	--	51	--	5	--	<3
JUN 05...	1145	--	40	--	59	--	2	--	<3
JUL 11...	1100	60	30	80	26	10	3	<10	4
AUG 25...	0840	--	20	--	37	--	2	--	<3

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 mi².

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

GAGE.--Water-stage recorder. Elevation of gage is 8,950 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 7 to May 1. Records good except for estimated daily discharges, which are poor. No diversion upstream from station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--21 years, 33.2 ft³/s; 24,050 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 464 ft³/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 ft³/s, Mar. 6, 1967.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 200 ft³/s, and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
June 6	2300	*279	*3.22	July 4	0100	207	3.01
June 19	2100	264	3.18				

Minimum daily discharge, 6.9 ft³/s, Feb. 12-18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	14	14	8.6	8.0	7.8	11	27	141	127	44	26
2	16	15	13	8.4	8.0	7.8	11	36	147	119	42	25
3	16	15	13	8.4	8.0	7.8	11	45	169	119	41	24
4	17	14	313	8.2	8.0	7.8	11	57	189	137	41	22
5	16	14	13	8.2	8.0	7.8	11	62	200	133	39	22
6	16	16	13	8.0	8.0	7.8	11	52	221	119	38	21
7	19	16	13	8.0	8.0	7.8	13	45	242	119	37	23
8	19	15	13	8.0	8.0	7.8	14	42	224	105	36	31
9	17	15	12	8.0	8.0	7.8	12	37	216	101	35	24
10	17	16	12	8.0	8.0	7.8	12	35	198	102	33	27
11	20	19	12	8.0	7.4	7.8	12	40	171	89	32	25
12	18	18	12	8.0	6.9	7.8	12	48	166	84	37	22
13	17	17	12	8.0	6.9	7.8	12	52	173	81	36	21
14	16	16	12	8.0	6.9	7.8	12	58	179	77	32	20
15	16	16	12	8.0	6.9	7.8	12	53	196	75	30	20
16	17	16	11	8.0	6.9	7.8	12	51	202	72	29	19
17	17	16	11	8.0	6.9	7.8	12	46	211	76	27	18
18	16	16	11	8.0	6.9	7.8	11	47	215	78	26	18
19	16	16	11	8.0	7.8	7.8	11	56	226	72	26	18
20	16	16	11	8.0	7.8	7.8	11	71	227	72	28	17
21	16	15	11	8.0	7.8	7.8	13	90	215	79	29	17
22	15	15	11	8.0	7.8	7.8	16	102	200	69	29	17
23	15	15	11	8.0	7.8	7.8	18	101	185	69	31	17
24	15	15	11	8.0	7.8	7.8	19	97	185	65	30	18
25	15	14	10	8.0	7.8	7.8	19	102	166	62	28	19
26	15	14	9.8	8.0	7.8	8.0	18	112	177	59	29	19
27	15	14	9.5	8.0	7.8	8.8	17	116	167	56	26	18
28	15	14	9.4	8.0	7.8	9.0	15	123	159	53	24	19
29	15	14	9.0	8.0	---	9.8	19	131	150	50	25	20
30	15	14	8.8	8.0	---	10	22	132	142	48	26	19
31	15	---	8.6	8.0	---	11	---	139	---	46	26	---
TOTAL	504	460	653.1	249.8	213.7	251.6	410	2205	5659	2613	992	626
MEAN	16.3	15.3	21.1	8.06	7.63	8.12	13.7	71.1	189	84.3	32.0	20.9
MAX	20	19	313	8.6	8.0	11	22	139	242	137	44	31
MIN	15	14	8.6	8.0	6.9	7.8	11	27	141	46	24	17
AC-FT	1000	912	1300	495	424	499	813	4370	11220	5180	1970	1240
CAL YR 1985	TOTAL	12596.3		MEAN	34.5	MAX	313	MIN	7.0	AC-FT	24980	
WTR YR 1986	TOTAL	14837.2		MEAN	40.6	MAX	313	MIN	6.9	AC-FT	29430	

WILLIAMS FORK BASIN

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 mi².

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. Elevation of gage is 8,790 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Aug. 16, 1953, at site 15 ft downstream at present datum.

REMARKS.--Estimated Daily discharges: Jan. 5, Feb. 7, 10, Mar. 14-19. Records good. Transmountain diversion upstream from station through August P. Gumlick Tunnel (see table below for figures of diversion). Diversions for irrigation of about 200 acres of hay meadows upstream from station and about 40 acres downstream from station. 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.--53 years, 105 ft³/s; 76,070 acre-ft/yr, including diversions to August P. Gumlick Tunnel.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,720 ft³/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 ft³/s, at times in 1939, 1963, 1964, and 1967.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 885 ft³/s at 0100 June 8, gage height, 3.81 ft; minimum daily, 16 ft³/s, Feb. 14, 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	57	29	26	22	20	19	39	87	365	519	98	63
2	61	32	28	22	20	18	42	106	395	480	94	59
3	61	34	28	22	19	18	37	130	442	466	93	57
4	63	31	27	22	20	18	37	157	473	540	99	52
5	43	34	24	22	20	18	36	182	506	523	90	50
6	42	29	29	22	20	17	37	156	574	471	85	47
7	59	30	28	22	20	19	44	137	672	457	90	55
8	62	31	27	22	20	19	48	131	766	399	82	69
9	56	24	27	21	20	19	47	110	776	374	80	55
10	47	32	26	22	19	19	42	98	728	375	76	61
11	52	35	27	21	18	19	40	111	608	331	74	59
12	45	33	25	21	18	19	40	136	584	308	79	54
13	45	29	26	21	18	19	41	144	609	293	81	50
14	44	25	25	21	16	19	38	194	618	283	73	46
15	39	29	24	21	16	19	38	158	667	268	70	44
16	41	29	24	21	17	19	40	160	710	262	65	43
17	40	31	24	21	17	20	40	141	737	253	62	42
18	41	30	24	21	18	20	37	138	747	209	60	40
19	36	29	23	21	18	20	35	155	762	184	59	38
20	36	28	23	20	19	19	34	198	768	196	65	38
21	36	29	23	20	19	19	35	238	733	261	67	38
22	35	28	23	20	19	20	43	261	700	231	64	38
23	34	28	23	20	19	21	54	269	673	235	69	39
24	33	28	24	20	19	21	59	252	669	222	69	42
25	34	28	24	20	19	21	65	259	627	204	65	45
26	35	27	23	19	20	21	57	296	649	191	69	46
27	33	25	24	19	20	23	49	327	618	178	59	42
28	33	28	23	19	18	28	46	322	603	161	55	43
29	33	27	22	19	---	33	56	348	589	120	56	52
30	32	27	22	19	---	36	71	365	561	110	61	51
31	33	---	22	19	---	41	---	355	---	103	61	---
TOTAL	1341	879	768	642	526	661	1327	6121	18929	9207	2270	1458
MEAN	43.3	29.3	24.8	20.7	18.8	21.3	44.2	197	631	297	73.2	48.6
MAX	63	35	29	22	20	41	71	365	776	540	99	69
MIN	32	24	22	19	16	17	34	87	365	103	55	38
AC-FT	2660	1740	1520	1270	1040	1310	2630	12140	37550	18260	4500	2890
a	377	200	157	146	66	71	168	2150	1350	769	1250	726
CAL YR 1985	TOTAL	37682	MEAN	103	MAX	931	MIN	19	AC-FT	74740		
WTR YR 1986	TOTAL	44129	MEAN	121	MAX	776	MIN	16	AC-FT	87530		

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

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 left 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 mi².

WATER-DISCHARGE RECORDS

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. Aug. 10, 1938 to Aug. 19, 1983 gage located on right bank at present datum.

REMARKS.--Estimated daily discharges: Nov. 2 to Apr. 22. Records good except for estimated daily discharges, which are poor. Transmountain diversion upstream from station through August P. Gumlick Tunnel (station 09036000). Diversions upstream from station for irrigation of about 1,300 acres upstream from station, and about 2,500 acres downstream from station. About 150 acres upstream from station irrigated by diversions into the drainage area.

AVERAGE DISCHARGE.--73 years, 138 ft³/s; 99,980 acre-ft/yr, including diversion to August P. Gumlick Tunnel.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 2,620 ft³/s, June 14, 1918, gage height, 6.05 ft, site and datum then in use, from rating curve extended above 1,400 ft³/s; minimum daily, 4.8 ft³/s, May 6, 1910, 1972.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,120 ft³/s at 0500 June 8, gage height, 4.10 ft; minimum daily, 22 ft³/s, Aug. 28, 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	73	53	46	43	40	40	61	177	450	494	39	63
2	74	52	46	43	40	40	63	205	405	440	37	94
3	76	52	46	43	40	40	66	243	447	413	34	94
4	79	52	46	43	40	40	69	272	450	497	36	84
5	67	52	46	43	40	40	72	331	616	478	38	82
6	65	52	46	43	40	40	76	293	821	450	34	79
7	79	52	46	43	40	40	70	266	974	416	32	84
8	99	52	46	43	40	40	70	251	1010	376	32	105
9	84	52	46	43	40	40	71	224	955	335	31	92
10	80	52	46	43	40	41	72	197	877	339	30	94
11	91	52	46	43	40	42	72	202	700	285	28	98
12	84	52	46	43	38	44	72	226	633	233	28	89
13	80	52	46	43	37	46	74	229	641	210	32	82
14	74	52	46	43	36	41	72	263	627	205	30	77
15	65	52	46	40	34	40	69	246	641	180	30	76
16	71	52	46	40	33	39	71	254	706	177	27	74
17	68	52	46	40	33	38	73	240	727	170	26	73
18	70	52	46	40	33	38	70	232	747	150	25	71
19	65	52	46	40	33	39	66	240	747	126	24	71
20	64	52	46	40	33	39	62	269	752	120	25	70
21	62	52	44	40	33	40	70	361	717	176	30	68
22	64	52	43	40	33	41	90	434	674	156	27	68
23	61	52	43	40	33	44	116	443	636	156	27	70
24	62	52	43	40	35	46	124	420	636	161	28	71
25	59	52	43	40	39	49	132	413	601	156	28	76
26	64	50	43	40	40	50	124	443	609	134	27	80
27	61	50	43	40	40	53	112	466	582	124	24	77
28	61	50	43	40	40	55	109	470	556	112	22	76
29	61	50	43	40	---	57	118	478	565	82	22	80
30	61	50	43	40	---	58	150	486	518	73	25	84
31	61	---	43	40	---	60	---	447	---	53	24	---
TOTAL	2185	1551	1394	1282	1043	1360	2536	9721	20020	7477	902	2402
MEAN	70.5	51.7	45.0	41.4	37.3	43.9	84.5	314	667	241	29.1	80.1
MAX	99	53	46	43	40	60	150	486	1010	497	39	105
MIN	59	50	43	40	33	38	61	177	405	53	22	63
AC-FT	4330	3080	2760	2540	2070	2700	5030	19280	39710	14830	1790	4760
CAL YR 1985	TOTAL	46193	MEAN	127	MAX	1150	MIN	37	AC-FT	91620		
WTR YR 1986	TOTAL	51873	MEAN	142	MAX	1010	MIN	22	AC-FT	102900		

WILLIAMS FORK BASIN

09037500 WILLIAMS FORK NEAR PARSHALL, CO--Continued

PERIOD OF RECORD.--April to September 1986.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: April to September 1986.

WATER TEMPERATURE: April to September 1986.

INSTRUMENTATION.--Water quality monitor since April 1986.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum for period April to September, 115 microsiemens Aug. 29; minimum, 37 microsiemens June 20.

WATER TEMPERATURE: Maximum for period April to September, 21.5°C Aug. 18; minimum, 1.5°C May 10.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 20 DAY (MG/L)	HARD- NESS (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)
APR										
29...	1230	90	90	8.2	9.0	9.9	1.0	2.4	33	10
MAY										
13...	1030	248	79	7.9	5.5	8.9	1.0	2.4	32	9.8
23...	1130	437	56	7.6	5.0	9.5	--	--	24	7.3
JUN										
12...	1330	608	54	8.2	9.0	8.7	--	--	22	6.7
JUL										
16...	1430	173	69	7.6	14.0	7.9	--	--	27	8.5
SEP										
09...	1210	69	91	8.1	13.5	8.7	--	--	40	12

DATE	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	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 SI02)
APR									
29...	2.0	2.6	14	1.2	37	7.5	1.1	0.2	10
MAY									
13...	1.8	2.2	13	1.0	32	7.6	1.0	0.2	9.8
23...	1.5	1.8	13	0.8	26	6.7	0.6	0.2	8.7
JUN									
12...	1.2	1.4	12	0.7	23	6.0	0.1	0.2	7.2
JUL									
16...	1.5	1.6	11	0.8	29	4.6	0.4	0.3	7.6
SEP									
09...	2.4	2.3	11	1.3	41	6.2	0.7	0.3	9.6

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 TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)
APR									
29...	64	57	0.09	16	<0.10	<0.10	0.03	<0.01	0.47
MAY									
13...	62	53	0.08	42	<0.10	<0.10	0.03	0.04	0.27
23...	57	43	0.08	67	<0.10	<0.10	0.02	0.02	0.28
JUN									
12...	40	37	0.05	66	<0.10	<0.10	<0.01	0.01	--
JUL									
16...	42	43	0.06	20	<0.10	<0.10	0.01	0.03	0.29
SEP									
09...	62	59	0.08	12	<0.10	<0.10	<0.01	<0.01	--

09037500 WILLIAMS FORK NEAR PARSHALL, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	NITRO- GEN, ORGANIC 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)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, ORTHO, TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)
APR 29...	--	0.5	0.4	0.01	0.01	<0.01	<0.01	4.5	5.5
MAY 13...	0.26	0.3	0.3	0.01	0.01	<0.01	<0.01	5.6	5.7
23...	0.28	0.3	0.3	0.03	0.02	<0.01	<0.01	6.4	5.7
JUN 12...	--	0.2	<0.2	0.02	0.01	<0.01	0.01	4.7	4.8
JUL 16...	0.17	0.3	0.2	0.01	<0.01	<0.01	<0.01	2.2	2.2
SEP 09...	--	<0.2	<0.2	0.01	<0.01	<0.01	<0.01	2.5	2.3

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	70	53	---	93	102
2	---	---	---	---	---	---	---	70	54	---	98	93
3	---	---	---	---	---	---	---	67	53	---	99	93
4	---	---	---	---	---	---	---	62	55	---	101	96
5	---	---	---	---	---	---	---	58	63	---	99	102
6	---	---	---	---	---	---	---	60	61	---	101	100
7	---	---	---	---	---	---	---	61	62	---	102	99
8	---	---	---	---	---	---	---	61	---	---	102	94
9	---	---	---	---	---	---	---	65	---	---	103	98
10	---	---	---	---	---	---	---	63	---	---	105	100
11	---	---	---	---	---	---	---	63	---	---	105	100
12	---	---	---	---	---	---	---	62	---	---	106	99
13	---	---	---	---	---	---	---	61	50	---	104	100
14	---	---	---	---	---	---	---	58	51	---	106	102
15	---	---	---	---	---	---	---	58	50	---	105	104
16	---	---	---	---	---	---	---	59	48	---	107	103
17	---	---	---	---	---	---	---	61	48	67	109	103
18	---	---	---	---	---	---	---	63	47	70	109	102
19	---	---	---	---	---	---	---	62	47	73	111	101
20	---	---	---	---	---	---	---	60	46	76	110	102
21	---	---	---	---	---	---	---	57	49	69	107	102
22	---	---	---	---	---	---	---	57	51	70	109	101
23	---	---	---	---	---	---	---	57	59	71	109	101
24	---	---	---	---	---	---	---	57	63	70	108	99
25	---	---	---	---	---	---	---	57	65	71	106	96
26	---	---	---	---	---	---	---	56	---	72	108	94
27	---	---	---	---	---	---	---	53	---	74	110	94
28	---	---	---	---	---	---	---	54	---	76	111	97
29	---	---	---	---	---	---	---	53	---	81	112	96
30	---	---	---	---	---	---	68	53	---	85	110	92
31	---	---	---	---	---	---	---	53	---	88	110	---
MEAN	---	---	---	---	---	---	---	59.7	---	---	106	98.8

PLATTE RIVER BASIN

09037500 WILLIAMS FORK NEAR PARSHALL, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	10.5	3.5	9.0	5.0	13.5	7.0	19.5	9.5	13.5	9.0
2	---	---	10.5	4.0	11.0	5.5	13.5	7.5	19.5	9.5	12.5	8.0
3	---	---	9.0	3.5	10.5	5.5	12.5	8.5	15.5	9.5	15.5	7.5
4	---	---	10.0	3.5	9.5	5.0	14.0	8.5	16.5	9.0	14.0	8.0
5	---	---	8.0	2.0	9.0	4.0	12.0	9.5	17.0	9.0	15.5	8.5
6	---	---	6.5	2.5	11.5	4.5	13.0	8.0	17.5	10.0	14.5	8.0
7	---	---	7.5	2.5	10.5	4.5	11.0	8.5	18.0	9.5	14.5	9.0
8	---	---	5.5	2.5	10.5	5.0	10.0	7.5	17.0	10.0	14.5	9.0
9	---	---	6.5	2.0	8.5	5.5	11.0	7.5	19.5	9.0	13.0	9.0
10	---	---	9.0	1.5	6.5	4.5	11.0	8.0	10.0	10.0	11.0	8.0
11	---	---	11.0	3.0	10.0	3.0	12.5	7.5	16.5	9.5	12.5	6.5
12	---	---	8.0	3.5	---	---	14.0	8.5	16.0	10.0	11.5	6.0
13	---	---	10.5	3.0	9.0	5.5	14.5	9.0	17.0	9.5	12.5	7.0
14	---	---	7.0	3.5	10.5	4.5	16.0	10.5	17.5	9.5	14.5	7.5
15	---	---	7.0	3.0	11.5	5.0	16.0	11.0	19.5	8.5	13.0	7.0
16	---	---	7.0	2.0	11.0	5.5	14.0	10.5	20.0	9.5	13.5	7.5
17	---	---	8.5	1.5	10.0	6.0	14.5	9.0	20.5	10.0	12.0	6.5
18	---	---	10.0	3.5	9.5	5.5	15.0	9.5	21.5	11.0	10.5	6.5
19	---	---	11.0	4.0	11.0	5.5	14.5	9.0	20.5	12.0	12.0	4.5
20	---	---	10.0	4.0	11.5	5.5	15.5	8.5	18.5	12.0	12.0	6.0
21	---	---	10.5	4.5	11.0	5.5	15.0	8.5	19.5	12.0	12.5	6.0
22	---	---	10.0	4.0	11.5	5.5	14.5	9.5	18.5	10.5	13.5	7.5
23	---	---	8.0	3.0	12.0	6.0	14.5	10.0	17.5	10.0	12.0	8.0
24	---	---	8.5	4.5	10.0	7.5	13.5	10.0	19.0	10.0	8.5	5.0
25	---	---	11.0	3.5	9.5	6.5	15.0	8.5	15.5	11.5	9.0	3.5
26	---	---	10.5	4.0	12.0	7.0	15.0	9.5	20.0	10.0	8.5	3.5
27	---	---	10.0	4.0	13.0	7.0	16.0	9.0	19.0	10.0	10.0	2.5
28	---	---	10.5	4.5	13.0	8.0	16.5	9.0	18.5	10.5	9.5	5.5
29	---	---	9.5	4.5	10.5	8.0	17.0	9.0	18.0	11.0	9.0	5.5
30	11.5	3.5	9.5	3.5	9.5	7.5	18.0	9.5	16.5	11.0	8.0	4.0
31	---	---	10.0	4.0	---	---	18.5	9.5	16.5	9.5	---	---
MONTH			11.0	1.5			18.5	7.0	21.5	9.0	15.5	2.5

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 mi².

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 above National Geodetic Vertical Datum of 1929.

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 provided 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, 90,280 acre-ft, Sept. 30, elevation, 7,806.85 ft; minimum, 49,630 acre-ft, May 19, elevation, 7,774.04 ft.

MONTHEND ELEVATION AND CONTENTS, AT 0800, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

Date	Elevation	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.	7,799.18	79,180	-
Oct. 31.	7,799.18	79,180	0
Nov. 30.	7,797.02	76,250	-2,930
Dec. 31.	7,794.57	73,020	-3,230
CAL YR 1985			+10,130
Jan. 31.	7,791.80	69,460	-3,560
Feb. 28.	7,789.42	66,510	-2,950
Mar. 31.	7,782.50	58,490	-8,020
Apr. 30.	7,774.68	50,260	-8,230
May 31.	7,777.94	53,590	+3,330
June 30.	7,800.14	80,510	+26,920
July 31.	7,802.94	84,480	+3,970
Aug. 31.	7,804.22	86,340	+1,860
Sept. 30.	7,806.85	90,280	+3,940
WTR YR 1986			+11,100

WILLIAMS FORK BASIN

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 mi².

WATER-DISCHARGE RECORDS

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.--No estimated daily discharges. Records good. Flow completely regulated by Williams Fork Reservoir (station 09038000). Transmountain diversion upstream from station through August P. Gumlick Tunnel (station 09036000). Diversions upstream from station for irrigation of about 3,200 acres upstream from station and about 100 acres downstream from station. About 450 acres upstream from 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.--34 years, 131 ft³/s; 94,910 acre-ft/yr, adjusted for storage in Williams Fork Reservoir.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,640 ft³/s, June 20, 1953, gage height, 8.50 ft, site and datum then in use, from rating curve extended above 1,500 ft³/s; no flow for part of Apr. 29, 1975.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 290 ft³/s at 0830 Mar. 25, gage height, 2.35 ft; maximum gage-height, 2.43 ft, May 2; minimum daily discharge, 15 ft³/s, Aug. 22, 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	105	108	106	106	111	285	272	260	236	73	17
2	73	104	108	106	106	111	285	273	259	235	21	17
3	98	105	108	106	106	111	277	274	261	235	21	17
4	106	106	108	104	106	111	279	273	263	235	21	17
5	106	106	108	104	107	109	277	272	261	237	21	17
6	106	106	108	104	108	109	278	270	262	238	22	17
7	103	106	108	104	108	109	279	269	259	239	19	17
8	101	105	108	104	106	109	278	269	257	238	16	17
9	104	104	108	104	106	109	277	269	255	235	16	17
10	104	105	108	104	106	110	277	269	105	235	16	17
11	105	107	108	104	106	111	277	271	30	234	16	17
12	106	107	108	104	106	111	275	272	153	233	16	17
13	106	106	108	104	107	222	274	272	248	233	17	17
14	106	107	108	104	108	280	272	272	248	192	17	17
15	106	108	108	104	108	280	272	272	246	168	17	17
16	106	108	108	104	108	281	271	274	245	174	17	17
17	106	108	107	103	108	282	271	274	245	173	17	17
18	106	108	106	103	108	282	269	274	245	171	17	17
19	106	108	106	103	108	282	268	274	243	170	17	17
20	106	107	106	103	109	282	267	274	242	169	17	17
21	106	106	106	90	109	282	266	274	242	171	16	17
22	106	107	104	105	109	284	266	274	242	171	15	17
23	106	108	106	106	109	285	267	273	242	171	15	17
24	106	108	106	106	109	287	267	272	240	171	16	17
25	106	108	106	106	110	289	267	270	239	172	17	17
26	106	108	106	106	111	288	267	265	232	172	17	17
27	106	108	106	106	111	287	267	264	242	171	17	17
28	100	108	106	106	111	287	267	264	242	171	17	17
29	81	108	106	107	---	287	268	264	239	147	17	17
30	17	108	106	107	---	287	271	264	238	171	17	19
31	72	---	104	106	---	287	---	262	---	171	17	---
TOTAL	2995	3203	3315	3233	3020	6662	8181	8385	6985	6139	595	512
MEAN	96.6	107	107	104	108	215	273	270	233	198	19.2	17.1
MAX	106	108	108	107	111	289	285	274	263	239	73	19
MIN	17	104	104	90	106	109	266	262	30	147	15	17
AC-FT	5940	6350	6580	6410	5990	13210	16230	16630	13850	12180	1180	1020
CAL YR 1985	TOTAL	51048	MEAN	140	MAX	267	MIN	17	AC-FT	101300		
WTR YR 1986	TOTAL	53225	MEAN	146	MAX	289	MIN	15	AC-FT	105600		

09038500 WILLIAMS FORK BELOW WILLIAMS FORK RESERVOIR, CO--Continued

PERIOD OF RECORD.--April to September 1986.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: March to September 1986.

WATER TEMPERATURE: March to September 1986.

INSTRUMENTATION.--Water quality monitor from March to September 1986.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum for period March to September, 110 microsiemens Mar. 26 to Apr. 5; minimum, 76 microsiemens June 19, July 28, 31, Aug. 1.

WATER TEMPERATURE: Maximum for period March to September, 12.0°C, Aug. 15; minimum, 3.5°C, Mar. 26-28.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	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)	PERCENT SODIUM	POTAS- SIUM, DIS- SOLVED (MG/L AS K)
APR 29...	1400	316	110	7.5	5.5	9.0	45	14	2.4	2.9	12	1.5
MAY 13...	0800	316	104	8.1	7.5	9.1	47	15	2.4	2.9	11	1.5
23...	0920	272	96	7.8	7.5	8.6	42	13	2.3	2.7	12	1.3
JUN 12...	0955	32	100	7.2	8.0	8.2	42	13	2.3	2.7	12	1.3
JUL 16...	1605	172	89	7.3	9.0	6.5	35	11	1.9	2.3	12	1.1
SEP 09...	1300	17	82	8.2	10.5	9.0	38	12	1.9	2.2	11	1.3

DATE	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, 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 TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)
APR 29...	48	6.0	1.0	0.3	10	68	67	0.09	58	<0.10	<0.10	0.03
MAY 13...	46	6.6	0.9	0.2	10	74	67	0.10	63	<0.10	<0.10	0.03
23...	45	5.7	0.9	0.2	9.8	63	63	0.09	46	<0.10	<0.10	0.03
JUN 12...	45	6.1	0.7	0.2	9.8	66	63	0.09	5.7	<0.10	<0.10	0.04
JUL 16...	38	6.0	0.8	0.3	9.4	56	56	0.08	26	<0.10	0.10	0.02
SEP 09...	36	6.4	1.0	0.3	8.9	59	56	0.08	2.7	0.10	0.12	<0.01

DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC 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)	PHOS- PHORUS, ORTHO, TOTAL (MG/L AS P)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)
APR 29...	<0.01	0.37	--	0.4	0.3	--	0.01	<0.01	<0.01	<0.01	3.7	3.6
MAY 13...	0.04	0.21	0.16	0.3	0.2	0.3	0.02	0.01	<0.01	<0.01	--	4.0
23...	0.03	0.27	0.27	0.3	0.3	--	0.02	0.03	<0.01	<0.01	2.8	3.6
JUN 12...	0.03	0.26	0.17	0.3	0.2	--	0.03	0.01	0.01	0.01	4.5	4.0
JUL 16...	0.04	0.38	0.16	0.4	0.2	--	0.02	0.01	<0.01	<0.01	3.3	3.9
SEP 09...	<0.01	--	--	0.3	<0.2	0.4	0.03	0.02	<0.01	<0.01	5.0	--

WILLIAMS FORK BASIN

09038500 WILLIAMS FORK BELOW WILLIAMS FORK RESERVOIR, CO--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	109	100	95	85	81	81
2	---	---	---	---	---	---	109	100	94	85	82	81
3	---	---	---	---	---	---	109	101	94	84	81	82
4	---	---	---	---	---	---	109	100	93	84	81	82
5	---	---	---	---	---	---	109	100	95	84	81	82
6	---	---	---	---	---	---	109	100	96	85	81	82
7	---	---	---	---	---	---	109	101	96	83	81	81
8	---	---	---	---	---	---	108	101	96	83	82	81
9	---	---	---	---	---	---	108	101	96	84	81	81
10	---	---	---	---	---	---	108	100	96	83	82	81
11	---	---	---	---	---	---	109	99	97	83	81	81
12	---	---	---	---	---	---	108	99	93	83	81	81
13	---	---	---	---	---	---	101	99	91	82	81	81
14	---	---	---	---	---	---	100	99	90	82	81	81
15	---	---	---	---	---	---	103	98	92	82	81	81
16	---	---	---	---	---	---	103	98	91	82	81	82
17	---	---	---	---	---	---	101	98	90	82	81	81
18	---	---	---	---	---	---	102	99	90	81	81	81
19	---	---	---	---	---	---	101	98	89	81	81	81
20	---	---	---	---	---	---	101	96	89	80	81	81
21	---	---	---	---	---	---	101	98	88	81	81	81
22	---	---	---	---	---	---	101	96	88	80	81	81
23	---	---	---	---	---	---	101	97	87	81	81	81
24	---	---	---	---	---	---	101	96	87	80	81	81
25	---	---	---	---	---	---	101	95	87	80	81	82
26	---	---	---	---	---	109	100	95	86	80	80	82
27	---	---	---	---	---	109	100	95	87	80	81	82
28	---	---	---	---	---	109	100	94	85	80	81	82
29	---	---	---	---	---	110	100	94	86	80	81	82
30	---	---	---	---	---	109	100	94	86	79	82	82
31	---	---	---	---	---	109	---	94	---	79	81	---
MEAN	---	---	---	---	---	---	104	97.9	91.0	81.9	81.1	81.4

09038500 WILLIAMS FORK BELOW WILLIAMS FORK RESERVOIR, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---	---	3.5	3.5
27	---	---	---	---	---	---	---	---	---	---	3.5	3.5
28	---	---	---	---	---	---	---	---	---	---	3.5	3.5
29	---	---	---	---	---	---	---	---	---	---	3.5	3.5
30	---	---	---	---	---	---	---	---	---	---	3.5	3.5
31	---	---	---	---	---	---	---	---	---	---	3.5	3.5
MONTH	---	---	---	---	---	---	---	---	---	---	---	---
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	3.5	3.5	5.5	5.5	8.0	7.5	9.0	8.5	9.5	9.0	10.0	9.0
2	3.5	3.5	6.0	5.5	9.0	7.5	9.5	8.0	10.0	9.0	10.0	9.0
3	3.5	3.5	5.5	5.5	8.0	7.5	9.0	8.5	10.0	9.0	10.0	9.0
4	3.5	3.5	7.0	5.5	8.5	7.5	9.0	8.5	10.0	9.0	10.0	9.0
5	4.0	3.5	7.5	5.5	8.0	7.5	9.0	8.5	10.0	9.0	10.0	9.0
6	4.0	3.5	7.0	5.5	8.0	7.5	9.0	8.5	10.0	9.0	10.0	9.0
7	4.0	3.5	7.0	5.5	8.5	7.5	9.0	8.5	10.0	9.0	10.0	9.0
8	4.0	4.0	6.5	6.0	8.0	7.5	9.0	8.5	10.5	9.0	10.5	9.5
9	4.0	4.0	7.0	6.0	8.0	7.5	9.0	8.5	10.0	9.0	10.0	9.5
10	4.0	4.0	6.5	6.0	8.0	7.5	9.0	8.5	10.0	9.0	10.0	9.0
11	4.0	4.0	7.5	6.0	8.0	7.5	9.0	8.5	10.0	9.0	10.0	9.0
12	4.0	4.0	7.5	6.0	8.0	7.5	9.5	8.5	10.0	9.0	10.0	9.0
13	4.0	4.0	7.0	6.0	9.0	7.5	9.5	8.5	10.5	9.0	10.0	9.0
14	4.0	4.0	7.5	6.0	9.0	7.5	9.5	8.5	10.0	9.0	10.0	9.0
15	4.5	4.0	7.0	6.5	8.5	7.5	9.5	9.0	12.0	9.0	9.5	9.0
16	4.5	4.0	7.0	6.5	8.5	8.0	9.5	8.5	10.5	9.0	10.0	9.0
17	4.0	4.0	7.0	6.5	8.5	8.0	9.5	8.5	10.5	9.0	10.0	9.0
18	4.0	4.0	7.5	6.5	9.0	8.0	9.5	9.0	10.5	9.0	9.5	9.0
19	4.5	4.0	8.0	6.5	9.5	8.0	9.5	9.0	10.5	9.5	10.0	9.0
20	4.5	4.0	7.5	6.5	8.5	8.0	9.5	9.0	10.0	9.5	10.0	9.0
21	4.0	4.0	7.5	6.5	8.5	8.0	9.5	9.0	10.5	9.5	10.0	9.0
22	5.0	4.0	9.5	6.5	8.5	8.0	9.5	9.0	10.5	9.0	10.0	9.5
23	5.0	4.5	8.5	7.0	8.5	8.0	9.5	9.0	10.5	9.0	10.0	9.5
24	5.5	4.5	8.5	7.0	8.5	8.0	9.5	9.0	10.5	9.5	9.5	9.0
25	6.0	5.0	8.5	7.0	8.5	8.0	9.5	9.0	10.0	9.5	10.0	9.0
26	5.0	5.0	9.0	7.0	8.5	8.0	9.5	9.0	10.5	9.5	9.5	9.0
27	5.5	5.0	9.0	7.0	8.5	8.0	9.5	9.0	10.0	9.0	10.0	9.0
28	5.0	5.0	8.0	7.0	9.0	8.0	10.0	9.0	10.0	9.0	9.5	9.0
29	5.5	5.0	9.0	7.5	8.5	8.5	10.0	9.0	10.0	9.5	9.5	9.5
30	6.0	5.5	8.5	7.5	9.0	8.5	10.0	9.0	10.0	9.5	9.5	9.0
31	---	---	8.0	7.5	---	---	9.5	9.0	10.0	9.5	---	---
MONTH	6.0	3.5	9.5	5.5	9.5	7.5	10.0	8.0	12.0	9.0	10.5	9.0

TROUBLESOME CREEK BASIN

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 mi².

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

GAGE.--Water-stage recorder. Elevation of gage is 8,049 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 10 to Dec. 9, Dec. 16 to Mar. 27. Records good except for estimated daily discharges, which are poor. One diversion upstream from station for irrigation of about 250 acres downstream from station. Flow partly regulated during irrigation season by one reservoir, capacity, 1,070 acre-ft, upstream from station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--33 years, 31.0 ft³/s; 22,460 acre-ft/yr. The figure published in 1985 report was in error; the correct figure is 32 years, 30.9 ft³/s, 22,100 acre-ft.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 630 ft³/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 ft³/s, Dec. 20-24, 1976.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 358 ft³/s at 2300 June 6, gage height, 2.36 ft; minimum daily, 10 ft³/s, Feb. 16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	11	12	12	11	14	30	62	267	87	32	21
2	16	12	12	12	11	14	32	81	266	78	31	21
3	16	12	12	12	11	14	31	108	283	74	29	22
4	16	12	12	12	11	14	29	144	309	70	29	21
5	17	12	12	12	11	14	27	154	306	73	28	20
6	17	12	12	12	11	14	28	123	300	105	28	20
7	18	14	12	12	11	14	31	103	319	77	27	20
8	19	13	12	12	11	14	32	92	323	66	27	22
9	20	11	12	12	11	14	31	77	318	62	27	22
10	20	12	12	12	11	14	30	71	276	59	22	22
11	21	12	12	12	11	14	30	70	218	55	20	22
12	19	12	13	12	11	14	31	75	182	51	22	22
13	19	12	13	12	11	14	31	81	180	48	22	21
14	17	12	12	12	11	14	28	100	183	43	22	20
15	16	12	12	12	11	14	28	110	182	41	21	20
16	16	12	12	12	10	14	30	104	200	43	20	19
17	15	12	13	12	11	14	31	91	215	40	19	19
18	14	12	14	12	11	14	28	86	217	41	18	20
19	13	12	14	12	11	14	27	97	206	42	20	20
20	13	12	14	12	11	14	26	133	189	41	22	20
21	12	12	14	12	11	14	28	195	177	42	26	20
22	13	12	14	12	11	14	32	260	163	43	25	20
23	12	12	14	12	11	15	36	253	153	43	24	23
24	12	12	13	12	11	15	37	222	145	46	23	23
25	12	12	13	12	12	15	36	211	136	51	24	23
26	12	12	13	12	13	16	34	231	134	51	23	23
27	12	12	13	12	13	17	32	259	122	48	22	23
28	12	12	13	12	14	20	44	271	110	41	21	24
29	12	12	13	12	---	23	58	269	98	37	21	24
30	12	12	13	12	---	25	49	246	93	35	22	23
31	12	---	12	11	---	26	---	239	---	32	22	---
TOTAL	471	361	394	371	315	480	977	4618	6270	1665	739	640
MEAN	15.2	12.0	12.7	12.0	11.3	15.5	32.6	149	209	53.7	23.8	21.3
MAX	21	14	14	12	14	26	58	271	323	105	32	24
MIN	12	11	12	11	10	14	26	62	93	32	18	19
AC-FT	934	716	781	736	625	952	1940	9160	12440	3300	1470	1270
CAL YR 1985	TOTAL	10988	MEAN	30.1	MAX	198	MIN	10	AC-FT	21790		
WTR YR 1986	TOTAL	17301	MEAN	47.4	MAX	323	MIN	10	AC-FT	34320		

09041500 MUDDY CREEK AT KREMMLING, CO

LOCATION.--Lat 40°03'37", long 106°23'48", in SW 1/4 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 mi².

WATER-DISCHARGE RECORDS

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. Elevation of gage is 7,340 ft above National Geodetic Vertical Datum of 1929, from topographic map. Supplementary recorder on diversion ditch about 2,000 ft downstream from point of diversion.

REMARKS.--Estimated daily discharges: Nov. 10-15, Dec. 8 to Feb. 25, Mar. 17-27, July 14, 15, Aug. 19-27. Records good, except for estimated daily discharges, which are poor. Records include flow of diversion ditch.

EXTREMES FOR PERIOD OF RECORD.--Maximum combined discharge, 1,670 ft³/s, May 16, 1984, gage height, 12.67 ft; minimum daily, 1.0 ft³/s, Sept. 24, 25, 1905.

EXTREMES FOR CURRENT YEAR.--Maximum combined discharge, 1,110 ft³/s at 2230 May 5, gage height, 10.50 ft; minimum daily, 6.8 ft³/s, Oct. 2, 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	30	28	26	22	105	179	682	614	154	30	36
2	6.8	29	29	26	22	88	182	725	583	130	27	31
3	8.9	30	29	26	22	80	184	791	569	115	32	28
4	8.1	30	26	26	22	100	163	884	576	103	37	26
5	6.8	28	24	26	22	115	155	995	564	128	33	25
6	8.8	30	25	26	22	155	162	963	528	124	32	24
7	15	23	30	26	22	158	168	848	484	150	27	22
8	23	32	30	26	22	136	168	833	408	120	27	24
9	35	30	30	26	22	185	170	786	409	118	27	27
10	33	29	30	26	22	92	178	649	499	139	28	27
11	36	29	30	26	22	72	187	600	462	156	27	25
12	39	29	30	26	22	65	210	632	335	120	30	24
13	32	29	30	26	22	59	253	629	278	101	42	23
14	37	29	30	26	22	54	192	666	282	100	43	23
15	28	30	30	26	22	57	179	691	283	100	45	23
16	25	32	30	23	23	46	209	677	258	101	33	22
17	23	30	30	23	25	49	353	601	225	102	29	21
18	24	30	30	23	28	52	297	569	212	99	30	20
19	24	28	30	23	31	56	251	608	193	106	30	20
20	24	27	30	23	34	60	239	676	173	112	31	20
21	24	26	30	23	38	65	302	733	146	105	31	20
22	25	27	30	23	43	68	446	808	136	85	31	20
23	26	28	30	23	50	73	553	850	132	73	32	22
24	26	30	30	23	63	76	602	806	114	73	32	24
25	26	32	30	23	90	80	662	735	111	80	32	27
26	26	32	26	23	125	85	653	703	178	90	32	29
27	27	30	26	23	164	90	524	688	158	80	31	42
28	27	30	26	23	134	101	440	703	133	62	29	30
29	27	31	26	23	---	113	463	696	128	52	27	39
30	30	30	26	23	---	132	572	691	137	40	30	31
31	31	---	26	23	---	160	---	657	---	32	36	---
TOTAL	743.4	880	887	758	1178	2827	9296	22575	9308	3150	983	775
MEAN	24.0	29.3	28.6	24.5	42.1	91.2	310	728	310	102	31.7	25.8
MAX	39	32	30	26	164	185	662	995	614	156	45	42
MIN	6.8	23	24	23	22	46	155	569	111	32	27	20
AC-FT	1470	1750	1760	1500	2340	5610	18440	44780	18460	6250	1950	1540
CAL YR 1985	TOTAL	47495.8		MEAN	130	MAX	1180	MIN	5.5	AC-FT	94210	
WTR YR 1986	TOTAL	53360.4		MEAN	146	MAX	995	MIN	6.8	AC-FT	105800	

MUDDY CREEK BASIN

09041500 MUDDY CREEK AT KREMMLING, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April to September 1986.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: April to September 1986.

WATER TEMPERATURE: April to September 1986.

INSTRUMENTATION.--Water quality monitor since April 1986.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum during period April to September, 1,450 microsiemens, Aug. 27; minimum, 212 microsiemens, May 22.

WATER TEMPERATURE: Maximum during period April to September, 22.0°C, July 15; minimum, 4.0°C, May 10.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	HARD- NESS (MG/L AS CACO3)	HARD- NESS NONCARB WH WAT TOT FLD 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)	PERCENT SODIUM
OCT												
01...	1100	123	1100	8.2	4.5	9.5	490	320	110	53	59	21
29...	1015	27	775	7.8	5.5	--	350	210	82	34	40	--
NOV												
26...	1530	32	810	8.3	0.5	10.8	340	160	76	36	45	22
DEC												
18...	1550	30	774	8.0	0.0	10.2	310	150	71	32	40	22
JAN												
28...	1215	23	732	7.9	0.0	10.2	310	160	73	32	41	22
FEB												
26...	1640	94	970	8.0	0.0	10.0	410	280	84	49	74	28
MAR												
27...	1400	92	1060	8.2	7.0	9.6	420	250	92	47	68	26
APR												
23...	1620	540	414	8.0	6.5	9.2	180	58	48	14	17	17
MAY												
14...	1250	652	263	8.1	8.0	8.8	110	27	30	8.0	8.8	15
22...	1535	724	245	8.0	10.5	8.2	--	--	--	--	--	--
JUN												
11...	1630	367	455	8.3	12.5	8.3	210	110	52	19	17	15
JUL												
16...	1330	101	1150	8.3	18.5	7.3	550	340	140	48	37	13
30...	1310	39	1130	8.5	19.0	7.2	530	310	130	49	46	16
AUG												
27...	1300	32	1020	7.8	18.0	7.6	440	290	100	45	50	20

DATE	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LITY 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)
OCT												
01...	1	3.1	177	430	6.9	0.3	7.1	780	1.1	258	<0.10	<0.10
29...	1	--	140	230	3.9	0.2	7.1	--	--	--	<0.10	--
NOV												
26...	1	2.1	183	280	5.6	0.3	8.4	560	0.77	49	0.10	--
DEC												
18...	1	2.0	160	250	5.2	0.2	10	510	0.69	41	0.201	--
JAN												
28...	1	2.4	159	250	5.1	0.2	11	510	0.69	32	0.20	--
FEB												
26...	2	6.7	136	400	12	0.2	8.7	720	0.97	182	0.40	--
MAR												
27...	1	4.2	177	410	8.8	0.2	8.3	750	1.0	185	0.10	--
APR												
23...	0.6	2.8	120	98	2.2	0.2	9.0	260	0.36	385	0.20	0.23
MAY												
14...	0.4	1.4	81	55	1.2	0.1	9.3	160	0.22	287	0.10	0.11
22...	--	--	--	--	--	--	--	--	--	--	--	--
JUN												
11...	0.5	1.5	98	120	2.2	0.1	9.9	280	0.38	278	<0.10	--
JUL												
16...	0.7	2.8	212	430	3.7	0.3	10	800	1.1	218	<0.10	<0.10
30...	0.9	3.1	212	410	5.0	0.3	9.6	780	1.1	87	<0.10	<0.10
AUG												
27...	1	4.6	151	400	5.3	0.3	7.3	700	0.96	61	<0.10	--

09041500 MUDDY CREEK AT KREMMLING, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC 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)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)
OCT												
01...	0.09	0.06	0.51	0.44	0.6	0.5	--	0.05	0.01	<0.01	4.1	4.9
29...	0.05	--	0.45	--	0.5	--	--	--	--	--	--	--
NOV												
26...	0.07	--	0.33	--	0.4	--	0.5	0.07	--	--	--	--
DEC												
18...	0.061	--	0.64	--	0.7	--	0.9	0.031	--	--	--	--
JAN												
28...	0.03	--	0.37	--	0.4	--	0.6	0.02	--	--	4.2	3.7
FEB												
26...	0.26	--	1.2	--	1.5	--	1.9	0.36	--	--	--	--
MAR												
27...	<0.01	--	--	--	0.9	--	1.0	0.24	--	--	--	--
APR												
23...	0.13	0.03	1.7	0.47	1.8	0.5	2.0	0.15	0.03	0.01	--	--
MAY												
14...	0.02	0.04	0.98	0.36	1.0	0.4	1.1	0.06	0.03	0.04	16	7.0
22...	--	--	--	--	--	--	--	--	--	--	--	--
JUN												
11...	0.04	--	0.56	--	0.6	--	--	0.18	--	--	--	--
JUL												
16...	0.12	0.11	0.58	0.39	0.7	0.5	--	0.09	0.02	<0.01	8.4	2.8
30...	0.05	0.05	0.45	0.45	0.5	0.5	--	0.05	0.01	<0.01	6.6	--
AUG												
27...	0.15	--	0.15	--	0.3	--	--	0.08	--	--	--	--

DATE	TIME	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA)	BARIUM, DIS- SOLVED (UG/L AS BA)	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)
OCT									
01...	1100	1	<1	100	80	2	<1	<10	<10
29...	1015	--	--	--	--	--	--	--	--
NOV									
26...	1530	--	--	--	--	--	--	--	--
DEC									
18...	1550	--	--	--	--	--	--	--	--
JAN									
28...	1215	--	--	--	--	--	--	--	--
FEB									
26...	1640	--	--	--	--	--	--	--	--
MAR									
27...	1400	--	--	--	--	--	--	--	--
APR									
23...	1620	--	--	--	--	--	--	--	--
MAY									
14...	1250	3	--	200	--	1	--	10	--
22...	1535	--	<1	--	40	--	1	--	<10
JUN									
11...	1630	--	--	--	--	--	--	--	--
JUL									
16...	1330	--	--	--	--	--	--	--	--
30...	1310	--	--	--	--	--	--	--	--
AUG									
27...	1300	--	--	--	--	--	--	--	--

MUDDY CREEK BASIN

09041500 MUDDY CREEK AT KREMMLING, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	COBALT, TOTAL RECOV- ERABLE (UG/L AS CO)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	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, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)
OCT									
01...	2	6	2	7	3	<1	100	43	0.1
29...	--	--	--	12	--	--	--	--	<1.0
NOV									
26...	--	--	--	24	--	--	--	--	--
DEC									
18...	--	--	--	36	--	--	--	--	--
JAN									
28...	--	--	--	32	--	--	--	--	--
FEB									
26...	--	--	--	86	--	--	--	--	--
MAR									
27...	--	--	--	29	--	--	--	--	--
APR									
23...	--	--	--	140	--	--	--	--	--
MAY									
14...	7	21	--	--	13	--	280	--	--
22...	--	--	5	100	--	<1	--	15	<0.1
JUN									
11...	--	--	--	57	--	--	--	--	--
JUL									
16...	--	--	--	29	--	--	--	--	--
30...	--	--	--	--	--	--	--	--	--
AUG									
27...	--	--	--	16	--	--	--	--	--

DATE	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, TOTAL (UG/L AS SE)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, DIS- SOLVED (UG/L AS ZN)
OCT									
01...	1	7	7	5	4	<1	1200	40	6
29...	--	--	--	--	--	--	820	--	--
NOV									
26...	--	--	--	--	--	--	750	--	--
DEC									
18...	--	--	--	--	--	--	710	--	--
JAN									
28...	--	--	--	--	--	--	780	--	--
FEB									
26...	--	--	--	--	--	--	890	--	--
MAR									
27...	--	--	--	--	--	--	880	--	--
APR									
23...	--	--	--	--	--	--	410	--	--
MAY									
14...	2	22	2	3	--	--	260	70	--
22...	<1	--	<1	--	1	<1	--	--	14
JUN									
11...	--	--	--	--	--	--	470	--	--
JUL									
16...	--	--	--	--	--	--	1300	--	--
30...	--	--	--	--	--	--	--	--	--
AUG									
27...	--	--	--	--	--	--	1000	--	--

09041500 MUDDY CREEK AT KREMMLING, CO--Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
DEC 18...	1600	29	30	2.3	--
FEB 26...	1640	94	314	80	95
APR 23...	1600	540	2240	3270	89
MAY 06...	1000	958	525	1360	78
06...	1335	935	506	1280	66
08...	1130	814	760	1670	72
12...	1150	823	937	2080	62
14...	1100	652	810	1430	63
22...	1510	724	727	1420	71
JUN 11...	1610	367	140	139	86
JUL 16...	1330	101	140	38	--
AUG 27...	1300	32	77	6.7	99

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	355	360	957	1090	1070
2	---	---	---	---	---	---	---	350	374	---	1100	1080
3	---	---	---	---	---	---	---	342	379	---	1110	893
4	---	---	---	---	---	---	---	316	---	---	1110	910
5	---	---	---	---	---	---	---	299	387	1080	1090	1050
6	---	---	---	---	---	---	---	275	---	1080	1070	982
7	---	---	---	---	---	---	---	279	---	1030	1060	938
8	---	---	---	---	---	---	---	292	---	1050	1020	955
9	---	---	---	---	---	---	---	320	---	1060	991	966
10	---	---	---	---	---	---	---	336	---	1080	1000	991
11	---	---	---	---	---	---	---	335	---	1070	974	928
12	---	---	---	---	---	---	---	306	474	1080	955	909
13	---	---	---	---	---	---	---	283	516	1080	950	916
14	---	---	---	---	---	---	---	275	545	1090	1020	890
15	---	---	---	---	---	---	---	270	593	1100	1190	894
16	---	---	---	---	---	---	---	322	596	1110	1150	923
17	---	---	---	---	---	---	---	329	619	1130	1070	944
18	---	---	---	---	---	---	---	322	656	1100	972	965
19	---	---	---	---	---	---	---	292	709	1070	896	982
20	---	---	---	---	---	---	---	259	744	1050	829	1000
21	---	---	---	---	---	---	---	260	781	1020	803	1020
22	---	---	---	---	---	---	---	256	811	1030	792	1030
23	---	---	---	---	---	---	---	244	833	1070	1010	1040
24	---	---	---	---	---	---	---	259	866	1060	1080	1010
25	---	---	---	---	---	---	---	280	892	1060	1070	982
26	---	---	---	---	---	---	---	299	959	1130	1040	965
27	---	---	---	---	---	---	---	306	944	1060	1070	1150
28	---	---	---	---	---	---	---	316	---	1020	1110	1080
29	---	---	---	---	---	---	---	323	---	---	959	1020
30	---	---	---	---	---	---	382	336	---	---	919	1080
31	---	---	---	---	---	---	---	344	---	---	937	---
MEAN	---	---	---	---	---	---	---	303	---	---	1014	985

09041500 MUDDY CREEK AT KREMMLING, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	8.0	6.5	12.5	10.0	20.0	10.5	20.5	16.5	15.5	14.0
2	---	---	8.5	6.5	13.5	10.0	22.5	8.5	20.5	17.0	15.5	13.5
3	---	---	9.0	7.5	13.5	9.5	21.5	9.5	18.5	17.0	16.0	13.0
4	---	---	9.5	7.0	14.0	6.5	21.5	9.0	18.0	14.5	16.5	13.5
5	---	---	7.5	5.5	12.5	8.5	18.0	12.0	18.5	15.0	17.0	13.0
6	---	---	7.0	5.5	---	---	19.5	16.0	20.0	16.0	16.5	13.0
7	---	---	7.5	6.5	---	---	17.5	16.0	19.0	16.0	16.5	13.0
8	---	---	7.0	5.5	---	---	16.5	14.0	18.5	13.0	17.5	13.5
9	---	---	5.5	4.5	---	---	16.5	14.0	19.0	14.0	16.5	14.0
10	---	---	8.0	4.0	---	---	16.5	14.0	19.5	15.0	14.0	10.5
11	---	---	9.0	7.0	---	---	16.5	12.5	18.5	14.0	12.0	9.5
12	---	---	8.5	7.5	16.0	12.5	19.5	16.0	18.0	13.5	13.0	10.0
13	---	---	8.5	6.5	15.5	13.0	19.0	16.5	17.5	15.0	14.5	11.0
14	---	---	8.5	7.0	13.0	11.0	21.5	18.0	17.0	13.5	15.5	11.5
15	---	---	7.5	6.0	15.5	11.5	22.0	18.5	19.0	14.5	15.0	11.5
16	---	---	7.5	6.0	18.0	14.5	20.5	18.5	20.0	16.0	14.5	11.5
17	---	---	9.0	6.0	18.0	16.5	19.5	16.0	21.0	15.0	14.0	11.0
18	---	---	9.5	7.5	17.0	14.5	19.0	16.5	20.5	13.0	13.0	11.5
19	---	---	10.0	9.0	16.5	14.0	18.5	17.0	22.0	13.5	12.0	9.5
20	---	---	10.0	8.5	17.5	13.5	17.5	15.5	20.0	12.5	13.5	10.5
21	---	---	10.0	8.5	18.0	15.0	19.0	15.5	20.0	13.5	14.0	11.5
22	---	---	10.5	8.5	17.5	15.0	20.0	18.0	19.0	16.5	14.0	12.5
23	---	---	9.0	6.5	18.5	15.0	19.5	17.5	18.0	16.0	14.5	13.0
24	---	---	9.5	8.5	18.5	17.0	18.5	16.5	18.0	14.5	14.0	9.5
25	---	---	11.0	8.0	20.5	13.0	18.5	14.5	18.5	16.5	9.5	8.0
26	---	---	11.0	9.5	19.5	13.5	18.0	15.0	19.5	16.5	9.0	7.0
27	---	---	11.0	9.0	20.0	15.5	19.0	15.0	19.5	16.0	10.0	7.0
28	---	---	11.0	9.5	---	---	---	---	18.0	16.0	11.5	8.5
29	---	---	11.0	9.5	---	---	---	6.5	18.0	15.5	12.0	10.0
30	8.0	7.0	11.0	8.5	---	---	---	6.5	17.5	16.0	10.5	8.5
31	---	---	12.5	9.5	---	---	---	5.0	16.5	15.0	---	---
MONTH			12.5	4.0					21.0	12.5	17.5	7.0

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. Elevation of gage is 10,986 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--No estimated daily discharges. 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, 52 ft³/s, June 29, 1985; no flow for most of each year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	.00	.00	.00	.00	.00	.00	.00	4.8	5.1	9.7	25
2	24	.00	.00	.00	.00	.00	.00	.00	4.9	5.2	9.1	25
3	23	.00	.00	.00	.00	.00	.00	.00	7.7	31	7.7	25
4	13	.00	.00	.00	.00	.00	.00	.00	9.5	42	7.5	26
5	5.6	.00	.00	.00	.00	.00	.00	.00	11	24	6.1	26
6	1.5	.00	.00	.00	.00	.00	.00	.00	13	25	6.1	26
7	.00	.00	.00	.00	.00	.00	.00	.00	12	7.1	5.5	26
8	.00	.00	.00	.00	.00	.00	.00	.00	11	8.7	6.9	27
9	.00	.00	.00	.00	.00	.00	.00	.00	10	14	8.5	26
10	.00	.00	.00	.00	.00	.00	.00	.00	8.1	15	7.9	22
11	.00	.00	.00	.00	.00	.00	.00	.00	6.5	13	7.9	11
12	.00	.00	.00	.00	.00	.00	.00	4.8	7.1	13	9.5	9.7
13	.00	.00	.00	.00	.00	.00	.00	5.1	8.1	11	10	9.7
14	.00	.00	.00	.00	.00	.00	.00	5.9	8.1	7.5	8.5	9.7
15	.00	.00	.00	.00	.00	.00	.00	5.1	8.5	8.9	7.5	9.5
16	.00	.00	.00	.00	.00	.00	.00	4.5	8.5	12	7.1	9.5
17	.00	.00	.00	.00	.00	.00	.00	4.0	9.3	9.1	6.7	9.5
18	.00	.00	.00	.00	.00	.00	.00	4.3	9.3	11	7.1	9.5
19	.00	.00	.00	.00	.00	.00	.00	6.3	9.3	11	7.1	9.3
20	.00	.00	.00	.00	.00	.00	.00	10	8.3	15	8.1	9.1
21	.00	.00	.00	.00	.00	.00	.00	14	7.1	18	12	9.3
22	.00	.00	.00	.00	.00	.00	.00	14	6.5	22	11	9.5
23	.00	.00	.00	.00	.00	.00	.00	10	6.1	27	11	14
24	.00	.00	.00	.00	.00	.00	.00	4.9	6.1	16	13	37
25	.00	.00	.00	.00	.00	.00	.00	4.8	5.9	8.2	11	36
26	.00	.00	.00	.00	.00	.00	.00	5.7	5.7	15	11	38
27	.00	.00	.00	.00	.00	.00	.00	5.9	5.7	13	8.9	41
28	.00	.00	.00	.00	.00	.00	.00	5.9	5.7	11	8.1	41
29	.00	.00	.00	.00	---	.00	.00	5.7	5.5	10	8.1	41
30	.00	.00	.00	.00	---	.00	.00	4.5	5.5	9.5	9.5	42
31	.00	---	.00	.00	---	.00	---	4.5	---	10	25	---
TOTAL	92.10	.00	.00	.00	.00	.00	.00	129.90	234.8	448.3	283.1	659.3
MEAN	2.97	.00	.00	.00	.00	.00	.00	4.19	7.83	14.5	9.13	22.0
MAX	25	.00	.00	.00	.00	.00	.00	14	13	42	25	42
MIN	.00	.00	.00	.00	.00	.00	.00	.00	4.8	5.1	5.5	9.1
AC-FT	183	.00	.00	.00	.00	.00	.00	258	466	889	562	1310
CAL YR 1985	TOTAL	1297.60		MEAN	3.56	MAX	52	MIN	.00	AC-FT	2570	
WTR YR 1986	TOTAL	1847.50		MEAN	5.06	MAX	42	MIN	.00	AC-FT	3660	

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. Elevation of gage is 10,986 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--No estimated daily discharges. 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 ft³/s, June 21, 1965; no flow for most of each year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	7.6	13	4.1	2.3
2	.00	.00	.00	.00	.00	.00	.00	.00	8.0	12	4.0	2.5
3	.00	.00	.00	.00	.00	.00	.00	.00	10	12	3.8	2.3
4	.00	.00	.00	.00	.00	.00	.00	.00	13	11	3.7	2.6
5	.00	.00	.00	.00	.00	.00	.00	.00	16	8.2	3.3	2.7
6	.00	.00	.00	.00	.00	.00	.00	.00	21	7.3	3.2	2.5
7	.00	.00	.00	.00	.00	.00	.00	.00	23	6.2	3.0	2.3
8	.00	.00	.00	.00	.00	.00	.00	.00	23	9.1	3.0	2.9
9	.00	.00	.00	.00	.00	.00	.00	.00	23	8.6	3.0	2.5
10	.00	.00	.00	.00	.00	.00	.00	.00	20	8.0	2.7	2.3
11	.00	.00	.00	.00	.00	.00	.00	.00	17	7.6	2.9	2.2
12	.00	.00	.00	.00	.00	.00	.00	3.3	18	7.4	3.2	2.2
13	.00	.00	.00	.00	.00	.00	.00	3.5	19	7.2	3.2	2.1
14	.00	.00	.00	.00	.00	.00	.00	3.5	20	6.5	2.9	1.9
15	.00	.00	.00	.00	.00	.00	.00	3.3	20	6.5	2.7	1.9
16	.00	.00	.00	.00	.00	.00	.00	3.0	21	6.3	2.7	1.9
17	.00	.00	.00	.00	.00	.00	.00	2.7	23	4.9	2.7	1.9
18	.00	.00	.00	.00	.00	.00	.00	3.0	22	3.7	2.6	1.9
19	.00	.00	.00	.00	.00	.00	.00	4.1	22	5.2	2.5	1.9
20	.00	.00	.00	.00	.00	.00	.00	5.0	21	4.6	2.9	1.9
21	.00	.00	.00	.00	.00	.00	.00	5.7	20	6.7	3.0	1.9
22	.00	.00	.00	.00	.00	.00	.00	6.1	18	6.7	2.9	1.6
23	.00	.00	.00	.00	.00	.00	.00	5.9	18	6.3	3.0	1.1
24	.00	.00	.00	.00	.00	.00	.00	5.7	18	5.9	2.7	.87
25	.00	.00	.00	.00	.00	.00	.00	6.3	17	5.7	2.7	.69
26	.00	.00	.00	.00	.00	.00	.00	7.2	17	5.4	2.6	.00
27	.00	.00	.00	.00	.00	.00	.00	7.2	16	5.0	2.5	.00
28	.00	.00	.00	.00	.00	.00	.00	7.2	15	4.8	2.5	.00
29	.00	.00	.00	.00	---	.00	.00	7.2	14	4.7	2.5	.00
30	.00	.00	.00	.00	---	.00	.00	6.7	14	4.5	2.5	.00
31	.00	---	.00	.00	---	.00	---	7.2	---	4.3	2.3	---
TOTAL	.00	.00	.00	.00	.00	.00	.00	103.80	534.6	215.3	91.3	50.86
MEAN	.00	.00	.00	.00	.00	.00	.00	3.35	17.8	6.95	2.95	1.70
MAX	.00	.00	.00	.00	.00	.00	.00	7.2	23	13	4.1	2.9
MIN	.00	.00	.00	.00	.00	.00	.00	.00	7.6	3.7	2.3	.00
AC-FT	.00	.00	.00	.00	.00	.00	.00	206	1060	427	181	101
CAL YR 1985	TOTAL	832.51		MEAN	2.28	MAX	32	MIN	.00	AC-FT	1650	
WTR YR 1986	TOTAL	995.86		MEAN	2.73	MAX	23	MIN	.00	AC-FT	1980	

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.78 W., 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. Elevation of gage is 10,986 ft, above National Geodetic Vertical datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: May 12-22. Records fair except for estimated daily discharges. 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 ft³/s, June 20, 1968, June 19, 1983; no flow for most of each year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	25	72	23	13
2	.00	.00	.00	.00	.00	.00	.00	.00	24	74	23	12
3	.00	.00	.00	.00	.00	.00	.00	.00	42	73	22	11
4	.00	.00	.00	.00	.00	.00	.00	.00	58	84	20	10
5	.00	.00	.00	.00	.00	.00	.00	.00	73	25	17	15
6	.00	.00	.00	.00	.00	.00	.00	.00	96	11	17	13
7	.00	.00	.00	.00	.00	.00	.00	.00	100	8.3	15	12
8	.00	.00	.00	.00	.00	.00	.00	.00	85	3.2	15	18
9	.00	.00	.00	.00	.00	.00	.00	.00	69	2.4	21	21
10	.00	.00	.00	.00	.00	.00	.00	.00	48	2.4	18	18
11	.00	.00	.00	.00	.00	.00	.00	.00	34	1.5	17	15
12	.00	.00	.00	.00	.00	.00	.00	3.5	41	2.0	20	13
13	.00	.00	.00	.00	.00	.00	.00	4.0	54	2.7	22	11
14	.00	.00	.00	.00	.00	.00	.00	4.6	59	2.6	19	10
15	.00	.00	.00	.00	.00	.00	.00	6.0	72	2.3	16	9.0
16	.00	.00	.00	.00	.00	.00	.00	7.0	82	2.2	15	8.1
17	.00	.00	.00	.00	.00	.00	.00	8.0	92	1.6	14	6.3
18	.00	.00	.00	.00	.00	.00	.00	9.0	80	1.6	14	5.9
19	.00	.00	.00	.00	.00	.00	.00	10	97	1.4	14	5.6
20	.00	.00	.00	.00	.00	.00	.00	11	87	9.0	15	4.9
21	.00	.00	.00	.00	.00	.00	.00	13	78	18	23	4.4
22	.00	.00	.00	.00	.00	.00	.00	15	70	18	24	4.1
23	.00	.00	.00	.00	.00	.00	.00	14	73	45	24	1.9
24	.00	.00	.00	.00	.00	.00	.00	13	74	34	26	.31
25	.00	.00	.00	.00	.00	.00	.00	14	67	20	22	.00
26	.00	.00	.00	.00	.00	.00	.00	20	81	17	22	.00
27	.00	.00	.00	.00	.00	.00	.00	25	85	17	18	.00
28	.00	.00	.00	.00	.00	.00	.00	27	87	25	16	.00
29	.00	.00	.00	.00	---	.00	.00	26	80	24	14	.00
30	.00	.00	.00	.00	---	.00	.00	20	76	24	13	.00
31	.00	---	.00	.00	---	.00	---	21	---	24	13	---
TOTAL	.00	.00	.00	.00	.00	.00	.00	271.10	2089	648.2	572	242.51
MEAN	.00	.00	.00	.00	.00	.00	.00	8.75	69.6	20.9	18.5	8.08
MAX	.00	.00	.00	.00	.00	.00	.00	27	100	84	26	21
MIN	.00	.00	.00	.00	.00	.00	.00	.00	24	1.4	13	.00
AC-FT	.00	.00	.00	.00	.00	.00	.00	538	4140	1290	1130	481
CAL YR 1985 TOTAL	655.96			MEAN	1.80	MAX	49	MIN	.00	AC-FT	1300	
WTR YR 1986 TOTAL	3822.81			MEAN	10.5	MAX	100	MIN	.00	AC-FT	7580	

BLUE RIVER BASIN

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 current year.

GAGE.--Water-stage recorder. Elevation of gage is 9,385 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Dec. 9-14, July 2-14. Records good, except for estimated daily discharges, which are poor. Transmountain diversions upstream from station by Boreas Pass ditch and Hoosier Pass tunnel. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 506 ft³/s July 1, 1984, gage height, 2.84 ft, minimum daily, 4.5 ft³/s, Mar. 23, 1986.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 117 ft³/s, June 6, gage height, 1.77 ft, minimum daily, 4.5 ft³/s, Mar. 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	18	13	7.6	7.3	6.1	12	36	64	55	24	15
2	31	18	12	8.3	6.7	6.1	12	46	69	54	22	14
3	29	20	12	7.9	7.0	6.1	12	54	75	51	22	13
4	28	19	13	8.6	7.3	6.1	9.7	60	86	50	23	13
5	28	19	12	7.9	7.3	6.1	9.3	60	99	66	22	15
6	25	20	13	9.7	7.0	6.1	9.7	55	105	110	21	13
7	25	18	11	8.3	7.0	5.8	11	40	111	108	21	14
8	30	19	11	7.3	7.0	6.1	12	35	109	106	22	18
9	31	21	10	8.3	7.0	6.7	12	31	111	102	21	16
10	27	20	9.0	9.3	6.7	6.4	12	24	103	102	19	16
11	18	19	9.0	8.3	7.6	6.1	11	25	89	100	18	14
12	24	19	9.0	8.3	7.6	6.1	12	35	83	98	19	13
13	26	19	9.0	8.6	7.6	6.1	12	34	82	98	19	13
14	26	16	9.0	9.0	7.6	5.8	10	38	81	98	16	13
15	23	17	9.0	9.0	6.7	5.8	10	40	82	96	15	12
16	23	16	9.0	9.0	7.3	5.8	11	38	82	96	14	11
17	23	15	9.0	9.0	7.3	6.1	11	35	85	94	14	11
18	23	16	8.6	8.6	7.3	5.8	10	34	86	99	13	11
19	22	15	8.6	8.3	7.3	5.8	9.3	38	86	94	13	11
20	22	14	8.6	8.3	8.6	6.1	9.7	45	82	90	16	11
21	22	14	9.0	8.3	7.6	6.1	10	49	75	65	20	11
22	22	13	8.6	7.6	6.4	6.7	15	52	74	53	19	11
23	21	13	8.6	8.3	7.0	4.5	21	57	68	39	19	12
24	21	13	9.0	8.3	7.0	5.0	24	58	67	42	18	16
25	21	14	9.0	7.2	6.7	5.5	24	58	65	67	18	17
26	21	13	8.6	6.1	6.4	5.5	22	62	65	48	18	18
27	21	13	8.3	7.3	6.1	5.8	18	67	61	43	16	18
28	21	13	7.9	7.9	5.8	6.4	18	66	57	33	14	18
29	21	12	7.9	7.3	---	7.6	21	69	54	27	14	19
30	20	12	9.0	7.3	---	8.7	28	64	54	27	14	20
31	21	---	8.3	7.0	---	10	---	64	---	25	14	---
TOTAL	744	488	299.0	252.2	198.2	192.9	418.7	1469	2410	2236	558	427
MEAN	24.0	16.3	9.65	8.14	7.08	6.22	14.0	47.4	80.3	72.1	18.0	14.2
MAX	31	21	13	9.7	8.6	10	28	69	111	110	24	20
MIN	18	12	7.9	6.1	5.8	4.5	9.3	24	54	25	13	11
AC-FT	1480	968	593	500	393	383	830	2910	4780	4440	1110	847
CAL YR 1985	TOTAL	14356.5	MEAN	39.3	MAX	268	MIN	7.0	AC-FT	28480		
WTR YR 1986	TOTAL	9693.0	MEAN	26.6	MAX	111	MIN	4.5	AC-FT	19230		

09046600 BLUE RIVER NEAR DILLON, CO

LOCATION.--Lat 39°32'55", long 106°02'19", in NW¼ sec.7, T.6 S., R.77 W., 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 mi².

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

REVISED RECORDS.--WSP 2124: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 9,120 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records good. Transmountain diversions upstream from 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.--29 years, 105 ft³/s; 76,070 acre-ft/yr, adjusted for diversions to Hoosier Pass tunnel.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,250 ft³/s, June 17, 1965, gage height, 5.38 ft, from rating curve extended above 800 ft³/s; minimum daily, 17 ft³/s, Mar. 21, 1961, Feb. 24-26, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 396 ft³/s at 0900 June 8, gage height, 3.97 ft; minimum daily, 23 ft³/s, Feb. 14, 15, 19, 20, Mar. 21-23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	80	56	41	28	29	25	41	86	242	249	98	61
2	80	56	40	28	31	25	44	104	245	231	94	61
3	78	55	39	28	31	26	44	137	255	217	89	61
4	76	54	40	29	32	26	42	162	279	216	86	60
5	74	54	38	28	30	32	40	184	327	236	87	57
6	71	55	40	28	30	33	39	188	350	314	85	58
7	69	55	41	27	30	33	42	170	365	318	83	57
8	69	54	39	27	31	28	45	153	388	304	82	58
9	73	53	38	27	31	28	46	135	389	273	81	61
10	79	52	36	26	28	28	47	123	379	268	81	63
11	79	53	35	27	30	28	47	116	341	248	78	61
12	77	53	35	27	30	27	46	118	316	230	76	59
13	71	53	34	27	26	28	47	125	311	222	72	59
14	70	51	33	27	23	27	45	134	306	220	72	57
15	71	50	32	27	23	27	44	141	306	219	69	55
16	71	47	33	28	24	27	45	145	311	214	66	54
17	67	48	33	29	24	27	47	144	318	210	65	52
18	66	48	33	29	24	24	46	136	326	219	62	53
19	66	46	32	29	23	24	44	133	337	226	61	53
20	64	45	33	29	23	24	43	140	337	212	62	52
21	63	44	32	29	24	23	43	162	323	203	65	51
22	63	43	32	28	24	23	47	182	312	177	69	51
23	62	44	31	29	24	23	54	200	302	175	73	51
24	61	44	32	29	25	24	63	208	292	156	74	53
25	59	44	31	30	26	25	72	208	286	145	72	54
26	58	44	30	30	27	25	77	214	283	152	69	56
27	58	42	30	30	25	26	75	226	279	136	67	58
28	58	43	30	30	26	29	70	234	265	125	66	58
29	57	42	29	29	---	32	70	242	258	114	63	60
30	57	42	30	29	---	36	77	243	251	107	61	60
31	56	---	29	29	---	39	---	234	---	102	61	---
TOTAL	2103	1470	1061	877	754	852	1532	5127	9279	6438	2289	1704
MEAN	67.8	49.0	34.2	28.3	26.9	27.5	51.1	165	309	208	73.8	56.8
MAX	80	56	41	30	32	39	77	243	389	318	98	63
MIN	56	42	29	26	23	23	39	86	242	102	61	51
AC-FT	4170	2920	2100	1740	1500	1690	3040	10170	18400	12770	4540	3380
CAL YR 1985	TOTAL	45085		MEAN	124	MAX	708	MIN	26	AC-FT	89430	
WTR YR 1986	TOTAL	33486		MEAN	91.7	MAX	389	MIN	23	AC-FT	66420	

BLUE RIVER BASIN

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 mi².

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

REVISED RECORDS.--WSP 2124: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 9,320 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Oct. 14, 1943, nonrecording gage at present site and datum.

REMARKS.--Estimated daily discharges: Nov. 3 to Apr. 30. Records good except for estimated daily discharges, which are poor. Small diversions upstream from 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.--39 years, 61.7 ft³/s; 44,700 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,250 ft³/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.--Peak discharges greater than base discharge of 500 ft³/s, and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
June 19	2100	*607	*a3.48	No other peak greater than base discharge.			

Minimum daily, 11 ft³/s, Feb. 15-23.
a From peak stage indicator.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32	25	20	14	12	12	20	44	252	284	104	58
2	33	23	20	14	12	12	20	50	232	270	101	55
3	34	23	20	14	12	12	20	56	258	265	99	52
4	34	23	20	13	12	12	20	66	316	285	98	50
5	32	23	20	13	12	12	20	73	363	300	92	49
6	32	23	20	13	12	12	20	66	415	280	89	46
7	37	23	20	12	12	12	20	62	461	273	85	50
8	37	23	19	12	12	12	20	59	463	241	83	64
9	35	23	18	12	12	12	20	52	422	224	81	52
10	36	23	17	12	12	12	20	50	355	218	78	55
11	40	23	17	12	12	12	20	57	312	199	73	53
12	37	23	17	12	12	12	20	66	327	190	73	49
13	36	23	17	12	12	12	20	71	349	186	74	47
14	34	23	17	12	12	12	20	83	350	182	68	45
15	31	23	17	12	11	12	20	73	376	179	64	44
16	32	22	17	12	11	12	20	71	399	174	62	43
17	32	22	17	12	11	12	20	66	408	175	61	41
18	32	21	17	12	11	12	20	70	407	188	59	41
19	30	20	17	12	11	12	20	85	448	179	59	41
20	30	20	17	12	11	12	20	104	445	169	61	40
21	30	20	17	12	11	12	20	128	402	168	65	39
22	29	20	17	12	11	12	27	145	374	165	66	39
23	28	20	17	12	11	12	25	154	362	198	71	39
24	29	20	17	12	12	12	28	148	364	167	66	41
25	29	20	17	12	12	12	30	160	339	154	63	41
26	29	20	17	12	12	13	33	192	355	144	63	42
27	28	20	16	12	12	14	32	207	346	135	58	40
28	28	20	16	12	12	15	31	225	335	125	56	41
29	28	20	15	12	---	16	30	237	323	118	61	43
30	28	20	15	12	---	17	29	224	305	112	57	42
31	28	---	15	12	---	19	---	235	---	108	58	---
TOTAL	990	652	543	381	327	394	685	3379	10863	6055	2248	1382
MEAN	31.9	21.7	17.5	12.3	11.7	12.7	22.8	109	362	195	72.5	46.1
MAX	40	25	20	14	12	19	33	237	463	300	104	64
MIN	28	20	15	12	11	12	20	44	232	108	56	39
AC-FT	1960	1290	1080	756	649	781	1360	6700	21550	12010	4460	2740
CAL YR 1985	TOTAL	23556	MEAN	64.5	MAX	542	MIN	14	AC-FT	46720		
WTR YR 1986	TOTAL	27899	MEAN	76.4	MAX	463	MIN	11	AC-FT	55340		

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 mi².

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

REVISED RECORDS.--WSP 2124: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 9,350 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 1, 2, 4, Nov. 9, to Apr. 30. Records good except for estimated daily discharges, which are poor. No known diversion upstream from station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--29 years, 6.04 ft³/s; 4,380 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 118 ft³/s, June 27, 1983, gage height, 3.01 ft, from rating curve extended above 65 ft³/s; minimum not determined.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 35 ft³/s, and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
June 6	1900	37	2.41	July 22	2300	*50	*2.48

Minimum daily discharge, 2.3 ft³/s, Jan. 29 to Feb. 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.1	3.5	4.4	2.5	2.3	2.5	6.8	8.1	26	15	8.0	5.4
2	3.8	3.5	4.4	2.5	2.3	2.5	6.4	9.8	27	14	7.8	5.2
3	3.8	3.5	4.3	2.5	2.3	2.5	5.8	12	27	14	7.7	5.0
4	3.8	3.5	4.2	2.5	2.3	2.5	5.2	14	29	14	7.7	4.8
5	3.6	3.5	4.0	2.5	2.3	2.5	5.0	15	30	15	7.6	4.8
6	3.6	3.6	4.0	2.5	2.3	2.7	5.0	12	32	15	7.3	4.7
7	4.2	4.3	3.9	2.5	2.3	2.7	5.0	11	31	15	7.2	4.8
8	4.1	3.3	3.8	2.5	2.3	2.7	5.0	11	28	14	7.0	5.8
9	4.0	4.0	3.7	2.5	2.4	2.7	5.0	9.2	31	14	7.0	5.0
10	4.0	5.0	3.6	2.5	2.5	2.7	5.0	9.1	29	13	7.1	5.3
11	4.2	4.8	3.5	2.5	2.5	2.7	5.0	11	25	13	6.7	5.2
12	3.9	4.6	3.5	2.5	2.5	2.7	5.0	11	23	12	6.5	4.9
13	3.8	4.5	3.4	2.5	2.5	2.7	5.0	12	22	12	6.7	4.7
14	3.7	4.4	3.3	2.5	2.5	2.7	5.0	12	22	11	6.1	4.8
15	4.5	4.4	3.2	2.5	2.5	2.7	5.0	11	22	11	5.9	4.7
16	4.0	4.4	3.2	2.5	2.5	2.7	5.0	12	22	11	5.8	4.4
17	3.8	4.4	3.1	2.5	2.5	2.7	5.0	11	22	12	5.6	4.4
18	3.6	4.4	3.0	2.5	2.5	2.7	5.0	12	22	14	5.5	4.4
19	3.6	4.4	2.9	2.5	2.5	2.7	5.6	14	22	12	5.5	4.4
20	3.5	4.4	2.8	2.5	2.5	2.7	6.4	17	21	12	5.8	4.4
21	3.5	4.4	2.7	2.5	2.5	2.7	7.2	20	21	12	6.2	4.4
22	3.5	4.4	2.7	2.5	2.5	2.7	8.0	23	20	14	6.1	4.4
23	3.5	4.4	2.6	2.5	2.5	2.7	9.0	24	19	15	6.3	4.5
24	3.5	4.4	2.5	2.5	2.5	2.7	10	24	18	11	6.1	4.6
25	3.5	4.4	2.5	2.5	2.5	2.7	9.0	25	18	10	5.9	4.6
26	3.4	4.4	2.5	2.5	2.5	3.2	8.5	26	18	9.8	6.0	4.9
27	3.4	4.4	2.5	2.5	2.5	3.7	7.8	25	18	9.2	5.4	4.7
28	3.4	4.4	2.5	2.5	2.5	4.0	7.0	26	17	8.6	5.2	4.8
29	3.5	4.4	2.5	2.3	---	4.5	6.4	28	16	8.4	5.5	5.0
30	3.4	4.4	2.5	2.3	---	5.2	6.6	27	16	8.2	5.5	4.9
31	3.4	---	2.5	2.3	---	5.8	---	25	---	8.1	5.4	---
TOTAL	115.6	126.4	100.2	76.9	68.3	92.9	185.7	507.2	694	377.3	198.1	143.9
MEAN	3.73	4.21	3.23	2.48	2.44	3.00	6.19	16.4	23.1	12.2	6.39	4.80
MAX	4.5	5.0	4.4	2.5	2.5	5.8	10	28	32	15	8.0	5.8
MIN	3.4	3.3	2.5	2.3	2.3	2.5	5.0	8.1	16	8.1	5.2	4.4
AC-FT	229	251	199	153	135	184	368	1010	1380	748	393	285
CAL YR 1985 TOTAL		2282.9		MEAN	6.25	MAX	35	MIN	2.2	AC-FT	4530	
WTR YR 1986 TOTAL		2686.5		MEAN	7.36	MAX	32	MIN	2.3	AC-FT	5330	

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

LOCATION.--Lat 39°34'31", long 106°06'36", 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. Elevation of gage is 9,100 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Apr. 21, 1981 at site 720 ft downstream at different datum.

REMARKS.--Estimated daily discharges: Nov. 13-22, Dec. 1-17, Jan. 1-9, 12-14, 22-27, Jan. 30 to Feb. 25, Apr. 14-21, Apr. 26 to May 20, Aug. 27, 28. Records good, except for estimated daily discharges, which are poor. Natural flow of stream affected by a few small diversions upstream from 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.--29 years, 100 ft³/s; 72,450 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 greater than base discharge of 700 ft³/s, and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
June 4	2400	*1,060	*4.18	No other peak greater than base discharge.			

Minimum daily, 16 ft³/s, Mar. 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	69	35	31	24	21	23	38	85	454	296	105	66
2	66	34	31	24	21	23	38	105	438	275	101	66
3	64	35	31	24	21	23	40	140	579	268	100	65
4	65	33	31	24	21	23	36	170	680	298	97	60
5	61	33	31	24	21	23	33	200	779	320	97	61
6	63	32	31	24	21	22	32	240	804	301	91	60
7	72	33	31	24	21	24	37	230	808	286	89	60
8	76	32	31	24	21	23	40	210	770	243	87	74
9	74	33	31	24	21	23	41	195	705	246	97	72
10	70	35	31	22	21	22	41	180	559	240	89	73
11	73	33	31	24	21	22	38	170	439	220	85	73
12	69	34	31	24	21	22	39	190	454	205	92	71
13	67	34	31	24	21	21	39	210	487	197	97	62
14	65	34	31	24	21	21	40	230	478	195	85	61
15	59	34	31	24	21	20	40	250	521	197	80	57
16	59	33	31	22	21	22	39	270	543	195	73	56
17	57	32	31	22	21	20	38	280	543	190	69	56
18	57	32	31	22	21	19	37	270	538	193	67	55
19	53	32	29	22	21	20	37	260	557	186	67	52
20	51	32	26	24	21	19	36	333	521	186	71	52
21	50	30	24	24	21	21	37	388	499	181	81	52
22	48	30	26	24	21	16	42	407	435	166	84	50
23	47	30	26	24	21	21	48	403	434	158	91	51
24	45	33	26	23	21	22	51	382	462	160	97	51
25	40	32	24	23	21	23	65	403	438	147	87	53
26	40	30	24	23	24	23	75	473	490	142	84	59
27	39	31	22	21	24	24	75	508	462	132	78	53
28	38	32	24	20	24	27	70	556	463	121	73	56
29	39	31	24	21	---	30	70	530	419	113	71	58
30	37	31	24	21	---	34	74	435	378	113	71	60
31	39	---	24	21	---	40	---	438	---	109	69	---
TOTAL	1752	975	881	715	597	716	1366	9141	16137	6279	2625	1795
MEAN	56.5	32.5	28.4	23.1	21.3	23.1	45.5	295	538	203	84.7	59.8
MAX	76	35	31	24	24	40	75	556	808	320	105	74
MIN	37	30	22	20	21	16	32	85	378	109	67	50
AC-FT	3480	1930	1750	1420	1180	1420	2710	18130	32010	12450	5210	3560
CAL YR 1985	TOTAL	46246	MEAN	127	MAX	980	MIN	20	AC-FT	91730		
WTR YR 1986	TOTAL	42979	MEAN	118	MAX	808	MIN	16	AC-FT	85250		

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. Elevation of gage is 8,760 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--No estimated daily discharges. 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 upstream from 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.--23 years (water years 1964-86), 217 ft³/s; 157,200 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, 1,880 ft³/s at 2300 May 12, gage height, 3.56 ft; minimum daily, 33.0 ft³/s, May 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	267	103	154	53	50	48	44	38	1070	1110	381	400
2	267	103	154	53	50	48	43	33	1060	1040	363	402
3	271	103	133	53	50	48	46	38	1140	966	345	400
4	271	103	109	53	48	48	51	38	1300	965	340	400
5	267	103	109	53	48	48	50	41	1450	986	331	400
6	267	103	112	53	46	48	48	40	1560	1070	318	400
7	267	106	109	53	46	48	50	41	1700	1100	309	400
8	267	106	106	53	46	48	47	261	1770	1060	300	400
9	180	106	106	51	46	48	46	975	1790	966	295	400
10	129	129	107	51	46	48	44	1390	1740	923	291	400
11	140	150	72	50	46	49	48	1400	1580	868	283	400
12	154	150	63	51	46	46	48	1380	1440	805	279	397
13	154	128	63	51	48	50	48	349	1390	757	283	395
14	154	109	56	51	48	50	48	50	1380	718	271	400
15	109	106	56	51	48	50	50	51	1390	692	259	400
16	51	106	56	51	48	50	50	51	1420	679	251	400
17	43	106	56	51	48	50	51	51	1490	666	241	282
18	115	106	55	51	48	50	50	51	1510	673	231	119
19	182	106	53	50	44	50	50	50	1560	666	231	208
20	183	81	51	51	48	50	50	50	1610	654	223	208
21	183	67	51	50	48	50	50	50	1580	648	231	204
22	183	67	51	50	48	50	50	92	1510	618	239	202
23	183	67	51	51	48	50	50	242	1430	612	259	215
24	183	67	51	51	48	50	48	433	1390	594	267	231
25	143	55	51	51	48	50	48	557	1340	558	267	239
26	119	48	51	51	48	50	46	678	1330	532	335	239
27	116	50	51	50	48	48	43	803	1300	507	381	239
28	118	81	51	50	48	48	43	915	1270	475	385	239
29	112	135	51	50	---	46	41	1010	1220	450	381	239
30	103	154	53	50	---	46	38	1020	1180	425	385	239
31	103	---	53	50	---	44	---	1020	---	400	395	---
TOTAL	5284	3004	2345	1588	1332	1507	1419	13198	42900	23183	9350	9497
MEAN	170	100	75.6	51.2	47.6	48.6	47.3	426	1430	748	302	317
MAX	271	154	154	53	50	50	51	1400	1790	1110	395	402
MIN	43	48	51	50	44	44	38	33	1060	400	223	119
AC-FT	10480	5960	4650	3150	2640	2990	2810	26180	85090	45980	18550	18840
CAL YR 1985	TOTAL	112138		MEAN	307	MAX	1850	MIN	11	AC-FT	222400	
WTR YR 1986	TOTAL	114607		MEAN	314	MAX	1790	MIN	33	AC-FT	227300	

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 mi².

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.--Estimated discharges: Nov. 14 to Apr. 28. Records good except for estimated daily discharges, which are poor. A few small diversions for irrigation of hay meadows upstream and downstream from station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--34 years, (water years 1943-56, 1967-86), 23.4 ft³/s; 16,950 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 289 ft³/s, June 10, 1973, gage height, 4.35 ft, from rating curve extended above 154 ft³/s; maximum gage height, 4.36 ft, June 24, 1971; minimum daily discharge, 2.2 ft³/s, Apr. 13, 17, 1945.

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
July 5	1200	*199	*4.01	No other peak greater than base discharge.			

Minimum daily, 4.7 ft³/s, Jan. 30 to Feb. 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.0	7.3	7.0	5.0	4.7	5.0	13	33	85	95	36	20
2	8.8	8.2	7.0	5.0	4.7	5.0	14	39	73	91	34	19
3	8.9	7.8	7.0	5.0	4.7	5.0	12	44	95	96	32	18
4	9.1	7.6	7.0	5.0	4.7	5.0	11	52	108	137	30	17
5	8.3	7.4	6.8	5.0	4.7	5.0	11	53	126	181	28	18
6	8.3	7.0	6.4	5.0	4.7	5.0	11	43	146	136	27	16
7	14	8.0	6.3	5.0	4.7	5.0	11	32	148	110	29	18
8	13	7.0	6.1	5.0	4.7	5.0	11	27	139	88	28	24
9	11	6.8	5.8	5.0	4.7	5.0	11	23	127	85	27	20
10	11	8.3	5.6	5.0	4.7	5.0	11	22	106	96	24	27
11	13	8.2	5.6	5.0	4.7	5.0	11	27	81	83	24	24
12	11	7.5	5.6	5.0	4.7	5.0	11	34	86	80	27	21
13	10	9.7	5.6	5.0	4.7	5.0	11	39	102	79	33	18
14	9.9	9.6	5.6	5.0	4.9	5.0	11	41	102	75	29	17
15	9.6	9.2	5.6	5.0	5.0	5.0	11	38	120	76	25	16
16	9.4	8.8	5.6	5.0	5.0	5.0	11	35	122	78	23	15
17	9.2	8.6	5.6	5.0	5.0	5.0	11	32	134	75	22	14
18	9.1	8.4	5.6	5.0	5.0	5.0	11	33	131	72	23	13
19	8.7	8.2	5.6	5.0	5.0	5.0	11	43	138	65	22	13
20	8.7	8.0	5.4	5.0	5.0	5.0	11	63	120	59	23	12
21	8.7	7.6	5.2	5.0	5.0	5.0	13	78	115	66	28	12
22	8.6	7.2	5.0	5.0	5.0	5.0	17	84	104	58	29	12
23	8.3	7.0	5.0	5.0	5.0	5.0	21	76	102	69	28	12
24	8.1	7.0	5.0	5.0	5.0	5.0	26	67	108	62	36	12
25	8.1	7.0	5.0	5.0	5.0	5.0	30	69	99	52	31	12
26	8.3	7.0	5.0	5.0	5.0	6.0	28	81	110	47	26	12
27	8.2	7.0	5.0	5.0	5.0	6.8	26	84	110	44	23	12
28	8.2	7.0	5.0	5.0	5.0	7.6	24	87	106	42	20	12
29	8.1	7.0	5.0	4.8	---	8.8	22	86	106	39	20	12
30	7.9	7.0	5.0	4.7	---	10	26	65	106	38	25	11
31	7.9	---	5.0	4.7	---	12	---	70	---	37	23	---
TOTAL	290.4	232.4	176.0	154.2	136.0	176.2	459	1600	3355	2411	835	479
MEAN	9.37	7.75	5.68	4.97	4.86	5.68	15.3	51.6	112	77.8	26.9	16.0
MAX	14	9.7	7.0	5.0	5.0	12	30	87	148	181	36	27
MIN	7.9	6.8	5.0	4.7	4.7	5.0	11	22	73	37	20	11
AC-FT	576	461	349	306	270	349	910	3170	6650	4780	1660	950
CAL YR 1985	TOTAL	8131.0		MEAN	22.3	MAX	139	MIN	4.5	AC-FT	16130	
WTR YR 1986	TOTAL	10304.2		MEAN	28.2	MAX	181	MIN	4.7	AC-FT	20440	

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.78 W., 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. Elevation of gage is 9,460 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 14-17, Nov. 1 to May 2, Sept. 23-30. Records good except for estimated daily discharges, which are poor. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--20 years, 17.6 ft³/s; 12,750 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 greater than base discharge of 120 ft³/s, and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
July 4	0230	*166	*3.83	No other peak greater than base discharge.			
Minimum daily, 2.8 ft ³ /s, Jan. 29 to Feb. 10.							

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.5	5.7	3.5	3.0	2.8	3.0	6.7	15	69	83	31	15
2	6.5	5.6	3.5	3.0	2.8	3.0	7.0	16	60	82	29	14
3	6.3	5.5	3.5	3.0	2.8	3.0	7.0	23	81	90	26	18
4	6.3	5.4	3.5	3.0	2.8	3.0	7.0	27	100	130	24	17
5	6.0	5.3	3.4	3.0	2.8	3.0	7.0	32	111	149	22	17
6	6.0	5.2	3.3	3.0	2.8	3.0	7.0	20	120	109	23	15
7	8.3	5.0	3.2	3.0	2.8	3.0	7.0	17	122	93	24	18
8	9.1	5.0	3.1	3.0	2.8	3.0	7.0	13	114	73	20	18
9	8.0	5.0	3.1	3.0	2.8	3.0	7.0	12	106	75	19	15
10	7.7	5.0	3.1	3.0	2.8	3.0	7.0	12	83	84	18	17
11	8.0	5.0	3.0	3.0	2.9	3.0	7.0	12	64	71	18	15
12	7.7	5.0	3.0	3.0	3.0	3.0	7.0	15	71	69	18	14
13	7.4	4.8	3.0	3.0	3.1	3.0	7.0	18	85	69	19	13
14	7.0	4.6	3.0	3.0	3.2	3.0	7.0	21	84	68	19	12
15	7.0	4.5	3.0	3.0	3.2	3.0	7.0	18	98	69	17	11
16	7.0	4.3	3.0	3.0	3.2	3.0	7.0	17	109	69	19	9.7
17	7.0	4.2	3.0	3.0	3.2	3.0	7.0	15	117	62	15	9.1
18	6.5	4.1	3.0	3.0	3.2	3.0	7.0	17	117	56	17	8.9
19	6.5	4.0	3.0	3.0	3.2	3.0	7.0	21	124	53	17	8.3
20	6.5	3.8	3.0	3.0	3.2	3.0	7.0	36	109	46	17	8.0
21	6.5	3.7	3.0	3.0	3.1	3.0	9.0	52	106	52	20	7.4
22	6.3	3.6	3.0	3.0	3.0	3.0	11	59	96	44	20	7.7
23	6.0	3.5	3.0	3.0	3.0	3.0	14	54	95	56	20	7.7
24	6.3	3.5	3.0	3.0	3.0	3.0	17	46	95	49	24	9.0
25	6.0	3.5	3.0	3.0	3.0	3.0	19	48	85	42	22	8.8
26	6.0	3.5	3.0	3.0	3.0	3.0	17	61	106	38	19	8.6
27	6.0	3.5	3.0	3.0	3.0	3.5	15	64	106	40	16	8.4
28	6.0	3.5	3.0	2.9	3.0	4.0	13	68	104	36	14	8.2
29	5.8	3.5	3.0	2.8	---	4.7	13	69	100	32	14	8.2
30	6.0	3.5	3.0	2.8	---	5.3	14	53	93	32	17	8.0
31	5.8	---	3.0	2.8	---	5.8	---	56	---	32	17	---
TOTAL	208.0	132.3	96.2	92.3	83.5	101.3	281.7	1007	2930	2053	615	355.0
MEAN	6.71	4.41	3.10	2.98	2.98	3.27	9.39	32.5	97.7	66.2	19.8	11.8
MAX	9.1	5.7	3.5	3.0	3.2	5.8	19	69	124	149	31	18
MIN	5.8	3.5	3.0	2.8	2.8	3.0	6.7	12	60	32	14	7.4
AC-FT	413	262	191	183	166	201	559	2000	5810	4070	1220	704
CAL YR 1985	TOTAL	7205.3		MEAN	19.7	MAX	165	MIN	2.3	AC-FT	14290	
WTR YR 1986	TOTAL	7955.3		MEAN	21.8	MAX	149	MIN	2.8	AC-FT	15780	

BLUE RIVER BASIN

09052800 SLATE CREEK AT UPPER STATION, NEAR DILLON, CO

LOCATION.--Lat 39°45'47", long 106°11'31", in SW1/4 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. Elevation of gage is 9,040 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 9-11, 14-17, Dec. 11 to Dec. 27, Dec. 29 to Jan. 1, Feb. 20-24, Mar. 2-22, and June 9-20. Records good except for estimated daily discharges, which are poor. No diversion upstream from station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--20 years, 27.0 ft³/s; 19,560 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 greater than base discharge of 160 ft³/s, and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
July 5	1200	*246	*4.98	No other peak greater than base discharge.			
Minimum daily, 2.9 ft ³ /s, Jan. 30 to Feb. 13.							

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	6.9	5.3	3.5	2.9	3.4	12	27	105	122	52	31
2	10	6.7	4.9	3.5	2.9	3.5	12	34	86	124	51	29
3	9.8	6.7	5.3	3.4	2.9	3.4	14	40	110	131	47	27
4	9.7	6.3	5.5	3.4	2.9	3.4	12	48	143	187	46	23
5	9.1	6.3	5.4	3.4	2.9	3.6	11	51	162	225	44	22
6	8.7	6.3	5.2	3.4	2.9	4.3	11	40	185	170	42	20
7	14	6.4	5.0	3.4	2.9	4.5	11	31	185	130	48	24
8	17	6.2	5.0	3.4	2.9	4.1	13	28	171	106	41	37
9	14	6.4	5.0	3.5	2.9	4.1	11	23	140	101	39	31
10	13	6.6	5.0	3.4	2.9	4.0	11	20	120	128	36	36
11	15	7.0	4.9	3.4	2.9	4.0	9.9	21	100	106	35	35
12	14	7.6	4.8	3.4	2.9	4.0	10	28	110	101	34	31
13	13	7.9	4.6	3.6	2.9	3.9	11	31	120	104	37	27
14	12	7.9	4.5	3.8	2.9	3.8	13	36	130	107	36	24
15	11	7.8	4.2	3.9	3.0	3.8	9.5	34	140	102	32	20
16	10	7.8	4.1	3.7	3.0	3.9	9.3	35	150	103	31	18
17	10	7.7	4.0	3.5	3.1	3.8	8.7	33	170	102	30	17
18	9.9	7.5	3.9	3.4	3.2	3.7	8.0	31	180	87	30	15
19	9.3	7.1	3.8	3.5	3.3	3.7	7.3	38	170	84	30	13
20	9.2	7.3	3.8	3.5	3.2	3.7	7.2	53	150	72	33	13
21	9.2	8.2	3.8	3.5	3.1	3.6	8.3	69	139	80	39	12
22	9.2	7.0	3.8	3.4	3.0	3.7	12	75	134	70	41	12
23	8.6	5.7	3.8	3.2	3.0	3.9	17	72	137	86	34	12
24	8.2	5.9	3.7	3.1	3.2	4.3	20	66	139	84	33	12
25	7.8	6.8	3.6	3.1	3.4	4.3	22	64	117	73	32	12
26	7.8	6.5	3.6	3.1	3.4	4.6	20	76	153	64	31	13
27	7.8	5.6	3.6	3.1	3.4	5.6	17	83	164	63	28	13
28	7.6	5.2	3.7	3.2	3.4	6.9	15	100	160	60	24	13
29	7.6	5.4	3.6	3.1	---	8.2	17	105	155	56	24	13
30	7.3	5.6	3.6	2.9	---	11	22	88	144	53	33	12
31	7.5	---	3.5	2.9	---	12	---	90	---	53	34	---
TOTAL	318.3	202.3	134.5	104.6	85.3	144.7	382.2	1570	4269	3134	1127	617
MEAN	10.3	6.74	4.34	3.37	3.05	4.67	12.7	50.6	142	101	36.4	20.6
MAX	17	8.2	5.5	3.9	3.4	12	22	105	185	225	52	37
MIN	7.3	5.2	3.5	2.9	2.9	3.4	7.2	20	86	53	24	12
AC-FT	631	401	267	207	169	287	758	3110	8470	6220	2240	1220
CAL YR 1985	TOTAL	10361.8		MEAN	28.4	MAX	234	MIN	3.1	AC-FT	20550	
WTR YR 1986	TOTAL	12088.9		MEAN	33.1	MAX	225	MIN	2.9	AC-FT	23980	

09053500 BLUE RIVER ABOVE GREEN MOUNTAIN RESERVOIR, CO.

LOCATION.--Lat 39°49'32", long 106°12'50", in NE¼ sec.3, R.79 W, T.3 S, Summit County, Hydrologic Unit 14010002, on left bank, 400 ft downstream of State Highway 9, 1.1 mi downstream from Brush Creek, 0.25 mi downstream from McKinney Gulch, and 18 mi southeast of Kremmling.

DRAINAGE AREA.--511 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1943 to September 1971, October 1985 to current year.

REVISED RECORDS.--WSP 2124: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 7,965 ft above National Geodetic Vertical Datum of 1929, from topographic map. Oct. 1, 1943 to Sept. 30, 1971, at site 0.2 mi downstream, at different datum.

REMARKS.--Estimated daily discharges: Oct. 1-21, Dec. 5 to Apr. 29, June 5-19, 24-25, July 6-15, and July 18 to Aug. 4. Records fair. Flow regulated by Dillon Reservoir since Sept. 3, 1963 (see station 09050600). Natural flow of stream affected by transmountain and transbasin diversions and by many small diversions for irrigation of about 4,000 acres of hay meadows upstream from station.

AVERAGE DISCHARGE.--20 years (1943-63), 433 ft³/s; 313,500 acre-ft/yr; 8 years (1963-70, 1986); 330 ft³/s; 239,100 acre-ft/yr, unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,020 ft³/s June 11, 1952, gage height, 4.93 ft; minimum daily, 33 ft³/s, Oct. 20, 1963.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, not determined; minimum daily, 110 ft³/s, Mar. 28 to Apr. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	300	195	219	170	170	120	110	274	1530	1720	610	543
2	300	199	221	170	170	120	110	303	1470	1620	580	535
3	300	202	217	170	170	120	120	330	1600	1550	550	530
4	300	198	187	170	165	120	120	356	1830	1740	530	519
5	300	202	170	170	160	120	120	384	2000	1920	543	529
6	300	198	170	170	150	120	120	334	2300	2000	514	513
7	300	194	170	170	145	120	120	279	2600	2100	510	526
8	300	202	170	170	140	120	120	299	2900	2000	488	583
9	250	205	170	170	140	120	120	1060	2750	1850	479	539
10	200	211	170	170	140	120	120	1560	2600	1700	461	569
11	210	238	170	170	140	120	120	1580	2450	1600	448	547
12	230	238	170	170	140	120	130	1630	2300	1500	452	541
13	230	226	170	170	140	120	130	917	2200	1400	473	523
14	230	193	170	170	140	120	130	297	2200	1320	450	515
15	230	193	170	170	140	120	130	274	2250	1140	423	511
16	170	193	170	170	140	120	130	282	2300	1120	397	496
17	140	193	170	170	140	120	130	266	2350	1110	382	453
18	180	193	170	170	140	120	130	247	2400	1080	367	202
19	220	193	170	170	130	120	130	253	2400	1030	349	281
20	260	193	170	170	120	120	130	297	2450	1000	349	282
21	260	193	170	170	120	120	135	367	2380	1000	373	278
22	270	193	170	170	120	120	140	411	2260	1000	389	276
23	270	194	170	170	120	120	150	511	2160	980	406	288
24	268	178	170	170	120	120	160	690	2050	920	426	312
25	252	153	170	170	120	120	170	842	2000	870	423	325
26	217	138	170	170	120	120	180	1020	2050	840	453	333
27	217	140	170	170	120	115	200	1170	2040	800	513	327
28	214	151	170	170	120	110	210	1310	1990	750	502	328
29	211	192	170	170	---	110	225	1450	1930	720	507	335
30	203	221	170	170	---	110	246	1380	1880	680	527	329
31	205	---	170	170	---	110	---	1380	---	640	545	---
TOTAL	7537	5812	5434	5270	3880	3675	4286	21753	65620	39700	14419	12868
MEAN	243	194	175	170	139	119	143	702	2187	1281	465	429
MAX	300	238	221	170	170	120	246	1630	2900	2100	610	583
MIN	140	138	170	170	120	110	110	247	1470	640	349	202
WTR YR 1986	TOTAL	190254		MEAN	521	MAX	2900	MIN	110			

BLUE RIVER BASIN

09053500 BLUE RIVER ABOVE GREEN MOUNTAIN RESERVOIR, CO--Continued

WATER QUALITY RECORDS

PERIOD OF RECORD.--May to September 1986.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: May to September 1986.

WATER TEMPERATURE: May to September 1986.

INSTRUMENTATION.--Water-quality monitor from May to September 1986.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum for period May to September, 239 microsiemens May 10; minimum, 98 microsiemens May 22.

WATER TEMPERATURE: Maximum for period May to September, 18.0°C Aug. 18; minimum, 1.5°C May 5, 10.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 20 DAY (MG/L)	HARD- NESS (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)
APR 30...	1500	232	170	8.4	10.5	9.0	1.0	2.3	70	21
MAY 14...	1140	277	152	8.4	7.0	8.7	1.6	3.2	61	19
MAY 23...	1430	481	130	7.9	8.5	8.8	--	--	52	16
JUN 10...	1530	2570	165	8.1	9.5	8.5	1.1	2.7	73	24
JUL 15...	1415	1260	158	7.7	17.0	7.3	--	--	59	19
SEP 08...	1300	535	206	8.4	10.0	8.7	--	--	82	27

DATE	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	PERCENT SODIUM	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 SI02)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)
APR 30...	4.2	4.6	12	1.5	55	17	3.5	0.3	8.2	110
MAY 14...	3.4	3.7	11	1.4	47	22	2.6	0.2	7.1	89
MAY 23...	2.9	3.2	12	1.2	39	24	2.0	0.3	6.1	85
JUN 10...	3.2	3.7	10	1.9	39	39	1.8	0.4	5.4	101
JUL 15...	2.9	2.9	9	1.6	39	31	1.4	0.4	4.8	83
SEP 08...	3.5	4.8	11	2.6	43	45	2.3	0.5	5.3	119

DATE	SOLIDS, SUM OF CONSTITUENTS, 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)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N)
APR 30...	93	0.15	69	0.10	0.14	0.03	<0.01	0.37	--
MAY 14...	88	0.12	67	0.10	0.13	0.03	0.02	0.17	0.28
MAY 23...	79	0.12	110	0.20	0.14	0.03	0.01	0.27	0.29
JUN 10...	100	0.14	701	0.20	0.15	0.02	0.02	0.28	0.18
JUL 15...	87	0.11	282	<0.10	<0.10	0.02	0.04	0.28	0.26
SEP 08...	120	0.16	172	0.40	0.24	0.03	0.02	0.37	0.38

09053500 BLUE RIVER ABOVE GREEN MOUNTAIN RESERVOIR, CO--Continued

WATER QUALITY DATA, OCTOBER 1985 TO SEPTEMBER 1986

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)	PHOS- PHORUS, ORTHO, TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)
APR 30...	0.4	0.4	0.5	0.01	0.01	<0.01	<0.01	6.0	5.5
MAY 14...	0.2	0.3	0.3	0.01	<0.01	<0.01	<0.01	4.8	4.1
23...	0.3	0.3	0.5	0.04	0.02	<0.01	<0.01	3.7	4.3
JUN 10...	0.3	0.2	0.5	0.02	0.01	<0.01	<0.01	2.9	3.0
JUL 15...	0.3	0.3	--	0.01	0.01	<0.01	<0.01	2.0	2.6
SEP 08...	0.4	0.4	0.8	0.02	0.02	<0.01	<0.01	3.0	2.5

SPECIFIC CONDUCTANCE, MICROSIEMENS/CM AT 25 DEG C, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	147	164	148	137	187
2	---	---	---	---	---	---	---	138	168	145	136	190
3	---	---	---	---	---	---	---	132	163	144	137	192
4	---	---	---	---	---	---	---	127	157	134	137	195
5	---	---	---	---	---	---	---	120	153	126	137	195
6	---	---	---	---	---	---	---	129	150	133	138	197
7	---	---	---	---	---	---	---	139	150	140	135	196
8	---	---	---	---	---	---	---	147	155	145	137	185
9	---	---	---	---	---	---	---	221	154	147	138	189
10	---	---	---	---	---	---	---	226	160	141	141	185
11	---	---	---	---	---	---	---	229	170	144	142	185
12	---	---	---	---	---	---	---	226	169	143	140	189
13	---	---	---	---	---	---	---	219	164	141	136	191
14	---	---	---	---	---	---	---	147	157	141	138	196
15	---	---	---	---	---	---	---	141	152	141	139	198
16	---	---	---	---	---	---	---	141	150	139	142	199
17	---	---	---	---	---	---	---	145	149	139	143	200
18	---	---	---	---	---	---	---	150	149	141	143	182
19	---	---	---	---	---	---	---	145	145	143	143	189
20	---	---	---	---	---	---	---	130	147	145	143	194
21	---	---	---	---	---	---	---	109	149	142	139	196
22	---	---	---	---	---	---	---	106	149	145	136	197
23	---	---	---	---	---	---	---	124	149	138	138	195
24	---	---	---	---	---	---	---	150	147	135	137	197
25	---	---	---	---	---	---	---	160	149	134	137	198
26	---	---	---	---	---	---	---	160	143	136	143	195
27	---	---	---	---	---	---	---	160	145	136	163	198
28	---	---	---	---	---	---	---	161	146	136	173	197
29	---	---	---	---	---	---	---	161	144	137	179	194
30	---	---	---	---	---	---	156	169	143	137	178	197
31	---	---	---	---	---	---	---	170	---	137	181	---
MEAN	---	---	---	---	---	---	---	156	153	140	145	193

BLUE RIVER BASIN

09053500 BLUE RIVER ABOVE GREEN MOUNTAIN RESERVOIR, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	10.0	3.5	9.5	6.5	15.5	9.5	17.0	10.5	9.5	5.5
2	---	---	10.0	4.0	11.0	7.0	15.5	8.5	16.0	10.5	8.5	4.5
3	---	---	8.5	3.5	12.0	7.0	15.0	10.0	14.5	10.0	11.5	4.5
4	---	---	10.5	3.5	10.5	6.5	15.0	9.5	14.5	9.5	10.5	4.5
5	---	---	8.0	1.5	10.5	6.5	12.5	10.5	15.5	9.5	11.0	4.5
6	---	---	6.0	1.5	12.0	7.0	14.5	9.5	15.5	10.0	10.0	4.0
7	---	---	8.0	2.0	12.0	6.0	12.5	10.0	14.5	9.5	9.0	5.0
8	---	---	5.5	2.0	12.0	7.5	13.0	10.0	15.0	10.0	10.0	5.0
9	---	---	4.5	1.5	11.0	7.5	13.5	10.5	16.0	9.0	8.5	5.0
10	---	---	7.0	1.5	8.5	6.0	13.5	8.0	15.5	10.0	7.5	4.5
11	---	---	7.5	2.0	12.0	5.5	14.5	9.5	15.0	9.5	9.5	4.0
12	---	---	6.5	2.0	12.5	7.0	13.5	9.0	14.0	9.5	8.5	3.5
13	---	---	9.5	1.5	11.5	7.0	15.5	10.0	14.5	9.5	9.5	4.0
14	---	---	6.5	3.5	12.0	6.5	16.0	10.5	15.0	10.0	10.0	4.5
15	---	---	7.0	3.5	13.0	7.0	16.0	11.0	16.0	9.0	9.5	3.5
16	---	---	9.0	2.0	13.0	7.0	14.5	11.5	17.0	10.0	9.0	4.5
17	---	---	10.5	2.5	12.5	9.0	15.0	10.5	16.5	10.5	9.0	3.0
18	---	---	11.0	3.5	12.5	8.5	15.0	11.0	18.0	11.5	7.0	4.5
19	---	---	11.0	4.0	12.5	7.5	14.5	10.5	17.0	12.0	9.0	3.0
20	---	---	11.0	4.5	12.5	8.0	14.5	11.0	15.0	11.5	8.0	4.0
21	---	---	11.0	4.5	13.5	7.5	15.5	10.0	16.0	11.5	9.5	3.5
22	---	---	11.0	3.5	13.5	8.0	15.5	11.5	14.5	10.0	10.0	5.5
23	---	---	9.0	2.5	14.0	8.0	14.0	11.0	14.5	10.5	8.5	6.0
24	---	---	9.0	4.0	12.5	9.5	14.5	11.5	15.0	10.5	7.0	4.0
25	---	---	11.5	3.5	12.5	9.5	15.0	9.0	14.5	11.0	6.0	2.5
26	---	---	11.0	4.0	13.0	9.5	15.5	7.0	17.5	11.0	6.5	2.5
27	---	---	10.5	4.0	15.0	8.5	16.0	9.5	15.5	9.0	7.5	1.5
28	---	---	10.5	4.5	15.0	9.5	16.5	9.5	13.5	8.5	8.0	3.0
29	---	---	10.0	5.0	13.5	10.0	15.0	9.5	11.5	8.0	7.0	4.5
30	11.0	4.0	10.5	5.5	12.5	9.5	16.5	10.0	11.0	7.5	6.0	2.5
31	---	---	12.0	6.0	---	---	17.0	10.0	9.5	6.0	---	---
MONTH	---	---	12.0	1.5	15.0	5.5	17.0	7.0	18.0	6.0	11.5	1.5

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.79 W., 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 mi².

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. Elevation of gage is 8,750 ft above National Geodetic Vertical Datum of 1929, 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.--Estimated daily discharges: Nov. 15 to Apr. 27. Records good except for estimated daily discharges, which are poor. No diversion upstream from station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--27 years, 33.0 ft³/s; 23,910 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 555 ft³/s, June 25, 1983, gage height, 4.74 ft, from rating curve extended above 240 ft³/s, maximum gage height, 5.64 ft, June 30, 1984; minimum daily discharge, 1.3 ft³/s, Feb. 22, 1976, Jan. 10, 1977.

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
June 7	0100	266	4.78	July 5	1200	*288	*4.89

Minimum daily discharge, 3.7 ft³/s, Jan. 27 to Feb. 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	11	6.6	4.0	3.7	4.0	13	26	121	129	59	49
2	13	11	6.6	4.0	3.7	4.0	15	40	102	134	58	39
3	13	11	6.6	4.0	3.7	4.0	16	52	140	147	56	32
4	12	9.4	6.6	4.0	3.7	4.0	15	67	174	228	54	27
5	12	9.7	6.6	4.0	3.7	4.0	14	68	189	260	50	26
6	12	9.0	6.4	4.0	3.7	4.0	14	46	223	193	49	25
7	16	9.3	6.3	4.0	3.7	4.0	14	33	218	141	55	27
8	24	8.2	6.2	4.0	3.7	4.0	14	27	195	121	49	47
9	22	8.7	6.0	4.0	3.7	4.0	14	24	171	111	46	40
10	21	9.6	5.8	4.0	3.7	4.0	14	21	142	143	42	49
11	23	11	5.6	4.0	3.7	4.0	14	21	99	118	40	48
12	21	10	5.5	4.0	3.7	4.0	14	28	94	107	42	39
13	19	9.2	5.4	4.0	3.7	4.0	14	31	114	111	45	32
14	17	8.3	5.2	4.0	3.7	4.0	14	39	120	122	43	28
15	15	8.0	5.0	4.0	3.8	4.0	14	37	152	120	37	24
16	15	7.4	5.0	4.0	4.0	4.0	14	36	170	132	36	22
17	16	7.0	4.9	4.0	4.0	4.0	14	32	187	135	35	19
18	18	6.8	4.7	4.0	4.0	4.0	14	30	178	110	35	17
19	17	6.6	4.6	4.0	4.0	4.0	14	36	198	95	38	16
20	16	6.6	4.5	4.0	4.0	4.0	14	60	181	83	43	15
21	16	6.6	4.4	4.0	4.0	4.0	14	90	168	84	55	14
22	16	6.6	4.3	4.0	4.0	4.0	14	102	153	77	55	13
23	14	6.6	4.2	4.0	4.0	4.0	17	88	155	97	49	14
24	12	6.6	4.0	4.0	4.0	4.0	19	75	159	89	44	16
25	12	6.6	4.0	4.0	4.0	4.5	21	71	135	81	39	14
26	12	6.6	4.0	3.9	4.0	5.0	19	96	185	71	36	16
27	12	6.6	4.0	3.7	4.0	5.8	17	107	190	68	34	17
28	12	6.6	4.0	3.7	4.0	6.7	16	116	182	65	30	17
29	12	6.6	4.0	3.7	---	8.0	16	121	185	62	32	17
30	12	6.6	4.0	3.7	---	10	19	87	164	59	57	16
31	12	---	4.0	3.7	---	11	---	98	---	60	52	---
TOTAL	477	243.8	159.0	122.4	107.6	147.0	455	1805	4844	3553	1395	775
MEAN	15.4	8.13	5.13	3.95	3.84	4.74	15.2	58.2	161	115	45.0	25.8
MAX	24	11	6.6	4.0	4.0	11	21	121	223	260	59	49
MIN	12	6.6	4.0	3.7	3.7	4.0	13	21	94	59	30	13
AC-FT	946	484	315	243	213	292	902	3580	9610	7050	2770	1540
CAL YR 1985	TOTAL	13407.1		MEAN	36.7	MAX	226	MIN	2.4	AC-FT	26590	
WTR YR 1986	TOTAL	14083.8		MEAN	38.6	MAX	260	MIN	3.7	AC-FT	27940	

BLUE RIVER BASIN

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 mi².

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

GAGE.--Water-stage recorder. Elevation of gage is 8,605 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Apr. 5 to May 6, July 12-15, July 24 to Aug. 18. Records good except for estimated daily discharges which are poor. No diversion upstream from station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--20 years, 20.8 ft³/s; 15,070 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 353 ft³/s, June 25, 1983, gage height, 5.20 ft, maximum gage height, 5.43 ft, June 21, 1967; minimum daily discharge, 0.28 ft³/s, Oct. 7, 1971.

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
June 7	0100	*246	*4.68	No other peak greater than base discharge.			
Minimum daily, 1.5 ft ³ /s, Jan. 30 to Feb. 14.							

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.4	4.7	3.9	2.1	1.5	1.8	7.5	25	106	129	23	16
2	5.1	4.8	3.8	2.0	1.5	1.8	8.3	31	98	150	21	14
3	5.2	4.8	3.9	2.0	1.5	1.7	7.3	37	134	118	20	12
4	4.8	4.5	3.8	2.0	1.5	1.7	6.7	40	151	70	19	10
5	4.9	4.8	3.7	1.9	1.5	1.7	6.6	35	156	64	18	8.8
6	4.7	4.6	3.6	1.9	1.5	1.7	6.6	30	202	77	17	7.4
7	6.8	4.9	3.4	1.9	1.5	1.7	6.6	25	203	66	20	7.5
8	10	4.8	3.3	1.9	1.5	1.8	6.6	24	171	58	19	11
9	10	5.4	3.3	1.8	1.5	1.8	6.6	21	142	61	18	12
10	10	5.7	3.2	1.8	1.5	1.9	6.6	19	121	63	16	16
11	13	5.7	3.0	1.8	1.5	1.9	6.6	21	86	61	15	19
12	12	5.4	2.9	1.8	1.5	1.9	6.6	27	79	58	14	17
13	10	5.1	2.9	1.8	1.5	1.9	6.6	28	102	62	13	15
14	9.5	4.8	2.8	1.8	1.5	1.9	7.6	34	100	62	12	12
15	8.2	4.8	2.7	1.7	1.6	2.0	7.2	33	130	62	11	10
16	7.6	4.6	2.7	1.7	1.7	2.0	7.0	33	148	68	11	9.2
17	7.0	4.3	2.6	1.7	1.8	2.0	6.6	31	152	72	10	8.1
18	7.0	4.3	2.5	1.7	1.8	2.0	6.4	27	146	54	9.4	7.4
19	7.0	4.2	2.5	1.7	1.8	2.0	6.1	27	142	46	8.7	6.9
20	6.7	4.0	2.5	1.7	2.1	1.9	5.8	35	139	44	9.2	6.7
21	6.3	4.1	2.4	1.7	2.2	1.9	7.6	56	144	47	13	6.4
22	7.4	4.0	2.4	1.7	2.1	1.9	11	72	122	41	14	6.1
23	8.8	3.8	2.3	1.7	2.0	2.0	14	69	123	38	12	6.0
24	6.4	3.9	2.3	1.7	1.9	2.1	17	70	124	37	11	11
25	5.7	4.0	2.3	1.6	1.9	2.2	19	62	100	37	11	8.8
26	5.4	4.1	2.2	1.6	1.8	2.3	18	73	155	35	10	8.1
27	5.1	3.9	2.2	1.6	1.8	2.5	14	86	134	33	9.5	7.9
28	5.1	3.8	2.1	1.6	1.8	3.4	13	97	121	30	8.3	8.1
29	5.1	3.8	2.1	1.6	---	4.5	16	100	102	28	7.7	8.1
30	5.1	3.8	2.1	1.5	---	5.7	20	77	85	26	10	8.0
31	4.9	---	2.1	1.5	---	6.6	---	84	---	24	13	---
TOTAL	220.2	135.4	87.5	54.5	47.3	72.2	285.5	1429	3918	1821	423.8	304.5
MEAN	7.10	4.51	2.82	1.76	1.69	2.33	9.52	46.1	131	58.7	13.7	10.1
MAX	13	5.7	3.9	2.1	2.2	6.6	20	100	203	150	23	19
MIN	4.7	3.8	2.1	1.5	1.5	1.7	5.8	19	79	24	7.7	6.0
AC-FT	437	269	174	108	94	143	566	2830	7770	3610	841	604
CAL YR 1985 TOTAL	8338.5		MEAN		22.8	MAX	269	MIN	1.5	AC-FT	16540	
WTR YR 1986 TOTAL	8798.9		MEAN		24.1	MAX	203	MIN	1.5	AC-FT	17450	

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 above National Geodetic Vertical Datum of 1929.

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 provided 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, 261,200 acre-ft, June 8, elevation, 9,019.16 ft; minimum, 229,100 acre-ft, Nov. 19, elevation, 9,008.92.

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 above National Geodetic Vertical Datum of 1929.

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 provided 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, 145,100 acre-ft, Aug. 27, elevation, 7,949.62 ft; minimum, 33,320 acre-ft, Apr. 30 elevation, 7,870.28 ft.

MONTHEND ELEVATION AND CONTENTS, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

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.....	9,009.70	231,400	-	7,943.77	133,000	-
Oct. 31.....	9,008.98	229,300	-2,100	7,939.98	125,500	-7,500
Nov. 30.....	9,009.07	229,500	+200	7,933.28	113,000	-12,500
Dec. 31.....	9,009.47	230,700	+1,200	7,924.81	98,280	-14,720
CAL YR 1985..	-	-	+1,300	-	-	-10,920
Jan. 31.....	9,010.21	232,900	+2,200	7,913.10	80,360	-17,920
Feb. 28.....	9,011.04	235,400	+2,500	7,900.94	64,190	-16,170
Mar. 31.....	9,012.01	238,300	+2,900	7,882.52	44,120	-20,070
Apr. 30.....	9,014.63	246,500	+8,200	7,870.28	33,320	-10,800
May 31.....	9,018.57	259,200	+12,700	7,884.98	46,500	+13,180
June 30.....	9,018.60	259,300	+100	7,924.34	97,500	+51,000
July 31.....	9,017.81	256,700	-2,600	7,948.76	143,300	+45,800
Aug. 31.....	9,017.03	254,100	-2,600	7,949.48	144,800	+1,500
Sept. 30.....	9,014.51	246,100	-8,000	7,947.01	139,600	-5,200
WTR YR 1986..	-	-	+14,700	-	-	+6,600

BLUE RIVER BASIN

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 mi², includes 15.3 mi² of Elliott Creek above diversion for Elliott Creek feeder canal.

WATER-DISCHARGE RECORDS

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 above 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.--Estimated daily discharges: May 18-23. Records good. Flow regulated by Green Mountain Reservoir since November 1942 (station 09057000). Diversions for irrigation of about 5,000 acres upstream from station. Transmountain diversions upstream from station (see elsewhere in this report).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,000 ft³/s, June 4, 1938, gage height, 5.93 ft, site and datum then in use, from rating curve extended above 3,000 ft³/s; maximum gage height, 9.52 ft, July 11, 1983; minimum daily discharge (prior to construction of Green Mountain Reservoir), 80 ft³/s, Feb. 18-24, 1938, Feb. 18-19, 1940; no flow at times in 1943.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,810 ft³/s at 1700 June 17, gage height, 7.60 ft; minimum daily, 53 ft³/s, Nov. 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	416	552	387	419	412	482	518	306	1260	1300	723	677
2	229	504	389	418	422	477	514	359	1310	1230	722	677
3	222	505	389	408	412	472	518	417	1320	826	719	679
4	230	503	383	400	409	475	532	415	1310	616	683	671
5	228	504	384	391	414	467	541	494	1320	613	575	653
6	226	508	381	397	416	476	541	616	1420	611	524	628
7	189	509	380	407	417	476	565	644	1560	496	527	650
8	110	499	381	413	408	471	559	613	1550	354	533	690
9	173	504	384	408	410	470	517	566	1650	321	531	659
10	490	502	384	400	412	489	530	566	1770	323	528	622
11	603	504	386	397	419	514	526	563	1780	323	506	630
12	601	502	386	401	415	522	519	612	1750	314	457	627
13	602	500	400	399	419	514	524	685	1760	309	422	626
14	603	482	392	398	415	509	524	716	1780	313	425	625
15	433	436	385	408	415	517	524	701	1780	323	437	623
16	114	404	380	423	415	518	526	648	1780	417	473	623
17	114	398	376	420	421	513	513	630	1780	516	474	621
18	371	401	380	420	416	529	473	640	1670	595	472	612
19	596	398	389	419	413	517	407	660	1550	718	469	519
20	599	386	385	415	416	484	411	700	1550	717	475	419
21	599	384	390	417	414	487	363	740	1560	710	454	415
22	600	383	385	418	416	516	314	770	1560	721	420	412
23	601	387	389	425	418	522	316	800	1560	743	422	440
24	597	389	389	420	433	485	315	845	1550	812	423	496
25	600	265	388	418	466	477	314	846	1560	927	443	545
26	600	53	398	414	476	485	314	849	1460	933	501	549
27	602	174	411	408	475	483	312	917	1300	934	553	551
28	604	384	416	419	476	500	310	1020	1290	903	640	545
29	600	380	415	419	---	507	309	1090	1300	855	681	543
30	604	379	410	415	---	508	305	1230	1300	783	685	541
31	602	---	409	418	---	518	---	1220	---	717	682	---
TOTAL	13758	12679	12101	12752	11870	15380	13454	21878	46090	20273	16579	17568
MEAN	444	423	390	411	424	496	448	706	1536	654	535	586
MAX	604	552	416	425	476	529	565	1230	1780	1300	723	690
MIN	110	53	376	391	408	467	305	306	1260	309	420	412
AC-FT	27290	25150	24000	25290	23540	30510	26690	43400	91420	40210	32880	34850
CAL YR 1985	TOTAL	228950.0		MEAN	627	MAX	1690	MIN	8.0	AC-FT	454100	
WTR YR 1986	TOTAL	214382		MEAN	587	MAX	1780	MIN	53	AC-FT	425200	

09057500 BLUE RIVER BELOW GREEN MOUNTAIN RESERVOIR, CO--Continued

WATER QUALITY RECORDS

PERIOD OF RECORD.--January to September 1986.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: January to September 1986.

WATER TEMPERATURE: January to September 1986.

INSTRUMENTATION.--Water quality monitor from January to September 1986.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum for period January to September, 196 microsiemens Apr. 13; minimum, 127 microsiemens July 24.

WATER TEMPERATURE: Maximum for period January to September, 13.0°, Aug. 19, 30; minimum, 3.0°, Feb. 10, 13, 14, 19.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	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)	PERCENT SODIUM	POTAS- SIUM, DIS- SOLVED (MG/L AS K)
APR												
30...	1300	360	245	8.1	6.0	9.0	90	28	4.9	4.8	10	1.7
MAY												
14...	0800	804	205	8.4	7.0	8.8	76	23	4.6	4.3	11	1.6
23...	1330	856	184	7.7	8.0	8.6	78	24	4.3	4.4	11	1.6
JUN												
10...	0830	1880	160	8.0	10.5	8.0	66	21	3.3	3.7	11	1.8
JUL												
15...	1600	323	162	7.4	12.0	7.5	62	20	2.9	3.0	9	1.5
SEP												
08...	1400	796	170	8.4	13.5	6.6	71	23	3.4	3.5	9	1.9

DATE	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, 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 TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)
APR												
30...	61	34	2.4	0.4	6.2	122	120	0.17	119	0.20	0.18	0.04
MAY												
14...	60	31	2.4	0.3	6.3	113	110	0.15	245	0.02	0.17	0.02
23...	55	34	2.3	0.4	6.1	110	110	0.15	254	0.20	0.16	0.04
JUN												
10...	42	32	1.9	0.3	5.6	89	95	0.12	452	0.10	0.15	0.03
JUL												
15...	38	33	1.6	0.4	4.8	94	90	0.13	78	0.10	0.15	0.03
SEP												
08...	41	33	1.6	0.4	4.7	97	96	0.13	208	0.20	0.16	0.02

DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC 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)	PHOS- PHORUS, ORTHOPHOS- PHATE, TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHOPHOS- PHATE, DIS- SOLVED (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)
APR												
30...	<0.01	0.36	--	0.4	0.4	0.6	0.01	<0.01	<0.01	<0.01	2.2	2.5
MAY												
14...	0.03	0.18	0.27	0.2	0.3	0.4	<0.01	<0.01	<0.01	<0.01	--	3.1
23...	0.03	0.36	0.27	0.4	0.3	0.6	0.02	0.03	<0.01	<0.01	3.8	3.8
JUN												
10...	0.03	0.27	0.17	0.3	0.2	0.4	0.01	0.01	<0.01	<0.01	3.0	3.1
JUL												
15...	0.04	0.57	0.16	0.6	0.2	0.7	0.01	0.01	<0.01	<0.01	8.0	2.6
SEP												
08...	0.02	0.38	--	0.4	<0.2	0.6	0.01	<0.01	<0.01	<0.01	--	2.2

BLUE RIVER BASIN

09057500 BLUE RIVER BELOW GREEN MOUNTAIN RESERVOIR, CO--Continued

WATER QUALITY DATA, WATER YEAR 1985 TO SEPTEMBER 1986

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	170	176	188	188	165	139	132	138
2	---	---	---	---	169	177	188	187	165	138	132	138
3	---	---	---	---	170	176	188	187	161	139	131	139
4	---	---	---	---	170	177	187	188	156	139	133	141
5	---	---	---	---	170	177	187	186	156	140	133	143
6	---	---	---	---	171	177	187	185	152	140	133	146
7	---	---	---	---	171	177	187	183	141	139	133	148
8	---	---	---	---	171	177	185	181	146	139	134	150
9	---	---	---	---	171	178	185	183	148	139	134	149
10	---	---	---	---	170	178	186	183	144	139	134	150
11	---	---	---	---	171	178	185	184	140	139	134	151
12	---	---	---	---	171	179	184	182	140	139	135	152
13	---	---	---	---	172	179	193	182	140	139	136	152
14	---	---	---	---	173	179	191	181	140	140	136	152
15	---	---	---	---	173	180	184	180	142	142	135	153
16	---	---	---	---	173	180	187	179	141	147	135	153
17	---	---	---	---	173	181	188	178	142	142	135	152
18	---	---	---	166	174	181	188	181	142	140	135	152
19	---	---	---	167	174	181	187	185	142	140	135	152
20	---	---	---	167	174	181	188	183	142	136	136	151
21	---	---	---	167	175	181	186	183	142	136	137	151
22	---	---	---	167	175	181	186	181	144	135	137	151
23	---	---	---	167	175	182	187	179	144	130	137	151
24	---	---	---	168	175	182	187	176	143	129	136	151
25	---	---	---	168	176	184	187	180	142	132	136	150
26	---	---	---	168	176	185	186	178	142	133	137	151
27	---	---	---	168	176	186	186	175	141	133	137	151
28	---	---	---	168	176	186	188	175	140	132	137	152
29	---	---	---	169	---	188	188	177	140	132	137	151
30	---	---	---	169	---	188	188	174	140	132	138	152
31	---	---	---	169	---	189	---	173	---	132	138	---
MEAN	-	--	---	---	---	173	181	187	181	145	137	149

09057500 BLUE RIVER BELOW GREEN MOUNTAIN RESERVOIR, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	---	---	---	---	---	---	3.0	3.0	3.0	3.0
2	---	---	---	---	---	---	---	---	3.0	3.0	3.5	3.0
3	---	---	---	---	---	---	---	---	3.0	3.0	3.5	3.0
4	---	---	---	---	---	---	---	---	3.0	3.0	3.5	3.0
5	---	---	---	---	---	---	---	---	3.0	3.0	3.5	3.0
6	---	---	---	---	---	---	---	---	3.0	3.0	3.5	3.0
7	---	---	---	---	---	---	---	---	3.0	3.0	3.5	3.0
8	---	---	---	---	---	---	---	---	3.0	3.0	3.5	3.0
9	---	---	---	---	---	---	---	---	3.0	3.0	3.5	3.0
10	---	---	---	---	---	---	---	---	3.0	3.0	3.0	3.0
11	---	---	---	---	---	---	---	---	3.0	3.0	3.5	3.0
12	---	---	---	---	---	---	---	---	3.0	3.0	3.0	3.0
13	---	---	---	---	---	---	---	---	3.0	3.0	3.5	3.0
14	---	---	---	---	---	---	---	---	3.0	3.0	3.5	3.0
15	---	---	---	---	---	---	---	---	3.0	3.0	3.5	3.0
16	---	---	---	---	---	---	---	---	3.0	3.0	3.5	3.0
17	---	---	---	---	---	---	---	---	3.0	3.0	3.5	3.0
18	---	---	---	---	---	---	3.0	3.0	3.0	3.0	3.5	3.0
19	---	---	---	---	---	---	3.0	3.0	3.0	3.0	3.5	3.0
20	---	---	---	---	---	---	3.0	3.0	3.5	3.0	3.5	3.0
21	---	---	---	---	---	---	3.0	3.0	3.0	3.0	3.5	3.0
22	---	---	---	---	---	---	3.0	3.0	3.5	3.0	3.5	3.0
23	---	---	---	---	---	---	3.0	3.0	3.5	3.0	3.5	3.0
24	---	---	---	---	---	---	3.0	3.0	3.0	3.0	3.5	3.5
25	---	---	---	---	---	---	3.0	3.0	3.5	3.0	3.5	3.5
26	---	---	---	---	---	---	3.0	3.0	3.5	3.0	3.5	3.5
27	---	---	---	---	---	---	3.0	3.0	3.5	3.0	3.5	3.5
28	---	---	---	---	---	---	3.0	3.0	3.5	3.0	3.5	3.5
29	---	---	---	---	---	---	3.0	3.0	---	---	3.5	3.5
30	---	---	---	---	---	---	3.0	3.0	---	---	3.5	3.5
31	---	---	---	---	---	---	3.0	3.0	---	---	3.5	3.5
MONTH	---	---	---	---	---	---	---	---	3.5	3.0	3.5	3.0
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	3.5	3.5	6.0	5.5	9.5	8.0	11.5	11.0	12.0	12.0	12.5	12.5
2	3.5	3.5	6.5	5.5	9.0	8.0	11.5	11.0	12.5	12.0	12.5	12.5
3	3.5	3.5	6.0	5.5	9.5	8.5	11.5	10.5	12.5	12.0	12.5	12.0
4	3.5	3.5	6.0	5.5	9.5	8.0	12.0	10.5	12.5	12.0	12.5	12.0
5	3.5	3.5	5.5	5.0	9.0	8.5	11.5	11.0	12.5	12.0	12.5	12.0
6	3.5	3.5	7.0	5.5	9.0	9.0	12.0	11.0	12.5	12.0	12.5	12.0
7	3.5	3.5	7.0	6.0	10.0	8.5	12.0	11.0	12.5	12.0	12.5	12.0
8	4.0	3.5	7.0	6.5	9.5	9.0	11.5	11.0	12.5	12.0	12.5	12.0
9	4.0	3.5	7.0	6.0	9.5	9.0	12.0	11.0	12.5	12.0	12.5	12.0
10	4.0	3.5	7.5	6.0	10.0	9.0	11.5	11.5	12.5	12.0	12.5	12.0
11	4.0	3.5	6.5	6.0	10.0	9.0	12.0	11.5	12.5	12.0	12.0	12.0
12	4.0	3.5	7.0	6.0	10.0	9.0	12.0	11.0	12.5	12.0	12.0	12.0
13	4.0	3.5	7.0	6.0	10.0	9.0	12.0	11.5	12.5	12.0	12.0	12.0
14	4.0	3.5	7.0	6.0	10.0	9.0	12.0	11.5	12.5	12.0	12.0	11.5
15	4.5	4.0	7.0	6.0	10.0	9.5	12.5	11.0	12.5	12.0	12.0	11.5
16	4.0	4.0	7.0	6.0	10.0	9.5	12.0	11.5	12.5	12.0	12.0	11.5
17	4.0	4.0	7.0	6.5	10.0	9.5	12.0	11.5	12.5	12.5	12.0	11.5
18	4.0	4.0	7.0	6.5	10.5	9.5	12.0	11.5	12.5	12.0	12.0	11.5
19	4.0	4.0	8.0	6.5	10.5	9.5	12.0	11.5	12.5	12.5	11.5	11.5
20	4.5	4.0	7.5	6.5	10.5	9.5	12.0	11.5	12.5	12.5	11.5	11.5
21	4.5	4.0	7.5	6.5	11.0	9.5	12.0	11.5	12.5	12.5	11.5	11.5
22	4.5	4.5	7.5	6.5	11.0	10.0	12.0	11.5	12.5	12.0	11.5	11.5
23	4.5	4.0	8.0	7.0	11.0	10.0	12.0	11.5	12.5	12.0	11.5	11.5
24	5.0	4.0	8.5	7.0	11.0	10.5	12.0	11.5	12.5	12.0	11.5	11.5
25	5.0	4.5	8.0	7.0	11.0	10.5	12.0	12.0	12.5	12.5	12.0	11.5
26	5.0	4.5	8.5	7.0	11.0	10.5	12.0	12.0	12.5	12.5	11.5	11.5
27	5.0	4.5	8.5	7.0	11.0	10.5	12.0	12.0	12.5	12.5	11.5	11.5
28	5.0	4.5	8.5	7.5	11.5	10.5	12.5	12.0	12.5	12.5	11.5	11.0
29	5.5	4.5	8.5	7.5	11.0	10.5	12.5	12.0	12.5	12.5	11.5	11.0
30	6.0	5.0	8.5	8.0	11.5	10.5	12.5	12.0	12.5	12.5	11.5	11.0
31	---	---	8.5	8.0	---	---	12.5	12.0	12.5	12.5	---	---
MONTH	6.0	3.5	8.5	5.0	11.5	8.0	12.5	10.5	12.5	12.0	12.5	11.0

COLORADO RIVER MAIN STEM

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. Elevation of gage is 7,320 ft above National Geodetic Vertical Datum of 1929, from topographic map. See WSP 1313 for history of changes prior to Oct. 1, 1961.

REMARKS.--No estimated daily discharges. Records good. Natural flow of stream affected by transmountain diversions, storage reservoirs, diversions for irrigation of about 40,000 acres upstream from 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, 4,530 ft³/s at 0500 June 10, gage height, 11.03 ft; minimum daily, 544 ft³/s, Oct. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	818	934	828	711	710	921	1750	2680	4060	2770	1320	985
2	544	855	839	742	713	902	1820	2900	4000	2810	1160	973
3	575	860	833	730	707	899	1900	3290	3930	2470	1130	955
4	579	859	812	732	701	912	1720	3640	3950	2020	1130	930
5	582	857	685	675	705	940	1610	4050	4070	2060	1020	887
6	578	859	706	717	703	1010	1620	4190	4140	2140	901	822
7	611	848	729	704	706	1060	1670	3880	4250	2200	887	819
8	591	855	749	716	701	1080	1740	3720	4180	2030	906	866
9	651	875	748	760	699	1210	1770	3510	4170	1950	940	914
10	828	871	725	853	695	1020	1810	3220	4490	1750	920	864
11	1030	979	725	721	720	1010	1810	3060	4260	1710	885	873
12	1090	1010	731	733	691	991	1800	3050	3930	1600	809	859
13	1080	1010	770	765	708	1010	1890	3070	3950	1480	786	840
14	1070	942	779	747	694	1100	1790	3140	3960	1460	798	823
15	1020	956	775	752	711	1090	1760	3200	3940	1390	778	808
16	622	885	856	715	715	1070	1830	3290	3950	1530	793	800
17	557	910	751	731	719	1080	1950	3330	3870	1690	780	804
18	600	925	731	731	793	1050	1910	3210	3840	1670	770	790
19	931	902	737	727	1030	1020	1760	3150	3590	1890	754	766
20	955	877	726	719	1020	1010	1740	3160	3690	1810	737	627
21	953	867	733	727	900	1010	1770	3250	3670	1810	749	610
22	951	880	720	700	846	1050	1920	3430	3560	1790	739	608
23	960	877	722	744	865	1120	2230	3770	3380	1770	746	623
24	958	897	728	713	895	1160	2400	4080	3220	1750	751	674
25	957	892	742	707	986	1230	2560	4030	3110	1870	747	756
26	957	617	728	695	977	1250	2640	3910	3110	1840	792	784
27	952	587	775	698	1030	1280	2440	3850	2890	1800	832	799
28	946	854	747	693	966	1350	2240	4060	2650	1710	888	797
29	949	841	742	682	---	1420	2270	4130	2600	1630	956	799
30	895	836	754	689	---	1520	2460	4270	2610	1470	1010	796
31	879	---	748	699	---	1660	---	4190	---	1370	990	---
TOTAL	25669	26217	23374	22428	22306	34435	58580	109710	111020	57240	27404	24251
MEAN	828	874	754	723	797	1111	1953	3539	3701	1846	884	808
MAX	1090	1010	856	853	1030	1660	2640	4270	4490	2810	1320	985
MIN	544	587	685	675	691	899	1610	2680	2600	1370	737	608
AC-FT	50910	52000	46360	44490	44240	68300	116200	217600	220200	113500	54360	48100
CAL YR 1985	TOTAL	487812		MEAN	1336	MAX	3540	MIN	433	AC-FT	967600	
WTR YR 1986	TOTAL	542634		MEAN	1487	MAX	4490	MIN	544	AC-FT	1076000	

09058030 COLORADO RIVER NEAR RADIIUM, 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.

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

GAGE.--Water-stage recorder. Elevation of gage is 6,910 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Jan. 16 to Mar. 25, Aug. 12-25. Records good, except for estimated daily discharges, which are poor. Natural flow of stream affected by transmountain diversions, storage reservoirs, diversions for irrigation of about 40,000 acres upstream from station, and return flow from irrigated areas.

AVERAGE DISCHARGE.--5 years, 1,601 ft³/s; 1,160,000 acre-ft/yr.

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

EXTREMES FOR CURRENT PERIOD.--Maximum discharge, 4,710 ft³/s at 0630 June 10, gage height, 7.22 ft; minimum daily, 551 ft³/s, Oct. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	834	888	832	695	720	950	1830	2600	4170	2860	1330	993
2	551	819	843	731	720	920	1910	2870	4100	2930	1170	984
3	589	825	836	707	720	920	2060	3330	4030	2570	1130	970
4	591	825	818	695	720	930	1870	3730	4070	2070	1150	948
5	592	825	681	665	720	990	1740	4140	4210	2090	1040	916
6	586	829	683	716	720	1040	1710	4410	4310	2180	922	858
7	617	818	714	728	720	1080	1730	4070	4430	2240	916	850
8	600	825	731	717	720	1100	1790	3850	4370	2060	925	894
9	649	850	745	707	720	1100	1780	3640	4320	1970	966	943
10	824	843	710	755	720	1100	1800	3310	4650	1770	953	895
11	1020	947	668	751	720	1030	1800	3100	4440	1720	930	912
12	1080	993	662	738	720	1020	1790	3070	4090	1610	840	894
13	1070	988	713	727	720	1030	1860	3100	4100	1490	800	874
14	1060	927	759	738	720	1100	1800	3160	4090	1450	800	860
15	1010	944	717	780	720	1100	1730	3250	4070	1380	800	846
16	624	868	735	750	720	1100	1800	3330	4070	1520	800	836
17	552	898	759	750	760	1100	1910	3370	4010	1690	790	839
18	589	907	752	750	900	1100	1920	3250	3950	1680	780	822
19	918	885	745	750	1040	1060	1750	3170	3700	1890	770	801
20	935	857	728	750	1030	1040	1710	3190	3790	1820	750	643
21	930	853	724	750	950	1040	1730	3290	3760	1810	760	623
22	918	846	692	740	890	1100	1860	3470	3670	1790	750	620
23	930	870	692	740	900	1160	2190	3820	3490	1760	760	632
24	930	890	738	740	940	1210	2390	4210	3320	1750	760	685
25	922	890	710	740	1020	1260	2520	4140	3220	1870	770	779
26	921	638	686	730	1040	1300	2610	3990	3230	1830	822	811
27	917	591	701	730	1050	1310	2400	3910	2970	1800	857	829
28	903	836	724	720	1000	1370	2190	4140	2690	1710	903	825
29	907	839	749	720	---	1450	2180	4250	2630	1650	965	829
30	854	839	759	720	---	1560	2370	4400	2650	1480	1010	829
31	836	---	742	720	---	1700	---	4310	---	1370	993	---
TOTAL	25259	25653	22748	22650	23040	35270	58730	111870	114600	57810	27912	25040
MEAN	815	855	734	731	823	1138	1958	3609	3820	1865	900	835
MAX	1080	993	843	780	1050	1700	2610	4410	4650	2930	1330	993
MIN	551	591	662	665	720	920	1710	2600	2630	1370	750	620
AC-FT	50100	50880	45120	44930	45700	69960	116500	221900	227300	114700	55360	49670
CAL YR 1985	TOTAL	504187		MEAN	1381	MAX	3720	MIN	551	AC-FT	1000000	
WTR YR 1986	TOTAL	550582		MEAN	1508	MAX	4650	MIN	551	AC-FT	1092000	

PINEY RIVER BASIN

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 mi².

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 above 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.--Estimated daily discharges: Nov. 6 to Apr. 9. Records good except for estimated daily discharges, which are poor. No diversion upstream from station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--30 years (1948-54, 1964-86), 25.4 ft³/s; 18,400 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 560 ft³/s, June 8, 1985, gage height, 5.12 ft; maximum gage height observed, 6.44 ft, Apr. 13, 1977; minimum not determined.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 150 ft³/s, and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 29	0600	203	4.37	June 17	0400	218	4.44
June 1	0600	203	4.38	June 27	0200	218	4.41
June 7	0200	*308	*4.65	July 4	0400	222	4.40

Minimum daily discharge, 2.0 ft³/s, Feb. 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.5	10	7.0	3.8	2.3	3.0	12	35	166	92	19	13
2	8.6	7.6	7.0	3.7	2.3	3.3	14	49	136	92	17	13
3	9.1	8.0	7.0	3.6	2.3	3.6	13	62	211	101	17	12
4	9.4	7.6	7.0	3.5	2.3	3.7	12	75	218	165	16	10
5	8.1	7.8	7.0	3.4	2.3	3.7	11	78	222	174	15	9.8
6	7.6	8.0	7.0	3.3	2.3	3.7	12	50	232	128	13	9.1
7	12	8.5	7.0	3.2	2.3	3.7	11	36	248	90	16	9.0
8	15	8.0	7.0	3.1	2.3	3.6	12	30	213	72	14	13
9	13	7.5	6.5	3.0	2.3	3.6	13	23	190	66	12	13
10	15	7.0	6.0	2.9	2.3	3.5	11	20	136	79	11	19
11	18	7.0	5.5	2.9	2.3	3.5	9.7	25	96	70	10	23
12	16	7.0	5.0	2.8	2.3	3.4	9.2	38	100	63	10	26
13	17	7.0	5.4	2.8	2.0	3.4	9.9	39	122	63	10	21
14	14	7.0	5.6	2.7	2.3	3.3	11	51	124	68	9.9	16
15	12	7.0	5.8	2.7	2.3	3.3	8.2	39	169	62	9.3	13
16	12	7.0	6.0	2.6	2.3	3.5	8.5	36	177	65	8.7	11
17	13	7.0	5.7	2.6	2.4	3.8	8.2	30	189	66	8.3	9.5
18	12	7.0	5.4	2.5	2.5	4.2	7.9	30	165	50	7.9	8.7
19	11	7.0	5.2	2.5	2.5	4.5	7.3	34	163	43	7.6	8.2
20	11	7.0	5.0	2.4	2.6	4.8	6.2	60	140	38	8.0	7.6
21	11	7.0	4.6	2.4	2.6	5.1	6.8	101	139	51	11	7.1
22	11	7.0	4.3	2.4	2.7	5.3	11	108	134	38	12	6.5
23	9.7	7.0	4.0	2.4	2.7	5.5	16	104	136	44	11	6.5
24	9.2	7.0	4.0	2.3	2.8	6.0	19	91	133	41	10	7.0
25	8.8	7.0	4.0	2.3	2.8	6.5	19	81	115	36	10	7.8
26	9.0	7.0	4.0	2.3	2.9	7.0	17	117	181	31	10	9.2
27	8.6	7.0	4.0	2.3	2.9	8.0	13	135	165	29	9.3	9.1
28	9.0	7.0	4.0	2.3	3.0	9.0	12	166	134	25	8.5	9.9
29	9.0	7.0	3.9	2.3	---	9.8	16	170	124	23	8.5	9.6
30	8.5	7.0	3.9	2.3	---	10	24	109	111	21	13	9.1
31	8.8	---	3.8	2.3	---	11	---	122	---	20	13	---
TOTAL	343.9	220.0	167.6	85.6	68.9	156.3	360.9	2144	4789	2006	356.0	346.7
MEAN	11.1	7.33	5.41	2.76	2.46	5.04	12.0	69.2	160	64.7	11.5	11.6
MAX	18	10	7.0	3.8	3.0	11	24	170	248	174	19	26
MIN	7.5	7.0	3.8	2.3	2.0	3.0	6.2	20	96	20	7.6	6.5
AC-FT	682	436	332	170	137	310	716	4250	9500	3980	706	688
CAL YR 1985	TOTAL	11084.7		MEAN	30.4	MAX	362	MIN	2.3	AC-FT	21990	
WTR YR 1986	TOTAL	11044.9		MEAN	30.3	MAX	248	MIN	2.0	AC-FT	21910	

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 mi².

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

GAGE.--Water-stage recorder. Elevation of gage is 9,245 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Dec. 1 to Apr. 7. Records good except for estimated daily discharges, which are poor. Diversion by Willy N. ditch 75 ft upstream for irrigation of hay meadows downstream from station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--15 years, 2.34 ft³/s; 1,700 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 48 ft³/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, 8.1 ft³/s at 1000 June 5, gage height, 2.53 ft; minimum daily, 0.60 ft³/s, Dec. 23-25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.1	1.2	.80	.70	.80	.85	2.1	5.2	6.7	3.2	1.5	1.2
2	2.1	1.3	.80	.70	.80	.85	2.1	5.9	6.7	3.1	1.5	1.2
3	2.0	1.4	.80	.70	.78	.85	2.1	5.7	6.7	3.2	1.5	1.2
4	1.9	1.3	.80	.70	.75	.85	2.1	6.1	7.2	3.2	1.5	1.2
5	1.7	1.3	.80	.73	.75	.85	2.1	5.9	8.0	3.2	1.5	1.2
6	1.5	1.2	.80	.76	.75	.85	1.9	5.4	8.1	2.9	1.5	1.2
7	2.4	1.2	.80	.80	.75	.85	1.8	5.2	7.8	2.7	1.4	1.2
8	1.8	1.2	.80	.80	.75	.85	1.8	4.9	7.5	2.6	1.4	1.3
9	1.7	1.2	.80	.80	.75	.85	1.8	4.4	7.5	2.7	1.4	1.2
10	1.5	1.2	.78	.80	.75	.85	1.8	4.1	7.2	2.6	1.4	1.5
11	1.6	1.2	.77	.80	.75	.85	2.0	4.5	6.4	2.5	1.4	1.4
12	1.2	1.2	.76	.80	.75	.85	2.2	4.9	5.9	2.3	1.5	1.2
13	1.0	1.1	.74	.80	.75	.85	2.2	5.2	5.9	2.3	1.6	1.2
14	.87	1.1	.72	.80	.75	.85	2.2	5.4	5.6	2.3	1.5	1.2
15	.82	1.0	.70	.80	.75	.85	2.1	5.4	5.4	2.2	1.5	1.2
16	.80	1.0	.70	.80	.75	.85	2.2	5.2	5.2	2.6	1.5	1.2
17	.80	.93	.70	.80	.75	.85	2.1	5.2	5.2	2.5	1.4	1.1
18	.93	1.1	.70	.80	.75	.83	1.8	4.9	4.9	2.3	1.4	1.2
19	.93	1.0	.70	.80	.75	.80	1.8	5.2	4.8	2.3	1.4	1.2
20	1.1	1.0	.70	.80	.75	.80	1.7	5.9	4.9	2.2	1.6	1.2
21	1.2	1.0	.70	.80	.75	.80	1.8	6.7	4.7	2.1	1.7	1.3
22	1.4	1.0	.65	.80	.75	.80	2.7	7.2	4.3	2.1	1.5	1.3
23	1.7	.87	.60	.80	.80	.80	3.4	7.2	4.1	2.1	1.4	1.3
24	1.7	.80	.60	.80	.85	.80	3.6	6.9	3.9	2.0	1.4	1.5
25	1.8	.72	.60	.80	.85	.90	3.6	6.9	3.9	2.1	1.4	1.5
26	1.5	.72	.65	.80	.85	1.0	3.2	6.9	3.9	2.1	1.4	1.5
27	1.4	.72	.70	.80	.85	1.2	2.5	7.2	3.6	2.0	1.3	1.5
28	1.4	.80	.70	.80	.85	1.5	2.5	7.2	3.4	1.8	1.2	1.5
29	1.4	.72	.70	.80	---	2.0	3.2	7.2	3.2	1.7	1.2	1.5
30	1.5	.80	.70	.80	---	2.0	4.1	6.9	3.1	1.9	1.3	1.4
31	1.5	---	.70	.80	---	2.0	---	6.7	---	1.5	1.2	---
TOTAL	45.25	31.28	22.47	24.29	21.68	30.68	70.5	181.6	165.7	74.3	44.4	38.8
MEAN	1.46	1.04	.72	.78	.77	.99	2.35	5.86	5.52	2.40	1.43	1.29
MAX	2.4	1.4	.80	.80	.85	2.0	4.1	7.2	8.1	3.2	1.7	1.5
MIN	.80	.72	.60	.70	.75	.80	1.7	4.1	3.1	1.5	1.2	1.1
AC-FT	90	62	45	48	43	61	140	360	329	147	88	77
CAL YR 1985 TOTAL	966.94		MEAN		2.65	MAX	14	MIN	.60	AC-FT	1920	
WTR YR 1986 TOTAL	750.95		MEAN		2.06	MAX	8.1	MIN	.60	AC-FT	1490	

PINEY RIVER BASIN

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. Elevation of gage is 9,335 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 6 to Apr. 8 and Sept. 2-4. Records fair except for estimated daily discharges, which are poor. No regulation or diversion upstream from station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--22 years, 1.44 ft³/s; 1,040 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 discharge greater than base discharge of 25 ft³/s, and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 3	2200	31	2.04	May 20	1100	*39	*2.14
May 13	0400	26	2.03	June 4	2000	25	2.03
				June 10	1200	25	2.00

Minimum daily discharge, 0.11 ft³/s, Dec. 21-27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.56	.24	.19	.15	.19	.22	1.1	9.5	7.5	1.1	.42	.29
2	.60	.20	.20	.15	.18	.22	1.1	11	7.1	1.1	.41	.29
3	.74	.16	.20	.15	.18	.22	1.1	16	8.0	1.0	.39	.28
4	.65	.15	.20	.15	.18	.22	1.1	18	11	1.3	.41	.28
5	.51	.16	.20	.16	.18	.22	1.1	12	12	1.9	.38	.28
6	.42	.17	.20	.17	.18	.22	1.1	10	11	1.2	.38	.29
7	1.3	.18	.20	.17	.18	.22	1.1	8.4	9.6	1.2	.38	.34
8	.95	.18	.20	.18	.18	.22	1.1	5.6	8.7	.90	.36	.44
9	.85	.19	.19	.18	.18	.22	.98	4.1	10	1.3	.32	.38
10	.85	.20	.18	.19	.18	.22	.90	6.5	16	1.3	.31	.72
11	.82	.20	.17	.20	.18	.22	.87	11	8.8	.88	.34	.51
12	.74	.20	.17	.20	.18	.22	.87	11	6.7	.91	.36	.39
13	.60	.20	.16	.20	.18	.22	.86	15	5.9	.85	.39	.35
14	.53	.20	.15	.20	.18	.22	.81	11	5.0	.80	.32	.32
15	.44	.20	.15	.20	.18	.22	.81	8.8	4.1	.80	.27	.28
16	.44	.20	.15	.20	.18	.22	.81	7.0	3.6	1.1	.26	.27
17	.42	.20	.15	.20	.18	.20	.77	7.5	3.1	.97	.26	.27
18	.40	.20	.15	.20	.18	.20	.75	8.6	3.2	.86	.19	.28
19	.33	.20	.14	.20	.18	.20	.75	12	2.9	.77	.22	.28
20	.31	.20	.13	.20	.18	.20	.75	18	2.3	.76	.27	.29
21	.30	.20	.11	.20	.19	.20	1.1	18	2.0	.76	.48	.29
22	.29	.20	.11	.20	.20	.20	1.8	18	1.8	.71	.37	.30
23	.31	.19	.11	.20	.22	.20	2.2	13	1.7	.76	.30	.34
24	.30	.17	.11	.20	.22	.27	2.1	11	1.7	.69	.34	.39
25	.27	.17	.11	.20	.22	.34	1.8	11	1.6	.65	.36	.47
26	.26	.17	.11	.20	.22	.41	1.7	11	2.1	.61	.32	.52
27	.24	.17	.11	.20	.22	.48	1.7	10	1.4	.57	.27	.51
28	.22	.17	.13	.20	.22	.55	2.1	9.4	1.2	.53	.25	.55
29	.22	.17	.14	.20	---	.60	4.5	9.3	1.2	.50	.28	.52
30	.20	.17	.15	.20	---	.65	6.4	8.2	1.2	.48	.32	.44
31	.29	---	.15	.20	---	.87	---	7.3	---	.44	.31	---
TOTAL	15.36	5.61	4.82	5.85	5.32	9.09	44.13	337.2	162.4	27.70	10.24	11.16
MEAN	.50	.19	.16	.19	.19	.29	1.47	10.9	5.41	.89	.33	.37
MAX	1.3	.24	.20	.20	.22	.87	6.4	18	16	1.9	.48	.72
MIN	.20	.15	.11	.15	.18	.20	.75	4.1	1.2	.44	.19	.27
AC-FT	30	11	9.6	12	11	18	88	669	322	55	20	22
CAL YR 1985 TOTAL	839.20			MEAN	2.30	MAX	25	MIN	.11	AC-FT	1660	
WTR YR 1986 TOTAL	638.88			MEAN	1.75	MAX	18	MIN	.11	AC-FT	1270	

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 mi².

PERIOD OF RECORD.--October 1964 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 9,455 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 1 to Apr. 8. Records fair except for estimated daily discharges, which are poor. No regulation or diversion upstream from station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--22 years, 4.60 ft³/s; 3,330 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 81 ft³/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 ft³/s, Jan. 7, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 67 ft³/s at 2000 June 5, gage height, 1.75 ft; minimum daily, 0.50 ft³/s, Dec. 21-23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.6	1.1	1.1	.55	.70	.80	2.0	10	42	14	2.7	2.0
2	1.8	1.3	1.1	.55	.66	.80	2.0	14	41	13	2.7	1.9
3	2.0	1.2	1.1	.60	.63	.80	2.0	16	46	13	2.7	1.8
4	2.1	1.2	1.1	.60	.63	.80	2.0	19	45	14	2.7	1.5
5	1.7	1.2	1.1	.65	.63	.80	2.0	19	49	16	2.5	1.5
6	1.9	1.2	1.1	.65	.63	.80	1.8	17	49	13	2.4	1.4
7	2.5	1.2	1.1	.70	.63	.80	1.7	17	48	11	2.4	1.9
8	2.5	1.2	1.1	.70	.63	.80	1.8	16	43	10	2.3	2.3
9	2.4	1.2	1.1	.70	.63	.80	1.9	13	42	10	2.3	2.0
10	2.3	1.1	1.1	.70	.63	.80	1.8	14	41	9.8	2.0	3.1
11	2.3	1.1	1.0	.70	.63	.80	1.8	17	34	8.0	2.0	3.2
12	2.1	1.1	1.0	.70	.63	.80	1.9	20	33	7.2	1.9	2.4
13	2.1	1.1	.95	.70	.63	.80	2.0	21	33	6.8	1.9	2.1
14	1.7	1.1	.90	.70	.63	.80	2.0	22	32	6.1	1.8	1.9
15	1.8	1.1	.80	.70	.63	.77	2.0	20	33	5.6	1.6	1.8
16	1.3	1.1	.80	.70	.63	.74	2.1	19	33	7.6	1.5	1.6
17	1.4	1.1	.75	.70	.63	.70	2.2	17	32	6.8	1.4	1.5
18	1.3	1.1	.70	.70	.63	.68	2.3	19	30	5.7	1.4	1.5
19	1.2	1.1	.65	.70	.63	.65	2.3	23	29	5.1	1.3	1.5
20	1.2	1.1	.60	.70	.63	.65	2.4	28	28	5.1	1.4	1.5
21	1.2	1.1	.50	.70	.69	.65	2.5	34	25	5.7	2.0	1.6
22	1.2	1.1	.50	.70	.75	.65	3.0	38	23	5.1	1.6	1.6
23	1.1	1.1	.50	.70	.80	.65	4.1	38	23	5.1	1.5	1.8
24	1.0	1.1	.53	.70	.80	.80	4.3	37	21	4.3	1.8	1.9
25	.94	1.1	.55	.70	.80	1.0	4.8	39	22	4.1	1.9	2.1
26	1.0	1.1	.55	.70	.80	1.2	4.6	44	21	3.9	1.6	2.1
27	.94	1.1	.55	.70	.80	1.4	4.0	46	19	3.5	1.4	2.3
28	1.0	1.1	.55	.70	.80	1.6	3.9	47	17	3.3	1.3	2.5
29	1.1	1.1	.55	.70	---	1.8	4.8	46	16	3.2	1.9	2.5
30	.90	1.1	.55	.70	---	1.8	8.3	42	16	3.0	2.5	2.3
31	1.1	---	.55	.70	---	2.0	---	43	---	3.0	2.1	---
TOTAL	48.68	33.9	25.03	21.10	18.94	28.94	84.3	815	966	232.0	60.5	59.1
MEAN	1.57	1.13	.81	.68	.68	.93	2.81	26.3	32.2	7.48	1.95	1.97
MAX	2.5	1.3	1.1	.70	.80	2.0	8.3	47	49	16	2.7	3.2
MIN	.90	1.1	.50	.55	.63	.65	1.7	10	16	3.0	1.3	1.4
AC-FT	97	67	50	42	38	57	167	1620	1920	460	120	117
CAL YR 1985	TOTAL	1600.24		MEAN	4.38	MAX	40	MIN	.50	AC-FT	3170	
WTR YR 1986	TOTAL	2393.49		MEAN	6.56	MAX	49	MIN	.50	AC-FT	4750	

PINEY RIVER BASIN

09059500 PINEY RIVER NEAR STATE BRIDGE, CO

LOCATION.--Lat 39°48'00", long 106°35'00", in SW¼NE¼ 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 mi².

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 above 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.--Estimated daily discharges: Nov. 1 - June 26. Records fair except for estimated daily discharges, which are poor. Diversions upstream from station for irrigation of about 400 acres of hay meadows upstream and downstream from station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--42 years, 77.6 ft³/s; 56,220 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 1,300 ft³/s, May 25, 1984 (occured during a period of no gage-height record); maximum recorded discharge, 1,220 ft³/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 ft³/s, Sept. 1, 18, 19, 1954.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 520 ft³/s, and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
June 7	unknown	a720	unknown	No other peak greater than base discharge.			

a-Maximum daily discharge.

Minimum daily, 15 ft³/s, Jan. 6-8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27	24	22	19	24	33	62	210	600	220	57	36
2	27	24	22	20	24	34	60	250	540	206	55	33
3	27	23	24	20	22	36	56	280	600	207	54	32
4	27	23	24	18	22	37	52	320	640	262	51	29
5	27	23	22	17	22	35	47	350	660	276	49	27
6	26	23	22	15	20	33	42	370	690	229	46	26
7	38	24	23	15	19	32	45	300	720	186	46	26
8	52	25	24	15	18	32	45	260	660	163	44	38
9	46	23	22	16	17	35	43	220	600	157	42	35
10	44	22	21	17	17	33	44	190	510	167	41	45
11	44	23	19	17	19	33	44	210	400	141	39	50
12	45	22	19	16	20	33	45	230	380	129	41	45
13	44	21	20	16	21	34	43	260	420	124	41	40
14	40	20	20	16	23	34	43	280	450	121	39	34
15	32	20	18	17	23	32	47	230	500	116	36	31
16	34	20	17	19	24	33	52	190	560	129	34	27
17	34	22	17	19	26	33	52	180	520	125	31	26
18	34	22	19	20	28	32	48	180	450	105	29	25
19	33	20	18	20	29	30	48	220	410	95	28	25
20	33	19	18	19	28	30	52	290	400	91	32	24
21	32	19	19	19	27	31	62	340	380	105	47	23
22	33	19	18	18	28	32	86	340	380	90	37	23
23	29	20	18	19	31	32	110	330	390	92	34	23
24	29	21	19	19	30	32	140	310	370	87	34	24
25	27	22	19	19	31	33	140	370	350	83	36	26
26	26	21	18	17	32	35	140	430	350	76	33	31
27	26	21	19	18	31	37	130	480	328	72	29	32
28	25	20	19	19	30	40	130	540	288	68	26	37
29	25	21	20	20	---	45	160	580	269	64	26	35
30	25	22	20	22	---	54	170	520	246	63	37	33
31	25	---	19	23	---	58	---	560	---	61	35	---
TOTAL	1016	649	619	564	686	1093	2238	9820	14061	4110	1209	941
MEAN	32.8	21.6	20.0	18.2	24.5	35.3	74.6	317	469	133	39.0	31.4
MAX	52	25	24	23	32	58	170	580	720	276	57	50
MIN	25	19	17	15	17	30	42	180	246	61	26	23
AC-FT	2020	1290	1230	1120	1360	2170	4440	19480	27890	8150	2400	1870
CAL YR 1985	TOTAL	37203		MEAN	102	MAX	1020	MIN	12	AC-FT	73790	
WTR YR 1986	TOTAL	37006		MEAN	101	MAX	720	MIN	15	AC-FT	73400	

09060550 ROCK CREEK AT CRATER, CO

LOCATION.--Lat 39°58'42", long 106°42'34", in NW¼NE¼ sec. 17, T.1 S., R.83 W., Routt County, Hydrologic Unit 14010001, on right bank 250 ft downstream from county bridge crossing, 2 miles downstream from Kayser Mutual Ditch diversion and 0.8 miles northwest of Crater, Colorado.

DRAINAGE AREA.--72.6 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1984 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 7,185 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records good. Diversions for irrigation of approximately 1,025 acres upstream from station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge recorded, 422 ft³/s, May 6, 1985, gage height, 3.97 ft, but may have been higher during period of no gage-height record May 7-14, 1985; minimum daily, 6.1 ft³/s, Sept. 18-19, 1985.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 393 ft³/s at 2100 May 4, gage height, 4.03 ft; minimum daily, 6.8 ft³/s, Oct. 4-6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.9	14	15	13	11	16	67	218	233	33	11	11
2	6.9	14	15	13	11	16	82	246	226	28	10	11
3	6.9	16	15	13	11	16	61	259	222	25	9.9	14
4	6.8	14	15	13	11	17	56	299	223	25	9.9	11
5	6.8	16	14	12	11	17	61	310	219	40	11	14
6	6.8	12	16	12	12	17	59	267	205	40	11	14
7	10	13	15	12	11	18	68	264	176	52	10	13
8	20	15	16	12	11	18	76	250	161	31	10	15
9	21	11	15	12	11	20	77	229	170	33	11	16
10	21	15	14	12	9.8	20	77	206	171	31	10	18
11	31	18	14	12	10	18	75	201	143	32	9.9	20
12	27	17	13	12	10	18	72	208	116	24	10	16
13	29	14	14	12	9.8	17	77	211	110	20	17	14
14	22	11	14	12	9.3	16	61	226	106	21	16	13
15	18	16	13	12	9.3	15	64	231	93	18	11	12
16	20	14	13	12	8.8	16	76	240	84	23	10	12
17	20	16	13	12	8.8	16	88	210	77	24	9.9	11
18	21	16	13	12	9.5	15	68	202	77	21	9.6	10
19	20	15	13	12	11	15	63	220	77	21	9.0	10
20	20	15	13	12	12	14	63	238	72	29	8.2	11
21	20	15	13	12	12	14	89	254	61	32	15	10
22	20	15	13	12	13	15	128	278	55	24	16	10
23	17	14	13	12	13	16	172	278	50	18	13	12
24	16	14	13	12	12	18	178	272	46	20	27	13
25	15	13	12	12	12	20	184	271	45	36	14	17
26	17	14	12	12	13	22	154	283	72	24	12	20
27	16	15	12	12	13	23	123	284	46	21	9.9	21
28	17	15	13	12	15	27	111	289	37	15	9.3	37
29	17	15	13	11	---	32	138	279	33	13	9.3	32
30	17	15	13	11	---	42	185	251	33	12	10	27
31	17	---	13	11	---	55	---	246	---	11	12	---
TOTAL	530.1	437	423	373	311.3	619	2853	7720	3439	797	361.9	465
MEAN	17.1	14.6	13.6	12.0	11.1	20.0	95.1	249	115	25.7	11.7	15.5
MAX	31	18	16	13	15	55	185	310	233	52	27	37
MIN	6.8	11	12	11	8.8	14	56	201	33	11	8.2	10
AC-FT	1050	867	839	740	617	1230	5660	15310	6820	1580	718	922
CAL YR 1985	TOTAL	16289.0		MEAN	44.6	MAX	410	MIN	6.1	AC-FT	32310	
WTR YR 1986	TOTAL	18329.3		MEAN	50.2	MAX	310	MIN	6.8	AC-FT	36360	

09060550 ROCK CREEK AT CRATER, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--December 1984 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: April 1986 to current year.

WATER TEMPERATURE: April 1986 to current year.

INSTRUMENTATION.--Water-quality monitor since April 1986.

REMARKS.--Daily maximum and minimum specific-conductance data available in district office.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum during period April to September, 187 microsiemens Aug. 28; minimum for current year, 46 microsiemens several days during May and June.

WATER TEMPERATURE: Maximum, 18.0°C July 15; minimum, 0.0°C several days during April.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	HARD- NESS (MG/L AS CACO3)	HARD- NESS NONCARB WH WAT TOT FLD 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											
23...	1100	13	126	8.3	2.0	10.0	58	6	17	3.7	3.6
NOV											
20...	1200	15	132	8.2	0.0	11.2	63	7	19	3.8	3.5
DEC											
17...	1100	13	132	8.3	0.0	11.0	62	4	18	4.0	4.0
JAN											
14...	1100	12	136	8.3	0.0	10.9	67	5	20	4.2	3.6
FEB											
12...	1200	11	128	8.0	0.0	10.8	68	8	20	4.3	3.9
MAR											
20...	1000	15	127	8.2	0.5	10.9	64	4	19	4.1	3.7
APR											
29...	1130	111	108	7.8	2.0	--	53	--	16	3.2	3.4
MAY											
28...	1100	281	55	7.8	4.5	--	26	0	7.7	1.7	2.3
JUN											
25...	1300	46	122	8.0	10.5	--	47	--	14	2.9	2.9
JUL											
22...	1305	22	132	8.8	11.0	7.8	66	4	20	3.9	3.8
AUG											
19...	1115	8.6	159	8.3	12.0	8.1	80	4	24	4.9	4.0

DATE	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LITY 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)
OCT										
23...	0.2	0.8	52	11	1.0	<0.1	12	81	0.11	2.7
NOV										
20...	0.2	0.8	56	13	0.8	<0.1	14	89	0.12	3.5
DEC										
17...	0.2	1.2	58	10	0.7	<0.1	14	87	0.12	3.0
JAN										
14...	0.2	0.8	62	10	0.7	0.1	15	92	0.12	3.0
FEB										
12...	0.2	1.0	60	10	0.6	0.1	15	91	0.12	2.6
MAR										
20...	0.2	0.9	60	10	1.2	0.1	14	89	0.12	3.7
APR										
29...	0.2	1.2	55	10	1.1	<0.1	12	80	0.11	24
MAY										
28...	0.2	0.6	26	8.2	0.5	<0.1	10	47	0.06	36
JUN										
25...	0.2	0.8	51	9.4	1.2	<0.1	12	74	0.1	9.1
JUL										
22...	0.2	1.1	62	9.6	0.7	0.1	12	89	0.12	5.3
AUG										
19...	0.2	1.0	76	6.5	0.6	0.2	9.5	97	0.13	2.2

09060550 ROCK CREEK AT CRATER, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)
OCT 23...	--	<0.10	--	0.03	--	0.17	--	0.2	--	--
NOV 20...	--	<0.10	--	0.01	--	0.29	--	0.3	--	--
DEC 17...	--	0.10	--	0.04	--	0.46	--	0.5	--	0.6
JAN 14...	--	0.20	--	0.04	--	0.26	--	0.3	--	0.5
FEB 12...	--	--	--	--	--	--	--	--	--	--
MAR 20...	--	<0.10	--	0.01	--	0.29	--	0.3	--	--
APR 29...	--	<0.10	--	0.05	--	0.55	--	0.6	--	--
MAY 28...	<0.01	<0.10	<0.10	0.04	0.03	0.26	0.67	0.3	0.7	--
JUN 25...	--	<0.10	--	<0.01	--	--	--	0.2	--	--
JUL 22...	--	<0.10	--	0.04	--	0.26	--	0.3	--	--
AUG 19...	<0.01	<0.10	<0.10	0.02	<0.01	--	--	<0.2	0.3	--

DATE	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, ORTHO, TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)	BORON, DIS- SOLVED (UG/L AS B)	IRON, DIS- SOLVED (UG/L AS FE)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)
OCT 23...	0.02	--	--	--	--	--	--	<10	140	110
NOV 20...	0.02	--	--	--	--	--	--	<10	97	110
DEC 17...	0.01	--	--	--	2.1	2.5	--	<10	130	120
JAN 14...	0.02	--	--	--	--	--	--	<10	120	140
FEB 12...	--	--	--	--	--	--	--	50	29	140
MAR 20...	0.01	--	0.01	--	--	--	--	20	170	120
APR 29...	0.04	--	0.02	--	8.0	6.2	--	20	130	81
MAY 28...	0.04	0.04	0.01	0.02	5.5	6.8	<0.01	<10	150	50
JUN 25...	0.03	--	0.01	--	--	--	--	<10	140	91
JUL 22...	0.03	--	0.02	--	--	--	--	<10	120	110
AUG 19...	0.02	0.01	<0.01	0.01	2.7	3.2	<0.01	<10	19	130

ROCK CREEK BASIN

09060550 ROCK CREEK AT CRATER, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)
MAY 28...	1100	400	<1	<1	<100	31	<10	<1	<1	<10
AUG 19...	1115	40	<1	<1	100	65	<10	<1	<1	<10

DATE	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, TOTAL RECOV- ERABLE (UG/L AS CO)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER, DIS- SOLVED (UG/L AS CU)	*LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	*LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM TOTAL RECOV- ERABLE (UG/L AS LI)	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)
MAY 28...	<10	<1	3	1	2	1	<10	30	6	<0.1
AUG 19...	<10	<1	1	2	<5	<5	10	20	4	<0.1

DATE	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, TOTAL RECOV- ERABLE (UG/L AS MO)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, TOTAL (UG/L AS SE)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, DIS- SOLVED (UG/L AS ZN)
MAY 28...	<0.1	<1	<1	4	1	<1	<1	<1	10	7
AUG 19...	0.4	<1	<1	1	1	<1	<1	<1	50	8

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)
APR 23...	1620	192	67	35	JUL 22...	1305	22	9	0.53
29...	1130	111	13	3.9	AUG 01...	1010	17	1	0.05
MAY 21...	1405	247	11	7.3	19...	1115	8.6	2	0.05
28...	1100	281	16	12	21...	0945	14	12	0.45
JUN 10...	1015	165	17	7.6					
25...	1300	46	8	0.98					

* The minimum reporting level for Lead was changed from <1 to <5 during June, 1986.

09060550 ROCK CREEK AT CRATER, CO--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25 DEG. C, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1							---	89	51	118	151	147
2							99	94	51	123	152	145
3							109	89	51	125	152	140
4							110	86	53	125	150	146
5							110	102	55	117	147	144
6							113	93	57	117	147	145
7							110	81	64	104	149	146
8							107	82	64	118	149	141
9							111	85	64	119	154	143
10							110	91	63	121	156	138
11							113	92	67	116	162	139
12							115	77	72	125	161	143
13							114	75	72	130	160	146
14							118	70	75	127	160	147
15							119	69	77	131	168	150
16							115	70	82	127	168	151
17							111	69	84	125	165	152
18							115	68	86	127	161	153
19							119	65	89	127	158	153
20							120	62	91	119	158	152
21							115	65	97	122	154	152
22							104	71	102	134	157	152
23							95	71	105	135	164	149
24							94	70	109	133	162	142
25							93	68	108	125	179	137
26							98	65	96	131	183	131
27							104	61	107	136	182	132
28							109	57	112	143	179	131
29							108	52	115	148	166	140
30							96	55	117	153	157	140
31							---	53	---	154	147	---
MEAN							109	74	81	128	160	144

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	9.0	1.5	10.0	5.5	16.5	10.0	16.5	10.0	13.5	9.5
2	3.0	.0	10.0	2.0	12.0	6.5	16.5	10.0	17.0	10.5	12.0	9.0
3	2.0	.0	9.5	2.5	11.0	7.0	15.0	11.0	13.5	10.5	13.0	8.5
4	2.0	.0	9.0	2.5	10.0	7.0	17.0	11.0	14.5	10.5	14.0	9.0
5	3.5	.0	6.5	1.5	11.0	6.5	15.0	12.0	14.5	10.0	13.5	9.0
6	5.5	.0	8.0	2.0	12.5	7.0	15.5	11.5	16.0	11.0	13.0	8.5
7	5.0	.5	7.5	3.5	13.0	7.0	13.5	10.0	14.5	10.5	13.5	9.5
8	3.0	.5	6.0	2.0	13.0	7.5	12.5	9.5	15.0	10.5	13.5	10.0
9	4.0	1.0	4.5	2.5	11.5	8.5	13.0	10.0	16.0	10.0	13.0	9.5
10	5.0	1.0	8.5	1.5	9.0	7.0	12.5	10.0	16.0	10.5	10.0	8.5
11	3.5	.5	10.0	2.5	11.5	5.5	13.0	9.5	14.0	10.0	12.0	7.5
12	5.5	1.0	8.0	3.5	13.5	7.0	15.0	11.0	13.5	10.0	10.5	7.0
13	2.5	.5	9.5	2.5	11.5	8.5	16.5	11.0	15.5	10.5	11.0	7.0
14	4.5	.0	7.5	3.5	12.0	6.5	17.5	12.0	14.5	10.0	12.5	8.0
15	5.5	.0	6.0	3.5	13.5	7.0	18.0	12.5	16.0	9.5	10.5	7.0
16	5.0	1.5	7.5	3.0	14.5	8.0	15.0	13.0	16.5	10.0	12.0	8.0
17	2.5	1.0	9.0	3.0	14.5	10.0	16.5	11.5	17.0	10.5	10.5	6.5
18	4.0	.5	10.0	3.5	13.0	9.0	16.0	12.0	17.0	11.0	8.5	6.5
19	5.0	.5	10.0	4.0	13.5	9.0	14.5	11.5	16.5	12.0	9.0	5.5
20	6.0	2.0	10.0	4.0	13.5	8.5	14.0	11.0	15.5	12.5	11.0	7.5
21	6.0	2.5	10.5	4.5	14.5	9.0	15.5	9.5	16.5	12.0	10.0	8.5
22	7.5	1.5	9.5	3.5	14.5	8.5	15.0	12.0	14.5	11.0	10.5	8.5
23	6.0	1.5	9.5	2.5	15.5	8.5	14.5	11.5	14.5	11.0	10.0	8.5
24	6.5	1.5	9.5	4.5	13.5	10.5	14.0	12.0	16.0	11.0	8.5	5.5
25	6.0	1.5	11.5	3.5	13.5	10.0	15.5	10.0	15.5	12.0	5.5	4.5
26	3.0	1.5	11.0	4.0	15.0	11.0	16.0	11.0	15.5	11.0	5.5	3.0
27	4.5	1.0	11.5	4.0	16.5	10.0	16.0	10.5	15.5	10.5	7.0	3.0
28	6.0	2.0	11.5	5.0	17.0	11.5	16.0	9.5	14.0	10.5	6.5	5.0
29	8.0	2.0	9.5	5.0	15.5	12.0	15.5	9.5	15.5	11.0	6.5	4.5
30	9.5	2.0	11.0	4.0	13.5	12.0	16.0	9.5	14.5	11.5	6.5	4.0
31	---	---	11.5	5.0	---	---	16.5	9.5	12.5	10.5	---	---
MONTH	9.5	.0	11.5	1.5	17.0	5.5	18.0	9.5	17.0	9.5	14.0	3.0

NOTE: NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR

ROCK CREEK BASIN

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 from 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 current year.

GAGE.--Water-stage recorder. Elevation of gage is 6,660 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 13-18, 20-23, Dec. 1, 5 - Feb. 15, 17-20. Records good except for periods of estimated daily discharges, which are fair. Diversions for irrigation of approximately 5,000 acres upstream from 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, Feb. 1, 1985.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 854 ft³/s at 0200 May 4, gage height, 3.02 ft; minimum daily, 24 ft³/s, Aug. 17, 19, 1986.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30	34	40	36	32	56	202	460	385	69	30	34
2	31	38	39	37	32	52	245	545	371	63	28	34
3	31	41	39	37	32	52	190	583	372	59	27	37
4	31	37	40	37	31	54	148	712	370	61	28	35
5	30	38	40	35	31	54	151	802	381	78	28	35
6	30	33	43	33	31	56	162	682	328	75	28	34
7	35	34	44	29	31	56	204	630	280	100	27	34
8	56	39	44	26	32	59	237	664	259	74	30	38
9	54	31	45	29	31	63	227	581	274	74	29	37
10	59	31	42	31	30	61	223	487	295	72	28	43
11	70	43	41	31	33	58	209	439	249	67	26	45
12	67	45	39	29	35	54	209	426	210	58	27	40
13	65	41	40	28	37	53	231	435	187	52	34	36
14	57	37	40	28	34	52	182	466	180	50	34	34
15	51	42	40	29	32	52	179	481	160	45	29	33
16	55	38	40	31	31	52	213	550	142	45	26	34
17	53	40	39	31	31	50	266	490	134	50	24	33
18	50	41	38	32	32	49	202	437	124	47	26	33
19	46	42	37	31	33	51	187	446	126	56	24	34
20	47	41	37	30	35	46	190	498	114	63	26	34
21	42	40	37	29	37	47	235	530	98	76	37	34
22	41	39	37	29	41	49	347	562	87	59	36	36
23	39	39	37	30	41	55	489	569	79	54	36	38
24	39	39	37	32	46	63	493	528	73	54	47	40
25	39	38	34	30	44	72	544	492	74	76	39	46
26	38	37	34	29	47	79	478	505	104	57	37	50
27	39	42	35	29	49	91	372	488	77	55	31	48
28	38	41	36	30	52	103	326	471	68	46	29	59
29	38	41	36	31	---	128	369	448	65	41	30	58
30	39	40	36	32	---	164	447	422	69	38	35	55
31	39	---	36	32	---	194	---	403	---	32	37	---
TOTAL	1379	1162	1202	963	1003	2125	8157	16232	5735	1846	953	1181
MEAN	44.5	38.7	38.8	31.1	35.8	68.5	272	524	191	59.5	30.7	39.4
MAX	70	45	45	37	52	194	544	802	385	100	47	59
MIN	30	31	34	26	30	46	148	403	65	32	24	33
AC-FT	2740	2300	2380	1910	1990	4210	16180	32200	11380	3660	1890	2340
CAL YR 1985 TOTAL		38220		MEAN	105	MAX	837	MIN	21	AC-FT	75810	
WTR YR 1986 TOTAL		41938		MEAN	115	MAX	802	MIN	24	AC-FT	83180	

09060770 ROCK CREEK AT MCCOY, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.-- December 1984 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	HARD- NESS (MG/L AS CACO3)	HARD- NESS NONCARB WH WAT TOT FLD 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 23...	1400	37	354	8.5	5.5	9.8	170	36	50	12	10
NOV 21...	1000	40	385	8.3	0.0	11.0	200	18	56	14	11
DEC 17...	1500	41	370	8.6	0.0	11.3	190	29	53	13	10
JAN 14...	1500	27	380	8.5	0.0	11.3	180	24	52	13	11
FEB 12...	1500	45	345	8.1	0.0	10.6	180	29	50	13	10
MAR 20...	1300	45	390	8.3	5.0	10.1	200	36	56	15	12
APR 29...	1640	350	265	8.3	10.0	--	130	15	38	8.0	5.6
MAY 28...	1530	451	158	8.0	12.0	--	71	--	21	4.4	3.5
JUN 25...	1310	74	265	8.9	15.5	--	130	16	39	8.8	6.8
JUL 22...	1325	56	375	8.9	16.0	8.4	180	19	51	13	9.3
AUG 19...	1530	24	352	8.7	19.5	7.8	170	19	45	14	11

DATE	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LITY 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)
OCT 23...	0.3	2.9	139	50	2.0	0.7	14	230	0.31	22
NOV 21...	0.4	2.6	180	--	--	0.3	16	--	--	--
DEC 17...	0.3	3.0	157	46	2.0	0.2	16	240	0.32	26
JAN 14...	0.4	2.7	160	36	2.2	0.2	17	230	0.31	17
FEB 12...	0.3	2.7	150	34	16	0.2	16	230	0.32	28
MAR 20...	0.4	2.8	166	57	2.9	0.2	15	260	0.35	32
APR 29...	0.2	1.8	113	24	1.9	0.1	12	160	0.22	151
MAY 28...	0.2	1.0	71	15	1.0	<0.1	11	100	0.14	122
JUN 25...	0.3	1.9	118	29	1.4	0.1	12	170	0.23	34
JUL 22...	0.3	2.7	162	51	1.5	0.2	14	240	0.33	36
AUG 19...	0.4	1.1	151	44	2.2	0.2	13	220	0.3	14

ROCK CREEK BASIN

09060770 ROCK CREEK AT MCCOY, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC 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)
OCT 23...	--	<0.10	--	0.03	--	0.27	--	0.3	--	--
NOV 21...	--	0.10	--	0.02	--	0.28	--	0.3	--	0.4
DEC 17...	--	0.20	--	0.03	--	0.67	--	0.7	--	0.9
JAN 14...	--	0.20	--	0.04	--	0.26	--	0.3	--	0.5
FEB 12...	--	--	--	--	--	--	--	--	--	--
MAR 20...	--	0.10	--	0.02	--	0.38	--	0.4	--	0.5
APR 29...	--	0.70	--	0.05	--	0.55	--	0.6	--	1.3
MAY 28...	<0.01	<0.10	<0.10	0.04	0.03	0.46	0.37	0.5	0.4	--
JUN 25...	--	<0.10	--	<0.01	--	--	--	0.3	--	--
JUL 22...	--	<0.10	--	0.05	--	0.45	--	0.5	--	--
AUG 19...	<0.01	<0.10	<0.10	0.02	<0.01	0.28	--	0.3	0.4	--

DATE	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, ORTHO, TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)	BORON, DIS- SOLVED (UG/L AS B)	IRON, DIS- SOLVED (UG/L AS FE)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)
OCT 23...	0.02	--	--	--	--	--	--	20	56	310
NOV 21...	0.02	--	--	--	--	--	--	50	40	340
DEC 17...	0.02	--	--	--	2.9	3.1	--	20	37	340
JAN 14...	0.02	--	--	--	--	--	--	40	35	360
FEB 12...	--	--	--	--	--	--	--	30	29	330
MAR 20...	0.02	--	0.01	--	--	--	--	20	30	360
APR 29...	0.05	--	0.03	--	8.3	7.5	--	10	180	220
MAY 28...	0.05	0.02	0.02	<0.01	6.8	8.2	<0.01	20	130	130
JUN 25...	0.02	--	<0.01	--	--	--	--	20	48	250
JUL 22...	0.03	--	0.02	--	--	--	--	30	36	330
AUG 19...	0.02	0.01	<0.01	<0.01	4.9	5.2	<0.01	30	14	330

09060770 ROCK CREEK AT MCCOY, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)
MAY 28...	1530	400	<1	<1	100	51	<10	1	<1	<10
AUG 19...	1530	40	1	1	<100	79	<10	<1	<1	<10

DATE	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, TOTAL RECOV- ERABLE (UG/L AS CO)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER, DIS- SOLVED (UG/L AS CU)	*LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	*LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM TOTAL RECOV- ERABLE (UG/L AS LI)	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)
MAY 28...	<10	<1	3	1	1	<1	<10	40	8	<0.1
AUG 19...	<10	<1	4	1	<5	<5	20	30	14	<0.1

DATE	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, TOTAL RECOV- ERABLE (UG/L AS MO)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, TOTAL RECOV- ERABLE (UG/L AS SE)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, DIS- SOLVED (UG/L AS ZN)
MAY 28...	<0.1	<1	1	3	<1	<1	<1	<1	<10	17
AUG 19...	<0.1	<1	2	4	2	<1	<1	<1	10	8

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)
APR 29...	1640	350	63	60	JUL 22...	1325	56	21	3.2
MAY 22...	1010	580	66	103	AUG 01...	1105	35	6	0.57
28...	1530	451	31	38	19...	1530	24	6	0.38
JUN 10...	1315	300	23	19	21...	0850	38	64	6.6
25...	1310	74	11	2.2					

* The minimum reporting level for Lead was changed from <1 to <5 during June, 1986.

BIG ALKALI CREEK BASIN

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 downstream from Castle Creek, 1.0 mi upstream from mouth and 3.0 mi east of Burns, CO.

DRAINAGE AREA.--34.1 mi².

PERIOD OF RECORD.--October 1981 to September 1986 (discontinued).

GAGE.--Water-stage recorder. Elevation of gage is 7,040 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 20-22, Dec. 5 - Feb. 11, 15-21, 24 - Mar. 10, Apr. 1-5, 7-14, 19, 20, 23, 27-30. Records good except for estimated daily discharges, 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.

AVERAGE DISCHARGE.--5 years, 10.1 ft³/s; 7,320 acre-ft/yr.

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, 94 ft³/s at 2100 May 4, gage height, 2.45 ft; minimum daily, 1.20 ft³/s, Jan. 8, Feb. 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.1	3.1	2.5	1.9	1.6	3.6	23	49	61	12	2.7	3.8
2	3.1	3.0	2.6	2.0	1.7	3.7	24	57	45	9.6	2.6	3.5
3	3.1	3.0	2.6	1.7	1.7	3.8	21	59	44	8.8	2.8	3.7
4	3.1	3.2	2.4	1.5	1.6	3.8	17	68	50	11	2.7	3.4
5	3.1	3.5	2.3	1.4	1.7	4.0	15	62	54	15	2.6	3.8
6	3.1	3.1	2.3	1.6	1.5	4.2	15	50	56	10	2.2	3.7
7	4.4	2.8	2.2	1.5	1.5	4.4	17	47	50	8.5	2.4	3.7
8	6.4	3.0	2.4	1.2	1.6	4.6	19	40	49	8.1	11	4.7
9	5.4	2.1	2.2	1.3	1.6	4.7	19	36	48	12	2.7	4.8
10	4.5	2.6	2.1	1.4	1.6	4.4	18	32	47	16	2.1	7.2
11	4.7	3.2	2.0	1.6	1.4	4.1	19	31	38	13	1.9	6.7
12	4.4	3.1	1.9	1.6	1.2	3.5	21	33	35	9.6	2.2	4.9
13	4.2	2.5	1.9	1.5	1.4	3.4	21	33	33	9.3	2.5	4.3
14	4.6	2.5	2.1	1.5	1.3	3.3	18	39	30	8.9	2.3	4.0
15	4.2	2.8	2.0	1.5	1.4	3.0	13	41	27	7.9	2.2	4.0
16	4.4	2.9	2.0	1.6	1.4	3.5	22	45	25	7.2	1.9	4.0
17	4.5	2.7	2.0	1.6	1.5	3.2	18	37	24	7.3	1.8	4.0
18	4.2	2.8	2.1	1.7	1.6	3.1	10	36	25	6.0	1.6	4.1
19	3.9	2.7	2.1	1.6	1.8	3.4	11	40	23	5.4	1.5	4.8
20	3.6	2.6	2.1	1.5	2.0	3.2	13	51	21	6.2	11	4.8
21	3.5	2.6	2.1	1.6	2.2	3.5	20	61	17	4.9	4.8	4.4
22	3.5	2.5	2.0	1.5	2.2	4.2	25	61	15	4.9	2.9	4.6
23	3.3	2.6	2.1	1.5	2.7	4.9	38	55	13	6.0	2.7	5.6
24	3.3	2.8	2.2	1.6	2.6	5.8	40	52	13	5.1	2.8	6.6
25	3.3	2.9	2.2	1.6	2.7	5.6	48	52	13	7.6	2.8	7.4
26	3.3	2.8	2.0	1.5	2.9	5.7	52	56	16	5.5	2.8	9.7
27	3.3	2.6	2.0	1.5	3.1	6.6	38	55	13	4.4	2.6	8.1
28	3.2	2.6	2.2	1.6	3.5	7.4	31	52	11	3.8	2.6	12
29	3.1	2.6	2.1	1.6	---	9.9	35	51	13	3.6	2.7	9.0
30	3.1	2.6	2.2	1.6	---	12	43	48	12	3.2	3.1	8.2
31	3.2	---	2.0	1.7	---	23	---	48	---	2.8	4.5	---
TOTAL	118.1	83.8	66.9	48.5	53.0	163.5	724	1477	921	243.6	97.0	163.5
MEAN	3.81	2.79	2.16	1.56	1.89	5.27	24.1	47.6	30.7	7.86	3.13	5.45
MAX	6.4	3.5	2.6	2.0	3.5	23	52	68	61	16	11	12
MIN	3.1	2.1	1.9	1.2	1.2	3.0	10	31	11	2.8	1.5	3.4
AC-FT	234	166	133	96	105	324	1440	2930	1830	483	192	324
CAL YR 1985	TOTAL	4228.8		MEAN	11.6	MAX	91	MIN	1.2	AC-FT	8390	
WTR YR 1986	TOTAL	4159.9		MEAN	11.4	MAX	68	MIN	1.2	AC-FT	8250	

09063000 EAGLE RIVER AT RED CLIFF, 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 above 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.--Estimated daily discharges: Nov. 14-25, Dec. 5-18, Dec. 26 to Feb. 14, and Feb. 22. Records good except for estimated daily discharges, which are poor. Transmountain diversions upstream from station by Columbine, Ewing, and Wurtz ditches. Transbasin diversion upstream from station from Robinson Reservoir, capacity, 2,520 acre-ft to Tenmile Creek for mining development. Small diversions for irrigation of 400 acres upstream from station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--57 years (water years 1911-25, 1945-86), 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.--Peak discharges greater than base discharge of 280 ft³/s, and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
June 6	2100	*301	*4.78	No other peak greater than base discharge.			

Minimum daily discharge, 8.5 ft³/s, Feb. 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	13	14	12	11	12	28	112	197	102	29	25
2	18	13	14	12	11	10	29	128	194	92	28	25
3	18	15	14	12	11	9.1	30	139	209	86	28	25
4	18	13	15	12	11	9.3	27	155	229	89	27	22
5	17	14	15	12	11	9.6	26	156	248	88	28	22
6	17	14	15	12	11	10	28	139	259	89	25	21
7	22	12	15	12	11	11	32	127	268	83	25	20
8	28	14	15	12	11	11	37	119	267	78	26	26
9	26	14	15	12	11	11	37	105	273	78	27	25
10	25	14	15	12	11	12	36	96	262	73	25	26
11	25	15	15	12	11	11	35	102	233	68	23	27
12	24	15	15	12	11	11	35	107	212	64	25	25
13	23	14	15	12	11	11	36	113	205	60	26	23
14	22	14	15	12	11	11	39	122	200	58	23	22
15	19	14	15	12	11	11	36	118	196	58	21	21
16	20	14	15	12	10	16	37	118	192	54	20	20
17	19	14	15	11	10	11	37	113	191	57	19	20
18	19	14	16	11	9.4	11	36	108	190	59	20	20
19	18	14	18	11	9.7	11	35	116	185	57	21	20
20	18	14	18	11	10	11	35	133	177	58	23	19
21	17	14	18	11	9.2	12	40	153	167	59	25	19
22	17	14	16	11	8.8	12	55	172	157	57	26	18
23	16	14	16	11	8.5	12	69	180	150	56	31	18
24	15	14	15	11	8.7	13	79	178	145	53	39	18
25	15	14	14	11	8.8	14	82	178	144	49	31	21
26	15	14	13	11	9.2	14	77	191	144	44	28	21
27	15	16	12	11	8.8	16	66	200	133	42	25	21
28	15	14	12	11	9.3	19	64	206	124	39	23	21
29	15	14	12	11	---	23	82	203	117	36	23	21
30	14	14	12	11	---	26	98	194	111	35	25	22
31	14	---	12	11	---	28	---	197	---	33	25	---
TOTAL	582	420	456	357	285.4	409.0	1383	4478	5779	1954	790	654
MEAN	18.8	14.0	14.7	11.5	10.2	13.2	46.1	144	193	63.0	25.5	21.8
MAX	28	16	18	12	11	28	98	206	273	102	39	27
MIN	14	12	12	11	8.5	9.1	26	96	111	33	19	18
AC-FT	1150	833	904	708	566	811	2740	8880	11460	3880	1570	1300
CAL YR 1985	TOTAL	17276		MEAN	47.3	MAX	272	MIN	11	AC-FT	34270	
WTR YR 1986	TOTAL	17547.4		MEAN	48.1	MAX	273	MIN	8.5	AC-FT	34810	

EAGLE RIVER BASIN

09063200 WEARYMAN CREEK NEAR RED CLIFF, 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 Red Cliff.

DRAINAGE AREA.--8.78 mi².

PERIOD OF RECORD.--October 1964 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 9,158 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 1 to Apr. 9. Records good except for estimated daily discharges, which are poor. No regulation or diversion upstream from station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--22 years, 8.96 ft³/s; 6,490 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 155 ft³/s, June 20, 1983, gage height, 3.61 ft; minimum daily, 0.30 ft³/s, Feb. 21, 1967.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 70 ft³/s, and maximum (#):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
June 9	2000	86	2.64	June 17	1200	*100	*2.69

Minimum Daily discharge, 1.1 ft³/s, Jan. 29 to Feb. 21, and Apr. 23-24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.1	2.4	1.4	1.3	1.1	1.2	1.9	2.2	30	52	8.2	5.2
2	3.0	2.4	1.4	1.3	1.1	1.2	1.9	3.0	34	48	7.9	5.5
3	3.1	2.4	1.5	1.3	1.1	1.2	2.0	3.8	38	48	8.0	5.4
4	3.2	2.4	1.5	1.3	1.1	1.2	2.0	4.8	47	44	8.2	4.9
5	2.9	2.2	1.6	1.3	1.1	1.2	2.1	5.5	57	44	7.9	5.0
6	2.8	2.1	1.6	1.3	1.1	1.2	2.2	5.3	58	39	7.8	4.7
7	3.3	1.9	1.6	1.3	1.1	1.2	2.3	4.7	67	37	7.7	4.9
8	3.3	1.8	1.6	1.3	1.1	1.2	2.4	4.2	72	34	7.7	5.6
9	3.4	1.7	1.6	1.3	1.1	1.2	2.5	3.7	78	33	7.6	5.1
10	3.3	1.6	1.6	1.3	1.1	1.3	2.6	3.3	75	30	7.1	5.7
11	3.4	1.6	1.6	1.3	1.1	1.3	2.6	3.1	68	27	7.5	5.4
12	3.1	1.6	1.6	1.3	1.1	1.4	2.3	3.1	64	26	8.3	5.0
13	2.7	1.6	1.6	1.3	1.1	1.4	2.2	3.4	61	25	7.7	4.6
14	2.5	1.6	1.6	1.3	1.1	1.5	1.9	3.7	59	24	7.0	4.4
15	4.7	1.6	1.6	1.3	1.1	1.5	1.8	3.7	59	22	6.9	4.1
16	2.6	1.6	1.6	1.3	1.1	1.5	1.7	3.5	61	21	6.1	4.1
17	2.6	1.6	1.6	1.3	1.1	1.5	1.5	3.0	93	20	6.0	4.1
18	2.5	1.6	1.6	1.3	1.1	1.5	1.4	2.8	91	19	5.7	4.0
19	2.3	1.6	1.6	1.3	1.1	1.5	1.4	2.9	92	18	6.0	3.9
20	2.4	1.6	1.6	1.3	1.1	1.5	1.3	3.4	85	17	6.0	3.6
21	2.3	1.6	1.6	1.3	1.1	1.5	1.2	4.9	83	16	6.5	3.5
22	2.3	1.6	1.6	1.3	1.2	1.5	1.2	6.8	77	15	6.4	3.5
23	2.2	1.6	1.6	1.3	1.2	1.5	1.1	8.2	75	13	6.2	3.5
24	2.2	1.6	1.5	1.3	1.2	1.5	1.1	9.9	74	13	6.2	3.7
25	2.2	1.6	1.4	1.3	1.2	1.5	1.3	12	76	12	5.7	3.8
26	2.4	1.6	1.4	1.3	1.2	1.6	1.5	14	76	11	5.5	3.9
27	2.3	1.7	1.3	1.2	1.2	1.6	1.3	16	75	11	5.4	3.9
28	2.3	1.7	1.3	1.2	1.2	1.7	1.2	19	71	11	5.4	3.9
29	2.4	1.6	1.3	1.1	---	1.7	1.5	23	63	9.9	5.4	3.9
30	2.4	1.5	1.3	1.1	---	1.8	1.8	26	59	9.0	5.5	3.6
31	2.4	---	1.3	1.1	---	1.8	---	27	---	8.6	5.1	---
TOTAL	85.6	53.0	47.0	39.5	31.5	44.4	53.2	239.9	2018	757.5	208.6	132.4
MEAN	2.76	1.77	1.52	1.27	1.12	1.43	1.77	7.74	67.3	24.4	6.73	4.41
MAX	4.7	2.4	1.6	1.3	1.2	1.8	2.6	27	93	52	8.3	5.7
MIN	2.2	1.5	1.3	1.1	1.1	1.2	1.1	2.2	30	8.6	5.1	3.5
CAL YR 1985 TOTAL	3582.4			MEAN	9.81	MAX	73	MIN	1.3			
WTR YR 1986 TOTAL	3710.6			MEAN	10.2	MAX	93	MIN	1.1			

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DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.6	4.9	3.6	3.3	3.0	3.4	10	25	124	95	23	11
2	9.6	5.8	3.6	3.3	3.0	3.4	10	29	124	84	23	10
3	9.6	5.5	3.6	3.3	3.0	3.6	9.7	34	125	79	22	9.8
4	9.6	5.2	3.8	3.3	3.0	3.8	9.3	39	129	76	22	10
5	9.6	5.1	4.0	3.3	3.0	3.9	8.9	46	132	78	21	11
6	9.3	4.8	4.0	3.3	3.0	4.0	9.1	46	152	68	20	11
7	9.0	4.6	4.0	3.3	3.0	4.0	9.8	45	163	63	20	11
8	8.3	4.6	4.0	3.3	3.0	4.0	11	41	170	56	19	12
9	7.4	4.6	4.0	3.3	3.0	4.0	11	37	161	56	18	11
10	7.1	4.6	4.0	3.3	3.0	4.0	11	34	153	54	17	14
11	7.4	4.4	4.0	3.3	3.0	4.0	11	34	153	50	17	13
12	6.9	4.3	4.0	3.3	3.0	4.0	11	36	141	46	19	12
13	6.8	4.2	4.0	3.3	3.0	4.0	11	40	137	44	18	11
14	6.8	4.2	4.0	3.3	3.0	4.0	14	45	139	42	16	11
15	6.5	4.2	4.0	3.3	3.0	4.0	13	46	146	40	15	10
16	6.6	4.2	4.0	3.3	3.0	4.0	11	45	151	38	14	9.9
17	6.4	4.2	4.0	3.3	3.0	4.0	12	41	159	37	14	9.8
18	6.5	4.2	4.0	3.3	3.0	4.0	11	40	167	34	13	9.7
19	6.2	4.2	4.0	3.3	3.0	4.2	11	43	170	32	13	9.7
20	6.1	4.2	4.0	3.2	3.1	4.4	11	49	161	31	14	9.6
21	6.1	4.2	4.0	3.1	3.2	4.7	11	61	137	30	14	9.4
22	6.1	4.2	4.0	3.0	3.3	4.5	12	75	119	29	14	9.6
23	5.9	4.2	3.8	3.0	3.4	4.0	13	85	107	28	13	9.6
24	5.8	4.2	3.6	3.0	3.4	4.2	15	91	105	28	14	10
25	5.8	4.2	3.3	3.0	3.4	4.2	17	88	103	26	13	10
26	5.8	4.2	3.3	3.0	3.4	4.5	18	90	102	25	12	11
27	5.6	4.4	3.3	3.0	3.4	5.1	17	101	108	23	11	10
28	5.7	4.3	3.3	3.0	3.4	5.9	17	109	109	23	11	10
29	5.8	3.9	3.3	3.0	---	7.2	18	118	100	22	11	11
30	5.7	3.7	3.3	3.0	---	8.8	21	115	95	21	11	10
31	5.7	---	3.3	3.0	---	10	---	114	---	22	11	---
TOTAL	219.3	133.5	117.1	99.0	87.0	141.8	374.8	1842	4042	1380	493	317.1
MEAN	7.07	4.45	3.78	3.19	3.11	4.57	12.5	59.4	135	44.5	15.9	10.6
MAX	9.6	5.8	4.0	3.3	3.4	10	21	118	170	95	23	14
MIN	5.6	3.7	3.3	3.0	3.0	3.4	8.9	25	95	21	11	9.4
AC-FT	435	265	232	196	173	281	743	3650	8020	2740	978	629
CAL YR 1985	TOTAL	11708.3		MEAN	32.1	MAX	409	MIN	3.3	AC-FT	23220	
WTR YR 1986	TOTAL	9246.6		MEAN	25.3	MAX	170	MIN	3.0	AC-FT	18340	

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 mi².

PERIOD OF RECORD.--August 1972 to current year.

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 9,980 ft, above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records good except those for winter period, which are poor. Transmountain diversion upstream from 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.--14 years, 8.85 ft³/s; 6,410 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 300 ft³/s, July 4, 1975, gage height, 3.19 ft, from rating curve extended above 35 ft³/s; maximum gage height, 3.83 ft, July 30, 1983; minimum daily discharge, 0.24 ft³/s, Feb. 12, 13, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 184 ft³/s at 2100 June 4, gage height, 3.29 ft; minimum daily, 0.61 ft³/s, Feb. 3-5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.3	4.2	2.5	1.0	.73	.82	3.4	16	67	75	21	10
2	3.8	4.0	2.6	1.0	.66	.82	2.9	22	64	80	20	10
3	3.7	3.6	2.5	1.1	.61	.82	2.7	28	94	92	19	9.4
4	3.8	3.6	2.6	1.1	.61	.84	2.5	36	125	110	18	7.9
5	3.7	3.2	2.6	1.1	.61	.90	2.3	35	120	135	17	7.0
6	3.8	3.4	2.5	1.1	.66	.90	2.1	24	107	94	17	6.3
7	5.7	3.5	2.2	1.1	.78	.82	2.5	18	95	73	17	6.2
8	8.1	3.4	2.0	1.1	.82	.89	2.6	14	81	59	17	10
9	7.5	4.5	2.0	1.1	.82	.92	2.6	11	62	59	18	9.6
10	7.4	6.3	2.0	1.1	.82	.97	2.6	9.9	43	58	15	17
11	8.3	4.8	2.0	1.0	.82	.97	2.5	12	34	58	13	17
12	7.7	3.9	2.0	.99	.82	.92	2.4	16	43	65	14	15
13	7.2	3.7	2.0	.93	.82	.93	2.4	21	52	61	15	13
14	6.4	3.7	2.0	.90	.82	.98	2.4	25	59	54	14	11
15	7.1	3.6	2.0	.90	.82	1.0	2.3	19	69	55	11	8.8
16	6.5	3.6	2.0	.90	.82	1.1	2.4	17	73	60	11	7.6
17	6.2	3.6	2.0	.90	.82	1.1	2.4	15	80	50	9.7	6.7
18	5.4	3.6	1.9	.90	.82	1.0	2.4	16	81	41	10	6.1
19	5.2	3.6	1.6	.90	.82	1.0	2.4	23	71	42	11	5.6
20	5.3	3.6	1.4	.93	.82	1.0	2.3	34	63	41	12	5.2
21	5.4	3.6	1.3	.97	.82	1.0	2.8	48	64	39	14	4.7
22	4.9	3.6	1.2	.97	.78	1.0	5.4	53	59	48	14	5.4
23	5.3	3.5	1.1	.97	.76	1.0	8.4	48	59	45	13	5.9
24	4.6	2.6	1.0	.97	.82	1.1	9.3	44	54	39	14	5.8
25	4.6	3.4	1.0	.97	.82	.98	9.2	50	60	38	13	6.0
26	4.5	3.0	1.0	1.1	.82	.94	8.1	66	111	34	12	6.8
27	4.4	2.6	.99	1.1	.82	1.0	6.6	69	104	30	9.3	6.1
28	4.4	2.6	.95	.99	.82	1.3	5.4	74	99	27	8.1	7.0
29	4.4	2.5	.90	.91	---	1.8	5.8	69	98	25	8.5	7.7
30	4.4	2.5	.90	.79	---	2.5	9.7	46	83	24	14	7.1
31	4.2	---	.94	.75	---	3.7	---	56	---	24	11	---
TOTAL	168.2	107.3	53.68	30.54	21.78	35.02	120.8	1034.9	2274	1735	430.6	251.9
MEAN	5.43	3.58	1.73	.99	.78	1.13	4.03	33.4	75.8	56.0	13.9	8.40
MAX	8.3	6.3	2.6	1.1	.82	3.7	9.7	74	125	135	21	17
MIN	3.7	2.5	.90	.75	.61	.82	2.1	9.9	34	24	8.1	4.7
AC-FT	334	213	106	61	43	69	240	2050	4510	3440	854	500
CAL YR 1985	TOTAL	3986.32		MEAN	10.9	MAX	107	MIN	.61	AC-FT	7910	
WTR YR 1986	TOTAL	6263.72		MEAN	17.2	MAX	135	MIN	.61	AC-FT	12420	

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 Red Cliff.

DRAINAGE AREA.--36.1 mi².

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. Elevation of gage is 9,200 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Aug. 1, 1972, water-stage recorder at site 1,500 ft upstream at datum 9,245 ft, above National Geodetic Vertical Datum of 1929 (river-profile survey).

REMARKS.--Estimated daily discharges: Nov. 7-27, Dec. 21 to Jan. 22, Feb. 17-26, and Mar. 12-15, 18-21. Records good except for estimated daily discharges, which are poor. Flow regulated by Homestake Lake, capacity, 44,360 acre-ft, since June 7, 1966. Transmountain diversion upstream from 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 ft³/s; 45,930 acre-ft/yr, prior to diversion through Homestake tunnel; 14 years (water years 1973-86), 30.8 ft³/s; 22,310 acre-ft/yr, subsequent to diversion through Homestake tunnel.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,080 ft³/s, June 13, 1953, gage height, 6.84 ft, site and datum then in use, from rating curve extended above 700 ft³/s; minimum not determined.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 530 ft³/s at 2300 June 4, gage height, 5.50 ft; minimum daily, 8.6 ft³/s, Mar. 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	20	12	11	9.2	12	25	85	227	248	54	31
2	17	21	12	11	8.8	12	26	113	228	261	51	31
3	17	16	12	11	9.2	9.4	23	137	245	271	48	29
4	18	18	13	11	9.0	8.7	20	159	288	300	45	24
5	17	15	13	11	8.9	11	22	150	306	352	40	22
6	17	15	14	11	9.4	8.6	21	112	291	262	41	20
7	27	15	15	11	9.7	8.7	24	89	282	232	43	21
8	36	15	15	11	10	9.2	27	70	242	217	43	34
9	36	15	15	11	9.9	10	26	55	181	200	45	31
10	35	15	15	11	9.5	9.2	25	51	107	174	39	51
11	38	15	16	11	9.5	9.1	22	60	83	162	36	51
12	33	15	17	11	9.5	9.3	22	82	92	165	36	46
13	31	15	18	11	9.9	9.3	24	103	108	163	37	39
14	29	15	18	11	10	9.3	30	113	121	149	35	33
15	29	15	18	11	11	9.3	25	95	146	147	31	29
16	27	15	18	11	11	9.3	21	88	149	157	29	24
17	23	15	16	11	11	8.9	21	82	152	124	28	21
18	23	15	15	11	11	9.0	20	85	161	100	28	20
19	22	15	15	11	11	9.0	19	110	151	99	29	19
20	22	15	15	11	11	9.0	18	154	124	95	31	18
21	22	15	14	11	11	9.0	24	197	113	94	34	17
22	20	15	13	11	11	9.2	42	215	106	110	37	18
23	20	15	12	11	11	9.6	57	199	143	104	41	19
24	19	15	11	11	11	9.7	58	184	212	92	43	20
25	19	15	11	11	11	9.7	57	195	232	89	41	21
26	19	15	11	10	11	10	51	240	352	80	37	23
27	19	14	11	11	11	12	46	255	353	70	30	22
28	19	13	11	11	13	16	42	260	320	64	28	25
29	19	13	11	11	---	20	53	241	295	59	29	28
30	19	12	11	10	---	27	68	176	261	58	37	26
31	18	---	11	9.9	---	28	---	197	---	56	31	---
TOTAL	729	457	429	337.9	288.5	350.5	959	4352	6071	4754	1157	813
MEAN	23.5	15.2	13.8	10.9	10.3	11.3	32.0	140	202	153	37.3	27.1
MAX	38	21	18	11	13	28	68	260	353	352	54	51
MIN	17	12	11	9.9	8.8	8.6	18	51	83	56	28	17
AC-FT	1450	906	851	670	572	695	1900	8630	12040	9430	2290	1610
CAL YR 1985	TOTAL	12513.2		MEAN	34.3	MAX	290	MIN	6.0	AC-FT	24820	
WTR YR 1986	TOTAL	20697.9		MEAN	56.7	MAX	353	MIN	8.6	AC-FT	41050	

09064500 HOMESTAKE CREEK NEAR RED CLIFF, 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 Red Cliff, and 3.0 mi upstream from mouth.

DRAINAGE AREA.--58.3 mi².

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 above National Geodetic Vertical Datum of 1929 (river-profile survey). See WSP 1713 or 1733 for history of changes prior to May 8, 1961.

REMARKS.--Estimated daily discharges: Nov. 7 to Apr. 3. Records good except for estimated daily discharges, which are poor. Flow regulated by Homestake Lake (capacity, 44,360 acre-ft) since June 7, 1966. Transmountain diversions upstream from 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 ft³/s; 62,740 acre-ft/yr, prior to diversion through Homestake tunnel; 20 years (water years 1967-86), 45.0 ft³/s; 32,600 acre-ft/yr, subsequent to diversion through Homestake tunnel.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 1,300 ft³/s, June 24, 1918, gage height, 6.2 ft, site and datum then in use; minimum observed, 0.60 ft³/s, Jan. 25, 1915 (discharge measurement).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 583 ft³/s at 0100 June 5, gage height, 3.39 ft; minimum daily, 10 ft³/s, Feb. 1-5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	43	13	12	10	16	50	164	274	274	72	39
2	19	47	13	12	10	16	44	193	259	285	68	39
3	18	42	13	12	10	16	35	227	294	285	66	39
4	18	35	13	12	10	16	26	258	323	327	63	32
5	17	19	14	12	10	16	25	256	415	405	58	28
6	15	17	15	12	11	16	27	195	351	342	57	25
7	33	17	16	12	11	16	36	160	379	286	58	26
8	45	17	17	12	12	16	65	137	335	262	59	44
9	42	17	18	12	12	16	71	118	304	250	63	39
10	41	17	18	12	12	16	68	103	211	217	53	64
11	47	17	18	12	12	16	61	109	164	197	47	63
12	43	17	19	12	12	16	61	138	159	196	49	58
13	42	17	20	12	12	16	65	162	181	196	49	48
14	40	17	20	12	12	16	83	178	184	181	46	41
15	35	17	20	12	12	16	59	154	210	176	40	35
16	37	17	20	12	13	16	59	146	219	189	36	32
17	36	17	19	12	14	16	61	135	221	164	34	29
18	35	17	18	12	15	16	55	132	232	130	34	26
19	35	17	17	12	16	16	52	157	227	126	33	26
20	36	17	16	12	16	16	56	211	193	122	39	24
21	37	17	15	12	16	16	70	258	174	121	42	21
22	38	17	14	12	16	16	99	285	162	138	48	23
23	37	17	13	12	16	16	128	264	175	137	49	26
24	36	17	12	12	16	16	133	246	253	118	57	26
25	37	17	12	12	16	16	131	250	272	115	50	29
26	38	17	12	12	16	17	120	303	369	105	46	35
27	38	16	12	12	16	18	99	308	373	95	38	32
28	40	15	12	12	16	19	97	310	359	87	32	35
29	40	14	12	12	---	20	117	306	330	81	34	40
30	42	13	12	12	---	32	140	224	306	78	44	39
31	43	---	12	11	---	48	---	234	---	76	39	---
TOTAL	1079	601	475	371	370	554	2193	6321	7908	5761	1503	1063
MEAN	34.8	20.0	15.3	12.0	13.2	17.9	73.1	204	264	186	48.5	35.4
MAX	47	47	20	12	16	48	140	310	415	405	72	64
MIN	15	13	12	11	10	16	25	103	159	76	32	21
AC-FT	2140	1190	942	736	734	1100	4350	12540	15690	11430	2980	2110
CAL YR 1985	TOTAL	20284		MEAN	55.6	MAX	440	MIN	10	AC-FT	40230	
WTR YR 1986	TOTAL	28199		MEAN	77.3	MAX	415	MIN	10	AC-FT	55930	

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. Elevation of gage is 7,992 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to July 18, 1956, nonrecording gage at site 0.3 mi downstream at different datum.

REMARKS.--Estimated daily discharges: Nov. 9 to Dec. 1, Dec. 5 to Feb. 24, Feb. 28 to Mar. 16, and Mar. 19. Records good except for estimated daily discharges, which are poor. Bolts ditch exports water upstream from station to tailings ponds and recreation lake along Eagle River. Diversion 0.2 mi upstream from 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.--26 years, 53.9 ft³/s; 39,050 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; minimum daily discharge, 0.1 ft³/s, Dec. 27-31, 1962, Jan. 6-8, 11-15, 1963.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 400 ft³/s, and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
June 7	0500	564	4.97	July 5	1800	*659	*5.19
June 27	0600	527	4.87				

Minimum daily discharge, 4.5 ft³/s, Mar. 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	14	5.8	5.7	4.8	8.6	32	78	226	256	76	42
2	18	16	5.8	5.7	4.8	8.8	32	98	204	257	73	40
3	16	15	5.7	5.6	4.8	8.8	29	106	254	275	68	39
4	18	13	6.6	5.6	4.8	8.5	23	117	368	360	64	34
5	17	14	6.8	5.6	4.8	8.0	19	122	410	532	60	32
6	17	12	7.0	5.5	4.8	7.5	18	101	401	459	57	29
7	25	12	7.2	5.4	4.8	7.0	23	82	459	290	58	29
8	32	11	7.1	5.4	4.8	6.7	25	65	433	219	56	40
9	32	11	7.1	5.3	4.8	6.5	26	55	368	208	57	43
10	32	11	7.0	5.3	4.8	6.3	26	48	272	213	53	63
11	33	11	7.0	5.2	4.8	6.2	23	50	196	195	50	65
12	31	10	7.0	5.2	4.8	6.0	22	65	195	194	57	63
13	29	9.9	6.9	5.1	4.8	5.7	23	74	257	215	71	53
14	29	9.6	6.9	5.1	4.9	5.3	25	89	257	190	55	47
15	25	9.3	6.8	5.0	5.1	5.0	20	80	320	185	48	40
16	26	9.0	6.7	5.0	5.2	4.8	21	76	355	214	43	35
17	26	8.9	6.6	4.9	5.4	4.5	22	72	366	204	41	32
18	26	8.6	6.5	4.9	5.6	4.7	20	70	351	161	40	29
19	24	8.4	6.4	4.8	5.8	4.6	18	83	376	162	40	28
20	23	8.0	6.3	4.8	6.0	4.6	19	118	338	143	42	26
21	23	7.7	6.2	4.8	6.1	6.1	22	157	347	129	52	23
22	22	7.5	6.2	4.8	6.3	6.2	31	175	328	138	71	24
23	19	7.3	6.1	4.8	6.5	6.2	47	169	318	156	58	29
24	20	7.1	6.1	4.8	7.0	7.3	53	161	336	131	92	28
25	17	7.0	6.0	4.8	7.8	8.1	52	157	280	126	76	28
26	19	6.8	6.0	4.8	7.2	9.1	48	204	345	113	68	32
27	17	6.6	5.9	4.8	7.1	13	36	219	414	101	56	29
28	18	6.4	5.9	4.8	8.0	19	33	230	372	92	47	31
29	18	6.2	5.9	4.8	---	24	41	247	348	86	44	31
30	16	6.0	5.8	4.8	---	30	57	179	321	83	52	30
31	17	---	5.8	4.8	---	35	---	177	---	81	48	---
TOTAL	701	290.3	199.1	157.9	156.4	292.1	886	3724	9815	6168	1773	1094
MEAN	22.6	9.68	6.42	5.09	5.59	9.42	29.5	120	327	199	57.2	36.5
MAX	33	16	7.2	5.7	8.0	35	57	247	459	532	92	65
MIN	16	6.0	5.7	4.8	4.8	4.5	18	48	195	81	40	23
AC-FT	1390	576	395	313	310	579	1760	7390	19470	12230	3520	2170
CAL YR 1985	TOTAL	21620.6		MEAN	59.2	MAX	520	MIN	2.9	AC-FT	42880	
WTR YR 1986	TOTAL	25256.8		MEAN	69.2	MAX	532	MIN	4.5	AC-FT	50100	

EAGLE RIVER BASIN

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. Datum of gage is 8,600 ft above National Geodetic Vertical Datum of 1929, 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.--Estimated daily discharges: Oct. 1-3, Nov. 8 to Mar. 13. Records good, except for estimated daily discharges, which are poor. No diversion upstream from station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--32 years, 30.5 ft³/s; 22,100 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 greater than above base discharge of 200 ft³/s and maximum (*).

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
June 6	1900	*242	*1.53	June 16	1900	201	1.38

Minimum daily discharge, 6.7 ft³/s, Jan. 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	10	9.2	9.8	10	10	24	34	71	108	31	15
2	13	11	9.0	11	10	10	23	40	74	94	29	15
3	14	11	8.8	10	10	10	20	43	101	89	29	14
4	14	9.8	8.4	8.2	10	10	18	57	123	96	28	13
5	12	9.3	7.7	6.7	9.6	10	16	57	170	112	26	12
6	12	9.3	7.9	7.6	9.0	11	17	49	184	133	25	11
7	15	10	8.2	8.8	9.2	11	19	44	175	101	25	12
8	16	9.6	8.1	8.2	9.2	12	20	39	154	100	25	16
9	16	9.7	8.0	9.0	8.8	13	20	35	115	77	23	15
10	16	11	7.7	11	8.2	12	19	27	83	71	21	17
11	17	10	7.2	11	8.4	11	17	29	62	73	20	16
12	16	11	7.2	10	9.2	11	17	39	84	66	21	16
13	16	11	7.9	9.6	9.4	11	17	43	108	66	22	15
14	16	11	8.6	9.4	9.4	9.8	16	53	108	60	21	14
15	14	9.4	8.8	10	11	8.9	16	49	126	57	19	14
16	15	9.6	9.0	11	11	9.8	17	43	145	36	17	13
17	15	9.0	9.4	11	12	8.9	16	40	139	68	16	12
18	16	9.4	10	11	13	9.3	15	40	121	45	16	11
19	15	9.8	11	10	15	8.4	14	49	164	39	16	10
20	15	8.4	10	10	15	7.7	13	75	177	35	16	9.8
21	15	8.6	10	9.8	14	8.4	13	102	159	39	17	8.9
22	14	8.0	10	10	12	8.4	16	57	153	35	20	8.9
23	14	8.6	11	10	9.4	8.4	20	50	141	50	19	9.3
24	13	9.3	11	10	10	9.8	22	40	135	53	24	9.8
25	13	9.8	11	9.8	11	9.8	22	46	130	47	21	10
26	14	9.6	10	9.6	11	11	20	62	112	43	20	9.8
27	13	9.2	10	9.8	11	12	16	66	135	36	17	10
28	13	9.2	10	10	11	17	16	73	135	35	16	12
29	13	9.2	10	10	---	23	18	68	119	35	16	12
30	12	9.3	11	10	---	25	25	45	114	33	17	11
31	12	---	10	10	---	27	---	57	---	32	16	---
TOTAL	442	290.1	286.1	302.3	296.8	364.6	542	1551	3817	1964	649	372.5
MEAN	14.3	9.67	9.23	9.75	10.6	11.8	18.1	50.0	127	63.4	20.9	12.4
MAX	17	11	11	11	15	27	25	102	184	133	31	17
MIN	12	8.0	7.2	6.7	8.2	7.7	13	27	62	32	16	8.9
AC-FT	877	575	567	600	589	723	1080	3080	7570	3900	1290	739
CAL YR 1985	TOTAL	14344.0		MEAN	39.3	MAX	443	MIN	6.0	AC-FT	28450	
WTR YR 1986	TOTAL	10877.4		MEAN	29.8	MAX	184	MIN	6.7	AC-FT	21580	

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 mi².

PERIOD OF RECORD.--October 1947 to September 1956, October 1963 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 9,150 ft above National Geodetic Vertical Datum of 1925, from topographic map. Prior to October 1963, at site 15 ft upstream, at present datum.

REMARKS.--Estimated daily discharges: Nov. 7 to May 14. Records good except for estimated daily discharges, which are poor. No diversion upstream from station. Natural regulation by two small recreation lakes upstream from station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--32 years, 17.6 ft³/s; 12,750 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 365 ft³/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 ft³/s, Feb. 22, 1968, Jan. 30, 1970, Feb. 4 to Mar. 6, 1979.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 150 ft³/s, and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
June 4	2000	*228	*4.47	No other peak greater than base discharge.			

Minimum daily, 5.3 ft³/s, Sept. 20-23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	7.6	7.0	8.0	9.5	10	16	25	97	34	9.1	6.4
2	9.8	8.4	8.0	8.0	9.0	10	17	31	95	31	8.9	6.6
3	9.8	8.6	9.0	8.0	9.0	11	16	37	109	31	8.9	6.2
4	9.8	8.6	9.0	8.0	9.0	11	14	43	131	31	8.7	6.1
5	8.9	7.9	7.5	8.0	9.0	12	14	54	145	33	8.4	5.9
6	8.9	8.1	8.0	8.0	8.5	13	15	52	139	31	8.2	5.6
7	11	9.2	8.5	7.5	8.5	14	16	46	130	29	8.0	5.9
8	14	10	9.0	7.5	9.0	15	16	42	126	26	8.0	7.0
9	13	9.5	8.5	7.5	9.0	16	16	39	122	26	7.7	6.4
10	12	9.0	8.0	7.5	8.5	16	16	37	110	25	7.5	8.7
11	13	9.5	8.0	7.5	8.5	16	15	40	94	22	7.5	7.5
12	12	9.5	7.5	7.5	9.0	14	15	43	89	20	9.1	6.8
13	11	8.5	8.0	8.0	9.0	14	16	46	84	18	8.9	6.2
14	11	7.5	8.0	8.0	9.0	15	13	48	83	18	7.5	5.9
15	10	8.5	8.0	8.0	9.5	15	14	44	81	16	7.1	5.6
16	9.8	7.5	8.0	7.5	9.0	14	15	42	78	17	7.0	5.4
17	10	8.5	8.0	7.5	9.0	15	16	37	78	18	6.8	5.4
18	9.8	8.5	8.5	7.5	9.0	14	14	37	73	16	6.4	5.4
19	9.8	7.5	8.5	8.0	9.5	13	13	47	70	18	6.6	5.4
20	9.5	7.0	9.0	8.0	9.5	14	15	63	65	16	6.6	5.3
21	8.9	7.5	9.0	8.0	9.0	13	17	78	60	16	7.3	5.3
22	8.9	7.0	9.0	8.0	9.0	15	17	87	56	16	7.3	5.3
23	8.4	7.5	8.5	8.5	9.0	16	19	89	54	16	7.5	5.3
24	8.6	7.5	8.5	8.0	9.0	17	18	84	49	16	7.3	5.9
25	8.4	7.5	8.0	7.5	9.0	17	18	87	47	14	7.1	5.9
26	8.4	7.0	8.0	7.5	9.5	16	17	95	48	13	6.8	7.3
27	8.4	7.0	8.0	8.5	10	16	15	102	43	12	6.4	6.8
28	8.4	8.0	8.0	9.5	10	17	15	105	39	11	6.2	6.4
29	8.6	8.0	8.5	9.5	---	17	19	102	36	10	6.6	6.6
30	8.6	7.5	8.5	10	---	17	19	92	36	9.8	6.8	6.2
31	8.4	---	8.5	10	---	18	---	98	---	9.3	6.4	---
TOTAL	308.1	243.9	256.5	250.5	254.5	451	476	1872	2467	619.1	232.6	184.7
MEAN	9.94	8.13	8.27	8.08	9.09	14.5	15.9	60.4	82.2	20.0	7.50	6.16
MAX	14	10	9.0	10	10	18	19	105	145	34	9.1	8.7
MIN	8.4	7.0	7.0	7.5	8.5	10	13	25	36	9.3	6.2	5.3
AC-FT	611	484	509	497	505	895	944	3710	4890	1230	461	366
CAL YR 1985	TOTAL	9031.0	MEAN	24.7	MAX	195	MIN	3.0	AC-FT	17910		
WTR YR 1986	TOTAL	7615.9	MEAN	20.9	MAX	145	MIN	5.3	AC-FT	15110		

EAGLE RIVER BASIN

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. Elevation of gage is 8,625 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 1, 2, Nov. 7 to Mar. 16. Records good, except for estimated daily discharges, which are poor. No regulation or diversion upstream from station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--23 years, 10.1 ft³/s; 7,320 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 338 ft³/s, June 8, 1985, gage height, 4.10 ft, from rating curve extended above 82 ft³/s; maximum gage height, 4.26 ft, June 8, 1985 (backwater from debris); minimum daily discharge determined, 0.10 ft³/s, Feb. 8, 1967, Jan. 30, 1970.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 50 ft³/s, and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 21	2300	61	2.17	July 5	0300	70	3.34
June 6	2230	*101	*3.47				

Minimum daily discharge, 1.8 ft³/s, Mar. 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.6	6.0	2.6	1.9	2.1	3.0	9.2	15	59	36	11	5.1
2	6.8	6.5	2.6	1.9	2.3	3.0	8.3	19	49	36	11	4.7
3	7.0	6.7	2.6	1.9	2.8	3.0	7.5	17	69	36	8.9	4.5
4	6.5	5.7	2.0	1.9	3.0	3.0	5.7	26	71	49	8.6	4.1
5	6.5	5.7	2.0	1.9	3.0	3.0	5.7	27	75	63	8.3	4.3
6	6.7	5.3	2.0	1.7	3.0	3.0	5.1	21	79	44	8.6	4.0
7	7.5	3.5	2.0	1.7	3.0	3.0	5.5	15	79	40	8.6	4.3
8	8.1	3.5	2.0	1.7	3.0	3.0	7.2	14	77	30	7.8	5.3
9	8.7	3.5	2.0	1.7	2.6	3.0	7.5	12	65	28	7.2	4.9
10	8.9	3.5	1.8	1.7	2.6	3.0	7.2	11	51	32	7.0	6.2
11	8.9	3.5	1.8	1.7	2.6	3.0	6.7	12	42	28	6.7	6.0
12	8.9	3.5	1.8	1.7	2.3	3.0	6.2	15	46	28	7.0	6.5
13	9.2	3.5	1.8	1.7	1.7	3.1	6.2	16	59	25	7.5	5.7
14	9.2	2.9	1.8	1.7	1.7	3.4	6.0	19	54	22	7.0	5.5
15	9.2	2.9	1.8	1.7	1.7	2.1	5.3	17	69	22	6.2	5.1
16	8.9	2.9	1.8	2.1	1.7	2.0	5.3	15	65	21	6.2	4.7
17	9.2	2.9	1.6	2.4	2.1	2.0	5.5	15	67	18	6.2	4.3
18	8.9	2.9	1.6	2.4	2.6	2.0	5.3	15	59	17	6.5	3.8
19	8.3	2.9	1.6	2.4	2.6	1.9	4.9	19	59	17	6.2	3.5
20	8.3	2.9	1.9	2.4	2.6	1.8	4.9	32	54	15	6.5	3.2
21	8.3	2.6	1.9	2.4	2.7	1.8	4.5	49	56	18	7.2	2.8
22	8.3	2.4	1.9	2.4	2.7	1.8	4.7	49	52	16	7.0	2.8
23	8.1	2.4	1.9	2.4	2.7	1.9	6.2	42	49	22	6.7	2.8
24	7.8	2.4	1.9	2.4	2.7	1.9	8.1	35	48	19	7.8	2.7
25	7.8	2.4	1.9	2.4	2.7	2.1	8.9	33	42	17	7.2	2.7
26	7.8	2.4	1.9	2.4	2.7	2.1	8.9	45	49	15	6.5	2.8
27	7.8	2.4	1.9	2.1	2.9	2.5	7.5	52	49	14	6.0	2.8
28	7.8	2.4	1.9	2.1	3.0	3.3	6.7	59	46	13	5.3	2.8
29	8.1	2.5	1.9	2.1	---	5.1	7.5	59	42	13	5.3	2.9
30	7.5	2.6	1.9	2.1	---	6.7	11	44	40	12	5.5	2.8
31	7.2	---	1.9	2.1	---	8.6	---	45	---	12	5.3	---
TOTAL	248.8	105.2	60.0	63.1	71.1	92.1	199.2	864	1721	778	222.8	123.6
MEAN	8.03	3.51	1.94	2.04	2.54	2.97	6.64	27.9	57.4	25.1	7.19	4.12
MAX	9.2	6.7	2.6	2.4	3.0	8.6	11	59	79	63	11	6.5
MIN	6.5	2.4	1.6	1.7	1.7	1.8	4.5	11	40	12	5.3	2.7
AC-FT	493	209	119	125	141	183	395	1710	3410	1540	442	245
CAL YR 1985	TOTAL	4885.9		MEAN	13.4	MAX	167	MIN	1.4	AC-FT	9690	
WTR YR 1986	TOTAL	4548.9		MEAN	12.5	MAX	79	MIN	1.6	AC-FT	9020	

09066150 PITKIN CREEK NEAR MINTURN, CO

LOCATION.--Lat 39°38'37", long 106°18'07", in SW¼SW¼ sec.1, T.5 S., R.80 W., 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 1965-66. October 1966 to current year.

REVISED RECORDS.--WRD Colo. 1971: 1967-70.

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 8,525 ft above National Geodetic Vertical Datum of 1929, from topographic map. Oct. 1, 1964, to Sept. 30, 1966, crest-stage gage at datum 0.98 ft, lower.

REMARKS.--Estimated daily discharges: Nov. 8 to Mar. 12, July 24-27. Records good, except for estimated daily discharges, which are poor. Diversions upstream from station by Pitkin ditch for irrigation downstream from station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--20 years, 12.4 ft³/s; 8,980 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 265 ft³/s, June 8, 1985, gage height, 2.85 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 greater than base discharge of 60 ft³/s, and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
July 3	2230	60	2.49	No other peak greater than base discharge.			

Minimum daily, 1.3 ft³/s, Mar. 21-26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.5	3.9	3.5	3.4	5.0	3.1	4.2	14	43	42	15	8.8
2	4.8	3.6	3.5	3.4	5.6	3.1	4.5	17	42	42	14	8.8
3	5.2	3.9	3.5	3.4	6.4	3.1	4.2	23	47	44	13	7.9
4	5.2	3.6	3.4	3.4	6.4	3.1	4.8	30	47	53	12	7.5
5	4.8	3.3	3.3	3.4	6.4	3.1	4.8	32	47	58	12	7.5
6	5.2	3.2	3.3	3.2	6.4	3.1	4.8	26	49	49	12	7.1
7	5.9	3.2	3.3	3.1	6.0	3.1	5.2	21	53	44	11	7.5
8	6.3	3.2	3.3	3.1	4.9	3.1	5.9	19	53	36	9.8	9.8
9	5.9	3.3	3.3	3.1	4.9	3.1	5.9	16	52	37	9.3	8.8
10	6.3	3.3	3.1	3.1	4.9	3.1	5.9	14	44	40	9.3	11
11	6.7	3.3	3.1	3.1	4.7	3.1	5.9	15	39	36	8.8	11
12	6.3	3.3	3.1	3.1	3.0	2.5	5.9	18	41	36	9.3	12
13	6.3	3.3	3.1	3.1	2.4	2.3	5.9	19	47	36	9.3	10
14	5.9	3.3	3.1	3.1	2.4	2.3	5.9	22	45	35	8.8	9.3
15	5.5	3.1	3.1	3.1	2.4	2.1	5.9	22	51	34	8.8	8.8
16	5.9	3.1	2.9	4.2	2.4	1.7	5.5	20	52	33	8.8	8.4
17	5.5	3.1	2.9	4.6	2.6	1.7	5.5	18	53	30	8.4	7.5
18	5.5	3.1	2.9	4.6	3.0	1.5	5.5	18	52	27	8.4	7.1
19	5.5	3.1	3.2	4.6	3.0	1.5	4.8	22	52	27	8.4	6.7
20	5.5	3.1	3.4	4.6	3.0	1.5	4.8	29	52	27	8.4	6.7
21	5.5	3.1	3.4	4.6	3.0	1.3	4.5	38	53	34	9.8	6.3
22	4.8	3.1	3.4	4.6	3.0	1.3	5.2	41	51	27	8.8	6.3
23	4.8	3.0	3.4	4.6	3.1	1.3	5.9	37	51	28	8.8	6.7
24	4.8	3.0	3.4	4.6	3.1	1.3	6.7	33	50	27	9.3	6.7
25	4.8	3.0	3.4	4.3	3.1	1.3	7.1	34	47	24	8.8	6.7
26	4.8	3.0	3.4	4.3	3.1	1.3	7.1	41	56	23	8.4	7.1
27	4.8	3.0	3.4	4.2	3.1	1.7	7.1	44	55	20	7.9	7.1
28	4.5	3.0	3.4	4.2	3.1	2.3	7.1	46	53	19	7.5	7.1
29	4.5	3.0	3.4	4.3	---	3.0	7.1	42	50	17	7.4	7.1
30	4.2	3.2	3.4	4.3	---	3.0	9.8	36	46	16	8.4	7.1
31	4.2	---	3.4	4.3	---	3.9	---	38	---	15	8.4	---
TOTAL	164.4	96.7	101.7	119.0	110.4	72.9	173.4	845	1473	1016	298.3	240.4
MEAN	5.30	3.22	3.28	3.84	3.94	2.35	5.78	27.3	49.1	32.8	9.62	8.01
MAX	6.7	3.9	3.5	4.6	6.4	3.9	9.8	46	56	58	15	12
MIN	4.2	3.0	2.9	3.1	2.4	1.3	4.2	14	39	15	7.4	6.3
AC-FT	326	192	202	236	219	145	344	1680	2920	2020	592	477
CAL YR 1985	TOTAL	6137.1		MEAN	16.8	MAX	154	MIN	1.3	AC-FT	12170	
WTR YR 1986	TOTAL	4711.2		MEAN	12.9	MAX	58	MIN	1.3	AC-FT	9340	

EAGLE RIVER BASIN

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 mi².

PERIOD OF RECORD.--October 1964 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 8,325 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to June 4, 1984, gage at site 1,000 ft upstream at different datum (gage destroyed by rock slide).

REMARKS.--Estimated daily discharges: Oct. 1-2, Nov. 9-11, Dec. 4-6, Jan. 3-7, Jan. 12-15, Jan. 31, Feb. 11 to Mar. 16, May 21 to June 19, July 19-24. Records fair, except for estimated daily discharges, which are poor. No diversion or regulation upstream from station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--22 years, 12.7 ft³/s; 9,200 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 355 ft³/s, June 15, 1978, gage height, 4.07 ft; maximum gage height, 4.62 ft, June 18, 1983 (backwater from debris); minimum daily discharge, 0.20 ft³/s, Feb. 8, 1967, Jan. 29, 1970, Feb. 10-11, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, unknown; minimum daily, 2.4 ft³/s, Nov. 25-25, Jan. 9-21, 24-25, Feb. 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.8	6.1	4.0	2.6	2.5	2.6	17	32	54	38	9.7	8.1
2	3.9	6.7	4.0	2.6	2.5	2.6	17	36	59	37	9.6	7.8
3	4.2	6.8	3.9	2.6	2.5	2.8	15	38	64	39	9.3	7.2
4	4.7	6.4	3.9	2.6	2.5	2.8	14	34	71	52	9.2	6.6
5	4.4	6.7	3.8	2.5	2.4	3.0	13	27	75	61	9.0	6.7
6	4.6	6.5	3.7	2.5	2.5	3.2	13	21	82	42	9.1	6.0
7	5.4	6.7	3.6	2.5	2.4	3.4	16	15	86	30	9.1	6.5
8	5.9	6.6	3.4	2.5	2.6	3.7	18	14	86	22	8.6	8.7
9	5.8	6.6	3.3	2.4	2.5	4.0	18	14	85	24	8.3	7.9
10	6.2	6.8	3.3	2.4	2.5	4.2	18	14	75	26	8.0	9.6
11	7.1	7.0	3.3	2.4	2.6	4.5	17	16	63	21	7.8	9.4
12	7.0	7.0	3.5	2.4	2.6	4.7	17	19	52	21	7.8	9.2
13	7.4	7.1	3.5	2.4	2.6	4.7	17	23	49	21	8.1	8.5
14	7.0	7.4	3.5	2.4	2.6	4.6	18	34	52	19	8.1	7.7
15	6.5	7.4	3.5	2.4	2.6	4.5	10	29	54	17	8.0	6.8
16	6.7	7.1	3.5	2.4	2.6	4.4	5.2	27	58	18	7.0	6.0
17	6.8	5.9	3.4	2.4	2.6	4.4	5.5	23	60	15	6.7	5.6
18	6.9	5.0	2.8	2.4	2.6	4.4	5.8	24	63	12	6.5	5.2
19	6.5	5.1	2.6	2.4	2.6	4.4	5.8	28	66	12	6.2	4.9
20	6.5	5.1	2.5	2.4	2.6	4.3	5.9	35	68	12	6.4	4.7
21	6.6	5.1	3.1	2.4	2.6	4.7	5.8	40	71	11	7.9	4.4
22	6.7	5.1	3.0	2.5	2.6	5.0	7.2	52	66	11	7.2	4.2
23	6.5	3.9	2.9	2.5	2.6	5.5	12	54	63	11	7.0	4.3
24	6.4	2.4	2.8	2.4	2.6	6.4	17	51	55	11	7.8	4.5
25	6.3	2.4	2.7	2.4	2.6	6.2	20	45	56	10	7.6	4.5
26	6.6	2.9	2.6	2.5	2.6	6.6	21	41	74	10	6.9	4.9
27	6.5	3.6	2.8	2.5	2.6	7.7	19	49	63	10	6.4	5.1
28	6.7	4.0	2.6	2.5	2.6	10	13	59	56	9.9	6.0	5.2
29	6.8	4.0	2.6	2.5	---	13	15	65	49	9.8	6.0	5.0
30	6.9	4.0	2.6	2.5	---	16	30	64	42	9.7	7.4	4.9
31	7.1	---	2.5	2.5	---	19	---	58	---	9.7	7.4	---
TOTAL	190.4	167.4	99.2	76.4	71.7	177.3	426.2	1081	1917	652.1	240.1	190.1
MEAN	6.14	5.58	3.20	2.46	2.56	5.72	14.2	34.9	63.9	21.0	7.75	6.34
MAX	7.4	7.4	4.0	2.6	2.6	19	30	65	86	61	9.7	9.6
MIN	3.8	2.4	2.5	2.4	2.4	2.6	5.2	14	42	9.7	6.0	4.2
AC-FT	378	332	197	152	142	352	845	2140	3800	1290	476	377
CAL YR 1985	TOTAL	5023.9		MEAN	13.8	MAX	125	MIN	1.7	AC-FT	9960	
WTR YR 1986	TOTAL	5288.9		MEAN	14.5	MAX	86	MIN	2.4	AC-FT	10490	

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 mi².

PERIOD OF RECORD.--October 1964 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 8,200 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Oct. 1, 1977 at site 700 ft upstream, at different datum.

REMARKS.--Estimated daily discharges: Nov. 8-March 12, July 8-23, Sept. 11-30. Records good except for estimated daily discharges, which are poor. No diversion or regulation upstream from station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--22 years, 6.32 ft³/s; 4,580 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 116 ft³/s, June 20, 1974, gage height, 2.65 ft, datum then in use; maximum gage height, 3.28 ft, June 25, 1983, backwater from debris; no flow at times most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge 81 ft³/s at 2300 June 6, gage height, 2.67 ft; minimum daily, 0.94 ft³/s, Mar. 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.9	1.5	1.8	2.2	2.6	1.8	2.4	6.4	39	23	3.8	3.8
2	2.9	2.0	1.8	2.4	2.6	1.8	2.3	7.5	41	20	3.8	3.4
3	3.2	2.0	1.8	2.3	2.6	1.8	2.3	10	48	19	3.6	3.0
4	3.2	1.7	1.7	2.0	2.6	1.8	2.1	12	51	22	3.6	2.7
5	2.9	1.7	1.6	2.0	2.6	1.9	1.9	14	59	22	3.5	2.4
6	2.7	1.6	1.6	2.1	2.5	1.9	1.7	14	65	19	3.4	2.3
7	3.5	1.5	1.7	2.3	2.4	2.0	1.9	14	67	18	3.6	2.7
8	3.2	1.5	1.7	2.2	2.2	2.1	2.3	14	64	15	3.4	3.8
9	3.0	1.6	1.7	2.4	2.3	2.1	2.3	13	64	12	3.2	3.0
10	3.0	1.6	1.5	2.6	2.2	2.0	2.3	11	57	12	3.0	4.4
11	3.0	1.8	1.2	2.7	2.2	1.9	2.4	12	48	11	3.0	4.2
12	2.5	2.0	1.1	2.5	2.1	1.8	2.3	13	44	10	3.0	3.8
13	2.6	1.8	1.2	2.4	2.2	1.7	2.3	14	46	9.8	3.3	3.4
14	2.4	1.8	1.4	2.5	2.6	1.7	2.3	15	49	9.0	3.0	3.2
15	2.2	1.9	1.6	2.6	2.7	1.5	2.3	14	54	8.8	2.8	3.0
16	2.2	1.8	1.7	2.7	2.6	1.4	2.3	14	56	9.0	2.7	2.8
17	2.2	1.9	1.8	2.6	3.0	1.4	2.3	14	59	8.4	2.5	2.6
18	2.1	2.0	2.0	2.7	2.9	1.3	2.3	13	56	8.0	2.4	2.4
19	2.1	2.0	1.9	2.6	2.7	1.2	2.3	14	53	7.6	2.3	2.3
20	2.0	1.8	1.9	2.5	2.4	1.1	2.3	15	50	7.0	2.3	2.2
21	2.0	1.9	1.8	2.5	2.1	.96	2.3	19	45	6.5	3.1	2.0
22	2.0	1.8	1.8	2.6	1.9	.96	2.5	24	42	6.4	3.0	1.9
23	2.0	2.0	1.9	2.6	1.8	.95	3.2	26	39	6.8	2.8	1.9
24	1.9	2.1	2.1	2.6	1.9	.96	3.3	26	35	5.4	3.0	2.0
25	1.9	2.1	2.0	2.4	2.0	.96	4.0	26	33	5.3	3.4	2.1
26	2.0	2.0	1.9	2.3	2.0	.94	4.0	29	40	5.1	3.0	2.3
27	2.0	1.9	1.9	2.4	2.0	.96	4.1	33	33	4.6	2.5	2.2
28	2.0	1.8	2.0	2.5	1.9	1.2	4.2	34	30	4.5	2.5	2.2
29	2.0	1.8	2.0	2.6	---	1.6	4.4	38	27	4.4	2.4	2.1
30	1.9	1.8	2.2	2.6	---	2.0	5.0	36	26	4.4	3.2	2.2
31	1.7	---	2.1	2.6	---	2.4	---	36	---	4.0	3.4	---
TOTAL	75.2	54.7	54.4	76.0	65.6	48.09	81.6	580.9	1420	328.0	94.5	82.3
MEAN	2.43	1.82	1.75	2.45	2.34	1.55	2.72	18.7	47.3	10.6	3.05	2.74
MAX	3.5	2.1	2.2	2.7	3.0	2.4	5.0	38	67	23	3.8	4.4
MIN	1.7	1.5	1.1	2.0	1.8	.94	1.7	6.4	26	4.0	2.3	1.9
AC-FT	149	108	108	151	130	95	162	1150	2820	651	187	163

CAL YR 1985	TOTAL	2986.50	MEAN	8.18	MAX	58	MIN	.60	AC-FT	5920
WTR YR 1986	TOTAL	2961.29	MEAN	8.11	MAX	67	MIN	.94	AC-FT	5870

EAGLE RIVER BASIN

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 mi².

PERIOD OF RECORD.--October 1963 to current year.

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 9,212 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 6 to Dec. 10, Jan. 15-19, 21-29, and Feb. 14-24. Records good except for estimated daily discharges, which are poor. No regulation or diversion upstream from station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--23 years, 9.48 ft³/s; 6,870 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 215 ft³/s, June 19, 1983, gage height, 4.66 ft; minimum daily, 0.20 ft³/s, Jan. 30, 1970.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 70 ft³/s, and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
June 6	2000	*88	*3.86	No other peak greater than base discharge.			
Minimum daily, 1.0 ft ³ /s, Dec. 22-26.							

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.0	2.1	1.8	1.1	1.2	1.4	4.8	17	59	22	3.0	2.5
2	2.3	2.9	1.8	1.1	1.2	1.3	4.6	21	62	19	2.9	2.5
3	2.5	2.5	1.8	1.1	1.2	1.3	4.7	22	70	19	2.9	2.4
4	3.1	2.4	1.8	1.1	1.2	1.3	4.8	31	71	23	3.0	2.0
5	2.2	2.4	1.8	1.1	1.2	1.4	4.5	29	64	21	2.9	1.8
6	2.3	2.3	1.8	1.1	1.2	1.4	3.9	26	70	20	2.5	1.6
7	2.4	2.2	1.8	1.1	1.2	1.4	3.9	25	71	17	2.5	1.6
8	3.0	2.1	1.8	1.1	1.2	1.3	5.0	22	72	15	2.5	2.7
9	2.7	2.0	1.8	1.2	1.2	1.3	5.0	20	68	14	2.5	2.4
10	2.7	1.9	1.8	1.2	1.2	1.3	5.0	20	67	14	2.4	3.0
11	2.7	1.8	1.8	1.2	1.2	1.4	5.0	26	56	13	2.1	4.0
12	2.6	1.8	1.6	1.2	1.2	1.4	5.1	27	50	12	2.1	3.4
13	2.7	1.8	1.6	1.2	1.2	1.3	5.0	30	48	11	2.2	2.7
14	2.7	1.8	1.5	1.2	1.2	1.3	4.6	29	47	9.6	2.3	2.2
15	2.3	1.8	1.4	1.3	1.2	1.3	4.4	25	48	9.4	2.2	1.9
16	2.6	1.8	1.4	1.3	1.2	1.3	4.6	25	49	11	1.8	1.6
17	2.4	1.8	1.4	1.3	1.2	1.3	4.8	26	46	9.5	1.7	1.5
18	2.1	1.8	1.4	1.3	1.2	1.2	4.8	29	43	8.8	1.5	1.4
19	2.2	1.8	1.3	1.3	1.2	1.2	4.8	36	42	8.1	1.5	1.4
20	2.6	1.8	1.2	1.3	1.2	1.2	4.8	41	39	7.4	1.5	1.4
21	2.2	1.8	1.3	1.3	1.2	1.2	5.0	45	37	7.3	3.2	1.4
22	2.4	1.8	1.0	1.3	1.3	1.2	6.2	50	35	7.0	3.3	1.4
23	1.7	1.8	1.0	1.3	1.3	1.2	7.2	50	32	6.9	2.4	1.4
24	2.2	1.8	1.0	1.3	1.3	1.4	7.8	48	30	6.4	2.3	1.4
25	2.3	1.8	1.0	1.3	1.4	1.4	8.2	46	29	5.8	2.3	1.4
26	1.9	1.8	1.0	1.3	1.4	1.4	8.4	50	30	5.0	2.3	1.3
27	2.3	1.8	1.1	1.3	1.4	1.6	8.4	58	28	4.8	2.1	1.7
28	2.1	1.8	1.1	1.3	1.4	2.3	8.4	62	27	4.2	2.0	2.5
29	2.0	1.8	1.1	1.3	---	3.1	9.7	65	25	3.6	1.8	2.5
30	2.2	1.8	1.1	1.2	---	4.3	13	58	25	3.1	2.1	2.5
31	2.7	---	1.1	1.2	---	4.8	---	57	---	3.0	2.3	---
TOTAL	75.1	58.8	44.4	37.9	34.7	50.2	176.4	1116	1440	340.9	72.1	61.5
MEAN	2.42	1.96	1.43	1.22	1.24	1.62	5.88	36.0	48.0	11.0	2.33	2.05
MAX	3.1	2.9	1.8	1.3	1.4	4.8	13	65	72	23	3.3	4.0
MIN	1.7	1.8	1.0	1.1	1.2	1.2	3.9	17	25	3.0	1.5	1.3
AC-FT	149	117	88	75	69	100	350	2210	2860	676	143	122
CAL YR 1985	TOTAL	4037.8		MEAN	11.1	MAX	125	MIN	1.0	AC-FT	8010	
WTR YR 1986	TOTAL	3508.0		MEAN	9.61	MAX	72	MIN	1.0	AC-FT	6960	

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 mi².

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. Elevation of gage is 7,453 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to May 1, 1974, nonrecording gage near present site at different datum.

REMARKS.--Estimated daily discharges: Nov. 10-28, Dec. 1-2, 5-19, 26-30, Jan. 22-31, Feb. 1-13, 21-22, 28, and Mar. 1. Records good except for estimated daily discharges, which are poor. Diversions upstream from station for irrigation upstream and downstream from station. Slight natural regulation by several small lakes in headwaters.

AVERAGE DISCHARGE.--12 years (water years 1975-86), 13.9 ft³/s; 10,070 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 249 ft³/s, June 27, 1983, gage height, 3.46 ft; minimum daily, 0.55 ft³/s, Sept. 10, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 80 ft³/s, and maximum (*)

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
June 6	2100	*97	*2.68	No other peak greater than base discharge.			

Minimum daily discharge 2.6 ft³/s, March 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.1	5.4	5.3	3.8	4.0	4.6	6.0	15	38	51	11	10
2	6.1	5.4	5.3	4.3	3.9	4.7	6.2	18	42	44	11	9.5
3	6.0	5.3	5.3	3.8	3.9	4.6	5.6	20	51	42	10	9.3
4	6.1	5.1	5.6	4.0	3.9	4.7	4.9	24	58	47	9.5	8.4
5	6.0	5.6	5.4	4.2	3.9	4.8	4.8	23	65	61	9.8	7.7
6	6.0	5.8	5.3	4.2	3.8	4.7	5.3	20	78	47	9.1	7.1
7	8.7	5.4	5.2	4.2	3.8	4.7	6.3	18	79	40	9.0	7.3
8	11	5.2	5.2	4.2	3.8	4.6	6.9	17	79	36	8.5	9.0
9	9.5	5.3	5.2	4.2	3.8	4.3	6.6	17	85	39	8.5	10
10	7.5	5.3	5.2	4.2	3.8	3.9	6.6	16	80	39	8.0	15
11	7.7	5.2	5.1	4.2	3.7	3.6	7.2	16	70	34	8.0	12
12	7.2	5.2	5.1	4.2	3.7	3.6	7.4	18	72	31	9.8	11
13	7.1	5.2	5.1	4.2	3.7	3.3	7.4	19	71	30	11	9.6
14	6.7	5.2	5.1	4.2	3.6	3.4	7.2	21	69	28	9.0	8.7
15	6.8	5.2	5.1	4.3	3.7	3.1	6.7	22	73	28	8.1	8.0
16	7.5	5.2	5.1	4.3	3.8	3.8	6.9	23	78	35	7.5	7.2
17	6.7	5.2	5.1	4.3	3.9	2.8	6.7	20	81	32	7.1	7.5
18	6.0	5.2	5.0	4.3	3.9	2.7	6.2	19	80	28	6.8	6.4
19	5.9	5.2	5.0	4.3	4.1	3.0	6.0	21	85	25	6.5	6.7
20	5.9	5.2	4.8	4.3	4.2	2.6	6.1	26	81	22	6.8	6.2
21	5.9	5.2	4.2	4.3	4.1	2.8	7.5	31	79	21	9.6	6.1
22	5.8	5.2	4.1	4.2	4.0	2.8	10	35	75	21	12	6.2
23	5.7	5.2	4.1	4.2	3.9	3.1	12	34	72	24	11	6.5
24	6.0	5.2	3.3	4.2	4.3	3.1	12	32	66	22	12	7.1
25	5.6	5.2	3.7	4.2	4.5	3.2	13	31	62	19	11	7.5
26	5.6	5.2	4.0	4.1	4.7	3.4	11	33	72	17	12	9.0
27	5.4	5.2	4.0	4.1	4.6	3.6	9.2	33	62	15	9.6	7.9
28	5.4	5.2	4.0	4.1	4.6	4.2	8.3	35	58	14	9.0	7.6
29	5.5	5.2	4.0	4.1	---	4.7	10	38	57	12	9.4	7.6
30	5.4	5.2	4.0	4.0	---	5.2	13	35	56	12	12	7.0
31	5.5	---	4.1	4.0	---	6.6	---	34	---	11	11	---
TOTAL	202.3	157.8	147.0	129.2	111.6	120.2	233.0	764	2074	927	293.6	249.1
MEAN	6.53	5.26	4.74	4.17	3.99	3.88	7.77	24.6	69.1	29.9	9.47	8.30
MAX	11	5.8	5.6	4.3	4.7	6.6	13	38	85	61	12	15
MIN	5.4	5.1	3.3	3.8	3.6	2.6	4.8	15	38	11	6.5	6.1
AC-FT	401	313	292	256	221	238	462	1520	4110	1840	582	494
CAL YR 1985	TOTAL	5483.9		MEAN	15.0	MAX	127	MIN	2.3	AC-FT	10880	
WTR YR 1986	TOTAL	5408.8		MEAN	14.8	MAX	85	MIN	2.6	AC-FT	10730	

WATER-QUALITY RECORDS

PERIOD OF RECORD.-- January 1975 to current year.

INSTRUMENTATION.--Turbidity recorder since September 1974.

REMARKS.--Daily record for turbidity data available in district office. Turbidity data at this station will continue to be published in the annual reports. Records published will be the daily maximum and minimum turbidity.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (NTU)	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)	SODIUM AD- SORP- TION RATIO
OCT 22...	1200	5.8	270	8.3	2.5	1.2	9.8	140	40	9.0	2.4	0.1
NOV 19...	1100	5.1	280	8.3	0.5	1.2	10.6	150	42	9.9	2.8	0.1
DEC 16...	1500	5.4	315	8.3	0.0	0.5	10.7	160	47	11	3.2	0.1
JAN 13...	1500	5.1	300	8.5	0.0	1.5	10.9	160	45	11	3.2	0.1
FEB 11...	1100	2.8	324	8.1	0.0	0.4	10.3	180	54	12	3.1	0.1
MAR 21...	1000	4.1	440	8.2	0.5	0.6	10.9	240	72	15	3.5	0.1
MAY 01...	1015	15	--	--	5.0	12	--	100	28	8.4	1.8	0.1
JUN 05...	1600	72	68	7.6	8.0	5.0	9.4	37	10	2.8	1.2	0.1
JUL 31...	1510	13	133	8.0	15.5	1.0	--	56	16	3.9	1.7	0.1
AUG 29...	1330	9.1	166	8.2	13.0	0.2	8.1	81	24	5.2	1.9	0.1

DATE	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, 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)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)
OCT 22...	1.0	74	59	1.3	<0.1	8.1	168	170	0.23	2.6	<0.10	<0.01
NOV 19...	1.0	78	60	1.3	<0.1	8.2	176	170	0.24	2.4	0.17	0.02
DEC 16...	1.4	87	73	1.8	0.1	8.3	182	200	0.25	2.7	--	--
JAN 13...	0.9	84	70	1.7	0.1	8.6	188	190	0.26	2.6	0.25	0.01
FEB 11...	1.1	90	87	1.5	0.1	9.1	223	220	0.3	1.7	0.18	--
MAR 21...	1.3	99	120	2.5	0.1	8.7	303	280	0.41	3.4	0.24	<0.01
MAY 01...	1.1	85	19	1.1	0.1	7.8	129	120	0.18	5.2	0.14	<0.01
JUN 05...	0.9	32	11	0.4	<0.1	6.9	59	52	0.08	11	<0.10	<0.01
JUL 31...	0.6	42	19	0.5	<0.1	7.5	90	74	0.12	3.2	<0.10	<0.01
AUG 29...	0.9	51	25	0.5	<0.1	7.6	110	96	0.15	2.7	<0.10	<0.01

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE (DEG C)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE (DEG C)
MAY 21...	1450	28	--	8.0	JUN 12...	1427	69	85	11.5
28...	1410	42	113	9.5					

09067000 BEAVER CREEK AT AVON, CO--Continued

TURBIDITY (NTU), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	4.0	---	---	---	3.0	2.0	---	---	38	24
2	---	---	2.0	---	---	---	3.0	2.0	---	---	28	22
3	---	---	---	---	2.0	1.0	---	---	---	---	26	20
4	---	---	---	---	2.0	1.0	---	---	---	---	34	16
5	---	---	---	---	4.0	1.0	---	---	---	---	49	24
6	---	---	---	---	3.0	1.0	---	---	---	---	34	24
7	---	---	---	---	---	---	---	---	---	---	30	22
8	---	---	---	---	2.0	1.0	---	---	---	---	30	24
9	---	---	---	---	---	---	---	---	---	---	33	22
10	---	---	---	---	---	---	---	---	---	---	26	20
11	---	---	---	---	---	---	---	---	---	---	24	16
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	20	20	---	---
14	---	---	---	---	---	---	---	---	25	20	---	---
15	---	---	---	---	---	---	---	---	22	20	---	---
16	---	---	---	---	2.0	1.0	---	---	24	20	---	---
17	---	---	---	---	3.0	2.0	---	---	20	20	---	---
18	---	---	---	---	3.0	2.0	---	---	---	---	---	---
19	---	---	---	---	3.0	2.0	---	---	---	---	---	---
20	---	---	10	6.0	3.0	2.0	---	---	---	---	---	---
21	---	---	8.0	2.0	3.0	2.0	---	---	---	---	26	20
22	6.0	2.0	12	2.0	3.0	2.0	---	---	---	---	24	20
23	3.0	2.0	24	6.0	3.0	2.0	---	---	---	---	30	18
24	8.0	2.0	16	6.0	2.0	1.0	---	---	---	---	22	16
25	3.0	2.0	30	6.0	2.0	2.0	---	---	---	---	18	14
26	---	---	12	4.0	3.0	2.0	---	---	---	---	24	12
27	---	---	25	6.0	3.0	2.0	---	---	---	---	18	14
28	---	---	6.0	2.0	3.0	2.0	---	---	30	24	18	13
29	---	---	20	4.0	3.0	2.0	---	---	---	---	16	13
30	---	---	30	4.0	3.0	2.0	---	---	---	---	16	14
31	---	---	---	---	2.0	2.0	---	---	---	---	62	18
DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	20	14	---	---	---	---	4.0	3.0	3.0	2.0	10	3.0
2	16	14	---	---	---	---	20	5.0	3.0	2.0	3.0	2.0
3	---	---	---	---	---	---	65	3.0	3.0	2.0	4.0	2.0
4	---	---	---	---	---	---	30	5.0	---	---	8.0	2.0
5	---	---	---	---	20	5.0	65	5.0	---	---	3.0	2.0
6	---	---	---	---	28	5.0	20	2.0	---	---	3.0	2.0
7	---	---	---	---	30	5.0	3.0	2.0	---	---	3.0	2.0
8	---	---	---	---	15	2.0	5.0	2.0	---	---	10	4.0
9	---	---	---	---	15	2.0	65	2.0	---	---	10	3.0
10	35	14	---	---	15	2.0	20	2.0	---	---	10	---
11	65	18	---	---	15	5.0	25	2.0	---	---	5.0	3.0
12	18	15	3.0	2.0	15	7.0	65	10	---	---	3.0	3.0
13	18	14	---	---	8.0	5.0	65	10	---	---	---	2.0
14	28	13	---	---	10	5.0	45	2.0	---	---	---	2.0
15	63	15	---	---	8.0	4.0	65	10	---	---	3.0	1.0
16	18	16	---	---	9.0	5.0	65	30	---	---	3.0	1.0
17	18	15	---	---	6.0	5.0	65	20	---	---	10	2.0
18	16	14	---	---	9.0	5.0	45	10	---	---	10	5.0
19	35	14	---	---	5.0	5.0	35	10	3.0	1.0	10	5.0
20	54	14	---	---	6.0	4.0	25	5.0	10	2.0	10	3.0
21	36	15	---	---	5.0	4.0	30	5.0	10	2.0	21	3.0
22	62	14	---	---	10	4.0	65	10	10	2.0	10	3.0
23	38	18	---	---	5.0	4.0	65	10	10	2.0	---	2.0
24	30	16	---	---	5.0	4.0	30	10	10	3.0	10	1.0
25	28	16	---	---	8.0	4.0	10	5.0	5.0	2.0	10	2.0
26	24	15	---	---	5.0	4.0	10	3.0	10	2.0	---	---
27	22	14	---	---	5.0	4.0	10	2.0	10	2.0	10	3.0
28	22	14	---	---	5.0	4.0	5.0	2.0	4.0	2.0	10	3.0
29	---	---	---	---	9.0	4.0	5.0	2.0	10	2.0	---	3.0
30	---	---	---	---	5.0	4.0	9.0	3.0	10	7.0	---	---
31	---	---	---	---	---	---	5.0	1.0	10	3.0	---	---
MONTH	---	---	---	---	---	---	65	1.0	---	---	---	---

EAGLE RIVER BASIN

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 mi², 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 microsiemens Aug. 6, 1949; minimum daily, 130 microsiemens June 9, 10, 1976.

WATER TEMPERATURE: Maximum daily, 24°C Aug. 24, 1949; minimum, 0.0°C on many days during winter months.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum daily, 1,100 microsiemens Feb. 11; minimum daily, 180 microsiemens June 1, 5, and 7.

WATER TEMPERATURE: Maximum daily, 20.0°C Aug. 16-19; minimum daily, 0.0°C on many days during November through February.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	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)
NOV 18...	1300	322	840	8.4	1.5	10.9	330	100	20
FEB 10...	1400	151	875	8.2	0.0	11.6	370	110	24
MAY 27...	1700	2390	208	8.1	9.5	--	92	27	5.9
AUG 18...	1550	353	759	8.8	21.0	8.3	280	85	17

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 CONSTITU- ENTS, DIS- SOLVED (MG/L)
NOV 18...	57	1	2.3	125	190	83	0.1	7.8	540
FEB 10...	66	2	3.0	145	240	93	0.2	9.0	630
MAY 27...	6.1	0.3	0.9	65	37	7.2	<0.1	6.0	130
AUG 18...	50	1	2.5	117	170	74	0.1	7.8	480

DATE	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)	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)
NOV 18...	0.73	466	0.30	0.27	0.2	<0.2	0.5	0.02	0.01
FEB 10...	0.86	258	0.60	0.59	0.5	0.4	1.1	0.10	0.06
MAY 27...	0.18	834	0.10	0.14	0.6	0.7	0.7	0.10	0.06
AUG 18...	0.65	454	0.20	0.13	0.4	0.3	0.6	0.03	0.02

09069000 EAGLE RIVER AT GYPSUM, CO.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	ANTI-MONY, DIS-SOLVED (UG/L AS SB)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL- LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)
NOV 18...	1300	<1	<1	<1	60	<0.5	<1	<1	11
FEB 10...	1400	<1	<1	<1	79	<0.5	1	<1	13
MAY 27...	1700	<1	<1	<1	40	<0.5	<1	<1	10
AUG 18...	1550	<1	<1	<1	61	<0.5	1	1	4

DATE	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	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)
NOV 18...	1	3	2	54	3	1	200	<0.1	<0.1
FEB 10...	<1	2	<1	7	7	2	250	0.1	<0.1
MAY 27...	<1	8	3	78	6	2	42	<0.1	<0.1
AUG 18...	<1	3	3	12	<5	<5	38	0.1	<0.1

DATE	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, TOTAL SOLVED (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG)	SILVER, DIS-SOLVED (UG/L AS AG)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
NOV 18...	8	3	<1	<1	<1	<1	120	140
FEB 10...	13	<1	1	1	<1	<1	160	38
MAY 27...	20	<1	<1	<1	<1	<1	120	26
AUG 18...	2	1	<1	1	<1	<1	70	18

* The minimum reporting level for Lead was changed from <1 to <5 during June, 1986.

09069000 EAGLE RIVER AT GYPSUM, CO.--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25 DEG. C, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	850	900	900	950	900	900	600	360	180	260	500	700
2	850	900	950	950	900	900	600	360	200	260	500	700
3	850	900	1000	950	900	900	600	360	200	260	550	800
4	850	850	1000	950	900	---	---	360	200	260	600	---
5	800	850	900	950	900	850	---	360	180	260	600	750
6	800	800	950	1000	950	900	---	360	---	210	600	700
7	800	900	900	1000	950	900	600	360	180	---	600	800
8	650	850	950	1000	950	900	600	360	200	280	600	700
9	700	800	850	1000	900	900	580	360	200	300	680	700
10	700	800	900	950	1000	850	600	350	200	---	650	700
11	750	750	900	950	1100	850	580	340	200	---	700	600
12	800	800	1000	950	1000	850	580	340	200	320	650	580
13	850	850	950	950	950	900	580	300	210	300	600	---
14	900	900	950	950	900	900	560	280	---	300	620	650
15	950	1000	1000	1000	950	850	560	280	200	300	680	750
16	800	950	900	900	950	850	580	280	---	300	700	800
17	750	1000	1000	900	900	800	580	300	220	300	700	800
18	750	1000	1000	950	950	900	500	280	---	325	680	800
19	800	1000	1000	950	1000	850	500	270	---	---	700	800
20	800	950	950	950	1000	900	520	250	220	360	650	750
21	800	950	---	950	900	750	500	250	220	360	650	800
22	750	1000	---	950	950	800	460	280	240	360	650	800
23	750	1000	---	1000	900	850	460	260	220	340	620	---
24	750	1000	1000	950	950	900	400	260	220	---	600	---
25	800	1000	950	950	900	900	400	250	230	---	600	800
26	650	1000	1000	950	900	900	460	240	220	440	620	800
27	800	1000	1000	950	950	800	420	200	220	440	650	800
28	800	1000	1000	1000	900	850	500	200	220	450	650	800
29	750	900	1000	900	---	800	380	200	220	500	680	800
30	800	900	1000	900	---	650	400	200	240	600	680	750
31	850	---	950	900	---	560	---	200	---	600	700	---
MEAN	790	917		953	939			292			634	
WTR YR 1986	MEAN	689		MAX	1100		MIN	180				

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12.0	5.0	.0	.0	1.0	5.0	7.0	12.0	11.0	13.0	16.0	15.0
2	12.0	5.0	.0	.0	1.0	5.0	6.0	12.0	11.0	14.0	16.0	16.0
3	12.0	5.0	.0	.0	2.0	7.0	6.0	12.0	11.0	13.0	16.0	17.0
4	12.0	5.0	.0	.0	2.0	---	---	12.0	11.0	13.0	17.0	---
5	10.0	5.0	.0	.0	2.0	7.0	---	12.0	11.0	13.0	17.0	17.0
6	10.0	5.0	.0	.0	1.0	6.0	---	12.0	---	14.0	17.0	16.0
7	10.0	5.0	.0	.0	1.0	7.0	11.0	11.0	11.0	---	17.0	17.0
8	9.0	5.0	.0	.0	1.0	7.0	11.0	7.0	11.0	12.0	17.0	15.0
9	9.0	5.0	.0	.0	1.0	7.0	9.0	7.0	11.0	14.0	16.0	15.0
10	9.0	5.0	.0	.0	.0	5.0	10.0	8.0	12.0	---	17.0	15.0
11	9.0	6.0	.0	.0	.0	5.0	9.0	8.0	12.0	---	17.0	14.0
12	10.0	6.0	.0	.0	.0	6.0	9.0	8.0	12.0	16.0	18.0	14.0
13	10.0	5.0	.0	.0	1.0	7.0	10.0	8.0	12.0	16.0	18.0	---
14	10.0	4.0	.0	.0	2.0	7.0	8.0	9.0	---	16.0	18.0	11.0
15	10.0	3.0	.0	.0	1.0	5.0	8.0	9.0	12.0	16.0	19.0	9.0
16	10.0	1.0	.0	.0	1.0	5.0	9.0	9.0	---	16.0	20.0	10.0
17	10.0	3.0	.0	.0	2.0	6.0	9.0	10.0	12.0	16.0	20.0	10.0
18	10.0	2.0	.0	.0	2.0	5.0	10.0	10.0	---	16.0	20.0	11.0
19	10.0	2.0	.0	.0	3.0	5.0	11.0	11.0	---	---	20.0	10.0
20	9.0	1.0	.0	.0	2.0	7.0	10.0	11.0	12.0	16.0	19.0	9.0
21	9.0	1.0	---	.0	6.0	9.0	10.0	11.0	12.0	16.0	19.0	10.0
22	9.0	1.0	---	.0	7.0	8.0	9.0	11.0	12.0	16.0	19.0	10.0
23	9.0	.0	---	.0	7.0	8.0	9.0	10.0	12.0	16.0	18.0	---
24	9.0	.0	.0	.0	8.0	10.0	10.0	10.0	12.0	---	17.0	---
25	10.0	1.0	.0	.0	7.0	10.0	11.0	11.0	12.0	---	17.0	9.0
26	9.0	1.0	.0	.0	7.0	10.0	10.0	11.0	13.0	16.0	18.0	9.0
27	10.0	1.0	.0	.0	7.0	11.0	11.0	11.0	12.0	16.0	18.0	10.0
28	11.0	1.0	.0	.0	7.0	10.0	9.0	11.0	12.0	17.0	18.0	10.0
29	11.0	.0	.0	1.0	---	8.0	12.0	11.0	12.0	17.0	17.0	10.0
30	10.0	.0	.0	1.0	---	7.0	12.0	11.0	12.0	17.0	16.0	9.0
31	8.0	---	.0	1.0	---	10.0	---	11.0	---	17.0	15.0	---
MEAN	10.0	3.0		.0	3.0			10.0			17.5	
WTR YR 1986	MEAN	8.0		MAX	20.0		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 mi².

PERIOD OF RECORD.--October 1946 to current year.

REVISED RECORDS.--WSP 2124: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 6,275.11 ft, above National Geodetic Vertical Datum of 1929.

REMARKS.--No estimated daily discharges. 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.--40 years, 588 ft³/s; 426,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,020 ft³/s, May 25, 1984, gage height, 9.46 ft; minimum daily, 110 ft³/s, Feb. 21, 1955, Feb. 3, 1956, Dec. 26, 27, 1962.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,500 ft³/s, and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
June 7	0800	*4,070	*7.61	No other peak greater than base discharge.			
Minimum daily, 175 ft ³ /s, Jan. 5.							

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	374	368	305	211	231	265	575	1040	2340	2070	602	401
2	376	341	304	252	231	275	582	1250	2250	1960	571	377
3	379	350	310	226	226	286	551	1450	2490	1930	551	368
4	391	345	305	217	219	281	484	1590	2930	2230	536	343
5	388	339	258	175	219	286	439	1780	3350	2660	518	323
6	384	346	275	222	201	286	425	1550	3330	2610	492	309
7	435	330	291	224	194	294	468	1350	3700	2040	479	301
8	629	335	291	188	211	309	512	1210	3580	1780	456	340
9	569	370	286	192	206	336	538	1070	3500	1670	448	411
10	507	340	245	254	178	298	535	932	3160	1700	433	514
11	498	379	187	240	196	286	514	904	2600	1520	409	561
12	505	392	185	227	214	283	505	1010	2360	1410	404	517
13	527	368	215	211	221	272	540	1070	2520	1430	478	475
14	507	304	230	202	212	259	483	1250	2470	1340	435	436
15	463	335	231	218	260	259	488	1230	2660	1270	406	410
16	453	302	236	241	254	245	508	1240	2800	1380	383	380
17	448	323	240	231	250	260	525	1110	2890	1390	365	362
18	433	340	261	241	348	246	501	1050	2810	1230	358	344
19	424	307	249	233	391	235	472	1110	2850	1130	338	338
20	412	275	248	225	372	244	469	1370	2680	1070	356	324
21	407	302	245	227	265	240	485	1780	2590	1020	429	314
22	413	268	231	216	241	243	579	2060	2470	971	464	314
23	402	319	235	219	254	258	740	2080	2370	1090	439	321
24	392	333	262	228	268	276	823	1970	2400	1000	515	339
25	380	330	239	215	294	289	881	1900	2290	932	535	361
26	375	330	217	215	308	293	879	2190	2530	854	500	423
27	371	315	224	206	308	311	759	2350	2660	795	441	395
28	368	309	235	220	279	352	693	2440	2470	733	397	413
29	369	313	220	235	---	408	714	2550	2390	689	374	402
30	365	317	246	224	---	461	876	2200	2260	658	409	415
31	379	---	239	231	---	559	---	2080	---	633	419	---
TOTAL	13323	9925	7745	6866	7051	9195	17543	48166	81700	43195	13940	11531
MEAN	430	331	250	221	252	297	585	1554	2723	1393	450	384
MAX	629	392	310	254	391	559	881	2550	3700	2660	602	561
MIN	365	268	185	175	178	235	425	904	2250	633	338	301
AC-FT	26430	19690	15360	13620	13990	18240	34800	95540	162100	85680	27650	22870
CAL YR 1985	TOTAL	271544		MEAN	744	MAX	5180	MIN	135	AC-FT	538600	
WTR YR 1986	TOTAL	270180		MEAN	740	MAX	3700	MIN	175	AC-FT	535900	

09070500 COLORADO RIVER NEAR DOTSERO, CO

LOCATION.--Lat 39°38'38", long 107°04'38", in NW¼ sec.6, T.5 S., R.86 W., Eagle County, Hydrologic Unit 14010001, on left bank about 500 ft south of Interstate Highway 70, 1.5 mi west of Dotsero, and 1.5 mi downstream from Eagle River.

DRAINAGE AREA.--4,394 mi².

PERIOD OF RECORD.--October 1940 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 6,130 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 22, Dec. 11 - Feb. 13. Records good except for estimated daily discharges, which are fair. Natural flow of stream affected by transmountain diversions, storage reservoirs, power development, diversions for irrigation of 68,000 acres upstream from station, and return flow from irrigated areas.

COOPERATION.--Gage-height record collected in cooperation with the Colorado State Engineer.

AVERAGE DISCHARGE.--46 years, 2,169 ft³/s; 1,571,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 22,200 ft³/s, May 25, 1984, gage height, 14.20 ft; minimum daily, 350 ft³/s, Jan. 5, 1944.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 11,100 ft³/s at 1200 June 7, gage height, 9.32 ft; minimum daily, 1,200 ft³/s, Dec. 12, 13, Jan. 4, 5, 9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1580	1570	1490	1300	1400	1600	3150	5310	8720	5820	2300	1780
2	1470	1560	1480	1400	1400	1570	3320	5900	8530	5760	2160	1740
3	1230	1510	1510	1300	1400	1580	3360	6660	8860	5540	2000	1710
4	1280	1510	1480	1200	1350	1570	3090	7370	9550	5420	1990	1660
5	1290	1510	1370	1200	1350	1590	2830	8040	9950	5750	1960	1600
6	1280	1510	1210	1300	1300	1630	2690	7890	10200	5880	1810	1530
7	1340	1490	1320	1300	1300	1710	2820	7480	10600	5220	1740	1470
8	1730	1490	1370	1250	1300	1770	3070	6970	10500	4760	1730	1530
9	1660	1590	1390	1200	1250	1880	3150	6540	10200	4490	1800	1670
10	1610	1530	1320	1250	1250	1890	3200	5970	9980	4520	1750	1800
11	1830	1610	1300	1300	1250	1690	3190	5570	9220	4030	1700	1890
12	2010	1760	1200	1300	1300	1680	3100	5550	8490	3740	1650	1790
13	2040	1730	1200	1300	1400	1640	3250	5660	8420	3610	1670	1720
14	2030	1560	1300	1300	1420	1650	3110	5950	8370	3440	1620	1650
15	1910	1600	1300	1300	1470	1720	2950	6080	8520	3290	1580	1590
16	1790	1560	1400	1380	1450	1670	3040	6250	8710	3340	1510	1560
17	1430	1560	1400	1400	1370	1690	3250	6120	8750	3570	1490	1520
18	1370	1630	1400	1400	1640	1660	3230	5860	8560	3440	1460	1500
19	1430	1580	1400	1320	1910	1600	2980	5840	8460	3390	1420	1490
20	1700	1480	1400	1380	2150	1600	2850	6260	8000	3460	1420	1450
21	1700	1570	1380	1300	1640	1570	2890	7020	7930	3390	1650	1290
22	1710	1330	1300	1300	1490	1580	3220	7650	7630	3270	1610	1280
23	1690	1670	1300	1300	1460	1670	3990	7950	7260	3330	1570	1290
24	1680	1630	1400	1350	1510	1770	4550	8130	7100	3220	1650	1320
25	1660	1620	1300	1300	1660	1840	4850	8050	6760	3240	1710	1430
26	1650	1580	1300	1300	1710	1910	5040	8360	6950	3170	1660	1620
27	1640	1290	1300	1300	1730	1960	4720	8530	7090	3060	1620	1640
28	1630	1270	1300	1360	1680	2080	4200	8730	6490	2880	1590	1690
29	1630	1540	1360	1400	---	2280	4100	8960	6210	2750	1640	1690
30	1620	1550	1400	1400	---	2510	4750	8620	6010	2580	1720	1670
31	1570	---	1320	1400	---	2880	---	8480	---	2430	1810	---
TOTAL	50190	46390	41900	40790	41540	55440	103940	217750	252020	121790	52990	47570
MEAN	1619	1546	1352	1316	1484	1788	3465	7024	8401	3929	1709	1586
MAX	2040	1760	1510	1400	2150	2880	5040	8960	10600	5880	2300	1890
MIN	1230	1270	1200	1200	1250	1570	2690	5310	6010	2430	1420	1280
AC-FT	99550	92010	83110	80910	82390	110000	206200	431900	499900	241600	105100	94360
CAL YR 1985	TOTAL	1038020		MEAN	2844	MAX	10900	MIN	1100	AC-FT	2059000	
WTR YR 1986	TOTAL	1072310		MEAN	2938	MAX	10600	MIN	1200	AC-FT	2127000	

[illegible]

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	9.5	7.5	7.5	6.0	3.0	2.5						
2	10.0	8.0	6.5	5.5	2.5	2.0						
3	10.5	9.0	7.0	6.0	3.0	2.0						
4	11.0	10.0	8.0	6.5	3.0	2.5						
5	11.0	9.0	7.5	7.0	3.0	1.0						
6	10.5	9.0	7.0	6.5	1.0	.5						
7	11.0	10.0	6.5	5.5	.5	.0						
8	10.0	8.5	6.0	5.5	.5	.0						
9	10.5	8.5	5.5	3.5	.5	.0						
10	11.0	9.0	3.5	3.0	.5	.0						
11	11.0	9.5	4.0	3.5	.0	.0						
12	10.0	9.0	4.5	4.0	---	---						
13	10.0	9.0	5.0	4.0	---	---						
14	9.5	7.5	4.0	2.5	---	---						
15	9.0	7.0	2.5	1.5	---	---						
16	9.0	7.0	2.0	1.0	---	---						
17	9.0	7.5	1.5	1.0	---	---						
18	9.5	8.0	1.5	1.5	---	---						
19	9.5	8.0	1.5	.5	---	---						
20	9.5	7.5	1.0	.5	---	---						
21	9.5	8.0	.5	.5	---	---						
22	9.0	7.5	.5	.5	---	---						
23	8.5	7.0	.5	.5	---	---						
24	8.5	7.0	1.0	.5	---	---						
25	9.0	7.0	2.5	1.0	---	---						
26	9.5	7.5	4.0	2.5	---	---						
27	9.0	7.5	4.0	2.5	---	---						
28	9.0	7.5	3.0	3.0	---	---						
29	9.5	7.5	3.5	3.0	---	---						
30	9.0	7.5	3.0	2.0	---	---						
31	9.0	7.5	---	---	---	---						
MONTH	11.0	7.0	8.0	.5								

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 mi².

PERIOD OF RECORD.--September 1976 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 10,435 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Oct. 19, 1978, at site 600 ft upstream, at datum, 25.33 ft, higher.

REMARKS.--Estimated daily discharges: Oct. 31 - Feb. 27, May 26. Records good except for estimated daily discharges, which are poor. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--10 years, 15.5 ft³/s; 11,230 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 364 ft³/s, June 5, 1986, gage height, 4.99 ft, maximum gage height observed, 8.63 ft, May 4, 1982 (backwater from ice); no flow many days most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 85 ft³/s, and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
June 5	0500	*364	*4.99	July 5	0800	111	4.04
June 16	1600	244	4.60				

Minimum daily discharge, 0.79 ft³/s, Mar. 16-21, 24-28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.8	2.1	1.9	1.5	1.3	.91	.84	4.0	174	90	4.7	2.9
2	1.7	2.2	2.0	1.6	1.3	.91	.84	5.5	206	74	4.4	2.9
3	1.7	2.3	2.1	1.6	1.3	.95	.84	6.9	215	65	4.5	2.7
4	1.7	2.4	2.1	1.5	1.2	.91	.84	10	243	70	4.4	2.4
5	1.6	2.4	2.2	1.3	1.2	.91	.84	12	278	100	4.3	2.2
6	1.4	2.3	2.1	1.2	1.2	.91	.84	14	271	74	3.4	2.1
7	1.8	2.3	2.1	1.2	1.2	.91	.84	15	288	52	3.3	2.3
8	2.6	2.2	2.1	1.3	1.1	.91	.84	14	290	40	3.4	2.7
9	2.1	2.1	2.0	1.3	1.1	.91	.84	13	252	38	3.4	3.4
10	2.0	2.2	1.8	1.3	1.1	.84	.84	12	215	33	3.5	3.7
11	1.8	2.3	1.8	1.2	1.2	.84	.84	11	194	28	3.1	3.4
12	1.8	2.4	1.8	1.2	1.2	.84	.84	11	195	24	3.0	3.1
13	1.8	2.2	1.8	1.2	1.2	.84	.84	11	201	23	3.1	2.9
14	1.9	2.2	1.9	1.2	1.2	.84	.84	11	204	18	3.1	2.6
15	2.0	2.3	2.0	1.3	1.2	.83	.84	11	211	16	2.9	2.4
16	2.0	2.3	2.0	1.4	1.2	.79	.84	11	223	17	3.0	2.4
17	2.0	2.3	2.0	1.4	1.2	.79	.84	9.9	197	16	3.2	2.3
18	2.1	2.0	2.0	1.4	1.1	.79	.84	9.9	193	13	3.1	2.4
19	2.0	2.0	1.9	1.3	1.1	.79	.84	11	199	12	2.9	2.5
20	2.0	2.0	1.9	1.3	1.1	.79	.84	14	207	12	2.8	2.6
21	2.0	2.1	1.9	1.3	1.1	.79	1.2	21	199	11	3.3	2.5
22	2.5	2.2	1.9	1.3	1.0	.81	1.9	28	195	11	3.0	2.9
23	3.0	2.3	2.0	1.3	1.0	.83	1.9	34	190	12	3.5	4.7
24	2.2	2.4	1.9	1.3	1.0	.79	2.0	41	186	9.5	3.7	4.7
25	2.2	2.3	1.7	1.2	.98	.79	2.2	53	182	10	3.5	4.7
26	2.1	2.2	1.7	1.2	.95	.79	2.2	82	176	9.0	3.0	4.8
27	2.1	2.0	1.7	1.2	.93	.79	2.3	89	167	7.8	2.9	3.7
28	2.1	2.0	1.7	1.2	.91	.79	2.7	99	164	6.9	3.2	4.1
29	2.1	1.9	1.7	1.3	---	.80	2.9	122	149	6.2	3.6	4.2
30	2.1	1.9	1.7	1.3	---	.84	3.2	137	121	5.7	3.1	4.3
31	2.1	---	1.6	1.3	---	.84	---	146	---	5.4	3.1	---
TOTAL	62.3	65.8	59.0	40.6	31.57	26.07	39.30	1069.2	6185	909.5	105.4	94.5
MEAN	2.01	2.19	1.90	1.31	1.13	.84	1.31	34.5	206	29.3	3.40	3.15
MAX	3.0	2.4	2.2	1.6	1.3	.95	3.2	146	290	100	4.7	4.8
MIN	1.4	1.9	1.6	1.2	.91	.79	.84	4.0	121	5.4	2.8	2.1
AC-FT	124	131	117	81	63	52	78	2120	12270	1800	209	187
CAL YR 1985	TOTAL	7557.4		MEAN	20.7	MAX	284	MIN	1.4	AC-FT	14990	
WTR YR 1986	TOTAL	8688.24		MEAN	23.8	MAX	290	MIN	.79	AC-FT	17230	

09071750 COLORADO RIVER ABOVE GLENWOOD SPRINGS, CO

LOCATION.--Lat 39°33'38", long 107°17'59", Garfield County, Hydrologic Unit 14010001, 100 yards downstream of No Name Creek and two miles above Glenwood Springs.

DRAINAGE AREA.--4,556 mi².

PERIOD OF RECORD.--December 1985 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: December 1985 to current year.

WATER TEMPERATURE: December 1985 to current year.

INSTRUMENTATION.--Water-quality monitor since December 1985.

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). Water-quality data collection was moved downstream to this site from previous site 09071100 on Dec. 12, 1985. Water-quality data collected at this site are considered equivalent to data collected at old site. Daily maximum and minimum specific-conductance data available in district office.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum for period December to September 1986, 806 microsiemens Aug. 21; minimum, 228 microsiemens June 10 (but may have been lower during period of missing record in May and June).

WATER TEMPERATURE: Maximum 20.0°C July 16; minimum, 0.0°C many days during winter period.

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25 DEG. C, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1			---	643	593	646	468	---	---	324	497	615
2			---	648	589	657	461	---	---	331	503	617
3			---	652	596	658	454	---	---	337	533	611
4			---	650	604	652	458	---	---	350	547	620
5			---	583	607	647	480	---	---	347	553	626
6			---	559	615	641	504	---	---	316	572	630
7			---	610	616	638	502	---	---	353	597	643
8			---	604	624	633	496	---	---	368	609	661
9			---	640	631	627	471	---	---	380	601	656
10			---	644	635	611	458	---	236	413	605	631
11			---	639	661	627	452	---	252	398	612	621
12			---	633	630	627	460	---	259	410	623	608
13			662	660	598	623	465	---	258	420	636	603
14			631	613	589	624	457	---	258	411	625	612
15			570	627	579	614	468	---	257	426	638	628
16			580	655	572	607	457	308	251	431	658	639
17			574	636	600	605	441	316	255	415	665	651
18			580	614	599	609	---	321	259	415	664	656
19			612	611	586	615	---	318	266	419	663	660
20			626	621	585	608	---	305	270	411	674	661
21			638	630	578	608	---	281	273	418	706	663
22			641	637	610	604	---	267	274	421	695	670
23			655	648	629	600	---	---	276	423	653	675
24			653	635	634	582	---	---	282	416	644	680
25			640	624	638	580	---	---	290	458	630	686
26			658	632	624	581	---	---	295	435	631	684
27			678	634	632	581	---	---	289	441	633	664
28			682	638	628	563	---	---	306	448	635	655
29			664	621	---	545	---	---	312	456	633	651
30			645	611	---	517	---	---	316	460	624	651
31			633	602	---	493	---	---	---	481	616	---
MEAN				628	610	607				404	619	644

NOTE: NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR

09071750 COLORADO RIVER ABOVE GLENWOOD SPRINGS, CO.--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1					---	---	.0	.0	1.0	.5	5.5	4.5
2					---	---	.5	.0	1.0	.5	6.0	4.5
3					---	---	.5	.0	1.0	.0	6.5	5.0
4					---	---	.0	.0	1.0	.0	6.5	5.5
5					---	---	.0	.0	1.0	.5	6.5	5.5
6					---	---	.5	.0	1.0	.0	7.0	5.5
7					---	---	.5	.0	.5	.0	7.0	6.0
8					---	---	.0	.0	.5	.0	7.5	6.5
9					---	---	.5	.0	1.0	.0	7.5	6.5
10					---	---	.5	.0	.5	.0	6.5	5.0
11					---	---	.5	.0	.5	.0	5.0	4.5
12					---	---	.5	.0	1.0	.0	6.0	5.0
13					.0	.0	.5	.0	.5	.5	5.5	4.5
14					.0	.0	.5	.0	1.0	.5	5.5	5.0
15					.0	.0	.5	.0	1.5	1.0	6.0	5.0
16					.0	.0	.5	.5	1.5	1.0	6.0	4.5
17					.0	.0	.5	.5	2.0	1.5	5.5	4.5
18					.5	.0	1.0	.5	2.5	2.0	6.0	5.0
19					.5	.0	.5	.0	2.0	1.5	6.0	4.0
20					.5	.0	1.0	.0	2.0	1.5	6.0	4.5
21					.0	.0	.5	.0	3.5	1.5	7.0	5.5
22					.5	.0	.5	.0	4.0	2.5	8.0	6.5
23					.5	.0	1.0	.0	4.5	4.0	9.0	7.5
24					.5	.0	.5	.0	6.0	4.5	9.0	8.0
25					.5	.0	.5	.0	6.0	5.0	9.5	8.0
26					.0	.0	.5	.0	6.5	5.5	9.5	8.0
27					.0	.0	.5	.0	6.5	5.5	9.0	7.5
28					.0	.0	.5	.0	6.0	4.5	10.0	8.0
29					.0	.0	1.0	.5	---	---	10.0	8.5
30					.5	.0	1.0	.0	---	---	10.0	8.5
31					.5	.0	1.0	.5	---	---	10.0	9.0
MONTH						.0	1.0	.0	6.5	.0	10.0	4.0
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	9.0	8.0	---	---	---	---	17.5	14.5	17.5	16.5	16.5	15.5
2	8.5	8.0	---	---	---	---	18.0	15.5	17.5	17.0	15.5	14.5
3	8.5	6.5	---	---	---	---	18.5	16.5	17.5	16.5	15.0	14.0
4	6.5	5.5	---	---	---	---	18.0	16.5	17.0	14.5	16.0	15.0
5	7.0	5.5	---	---	---	---	18.0	17.0	14.5	14.5	16.5	15.5
6	8.5	6.5	---	---	---	---	17.0	15.5	16.0	14.5	16.5	15.5
7	9.0	8.0	---	---	---	---	17.0	16.0	17.0	16.0	17.0	15.5
8	9.5	8.5	---	---	---	---	16.5	15.5	17.0	16.0	16.5	15.0
9	9.0	8.0	---	---	---	---	16.5	15.0	16.5	16.0	15.5	14.5
10	9.5	8.0	---	---	12.5	11.5	16.5	15.0	17.5	16.5	15.0	13.0
11	9.5	8.5	---	---	13.5	10.5	18.0	15.5	17.5	17.0	13.0	12.0
12	9.0	7.5	---	---	14.5	12.0	18.0	16.0	17.5	16.5	13.5	13.0
13	9.0	7.0	---	---	14.5	13.0	19.0	17.0	17.0	16.0	13.5	13.0
14	7.0	6.0	---	---	14.5	12.0	19.5	18.0	16.5	16.0	14.5	13.5
15	8.5	6.5	---	---	14.5	12.5	19.5	18.5	16.5	16.0	14.5	13.0
16	9.5	8.0	10.5	9.0	15.0	13.0	20.0	18.5	17.5	16.5	14.5	13.0
17	9.0	8.5	11.5	9.5	15.5	14.0	18.5	17.0	18.5	17.5	14.5	13.0
18	---	---	12.0	10.0	15.0	13.5	18.5	17.5	19.0	18.0	13.0	11.5
19	---	---	13.5	11.0	15.0	13.0	18.0	17.0	19.0	18.5	12.0	11.0
20	---	---	14.0	12.0	15.5	13.0	17.5	16.5	19.5	18.5	13.0	11.5
21	---	---	14.0	12.5	15.5	13.5	17.5	16.0	19.5	18.0	14.5	13.0
22	---	---	12.5	11.5	16.0	13.5	18.0	16.5	18.5	17.0	15.0	13.5
23	---	---	---	---	16.0	14.0	18.0	17.0	17.5	16.5	14.0	13.0
24	---	---	---	---	16.0	14.5	17.0	16.5	17.5	16.5	14.0	11.0
25	---	---	---	---	15.5	14.0	17.0	15.5	18.0	17.5	11.0	9.5
26	---	---	---	---	16.5	14.5	17.0	15.5	18.0	16.5	9.5	9.0
27	---	---	---	---	17.0	15.0	17.0	16.0	18.5	17.5	9.5	9.0
28	---	---	---	---	17.5	16.0	17.0	16.0	18.5	17.0	10.5	10.0
29	---	---	---	---	17.5	16.0	17.0	16.0	17.5	16.5	11.0	10.5
30	---	---	---	---	16.5	15.0	17.0	16.0	18.0	17.0	11.5	10.0
31	---	---	---	---	---	---	17.5	16.0	17.5	16.0	---	---
MONTH							20.0	14.5	19.5	14.5	17.0	9.0

NOTE: NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR

ROARING FORK RIVER BASIN

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 mi².

PERIOD OF RECORD.--October 1980 to September 1986 (discontinued).

GAGE.--Water-stage recorder. Elevation of gage is 10,520 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 29 to July 4. Records fair except for estimated daily discharges, 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.

AVERAGE DISCHARGE.--6 years, 13.4 ft³/s; 9,710 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 740 ft³/s, June 8, 1985, gage height, 4.40 ft; no flow many days each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, unknown; minimum daily discharge, 0.88 ft³/s, March 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.1	2.9	1.9	1.2	1.0	.93	1.3	1.4	1.4	5.2	49	11
2	5.0	2.9	1.9	1.1	1.0	.95	1.3	1.7	1.3	3.7	42	12
3	5.1	2.9	1.9	1.0	1.0	.96	1.2	2.0	2.1	5.6	40	11
4	5.7	2.8	1.8	.96	.96	.96	1.1	2.3	13	8.4	38	9.2
5	5.5	2.9	1.7	1.1	.97	.98	1.1	2.2	75	5.2	35	9.0
6	5.9	2.9	1.8	1.0	1.0	1.0	1.1	1.7	180	2.1	44	8.7
7	7.0	2.6	1.9	.94	1.0	1.0	1.2	1.5	200	1.4	33	8.4
8	7.9	2.9	1.8	.92	1.0	1.0	1.2	1.3	150	1.9	29	8.7
9	7.7	2.8	1.7	.92	1.0	1.0	1.2	1.1	92	3.7	29	8.7
10	8.1	2.8	1.6	.94	1.0	1.0	1.2	1.0	45	4.0	24	9.7
11	9.7	2.8	1.5	.94	.96	1.0	1.2	.92	25	4.0	21	12
12	8.7	2.7	1.5	.91	.97	.98	1.2	.96	10	4.0	27	12
13	8.7	2.4	1.5	.91	.97	.96	1.2	1.1	17	4.0	24	12
14	8.1	2.1	1.5	.91	.95	.94	1.2	1.3	28	4.0	20	10
15	5.9	2.1	1.5	.94	.96	.93	1.2	1.3	35	34	13	9.5
16	3.0	2.3	1.5	.96	.94	.94	1.2	1.2	47	120	6.9	9.5
17	2.8	2.4	1.4	.93	.94	.92	1.1	1.2	49	108	6.9	9.5
18	2.9	2.5	1.4	.93	.98	.92	1.0	1.1	49	104	6.9	9.2
19	2.8	2.3	1.4	.93	1.0	.92	1.0	1.3	48	118	7.2	9.2
20	2.9	2.2	1.4	.93	1.0	.90	.96	1.5	47	124	8.2	9.2
21	2.9	2.1	1.3	.94	.97	.88	1.0	1.8	41	99	13	8.7
22	3.0	2.1	1.3	.95	.96	.90	1.1	1.9	31	120	8.5	10
23	3.0	2.1	1.3	.96	.96	.94	1.3	1.8	31	112	12	15
24	3.1	2.1	1.3	.94	.98	.96	1.4	1.8	23	106	13	17
25	3.1	2.1	1.3	.94	1.0	.98	1.3	2.0	21	94	12	17
26	3.2	2.0	1.3	.97	1.0	1.0	1.2	2.0	26	85	10	17
27	3.1	2.0	1.3	1.0	1.0	1.1	1.2	2.1	22	69	9.7	17
28	3.2	1.9	1.2	1.0	.95	1.2	1.1	2.0	15	62	11	17
29	3.1	1.9	1.2	1.0	---	1.3	1.1	1.9	10	55	11	17
30	3.1	1.8	1.2	.97	---	1.4	1.3	1.6	6.4	58	12	17
31	3.0	---	1.2	.97	---	1.4	---	1.4	---	56	10	---
TOTAL	151.3	72.3	46.5	30.01	27.42	31.25	35.16	48.38	1341.2	1581.2	626.3	351.2
MEAN	4.88	2.41	1.50	.97	.98	1.01	1.17	1.56	44.7	51.0	20.2	11.7
MAX	9.7	2.9	1.9	1.2	1.0	1.4	1.4	2.3	200	124	49	17
MIN	2.8	1.8	1.2	.91	.94	.88	.96	.92	1.3	1.4	6.9	8.4
AC-FT	300	143	92	60	54	62	70	96	2660	3140	1240	697
CAL YR 1985	TOTAL	10854.71		MEAN	29.7	MAX	442	MIN	.00	AC-FT	21530	
WTR YR 1986	TOTAL	4342.22		MEAN	11.9	MAX	200	MIN	.88	AC-FT	8610	

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 mi².

PERIOD OF RECORD.--October 1980 to September 1986 (discontinued).

GAGE.--Water-stage recorder. Elevation of gage is 10,510 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: July 19-24. Records good except for estimated daily discharges, which are fair. Flow completely regulated by Grizzly Reservoir; capacity, 400 ac/ft (approximate). Inter-basin diversion into Grizzly Reservoir from Roaring Fork River. Diversions through New York Canal from main stem tributaries below gage into Grizzly Reservoir. Trans-mountain diversion from Grizzly Reservoir into North Fork Lake Creek. 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 ft³/s, July 1, 1984; gage height, 3.16 ft, maximum gage height, 3.28 ft, Sept. 26, 1983; minimum daily discharge, 0.20 ft³/s, Oct. 18, 20-21, 1982.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 202 ft³/s at 0900 July 16, gage height, 3.03 ft; minimum daily, 2.7 ft³/s, July 9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.8	3.5	4.0	4.9	4.7	4.7	4.0	3.5	4.0	2.9	46	17
2	3.8	3.8	4.0	4.9	4.7	4.7	4.2	3.8	4.0	3.1	43	16
3	4.0	3.8	4.0	4.9	4.7	4.7	4.2	4.0	4.0	2.9	40	14
4	4.0	3.8	4.0	4.9	4.7	4.7	4.2	4.2	4.0	2.9	37	13
5	4.0	4.0	4.0	4.9	4.7	4.7	4.5	4.7	3.9	2.9	34	12
6	4.0	4.0	4.0	4.9	4.7	4.7	4.2	4.0	3.5	3.1	41	12
7	3.8	3.8	4.2	4.9	4.7	4.7	4.2	3.5	3.8	3.1	34	12
8	3.8	3.8	4.2	4.9	4.7	4.5	4.2	3.5	3.8	2.9	31	14
9	3.8	3.5	4.2	4.9	4.7	4.2	4.5	3.8	3.8	2.7	30	15
10	3.8	3.5	4.2	4.9	4.7	4.2	4.5	3.8	3.2	2.9	27	18
11	3.8	3.5	4.2	4.9	4.7	4.2	4.5	4.0	2.9	3.1	25	19
12	3.8	3.5	4.2	4.9	4.7	4.2	4.5	4.0	2.9	3.1	26	20
13	3.8	3.5	4.2	4.9	4.7	4.2	4.5	4.2	3.1	3.0	24	20
14	3.8	3.5	4.5	4.9	4.7	4.2	4.2	4.2	3.1	2.9	23	20
15	3.8	3.8	4.5	4.9	4.7	4.2	4.2	4.5	3.0	2.9	21	19
16	3.8	3.8	4.5	4.9	4.5	4.2	4.2	4.5	2.9	137	19	18
17	3.8	3.8	4.5	4.9	4.5	4.2	4.2	4.2	3.1	121	19	17
18	3.8	3.8	4.5	4.9	4.2	4.2	4.2	4.2	3.3	42	19	16
19	3.8	3.8	4.5	4.9	4.2	4.2	4.2	4.2	3.3	70	20	15
20	3.8	3.8	4.5	4.9	4.2	4.2	4.2	4.2	3.3	100	20	14
21	3.8	3.8	4.5	4.9	4.0	4.2	4.2	4.7	3.5	115	20	13
22	3.8	3.8	4.5	4.7	4.1	4.2	4.0	4.5	3.5	135	21	17
23	3.8	3.8	4.5	4.7	4.2	4.2	4.0	4.2	3.3	120	22	19
24	3.8	3.8	4.5	4.7	4.5	4.5	4.2	4.2	3.3	110	24	23
25	3.8	4.0	4.7	4.7	4.5	4.5	4.2	4.2	3.1	97	32	24
26	3.8	4.0	4.7	4.7	4.5	4.2	4.0	4.2	3.1	67	26	24
27	3.8	4.0	4.7	4.7	4.5	4.2	4.0	4.2	3.3	60	22	24
28	3.8	4.0	4.7	4.9	4.5	4.2	3.8	4.0	3.1	55	20	23
29	3.5	4.0	4.7	4.9	---	4.0	3.5	4.0	3.1	51	20	23
30	3.5	4.0	4.7	4.9	---	4.0	3.5	3.8	3.1	48	18	22
31	3.5	---	4.9	4.7	---	4.0	---	4.0	---	47	17	---
TOTAL	117.7	113.5	136.0	150.5	126.9	134.0	125.0	127.0	101.3	1419.4	821	533
MEAN	3.80	3.78	4.39	4.85	4.53	4.32	4.17	4.10	3.38	45.8	26.5	17.8
MAX	4.0	4.0	4.9	4.9	4.7	4.7	4.5	4.7	4.0	137	46	24
MIN	3.5	3.5	4.0	4.7	4.0	4.0	3.5	3.5	2.9	2.7	17	12
AC-FT	233	225	270	299	252	266	248	252	201	2820	1630	1060
CAL YR 1985	TOTAL	8604.8		MEAN	23.6	MAX	298	MIN	1.8	AC-FT	17070	
WTR YR 1986	TOTAL	3905.3		MEAN	10.7	MAX	137	MIN	2.7	AC-FT	7750	

ROARING FORK RIVER BASIN

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 mi².

PERIOD OF RECORD.--October 1979 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 8,120 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 16, 19-22, Dec. 5, 9 - Feb. 15, 18-20, 22, Mar. 29 - May 13, Aug. 15-27, Sept. 15-30. Records fair except for estimated daily discharges, which are poor. Transmountain diversion 11 mi upstream through Twin Lakes Tunnel to Arkansas River basin since May 24, 1935 (50,600 acre-ft diverted, current year, furnished by U.S. Bureau of Reclamation). Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--7 years, 145 ft³/s; 105,100 acre-ft/yr, including diversion by Twin Lakes tunnel.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,350 ft³/s, June 8, 1985, gage height, 5.10 ft, from rating curve extended above 910 ft³/s; minimum daily, 8.0 ft³/s, Jan. 11, 1980.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 731 ft³/s at 2100 June 6, gage height, 3.43 ft; minimum daily, 15 ft³/s, Jan. 3, 7, 18, 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	26	22	17	17	21	39	72	161	167	158	95
2	32	28	22	17	17	21	38	86	155	165	158	98
3	32	27	22	15	17	21	33	98	199	140	152	90
4	32	26	21	16	16	20	31	110	258	130	135	84
5	31	26	20	17	17	21	30	120	294	174	132	82
6	31	26	21	16	16	21	31	110	425	161	166	75
7	36	22	22	15	17	22	33	92	509	131	138	71
8	41	27	21	16	17	23	35	80	476	115	127	81
9	39	26	20	16	18	22	34	72	397	112	125	89
10	40	26	19	16	18	22	33	62	293	105	122	112
11	42	25	18	16	18	22	34	58	287	100	115	125
12	40	24	18	16	18	21	36	60	236	88	115	137
13	37	21	19	16	17	21	36	64	259	92	115	130
14	37	22	19	17	17	21	33	67	294	90	105	125
15	34	24	20	16	17	20	32	69	323	126	98	110
16	30	23	19	17	17	19	32	69	337	315	92	100
17	30	23	19	16	16	21	31	69	360	374	90	88
18	28	25	19	15	17	20	30	66	342	281	92	78
19	28	24	18	15	17	20	29	68	342	275	96	68
20	28	22	18	16	17	19	29	88	314	306	100	64
21	28	23	17	16	16	19	32	139	295	315	120	68
22	28	23	17	16	16	19	39	149	264	345	120	70
23	27	24	17	16	17	21	45	146	255	329	110	72
24	28	24	17	16	19	21	47	140	271	320	130	70
25	28	24	18	17	19	22	48	140	250	303	170	66
26	28	24	19	17	20	23	44	169	326	252	150	56
27	26	22	17	17	20	26	41	170	285	228	105	52
28	27	21	17	17	20	29	41	170	247	201	97	52
29	27	22	17	17	---	31	49	161	204	185	107	52
30	26	22	16	17	---	34	58	140	184	182	100	50
31	26	---	16	16	---	37	---	143	---	170	90	---
TOTAL	973	722	585	503	488	700	1103	3247	8842	6277	3730	2510
MEAN	31.4	24.1	18.9	16.2	17.4	22.6	36.8	105	295	202	120	83.7
MAX	42	28	22	17	20	37	58	170	509	374	170	137
MIN	26	21	16	15	16	19	29	58	155	88	90	50
AC-FT	1930	1430	1160	998	968	1390	2190	6440	17540	12450	7400	4980
CAL YR 1985	TOTAL	47937	MEAN	131	MAX	1930	MIN	16	AC-FT	95080		
WTR YR 1986	TOTAL	29680	MEAN	81.3	MAX	509	MIN	15	AC-FT	58870		

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 mi².

PERIOD OF RECORD.--October 1964 to current year.

GAGE.--Water-stage recorder. Datum of gage is 8,014.01 ft above National Geodetic Vertical Datum of 1929. Prior to Apr. 25, 1968, at site 85 ft upstream at datum 1.16 ft, higher.

REMARKS.--Estimated daily discharges: Sept. 11-30. Records good except for estimated daily discharges, which are fair. Transmountain diversion 14 mi upstream through Twin Lakes tunnel to Arkansas River basin since May 24, 1935 (50,600 acre-ft diverted, current year, provided by U.S. Bureau of Reclamation). Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--22 years, 150 ft³/s; 108,700 acre-ft/yr, including diversion by Twin Lakes tunnel.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,230 ft³/s, June 9, 1985, gage height, 5.29 ft; minimum daily, 12 ft³/s, Nov. 28, 1976.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 684 ft³/s at 0500 June 7, gage height, 3.59 ft; minimum daily, 29 ft³/s, Jan. 4, 12-15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	58	50	42	33	31	36	68	115	243	216	156	109
2	64	51	43	32	32	37	65	137	231	207	151	113
3	64	51	43	31	32	37	62	164	274	194	144	104
4	66	49	42	29	31	37	57	204	353	182	140	89
5	62	50	39	34	32	38	54	208	382	241	134	82
6	63	51	42	31	31	38	55	182	427	235	171	76
7	82	44	41	30	33	39	60	149	516	183	142	76
8	90	51	41	30	33	39	65	130	483	162	134	90
9	83	49	39	30	33	40	63	117	407	159	131	91
10	80	48	36	30	33	39	64	104	316	144	118	124
11	85	49	36	30	33	38	63	102	265	132	109	105
12	79	48	36	29	33	38	62	114	245	125	110	99
13	76	41	36	29	33	37	64	138	271	120	117	94
14	73	38	38	29	33	36	58	156	300	113	103	100
15	66	43	38	29	33	37	59	156	334	142	94	95
16	64	44	38	31	33	36	61	148	345	326	83	85
17	61	45	37	30	32	38	59	145	359	382	87	82
18	59	47	37	30	33	38	56	136	344	291	85	77
19	57	42	36	30	34	37	54	145	357	283	88	74
20	56	41	36	30	35	38	53	187	333	329	99	70
21	56	43	35	30	32	38	54	234	325	335	113	68
22	56	45	34	30	32	39	68	252	309	381	112	81
23	54	46	34	31	34	41	83	241	297	347	101	90
24	54	46	34	31	37	43	90	242	301	340	143	90
25	55	45	33	30	37	43	91	239	280	319	169	80
26	54	45	35	31	38	44	83	276	348	258	137	76
27	54	43	33	32	37	47	73	277	331	234	112	72
28	55	43	33	32	35	52	69	272	303	212	104	75
29	54	43	33	32	---	59	80	260	261	196	118	74
30	54	42	33	31	---	63	94	216	246	180	108	72
31	54	---	32	31	---	70	---	229	---	169	98	---
TOTAL	1988	1373	1145	948	935	1292	1987	5675	9786	7137	3711	2613
MEAN	64.1	45.8	36.9	30.6	33.4	41.7	66.2	183	326	230	120	87.1
MAX	90	51	43	34	38	70	94	277	516	382	171	124
MIN	54	38	32	29	31	36	53	102	231	113	83	68
AC-FT	3940	2720	2270	1880	1850	2560	3940	11260	19410	14160	7360	5180
CAL YR 1985	TOTAL	59051		MEAN	162	MAX	1790	MIN	28	AC-FT	117100	
WTR YR 1986	TOTAL	38590		MEAN	106	MAX	516	MIN	29	AC-FT	76540	

ROARING FORK RIVER BASIN

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 mi².

PERIOD OF RECORD.--June 1950 to September 1956, September 1969 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 8,610 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Sept. 1, 1969, at site 220 ft downstream, at different datum.

REMARKS.--Estimated daily discharges: Nov. 9, 10, Nov. 13 - Mar. 30, and May 7-23. Records fair except for estimated daily discharges, which are poor. Transmountain diversion upstream from station to Charles H. Boustead tunnel by feeder conduit. Several small diversions upstream from station for irrigation of hay meadows upstream from and downstream from station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--16 years (water years 1951-1956, 1970-1979), 50.7 ft³/s; 36,730 acre-ft/yr, prior to diversion through Charles H. Boustead Tunnel; 7 years (water years 1980-86), 47.1 ft³/s; 34,120 acre-ft/yr, subsequent to diversions through Charles H. Boustead Tunnel.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,170 ft³/s, June 8, 1985, gage height, 2.33 ft; from rating curve extended above 300 ft³/s; maximum gage height, 4.30 ft, Nov. 30, 1984 (backwater from ice); minimum not determined.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 590 ft³/s at 2100 June 16, gage height, 1.92 ft; minimum daily, 5.0 ft³/s, Feb. 9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	14	13	9.2	7.2	6.0	31	61	139	184	35	48
2	18	16	12	9.4	7.0	6.2	30	83	143	178	34	50
3	18	18	13	8.0	6.8	6.4	28	111	164	178	34	42
4	19	14	12	6.6	6.2	6.6	26	135	187	166	33	35
5	16	16	11	7.6	5.6	6.8	27	132	188	234	34	30
6	15	15	12	8.6	5.4	7.0	28	101	314	191	40	25
7	21	13	12	7.0	5.8	7.4	39	94	267	154	35	25
8	25	15	12	7.4	5.4	7.6	47	83	226	123	36	34
9	25	14	12	9.6	5.0	8.2	40	77	179	129	35	33
10	26	14	11	9.4	5.3	7.8	37	76	154	117	34	54
11	30	15	9.0	8.8	5.7	7.4	35	86	180	100	31	64
12	25	15	8.0	8.0	6.0	7.4	36	97	254	98	31	60
13	25	13	9.0	7.6	6.0	7.2	41	110	327	96	35	51
14	24	12	9.2	7.8	6.1	7.2	36	112	357	85	35	45
15	22	14	9.4	8.2	6.2	7.2	31	100	381	84	30	36
16	25	11	9.6	8.2	6.2	7.1	29	92	408	121	30	30
17	24	13	10	8.2	6.3	7.0	26	92	417	108	27	27
18	24	15	9.4	8.0	6.5	7.0	25	100	405	85	27	25
19	23	12	9.2	7.8	6.8	6.8	24	122	378	59	29	25
20	23	10	9.0	7.8	7.2	6.8	24	160	319	58	31	22
21	23	12	8.8	8.0	6.0	7.0	24	176	280	54	41	20
22	23	10	8.8	8.2	6.2	7.8	38	160	253	121	35	22
23	21	13	10	7.8	6.2	8.6	46	190	241	99	33	25
24	19	14	9.0	7.6	6.2	9.4	47	209	148	102	52	24
25	19	14	8.2	7.2	6.3	10	46	214	97	90	68	28
26	19	13	8.4	7.4	6.6	11	37	267	142	79	45	29
27	19	13	9.2	7.6	6.3	13	32	268	168	67	42	29
28	19	13	8.2	7.4	6.0	17	28	238	237	55	39	34
29	19	13	9.2	7.2	---	21	31	145	211	48	45	39
30	18	14	9.2	7.4	---	27	44	125	196	40	47	34
31	18	---	8.0	7.4	---	31	---	136	---	37	40	---
TOTAL	663	408	308.8	246.4	172.5	303.9	1013	4152	7360	3340	1143	1045
MEAN	21.4	13.6	9.96	7.95	6.16	9.80	33.8	134	245	108	36.9	34.8
MAX	30	18	13	9.6	7.2	31	47	268	417	234	68	64
MIN	15	10	8.0	6.6	5.0	6.0	24	61	97	37	27	20
AC-FT	1320	809	613	489	342	603	2010	8240	14600	6620	2270	2070
CAL YR 1985	TOTAL	18851.1		MEAN	51.6	MAX	780	MIN	7.8	AC-FT	37390	
WTR YR 1986	TOTAL	20155.6		MEAN	55.2	MAX	417	MIN	5.0	AC-FT	39980	

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 mi².

PERIOD OF RECORD.--September 1969 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 9,100 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Dec. 29-Jan. 22, Feb. 10, and May 21-June 5. Records good except for estimated daily discharges, which are fair. No diversion upstream from station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--17 years, 44.4 ft³/s; 32,170 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 559 ft³/s, June 30, 1984, gage height, 3.64 ft; maximum gage height, 3.88 ft, June 23, 1970; minimum daily discharge, 6.0 ft³/s, Jan. 7, 1982.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 200 ft³/s, and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
June 7	0100	436	3.36	June 26	2300	382	3.24
June 16	2400	300	2.92	July 5	2000	345	3.12

Minimum daily discharge, 13 ft³/s, Feb. 14-18, 25-28.

CORRECTIONS.--The figure published for the minimum daily discharge in the 1985 report was in error; the correct figure is 10 ft³/s.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31	25	21	15	15	14	17	43	120	204	75	52
2	30	25	21	15	15	14	18	56	110	211	72	47
3	30	25	20	15	15	14	17	71	130	208	72	43
4	30	24	20	15	15	14	17	80	160	223	68	41
5	29	24	20	17	14	14	17	78	223	293	63	40
6	29	24	21	17	14	14	18	71	294	251	73	38
7	36	22	20	16	14	14	19	67	324	206	66	37
8	34	23	20	16	14	14	19	62	263	164	64	44
9	33	24	19	16	14	14	19	59	207	179	62	47
10	35	23	16	16	14	14	19	45	151	165	59	59
11	34	23	15	16	14	14	19	50	121	140	58	49
12	32	23	15	15	14	15	20	49	133	145	58	48
13	32	21	16	16	14	15	20	49	177	150	61	48
14	31	19	21	16	13	15	19	52	206	149	60	49
15	29	21	19	16	13	15	19	54	237	150	57	49
16	29	21	19	16	13	15	20	53	251	169	56	43
17	28	23	18	16	13	15	19	52	262	124	54	41
18	28	23	18	15	13	15	18	51	250	109	56	38
19	28	21	18	15	14	15	18	52	247	120	59	36
20	28	21	17	15	14	15	19	55	240	110	62	34
21	28	22	17	15	14	15	22	66	252	113	68	32
22	27	21	16	15	14	16	26	84	246	122	69	38
23	27	22	16	15	14	16	28	82	241	116	64	43
24	27	22	15	15	14	16	30	82	240	103	65	44
25	27	22	16	15	13	15	30	84	221	98	76	40
26	27	22	16	15	13	15	29	94	290	96	70	38
27	26	21	16	15	13	15	29	110	288	88	61	36
28	26	21	16	15	13	15	30	110	272	82	56	36
29	26	22	16	15	---	15	33	100	274	79	61	36
30	25	22	16	15	---	15	36	96	245	79	53	35
31	26	---	16	15	---	17	---	100	---	78	50	---
TOTAL	908	672	550	479	387	459	664	2157	6675	4524	1948	1261
MEAN	29.3	22.4	17.7	15.5	13.8	14.8	22.1	69.6	223	146	62.8	42.0
MAX	36	25	21	17	15	17	36	110	324	293	76	59
MIN	25	19	15	15	13	14	17	43	110	78	50	32
AC-FT	1800	1330	1090	950	768	910	1320	4280	13240	8970	3860	2500
CAL YR 1985	TOTAL	22670	MEAN	62.1	MAX	456	MIN	10	AC-FT	44970		
WTR YR 1986	TOTAL	20684	MEAN	56.7	MAX	324	MIN	13	AC-FT	41030		

ROARING FORK RIVER BASIN

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 mi².

PERIOD OF RECORD.--September 1969 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 8,720 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Dec. 9 - Mar. 27. Records fair except for estimated daily discharges, which are poor. No diversion upstream from 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.--17 years, 69.8 ft³/s; 50,570 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 836 ft³/s, June 22, 1980, gage height, 3.39 ft, from rating curve extended above 350 ft³/s, but may have been higher during a period of indefinite stage-discharge relationship in June, 1984; maximum gage height, 4.53 ft, Feb. 3, 1972 (backwater from ice); minimum daily discharge, 9.0 ft³/s, Mar. 29, 1975.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 250 ft³/s, and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
June 20	1900	*604	2.90	July 6	0600	592	*2.94

Minimum daily discharge, 18 ft³/s, Feb. 28, Mar. 5, 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	59	43	34	27	22	19	23	38	196	351	142	92
2	59	43	34	25	22	19	24	43	197	323	137	89
3	58	42	33	25	22	19	23	49	202	449	135	88
4	56	42	33	25	22	19	23	57	212	455	131	84
5	55	42	33	26	21	18	23	65	237	445	130	81
6	55	42	32	25	21	18	22	67	219	519	132	80
7	60	41	31	25	22	19	23	65	264	459	130	80
8	59	42	31	25	21	20	24	61	293	368	129	82
9	58	42	30	25	21	20	24	59	338	358	126	83
10	56	41	30	25	21	20	24	59	374	304	124	91
11	55	40	29	25	21	20	24	59	346	281	123	84
12	54	40	29	24	21	19	24	61	372	274	121	81
13	54	40	30	24	21	19	25	63	384	273	119	80
14	53	40	31	23	21	19	24	66	372	264	119	79
15	52	39	30	23	20	19	24	67	349	256	116	78
16	51	38	30	23	20	20	25	65	362	264	114	77
17	51	38	31	22	20	21	25	65	362	255	110	76
18	49	38	29	22	20	20	24	64	428	242	108	76
19	49	38	29	22	20	20	24	64	492	232	109	76
20	48	37	29	22	21	20	25	70	502	224	110	76
21	48	37	28	22	19	20	27	83	514	223	109	76
22	47	37	27	23	19	20	29	97	453	217	112	77
23	46	36	27	23	19	20	31	101	435	209	105	79
24	46	36	27	23	20	20	33	113	414	202	109	78
25	45	36	28	22	20	20	35	119	344	196	114	78
26	44	35	28	23	20	20	35	141	366	190	105	76
27	44	35	27	22	19	21	34	148	372	179	101	74
28	44	34	27	23	18	21	33	161	378	167	98	73
29	44	35	27	22	---	21	34	167	344	154	96	73
30	44	34	26	21	---	21	35	158	331	147	95	72
31	44	---	26	22	---	22	---	181	---	148	93	---
TOTAL	1587	1163	916	729	574	614	803	2676	10452	8628	3602	2389
MEAN	51.2	38.8	29.5	23.5	20.5	19.8	26.8	86.3	348	278	116	79.6
MAX	60	43	34	27	22	22	35	181	514	519	142	92
MIN	44	34	26	21	18	18	22	38	196	147	93	72
AC-FT	3150	2310	1820	1450	1140	1220	1590	5310	20730	17110	7140	4740
CAL YR 1985	TOTAL	36824	MEAN	101	MAX	488	MIN	21	AC-FT	73040		
WTR YR 1986	TOTAL	34133	MEAN	93.5	MAX	519	MIN	18	AC-FT	67700		

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 mi².

PERIOD OF RECORD.--October 1974 to current year.

GAGE.--Water-stage recorder with V-notch concrete control. Elevation of gage is 7,870 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Dec. 4-6, 11-19, 28, 29, 31, Jan. 1-24, Feb. 5-9, 19-22, 25-27, May 4, and Sept. 15-30. Records good except for estimated daily discharges, which are poor. Several small diversions upstream from station for irrigation of hay meadows. Water imported upstream from 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.--12 years, 3.25 ft³/s; 2,350 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 90 ft³/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 May 4, unknown, gage height, unknown; minimum daily, 0.32 ft³/s, Dec. 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.75	.48	.75	.42	.48	1.3	6.8	17	2.6	4.1	1.2	.64
2	.63	.45	.75	.44	.48	1.5	6.6	22	2.3	3.6	1.0	.61
3	.61	.48	.75	.40	.55	2.0	4.8	26	1.8	4.0	1.2	.61
4	.53	.45	.74	.39	.55	2.0	3.0	39	2.9	4.8	1.3	.55
5	.45	.48	.72	.39	.54	3.3	3.4	35	1.9	7.4	1.2	.48
6	.45	.55	.72	.43	.52	3.4	4.8	33	1.6	5.4	1.5	.43
7	2.1	.44	.75	.44	.52	3.6	6.8	26	1.6	5.2	.96	.45
8	2.7	.48	.75	.43	.50	4.3	12	24	2.1	5.9	1.2	.55
9	1.5	.55	.68	.44	.52	3.9	13	20	2.8	6.1	1.4	.94
10	1.1	.55	.61	.47	.48	2.0	13	18	3.3	5.4	.89	2.1
11	1.1	.61	.58	.44	.55	1.9	14	16	2.9	5.0	.75	1.1
12	1.0	.75	.54	.47	.55	1.7	13	16	1.7	4.4	.88	.95
13	.95	.55	.56	.44	.61	1.5	9.4	15	1.3	4.4	1.2	.80
14	1.2	.64	.60	.43	.61	1.6	8.7	16	1.3	4.5	.82	.69
15	1.2	.61	.54	.44	.61	1.4	8.1	18	1.2	4.5	.68	.68
16	1.1	.45	.50	.47	.68	1.5	8.4	19	1.2	5.4	.55	.66
17	.95	.48	.54	.49	.68	1.4	8.7	22	1.2	5.0	.48	.64
18	.88	.55	.54	.50	.81	1.4	8.1	20	1.2	3.6	.48	.62
19	.78	.55	.52	.47	1.0	1.2	7.3	16	1.5	3.1	.47	.60
20	.68	.48	.48	.45	1.0	1.2	7.8	17	1.3	3.3	.48	.60
21	.61	.51	.48	.47	1.0	1.5	9.3	19	1.4	3.8	.55	.68
22	.61	.55	.48	.47	1.0	1.8	14	22	1.2	3.6	.61	.78
23	.68	.55	.38	.45	1.0	2.0	21	22	.89	3.9	.68	.84
24	.57	.61	.40	.45	1.1	2.1	20	22	.75	3.2	.75	.78
25	.48	.75	.45	.48	1.2	2.6	22	19	.81	2.8	.95	.76
26	.47	.82	.38	.48	1.3	4.7	20	18	1.7	2.6	.75	.70
27	.45	.82	.32	.48	1.3	4.7	18	18	1.4	2.6	.55	.68
28	.48	.58	.34	.48	1.4	4.7	16	18	2.1	2.2	.48	.68
29	.55	.75	.35	.48	---	4.7	14	16	2.9	2.1	.80	.68
30	.48	.75	.35	.48	---	4.3	14	15	3.8	2.0	.75	.70
31	.51	---	.38	.48	---	5.9	---	5.4	---	1.6	.68	---
TOTAL	26.55	17.27	16.93	14.05	21.54	81.1	336.0	629.4	54.65	125.5	26.19	21.98
MEAN	.86	.58	.55	.45	.77	2.62	11.2	20.3	1.82	4.05	.84	.73
MAX	2.7	.82	.75	.50	1.4	5.9	22	39	3.8	7.4	1.5	2.1
MIN	.45	.44	.32	.39	.48	1.2	3.0	5.4	.75	1.6	.47	.43
AC-FT	53	34	34	28	43	161	666	1250	108	249	52	44
CAL YR 1985	TOTAL	2295.02		MEAN	6.29	MAX	66	MIN	.32	AC-FT	4550	
WTR YR 1986	TOTAL	1371.16		MEAN	3.76	MAX	39	MIN	.32	AC-FT	2720	

ROARING FORK RIVER BASIN

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 mi².

PERIOD OF RECORD.--October 1975 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 8,210 ft, from topographic map.

REMARKS.--Estimated daily discharges: Dec. 6, Dec. 12 to Jan. 11, and Jan. 15 to Feb. 20. Records good except for estimated daily discharges, which are poor. Records good except those for winter period, which are poor. Transmountain diversions upstream from 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.--11 years, 103 ft³/s; 74,620 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,330 ft³/s, May 25, 1984, gage height, 4.23 ft; minimum daily, 10 ft³/s, Nov. 28, 1976, Jan. 2, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,090 ft³/s at 2400 June 6, gage height, 4.03 ft; minimum daily, 23 ft³/s, Feb. 10-11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	60	50	41	28	28	36	133	280	474	536	93	117
2	60	54	41	28	28	38	122	339	467	501	84	120
3	61	57	42	28	27	40	110	406	550	501	82	113
4	64	50	41	27	27	42	93	487	655	529	88	95
5	58	56	36	26	27	45	86	515	720	669	86	88
6	57	53	37	26	26	48	91	400	813	599	90	80
7	95	48	41	26	25	51	117	329	862	487	86	77
8	110	53	40	26	24	53	125	266	805	400	95	101
9	97	44	38	26	24	57	125	223	781	377	95	110
10	93	54	36	27	23	53	120	193	641	306	84	160
11	104	60	34	27	23	49	110	200	494	193	82	156
12	91	54	32	28	24	47	108	261	467	212	88	156
13	91	40	31	28	24	45	110	313	522	208	88	133
14	86	36	30	28	25	43	97	350	515	197	82	125
15	74	44	30	28	25	41	95	303	550	182	77	110
16	77	44	30	28	25	41	108	289	564	215	80	99
17	77	50	30	28	25	41	108	266	585	215	75	91
18	74	47	30	28	26	40	95	253	557	179	75	88
19	69	40	30	28	26	35	90	299	557	130	77	84
20	67	41	31	30	26	40	86	411	648	142	86	82
21	66	41	32	29	27	39	93	536	797	128	104	75
22	66	40	31	27	28	41	139	578	758	219	101	78
23	61	42	32	27	31	45	186	515	750	236	99	86
24	60	43	31	27	32	51	186	480	705	212	128	84
25	58	42	31	27	34	51	197	487	648	200	125	90
26	61	43	30	26	36	51	176	571	765	172	113	97
27	60	42	29	27	36	66	144	578	712	153	95	90
28	63	42	28	27	34	90	133	501	698	136	86	101
29	64	43	27	28	---	113	144	501	648	104	101	110
30	63	43	28	28	---	125	208	400	606	101	122	101
31	63	---	28	28	---	144	---	423	---	97	117	---
TOTAL	2250	1396	1028	850	766	1701	3735	11953	19314	8536	2884	3097
MEAN	72.6	46.5	33.2	27.4	27.4	54.9	125	386	644	275	93.0	103
MAX	110	60	42	30	36	144	208	578	862	669	128	160
MIN	57	36	27	26	23	35	86	193	467	97	75	75
AC-FT	4460	2770	2040	1690	1520	3370	7410	23710	38310	16930	5720	6140
CAL YR 1985	TOTAL	41089		MEAN	113	MAX	829	MIN	27	AC-FT	81500	
WTR YR 1986	TOTAL	57510		MEAN	158	MAX	862	MIN	23	AC-FT	114100	

ROARING FORK RIVER BASIN

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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 above National Geodetic Vertical Datum of 1929.

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 provided 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, 102,000 acre-ft, Sept. 17, elevation, 7,765.62 ft; minimum, 50,600 acre-ft, April 30, elevation, 7,702.10 ft.

MONTHEND ELEVATION IN FEET NGVD AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

Date	Elevation	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.	7,756.48	93,200	-
Oct. 31.	7,756.99	93,600	+400
Nov. 30.	7,751.72	88,800	-4,800
Dec. 31.	7,742.50	80,600	-8,200
CAL YR 1985			-4,000
Jan. 31.	7,731.89	71,900	-8,700
Feb. 28.	7,720.95	63,500	-8,400
Mar. 31.	7,709.18	55,300	-8,200
Apr. 30.	7,702.10	50,600	-4,700
May 31.	7,715.57	59,700	+9,100
June 30.	7,757.76	94,400	+34,700
July 31.	7,763.29	99,700	+5,300
Aug. 31.	7,764.35	100,700	+1,000
Sept. 30.	7,764.50	100,900	+200
WTR YR 1986.			+7,700

ROARING FORK RIVER BASIN

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 mi².

PERIOD OF RECORD.--October 1964 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 7,473.25 ft above 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.--No estimated daily discharges. Records good. Diversions for irrigation of hay meadows upstream from station. Transmountain diversions upstream from 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.--19 years (water years 1968-86), 190 ft³/s; 137,700 acre-ft/yr, subsequent to completion of Ruedi Reservoir.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,690 ft³/s, June 18, 1965, gage height, 5.16 ft, site and datum then in use; minimum daily, 16 ft³/s, Feb. 2, 1968 (result of storage in Ruedi Reservoir); minimum daily prior to construction of Ruedi Reservoir, 28 ft³/s, Mar. 4, 1966.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 644 ft³/s, June 7, gage height, 2.84 ft; minimum daily, 65 ft³/s, Sept. 16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	117	104	196	195	207	204	256	394	600	290	150	120
2	115	105	197	194	207	204	283	425	600	328	150	120
3	115	106	197	194	207	204	298	445	600	333	150	120
4	115	106	197	194	209	204	298	460	611	333	150	120
5	115	106	194	194	211	204	298	512	616	333	150	120
6	113	106	191	194	211	205	298	556	628	333	150	120
7	113	106	197	194	211	218	298	562	639	362	150	120
8	111	110	197	194	211	228	302	562	636	426	150	119
9	111	108	197	194	211	228	305	562	632	426	152	119
10	110	108	197	191	211	228	309	562	628	421	153	119
11	110	108	204	191	207	228	312	562	623	421	153	119
12	110	108	194	191	207	228	313	562	620	417	153	138
13	108	108	191	191	207	228	317	562	617	412	153	179
14	108	343	202	191	207	228	313	562	611	412	153	181
15	115	298	200	191	211	228	313	562	608	415	153	107
16	117	191	200	191	211	228	313	562	600	417	153	65
17	117	191	200	191	207	239	313	562	600	448	153	86
18	117	191	200	191	209	249	313	562	548	302	149	157
19	117	192	200	191	211	249	313	562	465	305	113	160
20	115	194	200	188	214	249	313	562	429	305	113	162
21	115	194	200	183	207	249	313	562	358	305	113	164
22	113	194	200	188	207	249	313	562	354	305	115	162
23	113	194	198	185	211	249	313	562	288	305	115	162
24	113	194	197	200	211	251	313	562	242	309	115	162
25	104	195	197	211	211	253	353	567	235	321	139	162
26	100	197	197	211	207	253	389	578	252	321	126	162
27	98	194	197	207	207	253	390	584	257	322	126	162
28	103	194	197	207	204	253	390	595	256	270	124	161
29	138	194	197	207	---	253	394	600	256	200	122	160
30	104	194	197	207	---	253	394	600	256	207	122	160
31	104	---	197	207	---	253	---	600	---	164	121	---
TOTAL	3474	4933	6125	6058	5852	7250	9640	17032	14665	10468	4289	4168
MEAN	112	164	198	195	209	234	321	549	489	338	138	139
MAX	138	343	204	211	214	253	394	600	639	448	153	181
MIN	98	104	191	183	204	204	256	394	235	164	113	65
AC-FT	6890	9780	12150	12020	11610	14380	19120	33780	29090	20760	8510	8270
CAL YR 1985 TOTAL		80647		MEAN	221	MAX	1200	MIN	45	AC-FT	160000	
WTR YR 1986 TOTAL		93954		MEAN	257	MAX	639	MIN	65	AC-FT	186400	

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. Elevation of gage is 6,905 ft, from river-profile map.

REMARKS.--Estimated daily discharges: Oct. 15-26, Nov. 8 - Dec. 10, Feb. 11 - Mar. 22, May 6 - June 6. Records good except for estimated daily discharges, which are poor. A few small diversions for irrigation upstream from station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--31 years, 305 ft³/s; 221,000 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.--Peak discharges greater than base discharge of 2,000 ft³/s, and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
June 6	2400	*2,900	*5.32	June 27	0100	2,120	4.66
June 17	2400	2,150	4.69	July 5	2200	2,050	4.59

Minimum daily, 66 ft³/s, Jan. 25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	181	152	110	82	85	110	561	527	1700	1530	423	202
2	173	150	110	93	85	120	638	691	1700	1520	408	199
3	165	147	120	90	85	120	527	890	1800	1530	394	191
4	165	141	110	78	80	130	409	1090	1900	1530	358	176
5	159	143	100	71	76	140	351	1040	2000	1950	340	172
6	155	138	110	89	73	150	336	900	2370	1690	404	168
7	361	131	110	81	76	150	355	880	2530	1440	371	166
8	395	130	110	67	76	160	352	760	2280	1140	350	179
9	330	130	100	79	72	160	359	660	1950	1150	324	246
10	278	120	95	84	70	150	356	640	1490	1140	301	446
11	300	120	92	82	74	150	337	640	1270	1000	290	289
12	261	120	80	79	74	140	320	640	1300	1020	294	280
13	264	120	82	80	78	140	331	640	1500	1080	317	254
14	246	130	92	80	76	140	280	650	1660	1030	287	248
15	240	160	86	85	80	130	262	700	1860	994	272	243
16	230	130	86	85	82	130	278	720	1880	1070	263	219
17	220	120	86	82	88	140	269	720	1930	906	252	201
18	210	120	99	82	96	130	244	720	1960	813	257	188
19	210	120	95	81	110	130	218	740	1910	801	271	177
20	210	110	95	84	130	130	207	800	1850	706	280	165
21	210	120	96	76	110	130	241	920	1900	674	318	156
22	210	110	96	77	98	140	385	1100	1850	621	309	225
23	210	120	97	84	96	154	519	1200	1780	665	270	477
24	200	120	98	76	98	169	516	1300	1720	636	277	376
25	180	130	92	66	110	182	498	1300	1560	612	403	349
26	170	120	88	69	120	206	441	1400	1800	590	304	338
27	163	120	87	76	110	259	355	1500	1920	541	259	303
28	163	110	85	82	110	331	313	1600	1890	495	239	358
29	166	110	85	87	---	390	321	1600	1830	459	261	309
30	161	120	93	86	---	443	393	1600	1720	433	243	282
31	163	---	89	86	---	555	---	1600	---	445	212	---
TOTAL	6749	3812	2974	2499	2518	5709	10972	30168	54810	30211	9551	7582
MEAN	218	127	95.9	80.6	89.9	184	366	973	1827	975	308	253
MAX	395	160	120	93	130	555	638	1600	2530	1950	423	477
MIN	155	110	80	66	70	110	207	527	1270	433	212	156
CAL YR 1985	TOTAL	158288		MEAN	434	MAX	2850	MIN	60			
WTR YR 1986	TOTAL	167555		MEAN	459	MAX	2530	MIN	66			

ROARING FORK RIVER BASIN

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 above 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.--No estimated daily discharges. Records good. Diversions upstream from 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; 15 years (water years 1972-86), 1,304 ft³/s, 944,700 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, 7,670 ft³/s at 0600 June 7, gage height, 6.52 ft; minimum daily, 601 ft³/s, Feb. 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	976	905	821	657	672	759	1630	2100	4220	4610	1750	1080
2	988	869	820	699	664	779	1750	2520	4210	4610	1650	1100
3	965	860	840	690	672	809	1640	3030	4520	4530	1610	1060
4	952	850	820	672	656	820	1420	3630	5510	4530	1510	966
5	917	860	751	636	648	845	1290	3740	5730	5400	1470	917
6	916	860	801	718	617	840	1250	3250	6160	5220	1500	893
7	1160	831	780	681	624	869	1340	2840	7020	4660	1470	880
8	1610	840	800	641	655	903	1410	2460	6770	4100	1410	915
9	1420	874	780	662	633	988	1420	2190	6340	3970	1420	951
10	1280	821	711	699	601	918	1450	1950	5370	3980	1340	1460
11	1270	849	688	673	639	881	1370	1810	4630	3630	1280	1320
12	1230	870	690	666	632	839	1360	1770	4490	3490	1280	1270
13	1290	831	680	664	656	791	1420	1750	4800	3610	1330	1250
14	1250	830	700	664	633	780	1290	1920	5050	3570	1270	1240
15	1160	1160	681	680	671	780	1250	2000	5460	3430	1250	1180
16	1140	830	700	690	680	735	1280	2160	5620	3710	1220	980
17	1160	879	673	672	657	740	1300	2030	5860	3710	1170	929
18	1110	892	743	664	699	711	1240	1950	5870	3180	1130	975
19	1070	851	711	648	759	700	1170	1980	5770	3040	1110	1000
20	1060	791	720	656	925	691	1140	2280	5620	2960	1130	941
21	1050	859	710	664	744	672	1170	2900	5550	2850	1190	881
22	1060	819	699	609	701	699	1410	3410	5430	2870	1280	870
23	1040	859	700	671	710	736	1810	3470	5210	2910	1220	1150
24	1000	880	720	656	700	779	1940	3470	5020	2800	1270	1200
25	977	880	693	633	729	819	1980	3440	4600	2740	1460	1180
26	964	880	680	616	752	849	2000	3960	4930	2620	1380	1300
27	952	841	690	655	789	919	1780	4160	5280	2490	1250	1240
28	952	840	729	664	761	1050	1650	4310	5310	2290	1170	1370
29	964	845	678	672	---	1180	1670	4270	5260	2080	1180	1290
30	941	850	719	664	---	1280	1810	3960	5050	1950	1180	1250
31	928	---	710	672	---	1520	---	3970	---	1920	1120	---
TOTAL	33752	25906	22638	20608	19279	26681	44640	88680	160660	107460	41000	33038
MEAN	1089	864	730	665	689	861	1488	2861	5355	3466	1323	1101
MAX	1610	1160	840	718	925	1520	2000	4310	7020	5400	1750	1460
MIN	916	791	673	609	601	672	1140	1750	4210	1920	1110	870
AC-FT	66950	51380	44900	40880	38240	52920	88540	175900	318700	213100	81320	65530
CAL YR 1985	TOTAL	637804		MEAN	1747	MAX	9690	MIN	470	AC-FT	1265000	
WTR YR 1986	TOTAL	624342		MEAN	1711	MAX	7020	MIN	601	AC-FT	1238000	

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.

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

GAGE.--Water-stage recorder. Datum of gage is 5,700.75 ft above National Geodetic Vertical Datum of 1929 (Colorado State Highway Department benchmark).

REMARKS.--No estimated daily discharges. Records good. Natural flow of stream affected by transmountain diversions, storage reservoirs, power development, and diversions for irrigation of 110,000 acres.

AVERAGE DISCHARGE.--20 years, 3,648 ft³/s; 2,643,000 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, 20,200 ft³/s at 1000 June 7, gage height, 9.74 ft; minimum daily, 1,710 ft³/s, Jan. 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2800	2510	2390	1910	2040	2530	4790	7010	14000	11100	4120	2970
2	2560	2480	2370	1990	2040	2510	5020	8100	14000	11000	3910	2940
3	2240	2420	2410	1990	2030	2540	4970	9240	14700	10700	3660	2870
4	2250	2290	2390	1910	2000	2550	4500	10500	16300	10500	3570	2760
5	2240	2410	2240	1710	1980	2580	4090	11300	17100	11800	3500	2640
6	2220	2360	2100	1830	1900	2630	3880	10700	17900	11900	3410	2540
7	2490	2380	2100	1900	1890	2740	4040	9950	19400	10400	3260	2460
8	3290	2350	2210	1820	1920	2860	4300	9070	18900	9390	3200	2530
9	3110	2510	2230	1740	1880	3080	4440	8410	18100	8970	3240	2740
10	2910	2440	2100	1910	1730	3080	4510	7640	16600	9010	3160	3340
11	3040	2490	1930	1970	1780	2810	4430	7060	15400	8150	3050	3310
12	3270	2700	1740	1930	1910	2750	4330	6980	14500	7720	3000	3170
13	3370	2660	1750	1780	2020	2660	4500	7090	14600	7680	3020	3100
14	3350	2470	1910	1790	2050	2620	4310	7520	14800	7340	2980	2990
15	3140	2770	1960	1790	2110	2730	4110	7850	15300	6990	2900	2870
16	3040	2490	1930	1980	2220	2660	4150	8210	15600	7310	2820	2640
17	2650	2490	1960	2010	2090	2660	4350	8070	15800	7520	2710	2550
18	2500	2590	2150	2060	2230	2630	4360	7770	15600	6850	2660	2570
19	2460	2510	2110	2020	2820	2510	4070	7810	15500	6560	2600	2570
20	2780	2340	2070	1930	3270	2490	3850	8510	14800	6630	2480	2520
21	2780	2440	2050	1970	2620	2440	3920	9910	14600	6430	2860	2350
22	2810	2310	2020	1850	2360	2440	4460	11100	14300	6300	2950	2260
23	2750	2460	1970	1910	2280	2520	5490	11600	13700	6360	2860	2540
24	2720	2590	2060	1960	2310	2660	6160	11900	13200	6160	2950	2610
25	2680	2560	2050	1900	2460	2770	6560	12000	12400	6090	3240	2640
26	2650	2550	1950	1830	2600	2870	6730	12800	12900	5900	3110	3000
27	2630	2270	1880	1860	2670	2990	6230	13300	13400	5600	2950	2990
28	2610	2150	1910	1870	2630	3200	5690	13700	12800	5300	2820	3150
29	2610	2390	1920	1970	---	3500	5540	14100	12300	4900	2870	3100
30	2600	2490	2050	1980	---	3840	6120	13700	11900	4640	2950	3030
31	2550	---	2070	2010	---	4380	---	13500	---	4420	3030	---
TOTAL	85100	73870	63980	59080	61840	87230	143900	306400	450400	239620	95840	83750
MEAN	2745	2462	2064	1906	2209	2814	4797	9884	15010	7730	3092	2792
MAX	3370	2770	2410	2060	3270	4380	6730	14100	19400	11900	4120	3340
MIN	2220	2150	1740	1710	1730	2440	3850	6980	11900	4420	2480	2260
CAL YR 1985	TOTAL	1728610		MEAN	4736	MAX	20300	MIN	1580			
WTR YR 1986	TOTAL	1751010		MEAN	4797	MAX	19400	MIN	1710			

CANYON CREEK BASIN

09085200 CANYON CREEK ABOVE NEW CASTLE, CO

LOCATION.--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 300 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 mi².

PERIOD OF RECORD.--March 1969 to September 1986 (discontinued).

REVISED RECORDS.--WRD Colo. 1973: 1972(M).

GAGE.--Water-stage recorder. Elevation of gage is 6,060 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records fair. A few small diversions for irrigation of hay meadows upstream from station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--17 years, 55.0 ft³/s; 39,850 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 966 ft³/s, June 19, 1983, gage height, 5.78 ft, (from floodmarks) site then in use; maximum gage height 8.15 ft, June 5, 1986; minimum daily discharge, 2.6 ft³/s, Jan. 2, 1979.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 350 ft³/s, and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
June 5	2200	*840	*8.15	June 15	2000	565	7.38

Minimum daily discharge, 13 ft³/s, Feb. 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	26	22	16	16	18	46	59	597	146	39	25
2	25	27	23	17	16	18	46	75	599	122	37	25
3	24	26	21	16	16	19	43	98	609	105	35	25
4	23	25	22	16	15	19	40	123	690	100	33	23
5	22	25	21	16	15	20	36	128	735	131	32	21
6	21	24	20	15	15	21	35	116	690	92	33	21
7	25	24	20	17	15	21	35	102	512	78	34	20
8	29	24	20	16	14	22	35	85	480	68	32	20
9	27	24	20	16	14	25	35	77	424	60	31	23
10	27	24	18	15	13	24	37	68	344	52	30	25
11	31	25	15	15	14	24	36	65	331	45	30	24
12	30	26	14	15	15	22	35	65	407	38	31	22
13	33	24	15	16	15	22	37	68	459	32	29	21
14	31	21	17	15	14	21	36	75	417	32	28	20
15	30	23	18	15	16	21	35	83	497	35	26	20
16	30	22	20	16	14	20	35	85	455	38	24	20
17	30	24	21	16	14	20	35	86	484	34	25	20
18	30	22	20	16	18	19	34	91	463	33	24	20
19	30	21	19	15	18	19	33	106	454	35	24	20
20	30	20	19	16	18	19	33	140	467	34	24	19
21	30	22	18	15	17	18	33	195	460	35	27	19
22	31	22	18	15	16	18	41	232	434	36	26	20
23	30	22	18	16	16	19	56	241	393	37	25	26
24	29	21	18	15	16	20	62	250	370	39	29	30
25	28	22	17	15	17	20	61	295	299	40	28	30
26	28	22	17	15	17	20	59	367	288	39	25	31
27	27	21	17	15	18	21	54	387	267	39	24	29
28	27	21	17	15	18	23	51	409	241	40	23	41
29	28	21	17	15	---	27	50	458	206	41	24	44
30	28	19	17	15	---	32	51	446	176	41	25	44
31	29	---	17	16	---	42	---	482	---	41	25	---
TOTAL	869	690	576	482	440	674	1255	5557	13248	1738	882	748
MEAN	28.0	23.0	18.6	15.5	15.7	21.7	41.8	179	442	56.1	28.5	24.9
MAX	33	27	23	17	18	42	62	482	735	146	39	44
MIN	21	19	14	15	13	18	33	59	176	32	23	19
AC-FT	1720	1370	1140	956	873	1340	2490	11020	26280	3450	1750	1480
CAL YR 1985	TOTAL	26203	MEAN	71.8	MAX	651	MIN	11	AC-FT	51970		
WTR YR 1986	TOTAL	27159	MEAN	74.4	MAX	735	MIN	13	AC-FT	53870		

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 mi².

PERIOD OF RECORD.--October 1955 to current year.

REVISED RECORDS.--WSP 2124: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 7,050 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 11-28, Dec. 5 - Jan. 17, Feb. 21, 22. Records good except for estimated daily discharges, 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.--31 years, 36.3 ft³/s; 26,300 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,410 ft³/s, May 14, 1984, gage height, 5.83 ft, from rating curve extended above 670 ft³/s; no flow at times in most years.

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Apr 23	2400	234	4.12	May 21	2000	356	4.31
May 4	1800	*444	*4.69				

Minimum daily discharge, 2.2 ft³/s, Sept. 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.3	6.2	6.0	5.2	5.8	19	122	240	225	85	8.6	3.5
2	4.0	6.8	6.1	5.6	5.7	17	125	266	213	76	7.6	3.3
3	3.8	6.9	6.1	5.4	5.5	17	92	328	219	75	7.0	3.3
4	3.6	5.7	6.0	5.0	5.5	17	67	369	227	73	6.8	2.9
5	3.6	6.7	5.6	4.4	5.5	18	62	329	222	85	8.1	2.8
6	3.4	6.4	5.6	5.0	5.6	18	65	269	215	82	9.8	2.4
7	4.3	4.8	5.8	4.7	5.3	20	74	255	211	70	6.9	2.2
8	11	6.4	5.8	4.6	5.4	23	83	234	199	62	5.9	2.7
9	12	6.1	5.4	4.9	5.2	26	94	215	192	55	5.7	4.4
10	8.2	6.2	5.0	5.4	4.9	22	96	196	171	51	5.3	19
11	9.7	6.8	4.5	5.2	5.0	20	91	204	143	46	4.8	14
12	9.7	6.8	4.6	5.0	5.2	18	94	216	136	41	5.5	8.5
13	12	6.4	5.0	4.8	5.3	16	101	192	131	37	8.6	6.3
14	11	6.2	5.0	4.9	5.5	17	86	210	136	35	5.8	5.1
15	9.1	6.4	5.2	5.2	6.5	16	83	221	134	31	5.7	3.9
16	9.4	6.2	5.2	5.4	6.1	15	97	230	127	31	4.9	3.4
17	8.8	6.4	5.4	5.5	5.9	16	96	229	127	31	4.0	3.1
18	8.3	6.2	5.8	5.4	7.3	15	91	229	127	31	3.9	3.0
19	7.5	6.0	6.0	5.3	9.7	19	80	237	134	28	3.7	3.3
20	7.2	6.2	5.8	5.4	10	18	79	255	125	31	4.5	3.4
21	6.9	6.4	5.6	5.5	9.4	18	100	280	125	324	5.2	3.2
22	7.7	6.0	5.4	5.2	9.0	22	135	276	116	22	8.8	3.2
23	7.2	6.4	5.6	5.4	9.7	26	185	269	106	25	5.7	4.8
24	6.5	6.5	5.6	5.3	9.3	30	216	251	102	23	5.0	7.3
25	6.2	6.5	5.2	5.0	11	33	207	264	104	27	5.5	8.1
26	6.2	6.4	5.0	4.8	14	36	174	277	106	20	5.1	12
27	6.0	6.0	5.2	5.1	15	46	128	271	102	16	3.9	9.6
28	6.1	5.8	5.2	5.6	19	59	125	265	106	14	3.3	22
29	6.3	6.0	5.2	5.8	---	70	147	253	106	12	4.0	14
30	6.1	6.1	5.6	5.9	---	77	196	241	96	11	4.7	11
31	6.9	---	5.6	5.9	---	123	---	234	---	9.5	4.0	---
TOTAL	223.0	187.9	169.1	161.8	217.3	907	3391	7805	4483	1559.5	178.3	195.7
MEAN	7.19	6.26	5.45	5.22	7.76	29.3	113	252	149	50.3	5.75	6.52
MAX	12	6.9	6.1	5.9	19	123	216	369	227	324	9.8	22
MIN	3.4	4.8	4.5	4.4	4.9	15	62	192	96	9.5	3.3	2.2
AC-FT	442	373	335	321	431	1800	6730	15480	8890	3090	354	388
CAL YR 1985	TOTAL	24819.0		MEAN	68.0	MAX	603	MIN	2.3	AC-FT	49230	
WTR YR 1986	TOTAL	19478.6		MEAN	53.4	MAX	369	MIN	2.2	AC-FT	38640	

DIVIDE CREEK BASIN

09089500 WEST DIVIDE CREEK NEAR RAVEN, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.-- May 1986 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	HARD- NESS (MG/L AS CACO3)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
MAY										
01...	1200	223	251	8.4	3.5	--	120	--	39	5.5
30...	1220	250	190	8.2	6.5	--	100	0	33	4.3
JUN										
27...	1045	101	162	8.2	9.5	--	73	--	23	3.9
AUG										
22...	1200	9.5	329	8.6	14.0	8.5	120	--	35	7.2

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)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)
MAY										
01...	9.3	0.4	1.4	127	11	2.7	0.1	9.1	150	0.21
30...	6.9	0.3	1.9	100	11	1.7	<0.1	11	130	0.18
JUN										
27...	6.7	0.4	0.8	80	9.9	2.1	<0.1	9.1	100	0.14
AUG										
22...	15	0.6	1.6	155	19	6.2	0.2	7.9	190	0.25

DATE	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NITRATE TOTAL (MG/L AS N)	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)
MAY										
01...	93	0.09	0.01	--	<0.10	--	0.03	--	0.57	0.6
30...	88	--	0.03	<0.01	<0.10	<0.10	0.05	<0.01	0.35	0.4
JUN										
27...	28	--	0.03	--	<0.10	--	0.06	--	0.44	0.5
AUG										
22...	4.8	--	0.04	--	<0.10	--	0.06	--	0.34	0.4

DATE	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, ORTHO, TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	BORON, DIS- SOLVED (UG/L AS B)	IRON, DIS- SOLVED (UG/L AS FE)
MAY									
01...	--	0.27	--	0.03	--	12	2.4	<10	130
30...	<0.2	0.04	0.03	0.04	<0.01	4.9	5.0	20	680
JUN									
27...	--	0.13	--	0.04	--	7.7	7.2	<10	110
AUG									
22...	--	0.19	--	0.05	--	8.4	5.5	20	40

09089500 WEST DIVIDE CREEK NEAR RAVEN, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA)	BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	COBALT, TOTAL RECOV- ERABLE (UG/L AS CO)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	*LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)
MAY 30...	1220	5300	200	<10	4	2	6	3300	1

DATE	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MOLYB- DENUM, TOTAL RECOV- ERABLE (UG/L AS MO)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI)	SELE- NIUM, TOTAL RECOV- ERABLE (UG/L AS SE)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG)	STRON- TIUM, TOTAL RECOV- ERABLE (UG/L AS SR)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)
MAY 30...	90	<0.1	<1	20	<1	<1	240	30

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)
MAY 01...	1130	223	484	291	JUL 24...	1005	25	116	7.8
30...	1220	250	378	255	AUG 22...	1200	9.5	259	6.7
JUN 03...	1145	214	229	132					
11...	1100	141	195	74					
27...	1045	101	307	84					

* The minimum reporting level for Lead was changed from <1 to <5 during June, 1986.

PARACHUTE CREEK BASIN

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 mi².

PERIOD OF RECORD.--Streamflow records, October 1948 to September 1954, October 1964 to September 1970, April 1975 to September 1986 (discontinued). Prior to October 1979, published as near Grand Valley. Water-quality data available, November 1974 to October 1981.

GAGE.--Water-stage recorder. Elevation of gage is 5,795 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Apr. 1, 1975, at sites 0.05 mi downstream, at different datums.

REMARKS.--Estimated daily discharges: Nov. 20, 21, Mar. 11 - Apr. 7, May 8-15. Records good except for estimated daily discharges, which are poor. Diversions for irrigation of about 75 acres upstream from station. One diversion from East Fork bypasses station for irrigation of about 100 acres downstream from station.

AVERAGE DISCHARGE.--23 years (water years 1949-54, 1965-70, 1976-86), 33.4 ft³/s; 24,200 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,310 ft³/s, Aug. 19, 1977, gage height, 6.11 ft, from highwater mark, from rating curve extended above 150 ft³/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.--Peak discharges greater than base discharge of 150 ft³/s, and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Apr. 2	0500	410	2.63	Apr. 24	1700	*564	*3.19
Apr. 13	0600	421	2.61	May 4	1200	459	2.79

Minimum daily discharge, 11 ft³/s, many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	20	18	17	12	19	370	267	126	61	26	27
2	20	20	17	17	12	20	440	342	117	61	26	26
3	20	21	18	16	13	22	330	387	112	60	27	25
4	19	20	18	15	12	24	290	426	106	59	27	24
5	20	20	18	15	12	25	250	394	98	82	27	24
6	20	20	19	15	12	27	220	344	92	67	28	24
7	22	19	19	16	11	29	260	316	95	61	28	25
8	24	19	20	15	12	33	323	290	96	58	28	24
9	22	20	20	15	12	56	372	260	96	61	27	24
10	21	18	19	15	11	62	397	230	99	54	27	27
11	24	22	18	15	11	56	410	220	99	49	27	24
12	23	23	18	15	11	46	412	230	97	45	30	23
13	23	21	18	14	11	45	416	230	97	41	32	25
14	22	17	18	14	11	46	395	240	98	38	30	25
15	21	17	18	14	13	44	368	260	93	37	29	21
16	21	16	19	14	13	41	346	279	89	44	28	21
17	21	16	19	13	13	39	347	252	85	39	27	21
18	21	17	19	13	14	38	340	231	81	31	27	21
19	21	17	19	12	15	36	314	220	81	33	27	22
20	21	17	19	13	18	38	290	239	77	35	27	21
21	20	16	19	13	17	42	275	269	75	37	37	20
22	20	16	19	12	16	46	303	274	73	37	30	21
23	20	16	19	12	17	60	426	247	71	35	27	23
24	18	16	19	12	17	74	525	217	69	30	26	25
25	18	17	18	12	16	84	482	201	66	30	28	24
26	19	17	18	12	16	100	403	190	64	31	27	23
27	19	17	18	12	17	115	261	182	63	31	26	21
28	20	17	18	11	18	140	191	175	60	31	25	21
29	20	18	18	11	---	190	174	162	61	32	26	21
30	20	19	18	11	---	240	194	152	61	32	25	21
31	20	---	17	11	---	270	---	138	---	31	27	---
TOTAL	640	549	572	422	383	2107	10124	7864	2597	1373	859	694
MEAN	20.6	18.3	18.5	13.6	13.7	68.0	337	254	86.6	44.3	27.7	23.1
MAX	24	23	20	17	18	270	525	426	126	82	37	27
MIN	18	16	17	11	11	19	174	138	60	30	25	20
AC-FT	1270	1090	1130	837	760	4180	20080	15600	5150	2720	1700	1380
CAL YR 1985 TOTAL	44159.7			MEAN	121	MAX	1410	MIN	7.7	AC-FT	87590	
WTR YR 1986 TOTAL	28184			MEAN	77.2	MAX	525	MIN	11	AC-FT	55900	

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. Elevation of gage is 4,940 ft from National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records good. 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.--20 years, 4,027 ft³/s; 2,918,000 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, 22,100 ft³/s at 1800 June 7, gage height, 11.56 ft; minimum daily, 1,910 ft³/s, Feb. 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2870	2690	2710	2160	2220	2640	5660	8740	16000	11600	4750	3240
2	2760	2610	2610	2100	2200	2580	6040	9940	16000	11200	4510	3200
3	2500	2560	2750	2150	2240	2590	6300	11500	16200	11000	4250	3170
4	2320	2530	2690	2140	2180	2620	5910	13300	18100	10800	4040	3060
5	2340	2410	2530	1980	2110	2620	5250	14700	19000	11800	3960	2930
6	2340	2450	2370	1970	2080	2670	4920	14100	19900	12600	3860	2830
7	2420	2500	2300	2060	2040	2740	4930	13300	21200	11000	3780	2740
8	3770	2460	2380	2060	2020	2860	5210	12000	21400	10000	3580	2720
9	3610	2660	2430	1940	2030	3090	5570	11100	20500	9300	3580	2880
10	3160	2690	2350	2040	1950	3250	5700	10100	18900	9450	3540	3350
11	3330	2690	2170	2150	1910	3070	5730	9290	17200	8800	3400	3770
12	3460	2930	2000	2110	2000	2910	5660	8950	15800	8220	3290	3560
13	3710	2900	2000	2020	2110	2830	5730	8940	15700	8020	3310	3420
14	3640	2650	2070	1950	2140	2740	5730	9230	16000	7840	3380	3330
15	3410	2740	2180	1970	2240	2780	5450	9650	16700	7580	3250	3220
16	3220	2750	2160	2060	2420	2820	5290	10200	17100	7670	3170	3010
17	3040	2620	2150	2160	2370	2770	5530	9910	17300	8280	3040	2860
18	2730	2750	2250	2160	2380	2750	5660	9460	17300	7820	2930	2830
19	2620	2690	2370	2220	2810	2660	5410	9270	17000	7350	2980	2880
20	2770	2480	2260	2100	3410	2590	5100	9890	16300	7460	2710	2850
21	2910	2490	2200	2110	3130	2580	5020	11500	15800	7160	2900	2750
22	2960	2490	2260	2060	2540	2560	5480	13000	15300	7040	3160	2610
23	2930	2490	2170	2030	2410	2610	6730	13800	14600	6980	3150	2720
24	2850	2730	2170	2070	2380	2770	7960	13800	13900	6950	3170	3210
25	2830	2900	2260	2080	2460	2930	8510	13800	13200	6810	3430	3180
26	2780	2850	2180	2030	2640	3070	8900	14700	13000	6700	3540	3430
27	2770	2620	2100	2010	2740	3180	8410	15500	14000	6370	3280	3560
28	2750	2380	2070	2020	2720	3420	7670	15900	13400	6030	3140	3620
29	2740	2460	2130	2060	---	3790	7270	16400	12800	5590	3100	3800
30	2750	2970	2150	2110	---	4230	7590	16000	12300	5300	3200	3600
31	2720	---	2250	2160	---	4810	---	15600	---	5070	3250	---
TOTAL	91010	79140	70670	64240	65880	91530	184320	373570	491900	257790	106630	94330
MEAN	2936	2638	2280	2072	2353	2953	6144	12050	16400	8316	3440	3144
MAX	3770	2970	2750	2220	3410	4810	8900	16400	21400	12600	4750	3800
MIN	2320	2380	2000	1940	1910	2560	4920	8740	12300	5070	2710	2610
AC-FT	180500	157000	140200	127400	130700	181500	365600	741000	975700	511300	211500	187100
CAL YR 1985	TOTAL	2025300		MEAN	5549	MAX	24500	MIN	1800	AC-FT	4017000	
WTR YR 1986	TOTAL	1971010		MEAN	5400	MAX	21400	MIN	1910	AC-FT	3909000	

COLORADO RIVER MAIN STEM

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 mi², 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 above 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.--No estimated daily discharges. Records good. Natural flow of stream affected by transmountain diversions, storage reservoirs, power development, and diversion for irrigation of about 160,000 acres.

AVERAGE DISCHARGE.--53 years, 3,974 ft³/s; 2,879,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 39,300 ft³/s, May 26, 1984, gage height, 14.36 ft, minimum daily, 700 ft³/s, Dec. 29, 1939.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 23,200 ft³/s at 2100 June 7, gage height, 10.73 ft, minimum daily, 2,040 ft³/s, Dec. 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3000	2960	2990	2270	2650	3040	6260	9390	16400	12200	4580	3510
2	3040	2900	2830	2180	2840	2980	7010	10800	16700	11700	4360	3470
3	2880	2860	3000	2220	2700	2980	7440	12600	16900	11500	4130	3390
4	2750	2830	2910	2280	2670	3010	6900	14800	18900	11300	3970	3280
5	2620	2680	2750	2270	2570	3030	6160	16400	19900	13000	3920	3150
6	2610	2760	2570	2090	2540	3070	5740	15800	20700	13600	3850	3030
7	2700	2750	2460	2400	2430	3150	5710	14700	22100	11700	3780	2910
8	4070	2790	2440	2360	2380	3230	6040	13200	22100	10500	3640	2830
9	3810	2860	2500	2270	2380	3410	6500	12000	21100	9650	3700	2940
10	3400	2930	2510	2310	2350	3610	6740	10700	19500	9820	3650	3270
11	3850	2980	2470	2390	2260	3530	6730	9580	17700	9060	3520	3720
12	3610	3230	2510	2470	2270	3390	6580	9060	16200	8260	3430	3550
13	3980	3210	2040	2410	2460	3300	6520	9070	15800	8010	3420	3440
14	3840	3030	2150	2340	2650	3210	6460	9390	16200	7910	3490	3370
15	3590	2980	2380	2340	2740	3230	6090	9870	16700	7480	3370	3260
16	3450	3070	2340	2360	2910	3260	5790	10500	17400	7460	3290	3140
17	3310	2950	2360	2470	2890	3240	5990	10300	17800	8090	3200	2970
18	3020	2980	2430	2500	2830	3210	6170	9780	17900	7580	3130	2920
19	2940	3010	2480	2500	3180	3120	5890	9470	17600	7060	3100	2960
20	3020	2880	2360	2530	3730	3050	5450	9930	17000	7210	3000	2940
21	3150	2750	2290	2500	3630	3040	5340	11700	16500	6940	3070	2860
22	3210	2820	2310	2410	3000	3000	5730	13600	16000	6780	3360	2750
23	3190	2720	2250	2370	2860	3020	7110	14400	15300	6770	3340	2780
24	3130	2900	2210	2400	2830	3150	8810	14500	14500	6680	3340	3370
25	3100	3220	2260	2460	2810	3310	9620	14500	13800	6540	3580	3290
26	3070	3180	2320	2390	2960	3450	9970	15200	13600	6420	3670	3500
27	3040	2980	2180	2330	3070	3590	9410	16000	14800	6100	3470	3560
28	3020	2630	2110	2370	3100	3800	8420	16500	14100	5790	3340	3570
29	3000	2670	2130	2410	---	4160	7820	17100	13500	5400	3290	3780
30	3000	3320	2140	2490	---	4570	8100	16800	12900	5100	3390	3630
31	2970	---	2240	2520	---	5160	---	16200	---	4830	3460	---
TOTAL	99370	87830	74920	73610	77690	104300	206500	393840	509600	260440	109840	97140
MEAN	3205	2928	2417	2375	2775	3365	6883	12700	16990	8401	3543	3238
MAX	4070	3320	3000	2530	3730	5160	9970	17100	22100	13600	4580	3780
MIN	2610	2630	2040	2090	2260	2980	5340	9060	12900	4830	3000	2750
AC-FT	197100	174200	148600	146000	154100	206900	409600	781200	1011000	516600	217900	192700
CAL YR 1985	TOTAL	2125700		MEAN	5824	MAX	25800	MIN	2000	AC-FT	4216000	
WTR YR 1986	TOTAL	2095080		MEAN	5740	MAX	22100	MIN	2040	AC-FT	4156000	

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.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum , 1,970 microsiemens Jan. 19, 1940; minimum , 230 microsiemens June 2,3 1984.

WATER TEMPERATURES: Maximum, 24°C Aug. 16, 1962; minimum, 0.0°C on many days during winter months.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum recorded, 1,190 microsiemens Oct. 8; minimum, 306 microsiemens June 19.

WATER TEMPERATURES: Maximum recorded, 23.0°C Aug. 20; minimum, 1.5°C Dec. 9 (may have been lower during period of missing record Dec. 10 through Jan. 22).

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT					
02...	1045	3060	107	884	72
09...	1105	3890	1680	17600	95
16...	1315	3430	120	1110	61
25...	1330	3110	40	336	57
30...	1205	3040	730	5990	59
NOV					
06...	1350	2690	24	174	64
14...	1230	3000	90	729	86
20...	1315	2880	67	521	75
27...	1000	3040	393	3230	94
DEC					
04...	1200	2880	1310	10200	96
11...	1100	2490	173	1160	29
18...	1430	2400	88	570	73
31...	1300	2280	47	289	65
JAN					
15...	1600	2300	44	273	58
22...	1500	2470	30	200	90
28...	1400	2360	26	166	77
FEB					
03...	1200	2660	207	1490	99
13...	1300	2510	28	190	83
18...	1800	2800	488	3690	98
26...	1200	2970	465	3730	94
MAR					
06...	1300	3110	191	1600	98
12...	1430	3390	450	4120	96
19...	1330	3160	143	1220	97
26...	1300	3460	262	2450	96
APR					
02...	0845	6770	2550	46600	78
10...	1500	6770	1420	26000	80
16...	1300	5170	1170	16300	74
23...	1400	6600	1700	30300	78
30...	1400	8020	444	9610	98
MAY					
07...	1200	14700	953	37800	69
14...	1400	9380	401	10200	70
21...	1330	11100	802	24000	75
28...	1430	16900	546	24900	57
JUN					
04...	1330	19300	698	36400	62
11...	1400	17200	307	14300	57
18...	1200	18000	230	11200	51
25...	1300	13700	141	5220	56
JUL					
02...	1000	11400	102	3140	84
09...	1300	9500	249	6390	65
16...	1200	7240	202	3950	79
23...	1100	6680	344	6200	94
30...	1200	5040	37	503	70
AUG					
06...	1300	3790	20	205	71
15...	1600	3340	75	676	79
20...	1200	2880	50	389	58
27...	0900	3460	111	1040	89
SEP					
03...	1200	3460	117	1090	95
10...	1300	3200	589	5090	97
17...	1200	2950	18	143	80
24...	1200	3720	7960	80000	89

COLORADO RIVER MAIN STEM

09095500 COLORADO RIVER NEAR CAMEO, CO--Continued

SPECIFIC CONDUCTANCE, (MICROSIEMENS /CM AT 25 DEG. C), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	940	---	984	---	1010	932	655	580	347	479	692	861
2	946	---	1010	---	999	947	603	552	350	501	715	886
3	972	---	1010	---	1010	961	604	519	355	513	735	942
4	1020	---	1020	---	1010	957	609	481	347	520	760	1040
5	1050	---	1010	---	1010	951	628	442	336	527	781	934
6	1050	---	1020	---	1020	948	643	402	337	522	791	827
7	1060	---	1040	---	1020	949	657	364	358	515	805	857
8	1040	---	1050	---	1020	946	642	372	349	503	828	895
9	941	964	1030	---	1020	942	620	385	354	471	859	929
10	959	961	---	---	1020	930	607	382	351	462	847	948
11	979	975	---	---	1030	934	604	---	356	479	867	880
12	962	996	---	---	1040	978	606	---	368	495	882	839
13	942	985	---	---	1030	990	614	---	371	510	900	852
14	909	964	---	---	971	963	623	---	364	529	904	863
15	923	---	---	---	989	980	628	479	356	548	908	873
16	936	---	---	---	989	962	643	474	347	566	900	892
17	949	---	---	---	965	956	644	466	341	544	940	935
18	978	---	---	---	1000	950	635	456	323	542	959	960
19	1010	---	---	---	988	944	620	444	312	564	960	963
20	1020	---	---	---	920	954	613	432	318	576	957	955
21	967	---	---	---	878	958	613	413	327	581	975	967
22	939	---	---	---	904	958	610	380	337	592	932	992
23	922	---	---	1040	961	954	592	360	346	591	924	1030
24	912	---	---	1050	979	942	509	370	358	585	879	1010
25	906	---	---	1030	978	915	475	368	371	590	870	952
26	898	---	---	1020	944	890	499	347	390	627	871	953
27	896	---	---	1030	935	881	518	332	390	613	800	917
28	---	---	---	1040	931	864	544	326	402	628	788	908
29	---	---	---	1040	---	833	571	324	443	646	742	898
30	---	1020	---	1030	---	799	595	330	460	665	816	914
31	---	---	---	1020	---	763	---	340	---	678	842	---
MEAN	964				985	930	601		359	554	853	922

NOTE: NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR

09095500 COLORADO RIVER NEAR CAMEO, CO---Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	12.5	9.5	---	---	4.0	3.5	---	---	6.0	4.0	8.5	6.0
2	12.5	10.5	---	---	3.5	3.5	---	---	6.5	4.5	9.0	6.0
3	14.0	10.5	---	---	4.5	3.5	---	---	7.0	4.5	10.0	7.5
4	14.0	11.0	---	---	5.5	4.5	---	---	6.0	4.0	9.5	7.0
5	13.5	10.5	---	---	4.5	3.5	---	---	6.0	3.5	10.0	7.0
6	13.0	10.5	---	---	4.0	3.0	---	---	5.5	3.5	10.0	7.0
7	13.0	12.0	---	---	3.0	2.0	---	---	3.5	2.5	10.0	7.5
8	12.0	9.0	---	---	2.5	2.0	---	---	3.5	1.5	10.0	8.5
9	11.0	9.0	6.5	5.0	2.5	1.5	---	---	3.5	1.5	9.5	8.0
10	12.0	10.5	5.5	4.5	---	---	---	---	2.0	1.5	7.5	7.0
11	12.0	11.0	6.5	5.5	---	---	---	---	2.5	1.5	8.0	7.0
12	12.5	10.5	6.5	5.0	---	---	---	---	3.0	1.5	8.5	6.5
13	12.5	10.0	5.0	4.0	---	---	---	---	3.5	2.5	8.0	6.5
14	10.5	9.0	4.0	3.0	---	---	---	---	4.0	2.5	7.5	6.5
15	10.5	9.0	---	---	---	---	---	---	5.0	4.0	8.5	6.5
16	11.0	9.0	---	---	---	---	---	---	5.5	4.5	7.5	6.5
17	11.0	9.5	---	---	---	---	---	---	5.5	4.0	7.5	6.0
18	11.5	9.5	---	---	---	---	---	---	6.5	5.0	8.5	6.5
19	12.5	9.5	---	---	---	---	---	---	7.0	6.0	7.5	5.5
20	12.0	9.5	---	---	---	---	---	---	6.0	4.5	8.5	6.0
21	11.5	10.0	---	---	---	---	---	---	5.5	3.5	10.0	6.5
22	10.5	9.5	---	---	---	---	---	---	6.0	4.0	11.0	7.5
23	10.5	8.5	---	---	---	---	3.5	2.0	7.0	4.5	12.0	8.5
24	11.0	8.5	---	---	---	---	4.0	2.0	8.0	5.5	11.5	9.5
25	11.0	9.0	---	---	---	---	4.0	2.0	9.0	6.0	12.0	9.0
26	11.5	9.5	---	---	---	---	4.0	2.0	10.0	7.5	12.0	9.5
27	11.5	9.5	---	---	---	---	4.5	2.0	10.0	8.0	12.5	9.5
28	---	---	---	---	---	---	4.5	2.5	8.5	6.5	12.5	10.0
29	---	---	---	---	---	---	5.5	3.0	---	---	12.5	10.5
30	---	---	5.0	4.0	---	---	5.0	3.5	---	---	12.5	10.5
31	---	---	---	---	---	---	5.5	4.0	---	---	13.0	11.5
MONTH									10.0	1.5	13.0	5.5
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	11.5	10.0	14.0	11.5	14.5	12.5	17.5	14.5	20.5	17.5	19.0	17.0
2	10.0	9.0	14.0	11.5	14.0	12.0	18.5	15.5	20.5	18.5	18.0	16.0
3	9.0	7.0	14.0	11.5	14.0	12.0	18.5	15.5	20.5	18.0	18.5	15.5
4	8.0	6.0	13.5	11.5	13.5	12.5	18.5	16.0	20.0	18.5	19.0	16.0
5	9.5	6.5	11.0	9.5	13.0	11.5	18.0	16.0	18.5	17.0	19.0	16.0
6	10.5	7.5	10.0	8.5	13.5	11.5	17.0	15.0	19.5	16.5	19.0	16.0
7	10.0	9.0	9.0	8.0	13.0	11.5	16.5	14.5	20.5	17.5	19.0	16.0
8	10.5	8.5	9.0	7.5	13.0	11.5	16.5	14.0	21.0	18.5	18.0	16.0
9	11.0	8.5	9.0	8.0	12.5	11.5	17.0	14.5	20.5	17.5	17.5	15.5
10	11.5	10.0	11.0	7.5	12.5	11.5	17.0	15.0	21.5	18.5	15.5	14.0
11	10.5	9.0	---	---	13.0	10.5	17.0	14.5	20.5	18.5	15.5	13.0
12	10.0	8.5	---	---	14.5	11.5	18.5	15.0	21.0	18.5	15.5	13.5
13	10.0	7.5	---	---	14.5	12.5	19.0	16.0	21.0	18.0	15.5	13.5
14	8.5	6.0	---	---	14.5	12.0	19.0	16.5	20.0	18.0	16.5	14.0
15	10.0	7.0	11.5	10.0	14.0	12.0	19.0	17.0	20.0	17.0	16.5	14.0
16	10.0	9.0	10.0	9.0	14.5	12.0	18.5	17.0	21.0	18.0	16.5	14.5
17	9.5	8.5	12.5	8.5	15.0	12.5	17.5	15.5	22.0	18.5	15.5	13.5
18	10.0	7.5	13.0	10.0	14.0	12.5	19.0	15.5	22.5	19.0	13.5	12.5
19	10.0	8.0	14.0	10.5	14.0	12.0	18.0	15.5	22.5	20.0	13.5	11.5
20	11.0	9.0	15.5	12.0	14.5	12.0	17.5	15.5	23.0	20.5	13.5	12.5
21	13.0	9.5	15.5	13.0	14.5	12.0	18.0	14.5	22.5	20.0	14.0	12.5
22	13.5	11.5	14.5	12.5	15.0	12.5	18.0	16.0	21.5	19.0	14.5	13.5
23	13.5	11.5	13.5	11.5	15.5	12.5	17.5	15.0	20.0	18.5	15.0	14.0
24	12.0	10.0	13.5	11.5	15.0	13.0	18.0	15.0	20.5	18.0	14.5	11.5
25	11.0	10.0	14.0	11.5	14.5	13.0	17.5	15.0	21.5	18.0	11.5	10.5
26	10.5	8.5	14.5	12.0	16.5	13.0	17.5	15.5	21.0	19.0	11.0	9.5
27	10.0	7.5	14.0	12.0	17.0	14.5	18.5	15.5	21.0	18.5	10.5	9.5
28	11.5	8.0	16.0	12.0	17.5	14.5	19.0	16.0	20.0	18.5	10.5	9.5
29	13.0	9.5	15.0	13.5	17.5	15.0	19.0	16.5	19.0	18.5	10.5	9.5
30	14.0	11.0	14.5	12.5	17.0	15.0	19.5	16.5	20.0	17.0	10.5	9.0
31	---	---	15.0	12.5	---	---	20.0	17.0	19.5	18.0	---	---
MONTH	14.0	6.0			17.5	10.5	20.0	14.0	23.0	16.5	19.0	9.0

NOTE: NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR

COLORADO RIVER BASIN

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 December 1985 (discontinued).

GAGE.--Water-stage recorder and Marsh-McBirney velocity meter. Elevation of gage is 4,740 ft above National Geodetic Vertical Datum of 1929, 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.--Estimated daily discharges: Oct. 1 to Nov. 14. Records 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 ft³/s, June 16, 1983; no flow for part of each year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	240	295	.00									
2	230	290	.00									
3	240	295	.00									
4	250	310	.00									
5	260	320	.00									
6	260	305	.00									
7	270	315	.00									
8	280	320	.00									
9	290	335	.00									
10	300	355	.00									
11	310	335	.00									
12	290	355	.00									
13	270	290	.00									
14	250	115	.00									
15	250	.00	.00									
16	220	.00	.00									
17	210	.00	.00									
18	200	.00	.00									
19	190	.00	.00									
20	180	.00	.00									
21	175	.00	.00									
22	175	.00	.00									
23	190	.00	.00									
24	190	.00	.00									
25	220	.00	.00									
26	240	.00	.00									
27	240	.00	.00									
28	235	.00	.00									
29	225	.00	.00									
30	230	.00	.00									
31	290	---	.00									
TOTAL	7400	4235.00	.00									
MEAN	239	141	.00									
MAX	310	355	.00									
MIN	175	.00	.00									
AC-FT	14680	8400	.00									
CAL YR 1985	TOTAL	60392.00	MEAN	165	MAX	374	MIN	.00	AC-FT	119800		

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 December 1985 (discontinued).

GAGE.--Water-stage recorder and Marsh-McBirney velocity meter. Elevation of gage is 4,720 ft above National Geodetic Vertical Datum of 1929, 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 ft³/s June 8, 1984; no flow for part of each year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	153	285	.00									
2	147	279	.00									
3	149	282	.00									
4	152	295	.00									
5	155	301	.00									
6	157	292	.00									
7	165	296	.00									
8	191	292	.00									
9	219	291	.00									
10	244	294	.00									
11	298	294	.00									
12	264	281	.00									
13	247	211	.00									
14	245	167	.00									
15	245	49	.00									
16	192	.00	.00									
17	180	.00	.00									
18	178	.00	.00									
19	174	.00	.00									
20	169	.00	.00									
21	168	.00	.00									
22	168	.00	.00									
23	175	.00	.00									
24	179	.00	.00									
25	210	.00	.00									
26	233	.00	.00									
27	229	.00	.00									
28	222	.00	.00									
29	222	.00	.00									
30	231	.00	.00									
31	265	---	.00									
TOTAL	6226	3909.00	.00									
MEAN	201	130	.00									
MAX	298	301	.00									
MIN	147	.00	.00									
AC-FT	12350	7750	.00									
CAL YR 1985	TOTAL	45745.00	MEAN	125	MAX	339	MIN	.00	AC-FT	90740		

PLATEAU CREEK BASIN

09105000 PLATEAU CREEK NEAR CAMEO, CO

LOCATION.--Lat 39°11'00", long 108°16'02", in SW¼SW¼ sec.18, T.10 S., R.97 W., Mesa County, Hydrologic Unit 14010005, on left bank 300 ft from State Highway 65, 1.15 mi upstream from mouth and 4 mi northeast of Cameo.

DRAINAGE AREA.--592 mi².

PERIOD OF RECORD.--October 1935 to September 1983. October 1985 to September 1986. Prior to May 1936, monthly discharges only, published in WSP 1313.

REVISED RECORDS.--WSP 979: 1942. WSP 2124: Drainage area. WDR-CO-83-2: 1973 (M), 1975 (M).

GAGE.--Water-stage recorder. Elevation of gage is 4,840 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Aug. 27, 1936, nonrecording gage.

REMARKS.--Estimated daily discharges: Oct. 1 to Mar. 13, Apr. 1-10, 16, 17, 22, 23, and Apr. 28 to May 2. Records good except for estimated daily discharges, which are poor. Natural flow of stream affected by storage reservoirs, diversions for irrigation of about 25,000 acres, return flow from irrigated areas, and for power development. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--49 years (water years 1935-83, 1986) 190 ft³/s; 137,700 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,010 ft³/s, June 22, 1983, gage height, 8.51 ft; maximum gage height, 8.59 ft, May 28, 1983; minimum daily discharge, 8.2 ft³/s, Aug. 15, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,810 ft³/s, at 0300 June 5, gage height 5.96 ft; minimum daily, 90 ft³/s, Jan. 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	120	140	130	110	110	190	720	960	1790	388	157	163
2	115	150	120	110	110	180	700	1100	1700	355	156	157
3	110	150	120	110	110	170	450	1380	1740	327	154	180
4	110	130	120	110	110	170	330	1620	2230	311	156	162
5	100	150	120	100	110	180	280	1400	2430	395	156	156
6	100	150	120	110	110	190	290	1100	2240	507	164	158
7	130	120	120	96	110	200	230	1050	2280	383	164	156
8	220	130	120	90	110	220	370	857	2070	357	159	185
9	230	140	120	100	110	250	400	760	1830	331	157	191
10	200	140	110	105	96	200	425	701	1540	324	155	232
11	210	140	100	110	100	180	403	741	1290	271	150	269
12	210	140	100	110	110	160	390	764	1220	247	148	241
13	230	140	110	110	110	122	449	730	1170	220	180	224
14	230	130	110	110	110	155	381	737	1130	196	162	217
15	220	130	110	110	120	157	420	795	1000	191	156	205
16	200	130	110	110	110	150	435	958	1010	219	151	203
17	200	140	110	110	110	157	450	938	958	211	150	192
18	190	140	110	110	120	150	463	890	864	197	143	183
19	170	130	110	110	130	122	421	838	813	314	137	192
20	160	110	110	110	150	140	417	961	746	219	135	190
21	150	130	110	110	140	138	386	1190	679	186	151	182
22	160	120	100	110	130	157	500	1430	596	182	160	183
23	160	130	100	110	130	183	740	1490	553	190	160	300
24	150	140	110	110	140	216	806	1520	458	175	153	463
25	140	140	110	100	150	220	770	1470	483	193	159	386
26	140	140	110	100	170	225	732	1780	546	195	160	394
27	140	130	110	110	190	219	584	1950	448	181	144	322
28	140	130	110	110	200	279	630	2030	426	167	141	401
29	140	130	110	110	---	313	670	2030	451	165	157	391
30	150	130	110	110	---	329	780	1850	412	166	161	347
31	150	---	110	110	---	536	---	1730	---	162	153	---
TOTAL	5075	4050	3470	3331	3506	6258	15022	37750	35103	7925	4789	7225
MEAN	164	135	112	107	125	202	501	1218	1170	256	154	241
MAX	230	150	130	110	200	536	806	2030	2430	507	180	463
MIN	100	110	100	90	96	122	230	701	412	162	135	156
WTR YR 1986	TOTAL	133504		MEAN	366	MAX	2430	MIN	90			

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 December 1985 (discontinued).

GAGE.--Water-stage recorder. Elevation of gage is 4,595 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 14 to Dec. 31. Records fair except for estimated daily discharges, which are poor. 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 ft³/s, Sept. 22, 1980, Aug. 28, 1982; no flow for part of each year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	126	131	.00									
2	126	131	.00									
3	126	131	.00									
4	127	131	.00									
5	127	131	.00									
6	127	131	.00									
7	127	131	.00									
8	127	131	.00									
9	127	131	.00									
10	127	131	.00									
11	128	131	.00									
12	128	65	76									
13	128	4.2	36									
14	129	3.6	.00									
15	129	2.7	.00									
16	129	.00	.00									
17	129	.00	.00									
18	129	.00	.00									
19	129	.00	.00									
20	130	.00	.00									
21	130	.00	.00									
22	130	.00	.00									
23	130	.00	.00									
24	130	.00	.00									
25	130	.00	.00									
26	130	.00	.00									
27	131	.00	.00									
28	131	.00	.00									
29	131	.00	.00									
30	131	.00	.00									
31	131	---	.00									
TOTAL	3990	1516.50	112.00									
MEAN	129	50.5	3.61									
MAX	131	131	76									
MIN	126	.00	.00									
AC-FT	7910	3010	222									
CAL YR 1985	TOTAL	27747.50		MEAN	76.0	MAX	135	MIN	.00	AC-FT	55040	

COLORADO RIVER BASIN

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 'O' Road, 1,800 ft west of 13 Road, and 2.5 mi north of Loma.

PERIOD OF RECORD.--October 1975 to December 1985 (discontinued).

GAGE.--Water-stage recorder. Elevation of gage is 4,585 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 27 to Nov. 15, and Dec. 12-13. Records fair except for estimated daily discharges, which are poor. 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 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, 88 ft³/s, June 7, 8, July 25 1982; no flow part of each year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	67	56	.00									
2	69	54	.00									
3	69	54	.00									
4	68	54	.00									
5	66	52	.00									
6	64	52	.00									
7	68	54	.00									
8	67	52	.00									
9	64	54	.00									
10	60	54	.00									
11	58	48	.00									
12	54	15	15									
13	57	11	10									
14	55	6.2	.00									
15	54	3.4	.00									
16	54	.00	.00									
17	54	.00	.00									
18	54	.00	.00									
19	54	.00	.00									
20	54	.00	.00									
21	54	.00	.00									
22	55	.00	.00									
23	54	.00	.00									
24	55	.00	.00									
25	54	.00	.00									
26	54	.00	.00									
27	56	.00	.00									
28	54	.00	.00									
29	54	.00	.00									
30	54	.00	.00									
31	52	---	.00									
TOTAL	1806	619.60	25.00									
MEAN	58.3	20.7	.81									
MAX	69	56	15									
MIN	52	.00	.00									
AC-FT	3580	1230	50									

CAL YR 1985 TOTAL 14544.60 MEAN 39.8 MAX 84 MIN .00 AC-FT 28850

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 mi².

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 above National Geodetic Vertical Datum of 1929 (levels by U.S. Bureau of Reclamation); gage readings have been reduced to elevations above National Geodetic Vertical Datum of 1929.

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 provided 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, 107,700 acre-ft, June 28-29, elevation, 9,330.80 ft; minimum 48,200 acre-ft, April 30, elevation, 9,294.80 ft.

MONTHEND ELEVATION IN FEET NGVD AND CONTENTS, AT 1800, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

Date	Elevation	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.	9,313.60	75,800	--
Oct. 31.	9,310.20	70,000	-5,800
Nov. 30.	9,308.70	67,600	-2,400
Dec. 31.	9,309.60	69,000	+1,400
CAL YR 1985	-	-	+1,300
Jan. 31.	9,310.20	70,000	+1,000
Feb. 28.	9,310.60	70,600	+600
Mar. 31.	9,301.70	57,200	-13,400
Apr. 30.	9,294.80	48,200	-9,000
May 31.	9,307.80	66,200	+18,000
June 30.	9,330.70	107,500	+41,300
July 31.	9,328.70	103,400	-4,100
Aug. 31.	9,323.50	93,300	-10,100
Sept. 30.	9,316.60	80,700	-12,600
WTR YR 1986.	-	-	+4,900

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 mi².

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 above 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.--Estimated daily discharges: Nov. 13 to Apr. 23. Records good, except for estimated daily discharges, which are poor. Flow regulated by Taylor Park Reservoir (station 09108500) since 1937. One small diversion for irrigation from Willow Creek upstream from 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 ft³/s; 113,000 acre-ft/yr; 48 years (water years 1939-86), 199 ft³/s; 144,200 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,270 ft³/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, 1,250 ft³/s at 0900 June 28, gage height, 6.24 ft; minimum daily, 75 ft³/s, many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	574	141	160	85	75	75	360	335	390	1110	444	417
2	571	142	135	85	75	75	360	334	390	1030	386	418
3	553	144	135	85	75	75	360	335	384	968	403	418
4	516	143	135	80	75	95	360	339	382	928	411	423
5	470	145	135	80	75	160	360	352	368	981	405	436
6	430	142	135	80	75	245	360	356	377	1070	406	437
7	396	141	135	80	75	305	360	357	387	1050	402	437
8	344	141	135	80	75	375	360	349	396	966	412	440
9	280	142	110	80	75	375	360	339	368	950	401	440
10	228	143	90	80	75	375	355	338	283	919	404	441
11	183	145	90	80	75	375	355	341	182	837	407	430
12	158	145	90	80	75	375	355	340	143	769	406	430
13	157	140	90	80	75	375	355	340	147	723	400	432
14	156	165	90	80	75	375	355	341	152	702	406	430
15	155	190	90	80	75	370	355	353	150	660	404	423
16	155	190	90	80	75	370	355	376	149	660	412	421
17	156	190	90	75	75	370	355	390	150	666	412	417
18	155	190	90	75	75	370	355	392	220	643	413	424
19	147	190	90	75	75	370	350	397	307	650	411	421
20	146	190	90	75	75	370	350	399	440	664	408	415
21	147	190	90	75	75	370	350	396	680	648	418	419
22	148	190	85	75	75	370	350	395	843	643	409	414
23	148	190	85	75	75	370	350	395	929	642	415	409
24	149	190	85	75	75	365	358	391	785	615	423	421
25	150	190	85	75	75	365	358	391	710	589	424	424
26	151	190	85	75	75	365	350	339	956	594	423	418
27	150	190	85	75	75	365	337	196	1180	589	423	416
28	149	190	85	75	75	365	336	196	1240	593	426	403
29	149	190	85	75	---	365	337	197	1220	579	415	364
30	150	190	85	75	---	365	337	259	1170	539	414	291
31	142	---	85	75	---	365	---	388	---	510	416	---
TOTAL	7563	5059	3145	2420	2100	9905	10598	10646	15478	23487	12759	12529
MEAN	244	169	101	78.1	75.0	320	353	343	516	758	412	418
MAX	574	190	160	85	75	375	360	399	1240	1110	444	441
MIN	142	140	85	75	75	75	336	196	143	510	386	291
AC-FT	15000	10030	6240	4800	4170	19650	21020	21120	30700	46590	25310	24850
CAL YR 1985	TOTAL	96661	MEAN	265	MAX	646	MIN	50	AC-FT	191700		
WTR YR 1986	TOTAL	115689	MEAN	317	MAX	1240	MIN	75	AC-FT	229500		

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 mi².

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 above National Geodetic Vertical Datum of 1929. Prior to Apr. 16, 1922, nonrecording gage at same site and datum.

REMARKS.--Estimated daily discharges: Nov. 14 to Mar. 11. Records good except for estimated daily discharges, which are poor. Flow partly regulated since September 1937 by Taylor Park Reservoir (station 09108500), 24 mi upstream from station. Diversions for irrigation of about 360 acres upstream from station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--76 years, 340 ft³/s; 246,300 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 3,760 ft³/s, June 9, 1920, gage height, 5.00 ft, from rating curve extended above 2,300 ft³/s; maximum gage height, 5.32 ft, July 1, 1957; minimum discharge observed before storage began in Taylor Park Reservoir, 50 ft³/s for several days in August 1913, gage height, 1.2 ft; minimum daily discharge, subsequent to completion of Taylor Park Dam, 24 ft³/s, Mar. 12, 1938.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,660 ft³/s at 1100 June 27, gage height, 4.09 ft; minimum daily, 85 ft³/s, Jan. 25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	644	236	220	110	100	130	451	640	931	1370	630	551
2	637	236	200	110	100	130	458	676	923	1240	562	551
3	615	236	200	110	100	130	445	726	990	1140	574	562
4	583	231	190	110	100	160	431	798	1120	1080	584	534
5	540	230	170	100	90	230	424	794	1160	1210	582	539
6	501	230	180	110	90	310	427	739	1290	1370	615	538
7	483	226	190	110	100	380	439	692	1420	1310	590	538
8	439	232	190	100	100	380	452	655	1360	1170	598	540
9	380	233	160	100	100	390	461	618	1340	1190	588	545
10	316	227	130	110	90	400	463	591	1040	1120	570	585
11	298	224	110	110	90	400	468	588	847	1000	569	549
12	246	225	100	110	100	378	471	592	788	929	551	533
13	241	226	100	100	110	380	474	595	822	890	539	527
14	245	230	110	100	110	383	460	613	853	873	534	525
15	234	220	120	100	130	385	460	638	849	828	529	521
16	236	220	120	100	120	386	465	671	835	878	565	526
17	238	240	130	90	110	384	464	670	823	865	568	521
18	237	260	140	90	120	381	453	661	831	839	567	533
19	235	240	150	90	120	384	450	673	904	845	565	535
20	234	240	140	100	120	391	455	711	975	932	557	525
21	235	250	150	100	110	394	490	774	1210	914	562	533
22	237	230	140	90	100	394	529	833	1400	898	552	529
23	236	250	140	100	100	394	553	859	1470	881	549	534
24	236	260	140	100	110	394	580	868	1300	839	560	543
25	236	260	130	85	110	394	586	874	1060	804	583	542
26	236	260	120	90	120	395	562	924	1420	799	579	514
27	235	250	120	90	130	399	515	763	1610	788	571	518
28	239	240	110	90	130	408	506	773	1600	785	569	504
29	239	260	110	100	---	420	527	774	1530	768	577	491
30	239	250	120	100	---	430	589	746	1450	731	558	409
31	240	---	120	110	---	447	---	912	---	697	553	---
TOTAL	10190	7152	4450	3115	3010	10961	14508	22441	34151	29983	17650	15895
MEAN	329	238	144	100	108	354	484	724	1138	967	569	530
MAX	644	260	220	110	130	447	589	924	1610	1370	630	585
MIN	234	220	100	85	90	130	424	588	788	697	529	409
AC-FT	20210	14190	8830	6180	5970	21740	28780	44510	67740	59470	35010	31530
CAL YR 1985	TOTAL	165217		MEAN	453	MAX	1220	MIN	60	AC-FT	327700	
WTR YR 1986	TOTAL	173506		MEAN	475	MAX	1610	MIN	85	AC-FT	344100	

GUNNISON RIVER BASIN

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 above 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.--Estimated daily discharges: Dec. 6, and Dec. 16 to Feb. 14. Records good except for estimated daily discharges, which are fair. Diversions for irrigation of about 7,400 acres upstream from station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--64 years (water years 1911-22, 1935-86), 343 ft³/s; 248,500 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.--Peak discharges greater than base discharge of 1,600 ft³/s, and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 4	1900	1,940	6.00	June 7	0700	*3,060	*7.32

Minimum daily discharge, 76 ft³/s, Feb. 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	215	176	122	95	94	96	378	1110	1790	1360	543	255
2	205	176	128	95	89	97	405	1290	1680	1300	535	255
3	200	183	128	96	88	101	362	1520	1920	1280	546	250
4	205	170	124	95	86	103	305	1760	2380	1270	539	234
5	199	179	101	95	82	107	283	1700	2520	1410	515	223
6	196	177	106	96	81	111	287	1440	2640	1430	568	214
7	265	160	113	94	83	117	330	1220	2810	1280	553	212
8	327	175	121	91	84	124	357	1050	2590	1090	509	217
9	280	170	111	92	82	132	376	964	2380	1060	477	243
10	256	164	102	93	79	131	399	862	1880	1060	453	369
11	272	169	100	92	76	133	418	825	1570	950	433	320
12	269	167	94	92	79	125	435	859	1530	918	417	294
13	252	149	99	95	80	122	434	941	1670	922	408	281
14	246	131	100	93	82	128	374	1000	1730	890	389	275
15	220	149	101	92	84	127	364	1040	1860	836	378	264
16	217	128	100	90	81	114	382	980	1880	927	356	248
17	217	149	101	88	81	125	378	939	1900	857	334	239
18	212	147	104	86	82	116	347	919	1870	781	322	230
19	212	127	104	88	84	105	318	970	1840	768	315	225
20	211	118	107	92	86	118	327	1090	1770	777	315	216
21	209	132	106	89	82	109	456	1360	1770	838	314	210
22	209	120	105	90	80	114	651	1470	1730	768	318	236
23	204	135	102	94	81	120	841	1440	1660	794	299	328
24	196	135	102	90	82	127	899	1410	1640	751	314	353
25	191	133	99	85	84	133	849	1330	1510	722	333	316
26	190	130	97	85	88	142	744	1540	1790	693	302	306
27	189	127	97	88	93	158	639	1640	1870	644	282	288
28	191	140	98	94	94	182	610	1750	1730	614	270	296
29	195	136	99	95	---	221	739	1860	1630	583	269	308
30	193	126	100	98	---	266	925	1660	1560	549	267	291
31	192	---	100	99	---	333	---	1690	---	550	258	---
TOTAL	6835	4478	3271	2857	2347	4237	14612	39629	57100	28672	12131	7996
MEAN	220	149	106	92.2	83.8	137	487	1278	1903	925	391	267
MAX	327	183	128	99	94	333	925	1860	2810	1430	568	369
MIN	189	118	94	85	76	96	283	825	1510	549	258	210
AC-FT	13560	8880	6490	5670	4660	8400	28980	78600	113300	56870	24060	15860
CAL YR 1985	TOTAL	160223		MEAN	439	MAX	2920	MIN	67	AC-FT	317800	
WTR YR 1986	TOTAL	184165		MEAN	505	MAX	2810	MIN	76	AC-FT	365300	

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 mi².

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. Elevation of gage is 7,655 ft above National Geodetic Vertical Datum of 1929, 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.--Estimated daily discharges: Dec. 12 to Feb. 17, Feb. 20, 21, 23, Mar. 13 to Apr. 22. Records good except for estimated daily discharges, which are poor. Flow regulated by Taylor Park Reservoir (station 09108500), 37 mi upstream from station. Diversions for irrigation of about 22,000 acres upstream from station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--60 years (water years 1911-28, 1945-86), 773 ft³/s; 560,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 11,400 ft³/s, June 13, 1918, gage height, 4.05 ft, site and datum then in use, from rating curve extended above 5,000 ft³/s; minimum daily discharge, 80 ft³/s, Dec. 27, 1962.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,970 ft³/s at 0800 June 7, gage height, 4.49 ft; maximum gage height, 4.83 ft, Feb. 2 (backwater from ice); minimum daily, 230 ft³/s, Feb. 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	957	470	406	390	370	302	955	1950	3070	2880	1310	935
2	946	452	385	390	360	308	990	2190	2970	2730	1220	935
3	944	468	395	390	355	302	890	2510	3240	2590	1240	913
4	935	435	378	390	355	308	810	2810	3910	2510	1270	872
5	892	444	315	370	325	377	780	2910	4250	2430	1280	891
6	841	436	345	390	325	515	785	2630	4440	3000	1380	870
7	897	407	357	390	350	615	845	2220	4690	2720	1320	841
8	988	450	371	360	350	652	890	1950	4440	2430	1280	830
9	882	452	315	365	345	644	920	1800	4190	2450	1230	879
10	792	421	302	385	320	635	950	1620	3420	2390	1200	1070
11	754	433	302	385	315	626	975	1570	2830	2150	1180	1000
12	664	428	270	385	320	617	995	1580	2700	2030	1140	936
13	662	400	280	370	325	600	1000	1650	2810	2000	1130	913
14	651	378	295	365	305	615	915	1810	2860	1920	1110	902
15	600	406	310	365	300	615	905	1870	3000	1810	1090	871
16	599	385	310	360	260	600	890	1900	2970	1930	1080	850
17	573	422	345	340	230	610	885	1810	2980	1870	1060	830
18	565	436	365	335	236	595	840	1750	3000	1730	1030	811
19	572	400	380	340	248	585	805	1780	3030	1740	1020	830
20	572	372	370	365	260	585	820	2000	3000	1840	1010	801
21	570	412	385	360	250	580	995	2380	3170	1900	1010	790
22	554	365	370	340	255	585	1240	2620	3240	1830	1000	810
23	545	412	365	370	235	590	1430	2640	3150	1870	969	924
24	536	413	365	360	272	600	1640	2590	3090	1760	1020	978
25	521	413	365	325	272	605	1610	2460	2740	1710	1100	957
26	509	413	370	335	284	620	1480	2720	3260	1660	1040	914
27	500	398	370	340	290	640	1290	2690	3460	1610	991	902
28	498	420	355	350	290	680	1230	2810	3300	1530	968	907
29	492	420	355	370	---	735	1350	2980	3210	1490	990	913
30	492	417	395	375	---	800	1650	2780	3150	1410	958	832
31	484	---	395	395	---	895	---	2880	---	1360	946	---
TOTAL	20987	12578	10886	11350	8402	18036	31760	69860	99570	63280	34572	26707
MEAN	677	419	351	366	300	582	1059	2254	3319	2041	1115	890
MAX	988	470	406	395	370	895	1650	2980	4690	3000	1380	1070
MIN	484	365	270	325	230	302	780	1570	2700	1360	946	790
AC-FT	41630	24950	21590	22510	16670	35770	63000	138600	197500	125500	68570	52970
CAL YR 1985	TOTAL	380316		MEAN	1042	MAX	4430	MIN	155	AC-FT	754400	
WTR YR 1986	TOTAL	407988		MEAN	1118	MAX	4690	MIN	230	AC-FT	809200	

GUNNISON RIVER BASIN

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 mi².

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

GAGE.--Water-stage recorder. Elevation of gage is 8,470 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 15-18, 20 - Jan. 28, Feb. 11-13, 26-28, Apr. 16-22, Aug. 5-7. Records fair except for estimated daily discharges, which are poor. Diversions for irrigation of hay meadows upstream from station. Transmountain diversion by Tarbell ditch exports water upstream from station to Saguache Creek, since 1913. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--5 years, 65.4 ft³/s; 47,380 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,120 ft³/s, May 23, 1984, gage height, 4.49 ft; minimum daily, 8.4 ft³/s, Feb. 7, 1982.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 197 ft³/s at 1200 July 22, gage height, 2.82 ft; minimum daily, 16 ft³/s, May 22, 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36	44	38	27	26	56	58	74	36	119	87	51
2	38	41	39	26	28	59	56	69	44	93	106	49
3	51	42	39	27	29	64	49	61	50	85	118	49
4	51	42	37	27	28	70	43	55	53	96	116	46
5	51	44	35	26	25	71	44	51	79	133	120	46
6	50	45	37	26	25	66	48	50	85	162	130	45
7	53	38	38	27	27	61	51	44	119	141	110	43
8	55	44	38	26	25	57	48	41	134	117	101	46
9	53	45	38	26	25	50	47	38	134	122	96	61
10	52	40	34	27	24	41	45	37	133	112	88	61
11	53	44	29	26	24	38	45	37	113	92	84	54
12	53	46	27	26	24	39	46	32	92	84	86	53
13	50	41	27	26	25	36	46	31	95	84	97	52
14	52	42	27	27	25	35	42	31	118	91	87	51
15	51	39	29	26	27	37	46	26	130	93	78	49
16	49	40	29	25	32	35	47	25	125	90	74	48
17	50	41	29	25	35	36	46	23	135	91	72	48
18	53	41	30	24	34	37	44	21	138	97	72	46
19	53	40	30	25	34	34	43	17	131	112	70	46
20	50	39	30	26	36	37	43	18	126	157	60	44
21	49	41	30	26	36	36	45	18	119	166	59	44
22	49	37	31	25	32	38	46	16	113	192	54	42
23	48	37	30	25	41	44	46	16	104	183	66	43
24	46	40	29	27	45	47	45	19	104	183	84	45
25	46	40	29	25	51	46	46	21	107	146	117	48
26	46	40	30	25	52	51	45	20	126	132	89	45
27	45	39	28	25	62	52	41	22	109	116	64	44
28	45	38	28	24	58	57	45	27	94	98	58	44
29	45	39	28	26	---	60	68	39	109	91	65	42
30	44	40	28	26	---	59	88	45	123	79	72	42
31	44	---	29	26	---	59	---	40	---	82	58	---
TOTAL	1511	1229	980	801	935	1508	1452	1064	3178	3639	2638	1427
MEAN	48.7	41.0	31.6	25.8	33.4	48.6	48.4	34.3	106	117	85.1	47.6
MAX	55	46	39	27	62	71	88	74	138	192	130	61
MIN	36	37	27	24	24	34	41	16	36	79	54	42
AC-FT	3000	2440	1940	1590	1850	2990	2880	2110	6300	7220	5230	2830
CAL YR 1985	TOTAL	23156		MEAN	63.4	MAX	316	MIN	27	AC-FT	45930	
WTR YR 1986	TOTAL	20362		MEAN	55.8	MAX	192	MIN	16	AC-FT	40390	

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 mi².

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 in WSP 1313. Published as "near Gunnison" 1910.

REVISED RECORDS.--WSP 2124: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 7,628.58 ft above 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.--Estimated daily discharges: Nov. 4-17, 20-25, Nov. 29 to Apr. 23, June 2-17, Aug. 15-25, 27-29, Sept. 1-9, 12-25, and 28-30. Records fair except for estimated daily discharges, which are poor. Diversions for irrigation of about 24,000 acres upstream from station. Water diverted upstream from 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.--49 years (water years 1938-86), 176 ft³/s; 127,500 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,620 ft³/s, May 23, 1984, gage height, 5.49 ft; minimum daily, 2.6 ft³/s, Sept. 30, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, unknown; maximum gage height, unknown; minimum daily, 75 ft³/s, Jan 25.

REVISIONS.--The discharge table published in the 1985 report was not the table for this station. The correct table is being published herein, and supersedes that published in WDR CO-85-2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	94	216	125	110	90	105	120	450	936	339	420	64
2	75	208	120	100	85	110	135	505	910	321	400	66
3	70	186	105	105	95	105	165	540	876	320	380	66
4	230	195	115	105	100	100	220	640	837	271	320	66
5	273	148	110	105	100	100	170	727	825	230	291	64
6	250	135	115	110	100	110	150	770	833	216	271	64
7	225	138	110	110	100	115	200	815	886	211	253	62
8	204	140	110	110	100	115	350	852	998	207	236	62
9	192	138	135	115	95	120	500	914	1180	201	257	62
10	187	124	130	115	90	145	461	914	1360	187	269	64
11	154	89	130	110	85	150	459	936	1410	200	245	68
12	105	130	120	110	90	145	455	939	1260	201	241	78
13	164	135	125	105	95	135	457	960	1140	286	210	115
14	194	140	125	100	90	130	489	892	1010	289	157	83
15	220	130	125	100	95	135	553	749	927	240	126	63
16	198	111	120	100	100	140	610	670	847	244	128	104
17	211	106	115	100	100	140	622	640	813	259	124	111
18	230	130	115	105	100	145	631	618	771	288	124	94
19	215	120	115	110	95	140	663	601	695	308	123	132
20	231	110	120	105	100	135	608	623	649	348	119	130
21	226	98	115	105	100	140	524	619	583	362	111	151
22	221	92	110	105	100	135	493	623	529	370	111	170
23	232	113	95	105	100	125	446	598	496	427	108	177
24	232	120	90	105	95	130	415	609	486	410	96	168
25	224	128	95	105	100	135	401	608	551	334	63	149
26	216	125	105	105	100	135	409	646	585	350	62	134
27	220	130	110	105	100	125	390	700	519	340	60	132
28	230	130	115	105	100	120	387	761	453	313	60	131
29	215	140	115	105	---	120	394	831	403	416	60	154
30	202	140	110	105	---	115	414	910	367	459	62	144
31	204	---	110	95	---	115	---	941	---	417	63	---
TOTAL	6144	4045	3555	3275	2700	3915	12291	22601	24135	9364	5550	3128
MEAN	198	135	115	106	96.4	126	410	729	805	302	179	104
MAX	273	216	135	115	100	150	663	960	1410	459	420	177
MIN	70	89	90	95	85	100	120	450	367	187	60	62
AC-FT	12190	8020	7050	6500	5360	7770	24380	44830	47870	18570	11010	6200
CAL YR 1984	TOTAL	177216		MEAN	484	MAX	4040	MIN	70	AC-FT	351500	
WTR YR 1985	TOTAL	100703		MEAN	276	MAX	1410	MIN	60	AC-FT	199700	

GUNNISON RIVER BASIN

09119000 TOMICHI CREEK AT GUNNISON, CO--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	132	146	115	85	90	130	340	382	442	458	233	110
2	125	137	120	85	90	130	315	424	420	400	231	100
3	137	121	120	90	90	130	270	465	430	338	253	96
4	155	134	120	90	90	135	230	504	440	313	280	92
5	148	139	110	85	85	140	215	532	440	374	308	88
6	138	146	105	90	85	140	215	555	560	444	327	86
7	148	134	98	90	90	150	230	524	620	458	302	83
8	153	132	105	85	90	140	240	438	630	456	260	82
9	156	157	110	85	90	150	250	394	640	448	240	90
10	149	151	115	90	85	145	260	365	630	417	219	200
11	158	142	90	90	85	140	270	338	620	362	204	171
12	175	156	90	90	90	140	280	296	540	308	211	140
13	166	148	85	95	100	135	280	259	460	275	222	130
14	171	130	90	90	100	135	260	278	470	284	215	120
15	167	135	95	90	115	135	250	258	530	282	185	110
16	152	150	95	90	105	135	250	280	580	327	165	100
17	152	145	95	85	100	135	240	283	620	326	160	98
18	156	178	100	85	105	125	230	264	606	302	160	96
19	156	141	105	85	105	125	220	239	604	317	160	94
20	147	130	100	95	105	125	220	212	565	380	150	90
21	146	110	105	90	95	135	250	231	525	541	130	90
22	147	120	105	85	85	130	350	268	476	599	120	87
23	144	115	105	95	90	135	400	298	441	589	120	84
24	141	120	100	95	100	140	377	318	417	505	140	84
25	146	125	100	75	105	150	379	318	418	440	155	130
26	145	122	95	80	115	165	400	330	484	384	180	134
27	146	123	95	80	130	185	374	322	509	339	160	120
28	142	115	90	80	130	205	347	376	439	297	150	110
29	141	125	90	85	---	215	309	441	393	271	150	88
30	142	120	95	90	---	250	342	465	411	258	146	110
31	142	---	95	95	---	290	---	450	---	241	125	---
TOTAL	4623	4047	3138	2720	2745	4720	8593	11107	15360	11733	6061	3213
MEAN	149	135	101	87.7	98.0	152	286	358	512	378	196	107
MAX	175	178	120	95	130	290	400	555	640	599	327	200
MIN	125	110	85	75	85	125	215	212	393	241	120	82
AC-FT	9170	8030	6220	5400	5440	9360	17040	22030	30470	23270	12020	6370
CAL YR 1985	TOTAL	98767	MEAN	271	MAX	1410	MIN	60	AC-FT	195900		
WTR YR 1986	TOTAL	78060	MEAN	214	MAX	640	MIN	75	AC-FT	154800		

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 mi².

PERIOD OF RECORD.--October 1981 to September 1986 (discontinued).

GAGE.--Water-stage recorder. Elevation of gage is 9,400 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 15 to Mar. 26. Records fair except for estimated daily discharges, which are poor. No regulation or diversions upstream from station. Several observations of water temperature and specific conductance were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--5 years, 100 ft³/s; 73,170 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,530 ft³/s, June 9, 1985, gage height, 7.13 ft (from rating curve extended above 670 ft³/s); maximum recorded gage height, 8.47 ft, Apr. 8, 1982 (backwater from ice); minimum daily discharge, 6.5 ft³/s, Mar. 22, 1982.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 500 ft³/s, and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 28	2100	560	5.92	June 18	2100	699	6.22
June 7	0200	*900	*6.40				

Minimum daily discharge, 10 ft³/s, Jan. 27, Feb. 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	62	34	19	12	12	14	53	100	317	326	123	63
2	58	32	18	12	12	14	51	124	304	336	116	63
3	56	32	19	12	12	14	45	173	337	332	110	65
4	54	32	19	12	12	15	39	202	403	334	107	59
5	50	34	18	11	11	15	36	169	509	380	104	56
6	48	30	17	12	11	16	36	136	569	353	125	53
7	51	24	17	11	11	16	36	107	598	305	106	52
8	53	29	17	11	11	17	37	87	577	284	99	69
9	55	29	18	11	11	17	37	73	468	373	95	102
10	55	27	17	11	11	16	37	64	338	342	89	138
11	60	28	16	11	11	16	38	63	333	312	87	126
12	57	29	15	11	10	16	39	64	420	289	88	121
13	57	22	15	11	11	15	39	74	495	281	126	113
14	56	20	14	11	12	15	35	83	442	266	99	107
15	49	18	12	11	12	14	36	84	509	262	88	100
16	50	19	12	11	13	14	35	80	491	272	82	95
17	50	19	12	11	13	14	34	77	498	245	76	86
18	48	17	12	11	14	14	29	76	483	209	74	80
19	46	18	13	11	13	14	26	91	390	201	77	74
20	47	18	13	11	13	14	26	149	371	190	73	68
21	45	18	13	11	13	14	33	217	379	181	73	64
22	44	19	13	11	12	15	55	230	424	196	75	64
23	41	18	13	11	11	16	74	257	448	186	74	67
24	40	18	12	11	13	17	69	266	429	193	78	68
25	39	19	13	12	13	17	67	266	377	178	84	64
26	40	20	12	11	13	18	61	322	422	170	78	67
27	40	20	12	10	13	19	52	336	439	161	70	65
28	40	19	12	11	14	21	49	404	391	145	72	66
29	40	18	12	11	---	31	58	451	427	140	76	65
30	40	20	12	11	---	41	75	362	363	135	70	63
31	40	---	12	12	---	51	---	318	---	129	63	---
TOTAL	1511	700	449	347	338	560	1337	5505	12951	7706	2757	2343
MEAN	48.7	23.3	14.5	11.2	12.1	18.1	44.6	178	432	249	88.9	78.1
MAX	62	34	19	12	14	51	75	451	598	380	126	138
MIN	39	17	12	10	10	14	26	63	304	129	63	52
AC-FT	3000	1390	891	688	670	1110	2650	10920	25690	15280	5470	4650
CAL YR 1985	TOTAL	40132.6		MEAN	110	MAX	820	MIN	7.0	AC-FT	79600	
WTR YR 1986	TOTAL	36504		MEAN	100	MAX	598	MIN	10	AC-FT	72410	

GUNNISON RIVER BASIN

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 mi².

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 above 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.--Estimated daily discharges: Dec. 6 - Mar. 12, Apr. 24 - May 21. Records good except for estimated daily discharges, which are poor. Diversions for irrigation of about 1,600 acres upstream from station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--49 years, 241 ft³/s, 174,600 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,720 ft³/s, July 10, 1983, gage height, 4.18 ft; minimum daily, 22 ft³/s, Jan. 21, 1976.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1400 ft³/s, and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
June 8	0300	*1,840	*3.56	June 17	0100	1,510	3.21

Minimum daily discharge, 54 ft³/s, Jan. 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	170	115	84	60	70	83	155	340	695	948	233	136
2	163	110	80	62	70	83	152	410	667	916	222	129
3	158	110	78	63	70	84	145	475	707	904	210	128
4	152	107	76	60	68	88	129	500	863	871	207	119
5	148	110	65	60	65	92	118	490	1020	971	206	114
6	145	105	60	61	66	94	115	450	1400	921	233	105
7	151	94	60	59	67	97	116	400	1680	860	225	97
8	166	107	60	54	66	95	121	330	1610	725	201	108
9	168	103	62	59	62	100	126	280	1400	814	182	157
10	163	98	59	64	62	96	131	270	986	888	167	302
11	167	100	57	66	64	94	137	280	800	779	159	294
12	169	105	57	66	70	92	141	300	915	706	155	271
13	167	95	57	68	72	96	142	320	1160	670	198	252
14	166	84	57	68	77	94	131	320	1330	644	193	236
15	152	84	60	68	78	87	129	360	1370	618	169	221
16	151	83	61	68	73	77	126	350	1380	631	152	209
17	149	92	61	68	75	73	131	370	1420	596	141	198
18	147	90	60	68	77	68	125	380	1280	528	133	180
19	143	82	64	70	76	59	115	400	1380	505	132	172
20	140	71	64	71	72	62	114	510	1230	481	125	162
21	134	99	64	68	62	57	117	590	1240	442	129	148
22	133	84	64	68	64	62	152	636	1210	455	130	142
23	127	98	62	69	67	66	209	653	1160	438	128	147
24	124	95	62	64	72	72	226	703	1090	447	147	161
25	123	90	62	61	76	75	220	665	928	419	169	166
26	123	85	60	63	81	78	210	808	995	389	161	164
27	122	80	58	66	84	85	195	902	1130	358	145	159
28	122	76	60	69	82	97	185	949	1110	324	135	160
29	125	86	62	70	---	109	220	1020	1210	297	144	162
30	124	86	62	75	---	119	280	863	1120	274	140	161
31	122	---	62	72	---	147	---	698	---	248	135	---
TOTAL	4514	2824	1960	2028	1988	2681	4613	16022	34486	19067	5206	5160
MEAN	146	94.1	63.2	65.4	71.0	86.5	154	517	1150	615	168	172
MAX	170	115	84	75	84	147	280	1020	1680	971	233	302
MIN	122	71	57	54	62	57	114	270	667	248	125	97
AC-FT	8950	5600	3890	4020	3940	5320	9150	31780	68400	37820	10330	10230
CAL YR 1985	TOTAL	121727		MEAN	333	MAX	2350	MIN	38	AC-FT	241400	
WTR YR 1986	TOTAL	100549		MEAN	275	MAX	1680	MIN	54	AC-FT	199400	

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 mi².

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 above National Geodetic Vertical Datum of 1929. Prior to Oct. 12, 1972, at site 0.2 mi downstream at different datum.

REMARKS.--Estimated daily discharges: Dec. 5, Dec. 13 to Mar. 13, and Sept. 4-10. Records good except for estimated daily discharges, which are poor. Diversion upstream from station through Owl Creek ditch into Uncompangre 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 conductance and water temperature were obtained and are published elsewhere in this report.

COOPERATION.--For period Sept. 4-30, gage-height record provided by Colorado State Engineer.

AVERAGE DISCHARGE.--16 years (water years 1955-70), 88.6 ft³/s; 64,190 acre-ft/yr, prior to completion of Silver Jack Dam; 16 years (water years 1971-86), 101 ft³/s; 73,170 acre-ft/yr, subsequent to completion of Silver Jack Dam.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,790 ft³/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 ft³/s, Dec. 27, 28, 1962, Jan. 13, 1963; minimum daily, 4.4 ft³/s, Apr. 20, 21, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 870 ft³/s at 0100 June 7, gage height, 5.07 ft, minimum daily, 9.0 ft³/s, Dec. 25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	41	51	18	28	29	38	36	58	394	369	112	80
2	41	51	15	29	29	39	35	63	415	347	112	76
3	41	51	13	30	29	39	33	61	537	339	112	72
4	41	51	11	29	28	43	31	56	612	325	121	66
5	41	50	9.0	26	24	47	29	53	629	370	129	66
6	39	51	15	29	24	46	30	48	718	329	128	66
7	43	49	31	28	27	50	32	47	786	294	132	66
8	43	49	36	25	26	46	34	47	728	216	136	68
9	43	49	35	28	25	50	35	46	659	320	136	72
10	40	50	32	27	23	43	34	45	528	316	136	71
11	42	50	29	28	23	37	37	46	426	302	136	60
12	42	50	27	28	25	37	35	46	453	265	136	53
13	42	50	26	30	30	33	35	127	541	231	136	52
14	43	49	29	28	30	31	33	131	580	210	134	52
15	42	57	31	28	40	31	32	132	551	201	134	59
16	42	65	31	28	33	29	31	131	573	208	134	66
17	42	65	32	26	30	29	33	143	558	168	132	66
18	42	65	33	27	33	29	31	253	487	153	132	66
19	41	64	35	26	33	29	31	298	504	148	132	66
20	41	61	34	30	33	28	29	302	494	148	132	65
21	40	58	35	28	28	29	34	311	483	140	126	43
22	40	57	35	26	23	29	39	348	441	138	118	26
23	40	46	35	29	24	28	41	381	438	137	119	27
24	40	36	34	29	29	29	42	398	406	143	119	28
25	45	36	33	22	30	29	45	370	356	148	119	28
26	50	28	31	23	35	30	38	456	427	147	117	27
27	50	11	32	25	40	31	36	497	426	146	117	27
28	50	18	30	26	39	32	40	516	439	145	103	26
29	51	21	29	28	---	33	44	523	449	142	88	27
30	50	19	32	30	---	34	49	446	430	142	86	27
31	51	---	32	33	---	35	---	379	---	128	86	---
TOTAL	1339	1408	880.0	857	822	1093	1064	6758	15468	6815	3790	1594
MEAN	43.2	46.9	28.4	27.6	29.4	35.3	35.5	218	516	220	122	53.1
MAX	51	65	36	33	40	50	49	523	786	370	136	80
MIN	39	11	9.0	22	23	28	29	45	356	128	86	26
AC-FT	2660	2790	1750	1700	1630	2170	2110	13400	30680	13520	7520	3160
CAL YR 1985	TOTAL	46119.0		MEAN	126	MAX	996	MIN	9.0	AC-FT	91480	
WTR YR 1986	TOTAL	41888.0		MEAN	115	MAX	786	MIN	9.0	AC-FT	83080	

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 above 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.--Estimated daily discharges: July 31 to Aug. 5. 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; provided by Uncompahgre Valley Water Users Association.

AVERAGE DISCHARGE.--83 years, 1,400 ft³/s; 1,014,000 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, 4,500 ft³/s at 2100 July 15, gage height, 7.23 ft; minimum daily, 933 ft³/s, Apr. 12, 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1550	1620	1930	1930	2660	2500	1120	1960	1010	2510	1500	1240
2	1580	1610	1910	1950	2670	2510	1110	1930	1010	2550	1500	1320
3	1600	1580	1920	1910	2600	2490	1110	1280	1010	2550	1500	1320
4	1590	1580	1930	1910	2470	2480	1140	1220	996	2560	1400	1330
5	1600	1590	1940	1900	2470	2480	1150	2060	994	2560	1300	1410
6	1570	1600	1940	1890	2460	2110	1140	2130	1100	2900	1230	1430
7	1440	1580	1920	1910	2440	2220	1160	2140	1130	3330	1240	1450
8	949	1590	1920	1870	2510	2450	1160	2490	1130	3940	1230	1440
9	1460	1600	1890	1860	2500	2460	1060	2810	1130	3950	1240	1440
10	1650	1610	1870	1870	2240	2450	1040	2820	1130	4300	1240	1460
11	1650	1600	1690	1890	1940	2470	965	2820	1140	4240	1250	1450
12	1680	1610	1940	1890	1920	2320	933	2790	1170	4230	1250	1510
13	1670	1610	1940	2120	1920	2280	940	2680	1140	4180	1260	1550
14	1640	1810	1960	2340	1910	2200	933	2490	1140	4040	1250	1560
15	1680	1880	1940	2350	1910	2200	945	2450	1160	3960	1250	1560
16	1690	1900	1960	2330	1950	2190	955	2460	1160	4030	1260	1540
17	1690	1920	1920	2370	1930	2110	1380	2460	1160	4000	1260	1560
18	1720	1930	1860	2400	1930	1590	1900	2580	1170	3630	1270	1570
19	1700	1930	1940	2390	1940	1470	2000	2650	1170	3130	1270	1670
20	1680	1920	1930	2390	1940	1600	2020	2650	1170	3050	1280	1690
21	1680	1960	1930	2540	2040	1380	2020	2650	1180	3080	1270	1710
22	1660	1930	1950	2650	2140	1560	2010	2650	1200	2850	1300	1700
23	1680	1880	1940	2650	2140	1630	2020	2760	1190	2410	1270	1710
24	1660	1900	1940	2660	2360	1130	1770	2870	1170	2200	1300	1710
25	1660	1750	1950	2680	2450	1360	1950	2860	1250	1950	1270	1710
26	1660	1900	1940	2670	2450	1310	1950	2840	1580	1950	1280	1720
27	1670	1910	1950	2650	2490	1420	1960	2850	1870	1960	1230	1730
28	1680	1950	1930	2660	2490	1010	1930	2540	2010	1970	1250	1730
29	1540	1960	1930	2670	---	981	1950	2260	2000	1960	1250	1840
30	1670	1940	1920	2650	---	1150	1950	1640	2230	1830	1240	1810
31	1670	---	1920	2670	---	1170	---	1140	---	1700	1260	---
TOTAL	50019	53150	59550	70620	62870	58681	43671	73930	37900	93500	39900	46870
MEAN	1614	1772	1921	2278	2245	1893	1456	2385	1263	3016	1287	1562
MAX	1720	1960	1960	2680	2670	2510	2020	2870	2230	4300	1500	1840
MIN	949	1580	1690	1860	1910	981	933	1140	994	1700	1230	1240
AC-FT	99210	105400	118100	140100	124700	116400	86620	146600	75170	185500	79140	92970
a	23960	0	0	0	0	0	51600	49300	45900	57540	124700	47490
CAL YR 1985	TOTAL	838963		MEAN	2299	MAX	5300	MIN	326	AC-FT	1664000	
WTR YR 1986	TOTAL	690661		MEAN	1892	MAX	4300	MIN	933	AC-FT	1370000	

a-Diversions, in acre-feet, through Gunnison Tunnel, provided 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. WDR CO-85-2: 1984, 1984 (m).

GAGE.--Water-stage recorder. Elevation of gage is 7,091 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Nov. 16, 1936, nonrecording gage at present site and datum.

REMARKS.--Estimated daily discharges: Nov. 16, 19-22, Dec. 5, 7, 9-18, 26-31, Jan. 2, 5, 8, 12-15, 17, 22, 25, 26, Jan. 27 to Feb. 18, 21, 22, Mar. 9-21, Apr. 28, 29, July 22 to Sept. 9, and Sept. 13-19. Records fair except for estimated daily discharges, which are poor. Diversions for irrigation of a few small hay meadows upstream from station. Saddle Mountain ditch diverts water upstream from station for irrigation of about 800 acres downstream. 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.--51 years, 42.7 ft³/s; 30,940 acre-ft/yr. The years published in the 1985 report were in error; the correct years are 49 and 50 respectively.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,410 ft³/s, revised, May 15, 1984, gage height, 8.28 ft, but may have been higher during period of indefinite stage-discharge relationship May 16-21, 1984; minimum daily discharge, 1.8 ft³/s, July 30-31, Aug. 1, 1963, Sept. 5-6, 1978.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 260 ft³/s, and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 4	0300	*343	*3.29	May 22	0100	277	2.91

Minimum daily discharge, 7.0 ft³/s, Aug. 27, 28, Sept. 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	20	14	11	12	32	145	219	197	68	13	10
2	21	20	13	12	12	36	165	259	199	62	12	9.5
3	20	19	13	12	12	40	142	298	229	61	10	9.0
4	18	19	14	13	12	45	117	326	251	60	12	8.5
5	18	18	11	12	11	47	106	320	250	65	12	8.0
6	18	18	14	13	11	51	104	261	245	60	20	7.5
7	27	18	13	15	12	53	110	223	233	57	13	7.0
8	32	17	13	13	12	56	116	187	213	51	11	7.5
9	29	18	12	14	12	60	121	166	205	50	10	9.5
10	29	17	10	12	11	55	126	153	196	50	9.5	27
11	31	17	9.5	11	11	50	123	144	176	46	9.0	26
12	31	17	9.0	11	12	50	123	137	160	44	11	20
13	32	16	8.5	12	13	45	122	140	155	42	30	18
14	33	17	9.5	11	13	40	111	160	155	41	13	16
15	31	17	10	11	16	45	107	184	153	41	11	15
16	30	17	10	12	14	50	110	201	142	45	9.5	14
17	30	16	11	11	13	45	114	195	131	41	9.0	12
18	29	16	12	11	14	45	111	189	125	40	8.5	11
19	27	13	12	13	12	40	106	199	120	40	9.0	10
20	26	12	12	13	17	35	102	229	115	39	8.5	9.3
21	25	14	12	14	18	40	108	259	112	38	9.0	8.8
22	26	15	12	12	16	46	138	277	105	38	8.5	12
23	25	15	12	14	14	52	171	275	98	36	8.5	17
24	23	14	12	13	14	61	182	253	93	42	8.5	20
25	22	15	12	11	17	66	186	235	89	36	9.5	25
26	22	15	11	11	23	70	178	245	89	34	8.0	27
27	21	14	11	11	29	84	157	243	86	30	7.0	26
28	21	14	10	11	32	98	150	231	82	22	7.0	28
29	21	15	10	12	---	110	182	221	76	17	9.0	30
30	20	14	12	12	---	120	184	205	76	15	9.0	32
31	21	---	12	13	---	140	---	199	---	14	11	---
TOTAL	782	487	356.5	377	415	1807	4017	6833	4556	1325	336.0	480.6
MEAN	25.2	16.2	11.5	12.2	14.8	58.3	134	220	152	42.7	10.8	16.0
MAX	33	20	14	15	32	140	186	326	251	68	30	32
MIN	18	12	8.5	11	11	32	102	137	76	14	7.0	7.0
AC-FT	1550	966	707	748	823	3580	7970	13550	9040	2630	666	953
CAL YR 1985	TOTAL	25788.4		MEAN	70.7	MAX	510	MIN	4.1	AC-FT	51150	
WTR YR 1986	TOTAL	21772.1		MEAN	59.6	MAX	326	MIN	7.0	AC-FT	43180	

GUNNISON RIVER BASIN

09129600 SMITH FORK NEAR LAZEAR, CO

LOCATION.--Lat 38°42'27", long 107°42'35", in SE¼NE¼ sec.31, T.15 S., R.92 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 mi².

PERIOD OF RECORD.--June 1976 to current year.

REVISED RECORDS.--WRD-CO-85-2: 1984, 1984 (M).

GAGE.--Water-stage recorder. Elevation of gage is 5,830 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 1-4, 17-29, Dec. 10 to Jan. 16 and, Feb. 9-12. Records good except for estimated daily discharges, 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.--10 years, 37.1 ft³/s; 26,880 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,610 ft³/s, May 18, 1984, gage height, 9.28 ft, from floodmarks; minimum daily, 0.10 ft³/s, Aug. 12-14, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 295 ft³/s, 0900 May 5, gage height 6.59 ft; minimum daily, 1.7 ft³/s, Aug. 1-3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.0	8.6	8.0	4.0	28	63	224	147	121	35	1.7	8.1
2	5.7	8.2	7.4	5.0	29	65	247	187	117	30	1.7	7.6
3	5.7	7.8	7.4	5.6	31	72	226	236	136	25	1.7	7.1
4	5.5	7.4	7.3	6.2	32	75	199	266	167	20	1.8	6.9
5	5.5	7.3	6.8	6.8	30	82	175	280	169	20	2.0	6.3
6	5.5	6.3	6.7	7.6	29	89	168	242	164	23	2.4	6.5
7	8.2	5.9	6.7	9.0	27	99	172	199	158	24	2.4	7.1
8	8.2	5.9	7.0	10	26	106	179	160	139	24	2.4	6.4
9	7.1	5.9	7.0	12	23	111	198	149	132	20	2.3	6.6
10	6.7	6.0	6.8	12	21	106	201	127	139	18	1.9	10
11	6.3	6.3	6.2	12	22	100	192	112	120	17	1.9	7.9
12	6.7	6.2	5.0	13	23	97	187	96	100	15	4.7	7.2
13	6.3	6.3	5.1	14	24	90	175	89	91	15	5.1	8.0
14	6.3	5.5	5.3	15	24	87	168	98	85	12	3.6	8.0
15	6.3	5.5	5.5	17	26	90	165	108	80	9.1	3.5	7.0
16	6.3	5.5	5.7	18	32	93	164	144	73	7.6	3.0	5.5
17	6.0	5.5	5.8	19	32	89	166	151	64	6.6	2.5	6.4
18	6.0	6.2	5.5	20	33	86	164	148	62	6.7	2.4	6.9
19	6.0	5.8	5.4	21	35	83	154	152	59	6.6	2.5	7.6
20	6.0	6.7	5.2	22	47	80	143	176	55	6.3	2.2	11
21	6.5	5.2	5.0	25	50	78	122	215	53	8.4	1.9	11
22	7.0	6.0	5.0	26	43	83	115	232	53	10	1.9	11
23	7.0	4.8	5.0	27	42	94	123	223	51	9.9	1.9	12
24	7.0	4.8	4.9	27	41	115	142	210	47	9.0	1.9	13
25	7.0	5.3	4.8	26	40	131	142	192	45	9.5	4.1	12
26	7.0	6.6	4.7	28	48	144	152	189	46	9.3	4.0	14
27	7.0	5.9	4.6	27	58	165	134	181	46	8.2	5.2	12
28	9.5	5.9	4.2	25	64	198	122	168	43	7.6	5.2	11
29	9.0	6.0	3.9	25	---	213	118	155	40	4.6	6.5	11
30	9.5	8.7	3.7	26	---	217	110	141	38	3.6	7.3	11
31	8.8	---	3.8	25	---	204	---	129	---	2.2	7.9	---
TOTAL	211.6	188.0	175.4	536.2	960	3405	4947	5302	2693	423.2	99.5	266.1
MEAN	6.83	6.27	5.66	17.3	34.3	110	165	171	89.8	13.7	3.21	8.87
MAX	9.5	8.7	8.0	28	64	217	247	280	169	35	7.9	14
MIN	5.5	4.8	3.7	4.0	21	63	110	89	38	2.2	1.7	5.5
AC-FT	420	373	348	1060	1900	6750	9810	10520	5340	839	197	528
CAL YR 1985	TOTAL	23270.02		MEAN	63.8	MAX	630	MIN	.46	AC-FT	46160	
WTR YR 1986	TOTAL	19207.0		MEAN	52.6	MAX	280	MIN	1.7	AC-FT	38100	

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. Elevation of gage is 6,280 ft above National Geodetic Vertical Datum of 1929, 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.--Estimated daily discharges: Dec. 7-16, Jan. 6-21, Feb. 3-8, Apr. 24 - May 6, June 30 - July 17, 22-28. Records fair except those for estimated daily discharges, which are poor. Natural flow of stream affected by small diversions for irrigation in nearby drainage areas, irrigation of about 3,000 acres upstream from 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; provided by U.S. Bureau of Reclamation.

AVERAGE DISCHARGE.--53 years, 463 ft³/s; 335,400 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, 4,000 ft³/s at 0500 May 24, gage height, 5.74 ft; minimum daily, 80 ft³/s, Jan. 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	296	145	139	170	143	346	2150	1500	2220	1200	295	272
2	280	138	140	169	144	377	2620	1800	2280	1150	248	261
3	268	137	143	162	140	502	2440	2200	2800	1200	185	272
4	265	128	160	154	135	622	2190	2900	2780	1300	183	261
5	260	128	165	148	130	630	1730	3500	3050	1150	194	252
6	256	129	181	140	130	639	1500	3100	3250	1050	276	247
7	407	118	170	140	130	664	1440	2920	3200	1000	241	245
8	529	123	160	140	120	669	1380	2660	2880	1300	227	245
9	665	123	140	140	120	704	1390	2520	2770	1200	217	276
10	962	121	135	140	120	715	1220	2410	2460	1100	207	429
11	959	144	130	140	132	760	1350	2370	2140	1000	193	349
12	933	198	120	140	131	783	1730	2380	2500	900	185	327
13	586	188	130	130	128	802	1830	2340	3280	800	189	310
14	334	175	140	90	131	788	1580	2280	2310	750	190	306
15	305	189	150	80	143	751	1630	2220	2270	800	189	295
16	286	179	160	82	141	725	1810	2170	2600	700	171	283
17	276	195	169	100	133	696	1730	1920	2270	600	162	272
18	264	192	174	120	144	571	1530	1880	2130	558	266	268
19	261	177	169	120	161	322	1390	1940	2070	524	352	261
20	254	130	168	120	243	191	1170	2260	1930	500	344	252
21	230	108	169	125	249	220	1470	2780	1860	475	260	252
22	169	119	169	128	246	244	2120	2640	1790	400	205	281
23	160	142	172	148	241	419	2390	3350	1600	450	204	427
24	151	142	171	136	235	577	2200	3690	1610	430	217	430
25	228	150	167	119	256	629	2200	3400	1540	410	253	413
26	318	152	166	116	312	688	2200	3190	1700	390	228	444
27	308	145	169	135	355	924	1800	3310	1660	370	238	389
28	298	141	169	141	353	1220	1500	3380	1400	350	258	412
29	291	145	170	154	---	1440	1100	2950	1410	280	271	427
30	214	147	166	158	---	1650	1300	2370	1250	287	275	398
31	153	---	166	147	---	2070	---	2150	---	300	280	---
TOTAL	11166	4448	4897	4132	5046	22338	52090	80480	67010	22924	7203	9556
MEAN	360	148	158	133	180	721	1736	2596	2234	739	232	319
MAX	962	198	181	170	355	2070	2620	3690	3280	1300	352	444
MIN	151	108	120	80	120	191	1100	1500	1250	280	162	245
AC-FT	22150	8820	9710	8200	10010	44310	103300	159600	132900	45470	14290	18950
a	5930	7730	6500	5610	7270	2870	9300	18500	18400	18200	16000	13700
CAL YR 1985	TOTAL	298650		MEAN	818	MAX	5030	MIN	57	AC-FT	592400	
WTR YR 1986	TOTAL	291290		MEAN	798	MAX	3690	MIN	80	AC-FT	577800	

a-Monthend contents, in acre-feet, in Paonia Reservoir.

GUNNISON RIVER BASIN

09134000 MINNESOTA CREEK NEAR PAONIA, CO

LOCATION.--Lat 38°52'12", long 107°30'13", in SE¼NE¼ of sec.1, T. 14 S., R. 91 W., Delta County, Hydrologic Unit 14020004, on right bank .25 mi downstream from South Fork, 6 mi upstream from mouth, and 4.5 mi east of Paonia.

DRAINAGE AREA.--41.3 mi².

PERIOD OF RECORD.--April 1936 to September 1947, October 1985 to September 1986.

GAGE.--Water-stage recorder. Elevation of gage is 6,200 ft above National Geodetic Vertical Datum of 1929, from topographic map. April 1936 to October 1941, staff gages at different datums. October 1941 to September 1947, water-stage recorder at different datum. December 1985 to present, water-stage recorder, datum lowered 2.0 ft.

REMARKS.--Estimated daily discharges: Oct. 1 - Dec. 11, 12-15, 17, Dec. 30 - Jan. 9, 25-28, Feb. 10, 11, 15, 16, 18-20, 21, 25-27, Sept. 12-17. Records good except for estimated daily discharges, which are poor. Natural flow of stream affected by two small storage reservoirs, one of which obtains water from the East Muddy Creek Basin. Small trans-basin diversion from Coal Creek into Minnesota Creek. Diversions upstream from station for irrigation of about 100 acres. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--12 years (water years 1936-47, 1986), 25.6 ft³/s; 18,550 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 356 ft³/s, July 10, 1936 (gage height 3.00 ft, site and datum then in use); minimum daily, 4.9 ft³/s, Jan. 26, 1986.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 218 ft³/s at 0200 June 6, gage height, 2.75 ft; minimum daily, 4.9 ft³/s, Jan. 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	9.5	8.5	5.4	6.4	13	53	116	152	63	30	18
2	13	9.5	9.0	5.4	6.4	14	91	129	161	57	29	19
3	13	9.5	9.0	5.4	6.2	16	67	146	166	54	28	18
4	12	9.0	9.0	5.2	5.1	19	50	164	182	54	28	18
5	12	9.0	8.5	5.0	5.8	17	57	167	203	58	28	18
6	12	9.0	8.5	5.2	6.3	18	47	157	196	56	29	17
7	14	8.5	9.0	5.2	5.8	20	56	147	196	54	27	17
8	15	9.0	9.0	5.0	6.2	20	56	143	188	51	27	19
9	14	9.0	8.5	5.4	5.9	22	56	138	186	49	25	21
10	14	9.0	7.5	5.6	5.5	18	61	130	178	49	24	28
11	16	9.5	6.5	5.6	5.5	19	65	126	140	46	23	22
12	15	9.5	6.0	5.6	6.1	21	67	115	127	41	22	21
13	15	9.0	6.0	5.4	5.5	18	68	103	120	39	22	20
14	16	8.5	6.5	5.5	5.4	16	64	104	116	37	21	19
15	14	8.5	7.0	5.5	7.5	15	64	114	114	34	22	18
16	14	8.5	7.3	5.4	7.0	13	66	125	110	33	21	17
17	14	9.5	7.0	5.3	6.8	13	68	124	110	29	20	16
18	13	9.5	6.8	5.3	10	12	65	120	106	28	21	15
19	13	8.5	6.7	5.2	13	11	62	130	100	32	22	14
20	12	8.5	6.6	5.5	12	12	63	143	97	34	23	13
21	12	9.0	6.6	5.4	11	13	72	154	98	33	25	13
22	11	8.0	6.6	5.3	11	16	83	160	97	29	24	19
23	10	9.0	6.5	5.4	12	16	90	155	97	28	25	22
24	10	9.5	6.5	5.3	13	19	94	153	98	29	26	23
25	10	9.5	6.3	5.0	14	18	95	144	87	30	25	20
26	10	9.5	6.3	4.9	15	21	94	148	75	32	19	24
27	10	9.0	6.0	5.2	14	24	85	153	73	31	19	15
28	10	8.5	5.9	5.4	13	28	84	153	70	30	20	17
29	9.5	9.5	5.9	5.6	---	31	86	157	68	30	19	13
30	9.5	9.0	5.6	5.7	---	34	101	152	69	30	18	11
31	10	---	5.6	6.2	---	48	---	148	---	29	18	---
TOTAL	387.0	271.0	220.7	166.5	241.4	595	2130	4318	3780	1229	730	545
MEAN	12.5	9.03	7.12	5.37	8.62	19.2	71.0	139	126	39.6	23.5	18.2
MAX	16	9.5	9.0	6.2	15	48	101	167	203	63	30	28
MIN	9.5	8.0	5.6	4.9	5.1	11	47	103	68	28	18	11
WTR YR 1986	TOTAL	14613.6		MEAN	40.0	MAX	203	MIN	4.9			

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 mi².

PERIOD OF RECORD.--June 1976 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 5,315 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharge: Oct. 2-4. Records fair. Natural flow of stream is affected by diversions upstream from station for irrigation and by return flow from irrigated area upstream from 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.--10 years, 36.1 ft³/s; 26,150 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,880 ft³/s, June 7, 1984, gage height, 11.82 ft; minimum daily, 0.55 ft³/s, July 10, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 549 ft³/s at 0200 June 4, gage height, 6.70 ft; minimum daily, 4.0 ft³/s, July 14, 15, 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	41	30	25	21	16	20	200	203	180	9.2	8.8	4.5
2	41	28	24	21	15	20	264	248	178	7.9	12	4.5
3	48	28	24	20	16	23	129	301	229	8.3	12	4.5
4	54	27	24	19	15	27	90	333	425	7.9	12	4.5
5	56	28	24	18	15	27	83	217	405	15	11	4.5
6	56	28	24	20	15	37	95	110	382	17	12	4.5
7	81	27	24	18	13	37	128	67	374	8.5	11	4.5
8	78	29	24	16	12	37	123	47	332	7.9	8.4	4.8
9	67	26	23	17	12	41	134	35	271	8.7	5.7	5.9
10	66	25	23	17	11	32	124	24	199	6.1	5.6	11
11	75	26	25	16	12	28	110	68	126	5.4	5.6	8.4
12	67	27	18	16	12	28	101	99	115	4.8	6.2	6.2
13	63	26	19	15	12	26	92	76	114	4.8	5.4	7.0
14	60	26	19	14	13	25	71	69	98	4.0	4.8	6.6
15	50	26	18	14	15	26	63	60	95	4.0	4.8	6.1
16	51	26	18	14	15	25	82	77	80	4.2	4.8	5.6
17	50	28	17	14	16	27	79	44	72	4.2	4.8	5.0
18	46	28	20	14	18	25	65	38	60	4.2	4.8	5.1
19	48	26	21	13	18	26	47	78	51	4.0	7.2	4.9
20	50	26	21	13	19	26	51	176	40	4.5	4.8	4.8
21	49	28	25	13	20	25	115	230	30	5.1	5.0	4.2
22	45	26	25	14	19	35	213	245	23	5.1	4.8	4.4
23	44	26	24	15	19	41	260	223	16	5.6	4.5	50
24	40	26	23	14	14	50	238	211	14	6.2	4.8	22
25	38	26	23	14	15	53	174	225	12	6.3	5.4	5.7
26	38	26	20	14	18	66	93	280	10	6.6	4.8	23
27	38	25	22	14	20	84	61	300	8.8	7.1	5.4	28
28	36	25	23	14	23	101	50	275	8.0	6.6	4.8	30
29	32	25	22	15	---	109	67	249	9.2	6.6	4.8	26
30	32	25	21	15	---	132	134	193	8.8	7.1	4.8	33
31	32	---	21	16	---	219	---	146	---	7.5	4.8	---
TOTAL	1572	799	684	488	438	1478	3536	4947	3965.8	210.4	205.6	339.2
MEAN	50.7	26.6	22.1	15.7	15.6	47.7	118	160	132	6.79	6.63	11.3
MAX	81	30	25	21	23	219	264	333	425	17	12	50
MIN	32	25	17	13	11	20	47	24	8.0	4.0	4.5	4.2
AC-FT	3120	1580	1360	968	869	2930	7010	9810	7870	417	408	673
CAL YR 1985	TOTAL	19140.1		MEAN	52.4	MAX	515	MIN	3.4	AC-FT	37960	
WTR YR 1986	TOTAL	18663.0		MEAN	51.1	MAX	425	MIN	4.0	AC-FT	37020	

GUNNISON RIVER BASIN

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 mi².

PERIOD OF RECORD.--May 1976 to current year.

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 5,035 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records good. 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.--10 years, 13.9 ft³/s; 10,070 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 644 ft³/s, June 7, 1984, gage height, 5.73 ft, no flow, Aug. 2, 4, 5, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 345 ft³/s at 0730 Apr. 2, gage height, 4.83 ft, from peak stage indicator; minimum daily, 2.2, Aug. 27, Sept. 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	15	10	17	17	23	127	49	31	7.6	5.3	4.7
2	20	14	10	17	17	26	186	54	29	6.4	4.9	4.3
3	23	16	15	17	17	31	85	71	29	6.3	4.4	3.9
4	19	15	21	16	16	33	51	91	45	5.5	4.6	3.1
5	17	15	19	16	15	28	40	55	58	5.2	4.6	2.4
6	17	12	20	16	15	23	44	29	51	5.6	6.1	2.3
7	26	8.6	19	17	15	31	57	22	58	4.8	5.5	2.3
8	27	8.9	20	18	15	39	49	24	54	5.2	3.8	2.2
9	22	8.9	19	20	15	44	62	44	47	7.0	5.2	4.7
10	17	8.8	17	18	15	33	55	37	43	8.5	4.9	14
11	20	9.0	16	16	15	30	53	64	38	9.4	5.7	11
12	20	9.6	17	16	15	26	55	122	28	8.7	4.0	7.9
13	21	9.1	18	16	16	22	51	84	13	6.5	4.0	7.2
14	26	8.5	16	16	16	22	37	66	11	5.8	3.1	6.3
15	20	8.6	17	17	24	21	39	50	13	4.8	3.0	7.4
16	18	8.7	17	17	25	19	54	82	9.5	4.8	2.8	7.1
17	18	9.4	18	17	22	18	47	59	8.6	4.9	2.9	7.0
18	17	9.3	17	16	20	17	37	45	8.4	3.4	2.6	6.6
19	16	8.3	16	16	20	16	25	47	7.0	2.8	2.5	7.1
20	15	8.4	16	17	19	16	28	58	6.9	3.1	2.6	6.4
21	15	9.0	16	17	17	17	57	71	6.0	2.9	2.9	5.0
22	15	8.4	17	16	16	25	89	75	5.9	4.0	2.7	5.7
23	15	8.5	17	17	15	36	69	65	5.2	6.3	2.6	9.9
24	14	8.8	17	16	15	43	49	61	5.3	7.7	2.5	24
25	14	9.4	17	15	16	40	37	51	5.8	8.7	2.9	25
26	14	9.5	17	16	19	43	27	57	6.8	8.8	3.3	34
27	14	9.0	18	16	23	53	16	54	7.3	7.8	2.2	25
28	14	9.3	18	16	25	66	9.2	54	7.4	5.6	2.4	31
29	14	11	17	16	---	76	18	47	8.3	6.2	3.2	29
30	14	13	18	16	---	77	32	37	8.2	6.4	3.0	27
31	15	---	19	17	---	158	---	29	---	6.3	2.8	---
TOTAL	557	307.0	529	514	495	1152	1585.2	1754	654.6	187.0	113.0	333.5
MEAN	18.0	10.2	17.1	16.6	17.7	37.2	52.8	56.6	21.8	6.03	3.65	11.1
MAX	27	16	21	20	25	158	186	122	58	9.4	6.1	34
MIN	14	8.3	10	15	15	16	9.2	22	5.2	2.8	2.2	2.2
AC-FT	1100	609	1050	1020	982	2280	3140	3480	1300	371	224	661
CAL YR 1985	TOTAL	8606.48		MEAN	23.6	MAX	203	MIN	.45	AC-FT	17070	
WTR YR 1986	TOTAL	8181.3		MEAN	22.4	MAX	186	MIN	2.2	AC-FT	16230	

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 mi².

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. Elevation of gage is 8,261 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 13-22, 25, 26, Dec. 12, 13, Jan. 1, 5, 21-29, Feb. 3-14, Mar. 13, 19. Records good except for estimated daily discharges, 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.--47 years, 43.3 ft³/s; 31,370 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 824 ft³/s, June 7, 1984, gage height, 3.67 ft, from rating curve extended above 310 ft³/s; maximum gage height, 5.10 ft, Apr. 13, 1958 (ice jam); minimum daily discharge, 0.80 ft³/s, Jan. 15, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 430 ft³/s at 1900 May 28, gage height, 2.71 ft; minimum daily, 4.6 ft³/s, Oct. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.5	14	8.2	5.5	5.7	6.8	76	144	334	171	89	35
2	4.7	11	7.6	6.0	5.7	7.1	70	173	325	162	97	38
3	4.6	9.1	7.9	6.0	5.6	7.6	46	203	329	165	101	38
4	5.3	9.7	7.6	6.0	5.4	8.2	36	224	355	153	101	38
5	5.3	9.4	7.3	5.5	5.2	9.1	31	193	353	201	106	39
6	5.5	9.4	7.3	6.0	5.4	9.4	36	160	339	186	106	52
7	12	9.7	7.3	6.0	5.4	10	42	124	366	160	88	56
8	15	8.5	7.3	6.0	5.4	11	43	138	352	148	83	54
9	14	7.9	7.0	6.0	5.2	12	47	114	332	143	58	66
10	15	8.8	6.8	5.7	4.9	11	46	103	305	133	54	79
11	19	8.2	6.6	5.7	5.0	10	50	115	288	114	53	71
12	16	9.7	6.0	5.7	5.2	9.1	49	121	280	106	74	64
13	17	8.5	6.5	6.0	5.4	8.5	46	119	273	103	79	38
14	14	7.5	6.5	6.0	5.8	9.1	40	119	264	96	67	36
15	14	8.0	6.3	6.0	6.3	8.2	45	124	257	86	59	34
16	15	8.0	6.3	6.0	6.3	8.4	53	123	243	89	58	35
17	14	9.0	6.5	6.0	5.5	8.2	46	116	238	85	57	34
18	13	9.0	6.8	5.7	6.5	7.3	41	136	231	77	58	36
19	12	8.0	6.5	6.0	6.0	7.0	44	174	224	76	73	35
20	12	8.0	6.5	6.0	5.8	7.4	59	228	215	73	73	34
21	12	8.5	6.5	5.8	5.5	8.5	94	267	210	67	70	33
22	12	8.0	6.3	5.6	5.8	11	115	277	207	73	69	41
23	11	8.0	6.3	5.6	5.5	13	110	293	201	73	89	104
24	11	7.6	6.3	5.6	5.5	14	99	302	189	67	92	85
25	11	8.0	6.0	5.4	6.0	15	86	318	192	73	92	64
26	11	8.5	6.3	5.5	6.5	18	70	350	204	64	79	60
27	11	7.3	6.3	5.6	7.0	23	59	360	196	57	79	58
28	11	7.3	6.3	5.6	7.0	30	59	388	195	52	80	61
29	16	7.4	6.3	5.6	---	37	86	377	198	81	79	49
30	15	7.6	6.3	5.7	---	45	117	344	186	86	42	29
31	16	---	5.8	5.7	---	70	---	333	---	91	40	---
TOTAL	369.9	259.6	207.5	179.5	160.5	459.9	1841	6560	7881	3311	2345	1496
MEAN	11.9	8.65	6.69	5.79	5.73	14.8	61.4	212	263	107	75.6	49.9
MAX	19	14	8.2	6.0	7.0	70	117	388	366	201	106	104
MIN	4.6	7.3	5.8	5.4	4.9	6.8	31	103	186	52	40	29
AC-FT	734	515	412	356	318	912	3650	13010	15630	6570	4650	2970
CAL YR 1985	TOTAL	20977.3		MEAN	57.5	MAX	294	MIN	4.1	AC-FT	41610	
WTR YR 1986	TOTAL	25070.9		MEAN	68.7	MAX	388	MIN	4.6	AC-FT	49730	

GUNNISON RIVER BASIN

09143000 SURFACE CREEK NEAR CEDAREDGE, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.-- November 1985 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	HARD- NESS (MG/L AS CACO3)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
NOV										
12...	1245	10	95	--	5.0	10.3	56	1	15	4.4
MAY										
14...	1230	111	75	--	12.0	8.7	47	--	13	3.5
JUN										
12...	1030	278	75	7.5	5.0	9.4	32	0	9.2	2.3
24...	1100	192	90	7.5	10.0	8.6	29	--	8.2	2.1

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)
NOV									
12...	3.2	0.2	1.5	55	5.8	0.8	0.1	18	82
MAY									
14...	2.4	0.2	1.4	51	7.8	1.0	<0.1	14	74
JUN									
12...	2.9	0.2	1.1	32	4.7	0.2	<0.1	14	54
24...	1.7	0.1	1.2	31	3.5	0.3	<0.1	15	51

DATE	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)
NOV									
12...	0.11	2.3	<0.01	--	<0.10	--	0.01	--	0.39
MAY									
14...	0.1	22	<0.01	--	<0.10	--	0.03	--	0.37
JUN									
12...	0.07	40	<0.01	<0.01	<0.10	<0.10	0.02	0.02	0.28
24...	0.07	26	<0.01	--	<0.10	--	<0.01	--	--

DATE	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, TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	BORON, DIS- SOLVED (UG/L AS B)	IRON, DIS- SOLVED (UG/L AS FE)
NOV									
12...	0.4	0.02	--	0.01	--	12	4.6	<10	140
MAY									
14...	0.4	0.05	--	0.02	--	7.4	5.6	10	120
JUN									
12...	0.3	0.05	0.07	0.02	0.02	3.5	4.0	<10	130
24...	0.3	0.03	--	0.02	--	2.9	5.1	<10	74

09143000 SURFACE CREEK NEAR CEDAREDGE, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA)	BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	COBALT, TOTAL RECOV- ERABLE (UG/L AS CO)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)
JUN 12...	1030	330	<100	<10	20	<1	5	360

DATE	*LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MOLYB- DENUM, TOTAL RECOV- ERABLE (UG/L AS MO)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI)	SELE- NIUM, TOTAL RECOV- ERABLE (UG/L AS SE)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG)	STRON- TIUM, TOTAL RECOV- ERABLE (UG/L AS SR)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)
JUN 12...	1	20	1	2	<1	<1	70	30

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
NOV 12...	1245	10	3	0.08	86
MAY 14...	1230	111	30	9.0	67
29...	1015	356	46	44	60
JUN 12...	1030	278	17	13	55
24...	1100	192	11	5.7	59
JUL 09...	0945	142	40	15	63
30...	0915	85	32	7.3	37
AUG 27...	0915	76	13	2.7	66

The minimum reporting level for Lead was changed from <1 to <5 during June, 1986.

GUNNISON RIVER BASIN

09143500 SURFACE CREEK AT CEDAREGE, 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 Cedarege, 700 ft east of State Highway 65, and 8.5 mi upstream from mouth.

DRAINAGE AREA.--39.0 mi².

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. Elevation of gage is 6,220 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to June 8, 1917, nonrecording gage at present site at datum 0.50 ft, higher.

REMARKS.--Estimated daily discharges: Nov. 16, 19-23, Dec. 10, 11-17, Dec. 18 to Jan. 22, 26-28, Feb. 5, and Feb. 6 to Mar. 5. Records good except for estimated daily discharges, 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.--70 years, 28.3 ft³/s; 20,500 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,190 ft³/s, May 13, 1941, gage height, 2.50 ft, from rating curve extended above 640 ft³/s; no flow, Sept. 25, 1939, and practically no flow at times in some winters.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 387 ft³/s at 2200 May 28, gage height, 2.58 ft; maximum gage height, 2.66 ft, May 3; minimum daily discharge, 3.0 ft³/s, Feb. 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.6	9.8	6.1	4.5	5.5	11	119	120	237	58	20	16
2	6.1	8.1	5.5	4.5	5.2	12	123	159	230	61	24	14
3	5.2	9.3	5.5	4.5	5.2	13	69	222	242	71	23	14
4	5.5	8.9	5.2	4.5	5.0	14	51	248	282	65	23	14
5	5.2	6.9	6.1	4.0	4.5	13	46	189	275	103	31	14
6	5.5	6.1	5.0	5.0	5.0	13	55	133	254	96	34	20
7	9.7	5.2	5.5	5.0	5.0	15	62	96	259	77	30	20
8	16	6.1	5.0	5.0	4.5	16	64	99	245	71	30	21
9	15	5.6	5.0	5.5	4.0	16	72	75	230	68	20	30
10	15	5.5	4.5	5.0	3.0	14	71	66	201	61	18	45
11	20	6.1	5.0	5.0	4.5	13	74	86	179	55	18	37
12	17	6.4	4.0	5.0	4.0	12	72	93	173	58	28	34
13	17	4.7	4.5	5.0	5.0	11	69	85	165	56	30	22
14	14	4.6	5.0	5.0	5.5	11	56	80	153	50	30	22
15	14	6.1	4.5	5.0	6.0	11	61	83	142	44	25	20
16	15	6.0	5.5	5.5	6.0	10	72	90	119	42	23	20
17	14	6.4	6.5	5.5	6.0	11	52	72	107	39	20	19
18	12	6.2	6.5	5.5	6.0	9.8	38	83	105	32	20	20
19	11	5.5	6.0	5.5	5.5	8.5	39	109	100	38	22	22
20	9.8	5.5	6.0	5.5	5.5	8.9	56	154	92	38	21	22
21	9.8	6.0	5.5	5.5	5.0	11	99	197	83	35	23	23
22	9.8	5.5	5.5	6.0	4.5	16	138	219	75	37	22	25
23	9.4	5.5	5.5	6.4	4.5	21	119	216	66	39	23	62
24	9.8	4.7	5.5	6.1	4.5	24	96	218	63	38	23	48
25	8.9	5.5	5.0	5.5	5.5	24	68	233	70	44	23	36
26	8.1	5.5	4.5	5.5	7.0	28	48	265	83	33	15	37
27	8.9	5.0	4.5	6.0	9.5	33	36	286	73	28	14	42
28	8.5	5.2	5.0	5.5	12	42	35	310	70	25	17	52
29	8.5	5.2	4.5	5.5	---	52	53	288	75	23	19	47
30	7.2	5.2	5.5	5.2	---	59	79	255	66	19	17	34
31	10	---	5.5	5.5	---	107	---	236	---	23	16	---
TOTAL	332.5	182.3	163.4	162.7	153.4	660.2	2092	5065	4514	1527	702	852
MEAN	10.7	6.08	5.27	5.25	5.48	21.3	69.7	163	150	49.3	22.6	28.4
MAX	20	9.8	6.5	6.4	12	107	138	310	282	103	34	62
MIN	5.2	4.6	4.0	4.0	3.0	8.5	35	66	63	19	14	14
AC-FT	660	362	324	323	304	1310	4150	10050	8950	3030	1390	1690
CAL YR 1985	TOTAL	14636.2		MEAN	40.1	MAX	263	MIN	3.0	AC-FT	29030	
WTR YR 1986	TOTAL	16406.5		MEAN	44.9	MAX	310	MIN	3.0	AC-FT	32540	

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 mi².

PERIOD OF RECORD.--October 1957 to September 1968, May 1976 to current year.

REVISED RECORDS.--WSP 2124: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 5,030 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records fair. 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.--21 years (water years 1958-68, 1977-86), 44.7 ft³/s; 32,390 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,130 ft³/s, June 7, 1984, gage height, 6.77 ft, from peak stage indicator; minimum daily, 0.35 ft³/s, July 22, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 614 ft³/s at 0230 Apr. 2, gage height, 3.84 ft; from peak stage indicator; minimum daily, 32 ft³/s, Aug. 11, 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	79	59	65	54	53	83	311	161	346	64	38	40
2	73	60	63	54	53	91	444	218	319	59	36	40
3	70	62	69	53	53	97	229	273	343	58	35	36
4	68	62	62	52	49	100	168	314	406	56	33	41
5	70	62	66	49	45	92	155	256	480	76	33	41
6	71	60	65	54	50	89	171	212	384	112	40	40
7	87	51	64	53	49	84	183	208	401	89	38	41
8	101	52	64	54	46	86	169	206	362	76	36	41
9	94	52	63	57	44	92	182	206	352	67	34	56
10	88	52	55	52	37	76	172	183	351	61	33	92
11	96	53	57	52	46	79	170	234	288	54	32	65
12	99	61	49	52	44	75	166	238	249	52	42	59
13	100	56	54	51	50	71	164	218	236	51	43	57
14	103	49	56	51	52	72	154	218	222	50	40	56
15	92	53	54	52	57	70	146	231	218	59	38	55
16	85	52	58	53	57	64	165	306	207	52	37	56
17	79	57	59	52	56	66	146	238	180	55	36	56
18	73	57	58	52	55	64	111	215	164	50	36	55
19	73	52	56	52	54	61	101	220	149	48	34	56
20	74	51	55	53	52	65	108	255	135	52	33	55
21	73	54	54	52	47	68	162	316	121	51	32	53
22	64	51	55	46	44	91	223	355	107	53	33	55
23	64	52	55	52	45	114	195	364	92	57	33	103
24	63	53	55	51	45	127	165	367	77	50	33	127
25	62	57	54	47	50	130	127	355	65	54	35	97
26	59	58	53	49	66	131	107	408	75	49	36	148
27	60	55	53	52	86	137	88	413	70	47	37	108
28	59	55	54	51	87	166	82	418	63	46	37	170
29	60	63	53	50	---	184	82	394	69	44	42	150
30	58	78	57	52	---	195	110	368	68	42	41	124
31	60	---	57	54	---	326	---	317	---	40	40	---
TOTAL	2357	1689	1792	1608	1472	3246	4956	8685	6599	1774	1126	2173
MEAN	76.0	56.3	57.8	51.9	52.6	105	165	280	220	57.2	36.3	72.4
MAX	103	78	69	57	87	326	444	418	480	112	43	170
MIN	58	49	49	46	37	61	82	161	63	40	32	36
AC-FT	4680	3350	3550	3190	2920	6440	9830	17230	13090	3520	2230	4310
CAL YR 1985	TOTAL	36215	MEAN	99.2	MAX	474	MIN	20	AC-FT	71830		
WTR YR 1986	TOTAL	37477	MEAN	103	MAX	480	MIN	32	AC-FT	74340		

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.--No estimated daily discharges. 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.--10 years, 2,557 ft³/s; 1,853,000 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, 8,400 ft³/s at 0300 May 5, gage-height, 7.82 ft; minimum daily, 1,720 ft³/s, Aug. 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2560	2460	2820	2730	3560	3710	5640	6310	5700	4560	2510	1960
2	2540	2420	2740	2750	3550	3760	6550	6790	5530	4440	2270	1960
3	2530	2380	2770	2740	3550	3840	5530	7080	5840	4360	2220	2030
4	2480	2380	2760	2700	3360	4030	4670	7090	6830	4340	2230	1990
5	2500	2360	2750	2650	3310	4090	4230	7750	6770	4560	2180	2040
6	2460	2380	2750	2690	3310	3930	4080	7080	6720	4970	1980	2090
7	2710	2340	2740	2670	3300	3670	4080	6610	6840	5220	1970	2040
8	2590	2360	2750	2640	3350	4150	4060	6280	6300	5460	1920	2070
9	2450	2380	2730	2620	3340	4320	4220	6660	5940	5670	1880	2230
10	3220	2390	2640	2640	3250	4110	4110	6420	5690	5940	1850	2620
11	3350	2380	2490	2700	2760	4180	3850	6600	5070	5750	1820	2560
12	3330	2440	2560	2700	2770	4050	4310	6780	4740	5620	1840	2440
13	3250	2480	2660	2760	2780	3980	4360	6410	4760	5480	1870	2510
14	2870	2520	2720	3140	2790	3850	3940	6080	4740	5340	1870	2490
15	2720	2740	2710	3110	2820	3780	3790	5990	4760	5240	1880	2440
16	2690	2710	2710	3110	2950	3720	4090	6630	4650	5210	1850	2420
17	2660	2760	2690	3090	2910	3690	4200	6200	4540	5230	1820	2390
18	2660	2820	2650	3190	2880	3210	4480	5960	4410	4990	1780	2370
19	2650	2790	2710	3180	2900	2670	4440	6180	4290	4370	1850	2400
20	2620	2710	2700	3200	3060	2550	4240	6610	4110	4150	1850	2460
21	2620	2720	2730	3300	3070	2460	4470	7200	3980	4160	1880	2430
22	2520	2680	2740	3440	3180	2720	5630	7340	3860	4090	1780	2450
23	2500	2650	2730	3470	3190	2900	6050	7940	3740	3440	1720	2800
24	2450	2670	2750	3500	3270	2960	5700	7950	3600	3310	1770	3160
25	2450	2600	2750	3500	3510	3060	5430	7570	3520	2950	1860	3030
26	2580	2740	2730	3480	3590	3250	5220	7890	3940	2890	1830	3260
27	2630	2700	2750	3500	3730	3600	4770	8010	4240	2800	1780	2990
28	2640	2720	2700	3510	3740	3880	4550	7960	4320	2740	1770	3110
29	2580	2790	2730	3550	---	3990	4720	7380	4270	2630	1880	3070
30	2570	2960	2740	3530	---	4310	5310	6640	4300	2590	1940	3070
31	2500	---	2770	3550	---	5350	---	5750	---	2400	1960	---
TOTAL	82880	77430	84170	95340	89780	113770	140720	213140	148000	134900	59610	74880
MEAN	2674	2581	2715	3075	3206	3670	4691	6875	4933	4352	1923	2496
MAX	3350	2960	2820	3550	3740	5350	6550	8010	6840	5940	2510	3260
MIN	2450	2340	2490	2620	2760	2460	3790	5750	3520	2400	1720	1960
AC-FT	164400	153600	167000	189100	178100	225700	279100	422800	293600	267600	118200	148500
CAL YR 1985	TOTAL	1427500		MEAN	3911	MAX	11000	MIN	1230	AC-FT	2831000	
WTR YR 1986	TOTAL	1314620		MEAN	3602	MAX	8010	MIN	1720	AC-FT	2608000	

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 downstream 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 above National Geodetic Vertical Datum of 1929 (levels by U.S. Bureau of Reclamation).

REMARKS.--Estimated daily discharges: Dec. 14-18, and Jan. 8,9. Records good except for estimated daily discharges, which are fair. Diversions for irrigation upstream from station. Water is imported upstream from 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.--28 years, 168 ft³/s; 121,700 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 greater than base discharge of 1,000 ft³/s, and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
June 6	2400	*1,390	*4.84	July 9	1100	1,260	4.72
June 15	0100	1,080	4.50	Aug. 13	0100	1,010	4.31
June 28	1800	1,060	4.49				

Minimum daily discharge, 42 ft³/s, Jan. 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	120	88	72	50	50	59	105	242	461	703	210	171
2	116	85	74	51	50	60	107	293	454	676	195	165
3	116	86	74	52	50	61	103	381	560	646	183	163
4	110	83	72	51	49	64	94	453	687	684	198	150
5	110	83	65	49	46	67	92	419	786	792	193	145
6	108	81	72	51	46	67	94	348	930	663	275	136
7	122	75	70	50	48	70	96	298	1130	582	217	134
8	130	78	70	42	47	67	89	231	1020	536	195	164
9	124	77	68	50	46	70	89	207	894	785	188	344
10	124	77	61	49	44	67	92	202	670	725	174	548
11	139	81	51	50	44	65	94	205	509	598	165	331
12	134	83	49	50	46	64	94	204	572	551	191	280
13	134	77	48	51	51	61	94	223	716	521	384	247
14	139	74	46	49	51	61	88	228	877	495	220	234
15	122	72	50	49	61	61	85	225	900	467	191	225
16	118	71	55	49	54	60	88	249	899	497	167	215
17	115	77	55	48	52	61	89	270	890	435	161	200
18	112	78	50	48	55	57	88	244	808	407	158	186
19	108	72	57	48	55	57	86	272	818	383	158	174
20	103	70	56	51	54	56	89	348	748	362	156	165
21	103	74	57	49	49	60	104	421	805	326	159	158
22	98	67	57	47	44	67	140	438	747	322	152	176
23	96	74	57	50	46	70	161	450	740	312	156	198
24	94	77	56	50	50	77	152	462	706	342	156	212
25	94	77	55	43	52	77	152	438	632	316	174	189
26	94	77	54	44	56	78	153	528	773	303	158	186
27	94	74	54	46	61	88	130	564	835	291	145	176
28	94	71	52	47	60	98	139	564	871	265	145	174
29	91	77	52	49	---	103	168	584	828	246	152	174
30	89	75	54	51	---	105	194	472	824	231	152	161
31	92	---	54	54	---	110	---	418	---	220	176	---
TOTAL	3443	2311	1817	1518	1417	2188	3349	10881	23090	14682	5704	6181
MEAN	111	77.0	58.6	49.0	50.6	70.6	112	351	770	474	184	206
MAX	139	88	74	54	61	110	194	584	1130	792	384	548
MIN	89	67	46	42	44	56	85	202	454	220	145	134
AC-FT	6830	4580	3600	3010	2810	4340	6640	21580	45800	29120	11310	12260
CAL YR 1985	TOTAL	80299		MEAN	220	MAX	1520	MIN	36	AC-FT	159300	
WTR YR 1986	TOTAL	76581		MEAN	210	MAX	1130	MIN	42	AC-FT	151900	

GUNNISON RIVER BASIN

09147000 DALLAS CREEK NEAR RIDGWAY, CO

LOCATION.--Lat 38°10'40", long 107°45'28", on line between sec.4 and 5, T.4 S 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 mi².

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. Elevation of gage is 6,980 ft above National Geodetic Vertical Datum of 1929, from topographic map. Mar. 1, 1922 to Oct. 31, 1927, nonrecording gage at different datum.

REMARKS.--Estimated daily discharges: Nov. 15-17, 19-23, Dec. 5, 9-29, Jan. 1, 2, 4-20, 22, 26-28, Feb. 7-12. Records good except for estimated daily discharges, which are poor. Diversions upstream from station for irrigation of about 4,500 acres upstream from and 700 acres downstream from station. One small ditch imports water from Leopard Creek (Dolores River basin) to drainage upstream from station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--28 years, 41.6 ft³/s; 30,140 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 1,120 ft³/s, Aug. 15, 1923, gage height, 4.40 ft, datum then in use, from rating curve extended above 160 ft³/s; maximum gage height, 6.13 ft, July 21, 1983; minimum daily discharge, 0.21 ft³/s, June 19, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 272 ft³/s at 1900 May 17, gage height, 4.50 ft; minimum daily, 12 ft³/s, June 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	49	38	30	20	18	19	55	44	13	178	53	59
2	47	36	30	20	17	18	55	45	12	160	49	59
3	44	36	30	20	16	18	44	54	18	153	54	58
4	41	35	30	20	15	17	39	55	36	184	61	54
5	40	35	28	19	15	18	39	51	61	229	48	50
6	42	36	31	20	16	19	50	36	77	195	66	49
7	48	34	31	19	16	21	55	37	106	154	55	50
8	49	34	30	19	16	21	54	34	97	137	44	54
9	43	33	28	22	15	23	48	38	97	194	41	106
10	42	33	24	19	15	22	45	56	101	195	39	171
11	44	34	22	20	16	21	45	75	62	163	40	116
12	43	34	20	20	19	23	45	54	56	141	41	98
13	45	30	20	20	22	22	44	41	65	141	85	89
14	49	28	22	19	22	23	33	38	86	139	63	82
15	45	28	24	20	31	23	36	36	103	127	51	77
16	43	28	24	20	25	22	38	61	110	149	45	73
17	43	30	24	20	26	22	38	119	104	129	40	68
18	42	30	24	20	30	20	35	87	103	141	39	67
19	41	28	24	22	24	20	38	60	113	118	36	63
20	41	28	24	24	26	21	42	51	97	113	33	60
21	41	28	24	23	21	21	40	50	106	109	29	56
22	40	26	24	20	20	23	44	49	113	109	29	60
23	39	28	24	23	21	23	43	51	113	103	30	63
24	38	31	24	20	21	24	43	53	107	104	32	72
25	39	31	22	18	21	27	43	54	112	93	36	64
26	39	31	22	18	20	29	49	62	152	88	55	61
27	39	29	22	18	20	39	49	53	153	82	49	56
28	39	29	22	18	18	47	87	30	149	76	54	55
29	38	30	22	18	---	51	62	22	158	72	62	55
30	37	30	24	18	---	50	44	21	199	63	59	54
31	38	---	21	18	---	55	---	17	---	56	59	---
TOTAL	1308	941	771	615	562	802	1382	1534	2879	4095	1477	2099
MEAN	42.2	31.4	24.9	19.8	20.1	25.9	46.1	49.5	96.0	132	47.6	70.0
MAX	49	38	31	24	31	55	87	119	199	229	85	171
MIN	37	26	20	18	15	17	33	17	12	56	29	49
AC-FT	2590	1870	1530	1220	1110	1590	2740	3040	5710	8120	2930	4160
CAL YR 1985	TOTAL	27185	MEAN	74.5	MAX	291	MIN	16	AC-FT	53920		
WTR YR 1986	TOTAL	18465	MEAN	50.6	MAX	229	MIN	12	AC-FT	36630		

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 mi².

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 above National Geodetic Vertical Datum of 1929. See WSP 1713 or 1733 for history of changes prior to Sept. 30, 1949.

REMARKS.--Estimated daily discharges: Mar. 30, Apr. 3, 6, May 6, June 16-18. Records good except for estimated daily discharges, which are fair. Flow regulated by Ridgway Reservoir, 1.1 mi upstream since 1986, total capacity, 80,000 acre-ft. Diversions upstream from station for irrigation of about 2,600 acres downstream from station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--75 years (water years 1904-5, 1913-86), 271 ft³/s; 196,300 acre-ft/yr, prior to completion of Ridgway Reservoir.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 4,080 ft³/s, June 13, 14, 1921; minimum daily, 12 ft³/s, Sept. 19, 1956, May 7, 1967.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,770 ft³/s at 0300 June 7, gage height, 4.67 ft; minimum daily, 46 ft³/s, Jan. 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	219	170	130	102	107	111	261	348	579	1100	265	274
2	205	162	130	107	104	113	254	408	567	1020	244	244
3	202	157	132	105	102	113	233	541	701	958	223	270
4	193	152	130	101	96	111	203	652	922	973	250	230
5	192	150	117	92	90	115	226	576	1090	1180	240	212
6	187	145	126	113	86	113	240	450	1240	982	331	196
7	205	138	125	107	92	119	258	378	1490	854	283	190
8	229	142	125	92	89	121	237	312	1350	755	225	205
9	219	142	121	102	86	128	233	276	1200	1020	219	409
10	205	140	113	111	82	122	230	273	962	1030	201	792
11	219	140	95	105	89	121	233	318	700	844	193	576
12	226	142	91	105	82	121	206	292	708	770	219	492
13	222	129	99	105	105	117	202	291	889	728	458	428
14	246	123	104	46	107	119	163	307	1110	696	320	383
15	213	123	105	48	142	122	162	300	1190	650	271	348
16	208	130	117	72	123	115	170	363	1170	713	238	329
17	202	140	113	76	112	119	172	473	1120	609	221	300
18	202	135	119	167	125	107	165	430	1100	629	211	279
19	196	135	121	192	123	105	166	413	1180	563	208	265
20	190	117	117	76	123	111	181	520	1070	529	196	247
21	184	130	117	76	100	113	207	620	1130	481	196	230
22	181	119	117	74	87	131	260	666	1070	470	193	240
23	170	135	115	77	93	145	272	704	1040	450	190	271
24	166	132	117	76	95	160	257	729	975	489	212	306
25	167	135	111	95	96	162	254	639	911	442	236	287
26	167	135	109	206	102	169	264	805	1170	410	233	277
27	170	130	109	187	113	192	237	851	1210	386	212	268
28	167	123	109	107	111	225	258	828	1230	348	202	264
29	167	130	109	107	---	263	302	847	1230	324	228	172
30	165	132	113	115	---	261	299	663	1260	300	222	97
31	167	---	113	111	---	262	---	517	---	281	240	---
TOTAL	6051	4113	3569	3255	2862	4406	6805	15790	31564	20984	7380	9081
MEAN	195	137	115	105	102	142	227	509	1052	677	238	303
MAX	246	170	132	206	142	263	302	851	1490	1180	458	792
MIN	165	117	91	46	82	105	162	273	567	281	190	97
AC-FT	12000	8160	7080	6460	5680	8740	13500	31320	62610	41620	14640	18010
CAL YR 1985	TOTAL	155166	MEAN	425	MAX	2120	MIN	70	AC-FT	307800		
WTR YR 1986	TOTAL	115860	MEAN	317	MAX	1490	MIN	46	AC-FT	229800		

GUNNISON RIVER BASIN

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 above 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.--Estimated daily discharges: Jan. 19, 20, 27-28, May 6-7, and Sept. 10-17. Records good except for estimated daily discharges, which are poor. 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.--50 years (water years 1908, 1921, 1939-86), 296 ft³/s; 214,500 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, 7.0 ft³/s, July 10-15, 17, 21, 24-28, 1910.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,800 ft³/s at 1100 May 5, gage height, 5.31 ft; minimum daily, 80 ft³/s, Mar. 8, 11-12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	481	474	156	110	108	85	248	504	470	782	198	641
2	478	442	144	105	104	84	389	650	478	565	195	608
3	462	442	138	104	102	84	505	845	560	524	202	590
4	437	430	135	104	99	82	441	1130	893	592	202	539
5	432	424	135	100	94	81	320	1260	1090	802	289	486
6	438	424	141	94	91	81	310	1000	1150	916	309	349
7	467	411	142	113	90	82	288	750	1140	689	350	338
8	478	370	146	108	90	80	259	597	1190	627	290	367
9	465	381	146	115	91	82	228	556	1120	686	260	580
10	451	375	136	112	87	82	270	517	1060	1000	225	1000
11	520	371	134	110	89	80	296	525	687	806	195	950
12	586	379	127	105	91	80	349	459	539	608	202	900
13	585	429	120	105	92	98	362	393	673	495	401	850
14	642	399	118	112	97	146	346	381	888	445	429	800
15	576	189	123	95	96	151	292	494	975	505	319	750
16	556	112	124	95	115	132	283	703	956	564	249	700
17	555	117	125	105	100	137	324	1120	897	567	192	650
18	551	123	127	96	98	149	313	1150	831	501	182	607
19	538	118	126	120	101	127	299	845	823	454	174	592
20	522	115	127	110	110	125	269	789	768	766	169	460
21	512	125	120	104	104	101	273	913	715	557	177	413
22	513	119	122	97	91	99	313	963	640	538	193	393
23	501	129	122	97	87	102	408	935	590	695	202	429
24	480	131	116	98	86	102	444	905	529	647	228	498
25	464	129	114	93	84	86	453	786	444	636	351	530
26	445	135	108	110	84	87	608	826	606	595	356	581
27	451	134	110	100	85	96	558	889	738	545	321	568
28	447	128	114	100	85	114	470	778	722	457	332	549
29	454	133	115	106	---	148	492	681	851	299	508	546
30	443	197	109	104	---	150	459	562	731	237	606	335
31	448	---	111	108	---	178	---	437	---	195	576	---
TOTAL	15378	7885	3931	3235	2651	3311	10869	23343	23754	18295	8882	17599
MEAN	496	263	127	104	94.7	107	362	753	792	590	287	587
MAX	642	474	156	120	115	178	608	1260	1190	1000	606	1000
MIN	432	112	108	93	84	80	228	381	444	195	169	335
AC-FT	30500	15640	7800	6420	5260	6570	21560	46300	47120	36290	17620	34910
CAL YR 1985 TOTAL		166658		MEAN	457	MAX	2080	MIN	81	AC-FT	330600	
WTR YR 1986 TOTAL		139133		MEAN	381	MAX	1260	MIN	80	AC-FT	276000	

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.--209 mi².

PERIOD OF RECORD.--April 1922 to September 1923, May 1976 to current year.

REVISED RECORDS.--WSP 1313: 1923 (monthly runoff). WDR CO-84-2: 1979.

GAGE.--Water-stage recorder. Elevation of gage is 4,810 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to September 1923, nonrecording gage at different datum operated by State Engineer of Colorado.

REMARKS.--Estimated daily discharges: Nov 26, 30, Dec. 6 to Mar. 7, June 12, 13, July 6-16, July 18 to Aug. 30, Sept. 1-9, 15-18, 20-23. Records fair except for estimated daily discharges, which are poor. Diversions upstream from station for irrigation. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--10 years, 63.8 ft³/s; 46,220 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, 818 ft³/s at 2400 May 3, gage height, 5.59 ft; minimum daily, 2.1 ft³/s, July 31, Aug. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	17	20	14	15	26	440	520	169	23	2.2	11
2	20	18	21	14	13	30	620	554	147	22	2.1	8.9
3	18	17	20	14	13	34	454	628	133	19	2.2	8.0
4	18	18	18	14	13	36	355	641	128	18	2.2	7.6
5	22	18	14	14	13	39	305	548	102	70	3.0	6.7
6	26	18	13	14	13	43	310	454	87	20	3.2	6.4
7	55	18	13	14	13	48	351	386	72	8.9	3.7	6.4
8	61	15	13	14	13	58	352	350	66	6.4	3.4	6.4
9	46	16	13	14	13	78	377	324	65	6.0	3.0	12
10	33	16	13	14	12	68	399	294	70	5.7	2.6	44
11	57	20	13	14	12	63	419	324	62	5.7	2.2	39
12	43	32	12	14	13	59	420	391	55	4.8	2.4	28
13	50	23	12	14	14	50	439	382	48	4.3	3.2	22
14	38	15	13	13	15	54	372	374	41	5.1	4.1	18
15	30	18	15	13	17	48	358	362	38	3.4	5.7	21
16	25	15	16	13	19	48	413	381	33	5.1	5.7	19
17	23	20	17	13	18	49	430	379	29	18	3.4	19
18	21	18	17	13	17	47	378	388	28	16	4.0	21
19	20	12	17	13	18	39	361	403	26	7.3	4.0	22
20	19	15	16	13	18	45	338	433	26	6.0	4.5	22
21	18	19	16	13	17	48	423	423	25	9.8	5.0	21
22	18	15	16	12	17	51	542	428	23	7.3	4.3	19
23	18	19	16	13	19	66	577	385	21	6.4	4.0	29
24	18	20	15	13	20	91	555	344	22	4.8	3.5	90
25	16	20	15	12	21	115	500	306	23	3.9	11	87
26	16	19	15	12	22	136	410	293	23	3.2	12	84
27	17	19	15	13	24	177	341	272	23	3.2	6.7	62
28	17	18	14	13	225	230	318	242	23	2.9	4.8	78
29	17	21	14	14	---	276	379	211	25	2.6	5.4	87
30	17	20	15	14	---	299	464	184	24	2.3	9.4	93
31	16	---	15	15	---	386	---	180	---	2.1	20	---
TOTAL	834	549	472	417	657	2837	12400	11784	1657	323.2	152.9	998.4
MEAN	26.9	18.3	15.2	13.5	23.5	91.5	413	380	55.2	10.4	4.93	33.3
MAX	61	32	21	15	225	386	620	641	169	70	20	93
MIN	16	12	12	12	12	26	305	180	21	2.1	2.1	6.4
AC-FT	1650	1090	936	827	1300	5630	24600	23370	3290	641	303	1980
CAL YR 1985	TOTAL	34068.05		MEAN	93.3	MAX	1070	MIN	.12	AC-FT	67570	
WTR YR 1986	TOTAL	33081.5		MEAN	90.6	MAX	641	MIN	2.1	AC-FT	65620	

GUNNISON RIVER BASIN

09152500 GUNNISON RIVER NEAR GRAND JUNCTION, CO

LOCATION.--Lat 38°59'00", long 108°27'00", in NE½SW¼ 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 mi².

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 above National Geodetic Vertical Datum of 1929. See WSP 1733 or 1924 for history of changes prior to October 1959.

REMARKS.--Estimated daily discharges: Sept 10-15, 24. Records good. Records show flow that enters Colorado River from Gunnison River basin except for about 60 ft³/s diverted downstream from gage during irrigation season. Natural flow of river affected by diversions for irrigation of about 233,000 acres upstream from station, storage reservoirs, and return flow from irrigated lands.

AVERAGE DISCHARGE.--78 years (water years 1897-99, 1902-06, 1917-86), 2,620 ft³/s; 1,898,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 35,700 ft³/s, May 23, 1920, gage height, 14.95 ft, site and datum then in use, from rating curve extended above 22,000 ft³/s; minimum daily, 106 ft³/s, July 20, 1934.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 10,600 ft³/s at 1200 May 5, gage height, 8.69 ft; minimum daily, 1,980 ft³/s, Aug. 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3130	2910	2980	2670	3330	3440	6460	7250	6770	4950	2740	2630
2	3060	2830	2810	2650	3300	3480	7530	8150	6560	4680	2550	2600
3	3040	2780	2810	2670	3300	3540	7240	8870	6590	4480	2500	2660
4	2990	2750	2810	2590	3200	3680	5980	9270	8130	4570	2490	2590
5	2960	2740	2760	2540	3080	3790	5140	9830	8010	4830	2550	2540
6	2950	2730	2770	2590	3070	3800	4930	9120	8120	5550	2430	2520
7	3090	2690	2770	2560	3070	3460	4770	8040	8240	5560	2390	2440
8	3370	2650	2770	2550	3040	3850	4780	7600	7710	5620	2320	2430
9	2980	2680	2770	2510	3090	4090	4930	7720	7010	5940	2240	2660
10	3530	2700	2690	2530	2990	4110	4940	7550	6830	6510	2180	3200
11	4040	2690	2610	2580	2700	4000	4760	7500	5960	6330	2100	3300
12	3990	2740	2390	2590	2530	3970	5040	7840	5170	5980	2170	3200
13	3980	2840	2620	2570	2580	3840	5300	7440	5120	5730	2170	3200
14	3680	2750	2650	2920	2620	3870	4950	7040	5270	5620	2400	3200
15	3360	2850	2670	2990	2650	3850	4600	6870	5350	5420	2280	3300
16	3250	2720	2660	2960	2820	3790	4770	7880	5310	5550	2200	3120
17	3220	2740	2660	2930	2760	3750	4950	7970	5080	5730	2130	3040
18	3180	2820	2620	3010	2700	3570	5240	7720	4870	5480	2060	2980
19	3170	2780	2630	3070	2740	2810	5190	7600	4760	4870	2010	3000
20	3120	2700	2680	3110	2860	2750	4900	7910	4610	4780	2040	3010
21	3090	2720	2660	3060	2930	2600	4980	8770	4290	4660	2110	2900
22	3040	2670	2680	3200	2950	2660	6090	9320	4150	4580	2070	2880
23	2950	2670	2680	3240	2940	2880	7140	9540	3990	4280	1980	3060
24	2930	2690	2680	3270	2950	3100	7390	9740	3770	3970	2000	3700
25	2900	2720	2670	3220	3170	2990	6640	9240	3650	3700	2170	3890
26	2950	2670	2650	3200	3240	3370	6550	9400	3880	3500	2210	4060
27	3020	2740	2650	3310	3380	3520	6050	9760	4540	3350	2110	3830
28	3030	2720	2630	3320	3450	4020	5540	9670	4590	3200	2030	3800
29	3050	2780	2640	3290	---	4310	5560	9110	4700	2970	2180	3820
30	2880	3020	2680	3300	---	4610	6160	8200	4630	2860	2540	3770
31	2940	---	2710	3310	---	5340	---	7170	---	2670	2550	---
TOTAL	98870	82490	83460	90310	83440	112840	168500	259090	167660	147920	69900	93330
MEAN	3189	2750	2692	2913	2980	3640	5617	8358	5589	4772	2255	3111
MAX	4040	3020	2980	3320	3450	5340	7530	9830	8240	6510	2740	4060
MIN	2880	2650	2390	2510	2530	2600	4600	6870	3650	2670	1980	2430
AC-FT	196100	163600	165500	179100	165500	223800	334200	513900	332600	293400	138600	185100
CAL YR 1985	TOTAL	1601500		MEAN	4388	MAX	15100	MIN	1220	AC-FT	3177000	
WTR YR 1986	TOTAL	1457810		MEAN	3994	MAX	9830	MIN	1980	AC-FT	2892000	

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 microsiemens several days during July and September 1974; minimum, 194 microsiemens June 6, 1979.
WATER TEMPERATURE: Maximum, 30.0°C Aug. 13, 1958; minimum, 0.0°C on many days during winter months most years.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum recorded, 950 microsiemens Aug. 30 and 31; minimum recorded, 293 microsiemens May 27.
WATER TEMPERATURE: Maximum, 23.0°C Aug. 17, 19; minimum, 1.0°C Dec. 13, Jan. 7, 8, 9, and Feb. 10

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	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)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
NOV 26...	1300	2660	880	8.5	7.0	2.5	10.1	K1	K22	290	71	27
JAN 28...	1200	3250	510	8.3	3.0	10	11.2	K7	K79	220	56	19
MAR 26...	1300	3480	518	8.2	9.5	92	9.7	K110	220	210	54	19
MAY 30...	1100	7970	340	8.2	13.0	50	8.4	300	620	150	41	12
JUL 16...	1200	5630	600	8.3	18.0	550	7.3	--	K2100	240	68	16
SEP 24...	1230	3710	790	7.2	14.0	130	7.5	360	390	380	100	32

DATE	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE IT-FLD (MG/L AS HCO3)	CAR- BONATE IT-FLD (MG/L AS CO3)	ALKA- LINITY, CARBON- ATE IT-FLD (MG/L - 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, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)
NOV 26...	44	1	3.0	140	3.0	120	220	6.5	0.3	14	--	460
JAN 28...	29	0.9	2.4	145	0	119	150	5.6	0.3	14	352	350
MAR 26...	30	0.9	2.6	149	0	122	160	6.1	0.3	12	366	360
MAY 30...	20	0.7	2.6	100	0	82	110	5.6	0.2	13	333	250
JUL 16...	28	0.8	2.5	116	0	95	180	4.8	0.3	16	584	370
SEP 24...	45	1	3.2	160	0	131	290	6.5	0.4	18	707	580

DATE	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (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 26...	0.63	3340	0.63	0.01	0.64	0.06	0.05	0.44	0.5	0.02	0.04	0.01
JAN 28...	0.48	3090	--	<0.01	0.52	0.05	0.04	0.45	0.5	0.04	0.02	0.01
MAR 26...	0.5	3440	0.59	0.01	0.60	0.03	0.03	0.77	0.8	0.10	0.06	0.01
MAY 30...	0.45	7170	--	<0.01	0.38	0.14	0.14	1.3	1.4	0.07	0.03	0.03
JUL 16...	0.79	8880	1.18	0.02	1.20	0.08	0.07	0.72	0.8	0.11	0.03	<0.01
SEP 24...	0.96	7080	0.90	0.02	0.92	0.07	0.09	0.43	0.5	0.88	0.64	0.07

K BASED ON NON-IDEAL COLONY COUNT

GUNNISON RIVER BASIN

09152500 GUNNISON RIVER NEAR GRAND JUNCTION, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	*LEAD, DIS- SOLVED (UG/L AS PB)
NOV 26...	1300	20	1	74	<0.5	<1	<1	<3	2	15	<1
MAR 26...	1300	60	1	61	<0.5	<1	<1	<3	3	19	<1
MAY 30...	1100	80	2	53	<0.5	8	<1	<3	23	69	10
JUL 16...	1200	450	6	51	<0.5	<1	<1	<3	12	430	6
SEP 24...	1230	70	1	67	<0.5	<1	2	<3	7	1500	7

DATE	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)
NOV 26...	41	17	<0.1	<10	3	6	<1	720	<6	10
MAR 26...	28	13	<0.1	<10	2	4	<1	530	<6	18
MAY 30...	23	9	--	<10	3	2	<1	390	<6	82
JUL 16...	28	27	--	<10	28	3	<1	560	<6	13
SEP 24...	47	57	0.3	<10	4	5	<1	930	<6	25

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
NOV 26...	1300	2660	30	215	--
JAN 28...	1200	3250	46	404	62
MAR 26...	1300	3480	259	2430	84
MAY 30...	1100	7970	655	14100	68
JUL 16...	1200	5630	1550	23600	91
SEP 24...	1230	3710	489	4900	83

* The minimum reporting level for Lead was changed from <1 to <5 during June, 1986.

09152500 GUNNISON RIVER NEAR GRAND JUNCTION, CO--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25 DEG. C, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	800	733	812	621	516	548	386	358	372	601	765	935
2	784	746	770	616	523	546	377	334	388	595	758	916
3	768	739	731	607	525	535	422	321	402	590	749	893
4	761	741	740	606	531	512	466	314	397	592	749	877
5	748	738	722	597	531	496	445	312	397	609	752	877
6	740	741	696	581	525	492	453	316	401	626	773	868
7	742	722	682	590	522	507	459	342	405	632	830	860
8	792	714	680	589	519	496	448	409	412	593	900	856
9	821	722	685	574	514	471	432	418	430	584	913	858
10	776	718	687	587	506	488	425	435	446	570	900	891
11	745	712	670	599	501	507	430	419	468	550	861	898
12	772	713	668	594	547	511	429	390	498	540	848	863
13	775	718	662	585	557	523	411	382	491	535	880	839
14	766	707	647	571	573	532	413	387	472	529	874	830
15	788	687	642	542	584	528	433	404	475	522	853	825
16	787	652	632	529	603	527	437	449	474	513	866	819
17	782	659	628	537	632	528	428	458	478	477	873	806
18	779	682	621	540	637	529	423	476	484	461	875	793
19	770	685	629	532	650	564	427	442	506	485	873	791
20	754	671	618	552	651	589	426	413	532	568	859	785
21	751	670	613	547	654	595	427	377	552	631	848	775
22	741	681	607	529	632	608	384	351	559	619	866	772
23	742	673	609	501	605	594	353	339	572	658	895	766
24	739	692	610	507	592	572	341	326	592	712	887	758
25	739	689	605	503	565	574	355	328	609	736	889	712
26	738	719	597	483	553	546	376	319	645	752	899	687
27	727	727	598	502	563	516	424	310	628	760	885	707
28	723	693	598	512	552	482	426	307	590	759	879	680
29	725	678	598	494	---	463	429	314	593	751	915	676
30	730	705	598	491	---	445	398	329	604	750	936	653
31	709	---	608	506	---	417	---	347	---	755	940	---
MEAN	759	704	654	552	567	524	416	369	496	615	858	809

09152500 GUNNISON RIVER NEAR GRAND JUNCTION, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	12.0	10.5	10.0	9.0	6.0	6.0	4.0	3.0	5.5	4.0	6.5	5.0
2	12.5	11.0	9.5	8.5	6.0	6.0	3.5	2.5	5.5	4.5	7.0	5.5
3	13.0	11.0	10.0	8.5	6.5	6.0	3.5	2.5	5.5	4.5	7.5	6.0
4	13.0	11.5	10.0	8.5	7.0	6.0	3.5	2.0	5.0	3.5	7.5	6.0
5	13.0	11.5	10.0	9.0	6.0	5.0	2.0	1.5	4.5	3.0	7.5	6.0
6	13.0	11.5	10.0	8.5	6.0	5.0	2.0	1.5	4.0	3.0	7.5	6.0
7	13.5	11.5	9.0	8.0	6.0	5.0	2.5	1.0	3.0	2.0	8.0	6.0
8	12.5	11.0	9.5	8.0	5.5	5.0	2.0	1.0	3.0	2.0	8.0	7.0
9	11.0	10.5	9.0	8.0	5.0	4.0	2.0	1.0	3.0	2.0	7.5	6.0
10	12.5	11.0	9.0	7.5	4.0	2.5	3.0	1.5	2.0	1.0	6.0	4.5
11	12.5	11.5	9.0	7.5	3.0	2.0	3.5	2.0	3.0	1.5	6.5	4.5
12	12.0	11.5	8.5	7.5	2.5	1.5	3.5	2.0	3.0	1.5	7.0	6.0
13	12.0	10.5	7.5	6.5	2.5	1.0	3.0	2.0	4.0	2.5	6.5	5.5
14	11.0	9.5	6.0	5.0	3.0	2.0	3.0	1.5	4.0	3.5	6.5	5.5
15	11.5	10.0	6.5	5.0	3.0	2.0	2.5	2.0	6.0	4.0	7.0	5.0
16	11.5	10.0	6.5	6.0	3.0	2.0	3.5	2.0	5.5	4.5	7.5	6.5
17	11.5	10.5	7.0	5.5	2.5	1.5	4.0	3.0	6.0	4.5	6.5	5.5
18	12.5	10.5	7.5	6.0	2.5	1.5	3.5	2.5	7.0	5.5	6.0	5.0
19	12.5	11.0	6.0	4.0	3.0	2.0	4.0	3.0	7.5	6.0	7.0	5.0
20	12.0	11.0	5.0	3.5	3.5	2.0	4.0	3.0	7.5	6.0	8.0	5.5
21	12.0	11.0	6.0	4.5	3.5	2.0	4.5	3.0	6.0	5.0	9.0	6.5
22	11.5	10.5	5.5	4.5	3.5	2.0	3.0	2.5	5.5	4.5	10.5	7.5
23	11.5	10.0	5.0	4.5	3.5	2.5	3.0	2.5	6.0	4.5	10.5	8.5
24	12.0	10.0	6.5	5.0	3.5	2.5	4.0	3.0	7.0	5.0	9.5	9.0
25	12.0	10.5	7.0	6.5	3.5	2.5	3.5	2.5	7.0	5.5	10.5	8.5
26	12.0	10.5	8.0	7.0	3.5	2.0	3.5	2.5	8.0	6.5	10.5	9.0
27	12.5	11.0	7.0	6.0	3.0	2.0	3.5	2.5	8.0	6.5	11.0	9.0
28	12.5	11.0	6.0	5.5	3.0	2.0	3.5	2.5	7.0	5.5	11.0	9.0
29	12.5	11.0	6.5	5.5	3.0	2.0	4.0	3.0	---	---	11.0	9.5
30	12.0	11.0	6.5	6.0	3.5	2.5	4.0	3.5	---	---	11.0	9.5
31	11.5	10.0	---	---	4.5	3.0	5.0	4.0	---	---	11.5	10.0
MONTH	13.5	9.5	10.0	3.5	7.0	1.0	5.0	1.0	8.0	1.0	11.5	4.5
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	10.0	8.0	12.5	11.5	14.5	13.5	17.5	16.0	21.0	18.5	19.5	17.0
2	8.5	7.5	12.0	11.5	15.0	13.0	18.5	17.0	21.0	18.5	19.0	17.5
3	7.5	5.5	13.0	11.5	15.5	14.0	18.0	16.5	20.5	18.0	19.0	16.5
4	7.0	5.5	13.0	12.0	15.5	14.5	18.0	16.5	20.5	17.5	19.5	17.0
5	8.5	7.0	12.0	10.0	15.0	14.0	17.5	16.5	20.5	18.0	20.0	17.0
6	11.0	8.5	10.5	9.5	15.5	14.0	17.5	16.0	21.0	17.5	19.5	17.0
7	11.5	10.0	9.5	9.0	15.5	14.5	17.5	16.0	22.0	19.0	19.5	17.0
8	10.5	9.0	9.0	8.5	15.5	14.5	16.0	15.5	22.5	19.5	18.0	16.0
9	10.5	9.5	9.5	9.0	15.0	13.5	17.5	16.0	22.5	19.0	16.5	15.0
10	11.5	9.5	10.0	8.0	14.0	13.0	17.5	17.0	22.5	19.0	15.5	14.5
11	11.0	10.0	12.0	10.0	15.0	13.5	17.0	16.5	21.5	19.5	15.0	14.0
12	10.5	9.5	12.5	12.0	17.0	14.5	18.0	17.0	20.5	18.5	16.0	14.5
13	10.0	9.0	13.0	12.0	17.0	16.0	18.5	17.5	21.0	18.5	16.0	15.0
14	9.0	7.5	12.5	12.0	17.0	15.5	18.5	17.5	21.0	18.5	16.5	15.0
15	10.0	8.0	11.5	10.5	17.0	15.5	19.0	18.0	21.0	17.5	17.0	15.5
16	11.5	9.5	10.5	10.0	17.5	15.5	18.5	16.5	22.0	18.0	17.5	15.0
17	10.5	9.0	11.5	9.5	18.0	16.0	18.5	16.5	23.0	19.0	16.5	15.5
18	9.0	8.0	12.0	11.5	17.0	16.0	18.5	18.0	22.5	19.5	15.0	14.0
19	9.0	8.0	13.0	12.0	16.5	15.0	19.0	18.0	23.0	19.5	14.5	13.0
20	11.0	9.0	13.5	13.0	17.0	15.5	18.5	17.0	22.5	20.0	16.0	14.0
21	12.5	10.5	13.5	12.5	17.5	15.5	18.0	16.5	22.0	20.0	16.5	14.5
22	12.5	11.0	12.5	11.5	17.5	15.5	18.0	16.5	21.5	19.0	15.5	14.5
23	11.5	10.5	12.0	11.0	18.0	16.0	18.5	17.5	20.5	19.0	14.5	14.0
24	11.0	10.5	11.5	11.0	17.5	17.0	18.5	17.0	20.5	18.0	14.0	13.0
25	10.5	10.0	12.5	11.0	17.0	16.0	19.5	17.5	21.5	18.5	13.0	12.0
26	10.0	8.0	13.0	12.5	18.0	15.0	20.0	18.0	21.0	18.5	12.5	12.0
27	9.0	7.5	13.0	12.5	18.5	17.0	20.0	18.5	22.0	18.0	12.0	11.5
28	11.0	9.0	13.5	12.5	18.5	17.0	19.5	18.0	20.5	19.0	13.0	12.0
29	12.5	10.5	13.0	12.5	17.5	16.5	19.0	18.0	19.5	18.0	13.0	12.5
30	12.5	12.0	13.0	12.0	17.0	16.5	20.0	17.5	19.0	17.0	13.5	12.5
31	---	---	14.5	12.5	---	---	21.0	18.0	19.0	17.5	---	---
MONTH	12.5	5.5	14.5	8.0	18.5	13.0	21.0	15.5	23.0	17.0	20.0	11.5
YEAR	23.0	1.0										

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 mi².

PERIOD OF RECORD.--October 1975 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 4,505 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Sept. 2, 3. Records good. 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.--11 years, 48.8 ft³/s; 35,360 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 390 ft³/s, July 23, 1983, gage height, unknown, maximum recorded gage height, 6.09 ft, July 24, 1979; minimum daily discharge, 2.0 ft³/s, Jan. 31, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 223 ft³/s at 0900 Oct. 11, gage height, 5.45 ft; minimum daily, 2.6 ft³/s, March 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	64	78	7.4	6.0	4.4	4.1	55	57	65	69	101	86
2	64	75	10	5.9	4.4	4.0	68	60	67	69	102	90
3	65	74	9.1	5.8	4.4	3.9	70	70	67	60	107	98
4	64	75	7.4	5.7	4.4	3.8	74	74	80	69	102	101
5	61	75	7.5	5.7	4.4	3.8	73	75	74	73	102	98
6	65	75	7.4	5.7	4.6	3.7	69	73	81	75	99	100
7	66	75	7.4	5.8	4.6	3.6	67	81	86	77	82	109
8	96	70	7.4	5.7	4.7	3.6	69	76	81	68	81	104
9	104	67	7.4	5.7	5.4	3.8	65	67	87	77	77	108
10	84	62	7.2	5.9	5.3	3.6	64	65	80	70	75	101
11	113	65	30	6.0	5.2	3.6	71	69	65	68	71	89
12	76	23	73	4.3	5.2	3.7	72	61	59	65	69	94
13	83	14	15	4.7	6.0	3.6	77	58	50	70	74	95
14	76	13	8.1	4.9	5.5	3.5	72	60	45	75	81	84
15	75	12	7.4	26	5.2	3.5	69	62	50	78	80	89
16	75	11	7.3	69	5.2	3.4	66	70	53	90	89	89
17	74	11	7.4	81	5.2	3.5	73	65	57	83	104	85
18	75	11	7.4	79	5.2	3.2	75	65	62	86	97	80
19	73	11	7.4	71	5.2	3.2	67	64	64	86	88	83
20	73	9.9	7.2	12	5.2	3.2	67	60	61	92	108	84
21	73	9.9	7.1	5.8	4.9	3.0	66	65	66	94	102	77
22	76	9.9	7.1	5.7	4.3	3.0	59	65	71	101	90	77
23	73	9.6	7.1	5.7	4.2	2.9	51	65	62	100	93	79
24	74	9.9	7.1	5.5	4.4	2.9	55	66	54	88	102	78
25	74	9.7	6.8	5.2	4.4	2.9	59	70	55	88	96	72
26	74	9.4	6.0	5.2	4.3	2.6	63	70	62	85	90	78
27	72	8.8	6.2	5.2	4.3	27	57	65	63	84	87	79
28	72	8.6	6.3	5.2	4.2	72	59	64	60	81	86	78
29	74	9.3	6.3	4.9	---	58	55	69	71	80	83	81
30	75	12	6.2	4.4	---	54	51	68	77	82	82	80
31	77	---	6.0	4.4	---	53	---	66	---	88	88	---
TOTAL	2340	1004.0	320.6	473.0	134.7	353.6	1958	2065	1975	2471	2788	2646
MEAN	75.5	33.5	10.3	15.3	4.81	11.4	65.3	66.6	65.8	79.7	89.9	88.2
MAX	113	78	73	81	6.0	72	77	81	87	101	108	109
MIN	61	8.6	6.0	4.3	4.2	2.6	51	57	45	60	69	72
AC-FT	4640	1990	636	938	267	701	3880	4100	3920	4900	5530	5250
CAL YR 1985	TOTAL	15381.8		MEAN	42.1	MAX	113	MIN	3.2	AC-FT	30510	
WTR YR 1986	TOTAL	18528.9		MEAN	50.8	MAX	113	MIN	2.6	AC-FT	36750	

COLORADO RIVER MAIN STEM

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 McDonald Creek, 12 mi southwest of Mack, 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. Elevation of gage is 4,325 ft above National Geodetic Vertical Datum of 1929, from topographic map. May 1951, to October 1979, water-stage recorder at site 5.7 mi upstream at different datum.

REMARKS.--Estimated daily discharges: Dec. 9-17. 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.--35 years, 6,385 ft³/s; 4,626,000 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, 33,800 ft³/s at 0300 June 8, gage height, 10.33 ft; minimum daily, 4,620 ft³/s, Aug. 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7210	6260	6940	5800	6070	6880	13300	16300	25200	18300	7450	5770
2	7180	6190	6420	5590	6070	6830	14600	18700	25500	17300	7150	5860
3	6400	6060	6580	5550	6090	6910	16300	21300	25300	16900	6780	5840
4	5850	5900	6660	5490	6050	7070	14200	23900	27800	16700	6510	5870
5	5570	5920	6520	5310	5740	7160	12600	26300	30300	18100	6400	5670
6	5580	5940	6420	5030	5650	7250	11500	26100	31000	20200	6390	5470
7	5620	6010	6370	4940	5600	7120	11000	24000	32100	19300	6070	5280
8	6810	5920	6460	4960	5500	7310	11200	22700	32800	17800	5990	5230
9	9930	5940	6400	4880	5580	7870	11600	21200	31100	17000	5760	5480
10	8970	6010	6400	4830	5460	8400	11900	20200	29200	17000	5680	6360
11	9140	6080	6200	5050	5230	8220	11900	18800	26100	17000	5520	7810
12	9850	6440	5600	5170	4930	8060	11900	18300	23400	15600	5410	7500
13	9660	6720	5200	5070	5160	7820	12300	18000	22400	14900	5480	7090
14	9200	6840	5300	4860	5370	7760	12300	17700	22700	14600	5670	6880
15	8250	7120	5500	5290	5430	7620	11500	18000	22800	14100	5530	6640
16	7770	6910	5600	5320	6020	7630	11100	19600	23600	14100	5340	6530
17	7280	6790	5840	5470	6050	7570	11500	20200	23500	14800	5210	6320
18	7120	6790	5890	5540	5900	7510	11900	19700	23500	14500	5010	6110
19	6680	6780	6000	5670	6050	6760	11900	19000	23500	13400	4740	6070
20	6560	6790	6100	5910	6770	6410	11100	19100	23100	12900	4780	6190
21	6570	6670	5960	5680	7100	6340	10800	21100	21900	12900	4620	6030
22	6690	6350	5900	5740	6370	6140	11700	23900	21500	12400	4890	5800
23	6730	6020	5910	5710	6090	6440	13900	25300	20600	12100	4960	5880
24	6660	6020	5820	5740	6020	6770	16100	26000	19500	11600	4990	6910
25	6600	6370	5820	5780	6170	6750	16900	25700	18700	11100	5210	8120
26	6560	6600	5810	5740	6460	7290	17100	25800	17900	10600	5640	8110
27	6580	6490	5660	5740	6740	7490	16500	27400	19400	10300	5590	8440
28	6560	6080	5560	5770	6920	7970	15000	27900	19700	9620	5190	7960
29	6660	5910	5520	5780	---	8650	14000	27800	19200	8930	5370	8500
30	6670	6660	5650	5870	---	9470	14400	27700	18800	8220	5170	8300
31	6600	---	5760	5920	---	10600	---	25800	---	7840	5460	---
TOTAL	223510	190580	185770	169200	166590	232070	392000	693500	722100	440110	173960	198020
MEAN	7210	6353	5993	5458	5950	7486	13070	22370	24070	14200	5612	6601
MAX	9930	7120	6940	5920	7100	10600	17100	27900	32800	20200	7450	8500
MIN	5570	5900	5200	4830	4930	6140	10800	16300	17900	7840	4620	5230
AC-FT	443300	378000	368500	335600	330400	460300	777500	1376000	1432000	873000	345000	392800
CAL YR 1985	TOTAL	3911710		MEAN	10720	MAX	38200	MIN	3580	AC-FT	7759000	
WTR YR 1986	TOTAL	3787410		MEAN	10380	MAX	32800	MIN	4620	AC-FT	7512000	

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 TEMPERATURE: 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 microsiemens Aug. 13, 1981; minimum, 277 microsiemens June 11, 1985.

WATER TEMPERATURE: Maximum, 27.0°C Aug. 7-9, 1981; minimum, 0.0°C on many days during winter months

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum recorded, 1,300 microsiemens Aug. 20; minimum, 319 microsiemens May 29.

WATER TEMPERATURE: Maximum, 24.5°C Aug. 20; minimum, 0.5°C Jan. 7-9 (but may have been lower during period of missing record Jan. 16-Feb. 21).

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	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 CAC03)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
NOV 05...	1130	5840	950	8.5	9.5	14	10.1	K72	K94	340	85	30
JAN 08...	1100	4860	970	8.5	0.5	7.0	13.4	K15	K17	320	81	29
MAR 25...	1200	6800	798	8.3	10.0	1.0	9.1	K69	200	270	68	25
MAY 13...	1300	18000	490	8.3	13.0	140	8.6	170	590	190	53	15
JUL 15...	1230	14300	625	8.2	18.5	42	7.6	190	620	220	58	17
AUG 19...	1300	4760	1290	8.3	22.0	45	7.4	K100	K110	410	110	32

DATE	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE IT-FLD (MG/L AS HCO3)	CAR- BONATE IT-FLD (MG/L AS CO3)	ALKA- LINITY, CARBON- ATE IT-FLD (MG/L - CAC03)	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, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)
NOV 05...	84	2	3.4	176	6.6	155	260	73	0.3	9.2	--	640
JAN 08...	91	2	3.3	166	4.8	144	230	100	0.3	12	620	640
MAR 25...	72	2	2.9	183	0	150	200	64	0.3	11	555	530
MAY 13...	36	1	2.0	152	0	125	110	17	0.2	12	330	320
JUL 15...	41	1	2.3	154	0	122	140	31	0.3	11	379	380
AUG 19...	91	2	4.0	200	0.9	166	330	74	0.4	10	773	750

DATE	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (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 05...	0.88	10200	0.51	0.01	0.52	0.06	0.05	0.34	0.4	0.05	0.01	0.01
JAN 08...	0.84	8140	0.64	0.01	0.65	0.08	0.08	0.32	0.4	0.03	0.02	0.02
MAR 25...	0.75	10200	0.53	0.01	0.54	0.07	0.07	0.53	0.6	0.04	0.02	0.01
MAY 13...	0.45	16000	--	<0.01	0.42	0.08	0.04	0.42	0.5	0.05	0.03	0.01
JUL 15...	0.52	14600	0.45	0.01	0.46	0.05	0.04	0.45	0.5	0.10	0.02	0.02
AUG 19...	1.1	9930	0.67	0.11	0.78	0.06	<0.01	0.54	0.6	0.09	0.01	<0.01

K BASED ON NON-IDEAL COLONY COUNT

COLORADO RIVER MAIN STEM

09163500 COLORADO RIVER NEAR COLORADO-UTAH STATE LINE--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	*LEAD, DIS- SOLVED (UG/L AS PB)
JAN 08...	1100	<10	1	64	<0.5	<1	1	<3	4	8	2
MAR 25...	1200	20	1	58	<0.5	<1	<1	<3	3	28	1
JUL 15...	1230	20	<1	85	<0.5	<1	<1	<3	5	22	<5
AUG 19...	1300	<10	<1	85	<0.5	<1	<1	<3	4	15	<5

DATE	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)
JAN 08...	32	24	<0.1	10	<1	6	<1	880	<6	29
MAR 25...	31	7	<0.1	<10	1	4	1	710	<6	17
JUL 15...	22	3	<0.1	<10	1	3	<1	560	<6	13
AUG 19...	45	4	<0.1	<10	2	7	<1	1100	<6	15

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
NOV 05...	1130	5840	48	757	59
JAN 08...	1100	4860	17	223	62
MAR 25...	1200	6800	311	5710	84
MAY 13...	1300	18000	700	34000	66
JUL 15...	1230	14300	221	8530	62
AUG 19...	1300	4760	112	1440	80

* The minimum reporting level for Lead was changed from <1 to <5 during June, 1986.

09163500 COLORADO RIVER NEAR COLORADO-UTAH STATE LINE--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25 DEG. C, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1050	933	---	978	---	818	604	500	389	522	854	1120
2	1030	944	---	972	---	812	565	459	386	533	882	1110
3	1030	953	---	974	---	810	551	430	390	539	---	1090
4	1030	952	---	983	---	810	587	386	388	544	922	1080
5	1040	954	---	982	---	792	605	370	367	665	---	1080
6	1060	965	897	987	---	777	618	364	363	592	953	---
7	1070	973	893	980	---	777	632	385	359	529	998	1090
8	1080	965	903	1010	---	799	635	423	348	541	1020	1080
9	1100	971	916	987	---	774	624	450	355	565	1020	1070
10	1050	975	918	982	---	756	604	468	374	580	1060	1120
11	998	969	910	984	---	774	590	483	400	582	1060	1080
12	964	961	914	964	---	771	590	484	427	587	1060	1020
13	981	980	956	936	---	798	581	467	444	600	1090	985
14	940	972	962	919	---	820	577	463	440	609	1080	996
15	956	954	964	895	---	806	586	462	438	635	1070	1010
16	972	943	975	---	---	805	601	454	426	610	1090	1030
17	965	926	953	---	---	809	596	453	423	656	1100	1010
18	969	924	943	---	---	807	587	463	419	622	1110	1010
19	981	946	943	---	---	819	575	470	424	628	1190	1020
20	997	949	944	---	---	866	581	463	443	667	1240	1060
21	1010	952	927	---	---	884	593	435	447	695	1230	1070
22	999	961	935	---	---	864	891	594	453	684	1220	1040
23	978	976	939	---	---	855	887	546	349	682	1190	1040
24	975	972	943	---	---	875	873	513	341	472	1200	1050
25	966	987	952	---	---	883	855	482	338	741	1190	1000
26	965	---	956	---	---	868	835	473	338	499	1200	993
27	958	---	950	---	---	857	794	503	332	512	1180	969
28	946	---	953	---	---	835	775	521	331	487	1170	987
29	947	---	960	---	---	---	731	535	329	507	1110	939
30	939	---	971	---	---	---	699	533	356	513	1120	943
31	949	---	971	---	---	---	661	---	378	---	1140	---
MEAN	997		940			803	573	413	428	648	1090	1040

COLORADO RIVER MAIN STEM

09163500 COLORADO RIVER NEAR COLORADO-UTAH STATE LINE--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	12.5	11.0	10.5	9.0	---	---	3.0	2.5	---	---	9.0	8.0
2	12.5	11.5	9.5	8.5	---	---	3.5	3.0	---	---	9.0	8.0
3	13.0	12.0	9.5	8.5	---	---	3.0	2.5	---	---	10.0	8.5
4	14.0	12.5	9.5	8.5	---	---	2.5	1.5	---	---	10.0	8.5
5	13.5	12.0	9.5	9.0	---	---	1.5	1.0	---	---	10.0	8.5
6	13.0	12.5	9.0	8.5	5.5	5.5	1.5	1.0	---	---	10.0	8.5
7	13.5	12.5	9.0	8.0	5.5	5.0	1.0	.5	---	---	10.0	8.5
8	13.5	11.5	8.5	8.0	5.0	4.5	1.0	.5	---	---	10.5	9.0
9	11.5	10.5	8.5	7.5	4.5	4.5	1.5	.5	---	---	10.5	9.0
10	11.5	10.5	7.5	7.0	4.0	2.5	2.0	1.0	---	---	9.0	7.5
11	12.0	11.5	8.0	7.0	2.5	1.5	2.5	1.5	---	---	8.0	7.0
12	12.5	11.5	8.0	7.0	1.5	1.0	2.5	1.5	---	---	8.5	7.5
13	12.5	11.5	7.0	6.0	2.0	1.0	2.5	2.0	---	---	8.5	7.5
14	11.5	10.5	5.5	4.5	2.0	1.0	4.0	2.0	---	---	8.0	7.5
15	11.0	10.0	5.0	4.5	2.0	1.0	3.5	3.5	---	---	8.5	7.0
16	11.5	10.0	4.5	4.0	2.0	1.5	---	---	---	---	8.0	7.5
17	11.5	10.5	4.5	4.0	2.0	1.0	---	---	---	---	8.0	7.0
18	12.0	10.5	5.0	4.0	2.0	1.5	---	---	---	---	8.0	6.5
19	12.0	11.0	4.5	3.0	2.0	1.5	---	---	---	---	8.0	6.5
20	12.0	11.0	3.5	3.0	2.0	1.5	---	---	---	---	9.0	7.0
21	12.0	11.0	3.5	2.5	2.5	1.5	---	---	8.0	---	9.5	8.0
22	12.0	11.0	3.5	2.5	2.5	1.5	---	---	7.5	6.5	10.0	8.5
23	11.0	10.0	3.5	2.5	2.5	1.5	---	---	8.0	6.5	11.0	9.5
24	11.0	10.0	4.0	3.5	2.5	1.5	---	---	8.5	7.0	11.0	10.5
25	11.0	10.0	5.5	4.0	2.5	1.5	---	---	9.5	8.0	12.0	10.0
26	11.5	10.5	---	---	2.0	1.5	---	---	10.0	8.5	12.5	11.0
27	11.5	10.5	---	---	2.0	1.5	---	---	10.5	9.5	12.5	11.0
28	12.0	11.0	---	---	2.0	1.0	---	---	10.0	9.0	13.0	11.5
29	12.0	11.0	---	---	2.0	1.5	---	---	---	---	13.0	11.5
30	12.0	11.0	---	---	2.5	2.0	---	---	---	---	13.5	12.0
31	11.5	10.5	---	---	3.0	2.0	---	---	---	---	13.5	12.0
MONTH	14.0	10.0									13.5	6.5
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	13.0	11.5	14.0	11.5	15.0	13.5	---	---	21.5	20.0	20.0	18.5
2	11.5	10.0	14.5	12.0	15.0	13.5	---	---	21.5	20.5	19.5	18.5
3	10.0	8.5	14.0	12.0	---	---	---	---	21.5	20.0	19.5	18.0
4	9.0	7.5	14.5	12.5	---	---	---	---	21.5	20.0	20.0	18.5
5	10.5	8.0	12.5	11.0	---	---	---	---	21.5	19.5	20.5	18.5
6	11.5	9.0	10.5	9.5	---	---	---	---	21.5	20.0	20.0	18.5
7	12.0	10.5	10.0	9.0	---	---	---	---	22.0	20.0	20.5	19.0
8	12.0	10.5	10.0	9.0	---	---	---	---	22.5	21.0	19.5	18.5
9	12.0	10.5	10.5	9.0	---	---	---	---	22.0	20.0	18.0	17.0
10	13.0	10.5	11.0	9.0	---	---	---	---	22.5	20.5	17.5	16.0
11	12.5	11.0	13.0	10.0	---	---	---	---	22.5	21.0	16.0	14.5
12	12.0	10.5	14.0	11.5	---	---	---	---	22.0	20.5	16.0	14.5
13	11.0	9.5	14.5	12.5	---	---	---	---	22.0	20.5	16.0	15.5
14	10.0	8.5	14.5	13.0	---	---	---	---	21.5	20.5	16.5	15.0
15	11.0	8.5	14.0	12.0	---	---	---	---	21.5	20.0	17.0	15.5
16	11.5	10.0	12.0	11.0	---	---	19.5	18.5	22.0	20.0	17.0	16.0
17	11.0	10.5	12.5	10.5	---	---	20.0	17.5	23.0	21.0	16.5	15.5
18	11.5	9.5	14.5	11.5	---	---	20.5	18.0	23.5	21.5	16.5	15.0
19	11.0	9.5	15.0	12.5	---	---	21.0	18.5	24.0	21.5	15.0	13.5
20	12.5	10.0	16.0	13.5	---	---	20.5	18.5	24.5	22.5	15.0	14.0
21	14.0	11.0	16.0	14.0	---	---	20.0	18.0	23.5	22.5	16.0	15.0
22	15.0	13.0	15.0	13.5	---	---	19.5	18.0	23.5	21.5	16.0	15.0
23	14.5	13.0	14.0	12.5	---	---	20.5	18.5	22.0	21.0	15.0	14.5
24	13.0	11.0	14.0	12.5	---	---	20.0	18.5	21.5	20.0	14.5	13.0
25	12.0	9.5	14.5	12.5	---	---	20.5	18.0	22.0	20.0	13.5	12.0
26	10.5	9.5	15.0	13.5	---	---	20.5	19.0	22.0	20.5	12.0	11.5
27	9.5	7.5	15.0	13.5	---	---	20.5	18.5	22.0	20.5	12.0	11.0
28	11.0	8.0	15.5	14.0	---	---	20.5	19.0	21.5	20.5	11.5	11.5
29	12.5	9.5	15.0	14.0	---	---	20.5	19.0	21.0	19.0	12.5	11.0
30	13.5	11.0	14.5	13.5	---	---	20.5	19.0	20.5	18.5	12.0	11.0
31	---	---	14.5	13.0	---	---	20.5	19.0	20.5	19.0	---	---
MONTH	15.0	7.5	16.0	9.0					24.5	18.5	20.5	11.0

NOTE: NUMBER OF MISSING DAYS OF RECORD EXCEEDED 20% OF YEAR

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. Elevation of gage is 8,885 ft above National Geodetic Vertical Datum of 1929, from topographic map. April 1, 1983 to August 23, 1983, water-stage recorder at site 100 ft upstream, at datum 5 ft, higher.

REMARKS.--Estimated daily discharges: Oct. 1 to Apr. 8 and, June 3-5. Records fair except for estimated daily discharges, 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 9.7 ft³/s; minimum daily, 0.02 ft³/s, Sept. 20, 21, 1986.

EXTREMES FOR CURRENT YEAR.--Peak discharge greater than base discharge of 5.0 ft³/s, and maximum (*).

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Apr. 23	2100	8.1	1.03	May 30	0600	8.3	0.97
May 3	1800	9.9	1.10	June 3	2000	unknown	*a2.13

Minimum daily discharge, 0.02 ft³/s, Sept. 20, 21.

(a) Backwater from debris.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.04	.06	.08	.07	.08	.33	1.1	4.0	5.7	.47	.13	.08
2	.05	.06	.07	.07	.08	.37	1.6	5.6	5.6	.47	.13	.06
3	.05	.06	.07	.07	.08	.39	1.2	8.0	5.0	.38	.10	.08
4	.05	.06	.06	.07	.07	.40	.80	6.6	4.5	.38	.10	.08
5	.06	.06	.06	.07	.07	.45	.58	5.6	4.0	.47	.10	.05
6	.08	.06	.06	.06	.07	.47	.58	4.7	3.7	.47	.20	.03
7	.14	.06	.06	.06	.07	.50	.64	4.0	2.6	.29	.18	.04
8	.20	.06	.06	.06	.08	.56	.70	3.8	2.1	.29	.11	.03
9	.15	.06	.05	.06	.08	.66	.83	3.5	2.2	.29	.10	.05
10	.13	.06	.05	.07	.09	.60	.83	3.0	3.0	.20	.10	.08
11	.18	.06	.05	.08	.09	.54	.83	3.0	2.0	.20	.10	.08
12	.15	.06	.06	.08	.09	.49	.83	3.2	1.7	.18	.09	.06
13	.11	.07	.06	.07	.09	.47	.74	3.7	1.3	.18	.08	.05
14	.09	.07	.06	.07	.09	.45	.74	4.2	1.3	.18	.08	.05
15	.08	.07	.06	.07	.09	.40	.74	4.0	1.3	.17	.08	.03
16	.08	.07	.06	.07	.10	.37	.83	3.5	1.1	.20	.10	.03
17	.07	.06	.06	.07	.10	.35	1.0	3.5	1.1	.18	.10	.03
18	.07	.06	.06	.07	.10	.33	.83	3.2	1.0	.17	.08	.03
19	.07	.06	.06	.07	.10	.31	.83	3.9	.83	.18	.08	.03
20	.07	.05	.06	.07	.10	.34	1.0	4.7	.83	.17	.06	.02
21	.07	.06	.06	.07	.10	.39	1.7	5.6	.74	.17	.05	.02
22	.07	.06	.06	.07	.13	.44	3.5	6.1	.74	.17	.03	.05
23	.06	.07	.07	.07	.16	.46	5.7	5.8	.74	.17	.03	.15
24	.06	.07	.07	.07	.24	.49	6.9	5.4	.74	.19	.05	.15
25	.06	.07	.07	.07	.27	.56	5.9	5.5	.74	.15	.06	.13
26	.06	.08	.07	.08	.29	.60	5.2	6.1	.74	.15	.11	.13
27	.06	.08	.07	.08	.31	.66	4.7	5.9	.65	.13	.06	.11
28	.06	.08	.07	.08	.32	.70	4.9	6.1	.65	.13	.06	.13
29	.06	.08	.07	.08	---	.78	5.1	6.4	.56	.13	.06	.11
30	.06	.08	.07	.08	---	.84	4.5	6.2	.56	.13	.03	.13
31	.06	---	.07	.08	---	.90	---	5.9	---	.13	.05	---
TOTAL	2.60	1.96	1.96	2.21	3.54	15.60	65.33	150.7	57.72	7.17	2.69	2.10
MEAN	.08	.06	.06	.07	.13	.50	2.18	4.86	1.92	.23	.09	.07
MAX	.20	.08	.08	.08	.32	.90	6.9	8.0	5.7	.47	.20	.15
MIN	.04	.05	.05	.06	.07	.31	.58	3.0	.56	.13	.03	.02
AC-FT	5.2	3.9	3.9	4.4	7.0	31	130	299	114	14	5.3	4.2
CAL YR 1985	TOTAL	267.86		MEAN	.73	MAX	9.1	MIN	.03	AC-FT	531	
WTR YR 1986	TOTAL	313.58		MEAN	.86	MAX	8.0	MIN	.02	AC-FT	622	

09165000 DOLORES RIVER BELOW RICO, CO

LOCATION.--Lat 37°38'20", long 108°03'35", Dolores County, Hydrologic Unit 14030002, on left bank at upstream side of Montelores bridge northwest of State Highway 145 (relocated), at Dolores-Montezuma County line, 0.5 mi upstream from Ryman Creek, and 4.0 mi southwest of Rico.

DRAINAGE AREA.--105 mi².

PERIOD OF RECORD.--October 1951 to current year.

GAGE.--Water-stage recorder. Datum of gage is 8,422.23 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Nov. 15-26, 28, Nov. 30 to Dec. 2, Dec. 5 to Jan. 31, Feb. 5-19, 22, 23 Mar. 1-12, Aug. 25 to Sept. 2, and Sept. 4-30. Records good except for estimated daily discharges, which are poor. No diversion upstream from station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--35 years, 139 ft³/s; 100,700 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,170 ft³/s, May 24, 1984, gage height, 5.95 ft; from rating curve extended above 1,620 ft³/s, maximum gage height, 6.15 ft, June 10, 1952; minimum daily discharge, 7.0 ft³/s, Nov. 16-17, 1956, Feb. 6-7, 1961.

EXTREMES OUTSIDE PERIOD OF RECORD.--Greatest flood since at least 1885 occurred Oct. 5, 1911.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 800 ft³/s, and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 4	1900	1,110	4.91	June 6	2100	*1,590	*5.42
May 26	2100	1,270	5.11	June 14	2200	1,080	4.84

Minimum daily discharge, 26 ft³/s, Feb. 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	91	67	44	34	36	44	121	487	758	354	109	55
2	84	70	44	34	35	46	114	566	773	317	101	55
3	80	68	46	34	35	46	101	830	995	312	101	53
4	76	65	43	32	32	48	90	976	1270	328	94	50
5	72	66	42	32	30	50	88	834	1260	316	93	50
6	70	59	44	32	30	50	97	638	1310	292	103	48
7	108	48	44	32	30	50	118	473	1290	279	88	48
8	118	60	44	30	30	50	123	366	1060	279	84	50
9	109	56	42	32	28	50	128	301	970	447	79	60
10	116	52	38	32	28	50	134	274	709	380	75	140
11	141	54	34	32	28	50	138	273	641	287	76	120
12	134	51	30	34	30	48	130	297	722	241	90	110
13	130	44	30	34	32	47	123	351	820	214	104	100
14	118	39	30	32	34	47	109	381	902	197	81	95
15	103	40	32	32	36	45	111	368	881	224	72	85
16	106	40	34	32	34	43	123	345	830	208	67	80
17	100	42	34	32	34	44	116	321	774	192	65	75
18	97	42	32	32	34	44	105	351	752	185	65	70
19	94	42	34	32	34	38	98	443	731	212	65	65
20	93	40	36	32	34	40	106	601	649	202	65	60
21	90	42	36	32	28	40	143	742	617	197	67	60
22	87	40	36	32	26	48	209	786	546	239	68	60
23	81	42	36	34	28	55	251	877	486	252	62	85
24	81	44	36	32	30	63	257	858	441	240	65	130
25	80	44	36	30	32	63	255	857	479	201	70	130
26	84	44	34	30	37	75	221	1070	549	181	65	120
27	84	43	34	32	42	92	189	1010	462	163	60	120
28	84	44	34	32	43	114	190	1010	450	146	60	120
29	80	44	34	34	---	123	252	985	445	134	60	120
30	80	44	34	36	---	118	366	825	425	123	60	110
31	80	---	34	36	---	119	---	712	---	116	60	---
TOTAL	2951	1476	1141	1008	910	1840	4606	19208	22997	7458	2374	2524
MEAN	95.2	49.2	36.8	32.5	32.5	59.4	154	620	767	241	76.6	84.1
MAX	141	70	46	36	43	123	366	1070	1310	447	109	140
MIN	70	39	30	30	26	38	88	273	425	116	60	48
AC-FT	5850	2930	2260	2000	1800	3650	9140	38100	45610	14790	4710	5010
CAL YR 1985 TOTAL		65104		MEAN	178	MAX	1450	MIN	20	AC-FT	129100	
WTR YR 1986 TOTAL		68493		MEAN	188	MAX	1310	MIN	26	AC-FT	135900	

09166500 DOLORES RIVER AT DOLORES, CO

LOCATION.--Lat 37°28'21", long 108°29'49", in SW¼SW¼ sec.10, T.37 N., R.15 W., Montezuma County, Hydrologic Unit 14030002, on left bank 0.25 mi upstream from bridge on State Highway 184 in Dolores and 0.8 mi upstream from Lost Canyon Creek.

DRAINAGE AREA.--504 mi².

PERIOD OF RECORD.--June 1895 to October 1903, August 1910 to November 1912, October 1921 to current year. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 859: 1937. WRD Colo. 1972: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 6,940 ft above National Geodetic Vertical Datum of 1929. See WSP 1713 or 1733 for history of changes prior to Oct. 7, 1952. Oct. 7, 1952 to Nov. 16, 1983, at site 0.4 mi downstream at different datum.

REMARKS.--Estimated daily discharges: Nov. 29, 30, Dec. 1-3, Dec. 11 to Feb. 19, Feb. 22, 23, May 26, 27. Records good except for estimated daily discharges, which are poor. Diversions for irrigation of about 2,000 acres upstream from station. Flow partly regulated by Ground Hog Reservoir, capacity, 21,710 acre-ft. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--75 years (water years 1896-1903, 1911-12, 1922-86), 439 ft³/s; 318,100 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,000 ft³/s, Oct. 5, 1911, gage height, 10.2 ft, site and datum then in use, from rating curve extended above 2,800 ft³/s; minimum daily, 8.0 ft³/s, Aug. 16, 1896.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1885, that of Oct. 5, 1911.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,800 ft³/s, and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Apr. 2	0600	1,810	4.89	May 24	0300	3,270	5.96
Apr. 25	0100	1,860	4.96	May 28	0200	3,100	5.83
May 4	0100	*4,820	*6.93	June 5	0200	3,840	6.32

Minimum daily discharge, 65 ft³/s, Dec. 13, Feb. 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	199	175	100	100	110	222	1040	2450	2040	752	355	193
2	184	157	130	100	110	256	1510	2910	2070	640	369	167
3	175	166	120	90	100	268	1050	3960	2400	603	360	146
4	166	157	113	80	95	287	841	4160	3270	649	325	135
5	157	157	93	75	95	323	814	3770	3250	707	280	125
6	148	145	110	75	90	346	877	2940	3120	701	350	118
7	183	122	104	75	85	372	1050	2180	3010	604	373	114
8	289	130	110	75	80	373	1100	1780	2780	643	355	118
9	268	135	109	80	85	363	1120	1620	2500	1040	333	237
10	261	125	86	85	80	304	1120	1470	1960	992	311	605
11	340	125	75	85	75	291	1130	1570	1660	728	310	356
12	351	132	70	90	65	266	1040	1630	1630	575	328	277
13	333	112	65	95	80	238	1010	1710	1760	492	390	237
14	315	91	70	95	80	233	810	1870	1820	461	343	213
15	269	87	75	95	90	219	814	1750	1780	564	308	188
16	272	117	80	100	85	209	1030	1680	1670	566	299	175
17	261	144	85	90	85	223	992	1500	1630	496	291	160
18	251	140	90	90	90	202	804	1450	1590	485	287	142
19	244	117	85	90	110	176	696	1770	1570	475	314	137
20	230	106	90	95	137	199	721	2260	1370	505	381	135
21	226	134	100	100	130	202	959	2680	1240	530	405	132
22	226	105	100	90	100	264	1430	2530	1110	659	409	145
23	212	144	100	90	100	354	1670	2680	1050	827	409	338
24	205	180	100	90	120	444	1680	2790	874	926	418	520
25	194	155	110	80	137	446	1660	2480	859	688	414	456
26	193	157	100	80	171	522	1420	2600	1120	592	339	419
27	193	137	100	90	201	636	1150	2700	950	531	315	365
28	193	113	100	90	215	748	1110	2700	848	481	284	387
29	190	110	100	100	---	891	1490	2710	909	433	208	435
30	184	110	110	110	---	963	1940	2510	824	427	199	401
31	181	---	110	110	---	964	---	2150	---	379	184	---
TOTAL	7093	3985	2990	2790	3001	11804	34078	72960	52664	19151	10246	7576
MEAN	229	133	96.5	90.0	107	381	1136	2354	1755	618	331	253
MAX	351	180	130	110	215	964	1940	4160	3270	1040	418	605
MIN	148	87	65	75	65	176	696	1450	824	379	184	114
AC-FT	14070	7900	5930	5530	5950	23410	67590	144700	104500	37990	20320	15030
QAL YR 1985	TOTAL	237851		MEAN	652	MAX	3670	MIN	50	AC-FT	471800	
WTR YR 1986	TOTAL	228338		MEAN	626	MAX	4160	MIN	65	AC-FT	452900	

SAN JUAN RIVER BASIN

09166950 LOST CANYON CREEK NEAR DOLORES, CO

LOCATION.--Lat 37°26'46", long 108°28'07", in SE¼SE¼ sec.23, T.37N., R.15W., Montezuma County, Hydrologic Unit 14030002, on right bank 3 mi upstream from mouth, and 2.5 mi southeast of Dolores

DRAINAGE AREA.--71.3 mi².

PERIOD OF RECORD.--April 1984 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 7,030 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 15-19, Dec. 5, 7, 8, 26, 27, Dec. 29 to Jan. 2, 4-6, 14, 16, 17, Jan. 19 to Feb. 10, 20-28, Mar. 1-11, 19-21, June 4, 5, 15-21, June 28 to July 6, 12-31 and, Aug. 1-21. Records good except for estimated daily discharges, which are poor. Several small storage reservoirs and diversions for irrigation of about 4,700 acres in the San Juan River basin and one diversion for irrigation of about 10 acres in Lost Canyon in the Dolores River basin. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 744 ft³/s, Apr. 2, 1986, gage height, 7.23 ft; no flow many days each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 744 ft³/s at 0080 Apr. 2, gage height, 7.23 ft; no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.7	3.2	2.9	3.2	4.0	9.5	311	319	31	.00	.46	.00
2	3.2	2.9	3.2	3.2	4.2	10	555	343	33	.00	.38	.02
3	2.8	2.4	3.8	3.2	4.0	12	343	512	36	.00	.36	.06
4	2.6	2.4	4.0	3.2	3.6	14	254	441	46	.00	.34	.06
5	2.5	2.3	3.8	3.0	3.6	16	233	335	38	.00	.34	.04
6	2.5	2.2	3.8	2.6	3.4	16	251	237	34	.01	.34	.02
7	3.0	2.0	3.6	2.9	3.2	17	305	150	21	1.4	.28	.02
8	4.2	1.5	3.4	3.0	3.0	16	302	128	12	1.3	.22	.04
9	5.2	1.7	3.3	3.2	3.2	16	282	114	8.3	.99	.18	.78
10	5.5	2.1	3.5	3.3	3.0	16	269	102	11	.63	.14	1.5
11	7.7	1.7	3.7	3.2	2.9	16	261	161	5.6	.04	.16	3.0
12	7.7	1.9	3.7	3.0	2.6	15	226	177	2.6	.01	.18	5.0
13	7.9	1.9	3.8	3.0	2.8	15	205	174	1.2	.01	.26	4.4
14	8.5	1.3	4.0	3.0	2.8	12	154	189	.81	.01	.22	3.5
15	8.2	1.4	4.7	2.9	3.0	10	159	168	.28	.01	.16	2.8
16	7.2	1.5	4.4	3.0	3.3	11	217	155	.00	.01	.08	2.2
17	7.0	1.5	4.5	2.8	2.8	8.7	211	136	.00	.01	.04	1.9
18	7.2	1.5	4.5	3.3	3.0	8.7	151	124	.00	.01	.03	1.5
19	7.7	2.6	4.2	3.0	5.3	10	117	134	.00	.01	.05	1.2
20	7.2	3.7	3.8	3.2	5.5	17	130	163	.00	.01	.01	1.1
21	7.0	3.8	3.8	3.4	5.0	26	199	156	.70	.01	.00	1.1
22	6.9	3.0	3.7	3.4	4.2	52	256	118	1.8	.36	.00	1.2
23	6.3	2.8	3.7	3.2	4.2	88	258	111	1.8	1.6	.00	1.6
24	5.7	2.8	3.8	3.6	4.8	116	255	89	1.4	1.6	.00	11
25	5.4	4.2	3.8	3.2	5.5	110	232	45	1.8	1.1	.00	14
26	4.8	6.3	3.4	3.0	7.0	135	162	50	1.1	.80	.00	14
27	4.5	4.7	3.4	3.2	10	164	107	42	.37	.65	.00	11
28	4.0	3.7	3.7	3.4	9.5	187	106	29	.07	.55	.00	12
29	3.7	3.5	3.4	3.4	---	219	199	9.1	.00	.46	.00	17
30	3.3	3.2	3.4	3.6	---	271	262	11	.00	.46	.00	18
31	3.3	---	3.4	3.6	---	278	---	22	---	.48	.00	---
TOTAL	166.4	79.7	116.1	98.2	119.4	1911.9	6972	4944.1	289.83	12.53	4.23	130.04
MEAN	5.37	2.66	3.75	3.17	4.26	61.7	232	159	9.66	.40	.14	4.33
MAX	8.5	6.3	4.7	3.6	10	278	555	512	46	1.6	.46	18
MIN	2.5	1.3	2.9	2.6	2.6	8.7	106	9.1	.00	.00	.00	.00
AC-FT	330	158	230	195	237	3790	13830	9810	575	25	8.4	258
CAL YR 1985	TOTAL	13784.33		MEAN	37.8	MAX	484	MIN	.00	AC-FT	27340	
WTR YR 1986	TOTAL	14844.43		MEAN	40.7	MAX	555	MIN	.00	AC-FT	29440	

09168100 DISAPPOINTMENT CREEK NEAR DOVE CREEK, CO

LOCATION.--Lat 37°52'36", long 108°34'57", Dolores County, Hydrologic Unit 14030002, 0.2 mi downstream from ford, 6.5 mi southeast of Cedar, and 19 mi northeast of town of Dove Creek.

DRAINAGE AREA.--147 mi².

PERIOD OF RECORD.--August 1957 to September 1986 (discontinued).

GAGE.--Water-stage recorder. Elevation of gage is 6,420 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 14-24, Dec. 9 - Mar. 12, Aug. 30 - Sept. 3. Records good except those for stages below 1 ft. and above 3.5 ft. which are fair and those for estimated daily discharges, which are poor. Several small reservoirs and ponds upstream from station. Small diversions for irrigation upstream from station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--29 years, 21.6 ft³/s; 15,650 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,140 ft³/s, Aug. 8, 1983, gage height, 13.54 ft, from rating curve extended above 250 ft³/s, on basis of slope-area measurements at gage heights 7.18 ft, 10.26 ft, and 13.38 ft; maximum gage height, 13.54 ft, July 13, 1965 (slope-area measurement), Aug. 8, 1983; no flow at times most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 560 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Oct. 11	0700	*1,140	*5.46	July 9	1900	666	4.50
Oct. 13	1600	570	4.20	July 10	0300	939	5.14
Apr. 2	0700	595	4.40				

Minimum daily discharge, 0.20 ft³/s, Sept. 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.7	7.7	15	4.8	6.5	16	115	111	81	19	11	20
2	7.1	5.1	12	4.8	7.0	17	342	128	86	14	9.3	11
3	6.9	4.8	12	4.8	6.5	20	159	152	97	13	8.5	6.5
4	6.3	4.4	7.5	4.8	6.5	24	129	174	121	13	8.0	3.9
5	6.1	4.4	5.4	4.6	6.5	26	138	171	114	17	8.0	3.5
6	5.8	4.2	7.4	4.6	6.0	28	146	136	98	14	8.0	2.6
7	19	3.5	5.4	4.8	5.5	28	138	120	88	13	6.6	2.3
8	15	4.0	6.3	4.8	5.5	26	115	108	76	13	5.4	2.8
9	12	4.0	7.0	5.0	5.5	28	97	104	81	115	4.8	48
10	14	3.5	6.5	5.5	5.0	28	89	110	77	101	4.0	30
11	289	10	4.6	6.0	4.8	28	86	117	58	21	4.4	5.9
12	16	17	5.0	5.0	4.4	28	81	104	51	15	4.6	3.3
13	124	6.8	4.2	5.0	4.8	26	83	88	44	12	6.6	1.9
14	34	3.8	4.6	5.0	4.8	24	58	85	41	11	5.2	1.1
15	9.4	3.6	4.6	6.0	5.0	23	55	80	35	22	4.4	.71
16	6.9	3.8	5.5	6.0	6.0	21	72	98	34	16	3.5	.50
17	6.1	3.8	5.5	5.5	4.8	17	78	122	32	32	2.9	.40
18	5.4	4.0	4.8	5.0	5.5	18	67	105	31	23	2.8	.40
19	5.4	3.6	5.5	4.8	8.5	24	57	93	30	33	3.4	.50
20	5.4	3.8	5.5	5.5	9.5	33	55	105	26	36	2.6	.30
21	5.4	3.8	5.0	5.5	8.5	40	66	117	22	56	2.5	.20
22	5.2	5.5	5.0	5.5	7.0	49	94	108	19	41	2.8	2.3
23	5.2	8.0	5.5	5.0	7.0	65	105	117	15	42	2.8	8.4
24	4.8	17	6.0	5.5	8.0	81	104	117	13	40	2.9	108
25	4.8	41	6.0	5.0	9.5	68	100	102	18	27	7.5	41
26	5.0	28	5.5	4.8	13	71	127	116	26	21	4.6	21
27	5.2	14	5.0	5.5	17	75	99	114	19	16	3.8	10
28	5.2	6.1	5.0	6.0	16	81	95	107	16	13	3.7	8.2
29	6.3	17	5.5	6.0	---	84	97	105	14	11	54	11
30	7.7	24	5.5	6.0	---	87	99	97	14	11	16	12
31	6.9	---	5.0	6.0	---	107	---	83	---	12	12	---
TOTAL	663.2	270.2	193.3	163.1	204.6	1291	3146	3494	1477	843	226.6	367.71
MEAN	21.4	9.01	6.24	5.26	7.31	41.6	105	113	49.2	27.2	7.31	12.3
MAX	289	41	15	6.0	17	107	342	174	121	115	54	108
MIN	4.8	3.5	4.2	4.6	4.4	16	55	80	13	11	2.5	.20
AC-FT	1320	536	383	324	406	2560	6240	6930	2930	1670	449	729
CAL YR 1985	TOTAL	17423.52		MEAN	47.7	MAX	289	MIN	.01	AC-FT	34560	
WTR YR 1986	TOTAL	12339.71		MEAN	33.8	MAX	342	MIN	.20	AC-FT	24480	

DOLORES RIVER BASIN

09169500 DOLORES RIVER AT BEDROCK, CO

LOCATION.--Lat 38°18'37", long 108°53'05", in NW¼SW¼ sec.20, T.47 N., R.18 W., Montrose County, Hydrologic Unit 14030002, on right bank at upstream side of bridge, 0.4 mi southeast of Bedrock, and 3.1 mi upstream from East Paradox Creek.

DRAINAGE AREA.--2,024 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1917 to September 1922 (monthly discharge only for some periods, published in WSP 1313), August 1971 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 4,940 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Aug. 1, 1971, nonrecording gage at different datum.

REMARKS.--Estimated daily discharges: Dec. 10-28, Dec. 31 to Jan. 7, 10-23, 25, 26, and Feb. 1-4, 11, 13, 14. Records good except for estimated daily discharges, which are fair. Diversions upstream from station for irrigation of about 5,000 acres upstream from station, and about 74,760 acres in the San Juan River basin. Flow partly regulated since Mar. 19, 1984 by McPhee Reservoir, capacity 381,000 acre-ft.

AVERAGE DISCHARGE.--17 years (water years 1918-22, 1972-83), 497 ft³/s; 360,100 acre-ft/yr, prior to completion of McPhee Reservoir.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,280 ft³/s, Apr. 30, 1973, gage height, 12.09 ft, from floodmarks, from rating curve extended above 8,700 ft³/s; no flow, Sept. 13, 1974, Aug. 15 to 18, 1978.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Sept. 6, 1970, reached a stage of 7.15 ft, present datum, from floodmarks (discharge not determined).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,230 ft³/s at 2400 May 5, gage height, 9.12 ft; minimum daily, 55 ft³/s, Jan. 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	90	74	139	65	75	248	1160	2390	1170	453	94	116
2	71	71	125	65	75	237	1720	2660	1170	470	91	100
3	65	74	103	65	75	258	2930	3290	1180	411	90	130
4	63	71	94	65	75	282	2410	4070	1200	221	87	97
5	62	70	91	55	75	346	1670	4690	1300	153	84	84
6	61	69	89	60	75	382	1420	4430	1290	186	82	82
7	82	66	106	60	75	368	1470	3150	1360	121	80	79
8	139	66	122	63	71	392	1410	2210	2090	142	82	86
9	75	63	117	60	62	395	1380	1800	2400	215	80	569
10	83	64	90	70	60	389	1600	1510	2200	497	79	731
11	624	65	70	70	60	304	1820	1530	1600	601	77	275
12	488	79	60	70	66	256	1960	1520	1330	496	99	128
13	199	95	60	70	70	228	1990	1450	1260	345	266	104
14	189	97	60	70	75	215	1960	1420	1240	327	123	97
15	203	82	65	70	94	198	1510	1350	1230	232	86	91
16	116	75	70	70	86	207	1210	1290	1220	175	82	87
17	91	77	75	70	107	198	1310	1290	1210	134	79	84
18	82	79	70	70	118	191	1590	1320	1210	274	76	83
19	77	79	70	70	107	155	1700	1310	1200	339	75	84
20	75	69	70	75	110	138	1530	1270	1180	408	75	84
21	74	69	75	75	157	140	1210	1260	1030	643	82	83
22	72	75	75	75	154	158	1290	1250	942	346	79	87
23	72	76	75	75	126	206	2020	1250	823	446	75	109
24	70	79	70	71	109	359	2270	1250	610	397	75	253
25	70	87	70	65	104	495	2500	1250	355	758	87	309
26	70	90	70	65	118	482	2340	1230	234	613	83	498
27	69	107	70	69	177	576	1890	1230	154	346	77	230
28	69	112	70	72	249	652	1630	1240	134	227	77	148
29	69	98	72	74	---	654	1520	1230	124	199	532	121
30	70	110	72	77	---	725	1790	1210	120	165	639	112
31	71	---	70	86	---	901	---	1190	---	104	163	---
TOTAL	3711	2388	2535	2137	2805	10735	52210	57540	32566	10444	3856	5141
MEAN	120	79.6	81.8	68.9	100	346	1740	1856	1086	337	124	171
MAX	624	112	139	86	249	901	2930	4690	2400	758	639	731
MIN	61	63	60	55	60	138	1160	1190	120	104	75	79
AC-FT	7360	4740	5030	4240	5560	21290	103600	114100	64590	20720	7650	10200
CAL YR 1985	TOTAL	224570		MEAN	615	MAX	3860	MIN	44	AC-FT	445400	
WTR YR 1986	TOTAL	186068		MEAN	510	MAX	4690	MIN	55	AC-FT	369100	

09169500 DOLORES RIVER AT BEDROCK, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1979 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: November 1979 to current year.

WATER TEMPERATURES: November 1979 to current year.

INSTRUMENTATION.--Water-quality monitor since November 1979.

REMARKS.--Daily maximum and minimum specific-conductance data available in district office.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 4,790 microsiemens July 12, 1981; minimum, 140 microsiemens May 25, 1983.

WATER TEMPERATURES: Maximum, 33.5°C Aug. 7, 1981; minimum, -0.5°C Dec. 3-8, 1982.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum recorded, 2,350 microsiemens July 11; minimum recorded, 181 microsiemens May 6.

WATER TEMPERATURES: Maximum recorded, 28.0°C Aug. 8, 1981; minimum recorded, 0.0°C many days during winter months.

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25 DEG. C, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1270	1190	1280	979	1190	891	450	342	315	823	718	1420
2	1700	1160	1120	967	1180	841	457	310	320	426	725	1530
3	2190	1170	1110	989	1210	826	438	295	319	397	762	1570
4	2050	1190	1410	1010	1240	811	447	285	341	450	866	1210
5	1750	1300	1400	1000	1260	770	486	268	405	544	881	932
6	1470	1260	1300	1030	1300	697	508	229	355	669	880	930
7	1310	1240	1350	1040	1320	702	508	243	317	546	896	910
8	1240	1200	1310	1020	1340	684	506	232	268	644	851	946
9	1150	1150	1170	1060	1350	665	503	250	214	880	813	770
10	1050	1120	1010	1050	1360	636	510	286	231	614	788	603
11	900	1140	1020	1010	1330	609	504	338	321	1670	772	704
12	885	1120	984	1080	1320	595	491	352	329	1280	742	814
13	1010	980	968	1050	1290	620	488	380	324	667	590	928
14	1010	968	934	991	1260	705	485	410	315	600	594	1060
15	1220	876	932	964	1210	756	494	414	312	592	608	1160
16	1250	955	911	944	1210	790	534	440	318	589	632	1230
17	1250	1210	984	921	1220	822	541	455	317	648	638	1230
18	1240	1520	982	914	1240	797	531	472	319	688	687	1230
19	1230	1280	967	911	1210	898	508	489	317	916	712	1200
20	1270	1140	962	940	1370	967	502	415	320	581	802	1180
21	1310	1040	959	1040	1250	976	511	384	327	670	835	1150
22	1300	1220	957	1040	1310	984	519	352	345	904	851	1120
23	1290	1180	950	1040	1400	975	478	352	351	1020	923	1080
24	1280	1160	950	1060	1250	966	435	351	377	510	1010	1040
25	1250	1070	947	1120	1190	688	410	336	434	622	1080	946
26	1240	1070	946	1110	1120	602	395	336	525	463	1070	405
27	1240	1190	937	1160	1070	558	393	340	617	427	1070	1210
28	1240	1190	1020	1220	1020	522	407	334	718	498	1120	1240
29	1230	1280	996	1250	---	502	387	324	938	549	1070	1210
30	1210	1570	941	1270	---	493	373	321	970	613	1120	1220
31	1190	---	913	1280	---	466	---	315	---	684	1270	---
MEAN	1300	1170	1050	1050	1250	736	473	344	396	683	851	1070
WTR YR 1986	MEAN	862	MAX	2190	MIN	214						

09169500 DOLORES RIVER AT BEDROCK, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	13.0	9.0	10.5	7.0	4.5	3.5	.0	.0	2.0	.0	8.5	5.5
2	13.5	9.5	9.0	6.0	3.5	3.0	.0	.0	2.5	.0	8.5	5.5
3	14.0	9.5	10.0	6.0	5.0	3.0	.5	.0	2.5	.0	9.5	6.5
4	14.5	10.5	10.0	6.0	4.5	3.0	.0	.0	1.5	.0	9.0	6.5
5	14.0	10.0	10.5	7.5	3.0	1.5	.0	.0	1.0	.0	9.5	6.5
6	13.5	10.0	9.5	6.5	4.0	2.0	.0	.0	.5	.0	9.0	6.5
7	13.5	11.5	8.5	4.5	3.0	1.5	.0	.0	.5	.0	9.0	6.5
8	12.0	11.0	8.0	5.5	3.0	2.0	.0	.0	1.0	.0	8.5	7.0
9	12.0	10.5	8.5	6.5	2.0	.0	.5	.0	.5	.0	8.0	6.5
10	12.5	10.5	7.0	5.5	.5	.0	.0	.0	.5	.0	6.5	6.0
11	12.0	9.5	9.0	6.0	.0	.0	.0	.0	1.0	.0	6.5	5.0
12	12.0	9.5	8.0	6.0	.0	.0	.0	.0	1.0	.0	7.5	5.0
13	11.0	10.0	6.0	3.5	.0	.0	.0	.0	.5	.0	8.0	5.0
14	11.5	8.5	4.0	2.5	.0	.0	.0	.0	1.5	.0	7.5	5.5
15	11.0	7.5	5.0	2.0	.0	.0	.0	.0	2.0	.5	9.0	5.5
16	11.0	8.0	3.0	1.0	.0	.0	.0	.0	2.5	1.0	7.5	6.0
17	11.5	9.0	3.5	2.0	.0	.0	.0	.0	4.5	2.0	7.5	6.5
18	12.5	9.0	3.5	2.0	.0	.0	.5	.0	6.5	3.5	8.5	5.5
19	13.0	9.0	2.0	.5	.0	.0	.5	.0	6.5	5.5	8.5	5.0
20	12.0	9.0	1.0	.5	.0	.0	.5	.0	8.0	6.0	9.5	6.0
21	11.5	9.0	2.0	.5	.0	.0	.5	.0	7.0	4.5	10.5	7.0
22	12.0	9.0	.5	.0	.0	.0	.0	.0	5.5	4.0	11.5	8.0
23	12.0	8.0	1.5	.0	.0	.0	.5	.0	6.5	4.0	12.0	8.5
24	12.0	8.0	3.0	1.5	.0	.0	1.0	.0	7.5	4.5	11.5	9.5
25	12.0	8.0	4.0	3.0	.0	.0	.5	.0	8.5	5.0	12.0	8.5
26	12.5	8.5	6.0	3.5	.0	.0	.5	.0	9.0	6.0	13.0	8.5
27	12.5	8.5	5.0	3.5	.0	.0	.5	.0	9.0	6.5	13.5	9.0
28	12.5	9.5	3.0	2.5	.0	.0	.5	.0	8.5	5.5	14.0	9.5
29	12.5	9.5	4.5	3.0	.0	.0	1.0	.0	---	---	13.5	10.0
30	12.5	9.0	4.5	3.5	.0	.0	.5	.0	---	---	13.0	10.5
31	10.5	9.0	---	---	.0	.0	2.0	.0	---	---	13.0	10.5
MONTH	14.5	7.5	10.5	.0	5.0	.0	2.0	.0	9.0	.0	14.0	5.0
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	11.5	9.0	12.5	10.5	17.5	15.0	24.5	20.5	26.5	20.5	21.5	18.0
2	9.0	6.5	12.5	10.0	17.5	14.5	25.5	21.0	26.0	21.0	21.0	18.0
3	6.5	5.0	13.0	10.5	18.0	15.0	23.5	21.5	26.5	21.5	21.0	17.0
4	6.5	4.5	12.5	10.5	18.5	15.5	23.0	20.0	27.0	21.5	22.5	18.0
5	8.0	5.5	11.0	9.5	18.0	16.5	21.5	20.0	26.5	21.5	23.0	17.0
6	9.5	7.5	10.0	9.0	19.0	16.5	23.0	19.0	26.5	21.0	22.5	17.5
7	10.5	9.0	9.5	8.5	18.5	16.5	21.0	19.0	27.0	21.0	22.0	18.0
8	11.5	9.0	9.5	8.5	17.0	15.0	21.5	19.0	28.0	22.0	19.5	18.0
9	11.0	8.5	9.5	8.5	15.0	13.0	23.0	19.5	27.5	21.5	18.0	13.5
10	10.5	9.0	11.0	8.0	14.0	11.5	23.0	19.5	26.5	21.0	15.5	11.5
11	10.0	9.0	12.5	10.0	15.5	12.5	22.5	19.5	26.0	22.0	16.0	11.0
12	9.5	7.5	13.5	11.5	17.5	14.5	23.5	20.0	25.0	21.5	16.5	14.0
13	8.5	7.0	13.5	12.0	18.5	15.5	23.5	20.5	22.5	18.5	16.5	15.0
14	7.5	6.0	12.5	11.5	18.5	15.5	24.0	20.5	24.0	21.0	18.5	14.5
15	8.5	5.5	12.0	10.5	18.5	15.5	24.5	20.5	25.5	19.5	18.5	14.5
16	10.5	8.5	12.0	10.0	18.5	15.5	22.0	21.0	27.0	20.5	18.5	15.5
17	9.5	7.5	12.0	9.0	19.0	15.5	25.0	19.5	27.5	21.0	17.5	14.5
18	7.5	6.0	12.5	10.0	18.0	16.5	24.0	21.0	28.0	22.5	15.5	14.0
19	7.0	5.0	14.0	11.5	18.5	15.5	24.0	21.0	27.0	23.0	14.0	12.0
20	9.0	6.0	15.5	12.5	18.5	15.0	24.0	18.5	26.0	21.5	14.5	13.0
21	11.5	8.5	15.5	13.5	19.5	15.5	22.0	13.0	24.5	21.0	15.5	13.5
22	12.0	10.0	15.0	13.0	19.5	15.5	21.0	19.5	26.5	20.5	14.5	14.0
23	11.0	9.0	15.5	12.0	19.5	15.5	20.5	11.0	23.0	21.0	15.0	14.0
24	9.5	8.0	15.5	13.5	18.0	16.5	19.0	11.5	24.0	20.0	14.5	11.5
25	9.0	8.0	16.0	13.0	18.0	16.5	21.0	16.5	25.5	20.0	11.5	11.0
26	9.0	7.0	17.0	13.5	22.0	16.5	21.5	18.0	25.5	20.0	11.0	9.0
27	9.5	6.5	17.5	14.5	24.5	18.5	22.5	18.0	26.0	20.0	12.5	10.5
28	11.0	8.0	17.5	14.5	24.5	21.0	23.0	17.5	22.5	21.0	13.0	11.5
29	12.5	10.5	17.0	14.5	23.0	20.0	23.0	19.0	21.0	17.5	13.5	12.0
30	13.0	11.5	17.5	14.5	25.0	20.5	25.0	19.5	20.0	16.5	13.0	11.0
31	---	---	17.5	14.5	---	---	26.5	20.0	21.0	18.0	---	---
MONTH	13.0	4.5	17.5	8.0	25.0	11.5	26.5	11.0	28.0	16.5	23.0	9.0
YEAR	28.0	.0										

09171100 DOLORES RIVER NEAR BEDROCK, CO

LOCATION.--Lat 38°21'29", long 108°49'54", in SW¼NW¼ sec.2, T.47 N., R.18 W., Montrose County, Hydrologic Unit 14030002, on right bank 2.5 mi downstream from West Paradox Creek and 4.3 mi northeast of Bedrock.

DRAINAGE AREA.--2,145 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1971 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 4,910 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Feb. 1, 1972, at site 400 ft upstream at datum 1.02 ft, higher.

REMARKS.--Estimated daily discharges: Oct. 11-24, Dec. 10-24, Dec. 30 to Jan. 2, Jan. 6, 7, 10-12, 16-18, 21-23, 25, 26, Feb. 1-3, 11-13, 14, and Sept. 11-25. Records good except for estimated daily discharges, which are fair. Diversions upstream from station for irrigation of about 80,000 acres, of which about 74,760 acres are in the San Juan River basin. Flow partly regulated by McPhee Reservoir, capacity 381,000 acre-ft, since Mar. 19, 1984.

AVERAGE DISCHARGE.--12 years (water years 1972-83), 502 ft³/s; 363,700 acre-ft/yr, prior to completion of McPhee Dam.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,500 ft³/s, Apr. 30, 1973, gage height, 12.88 ft, from floodmarks; minimum daily, 0.12 ft³/s, July 17, 18, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Sept. 6, 1970, reached a stage of 11.25 ft, site and datum in use prior to Feb. 1, 1972 (discharge, 5,710 ft³/s), by slope-area measurement at site 1,400 ft upstream.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,260 ft³/s at 0200 May 6, gage height, 10.82 ft; minimum daily, 60 ft³/s, Feb. 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	113	84	150	75	90	267	1280	2240	1210	425	104	162
2	87	86	149	75	90	254	1770	2630	1210	512	101	149
3	77	86	128	81	90	263	3600	3160	1200	445	98	179
4	73	87	113	78	95	288	2860	4030	1240	279	93	126
5	70	86	108	65	93	347	1880	4530	1330	148	88	102
6	69	83	107	70	96	394	1520	4550	1340	235	85	96
7	87	78	113	70	89	387	1550	3220	1410	145	85	92
8	150	78	135	72	86	399	1450	2120	2090	145	85	96
9	91	75	131	73	71	408	1410	1850	2550	218	87	530
10	95	75	100	80	60	399	1630	1600	2310	463	85	1020
11	720	77	80	80	65	333	1790	1610	1750	669	88	330
12	570	81	70	80	68	268	1940	1600	1410	578	87	140
13	230	105	70	80	75	238	1960	1520	1390	400	253	120
14	220	116	70	80	85	220	1960	1480	1410	361	132	110
15	230	101	75	80	111	207	1600	1410	1370	264	94	100
16	130	87	80	80	108	210	1270	1310	1350	199	88	100
17	110	87	85	80	113	207	1320	1310	1330	146	84	95
18	95	93	85	80	137	200	1580	1330	1310	260	81	95
19	90	93	80	84	126	168	1700	1340	1290	354	79	95
20	85	78	85	84	123	140	1610	1290	1280	353	79	95
21	85	86	85	80	158	143	1310	1280	1140	759	87	100
22	85	80	85	80	175	157	1320	1270	978	389	84	110
23	85	95	85	80	146	204	1990	1270	897	439	78	140
24	80	93	85	81	128	327	2280	1270	699	539	79	330
25	81	101	83	75	123	524	2560	1270	405	857	87	360
26	81	105	87	70	129	493	2490	1260	290	683	93	566
27	81	114	86	75	179	574	1970	1260	180	384	85	254
28	81	132	84	84	256	654	1670	1260	152	262	90	161
29	83	122	84	90	---	704	1570	1250	139	213	470	132
30	81	123	85	96	---	734	1800	1240	129	184	799	120
31	81	---	80	102	---	926	---	1220	---	120	216	---
TOTAL	4296	2787	2943	2460	3165	11037	54640	57980	34789	11428	4144	6105
MEAN	139	92.9	94.9	79.4	113	356	1821	1870	1160	369	134	204
MAX	720	132	150	102	256	926	3600	4550	2550	857	799	1020
MIN	69	75	70	65	60	140	1270	1220	129	120	78	92
AC-FT	8520	5530	5840	4880	6280	21890	108400	115000	69000	22670	8220	12110
CAL YR 1985	TOTAL	236298		MEAN	647	MAX	4370	MIN	46	AC-FT	468700	
WTR YR 1986	TOTAL	195774		MEAN	536	MAX	4550	MIN	60	AC-FT	388300	

DOLORES RIVER BASIN

09171100 DOLORES RIVER NEAR BEDROCK, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--December 1979 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: December 1979 to current year.

WATER TEMPERATURES: December 1979 to current year.

INSTRUMENTATION.--Water-quality monitor since December 1979.

REMARKS.--Daily maximum and minimum specific-conductance data available in district office.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 83,300 microsiemens Aug. 9, 1981; minimum, 103 microsiemens June 4, 1984.

WATER TEMPERATURES: Maximum, 33.5°C July 10, 1981; minimum, -1.5°C several days during November to January 1981 and 1983.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum recorded, 15,200 microsiemens Feb. 10 (but may have been exceeded during periods of missing record from June 14 to Sept. 4); minimum recorded, 290 microsiemens June 11 (but may have been less during periods of missing record June 14 to Sept. 4).

WATER TEMPERATURES: Maximum, 31.0°C Aug. 18; minimum, 0.0°C several days during winter months.

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25 DEG. C, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4230	4490	3030	2950	3830	1570	587	380	351	---	---	---
2	4370	4620	3080	3330	3680	1530	573	359	350	---	---	---
3	4630	4480	3440	3700	3820	1470	608	345	349	---	---	---
4	4820	4560	3840	3790	4270	1390	659	342	347	---	---	---
5	4960	4790	3980	4420	4320	1310	684	336	348	---	---	5740
6	5050	4790	3980	3900	4260	1210	579	335	350	---	---	5730
7	5290	4880	3660	3620	4550	1170	539	341	351	---	3350	5900
8	4780	4970	2980	4340	4600	1150	533	333	341	---	3370	6610
9	4610	5110	2910	4510	5270	1120	542	349	336	1560	3020	8160
10	4640	4980	2490	4170	6470	1120	526	366	320	999	3140	4880
11	4190	4800	2670	3970	4220	1190	520	381	305	859	---	4480
12	3550	4230	2860	4040	4310	1320	509	392	352	---	---	4450
13	3550	3180	2880	4270	3150	1500	504	405	428	---	---	4600
14	3690	2970	3370	4480	3090	1630	500	415	---	---	---	4920
15	3720	3560	3360	4670	2960	1770	504	411	---	---	---	5280
16	3800	4160	2920	4570	3140	1800	519	421	---	---	---	5570
17	4050	4380	3330	4740	3000	1880	529	434	---	---	---	5640
18	4260	4390	3130	5140	2580	1860	516	446	---	---	---	5700
19	4410	4240	2980	5540	2670	2190	502	466	---	---	---	5750
20	4530	5270	2990	5650	2750	2590	498	447	---	---	---	5800
21	4610	4730	2950	5740	2340	2550	494	426	---	---	---	5820
22	4680	4830	2910	5190	2060	2380	496	407	---	---	---	5860
23	4730	4280	3010	4660	2300	2050	477	401	---	---	---	5700
24	4780	4430	3630	5240	2410	1650	447	401	---	---	---	5230
25	4820	4050	3460	4740	2530	1170	428	395	---	---	---	4260
26	4860	4000	3530	4930	2440	1080	411	387	---	---	---	3990
27	4900	3700	3730	5410	2050	992	405	381	---	---	---	4110
28	4930	3360	3870	4530	1740	905	418	378	---	---	---	4360
29	4970	3880	3830	4440	---	800	408	370	---	---	---	4560
30	5080	3770	3240	3910	---	615	396	363	---	---	---	4770
31	5050	---	2850	3760	---	601	---	359	---	---	---	---
MEAN	4530	4330	3250	4460	3390	1470	510	386				5300

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	16.0	8.5	12.0	5.5	6.0	3.0	1.5	.0	5.0	.0	10.0	5.0
2	16.0	9.0	10.5	5.0	3.5	2.5	2.0	.0	6.5	.5	10.5	5.0
3	17.0	9.0	11.5	4.5	7.0	3.0	3.0	.0	4.5	.5	11.0	6.0
4	18.0	10.0	11.5	5.5	6.5	2.0	.5	.0	5.0	.0	11.5	6.0
5	18.0	9.0	11.0	7.0	4.5	1.0	.0	.0	5.0	.0	11.0	6.0
6	16.5	9.5	11.0	4.5	5.5	1.5	.0	.0	2.5	.0	10.5	6.0
7	15.5	12.0	10.0	3.5	4.0	.5	.0	.0	2.0	.0	10.5	6.5
8	14.5	11.5	9.5	4.5	4.5	1.0	.0	.0	4.5	.0	9.5	7.0
9	15.0	11.0	10.0	5.0	3.0	.0	.0	.0	2.0	.0	8.5	6.5
10	14.5	10.5	7.0	4.0	1.0	.0	.5	.0	1.0	.0	6.5	5.5
11	12.5	11.5	9.5	5.5	1.0	.0	2.5	.0	5.0	.0	7.5	5.0
12	14.0	10.5	7.5	4.5	.0	.0	2.5	.0	4.0	.0	9.0	6.0
13	12.0	11.0	7.0	2.0	.5	.0	2.0	.0	1.5	.0	9.5	5.0
14	14.5	9.5	5.0	.5	1.0	.0	1.0	.0	3.0	.0	9.0	5.5
15	13.5	8.5	6.0	1.0	1.0	.0	.0	.0	3.0	1.5	11.0	5.5
16	14.5	8.0	3.5	.0	1.0	.0	3.5	.0	5.5	1.5	8.5	6.0
17	15.0	9.0	4.5	1.0	.0	.0	3.0	.0	7.0	1.5	8.0	5.5
18	16.5	9.5	4.5	1.0	.0	.0	3.0	.0	9.5	3.5	10.5	5.0
19	16.5	9.5	3.5	.0	1.0	.0	3.5	.0	8.0	5.5	10.5	4.0
20	15.5	9.5	4.0	.0	1.5	.0	3.5	.0	10.0	5.5	12.5	4.5
21	14.5	9.5	4.5	.0	2.0	.0	3.0	.0	8.5	3.5	14.0	5.0
22	15.5	10.5	3.0	.0	2.0	.0	1.0	.0	7.5	3.0	14.5	6.5
23	15.5	9.0	3.0	.0	2.0	.0	3.0	.0	9.5	3.0	14.0	7.5
24	16.0	8.5	3.5	2.0	2.0	.0	4.5	.0	10.5	3.5	12.0	8.5
25	16.0	8.5	5.0	3.0	2.0	.0	2.5	.0	11.5	3.5	12.5	8.0
26	16.5	9.5	7.5	3.5	2.0	.0	2.5	.0	12.0	4.5	13.0	8.0
27	16.5	9.5	6.5	3.0	2.0	.0	4.0	.0	11.5	5.5	13.5	8.5
28	16.0	11.0	3.5	2.0	1.5	.0	4.0	.0	10.5	5.0	13.5	9.0
29	16.5	10.5	6.0	3.0	1.5	.0	4.0	.0	---	---	14.0	9.0
30	15.0	10.0	5.0	3.5	2.0	.0	2.0	.0	---	---	13.0	9.5
31	10.5	7.0	---	---	2.0	.0	5.0	.5	---	---	13.5	10.0
MONTH	18.0	7.0	12.0	.0	7.0	.0	5.0	.0	12.0	.0	14.5	4.0
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	11.5	9.5	12.0	10.5	18.0	14.5	26.0	20.5	28.0	18.5	24.5	18.0
2	9.0	7.0	12.0	9.5	18.0	14.5	27.0	20.5	28.5	18.5	24.0	18.5
3	7.5	6.5	12.5	9.5	18.5	15.0	25.5	21.5	29.5	19.0	24.5	14.5
4	6.5	4.5	11.0	10.5	19.5	15.5	25.0	20.0	27.5	19.0	26.0	19.0
5	8.5	5.5	11.5	11.0	18.5	16.5	23.0	20.0	27.5	19.5	26.5	17.0

DOLORES RIVER BASIN

09172500 SAN MIGUEL RIVER NEAR PLACERVILLE, CO

LOCATION.--Lat 38°02'33", long 108°07'54", in NW¼NE¼ sec.25, T.44 N., R.12 W., San Miguel County, Hydrologic Unit 14030003, on right bank 1.5 mi downstream from Specie Creek in vicinity of mile marker 88.68 on State Highway 145 and 4.5 mi northwest of Placerville, Co.

DRAINAGE AREA.--310 mi².

PERIOD OF RECORD.--January to December 1909, September 1910 to December 1912, April 1930 to September 1934, April 1942 to current year. Monthly discharge only for some periods, published in WSP 1313. Published as "at Placerville," 1910-12.

GAGE.--Water-stage recorder. Datum of gage is 7,030 ft above National Geodetic Vertical Datum of 1929, from topographic map. See WSP 1713 or 1733 for history of changes prior to Oct. 21, 1958.

REMARKS.--Estimated daily discharges: Nov. 15, 20, 22, Dec. 10-19, 21-31, Jan. 1-29, Feb. 1, 6-11, 13, 14, 19, 20, 27, Mar. 4-16. Records good except for estimated daily discharges, which are poor. Diversions for irrigation of about 1,700 acres upstream from station. One diversion from Fall Creek for irrigation of about 2,000 acres in Beaver and Saltado Creek basins. One small ditch diverts water from Leopard Creek to Uncompahgre River basin. Slight regulation by Lake Hope and Trout Lake operated by Colorado Ute Electric Association, combined capacity, 5,040 acre-ft. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--50 years (water years 1911-12, 1931-34, 1943-86), 237 ft³/s; 171,700 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,000 ft³/s, Sept. 5, 1909 (result of failure of Trout and Middle Reservoir Dams); minimum daily, 26 ft³/s, Jan. 5, 1960.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 900 ft³/s, and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May. 29	0200	971	4.22	June 17	0200	1,330	4.75
June 7	0100	*1,540	*5.03	July 9	1400	1,170	4.53

Minimum daily discharge, 60 ft³/s, Feb. 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	165	128	111	85	85	88	242	458	726	973	294	169
2	152	124	109	85	85	89	249	516	737	935	271	172
3	144	124	107	85	78	89	217	659	847	928	263	192
4	156	117	99	80	70	95	198	735	1140	928	266	169
5	144	117	91	80	62	110	188	699	1260	989	270	163
6	137	107	98	80	65	110	218	628	1350	911	350	154
7	162	108	91	80	65	110	248	538	1420	839	280	148
8	171	117	89	70	65	110	289	501	1350	767	263	157
9	187	111	89	80	65	110	282	472	1240	1000	246	257
10	177	95	85	80	60	100	253	482	1010	962	232	483
11	191	102	80	80	65	100	246	522	870	822	216	327
12	185	109	80	80	68	100	232	477	908	755	251	291
13	177	93	80	85	70	95	229	449	1020	727	315	250
14	179	85	75	80	75	95	199	459	1150	677	271	232
15	160	95	80	80	82	100	213	454	1200	719	252	223
16	160	107	85	80	77	100	238	487	1210	698	224	213
17	152	114	90	80	75	109	239	559	1180	589	210	201
18	165	111	90	80	75	112	226	524	1100	555	216	188
19	164	107	90	80	75	109	210	500	1120	536	216	182
20	158	100	95	85	75	109	219	560	1030	495	198	166
21	154	109	90	80	76	109	245	632	1080	466	225	163
22	156	100	90	75	71	126	310	661	1050	522	193	178
23	151	107	90	80	73	137	333	719	1040	483	195	218
24	147	102	90	75	71	151	342	743	978	529	195	251
25	149	102	90	70	73	157	352	720	935	483	210	229
26	149	102	90	75	82	169	333	817	1120	433	210	219
27	147	99	85	75	85	188	295	872	1110	407	186	207
28	145	108	85	80	88	204	356	902	1050	362	182	185
29	142	116	85	80	---	213	378	907	1030	347	192	198
30	135	114	90	88	---	210	391	796	1060	329	188	195
31	139	---	90	89	---	223	---	707	---	311	182	---
TOTAL	4900	3230	2789	2482	2056	3927	7970	19155	32321	20477	7262	6380
MEAN	158	108	90.0	80.1	73.4	127	266	618	1077	661	234	213
MAX	191	128	111	89	88	223	391	907	1420	1000	350	483
MIN	135	85	75	70	60	88	188	449	726	311	182	148
AC-FT	9720	6410	5530	4920	4080	7790	15810	37990	64110	40620	14400	12650
CAL YR 1985	TOTAL	130400		MEAN	357	MAX	1820	MIN	50	AC-FT	258600	
WTR YR 1986	TOTAL	112949		MEAN	309	MAX	1420	MIN	60	AC-FT	224000	

09177000 SAN MIGUEL RIVER AT URAVAN, CO

LOCATION.--Lat 38°21'26", long 108°42'44", in SW¼ sec.2, T.47 N., R.17 W., Montrose County, Hydrologic Unit 14030003, on right bank 20 ft downstream from bridge on State Highway 141, 400 ft downstream from Tabeguache Creek, and 1.5 mi southeast of Uravan.

DRAINAGE AREA.--1,499 mi².

PERIOD OF RECORD.--August 1954 to September 1962, October 1973 to current year.

REVISED RECORDS.--WRD Colo. 1974: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 5,000 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Sept. 3, 1959, at site 0.5 mi downstream at different datum.

REMARKS.--Estimated daily discharges: Dec. 11 - 31, Jan. 1 - 25, 27 - 29, Feb. 2, 3, 19 - 21. Records good except for estimated daily discharges, which are poor. Natural flow of stream affected by storage reservoirs, diversions for irrigation of about 28,000 acres upstream from 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.--21 years (water years 1955-62, 1974-86), 398 ft³/s; 288,400 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,050 ft³/s, May 10, 1983, gage height, 10.14 ft, from rating curve extended above 4,100 ft³/s; minimum daily, 9.4 ft³/s, Aug. 10, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Sept. 6, 1970, reached a stage of 12.6 ft, from floodmarks, discharge, 8,910 ft³/s, by slope-area measurement at site 5.5 mi downstream.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,000 ft³/s, and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 12	0300	2,040	5.85	June 7	0900	2,280	6.00
May 18	0400	2,200	5.98	July 19	0600	*2,620	*6.37

Minimum daily discharge, 90 ft³/s, Jan. 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	220	213	197	110	140	170	1290	1160	1160	1060	280	199
2	199	196	185	100	130	201	1730	1300	1130	929	273	228
3	185	190	182	100	120	275	1340	1500	1220	867	252	245
4	182	188	175	100	122	284	976	1750	1800	878	252	200
5	188	182	158	100	118	319	909	1690	2000	1070	235	178
6	173	180	152	95	115	332	1030	1500	1950	958	287	169
7	223	171	162	100	124	356	1080	1350	2060	844	288	158
8	269	171	156	100	120	387	1040	1220	1900	789	239	180
9	252	178	156	95	122	439	1040	1110	1790	964	217	484
10	263	171	133	110	115	338	970	1040	1580	1140	210	856
11	446	162	120	100	118	301	950	1430	1160	919	190	478
12	389	180	100	100	111	284	891	1570	1110	802	210	374
13	318	180	95	100	141	253	849	1200	1210	724	276	333
14	371	145	95	100	138	256	684	1110	1370	693	280	301
15	298	136	95	95	170	256	657	1060	1400	768	246	274
16	264	152	100	95	162	252	703	1150	1430	823	222	263
17	256	175	110	95	150	252	786	1460	1340	695	197	242
18	252	182	110	95	148	235	706	1660	1270	633	178	228
19	252	162	110	95	150	228	628	1240	1270	1160	188	221
20	242	139	110	95	160	252	632	1270	1160	736	180	207
21	235	163	110	100	160	279	667	1390	1180	628	182	190
22	231	152	110	90	159	323	868	1510	1110	626	190	188
23	228	169	110	100	148	438	978	1600	1060	667	190	271
24	217	173	110	100	138	622	1010	1610	1040	786	193	700
25	217	171	110	100	128	691	981	1490	934	571	223	521
26	217	145	110	106	113	733	939	1610	1130	501	217	500
27	217	128	110	110	116	810	815	1750	1180	451	189	371
28	210	126	110	110	132	930	918	1680	1080	389	185	372
29	217	157	100	120	---	1040	1150	1650	1060	357	406	333
30	213	240	100	134	---	1080	1060	1480	1000	329	275	356
31	210	---	110	144	---	1100	---	1300	---	301	218	---
TOTAL	7654	5077	3891	3194	3768	13716	28277	43840	40084	23058	7168	9620
MEAN	247	169	126	103	135	442	943	1414	1336	744	231	321
MAX	446	240	197	144	170	1100	1730	1750	2060	1160	406	856
MIN	173	126	95	90	111	170	628	1040	934	301	178	158
AC-FT	15180	10070	7720	6340	7470	27210	56090	86960	79510	45740	14220	19080
CAL YR 1985 TOTAL	243789			MEAN	668	MAX	3320	MIN	95	AC-FT	483600	
WTR YR 1986 TOTAL	189347			MEAN	519	MAX	2060	MIN	90	AC-FT	375600	

GREEN RIVER BASIN

09236000 BEAR RIVER NEAR TOPONAS, CO

LOCATION.--Lat 40°03'00", long 107°04'00", in NW¼ sec.20, T.1 N., R.86 W., Garfield County, Hydrologic Unit 14050001, on right bank just downstream from Yampa Reservoir Dam at Stillwater campground, 0.8 mi downstream from Mandall Creek, 0.8 mi upstream from Dome Creek, and 14 mi west of Toponas.

DRAINAGE AREA.--23 mi², approximately.

PERIOD OF RECORD.--October 1952 to September 1965, October 1966 to September 1986 (discontinued). Published as Yampa River near Toponas prior to October 1973.

GAGE.--Water-stage recorder and Parshall flume. Elevation of gage is 9,700 ft, from river-profile map. Oct. 28, 1952, to Sept. 30, 1965, water-stage recorder at site 50 ft upstream at different datum.

REMARKS.--No estimated daily discharges. Records good. Flow regulated by Stillwater Reservoir, capacity, 6,200 acre-ft, 3.5 mi upstream and Yampa Reservoir, capacity, 620 acre-ft.

AVERAGE DISCHARGE.--13 years (water years 1953-65), 40.3 ft³/s; 29,200 acre-ft/yr, prior to filling of Stillwater Reservoir; 19 years (water years 1968-86), 41.2 ft³/s, 29,850 acre-ft/yr, subsequent to filling of Stillwater Reservoir.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 436 ft³/s, July 2, 1957, gage height, 6.39 ft, site and datum then in use; minimum daily, 1.6 ft³/s, Oct. 6-24, Nov. 18 to Dec. 8, 1966, during filling of Stillwater Reservoir.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 205 ft³/s at 2200 June 8, gage height, 2.52 ft; minimum daily, 13 ft³/s, Mar. 1-5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	24	21	18	18	13	21	30	98	139	65	45
2	26	23	20	18	18	13	21	35	103	138	62	43
3	26	23	20	18	18	13	21	42	116	138	62	43
4	25	22	20	17	19	13	19	47	146	139	62	43
5	25	23	19	17	18	13	19	46	154	152	61	41
6	25	23	19	18	18	17	18	43	160	146	61	39
7	28	23	18	18	18	19	18	41	161	138	60	39
8	31	24	19	18	18	19	18	33	191	129	58	39
9	29	26	19	18	18	20	18	29	191	129	57	39
10	27	26	19	18	18	19	18	27	180	123	55	39
11	29	25	18	18	18	19	18	26	177	117	54	39
12	28	24	18	18	18	19	18	28	185	107	55	39
13	29	23	18	18	18	19	18	28	187	106	55	39
14	27	23	18	18	18	19	18	31	177	102	53	36
15	25	23	18	17	16	19	17	32	165	98	52	28
16	25	22	18	17	17	20	18	30	172	97	52	28
17	25	22	18	17	15	20	18	28	176	95	52	27
18	25	23	18	18	15	20	18	32	174	93	49	27
19	25	23	18	18	17	20	17	41	164	93	48	27
20	25	23	18	18	19	20	17	54	161	91	47	27
21	25	23	18	18	18	20	16	63	160	90	52	30
22	25	23	18	18	16	20	18	67	156	86	49	28
23	24	23	18	18	16	20	22	66	156	86	48	28
24	24	22	18	18	16	19	23	65	153	84	46	29
25	24	21	18	18	15	19	22	68	147	83	48	28
26	25	22	18	18	15	19	21	76	150	78	45	29
27	25	22	18	18	14	19	18	83	147	75	44	29
28	24	21	18	18	14	19	18	91	143	72	45	29
29	24	21	18	18	---	20	20	91	143	71	46	30
30	25	21	18	18	---	21	25	87	142	69	46	29
31	24	---	18	18	---	21	---	91	---	67	45	---
TOTAL	800	687	572	553	476	571	571	1551	4735	3231	1634	1016
MEAN	25.8	22.9	18.5	17.8	17.0	18.4	19.0	50.0	158	104	52.7	33.9
MAX	31	26	21	18	19	21	25	91	191	152	65	45
MIN	24	21	18	17	14	13	16	26	98	67	44	27
AC-FT	1590	1360	1130	1100	944	1130	1130	3080	9390	6410	3240	2020
CAL YR 1985 TOTAL		15594		MEAN	42.7	MAX	218	MIN	15	AC-FT	30930	
WTR YR 1986 TOTAL		16397		MEAN	44.9	MAX	191	MIN	13	AC-FT	32520	

09237500 YAMPA RIVER NEAR OAK CREEK, CO.

LOCATION.--Lat 40°17'15", long 106°49'33", in SE¼NE¼ sec. 29, T. 4 N., R. 84 W., Routt County, Hydrologic Unit 1405001, on left bank, 1.0 mi upstream from Morrison Creek and 6.5 mi east of Oak Creek, Co.

DRAINAGE AREA.--227 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--September 1939 to September 1944 (monthly discharge only for some periods, published in WSP 1313), October 1956 to September 1972, October 1984 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 7,050 ft above National Geodetic Vertical Datum of 1929, from topographic map. Sept. 1939 to Nov. 15, 1939, nonrecording gage, Nov. 16 1939, to Sept 1944 and Oct. 1956 to Sept 1972, water-stage recorder at site 0.5 mi upstream, at different datum.

REMARKS.--Estimated daily discharges: Nov. 2 to Mar. 4. Records good except for estimated daily discharges, which are poor. Diversions for irrigation of about 12,000 acres upstream from station. Natural flow of stream affected by 2 diversions for irrigation to Egeria Creek into Colorado River basin and by storage in Stillwater, Yampa and Yamcolo Reservoirs (total capacity, 15,820 acre-ft).

AVERAGE DISCHARGE.--23 years, 90.3 ft³/s; 65,420 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,400 ft³/s, Apr. 16, 1962, gage height, 7.56 ft, from rating curve extended above 570 ft³/s, site and datum then in use; minimum daily, 8.9 ft³/s May 22, 1963.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 461 ft³/s at 1000 June 6, gage height 3.33 ft; maximum gage height, 6.00 ft, Nov. 16 (backwater from ice); minimum daily discharge, 36 ft³/s, Dec. 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	92	94	44	40	38	95	255	242	187	192	133	111
2	96	92	42	43	39	80	274	250	209	170	148	104
3	95	90	40	46	40	90	291	269	223	164	153	104
4	91	90	38	49	42	98	224	279	257	174	155	98
5	91	88	38	52	44	106	213	285	352	208	150	94
6	92	86	38	46	42	119	246	248	348	282	145	96
7	96	88	38	40	44	135	265	279	314	301	145	91
8	117	84	38	40	46	153	256	279	309	240	138	103
9	114	82	38	42	50	183	237	253	361	250	137	95
10	122	80	42	44	55	131	239	226	419	251	128	104
11	153	82	46	45	40	114	238	215	364	220	121	103
12	146	80	42	45	42	107	221	203	313	209	144	97
13	144	76	40	45	44	101	242	201	311	198	142	111
14	134	70	38	44	44	96	204	192	318	198	138	91
15	124	64	36	43	42	96	202	183	283	177	125	90
16	127	58	38	44	42	89	206	209	227	172	119	91
17	121	53	38	45	46	90	233	194	197	174	116	89
18	94	48	38	43	50	87	194	168	195	193	105	89
19	88	46	38	42	60	82	181	170	268	248	102	89
20	87	48	38	40	48	90	170	179	239	233	101	82
21	84	46	38	38	55	92	177	205	209	249	120	80
22	84	46	38	38	65	111	221	228	194	230	109	81
23	84	45	38	40	80	143	249	215	186	242	105	86
24	82	45	40	42	70	173	251	205	185	233	106	90
25	82	48	42	43	75	193	265	200	192	228	107	96
26	80	46	39	40	80	152	258	195	209	216	104	101
27	79	44	38	38	85	164	223	204	193	212	98	116
28	78	44	38	40	90	191	204	198	181	194	92	117
29	77	43	38	40	---	213	211	212	184	169	103	119
30	77	44	38	40	---	232	230	190	196	161	130	123
31	98	---	39	38	---	268	---	181	---	140	135	---
TOTAL	3129	1950	1214	1315	1498	4074	6880	6757	7623	6528	3854	2941
MEAN	101	65.0	39.2	42.4	53.5	131	229	218	254	211	124	98.0
MAX	153	94	46	52	90	268	291	285	419	301	155	123
MIN	77	43	36	38	38	80	170	168	181	140	92	80
AC-FT	6210	3870	2410	2610	2970	8080	13650	13400	15120	12950	7640	5830
CAL YR 1985	TOTAL	47046	MEAN	129	MAX	420	MIN	36	AC-FT	93320		
WTR YR 1986	TOTAL	47763	MEAN	131	MAX	419	MIN	36	AC-FT	94740		

GREEN RIVER BASIN

09237500 YAMPA RIVER NEAR OAK CREEK, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--July 1984 to current year.

PERIOD OF DAILY RECORD.--

SUSPENDED SEDIMENT DISCHARGE: May 1985 to current year, (seasonal record May to September).

INSTRUMENTATION.--Automatic pumping sediment sampler since May 1985.

REMARKS.--This station is part of a hydrologic investigation for a proposed reservoir. Data for related stations, Martin Creek, Little Morrison Creek, Middle Creek, and Yampa River, (all located above the dam site), are published elsewhere in this report.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	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)
JAN 14...	1515	43	360	8.1	0.0	10.2	180	47	15	9.5
APR 16...	1400	210	430	8.3	8.0	--	210	52	19	13
JUN 10...	1300	439	366	8.2	11.0	8.8	170	44	15	8.6
JUL 16...	1230	158	455	8.4	17.0	--	240	61	21	11
JUL 31...	1245	140	380	8.5	16.5	9.0	190	47	17	9.2
AUG 19...	1115	104	328	8.5	17.5	8.3	160	41	14	7.7
SEP 04...	1230	103	356	8.6	15.5	9.0	170	43	15	8.8
SEP 25...	1215	94	362	8.6	9.5	--	170	42	15	8.8

DATE	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINEITY 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)
JAN 14...	0.3	2.1	148	50	2.6	0.20	20	240	0.32
APR 16...	0.4	2.4	180	--	3.4	0.10	14	--	--
JUN 10...	0.3	2.3	145	50	1.9	0.10	20	230	0.31
JUL 16...	0.3	1.7	202	63	1.6	0.20	20	300	0.41
JUL 31...	0.3	1.6	163	45	1.4	0.10	18	240	0.32
AUG 19...	0.3	1.6	140	36	1.4	0.10	16	200	0.27
SEP 04...	0.3	1.7	144	36	1.3	0.20	17	210	0.28
SEP 25...	0.3	2.0	145	45	1.6	0.10	18	220	0.30

DATE	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)
JAN 14...	27	0.150	0.010	0.160	0.030	0.27	0.30	0.020	0.020
APR 16...	--	0.150	0.010	0.160	0.050	0.45	0.50	0.030	0.020
JUN 10...	273	--	<0.010	<0.100	0.030	0.47	0.50	0.060	0.040
JUL 16...	128	--	<0.010	<0.100	0.020	0.38	0.40	0.040	0.020
JUL 31...	90	--	<0.010	<0.100	0.020	0.18	0.20	0.030	0.020
AUG 19...	57	--	<0.010	<0.100	0.020	0.28	0.30	0.020	0.020
SEP 04...	58	--	<0.010	<0.100	<0.010	--	0.20	0.030	<0.010
SEP 25...	56	--	<0.010	<0.100	<0.010	--	0.30	0.020	0.020

09237500 YAMPA RIVER NEAR OAK CREEK, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ANTI- MONY, DIS- SOLVED (UG/L AS SB)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	BORON, DIS- SOLVED (UG/L AS B)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)
JAN 14...	<10	<1	<1	37	<0.5	20	<1	<1	1	3	17
APR 16...	10	<1	1	48	<0.5	30	<1	<1	<1	7	12

DATE	*LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	ZINC, DIS- SOLVED (UG/L AS ZN)
JAN 14...	<1	13	19	0.2	1	2	<1	<1	280	<3
APR 16...	3	--	11	0.1	4	3	2	<1	290	12

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE (DEG C)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE (DEG C)
OCT 24...	1200	77	385	7.0	MAY 02...	1200	258	430	11.5
MAR 06...	--	101	563	3.0	12...	1200	207	445	10.0
					29...	1200	223	351	13.0
					JUN 18...	1100	215	409	15.0

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
JAN 14...	1515	43	21	2.4	--
MAR 06...	0900	101	23	6.3	--
APR 16...	1400	210	156	88	--
24...	1445	251	314	213	--
MAY 02...	1200	258	299	208	--
12...	1200	207	155	87	--
20...	1200	179	140	68	--
29...	1200	223	148	89	87
JUN 10...	1300	439	221	262	62
18...	1100	215	114	66	--
26...	1210	209	64	36	--
JUL 07...	1040	301	151	123	--
16...	1230	158	56	24	--
31...	1245	140	41	15	--
AUG 19...	1115	104	65	18	--
SEP 04...	1230	103	41	11	--
25...	0900	94	35	8.9	--
25...	1200	94	14	3.6	--

The minimum reporting level for Lead was changed from <1 to <5 during June, 1986.

GREEN RIVER BASIN

09237500 YAMPA RIVER NEAR OAK CREEK, CO--Continued

SUSPENDED SEDIMENT DISCHARGE (TONS/DAY), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MEAN DISCHARGE (CFS)	MEAN SEDIMENT DISCHARGE		MEAN DISCHARGE (CFS)	MEAN SEDIMENT DISCHARGE		MEAN DISCHARGE (CFS)	MEAN SEDIMENT DISCHARGE	
		CONCEN- TRATION (MG/L)	(TONS/DAY)		CONCEN- TRATION (MG/L)	(TONS/DAY)		CONCEN- TRATION (MG/L)	(TONS/DAY)
APRIL									
1	254	---	---	242	277	181	187	108	55
2	274	---	---	250	270	182	209	126	71
3	291	---	---	269	336	244	223	152	92
4	224	---	---	279	352	265	257	183	127
5	213	---	---	285	319	245	352	327	311
6	246	---	---	248	239	160	348	275	258
7	265	---	---	279	276	208	314	221	187
8	256	---	---	279	218	164	309	176	147
9	237	---	---	253	186	127	361	185	180
10	239	---	---	226	183	112	419	211	239
11	238	---	---	215	185	107	364	169	166
12	221	---	---	203	171	94	313	143	121
13	242	---	---	201	160	87	311	143	120
14	204	---	---	192	153	79	318	137	118
15	202	---	---	183	148	73	283	136	104
16	206	144	80	209	158	89	227	97	59
17	233	284	178	194	135	71	197	69	37
18	194	173	91	168	118	54	195	99	52
19	180	118	58	170	116	53	268	154	111
20	170	116	53	179	120	58	239	92	59
21	177	108	52	205	155	86	209	72	41
22	221	242	144	228	210	129	194	67	35
23	249	353	236	215	187	108	186	55	28
24	251	316	214	204	150	83	185	45	22
25	265	296	212	200	129	70	191	37	19
26	258	202	141	195	128	67	209	60	34
27	223	202	122	204	132	73	193	62	32
28	204	186	102	198	134	72	181	53	26
29	211	190	108	212	145	83	184	51	25
30	230	269	167	190	128	66	196	47	25
31	---	---	---	181	108	53	---	---	---
TOTAL	6878	---	---	6755	---	3489	7622	---	2901
JULY									
1	192	39	20	133	18	6.5	111	30	9.0
2	170	33	15	148	18	7.2	104	25	7.0
3	164	37	16	153	17	7.0	104	27	7.6
4	174	56	26	155	16	6.7	98	26	6.9
5	208	125	70	150	16	6.5	94	26	6.6
6	282	141	107	145	19	7.4	96	14	3.6
7	301	144	117	145	14	5.5	91	24	5.9
8	240	81	52	138	13	4.8	103	30	8.3
9	250	77	52	137	16	5.9	95	19	4.9
10	251	59	40	128	20	6.9	104	19	5.3
11	220	47	28	121	17	5.6	103	10	2.8
12	209	46	26	144	25	9.7	97	16	4.2
13	198	40	21	142	19	7.3	111	12	3.6
14	198	74	40	138	17	6.3	91	12	2.9
15	177	46	22	125	17	5.7	90	15	3.6
16	172	55	26	119	18	5.8	91	32	7.9
17	174	38	18	115	16	5.0	89	14	3.4
18	193	52	27	105	15	4.2	89	12	2.9
19	248	132	88	102	15	4.1	89	12	2.9
20	233	58	36	100	16	4.4	82	12	2.7
21	249	88	59	120	27	8.7	80	16	3.5
22	230	55	34	109	21	6.2	81	13	2.8
23	242	47	31	105	19	5.4	86	19	4.4
24	232	44	28	105	18	5.2	90	12	2.9
25	228	48	30	107	20	5.8	96	15	3.9
26	216	26	15	104	23	6.4	101	16	4.4
27	212	25	14	98	16	4.2	116	19	6.0
28	194	24	13	92	20	5.0	117	18	5.7
29	169	23	11	103	22	6.1	119	19	6.1
30	161	23	10	130	49	17	123	51	17
31	140	24	9.1	135	49	18	---	---	---
TOTAL	6526	---	1101.1	3852	---	210.5	2941	---	158.7
AUGUST									
1	192	39	20	133	18	6.5	111	30	9.0
2	170	33	15	148	18	7.2	104	25	7.0
3	164	37	16	153	17	7.0	104	27	7.6
4	174	56	26	155	16	6.7	98	26	6.9
5	208	125	70	150	16	6.5	94	26	6.6
6	282	141	107	145	19	7.4	96	14	3.6
7	301	144	117	145	14	5.5	91	24	5.9
8	240	81	52	138	13	4.8	103	30	8.3
9	250	77	52	137	16	5.9	95	19	4.9
10	251	59	40	128	20	6.9	104	19	5.3
11	220	47	28	121	17	5.6	103	10	2.8
12	209	46	26	144	25	9.7	97	16	4.2
13	198	40	21	142	19	7.3	111	12	3.6
14	198	74	40	138	17	6.3	91	12	2.9
15	177	46	22	125	17	5.7	90	15	3.6
16	172	55	26	119	18	5.8	91	32	7.9
17	174	38	18	115	16	5.0	89	14	3.4
18	193	52	27	105	15	4.2	89	12	2.9
19	248	132	88	102	15	4.1	89	12	2.9
20	233	58	36	100	16	4.4	82	12	2.7
21	249	88	59	120	27	8.7	80	16	3.5
22	230	55	34	109	21	6.2	81	13	2.8
23	242	47	31	105	19	5.4	86	19	4.4
24	232	44	28	105	18	5.2	90	12	2.9
25	228	48	30	107	20	5.8	96	15	3.9
26	216	26	15	104	23	6.4	101	16	4.4
27	212	25	14	98	16	4.2	116	19	6.0
28	194	24	13	92	20	5.0	117	18	5.7
29	169	23	11	103	22	6.1	119	19	6.1
30	161	23	10	130	49	17	123	51	17
31	140	24	9.1	135	49	18	---	---	---
TOTAL	6526	---	1101.1	3852	---	210.5	2941	---	158.7
SEPTEMBER									
1	192	39	20	133	18	6.5	111	30	9.0
2	170	33	15	148	18	7.2	104	25	7.0
3	164	37	16	153	17	7.0	104	27	7.6
4	174	56	26	155	16	6.7	98	26	6.9
5	208	125	70	150	16	6.5	94	26	6.6
6	282	141	107	145	19	7.4	96	14	3.6
7	301	144	117	145	14	5.5	91	24	5.9
8	240	81	52	138	13	4.8	103	30	8.3
9	250	77	52	137	16	5.9	95	19	4.9
10	251	59	40	128	20	6.9	104	19	5.3
11	220	47	28	121	17	5.6	103	10	2.8
12	209	46	26	144	25	9.7	97	16	4.2
13	198	40	21	142	19	7.3	111	12	3.6
14	198	74	40	138	17	6.3	91	12	2.9
15	177	46	22	125	17	5.7	90	15	3.6
16	172	55	26	119	18	5.8	91	32	7.9
17	174	38	18	115	16	5.0	89	14	3.4
18	193	52	27	105	15	4.2	89	12	2.9
19	248	132	88	102	15	4.1	89	12	2.9
20	233	58	36	100	16	4.4	82	12	2.7
21	249	88	59	120	27	8.7	80	16	3.5
22	230	55	34	109	21	6.2	81	13	2.8
23	242	47	31	105	19	5.4	86	19	4.4
24	232	44	28	105	18	5.2	90	12	2.9
25	228	48	30	107	20	5.8	96	15	3.9
26	216	26	15	104	23	6.4	101	16	4.4
27	212	25	14	98	16	4.2	116	19	6.0
28	194	24	13	92	20	5.0	117	18	5.7
29	169	23	11	103	22	6.1	119	19	6.1
30	161	23	10	130	49	17	123	51	17
31	140	24	9.1	135	49	18	---	---	---
TOTAL	6526	---	1101.1	3852	---	210.5	2941	---	158.7

09238500 WALTON CREEK NEAR STEAMBOAT SPRINGS, CO

LOCATION.--Lat 40°24'29", long 106°47'11", in SW¼NW¼ sec.11, T.5 N., R.84 W., Routt County, Hydrologic Unit 14050001, on left bank, 0.4 mi upstream from Beaver Creek, 0.6 mi downstream from Storm King Creek, 4.5 mi upstream from mouth, and 6.0 mi southeast of Steamboat Springs.

DRAINAGE AREA.--42.4 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1920 to September 1922, monthly discharge only, published in WSP 1313. October 1965 to September 1973, flow of Highline Canal included. Annual maximum discharge, water years 1978-81. May 1982 to current year.

REVISED RECORDS.--WDR-CO-82-3: 1978-81 (M).

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 7,050 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Oct. 1, 1965, water-stage recorder at site 0.2 mi downstream at different datum. Supplementary water-stage recorder on Highline Canal, May 18, 1966 to Sept. 30, 1973. Operated as a crest-stage partial-record site, June 1978 to May 1982, at present site and datum. October 1983 to current year.

REMARKS.--Estimated daily discharges: Jan. 8 and Apr. 7-23. Records good except for estimated daily discharges, which are poor. Diversion upstream from station by Highline Canal from Beaver and Storm King Creeks for irrigation downstream from station. No other diversion upstream from station.

AVERAGE DISCHARGE.--14 years (water years 1921-22, 1966-73, 1984-86), 88.3 ft³/s; 63,970 acre-ft/yr, unadjusted for diversion.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 2,800 ft³/s, June 15, 1921; minimum daily, 4.5 ft³/s Oct. 29, Nov. 7, 8, 1921, Aug. 28, 29, 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 600 ft³/s, and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
June 5	2200	*820	*2.40	No other peak greater than base discharge.			
Minimum daily, 8.6 ft ³ /s, Feb. 7.							

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	19	19	13	8.8	14	61	91	699	156	22	28
2	18	19	17	13	8.8	14	59	126	664	132	20	23
3	21	18	16	12	8.8	15	53	169	680	117	19	25
4	19	18	17	13	8.8	15	49	207	725	114	18	21
5	13	20	23	13	8.8	15	46	229	733	144	18	16
6	12	17	16	14	8.8	16	45	185	741	154	18	13
7	21	18	16	13	8.6	16	48	167	680	143	17	12
8	31	17	16	13	8.8	17	52	158	623	123	17	14
9	26	15	16	14	9.0	18	56	140	560	106	18	15
10	30	17	16	13	10	17	56	122	466	107	18	18
11	40	19	15	12	12	17	52	129	394	92	16	27
12	28	18	16	12	13	16	52	162	394	80	16	21
13	34	18	21	11	13	15	54	164	396	69	19	17
14	25	17	18	10	12	15	50	199	370	66	20	15
15	22	18	16	9.8	12	15	47	204	364	58	18	14
16	23	17	14	9.6	11	15	50	186	357	58	16	13
17	25	18	13	9.2	10	15	54	168	347	73	14	12
18	26	17	13	9.2	10	14	50	181	332	59	13	12
19	25	16	13	9.2	11	14	43	240	306	52	12	12
20	25	16	13	9.2	12	14	38	320	279	48	12	12
21	26	16	13	9.2	11	14	40	388	270	45	21	12
22	25	16	13	9.4	11	15	50	429	257	43	35	12
23	20	16	13	9.6	11	19	65	380	244	43	22	16
24	19	17	13	9.5	12	24	77	375	229	43	18	23
25	23	16	14	8.8	13	26	80	404	213	51	33	26
26	26	15	14	8.8	14	23	75	466	226	49	29	29
27	26	16	14	8.8	14	24	68	537	225	47	21	27
28	27	15	14	9.0	14	31	60	585	194	41	16	32
29	29	16	14	9.1	---	42	54	657	195	32	13	32
30	26	16	14	8.8	---	54	64	635	175	28	22	31
31	26	---	13	8.8	---	66	---	664	---	24	29	---
TOTAL	752	511	473	332.0	305.2	645	1648	9067	12338	2397	600	580
MEAN	24.3	17.0	15.3	10.7	10.9	20.8	54.9	292	411	77.3	19.4	19.3
MAX	40	20	23	14	14	66	80	664	741	156	35	32
MIN	12	15	13	8.8	8.6	14	38	91	175	24	12	12
AC-FT	1490	1010	938	659	605	1280	3270	17980	24470	4750	1190	1150
CAL YR 1985	TOTAL	34845.5		MEAN	95.5	MAX	1180	MIN	7.7	AC-FT	69120	
WTR YR 1986	TOTAL	29648.2		MEAN	81.2	MAX	741	MIN	8.6	AC-FT	58810	

GREEN RIVER BASIN

09238500 WALTON CREEK NEAR STEAMBOAT SPRINGS, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1982 to September 1986 (discontinued).

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	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)
OCT 01...	1215	7.7	44	7.5	0.5	--	19	5.7	1.1
JAN 14...	1240	11	47	7.6	0.0	10.1	19	5.7	1.1
APR 22...	1020	44	46	7.7	4.0	12.4	18	5.6	0.98
JUN 19...	1000	312	--	--	7.5	--	8	2.6	0.48
JUL 15...	1100	58	38	8.4	16.0	--	15	4.8	0.82

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 CONSTITUENTS, DIS- SOLVED (MG/L)
OCT 01...	2.1	0.2	0.9	18	5.9	0.9	<0.1	10	38
JAN 14...	2.3	0.2	0.9	19	7.1	0.4	<0.1	13	42
APR 22...	1.7	0.2	0.7	21	6.7	0.5	<0.1	11	40
JUN 19...	1.1	0.2	0.5	9.0	6.1	0.3	<0.1	6.5	23
JUL 15...	1.5	0.2	0.4	17	5.3	0.3	<0.1	7.9	31

DATE	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)
OCT 01...	0.05	0.78	<0.01	<0.10	0.03	0.27	0.3	0.01	0.01
JAN 14...	0.06	1.2	<0.01	0.11	0.03	0.27	0.3	<0.01	0.01
APR 22...	0.05	4.7	<0.01	<0.10	0.01	0.19	0.2	0.03	0.01
JUN 19...	0.03	19	<0.01	<0.10	0.03	0.27	0.3	0.02	0.01
JUL 15...	0.04	4.9	<0.01	<0.10	<0.01	--	0.3	0.02	<0.01

09238500 WALTON CREEK NEAR STEAMBOAT SPRINGS, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	CYANIDE TOTAL (MG/L AS CN)	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ANTI- MONY, DIS- SOLVED (UG/L AS SB)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)
OCT 01...	--	--	30	<1	--	<1	--	14	--	<0.5
JUN 19...	<0.01	130	--	--	<1	--	<100	--	<10	--

DATE	BORON, DIS- SOLVED (UG/L AS B)	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)	COBALT, TOTAL RECOV- ERABLE (UG/L AS CO)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)
OCT 01...	<10	--	<1	--	<1	--	6	--	7	--
JUN 19...	--	<1	--	<10	--	<1	--	4	--	150

DATE	IRON, DIS- SOLVED (UG/L AS FE)	*LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	*LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM TOTAL RECOV- ERABLE (UG/L AS LI)	LITHIUM DIS- SOLVED (UG/L AS LI)	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)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, TOTAL RECOV- ERABLE (UG/L AS MO)
OCT 01...	82	--	4	--	<4	--	3	--	<0.1	--
JUN 19...	--	<5	--	<10	--	10	--	<0.1	--	<1

DATE	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, TOTAL (UG/L AS SE)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, DIS- SOLVED (UG/L AS ZN)
OCT 01...	<1	--	6	--	<1	<1	40	--	23
JUN 19...	--	3	--	<1	--	--	--	<10	--

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE (DEG C)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE (DEG C)
MAY 30...	1015	611	22	4.0	SEP 08...	1450	0.0	46	15.0
AUG 07...	1400	17	45	15.0					

* The minimum reporting level for Lead was changed from <1 to <5 during June, 1986.

GREEN RIVER BASIN

09238700 FISH CREEK TRIBUTARY ABOVE LONG LAKE, NEAR BUFFALO PASS, CO

LOCATION.--Lat 40°28'24", Long 106°40'46", in SE¼NW¼ sec. 23, T.6N., R.83W., Routt County, Hydrologic Unit 14050001, on left bank 0.2 mi above Long Lake, and 7.5 mi east of Steamboat Springs.

DRAINAGE AREA.--0.43 mi².

PERIOD OF RECORD.--August 31, 1984 to September 1986 (discontinued).

GAGE.--Water-stage recorder. Elevation of gage is 9,885 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Dec. 20 to Apr. 30, May 23 to July 1, 10-23, and Sept. 11-30. Records fair except for estimated daily discharges, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 31 ft³/s June 15, 1985, gage height 2.06 ft; minimum daily, 0.03 ft³/s, Jan. 25-28, 1985, and Jan. 16-31, 1986.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 15 ft³/s, June 17; minimum daily, 0.03 ft³/s, Jan. 16-31.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	.25	.12	.06	.04	.08	.11	.13	6.4	5.0	.28	.28
2	5.5	.25	.12	.06	.04	.08	.11	.34	7.0	4.5	.26	.21
3	.39	.19	.12	.06	.04	.08	.11	.58	7.8	5.9	.25	.20
4	.24	.13	.12	.06	.04	.08	.11	.85	8.8	4.1	.24	.12
5	.17	.16	.12	.06	.04	.08	.11	1.0	9.8	2.6	.21	.10
6	.14	.15	.12	.05	.05	.09	.11	.59	11	1.6	.20	.09
7	.23	.15	.11	.05	.05	.09	.11	.38	11	2.2	.17	.15
8	.25	.15	.11	.05	.05	.09	.11	.29	9.4	1.3	.24	.39
9	.26	.15	.11	.05	.05	.09	.11	.23	7.0	.84	.23	.18
10	.36	.15	.11	.05	.05	.09	.11	.20	4.7	1.0	.20	1.0
11	.42	.14	.11	.04	.06	.09	.11	.19	6.0	.90	.19	.80
12	.34	.14	.11	.04	.06	.09	.11	.30	9.0	.80	.33	.60
13	.35	.14	.11	.04	.06	.09	.11	.41	8.4	.70	.21	.40
14	.31	.14	.10	.04	.06	.09	.11	.78	11	.70	.17	.30
15	.29	.14	.10	.04	.06	.09	.11	.86	13	.60	.14	.20
16	.31	.14	.10	.03	.07	.10	.12	.75	14	.60	.12	.20
17	.31	.14	.10	.03	.07	.10	.12	.57	15	.80	.11	.20
18	.30	.14	.10	.03	.07	.10	.12	.65	13	1.0	.10	.20
19	.28	.14	.08	.03	.07	.10	.12	1.2	12	.90	.11	.20
20	.29	.14	.08	.03	.07	.10	.12	2.2	12	.80	.26	.20
21	.30	.14	.08	.03	.08	.10	.12	2.7	12	1.0	.65	.20
22	.25	.14	.08	.03	.08	.10	.12	3.3	11	1.0	.23	.20
23	.22	.14	.08	.03	.08	.10	.12	2.1	10	1.0	.14	.80
24	.21	.14	.08	.03	.08	.10	.12	1.9	9.0	1.0	.51	.70
25	.26	.12	.08	.03	.08	.10	.12	2.5	8.6	1.0	.51	.70
26	.27	.12	.07	.03	.08	.11	.12	3.2	8.0	.77	.29	.60
27	.32	.12	.07	.03	.08	.11	.12	4.0	7.4	.74	.16	.60
28	.34	.11	.07	.03	.08	.11	.12	4.8	7.0	.51	.13	.60
29	.30	.11	.07	.03	---	.11	.12	4.8	6.8	.41	.16	.60
30	.28	.12	.07	.03	---	.11	.12	5.4	5.6	.37	.55	.60
31	.25	---	.07	.03	---	.11	---	5.8	---	.33	.36	---
TOTAL	24.74	4.39	2.97	1.23	1.74	2.96	3.45	53.00	281.7	44.97	7.71	11.62
MEAN	.80	.15	.10	.04	.06	.09	.11	1.71	9.39	1.45	.25	.39
MAX	11	.25	.12	.06	.08	.11	.12	5.8	15	5.9	.65	1.0
MIN	.14	.11	.07	.03	.04	.08	.11	.13	4.7	.33	.10	.09
AC-FT	.49	8.7	5.9	2.4	3.5	5.9	6.8	105	559	89	15	23
CAL YR 1985	TOTAL	574.72		MEAN	1.57	MAX	18	MIN	.03	AC-FT	1140	
WTR YR 1986	TOTAL	440.48		MEAN	1.21	MAX	15	MIN	.03	AC-FT	874	

09238710 FISH CREEK TRIBUTARY BELOW LONG LAKE, NEAR BUFFALO PASS, CO.

LOCATION.--Lat 40°28'36", Long 106°41'13", in NE¼SE¼ sec. 22, T.6N., R.83W., Routt county, Hydrologic Unit 14050001, on right bank, 0.1 mi below Long Lake Spillway, and 7.5 mi east of Steamboat Springs.

DRAINAGE AREA.--1.03 mi².

PERIOD OF RECORD.--August 29, 1984 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 9,860 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Dec. 12 to Mar. 29. Records fair except for estimated daily discharges, which are poor. Flow regulated by Long Lake Reservoir, capacity 397 acre-ft, 0.1 mi upstream.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge 59 ft³/s, June 17, 1986, from rating curve extended above 16 ft³/s; no flow many days each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 59 ft³/s at 1400 June 17, from rating curve extended above 16 ft³/s, gage height, 2.63 ft; no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.40	.05	.69	.27	.26	.33	.33	.89	21	17	.02	.02
2	.16	.04	.71	.27	.26	.33	.36	1.3	22	12	.02	.02
3	.04	.03	.89	.27	.26	.33	.83	2.3	24	9.8	.01	.02
4	.03	.02	.79	.27	.26	.33	.76	3.2	28	11	.01	.01
5	.02	.03	.59	.27	.26	.33	.55	4.3	31	25	.01	.01
6	.02	.04	.38	.27	.28	.30	.42	4.0	35	16	.01	.01
7	.05	.04	.24	.27	.28	.30	.38	3.3	35	9.8	.01	.00
8	.09	.04	.22	.27	.28	.30	.38	2.9	35	7.2	.01	.01
9	.08	.05	.22	.27	.28	.30	.38	2.5	25	6.6	.01	.01
10	.06	.06	.22	.27	.28	.30	.38	2.4	15	6.8	.01	.03
11	.07	.04	.22	.26	.28	.20	.38	2.0	19	5.6	.01	.03
12	.06	.04	.27	.26	.28	.20	.38	2.0	28	5.1	.02	.02
13	.06	.03	.27	.26	.28	.20	.53	2.4	26	4.5	.02	.02
14	.05	.03	.27	.26	.28	.20	.71	3.0	33	4.3	.01	.01
15	.05	.03	.27	.26	.28	.20	.58	3.7	42	3.8	.01	.01
16	.04	.03	.27	.26	.30	.10	.48	4.1	45	4.2	.01	.00
17	.04	.03	.27	.26	.30	.10	.48	3.7	47	4.7	.00	.00
18	.03	.03	.27	.26	.30	.10	.60	3.4	43	3.0	.00	.00
19	.03	.03	.27	.26	.30	.10	.58	4.3	36	2.0	.00	.00
20	.03	.06	.27	.26	.30	.10	.51	5.8	38	1.4	.00	.00
21	.02	.09	.27	.26	.30	.08	.43	7.7	37	1.0	.03	.00
22	.03	.10	.27	.26	.30	.08	.42	8.8	35	.68	.03	.00
23	.03	.14	.27	.26	.30	.08	.70	6.9	31	.50	.02	.02
24	.03	.32	.27	.26	.30	.08	.95	6.0	28	.30	.01	.04
25	.03	.30	.27	.26	.30	.08	1.5	8.0	30	.27	.03	.05
26	.03	.54	.27	.26	.33	.04	1.6	10	40	.20	.03	.05
27	.03	.44	.27	.26	.33	.04	1.6	12	30	.13	.02	.04
28	.03	.34	.27	.26	.33	.04	1.3	15	28	.07	.02	.05
29	.03	.57	.27	.26	---	.10	.99	15	27	.05	.01	.04
30	.03	.74	.27	.26	---	.10	.89	18	21	.04	.02	.04
31	.05	---	.27	.26	---	.19	---	20	---	.03	.03	---
TOTAL	1.75	4.33	10.57	8.16	8.09	5.56	20.38	188.89	935	163.07	.45	.56
MEAN	.06	.14	.34	.26	.29	.18	.68	6.09	31.2	5.26	.01	.02
MAX	.40	.74	.89	.27	.33	.33	1.6	20	47	25	.03	.05
MIN	.02	.02	.22	.26	.26	.04	.33	.89	15	.03	.00	.00
AC-FT	3.5	8.6	21	16	16	11	40	375	1850	323	.9	1.1
CAL YR 1985 TOTAL		710.58		MEAN	1.95	MAX	31	MIN	.00	AC-FT	1410	
WTR YR 1986 TOTAL		1346.81		MEAN	3.69	MAX	47	MIN	.00	AC-FT	2670	

09238750 MIDDLE FORK FISH CREEK NEAR BUFFALO PASS, CO

LOCATION.--Lat 40°26'54", Long 106°41'30", in NE¼SE¼ sec. 10, T.6N., R.83W., Routt County, Hydrologic Unit 14050001, on right bank, 0.25 mi above Fish Creek Reservoir, and 7.5 mi east of Steamboat Springs.

DRAINAGE AREA.--1.37 mi².

PERIOD OF RECORD.--August 31, 1984 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 9,955 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Dec. 21 to May 1. Records fair except for estimated daily discharges, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 146 ft³/s, June 9, 1986, from rating curve extended above 24.3 ft³/s; gage height 4.56 ft; minimum daily, 0.02 ft³/s, Jan. 18 to Feb. 5, 1986.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 146 ft³/s at 1900 June 6, gage height 4.56 ft, from rating curve extended above 24.3 ft³/s; minimum daily, 0.02 ft³/s, Jan. 18 to Feb. 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.93	1.1	.41	.28	.02	.13	.23	.75	38	15	.50	.49
2	1.8	.83	.41	.26	.02	.13	.23	1.0	40	11	.47	.36
3	1.5	.77	.41	.24	.02	.13	.23	1.3	43	10	.47	.38
4	.99	.58	.41	.22	.02	.13	.23	1.6	43	14	.48	.26
5	.74	.48	.41	.20	.02	.13	.23	1.8	45	22	.45	.24
6	.64	.44	.41	.18	.03	.15	.24	1.6	62	14	.43	.23
7	.80	.44	.41	.16	.03	.15	.24	1.3	53	7.9	.44	.24
8	.99	.44	.41	.14	.03	.15	.24	2.0	44	6.0	.56	.25
9	1.0	.44	.41	.12	.03	.15	.24	3.0	33	7.4	.47	.22
10	1.2	.44	.41	.10	.03	.15	.24	4.0	24	5.4	.41	.99
11	1.5	.44	.41	.09	.04	.17	.25	5.0	28	4.6	.38	.51
12	1.2	.44	.41	.08	.04	.17	.25	5.0	37	3.5	.50	.30
13	1.2	.44	.41	.07	.04	.17	.25	6.0	35	3.4	.39	.27
14	1.1	.44	.39	.06	.04	.17	.25	8.0	38	2.8	.35	.25
15	1.0	.44	.39	.05	.04	.17	.25	10	43	2.3	.33	.24
16	1.0	.44	.39	.04	.06	.20	.26	11	46	5.4	.31	.24
17	1.0	.44	.39	.03	.06	.20	.26	10	47	3.0	.30	.24
18	1.1	.43	.39	.02	.06	.20	.26	9.0	43	2.1	.29	.28
19	1.1	.43	.39	.02	.06	.20	.26	13	37	1.8	.29	.32
20	1.1	.43	.39	.02	.06	.20	.26	17	39	1.7	.50	.28
21	1.2	.43	.39	.02	.08	.23	.26	22	37	1.9	1.2	.30
22	1.1	.43	.39	.02	.08	.23	.26	26	34	1.6	.41	.32
23	.94	.43	.39	.02	.08	.23	.26	27	30	1.5	.32	1.2
24	.94	.43	.38	.02	.08	.23	.26	25	25	1.6	.95	.77
25	1.1	.43	.37	.02	.08	.23	.26	25	26	1.4	.86	.83
26	1.3	.43	.36	.02	.13	.23	.27	28	35	1.4	.43	.80
27	1.6	.43	.35	.02	.13	.23	.27	31	25	1.8	.32	.81
28	1.7	.43	.34	.02	.13	.23	.27	34	25	.82	.29	.91
29	1.6	.43	.33	.02	---	.23	.30	35	25	.66	.34	.93
30	1.4	.42	.32	.02	---	.23	.50	35	20	.61	1.1	.94
31	1.2	---	.31	.02	---	.23	---	37	---	.54	.53	---
TOTAL	35.97	14.62	11.99	2.60	1.54	5.78	7.81	437.35	1100	157.13	15.07	14.40
MEAN	1.16	.49	.39	.08	.05	.19	.26	14.1	36.7	5.07	.49	.48
MAX	1.8	1.1	.41	.28	.13	.23	.50	37	62	22	1.2	1.2
MIN	.64	.42	.31	.02	.02	.13	.23	.75	20	.54	.29	.22
AC-FT	71	29	24	5.2	3.1	11	15	867	2180	312	30	29
CAL YR 1985	TOTAL	1396.27		MEAN	3.83	MAX	45	MIN	.10	AC-FT	2770	
WTR YR 1986	TOTAL	1804.26		MEAN	4.94	MAX	62	MIN	.02	AC-FT	3580	

09238770 GRANITE CREEK NEAR BUFFALO PASS, CO

LOCATION.--Lat 40°29'35", Long 106°41'31", NE¼NE¼ sec. 15, T.6N., R.83W., Routt County, Hydrologic Unit 14050001, on left bank 0.1 mi upstream from Fish Creek Reservoir, and 7.5 mi east of Steamboat Springs.

DRAINAGE AREA.--2.82 mi².

PERIOD OF RECORD.--August 31, 1984 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 9,875 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 13 to Apr. 6, and May 4 to July 1. Records good except for estimated daily discharges, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 90 ft³/s, June 14, from rating curve extended above 18 ft³/s, gage height, 3.90 ft, from highwater marks; minimum daily, 0.18 ft³/s, Jan. 21.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 80 ft³/s, June 6; minimum daily, 0.18 ft³/s, Apr. 9-15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.4	1.9	1.2	.90	.50	.80	1.1	1.5	54	31	2.1	1.8
2	2.6	1.6	1.2	.90	.50	.80	1.1	1.9	56	32	1.9	1.2
3	3.0	1.4	1.2	.90	.50	.80	1.1	2.6	60	33	1.9	1.3
4	2.1	1.2	1.2	.90	.50	.80	1.1	2.7	60	35	1.9	.94
5	1.5	1.2	1.2	.90	.50	.80	1.1	3.0	64	47	1.7	.82
6	1.3	1.2	1.2	.80	.55	.90	.88	3.2	80	41	1.6	.76
7	1.7	1.2	1.2	.80	.55	.90	.91	3.6	68	26	1.6	.84
8	2.1	1.2	1.2	.80	.55	.90	.38	4.0	60	20	2.2	.96
9	2.1	1.2	1.2	.80	.55	.90	.23	4.5	50	24	1.9	.82
10	2.3	1.2	1.2	.80	.55	.90	.23	4.7	38	18	1.5	3.2
11	2.7	1.2	1.2	.70	.60	1.0	.23	5.2	42	16	1.4	1.7
12	2.2	1.2	1.2	.70	.60	1.0	.23	8.4	47	13	1.9	1.1
13	2.1	1.2	1.2	.70	.60	1.0	.23	11	50	12	1.4	.90
14	2.0	1.2	1.2	.70	.60	1.0	.23	13	52	10	1.2	.83
15	1.8	1.2	1.2	.70	.60	1.0	.23	17	58	8.6	1.1	.79
16	1.8	1.2	1.2	.60	.65	1.2	.27	17	60	17	1.0	.74
17	1.8	1.2	1.2	.60	.65	1.2	.30	16	60	9.8	.98	.70
18	1.9	1.2	1.2	.60	.65	1.2	.31	15	58	7.3	.94	.75
19	1.8	1.2	1.2	.60	.65	1.2	.31	24	52	7.2	1.0	.86
20	1.8	1.2	1.2	.60	.65	1.2	.31	30	52	6.3	2.0	.74
21	1.8	1.2	1.1	.50	.76	1.4	.58	35	52	6.6	5.1	.82
22	1.6	1.2	1.1	.50	.76	1.4	1.0	40	47	5.6	1.8	.86
23	1.4	1.2	1.1	.50	.76	1.4	1.3	43	42	5.2	1.2	2.3
24	1.4	1.2	1.1	.50	.76	1.4	1.5	40	36	5.6	5.8	1.9
25	1.7	1.2	1.1	.50	.76	1.4	1.5	40	37	5.6	4.2	1.9
26	2.0	1.2	1.0	.46	.76	1.6	1.5	42	44	6.6	1.7	1.8
27	2.7	1.2	1.0	.46	.76	1.6	1.5	45	38	7.8	1.2	1.8
28	3.0	1.2	1.0	.46	.76	1.6	1.0	50	35	4.3	1.1	2.0
29	2.7	1.2	1.0	.46	---	1.6	.88	50	35	3.5	1.1	2.0
30	2.4	1.2	1.0	.45	---	1.6	1.1	51	33	2.9	3.5	2.2
31	2.0	---	1.0	.47	---	1.6	---	52	---	2.3	2.0	---
TOTAL	62.7	37.3	35.5	20.26	17.58	36.10	22.64	676.3	1520	470.2	59.92	39.33
MEAN	2.02	1.24	1.15	.65	.63	1.16	.75	21.8	50.7	15.2	1.93	1.31
MAX	3.0	1.9	1.2	.90	.76	1.6	1.5	52	80	47	5.8	3.2
MIN	1.3	1.2	1.0	.45	.50	.80	.23	1.5	33	2.3	.94	.70
AC-FT	124	74	70	40	35	72	45	1340	3010	933	119	78
CAL YR 1985 TOTAL	2625.79			MEAN	7.19	MAX	80	MIN	.18	AC-FT	5210	
WTR YR 1986 TOTAL	2997.83			MEAN	8.21	MAX	80	MIN	.23	AC-FT	5950	

09238800 MIDDLE FORK FISH CREEK TRIBUTARY, BELOW FISH CREEK RESERVOIR, CO

LOCATION.--Lat 40°29'50", Long 106°41'54", in NW¼SE¼ sec. 10, T.6N., R.83W., Routt County, Hydrologic Unit 14050001, on right bank, at Fish Creek Reservoir Spillway, and 7.5 mi east of Steamboat Springs.

DRAINAGE AREA.--4.78 mi².

PERIOD OF RECORD.--August 31, 1984 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 9,855 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: May 23 to July 1. Records good except for estimated daily discharges, which are poor. Flow regulated by Fish Creek Reservoir, capacity, 1,840 acre-ft.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 130 ft³/s, June 7, 1985, gage height, 1.75 ft, from floodmarks, from rating curve extended above 26 ft³/s, no flow many days most years.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 120 ft³/s, June 7, no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	86	54	1.5	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	88	53	1.0	.00
3	.00	.00	.00	.00	.00	.00	.00	.00	96	46	.24	.00
4	.00	.00	.00	.00	.00	.00	.00	.00	100	43	.00	.00
5	.00	.00	.00	.00	.00	.00	.00	.00	108	49	.00	.00
6	.00	.00	.00	.00	.00	.00	.00	.00	120	52	.00	.00
7	.00	.00	.00	.00	.00	.00	.00	.00	99	45	.00	.00
8	.00	.00	.00	.00	.00	.00	.00	.00	95	36	.00	.00
9	.00	.00	.00	.00	.00	.00	.00	.00	80	30	.00	.00
10	.00	.00	.00	.00	.00	.00	.00	.00	70	29	.00	.00
11	.00	.00	.00	.00	.00	.00	.00	.00	70	27	.00	.00
12	.00	.00	.00	.00	.00	.00	.00	.00	80	21	.00	.00
13	.00	.00	.00	.00	.00	.00	.00	.00	80	17	.00	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	85	16	.00	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	84	14	.00	.00
16	.00	.00	.00	.00	.00	.00	.00	.00	86	13	.00	.00
17	.00	.00	.00	.00	.00	.00	.00	.00	90	15	.00	.00
18	.00	.00	.00	.00	.00	.00	.00	.00	90	13	.00	.00
19	.00	.00	.00	.00	.00	.00	.00	.00	88	10	.00	.00
20	.00	.00	.00	.00	.00	.00	.00	.00	84	8.8	.00	.00
21	.00	.00	.00	.00	.00	.00	.00	.00	80	7.6	.00	.00
22	.00	.00	.00	.00	.00	.00	.00	.00	78	7.3	.00	.00
23	.00	.00	.00	.00	.00	.00	.00	31	74	6.9	.00	.00
24	.00	.00	.00	.00	.00	.00	.00	40	72	6.3	.00	.00
25	.00	.00	.00	.00	.00	.00	.00	40	70	6.5	.00	.00
26	.00	.00	.00	.00	.00	.00	.00	45	66	5.7	.00	.00
27	.00	.00	.00	.00	.00	.00	.00	53	64	6.0	.00	.00
28	.00	.00	.00	.00	.00	.00	.00	70	62	5.5	.00	.00
29	.00	.00	.00	.00	---	.00	.00	73	60	3.7	.00	.00
30	.00	.00	.00	.00	---	.00	.00	75	58	2.6	.00	.00
31	.00	---	.00	.00	---	.00	---	84	---	2.1	.00	---
TOTAL	.00	.00	.00	.00	.00	.00	.00	511.00	2463	652.0	2.74	.00
MEAN	.00	.00	.00	.00	.00	.00	.00	16.5	82.1	21.0	.09	.00
MAX	.00	.00	.00	.00	.00	.00	.00	84	120	54	1.5	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	58	2.1	.00	.00
AC-FT	.00	.00	.00	.00	.00	.00	.00	1010	4890	1290	5.4	.00
CAL YR 1985 TOTAL	2799.97			MEAN	7.67	MAX	120	MIN	.00	AC-FT	5550	
WTR YR 1986 TOTAL	3628.74			MEAN	9.94	MAX	120	MIN	.00	AC-FT	7200	

09238900 FISH CREEK AT UPPER STATION, NEAR STEAMBOAT SPRINGS, CO

LOCATION.--Lat 40°28'30", long 106°47'11", in SE¼SE¼ sec.15, T.6 N., R.84 W., Routt County, Hydrologic Unit 14050001, on right bank 2.6 mi upstream from mouth and 2.5 mi east of Steamboat Springs.

DRAINAGE AREA.--24.8 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1966 to September 1972, May 1982 to current year.

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 7,150 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 23 to Dec. 16, June 1 to Aug. 6, and Aug. 19 to Sept. 7. Records good except for estimated daily discharges, which are poor. Diversions upstream from station by Mount Werner Recreation district and City of Steamboat Springs for domestic use began in 1972 (see table below for figures of diversion). Natural flow of stream affected by storage in Fish Creek and Long Lake Reservoir.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge 1,110 ft³/s, June 20, 1968, gage height, 3.14 ft; minimum daily, 0.01 ft³/s, Aug. 7, 1972.

EXTREMES FOR CURRENT YEAR.--Maximum discharge 830 ft³/s, June 6, gage height, 2.86 ft, from highwater marks; minimum daily, 1.9 ft³/s, Aug. 16, 18-20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.0	10	9.6	7.2	6.3	7.3	51	124	540	190	18	7.4
2	7.5	10	9.6	6.5	6.5	7.9	51	157	520	160	17	6.4
3	7.6	9.9	9.6	6.2	6.7	8.3	45	192	540	140	16	7.0
4	6.6	9.6	9.6	6.2	7.1	9.2	38	141	560	130	15	6.0
5	5.2	10	9.6	6.5	6.8	11	34	108	560	150	15	5.0
6	5.7	10	9.0	7.1	7.2	12	35	89	570	155	15	4.5
7	8.8	11	9.0	6.4	7.0	12	41	78	500	145	15	3.8
8	12	10	9.0	6.7	7.2	12	45	69	450	125	15	4.3
9	11	11	9.0	6.5	7.5	13	48	69	420	110	14	4.8
10	12	12	9.0	6.6	7.1	12	48	81	400	92	14	10
11	16	11	8.4	6.4	9.0	12	43	86	390	80	13	11
12	14	9.6	8.4	6.1	8.0	11	43	118	400	70	18	5.9
13	15	9.6	8.4	6.0	5.9	11	45	129	420	60	13	5.0
14	12	9.7	8.4	7.0	5.7	11	41	119	410	50	5.0	4.5
15	11	9.2	8.4	7.0	6.6	10	39	101	400	45	4.2	3.4
16	12	9.1	8.3	6.7	5.8	10	42	98	400	45	1.9	3.3
17	13	9.9	8.1	6.5	5.8	9.7	43	132	420	50	2.7	3.5
18	13	9.9	8.1	6.5	6.8	9.5	38	200	440	44	1.9	3.5
19	12	9.9	7.8	6.6	7.2	9.5	33	266	420	40	1.9	4.3
20	12	11	7.6	7.1	6.0	9.7	31	324	400	38	1.9	4.3
21	13	11	7.3	7.5	8.1	9.8	33	215	350	36	3.0	4.1
22	13	11	7.3	7.8	7.2	11	50	293	320	35	4.4	5.2
23	12	11	7.9	7.2	6.2	14	74	370	290	35	3.0	10
24	11	11	7.5	7.2	7.5	18	68	447	270	35	4.0	11
25	12	11	7.0	7.2	7.5	18	55	471	250	40	5.4	9.9
26	13	10	6.8	7.5	8.0	17	48	476	270	38	5.0	11
27	13	10	6.8	6.5	7.6	20	44	505	270	36	4.5	10
28	14	10	6.5	6.4	7.2	28	47	483	240	32	4.0	12
29	13	10	6.1	6.4	---	41	67	520	240	27	3.5	11
30	13	10	6.0	6.6	---	53	86	536	210	23	6.0	11
31	13	---	7.4	6.9	---	62	---	526	---	20	7.8	---
TOTAL	353.4	307.4	251.5	209.0	195.5	499.9	1406	7523	11870	2276	268.1	203.1
MEAN	11.4	10.2	8.11	6.74	6.98	16.1	46.9	243	396	73.4	8.65	6.77
MAX	16	12	9.6	7.8	9.0	62	86	536	570	190	18	12
MIN	5.2	9.1	6.0	6.0	5.7	7.3	31	69	210	20	1.9	3.3
AC-FT	701	610	499	415	388	992	2790	14920	23540	4510	532	403
a	153	154	194	200	181	212	167	194	340	276	320	190
CAL YR 1985	TOTAL	24377.7	MEAN	66.8	MAX	785	MIN	2.2	AC-FT	48350		
WTR YR 1986	TOTAL	25362.9	MEAN	69.5	MAX	570	MIN	1.9	AC-FT	50310		

a - Diversions, in acre-feet, by Mount Werner Water & Sanitation District and City of Steamboat Springs.

GREEN RIVER BASIN

09238900 FISH CREEK AT UPPER STATION NEAR STEAMBOAT SPRINGS, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1982 to September 1986 (discontinued).

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	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)
OCT 01...	1400	7.9	28	7.3	0.5	--	12	3.6	0.7
JAN 14...	1045	7.0	38	7.4	0.0	10.4	13	4.2	0.7
APR 22...	1230	37	34	7.3	4.5	11.8	13	4.1	0.79
JUN 19...	0800	420	--	--	4.5	--	8	2.6	0.36
JUL 15...	1300	46	17	8.2	16.0	--	9	2.8	0.49

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 01...	1.3	0.2	0.6	10	4.4	0.6	<0.1	5.5	23
JAN 14...	1.4	0.2	0.7	13	4.8	0.4	<0.1	7.9	28
APR 22...	1.2	0.1	0.7	14	4.7	0.3	<0.1	7.8	28
JUN 19...	0.7	0.1	0.5	8.0	4.1	0.3	<0.1	3.8	17
JUL 15...	0.9	0.1	0.4	10	4.5	0.3	<0.1	4.5	20

DATE	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)
OCT 01...	0.03	0.49	<0.01	<0.10	0.03	0.27	0.3	<0.01	<0.01
JAN 14...	0.04	0.53	<0.01	0.11	0.03	0.27	0.3	<0.01	<0.01
APR 22...	0.04	2.8	<0.01	<0.10	<0.01	--	<0.2	0.01	<0.01
JUN 19...	0.02	20	<0.01	<0.10	0.04	0.16	0.2	0.02	0.01
JUL 15...	0.03	2.5	<0.01	<0.10	<0.01	--	0.3	<0.01	<0.01

09238900 FISH CREEK AT UPPER STATION NEAR STEAMBOAT SPRINGS, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	CYANIDE TOTAL (MG/L AS CN)	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ANTI- MONY, DIS- SOLVED (UG/L AS SB)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)
OCT 01...	--	--	30	<1	--	<1	--	14	--	<0.5
JUN 19...	<0.01	140	--	--	<1	--	<100	--	<10	--

DATE	BORON, DIS- SOLVED (UG/L AS B)	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)	COBALT, TOTAL RECOV- ERABLE (UG/L AS CO)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)
OCT 01...	<10	--	<1	--	<1	--	<1	--	4	--
JUN 19...	--	<1	--	<10	--	<1	--	11	--	190

DATE	IRON, DIS- SOLVED (UG/L AS FE)	*LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	*LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM TOTAL RECOV- ERABLE (UG/L AS LI)	LITHIUM DIS- SOLVED (UG/L AS LI)	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)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, TOTAL RECOV- ERABLE (UG/L AS MO)
OCT 01...	80	--	<1	--	<4	--	4	--	<0.1	--
JUN 19...	--	<5	--	<10	--	20	--	<0.1	--	<1

DATE	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, TOTAL (UG/L AS SE)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, DIS- SOLVED (UG/L AS ZN)
OCT 01...	<1	--	4	--	<1	<1	21	--	12
JUN 19...	--	5	--	<1	--	--	--	<10	--

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE (DEG C)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE (DEG C)
MAR 04...	1115	8.9	44	3.0	SEP 08...	1315	5.6	33	13.0
MAY 30...	1230	383	23	5.0					

* The minimum reporting level for Lead was changed from <1 to <5 during June, 1986.

GREEN RIVER BASIN

09239500 YAMPA RIVER AT STEAMBOAT SPRINGS, CO

LOCATION.--Lat 40°29'01", long 106°49'54", in NW¼NE¼ sec.17, T.6 N., R.84W., Routt County, Hydrologic Unit 14050001, on right bank 30 ft downstream from Fifth Street Bridge in Steamboat Springs and 0.6 mi upstream from Soda Creek.

DRAINAGE AREA.--604 mi².

PERIOD OF RECORD.--May 1904 to October 1906, October 1909 to current year. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 764: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 6,695.47 ft above National Geodetic Vertical Datum of 1929. Prior to May 8, 1905, nonrecording gage at bridge 0.2 mi upstream at datum 4.16 ft, higher. May 8, 1905, to Oct. 31, 1906, nonrecording gage on bridge 30 ft upstream at datum 0.44 ft, higher. Mar. 8, 1910, to Sept. 11, 1934, water-stage recorder at present site at datum 0.44 ft, higher.

REMARKS.--Estimated daily discharges: Dec. 8-19, 23, 26, 28, Dec. 31 to Jan. 16 and Mar. 1-17. Records good except for estimated daily discharges, which are fair. Natural flow of stream affected by two diversions for irrigation to Egeria Creek in Colorado River basin, one diversion for irrigation from Trout Creek drainage to Oak Creek drainage, irrigation of about 19,700 acres upstream from station, and by storage reservoirs. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--79 years, 474 ft³/s; 343,400 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,820 ft³/s, June 14, 1921, gage height, 7.08 ft, present datum, from rating curve extended above 4,800 ft³/s; maximum gage height, 7.12 ft, June 25, 1984; minimum daily, 4.0 ft³/s, Sept. 8, 1934, Sept. 10-13, 1944.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,000 ft³/s, and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
June 6	2300	*3,640	*6.07	No other peak greater than base discharge.			

Minimum daily, 93 ft³/s, Feb. 11

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	167	241	171	130	126	190	1260	1090	2800	805	230	204
2	167	236	169	130	125	190	1270	1280	2780	702	209	175
3	169	232	170	130	122	200	1320	1530	2880	625	217	166
4	168	225	163	130	119	200	973	1760	2970	614	217	154
5	161	232	165	130	118	200	837	1980	3080	913	263	141
6	157	211	160	130	111	210	918	1730	3220	850	339	128
7	163	204	160	130	106	220	1010	1610	3060	819	335	123
8	232	207	160	130	102	230	1060	1600	2820	696	337	138
9	251	205	160	130	104	230	1030	1450	2580	620	334	156
10	247	205	150	130	109	230	962	1280	2400	648	321	180
11	286	215	150	130	93	220	922	1200	2200	573	295	209
12	321	191	150	135	95	210	930	1310	2150	507	193	196
13	319	171	150	135	94	210	945	1300	2030	448	130	275
14	314	148	150	135	94	210	863	1460	1990	423	118	275
15	259	156	150	135	100	210	812	1520	1990	383	112	255
16	242	152	150	135	97	210	804	1500	1910	411	105	258
17	256	155	145	134	97	220	874	1410	1840	430	103	284
18	242	157	145	135	115	220	844	1340	1720	364	100	282
19	214	168	136	134	145	224	772	1520	1620	390	98	280
20	200	184	144	134	132	224	698	1850	1520	405	104	273
21	195	170	145	131	158	248	674	2110	1430	404	141	271
22	201	170	148	117	175	287	801	2560	1310	396	159	246
23	203	170	145	132	176	386	1030	2320	1200	390	137	225
24	207	165	145	135	179	527	1120	2280	1110	383	132	182
25	251	163	147	129	162	624	1200	2330	1080	419	169	176
26	225	173	140	121	176	596	1220	2590	1240	397	146	185
27	249	175	139	123	199	656	1050	2700	1160	399	130	177
28	244	167	130	124	169	806	924	2790	969	344	101	202
29	244	167	131	129	---	1030	855	2880	1000	293	103	189
30	241	166	132	125	---	1160	909	2800	847	255	131	183
31	251	---	130	126	---	1410	---	2800	---	250	158	---
TOTAL	7046	5581	4630	4034	3598	11988	28887	57880	58906	15556	5667	6188
MEAN	227	186	149	130	129	387	963	1867	1964	502	183	206
MAX	321	241	171	135	199	1410	1320	2880	3220	913	339	284
MIN	157	148	130	117	93	190	674	1090	847	250	98	123
AC-FT	13980	11070	9180	8000	7140	23780	57300	114800	116800	30860	11240	12270
CAL YR 1985	TOTAL	204546	MEAN	560	MAX	3420	MIN	92	AC-FT	405700		
WTR YR 1986	TOTAL	209961	MEAN	575	MAX	3220	MIN	93	AC-FT	416500		

09241000 ELK RIVER AT CLARK, CO

LOCATION.--Lat 40°43'03", long 106°54'55", in NW¼NW¼ sec.27, T.9 N., R.85 W., Routt County, Hydrologic Unit 14050001, on left bank 30 ft downstream from bridge on State Highway 129, 0.8 mi north of Clark, and 2.0 mi upstream from Cottonwood Gulch.

DRAINAGE AREA.--206 mi².

PERIOD OF RECORD.--May 1910 to September 1922 (published as "near Clark"), April 1930 to current year. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 1733: 1956.

GAGE.--Water-stage recorder. Datum of gage is 7,267.75 ft, (State Highway Department bench mark). May 1910 to September 1922, nonrecording gage at site 30 ft upstream at datum 0.15 ft, lower. Apr. 23, 1930, to Sept. 27, 1934, water-stage recorder at present site at datum 0.15 ft, lower.

REMARKS.--Estimated daily discharges: Nov. 20 to Mar. 10. Records good except for estimated daily discharges, which are poor. Diversions upstream from station for irrigation of about 230 acres upstream from and about 460 acres downstream from station. Natural flow of stream affected by storage in Lester Creek Reservoir (known also as Pearl Lake), capacity, 5,660 acre-ft, since 1963, and Steamboat Lake, capacity, 23,060 acre-ft, since 1968. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--68 years, 341 ft³/s; 247,100 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,910 ft³/s, May 23, 1984, gage height, 6.12 ft; minimum daily determined, 22 ft³/s, Dec. 12, 1963, but a lesser discharge may have occurred during periods of no gage-height record prior to 1939.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,900 ft³/s, and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 4	1900	2,270	4.52	June 29	0500	2,290	4.53
June 6	2200	*4,720	*6.03	July 5	0800	1,990	4.29

Minimum daily discharge, 58 ft³/s, Jan. 28 to Feb. 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	68	83	105	84	58	66	413	1150	2540	1320	228	141
2	73	92	105	84	58	68	475	1430	2640	1240	221	132
3	71	89	105	84	58	70	418	1570	3020	1190	214	144
4	65	85	105	84	58	70	364	1860	3050	1180	206	118
5	61	92	105	84	58	72	340	1710	2750	1590	205	109
6	66	75	105	84	58	72	338	1360	3770	1320	192	101
7	88	87	105	84	58	74	412	1290	3660	1100	189	102
8	109	86	105	84	58	76	500	1110	3310	923	217	111
9	97	80	105	84	58	78	542	957	3140	835	192	128
10	103	98	105	84	58	80	552	882	2160	775	187	170
11	126	102	105	84	58	81	591	892	1700	703	173	153
12	116	98	105	86	58	81	762	970	1730	647	202	123
13	134	89	105	86	58	89	825	1060	1800	639	181	110
14	102	82	105	86	58	95	729	1100	1710	624	163	104
15	94	99	105	86	58	93	704	944	1880	594	152	98
16	98	94	100	83	58	83	753	936	1980	614	143	93
17	101	107	100	80	58	93	757	850	2010	571	138	88
18	101	100	98	77	58	96	698	891	2070	517	132	88
19	100	98	96	75	58	87	658	1090	1980	463	127	104
20	98	98	94	73	58	92	637	1470	1670	443	150	93
21	101	98	92	71	60	91	581	1940	1740	415	183	139
22	102	98	90	70	60	95	589	1760	1650	395	154	191
23	95	98	88	68	62	106	815	1440	1590	403	136	179
24	94	100	86	66	60	118	911	1490	1510	366	129	198
25	94	100	86	64	62	131	947	1650	1460	392	134	189
26	97	100	86	62	62	124	851	1840	1560	413	128	184
27	98	100	86	60	64	129	730	2050	1520	355	116	175
28	97	100	86	58	64	150	680	2260	1510	308	110	196
29	98	105	86	58	---	196	799	2310	1830	290	107	181
30	96	105	84	58	---	257	981	2240	1510	268	133	174
31	99	---	84	58	---	377	---	2370	---	247	133	---
TOTAL	2942	2838	3017	2349	1654	3390	19352	44872	64450	21140	5075	4116
MEAN	94.9	94.6	97.3	75.8	59.1	109	645	1447	2148	682	164	137
MAX	134	107	105	86	64	377	981	2370	3770	1590	228	198
MIN	61	75	84	58	58	66	338	850	1460	247	107	88
AC-FT	5840	5630	5980	4660	3280	6720	38380	89000	127800	41930	10070	8160
CAL YR 1985	TOTAL	134267	MEAN	368	MAX	2410	MIN	40	AC-FT	266300		
WTR YR 1986	TOTAL	175195	MEAN	480	MAX	3770	MIN	58	AC-FT	347500		

GREEN RIVER BASIN

09243700 MIDDLE CREEK NEAR OAK CREEK, CO

LOCATION.--Lat 40°23'08", long 106°59'33", in SW¼SW¼ sec.13, T.5 N., R.86 W., Routt County, Hydrologic Unit 1450001, on left bank 1.1 mi above mouth of Foidel Creek and 13.5 mi northwest of Oak Creek.

DRAINAGE AREA.--23.5 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1975 to September 1981, April 1982 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 6,720 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 19 to Apr. 1. Records fair except for estimated daily discharges, which are poor.

AVERAGE DISCHARGE.--10 years (water years 1976-81, 83-86), 5.21 ft³/s; 3,780 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 329 ft³/s, May 14, 1984, gage height, 4.08 ft, from rating curve extended above 77 ft³/s; no flow many days each year.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 15 ft³/s, and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Apr. 3	0130	*46	2.42	Apr. 26	0045	*46	*2.45

Minimum daily discharge, 0.35 ft³/s, Sept. 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.0	1.3	1.8	.80	.88	3.2	27	37	9.9	3.1	1.0	2.0
2	.98	1.2	1.6	.80	.82	3.6	30	36	9.9	2.8	.85	1.2
3	.91	1.1	1.5	.80	.80	4.0	37	35	9.3	2.6	.79	1.1
4	.82	1.1	1.6	.80	.80	4.6	28	34	8.9	2.4	1.2	.87
5	.82	1.2	1.5	.80	.80	5.2	26	33	8.5	2.4	1.2	.82
6	.87	1.6	1.4	.80	.80	5.8	27	30	8.2	4.3	1.1	.54
7	1.2	1.3	1.4	.80	.80	5.0	27	30	7.7	3.9	1.3	.51
8	2.0	1.4	1.4	.80	.80	4.5	27	30	7.0	3.4	1.5	1.0
9	1.9	2.1	1.4	.80	.80	4.0	27	30	7.8	3.3	1.8	.80
10	1.7	1.4	1.3	.80	.80	3.5	28	27	8.9	3.3	1.8	1.3
11	2.0	1.3	1.1	.82	.80	3.2	29	24	7.9	3.0	1.8	1.2
12	1.9	1.6	1.0	.82	.80	2.8	30	22	6.9	2.8	2.0	.85
13	2.3	1.5	.92	.82	.80	2.6	31	20	6.3	2.4	2.2	.71
14	2.3	1.8	.92	.82	.80	2.3	29	19	6.1	2.3	2.1	.54
15	1.8	1.5	.92	.84	.80	2.3	28	19	5.8	2.1	1.8	.45
16	1.6	1.8	.92	.84	.80	2.3	28	21	5.3	2.6	1.6	.38
17	1.5	1.0	.84	.84	.80	2.3	29	19	4.9	2.6	1.2	.44
18	1.3	1.0	.92	.84	2.1	2.3	31	18	5.1	2.7	.92	.42
19	1.2	1.0	.92	.84	5.0	2.7	29	17	5.7	2.9	.90	.38
20	1.2	1.0	.92	.84	9.0	3.3	28	16	5.5	2.5	.98	.37
21	1.2	1.0	.92	.88	8.8	4.0	27	16	4.7	2.3	3.5	.36
22	1.3	1.0	.92	.94	6.6	5.8	29	16	4.3	3.0	3.5	.35
23	1.4	1.0	.92	1.0	5.6	7.5	31	15	3.9	3.0	2.5	.58
24	1.2	1.1	.92	1.1	4.8	10	34	14	3.9	2.3	2.2	.72
25	1.2	1.2	.92	1.2	4.1	12	41	14	3.9	2.2	2.5	.96
26	1.2	1.3	.92	1.1	3.5	16	45	13	4.1	2.2	2.4	1.0
27	1.1	1.4	.76	1.1	3.0	22	41	12	3.6	2.3	1.9	.92
28	1.0	1.5	.76	1.1	2.8	23	38	12	3.1	2.0	1.5	1.4
29	1.0	1.6	.76	1.0	---	24	35	11	3.2	1.6	1.3	1.7
30	1.0	1.7	.80	.93	---	25	35	11	3.2	1.3	2.6	1.2
31	1.4	---	.80	.88	---	26	---	10	---	1.1	2.3	---
TOTAL	42.30	40.0	33.68	27.55	69.00	244.8	932	661	183.5	82.7	54.24	25.07
MEAN	1.36	1.33	1.09	.89	2.46	7.90	31.1	21.3	6.12	2.67	1.75	.84
MAX	2.3	2.1	1.8	1.2	9.0	26	45	37	9.9	4.4	3.5	2.0
MIN	.82	1.0	.76	.80	.80	2.3	26	10	3.1	1.1	.79	.35
AC-FT	84	79	67	55	137	486	1850	1310	364	164	108	50
CAL YR 1985	TOTAL	3650.53		MEAN	10.0	MAX	125	MIN	.09	AC-FT	7240	
WTR YR 1986	TOTAL	2395.84		MEAN	6.56	MAX	45	MIN	.35	AC-FT	4750	

09243700 MIDDLE CREEK NEAR OAK CREEK, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.-- September 1975 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: April 1976 to September 1981.

WATER TEMPERATURE: April 1976 to September 1981.

INSTRUMENTATION.--Water-quality monitor April 1976 to September 1981.

REMARKS.--Unpublished maximum and minimum specific-conductance data for period of daily record available in district office.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 1,880 microsiemens May 29, 1981; minimum, 117 microsiemens Aug. 10, 1978.

WATER TEMPERATURE: Maximum, 31.5°C July 31, 1976; minimum, freezing point on many days during winter months.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	HARD- NESS (MG/L AS CAC03)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)
DEC 02...	1215	1.6	770	8.4	0.0	12.9	370	86	37	35
MAR 05...	1145	4.6	820	8.3	3.5	10.4	370	83	39	31
25...	1200	12	630	8.4	3.5	12.0	290	70	29	24
APR 10...	1330	28	501	8.2	--	--	250	60	25	20
MAY 15...	1345	18	588	8.4	9.5	9.1	280	65	28	16
JUN 16...	1300	5.4	705	8.8	21.5	8.0	320	75	33	25
JUL 23...	1350	2.6	735	8.6	22.0	7.2	330	75	35	30
AUG 20...	1030	0.78	743	8.2	18.5	7.5	360	83	38	33
SEP 03...	1030	0.86	--	8.4	14.0	9.8	340	80	35	30

DATE	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINITY LAB (MG/L AS CAC03)	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)
DEC 02...	0.8	2.9	247	190	7.7	0.2	8.2	520	0.7	2.2
MAR 05...	0.7	2.8	202	240	5.6	0.3	8.4	530	0.72	6.6
25...	0.6	2.9	164	180	4.8	0.2	8.0	420	0.57	13
APR 10...	0.6	2.4	134	130	3.6	0.2	9.7	330	0.45	25
MAY 15...	0.4	2.3	187	130	3.8	0.2	9.3	370	0.5	18
JUN 16...	0.6	2.8	201	170	5.1	0.2	5.6	440	0.59	6.4
JUL 23...	0.7	3.7	229	170	6.6	0.2	6.8	460	0.63	3.3
AUG 20...	0.8	3.5	213	180	5.6	0.2	5.7	480	0.65	1.0
SEP 03...	0.7	3.1	226	160	5.1	0.2	6.5	460	0.62	1.1

GREEN RIVER BASIN

09243700 MIDDLE CREEK NEAR OAK CREEK, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)	BORON, DIS- SOLVED (UG/L AS B)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)
DEC 02...	<0.01	0.21	0.07	0.43	0.5	0.01	<0.01	40	320	13
MAR 05...	<0.01	0.61	0.06	0.34	0.4	0.03	0.02	50	3300	16
25...	<0.01	0.48	0.02	0.58	0.6	0.03	0.01	30	5900	45
APR 10...	<0.01	0.51	0.03	0.57	0.6	0.03	0.03	20	7400	120
MAY 15...	<0.01	0.33	0.03	0.27	0.3	0.02	0.02	30	2700	23
JUN 16...	<0.01	<0.10	0.04	0.46	0.5	0.02	<0.01	40	630	28
JUL 23...	<0.01	<0.10	0.05	1.0	1.1	0.04	0.02	50	690	43
AUG 20...	<0.01	<0.10	0.01	0.29	0.3	0.02	0.02	50	240	68
SEP 03...	<0.01	<0.10	<0.01	--	0.3	0.03	<0.01	60	240	16

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE (DEG C)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE (DEG C)
OCT 02...	1300	0.94	804	10.0	JAN 15...	1430	0.84	901	0.0

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)
DEC 02...	1215	1.6	16	0.07	JUN 16...	1300	5.4	42	0.61
MAR 05...	1145	4.6	217	2.7	JUL 23...	1350	2.6	861	6.0
25...	1200	12	391	12	AUG 20...	1030	0.78	41	0.09
APR 10...	1330	28	443	33	SEP 03...	1030	0.86	26	0.06
MAY 15...	1345	18	204	9.9					

09243800 FOIDEL CREEK NEAR OAK CREEK, CO

LOCATION.--Lat 40°20'45", long 107°05'04", in NW¼SW¼ sec.31, T.5 N., R.86 W., Routt County, Hydrologic Unit 14050001, on right bank 2.3 mi downstream from Reservoir No. 1, 6.9 mi upstream from mouth, and 8.7 mi northwest of Oak Creek.

DRAINAGE AREA.--8.61 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1975 to October 1981, April 1982 to September 1983, October 1984 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,880 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 24 to Mar. 7. Records fair except for estimated daily discharges, which are poor.

AVERAGE DISCHARGE.--9 years (water years 1976-81, 1983, 1986), 1.43 ft³/s; 1,040 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 55 ft³/s Apr. 21, 1980, gage height, 3.38 ft; no flow many days most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 25 ft³/s at 2030 April 5, gage height, 2.96 ft; minimum daily 0.26 ft³/s, Sept. 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.79	4.2	1.2	1.0	1.5	9.0	8.6	10	3.6	2.0	.67	1.1
2	.79	4.5	1.4	1.0	1.5	12	8.1	11	3.7	1.9	.63	.88
3	.78	4.3	1.5	1.0	1.5	14	8.1	11	3.3	1.5	.65	.78
4	.76	3.7	1.5	1.0	1.4	16	8.9	9.0	3.2	1.4	.71	.71
5	.82	3.2	1.5	1.0	1.2	18	14	7.5	3.2	2.4	.71	.63
6	1.7	3.0	1.3	1.0	1.1	16	15	7.0	2.9	2.4	.70	.58
7	2.7	3.0	1.3	1.0	1.0	7.8	12	7.2	2.7	2.2	.73	.61
8	4.2	3.0	1.3	1.0	1.0	9.4	10	8.4	2.6	1.9	.75	.82
9	4.6	2.7	1.3	1.0	1.0	12	8.8	9.2	3.2	1.8	.79	.77
10	4.5	3.0	1.2	1.0	1.0	9.0	9.4	8.9	3.5	1.9	.59	.94
11	4.5	3.3	1.1	1.0	1.0	6.6	9.2	6.9	3.1	1.7	.53	.97
12	4.4	3.6	.90	1.0	1.0	5.8	9.5	5.8	2.9	1.6	.67	.85
13	4.5	2.7	.90	1.0	1.7	5.1	9.6	5.6	2.8	1.4	.74	.75
14	4.7	2.0	.90	1.0	2.6	4.8	10	5.4	2.7	1.3	.71	.69
15	4.3	1.8	.80	1.0	3.5	4.5	10	5.3	2.7	1.6	.67	.63
16	3.8	1.6	.90	1.2	4.6	4.5	9.2	6.4	2.8	2.3	.59	.58
17	3.5	1.6	.90	1.2	6.4	4.5	11	5.9	2.2	1.7	.33	.52
18	3.2	1.0	1.0	1.3	8.6	4.5	12	5.3	2.0	1.5	.26	.53
19	3.0	1.0	1.0	1.3	10	4.5	11	5.1	2.0	1.5	.29	.55
20	2.9	1.0	1.0	1.3	15	4.2	9.7	4.9	1.9	1.3	.43	.55
21	3.3	1.0	1.1	1.2	20	4.6	9.2	4.7	1.9	1.3	1.3	.58
22	3.9	1.0	1.1	1.2	24	4.4	9.1	4.6	1.9	1.3	2.1	.60
23	4.6	1.0	1.1	1.2	16	5.7	9.1	4.5	1.9	1.3	1.7	.67
24	4.3	1.2	1.1	1.2	14	7.3	9.9	4.4	1.9	1.1	1.2	.78
25	4.2	1.4	1.1	1.2	12	8.0	12	4.3	1.9	1.0	1.3	.92
26	4.2	1.6	1.0	1.2	10	6.1	13	4.3	2.1	1.0	1.1	1.0
27	4.0	1.6	1.0	1.2	8.0	6.0	13	4.2	2.0	1.0	.84	1.0
28	3.8	1.4	1.0	1.2	7.0	7.0	13	4.8	1.9	.93	.72	1.3
29	3.8	1.2	1.0	1.3	---	7.5	12	4.7	2.0	.86	.70	1.5
30	3.9	1.5	1.0	1.3	---	8.1	11	4.2	2.0	.75	.96	1.2
31	4.0	---	1.0	1.4	---	8.1	---	3.7	---	.69	1.4	---
TOTAL	104.44	67.1	34.40	34.9	177.6	245.0	315.4	194.2	76.5	46.53	25.47	23.99
MEAN	3.37	2.24	1.11	1.13	6.34	7.90	10.5	6.26	2.55	1.50	.82	.80
MAX	4.7	4.5	1.5	1.4	24	18	15	11	3.7	2.4	2.1	1.5
MIN	.76	1.0	.80	1.0	1.0	4.2	8.1	3.7	1.9	.69	.26	.52
AC-FT	207	133	68	69	352	486	626	385	152	92	51	48
CAL YR 1985 TOTAL	1459.89			MEAN	4.00	MAX	24	MIN	.12	AC-FT	2900	
WTR YR 1986 TOTAL	1345.53			MEAN	3.69	MAX	24	MIN	.26	AC-FT	2670	

GREEN RIVER BASIN

09243800 FOIDEL CREEK NEAR OAK CREEK, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--September 1975 to September 1983, October 1984 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: May 1976 to September 1981, April 1982 to September 1983. March 1986 to September 1986.

WATER TEMPERATURE: May 1976 to September 1981, April 1982 to September 1983. March 1986 to September 1986.

INSTRUMENTATION.--Water-quality monitor May 1976 to September 1981, April 1982 to September 1983. March 1986 to September 1986.

REMARKS.--Unpublished maximum and minimum specific conductance data for periods of daily record available in district office.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 2,880 microsiemens Jan. 23, 1983; minimum, 200 microsiemens Apr. 21, 22, 1980.

WATER TEMPERATURE: Maximum, 31.5°C July 30, 1983; minimum, 0.0°C during winter period when flowing each year.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Not determined.

WATER TEMPERATURE: Not determined.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	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)
DEC 03...	1220	1.5	2090	8.4	2.0	14.0	1300	270	150	56
FEB 19...	1115	9.3	1110	7.9	0.5	9.7	560	120	63	33
MAR 20...	1130	4.7	1930	8.2	6.0	9.5	1200	250	130	55
APR 10...	1130	10	1550	8.2	8.0	9.9	860	180	99	41
MAY 15...	1200	5.2	1870	8.2	11.5	9.9	1000	220	120	41
JUN 16...	1115	2.9	2030	8.4	18.0	9.0	1100	210	140	48
JUL 23...	1200	1.4	2250	8.2	19.0	7.1	1300	260	170	51
AUG 20...	1300	0.4	--	8.1	20.5	7.4	1700	320	210	60
SEP 03...	1240	0.84	2330	8.2	20.5	7.8	1300	240	170	57

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)
DEC 03...	0.7	5.7	285	960	20	0.2	7.1	1600	2.2	6.6
FEB 19...	0.6	5.7	161	470	8.3	0.2	6.8	800	1.1	20
MAR 20...	0.7	5.0	245	940	12	0.2	8.0	1500	2.1	20
APR 10...	0.6	4.7	239	650	12	0.2	7.0	1100	1.5	31
MAY 15...	0.6	4.8	173	830	8.3	0.1	7.2	1300	1.8	19
JUN 16...	0.6	4.7	227	1000	8.3	0.1	3.8	1600	2.1	12
JUL 23...	0.6	5.2	240	1200	14	0.1	5.7	1900	2.5	7.0
AUG 20...	0.7	7.3	232	1500	17	<0.1	3.6	2300	3.1	2.4
SEP 03...	0.7	6.9	256	1200	21	0.1	8.1	1900	2.5	4.2

09243800 FOIDEL CREEK NEAR OAK CREEK, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)	BORON, DIS- SOLVED (UG/L AS B)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)
DEC 03...	0.03	1.30	0.20	0.3	0.5	0.01	<0.01	90	390	80
FEB 19...	0.01	1.60	0.18	0.52	0.7	0.06	0.05	50	6900	26
MAR 20...	0.03	3.30	0.08	0.82	0.9	0.01	<0.01	70	460	24
APR 10...	0.02	1.60	0.07	0.53	0.6	0.03	<0.01	80	1500	32
MAY 15...	0.03	2.20	0.13	0.87	1.0	0.01	<0.01	90	310	15
JUN 16...	0.01	0.48	0.11	0.39	0.5	0.02	<0.01	110	330	50
JUL 23...	0.02	0.31	0.21	0.49	0.7	0.04	<0.01	130	850	60
AUG 20...	<0.01	<0.10	0.09	0.31	0.4	0.02	<0.01	140	410	80
SEP 03...	0.01	0.14	0.33	0.17	0.5	0.02	<0.01	140	470	50

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)
FEB 19...	1115	9.3	435	11	JUN 16...	1115	2.9	58	0.45
MAR 20...	1130	4.7	90	1.1	JUL 23...	1200	1.4	103	0.39
APR 10...	1130	10	649	18	AUG 20...	1300	0.4	44	0.05
MAY 15...	1200	5.2	50	0.7					

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25 DEG. C, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1						---	1460	---	2090	2280	2450	2370
2						---	1450	---	2060	2330	2450	2390
3						---	1350	---	2100	2350	2470	2430
4						---	1570	---	2080	2340	2430	2480
5						---	1460	---	2080	2330	2460	2490
6						1180	1400	---	2080	2330	2470	2500
7						1150	1500	---	2090	2300	2460	2450
8						1040	1600	---	2100	2300	2460	2360
9						970	1680	---	2060	2300	2410	2410
10						1210	1610	---	2040	2280	2420	2330
11						1340	1670	---	2040	2300	2440	2360
12						1420	1700	---	2060	2330	2420	2360
13						1480	1740	---	2080	2390	2380	2370
14						1550	1750	---	2080	2390	2400	2380
15						1660	1760	1900	2090	2410	2430	2390
16						1690	1810	1840	2050	2280	2440	2410
17						1760	1690	1880	2120	2290	2430	2420
18						1840	1700	1920	2150	2360	2430	2430
19						1920	1710	1940	2160	2320	2440	2420
20						1980	1790	1950	2180	2370	2480	2430
21						1980	1800	1990	2210	2380	2470	2440
22						1880	1800	2000	2240	2390	2460	2420
23						1700	1800	2040	2240	2330	2460	2410
24						1520	1810	2040	2230	2370	2430	2390
25						1490	---	2040	2220	2360	2350	2360
26						1640	---	2040	2220	2390	2390	2340
27						1630	---	2040	2250	2340	2440	2340
28						1520	---	2000	2280	2410	2440	2330
29						1470	---	1980	2270	2420	2420	2320
30						1470	---	2040	2270	2450	2370	2420
31						1320	---	2050	---	2450	2350	---
MEAN						---	---	---	2140	2350	2430	2400

GREEN RIVER BASIN

09243800 FOIDEL CREEK NEAR OAK CREEK, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1											---	---
2											---	---
3											---	---
4											---	---
5											---	---
6											6.5	2.0
7											7.5	1.5
8											6.0	1.5
9											4.0	.0
10											4.5	1.0
11											5.0	2.0
12											6.0	2.5
13											6.5	2.5
14											6.5	2.0
15											7.0	2.5
16											5.0	2.5
17											7.0	2.0
18											5.5	3.0
19											6.0	2.5
20											8.0	2.0
21											10.5	2.5
22											11.0	3.0
23											12.0	3.5
24											11.0	4.0
25											8.0	4.5
26											11.5	3.0
27											12.5	3.5
28											13.0	4.0
29											12.5	6.0
30											14.5	5.5
31											10.0	6.0
MONTH											14.5	.0
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	10.5	5.0	14.5	9.0	17.5	14.5	25.5	13.5	26.0	13.0	20.5	13.0
2	10.5	3.0	16.0	10.0	19.5	14.0	26.5	13.0	24.5	13.0	18.0	12.0
3	7.5	3.0	16.0	11.0	19.5	15.0	24.5	13.5	20.0	13.5	21.0	11.5
4	8.5	3.5	16.0	10.5	20.0	15.0	25.0	14.0	22.5	13.0	19.0	12.0
5	12.5	4.5	14.0	9.0	19.5	15.5	22.5	15.0	22.5	13.0	19.5	12.0
6	14.0	4.5	13.0	9.0	21.0	15.5	21.5	15.5	24.0	13.0	18.5	12.0
7	12.0	6.5	11.0	8.5	21.0	14.5	19.5	14.0	24.0	13.5	18.5	13.0
8	12.0	5.5	11.5	7.5	21.0	15.0	21.5	12.5	23.0	14.0	18.0	13.0
9	11.5	6.0	10.5	6.5	---	---	22.0	14.5	25.0	12.5	17.0	12.5
10	10.0	7.0	13.5	7.0	---	---	21.5	13.5	24.5	13.0	14.5	12.5
11	10.5	5.5	14.0	8.0	---	---	22.5	13.0	21.0	13.5	16.5	11.5
12	12.0	6.5	13.0	9.0	---	---	24.5	14.0	20.0	14.0	16.5	10.5
13	8.0	4.0	15.5	8.0	---	---	25.0	14.0	20.0	14.0	16.0	11.5
14	10.5	3.0	13.0	9.0	---	---	26.0	14.5	21.5	14.0	16.5	11.0
15	12.5	4.0	13.0	9.0	---	---	23.0	15.5	22.5	13.0	15.5	10.0
16	10.5	6.5	12.0	8.0	---	---	19.5	15.5	23.5	13.5	16.0	11.5
17	9.0	5.5	15.5	8.5	23.5	14.5	23.0	14.0	23.0	14.0	15.0	9.5
18	8.0	5.0	16.5	8.5	21.5	13.5	21.0	14.5	24.0	13.5	13.5	10.5
19	8.5	4.0	18.5	10.0	20.0	12.5	23.0	14.0	22.0	15.5	14.5	8.5
20	7.5	5.5	18.0	11.0	23.0	12.0	24.0	14.0	25.0	16.5	15.0	10.5
21	10.5	6.0	18.5	11.5	23.5	12.0	22.5	13.0	20.5	15.5	15.0	11.5
22	13.0	6.5	17.0	11.0	24.5	12.0	21.5	15.0	23.5	15.0	14.0	11.0
23	11.5	8.0	17.5	9.5	25.5	12.5	24.5	14.5	24.0	14.5	13.5	12.0
24	12.0	8.0	17.0	11.5	20.5	14.0	22.0	16.0	22.0	15.0	12.5	9.5
25	12.0	8.0	19.5	11.0	21.0	14.5	23.5	14.0	22.0	16.5	10.5	8.5
26	9.5	7.5	19.5	11.5	25.0	15.0	21.5	13.5	24.0	13.5	10.0	7.5
27	9.5	6.5	19.5	12.5	26.5	13.5	24.0	13.5	24.0	13.5	10.5	7.0
28	10.5	7.0	20.0	12.5	25.5	15.0	25.5	12.0	21.5	13.5	13.0	7.5
29	12.5	7.5	19.0	13.0	23.0	15.5	24.5	12.5	18.5	14.5	11.5	10.0
30	14.5	8.5	20.0	12.5	22.5	15.5	25.5	12.0	21.0	15.5	11.0	8.0
31	---	---	20.0	13.5	---	---	26.0	12.0	18.0	14.0	---	---
MONTH	14.5	3.0	20.0	6.5			26.5	12.0	26.0	12.5	21.0	7.0

09243900 FOIDEL CREEK AT MOUTH, NEAR OAK CREEK, CO

LOCATION.--Lat 40°23'25", long 106°59'39", in SE¼SE¼ sec.14, T.5 N., R.86 W., Routt County, Hydrologic Unit 14050001, on left bank 0.9 mi upstream from mouth and 13.6 mi northwest of Oak Creek.

DRAINAGE AREA.--17.5 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1975 to September 1981, June 1982 to current year.

REVISED RECORDS.--WDR CO-78-3: 1976 (M), 1976.

GAGE.--Water-stage recorder. Elevation of gage is 6,730 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 6-27, Dec. 5 to Jan. 24, Feb. 18 to Mar. 8 and Mar. 14-19. Records fair except for estimated daily discharges, which are poor.

AVERAGE DISCHARGE.--10 years (water years 1976-81, 83-86), 3.67 ft³/s; 2,660 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 90 ft³/s, Apr. 22, 1980, gage height, 5.18 ft; no flow many days most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 53 ft³/s at 0500 Mar. 24, gage height, 4.00 ft; minimum daily, 0.38 ft³/s, Aug. 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.5	6.9	7.8	5.4	6.1	13	23	16	5.5	4.0	1.2	1.4
2	1.5	5.7	7.4	5.4	6.2	14	25	16	5.4	3.8	1.1	1.4
3	1.5	5.1	7.0	5.2	6.2	17	43	16	5.3	3.7	1.0	1.4
4	1.5	5.2	7.3	5.2	6.0	21	36	14	5.1	3.6	1.1	1.2
5	1.8	5.2	7.4	5.2	5.9	24	32	13	5.1	4.9	1.0	1.1
6	2.2	5.0	7.0	5.2	5.8	21	34	13	5.0	5.5	.96	1.1
7	2.5	5.0	7.0	5.2	5.7	19	28	13	4.9	5.0	1.1	1.0
8	3.2	5.0	7.0	5.2	5.7	17	24	16	4.8	4.4	1.1	.95
9	4.2	4.7	7.0	5.2	5.8	16	21	18	4.7	4.4	.99	.98
10	4.2	5.0	6.4	5.2	5.8	15	21	16	4.7	4.2	.89	1.1
11	4.9	5.4	6.0	5.2	5.9	14	22	13	4.6	3.8	.70	1.1
12	4.8	6.0	5.4	5.2	5.9	13	22	11	4.3	3.4	.69	1.1
13	4.4	5.0	5.4	5.2	5.9	11	22	11	3.9	3.0	.80	1.1
14	4.3	4.5	5.4	5.2	5.9	11	24	10	3.8	2.8	.83	1.0
15	4.3	4.2	5.0	5.2	5.8	10	24	10	3.9	2.3	.74	.93
16	4.5	4.0	5.2	5.2	6.0	10	21	13	4.0	2.7	.65	1.5
17	4.5	4.0	5.2	5.4	6.5	10	23	11	4.1	2.7	.59	1.7
18	4.5	3.8	5.4	5.8	8.5	10	24	9.8	3.8	2.4	.46	1.1
19	4.3	3.8	5.4	6.0	20	11	23	9.1	3.8	2.2	.46	.88
20	4.4	3.8	5.4	6.4	25	12	20	8.6	3.8	2.1	.38	.80
21	4.2	3.8	5.6	6.6	27	13	19	8.1	3.6	1.9	.51	.68
22	4.5	3.8	5.6	7.0	25	16	18	7.4	3.5	1.9	.86	.64
23	4.7	3.8	5.6	7.2	20	21	17	7.1	3.6	1.9	1.1	.75
24	4.7	4.0	5.6	7.6	17	32	17	6.9	3.7	1.8	1.1	.83
25	4.8	5.0	5.6	7.7	15	26	20	6.7	3.7	1.7	1.1	.94
26	4.8	6.0	5.2	7.6	13	22	24	6.3	3.9	1.7	1.2	1.0
27	4.6	6.6	5.2	7.6	11	22	23	6.2	4.0	1.8	1.2	1.1
28	4.6	6.8	5.2	7.6	10	22	21	6.0	3.8	1.6	1.1	1.2
29	5.7	6.9	5.4	7.3	---	21	19	6.3	4.0	1.4	1.1	2.5
30	7.0	6.9	5.4	6.7	---	20	17	5.7	4.0	1.3	1.1	1.9
31	7.0	---	5.4	6.2	---	23	---	5.6	---	1.2	1.4	---
TOTAL	125.6	150.9	184.9	186.3	292.6	527	707	329.8	128.3	89.1	28.51	34.38
MEAN	4.05	5.03	5.96	6.01	10.4	17.0	23.6	10.6	4.28	2.87	.92	1.15
MAX	7.0	6.9	7.8	7.7	27	32	43	18	5.5	5.5	1.4	2.5
MIN	1.5	3.8	5.0	5.2	5.7	10	17	5.6	3.5	1.2	.38	.64
AC-FT	249	299	367	370	580	1050	1400	654	254	177	57	68
CAL YR 1985	TOTAL	2947.7		MEAN	8.08	MAX	61	MIN	1.2	AC-FT	5850	
WTR YR 1986	TOTAL	2784.39		MEAN	7.63	MAX	43	MIN	.38	AC-FT	5520	

09243900 FOIDEL CREEK AT MOUTH NEAR OAK CREEK, CO--CONTINUED

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1976 to September 1981, June 1982 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: April 1976 to September 1981.

WATER TEMPERATURE: April 1976 to September 1981.

SUSPENDED SEDIMENT DISCHARGE: April 1976 to September 1981.

INSTRUMENTATION.--Water-quality monitor April 1976 to September 1981. Automatic pumping sampler April 1976 to September 1981.

REMARKS.--Unpublished maximum and minimum specific conductance data for period of daily record available in district office.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 3,520 microsiemens Aug. 10, 11, 1980; minimum, 255 microsiemens July 1, 1980.

WATER TEMPERATURE: Maximum, 28.5°C July 22, 1980; minimum, 0.0°C several days during winter period each year.

SEDIMENT CONCENTRATION: Maximum daily, 3,650 mg/L Apr. 2, 1981; no flow many days most years.

SEDIMENT LOAD: Maximum daily, 702 tons Apr. 23, 1980; no flow many days most years.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	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)
DEC 02...	1215	6.9	2920	8.3	0.0	12.2	1900	390	230	83
FEB 19...	1245	9.9	1190	7.9	0.0	10.0	570	120	66	51
MAR 20...	1245	11	1740	8.3	6.0	9.1	950	200	110	63
APR 10...	1245	22	1650	8.2	8.0	9.8	900	180	110	50
MAY 15...	1445	10	1690	8.3	11.5	9.6	860	180	100	55
JUN 16...	1345	3.9	1910	8.4	21.5	7.8	980	180	130	68
JUL 23...	1500	2.0	2200	8.2	20.5	7.3	1100	210	150	110
AUG 20...	1130	0.36	2400	7.8	19.5	7.0	1300	250	170	140
SEP 03...	1120	1.4	2330	8.0	13.0	9.6	1100	190	140	130

DATE	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LITY 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)
DEC 02...	0.8	6.7	271	1600	9.0	0.3	5.2	2500	3.4	47
FEB 19...	1	5.3	164	480	19	0.2	7.1	850	1.2	23
MAR 20...	0.9	4.2	218	780	14	0.2	7.4	1300	1.8	39
APR 10...	0.7	4.4	263	700	9.8	0.2	7.2	1200	1.7	72
MAY 15...	0.8	4.0	199	720	9.2	0.2	6.3	1200	1.6	33
JUN 16...	1	4.0	199	940	10	0.2	0.7	1500	2.0	15
JUL 23...	1	5.6	217	1200	17	0.2	4.4	1800	2.5	9.9
AUG 20...	2	7.6	257	1300	30	0.2	4.2	2100	2.8	2.0
SEP 03...	2	5.9	272	1100	19	0.2	4.3	1800	2.4	6.6

09243900 FOIDEL CREEK AT MOUTH NEAR OAK CREEK, CO--CONTINUED

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)	BORON, DIS- SOLVED (UG/L AS B)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, DIS- SOLVED (UG/L AS FE)
DEC 02...	0.03	6.40	0.28	0.72	1.0	0.01	0.01	150	980	40
FEB 19...	0.03	2.90	0.60	0.8	1.4	0.08	0.07	100	4000	29
MAR 20...	0.03	5.60	0.16	0.84	1.0	0.02	<0.01	80	760	39
APR 10...	0.03	4.80	0.32	0.58	0.9	0.03	0.01	80	3300	120
MAY 15...	0.02	3.50	0.08	0.42	0.5	0.01	0.01	100	520	18
JUN 16...	0.02	1.60	0.09	0.61	0.7	0.02	<0.01	120	350	21
JUL 23...	0.03	1.20	0.14	0.66	0.8	0.04	0.01	150	880	50
AUG 20...	0.01	0.36	0.08	0.42	0.5	0.03	0.02	160	560	50
SEP 03...	0.01	0.81	0.06	0.34	0.4	0.03	0.01	150	550	30

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE (DEG C)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE (DEG C)
OCT 02...	1350	1.4	2390	10.0	JAN 14...	1230	5.1	3110	0.0

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)
DEC 02...	1215	6.9	1510	28	JUN 16...	1345	3.9	96	1.0
FEB 19...	1245	9.9	187	5.0	JUL 23...	1500	2.0	1170	6.3
MAR 20...	1245	11	115	3.4	AUG 20...	1130	0.36	113	0.11
APR 10...	1245	22	402	24	SEP 03...	1120	1.4	90	0.34
MAY 15...	1445	10	71	1.9					

GREEN RIVER BASIN

09244410 YAMPA RIVER BELOW DIVERSION, NEAR HAYDEN, CO

LOCATION.--Lat 40°29'18", long 107°09'33", in NW¼SW¼ sec.9, T.6 N., R.87W., Routt County, Hydrologic Unit 14050001, in bay of Colorado-Ute Electric Co. pumphouse on left bank 300 ft downstream from U.S. Highway 40, 0.1 mi upstream from Sage Creek, 0.5 mi downstream from diversion point of Gibraltar Canal, and 4.7 mi east of Hayden.

DRAINAGE AREA.--1,430 mi², approximately.

REVISED RECORDS.--WDR CO-84-3: 1974 (M), 1979 (M).

PERIOD OF RECORD.--Streamflow records, October 1965 to September 1986 (discontinued). Prior to October 1972, records included flow in Gibraltar Canal. Water-quality data available, June 1975 to September 1982.

GAGE.--Water-stage recorder. Elevation of gage is 6,380 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 14 to Feb. 27 and July 10 to Aug. 25. Records good except for estimated daily discharges, which are poor. Records show flow of river below Gibraltar Canal diversion. Natural flow of stream affected by diversions for irrigation of about 30,000 acres upstream from, and 200 acres downstream from station, transbasin diversions, storage reservoirs, 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.--21 years, 1,135 ft³/s, 822,300 acre-ft/yr; does not include flow in Gibraltar Canal.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,100 ft³/s, May 16, 1984, gage height, 11.45 ft, maximum gage height, 11.90 ft, Apr. 27, 1974; minimum daily discharge, 5.1 ft³/s, July 19, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 9,560 ft³/s at 1000 June 7, gage height, 9.40 ft; minimum daily, 132 ft³/s, Oct. 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	154	374	340	260	270	673	3310	2960	6950	3240	550	284
2	153	337	360	260	280	653	3140	3420	6880	2870	500	287
3	150	345	370	260	270	634	3550	4150	7290	2590	460	273
4	151	334	360	260	260	599	2580	4860	7600	2480	450	265
5	141	329	400	260	250	627	2150	5360	7470	3170	460	243
6	132	333	380	240	240	663	2160	4480	8170	3030	480	234
7	156	312	360	250	230	756	2510	4050	8670	2770	500	232
8	309	317	350	260	220	752	2770	3910	7960	2340	490	245
9	331	337	250	260	210	943	2750	3550	7680	2080	480	264
10	331	300	175	260	210	729	2610	3180	6730	1900	475	313
11	421	349	190	260	275	663	2480	2920	5550	1800	450	372
12	481	379	200	260	325	629	2660	3020	5250	1700	425	334
13	489	366	200	260	400	578	2850	3090	5540	1600	375	348
14	473	410	210	260	500	548	2490	3380	5100	1500	350	344
15	361	360	210	280	600	536	2310	3340	5490	1550	315	325
16	346	320	210	270	650	469	2300	3290	5480	1480	290	313
17	357	390	200	260	750	454	2410	3030	5460	1400	260	321
18	347	360	220	270	900	445	2290	2880	5360	1330	250	325
19	326	300	240	260	825	405	2110	3130	5200	1250	240	335
20	310	280	260	250	750	399	1920	3900	4560	1150	245	317
21	301	310	270	240	675	435	1840	4780	4570	1080	252	333
22	311	360	270	240	600	550	2010	5750	4320	1000	340	419
23	316	400	270	250	525	756	2660	5030	4100	950	320	411
24	302	470	260	240	600	1060	3050	4900	3880	925	305	439
25	296	500	260	240	675	1380	3210	5090	3750	900	290	427
26	323	490	260	240	750	1250	3270	5620	3910	875	281	439
27	347	520	260	240	800	1330	2790	6020	4010	860	268	428
28	345	460	270	250	743	1600	2450	6310	3650	800	234	482
29	351	400	270	255	---	2010	2330	6730	4120	725	211	459
30	354	370	270	260	---	2470	2580	6680	3620	650	248	441
31	374	---	260	265	---	3210	---	6730	---	600	276	---
TOTAL	9539	11112	8405	7920	13783	28206	77540	135540	168320	50595	11070	10252
MEAN	308	370	271	255	492	910	2585	4372	5611	1632	357	342
MAX	489	520	400	280	900	3210	3550	6730	8670	3240	550	482
MIN	132	280	175	240	210	399	1840	2880	3620	600	211	232
AC-FT	18920	22040	16670	15710	27340	55950	153800	268800	333900	100400	21960	20330
CAL YR 1985	TOTAL	484713	MEAN	1328	MAX	8000	MIN	123	AC-FT	961400		
WTR YR 1986	TOTAL	532282	MEAN	1458	MAX	8670	MIN	132	AC-FT	1056000		

LOCATION.--Lat 40°40'11", long 107°17'04", in NW¼NE¼ sec.8, T.8 N., R.88 W., Routt County, Hydrologic Unit 14050001, on right bank 0.2 mi upstream from North Fork Elkhead Creek, 4.5 mi northwest of Elkhead, and 12 mi north of Hayden.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.0	11	8.0	7.5	7.4	15	330	645	313	42	7.9	33
2	5.1	10	8.0	7.5	7.2	15	387	778	301	38	7.5	11
3	5.3	10	8.0	7.5	7.0	16	313	895	299	34	7.1	7.8
4	5.1	9.2	8.0	7.5	6.8	17	213	1060	284	33	7.5	6.5
5	4.9	11	8.0	7.4	7.0	18	149	801	275	41	7.1	5.4
6	4.9	8.6	7.9	7.4	7.2	21	176	569	285	45	6.5	4.7
7	7.3	9.6	7.9	7.4	7.4	22	265	504	259	41	6.8	4.5
8	18	10	7.9	7.4	7.4	25	299	415	230	36	8.0	5.3
9	14	8.5	7.9	7.4	7.4	25	285	374	224	32	7.7	7.0
10	17	12	7.9	7.2	7.6	21	270	339	222	29	6.6	14
11	20	11	7.9	7.4	7.8	20	274	443	186	27	5.9	12
12	21	11	7.9	7.4	7.8	22	342	530	164	25	12	7.8
13	33	8.5	7.8	7.4	8.0	24	348	566	151	22	9.6	6.3
14	16	15	7.8	7.4	8.2	25	235	551	143	22	7.0	5.7
15	12	9.8	7.8	7.4	8.4	22	218	476	131	20	5.8	5.1
16	12	9.6	7.8	7.4	8.6	21	273	421	119	24	5.1	4.6
17	12	9.1	7.8	7.4	8.7	18	283	380	109	26	4.7	4.4
18	11	8.5	7.8	7.4	9.5	17	204	426	100	19	4.3	4.3
19	10	8.5	7.8	7.4	10	16	162	496	98	18	4.0	5.3
20	9.7	8.5	7.8	7.4	10	14	149	558	92	18	4.4	5.8
21	9.4	8.4	7.8	7.4	11	15	176	582	88	17	6.4	6.0
22	11	8.4	7.8	7.4	11	18	355	532	84	16	6.0	9.8
23	11	8.3	7.7	7.4	11	23	536	423	79	20	5.2	11
24	11	8.2	7.7	7.4	12	30	559	390	74	16	5.6	21
25	11	8.2	7.7	7.4	13	31	546	385	69	14	6.7	25
26	10	8.2	7.6	7.4	13	38	442	393	65	14	6.7	22
27	9.2	8.1	7.6	7.2	14	48	325	389	61	16	5.0	19
28	8.8	8.1	7.6	7.0	14	72	265	373	54	12	4.2	26
29	8.6	8.1	7.6	7.2	---	103	351	356	49	10	3.9	21
30	8.2	8.0	7.6	7.4	---	199	568	333	46	9.2	6.8	21
31	12	---	7.5	7.2	---	293	---	319	---	8.6	7.7	---
TOTAL	353.5	281.4	241.9	228.6	258.4	1264	9298	15702	4654	744.8	199.7	342.3
MEAN	11.4	9.38	7.80	7.37	9.23	40.8	310	507	155	24.0	6.44	11.4
MAX	33	15	8.0	7.5	14	293	568	1060	313	45	12	33
MIN	4.9	8.0	7.5	7.0	6.8	14	149	319	46	8.6	3.9	4.3
AC-FT	701	558	480	453	513	2510	18440	31140	9230	1480	396	679
CAL YR 1985	TOTAL	25915.7		MEAN	71.0	MAX	887	MIN	3.1	AC-FT	51400	
WTR YR 1986	TOTAL	33568.6		MEAN	92.0	MAX	1060	MIN	3.9	AC-FT	66580	

09246920 FORTIFICATION CREEK NEAR FORTIFICATION, CO

LOCATION.--Lat 40°41'38", long 107°32'25", in NW¼NW¼ sec. 18, T.9 N., R.90 W., Moffat County, Hydrologic Unit 14050001, on right bank, 4.5 mi south of Fortification.

DRAINAGE AREA.--40.0 mi².

PERIOD OF RECORD.--October 1984 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 6,520 ft, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 15, 17, 19 to Feb. 18, May 18-26, and May 28 to July 16. Records fair except for estimated daily discharges, 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, 465 ft³/s, March 25, 1985, gage height 4.64 ft; minimum daily, 0.10 ft³/s, Sept 2, 1985.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 214 ft³/s at 2300 Feb. 18, gage height 3.52 ft; minimum daily, 0.34 ft³/s, Aug. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.3	5.1	2.0	2.0	3.0	33	54	63	95	20	.58	2.6
2	1.3	4.6	2.5	2.0	3.5	36	78	83	95	20	.89	1.4
3	1.1	5.1	3.0	2.0	3.5	41	60	105	90	20	1.0	.66
4	1.1	4.4	3.0	2.0	3.0	39	32	132	80	15	1.1	.65
5	.77	4.9	3.0	2.0	3.0	37	30	107	85	20	.99	.55
6	1.1	5.0	2.5	2.0	2.5	33	32	58	90	15	.76	.48
7	1.9	4.1	2.5	2.0	2.5	39	48	56	80	10	.88	.49
8	4.7	4.2	2.5	2.0	2.0	41	54	54	75	9.0	.91	.64
9	4.4	4.2	2.5	2.0	2.0	77	44	61	75	8.0	.92	1.3
10	6.6	3.5	1.5	2.0	2.0	40	39	57	70	7.0	.78	4.0
11	5.8	5.4	1.5	2.0	2.0	58	34	57	60	6.0	.59	2.6
12	5.6	6.0	1.5	2.0	2.0	30	34	63	60	5.0	.61	1.4
13	7.8	4.3	1.5	2.0	2.5	21	42	70	60	5.0	1.2	1.1
14	5.3	3.6	1.5	2.0	3.5	21	30	69	60	6.0	.76	.89
15	3.6	3.5	1.5	2.0	5.0	23	29	68	60	3.0	.58	.86
16	3.6	3.1	1.5	2.5	10	16	35	68	60	5.0	.51	.72
17	3.8	3.0	1.5	2.5	20	15	43	68	60	3.4	.35	.58
18	3.8	3.0	2.0	3.0	50	13	35	75	60	2.6	.34	.56
19	3.7	2.0	2.0	3.0	143	10	28	80	60	2.4	.36	.68
20	3.5	2.0	2.0	3.0	76	9.7	24	85	50	2.3	.38	.84
21	3.6	2.0	2.0	2.5	31	12	24	90	45	1.9	.40	.76
22	4.5	2.0	2.5	2.5	19	28	44	90	40	1.6	.47	.88
23	5.1	2.0	2.5	2.5	14	36	71	80	35	2.3	.51	1.6
24	4.5	2.0	2.5	2.5	42	38	64	80	30	1.8	.55	3.7
25	4.5	2.5	2.5	2.5	95	29	66	85	30	1.5	1.0	4.7
26	4.5	3.0	2.0	2.5	94	17	63	85	30	1.4	.56	3.9
27	4.6	3.0	2.0	2.5	70	21	44	84	30	1.0	.56	3.6
28	4.3	2.5	2.0	2.5	31	34	38	90	30	.74	.45	4.5
29	4.3	2.0	2.0	3.0	---	44	44	90	30	.61	.36	4.3
30	4.4	2.5	2.0	3.0	---	50	42	90	25	.62	.36	3.4
31	5.2	---	2.0	3.0	---	95	---	90	---	.60	.65	---
TOTAL	120.27	104.5	65.5	73.0	737.0	1036.7	1305	2433	1750	198.77	20.36	54.34
MEAN	3.88	3.48	2.11	2.35	26.3	33.4	43.5	78.5	58.3	6.41	.66	1.81
MAX	7.8	6.0	3.0	3.0	143	95	78	132	95	20	1.2	4.7
MIN	.77	2.0	1.5	2.0	2.0	9.7	24	54	25	.60	.34	.48
AC-FT	239	207	130	145	1460	2060	2590	4830	3470	394	40	108
CAL YR 1985	TOTAL	6691.26		MEAN	18.3	MAX	208	MIN	.10	AC-FT	13270	
WTR YR 1986	TOTAL	7898.44		MEAN	21.6	MAX	143	MIN	.34	AC-FT	15670	

09246920 FORTIFICATION CREEK NEAR FORTIFICATION, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--December 1985 to September 1986.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

		STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	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)		
DEC 03...	1545	3.8	573	8.0	1.0	11.7	190	50	16		
APR 30...	1150	42	226	7.8	7.5	10.0	80	22	6.1		
JUL 30...	1615	0.65	504	8.0	25.0	7.7	170	45	13		
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)	
DEC 03...	52	2	1.9	191	77	14	0.2	17	340		
APR 30...	13	0.7	1.8	88	19	4.1	<0.1	12	130		
JUL 30...	39	1	2.0	197	49	10	0.2	13	290		
DATE		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)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	
DEC 03...	0.47	3.5	0.20	0.16	0.05	0.35	0.4	0.05	3.7		
APR 30...	0.18	15	0.10	0.10	0.06	0.74	0.8	0.17	12		
JUL 30...	0.39	0.51	<0.10	<0.10	0.04	0.46	0.5	0.09	5.2		
DATE		ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	ANTI- MONY, TOTAL (UG/L AS SB)	ARSENIC TOTAL (UG/L AS AS)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA)	BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	COBALT, TOTAL RECOV- ERABLE (UG/L AS CO)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)
DEC 03...	430	<1	1	<100	<10	<1	8	1	4	490	
APR 30...	6300	<1	2	200	<10	1	17	8	18	7400	
DATE		*LEAD, TOTAL RECOV- ERABLE (UG/L AS Pb)	LITHIUM TOTAL RECOV- ERABLE (UG/L AS Li)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS Mn)	MERCURY TOTAL RECOV- ERABLE (UG/L AS Hg)	MOLYB- DENUM, TOTAL RECOV- ERABLE (UG/L AS Mo)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS Ni)	SELE- NIUM, TOTAL RECOV- ERABLE (UG/L AS Se)	SILVER, TOTAL RECOV- ERABLE (UG/L AS Ag)	STRON- TIUM, TOTAL RECOV- ERABLE (UG/L AS Sr)	ZINC, TOTAL RECOV- ERABLE (UG/L AS Zn)
DEC 03...	<1	20	410	2.3	<1	2	3	<1	500	<10	
APR 30...	5	--	200	0.2	<10	12	1	<1	210	40	

* The minimum reporting level for Lead was changed from <1 to <5 during June, 1986.

GREEN RIVER BASIN

09246920 FORTIFICATION CREEK NEAR FORTIFICATION, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE (DEG C)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE (DEG C)
OCT					APR				
01...	1720	1.3	530	9.0	07...	1235	42	245	6.5
NOV					MAY				
19...	1004	1.8	621	1.0	06...	1350	57	166	6.5
JAN					20...	1150	77	126	9.5
17...	1220	3.2	554	0.0	27...	1150	82	101	8.0
FEB					JUL				
18...	1345	37	331	0.0	17...	1205	4.1	284	19.0
26...	1215	70	411	0.5	SEP				
MAR					09...	1025	0.88	536	14.0
04...	2130	75	264	5.0					
27...	1445	14	455	11.0					

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)
DEC					APR				
03...	1545	3.8	42	0.43	07...	1055	42	690	78
JAN					MAY				
17...	1250	3.2	39	0.34	20...	1130	77	1190	247
FEB					27...	1135	82	526	116
21...	1310	19	263	13	JUL				
26...	1245	67	1180	213	22...	1435	2.3	51	0.32
MAR					30...	1615	0.65	27	0.05
04...	1940	75	2020	409	SEP				
11...	1915	101	3100	845	09...	1035	0.88	37	0.09

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .016 MM
FEB							
18...	1215	38	680	70	54	60	72
21...	1300	19	270	14	66	73	89
26...	1235	65	1160	204	61	74	93
MAR							
04...	1935	75	2000	405	63	75	94
11...	1900	108	3090	901	64	75	91
27...	1525	14	275	10	--	--	--
APR							
07...	1050	42	679	77	48	60	81
30...	1150	42	491	56	--	--	--
MAY							
06...	1125	56	662	100	--	--	--
20...	1125	77	1100	229	24	30	42
27...	1130	79	633	135	25	32	44
DATE		SED. SUSP. FALL DIAM. % FINER THAN .062 MM	SED. SUSP. FALL DIAM. % FINER THAN .125 MM	SED. SUSP. FALL DIAM. % FINER THAN .250 MM	SED. SUSP. FALL DIAM. % FINER THAN .500 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM
FEB							
18...		92	96	100	--	--	--
21...		--	--	--	--	99	100
26...		98	99	100	--	--	--
MAR							
04...		99	100	100	100	--	--
11...		98	99	100	--	--	--
27...		--	--	--	--	98	--
APR							
07...		97	100	100	--	--	--
30...		--	--	--	--	86	--
MAY							
06...		--	--	--	--	76	--
20...		64	83	99	100	--	--
27...		65	76	97	100	--	--

09247600 YAMPA RIVER BELOW CRAIG, CO.

LOCATION.--Lat 40°28'51", long 107°36'49", in SW¼NW¼ sec. 16, T.6 N., R.91 W., Moffat County, Hydrologic Unit 14050001, on left bank 0.5 mi downstream from state highway 13-789 bridge, and 3.3 mi southwest of Craig.

DRAINAGE AREA.--1750 mi²

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1975 to September 1980 (discharge measurements only), October 1984 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 6,100 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 21-25, 27, 28, Dec. 3, 4, and Dec. 10 to Feb. 20. Records good except for estimated daily discharges, which are poor. Natural flow of stream affected by diversions for irrigation, transbasin diversion, storage reservoirs, and return flow from irrigated areas.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,300 ft³/s May 6, 1985, gage height, 9.68 ft; minimum daily, 158 ft³/s, Sept. 2, 1985.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 9,950 ft³/s at 0200 June 8, gage height, 9.34 ft; minimum daily, 200 ft³/s, Dec. 11-13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	363	561	432	325	375	1150	5920	4550	7890	3570	600	325
2	332	538	421	325	375	1120	4920	5240	7970	3190	550	343
3	331	546	425	350	375	1200	5910	6220	8030	2850	513	333
4	320	513	430	325	350	1260	4310	7220	8440	2690	504	328
5	305	479	450	325	350	1280	3310	8020	8560	3080	492	315
6	290	511	441	325	325	1370	3110	6980	8530	3530	497	299
7	296	503	486	300	325	1520	3720	5640	9220	3230	513	284
8	377	499	449	300	300	1770	4270	5480	9340	2600	512	279
9	535	523	438	300	300	2240	4230	5000	8610	2230	537	286
10	540	513	250	325	275	2150	3950	4640	8110	2170	531	314
11	571	523	200	325	275	1590	3730	4180	6860	2000	512	354
12	682	590	200	325	275	1620	3830	4310	5960	1840	478	403
13	720	609	200	325	325	1330	4230	4600	6060	1660	440	382
14	782	506	250	325	375	1220	3860	4880	5880	1600	389	396
15	677	393	250	325	500	1230	3420	4910	5930	1470	355	381
16	555	374	250	350	700	1220	3330	4720	6040	1400	324	340
17	518	408	250	350	1000	1100	3580	4420	5950	1490	297	332
18	526	492	250	325	1200	1120	3580	4110	5900	1360	283	362
19	523	381	300	350	1700	1020	3130	4440	5790	1230	278	365
20	496	341	325	350	1900	977	2770	5340	5360	1220	268	368
21	469	350	350	325	2150	999	2640	6410	5120	1150	280	370
22	467	350	350	300	1720	1070	2880	7380	4920	1100	374	376
23	470	375	350	300	1370	1330	4010	7170	4580	1070	374	437
24	462	500	350	325	1090	1830	4870	6270	4310	1030	345	434
25	455	575	350	300	1140	2350	5070	6270	4080	993	332	483
26	444	584	325	325	1570	2160	5160	6710	4090	993	344	495
27	471	600	325	325	1540	2050	4520	7220	4390	971	342	505
28	494	650	325	325	1360	2470	3760	7580	4020	931	299	516
29	495	556	350	325	---	3110	3470	7900	4160	818	255	560
30	495	529	350	350	---	3730	3830	8100	4110	717	254	548
31	495	---	350	350	---	4660	---	7840	---	641	299	---
TOTAL	14956	14872	10472	10100	23540	53246	119320	183750	188210	54824	12371	11513
MEAN	482	496	338	326	841	1718	3977	5927	6274	1769	399	384
MAX	782	650	486	350	2150	4660	5920	8100	9340	3570	600	560
MIN	290	341	200	300	275	977	2640	4110	4020	641	254	279
AC-FT	29670	29500	20770	20030	46690	105600	236700	364500	373300	108700	24540	22840
CAL YR 1985	TOTAL	658656		MEAN	1805	MAX	9830	MIN	158	AC-FT	1306000	
WTR YR 1986	TOTAL	697174		MEAN	1910	MAX	9340	MIN	200	AC-FT	1383000	

GREEN RIVER BASIN

09249450 WADDLE CREEK NEAR PAGODA, CO.

LOCATION.--Lat 40°17'44", long 107°30'44", in SE¼SW¼ sec. 21, T.4 N., R.90 W., Moffat County, Hydrologic Unit 14050001, on right bank 12.5 mi southwest of Hamilton.

DRAINAGE AREA.--5.24 mi²

PERIOD OF RECORD.--October 1985 to September 1986 (discontinued).

GAGE.--Water-stage recorder. Elevation of gage is 7,040 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 11-13, 15-23, 25-30, and Dec. 1 to Apr. 7. Records fair except for estimated daily discharges, which are poor. No diversions upstream from gage.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 11 ft³/s at 2200 April 25, gage height, 2.22 ft; minimum daily, 0.30 ft³/s, Dec. 12-14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.67	.63	.60	.60	.60	1.2	4.0	6.0	2.5	1.5	.78	.74
2	.65	.63	.60	.60	.60	1.2	3.9	5.9	2.4	1.5	.78	.73
3	.64	.59	.60	.60	.60	1.2	3.8	5.8	2.3	1.4	.86	.72
4	.65	.56	.60	.60	.60	1.2	3.8	5.8	2.2	1.5	.84	.69
5	.66	.69	.60	.60	.60	1.2	3.0	5.4	2.2	2.0	.81	.64
6	.65	.62	.60	.60	.60	1.4	3.0	4.9	2.2	1.9	.81	.64
7	1.3	.60	.60	.60	.60	1.7	3.5	4.8	2.1	1.5	.84	.73
8	1.3	.61	.60	.60	.60	2.0	4.5	4.1	2.0	1.5	1.0	.79
9	1.3	.65	.60	.60	.60	3.0	4.4	4.6	2.2	1.5	.93	.82
10	1.3	.62	.60	.60	.60	1.8	4.8	4.0	2.5	1.4	.82	1.3
11	1.7	.60	.40	.60	.60	1.2	4.9	3.6	2.1	1.4	.79	.84
12	1.4	.60	.30	.60	.60	1.2	5.1	3.5	2.0	1.3	.87	.77
13	1.5	.60	.30	.60	.60	1.2	5.3	3.3	2.0	1.3	.84	.72
14	1.2	.50	.30	.60	.65	1.2	4.8	3.3	2.0	1.2	.73	.69
15	1.1	.50	.40	.60	.80	1.2	4.5	3.3	1.9	1.3	.71	.66
16	1.1	.50	.50	.60	.70	.80	4.8	3.7	1.8	1.5	.68	.64
17	.97	.50	.60	.60	.60	.70	5.2	3.3	1.8	1.3	.66	.59
18	.91	.50	.60	.60	.90	.80	5.4	3.1	1.8	1.2	.63	.61
19	.87	.50	.60	.60	1.5	.80	4.8	2.9	1.8	1.2	.64	.60
20	.85	.50	.60	.60	6.0	.80	4.6	2.8	1.7	1.2	.93	.59
21	.82	.50	.60	.60	1.0	1.2	5.1	2.7	1.7	1.1	1.1	.67
22	.94	.50	.60	.60	.80	1.5	6.0	2.7	1.7	1.1	.84	.67
23	.80	.50	.60	.60	.75	1.6	7.1	2.7	1.7	1.1	.77	.64
24	.69	.54	.60	.60	.75	1.7	7.6	2.7	1.7	1.1	.78	.85
25	.61	.60	.60	.60	.80	1.7	9.3	2.6	1.7	1.1	1.0	.74
26	.60	.60	.60	.60	.90	1.7	9.1	2.6	1.7	1.1	.82	.91
27	.58	.60	.60	.60	1.5	1.7	8.0	2.6	1.6	.97	.75	.76
28	.58	.60	.60	.60	1.5	1.8	7.0	2.6	1.6	.91	.71	1.2
29	.57	.60	.60	.60	---	1.9	6.5	2.6	1.6	.83	.80	.90
30	.57	.60	.60	.60	---	3.0	6.0	2.6	1.6	.80	.82	.80
31	.72	---	.60	.60	---	3.5	---	2.5	---	.78	.75	---
TOTAL	28.20	17.14	17.20	18.60	26.95	47.10	159.8	113.0	58.1	39.49	25.09	22.65
MEAN	.91	.57	.55	.60	.96	1.52	5.33	3.65	1.94	1.27	.81	.75
MAX	1.7	.69	.60	.60	6.0	3.5	9.3	6.0	2.5	2.0	1.1	1.3
MIN	.57	.50	.30	.60	.60	.70	3.0	2.5	1.6	.78	.63	.59
AC-FT	56	34	34	37	53	93	317	224	115	78	50	45
WTR YR 1986 TOTAL	573.32		MEAN		1.57	MAX	9.3	MIN	.30	AC-FT	1140	

09249455 DEEP ROCK GULCH NEAR HAMILTON, CO.

LOCATION.--Lat 40°17'49", long 107°31'11", in SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 20, T.4 N., R.90 W., Moffat County, Hydrologic Unit 14050001, on left bank 12.5 mi southwest of Hamilton.

DRAINAGE AREA.--3.53 mi²

PERIOD OF RECORD.--October 1985 to September 1986 (discontinued).

GAGE.--Water-stage recorder. Elevation of gage is 7,000 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 9 to Jan. 29, Feb. 2-13, Mar. 15, and Apr. 27-29. Records good except for flows above 10ft³/s, which are fair, and estimated daily discharges, which are poor. No diversions upstream from gage.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 18 ft³/s at 0530 April 25, gage height, 1.08 ft; minimum daily, 0.20 ft³/s, Dec. 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.49	.92	.60	.30	.32	.57	3.7	7.1	3.0	1.2	.72	.49
2	.52	1.0	.60	.30	.30	.59	3.6	8.0	3.0	1.0	.68	.49
3	.50	.94	.60	.30	.30	.56	3.4	8.6	2.9	1.1	.65	.49
4	.42	.88	.60	.30	.30	.58	3.4	10	2.8	1.1	.65	.49
5	.40	.92	.60	.30	.30	.56	2.1	9.5	2.7	1.3	.65	.49
6	.43	1.0	.60	.30	.30	.64	2.1	8.7	2.7	1.2	.65	.49
7	3.4	.90	.60	.30	.30	.72	1.9	8.4	2.7	1.2	.65	.56
8	1.6	.88	.60	.30	.30	.97	2.3	6.9	2.5	1.1	.63	.59
9	1.8	1.0	.60	.30	.30	1.9	2.4	7.3	2.5	1.1	.59	.60
10	1.6	1.0	.50	.30	.30	1.2	2.9	6.8	2.5	1.1	.59	.71
11	4.2	1.0	.40	.30	.30	.81	3.0	6.1	2.5	1.0	.59	.57
12	2.3	1.0	.30	.30	.30	.79	3.2	5.3	2.2	1.0	.59	.54
13	2.8	1.0	.20	.30	.30	.86	4.6	5.5	2.1	1.0	.59	.54
14	1.5	1.0	.30	.30	.31	.77	4.2	5.3	2.1	.97	.59	.54
15	1.2	.80	.30	.30	.38	.80	3.7	5.4	2.1	.99	.59	.55
16	1.1	.80	.30	.30	.35	.54	4.7	5.6	2.0	1.0	.59	.54
17	.97	.80	.30	.30	.37	.47	6.4	5.4	2.0	.97	.59	.60
18	.82	.80	.30	.30	.63	.60	5.7	5.0	2.0	.97	.59	.65
19	.98	.70	.30	.30	.87	.56	5.9	4.7	1.9	.96	.58	.65
20	.74	.70	.30	.30	4.8	.59	6.6	4.6	1.8	.90	.64	.65
21	.65	.70	.30	.30	.73	.76	7.5	4.5	1.7	.94	.61	.65
22	1.2	.70	.30	.30	.66	.90	9.2	4.5	1.7	.96	.54	.65
23	.74	.70	.30	.30	.55	1.0	11	4.4	1.7	.90	.54	.65
24	.80	.80	.30	.30	.55	1.3	13	4.2	1.5	.87	.54	.75
25	.88	.90	.30	.30	.63	1.4	16	3.8	1.5	.82	.56	.71
26	.88	.90	.30	.30	.68	1.4	17	3.6	1.5	.77	.49	.71
27	.88	.80	.30	.30	.75	1.3	15	3.4	1.4	.80	.49	.71
28	.88	.80	.30	.30	.74	1.5	13	3.3	1.3	.82	.49	.76
29	.88	.80	.30	.30	---	1.6	8.0	3.2	1.3	.77	.51	.74
30	.88	.80	.30	.30	---	2.2	6.6	3.1	1.2	.73	.52	.71
31	.88	---	.30	.30	---	2.5	---	3.0	---	.72	.52	---
TOTAL	37.32	25.94	12.20	9.30	16.92	30.94	192.1	175.2	62.8	30.26	18.21	18.27
MEAN	1.20	.86	.39	.30	.60	1.00	6.40	5.65	2.09	.98	.59	.61
MAX	4.2	1.0	.60	.30	4.8	2.5	17	10	3.0	1.3	.72	.76
MIN	.40	.70	.20	.30	.30	.47	1.9	3.0	1.2	.72	.49	.49
AC-FT	74	51	24	18	34	61	381	348	125	60	36	36
WTR YR 1986 TOTAL	629.46			MEAN	1.72	MAX	17	MIN	.20	AC-FT	1250	

GREEN RIVER BASIN

09249750 WILLIAMS FORK RIVER AT MOUTH NEAR HAMILTON, CO.

LOCATION.--Lat 40°26'14", Long 107°38'50", in SE¼NW¼ sec.31, T.6 N., R.91 W., Moffat County, Hydrologic Unit 14050001, on left bank at coal mine service road crossing, 2,300 ft upstream from confluence with Yampa River, and 6.1 mi north-northeast of Hamilton, Co.

DRAINAGE AREA.--419 mi².

PERIOD OF RECORD.--February 1984 to current year.

GAGE.--Water stage recorder. Elevation of gage is 6,170 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 17-23, Dec. 11, 14-17, 19-29, 31, Jan. 1-5, 8-12, 14, 17, 19-22, 24-28, and Feb 5-12. Records good except for estimated daily discharges, which are fair.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge 4,750 ft³/s, May 16, 1984, gage height, 9.96 ft; minimum daily, 55 ft³/s, Feb. 22, 23, Mar. 6, 7, 1984, and Feb. 7, 1986

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ft³/s, and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 5	0700	*1,980	*7.20	May 22	0900	1,740	6.85

Minimum daily discharge, 55 ft³/s, Feb. 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	82	106	83	65	84	114	481	969	1230	410	110	98
2	80	87	104	65	87	127	446	1110	1170	361	107	94
3	78	101	108	70	79	123	481	1400	1170	332	105	88
4	76	94	95	65	78	114	421	1620	1280	320	108	80
5	75	97	66	60	75	121	375	1720	1260	422	103	74
6	71	111	87	62	60	120	384	1300	1180	484	99	69
7	81	95	101	63	55	129	414	1130	1200	488	101	68
8	132	99	99	65	60	134	430	952	1130	362	100	79
9	134	103	92	70	65	205	431	840	1090	334	101	91
10	136	86	64	70	65	178	437	760	1040	374	97	94
11	160	124	65	70	70	162	435	734	913	301	92	113
12	164	138	65	70	75	149	422	779	822	273	84	99
13	163	113	56	70	73	127	459	787	834	258	90	84
14	143	78	80	65	75	124	419	956	803	248	91	77
15	115	81	90	65	108	133	414	963	791	231	84	70
16	116	86	85	67	136	116	422	884	799	241	80	68
17	115	85	85	65	118	122	486	790	801	262	77	64
18	110	85	85	73	186	124	478	747	771	229	73	65
19	105	80	85	70	209	106	449	848	767	225	70	67
20	102	85	75	70	176	112	415	1140	726	212	69	67
21	101	85	75	70	138	116	409	1340	692	209	131	69
22	108	85	75	70	123	133	514	1540	639	199	123	112
23	111	95	70	62	135	165	684	1350	600	188	107	97
24	99	104	70	65	125	198	815	1190	562	173	92	126
25	95	127	70	70	140	228	882	1160	543	175	98	113
26	92	137	65	70	152	196	866	1300	553	169	105	113
27	94	106	65	60	152	194	719	1340	526	165	84	115
28	92	115	65	65	118	222	631	1360	470	150	78	124
29	95	110	65	70	---	272	646	1370	445	132	84	136
30	95	102	69	74	---	325	753	1230	431	122	106	118
31	107	---	70	80	---	414	---	1200	---	115	112	---
TOTAL	3327	3000	2429	2096	3017	5103	15618	34809	25238	8164	2961	2732
MEAN	107	100	78.4	67.6	108	165	521	1123	841	263	95.5	91.1
MAX	164	138	108	80	209	414	882	1720	1280	488	131	136
MIN	71	78	56	60	55	106	375	734	431	115	69	64
AC-FT	6600	5950	4820	4160	5980	10120	30980	69040	50060	16190	5870	5420
CAL YR 1985	TOTAL	128113		MEAN	351	MAX	2630	MIN	56	AC-FT	254100	
WTR YR 1986	TOTAL	108494		MEAN	297	MAX	1720	MIN	55	AC-FT	215200	

09249750 WILLIAMS FORK AT MOUTH NEAR HAMILTON, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--June 1975 to September 1980, December 1985 to September 1986.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

		STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	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)	
DEC										
03...	1115	110	846	8.5	0.5	11.1	380	76	47	
JUN										
04...	1400	1350	225	8.0	11.5	8.9	91	22	8.7	
JUL										
31...	1450	111	547	8.3	22.0	6.8	250	52	30	
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)
DEC										
03...	39	0.9	2.5	228	220	9.7	0.2	13	540	
JUN										
04...	5.7	0.3	0.8	84	34	1.4	0.1	8.7	130	
JUL										
31...	28	0.8	1.7	173	130	5.3	0.2	12	360	
DATE		SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)
DEC										
03...	0.74	162	<0.01	0.48	0.07	0.43	0.5	<0.01	<0.01	
JUN										
04...	0.18	480	<0.01	0.11	<0.01	--	0.4	0.02	<0.01	
JUL										
31...	0.49	109	<0.01	<0.10	0.03	0.27	0.3	0.01	<0.01	
DATE		CYANIDE TOTAL (UG/L AS CN)	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA)	BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	COBALT, TOTAL RECOV- ERABLE (UG/L AS CO)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)
DEC										
03...	<0.01	410	<1	<100	<10	<1	<10	<1	3	
DATE		IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	*LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	LITHIUM TOTAL RECOV- ERABLE (UG/L AS LI)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MOLYB- DENUM, TOTAL RECOV- ERABLE (UG/L AS MO)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI)	SELE- NIUM, TOTAL RECOV- ERABLE (UG/L AS SE)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)
DEC										
03...	680	<1	30	90	0.6	<1	1	2	<10	
DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE (DEG C)	DATE		TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE (DEG C)
OCT					MAY					
04...	1110	76	782	8.5	21...		1305	1470	269	8.5
25...	1325	94	792	8.5	JUL					
NOV					21...		1440	207	535	21.0
20...	1245	84	919	0.0	AUG					
JAN					18...		1545	74	--	23.0
09...	1435	76	882	0.5	SEP					
MAR					02...		1435	96	655	18.0
05...	1445	130	926	8.5	09...		1500	87	670	17.5
APR					16...		1430	68	691	16.5
23...	1740	730	488	7.5						

* The minimum reporting level for Lead was changed from <1 to <5 during June, 1986.

GREEN RIVER BASIN

09250000 MILK CREEK NEAR THORNBURGH, CO

LOCATION.--Lat 40°11'37", long 107°43'57", in NE¼ sec.32, T.3 N., R.92 W., Rio Blanco County, Hydrologic Unit 14050002, on right bank 2.2 mi southwest of Thornburgh and 3.0 mi upstream from Little Creek.

DRAINAGE AREA.--65 mi², approximately.

PERIOD OF RECORD.--Streamflow records, October 1952 to September 1986 (discontinued). Water-quality data available, May to September 1982. Published as "near Thornburg" October 1952 to September 1968.

GAGE.--Water-stage recorder. Datum of gage is 6,599.32 ft above National Geodetic Vertical Datum of 1929 (levels by U.S. Bureau of Reclamation).

REMARKS.--Estimated daily discharges: Oct. 1-17, Dec. 4 to Jan. 25, Feb. 1-6, and Aug. 25 to Sept 10. Records good except for estimated daily discharges, which are poor. Diversion for irrigation of about 1,320 acres upstream from station.

AVERAGE DISCHARGE.--34 years, 29.8 ft³/s; 21,590 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,580 ft³/s, May 14, 1984, gage height, 7.36 ft, from rating curve extended above 540 ft³/s, on basis of slope-area determination of peak flow; minimum daily discharge, 0.20 ft³/s, for several days in 1956, 1963, and 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 250 ft³/s, and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Apr. 3	0300	386	4.00	May 4	2400	*568	*4.71
Apr. 23	2400	303	3.62	May 21	2400	379	3.97

Minimum daily discharge, 1.5 ft³/s, Oct. 2, 4-6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.8	11	6.5	6.0	7.5	21	134	262	197	27	8.0	20
2	1.5	8.8	6.3	6.0	10	22	162	306	179	25	7.6	15
3	1.6	9.4	6.3	6.0	10	22	210	367	179	22	7.9	10
4	1.5	9.4	6.3	6.0	9.5	20	125	414	183	22	7.5	9.0
5	1.5	9.1	6.3	6.0	9.0	23	126	349	173	41	7.1	8.5
6	1.5	10	6.3	6.0	9.0	25	119	271	148	52	6.9	7.5
7	2.2	8.7	6.2	6.0	8.9	25	125	225	134	36	6.7	18
8	5.3	8.5	6.2	6.0	6.7	26	128	188	111	27	6.4	29
9	6.3	19	6.2	6.0	6.6	53	129	184	105	29	7.3	20
10	8.2	9.7	6.2	6.0	6.5	44	136	154	147	29	6.7	13
11	17	13	6.2	5.9	6.5	40	133	159	109	21	5.8	9.2
12	19	28	6.2	6.0	6.3	36	141	175	95	19	5.4	7.2
13	17	18	6.2	6.0	6.0	30	156	171	92	17	5.7	5.6
14	15	16	6.2	6.0	5.8	30	126	207	83	17	5.4	5.1
15	14	11	6.2	6.0	15	34	121	208	76	18	5.3	4.3
16	13	13	6.1	6.5	55	31	135	192	72	26	5.0	4.1
17	10	12	6.1	7.0	26	31	151	166	69	25	4.3	4.1
18	8.8	15	6.1	7.2	61	28	141	162	68	18	3.9	4.1
19	8.5	11	6.1	7.2	87	20	126	196	64	18	3.4	4.8
20	8.3	12	6.1	7.0	55	24	108	249	59	16	6.7	4.9
21	8.1	13	6.5	6.7	41	42	119	287	52	19	17	4.5
22	9.4	14	7.0	6.3	27	77	179	297	45	15	12	6.2
23	10	13	7.0	6.0	27	88	240	263	42	15	7.9	8.3
24	8.6	16	7.0	5.9	24	73	251	248	39	14	6.7	13
25	8.6	18	6.5	5.7	44	60	240	248	39	14	6.0	12
26	8.4	23	6.0	5.6	39	47	221	247	42	13	5.5	9.6
27	8.3	29	6.0	5.4	31	48	185	251	34	13	5.0	10
28	8.3	16	6.0	5.4	22	58	165	248	31	12	4.8	12
29	8.4	6.6	6.0	5.2	---	76	155	223	30	10	10	13
30	8.6	6.6	6.0	5.0	---	89	206	201	29	8.6	20	10
31	10	---	6.0	5.5	---	125	---	198	---	8.3	30	---
TOTAL	258.7	407.8	194.3	187.5	662.3	1368	4693	7316	2726	646.9	247.9	302.0
MEAN	8.35	13.6	6.27	6.05	23.7	44.1	156	236	90.9	20.9	8.00	10.1
MAX	19	29	7.0	7.2	87	125	251	414	197	52	30	29
MIN	1.5	6.6	6.0	5.0	5.8	20	108	154	29	8.3	3.4	4.1
AC-FT	513	809	385	372	1310	2710	9310	14510	5410	1280	492	599
CAL YR 1985	TOTAL	20236.18		MEAN	55.4	MAX	472	MIN	.66	AC-FT	40140	
WTR YR 1986	TOTAL	19010.4		MEAN	52.1	MAX	414	MIN	1.5	AC-FT	37710	

09250507 WILSON CREEK ABOVE TAYLOR CREEK, NEAR AXIAL, CO

LOCATION.--Lat 40°18'53", long 107°47'58", in NW¼SW¼ sec.14, T.4 N., R.93 W., Moffatt County, Hydrologic Unit 14050002, on left bank about 200 ft upstream from Moffat County Road 17, about 50 ft upstream from confluence of Taylor Creek, and 2.4 mi north of Axial.

DRAINAGE AREA.--20.0 mi².

PERIOD OF RECORD.--October 1980 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 6,315 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 9-16, 19-27, Dec. 1, 4-13, Jan. 4-6, 8, 9, 12-14, 21, 22, 24-28, Feb. 4-11, 15, 21, Mar. 9, 20, 21, and Apr. 4. Records fair except for estimated daily discharges, which are poor.

AVERAGE DISCHARGE.--6 years, 7.12 ft³/s; 5,160 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 352 ft³/s, May 14, 1984 gage height, 8.71 ft, on basis of indirect measurement of peak flow; minimum daily, 0.15 ft³/s, Mar. 20, 21, 1982.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 52 ft³/s at 0500 Apr. 25, gage height, 3.34 ft; maximum gage height, 5.77 ft at 0545 Nov. 23 (backwater from ice); minimum daily discharge, 1.3 ft³/s, Sept. 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.8	2.5	2.5	2.0	2.5	4.5	18	41	10	5.0	3.4	3.2
2	2.6	2.4	2.6	2.2	2.5	4.3	22	41	6.0	4.8	3.4	3.1
3	2.3	2.7	2.6	2.2	2.4	4.2	22	40	3.0	4.8	3.3	2.5
4	1.8	2.6	2.5	1.5	2.5	4.3	22	43	3.3	4.8	3.2	1.7
5	1.7	2.5	2.5	2.0	2.5	4.4	22	39	3.2	5.1	3.2	1.7
6	1.8	2.4	2.5	2.0	2.5	4.5	24	36	3.5	6.7	3.2	1.8
7	2.5	2.3	2.5	2.0	2.5	4.7	26	34	4.2	4.5	3.2	1.8
8	3.0	2.5	2.5	2.0	2.0	5.1	27	31	4.0	4.3	3.3	1.9
9	2.7	2.5	2.5	2.0	2.0	4.5	27	31	3.9	4.6	3.2	1.8
10	2.8	2.5	2.0	2.0	2.0	5.7	28	30	4.6	4.3	3.0	2.3
11	3.6	2.5	2.0	2.1	2.0	5.6	29	29	3.6	4.3	3.0	1.9
12	2.9	2.5	1.5	2.0	2.6	5.5	30	28	3.7	4.1	3.1	1.8
13	4.5	2.5	1.5	2.0	2.4	5.3	33	28	3.6	4.1	3.1	1.8
14	2.9	2.5	2.0	2.0	2.8	5.8	32	27	3.4	4.1	3.0	1.7
15	2.6	2.5	1.8	2.2	3.0	5.8	30	26	3.2	3.8	2.8	1.7
16	2.6	2.5	1.8	2.3	3.7	5.4	29	26	2.8	4.3	2.9	1.8
17	2.5	2.5	1.8	2.4	3.4	5.6	31	25	2.2	4.1	2.8	1.8
18	2.4	2.5	2.1	2.5	3.5	5.3	31	24	1.5	4.0	2.9	1.8
19	2.1	2.0	2.1	2.5	4.4	5.1	30	24	3.0	4.0	3.3	1.8
20	2.3	2.0	2.1	2.5	4.0	6.0	30	23	4.5	4.0	5.0	1.7
21	2.2	2.0	2.1	2.5	4.0	6.0	32	22	4.4	4.1	4.5	1.7
22	2.4	2.0	2.2	2.5	4.4	5.9	36	21	4.5	4.1	3.4	1.9
23	2.1	2.0	2.2	2.6	4.0	7.2	47	20	4.5	3.9	3.1	1.9
24	2.3	2.9	2.3	2.5	3.8	7.2	48	20	4.7	3.8	3.6	2.7
25	2.1	3.0	2.1	2.5	4.1	7.6	47	18	4.9	3.8	3.7	2.1
26	2.1	3.0	2.1	2.5	4.4	7.7	45	17	5.0	3.8	3.4	2.1
27	2.1	3.0	2.2	2.5	4.3	8.1	43	17	5.0	3.7	3.3	2.0
28	2.1	3.0	2.3	2.5	4.6	9.4	40	15	5.0	3.5	3.1	1.3
29	2.1	2.7	2.3	2.6	---	11	39	13	5.1	3.0	3.3	2.4
30	2.1	2.4	2.4	2.8	---	12	40	12	4.9	3.0	3.0	2.1
31	2.6	---	2.2	3.1	---	16	---	11	---	3.4	2.9	---
TOTAL	76.6	74.9	67.8	71.0	88.8	199.7	960	812	125.2	129.8	101.6	59.8
MEAN	2.47	2.50	2.19	2.29	3.17	6.44	32.0	26.2	4.17	4.19	3.28	1.99
MAX	4.5	3.0	2.6	3.1	4.6	16	48	43	10	6.7	5.0	3.2
MIN	1.7	2.0	1.5	1.5	2.0	4.2	18	11	1.5	3.0	2.8	1.3
AC-FT	152	149	134	141	176	396	1900	1610	248	257	202	119
CAL YR 1985 TOTAL	3511.4											
WTR YR 1986 TOTAL	2767.2											
MEAN					9.62							
MAX					7.58							
MIN							97		1.5		6960	
AC-FT							48		1.3		5490	

GREEN RIVER BASIN

09250510 TAYLOR CREEK AT MOUTH, NEAR AXIAL, CO

LOCATION.--Lat 40°18'48", long 107°47'57", in NW¼SW¼ sec.14, T.4 N., R.93 W., Moffatt County, Hydrologic Unit 14050002, on right bank 475 ft upstream from confluence with Wilson Creek, about 1,000 ft southwest of Gossard ranch house, and 2 mi north of Axial.

DRAINAGE AREA.--7.22 mi².

PERIOD OF RECORD.--Streamflow records, July 1975 to current year. Water-quality data available, July 1975 to September 1981.

GAGE.--Water-stage recorder. Elevation of gage is 6,300 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Mar. 28, 1980, gage 25 ft upstream at datum 1.00 ft higher, Mar. 28, 1980 to Apr. 1, 1985 at same site at datum 1.08 ft higher, Apr. 1, 1985 to Sept. 17, 1986 at same site at datum 1.00 ft higher.

REMARKS.--Estimated daily discharges: Nov. 8 to Feb. 24, Mar. 1-5, 9, 11-20, May 27, 28, July 12-28, 31 to Aug. 2, 6-16, and Aug. 18 to Sept. 3. Records fair except for estimated daily discharges, which are poor. No diversions upstream from station. Low dam to prevent erosion, 75 ft upstream. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--11 years, 0.68 ft³/s; 493 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 41 ft³/s, May 15, 1984, gage height, 3.33 ft, present datum; no flow many days most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 12 ft³/s at 1945 August 20, gage height, 3.27 ft; minimum daily, 0.04 ft³/s, Sept. 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.1	.38	.20	.20	.20	.80	.86	6.0	2.6	1.2	.25	.20
2	.95	.33	.25	.20	.20	.50	1.3	6.0	2.4	1.1	.30	.20
3	.49	.25	.30	.20	.20	.30	1.7	5.9	2.4	1.0	.66	.20
4	.44	.18	.30	.20	.20	.30	1.6	6.0	2.3	.99	.46	.27
5	.45	.29	.20	.20	.20	.20	1.6	6.0	2.1	1.2	.30	.24
6	.40	.38	.20	.20	.20	.20	1.5	6.0	2.6	1.5	.25	.28
7	.78	.29	.20	.20	.15	.21	1.5	6.1	2.1	1.1	.20	.57
8	.77	.25	.20	.20	.10	.26	1.5	6.0	2.3	.79	.20	.60
9	1.1	.20	.20	.20	.10	.50	1.8	6.0	2.9	.88	.20	.36
10	1.5	.20	.15	.20	.10	.48	2.3	5.8	3.5	.84	.20	.38
11	.96	.20	.10	.20	.10	.50	2.7	5.6	2.8	.72	.20	.50
12	.75	.20	.05	.20	.10	.50	3.1	5.2	2.3	.60	.20	.27
13	1.4	.25	.05	.20	.15	.50	3.7	5.1	2.3	.58	.20	.25
14	.85	.25	.10	.20	.20	.40	3.7	5.0	2.2	.56	.20	.28
15	1.8	.25	.15	.20	.20	.50	3.8	4.8	2.0	.54	.20	.31
16	.95	.20	.15	.20	.25	.50	4.2	4.6	2.0	.52	.20	.23
17	.93	.20	.15	.20	.25	.50	4.8	4.4	1.7	.50	.29	.27
18	.16	.20	.15	.20	.30	.50	4.8	4.2	1.6	.48	.25	.30
19	.13	.20	.15	.20	.40	.50	4.7	4.1	1.6	.46	.20	.04
20	.30	.20	.15	.20	.50	.50	4.7	4.0	1.2	.44	1.7	.69
21	.20	.20	.15	.20	.40	.53	4.7	4.0	1.2	.42	1.7	.76
22	.07	.20	.15	.20	.40	.52	5.0	3.9	1.0	.40	.40	.58
23	.34	.20	.15	.20	.40	.46	5.5	3.9	1.0	.38	.30	.17
24	.05	.35	.15	.20	.75	.46	5.6	3.7	1.2	.36	.20	.35
25	.78	.30	.15	.20	1.7	.49	6.0	3.7	1.9	.34	.50	.46
26	.56	.30	.15	.20	1.2	.53	6.1	3.5	1.8	.32	.40	.74
27	.85	.30	.15	.20	1.2	.50	6.0	2.5	1.4	.32	.30	.50
28	.55	.30	.15	.20	1.1	.46	5.8	2.0	.95	.32	.20	1.3
29	.29	.30	.20	.20	---	.47	5.8	2.3	1.3	.31	.20	.66
30	.67	.30	.20	.20	---	.61	6.0	2.2	1.2	.28	.20	.36
31	.94	---	.20	.20	---	.73	---	2.7	---	.25	.20	---
TOTAL	21.51	7.65	5.20	6.20	11.25	14.41	112.36	141.2	57.85	19.70	11.26	12.32
MEAN	.69	.25	.17	.20	.40	.46	3.75	4.55	1.93	.64	.36	.41
MAX	1.8	.38	.30	.20	1.7	.80	6.1	6.1	3.5	1.5	1.7	1.3
MIN	.05	.18	.05	.20	.10	.20	.86	2.0	.95	.25	.20	.04
AC-FT	43	15	10	12	22	29	223	280	115	39	22	24
CAL YR 1985	TOTAL	738.30		MEAN	2.02	MAX	20	MIN	.00	AC-FT	1460	
WTR YR 1986	TOTAL	420.91		MEAN	1.15	MAX	6.1	MIN	.04	AC-FT	835	

09251000 YAMPA RIVER NEAR MAYBELL, CO

LOCATION.--Lat 40°30'10", long 108°01'45", in NW¼ sec.2, T.6 N., R.95 W., Moffat County, Hydrologic Unit 14050002, on left bank 100 ft downstream from bridge on U.S. Highway 40, 2.0 mi downstream from Lay Creek, and 3.0 mi east of Maybell.

DRAINAGE AREA.--3,410 mi², approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1904 to October 1905, June 1910 to November 1912, April 1916 to current year. Monthly discharge only for some periods, published in WSP 1313. No winter records prior to 1917.

GAGE.--Water-stage recorder. Datum of gage is 5,900.23 ft above National Geodetic Vertical Datum of 1929. See WSP 1733 for history of changes prior to Mar. 9, 1937.

REMARKS.--Estimated daily discharges: Nov. 25-29, Dec. 7-9, and Dec 12 to Feb. 21. Records good except for estimated daily discharges, which are poor. Natural flow of stream affected by transbasin diversions, numerous storage reservoirs, and diversions upstream from station for irrigation of about 65,000 acres upstream from, and about 800 acres downstream from station.

AVERAGE DISCHARGE.--70 years (water years 1917-86), 1,595 ft³/s; 1,156,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 25,100 ft³/s, May 17, 1984, gage height, 12.42 ft; minimum daily, 2.0 ft³/s, July 17-19, 1934.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 7,000 ft³/s, and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Feb. 20	1700	ice jam	*8.99	Apr. 3	2230	7,280	7.14
May 6	0200	10,300	8.47	June 8	1500	*11,000	8.76

Minimum daily discharge, 300 ft³/s, Dec. 12-14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	496	750	534	475	525	1580	6510	5670	9070	4230	858	433
2	423	795	658	450	550	1420	5830	6660	9190	3800	796	421
3	373	683	880	450	550	1450	6360	7700	9050	3450	744	434
4	369	703	917	475	550	1520	6060	8810	9520	3210	705	409
5	397	666	812	450	525	1540	4350	9860	9790	3230	692	406
6	386	653	682	450	525	1630	3800	9610	9650	4270	671	380
7	360	723	700	450	475	1670	3990	7880	10100	3950	727	348
8	456	666	700	450	475	1900	4650	7220	10400	3430	759	340
9	743	737	650	450	450	2360	4980	6690	9840	2950	753	344
10	852	751	551	450	450	3070	4700	6250	9560	2770	787	415
11	888	695	338	450	425	2320	4520	5580	8500	2630	742	462
12	986	832	300	450	425	1990	4350	5340	7220	2360	691	532
13	1120	936	300	450	425	1880	4760	5810	6950	2140	642	550
14	1140	855	300	450	500	1620	5020	6080	7110	1990	592	449
15	1070	671	360	450	600	1610	4240	6540	6760	1900	530	413
16	940	555	380	450	725	1610	4000	6310	7030	1810	500	449
17	840	560	370	475	900	1470	4220	6080	6970	1780	454	450
18	737	680	370	475	1200	1430	4540	5370	6890	1820	410	470
19	751	701	370	475	1500	1410	4150	5450	6820	1600	367	467
20	733	459	425	500	2200	1260	3720	6470	6560	1500	372	512
21	673	437	450	500	2300	1270	3480	7750	5920	1470	369	622
22	657	561	475	475	2030	1280	3510	8860	5790	1420	475	662
23	672	541	475	475	1860	1480	4380	9450	5360	1360	592	766
24	688	616	475	475	1660	1930	5990	8160	5020	1350	521	753
25	639	600	475	500	1780	2670	6510	7860	4730	1280	451	798
26	632	750	475	475	2240	2980	6770	8130	4610	1270	443	801
27	619	750	450	500	2250	2570	6440	8650	4810	1240	445	838
28	681	750	450	500	1900	2880	5260	9060	4710	1230	404	753
29	694	750	450	500	---	3460	4560	9300	4370	1140	357	741
30	691	706	475	500	---	4050	4650	9410	4860	1010	310	806
31	717	---	475	525	---	4640	---	9130	---	918	331	---
TOTAL	21423	20532	15722	14600	29995	63950	146300	231140	217160	68508	17490	16224
MEAN	691	684	507	471	1071	2063	4877	7456	7239	2210	564	541
MAX	1140	936	917	525	2300	4640	6770	9860	10400	4270	858	838
MIN	360	437	300	450	425	1260	3480	5340	4370	918	310	340
AC-FT	42490	40730	31180	28960	59500	126800	290200	458500	430700	135900	34690	32180
CAL YR 1985	TOTAL	824932		MEAN	2260	MAX	13300	MIN	201	AC-FT	1636000	
WTR YR 1986	TOTAL	863044		MEAN	2365	MAX	10400	MIN	300	AC-FT	1712000	

GREEN RIVER BASIN

09251000 YAMPA RIVER NEAR MAYBELL, CO--Continued
(National Stream-Quality Accounting Network Station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1950 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: November 1950 to August 1973, July 1975 to current year.

WATER TEMPERATURE: November 1950 to August 1973, July 1975 to current year.

SUSPENDED-SEDIMENT DISCHARGE: December 1950 to May 1958, October 1975 to September 1976, October 1977 to September 1978, October 1981 to September 1982.

INSTRUMENTATION:--Water-quality monitor since July 1975.

REMARKS.--Unpublished maximum and minimum specific conductance data for period of daily record available in district office. Maximum water temperature for the current year may have been higher during time of instrument malfunction for period Aug. 16-25.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 1260 microsiemens Nov. 17, 1985; minimum, 89 microsiemens June 27, 1983.

WATER TEMPERATURE: Maximum, 33.0°C Aug. 29, 1976; minimum, freezing point on many days during winter months each year.

SEDIMENT CONCENTRATION: Maximum daily, 6,180 mg/l, Aug. 16, 1981; minimum daily, 1 mg/l, several days during December 1975 to February 1976, Jan. 6, 1980.

SEDIMENT LOAD: Maximum daily, 47,100 tons May 9, 1958; minimum daily, 0.04 ton Oct. 2,3, 1982

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 1260 microsiemens Nov. 17; minimum 140 microsiemens June 9, 19.

WATER TEMPERATURE: Maximum recorded, 26.5°C, Aug. 10,13; minimum 0.0°C, many days November to February.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	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)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
NOV												
27...	1015	731	1090	8.3	0.0	27	10.4	K10	2000	420	71	59
FEB												
28...	1315	1780	1100	8.2	4.0	250	10.8	K50	1600	390	78	48
MAY												
29...	1045	9450	168	7.9	11.5	85	8.7	550	1100	70	17	6.6
AUG												
20...	1500	351	593	8.6	25.0	2.8	8.2	K5	240	210	41	26

DATE	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE IT-FLD (MG/L AS HCO3)	CAR- BONATE IT-FLD (MG/L AS CO3)	ALKA- LINITY, CARBON- ATE IT-FLD (MG/L - 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, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)
NOV												
27...	82	2	2.9	225	--	184	380	25	0.20	7.5	768	750
FEB												
28...	87	2	4.3	202	--	166	400	27	0.30	10	785	760
MAY												
29...	7.0	0.4	1.1	62	--	51	34	2.3	<0.10	6.9	118	110
AUG												
20...	35	1	2.3	133	21	144	140	14	0.20	5.3	368	370

DATE	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (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												
27...	1.0	1520	1.39	0.010	1.40	0.060	0.060	0.54	0.60	0.080	0.030	<0.010
FEB												
28...	1.1	3770	2.28	0.020	2.30	0.140	0.120	0.96	1.1	0.160	0.070	0.030
MAY												
29...	0.16	3010	--	<0.010	0.130	0.040	0.020	0.76	0.80	0.320	0.030	0.010
AUG												
20...	0.50	349	--	<0.010	<0.100	0.030	<0.010	0.37	0.40	0.010	<0.010	<0.010

K BASED ON NON-IDEAL COLONY COUNT.

09251000 YAMPA RIVER NEAR MAYBELL, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	*LEAD, DIS- SOLVED (UG/L AS PB)
NOV 27...	20	<1	59	<0.5	<1	<1	<3	1	17	<1
FEB 28...	60	<1	67	<0.5	<1	<1	<3	12	18	3
MAY 29...	40	<1	25	<0.5	<1	<1	<3	6	94	<1

DATE	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)
NOV 27...	49	23	0.3	<10	4	8	<1	680	<6	27
FEB 28...	40	30	0.2	<10	<1	11	<1	840	<6	7
MAY 29...	7	4	<0.1	<10	2	<1	<1	120	<6	<3

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
NOV 27...	1015	731	57	113	90
FEB 28...	1315	1780	636	3060	--
APR 09...	1335	4620	694	8660	--
MAY 29...	1045	9450	396	10100	68
AUG 20...	1500	351	3	2.8	--

* The minimum reporting level for Lead was changed from <1 to <5 during June, 1986.

GREEN RIVER BASIN

09251000 YAMPA RIVER NEAR MAYBELL, CO--Continued

SPECIFIC CONDUCTANCE MICROSIEMENS/CM AT 25 DEG C, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	760	780	1080	966	1010	1090	489	413	170	190	478	---
2	742	818	1050	976	1020	1110	479	363	167	200	492	---
3	696	853	1010	982	1060	1110	505	330	167	219	490	---
4	681	890	990	987	1080	1080	548	296	164	227	512	---
5	700	879	1000	994	1090	1050	617	266	161	231	525	---
6	727	881	986	1010	1090	1010	637	252	165	224	532	---
7	724	899	979	1000	1100	972	614	273	165	237	531	---
8	707	894	977	997	1100	930	529	292	160	251	502	---
9	732	874	980	999	1100	867	474	318	153	273	495	---
10	780	889	979	1000	1100	864	465	364	181	302	508	---
11	781	948	1010	1000	1110	901	481	397	208	305	512	---
12	801	978	1070	998	1110	956	496	372	213	310	495	---
13	836	1020	1090	998	1110	984	477	326	200	320	506	---
14	823	1070	1090	1000	1090	991	466	312	185	338	514	---
15	829	1110	1080	1010	999	1010	509	288	192	---	522	---
16	844	1170	1060	1020	940	1030	545	288	175	---	543	---
17	850	1210	1030	1020	1050	1090	531	320	167	373	559	---
18	881	1140	992	1020	1100	1130	530	353	160	353	572	---
19	839	---	954	1000	1120	1120	552	341	160	359	586	---
20	788	---	923	999	---	1140	564	299	165	375	585	---
21	775	---	902	1010	---	1140	565	249	180	382	588	---
22	760	1140	903	1030	---	1170	561	219	176	394	599	---
23	779	1110	921	1070	---	1120	519	200	177	405	677	---
24	781	1130	938	1090	---	1010	425	215	180	415	636	---
25	793	1070	944	1100	---	853	387	212	187	427	582	---
26	816	1060	948	1100	---	727	397	205	197	431	---	---
27	822	1060	950	1090	---	712	435	192	197	437	---	---
28	825	1060	950	1080	1070	711	490	185	186	438	---	---
29	795	1000	956	1070	---	652	494	181	190	449	---	---
30	776	1070	961	1060	---	578	481	173	178	447	---	---
31	765	---	960	1040	---	516	---	174	---	460	---	---
MEAN	781	---	989	1020	---	956	509	280	178	---	---	---

09251000 YAMPA RIVER NEAR MAYBELL, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	9.5	6.5	6.5	4.5	.0	.0	.0	.0	.0	.0	---	---
2	11.5	8.0	6.0	5.0	.0	.0	.0	.0	.0	.0	---	---
3	12.5	9.0	7.0	5.0	1.0	.0	.0	.0	.0	.0	---	---
4	11.5	8.5	7.5	5.0	1.0	.0	.0	.0	.0	.0	---	---
5	11.0	8.0	7.0	5.0	.0	.0	.0	.0	.0	.0	---	---
6	11.0	8.5	5.5	4.0	.5	.0	.0	.0	.0	.0	---	---
7	12.0	9.5	5.5	4.0	.5	.0	.0	.0	.0	.0	---	---
8	9.5	6.0	5.0	3.0	.0	.0	.0	.0	.0	.0	---	---
9	7.0	4.5	3.0	2.0	.0	.0	.0	.0	.0	.0	---	---
10	7.0	2.5	2.5	1.5	.0	.0	.0	.0	.0	.0	---	---
11	7.5	6.0	4.0	1.5	.0	.0	.0	.0	.0	.0	---	---
12	8.0	6.5	4.0	3.0	.0	.0	.0	.0	.0	.0	---	---
13	8.0	6.5	3.0	2.0	.0	.0	.0	.0	.0	.0	---	---
14	8.0	5.5	2.0	1.0	.0	.0	.0	.0	.0	.0	---	---
15	8.0	5.5	2.0	.5	.0	.0	.0	.0	.0	.0	---	---
16	9.0	6.5	1.0	.0	.0	.0	.0	.0	.0	.0	---	---
17	9.5	7.0	1.5	.5	.0	.0	.0	.0	.0	.0	---	---
18	9.5	7.0	1.0	.0	.0	.0	.0	.0	.0	.0	---	---
19	9.5	7.0	.5	.0	.0	.0	.0	.0	.5	.0	---	---
20	9.5	7.0	1.0	.0	.0	.0	.0	.0	---	---	---	---
21	9.5	7.5	.0	.0	.0	.0	.0	.0	---	---	---	---
22	8.5	6.5	.5	.0	.0	.0	.0	.0	---	---	---	---
23	8.0	6.0	.0	.0	.0	.0	.0	.0	---	---	---	---
24	8.5	6.5	.5	.0	.0	.0	.0	.0	---	---	---	---
25	9.0	7.0	.5	.0	.0	.0	.0	.0	---	---	8.5	7.5
26	10.0	8.0	1.0	.0	.0	.0	.0	.0	---	---	8.0	6.0
27	9.5	7.5	.5	.0	.0	.0	.0	.0	---	---	8.5	5.5
28	9.5	7.0	.5	.0	.0	.0	.0	.0	---	---	10.0	7.0
29	9.5	7.5	.0	.0	.0	.0	.0	.0	---	---	10.5	7.5
30	8.5	7.0	.0	.0	.0	.0	.0	.0	---	---	10.0	7.5
31	8.0	6.5	---	---	.0	.0	.0	.0	---	---	9.0	7.5
MONTH	12.5	2.5	7.5	.0	1.0	.0	.0	.0	---	---	---	---
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	7.0	6.0	11.5	10.0	13.0	11.5	19.0	16.0	25.0	21.0	21.5	18.0
2	6.5	5.5	11.5	10.5	13.0	11.0	19.5	16.5	25.0	21.5	20.0	17.5
3	5.5	4.5	11.5	10.5	14.5	12.5	20.0	17.5	23.5	21.0	20.5	17.0
4	4.5	3.5	10.5	9.5	14.5	13.0	20.0	17.5	22.5	20.0	21.5	17.5
5	6.5	4.0	9.5	8.5	14.0	13.0	20.0	17.5	22.0	19.5	21.0	18.0
6	8.5	5.5	8.5	7.5	14.0	12.5	19.0	18.0	23.5	19.5	---	---
7	9.5	7.5	7.5	7.0	14.5	13.0	18.5	17.5	25.5	20.5	---	---
8	9.0	7.5	7.0	6.5	14.0	13.0	18.5	16.5	24.0	21.5	---	---
9	8.0	7.0	8.0	7.0	13.5	11.5	19.5	16.0	25.5	20.5	---	---
10	8.0	7.0	8.5	6.5	11.5	10.0	19.5	17.0	26.5	22.0	---	---
11	8.0	7.0	10.5	8.0	12.5	10.0	19.5	17.5	26.0	22.5	---	---
12	8.5	6.5	12.0	10.0	15.0	12.0	20.5	17.0	25.0	22.0	---	---
13	7.5	6.0	11.0	9.5	14.5	13.5	21.0	18.5	26.5	22.0	---	---
14	7.0	5.5	11.0	9.5	14.5	13.0	22.5	19.0	26.0	22.0	---	---
15	8.0	5.0	10.5	9.0	15.0	13.5	21.5	20.5	26.0	21.0	---	---
16	9.0	7.5	9.0	8.0	15.5	14.0	21.0	20.0	---	---	---	---
17	8.0	6.5	9.5	7.5	16.0	14.5	23.0	18.5	---	---	---	---
18	8.0	5.5	11.5	9.0	16.0	15.0	22.5	21.0	---	---	---	---
19	7.0	5.5	13.0	10.5	15.0	14.0	23.5	20.5	---	---	---	---
20	8.5	6.5	13.5	12.0	15.0	13.5	24.0	20.5	---	---	---	---
21	11.0	7.5	12.5	11.5	16.0	13.5	23.5	20.5	---	---	---	---
22	11.5	8.5	11.5	10.0	16.5	14.5	23.0	21.0	---	---	---	---
23	11.5	10.0	10.0	8.5	17.0	15.0	23.5	21.0	---	---	---	---
24	10.0	9.0	11.0	9.5	16.5	15.5	23.0	20.5	---	---	---	---
25	9.0	8.0	12.0	10.0	16.0	15.0	22.5	19.5	---	---	---	---
26	8.0	6.5	12.5	10.5	17.0	14.5	23.5	20.0	25.0	21.0	---	---
27	7.0	6.0	12.5	11.0	18.5	15.5	23.5	19.5	23.5	19.5	---	---
28	8.0	6.5	13.0	11.0	19.0	17.5	24.0	20.0	22.5	20.0	---	---
29	9.5	6.5	12.5	11.0	19.0	17.5	23.0	19.5	21.0	19.5	---	---
30	12.0	9.0	12.5	11.0	18.5	17.0	24.0	19.0	22.0	18.5	---	---
31	---	---	13.0	11.5	---	---	25.0	20.0	23.0	19.0	---	---
MONTH	12.0	3.5	13.5	6.5	19.0	10.0	25.0	16.0	---	---	---	---

GREEN RIVER BASIN

09253000 LITTLE SNAKE RIVER NEAR SLATER, CO

LOCATION.--Lat 40°59'58", long 107°08'34", in SW¼NW¼ sec.15, T.12 N., R.87 W., Routt County, Hydrologic Unit 14050003, on left bank just downstream from highway bridge at Focus Ranch, 0.2 mi downstream from Spring Creek, and 12 mi east of Slater.

DRAINAGE AREA.--285 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1942 to September 1947, October 1950 to current year.

REVISED RECORDS.--WSP 1733: 1960.

GAGE.--Water-stage recorder. Datum of gage is 6,831.00 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Nov. 18 to Mar. 9. Records good except for estimated daily discharges, which are poor. Diversions for irrigation of about 2,000 acres upstream from station.

AVERAGE DISCHARGE.--41 years, 240 ft³/s; 173,900 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,780 ft³/s, May 23, 1984, gage height, 8.78 ft; maximum gage height, 8.95 ft, Apr. 25, 1974; minimum daily discharge, 8.6 ft³/s, Sept. 10, 1944.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,600 ft³/s, and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 4	2100	2,210	7.00	June 6	0200	2,220	7.01
May 21	2300	*2,220	*7.01				

Minimum daily discharge, 25 ft³/s, Dec. 25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33	46	50	45	40	100	443	920	1770	384	50	60
2	38	62	45	45	40	100	529	1170	1840	337	47	48
3	35	56	50	45	40	95	450	1480	1950	306	45	41
4	34	50	55	45	40	85	353	1750	1980	287	45	37
5	30	65	55	40	40	80	303	1570	1970	468	45	34
6	35	45	55	35	35	80	330	1180	2030	306	43	32
7	54	56	55	35	35	90	424	1150	1770	254	44	31
8	73	58	55	35	35	100	476	993	1620	222	46	34
9	55	49	55	35	35	115	445	909	1600	210	44	38
10	68	52	55	35	35	109	434	818	1690	206	41	69
11	84	61	45	35	30	99	418	825	1260	179	40	56
12	77	62	35	35	30	89	432	896	1190	164	55	43
13	85	54	30	35	30	83	480	981	1150	143	58	37
14	53	48	25	35	35	81	388	1050	1050	152	39	34
15	53	59	30	35	40	79	376	991	974	125	35	32
16	57	53	30	35	50	74	455	945	944	140	32	31
17	60	70	35	35	60	75	472	883	946	133	28	29
18	59	60	35	35	70	71	382	1000	998	107	27	29
19	58	55	35	40	70	70	339	1200	970	99	26	39
20	58	50	35	40	80	68	322	1460	823	91	31	36
21	61	45	35	40	80	73	377	1770	691	95	40	39
22	65	45	35	40	85	92	599	1740	626	89	35	54
23	59	50	40	35	85	115	834	1380	578	96	33	60
24	58	50	40	35	90	145	893	1290	548	87	31	76
25	60	55	40	35	90	162	950	1310	504	97	37	76
26	66	55	40	35	90	138	802	1430	504	84	38	74
27	61	55	40	35	90	144	626	1580	468	74	31	73
28	62	55	40	35	100	186	559	1730	512	64	29	84
29	65	55	45	35	---	258	589	1790	496	58	28	70
30	57	55	45	35	---	336	757	1710	447	54	42	67
31	68	---	45	40	---	505	---	1680	---	53	45	---
TOTAL	1781	1631	1310	1155	1580	3897	15237	39581	33899	5164	1210	1463
MEAN	57.5	54.4	42.3	37.3	56.4	126	508	1277	1130	167	39.0	48.8
MAX	85	70	55	45	100	505	950	1790	2030	468	58	84
MIN	30	45	25	35	30	68	303	818	447	53	26	29
AC-FT	3530	3240	2600	2290	3130	7730	30220	78510	67240	10240	2400	2900
CAL YR 1985 TOTAL		104148		MEAN	285	MAX	2330	MIN	23	AC-FT	206600	
WTR YR 1986 TOTAL		107908		MEAN	296	MAX	2030	MIN	25	AC-FT	214000	

09253000 LITTLE SNAKE RIVER NEAR SLATER, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1977 to July 1986 (discontinued).

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE LAB (US/CM)	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	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	
MAY 28...	1500	1550	53	9.0	25	7.6	1.4	1.6	0.1	0.2	
JUL 01...	1140	395	58	11.5	31	9.3	1.8	2.5	0.2	0.3	
DATE	TIME	ALKA- LITY 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 DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)
MAY 28...	30		2.8	0.5	0.2	7.5	40	0.05	166	0.00	0.05
JUL 01...	31		2.0	0.3	0.1	8.4	43	0.06	46	0.00	0.01
DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE (DEG C)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE (DEG C)		
OCT 1985					APR 1986						
01...	1455	27	180	7.5	29...	1645	521	96	9.0		
DEC					JUN						
04...	1155	59	176	0.0	03...	1050	1820	48	6.0		
JAN 1986					JUL						
16...	1350	36	180	0.0	16...	1505	139	85	15.0		
MAR					SEP						
04...	1135	99	193	0.0	04...	1040	37	155	12.5		
26...	1615	159	154	7.5							

GREEN RIVER BASIN

09255000 SLATER FORK NEAR SLATER, CO

LOCATION.--Lat 40°58'57", long 107°22'56", in SW¼NE¼ sec.21, T.12 N., R.89 W., Moffat County, Hydrologic Unit 14050003, on right bank 15 ft downstream from highway bridge, 1.0 mi upstream from mouth, and 1.5 mi south of Slater.

DRAINAGE AREA.--161 mi².

PERIOD OF RECORD.--May to October, December 1910, March to October 1911, and April to May 1912 (published as Slater Creek), July 1931 to current year. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 618: 1910-11. WSP 764: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 6,600 ft, from river-profile map. May 28, 1910, to May 25, 1912, nonrecording gage at site 1.5 mi upstream at different datum. July 9, 1931, to May 6, 1932, nonrecording gage at site 0.2 mi downstream at different datum.

REMARKS.--Estimated daily discharges: Oct. 20 to Feb. 18 and June 24 to July 22. Records good except for estimated daily discharges, which are poor. Diversions for irrigation of about 500 acres upstream from station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--55 years (water years 1932-86), 79.0 ft³/s; 57,240 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,250 ft³/s May 16, 1984, gage height, 11.78 ft (from floodmark), from rating curve extended above 1,000 ft³/s.; no flow Aug. 2-10, 1934, Aug. 18, 25-27, 1936, Aug. 29 to Sept. 3, 1954, Aug. 3, 4, 15, 16, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 430 ft³/s, and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Apr. 25	0130	604	7.28	May 22	0330	836	8.19
May 4	0330	*1,040	*8.95	June 6	0630	979	8.28

Minimum daily discharge, 2.0 ft³/s, Sept. 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	50	25	20	20	86	237	462	575	180	38	41
2	17	70	25	20	20	77	305	559	581	160	41	28
3	26	75	30	20	20	64	263	711	620	140	41	19
4	44	75	30	20	20	55	192	836	664	120	43	15
5	48	75	30	20	20	55	169	711	729	130	39	12
6	56	70	30	20	20	57	187	447	871	100	38	11
7	74	60	30	20	20	61	240	401	741	90	40	15
8	84	60	30	20	20	71	259	334	651	85	41	21
9	83	55	30	20	20	95	231	318	620	80	45	26
10	88	50	15	20	20	73	230	312	593	75	37	46
11	89	55	15	20	25	64	225	314	453	70	35	35
12	87	60	15	20	30	56	225	355	437	65	42	22
13	91	50	20	20	35	51	264	399	463	60	45	15
14	66	45	20	20	40	54	216	432	434	60	25	11
15	65	45	20	20	45	51	206	368	443	55	17	7.0
16	65	45	20	20	50	47	240	345	419	55	11	4.5
17	71	45	20	20	50	50	263	316	409	50	12	2.5
18	73	45	20	20	65	46	220	325	406	45	8.8	2.0
19	74	45	20	20	86	41	193	404	419	40	7.3	9.2
20	60	35	20	20	84	42	185	548	380	40	12	8.2
21	60	35	20	20	77	42	209	643	372	35	19	10
22	60	35	20	20	62	57	327	660	367	35	22	35
23	60	35	20	20	56	78	466	454	356	36	20	36
24	60	30	20	20	56	96	494	420	320	36	21	50
25	60	30	20	20	69	94	501	446	300	32	29	48
26	65	35	20	20	83	69	404	504	280	32	32	44
27	60	35	20	20	93	71	299	532	260	33	24	40
28	60	35	20	20	97	103	267	543	240	30	16	43
29	60	35	20	20	---	150	293	564	220	36	12	40
30	60	35	20	20	---	179	377	518	200	42	21	35
31	50	---	20	20	---	320	---	518	---	39	28	---
TOTAL	1933	1450	685	620	1303	2455	8187	14699	13823	2086	862.1	731.4
MEAN	62.4	48.3	22.1	20.0	46.5	79.2	273	474	461	67.3	27.8	24.4
MAX	91	75	30	20	97	320	501	836	871	180	45	50
MIN	17	30	15	20	20	41	169	312	200	30	7.3	2.0
AC-FT	3830	2880	1360	1230	2580	4870	16240	29160	27420	4140	1710	1450
CAL YR 1985	TOTAL	47250.2		MEAN	129	MAX	1110	MIN	9.2	AC-FT	93720	
WTR YR 1986	TOTAL	48834.5		MEAN	134	MAX	871	MIN	2.0	AC-FT	96860	

09257000 LITTLE SNAKE RIVER NEAR DIXON, WY

LOCATION.--Lat 41°01'42", long 107°32'55", in SE¼ NW¼ sec.8, T.12 N., R.90 W., Carbon County, Hydrologic Unit 14050003, on left bank 200 ft upstream from highway bridge, 1,000 ft upstream from Willow Creek, and 0.8 mi west of Dixon.

DRAINAGE AREA.--988 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1910 to September 1923, March 1938 to current year (no winter records since 1971). Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 1243: 1920(M). WDR CO-85-3: 1984 (M).

GAGE.--Water-stage recorder. Datum of gage is 6,331.22 ft above National Geodetic Vertical Datum of 1929. May 27, 1910, to Sept. 30, 1923, nonrecording gage on highway bridge 200 ft downstream at datum 2.98 ft, higher. Mar. 15, 1938, to Sept. 30, 1957, water-stage recorder at site 225 ft downstream at datum 2.98 ft, higher; Oct. 1, 1957, to June 6, 1968, at site 850 ft downstream at present datum, and June 7 to Sept. 30, 1968, at site 225 ft downstream at present datum.

REMARKS.--Estimated daily discharges: May 1-4. Records fair. Diversions for irrigation of about 9,500 acres upstream from station. One diversion upstream from station for irrigation of about 3,000 acres downstream. Transbasin diversions upstream from station.

AVERAGE DISCHARGE.--46 years (water years 1911-23, 1939-71), 514 ft³/s, 372,400 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,000 ft³/s (revised), May 16, 1984, gage height, 13.56 ft, from floodmark, from rating curve extended above 10,000 ft³/s, some increase in peak due to dam failure; no flow Sept. 19, 20, 22, 1977, Aug. 7, 17, 18, 27-29, 1981.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,200 ft³/s, and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 5	0330	*4,770	*9.64	June 6	0600	4,430	9.18
May 22	0730	4,220	9.17				

Minimum daily discharge during current period, 12 ft³/s, Aug. 19, 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1						---	1530	2340	3490	840	55	64
2						---	1910	2800	3690	704	47	43
3						---	1590	3250	3840	619	42	30
4						---	1200	3730	3860	586	42	25
5						---	1070	4110	3950	866	40	20
6						---	1120	2980	4160	659	38	18
7						---	1400	2800	3690	590	35	19
8						---	1510	2550	3360	533	37	22
9						---	1430	2250	3400	489	41	28
10						---	1360	2040	3950	498	38	78
11						---	1340	2050	2920	441	36	64
12						---	1350	2280	2650	415	35	42
13						---	1580	2370	2570	361	48	33
14						---	1250	2560	2430	364	34	27
15						---	1190	2350	2330	317	23	25
16						---	1400	2220	2240	375	19	22
17						---	1580	2060	2220	372	18	21
18						---	1290	2090	2230	301	16	22
19						---	1100	2370	2260	259	12	30
20						---	1040	2840	1980	230	12	33
21						---	1160	3420	1730	218	23	30
22						---	1780	3830	1530	207	29	46
23						---	2580	2960	1410	221	23	53
24						---	580	2770	2620	1280	216	20
25						---	616	2970	2530	1160	246	25
26						---	481	2740	2760	1110	218	30
27						---	511	2100	3010	1020	199	23
28						---	642	1860	3220	1020	141	20
29						---	862	1830	3390	1010	116	19
30						---	1070	2110	3340	947	98	41
31						---	1880	---	3350	---	76	47
TOTAL						---	49140	86470	73437	11775	968	2021
MEAN						---	1638	2789	2448	380	31.2	67.4
MAX						---	2970	4110	4160	866	55	227
MIN						---	1040	2040	947	76	12	18
AC-FT						---	97470	171500	145700	23360	1920	4010

GREEN RIVER BASIN

09257000 LITTLE SNAKE RIVER NEAR DIXON, WY--Continued

PERIOD OF RECORD.--Water years 1975 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE LAB (US/CM)	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	POTAS- SIUM, DIS- SOLVED (MG/L AS K)
MAY 27...	1900	2650	101	10.5	46	14	2.8	2.5	0.2	0.3
JUL 01...	0900	888	116	14.5	51	15	3.3	4.0	0.3	0.7

DATE	TIME	ALKA- LITY 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 CONSTITUENTS, 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, TOTAL (MG/L AS P)
MAY 27...	49		7.6	0.9	0.1	9.4	67	0.09	479	0.10	0.16
JUL 01...	55		0	0.5	0.1	9.3	66	0.09	158	0.10	0.06

PESTICIDE ANALYSIS, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	DICAMBA (MED- IBEN) (BAN- VEL D) TOTAL (UG/L)	PICLO- RAM (TOR- DON) TOTAL (UG/L)	2,4-D, TOTAL (UG/L)	2, 4-DP TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)	SILVEX, TOTAL (UG/L)
JUL 01...	0900	888	14.5	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
AUG 11...	1840	35	20.0	<0.01	0.01	<0.01	<0.01	<0.01	<0.01
SEP 24...	1700	109	9.5	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01

09258000 WILLOW CREEK NEAR DIXON, WY

LOCATION.--Lat 40°54'56", long 107°31'16", on line between secs. 8 and 17, T.11 N., R.90 W., Moffat County, Co., Hydrologic Unit 14050003, on right bank 6.2 mi south of Colorado-Wyoming State line, 8.0 mi upstream from mouth, and 8.3 mi south of Dixon.

DRAINAGE AREA.--24 mi², approximately.

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

GAGE.--Water-stage recorder. Elevation of gage is 6,700 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 19 to Mar. 2 and Sept. 13-30. Records good except for estimated daily discharges, which are poor. One small ditch diverts water upstream from station for irrigation. Regulation by Elk Lake, capacity, 400 acre-ft.

AVERAGE DISCHARGE.--33 years, 10.9 ft³/s; 7,900 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 476 ft³/s, May 10, 1984, gage height, 6.02 ft, from rating curve extended above 160 ft³/s; Maximum gage-height, 7.08 ft, Apr. 18, 1984 (backwater from ice); no flow Sept. 17-19, 1955, many days July through September 1977, and Aug. 8-16, 1982.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 70 ft³/s, and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Mar. 31	0730	*351	*5.47	June 6	2230	106	3.95

Minimum daily discharge, 1.8 ft³/s, Aug. 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.9	4.9	3.0	2.5	2.5	9.0	60	26	67	20	2.4	5.9
2	4.1	6.0	3.5	2.5	2.5	11	77	34	76	19	2.2	3.5
3	3.8	5.4	4.0	2.5	2.5	12	40	42	75	19	2.1	4.8
4	3.9	5.0	4.0	2.0	2.5	13	27	48	73	17	1.8	3.0
5	3.7	5.4	4.0	2.0	2.5	11	29	38	80	25	2.8	2.8
6	4.1	4.8	4.0	2.0	2.0	12	29	25	90	16	4.0	3.0
7	7.3	5.2	4.0	2.0	2.0	16	33	25	72	12	4.0	3.8
8	8.5	5.1	4.0	2.0	2.0	23	31	21	66	10	3.8	3.5
9	8.2	5.5	4.0	2.0	2.0	21	26	23	67	9.4	3.8	3.4
10	9.1	5.1	2.5	2.0	2.0	15	23	21	61	8.3	3.8	9.6
11	10	6.0	2.0	2.0	2.0	9.4	23	20	45	7.4	3.7	5.7
12	8.8	5.9	2.0	2.0	2.0	8.2	23	21	48	6.6	3.5	5.0
13	10	4.9	2.0	2.0	2.0	8.3	23	22	53	6.3	3.5	4.5
14	6.7	5.6	2.0	2.0	2.5	8.5	23	24	52	7.0	3.2	4.0
15	6.5	5.4	2.0	2.0	2.5	7.3	19	21	53	5.3	3.7	4.0
16	6.3	5.8	2.0	2.0	2.5	7.8	23	23	52	11	4.5	3.5
17	6.2	5.5	2.0	2.5	2.5	8.3	26	20	54	5.4	4.7	3.0
18	5.8	5.8	2.0	2.5	3.0	6.0	22	19	57	4.8	4.1	3.0
19	5.7	5.5	2.0	2.5	3.0	5.5	16	25	57	4.5	4.0	3.5
20	6.0	5.0	2.0	2.5	4.0	5.7	14	34	47	4.3	5.7	4.0
21	5.8	4.0	2.0	2.5	3.5	16	18	40	43	4.0	4.3	3.5
22	7.0	4.0	2.0	2.0	3.5	32	31	41	38	3.8	4.1	4.0
23	6.8	4.0	2.0	2.0	3.5	43	40	28	36	3.8	4.7	4.5
24	6.7	4.0	2.0	2.0	3.5	37	35	29	33	3.5	5.0	7.0
25	6.5	4.5	2.0	2.0	4.5	23	33	33	31	5.4	4.7	9.0
26	6.5	4.5	2.0	2.0	6.5	15	30	38	30	3.8	7.2	7.0
27	6.0	5.0	2.0	2.0	7.5	25	24	41	29	3.1	7.2	7.0
28	6.2	5.0	2.5	2.0	8.0	41	34	47	29	3.0	7.2	8.0
29	5.9	4.5	2.5	2.5	---	48	23	53	27	2.8	6.6	8.0
30	5.5	4.5	2.5	2.5	---	49	20	54	24	3.0	7.4	7.0
31	6.6	---	2.5	2.5	---	116	---	57	---	2.6	7.2	---
TOTAL	198.1	151.8	81.0	67.5	89.0	663.0	875	993	1565	257.1	136.9	148.5
MEAN	6.39	5.06	2.61	2.18	3.18	21.4	29.2	32.0	52.2	8.29	4.42	4.95
MAX	10	6.0	4.0	2.5	8.0	116	77	57	90	25	7.4	9.6
MIN	3.7	4.0	2.0	2.0	2.0	5.5	14	19	24	2.6	1.8	2.8
AC-FT	393	301	161	134	177	1320	1740	1970	3100	510	272	295
CAL YR 1985	TOTAL	6475.2	MEAN	17.7	MAX	130	MIN	1.4	AC-FT	12840		
WTR YR 1986	TOTAL	5225.9	MEAN	14.3	MAX	116	MIN	1.8	AC-FT	10370		

GREEN RIVER BASIN

09259050 LITTLE SNAKE RIVER BELOW BAGGS, WY

LOCATION.--Lat 41°01'43", long 107°41'14", in SE¼NW¼NW¼ sec.7, T.12 N., R.92 W., Carbon County, Hydrologic Unit 14050003, 0.8 mi downstream from Ledford Slough, 1.5 mi southwest of Baggs, and 3.5 mi downstream from bridge on State Highway 789 in Baggs.

PERIOD OF RECORD.--October 1980 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE (DEG C)	PH (STAND- ARD UNITS)	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	POTAS- SIUM, DIS- SOLVED (MG/L AS K)
NOV 06...	1545	206	468	4.5	8.30	180	48	15	24	0.8	2.3
JAN 07...	1600	206	570	0.0	8.00	210	54	18	31	1	2.1
MAY 28...	1930	3240	122	11.0	7.80	53	15	3.7	3.9	0.2	0.3

DATE	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 DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)
NOV 06...	140	77	6.1	0.1	16	270	0.37	152	0.00	0.04
JAN 07...	170	89	7.3	0.3	18	320	0.44	179	0.10	0.03
MAY 28...	52	13	1.1	0.2	9.7	78	0.11	683	0.10	0.12

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	BARO- METRIC PRES- SURE (MM OF HG)	OXYGEN, DIS- SOLVED (MG/L)
OCT 04...	0700	224	462	8.30	8.5	--	--
NOV 06...	1545	206	468	8.30	4.5	605	11.0
JAN 07...	1600	206	570	8.00	0.0	615	12.6
FEB 19...	1300	2330	345	8.20	0.0	596	11.7
MAR 24...	1700	774	600	8.30	8.0	602	8.8
APR 29...	1600	1780	290	7.90	9.0	599	7.4
MAY 28...	1930	3240	122	7.80	11.0	605	8.5
JUN 30...	1250	900	152	7.90	19.0	606	7.3
AUG 12...	1540	22	420	8.40	22.0	610	9.8
SEP 25...	0930	167	360	8.00	8.0	596	9.2

09259050 LITTLE SNAKE RIVER BELOW BAGGS, WY--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)
OCT 04...	--	40	<0.10	0.05	0.45	0.5	0.03
NOV 06...	--	<1	<0.10	0.09	0.31	0.4	0.04
JAN 07...	107	500	<0.10	0.05	0.35	0.4	0.03
FEB 19...	103	4600	0.20	0.05	3.1	3.2	0.64
MAR 24...	--	K700	<0.10	0.03	1.3	1.3	0.34
APR 29...	--	K24	<0.10	0.08	0.52	0.6	0.07
MAY 28...	97	K2	<0.10	0.02	0.58	0.6	0.12
JUN 30...	100	<1	<0.10	0.01	0.39	0.4	0.06
AUG 12...	141	72	<0.10	<0.01	--	0.6	0.04
SEP 25...	--	<1	<0.10	<0.01	--	0.5	0.02

PESTICIDE ANALYSIS, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	TEMPER- ATURE (DEG C)	DICAMBA (MED- IBEN) (BAN- VEL D) TOTAL (UG/L)	PICLO- RAM (TOR- DON) (AMDON) TOTAL (UG/L)	2,4-D, TOTAL (UG/L)	2, 4-DP TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)	SILVEX, TOTAL (UG/L)
JUN 30...	1250	900	19.0	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
AUG 12...	1540	22	22.0	<0.01	0.01	<0.01	<0.01	<0.01	<0.01
SEP 25...	0930	167	8.0	<0.01	0.01	<0.01	<0.01	<0.01	<0.01

K-Results based on colony count outside the acceptable range (non-ideal colony count).

GREEN RIVER BASIN

09260000 LITTLE SNAKE RIVER NEAR LILY, CO

LOCATION.--Lat 40°32'50", long 108°25'25", in NW¼ sec.20, T.7 N., R.98 W., Moffat County, Hydrologic Unit 14050003, on left bank 170 ft downstream from highway bridge, 6.0 mi north of Lily, and 10 mi upstream from mouth.

DRAINAGE AREA.--3,730 mi², approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June to August 1904 (published as "near Maybell"), October 1921 to current year. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 1713: 1959.

GAGE.--Water-stage recorder. Elevation of gage is 5,685 ft, from river-profile map. June 9 to Aug. 14, 1904, nonrecording gage, and May 5, 1922, to Nov. 30, 1935, water-stage recorder, at site 300 ft upstream at different datums.

REMARKS.--Estimated daily discharges: Nov. 1 to Feb. 20. Records good except those for winter period, which are poor. Diversions for irrigation of about 21,000 acres upstream from station.

AVERAGE DISCHARGE.--65 years, 596 ft³/s; 431,800 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,700 ft³/s, May 18, 1984, gage height, 9.85 ft; maximum gage height, 11.1 ft, Feb. 13, 1962, from floodmark (backwater from ice); no flow at times in most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,500 ft³/s, and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Feb. 20	2100	ice jam	*7.73	May 6	1100	5,290	5.99
May 23	1330	4,590	5.64	June 10	1930	*6,650	6.65

Minimum daily discharge, 46 ft³/s, Sept. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	153	250	225	175	225	900	1240	1930	3470	828	145	93
2	161	275	250	175	225	683	1940	2280	3560	751	135	75
3	140	300	275	175	225	626	1770	2800	3760	640	120	46
4	123	275	300	175	200	594	2050	3690	3870	527	106	87
5	119	275	275	175	200	545	1540	4470	3880	505	89	69
6	151	250	250	150	200	517	1610	4800	3900	451	91	71
7	146	275	250	150	200	545	1300	3700	4110	626	111	55
8	157	250	250	150	175	525	1300	3160	3950	505	99	51
9	161	275	225	150	175	620	1530	3110	3510	451	130	55
10	192	275	200	150	150	747	1600	2650	4310	407	88	79
11	298	250	150	150	150	1360	1520	2460	4790	390	100	58
12	301	300	125	150	150	865	1460	2260	3410	375	88	55
13	290	325	125	150	175	902	1460	2310	2690	349	77	65
14	291	350	125	150	175	736	1530	2580	2450	319	72	99
15	295	300	150	150	200	587	1550	2740	2360	295	73	99
16	306	250	150	175	300	546	1380	2630	2200	302	87	72
17	264	250	150	175	400	531	1360	2450	2090	291	70	69
18	239	275	150	175	600	484	1620	2370	1950	302	67	53
19	230	275	175	200	900	445	1920	2240	1930	341	54	52
20	231	200	175	200	1300	449	1830	2460	1990	302	94	48
21	228	200	175	175	2530	407	1270	2930	1880	261	305	48
22	236	200	175	175	1600	389	1160	3540	1650	244	67	51
23	234	200	175	175	1020	389	1320	4060	1450	220	73	55
24	223	200	175	175	788	452	2160	3390	1260	213	94	78
25	240	250	175	175	869	585	2710	2880	1150	229	81	82
26	248	300	175	175	1170	669	2920	2690	1040	247	81	225
27	269	300	175	175	1250	711	2840	2770	966	245	111	482
28	268	300	175	175	1110	606	2330	2970	919	242	75	471
29	275	300	175	175	---	612	1970	3230	852	244	62	329
30	256	275	175	200	---	721	1860	3500	858	207	54	286
31	240	---	175	200	---	980	---	3550	---	174	67	---
TOTAL	6965	8000	5900	5275	16662	19728	52050	92600	76205	11483	2966	3458
MEAN	225	267	190	170	595	636	1735	2987	2540	370	95.7	115
MAX	306	350	300	200	2530	1360	2920	4800	4790	828	305	482
MIN	119	200	125	150	150	389	1160	1930	852	174	54	46
AC-FT	13820	15870	11700	10460	33050	39130	103200	183700	151200	22780	5880	6860
CAL YR 1985	TOTAL	273785	MEAN	750	MAX	5390	MIN	25	AC-FT	543100		
WTR YR 1986	TOTAL	301292	MEAN	825	MAX	4800	MIN	46	AC-FT	597600		

GREEN RIVER BASIN

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09260000 LITTLE SNAKE RIVER NEAR LILY, CO--Continued
(National Stream-Quality Accounting Network Station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--September 1969 to September 1986 (discontinued).

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: July 1975 to September 1985.

WATER TEMPERATURES: July 1975 to September 1985.

INSTRUMENTATION:--Water-quality monitor July 1975 to September 1985.

REMARKS:--Unpublished maximum and minimum specific conductance data for period of daily record available in district office.

EXTREMES FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 2,020 microsiemens Oct. 11, 1977; minimum, 110 microsiemens June 1, 1985.

WATER TEMPERATURES: Maximum, 32.0°C Aug. 6, 1981; minimum, freezing point on many days during winter months each year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	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 26...	1000	254	716	8.3	0.5	76	10.7	K16	83	240
FEB 27...	1330	1310	687	8.2	4.5	3600	10.6	<40	23000	150
MAR 24...	1250	478	832	8.4	11.0	--	8.9	--	--	280
MAY 01...	1500	2030	320	8.1	14.5	--	8.5	--	--	130
28...	1100	3170	156	8.0	16.5	130	8.1	<1	30	60
JUL 30...	1215	210	608	8.4	21.5	--	7.2	--	--	160
AUG 20...	1000	55	937	8.5	20.5	9.5	7.6	93	72	240
SEP 10...	1200	99	826	8.3	16.0	--	7.7	--	--	120

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)	BICAR- BONATE IT-FLD (MG/L AS HCO3)	CAR- BONATE IT-FLD (MG/L AS CO3)	ALKA- LITY, CARBON- ATE IT-FLD (MG/L - CACO3)	ALKA- LITY LAB (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)
NOV 26...	61	20	58	2	2.5	258	--	211	183	160
FEB 27...	41	12	85	3	2.2	162	--	133	137	180
MAR 24...	69	26	77	2	2.7	--	--	--	169	210
MAY 01...	34	9.8	18	0.7	1.1	--	--	--	101	60
28...	17	4.3	7.9	0.5	0.7	72	--	59	64	19
JUL 30...	44	13	64	2	3.6	--	--	--	163	130
AUG 20...	63	19	110	3	4.7	228	8.0	200	196	210
SEP 10...	34	8.0	130	5	2.1	--	--	--	199	220

K BASED ON NON-IDEAL COLONY COUNT.

GREEN RIVER BASIN

09260000 LITTLE SNAKE RIVER NEAR LILY, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	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, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)
NOV 26...	20	0.3	16	456	470	0.62	313	<0.01	--
FEB 27...	20	0.3	10	430	430	0.58	1520	<0.01	--
MAR 24...	26	0.4	16	--	530	0.72	682	--	<0.10
MAY 01...	4.9	0.2	15	--	200	0.28	1120	--	<0.10
28...	2.1	<0.1	12	105	99	0.14	899	<0.01	--
JUL 30...	16	0.3	11	--	380	0.52	215	--	<0.10
AUG 20...	35	0.3	12	596	580	0.81	89	<0.01	--
SEP 10...	25	0.4	10	--	550	0.75	147	--	0.40

DATE	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (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)	CARBON, ORGANIC TOTAL (MG/L AS C)
NOV 26...	<0.10	0.17	0.03	0.23	0.4	0.16	0.01	0.02	--
FEB 27...	0.29	0.03	0.04	0.17	0.2	2.60	0.05	0.03	--
MAR 24...	<0.10	0.01	--	0.79	0.8	0.40	--	--	6.3
MAY 01...	<0.10	0.06	--	0.84	0.9	0.35	--	--	14
28...	<0.10	0.03	<0.01	0.57	0.6	0.25	0.03	0.02	--
JUL 30...	<0.10	0.02	--	0.68	0.7	0.24	--	--	6.2
AUG 20...	<0.10	0.04	<0.01	0.26	0.3	0.03	<0.01	0.02	--
SEP 10...	0.12	0.13	--	0.47	0.6	6.50	--	--	>100

DATE	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	ANTI- MONY, TOTAL (UG/L AS SB)	ARSENIC TOTAL (UG/L AS AS)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA)	BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	COBALT, TOTAL RECOV- ERABLE (UG/L AS CO)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)
MAY 01...	12000	<1	4	400	<10	1	23	10	32	15000
JUL 30...	8800	<1	4	200	<10	<1	3	4	21	8800
SEP 10...	98000	6	49	6200	10	1	<1	60	380	240000

DATE	*LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	LITHIUM TOTAL RECOV- ERABLE (UG/L AS LI)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MOLYB- DENUM, TOTAL RECOV- ERABLE (UG/L AS MO)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI)	SELE- NIUM, TOTAL (UG/L AS SE)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG)	STRON- TIUM, TOTAL RECOV- ERABLE (UG/L AS SR)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)
MAY 01...	13	20	530	<0.1	1	22	1	<1	290	110
JUL 30...	12	30	200	0.2	2	6	<1	<1	360	40
SEP 10...	400	440	8000	<0.1	--	17	3	<1	--	1000

09260000 LITTLE SNAKE RIVER NEAR LILY, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	*LEAD, DIS- SOLVED (UG/L AS PB)
NOV 26...	<10	1	55	<0.5	<1	<1	<3	2	5	<1
FEB 27...	<10	2	49	<0.5	<1	<1	<3	5	14	1
MAY 28...	60	2	14	<0.5	<1	<1	<3	19	96	2

DATE	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)
NOV 26...	25	5	0.1	<10	7	<1	<1	410	<6	18
FEB 27...	21	<1	0.4	10	3	2	<1	310	<6	5
MAY 28...	6	7	<0.1	<10	2	<1	<1	96	<6	35

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE (DEG C)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE (DEG C)
DEC 19...	1425	170	749	0.0	JUL 17...	1710	330	470	25.0

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)
MAR 24...	1250	478	871	1120	JUL 30...	1215	210	1570	890
MAY 01...	1500	2030	1910	10500	SEP 10...	1200	99	20300	5430

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
NOV 26...	1000	254	1240	850	14
FEB 27...	1330	1310	5750	20300	80
MAY 28...	1100	3170	1110	9500	36
AUG 20...	1000	55	166	25	17

* The minimum reporting level for Lead was changed from <1 to <5 during June, 1986.

09260050 YAMPA RIVER AT DEERLODGE PARK, CO

LOCATION.--Lat 40°27'02", long 108°31'20" (corrected), in SE¼SW¼ sec.21, T.6 N., R.99 W., Moffat County, Hydrologic Unit 1405002, in Dinosaur National Monument, on left bank at Deerlodge Park, 1,250 ft upstream from Disappointment Draw, and 5.5 mi downstream from Little Snake River.

DRAINAGE AREA.--7,660 mi², approximately.

PERIOD OF RECORD.--August 1975 and January 1978 (discharge measurements only), April 1982 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 5,600 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 18-20, 25 to Dec. 10, Dec. 12 to Feb. 26, Mar. 10, 11, 25-27, and Apr. 4. Records good except for estimated daily discharges, which are poor. Natural flow of stream affected by transbasin diversions, numerous storage reservoirs, and diversions for irrigation of about 86,800 acres upstream from 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, 33,200 ft³/s, May 18, 1984, gage height, 19.13 ft; minimum daily, 179 ft³/s Sept. 10, 1982.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 10,000 ft³/s, and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Feb. 21	0200	11,900	9.44	May 6	1100	15,600	11.17
Apr. 2	0600	11,200	9.11	June 11	0100	*16,900	*12.19

Minimum daily discharge, 392 ft³/s, Aug. 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	553	1220	1000	675	800	3470	8000	8580	13000	5140	997	439
2	604	1410	900	675	800	2940	9570	9500	13000	4600	933	472
3	539	1420	1000	650	850	2770	9040	10900	13000	4040	865	453
4	473	1380	1100	650	850	2780	9500	12600	12700	3600	816	452
5	480	1390	1200	650	850	2800	8830	14200	13100	3490	770	457
6	512	1320	1150	625	850	2780	7300	15000	13600	3900	744	457
7	538	1080	1000	625	850	2860	6560	12700	13600	4560	716	429
8	559	1030	1000	625	750	2930	7120	10800	14800	4190	780	408
9	650	1040	975	625	750	3070	7840	10400	14200	3470	807	428
10	894	1040	750	625	700	3200	7880	9350	13900	3100	780	439
11	1120	1110	522	625	700	3300	6690	8620	14600	2980	810	471
12	1230	1030	475	625	650	3450	6310	8230	11700	2750	755	486
13	1340	1230	450	600	650	3240	6400	7990	10600	2550	717	553
14	1430	1330	450	600	700	3010	6770	8530	10200	2340	657	576
15	1440	1430	475	600	800	2770	6570	9200	9840	2230	591	518
16	1370	1360	500	625	1000	2700	5830	9380	9820	2190	525	520
17	1170	1090	550	625	1300	2740	5710	8980	9500	2060	509	493
18	976	1050	550	650	1800	2770	6210	8470	8630	2090	470	443
19	935	1000	575	700	2400	2920	6560	7950	8520	2080	418	438
20	930	950	575	700	3200	2720	6190	8500	8440	1860	392	455
21	904	725	625	700	5000	2540	5140	10100	7800	1740	701	458
22	874	524	650	700	3900	2510	4850	12000	7300	1660	468	479
23	876	878	675	700	3500	2570	5270	13600	6720	1610	511	479
24	988	1120	675	675	3000	2920	7580	12400	6660	1530	636	570
25	1070	1100	675	675	2700	3100	9660	10800	5670	1510	598	687
26	1060	1100	675	675	3300	3200	10300	10600	5290	1470	521	751
27	1240	1100	675	675	4090	3300	10300	11700	5270	1490	524	1170
28	1100	1150	650	700	3980	3370	9030	12500	5430	1440	518	1290
29	1120	1150	650	700	---	4240	8210	12900	5020	1420	453	1120
30	1140	1050	650	750	---	5560	7940	13500	5180	1270	409	1040
31	1060	---	675	750	---	6660	---	13500	---	1110	436	---
TOTAL	29175	33807	22472	20475	50720	99190	223160	333480	297090	79470	19827	17431
MEAN	941	1127	725	660	1811	3200	7439	10760	9903	2564	640	581
MAX	1440	1430	1200	750	5000	6660	10300	15000	14800	5140	997	1290
MIN	473	524	450	600	650	2510	4850	7950	5020	1110	392	408
AC-FT	57870	67060	44570	40610	100600	196700	442600	661500	589300	157600	39330	34570
CAL YR 1985	TOTAL	1149868		MEAN	3150	MAX	18300	MIN	306	AC-FT	2281000	
WTR YR 1986	TOTAL	1226297		MEAN	3360	MAX	15000	MIN	392	AC-FT	2432000	

09302450 LOST CREEK NEAR BUFORD, CO

LOCATION.--Lat 40°03'01", long 107°28'06", in SE¼SE¼ sec.15, T.1 N., R.90 W., Rio Blanco County, Hydrologic Unit 14050005, on left bank 15 ft downstream from highway bridge, 540 ft upstream from mouth, 0.5 mi downstream from Long Park Creek, and 9 mi northeast of Buford.

DRAINAGE AREA.--21.5 mi².

PERIOD OF RECORD.--October 1964 to current year.

REVISED RECORDS.--WDR CO-79-3: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 7,560 ft above National Geodetic Vertical Datum of 1929, from topographic map. Oct. 1, 1973, to Sept. 30, 1975, at site 150 ft upstream at present datum.

REMARKS.--Estimated daily discharges: Dec. 11-13 and Feb. 7-13. Records good except for estimated daily discharges, which are poor. No diversion upstream from station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--22 years, 24.1 ft³/s; 17,460 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 944 ft³/s, May 9, 1974, gage height, 7.53 ft, from rating curve extended above 260 ft³/s; minimum daily, 0.30 ft³/s, Jan. 9, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 150 ft³/s, and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 5	1100	*738	*4.43	May 20	0200	439	3.63
May 14	1700	343	3.29				

Minimum daily discharge, 3.1 ft³/s, Aug. 11, 16, 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.1	4.1	5.2	4.4	3.5	5.6	41	167	134	12	3.6	4.1
2	4.1	4.7	4.9	4.3	3.6	5.7	39	199	117	10	3.6	4.1
3	3.9	4.8	4.8	4.3	3.7	6.0	49	152	115	9.2	3.5	4.1
4	3.9	4.4	4.4	4.3	3.7	6.4	55	374	117	9.0	3.5	4.0
5	3.7	4.9	5.0	4.7	3.6	6.9	57	548	103	20	3.5	3.8
6	3.9	4.4	4.9	4.8	3.6	7.2	63	284	89	21	3.4	3.8
7	4.6	4.6	5.1	4.5	3.7	7.8	60	199	79	13	3.7	4.0
8	5.7	4.9	5.2	3.9	3.8	9.4	56	152	72	10	3.5	5.0
9	5.6	3.9	5.1	3.9	3.8	9.4	55	119	69	14	3.5	4.4
10	6.5	4.8	5.4	3.9	3.8	8.7	54	107	68	11	3.4	6.6
11	8.1	5.3	5.0	3.9	3.8	8.3	54	92	61	8.6	3.1	5.9
12	6.7	5.3	5.0	3.9	3.9	7.6	62	120	56	7.5	3.2	4.6
13	7.1	5.0	5.0	4.1	3.9	7.4	56	140	54	6.9	3.5	4.1
14	5.6	4.2	5.4	4.3	4.0	7.8	53	216	51	6.3	3.5	3.8
15	5.2	5.5	5.1	4.4	3.9	7.5	50	220	47	5.9	3.4	3.5
16	5.4	4.9	4.8	4.2	4.4	8.1	60	177	44	8.4	3.1	3.3
17	5.5	5.1	4.7	3.9	4.4	8.2	59	128	42	7.4	3.1	3.3
18	5.4	5.2	4.5	3.8	4.4	9.1	57	169	40	6.0	3.4	3.4
19	5.2	5.1	4.4	3.6	4.7	11	49	225	36	5.8	3.6	3.6
20	5.1	5.2	4.4	3.8	4.5	12	44	326	33	5.6	3.9	3.6
21	5.2	5.5	4.4	3.8	4.9	12	40	286	28	6.1	8.0	4.4
22	5.4	5.4	4.4	3.8	4.6	17	52	321	24	7.5	5.9	5.1
23	4.9	5.0	4.4	3.9	4.6	29	94	241	22	7.2	5.0	8.6
24	5.0	5.0	4.2	3.8	4.7	42	135	211	22	6.7	4.8	7.0
25	4.8	4.6	4.1	3.8	4.9	67	147	218	23	7.2	7.2	5.6
26	4.9	5.1	4.3	3.9	5.4	77	138	225	22	5.9	5.2	5.3
27	4.8	4.8	4.4	4.0	5.5	77	113	215	17	6.4	4.4	4.9
28	4.9	4.9	4.6	4.0	5.5	72	89	205	15	5.0	4.1	7.1
29	4.8	5.1	4.7	3.9	---	56	76	178	15	4.2	4.2	5.9
30	4.8	5.0	4.7	3.6	---	52	122	157	14	4.1	4.4	5.5
31	5.1	---	4.5	3.5	---	45	---	147	---	3.8	4.2	---
TOTAL	159.9	146.7	147.0	124.9	118.8	706.1	2079	6518	1629	261.7	126.4	142.4
MEAN	5.16	4.89	4.74	4.03	4.24	22.8	69.3	210	54.3	8.44	4.08	4.75
MAX	8.1	5.5	5.4	4.8	5.5	77	147	548	134	21	8.0	8.6
MIN	3.7	3.9	4.1	3.5	3.5	5.6	39	92	14	3.8	3.1	3.3
AC-FT	317	291	292	248	236	1400	4120	12930	3230	519	251	282
CAL YR 1985 TOTAL		12566.3		MEAN	34.4	MAX	468	MIN	3.1	AC-FT	24930	
WTR YR 1986 TOTAL		12159.9		MEAN	33.3	MAX	548	MIN	3.1	AC-FT	24120	

GREEN RIVER BASIN

09303000 NORTH FORK WHITE RIVER AT BUFORD, CO

LOCATION.--Lat 39°59'15", long 107°36'50", in NW¼NW¼ sec.9, T.1 S., R.91 W., Rio Blanco County, Hydrologic Unit 14050005, on right bank 600 ft east of Buford and 1.2 mi upstream from South Fork White River.

DRAINAGE AREA.--260 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1910 to December 1915, July 1919 to December 1920, October 1951 to current year. Monthly discharge only for some periods, published in WSP 1313. Published as North Fork White River near Buford prior to 1951 and as White River at Buford 1951-67. Records for July 1903 to December 1906 at site 6.5 mi upstream not equivalent because of inflow between sites.

REVISED RECORDS.--WSP 1343: 1912. WDR CO-79-3: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 7,010 ft above National Geodetic Vertical Datum of 1929, from topographic map. May 24, 1910, to May 27, 1914, nonrecording gage at site 1.5 mi upstream at different datum. May 28, 1914, to Dec. 7, 1915, and July 1, 1919, to Oct. 9, 1920, nonrecording gage at present site at different datum.

REMARKS.--Estimated daily discharges: Dec. 16-23, 27-30, and Jan. 9-11, 15. Records good except those for estimated daily discharges, which are poor. Diversions upstream from station for irrigation of about 900 acres upstream from, and 300 acres downstream from station.

AVERAGE DISCHARGE.--41 years (water years 1911-15, 1920, 1952-86), 323 ft³/s; 234,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,550 ft³/s, May 24, 1984, gage height 6.76 ft; maximum gage height, 7.22 ft, Jan. 9, 1961 (backwater from ice); minimum daily discharge, 90 ft³/s, Feb. 21, 1955.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ft³/s, and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 4	2000	1,420	5.57	May 21	2200	*1,550	*5.68

Minimum daily discharge, 150 ft³/s, Feb. 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	271	250	232	211	196	206	405	771	1290	775	360	292
2	270	254	233	213	195	207	402	886	1260	732	356	288
3	271	253	235	211	199	209	369	1050	1260	702	351	285
4	268	248	232	197	197	209	338	1160	1340	706	347	276
5	264	259	223	199	195	212	320	1050	1280	858	342	272
6	263	251	230	223	191	212	328	867	1230	869	341	267
7	291	245	222	211	191	215	356	796	1260	814	341	271
8	315	251	224	208	189	222	362	691	1280	657	335	292
9	301	241	221	210	185	242	365	651	1270	690	334	271
10	305	252	205	215	180	222	361	621	1220	642	331	309
11	331	256	197	210	205	219	356	648	1070	591	322	301
12	307	259	198	206	204	217	359	678	1050	564	337	278
13	316	247	222	212	206	211	371	723	1040	545	330	268
14	295	238	238	221	204	210	344	802	1020	526	327	258
15	290	263	217	220	206	210	345	776	1010	504	318	250
16	290	235	220	212	204	208	372	707	1020	527	312	249
17	289	244	220	203	202	208	382	679	1030	495	309	249
18	287	245	215	202	207	207	360	749	1040	474	302	249
19	281	227	215	198	217	208	341	908	1050	465	300	249
20	276	228	220	201	221	209	334	1070	1030	455	301	251
21	277	230	225	200	209	209	356	1200	1010	474	337	278
22	278	227	230	194	205	218	448	1290	978	465	328	267
23	270	236	225	203	205	226	567	1180	958	447	331	290
24	269	237	223	196	206	236	613	1110	938	443	331	282
25	264	234	207	195	209	235	606	1160	907	451	349	273
26	265	233	216	192	211	234	550	1280	906	429	313	276
27	264	227	220	208	210	252	486	1280	881	418	303	272
28	266	228	220	201	205	275	465	1300	855	399	300	293
29	265	233	220	198	---	302	504	1300	852	388	311	278
30	260	240	220	197	---	331	635	1260	821	378	305	274
31	267	---	214	198	---	404	---	1260	---	370	298	---
TOTAL	8726	7271	6839	6365	5654	7185	12400	29903	32156	17253	10102	8208
MEAN	281	242	221	205	202	232	413	965	1072	557	326	274
MAX	331	263	238	223	221	404	635	1300	1340	869	360	309
MIN	260	227	197	192	180	206	320	621	821	370	298	249
AC-FT	17310	14420	13570	12620	11210	14250	24600	59310	63780	34220	20040	16280
CAL YR 1985	TOTAL	187313	MEAN	513	MAX	2360	MIN	193	AC-FT	371500		
WTR YR 1986	TOTAL	152062	MEAN	417	MAX	1340	MIN	180	AC-FT	301600		

09303000 NORTH FORK WHITE RIVER AT BUFORD, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1982 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	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)
MAR 28...	1000	260	310	8.4	3.0	11.4	160	49	9.3
MAY 30...	1315	1120	153	8.2	8.5	8.9	77	23	4.7
JUN 12...	1300	995	168	8.2	10.0	9.2	82	24	5.4

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)
MAR 28...	3.1	0.1	1.0	98	65	0.9	<0.1	17	200
MAY 30...	2.0	0.1	0.7	62	23	0.3	<0.1	14	100
JUN 12...	2.2	0.1	0.7	65	26	0.3	<0.1	15	110

DATE	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)
MAR 28...	0.28	143	<0.01	<0.10	<0.01	--	<0.2	0.02	0.01
MAY 30...	0.14	317	<0.01	<0.10	<0.01	--	<0.2	0.02	0.01
JUN 12...	0.15	304	<0.01	<0.10	0.02	0.28	0.3	0.02	0.01

DATE	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ANTI- MONY, DIS- SOLVED (UG/L AS SB)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	BORON, DIS- SOLVED (UG/L AS B)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)
JUN 12...	50	2	<1	19	<0.5	<10	<1	<1	1	6	45

DATE	*LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	ZINC, DIS- SOLVED (UG/L AS ZN)
JUN 12...	1	6	6	<0.1	<1	<1	<1	<1	220	<3

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE (DEG C)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE (DEG C)
OCT 17...	1410	282	300	6.0	MAY 21...	1105	994	190	6.0
NOV 26...	1150	238	316	4.0	JUN 25...	1235	900	189	11.0
JAN 31...	1045	198	337	2.0	JUL 23...	0940	430	251	12.0
MAR 07...	1500	207	341	7.0	AUG 21...	0940	333	267	11.0
APR 15...	1005	323	319	3.5					

* The minimum reporting level for Lead was changed from <1 to <5 during June, 1986.

09303300 SOUTH FORK WHITE RIVER AT BUDGE'S RESORT, CO

LOCATION.--Lat 39°50'36", long 107°20'03", in NW¼ sec.36, T.2 S., R.89 W., Garfield County, Hydrologic Unit 14050005, on right bank 20 ft upstream from Forest Service trail bridge, 0.2 mi upstream from Wagonwheel Creek, and 0.3 mi northeast of Budge's Resort.

DRAINAGE AREA.--52.3 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1975 to current year.

REVISED RECORDS.--WDR CO-79-3: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 8,980 ft above National Geodetic Vertical Datum of 1929, from topographic map. June 1, 1975, to July 7, 1976, at site on left bank 50 ft upstream at datum 1.3 ft, lower.

REMARKS.--Estimated daily discharge: Nov. 4 to Dec. 24, Jan. 27 to Feb. 26, Mar. 23 to Apr. 14, Jul. 15-30, and Sep. 7-18. Records good except for estimated daily discharges, which are poor. No diversion upstream from station.

AVERAGE DISCHARGE.--11 years, 114 ft³/s; 82,600 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,750 ft³/s, June 25, 1983, gage height, 6.57 ft, from rating curve extended above 850 ft³/s; minimum daily, 21 ft³/s, Sept. 29, 30, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 969 ft³/s at 2300 June 7, gage height, 5.60 ft; minimum daily, 48 ft³/s, Mar. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	65	71	62	67	68	48	94	118	635	324	101	90
2	64	66	64	80	67	49	95	143	646	303	99	89
3	64	59	62	77	67	52	92	178	651	290	99	86
4	63	59	62	74	67	55	90	211	773	308	99	85
5	60	59	62	67	68	57	84	207	742	399	99	86
6	60	57	62	67	69	71	80	186	764	283	96	82
7	78	53	62	67	68	78	75	167	859	233	97	82
8	74	53	64	67	66	74	76	151	844	214	101	85
9	70	53	64	67	64	72	74	148	802	221	98	90
10	75	54	64	67	58	66	74	127	604	227	94	92
11	77	55	65	67	60	65	75	124	475	201	94	98
12	75	54	66	67	62	65	72	123	525	187	100	96
13	76	53	66	68	60	68	70	124	584	175	100	92
14	69	53	66	67	60	68	69	130	543	172	97	88
15	70	54	68	67	62	67	71	128	591	175	93	82
16	70	56	68	67	64	69	73	123	635	180	91	81
17	70	58	69	67	66	68	71	122	655	170	89	83
18	64	58	70	67	64	67	69	128	624	160	87	83
19	65	58	69	67	64	69	69	148	638	150	86	85
20	74	58	68	67	62	70	68	187	623	155	92	85
21	79	58	69	70	62	67	71	238	624	160	110	93
22	79	58	69	73	60	67	84	270	635	140	102	90
23	79	60	68	73	57	69	98	275	659	130	100	92
24	79	60	67	73	56	67	103	271	515	125	101	92
25	79	61	67	73	57	72	102	281	489	135	93	91
26	79	62	66	74	54	71	94	340	579	125	90	90
27	79	62	65	74	50	70	88	459	531	120	89	91
28	79	62	65	73	49	74	86	535	468	120	89	91
29	74	62	76	72	---	78	91	571	412	115	90	90
30	71	62	68	70	---	82	101	549	355	110	95	90
31	72	---	67	68	---	88	---	578	---	102	92	---
TOTAL	2232	1748	2050	2164	1731	2103	2459	7340	18480	5909	2963	2650
MEAN	72.0	58.3	66.1	69.8	61.8	67.8	82.0	237	616	191	95.6	88.3
MAX	79	71	76	80	69	88	103	578	859	399	110	98
MIN	60	53	62	67	49	48	68	118	355	102	86	81
AC-FT	4430	3470	4070	4290	3430	4170	4880	14560	36660	11720	5880	5260
CAL YR 1985 TOTAL		48654		MEAN	133	MAX	973	MIN	53	AC-FT	96510	
WTR YR 1986 TOTAL		51829		MEAN	142	MAX	859	MIN	48	AC-FT	102800	

09303300 SOUTH FORK WHITE RIVER AT BUDGE'S RESORT, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1982 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

		STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	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)			
OCT 18...	0900	68	149	8.1	0.5	8.7	74	20	5.7			
JUN 18...	1105	558	150	7.6	5.5	10.3	64	17	5.2			
AUG 08...	1410	98	154	7.8	13.0	8.2	72	19	5.9			
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 18...	1.8	0.1	0.9	70	5.9	0.4	<0.1	17	94			
JUN 18...	0.9	0	0.7	64	3.0	0.3	<0.1	8.7	74			
AUG 08...	1.7	0.1	1.0	75	4.0	0.3	<0.1	17	94			
DATE		SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)		
OCT 18...	0.13	17	<0.01	0.13	0.03	--	<0.2	0.03	0.03			
JUN 18...	0.1	112	<0.01	<0.10	0.02	0.18	0.2	0.02	<0.01			
AUG 08...	0.13	25	<0.01	<0.10	<0.01	--	<0.2	0.02	0.01			
DATE		ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ANTI- MONY, DIS- SOLVED (UG/L AS SB)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	BORON, DIS- SOLVED (UG/L AS B)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)
OCT 18...	<10	<1	<1	11	<0.5	<10	2	<1	<1	5	26	
JUN 18...	20	<1	<1	13	<0.5	<10	<1	<1	<1	2	19	
DATE		*LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	ZINC, DIS- SOLVED (UG/L AS ZN)	
OCT 18...	<1	<4	6	<0.1	<1	6	<1	<1	<1	84	19	
JUN 18...	<5	<4	2	<0.1	<1	1	<1	<1	<1	42	5	
DATE		TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE (DEG C)	DATE		TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE (DEG C)	
DEC 17...	1230	70	144	0.5	JUL 11...		1255	195	238	9.0		
APR 15...	1345	69	146	8.0	SEP 19...		1140	87	150	8.0		
MAY 21...	1300	249	176	7.5								

* The minimum reporting level for Lead was changed from <1 to <5 during June, 1986.

GREEN RIVER BASIN

09303320 WAGONWHEEL CREEK AT BUDGE'S RESORT, CO

LOCATION.--Lat 39°50'40", long 107°20'10", in SW¼SW¼ sec.25, T.2 S., R.89 W., Garfield County, Hydrologic Unit 14050005, on right bank 60 ft upstream from mouth and confluence of South Fork White River, about 800 ft downstream from private road bridge, and 0.2 mi north-northeast of Budge's Resort.

DRAINAGE AREA.--7.36 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1975 to current year.

REVISED RECORDS.--WDR CO-79-3: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 8,980 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 1 to Apr. 15 and Aug. 17 to Sept 30. Records fair except for estimated daily discharges, which are poor.

AVERAGE DISCHARGE.--11 years, 11.5 ft³/s; 8,330 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 336 ft³/s, June 8, 1985, gage height 4.64 ft; no flow many days each year.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 55 ft³/s, and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
June 5	1600	*206	*3.87	June 21	2200	200	3.47

Minimum daily discharge, 0.20 ft³/s, Apr. 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.38	.38	.36	.31	.28	.21	.26	3.0	150	136	4.5	.92
2	.38	.37	.36	.32	.28	.22	.27	3.7	135	120	4.2	.90
3	.37	.36	.36	.34	.28	.22	.28	6.0	141	106	3.9	.90
4	.39	.35	.36	.32	.28	.23	.27	8.2	168	104	3.6	.84
5	.41	.33	.35	.31	.28	.24	.27	11	179	147	3.3	.83
6	.43	.32	.35	.30	.27	.26	.25	11	146	104	3.0	.82
7	.42	.34	.35	.30	.26	.27	.24	11	129	79	2.6	.76
8	.43	.35	.36	.29	.27	.28	.23	13	132	60	2.1	.84
9	.45	.35	.36	.29	.27	.27	.23	19	117	54	1.8	.90
10	.44	.34	.37	.29	.28	.26	.23	21	87	45	1.7	1.0
11	.43	.33	.38	.29	.28	.25	.23	20	81	28	1.7	.85
12	.42	.33	.38	.29	.27	.24	.23	19	108	21	1.7	.67
13	.41	.33	.38	.30	.27	.24	.23	18	119	20	1.6	.65
14	.40	.33	.38	.30	.27	.25	.23	18	121	21	1.6	.65
15	.39	.34	.38	.31	.27	.25	.50	18	137	21	1.5	.61
16	.38	.35	.38	.30	.28	.24	.25	17	145	24	1.5	.59
17	.38	.35	.38	.30	.27	.24	.23	17	151	25	1.4	.59
18	.36	.37	.38	.31	.27	.23	.24	17	158	14	1.3	.55
19	.36	.37	.38	.32	.27	.23	.27	17	158	13	1.6	.55
20	.40	.37	.38	.32	.27	.23	.26	17	152	14	2.0	.59
21	.42	.37	.37	.33	.28	.24	.20	24	138	15	1.6	.65
22	.44	.37	.36	.33	.27	.25	.49	27	106	15	1.4	.50
23	.45	.37	.35	.32	.28	.26	1.3	34	127	11	1.6	.54
24	.44	.37	.34	.32	.27	.25	1.4	40	176	8.0	1.8	.52
25	.44	.37	.33	.31	.26	.24	1.4	48	159	9.8	2.0	.55
26	.45	.36	.32	.30	.25	.23	1.7	65	162	7.6	1.5	.58
27	.44	.36	.31	.29	.24	.23	1.7	85	162	6.6	1.3	.56
28	.44	.36	.31	.28	.22	.24	1.6	115	150	5.5	1.0	.56
29	.43	.36	.32	.27	---	.24	1.8	110	138	5.0	.98	.66
30	.41	.36	.31	.27	---	.25	2.3	100	135	4.8	.97	.75
31	.40	---	.31	.28	---	.25	---	114	---	4.7	.97	---
TOTAL	12.79	10.61	11.01	9.41	7.54	7.54	19.09	1046.9	4167	1249.0	61.72	20.88
MEAN	.41	.35	.36	.30	.27	.24	.64	33.8	139	40.3	1.99	.70
MAX	.45	.38	.38	.34	.28	.28	2.3	115	179	147	4.5	1.0
MIN	.36	.32	.31	.27	.22	.21	.20	3.0	81	4.7	.97	.50
AC-FT	25	21	22	19	15	15	38	2080	8270	2480	122	41
CAL YR 1985	TOTAL	5963.66	MEAN	16.3	MAX	237	MIN	.00	AC-FT	11830		
WTR YR 1986	TOTAL	6623.49	MEAN	18.1	MAX	179	MIN	.20	AC-FT	13140		

09303320 WAGONWHEEL CREEK AT BUDGES RESORT, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1983 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	HARD- NESS (MG/L AS CAC03)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
OCT 18...	0945	0.36	288	8.3	0.0	8.3	170	43	14
JUN 18...	1138	140	215	8.1	6.5	9.9	120	33	9.5
AUG 08...	1400	2.0	281	8.1	13.0	8.2	160	41	13

DATE	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINEITY LAB (MG/L AS CAC03)	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 18...	0.6	0	0.4	155	3.5	0.6	<0.1	2.8	160
JUN 18...	0.5	0	0.5	123	2.0	0.3	<0.1	2.4	120
AUG 08...	0.4	0	0.6	160	1.6	0.3	<0.1	2.9	160

DATE	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, ORTHOPHOS- PHORUS, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, ORTHOPHOS- PHORUS, DIS- SOLVED (MG/L AS P)
OCT 18...	0.21	0.15	<0.01	0.18	0.04	--	<0.2	<0.01	0.01
JUN 18...	0.17	46	<0.01	<0.10	0.02	0.18	0.2	<0.01	<0.01
AUG 08...	0.21	0.84	<0.01	<0.10	<0.01	--	<0.2	<0.01	<0.01

DATE	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ANTI- MONY, DIS- SOLVED (UG/L AS SB)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	BORON, DIS- SOLVED (UG/L AS B)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)
OCT 18...	10	<1	<1	44	<0.5	<10	<1	<1	<1	6	4
JUN 18...	<10	<1	<1	31	<0.5	--	<1	<1	<1	2	11

DATE	*LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	ZINC, DIS- SOLVED (UG/L AS ZN)
OCT 18...	<1	<4	2	<0.1	<1	3	<1	<1	30	16
JUN 18...	<5	--	3	<0.1	<1	1	<1	<1	24	3

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE (DEG C)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE (DEG C)
DEC 17...	1300	0.38	305	0.5	JUL 11...	1300	24	256	10.0
APR 15...	1350	0.24	304	1.5	SEP 19...	1225	0.56	292	7.5
MAY 21...	1320	22	289	3.0					

* The minimum reporting level for Lead was changed from <1 to <5 during June, 1986.

WHITE RIVER BASIN

09303400 SOUTH FORK WHITE RIVER NEAR BUDGE'S RESORT, CO

LOCATION.--Lat 39°51'51", long 107°32'00", in NW¼SE¼ sec.19, T.2 S., R.90 W., Rio Blanco County, Hydrologic Unit 14050005, on right bank on downstream side of Forest Service bridge, 300 ft upstream from South Fork Campground, 10 mi above mouth, and about 10.5 mi southeast of Buford.

DRAINAGE AREA.--128 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1976 to current year.

REVISED RECORDS.--WDR CO-79-3: 1976(M), 1977, 78(P), 1978.

GAGE.--Water-stage recorder. Elevation of gage is 7,600 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 1 to Nov. 20, Dec 14 to Feb. 13, and June 5 to July 20. Records good except for estimated daily discharges, which are fair. No regulation or diversions upstream from station.

AVERAGE DISCHARGE.--10 years, 223 ft³/s; 161,600 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,770 ft³/s, June 22, 1983, gage height, 6.18 ft; minimum daily, 40 ft³/s, Feb. 1 to Mar. 10, 1980, Dec. 30, 1980, Jan. 10, 15, 1981.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 500 ft³/s, and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 4	2100	635	3.98	June 7	unknown	*a 2,390	----

Minimum daily discharge, 90 ft³/s, Feb. 10, 11, 13, 18, and 24.
a mean daily discharge.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	155	125	106	100	100	100	176	297	1170	620	173	129
2	150	127	106	98	100	92	178	363	1230	580	166	125
3	148	125	106	98	98	91	170	463	1190	520	165	127
4	145	125	103	98	100	92	156	573	1520	500	162	119
5	143	127	104	100	98	94	148	583	1400	700	159	114
6	140	125	104	101	110	96	149	529	1710	490	158	112
7	158	126	103	98	105	97	157	486	1900	460	160	120
8	156	126	101	92	98	99	157	431	1850	430	166	123
9	154	115	98	100	94	108	159	405	1780	450	160	119
10	156	117	98	105	90	101	164	371	1620	470	150	135
11	158	118	98	105	90	99	159	357	1140	450	146	133
12	156	120	97	98	92	97	157	355	1220	380	152	127
13	154	125	96	98	90	98	165	353	1340	360	158	123
14	154	130	100	105	97	96	156	370	1280	330	149	124
15	155	128	98	105	102	95	151	368	1330	335	142	120
16	154	132	100	105	92	94	160	356	1320	340	140	117
17	151	135	100	105	94	94	161	347	1360	325	136	114
18	148	132	105	103	90	93	153	355	1340	290	131	119
19	146	136	100	105	91	93	147	397	1300	275	132	122
20	144	122	100	103	96	93	144	492	1280	280	134	119
21	144	116	100	101	96	93	151	657	1240	279	175	138
22	144	114	98	110	104	93	187	790	1180	243	148	128
23	143	115	100	100	93	96	238	821	1100	233	146	149
24	141	114	104	98	90	99	262	831	1020	233	148	154
25	138	113	108	100	93	99	268	855	940	238	170	147
26	138	110	100	100	97	99	251	909	970	224	142	145
27	137	109	98	100	94	103	229	986	940	214	132	142
28	135	109	96	100	99	112	218	1020	830	200	127	158
29	135	109	98	102	---	127	225	1070	720	191	129	148
30	125	106	100	104	---	143	250	1050	660	183	136	143
31	125	---	106	102	---	172	---	1090	---	178	135	---
TOTAL	4530	3631	3131	3139	2693	3158	5446	18330	37880	11001	4627	3893
MEAN	146	121	101	101	96.2	102	182	591	1263	355	149	130
MAX	158	136	108	110	110	172	268	1090	1900	700	175	158
MIN	125	106	96	92	90	91	144	297	660	178	127	112
AC-FT	8990	7200	6210	6230	5340	6260	10800	36360	75130	21820	9180	7720
CAL YR 1985	TOTAL	103546		MEAN	284	MAX	2000	MIN	90	AC-FT	205400	
WTR YR 1986	TOTAL	101459		MEAN	278	MAX	1900	MIN	90	AC-FT	201200	

09303400 SOUTH FORK WHITE RIVER NEAR BUDGES RESORT, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1983 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	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)		
MAR 28...	1115	103	190	8.4	3.0	10.5	100	29	7.9	2.1		
MAY 30...	1015	1070	179	8.1	4.0	10.1	98	28	6.8	1.1		
JUN 12...	1015	1370	161	8.2	4.5	10.4	88	25	6.2	1.1		
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)		
MAR 28...		0.1	0.9	104	5.8	0.7	0.1	15	120	0.17		
MAY 30...		0	0.5	103	3.2	0.3	<0.1	8.0	110	0.15		
JUN 12...		0	0.5	92	3.2	0.3	<0.1	8.1	100	0.14		
DATE		SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)		
MAR 28...		34	0.15	0.02	0.17	0.03	0.17	0.2	0.02	0.03		
MAY 30...		317	--	<0.01	0.16	0.03	--	<0.2	0.02	0.01		
JUN 12...		369	--	<0.01	0.10	0.02	0.18	0.2	0.02	<0.01		
DATE		ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ANTI- MONY, DIS- SOLVED (UG/L AS SB)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	BORON, DIS- SOLVED (UG/L AS B)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)
JUN 12...	30	1	<1	15	<0.5	<10	<1	<1	1	6	22	
DATE		*LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	ZINC, DIS- SOLVED (UG/L AS ZN)	
JUN 12...		<1	5	4	<0.1	<1	1	<1	<1	54	8	
DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE (DEG C)								
OCT 17...	1020	155	200	1.5								
JAN 30...	1005	107	201	0.5								
MAY 13...	1135	307	234	5.0								
DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE (DEG C)								
JUN 04...	1100	1340										
JUL 21...	1125	272										

* The minimum reporting level for Lead was changed from <1 to <5 during June, 1986.

GREEN RIVER BASIN

09303500 SOUTH FORK WHITE RIVER NEAR BUFORD, CO

LOCATION.--Lat 39°55'18", long 107°33'04", in NW¼SE¼ sec.36, T.1 S., R.91 W., Rio Blanco County, Hydrologic Unit 14050005, on left bank at upstream side of county bridge, 10 ft downstream from Peltier Creek, and 5.6 mi southeast of Buford.

DRAINAGE AREA.--157 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1903 to October 1906, June 1910 to December 1915, October 1942 to September 1947, April 1967 to current year. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 1057: 1944-45, WDR CO-79-3: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 7,480 ft above National Geodetic Vertical Datum of 1929, from topographic map. July 26, 1903, to Oct. 31, 1906, nonrecording gage, and Oct. 1, 1942, to Sept. 30, 1947, water-stage recorder, at site 60 ft upstream at different datums. Records for 1919-20 at site 6.0 mi downstream not equivalent.

REMARKS.--Estimated daily discharges: Nov. 10-12, 16, 20-22, 27, Dec. 1, 6-8, 10, Jan. 19, 20, 24-28, and Feb. 7, 22. Records good except for estimated daily discharges, which are fair. Diversions for irrigation of about 600 acres of hay meadows upstream from station.

AVERAGE DISCHARGE.--32 years (water years 1904-06, 1911-15, 1943-47, 1968-86), 272 ft³/s; 197,100 acre-ft.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,620 ft³/s, June 24, 1983, gage height, 7.73 ft; maximum gage height 8.2 ft, June 17, 1906, site and datum then in use; minimum discharge recorded, 56 ft³/s, Dec. 18, 1946, gage height, 1.01 ft, site and datum then in use, but may have been less during periods of no gage-height record.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,200 ft³/s, and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
June 8	0300	*2,520	*6.83	No other peak greater than base discharge.			

Minimum daily, 118 ft³/s, Feb. 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	166	158	150	157	130	150	258	352	1590	807	238	193
2	167	167	154	142	129	143	259	437	1620	738	233	189
3	165	165	156	143	129	138	249	556	1610	690	228	189
4	163	161	153	145	134	138	231	718	1770	690	228	180
5	160	166	141	141	124	142	219	756	1890	895	226	174
6	159	159	150	147	126	144	215	681	2150	700	220	173
7	178	157	150	139	124	148	225	629	2360	611	216	177
8	195	161	150	126	120	150	224	564	2330	552	221	180
9	184	137	155	135	126	169	225	532	2260	558	222	180
10	186	140	150	143	119	158	232	480	1760	579	209	190
11	195	150	140	141	118	155	227	457	1440	514	203	190
12	191	150	130	132	120	152	223	454	1530	472	208	185
13	195	152	128	133	123	148	228	447	1680	446	216	175
14	187	163	138	132	120	147	219	465	1540	427	208	167
15	177	160	134	137	130	148	212	464	1640	398	198	165
16	182	160	137	141	126	145	220	450	1710	404	193	161
17	183	158	137	140	129	145	227	427	1760	378	193	158
18	181	156	148	139	130	142	222	432	1710	352	191	161
19	179	160	142	140	136	138	214	463	1670	338	191	164
20	178	161	140	140	136	146	212	565	1610	339	192	164
21	179	160	141	134	139	141	212	753	1560	341	227	180
22	181	160	138	143	140	145	236	897	1470	329	211	172
23	176	159	140	130	136	149	290	907	1380	311	209	180
24	176	155	147	140	133	154	325	902	1280	305	208	184
25	174	162	149	140	136	155	340	953	1110	316	226	184
26	175	165	144	140	142	156	329	1110	1190	289	204	185
27	173	160	140	140	140	163	305	1240	1180	279	194	182
28	172	156	136	140	146	174	285	1350	1060	264	192	188
29	173	157	135	136	---	191	286	1440	987	256	192	185
30	173	160	140	134	---	212	307	1410	891	250	194	184
31	177	---	145	132	---	246	---	1430	---	243	195	---
TOTAL	5500	4735	4438	4302	3641	4832	7456	22721	47738	14071	6486	5339
MEAN	177	158	143	139	130	156	249	733	1591	454	209	178
MAX	195	167	156	157	146	246	340	1440	2360	895	238	193
MIN	159	137	128	126	118	138	212	352	891	243	191	158
AC-FT	10910	9390	8800	8530	7220	9580	14790	45070	94690	27910	12860	10590

CAL YR 1985	TOTAL	131386	MEAN	360	MAX	2750	MIN	119	AC-FT	260600
WTR YR 1986	TOTAL	131259	MEAN	360	MAX	2360	MIN	118	AC-FT	260400

09303500 SOUTH FORK WHITE RIVER NEAR BUFORD, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1982 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	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)
MAR 28...	1300	169	240	8.2	4.0	8.0	130	37	9.1	2.2
MAY 30...	1115	1420	204	8.2	4.5	10.0	110	32	7.4	1.0
JUN 12...	1130	1550	181	7.9	5.5	9.8	100	29	6.9	1.1

DATE	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINEITY 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)
MAR 28...	0.1	1.0	116	14	0.8	0.2	16	150	0.2
MAY 30...	0	0.5	113	5.2	0.3	<0.1	7.6	120	0.17
JUN 12...	0	0.5	101	5.4	0.3	<0.1	7.7	110	0.15

DATE	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)
MAR 28...	68	0.17	0.02	0.19	0.05	0.25	0.3	0.02	0.03
MAY 30...	467	--	<0.01	0.17	0.02	--	<0.2	0.02	<0.01
JUN 12...	467	--	<0.01	0.12	0.02	0.18	0.2	0.02	<0.01

DATE	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ANTI- MONY, DIS- SOLVED (UG/L AS SB)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	BORON, DIS- SOLVED (UG/L AS B)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)
JUN 12...	20	3	<1	20	<0.5	<10	<1	<1	1	1	21

DATE	*LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	ZINC, DIS- SOLVED (UG/L AS ZN)
JUN 12...	<1	5	4	0.1	<1	1	<1	<1	67	6

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE (DEG C)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE (DEG C)
OCT 17...	1150	179	236	4.0	JUN 04...	1215	1750	201	8.5
JAN 30...	1045	173	221	1.0	JUL 21...	1300	341	234	11.0
MAY 13...	1400	429	252	7.5	AUG 25...	1335	241	217	10.5

* The minimum reporting level for Lead was changed from <1 to <5 during June, 1986.

09304000 SOUTH FORK WHITE RIVER AT BUFORD, CO

LOCATION.--Lat 39°58'28", long 107°37'30", in NW¼NE¼ sec.17, T.1 S., R.91 W., Rio Blanco County, Hydrologic Unit 14050005, on left bank 30 ft downstream from highway bridge, 0.8 mi upstream from mouth, and 1.0 mi south of Buford.

DRAINAGE AREA.--177 mi².

PERIOD OF RECORD.--Streamflow records, July 1919 to December 1920 (monthly discharge only, published in WSP 1313), October 1951 to current year. Water-quality data available, October 1976 to February 1978. Sediment data available, October 1976 to February 1978.

REVISED RECORDS.--WDR CO-79-3: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 6,970 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Nov. 30, 1920, nonrecording gage at site 200 ft downstream, at different datum. Oct. 1951 to Apr. 1981, at site 500 ft downstream, at different datum.

REMARKS.--Estimated daily discharges: Dec. 1, 6-8, 10, Jan. 19-20, 24-28, Feb. 7, 21 and Mar. 1-28. Records fair except for estimated daily discharges, which are poor. Diversions upstream from station for irrigation of about 1,100 acres upstream from station, and a small area downstream from station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--36 years, 264 ft³/s; 191,300 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,150 ft³/s, June 26, 1983; gage height, 6.27 ft; maximum gage height, 7.07 ft, June 30, 1957, site and datum then in use, minimum daily discharge, 47 ft³/s, Jan. 15, 1981.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,300 ft³/s, and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
June 8	1000	*2,230	*5.61	June 17	0700	1,790	5.12

Minimum daily discharge, 117 ft³/s, Jan. 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	156	146	154	159	126	152	248	430	1450	793	258	201
2	157	159	157	143	124	154	255	604	1490	704	255	194
3	155	157	158	144	125	152	230	693	1470	639	249	198
4	150	152	157	146	120	154	217	784	1600	678	249	188
5	147	156	148	142	125	156	208	755	1700	764	246	182
6	147	151	162	148	127	158	207	708	1880	624	241	179
7	167	149	161	140	124	164	221	655	2080	535	236	185
8	186	152	158	130	124	180	220	610	2100	511	240	192
9	169	139	142	136	127	172	223	570	2060	535	245	188
10	170	144	140	144	127	170	234	548	1710	571	230	207
11	188	152	139	142	127	168	226	525	1400	521	223	206
12	178	152	140	135	127	164	221	520	1420	489	229	194
13	168	153	141	136	129	160	235	540	1550	442	236	184
14	169	139	145	136	139	160	223	549	1480	433	229	175
15	160	150	140	138	141	158	220	559	1540	424	216	172
16	165	161	140	142	137	156	236	531	1620	430	209	169
17	164	170	142	144	137	153	233	523	1660	406	205	167
18	162	160	149	142	141	150	224	543	1620	399	202	172
19	161	162	143	120	144	155	217	616	1600	346	201	178
20	162	164	141	119	154	153	217	736	1550	345	201	177
21	163	159	142	121	131	156	238	785	1510	341	242	192
22	162	164	141	117	143	160	291	914	1450	360	228	187
23	157	167	142	135	152	164	351	925	1370	330	224	194
24	156	163	148	129	143	164	386	913	1300	337	226	206
25	154	168	150	120	145	168	384	945	1160	368	245	202
26	155	167	145	119	149	174	359	1070	1200	327	214	202
27	152	158	142	133	151	178	342	1170	1210	316	198	193
28	152	159	138	128	149	183	333	1270	984	295	196	215
29	155	162	136	128	---	193	348	1340	921	282	200	206
30	154	163	141	123	---	212	394	1340	873	274	205	200
31	161	---	146	128	---	248	---	1340	---	267	205	---
TOTAL	5002	4698	4528	4167	3788	5189	7941	24011	44958	14086	6983	5705
MEAN	161	157	146	134	135	167	265	775	1499	454	225	190
MAX	188	170	162	159	154	248	394	1340	2100	793	258	215
MIN	147	139	136	117	120	150	207	430	873	267	196	167
AC-FT	9920	9320	8980	8270	7510	10290	15750	47630	89170	27940	13850	11320
CAL YR 1985	TOTAL	127884		MEAN	350	MAX	2420	MIN	120	AC-FT	253700	
WTR YR 1986	TOTAL	131056		MEAN	359	MAX	2100	MIN	117	AC-FT	259900	

09304000

SOUTH FORK WHITE RIVER AT BUFORD, CO

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1984 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	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)
MAR 28...	1100	163	267	8.5	6.0	10.5	140	41	9.9	2.4
MAY 30...	1235	1360	213	8.3	7.0	9.6	110	33	7.6	1.2
JUN 12...	1230	1470	193	8.2	8.0	9.4	100	30	7.0	1.2

DATE	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LINEITY 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)
MAR 28...	0.1	0.9	120	23	0.7	0.2	16	170	0.23
MAY 30...	0	0.5	114	7.8	0.3	<0.1	8.3	130	0.17
JUN 12...	0	0.5	103	8.4	0.3	<0.1	7.9	120	0.16

DATE	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)
MAR 28...	73	0.09	0.02	0.11	0.04	0.16	0.2	0.01	0.03
MAY 30...	467	--	<0.01	0.16	0.03	--	<0.2	0.02	<0.01
JUN 12...	466	--	<0.01	0.11	0.03	0.27	0.3	0.02	0.01

DATE	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ANTI- MONY, DIS- SOLVED (UG/L AS SB)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	BORON, DIS- SOLVED (UG/L AS B)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)
JUN 12...	20	<1	<1	15	<0.5	<10	<1	<1	1	6	22

DATE	*LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	ZINC, DIS- SOLVED (UG/L AS ZN)
JUN 12...	<1	6	6	0.1	<1	1	<1	<1	85	5

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE (DEG C)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE (DEG C)
OCT 17...	1325	161	262	6.0	JUN 04...	1400	1670	212	9.5
NOV 26...	1250	166	268	3.5	JUL 23...	1430	234	265	14.0
JAN 30...	1240	142	274	2.0	AUG 25...	1450	255	248	13.0
MAY 21...	1010	783	244	7.0					

* The minimum reporting level for Lead was changed from <1 to <5 during June, 1986.

GREEN RIVER BASIN

09304200 WHITE RIVER ABOVE COAL CREEK, NEAR MEEKER, CO

LOCATION.--Lat 40°00'18", long 107°49'29", in NW¼NW¼ sec.3, T.1 S., R.93 W., Rio Blanco County, Hydrologic Unit 14050005, on left bank 40 ft downstream from county road bridge, 2.3 mi upstream from Coal Creek, and 5.0 mi southeast of Meeker.

DRAINAGE AREA.--648 mi².

PERIOD OF RECORD.--October 1961 to current year.

REVISED RECORDS.--WDR CO-79-3: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 6,400 ft above National Geodetic Vertical Datum of 1929, from topographic map. Oct. 1, 1961, to Sept. 30, 1976, at site 76 ft upstream at datum 2.00 ft, higher.

REMARKS.--Estimated daily discharges: Dec. 23 to Jan. 30 and Apr. 25 to May 12. Records good except for estimated daily discharges, which are poor. Diversions upstream from station for irrigation of about 8,000 acres upstream from, and about 4,000 acres downstream from station.

AVERAGE DISCHARGE.--25 years, 593 ft³/s; 429,600 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,740 ft³/s, June 26, 1983, gage height, 7.07 ft; minimum daily, 6.5 ft³/s, July 19-21, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,000 ft³/s, and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
June 7	0800	*4,160	*5.91	No other peak greater than base discharge.			
Minimum daily, 305 ft ³ /s, Feb. 10.							

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	569	464	451	420	382	400	837	1250	3270	1680	584	406
2	488	450	439	460	379	405	859	1500	3250	1550	577	399
3	424	435	426	440	382	405	826	1850	3200	1400	548	401
4	427	426	411	420	378	400	747	2200	3460	1410	508	383
5	421	437	403	380	374	407	693	2100	3570	1810	519	344
6	400	462	429	460	338	403	676	1900	3710	1720	551	341
7	429	450	411	450	342	416	736	1800	4030	1520	540	333
8	533	438	407	420	356	426	744	1700	3960	1360	540	344
9	521	441	391	430	360	487	762	1650	3940	1380	539	321
10	502	431	372	470	305	452	780	1600	3430	1430	521	417
11	548	427	346	470	375	439	769	1580	2880	1290	500	424
12	531	447	394	460	376	433	769	1550	2830	1100	498	383
13	546	457	415	440	397	419	801	1450	2910	1020	507	358
14	527	427	384	420	384	420	741	1600	2790	998	492	351
15	503	432	395	440	401	423	731	1660	2820	929	493	331
16	504	449	403	490	388	409	766	1580	2910	996	513	322
17	507	461	445	470	388	415	812	1430	2960	997	506	322
18	505	464	450	410	405	407	775	1510	2930	934	503	317
19	486	456	450	360	447	399	725	1670	2910	889	497	331
20	501	446	442	360	445	406	705	2000	2790	862	400	330
21	495	462	442	370	400	396	707	2620	2720	892	417	368
22	492	453	442	320	404	414	855	2690	2600	906	417	404
23	483	444	440	360	407	427	1100	2740	2470	849	418	442
24	470	436	460	350	400	444	1160	2760	2350	827	428	461
25	466	420	430	350	401	446	1180	2790	2120	860	453	454
26	465	424	430	310	413	448	1130	2930	2130	795	411	441
27	468	437	440	330	411	469	1040	2930	2110	781	391	439
28	461	428	440	360	392	504	970	2890	1940	744	391	480
29	457	417	440	360	---	566	970	3000	1870	707	403	481
30	475	437	460	350	---	633	1100	3140	1740	683	400	462
31	475	---	450	383	---	766	---	3100	---	629	397	---
TOTAL	15079	13258	13138	12513	10830	13884	25466	65170	86600	33948	14862	11590
MEAN	486	442	424	404	387	448	849	2102	2887	1095	479	386
MAX	569	464	460	490	447	766	1180	3140	4030	1810	584	481
MIN	400	417	346	310	305	396	676	1250	1740	629	391	317
AC-FT	29910	26300	26060	24820	21480	27540	50510	129300	171800	67340	29480	22990
CAL YR 1985	TOTAL	307848		MEAN	843	MAX	4340	MIN	196	AC-FT	610600	
WTR YR 1986	TOTAL	316338		MEAN	867	MAX	4030	MIN	305	AC-FT	627500	

09304500 WHITE RIVER NEAR MEEKER, CO

LOCATION.--Lat 40°02'01", long 107°51'42", in NE¼ sec.30, T.1 N., R.93 W., Rio Blanco County, Hydrologic Unit 14050005, on left bank 1.0 mi upstream from Curtis Creek and 2.5 mi east of Meeker.

DRAINAGE AREA.--755 mi².

PERIOD OF RECORD.--June 1901 to December 1906, October 1909 to current year. Monthly discharge only for some periods, published in WSP 1313. Published as "at Meeker" 1901-13.

REVISED RECORDS.--WDR CO-79-3: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 6,300 ft, from topographic map. Prior to Oct. 31, 1906, and May 7 to Aug. 13, 1910, nonrecording gage, and Aug. 14, 1910, to Oct. 19, 1913, water-stage recorder, at site 2.5 mi downstream, at different datum. Oct. 20, 1913, to Sept. 30, 1971, water-stage recorder at present site, at datum 3.00 ft, higher, prior to Oct. 1, 1933, and at datum 2.00 ft, higher, thereafter.

REMARKS.--Estimated daily discharges: Dec. 10 to Mar. 5 and Sept. 26-28. Records good except those for winter period, which are poor. Diversions upstream from station for irrigation of about 12,000 acres upstream from station, and about 3,000 acres downstream from station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--82 years, 633 ft³/s; 458,600 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,950 ft³/s, May 25, 1984, gage height, 6.12 ft, maximum gage height, 7.60 ft, June 16, 1921; minimum daily discharge, 78 ft³/s, July 16, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,100 ft³/s, and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 4	2400	3,100	4.85	June 8	0800	*4,570	*5.32

Minimum daily discharge, 260 ft³/s, Feb. 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	537	512	490	410	370	410	876	1530	3410	1780	623	435
2	531	510	502	450	380	420	904	1790	3380	1630	618	438
3	528	496	501	430	380	420	868	2210	3230	1480	586	439
4	525	488	493	410	350	430	770	2670	3580	1490	562	417
5	517	503	450	380	340	559	718	2690	3860	1980	576	400
6	513	503	482	450	310	499	699	2300	3860	1890	589	389
7	520	482	461	440	310	505	744	2120	4150	1640	575	393
8	661	488	477	410	300	515	744	1850	4240	1470	571	414
9	635	516	464	420	300	609	757	1760	4140	1520	565	395
10	625	494	457	420	260	558	774	1620	3470	1560	553	482
11	723	543	449	460	280	538	769	1590	2830	1370	520	477
12	673	571	448	450	320	532	765	1650	2750	1160	534	446
13	663	542	350	420	350	511	800	1530	2870	1080	543	429
14	630	452	400	440	330	504	741	1690	2770	1050	528	425
15	587	510	380	460	330	514	732	1750	2790	1000	523	407
16	589	480	390	480	340	499	755	1670	2840	1100	547	394
17	583	525	390	450	340	501	807	1530	2880	1040	537	394
18	577	522	460	400	360	487	793	1590	2880	942	528	393
19	569	494	450	350	360	475	748	1740	2880	907	511	417
20	559	483	450	350	380	479	718	2040	2810	888	420	413
21	559	524	450	360	380	461	718	2390	2750	916	436	428
22	570	517	440	310	400	482	844	2760	2640	923	431	477
23	566	503	460	360	390	497	1060	2690	2540	881	441	502
24	554	507	420	350	430	516	1210	2590	2430	874	448	527
25	547	517	420	340	430	521	1300	2670	2250	910	481	539
26	544	536	430	310	450	514	1260	2870	2290	845	425	540
27	543	499	430	330	460	532	1120	3060	2250	804	405	560
28	542	505	430	370	440	572	1040	3300	2080	762	406	570
29	544	496	450	370	---	624	1050	3410	2000	727	431	558
30	544	511	440	360	---	680	1190	3240	1850	699	438	551
31	552	---	440	360	---	811	---	3210	---	665	427	---
TOTAL	17810	15229	13754	12300	10070	16175	26274	69510	88700	35983	15778	13649
MEAN	575	508	444	397	360	522	876	2242	2957	1161	509	455
MAX	723	571	502	480	460	811	1300	3410	4240	1980	623	570
MIN	513	452	350	310	260	410	699	1530	1850	665	405	389
AC-FT	35330	30210	27280	24400	19970	32080	52110	137900	175900	71370	31300	27070
CAL YR 1985	TOTAL	334804		MEAN	917	MAX	4770	MIN	290	AC-FT	664100	
WTR YR 1986	TOTAL	335232		MEAN	918	MAX	4240	MIN	260	AC-FT	664900	

GREEN RIVER BASIN

09304800 WHITE RIVER BELOW MEEKER, CO

LOCATION.--Lat 40°00'48", long 108°05'33", in center of sec.31, T.1 N., R.95 W., Rio Blanco County, Hydrologic Unit 14050005, on left bank 30 ft downstream from county bridge, 4.5 mi downstream from Strawberry Creek, and 10 mi west of Meeker.

DRAINAGE AREA.--1,024 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1961 to current year.

REVISED RECORDS.--WDR CO-79-3: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 5,928 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Jan. 10, and Feb. 14-27. Records good except for estimated daily discharges, which are poor. Diversion upstream from station for irrigation of about 22,000 acres upstream from station, and a few small hay meadows downstream from station.

AVERAGE DISCHARGE.--25 years, 681 ft³/s; 493,400 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,590 ft³/s, June 26, 1983, gage height, 4.97 ft; minimum daily, 85 ft³/s, June 28, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,000 ft³/s, and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 5	0400	3,610	3.71	July 5	1900	2,550	3.10
June 7	1100	*4,410	*4.12				

Minimum daily discharge, 355 ft³/s, Feb. 10.

REVISIONS.--The discharge table published in the 1985 report was not the table for this station. The correct table is being published herein, and supersedes that published in WDR CO-85-3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	807	716	591	517	406	418	554	1880	3050	1490	938	383
2	803	686	561	422	469	446	595	2030	2720	1410	918	409
3	789	687	565	426	450	460	688	2350	2900	1360	902	428
4	934	663	558	451	420	412	738	2720	2900	1310	873	420
5	957	650	508	489	450	418	603	3060	2950	1280	840	386
6	860	680	502	490	470	458	576	3310	2980	1200	836	366
7	806	663	515	490	510	451	596	3200	3000	1080	764	375
8	785	664	520	500	480	455	618	3260	3800	1050	700	395
9	765	688	520	500	450	509	678	3600	4650	947	704	392
10	764	652	520	500	470	695	749	3630	4800	963	698	383
11	760	684	520	480	460	823	801	3760	4450	967	677	413
12	891	669	520	450	460	713	909	3330	3580	962	761	489
13	827	660	530	441	450	616	995	2960	3450	1030	638	451
14	859	664	540	463	440	589	1060	2550	3380	957	606	449
15	797	631	550	490	430	693	1180	2400	3350	919	657	479
16	775	616	582	503	430	715	1350	2350	3250	921	619	523
17	793	659	546	500	420	688	1560	2460	3260	950	561	488
18	808	604	546	490	420	678	1780	2690	3170	1060	559	495
19	796	593	575	480	420	656	1950	2830	3010	1140	558	557
20	796	579	561	470	410	654	1840	2730	2820	1110	525	576
21	799	593	552	460	410	624	1750	2690	2710	1120	495	594
22	769	612	529	460	410	598	1560	2820	2590	1130	498	642
23	755	595	498	489	410	549	1340	2800	2460	1140	483	690
24	745	604	536	478	420	538	1390	3020	2230	1200	473	673
25	723	626	502	482	420	584	1370	3180	2400	1150	442	665
26	729	611	545	500	420	633	1300	3290	2620	1060	427	638
27	772	562	530	520	434	592	1210	3400	2170	1040	375	633
28	736	596	530	540	443	552	1310	3560	1890	1020	368	642
29	732	620	520	545	---	570	1550	3610	1700	1110	361	669
30	719	598	520	540	---	526	1640	3600	1580	1030	372	621
31	722	---	520	494	---	539	---	3270	---	968	373	---
TOTAL	24573	19125	16612	15060	12282	17852	34240	92340	89820	34074	19001	15324
MEAN	793	638	536	486	439	576	1141	2979	2994	1099	613	511
MAX	957	716	591	545	510	823	1950	3760	4800	1490	938	690
MIN	719	562	498	422	406	412	554	1880	1580	919	361	366
AC-FT	48740	37930	32950	29870	24360	35410	67920	183200	178200	67590	37690	30400
CAL YR 1984	TOTAL	404880		MEAN	1106	MAX	5850	MIN	310	AC-FT	803100	
WTR YR 1985	TOTAL	390303		MEAN	1069	MAX	4800	MIN	361	AC-FT	774200	

09304800 WHITE RIVER BELOW MEEKER, CO--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	608	611	579	506	467	508	1120	1650	3490	2030	737	630
2	600	586	594	554	475	513	1130	1960	3510	1860	721	612
3	600	585	608	529	472	519	1150	2510	3430	1670	682	608
4	591	580	602	507	450	514	1020	3000	3710	1700	646	585
5	583	586	527	466	436	514	951	3190	3920	2230	675	542
6	586	605	578	551	409	511	911	2620	4100	2280	700	533
7	606	579	540	543	405	525	937	2370	4160	1950	688	534
8	810	580	572	509	394	537	951	2030	4150	1720	666	571
9	787	635	555	519	393	701	962	1900	4220	1760	653	553
10	758	592	489	520	355	648	1000	1730	3850	1800	641	686
11	960	688	446	566	371	601	994	1640	3220	1550	618	670
12	831	768	399	549	418	600	984	1670	3050	1330	628	624
13	838	679	452	528	445	564	1010	1560	3160	1270	637	607
14	754	542	503	542	430	555	939	1710	3090	1240	604	581
15	671	605	479	561	430	573	929	1780	3090	1180	589	553
16	662	565	492	585	440	563	926	1720	3130	1310	620	526
17	647	627	499	558	440	573	995	1550	3160	1260	607	510
18	639	619	560	496	460	553	1000	1570	3180	1090	594	504
19	628	573	554	452	460	520	938	1700	3200	1040	588	534
20	617	559	547	452	480	540	882	2050	3130	1010	513	525
21	613	590	545	465	480	521	856	2450	3040	1040	534	528
22	628	578	541	409	500	541	969	2940	2900	1070	565	578
23	612	578	537	449	490	558	1190	2940	2790	1020	546	600
24	604	602	558	436	530	586	1400	2780	2640	997	587	640
25	596	646	521	431	530	599	1520	2840	2480	1060	642	644
26	595	666	520	399	550	588	1520	3050	2530	994	602	625
27	593	599	527	417	560	600	1370	3250	2470	952	557	628
28	589	599	532	449	537	641	1260	3470	2290	898	557	677
29	591	601	533	448	---	703	1210	3510	2230	851	581	695
30	590	619	554	440	---	783	1280	3390	2100	820	609	652
31	622	---	541	441	---	915	---	3330	---	782	594	---
TOTAL	20409	18242	16484	15277	12807	18167	32304	73860	95420	41764	19181	17755
MEAN	658	608	532	493	457	586	1077	2383	3181	1347	619	592
MAX	960	768	608	585	560	915	1520	3510	4220	2280	737	695
MIN	583	542	399	399	355	508	856	1550	2100	782	513	504
AC-FT	40480	36180	32700	30300	25400	36030	64070	146500	189300	82840	38050	35220
CAL YR 1985	TOTAL	385128		MEAN	1055	MAX	4800	MIN	361	AC-FT	763900	
WTR YR 1986	TOTAL	381670		MEAN	1046	MAX	4220	MIN	355	AC-FT	757000	

GREEN RIVER BASIN

09304800 WHITE RIVER BELOW MEEKER, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1974 to September 1984, October 1985 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: July 1978 to September 1983.

WATER TEMPERATURE : July 1978 to September 1983.

INSTRUMENTATION.--Water-quality monitor July 1978 to September 1983.

REMARKS.--Unpublished maximum and minimum specific conductance data for period of daily record available in district office.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 908 microsiemens Aug. 30, 1981; minimum, 221 microsiemens June 13, 1980.

WATER TEMPERATURE : Maximum, 25.0°C Aug. 7, 1978, Aug. 7, 1980; minimum, 0.0°C many days during winter months.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN DEMAND, BIOCHEM UNINHIB 20 DAY (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)	
DEC 02...	1545	578	610	8.7	2.0	11.4	3.4	260	68	23	22	
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, DIS- SOLVED (MG/L AS N)
DEC 02...	0.6	1.6	146	150	9.6	0.2	14	380	0.51	587	<0.01	
DATE		NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, HYDRO. + ORTHO DIS. (MG/L AS P)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CHLORO- PHYLL A PHYTO- PLANK- TON, UNCORR. (UG/L)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)
DEC 02...	0.21	0.04	0.96	1.0	<0.01	<0.01	<0.01	2.6	8.60	37	58	
DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE (DEG C)			DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE (DEG C)	
OCT 16...	1440	672	566	8.5			APR 07...	1100	981	579	9.0	
JAN 10...	1445	520	575	0.0			MAY 08...	1015	2080	419	6.0	
FEB 14...	1440	429	573	0.0			AUG 01...	1020	726	480	15.0	
MAR 06...	1100	534	703	5.0			SEP 03...	1530	590	563	16.0	

09306007 PICEANCE CREEK BELOW RIO BLANCO, CO

LOCATION.--Lat 39°49'34", long 108°10'57", in SE¼SE¼ sec.32, T.2 S., R.96 W., Rio Blanco County, Hydrologic Unit 14050006, on left bank 20 ft downstream from private bridge, 1,100 ft upstream from Stewart Gulch, and 14.3 mi west of Rio Blanco.

DRAINAGE AREA.--177 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1974 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 6,366 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 8-12, Dec. 13, 15-17, 25-26, Jan. 1, 4-5, 8-9, 14, 22, 26-27, and Feb. 3-15. Records good except for estimated daily discharges, which are poor. Several diversions upstream from station for irrigation of hay meadows.

AVERAGE DISCHARGE.--12 years, 24.5 ft³/s; 17,750 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 520 ft³/s July 19, 1977, gage height, 7.01 ft, from rating curve based on indirect measurement of peak flow, maximum gage height, 7.47 ft, May 16, 1984; minimum daily discharge, 0.47 ft³/s, Apr. 25, 1981.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 100 ft³/s, and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Mar. 9	1500	100	3.85	Apr. 26	0800	178	4.13
Apr. 2	2200	*204	*4.38				

Minimum daily discharge, 9.9 ft³/s, Sept. 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	24	26	24	31	54	125	142	33	31	22	21
2	16	24	26	24	31	55	142	148	32	30	22	20
3	17	23	26	24	28	60	188	151	34	30	22	20
4	17	23	27	24	27	60	163	154	32	32	23	19
5	17	24	25	25	25	60	153	147	32	35	21	17
6	18	24	26	25	27	61	145	130	28	29	24	16
7	19	24	25	25	27	62	141	129	24	29	25	16
8	20	24	26	25	27	67	145	119	23	29	25	16
9	22	26	25	25	28	88	152	117	24	28	24	16
10	25	28	25	25	24	77	159	111	25	28	24	18
11	31	31	26	25	27	73	157	108	25	28	23	17
12	32	33	24	26	27	76	151	102	23	26	23	16
13	31	30	24	27	27	76	151	99	27	24	22	13
14	29	26	23	26	29	73	145	98	26	24	23	12
15	26	25	22	25	29	71	139	100	23	20	23	13
16	25	25	22	26	35	75	136	103	22	25	21	13
17	25	25	22	27	37	72	145	99	22	24	21	13
18	24	25	22	27	40	72	143	91	24	22	22	12
19	24	25	22	27	46	66	133	86	29	20	22	12
20	24	24	23	28	61	68	128	81	26	21	25	11
21	24	24	22	28	53	68	126	79	26	23	23	11
22	25	25	23	28	49	69	134	74	27	21	22	11
23	24	24	23	29	48	71	156	69	26	20	21	11
24	23	24	23	29	46	74	169	60	25	21	19	13
25	24	24	23	30	48	75	169	55	25	22	21	14
26	23	25	23	30	54	78	173	47	24	23	22	13
27	22	26	24	30	56	80	158	44	25	23	21	12
28	23	26	24	30	54	86	145	40	31	22	20	9.9
29	22	26	24	30	---	94	136	37	33	23	22	11
30	22	26	24	31	---	102	131	33	33	23	20	11
31	23	---	24	31	---	112	---	33	---	22	19	---
TOTAL	713	763	744	836	1041	2275	4438	2886	809	778	687	427.9
MEAN	23.0	25.4	24.0	27.0	37.2	73.4	148	93.1	27.0	25.1	22.2	14.3
MAX	32	33	27	31	61	112	188	154	34	35	25	21
MIN	16	23	22	24	24	54	125	33	22	20	19	9.9
AC-FT	1410	1510	1480	1660	2060	4510	8800	5720	1600	1540	1360	849
CAL YR 1985	TOTAL	19927.3		MEAN	54.6	MAX	361	MIN	9.6	AC-FT	39530	
WTR YR 1986	TOTAL	16397.9		MEAN	44.9	MAX	188	MIN	9.9	AC-FT	32530	

09306007 PICEANCE CREEK BELOW RIO BLANCO, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1974 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: December 1974 to September 1985.

pH: December 1974 to September 1984.

WATER TEMPERATURE: December 1974 to September 1985.

DISSOLVED OXYGEN: December 1974 to September 1984.

SUSPENDED SEDIMENT DISCHARGE: April 1974 to September 1985.

INSTRUMENTATION.--Automatic pumping sediment sampler April 1974 to September 1985. Water-quality monitor December 1974 to September 1985.

REMARKS.--Unpublished maximum and minimum specific conductance data for period of daily record available in district office.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 1,690 microsiemens June 21, 1976; minimum, 344 microsiemens Apr. 13, 1976.

pH: Maximum, 9.0 units June 21, 1976; minimum, 7.0 units May 24, 1976.

WATER TEMPERATURE: Maximum, 29.5°C July 25, 1977; minimum, freezing point on many days during winter months each year.

DISSOLVED OXYGEN: Maximum, 15.7 mg/L Oct. 8, 1975; minimum, 5.1 mg/L July 17, 1979.

SEDIMENT CONCENTRATION: Maximum daily, 20,300 mg/L July 20, 1974; minimum daily, 6 mg/L several days during September 1976.

SEDIMENT LOAD: Maximum daily, 18,600 tons May 16, 1984; minimum daily, 0.02 ton Apr. 20, 1981.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	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)
DEC 19...	1215	21	1180	8.5	0.5	11.4	420	84	50	110
APR 23...	0930	156	939	8.2	8.0	9.9	370	77	42	72
MAY 20...	1000	87	1100	8.4	8.5	10.2	400	84	46	84
JUL 18...	1500	22	1240	8.4	18.0	9.2	470	92	59	120

DATE	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LITY 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)
DEC 19...	2	2.2	331	270	21	0.8	15	750	1.0	43
APR 23...	2	2.1	214	220	13	0.5	15	570	0.78	241
MAY 20...	2	2.3	227	250	8.6	0.4	14	630	0.85	147
JUL 18...	2	2.7	336	300	20	0.8	16	810	1.1	48

DATE	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)	BORON, DIS- SOLVED (UG/L AS B)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)
DEC 19...	2.29	0.01	2.30	0.06	0.24	0.3	0.02	0.01	160	1600
APR 23...	--	<0.01	2.70	0.03	0.67	0.7	0.02	0.02	80	1000
MAY 20...	--	<0.01	2.80	0.04	0.66	0.7	0.02	0.02	100	1200
JUL 18...	1.69	0.01	1.70	0.04	0.46	0.5	0.02	0.01	170	1800

09306007 PICEANCE CREEK BELOW RIO BLANCO, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	COBALT, DIS- SOLVED (UG/L AS CO)	IRON, DIS- SOLVED (UG/L AS FE)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	ZINC, DIS- SOLVED (UG/L AS ZN)
DEC 19...	2	110	<1	11	17	32	4	1	10
MAY 20...	3	110	<1	10	21	7	7	<1	6

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE (DEG C)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE (DEG C)
FEB 20...	0840	58	876	1.0	JUN 19...	1430	26	1210	19.0
MAR 20...	1535	67	1150	8.0	AUG 25...	1530	22	1190	20.0
APR 03...	1030	185	985	3.5					
21...	1010	133	1050	7.5					

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)
DEC 19...	1215	21	159	9.0	APR 23...	0930	156	2380	1000
FEB 20...	0840	58	6110	957	MAY 20...	1000	87	2410	566
MAR 20...	1535	67	984	178	JUL 18...	1500	22	44	2.6

GREEN RIVER BASIN

09306022 STEWART GULCH ABOVE WEST FORK NEAR RIO BLANCO, CO

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1974 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1974 to September 1982.

pH: October 1974 to March 1982.

WATER TEMPERATURE: October 1974 to September 1982.

DISSOLVED OXYGEN: October 1974 to March 1982.

SUSPENDED-SEDIMENT DISCHARGE: October 1974 to September 1982.

INSTRUMENTATION.--Water-quality monitor October 1974 to September 1982. Pumping sediment sampler October 1974 to September 1982.

REMARKS.--Unpublished maximum and minimum specific conductance data for period of daily record available in district office.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 2,200 microsiemens Nov. 10, 1975; minimum, 583 microsiemens Feb. 22, 1982.

pH: Maximum, 8.9 units Dec. 9, 11, 1979; minimum, 7.6 units Oct. 7, 1975.

WATER TEMPERATURE: Maximum, 20.5°C July 3, 1976, June 3, 1977; minimum, 0.0°C Jan. 9, Dec. 17, 1977,

Mar. 3, Dec. 2, 3, 1978, Jan. 29, 1979.

DISSOLVED OXYGEN: Maximum, 16.6 mg/L Jan. 13, 1976; minimum, 3.6 mg/L Aug. 19, 20, 1977.

SEDIMENT CONCENTRATION: Maximum daily, 1,350 mg/L June 8, 1975; minimum daily, no flow Aug. 7-9, 1975.

SEDIMENT LOAD: Maximum daily, 10 tons estimated June 8, 1975; minimum daily, no flow Aug. 7-9, 1975.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	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)
DEC 19...	1045	6.2	1360	8.40	4.5	10.6	530	94	72	130
MAY 21...	0830	11	1310	8.20	10.0	9.6	480	83	67	110

DATE	TIME	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LITY 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)
DEC 19...	3	1.3	389	370	19	0.6	16	880	1.2	15	
MAY 21...	2	1.0	269	350	11	0.2	15	870	1.2	26	

DATE	TIME	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)	BORON, DIS- SOLVED (UG/L AS B)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)
DEC 19...	3.49	0.01	3.50	0.05	0.35	0.4	0.01	0.01	90	2600	
MAY 21...	--	<0.01	3.20	0.03	0.47	0.5	0.01	<0.01	70	--	

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE (DEG C)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE (DEG C)
OCT 16...	1452	8.5	1350	12.0	JUL 29...	1130	6.1	1340	11.0
NOV 12...	1300	8.1	1330	7.5					

09306042 PICEANCE CREEK TRIBUTARY NEAR RIO BLANCO, CO

LOCATION.--Lat 39°50'01", long 108°13'12", in SE¼NE¼ sec.36, T.2 S., R.97 W., Rio Blanco County, Hydrologic Unit 14050006, on left bank 600 ft upstream from mouth and 16.2 mi west of Rio Blanco.

DRAINAGE AREA.--1.06 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1974 to August 1984, May 1985 to current year.

REVISED RECORDS.--WDR CO-79-3: 1977(M).

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 6,335 ft above National Geodetic Vertical Datum of 1929, from topographic map. Nov. 10, 1980 to June 10, 1981 at datum 0.21 ft, lower.

REMARKS.--Estimated daily discharges: Nov. 18, 21-24, Dec. 14-16, 20, 23, 26, 28, Jan. 4-6, 9, 14, 22, 25-27, Feb. 7-8, 10-12, and June 8. Records fair. Most flow due to discharge of settling ponds on tract Cb, except for summer thunderstorms.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 506 ft³/s, Aug. 1, 1984, gage height, 6.38 ft, on basis of slope-area measurement of peak flow; no flow most of each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 92 ft³/s at 1600 Aug. 20, gage height, 3.76 ft, from rating curve extended above 0.35 ft/s, on basis of slope-area measurement of peak flow, at gage height of 6.38 ft; no flow, Dec. 11, 12, and Sept. 4.

REVISIONS.--The maximum discharge for water year 1984 has been revised to 506 ft³/s, Aug. 1, 1984, gage height, 6.38 ft, on basis of slope-area measurement of peak flow, superseding figures published in reports for 1984 and 1985.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.27	.22	.07	.12	.21	.14	.05	.07	.33	.19	.54	.09
2	.33	.27	.11	.17	.22	.04	.08	.07	.52	.21	.57	.12
3	.39	.29	.09	.23	.22	.26	.16	.07	.44	.20	.46	.09
4	.31	.31	.07	.23	.21	.49	.22	.05	.46	.22	.76	.08
5	.36	.25	.08	.23	.14	.41	.26	.08	.52	.16	1.3	.08
6	.39	.18	.08	.22	.07	.37	.24	.09	.57	.12	1.0	.08
7	.44	.41	.07	.22	.11	.21	.30	.14	.63	.12	.64	.08
8	.69	.37	.08	.24	.15	.13	.27	.09	.70	.12	.42	.08
9	.46	.13	.08	.20	.18	.19	.23	.14	.57	.16	.25	.12
10	.63	.27	.02	.16	.19	.17	.10	.11	.31	.35	.24	.12
11	.81	.25	.00	.19	.20	.22	.07	.09	.32	.31	.24	.08
12	.27	.31	.00	.21	.20	.31	.06	.11	.44	.21	.24	.11
13	.29	.29	.05	.29	.22	.21	.08	.08	.36	.20	.21	.11
14	.18	.11	.09	.33	.23	.22	.08	.11	.56	.20	.20	.00
15	.33	.27	.12	.37	.37	.19	.08	.12	.32	.20	.21	.13
16	.29	.20	.15	.25	.39	.16	.11	.17	.37	.27	.20	.07
17	.27	.17	.18	.22	.29	.23	.13	.13	.53	.33	.20	.11
18	.27	.10	.11	.22	.35	.22	.09	.11	.18	.39	.21	.16
19	.25	.03	.13	.27	.53	.17	.09	.10	.29	.41	.20	.11
20	.22	.04	.14	.29	.44	.13	.10	.07	.21	.46	4.3	.22
21	.22	.04	.15	.21	.79	.14	.14	.12	.22	.30	.04	.22
22	.24	.03	.14	.30	1.0	.13	.10	.11	.18	.29	.11	.22
23	.17	.02	.13	.39	.17	.13	.05	.11	.18	.26	.13	.25
24	.22	.01	.12	.21	.32	.08	.08	.11	.20	.39	.16	.24
25	.17	.01	.12	.22	.45	.07	.08	.12	.20	.44	.13	.25
26	.21	.05	.15	.23	.49	.07	.07	.11	.18	.52	.09	.24
27	.17	.13	.18	.24	.50	.08	.07	.14	.18	.49	.08	.27
28	.18	.11	.17	.25	.35	.08	.08	.20	.18	.52	.11	.37
29	.17	.11	.16	.44	---	.07	.07	.31	.18	.57	.04	.35
30	.18	.12	.17	.31	---	.05	.07	.29	.18	.49	.04	.37
31	.24	---	.17	.23	---	.04	---	.31	---	.46	.08	---
TOTAL	9.62	5.10	3.38	7.69	8.99	5.41	3.61	3.93	10.51	9.56	13.40	4.82
MEAN	.31	.17	.11	.25	.32	.17	.12	.13	.35	.31	.43	.16
MAX	.81	.41	.18	.44	1.0	.49	.30	.31	.70	.57	4.3	.37
MIN	.17	.01	.00	.12	.07	.04	.05	.05	.18	.12	.04	.00
AC-FT	19	10	6.7	15	18	11	7.2	7.8	21	19	27	9.6
WTR YR 1986	TOTAL	86.02		MEAN	.24	MAX	4.3	MIN	.00	AC-FT	171	

09306042 PICEANCE CREEK TRIBUTARY NEAR RIO BLANCO, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1974 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: April 1974 to August 1984, April 1985 to February 1986, (discontinued).

pH: February to September 1981.

WATER TEMPERATURE: April 1974 to August 1984, April 1985 to February 1986, (discontinued).

SUSPENDED-SEDIMENT DISCHARGE: April 1974 to September 1982.

INSTRUMENTATION.--Water-quality monitor April 1974 to February 1986, (discontinued). Pumping sediment sampler April 1974 to September 1982.

REMARKS.--Unpublished maximum and minimum values of specific conductance for periods of daily record are available in the district office. Water-quality monitor was moved February 21 to the discharge pipe of a settling pond on Occidental Petroleum's tract C-b oil shale lease. Daily monitor data subsequent to February 20 are site specific and not published in this report.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 2,570 microsiemens Sept. 16, 1980; minimum observed, 220 microsiemens Jan. 26, 1982.

WATER TEMPERATURES: Maximum, 35.0°C Aug. 6, 1985; minimum, 0.0°C many days during winter months.

SEDIMENT CONCENTRATIONS: Maximum daily, 28,000 mg/L estimated Sept. 3, 1978; no flow many days dry years.

SEDIMENT LOADS: Maximum daily, 900 tons, estimated, Sept. 3, 1978; no flow many days dry years.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Not determined.

WATER TEMPERATURES: Not determined.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	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)	SODIUM AD- SORP- TION RATIO
DEC 19...	1340	0.13	2130	9.1	1.5	11.0	64	10	9.0	580	33
APR 23...	1030	0.07	2300	8.7	20.5	6.6	92	20	10	560	26
MAY 21...	0945	0.16	2290	9.0	16.0	7.6	75	13	10	580	30
JUL 21...	1445	0.27	2290	9.0	29.5	6.5	52	9.0	7.0	580	36

DATE	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)	BROMIDE DIS- SOLVED (MG/L AS BR)	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, NITRATE DIS- SOLVED (MG/L AS N)
DEC 19...	1.5	1190	28	8.7	19	<0.01	15	1400	1.9	0.49	0.96
APR 23...	1.5	1220	29	9.1	25	--	7.0	1400	1.9	0.26	--
MAY 21...	1.5	1200	37	9.6	20	--	13	1400	1.9	0.61	0.66
JUL 21...	1.7	1270	36	9.2	20	--	9.7	1400	2.0	1.0	--

DATE	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	OIL AND GREASE, TOTAL RECOV. GRAVI- METRIC (MG/L)	BORON, DIS- SOLVED (UG/L AS B)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)
DEC 19...	0.03	0.99	0.08	0.32	0.4	0.01	0.01	3.0	2	690	1200
APR 23...	<0.01	0.63	<0.01	--	0.2	0.01	<0.01	--	--	690	1100
MAY 21...	0.01	0.67	0.02	0.38	0.4	<0.01	<0.01	4.2	<1	710	1200
JUL 21...	<0.01	<0.10	0.18	0.12	0.3	0.02	<0.01	--	--	750	940

09306042. PICEANCE CREEK TRIBUTARY NEAR RIO BLANCO, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)
DEC 19...	20	1	600	--	<1	<10	<1	1	40
MAY 21...	20	1	600	<10	<1	<10	<1	1	--

DATE	*LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)
DEC 19...	1	40	<10	0.1	<1	<1	<1	--	20
MAY 21...	1	40	<10	<0.1	4	<1	<1	9	<10

SPECIFIC CONDUCTANCE MICROSIEMENS/CM AT 25 DEG C, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2180	---	---	---	---	---	---	---	---	---	---	---
2	2150	---	---	---	---	---	---	---	---	---	---	---
3	2170	---	---	---	---	---	---	---	---	---	---	---
4	2170	---	---	---	---	---	---	---	---	---	---	---
5	2170	---	---	---	---	---	---	---	---	---	---	---
6	2180	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	2270	---	---	---	---	---	---	---	---	---
16	---	---	2160	---	---	---	---	---	---	---	---	---
17	---	2040	2130	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	2030	---	---	---	---	---	---	---	---	---	---
22	---	2140	---	---	---	---	---	---	---	---	---	---
23	---	2170	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
1	---	---	---	---	---	---	---	---	---	---	---	---

* The minimum reporting level for Lead was changed from <1 to <5 during June, 1986.

GREEN RIVER BASIN

09306042 PICEANCE CREEK TRIBUTARY NEAR RIO BLANCO, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY	
1	13.0	10.0	12.0	.0	5.0	.0	2.5	.0	9.5	.5
2	13.0	12.0	13.0	1.5	5.0	2.0	3.0	.0	10.5	.5
3	12.5	10.0	15.0	1.0	8.5	1.5	3.5	.0	7.5	1.0
4	12.5	10.0	15.5	2.0	8.0	.0	.0	.0	5.0	.0
5	13.0	11.0	9.0	2.5	5.5	.0	.0	.0	6.0	.0
6	13.0	12.0	11.0	.0	7.0	.0	2.0	.0	.0	.0
7	18.5	6.5	11.5	.0	6.0	.0	2.5	.0	.0	.0
8	7.0	.0	8.5	2.0	8.5	.0	.0	.0	---	---
9	11.0	.0	4.0	.0	3.5	.0	1.5	.0	---	---
10	14.5	4.5	9.0	.5	---	---	3.5	.0	---	---
11	14.0	2.5	11.5	2.5	---	---	4.0	.0	---	---
12	17.5	3.5	8.0	.0	---	---	3.5	.0	---	---
13	10.0	2.5	7.5	.0	---	---	3.5	.0	---	---
14	16.5	2.5	.0	.0	.0	.0	3.5	.0	---	---
15	18.0	2.0	6.0	.0	.0	.0	3.5	1.0	---	---
16	18.0	2.0	4.5	.0	.0	.0	4.0	1.0	---	---
17	18.0	2.5	6.5	1.5	1.5	.0	5.0	1.0	---	---
18	17.0	1.5	5.0	.0	3.0	.0	6.0	.5	---	---
19	18.0	1.5	.5	.0	2.5	.0	6.0	.0	---	---
20	17.0	2.0	.0	.0	3.0	.0	6.5	.5	---	---
21	14.5	3.0	.0	.0	3.0	.0	2.5	.0	---	---
22	14.5	2.5	.0	.0	3.0	.0	2.0	.0	---	---
23	17.0	2.5	.0	.0	1.5	.0	4.5	.0	---	---
24	17.5	2.5	3.5	.0	3.0	.0	2.5	.0	---	---
25	17.5	2.5	7.0	2.5	3.0	.0	.0	.0	---	---
26	19.5	3.5	7.0	.0	3.5	.0	.0	.0	---	---
27	19.0	1.5	7.5	.0	3.5	.0	3.5	.0	---	---
28	17.5	3.0	5.5	.0	3.5	.0	5.5	.0	---	---
29	18.0	2.5	9.0	2.0	4.0	.5	7.5	1.0	---	---
30	17.5	2.5	3.0	.0	4.0	2.5	4.5	.5	---	---
31	11.5	2.0	---	---	4.0	.0	6.0	2.5	---	---
MONTH	19.5	.0	15.5	.0			7.5	.0		

09306061 PICEANCE CREEK ABOVE HUNTER CREEK, NEAR RIO BLANCO, CO

LOCATION.--Lat 39°51'02", long 108°15'31", in SE¼NE¼ sec.27, T.2 S., R.97 W., Rio Blanco County, Hydrologic Unit 14050006, on left bank 120 ft downstream from private bridge, 0.4 mi upstream from Hunter Creek, and 18.7 mi west of Rio Blanco.

DRAINAGE AREA.--309 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1974 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 6,214 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Mar. 26, 1982, at site 75 ft upstream at datum 0.98 ft, lower.

REMARKS.--Estimated daily discharges: Oct. 1-10, Oct. 21 to Nov. 18, Nov. 27, Dec. 13-17, 19-21, 26-29, Jan. 4-5, 7-15, 17-19, 21-23, 25, Feb. 1-3, 7, 11, and July 14-17. Records good except for estimated daily discharges, which are poor.

AVERAGE DISCHARGE.--12 years, 33.1 ft³/s; 23,980 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 612 ft³/s, May 7, 1985, gage height, 5.65 ft, maximum gage height, 5.85 ft, May 16, 1984; no flow Oct. 4, 5, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 285 ft³/s at 1730 Apr. 2, gage height, 4.32 ft; minimum daily, 19 ft³/s, June 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33	42	44	34	34	69	207	158	41	33	47	52
2	33	42	44	34	33	71	227	159	43	51	51	52
3	36	40	45	36	32	84	187	163	41	54	53	51
4	35	39	45	37	30	92	182	167	35	60	52	43
5	36	39	40	37	28	92	183	163	30	70	52	42
6	36	39	43	37	30	92	153	153	27	59	55	43
7	36	38	44	37	30	92	151	153	19	49	61	45
8	40	39	46	37	30	107	150	151	23	46	56	51
9	44	43	47	37	31	139	148	146	32	53	56	48
10	46	37	42	37	27	106	157	145	35	58	61	43
11	79	41	46	37	30	96	171	135	34	49	56	43
12	79	52	43	36	30	104	166	123	24	46	58	43
13	77	52	42	36	30	99	169	121	32	45	57	40
14	74	42	41	36	32	88	155	122	31	45	56	38
15	62	40	40	35	32	80	164	122	34	41	58	36
16	55	39	39	35	43	94	161	133	35	46	58	30
17	60	41	38	35	43	86	157	124	46	44	56	30
18	63	43	37	36	53	78	156	117	55	42	55	30
19	52	40	36	36	53	70	151	111	43	45	56	30
20	52	36	36	37	83	86	143	108	32	45	62	33
21	48	32	36	37	70	79	149	106	34	53	62	33
22	50	35	35	36	67	84	152	100	32	51	57	33
23	48	34	33	35	58	90	160	94	43	47	57	35
24	44	38	34	34	59	94	160	81	46	48	50	38
25	43	39	36	33	61	94	165	70	46	52	54	38
26	42	43	36	32	65	103	180	68	39	50	55	40
27	40	43	36	32	73	111	173	59	43	47	49	43
28	41	42	35	34	68	127	162	53	43	51	46	43
29	40	49	35	32	---	141	154	51	39	50	54	43
30	38	48	34	34	---	163	150	48	36	46	51	43
31	42	---	34	35	---	172	---	43	---	47	48	---
TOTAL	1504	1227	1222	1096	1255	3083	4943	3547	1093	1523	1699	1212
MEAN	48.5	40.9	39.4	35.4	44.8	99.5	165	114	36.4	49.1	54.8	40.4
MAX	79	52	47	37	83	172	227	167	55	70	62	52
MIN	33	32	33	32	27	69	143	43	19	33	46	30
AC-FT	2980	2430	2420	2170	2490	6120	9800	7040	2170	3020	3370	2400
CAL YR 1985	TOTAL	26908.6	MEAN	73.7	MAX	549	MIN	6.8	AC-FT	53370		
WTR YR 1986	TOTAL	23404	MEAN	64.1	MAX	227	MIN	19	AC-FT	46420		

09306061 PICEANCE CREEK ABOVE HUNTER CREEK NEAR RIO BLANCO, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1974 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1974 to September 1985.

pH: October 1974 to September 1984.

WATER TEMPERATURE: October 1974 to September 1985.

DISSOLVED OXYGEN: October 1974 to September 1984.

SUSPENDED-SEDIMENT DISCHARGE: April 1974 to September 1985.

INSTRUMENTATION.--Automatic pumping sediment sampler April 1974 to September 1985. Water-quality monitor October 1974 to September 1985.

REMARKS.--Unpublished maximum and minimum specific conductance data for period of daily record available in district office.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum 1,980 microsiemens Jan. 15, 1976; minimum, 440 microsiemens Apr. 19, 1985.

pH: Maximum, 8.9 units Dec. 7, 1977; minimum, 7.4 units Apr. 18, 1979.

WATER TEMPERATURE: Maximum, 26.5°C June 26, 1977; minimum, freezing point on many days during winter months.

DISSOLVED OXYGEN: Maximum, 16.5 mg/L Mar. 21, 22, 1976; minimum, 3.1 mg/L Sept. 10, 1978.

SEDIMENT CONCENTRATION: Maximum daily, 15,000 mg/L May 2, 1986; minimum daily, no flow Oct. 4, 5, 1977.

SEDIMENT LOAD: Maximum daily, 27,000 tons estimated Sept. 3, 1977; minimum daily, no flow Oct. 4, 5, 1977.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	HARD- NESS (MG/L AS CAC03)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)
DEC 18...	1245	37	1290	8.6	2.5	--	470	87	61	120
APR 23...	1200	194	999	8.3	10.5	8.4	390	79	47	84
MAY 20...	1130	107	1170	8.4	10.5	9.3	420	84	51	92
JUL 18...	1335	45	1380	8.3	16.5	7.6	510	89	69	140

DATE	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LITY LAB (MG/L AS CAC03)	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)
DEC 18...	2	2.1	408	290	16	0.8	15	840	1.1	84
APR 23...	2	2.1	234	240	13	0.5	15	620	0.84	326
MAY 20...	2	2.1	321	270	7.5	0.4	15	720	0.97	207
JUL 18...	3	2.7	391	340	17	0.7	18	910	1.2	111

DATE	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)	BORON, DIS- SOLVED (UG/L AS B)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)
DEC 18...	--	<0.01	2.30	0.05	0.55	0.6	0.01	0.02	140	2100
APR 23...	--	<0.01	2.70	0.04	0.66	0.7	0.03	0.02	80	1200
MAY 20...	--	<0.01	2.70	0.03	0.67	0.7	0.02	0.02	110	1500
JUL 18...	1.29	0.01	1.30	0.04	0.36	0.4	0.04	0.02	180	2300

09306061 PICEANCE CREEK ABOVE HUNTER CREEK NEAR RIO BLANCO, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	COBALT, DIS- SOLVED (UG/L AS CO)	IRON, DIS- SOLVED (UG/L AS FE)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	ZINC, DIS- SOLVED (UG/L AS ZN)
DEC 18...	2	88	<1	7	16	15	4	2	8
MAY 20...	2	100	<1	8	19	7	6	1	7

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE (DEG C)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE (DEG C)
OCT 08...	1505	47	1280	8.0	APR 03...	1210	194	1030	4.0
FEB 20...	0950	88	973	1.5	21...	1045	170	1100	9.0
MAR 20...	1250	87	1210	6.0	JUN 19...	1350	43	1420	17.0
					AUG 25...	1300	48	1290	16.5

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)
OCT 08...	1505	47	101	13	APR 23...	1200	194	3520	1840
DEC 18...	1245	37	992	99	MAY 20...	1130	107	933	270
FEB 20...	0950	88	3290	782	JUL 18...	1335	45	999	121
MAR 20...	1250	87	1180	277					

GREEN RIVER BASIN

09306200 PICEANCE CREEK BELOW RYAN GULCH, NEAR RIO BLANCO, CO

LOCATION.--Lat 39°55'16", long 108°17'49", in sec.32, T.1 S., R.97 W., Rio Blanco County, Hydrologic Unit 14050006, on left bank at downstream side of bridge, 40 ft downstream from Ryan Gulch, and 23 mi northwest of Rio Blanco.

DRAINAGE AREA.--506 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1964 to current year.

REVISED RECORDS.--WDR CO-79-3: 1977(M).

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 6,070 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 13, Dec. 17, Jan. 6, 8, 10, 15, 17-21, 23-24, and July 21. Records good except for estimated daily discharges, which are fair. Diversions for irrigation upstream from station.

AVERAGE DISCHARGE.--22 years, 32.1 ft³/s; 23,560 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 550 ft³/s, May 5, 1985, gage height, 7.70 ft; maximum gage height, 7.81 ft, May 28, 1983; minimum daily discharge, 0.15 ft³/s, June 7, 1981.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 100 ft³/s, and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Oct. 11	2300	149	5.76	Mar. 9	2000	156	5.85
Feb. 20	0800	140	5.61	Apr. 26	1400	*283	*7.09

Minimum daily discharge, 36 ft³/s, June 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	53	60	61	45	56	75	202	248	65	53	68	66
2	52	60	60	47	56	77	225	255	66	61	70	62
3	56	57	61	47	56	84	240	259	62	67	70	59
4	54	56	62	44	51	86	223	265	56	71	73	53
5	55	55	60	42	51	89	216	267	47	86	73	53
6	54	55	58	43	48	87	204	256	45	81	71	51
7	55	54	57	45	46	89	200	254	36	71	84	52
8	59	55	58	44	44	95	203	244	38	67	78	48
9	64	61	59	43	45	125	214	237	58	71	76	44
10	68	54	53	45	37	131	226	229	78	71	73	52
11	115	58	49	47	45	119	227	208	66	70	71	54
12	129	75	51	45	42	119	224	197	60	65	68	52
13	119	75	52	44	43	123	224	192	58	58	71	50
14	106	62	62	45	42	115	221	187	60	62	72	47
15	92	57	63	45	57	114	216	184	56	61	76	47
16	84	56	65	45	62	117	213	189	53	77	76	43
17	78	59	61	45	70	115	224	185	53	81	74	45
18	73	61	58	45	78	113	224	173	56	69	73	46
19	70	56	51	45	72	102	218	165	59	64	75	46
20	68	53	52	44	108	104	213	158	51	66	74	44
21	66	54	52	44	84	104	212	149	50	80	82	44
22	69	51	49	44	74	105	214	143	51	76	71	52
23	66	51	50	44	72	107	232	135	56	71	68	57
24	61	53	50	45	66	110	256	119	58	69	64	58
25	60	57	48	45	68	113	268	100	60	77	65	62
26	58	61	48	46	76	116	278	97	56	74	65	66
27	56	61	48	48	82	124	271	85	57	70	60	63
28	57	61	47	49	77	136	256	80	63	72	66	64
29	56	61	47	52	---	150	244	77	58	74	66	63
30	55	64	47	53	---	162	239	73	53	70	62	63
31	59	---	47	54	---	178	---	68	---	67	64	---
TOTAL	2167	1753	1686	1419	1708	3484	6827	5478	1685	2172	2199	1606
MEAN	69.9	58.4	54.4	45.8	61.0	112	228	177	56.2	70.1	70.9	53.5
MAX	129	75	65	54	108	178	278	267	78	86	84	66
MIN	52	51	47	42	37	75	200	68	36	53	60	43
AC-FT	4300	3480	3340	2810	3390	6910	13540	10870	3340	4310	4360	3190
CAL YR 1985	TOTAL	36049		MEAN	98.8	MAX	534	MIN	25	AC-FT	71500	
WTR YR 1986	TOTAL	32184		MEAN	88.2	MAX	278	MIN	36	AC-FT	63840	

09306200 PICEANCE CREEK BELOW RYAN GULCH NEAR RIO BLANCO, CO--Continued

WATER-QUALITY RECORDS

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

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: December 1979 to September 1982, November 1985 to September 1986.

WATER TEMPERATURE: December 1979 to September 1982, November 1985 to September 1986.

SUSPENDED-SEDIMENT DISCHARGE: October 1972 to September 1983.

INSTRUMENTATION.--Automatic pumping sediment sampler October 1972 to September 1983. Water-quality monitor December 1979 to September 1982, November 1985 to September 1986.

REMARKS.--Unpublished maximum and minimum specific conductance data for period of daily record available in district office. Water temperature data for period December 18 to March 18 in error 1.5°C or less and not published.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum 2,920 microsiemens July 18, 1981; minimum, 520 microsiemens July 18, 1981.

WATER TEMPERATURE: Maximum 26.5°C June 22, 1981; minimum, 0.0°C on many days during the winter period.

SEDIMENT CONCENTRATION: Maximum daily, 21,700 mg/L July 20, 1977; minimum daily, 8 mg/L Oct. 14, 1979, several days in Sept. 1981.

SEDIMENT LOAD: Maximum daily, 5,390 tons July 23, 1983; minimum daily, 0.05 ton Sept. 27, 30, 1981.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum 1,700 microsiemens July 1,2; minimum 870 microsiemens Aug. 28,31.

WATER TEMPERATURE: Not determined.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	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)
DEC 18...	1445	57	1400	8.5	1.5	--	500	86	69	130
APR 23...	1230	235	1030	8.3	10.5	10.1	410	81	49	73
MAY 20...	1300	161	1190	8.5	11.5	8.4	440	83	55	93
JUL 21...	1330	82	1600	8.2	17.0	8.2	590	92	86	180

DATE	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LITY 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)
DEC 18...	3	2.0	428	340	15	0.7	16	920	1.2	141
APR 23...	2	1.9	288	250	13	0.4	15	660	0.89	417
MAY 20...	2	2.0	308	280	6.6	0.4	15	720	0.98	314
JUL 21...	3	3.2	451	430	16	0.9	19	1100	1.5	244

DATE	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)	BORON, DIS- SOLVED (UG/L AS B)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)
DEC 18...	--	<0.01	2.00	0.06	0.24	0.3	0.01	0.02	140	2600
APR 23...	--	<0.01	2.60	0.03	0.37	0.4	0.02	0.02	90	1500
MAY 20...	--	<0.01	2.40	0.04	0.56	0.6	0.02	0.02	100	1800
JUL 21...	0.95	0.01	0.96	0.02	0.28	0.3	0.04	0.02	200	3200

GREEN RIVER BASIN

09306200 PICEANCE CREEK BELOW RYAN GULCH NEAR RIO BLANCO, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	COBALT, DIS- SOLVED (UG/L AS CO)	IRON, DIS- SOLVED (UG/L AS FE)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	ZINC, DIS- SOLVED (UG/L AS ZN)
DEC 18...	2	90	2	6	17	13	2	4	12
MAY 20...	2	88	<1	3	18	3	8	1	4

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)
DEC 18...	1445	57	64	9.8	APR 23...	1230	235	8710	5530
FEB 20...	1300	111	2930	878	MAY 20...	1300	161	11700	5090
MAR 19...	1545	106	2310	661	JUL 21...	1330	82	2810	622

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25 DEG C, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		---	1350	1330	1320	1220	1060	1040	1300	1670	1600	1370
2		---	1340	1320	1320	1220	1050	1020	1300	1650	1590	1390
3		---	1340	1320	1330	1190	1040	1010	1300	1630	1570	1380
4		---	1350	1350	1340	1190	1080	1000	1300	1610	1550	1400
5		---	1350	1380	1300	1190	1110	1000	1320	1540	1550	1400
6		---	1350	1320	1280	1210	1120	1030	1340	1580	1520	1400
7		---	1350	1340	1290	1210	1110	1040	1360	1610	1500	1400
8		---	1330	1390	1340	1200	1110	1070	1350	1620	1510	1410
9		---	1320	1380	1370	1130	1090	1080	1370	1600	1500	1410
10		---	1330	1330	1480	1130	1070	1110	1380	1610	1500	1400
11		---	1360	1340	1480	1210	1080	1120	1430	1600	1480	1420
12		---	1450	1340	1330	1210	1090	1120	1480	1590	1440	1430
13		1370	1390	1350	1270	1210	1080	1130	1490	1590	1470	1440
14		1380	1350	1340	1290	1230	1100	1140	---	1590	1480	1450
15		1380	1370	1330	1310	1230	1110	1120	---	1600	1430	1450
16		1390	1360	1340	1340	1240	1110	1120	---	1570	---	1460
17		1380	1370	1330	1360	1240	1100	1130	---	1580	---	1440
18		1340	1340	1320	1380	1250	1100	1140	---	1590	1490	1440
19		1360	1340	1360	1340	1270	1100	1150	1580	1570	1490	1440
20		1370	1340	1340	1160	1260	1100	1150	1610	1570	1460	1430
21		1380	1330	1350	1160	1260	1100	1150	1620	1580	1360	1430
22		1380	1340	1370	1230	1260	1090	1160	1620	1620	1500	1430
23		1370	1330	1350	1280	1240	1050	1160	1640	1630	1510	1410
24		1380	1330	1350	1330	1230	---	1170	1660	1620	1520	1390
25		1370	1340	1360	1350	1220	---	1200	1640	1620	1470	1370
26		1370	1330	1350	1310	1220	---	1220	1660	1620	1400	1360
27		1360	1330	1340	1240	1210	---	1240	1660	1620	1410	1360
28		1350	1330	1330	1210	1180	---	1250	1640	1610	1320	1360
29		1340	1330	1320	---	1150	---	1270	1640	1600	1370	1360
30		1330	1330	1330	---	1130	---	1280	1660	1600	1390	1350
31		---	1320	1350	---	1100	---	1290	---	1600	1360	---
MEAN		---	1350	1340	1310	1210	---	1130	---	1600	---	1410

09306200 PICEANCE CREEK BELOW RYAN GULCH NEAR RIO BLANCO, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1			---	---	5.0	2.0					---	---
2			---	---	5.5	4.5					---	---
3			---	---	7.0	4.5					---	---
4			---	---	6.5	4.0					---	---
5			---	---	4.5	1.5					---	---
6			---	---	5.0	2.5					---	---
7			---	---	4.5	2.0					---	---
8			---	---	5.0	2.5					---	---
9			---	---	3.5	1.0					---	---
10			---	---	1.5	.0					---	---
11			---	---	.5	.0					---	---
12			---	---	.0	.0					---	---
13			7.0	5.5	.0	.0					---	---
14			6.5	3.5	.0	.0					---	---
15			8.0	4.0	.0	.0					---	---
16			7.0	3.5	.0	.0					---	---
17			8.0	6.0	.0	.0					---	---
18			7.5	4.5	---	---					---	---
19			5.0	2.5	---	---					6.0	3.5
20			5.5	3.0	---	---					7.5	3.0
21			5.5	2.5	---	---					10.0	3.5
22			4.5	1.5	---	---					10.5	4.5
23			5.0	1.5	---	---					11.0	5.0
24			6.5	5.0	---	---					9.5	5.5
25			8.5	6.0	---	---					9.5	5.0
26			8.5	6.0	---	---					10.5	4.0
27			6.5	3.5	---	---					11.0	5.0
28			6.0	3.5	---	---					10.0	5.0
29			7.0	5.0	---	---					10.5	6.0
30			6.5	3.0	---	---					10.5	5.5
31			---	---	---	---					11.0	8.0
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	9.5	5.5	13.0	7.0	17.5	9.5	21.5	11.5	19.5	10.5	15.5	9.5
2	8.5	6.5	14.0	8.5	18.5	9.5	20.5	11.5	19.0	11.5	14.0	10.0
3	6.5	3.0	15.0	9.0	19.5	11.5	19.0	12.0	18.0	10.5	17.5	9.0
4	7.5	2.5	13.5	9.0	20.0	11.5	20.0	13.0	16.0	11.0	17.5	10.0
5	10.0	4.5	11.0	6.0	18.5	12.0	19.0	13.0	16.5	10.5	18.0	10.0
6	11.0	5.5	10.5	6.5	20.5	11.0	20.0	11.0	18.5	11.5	17.0	10.0
7	10.0	6.5	9.0	6.5	20.0	9.5	17.0	12.0	17.5	11.5	15.5	11.0
8	9.0	5.0	10.0	5.5	18.5	9.5	18.0	11.0	17.5	12.0	16.0	10.5
9	9.5	6.0	9.0	6.5	14.0	9.5	17.5	12.5	18.5	10.5	16.0	10.5
10	10.5	6.5	12.0	5.5	15.5	9.5	19.5	11.5	19.0	11.0	13.5	10.0
11	9.5	6.5	13.5	7.0	20.0	8.5	18.0	11.0	17.5	11.0	16.0	8.5
12	8.5	5.0	12.0	8.5	20.5	10.5	20.0	12.0	18.0	11.5	15.5	8.5
13	8.0	5.0	14.0	6.0	18.0	11.0	20.0	12.5	18.0	11.5	12.0	9.5
14	9.5	2.5	12.5	8.5	18.0	10.5	20.5	12.5	17.5	10.5	16.0	8.0
15	10.5	4.5	11.0	8.0	20.0	9.5	18.0	13.5	18.5	10.5	15.5	8.0
16	10.5	7.0	9.0	7.0	20.5	10.0	17.0	13.0	18.0	11.5	14.5	9.5
17	9.5	7.0	13.0	6.5	21.5	11.0	19.5	12.5	19.0	11.0	14.5	7.5
18	8.5	5.0	14.5	7.0	17.5	12.0	20.0	13.0	17.5	11.5	11.0	8.5
19	10.0	4.5	15.0	8.0	18.0	12.0	19.0	12.5	18.5	12.0	13.0	6.5
20	11.5	6.5	16.5	9.5	20.5	10.0	18.0	12.5	18.5	13.0	15.0	9.5
21	13.5	7.5	15.0	9.5	20.0	9.5	18.0	11.0	16.0	13.5	15.0	10.0
22	13.0	8.0	14.5	8.5	21.0	10.0	18.0	13.0	16.5	11.0	12.5	9.5
23	12.5	8.5	13.0	7.0	21.0	10.5	19.0	12.5	17.0	10.5	12.0	10.0
24	10.5	7.5	15.0	9.0	17.5	11.0	16.0	12.5	15.5	12.0	11.0	8.5
25	10.0	7.0	16.5	8.0	15.0	12.0	17.5	11.0	20.0	12.5	9.5	7.0
26	8.5	6.0	17.0	8.5	21.5	11.5	19.0	11.5	19.0	12.0	11.5	6.5
27	9.5	5.0	17.5	8.5	21.5	11.0	18.5	12.0	18.5	11.0	9.0	6.5
28	10.0	6.5	18.0	9.0	21.0	12.0	19.0	10.0	15.5	11.0	9.0	7.5
29	12.0	7.0	17.0	9.5	17.5	13.0	18.5	10.5	14.0	12.0	10.0	7.0
30	13.5	8.0	18.0	8.5	19.0	13.0	19.5	10.5	17.5	10.5	9.0	5.5
31	---	---	18.0	9.5	---	---	19.5	10.5	14.5	10.0	---	---
MONTH	13.5	2.5	18.0	5.5	21.5	8.5	21.5	10.0	20.0	10.0	18.0	5.5

GREEN RIVER BASIN

09306222 PICEANCE CREEK AT WHITE RIVER, CO

LOCATION.--Lat 40°05'16", long 108°14'35", in SW¼NE¼ sec.2, T.1 N., R.97 W., Rio Blanco County, Hydrologic Unit 14050006, on left bank 900 ft upstream from mouth, 1.0 mi west of White River City, and 17 mi west of Meeker.

DRAINAGE AREA.--652 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1964 to September 1966, October 1970 to current year.

REVISED RECORDS.--WDR-CO-82-3: drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 5,705 ft above National Geodetic Vertical Datum of 1929, from topographic map. Oct. 1, 1964, to Sept. 30, 1966, and Oct. 1, 1970, to July 12, 1974, at several sites 1.1 mi upstream at different datums.

REMARKS.--Estimated daily discharges: Oct. 1-2, Nov. 20-23, Dec. 10 to Jan. 30, Feb. 11-13, 15-18, May 27 to June 10, Aug. 2-3, and Sept 21-22. Records good except for estimated daily discharges, which are poor. Diversions for irrigation of about 5,500 acres upstream from station.

AVERAGE DISCHARGE.--18 years, 41.6 ft³/s; 30,140 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 628 ft³/s, Sept. 7, 1978, gage height, 7.04 ft, on basis of slope-area measurement of peak flow; minimum daily, 0.50 ft³/s, July 21, 22, 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 100 ft³/s, and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Oct. 12	0100	135	3.57	Apr. 3	1600	312	4.43
Feb. 20	1500	159	3.71	Apr. 27	1300	380	5.10
Mar. 10	0200	155	3.72	July 6	0800	*540	*5.65
				Aug. 12	2300	281	4.38

Minimum daily discharge, 40 ft³/s, Sept. 9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	60	82	79	62	82	83	226	242	90	62	87	75
2	59	82	77	64	85	83	260	225	90	67	90	67
3	63	82	79	64	85	88	297	250	84	77	90	66
4	67	78	80	61	79	90	278	263	76	87	93	57
5	72	79	77	58	78	90	256	265	63	103	107	54
6	70	78	76	59	77	90	238	255	60	187	109	52
7	69	77	77	63	78	93	222	254	48	110	114	48
8	71	77	76	61	77	93	223	250	50	104	109	47
9	77	85	77	60	82	112	229	250	75	118	107	40
10	78	80	69	63	68	142	250	228	100	110	104	44
11	126	79	64	66	81	122	250	212	66	94	100	49
12	135	89	67	63	77	126	249	208	58	93	124	47
13	129	91	68	62	78	132	247	205	53	86	92	56
14	117	81	82	63	70	124	241	206	52	82	80	56
15	107	74	83	63	85	127	224	208	50	80	85	54
16	101	74	86	64	95	131	218	209	47	97	87	50
17	94	71	81	64	90	127	228	200	43	102	85	52
18	90	75	77	64	100	126	231	192	48	90	82	52
19	87	75	68	64	110	118	217	192	53	79	85	55
20	86	70	69	63	131	114	213	186	52	79	83	52
21	85	71	70	63	110	116	211	185	45	85	101	54
22	86	67	66	63	98	117	205	179	47	86	86	64
23	85	67	67	63	88	119	222	174	52	79	82	70
24	83	69	67	65	79	124	251	170	57	77	78	67
25	83	71	65	65	79	128	276	146	61	83	77	80
26	85	75	65	67	85	135	303	140	67	80	76	79
27	82	76	65	70	90	140	343	122	60	79	70	78
28	82	74	64	71	88	157	253	114	64	81	69	84
29	81	76	64	76	---	175	250	109	63	87	80	85
30	79	81	64	79	---	194	244	102	61	87	72	82
31	80	---	64	79	---	203	---	94	---	87	73	---
TOTAL	2669	2306	2233	2012	2425	3819	7355	6035	1835	2818	2777	1816
MEAN	86.1	76.9	72.0	64.9	86.6	123	245	195	61.2	90.9	89.6	60.5
MAX	135	91	86	79	131	203	343	265	100	187	124	85
MIN	59	67	64	58	68	83	205	94	43	62	69	40
AC-FT	5290	4570	4430	3990	4810	7570	14590	11970	3640	5590	5510	3600
CAL YR 1985	TOTAL	41504	MEAN	114	MAX	498	MIN	29	AC-FT	82320		
WTR YR 1986	TOTAL	38100	MEAN	104	MAX	343	MIN	40	AC-FT	75570		

09306222 PICEANCE CREEK AT WHITE RIVER, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--December 1970 to July 1986 (discontinued).

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: January 1971 to June 1974, May 1975 to September 1983.

WATER TEMPERATURE: January 1971 to September 1974, May 1975 to September 1983.

SUSPENDED-SEDIMENT DISCHARGE: March 1974 to September 1983.

INSTRUMENTATION.--Water-quality monitor May 1975 to September 1983. Pumping sediment sampler March 1974 to September 1983.

REMARKS.--Unpublished maximum and minimum specific conductance data for period of daily record available in district office. The maximum extreme specific conductance value of 10,000 microsiemens represents a value of 10,000 microsiemens or higher due to instrument limitations.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 10,000 microsiemens June 18, 1981; minimum, 460 microsiemens February 28 and March 2, 1983.

WATER TEMPERATURE: Maximum, 32.0°C July 14, 1978; minimum, 0.0°C many days during winter months.

SEDIMENT CONCENTRATION: Maximum daily, 25,000 mg/L estimated Sept. 7, 1978; 4 mg/L Oct. 2, 1977.

SEDIMENT LOAD: Maximum daily, 6,095 tons estimated May 28, 1983; minimum daily, 0.10 ton June 22, 1978.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	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)
DEC 18...	1115	64	1620	8.5	0.5	--	520	83	75	200
APR 23...	1330	222	1150	8.2	13.5	8.9	420	77	56	110
MAY 20...	1430	188	1290	8.5	15.5	8.4	410	75	54	120
JUL 21...	1045	86	1730	8.3	15.0	8.2	550	77	85	230

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)
DEC 18...	4	2.2	528	360	24	0.9	17	1100	1.5	187
APR 23...	2	2.1	271	270	17	0.5	16	710	0.97	427
MAY 20...	3	2.3	289	290	10	0.5	15	740	1.0	377
JUL 21...	4	3.0	516	440	25	0.7	18	1200	1.6	277

DATE	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)	BORON, DIS- SOLVED (UG/L AS B)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)
DEC 18...	<0.01	2.10	0.07	0.73	0.8	0.02	0.03	180	2600
APR 23...	<0.01	2.60	0.03	0.67	0.7	0.02	0.02	100	1700
MAY 20...	<0.01	2.40	0.04	0.36	0.4	0.03	0.02	110	1700
JUL 21...	<0.01	1.10	0.03	0.47	0.5	0.04	0.03	240	2800

GREEN RIVER BASIN

09306222 PICEANCE CREEK AT WHITE RIVER, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	COBALT, DIS- SOLVED (UG/L AS CO)	IRON, DIS- SOLVED (UG/L AS FE)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	ZINC, DIS- SOLVED (UG/L AS ZN)
DEC 18...	2	98	<1	6	23	10	6	4	13
MAY 20...	2	90	<1	8	20	3	8	2	6

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE (DEG C)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE (DEG C)
OCT 03...	1445	62	1640	13.0	MAR 20...	1100	122	1420	4.5
NOV 13...	1530	92	1560	4.0	APR 03...	1555	311	1120	4.5
JAN 30...	1500	60	1580	4.0	21...	1400	206	1230	13.5
FEB 20...	1445	159	1350	5.5	JUN 19...	1010	50	1850	16.0
					25...	1000	78	1540	15.0

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)
DEC 18...	1115	64	15	2.6	APR 23...	1330	222	3700	2220
FEB 20...	1445	159	7600	3260	MAY 20...	1430	188	4460	2260
MAR 20...	1100	122	2080	685	JUL 21...	1045	86	562	130

09306224 WHITE RIVER ABOVE CROOKED WASH, NEAR WHITE RIVER CITY, CO

LOCATION.--Lat 40°09'44", long 108°20'33", in NW¼NW¼ sec.12, T.2 N., R.98 W., Rio Blanco county, Hydrologic Unit 14050005, on right bank 15 ft upstream from County Road 77 bridge, 2.8 mi upstream from Crooked Wash, 9.8 mi downstream from Piceance Creek and 8.0 mi northwest of White River City.

DRAINAGE AREA.--1,821 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1982 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 5,590 ft above National Geodetic Vertical Datum of 1929, from topographic map. Oct. 1, 1982 to Aug. 15, 1983, at site 0.25 mi upstream, at datum 3.12 ft, higher.

REMARKS.--Estimated daily discharges: Oct. 1-15, Jan. 7 to Feb. 28. Records good except for estimated daily discharges, which are poor. Diversions upstream from station for irrigation of about 31,900 acres.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,370 ft³/s, June 7, 1984, gage height, 8.05 ft; minimum daily, 300 ft³/s, Jan. 1-7, 1982.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,820 ft³/s at 1800 June 7, gage height, 7.17 ft; minimum daily, 410 ft³/s, Feb. 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

US

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	680	647	577	655	520	630	1240	1700	3560	2160	881	710
2	675	596	543	671	530	632	1320	1940	3660	2070	858	690
3	675	581	591	681	500	639	1410	2390	3540	1840	840	681
4	670	587	582	628	556	651	1320	2880	3720	1860	773	665
5	660	576	523	543	540	649	1210	3250	3950	2220	822	602
6	660	604	528	641	548	652	1150	2880	4230	2710	854	595
7	680	559	530	620	520	654	1140	2640	4370	2200	836	583
8	710	555	549	580	450	665	1140	2370	4440	1940	813	613
9	765	618	553	590	450	826	1150	2190	4450	1900	790	594
10	830	568	584	590	410	880	1200	2040	4310	2020	771	715
11	960	621	592	620	420	782	1200	1890	3530	1810	744	721
12	1030	723	487	620	470	784	1190	1850	3220	1600	746	660
13	910	678	531	610	500	752	1210	1810	3280	1480	812	649
14	940	558	566	600	480	705	1180	1880	3280	1470	733	627
15	760	567	591	610	480	784	1150	1970	3230	1390	722	595
16	755	570	612	635	490	782	1120	1940	3300	1540	750	563
17	743	597	665	610	490	742	1200	1820	3320	1550	738	552
18	742	626	693	550	510	731	1240	1740	3380	1430	726	543
19	731	620	648	500	510	690	1160	1880	3480	1320	720	569
20	703	608	622	500	530	693	1090	2130	3380	1290	677	568
21	702	568	705	515	530	694	1070	2430	3260	1280	684	568
22	712	571	690	460	550	685	1130	2910	3170	1340	728	617
23	717	583	667	490	540	704	1330	2970	3070	1280	671	646
24	682	561	707	490	580	728	1520	2850	2870	1220	717	700
25	662	562	675	480	580	757	1640	2860	2700	1310	776	712
26	656	602	673	450	600	758	1690	3020	2720	1230	768	698
27	659	545	645	470	610	761	1570	3200	2690	1160	695	699
28	650	531	689	500	590	810	1490	3560	2490	1090	693	750
29	641	544	655	500	---	879	1440	3640	2360	1030	688	773
30	633	576	655	490	---	955	1450	3520	2270	982	702	716
31	662	---	673	490	---	1050	---	3420	---	937	678	---
TOTAL	22655	17702	19001	17389	14484	23104	38350	77570	101230	48659	23406	19374
MEAN	731	590	613	561	517	745	1278	2502	3374	1570	755	646
MAX	1030	723	707	681	610	1050	1690	3640	4450	2710	881	773
MIN	633	531	487	450	410	630	1070	1700	2270	937	671	543
AC-FT	44940	35110	37690	34490	28730	45830	76070	153900	200800	96520	46430	38430
CAL YR 1985	TOTAL	417045		MEAN	1143	MAX	4150	MIN	380	AC-FT	827200	
WTR YR 1986	TOTAL	422924		MEAN	1159	MAX	4450	MIN	410	AC-FT	838900	

GREEN RIVER BASIN

09306224 WHITE RIVER ABOVE CROOKED WASH NEAR WHITE RIVER CITY, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1982 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	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)
NOV 20...	1115	610	692	8.6	0.0	10.7	300	72	28
APR 07...	1320	1180	742	8.3	10.5	9.5	310	73	32
JUN 11...	1340	3370	378	8.1	12.0	9.0	160	42	14

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)
NOV 20...	40	1	1.4	186	180	14	0.2	14	460
APR 07...	50	1	1.8	194	180	11	0.2	15	480
JUN 11...	14	0.5	1.3	126	66	4.0	0.1	12	230

DATE	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)
NOV 20...	0.63	761	<0.01	0.33	0.03	0.57	0.6	0.01	0.01
APR 07...	0.65	1530	<0.01	0.86	0.02	0.48	0.5	0.04	0.02
JUN 11...	0.31	2090	<0.01	0.18	0.02	0.38	0.4	0.05	0.02

09306224 WHITE RIVER ABOVE CROOKED WASH NEAR WHITE RIVER CITY, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ANTI- MONY, DIS- SOLVED (UG/L AS SB)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	BORON, DIS- SOLVED (UG/L AS B)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)
NOV 20...	<10	<1	<1	39	<0.5	50	2	<1	1	5	10
JUN 11...	20	1	<1	33	<0.5	20	<1	1	1	1	30

DATE	*LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	ZINC, DIS- SOLVED (UG/L AS ZN)
NOV 20...	<1	16	16	0.1	1	7	3	<1	900	6
JUN 11...	<1	10	10	0.1	1	2	1	<1	330	8

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE (DEG C)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE (DEG C)
OCT 16...	1400	773	725	8.5	JUL 29...	0940	1020	598	15.0
MAR 06...	1330	615	852	8.0	AUG 29...	1445	655	719	16.0
MAY 08...	1200	2280	522	7.0					

* The minimum reporting level for Lead was changed from <1 to <5 during June, 1986.

GREEN RIVER BASIN

09306235 CORRAL GULCH BELOW WATER GULCH, NEAR RANGELY, CO

LOCATION.--Lat 39°54'22", long 108°31'56", in SE¼NW¼ sec.5, T.2 S., R.99 W., Rio Blanco County, Hydrologic Unit 14050006, on left bank 0.1 mi downstream from Water Gulch and 19 mi southeast of Rangely.

DRAINAGE AREA.--8.61 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 1974 to current year.

GAGE.--Water-stage recorder. Concrete control since Aug. 1, 1974. Prior to Aug. 1, 1974, water-stage recorder at different datum. Elevation of gage is 6,975 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 5-15, Nov. 23 to Dec. 5, 7, 9-12, Jan. 1, 4, 5, 12-30, Feb. 4-8, May 1, May 28 to June 6, July 7-8, 20-29, and Aug. 30 to Sept. 11. Records good except those above 28 ft³/s, which are fair, and estimated daily discharges, which are poor.

AVERAGE DISCHARGE.--12 years, 1.06 ft³/s; 768 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge determined, 272 ft³/s, July 23, 1977, gage height, 3.20 ft, maximum gage height, 13.50 ft, May 31, 1983 (from mud flow); no flow many days most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 68 ft³/s at 0100 July 6, gage height, 2.60 ft; minimum daily, 0.25 ft³/s, Feb. 10, 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.85	.64	.53	.41	.41	.46	3.7	4.4	4.1	1.7	1.4	3.6
2	.85	.64	.53	.41	.41	.46	4.6	4.1	3.5	1.5	1.3	2.1
3	.85	.64	.53	.41	.41	.52	4.6	4.4	3.4	1.5	1.3	1.3
4	.85	.64	.53	.41	.41	.52	3.9	4.6	3.2	1.5	1.3	1.2
5	.81	.64	.58	.41	.41	.52	3.3	4.9	3.1	1.5	1.3	1.2
6	.78	.64	.58	.46	.37	.41	2.4	5.1	2.7	7.1	1.3	1.1
7	.78	.64	.58	.46	.37	.41	1.9	5.1	2.7	1.6	1.2	1.1
8	.71	.64	.64	.41	.33	.46	1.7	5.4	2.9	1.9	1.3	1.1
9	.69	.64	.58	.46	.29	.64	2.1	5.1	3.1	2.2	1.3	1.0
10	.67	.64	.58	.41	.25	.52	2.4	4.4	2.9	2.5	1.3	1.1
11	.66	.64	.58	.41	.25	.64	2.5	4.4	2.7	2.0	1.1	1.0
12	.64	.64	.58	.41	.29	.92	2.7	4.1	2.7	1.6	1.1	1.1
13	.62	.64	.52	.41	.33	.93	2.7	4.1	2.5	1.4	1.1	1.1
14	.60	.64	.52	.41	.29	1.1	2.7	4.1	2.4	1.4	1.0	.95
15	.58	.64	.52	.41	.41	1.1	2.7	4.1	2.4	1.3	1.0	.86
16	.58	.64	.52	.41	.37	1.2	2.4	4.1	2.1	1.6	1.0	.93
17	.52	.64	.52	.41	.46	1.2	2.2	4.6	2.1	1.7	1.0	.93
18	.52	.64	.50	.41	.46	1.2	2.2	4.6	2.1	1.4	1.0	.93
19	.52	.64	.52	.41	.77	1.1	2.2	4.6	2.1	3.8	1.1	.91
20	.52	.63	.52	.41	.64	1.2	2.1	4.6	2.1	2.3	1.5	.85
21	.58	.64	.52	.41	.52	1.3	2.1	4.6	2.1	2.6	1.1	.85
22	.65	.58	.52	.40	.98	1.5	2.1	4.6	2.1	3.0	3.4	.88
23	.64	.52	.52	.40	.58	1.7	2.5	4.6	1.9	2.3	2.4	.85
24	.64	.52	.52	.40	.52	1.9	2.5	4.5	1.9	3.0	2.4	1.3
25	.64	.52	.52	.40	.46	2.2	2.9	4.6	2.2	1.4	1.9	1.1
26	.71	.52	.52	.40	.46	2.4	3.3	4.6	1.9	1.4	1.4	1.1
27	.71	.52	.52	.40	.46	2.9	3.5	4.6	1.9	1.4	1.1	1.1
28	.71	.52	.52	.40	.46	3.1	3.7	4.3	1.9	1.4	.99	1.2
29	.71	.52	.52	.40	---	3.3	3.9	4.2	1.8	1.4	2.9	1.1
30	.71	.53	.52	.40	---	3.5	3.9	4.2	1.8	1.4	2.1	1.1
31	.71	---	.52	.41	---	3.5	---	4.2	---	1.4	5.5	---
TOTAL	21.01	18.18	16.68	12.77	12.37	42.81	85.4	139.8	74.3	62.2	49.09	34.94
MEAN	.68	.61	.54	.41	.44	1.38	2.85	4.51	2.48	2.01	1.58	1.16
MAX	.85	.64	.64	.46	.98	3.5	4.6	5.4	4.1	7.1	5.5	3.6
MIN	.52	.52	.50	.40	.25	.41	1.7	4.1	1.8	1.3	.99	.85
AC-FT	42	36	33	25	25	85	169	277	147	123	97	69
CAL YR 1985	TOTAL	819.42		MEAN	2.24	MAX	14	MIN	.25	AC-FT	1630	
WTR YR 1986	TOTAL	569.55		MEAN	1.56	MAX	7.1	MIN	.25	AC-FT	1130	

WATER-QUALITY RECORDS

PERIOD OF RECORD.--March 1974 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: April 1974 to September 1985.

WATER TEMPERATURE: April 1974 to September 1985.

SUSPENDED-SEDIMENT DISCHARGE: October 1974 to September 1982.

INSTRUMENTATION.--Water-quality monitor April 1974 to September 1985. Pumping sediment sampler October 1974 to September 1982.

REMARKS.--Unpublished maximum and minimum specific conductance data for period of daily record available in district office.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 6,490 microsiemens Dec. 19, 1981; minimum, 230 microsiemens Mar. 20, 1978.

WATER TEMPERATURE: Maximum, 33.5°C June 11, 1981; minimum, freezing point many days during winter months each year.

SEDIMENT CONCENTRATION: Maximum daily, 17,800 mg/L July 26, 1981; no flow many days during 1974-78, 1981.
SEDIMENT LOAD: Maximum daily, 162 tons May 20, 1979; no flow many days during 1974-78, Dec. 15, 1979, 1981.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

		STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	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)	SODIUM AD- SORP- TION RATIO
NOV 06...	1030	0.64	1570	8.4	4.5	10.0	700	140	85	120	2
DATE	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, NITRATE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)
NOV 06...	3.0	338	560	27	0.2	20	1200	1.6	2.0	6.39	0.01
DATE	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, HYDRO. + ORTHO DIS- SOLVED (MG/L AS P)	BARIUM, DIS- SOLVED (UG/L AS Ba)	BERYL- LIUM, DIS- SOLVED (UG/L AS Be)	BORON, DIS- SOLVED (UG/L AS B)	CADMIUM DIS- SOLVED (UG/L AS Cd)
NOV 06...	6.40	0.07	0.63	0.7	<0.01	0.01	0.01	74	<0.5	90	<1
DATE	COBALT, DIS- SOLVED (UG/L AS Co)	COPPER, DIS- SOLVED (UG/L AS Cu)	IRON, DIS- SOLVED (UG/L AS Fe)	LEAD, DIS- SOLVED (UG/L AS Pb)	LITHIUM DIS- SOLVED (UG/L AS Li)	MANGA- NESE, DIS- SOLVED (UG/L AS Mn)	MOLYB- DENUM, DIS- SOLVED (UG/L AS Mo)	STRON- TIUM, DIS- SOLVED (UG/L AS Sr)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS Zn)	
NOV 06...		<3	10	23	<10	26	10	20	2600	<6	60
DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE (DEG C)			DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE (DEG C)
OCT 08...	1145	0.73	1550	3.5			MAY 01...	1130	4.9	1480	13.5
DEC 04...	1030	0.53	1750	2.0			13...	1230	4.1	1470	15.0
JAN 30...	0930	0.4	1600	2.5			JUN 11...	1000	2.7	1540	13.0
FEB 20...	1105	0.58	1530	7.0			JUL 18...	1015	1.4	1610	15.0
MAR 19...	1045	1.2	1540	4.5			AUG 18...	1020	0.98	1600	15.0
APR 03...	1100	4.6	1500	4.0			SEP 11...	1445	0.97	1610	18.5
	1100	2.4	1490	12.0							

GREEN RIVER BASIN

09306242 CORRAL GULCH NEAR RANGELY, CO

LOCATION.--Lat 39°55'13", long 108°28'20", in SE¼NW¼ sec.35, T.1 S., R.99 W., Rio Blanco County, Hydrologic Unit 14050006, on left bank 5 ft downstream from Boxelder Creek, and 3.5 mi upstream from confluence with Stake Springs Draw, and 21 mi southeast of Rangely.

DRAINAGE AREA.--31.6 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 1974 to current year.

GAGE.--Water-stage recorder. Concrete control since July 20, 1974. Elevation of gage is 6,570 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 1-8, Nov. 25 to Dec. 4, Jan. 22-30, Apr. 1-3, July 25-29, and Sept. 11. Records good except those above 30 ft³/s and for periods of estimated daily discharges, which are poor. No diversions upstream from station.

AVERAGE DISCHARGE.--12 years, 3.29 ft³/s; 2,040 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,780 ft³/s, Aug. 18, 1984, gage height, 6.12 ft, frimum daily, 0.41 ft³/s, July 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.5	2.2	1.6	1.2	1.2	1.7	11	9.4	7.9	.48	2.4	4.9
2	2.5	2.4	1.6	1.1	1.1	1.7	8.9	8.3	6.6	.41	2.4	3.1
3	2.5	2.4	1.6	1.1	1.0	1.7	8.4	7.6	6.4	.48	2.4	2.1
4	2.5	2.2	1.6	1.1	1.0	1.7	5.9	9.0	6.1	.60	2.4	2.0
5	2.4	2.2	1.6	1.1	1.0	1.6	5.7	8.6	6.0	1.6	2.4	2.0
6	2.3	2.0	1.5	1.1	1.0	1.6	5.9	9.1	5.2	15	2.4	2.1
7	2.3	1.7	1.5	1.1	1.0	1.5	6.6	10	5.1	3.5	2.5	2.1
8	2.1	1.7	1.5	1.1	1.0	1.5	5.1	10	4.9	4.1	2.4	2.1
9	2.0	1.7	1.5	1.1	1.0	1.7	4.2	9.8	5.7	4.7	2.4	2.2
10	2.0	1.7	1.4	1.2	1.0	1.5	5.9	8.4	5.2	5.1	2.0	2.4
11	2.2	1.7	1.3	1.2	1.1	1.6	6.1	8.3	4.7	4.1	2.0	2.7
12	2.2	1.7	1.3	1.2	1.1	1.7	5.7	7.9	4.1	3.3	1.7	2.5
13	2.2	1.6	1.3	1.2	1.2	1.7	5.8	8.4	3.7	2.8	1.8	2.4
14	2.2	1.6	1.2	1.2	1.2	1.8	4.3	9.3	3.1	2.8	1.7	2.3
15	2.2	1.6	1.2	1.2	1.5	1.9	4.1	9.2	2.7	2.7	1.7	2.0
16	2.2	1.6	1.2	1.1	1.2	2.2	4.4	11	2.4	3.1	1.6	1.9
17	2.2	1.6	1.3	1.1	3.6	2.1	5.1	12	2.1	3.3	1.6	1.8
18	2.1	1.6	1.4	1.1	3.4	2.1	4.9	11	2.1	2.8	1.7	1.8
19	2.1	1.6	1.4	1.1	3.3	2.4	4.8	12	2.0	7.3	1.7	1.8
20	2.1	1.5	1.4	1.1	2.8	2.6	4.9	11	1.7	4.3	1.7	1.8
21	2.1	1.6	1.4	1.0	2.5	2.9	5.1	11	1.4	4.7	1.7	1.7
22	2.0	1.6	1.4	1.0	2.2	3.7	5.9	11	1.2	5.1	3.9	1.8
23	2.0	1.6	1.4	1.0	2.2	4.2	6.5	9.6	1.2	3.9	3.0	2.0
24	2.0	1.7	1.4	1.1	2.1	5.4	8.1	9.1	1.2	4.8	3.0	2.7
25	2.0	1.6	1.3	1.1	2.0	6.6	11	8.7	1.6	2.2	2.5	2.7
26	2.1	1.6	1.2	1.1	2.7	7.1	12	8.4	1.2	2.2	1.8	2.2
27	2.1	1.6	1.2	1.1	1.9	7.9	11	8.9	.87	2.2	1.5	2.1
28	2.1	1.6	1.2	1.2	1.7	8.7	10	8.2	.77	2.2	1.4	2.1
29	2.1	1.6	1.2	1.2	---	9.2	9.8	8.1	.77	2.2	4.0	1.8
30	2.1	1.6	1.2	1.2	---	9.8	9.0	8.1	.68	2.2	3.0	1.8
31	2.2	---	1.2	1.2	---	11	---	8.0	---	2.2	8.2	---
TOTAL	67.6	52.4	42.5	34.9	48.0	112.8	206.1	289.4	98.59	106.37	74.9	66.9
MEAN	2.18	1.75	1.37	1.13	1.71	3.64	6.87	9.34	3.29	3.43	2.42	2.23
MAX	2.5	2.4	1.6	1.2	3.6	11	12	12	7.9	15	8.2	4.9
MIN	2.0	1.5	1.2	1.0	1.0	1.5	4.1	7.6	.68	.41	1.4	1.7
AC-FT	134	104	84	69	95	224	409	574	196	211	149	133
CAL YR 1985	TOTAL	1836.80		MEAN	5.03	MAX	33	MIN	.67	AC-FT	3640	
WTR YR 1986	TOTAL	1200.46		MEAN	3.29	MAX	15	MIN	.41	AC-FT	2380	

09306242 CORRAL GULCH NEAR RANGELY, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--March 1974 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: April 1975 to current year.

WATER TEMPERATURE: January 1975 to current year.

SUSPENDED-SEDIMENT DISCHARGE: October 1974 to September 1985.

INSTRUMENTATION.--Water-quality monitor since October 1974. Pumping sediment sampler October 1974 to September 1985.

REMARKS.--Unpublished maximum and minimum specific conductance data for period of daily record available in district office. Maximum water temperature for the current year may have been higher during period of missing record for months July and August.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 3,000 microsiemens July 17, 1976; minimum, 271 microsiemens Feb. 18, 1980.

WATER TEMPERATURE: Maximum, 29.0°C Aug. 5, 1979; minimum, 0.0°C on several days during winter months some years.

SEDIMENT CONCENTRATION: Maximum daily, 35,800 mg/L Aug. 2, 1982; minimum daily, 2 mg/L May 24, 1981.

SEDIMENT LOAD: Maximum daily, 43,600 tons August 18, 1984; minimum daily, 0.00 ton on many days during 1981.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Not determined.

WATER TEMPERATURE: Maximum recorded, 21.0°C June 27; minimum, 0.5°C Mar. 27, 28 and Apr. 3.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	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)	SODIUM AD- SORP- TION RATIO
NOV 06...	1130	2.0	1590	8.1	9.0	9.5	2.6	610	100	86	150	3
DATE	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, NITRATE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)
NOV 06...	1.1	457	480	19	0.4	20	1100	1.5	7.1	1.99	0.01	2.00
DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, HYDRO- LYZABLE DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, HYDRO. + ORTHO DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, ORGANIC DIS- SOLVED (MG/L AS P)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	BORON, DIS- SOLVED (UG/L AS B)
NOV 06...	0.05	0.55	0.6	0.01	0.01	0.01	0.02	0.0	7.6	62	<0.5	140
DATE	CADMIUM DIS- SOLVED (UG/L AS CD)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)	LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)	
NOV 06...	<1	<3	<10	6	<10	26	17	24	2900	6	39	

GREEN RIVER BASIN

09306242 CORRAL GULCH NEAR RANGELY, CO--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25 DEG. C, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	1570	---	---	1260	1370	1540	---	1540
2	---	---	---	---	1570	---	---	1180	1370	1540	---	1570
3	---	---	---	---	1580	---	---	1190	1380	1540	---	1580
4	---	---	1550	---	1590	---	---	1210	1390	1540	---	1590
5	---	---	1550	---	1600	1610	---	1210	1400	1520	---	1600
6	---	1430	---	---	1610	1600	---	1200	1420	---	---	1600
7	---	---	---	---	1610	1580	---	1190	1390	---	1540	1600
8	1440	---	---	---	1600	1570	---	1220	1350	---	1570	1600
9	1450	---	---	---	1590	---	---	1240	1350	---	1560	1590
10	---	---	---	---	1600	---	---	1270	1370	---	1570	1580
11	---	---	---	---	1560	---	1310	1300	1410	---	1570	1590
12	---	---	---	---	1510	---	---	1330	1430	---	1570	1600
13	---	---	---	---	1460	---	1330	1320	1420	---	1580	1600
14	---	---	---	---	1420	---	1370	1300	1450	---	1580	1610
15	---	---	---	---	878	---	1380	1280	1470	---	1570	1610
16	---	---	---	---	709	---	1350	1200	1420	---	1570	1600
17	---	---	---	---	600	---	---	1210	1420	---	1580	1600
18	---	---	---	---	703	---	---	1230	1430	---	1590	1610
19	---	---	---	---	1240	---	---	---	1430	---	1580	1600
20	---	---	---	---	1060	---	---	1250	1440	---	1570	1610
21	---	---	---	---	---	---	---	1230	1450	---	1540	1610
22	---	---	---	---	---	---	---	1270	1450	---	1440	1600
23	---	---	---	---	---	---	---	1320	1490	---	1490	1610
24	---	---	---	---	---	---	---	1360	1520	---	1570	1600
25	---	---	---	---	---	---	---	1380	1510	1370	1540	1630
26	---	---	---	---	---	---	---	1380	1530	1490	1550	1640
27	---	---	---	---	---	---	---	1390	1530	1500	1540	1630
28	---	---	---	---	---	---	---	1350	1530	1500	1590	---
29	---	---	---	---	---	---	---	1350	1520	1530	1430	---
30	---	---	---	1600	---	---	---	1350	1530	---	1650	---
31	---	---	---	1590	---	---	---	1360	---	---	1460	---
MEAN	---	---	---	---	---	---	---	---	1440	---	---	---

09306242 CORRAL GULCH NEAR RANGELY, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	14.5	5.5	10.0	6.5	---	---	8.0	5.0	10.0	5.0	---	---
2	15.0	7.0	10.5	6.5	---	---	7.5	4.5	10.0	5.5	---	---
3	15.0	7.0	11.0	6.5	---	---	8.0	4.5	9.0	4.5	---	---
4	13.5	5.5	11.0	7.0	9.0	5.0	8.0	4.5	8.0	5.0	---	---
5	14.5	5.5	9.5	7.0	8.0	5.5	7.5	4.5	8.5	4.5	12.0	5.0
6	14.5	6.5	11.0	5.5	8.5	5.0	6.5	4.0	8.5	4.5	12.5	4.5
7	14.0	8.5	---	---	8.5	5.0	7.5	4.0	8.0	4.5	12.0	5.0
8	8.5	4.0	---	---	8.0	4.5	7.0	4.0	8.0	5.0	12.0	5.5
9	10.5	5.5	---	---	7.0	4.5	7.5	4.5	8.0	4.5	10.0	3.5
10	12.0	7.5	---	---	7.0	4.5	8.0	4.5	7.0	4.5	8.5	4.5
11	12.5	4.5	---	---	7.0	4.5	8.5	5.0	7.0	5.5	11.0	4.5
12	12.5	7.0	---	---	7.0	4.5	8.0	4.5	8.5	4.5	12.0	4.0
13	10.0	6.0	---	---	8.0	4.5	7.5	4.5	7.0	5.5	9.5	4.0
14	11.5	6.5	---	---	8.0	5.0	7.5	4.5	9.5	5.5	8.5	4.0
15	12.0	6.5	---	---	8.5	5.0	7.5	5.0	6.0	2.5	9.0	4.0
16	12.0	6.5	---	---	8.0	5.0	8.5	5.0	8.5	3.5	7.5	4.0
17	12.0	7.0	---	---	8.0	5.0	8.5	5.0	8.5	1.0	10.0	4.0
18	12.0	7.0	---	---	8.0	5.0	9.0	5.0	4.0	2.0	9.0	4.0
19	12.0	6.5	---	---	8.0	5.0	8.5	5.0	4.0	1.0	9.5	3.5
20	12.0	7.0	---	---	8.0	5.0	8.5	5.0	5.0	1.5	11.5	4.0
21	11.0	7.5	---	---	8.0	5.0	8.5	4.5	---	---	14.0	4.0
22	10.5	7.0	---	---	8.0	4.5	8.0	5.0	---	---	13.5	3.5
23	10.5	7.0	---	---	8.0	5.0	7.5	5.0	---	---	12.5	4.0
24	12.0	7.0	---	---	7.5	4.5	8.5	4.5	---	---	13.0	2.5
25	11.5	7.0	---	---	7.5	4.5	8.5	4.5	---	---	14.0	3.0
26	12.5	7.5	---	---	7.5	4.5	8.5	4.5	---	---	15.5	2.0
27	12.0	7.0	---	---	7.5	4.5	8.5	4.5	---	---	18.0	.5
28	12.0	7.5	---	---	7.5	4.5	8.5	4.5	---	---	17.5	.5
29	12.0	7.5	---	---	8.5	5.0	9.5	5.5	---	---	15.0	3.5
30	11.5	7.5	---	---	8.0	5.5	8.5	5.5	---	---	12.0	4.0
31	10.0	7.0	---	---	8.0	4.5	7.5	5.5	---	---	14.0	2.5
MONTH	15.0	4.0	---	---	---	---	9.5	4.0	---	---	---	---
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	9.5	1.0	15.0	4.0	16.0	6.0	20.0	8.0	---	---	16.5	8.5
2	11.0	1.0	17.5	5.0	19.0	6.5	20.0	8.0	---	---	15.5	8.0
3	4.0	.5	17.5	6.0	20.5	7.5	18.5	9.0	---	---	18.5	8.0
4	11.5	2.0	15.5	4.0	19.5	8.0	20.0	9.0	---	---	18.5	7.5
5	12.5	3.5	13.5	3.0	17.5	8.5	19.5	10.0	---	---	18.0	8.0
6	16.0	2.5	13.0	4.5	19.5	7.5	---	---	---	---	17.5	7.5
7	14.0	3.5	11.5	3.0	19.5	6.0	---	---	19.5	11.0	17.0	9.0
8	13.0	2.5	12.5	3.5	18.0	6.5	---	---	20.0	9.5	17.5	8.0
9	10.5	3.0	10.0	4.5	11.5	7.5	---	---	19.5	8.0	16.5	8.0
10	14.0	4.5	15.5	3.0	16.5	8.0	---	---	19.5	8.0	---	---
11	13.0	4.0	16.0	4.0	19.5	6.0	---	---	18.0	8.5	16.5	8.0
12	14.5	2.5	13.5	5.0	19.5	6.5	---	---	19.5	9.0	16.0	6.5
13	7.0	2.0	17.0	3.0	18.0	8.0	---	---	19.5	8.5	16.0	7.5
14	13.5	1.0	14.5	5.5	18.0	7.5	---	---	18.0	8.0	15.5	7.0
15	15.0	1.5	10.0	5.0	19.5	6.5	---	---	19.0	8.0	16.0	6.0
16	12.5	4.5	10.5	4.5	19.5	6.5	---	---	19.5	9.0	14.5	7.5
17	11.5	2.5	14.5	4.0	20.0	7.0	---	---	19.0	8.5	15.0	6.0
18	9.5	3.5	16.5	4.0	17.0	8.0	20.5	13.5	18.5	6.0	13.0	7.0
19	13.5	2.5	18.5	5.0	18.5	7.0	19.0	10.0	19.5	6.0	14.5	6.0
20	13.5	4.0	17.5	5.5	19.5	7.0	17.5	9.5	19.5	10.5	15.0	7.5
21	18.0	5.0	16.5	5.5	19.0	7.0	16.5	9.5	18.0	10.5	14.5	8.5
22	17.0	4.5	15.5	4.5	20.0	7.0	18.5	12.0	18.5	9.5	14.0	7.5
23	15.5	5.0	14.5	3.0	20.5	7.0	16.0	11.0	16.5	9.5	12.0	9.0
24	12.0	4.5	16.0	6.0	19.0	7.5	14.0	10.5	16.0	10.0	10.0	7.0
25	13.0	4.0	18.0	5.0	15.5	9.0	---	---	18.0	11.0	12.5	6.0
26	9.5	4.0	18.0	5.0	20.5	8.0	---	---	17.0	10.0	12.5	4.0
27	13.5	3.5	18.0	5.0	21.0	8.0	---	---	17.0	9.0	10.5	6.0
28	14.0	5.0	18.5	5.5	18.5	8.5	---	---	16.0	9.0	10.5	6.0
29	16.0	4.0	17.5	5.5	17.0	10.0	19.0	9.5	16.0	10.5	12.0	6.5
30	16.5	4.0	18.5	5.5	18.5	10.0	---	---	16.5	9.5	11.0	5.5
31	---	---	18.0	6.0	---	---	---	---	17.0	6.5	---	---
MONTH	18.0	.5	18.5	3.0	21.0	6.0	---	---	---	---	---	---

GREEN RIVER BASIN

09306290 WHITE RIVER BELOW BOISE CREEK, NEAR RANGELY, CO

LOCATION.--Lat 40°10'47", long 108°33'53", in SW¼SE¼ sec.36, T.3 N., R.100 W., Rio Blanco County, Hydrologic Unit 14050007, on left bank 60 ft downstream from bridge on County Road 73, 0.5 mi below Boise Creek, and 16.4 mi east of Rangely.

WATER-DISCHARGE RECORDS

DRAINAGE AREA.--2,530 mi².

PERIOD OF RECORD.--August 1982 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 5,395 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 1-6, Dec. 31 to Mar. 25, Apr. 1-6, May 2-7, May 25 to June 2, and Aug. 16-20. Records fair except those for estimated daily discharges, which are poor. Diversions upstream from station for irrigation of about 31,500 acres.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,440 ft³/s, June 7, 1984, gage height, 8.45 ft; minimum daily, 320 ft³/s, Jan. 1-7, 1983.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,080 ft³/s at 1000 June 10, gage height, 6.82 ft; minimum daily, 430 ft³/s, Feb. 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	705	725	734	650	530	620	1270	2020	3460	2080	882	719
2	700	678	729	670	540	640	1320	2100	3150	2050	918	701
3	700	664	752	680	520	630	1410	2550	3230	1880	831	682
4	695	659	773	640	540	640	1320	2850	3300	1920	763	663
5	685	651	705	570	540	640	1200	3240	3510	2020	785	626
6	685	663	645	630	540	660	1160	2860	3710	2480	828	589
7	701	657	663	620	520	660	1090	2600	3900	2120	814	582
8	753	637	663	590	510	670	1180	2420	3890	1910	795	611
9	849	655	678	590	470	825	1210	2270	3900	1830	767	631
10	787	694	695	600	430	880	1210	2160	3980	1930	746	694
11	1030	702	635	620	450	790	1230	2030	3440	1730	721	752
12	1170	859	538	620	480	790	1250	1980	3140	1610	677	715
13	1010	873	560	610	510	760	1220	1980	3170	1490	797	671
14	1040	736	580	610	490	720	1220	2010	3190	1460	716	645
15	847	615	610	620	500	800	1170	2050	3140	1400	701	607
16	768	681	630	640	500	800	1150	2060	3180	1470	725	577
17	766	695	660	620	500	765	1240	1970	2950	1540	710	553
18	745	709	680	580	510	760	1330	1950	3040	1480	720	540
19	739	752	640	520	510	720	1260	2020	3040	1390	680	564
20	727	674	630	520	520	725	1190	2190	3010	1290	660	576
21	703	665	680	520	540	720	1190	2530	2990	1300	640	564
22	698	711	670	480	560	710	1190	2840	2890	1310	660	605
23	701	653	660	510	580	730	1310	2960	2760	1250	680	630
24	704	679	680	500	600	740	1590	2870	2610	1200	700	706
25	700	763	680	490	610	750	1730	2920	2570	1240	720	732
26	695	855	670	480	620	740	1820	3010	2520	1190	670	720
27	682	768	660	500	630	759	1730	3180	2490	1140	640	714
28	684	721	680	520	610	779	1630	3520	2320	1060	630	785
29	689	724	650	510	---	856	1570	3590	2230	1010	625	821
30	689	772	660	510	---	963	1710	3490	2190	966	694	754
31	695	---	660	520	---	1070	---	3380	---	938	682	---
TOTAL	23742	21290	20550	17740	14860	23312	40100	79600	92900	47684	22577	19729
MEAN	766	710	663	572	531	752	1337	2568	3097	1538	728	658
MAX	1170	873	773	680	630	1070	1820	3590	3980	2480	918	821
MIN	682	615	538	480	430	620	1090	1950	2190	938	625	540
AC-FT	47090	42230	40760	35190	29470	46240	79540	157900	184300	94580	44780	39130
CAL YR 1985	TOTAL	427507		MEAN	1171	MAX	4260	MIN	400	AC-FT	848000	
WTR YR 1986	TOTAL	424084		MEAN	1162	MAX	3980	MIN	430	AC-FT	841200	

09306290 WHITE RIVER BELOW BOISE CREEK NEAR RANGELY, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1982 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	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)
NOV										
07...	1330	620	760	8.7	3.5	12.2	310	70	34	55
20...	1430	667	741	8.7	0.0	11.3	300	70	31	53
JAN										
08...	1515	389	797	8.3	0.0	11.0	330	78	33	53
FEB										
14...	1410	490	870	8.2	0.0	12.0	320	72	34	59
MAR										
26...	1045	740	920	8.4	7.0	10.3	370	79	41	78
APR										
07...	1525	1150	831	8.4	10.5	9.4	360	80	40	60
JUN										
02...	1330	3260	375	8.4	13.0	8.3	160	41	14	14
11...	1100	3280	422	8.3	11.0	8.6	180	44	16	18
JULY										
29...	1500	958	661	8.6	20.0	8.9	260	58	27	41
AUG										
29...	1140	646	795	8.6	17.5	8.1	330	75	34	51
SEP										
03...	1645	680	740	8.4	18.5	7.8	290	65	31	47

DATE	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	ALKA- LITY 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 SI02)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)
NOV										
07...	1	1.8	200	220	14	0.2	13	530	0.72	884
20...	1	1.5	192	200	16	0.2	14	500	0.68	904
JAN										
08...	1	1.5	198	200	12	0.3	16	510	0.7	538
FEB										
14...	1	2.8	202	240	17	0.3	16	560	0.76	744
MAR										
26...	2	1.9	206	260	19	0.3	14	620	0.84	1230
APR										
07...	1	1.9	220	220	14	0.3	15	560	0.77	1750
JUN										
02...	0.5	1.1	124	69	3.6	0.1	11	230	0.31	2010
11...	0.6	1.2	129	83	5.0	0.1	12	260	0.35	2270
JUL										
29...	1	1.5	176	160	9.3	0.2	14	420	0.57	1080
AUG										
29...	1	2.2	202	210	10	0.3	15	520	0.71	905
SEP										
03...	1	1.7	179	200	11	0.3	14	480	0.65	877

DATE	NITRO- GEN, NITRATE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)	BORON, DIS- SOLVED (UG/L AS B)	IRON, DIS- SOLVED (UG/L AS FE)
NOV										
07...	--	<0.01	0.33	0.04	0.16	0.2	--	<0.01	--	42
20...	--	<0.01	0.46	0.03	0.57	0.6	0.02	0.03	50	33
JAN										
08...	--	<0.01	0.64	0.07	0.23	0.3	<0.01	0.01	50	4
FEB										
14...	0.64	0.01	0.65	--	0.99	1.0	0.03	0.03	80	16
MAR										
26...	--	<0.01	0.85	<0.01	--	0.4	0.02	<0.01	60	14
APR										
07...	--	<0.01	0.95	0.03	0.47	0.5	0.04	<0.01	60	110
JUN										
02...	--	<0.01	0.23	0.02	--	<0.2	0.02	0.02	20	64
11...	--	<0.01	0.22	0.03	0.27	0.3	0.03	0.02	30	39
JUL										
29...	--	<0.01	0.12	0.02	0.28	0.3	0.01	<0.01	40	9
AUG										
29...	--	<0.01	0.30	0.02	0.28	0.3	0.01	<0.01	60	7
SEP										
03...	0.29	0.01	0.30	<0.01	--	0.3	<0.01	<0.01	60	11

GREEN RIVER BASIN

09306290 WHITE RIVER BELOW BOISE CREEK NEAR RANGELY, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	NITRO- GEN, NO ₂ +NO ₃ TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC 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)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)				
NOV 20...	0.50	0.05	0.55	0.6	1.1	0.06	3.5	3.2				
JUN 11...	0.20	0.04	0.96	1.0	1.2	0.30	12	2.3				
AUG 29...	0.30	0.03	0.37	0.4	0.7	0.10	5.4	5.0				
DATE	CYANIDE TOTAL (MG/L AS CN)	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ANTI- MONY, DIS- SOLVED (UG/L AS SB)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)	CADMIUM DIS- SOLVED (UG/L AS CD)
NOV 20...	<0.01	1500	<10	1	1	<1	<100	37	<10	<0.5	3	<1
JUN 11...	<0.01	12000	20	5	2	<1	200	<100	<10	<10	<1	<1
DATE	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, TOTAL RECOV- ERABLE (UG/L AS CO)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER, DIS- SOLVED (UG/L AS CU)	*LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	*LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM TOTAL RECOV- ERABLE (UG/L AS LI)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
NOV 20...	<10	<1	1	1	7	5	5	<1	10	17	60	12
JUN 11...	10	<1	4	<1	19	3	7	<1	20	<10	250	<10
DATE	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY DIS- SOLVED (UG/L AS HG)	MOLYB- DENUM, TOTAL RECOV- ERABLE (UG/L AS MO)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, TOTAL (UG/L AS SE)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, DIS- SOLVED (UG/L AS ZN)
NOV 20...	0.2	0.1	<1	1	4	5	3	3	<1	970	20	6
JUN 11...	0.2	0.1	1	<1	12	1	2	1	<1	350	40	<10
DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE (DEG C)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE (DEG C)			
OCT 16...	1015	734	801	6.5	MAY 08...	1430	2400	562	7.5			
MAR 06...	1510	614	958	8.0	JUN 05...	1300	3270	367	16.0			
APR 23...	1330	1250	768	10.5	19...	1430	2990	415	15.0			

* The minimum reporting level for Lead was changed from <1 to <5 during June, 1986.

09306290 WHITE RIVER BELOW BOISE CREEK NEAR RANGELY, CO--Continued

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)
OCT					APR				
03...	1755	700	182	344	13...	1800	1220	2500	8230
10...	1640	786	1030	2190	22...	1820	1180	1930	6150
16...	1800	766	230	476	28...	1635	1630	1750	7700
25...	1300	700	54	102	MAY				
NOV					08...	1030	2420	4570	29900
01...	1650	725	87	170	17...	1810	1970	314	1670
07...	1330	620	22	37	25...	1825	2920	654	5160
08...	1525	635	46	79	JUN				
17...	1645	695	118	221	04...	1715	3300	1940	17300
20...	1430	667	72	130	14...	1600	3190	581	5000
25...	1225	760	232	476	23...	1100	2750	316	2350
DEC					JUL				
03...	1655	753	718	1460	03...	1000	1870	161	813
11...	1600	635	183	314	10...	1000	1930	189	985
23...	1630	660	147	262	20...	1915	1290	757	2640
JAN					29...	1500	958	97	251
02...	1615	670	51	92	30...	0700	965	117	305
FEB					AUG				
26...	1740	670	880	1590	06...	1800	830	163	365
MAR					14...	1720	715	199	384
06...	1845	660	362	645	22...	1400	660	1330	2370
14...	1605	720	490	953	28...	1700	630	123	209
22...	1820	710	478	916	29...	1140	646	142	248
26...	1045	740	486	971	SEP				
28...	1500	780	804	1690	03...	1645	680	173	318
APR					04...	1945	663	108	193
06...	1615	1120	1730	5230	13...	1235	670	327	592
07...	1525	1150	1280	3970	21...	1815	564	31	47
					28...	1700	785	2000	4240

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .062 MM	SED. SUSP. FALL DIAM. % FINER THAN .125 MM	SED. SUSP. FALL DIAM. % FINER THAN .250 MM	SED. SUSP. FALL DIAM. % FINER THAN .500 MM	SED. SUSP. FALL DIAM. % FINER THAN 1.00 MM
PR												
23...	1300	1250	1170	3950	15	22	36	64	83	96	100	--
AY												
08...	1330	2400	796	5170	18	24	40	64	77	94	99	100
JN												
02...	1300	3260	599	5270	16	21	34	62	75	92	100	--
05...	1100	3280	705	6240	17	22	36	65	77	91	99	100
11...	1015	3280	835	7380	24	29	46	76	88	97	100	--
19...	1300	2290	364	2250	17	23	37	66	76	91	99	100

SAN JUAN RIVER BASIN

09339900 EAST FORK SAN JUAN RIVER ABOVE SAND CREEK, NEAR PAGOSA SPRINGS, CO

LOCATION.--Lat 37°23'23", long 106°50'26", Archuleta County, Hydrologic Unit 14080101, on right bank 0.3 mi upstream from Sand Creek, 4.0 mi upstream from West Fork San Juan River, and 13 mi northeast of Pagosa Springs.

DRAINAGE AREA.--64.1 mi².

PERIOD OF RECORD.--October 1956 to current year. Prior to October 1959, published as San Juan River above Sand Creek, near Pagosa Springs.

REVISED RECORDS.--WSP 1713: 1957.

GAGE.--Water-stage recorder. Elevation of gage is 8,900 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 16, 19-23, 30, Dec. 5, 7 - Mar. 5. Records good except for estimated daily discharges, which are poor. Diversions upstream from station for irrigation of about 500 acres of hay meadows upstream from station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--30 years, 90.6 ft³/s; 65,640 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,260 ft³/s, Sept. 14, 1970, gage height, 6.75 ft, from rating curve extended above 460 ft³/s, on basis of slope-area measurement at gage height 6.13 ft; minimum daily determined, 3.4 ft³/s, Dec. 26, 1958.

EXTREMES OUTSIDE PERIOD OF RECORD.--Greatest flood since at least 1885 occurred Oct. 5, 1911.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 500 ft³/s, and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 4	0100	734	4.95	June 25	2100	728	4.75
May 22	2100	662	4.71	July 4	2100	555	4.46
June 6	2300	*1,120	*5.40	July 9	1300	614	4.56
June 18	2200	814	4.92				

Minimum daily discharge, 14 ft³/s, Feb. 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	65	59	35	24	24	50	150	373	325	401	86	46
2	61	53	33	24	24	50	145	458	349	366	80	42
3	56	51	33	22	24	55	116	556	433	341	75	39
4	52	50	30	20	22	60	95	616	508	378	74	36
5	50	49	26	19	20	65	90	574	671	432	71	36
6	47	46	30	18	20	71	95	460	882	361	67	33
7	85	41	30	18	19	74	100	348	963	295	61	32
8	89	42	28	19	18	71	104	272	817	263	59	41
9	90	41	28	20	18	71	109	213	706	463	64	58
10	92	39	26	20	17	63	113	182	553	416	57	182
11	149	46	22	20	15	58	122	175	491	317	54	116
12	135	47	18	22	14	53	117	191	544	283	53	97
13	128	36	17	22	17	48	117	237	642	255	51	82
14	115	37	18	22	18	45	100	289	691	231	48	75
15	100	37	20	22	19	42	99	295	627	203	44	66
16	93	36	22	22	18	41	115	294	632	233	42	68
17	88	38	22	20	18	39	117	289	667	214	41	63
18	88	36	22	20	19	36	100	264	732	249	39	55
19	80	32	22	20	20	33	90	334	687	215	38	52
20	75	26	24	22	32	33	99	456	604	241	36	49
21	72	30	24	22	30	34	139	549	546	226	47	46
22	72	26	26	20	24	39	224	589	555	199	39	44
23	67	30	26	20	24	46	293	597	511	194	40	48
24	65	31	26	20	26	54	278	556	456	175	60	64
25	65	33	26	19	30	58	227	511	506	158	57	61
26	65	35	26	19	36	66	185	594	551	143	50	75
27	64	35	26	20	44	83	141	573	545	131	43	68
28	64	33	26	20	50	107	138	516	550	115	45	75
29	64	35	24	22	---	128	177	510	511	108	48	82
30	62	30	28	24	---	135	268	441	461	99	52	75
31	62	---	26	24	---	142	---	342	---	90	46	---
TOTAL	2460	1160	790	646	660	1950	4263	12654	17716	7795	1667	1906
MEAN	79.4	38.7	25.5	20.8	23.6	62.9	142	408	591	251	53.8	63.5
MAX	149	59	35	24	50	142	293	616	963	463	86	182
MIN	47	26	17	18	14	33	90	175	325	90	36	32
AC-FT	4880	2300	1570	1280	1310	3870	8460	25100	35140	15460	3310	3780
CAL YR 1985	TOTAL	56971		MEAN	156	MAX	1020	MIN	14	AC-FT	113000	
WTR YR 1986	TOTAL	53667		MEAN	147	MAX	963	MIN	14	AC-FT	106400	

09340800 WEST FORK SAN JUAN RIVER AT WEST FORK CAMPGROUND NEAR PAGOSA SPRINGS, CO

LOCATION.--Lat 37°27'01", long 106°54'40", Mineral County, Hydrologic Unit 14080101, on right bank 1.8 mi upstream from Wolf Creek, 30 ft upstream from West Fork bridge and 15 mi northeast of Pagosa Springs, Co.

DRAINAGE AREA.--50.5 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1984 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 7,935 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 16 - Dec. 23, Jan. 3-8, 25-31, Feb. 1 - Mar. 3, May 9-13. Records good except for estimated daily discharges, which are poor. No regulation or diversions.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,050 ft³/s, May 8, 1985, gage height 5.25 ft; minimum daily, 11 ft³/s, Feb. 2, 1985.

EXTREMES OUTSIDE PERIOD OF RECORD.--A flood on October 5, 1911 has not yet been exceeded.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 960 ft³/s at 2100 June 6, gage height 5.10 ft; minimum daily, 12 ft³/s, Feb. 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	88	66	26	25	24	34	110	255	335	521	110	45
2	83	61	30	24	24	36	108	319	350	496	106	46
3	78	60	30	22	22	38	83	393	419	456	98	45
4	73	57	28	19	20	40	66	429	503	455	104	41
5	70	55	26	18	17	50	63	399	614	489	98	38
6	66	52	24	19	16	52	72	331	753	446	92	35
7	93	45	24	19	16	52	75	254	802	357	87	36
8	94	48	24	20	16	46	72	206	752	394	82	80
9	96	46	24	23	15	45	75	190	615	654	78	85
10	96	46	24	23	15	40	80	180	494	538	69	131
11	135	46	22	27	15	36	87	170	500	422	70	101
12	124	48	22	28	16	32	82	180	613	371	69	82
13	120	43	24	29	16	30	80	190	683	331	65	70
14	108	43	22	28	14	28	69	206	736	297	58	64
15	94	40	24	27	13	26	67	211	738	265	54	57
16	92	38	24	26	15	24	82	202	738	268	53	59
17	87	38	24	25	13	24	82	196	751	233	51	54
18	83	38	22	26	12	24	70	194	756	263	49	49
19	78	36	22	29	13	23	64	235	706	288	48	49
20	75	36	22	28	16	23	72	328	679	334	45	44
21	73	34	24	27	15	24	109	418	684	297	50	43
22	73	34	24	27	14	31	159	459	666	284	49	42
23	69	34	26	27	14	36	178	494	637	272	48	53
24	69	32	27	27	16	43	166	480	576	272	58	82
25	70	34	28	22	18	44	140	480	629	229	65	73
26	75	32	29	20	26	57	118	544	654	203	53	75
27	73	32	29	20	28	72	98	555	672	184	48	76
28	75	30	29	22	30	88	104	531	690	163	48	87
29	73	30	29	24	---	90	141	520	661	142	48	96
30	70	28	28	24	---	100	201	422	575	128	48	85
31	70	---	25	26	---	110	---	347	---	116	44	---
TOTAL	2623	1262	786	751	489	1398	2973	10318	18981	10168	2045	1923
MEAN	84.6	42.1	25.4	24.2	17.5	45.1	99.1	333	633	328	66.0	64.1
MAX	135	66	30	29	30	110	201	555	802	654	110	131
MIN	66	28	22	18	12	23	63	170	335	116	44	35
AC-FT	5200	2500	1560	1490	970	2770	5900	20470	37650	20170	4060	3810
CAL YR 1985 TOTAL	54013			MEAN	148	MAX	956	MIN	11	AC-FT	107100	
WTR YR 1986 TOTAL	53717			MEAN	147	MAX	802	MIN	12	AC-FT	106500	

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Chemical analyses: November 1984 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
DEC 16...	1100	17	48	6.1	0.0	1.7	--	--	0.2	K1	42
MAR 24...	1105	42	43	7.0	2.0	4.0	10.8	100	0	K1	K370
MAY 27...	1200	525	30	7.1	5.0	2.5	10.6	107	0.3	K1	59
AUG 20...	0830	46	49	7.4	10.0	0.9	9.6	108	0.8	K4	180

DATE	HARD- NESS (MG/L AS CACO3)	ACIDITY (MG/L AS H)	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- LITY WH WAT TOTAL FIELD (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)
DEC 16...	18	<0.1	5.9	0.9	3.7	0.4	1.1	20	6.6	0.5	<0.1
MAR 24...	19	<0.1	6.0	0.9	3.8	0.4	0.9	21	6.8	0.3	0.1
MAY 27...	13	<0.1	4.4	0.6	1.9	0.2	0.8	17	4.5	1.1	<0.1
AUG 20...	17	<0.1	5.4	0.8	3.0	0.3	1.1	20	4.5	0.3	<0.1

DATE	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)
DEC 16...	22	40	53	0.05	1.8	<0.01	<0.01	0.10	<0.10	0.03	0.03
MAR 24...	21	55	53	0.08	6.2	<0.01	<0.01	<0.10	<0.10	0.02	0.01
MAY 27...	16	40	40	0.05	57	<0.01	<0.01	<0.10	<0.10	0.03	0.03
AUG 20...	19	40	46	0.05	5.0	<0.01	<0.01	<0.10	<0.10	0.01	0.02

DATE	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC 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)	PHOS- PHORUS, ORTHOPHOS- PHATE, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, ORTHOPHOS- PHATE, DIS- SOLVED (MG/L AS P)	PHOS- PHATE, ORTHOPHOS- PHATE, DIS- SOLVED (MG/L AS PO4)
DEC 16...	0.27	0.27	0.3	0.3	0.4	0.03	0.03	0.03	0.02	0.06
MAR 24...	0.28	0.29	0.3	0.3	--	0.03	0.03	0.03	0.02	0.06
MAY 27...	0.27	0.27	0.3	0.3	--	0.05	0.02	0.02	0.02	0.06
AUG 20...	--	--	<0.2	<0.2	--	0.03	0.02	0.02	0.01	0.03

K BASED ON NON-IDEAL COLONY COUNT

09340800 WEST FORK SAN JUAN RIVER AT WEST FORK CAMPGROUND NEAR PAGOSA SPRINGS, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC DIS- SOLVED (UG/L AS AS)	CADMIUM DIS- SOLVED (UG/L AS CD)	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)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	NICKEL, DIS- SOLVED (UG/L AS NI)	ZINC, DIS- SOLVED (UG/L AS ZN)
DEC 16...	1100	40	1	<1	1	90	25	<1	<1	1	16
MAR 24...	1105	90	11	<1	<1	290	66	<1	3	<1	<3
MAY 27...	1200	60	<1	<1	3	230	34	<1	2	<1	6
AUG 20...	0830	20	1	<1	3	20	15	<5	2	<1	10

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
MAY					
02...	1330	267	56	40	66
06...	1500	315	17	14	57
21...	1045	372	25	25	67
27...	1200	525	46	65	42
JUN					
04...	1045	445	18	22	55
13...	0910	600	30	49	42
20...	1045	625	19	32	43
JUL					
09...	1000	696	106	199	43
AUG					
20...	0830	46	2	0.25	--
SEP					
12...	0945	83	2	0.45	--

* The minimum reporting level for Lead was changed from <1 to <5 during June, 1986.

SAN JUAN RIVER BASIN

09341300 WOLF CREEK AT WOLF CREEK CAMPGROUND NEAR PAGOSA SPRINGS, CO

LOCATION.--Lat 37°26'31", long 106°53'11", Mineral County, Hydrologic Unit 14080101, on left bank 0.8 mi upstream from mouth, 10 ft downstream from bridge at Wolf Creek and 14 mi northeast of Pagosa Springs, Co.

DRAINAGE AREA.--18.0 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1968 to September 1975, October 1984 to current year. Streamflow and water quality records for October 1968 to September 1975 at site 0.3 mi upstream not equivalent because of inflow between sites.

GAGE.--Water-stage recorder. Elevation of gage is 7,830 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Dec. 14, Mar. 22, 23, June 7-13. Records good except for estimated daily discharges, which are fair. No regulation. Small transmountain diversion upstream from station by Treasure Pass diversion ditch to South Fork Rio Grande drainage and small diversion by U.S. Forest Service for fish pond 0.3 mi upstream from gage.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 526 ft³/s, June 7, 1985, gage height, 3.79 ft; minimum daily, 3.4 ft³/s, Feb. 2, 1985.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 346 ft³/s at 1600 June 6, gage height, 3.21 ft; minimum daily, 3.9 ft³/s, Feb. 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31	22	8.5	8.5	8.1	13	41	109	205	235	32	12
2	28	19	8.5	8.1	8.1	14	35	134	217	229	30	11
3	26	19	8.5	7.8	7.4	15	27	155	235	220	28	11
4	23	18	7.8	6.8	6.3	16	22	163	256	218	25	9.6
5	21	16	7.4	6.8	5.7	19	20	153	282	232	25	9.2
6	19	15	7.1	6.8	5.4	21	22	135	311	218	25	8.8
7	40	13	7.1	6.6	5.4	22	26	114	320	200	21	7.8
8	39	13	7.1	6.3	5.2	20	25	89	300	192	21	13
9	36	13	6.8	6.3	5.2	19	25	74	240	261	21	20
10	40	12	7.1	6.8	4.9	15	27	66	220	256	18	66
11	54	12	6.0	7.4	4.9	13	29	65	210	209	16	45
12	51	12	6.8	7.8	5.2	11	28	68	210	185	15	37
13	51	11	6.8	8.8	5.2	10	26	74	250	161	14	29
14	48	12	6.5	9.2	4.7	8.8	22	80	280	131	13	25
15	41	12	7.1	9.2	4.2	7.8	21	82	292	108	12	22
16	39	11	6.8	8.8	4.9	6.8	26	80	286	110	12	21
17	36	11	6.3	7.8	4.4	6.3	26	78	283	81	12	21
18	33	11	6.0	7.8	3.9	6.0	21	77	283	82	11	18
19	30	9.6	6.3	7.8	4.4	5.7	19	101	286	88	11	16
20	28	9.6	6.6	8.5	5.2	5.4	21	146	277	115	9.6	14
21	28	9.6	6.8	8.8	4.6	6.8	36	194	274	106	9.2	13
22	27	9.2	7.4	7.8	4.6	8.5	64	218	277	98	9.6	13
23	24	9.2	7.8	7.1	4.6	10	77	215	259	90	9.2	13
24	24	9.6	8.1	7.1	5.2	12	72	219	247	84	12	22
25	24	9.2	8.5	6.8	6.0	15	59	215	256	72	12	19
26	25	8.8	9.2	6.8	9.1	19	46	262	268	65	11	21
27	26	8.5	9.2	7.1	11	25	39	271	268	56	11	25
28	27	8.1	9.6	7.4	12	32	37	265	268	48	9.6	29
29	26	7.8	9.9	8.1	---	36	49	262	262	42	9.2	32
30	25	7.4	9.9	8.5	---	40	76	221	253	38	9.6	29
31	24	---	9.6	8.8	---	44	---	199	---	34	9.2	---
TOTAL	994	358.6	237.1	238.2	165.8	503.1	1064	4584	7875	4264	483.2	632.4
MEAN	32.1	12.0	7.65	7.68	5.92	16.2	35.5	148	263	138	15.6	21.1
MAX	54	22	9.9	9.2	12	44	77	271	320	261	32	66
MIN	19	7.4	6.0	6.3	3.9	5.4	19	65	205	34	9.2	7.8
AC-FT	1970	711	470	472	329	998	2110	9090	15620	8460	958	1250
CAL YR 1985	TOTAL	20814.9		MEAN	57.0	MAX	398	MIN	3.4	AC-FT	41290	
WTR YR 1986	TOTAL	21399.4		MEAN	58.6	MAX	320	MIN	3.9	AC-FT	42450	

09341300 WOLF CREEK AT WOLF CREEK CAMPGROUND NEAR PAGOSA SPRINGS, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Chemical analyses: November 1984 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
DEC 16...	1200	6.9	61	5.9	0.0	1.3	--	--	0.3	K1	K250
MAR 24...	1305	14	66	7.2	2.0	8.6	10.9	101	1.7	K1	K1200
MAY 27...	1330	266	26	6.9	5.0	6.0	10.1	102	0	K1	K31
AUG 20...	1000	10	48	7.6	10.0	0.8	8.7	98	1.0	K3	73

DATE	HARD- NESS (MG/L AS CACO3)	ACIDITY (MG/L AS H)	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 WH WAT TOTAL FIELD 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)
DEC 16...	22	<0.1	7.3	0.9	3.8	0.4	1.1	24	6.4	0.5	<0.1
MAR 24...	28	<0.1	9.1	1.3	5.0	0.4	1.0	31	7.8	1.6	<0.1
MAY 27...	13	<0.1	4.4	0.5	2.1	0.3	0.8	16	4.0	0.5	<0.1
AUG 20...	18	<0.1	6.1	0.7	3.1	0.3	1.0	25	3.8	0.2	<0.1

DATE	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)
DEC 16...	18	44	53	0.06	0.82	<0.01	<0.01	0.10	0.14	0.01	0.02
MAR 24...	18	74	63	0.1	2.8	<0.01	<0.01	0.10	0.12	0.02	0.03
MAY 27...	15	38	37	0.05	27	<0.01	<0.01	<0.10	<0.10	0.03	0.02
AUG 20...	17	45	47	0.06	1.2	<0.01	<0.01	<0.10	<0.10	<0.01	0.02

DATE	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC 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)	PHOS- PHORUS, ORTHO, TOTAL (MG/L AS P)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)	PHOS- PHATE, ORTHO, DIS- SOLVED (MG/L AS PO4)
DEC 16...	--	--	<0.2	<0.2	--	0.02	0.02	0.02	0.02	0.06
MAR 24...	0.28	0.27	0.3	0.3	0.4	0.04	0.03	0.03	0.03	0.09
MAY 27...	0.27	0.18	0.3	0.2	--	0.04	0.02	0.02	0.02	0.06
AUG 20...	--	--	0.2	<0.2	--	0.04	0.02	0.02	0.02	0.06

K BASED ON NON-IDEAL COLONY COUNT

SAN JUAN RIVER BASIN

09341300 WOLF CREEK AT WOLF CREEK CAMPGROUND NEAR PAGOSA SPRINGS, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC DIS- SOLVED (UG/L AS AS)	CADMIUM DIS- SOLVED (UG/L AS CD)	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)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	NICKEL, DIS- SOLVED (UG/L AS NI)	ZINC, DIS- SOLVED (UG/L AS ZN)
DEC 16...	1200	20	1	<1	<1	110	19	1	<1	<1	<3
MAR 24...	1305	220	<1	<1	<1	730	81	<1	8	<1	<3
MAY 27...	1330	80	1	<1	2	240	55	<1	4	<1	14
AUG 20...	1000	<10	<1	2	4	60	32	<5	1	1	12

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
APR 29...	1330	45	14	1.7	81
MAY 06...	1650	145	18	7.0	56
21...	1245	180	39	19	56
27...	1330	266	28	20	55
JUN 04...	1230	226	13	7.9	56
13...	1020	295	16	13	68
20...	1200	269	21	15	54
JUL 09...	1030	277	124	93	40
AUG 20...	1000	10	1	0.03	--
SEP 12...	1015	37	5	0.50	--

* The minimum reporting level for Lead was changed from <1 to <5 during June, 1986.

09341350 WINDY PASS CREEK NEAR PAGOSA SPRINGS, CO

LOCATION.--Lat 37°26'21", long 106°52'46", Mineral County, Hydrologic Unit 14080101, on left bank 0.6 mi upstream from mouth, 40 ft upstream from U.S. Highway 160, and 14 mi northeast of Pagosa Springs, Co.

DRAINAGE AREA.--1.41 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1, 1984 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 8,030 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 1 - Apr. 8. Records good except for estimated daily discharges, which are poor. No diversions upstream from gage. Small diversion for domestic use of guest ranch downstream from gage.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 16 ft³/s, May 8, 1985, gage height, unknown, maximum gage-height recorded, 4.90 ft, May 4, 1985, backwater from plugged culvert; no flow many days each year

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 11 ft³/s at 2000, May 4, gage height, 2.08 ft; no flow, Feb. 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.36	.40	.12	.18	.19	.36	3.0	5.2	4.2	.11	.25	.04
2	.30	.36	.12	.16	.18	.38	2.6	6.6	4.1	.09	.23	.07
3	.26	.34	.12	.14	.18	.42	2.0	8.1	4.3	.07	.20	.04
4	.22	.32	.10	.10	.14	.46	1.8	10	4.4	.09	.18	.04
5	.20	.30	.08	.10	.12	.50	1.6	10	4.9	.11	.20	.04
6	.19	.28	.07	.10	.09	.60	1.8	8.8	5.5	.13	.18	.04
7	.65	.26	.07	.09	.08	.65	2.2	7.8	5.5	.07	.16	.02
8	.60	.24	.07	.08	.08	.60	2.0	6.1	4.9	.07	.14	.07
9	.60	.24	.07	.08	.06	.55	2.2	5.2	4.4	.23	.14	.09
10	.65	.22	.07	.10	.06	.50	2.5	4.1	3.5	.23	.11	.25
11	.85	.22	.04	.12	.06	.44	2.7	3.7	3.0	.20	.14	.16
12	.80	.22	.06	.14	.06	.38	2.6	3.7	2.7	.18	.14	.09
13	.80	.20	.06	.18	.06	.32	2.7	3.8	2.8	.16	.14	.09
14	.75	.22	.05	.20	.06	.28	2.6	4.3	2.7	.13	.14	.11
15	.70	.22	.06	.20	.02	.24	2.6	4.4	2.6	.13	.11	.11
16	.65	.20	.07	.18	.06	.22	3.3	4.7	2.3	.16	.14	.14
17	.60	.20	.06	.16	.04	.20	3.6	4.6	2.2	.11	.11	.11
18	.55	.20	.06	.14	.00	.16	2.8	4.6	1.9	.11	.09	.11
19	.50	.18	.06	.16	.04	.14	2.4	5.3	1.7	.43	.09	.09
20	.50	.17	.08	.18	.06	.12	2.6	6.1	1.2	.80	.04	.07
21	.50	.16	.09	.20	.04	.24	3.8	7.5	.81	.80	.04	.04
22	.48	.15	.10	.18	.04	.34	5.6	8.7	.58	.89	.04	.04
23	.46	.15	.12	.14	.04	.50	5.8	7.8	.52	.98	.04	.04
24	.44	.16	.14	.13	.07	.70	5.9	6.8	.41	.89	.07	.11
25	.44	.16	.16	.13	.10	.90	5.4	6.4	.41	.74	.07	.12
26	.46	.14	.18	.11	.22	1.1	4.9	6.5	.25	.69	.07	.20
27	.48	.12	.18	.12	.28	1.6	4.2	6.6	.23	.58	.06	.18
28	.50	.11	.20	.14	.32	2.0	4.1	6.2	.20	.47	.04	.20
29	.48	.10	.22	.16	---	2.4	4.2	6.0	.18	.41	.04	.23
30	.46	.08	.22	.18	---	3.0	3.8	5.4	.16	.30	.04	.25
31	.44	---	.20	.20	---	3.2	---	4.7	---	.25	.04	---
TOTAL	15.87	6.32	3.30	4.48	2.75	23.50	97.3	189.7	72.55	10.61	3.48	3.19
MEAN	.51	.21	.11	.14	.10	.76	3.24	6.12	2.42	.34	.11	.11
MAX	.85	.40	.22	.20	.32	3.2	5.9	10	5.5	.98	.25	.25
MIN	.19	.08	.04	.08	.00	.12	1.6	3.7	.16	.07	.04	.02
AC-FT	31	13	6.5	8.9	5.5	47	193	376	144	21	6.9	6.3
CAL YR 1985	TOTAL	602.26		MEAN	1.65	MAX	16	MIN	.00	AC-FT	1190	
WTR YR 1986	TOTAL	433.05		MEAN	1.19	MAX	10	MIN	.00	AC-FT	859	

SAN JUAN RIVER BASIN

09341350 WINDY PASS CREEK NEAR PAGOSA SPRINGS, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Chemical analyses: November 1984 to current year.

PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT DISCHARGE: April 9, 1986 to September 30, 1986.

INSTRUMENTATION.-- Pumping-sediment sampler since April 1986.

REMARKS.-- Daily-sediment discharge based on once-daily samples collected April 9 through September 30, except from April 30 to May 27, when samples were collected twice daily.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATION: Maximum daily mean, 62 mg/L May 6 (but may have been exceeded during periods when daily samples were not collected during May); minimum daily mean, 0 mg/L several days during August and September.

SEDIMENT LOADS: Maximum daily, 1.5 tons May 6; minimum daily, .00 tons many days during June through September.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)
DEC 16...	1330	0.08	82	6.5	0.0	1.6	--	--	0.2	K1	K17
MAR 24...	1420	0.72	81	7.9	2.0	2.3	11.9	111	0.4	K1	K150
MAY 27...	1000	6.4	49	7.2	3.0	5.0	10.6	102	0.2	K1	120
AUG 20...	1200	0.05	116	7.9	12.0	0.6	9.6	114	1.1	28	K640

DATE	HARD- NESS (MG/L AS CACO3)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	ACIDITY (MG/L AS H)	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 WH WAT TOTAL FIELD MG/L AS CACO3	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
DEC 16...	35	--	<0.1	10	2.4	5.1	0.4	1.1	41	7.0	0.6
MAR 24...	38	--	<0.1	11	2.6	5.3	0.4	1.0	44	6.7	0.6
MAY 27...	24	5	<0.1	7.0	1.5	3.5	0.3	0.9	19	7.1	0.4
AUG 20...	44	--	<0.1	13	2.9	5.8	0.4	1.4	53	5.3	0.3

DATE	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NITRITE TOTAL (MG/L AS N)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)
DEC 16...	<0.1	22	66	73	0.09	0.01	<0.01	<0.01	<0.10	<0.10	0.02
MAR 24...	<0.1	23	88	77	0.12	0.17	<0.01	<0.01	<0.10	<0.10	<0.01
MAY 27...	<0.1	22	62	55	0.08	1.1	<0.01	<0.01	0.50	<0.10	0.04
AUG 20...	<0.1	26	84	87	0.11	0.01	<0.01	<0.01	<0.10	<0.10	<0.01

K BASED ON NON-IDEAL COLONY COUNT

09341350 WINDY PASS CREEK NEAR PAGOSA SPRINGS, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC 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)	PHOS- PHORUS, ORTHODIS- SOLVED (MG/L AS P)	PHOS- PHORUS, ORTHODIS- SOLVED (MG/L AS P)	PHOS- PHATE, ORTHODIS- SOLVED (MG/L AS PO4)
DEC 16...	0.02	0.28	0.38	0.3	0.4	--	0.03	0.03	0.02	0.02	0.06
MAR 24...	0.02	--	0.28	0.4	0.3	--	0.03	0.03	0.03	0.03	0.09
MAY 27...	0.03	0.36	0.27	0.4	0.3	0.9	0.04	0.03	0.02	0.02	0.06
AUG 20...	<0.01	--	--	<0.2	<0.2	--	0.03	0.03	0.03	0.03	0.09

DATE	TIME	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC DIS- SOLVED (UG/L AS AS)	CADMIUM DIS- SOLVED (UG/L AS CD)	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)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	NICKEL, DIS- SOLVED (UG/L AS NI)	ZINC, DIS- SOLVED (UG/L AS ZN)
DEC 16...	1330	50	<1	<1	1	100	29	<1	<1	1	10
MAR 24...	1420	160	<1	<1	<1	100	74	1	<1	1	<3
MAY 27...	1000	490	<1	<1	3	460	200	<1	2	1	6
AUG 20...	1200	50	<1	<1	3	70	31	<5	2	2	4

SUSPENDED AND BEDLOAD SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	SEDI- MENT DIS- CHARGE, BEDLOAD (TONS/ DAY)	SED. BEDLOAD SIEVE DIAM. % FINER THAN .125 MM	SED. BEDLOAD SIEVE DIAM. % FINER THAN .250 MM
APR 29...	1130	4.2	8	0.09	57	0.04	3	8
MAY 02...	1100	6.3	28	0.47	55	0.04	14	28
07...	1230	8.0	8	0.17	--	0.37	0.3	0.6
13...	1305	3.6	8	0.08	--	0.08	0.8	3
21...	1400	6.9	17	0.32	65	0.06	0.6	1
27...	1000	6.4	10	0.17	70	0.00	40	77
JUN 04...	1445	4.2	8	0.09	66	0.02	3	7
13...	1210	2.7	8	0.06	62	0.06	3	6
SEP 12...	1040	0.11	4	0.00	--	--	--	--

DATE	SED. BEDLOAD SIEVE DIAM. % FINER THAN .500 MM	SED. BEDLOAD SIEVE DIAM. % FINER THAN 1.00 MM	SED. BEDLOAD SIEVE DIAM. % FINER THAN 2.00 MM	SED. BEDLOAD SIEVE DIAM. % FINER THAN 4.00 MM	SED. BEDLOAD SIEVE DIAM. % FINER THAN 8.00 MM	SED. BEDLOAD SIEVE DIAM. % FINER THAN 16.0 MM	SED. BEDLOAD SIEVE DIAM. % FINER THAN 32.0 MM	SED. BEDLOAD SIEVE DIAM. % FINER THAN 64.0 MM
APR 29...	20	37	66	97	100	100	100	100
MAY 02...	41	54	61	66	80	100	100	100
07...	1	3	10	24	46	86	100	100
13...	4	6	9	12	35	62	100	100
21...	4	10	27	50	74	100	100	100
27...	95	98	100	100	100	100	100	100
JUN 04...	13	25	42	52	56	100	100	100
13...	16	34	56	76	95	100	100	100
SEP 12...	--	--	--	--	--	--	--	--

* The minimum reporting level for Lead was changed from <1 to <5 during June, 1986.

SAN JUAN RIVER BASIN

09341350 WINDY PASS CREEK NEAR PAGOSA SPRINGS, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
APRIL			MAY			JUNE			
1	3.0	---	---	5.2	23	.32	4.2	---	.12
2	2.6	---	---	6.6	34	.64	4.1	---	.11
3	2.0	---	---	8.1	53	1.2	4.3	---	.12
4	1.8	---	---	10	42	1.1	4.4	8	.10
5	1.6	---	---	10	49	1.3	4.9	---	.14
6	1.8	---	---	8.8	62	1.5	5.5	---	.16
7	2.2	---	---	7.8	15	.31	5.5	---	.16
8	2.0	---	---	6.1	---	---	4.9	---	.14
9	2.2	21	.12	5.2	---	---	4.4	---	.12
10	2.5	24	.16	4.1	---	---	3.5	---	.09
11	2.7	17	.12	3.7	---	---	3.0	---	.08
12	2.6	8	.06	3.7	---	---	2.7	---	.07
13	2.7	9	.07	3.8	7	.07	2.8	---	.07
14	2.6	9	.06	4.3	2	.02	2.7	---	.07
15	2.6	13	.09	4.4	1	.01	2.6	---	.06
16	3.3	19	.17	4.7	1	.01	2.3	---	.05
17	3.6	14	.14	4.6	---	---	2.2	---	.05
18	2.8	9	.07	4.6	---	---	1.9	---	.04
19	2.4	8	.05	5.3	---	---	1.7	---	.04
20	2.6	7	.05	6.1	---	---	1.2	---	.02
21	3.8	8	.08	7.5	25	.51	.81	---	.01
22	5.6	13	.20	8.7	25	.59	.58	6	.01
23	5.8	12	.19	7.8	16	.34	.52	3	.00
24	5.9	11	.18	6.8	8	.15	.41	3	.00
25	5.4	8	.12	6.4	---	.20	.41	2	.00
26	4.9	10	.13	6.5	---	.20	.25	2	.00
27	4.2	10	.11	6.6	8	.14	.23	2	.00
28	4.1	12	.13	6.2	---	.19	.20	1	.00
29	4.2	7	.08	6.0	---	.18	.18	1	.00
30	3.8	12	.12	5.4	---	.16	.16	1	.00
31	---	---	---	4.7	---	.13	---	---	---
TOTAL	97.3	---	2.50	189.7	---	9.27	72.55	---	1.83
JULY			AUGUST			SEPTEMBER			
1	.11	1	.00	.25	---	.00	.04	15	.00
2	.09	1	.00	.23	---	.00	.07	1	.00
3	.07	1	.00	.20	---	.00	.04	0	.00
4	.09	3	.00	.18	---	.00	.04	1	.00
5	.11	3	.00	.20	---	.00	.04	0	.00
6	.13	2	.00	.18	---	.00	.04	1	.00
7	.07	5	.00	.16	---	.00	.02	0	.00
8	.07	3	.00	.14	---	.00	.07	1	.00
9	.23	15	.01	.14	---	.00	.09	8	.00
10	.23	8	.00	.11	---	.00	.25	10	.01
11	.20	5	.00	.14	---	.00	.16	6	.00
12	.18	2	.00	.14	---	.00	.09	4	.00
13	.16	1	.00	.14	---	.00	.09	1	.00
14	.13	2	.00	.14	---	.00	.11	1	.00
15	.13	2	.00	.11	---	.00	.11	2	.00
16	.16	---	.00	.14	---	.00	.14	1	.00
17	.11	---	.00	.11	---	.00	.11	1	.00
18	.11	1	.00	.09	---	.00	.11	1	.00
19	.43	6	.01	.09	---	.00	.09	1	.00
20	.80	9	.02	.04	6	.00	.07	3	.00
21	.80	1	.00	.04	0	.00	.04	2	.00
22	.89	1	.00	.04	0	.00	.04	1	.00
23	.98	1	.00	.04	0	.00	.04	1	.00
24	.89	1	.00	.07	0	.00	.11	1	.00
25	.74	1	.00	.07	0	.00	.12	1	.00
26	.69	---	.01	.07	0	.00	.20	1	.00
27	.58	---	.01	.06	0	.00	.18	1	.00
28	.47	---	.01	.04	0	.00	.20	1	.00
29	.41	---	.01	.04	0	.00	.23	1	.00
30	.30	---	.00	.04	3	.00	.25	1	.00
31	.25	---	.00	.04	2	.00	---	---	---
TOTAL	10.61	---	0.08	3.48	---	0.00	3.19	---	0.01

09341500 WEST FORK SAN JUAN RIVER NEAR PAGOSA SPRINGS, CO

LOCATION.--Lat 37°23'31", long 106°54'24" T.36 N., R.1 W., Archuleta County, Hydrologic Unit 14080101, on right bank 1.9 mi upstream from mouth, 400 ft. downstream from Archuleta-Mineral County line and 11 mi northeast of Pagosa Springs, CO.

DRAINAGE AREA.--85.4 mi².

PERIOD OF RECORD.--October 1984 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 7,645 ft above National Geodetic Vertical Datum of 1929, from topographic map. See WSP 1733 for history of changes prior to Sept. 28, 1984.

REMARKS.--Estimated daily discharges: Nov. 16-23, Nov. 29 to Dec. 2, Dec. 5-7, Dec. 9 to Feb. 17, Feb. 21-24, Feb. 28 to Mar. 2, Mar. 11, and Mar. 18-21. Records good except for estimated daily discharges, which are poor. Diversions upstream from station for irrigation of about 550 acres upstream from and 220 acres downstream from station. Treasure Pass ditch upstream from station exports water to Rio Grande basin.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,040 ft³/s, June 8, 1985, gage height, 4.85 ft; minimum daily, 20 ft³/s, Feb. 1, 1985.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,600 ft³/s at 2300 June 6, gage height, 4.61 ft; minimum daily, 26 ft³/s, Feb. 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	144	102	55	40	48	65	260	509	592	706	150	64
2	132	95	60	40	46	70	280	619	631	657	144	66
3	123	90	64	38	46	80	205	761	718	601	132	62
4	115	88	62	34	40	90	163	802	791	604	135	56
5	107	88	55	32	38	105	153	754	1030	655	135	54
6	100	80	60	32	36	110	165	658	1250	586	126	50
7	164	73	60	32	34	115	184	531	1370	470	117	46
8	159	76	60	32	32	110	180	428	1260	471	107	99
9	156	75	55	34	34	110	188	373	1100	936	110	107
10	156	73	42	36	32	97	192	341	875	701	97	214
11	250	85	32	36	30	85	204	330	860	539	95	160
12	221	93	30	38	26	80	200	345	1010	469	93	133
13	208	83	28	38	32	75	196	383	1130	436	85	112
14	188	75	30	40	32	66	169	419	1180	385	80	100
15	165	73	32	40	34	62	168	414	1180	346	73	90
16	159	70	34	40	34	62	203	408	1190	366	73	92
17	150	70	36	38	34	60	196	390	1180	306	70	85
18	144	70	38	36	33	55	163	378	1190	339	66	77
19	135	65	36	36	39	50	153	466	1120	371	66	75
20	126	55	38	38	54	50	175	636	1010	454	64	68
21	123	60	40	40	44	55	239	734	1010	409	68	64
22	123	55	42	36	38	70	338	799	973	385	68	62
23	115	60	42	38	38	83	377	868	902	366	64	72
24	112	60	44	38	38	93	355	821	798	355	83	111
25	115	72	44	34	44	100	321	785	829	306	83	117
26	117	70	42	34	56	120	271	921	934	266	75	141
27	117	66	44	38	66	149	229	948	948	229	66	129
28	117	70	42	38	65	183	228	891	995	208	64	138
29	115	65	42	40	---	208	279	880	973	185	64	150
30	112	60	46	42	---	228	400	715	804	168	68	135
31	110	---	44	46	---	255	---	602	---	156	60	---
TOTAL	4378	2217	1379	1154	1123	3141	6834	18909	29833	13431	2781	2929
MEAN	141	73.9	44.5	37.2	40.1	101	228	610	994	433	89.7	97.6
MAX	250	102	64	46	66	255	400	948	1370	936	150	214
MIN	100	55	28	32	26	50	153	330	592	156	60	46
AC-FT	8680	4400	2740	2290	2230	6230	13560	37510	59170	26640	5520	5810
CAL YR 1985	TOTAL	96049		MEAN	263	MAX	1640	MIN	20	AC-FT	190500	
WTR YR 1986	TOTAL	88109		MEAN	241	MAX	1370	MIN	26	AC-FT	174800	

SAN JUAN RIVER BASIN

09341500 WEST FORK SAN JUAN RIVER NEAR PAGOSA SPRINGS, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--December 1984 to current year.

PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT DISCHARGE: April 19, 1985 to September 30, 1986.

INSTRUMENTATION.--Pumping sediment sampler since April 1985.

REMARKS.--Daily-sediment discharge based on once daily samples collected April 9 through September 30, except from May 2 to June 26, when samples were collected twice daily.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SEDIMENT CONCENTRATION: Maximum daily mean, 2,630 mg/L May 16, 1985; minimum daily mean, 1 mg/L several days during 1985 and 1986.

SEDIMENT LOADS: Maximum daily, 3,550 tons May 16, 1985; minimum daily, .12 tons Sept. 1, 1985.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATION: Maximum daily mean, 678 mg/L May 22; minimum daily mean, 1 mg/L July 17, Aug. 13-15.

SEDIMENT LOADS: Maximum daily, 1,450 tons May 22; minimum daily, .20 tons Aug. 15.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	ODOR, ATMOS- PHERIC (SEVER- ITY)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	OXYGEN DEMAND, BIO- CHEM- ICAL, 5 DAY (MG/L)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	
OCT 31...	1130	107	54	6.3	6.0	--	--	4.0	9.6	100	--	--	
DEC 03...	1040	61	62	6.5	2.0	--	--	2.7	10.8	101	--	--	
17...	0815	31	66	6.6	0.0	--	--	1.4	--	--	0.3	K2	
JAN 22...	1000	36	73	6.7	1.0	--	--	1.4	11.0	98	--	--	
FEB 21...	1040	53	89	6.5	1.0	--	--	2.5	11.1	99	--	--	
MAR 25...	0810	96	68	7.4	2.0	--	--	4.5	10.8	103	0.4	K1	
APR 09...	1000	168	73	7.5	4.5	--	--	5.1	10.4	102	--	--	
MAY 20...	0930	584	45	7.5	6.0	15	0	6.0	11.3	115	1.5	K1	
JUN 26...	1030	860	27	7.0	8.0	--	--	3.0	9.7	104	--	--	
JUL 17...	1030	305	34	7.4	10.0	--	--	15	10.9	122	--	--	
AUG 20...	1400	65	80	7.8	20.0	--	--	1.0	6.4	89	1.1	K8	
SEP 12...	1130	129	53	7.3	10.0	--	--	5.7	8.6	96	--	--	
DATE		STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD- NESS (MG/L AS CACO3)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3	ACIDITY (MG/L AS H)	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 WH WAT TOTAL FIELD MG/L AS CACO3	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS- SOLVED (MG/L AS SO4)
OCT 31...	--		23	2	<0.1	7.3	1.2	4.0	0.4	1.2	21	--	6.4
DEC 03...	--		24	--	<0.1	7.8	1.2	4.3	0.4	1.1	29	--	5.8
17...	K22		31	--	<0.1	9.9	1.6	5.4	0.4	1.3	37	--	8.2
JAN 22...	--		29	--	<0.1	9.0	1.5	4.9	0.4	1.0	31	--	9.0
FEB 21...	--		29	--	<0.1	9.2	1.5	5.3	0.4	1.1	35	--	7.1
MAR 25...	--		28	--	<0.1	8.9	1.5	5.1	0.4	1.1	34	--	7.4
APR 09...	--		31	--	<0.1	9.4	1.8	5.4	0.4	1.0	38	--	7.3
MAY 20...	K70		19	--	<0.1	5.9	1.0	3.0	0.3	1.1	20	<0.5	5.5
JUN 26...	--		12	--	<0.1	3.8	0.64	1.8	0.2	1.1	16	--	3.9
JUL 17...	--		16	3	<0.1	5.0	0.78	2.6	0.3	1.1	13	--	4.0
AUG 20...	K17		22	--	<0.1	6.9	1.1	4.0	0.4	1.2	27	--	4.8
SEP 12...	--		19	--	<0.1	6.0	0.92	3.3	0.3	1.0	36	--	5.1

K BASED ON NON-IDEAL COLONY COUNT

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

NITRO- GEN, AMMONIA	NITRO- GEN, AMMONIA DIS-	NITRO- GEN, ORGANIC	NITRO- GEN, ORGANIC DIS-	NITRO- GEN,AM- MONIA + ORGANIC	NITRO- GEN,AM- MONIA + ORGANIC DIS.	PHOS- PHORUS, PHORUS, DIS- TOTAL	PHOS- PHORUS, PHORUS, ORTHO, DIS- TOTAL	PHOS- PHORUS, ORTHO, DIS- TOTAL	PHOS- PHATE, ORTHO, DIS- TOTAL
(MG/L AS N)	(MG/L AS N)	(MG/L AS N)	(MG/L AS N)	(MG/L AS N)	(MG/L AS N)	(MG/L AS P)	(MG/L AS P)	(MG/L AS P)	(MG/L AS P ₀₄)

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SAN JUAN RIVER BASIN

09341500 WEST FORK SAN JUAN RIVER NEAR PAGOSA SPRINGS, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC DIS- SOLVED (UG/L AS AS)	BORON, TOTAL RECOV- ERABLE (UG/L AS B)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, HEXA- VALENT, DIS- SOLVED (UG/L AS CR)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)
DEC 17...	0815	20	1	--	<1	--	--	<1	110
MAR 25...	0810	70	<1	--	<1	--	--	<1	420
MAY 20...	0930	70	<1	<10	<1	<10	<1	3	650
AUG 20...	1400	<10	1	--	<1	--	--	2	50

DATE	IRON, DIS- SOLVED (UG/L AS FE)	*LEAD, DIS- SOLVED (UG/L AS PB)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, TOTAL (UG/L AS SE)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG)	ZINC, DIS- SOLVED (UG/L AS ZN)
DEC 17...	31	<1	19	--	2	--	--	5
MAR 25...	63	<1	12	--	1	--	--	5
MAY 20...	89	1	4	<0.1	2	<1	<1	12
AUG 20...	35	<5	6	--	1	--	--	11

PESTICIDE ANALYSES, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	CYANIDE TOTAL (MG/L AS CN)	METHY- LENE BLUE ACTIVE SUB- STANCE (MG/L)	PCB, TOTAL (UG/L)	NAPH- THA- LENES, POLY- CHLOR. TOTAL (UG/L)	ALDRIN, TOTAL (UG/L)	CHLOR- DANE, TOTAL (UG/L)	DDD, TOTAL (UG/L)	DDE, TOTAL (UG/L)	DDT, TOTAL (UG/L)	DI- AZINON, TOTAL (UG/L)	DI- ELDRIN TOTAL (UG/L)
MAY 20...	0930	<0.01	0.04	<0.1	<0.1	<0.01	<0.1	<0.01	<0.01	<0.01	<0.01	<0.01

DATE	ENDO- SULFAN, TOTAL (UG/L)	ENDRIN, TOTAL (UG/L)	ETHION, TOTAL (UG/L)	HEPTA- CHLOR, TOTAL (UG/L)	HEPTA- CHLOR EPOXIDE TOTAL (UG/L)	LINDANE TOTAL (UG/L)	MALA- THION, TOTAL (UG/L)	METH- OXY- CHLOR, TOTAL (UG/L)	METHYL PARA- THION, TOTAL (UG/L)	METHYL TRI- THION, TOTAL (UG/L)	MIREX, TOTAL (UG/L)	PARA- THION, TOTAL (UG/L)
MAY 20...	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01

DATE	PER- THANE TOTAL (UG/L)	TOX- APHENE, TOTAL (UG/L)	TOTAL TRI- THION (UG/L)	2,4-D, TOTAL (UG/L)	2,4,5-T TOTAL (UG/L)	SILVEX, TOTAL (UG/L)	BENZENE TOTAL (UG/L)	BROM- OFORM TOTAL (UG/L)	CARBON- TETRA- CHLO- RIDE TOTAL (UG/L)	CHLORO- BENZENE TOTAL (UG/L)	CHLORO- DI- BROMO- METHANE TOTAL (UG/L)
MAY 20...	<0.1	<1	<0.01	<0.01	<0.01	<0.01	<3.0	<3.0	<3.0	<3.0	<3.0

DATE	CHLORO- ETHANE TOTAL (UG/L)	CHLORO- FORM TOTAL (UG/L)	DI- CHLORO- BROMO- METHANE TOTAL (UG/L)	DI- CHLORO- DI- FLUORO- METHANE TOTAL (UG/L)	ETHYL- BENZENE TOTAL (UG/L)	METHYL- BROMIDE TOTAL (UG/L)	METHYL- CHLO- RIDE TOTAL (UG/L)	TETRA- CHLORO- ETHYL- ENE TOTAL (UG/L)	TOLUENE TOTAL (UG/L)	TRI- CHLORO- ETHYL- ENE TOTAL (UG/L)	TRI- CHLORO- FLOURO- METHANE TOTAL (UG/L)
MAY 20...	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0

DATE	VINYL CHLO- RIDE TOTAL (UG/L)	1,1-DI- CHLORO- ETHYL- ENE TOTAL (UG/L)	1,1-DI- CHLORO- ETHANE TOTAL (UG/L)	1,1,1- TRI- CHLORO- ETHANE TOTAL (UG/L)	1,1,2- TRI- CHLORO- ETHANE TOTAL (UG/L)	1,1,2,2 TETRA- CHLORO- ETHANE TOTAL (UG/L)	1,2-DI- CHLORO- ETHANE TOTAL (UG/L)	1,2-DI- CHLORO- PROPANE TOTAL (UG/L)	1,3-DI- CHLORO- PROPANE TOTAL (UG/L)	CHLORO- ETHYL- ENE TOTAL (UG/L)	2- CHLORO- ETHYL- VINYL- ETHER TOTAL (UG/L)
MAY 20...	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0

* The minimum reporting level for Lead was changed from <1 to <5 during June, 1986.

SUSPENDED AND BEDLOAD SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

	SED. BEDLOAD SIEVE DIAM.	SED. BEDLOAD SIEVE DIAM.	SED. BEDLOAD SIEVE DIAM.	SED. BEDLOAD SIEVE DIAM.	SED. BEDLOAD SIEVE DIAM.	SED. BEDLOAD SIEVE DIAM.	SED. BEDLOAD SIEVE DIAM.
DATE	% FINER THAN .500 MM	% FINER THAN 1.00 MM	% FINER THAN 2.00 MM	% FINER THAN 4.00 MM	% FINER THAN 8.00 MM	% FINER THAN 16.0 MM	% FINER THAN 32.0 MM

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SAN JUAN RIVER BASIN

09341500 WEST FORK SAN JUAN RIVER NEAR PAGOSA SPRINGS, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
APRIL			MAY			JUNE			
1	260	---	---	509	70	96	592	12	19
2	280	---	---	619	202	338	631	16	27
3	205	---	---	761	186	382	718	20	39
4	163	---	---	802	155	336	791	28	60
5	153	---	---	754	67	136	1030	53	147
6	165	---	---	658	36	64	1250	100	337
7	184	---	---	531	27	39	1370	113	418
8	180	---	---	428	24	28	1260	91	310
9	188	3	1.5	373	29	29	1100	61	181
10	192	10	5.2	341	29	27	875	35	83
11	204	18	9.9	330	22	20	860	25	58
12	200	16	8.6	345	20	19	1010	30	82
13	196	5	2.6	383	16	17	1130	38	116
14	169	4	1.8	419	11	12	1180	42	134
15	168	5	2.3	414	6	6.7	1180	39	124
16	203	9	4.9	408	2	2.2	1190	29	93
17	196	10	5.3	390	3	3.2	1180	26	83
18	163	8	3.5	378	4	4.1	1190	46	148
19	153	6	2.5	466	23	35	1120	31	94
20	175	8	3.8	636	37	64	1010	19	52
21	239	9	5.8	734	550	1120	1010	19	52
22	338	12	11	799	678	1450	973	17	45
23	377	20	20	868	116	272	902	19	46
24	355	18	17	821	83	184	798	19	41
25	321	15	13	785	39	83	829	19	43
26	271	14	10	921	49	122	934	22	55
27	229	12	7.4	948	62	159	948	25	64
28	228	12	7.4	891	50	120	995	28	75
29	279	13	9.8	880	42	100	973	27	71
30	400	33	36	715	28	54	804	21	46
31	---	---	---	602	20	33	---	---	---
TOTAL	6834	---	189.3	18909	---	5355.2	29833	---	3143
JULY			AUGUST			SEPTEMBER			
1	706	15	29	150	3	1.2	64	10	1.7
2	657	10	18	144	3	1.2	66	8	1.4
3	601	12	19	132	3	1.1	62	4	.67
4	604	22	36	135	3	1.1	56	3	.45
5	655	81	143	135	5	1.8	54	5	.73
6	586	49	78	126	3	1.0	50	5	.68
7	470	17	22	117	5	1.6	46	5	.62
8	471	35	45	107	4	1.2	99	77	27
9	936	203	513	110	5	1.5	107	77	27
10	701	83	157	97	3	.79	214	212	122
11	539	29	42	95	3	.77	160	94	41
12	469	20	25	93	2	.50	133	15	5.4
13	436	19	22	85	1	.23	112	6	1.8
14	385	21	22	80	1	.22	100	3	.81
15	346	15	14	73	1	.20	90	2	.49
16	366	13	13	73	2	.39	92	5	1.2
17	306	1	.83	70	3	.57	85	4	.92
18	339	4	3.7	66	3	.53	77	5	1.0
19	371	69	102	66	3	.53	75	5	1.0
20	454	177	219	64	3	.52	68	5	.92
21	409	58	64	68	8	1.5	64	4	.69
22	385	27	28	68	4	.73	62	3	.50
23	366	27	27	64	3	.52	72	4	.78
24	355	32	31	83	8	1.8	111	32	13
25	306	14	12	83	11	2.5	117	23	8.3
26	266	10	7.2	75	11	2.2	141	43	16
27	229	8	4.9	66	6	1.1	129	40	14
28	208	4	2.2	64	5	.86	138	59	22
29	185	4	2.0	64	10	1.7	150	47	19
30	168	5	2.3	68	9	1.7	135	31	11
31	156	4	1.7	60	8	1.3	---	---	---
TOTAL	13431	---	1705.83	2781	---	32.86	2929	---	342.06

09342500 SAN JUAN RIVER AT PAGOSA SPRINGS, CO

LOCATION.--Lat 37°15'58", long 107°00'37", in NE1SW1/4 sec.13, T.35 N., R.2 W., Archuleta County, Hydrologic Unit 14080101, on right bank at former bridge site in Pagosa Springs, 0.2 mi upstream from McCabe Creek, 0.6 mi downstream from bridge on U.S. Highway 160, and 2.0 mi upstream from Mill Creek.

DRAINAGE AREA.--298 mi².

PERIOD OF RECORD.--October 1910 to December 1914, May 1935 to current year. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 1313: 1914(M).

GAGE.--Water-stage recorder. Datum of gage is 7,052.04 ft above National Geodetic Vertical Datum of 1929. Jan 29 to Mar. 6, 1911, nonrecording gage at site 0.5 mi upstream, at different datum. Mar. 7 to Oct. 4, 1911, nonrecording gage at present site, at different datum. Nov. 23, 1911, to Nov. 14, 1914, nonrecording gage at site 300 ft downstream, at different datum.

REMARKS.--Estimated daily discharges: Dec. 13, Jan. 7. Records good. Diversions for irrigation of large areas upstream from station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--55 years, 381 ft³/s; 276,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 25,000 ft³/s, Oct. 5, 1911, gage height, 17.8 ft, from floodmarks, from velocity-area study; minimum daily, 9.7 ft³/s, Oct. 5, 6, 1956.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known since at least 1885, that of Oct. 5, 1911. Flood of June 29, 1927, reached a stage of 13.5 ft, discharge about 16,000 ft³/s, from information by local residents.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,500 ft³/s, and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Apr. 2	1300	1,900	4.44	June 6	2400	*3,830	*6.23
Apr. 22	2200	1,690	4.21	July 9	1500	2,490	5.11
May 3	2400	2,970	5.51	July 20	0100	1,560	4.23
May 26	2400	2,640	5.31				

Minimum daily discharge, 73 ft³/s, Feb. 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	308	230	143	116	132	296	1230	1810	1450	1490	309	138
2	283	208	156	118	132	320	1630	2080	1480	1370	295	145
3	262	200	147	110	128	359	1120	2480	1740	1270	275	136
4	247	193	136	97	112	423	846	2680	1950	1280	255	122
5	224	190	124	90	112	494	746	2450	2430	1480	272	114
6	196	177	135	90	108	495	815	2050	3030	1320	256	110
7	341	158	134	90	99	519	911	1610	3260	1090	233	103
8	383	163	134	90	95	496	903	1300	2960	927	213	164
9	372	158	136	95	101	495	882	1060	2530	2070	224	204
10	364	154	116	101	90	410	882	913	1980	1700	196	613
11	634	165	94	103	87	388	903	911	1900	1280	187	456
12	591	199	83	105	73	353	855	937	2140	1070	190	374
13	546	159	80	110	97	313	881	1050	2470	985	177	309
14	486	154	82	112	95	295	747	1180	2550	850	170	273
15	421	149	90	114	103	273	726	1190	2470	755	151	242
16	400	143	97	116	99	259	844	1160	2420	815	140	230
17	365	156	101	105	101	256	902	1160	2440	725	138	232
18	360	145	105	103	103	240	759	1070	2520	773	132	201
19	337	134	101	103	108	221	668	1230	2420	784	126	187
20	313	116	107	112	180	221	695	1670	2190	1080	114	175
21	290	136	114	118	160	232	919	2040	2120	909	122	160
22	283	116	118	108	135	280	1330	2180	2040	830	122	156
23	269	140	118	110	132	351	1590	2310	1890	778	124	175
24	256	147	120	110	145	419	1490	2240	1660	756	200	298
25	253	158	124	97	176	440	1320	2040	1810	645	170	312
26	253	186	120	97	237	521	1190	2330	2090	576	172	430
27	253	182	122	108	307	623	957	2380	2040	509	151	362
28	250	159	120	108	300	777	911	2180	2060	453	147	376
29	253	156	118	116	---	894	1100	2190	2020	411	138	427
30	253	136	132	124	---	982	1460	1830	1730	373	164	401
31	244	---	128	132	---	1070	---	1500	---	338	149	---
TOTAL	10290	4867	3635	3308	3747	13715	30212	53211	65790	29692	5712	7625
MEAN	332	162	117	107	134	442	1007	1716	2193	958	184	254
MAX	634	230	156	132	307	1070	1630	2680	3260	2070	309	613
MIN	196	116	80	90	73	221	668	911	1450	338	114	103
AC-FT	20410	9650	7210	6560	7430	27200	59930	105500	130500	58890	11330	15120
CAL YR 1985	TOTAL	236826		MEAN	649	MAX	3650	MIN	57	AC-FT	469700	
WTR YR 1986	TOTAL	231804		MEAN	635	MAX	3260	MIN	73	AC-FT	459800	

09343300 RIO BLANCO BELOW BLANCO DIVERSION DAM, NEAR PAGOSA SPRINGS, CO

LOCATION.--Lat 37°12'11", long 106°48'45", in NW¼ sec.11, T.34 N., R.1 E., Archuleta County, Hydrologic Unit 14080101, on left bank 250 ft downstream from Blanco Diversion Dam, 1.1 mi downstream from Leche Creek, and 12 mi southeast of Pagosa Springs.

DRAINAGE AREA.--69.1 mi².

PERIOD OF RECORD.--March 1971 to current year.

GAGE.--Water-stage recorder. Datum of gage is 7,848.81 ft above National Geodetic Vertical Datum of 1929 (levels by U. S. Bureau of Reclamation).

REMARKS.--Estimated daily discharges: Oct. 1 to Dec. 5, Dec. 12 to Jan. 30, Feb. 4-14, and Sept. 24-30. Records good except for estimated daily discharges, which are fair. Flows controlled by diversion dam upstream.

AVERAGE DISCHARGE.--14 years, 46.4 ft³/s; 33,620 acre-ft/yr; 15 years, 49.7 ft³/s; 36,010 acre-ft/yr.

COOPERATION.--Records collected by U.S. Bureau of Reclamation, computed by Colorado Division of Water Resources, and reviewed by Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,810 ft³/s June 8, 1985, gage height, 4.75 ft; minimum daily, 6.9 ft³/s, Dec. 29, 1976.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,120 ft³/s at 2200 June 25, gage height, 4.41 ft; minimum daily, 13 ft³/s, Feb. 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	105	56	36	28	31	56	342	298	59	280	40	74
2	100	50	34	28	30	61	310	494	66	263	40	63
3	95	44	34	28	28	60	200	624	88	270	41	54
4	90	46	34	29	22	77	121	575	123	321	34	49
5	85	46	30	28	21	101	140	477	151	320	25	45
6	85	44	28	27	20	111	197	330	274	258	25	41
7	140	40	37	25	20	119	237	233	222	215	24	39
8	120	40	38	26	18	103	237	165	120	187	24	53
9	110	38	37	26	18	95	254	102	69	331	24	97
10	115	38	34	26	18	68	258	86	60	289	24	294
11	200	38	30	26	16	60	140	101	63	211	24	205
12	160	38	24	27	13	53	36	149	80	190	24	142
13	140	34	22	28	15	47	36	117	94	171	25	117
14	120	38	21	27	15	44	37	71	71	168	25	107
15	110	34	22	26	17	42	39	70	82	152	22	87
16	105	36	23	22	16	40	39	64	113	187	20	86
17	100	38	25	22	14	39	39	73	104	195	20	70
18	110	36	26	22	19	37	38	70	86	314	21	60
19	105	34	27	24	21	29	39	72	250	178	22	54
20	100	32	28	27	24	32	39	97	425	248	22	49
21	95	34	30	27	18	38	91	96	397	200	22	47
22	90	30	31	25	14	50	143	112	384	190	22	45
23	85	32	32	25	14	70	102	108	342	207	23	51
24	85	34	32	26	21	84	52	84	280	178	56	80
25	85	36	32	24	29	87	45	88	431	150	60	90
26	85	38	32	24	46	129	43	104	460	134	53	140
27	85	36	32	24	55	200	43	86	439	117	67	120
28	80	35	34	27	52	280	43	110	390	102	97	135
29	74	36	34	28	---	315	45	117	360	91	89	145
30	70	34	34	32	---	330	47	73	310	86	141	130
31	64	---	28	35	---	330	---	55	---	67	103	---
TOTAL	3193	1145	941	819	645	3187	3432	5301	6393	6270	1259	2769
MEAN	103	38.2	30.4	26.4	23.0	103	114	171	213	202	40.6	92.3
MAX	200	56	38	35	55	330	342	624	460	331	141	294
MIN	64	30	21	22	13	29	36	55	59	67	20	39
AC-FT	6330	2270	1870	1620	1280	6320	6810	10510	12680	12440	2500	5490
CAL YR 1985 TOTAL		49548		MEAN	136	MAX	1330	MIN	14	AC-FT	98280	
WTR YR 1986 TOTAL		35354		MEAN	96.9	MAX	624	MIN	13	AC-FT	70120	

09344000 NAVAJO RIVER AT BANDED PEAK RANCH, NEAR CHROMO, CO

LOCATION.--Lat 37°05'07", long 106°41'20", in NW¼ sec.24, T.33 N., R.2 E., Archuleta County, Hydrologic Unit 14080101, on left bank at downstream side of private bridge on Banded Peak Ranch, 0.5 mi downstream from Aspen Creek, 4.0 mi downstream from East Fork, and 9 mi northeast of Chromo.

DRAINAGE AREA.--69.8 mi².

PERIOD OF RECORD.--October 1936 to September 1986 (discontinued). Monthly discharge only for some periods, published in WSP 1313.

GAGE.--Water-stage recorder. Datum of gage is 7,940.6 ft above National Geodetic Vertical Datum of 1929 (river-profile survey). Prior to Oct. 1, 1949, at datum 3.00 ft, higher.

REMARKS.--Estimated daily discharges: Nov. 16, 20-22, Dec. 2, 3, 11-29, Jan. 2-6, 8-14, 17-24, 26, 27, and Feb. 10-12. Records good except for estimated daily discharges, which are fair. Diversions for irrigation of about 430 acres upstream from station.

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

AVERAGE DISCHARGE.--50 years, 110 ft³/s; 79,700 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,480 ft³/s, June 9, 1980, gage height, 4.55 ft, from rating curve extended above 840 ft³/s, on basis of float-area measurement at gage height 4.44 ft; maximum gage height, 7.02 ft, May 13, 1941, present datum; minimum daily discharge, 8.4 ft³/s, Sept. 29, 1960, result of temporary blockage by channel alteration upstream.

EXTREMES OUTSIDE PERIOD OF RECORD.--A major flood occurred Oct. 5, 1911.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 500 ft³/s, and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 3	2230	775	2.80	June 6	2230	*1,160	*3.44

Minimum daily discharge, 30 ft³/s, Dec. 12, 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	81	73	42	47	47	62	205	433	350	366	82	86
2	78	68	41	45	47	65	197	485	362	334	78	76
3	74	65	40	44	46	65	161	572	456	326	74	70
4	71	67	40	42	42	74	140	620	530	346	73	67
5	68	67	45	40	42	82	137	535	638	388	71	65
6	67	64	46	40	41	86	151	446	866	326	78	61
7	129	58	46	42	42	89	168	384	866	276	74	60
8	114	58	44	40	41	93	168	326	761	238	67	73
9	106	57	44	42	41	91	173	272	632	286	62	98
10	114	57	42	42	40	81	178	232	475	272	61	228
11	176	57	38	43	40	78	186	238	446	228	62	181
12	146	57	30	43	40	71	178	290	505	211	61	168
13	135	50	30	44	40	67	189	342	590	194	64	146
14	120	52	32	46	40	65	168	366	626	181	64	144
15	110	49	34	49	41	64	163	354	614	171	60	124
16	106	48	34	48	40	61	178	354	614	189	54	124
17	102	49	36	46	40	61	184	350	584	176	54	110
18	108	47	36	46	41	57	166	306	632	225	53	98
19	100	46	36	46	42	52	151	330	632	168	55	91
20	97	42	38	46	48	54	158	428	540	214	54	82
21	93	41	41	46	43	58	197	495	515	202	55	76
22	91	40	47	44	40	67	279	510	500	186	55	74
23	88	42	50	38	42	79	326	540	451	181	70	76
24	86	48	50	44	42	88	322	500	379	166	114	100
25	84	55	50	47	47	89	294	495	451	149	76	100
26	84	58	50	46	58	104	290	555	555	131	70	133
27	82	55	50	48	61	129	238	550	566	118	73	122
28	79	50	50	49	61	154	232	490	495	108	91	135
29	78	52	52	47	---	171	261	465	460	100	108	133
30	76	41	52	48	---	184	354	406	420	95	131	120
31	76	---	49	47	---	194	---	354	---	88	106	---
TOTAL	3019	1613	1315	1385	1235	2735	6192	13023	16511	6639	2250	3221
MEAN	97.4	53.8	42.4	44.7	44.1	88.2	206	420	550	214	72.6	107
MAX	176	73	52	49	61	194	354	620	866	388	131	228
MIN	67	40	30	38	40	52	137	232	350	88	53	60
AC-FT	5990	3200	2610	2750	2450	5420	12280	25830	32750	13170	4460	6390

CAL YR 1985	TOTAL	68807	MEAN	189	MAX	1080	MIN	26	AC-FT	136500
WTR YR 1986	TOTAL	59138	MEAN	162	MAX	866	MIN	30	AC-FT	117300

SAN JUAN RIVER BASIN

09344400 NAVAJO RIVER BELOW OSO DIVERSION DAM, NEAR CHROMO, CO

LOCATION.--Lat 37°01'48", long 106°44'16", in NE¼ sec.9, T.32 N., R.2 E., Archuleta County, Hydrologic Unit 14080101, on left bank 600 ft downstream from Oso Diversion Dam, 5.5 mi east of Chromo, and 6 mi upstream from Little Navajo River.

DRAINAGE AREA.--100.5 mi².

PERIOD OF RECORD.--March 1971 to current year.

GAGE.--Water-stage recorder. Datum of gage is 7,647.71 ft above National Geodetic Vertical Datum of 1929 (levels by U. S. Bureau of Reclamation).

REMARKS.--Estimated daily discharges: Oct. 1 to Jan. 16, and Feb. 10-13. Flows controlled by diversion dam upstream.

AVERAGE DISCHARGE.--15 years, 68.7 ft³/s; 49,770 acre-ft/yr.

COOPERATION.--Records collected by U.S. Bureau of Reclamation, computed by Colorado Division of Water Resources, and reviewed by Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,330 ft³/s, May 24, 1984, gage height, 4.92 ft; minimum daily, 10 ft³/s, Oct. 10, 11, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 741 ft³/s at 2300 June 26, gage height, 4.19 ft; minimum daily, 32 ft³/s, Dec. 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	88	80	50	52	54	91	118	222	140	374	70	90
2	86	76	48	50	54	94	117	374	141	307	70	80
3	82	72	50	48	53	98	116	435	141	262	71	73
4	78	72	54	46	47	113	116	520	152	261	66	69
5	72	72	52	44	46	129	117	465	220	346	62	64
6	68	68	54	44	46	133	116	350	372	314	61	59
7	150	64	54	46	46	140	117	259	315	242	61	56
8	140	66	54	44	46	145	117	202	215	193	61	73
9	120	64	54	46	45	140	117	152	154	254	61	95
10	120	62	50	48	43	115	114	143	136	253	61	278
11	220	64	42	48	43	106	111	146	139	183	60	210
12	180	66	34	48	43	97	112	147	140	157	60	170
13	170	60	32	50	43	88	114	147	146	149	60	152
14	140	60	34	50	45	84	113	153	165	113	61	151
15	130	54	36	50	49	80	112	162	144	102	59	130
16	125	54	40	49	46	76	114	148	137	180	56	129
17	120	56	44	48	46	76	115	142	137	166	55	116
18	130	54	44	48	48	72	114	142	156	226	52	103
19	120	50	44	48	49	66	115	142	151	165	51	96
20	110	46	46	48	57	66	116	142	217	205	51	88
21	100	48	50	48	49	74	116	138	307	202	55	81
22	98	46	54	46	47	89	117	138	307	183	55	77
23	96	52	54	40	49	108	116	137	342	178	61	80
24	92	56	52	48	54	124	118	136	378	165	125	105
25	90	62	52	48	63	131	120	137	460	152	84	107
26	90	66	52	48	81	158	122	137	558	138	77	154
27	86	60	52	49	93	157	122	137	576	128	74	134
28	82	56	52	51	91	125	122	137	520	118	93	150
29	82	58	52	54	---	120	120	137	475	110	109	153
30	82	52	56	55	---	119	122	136	430	105	142	138
31	86	---	56	56	---	118	---	138	---	88	118	---
TOTAL	3433	1816	1498	1498	1476	3332	3496	6101	7871	6019	2202	3461
MEAN	111	60.5	48.3	48.3	52.7	107	117	197	262	194	71.0	115
MAX	220	80	56	56	93	158	122	520	576	374	142	278
MIN	68	46	32	40	43	66	111	136	136	88	51	56
AC-FT	6810	3600	2970	2970	2930	6610	6930	12100	15610	11940	4370	6860
CAL YR 1985	TOTAL	57512	MEAN	158	MAX	1160	MIN	26	AC-FT	114100		
WTR YR 1986	TOTAL	42203	MEAN	116	MAX	576	MIN	32	AC-FT	83710		

09345200 LITTLE NAVAJO RIVER BELOW LITTLE OSO DIVERSION DAM, NEAR CHROMO, CO

LOCATION.--Lat 37°04'32", long 106°48'38", in SW¼ sec.23, T.33 N., R.1 E., Archuleta County, Hydrologic Unit 14080101, on right bank at Little Oso Diversion Dam, 3.5 mi northeast of Chromo, and 4.0 mi upstream from confluence with Navajo River.

DRAINAGE AREA.--14.2 mi².

PERIOD OF RECORD.--June 1971 to current year.

GAGE.--Water-stage recorder. Datum of gage is 7,756.10 ft above National Geodetic Vertical Datum of 1929 (levels by U.S. Bureau of Reclamation).

REMARKS.--Flows controlled by diversion dam upstream.

AVERAGE DISCHARGE.--15 years, 8.00 ft³/s; 5,800 acre-ft/yr.

COOPERATION.--Records collected and computed by U.S. Bureau of Reclamation.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 235 ft³/s, May 30, 1979; no flow Apr. 14, 1974.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 28 ft³/s, Mar. 27, gage height, 1.40 ft; minimum daily, 2.8 ft³/s, Aug. 20, 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.8	8.8	6.0	4.6	6.1	15	16	19	28	17	27	6.5
2	4.6	8.0	5.4	5.1	6.1	16	15	31	28	17	26	5.3
3	4.4	7.8	5.8	5.1	6.1	17	15	32	28	15	25	4.6
4	4.1	7.6	5.6	4.9	5.4	18	18	31	28	15	23	4.3
5	3.9	7.4	5.4	4.8	5.3	21	19	29	28	17	21	3.9
6	3.9	6.9	5.3	4.8	5.4	21	19	30	29	15	22	3.8
7	14	6.1	5.4	4.8	5.4	22	17	30	29	12	15	3.8
8	9.9	6.3	5.4	4.6	5.4	22	19	30	29	12	4.9	5.3
9	9.9	6.3	5.3	4.6	5.3	21	19	30	28	13	4.8	7.8
10	11	6.0	5.3	4.6	5.1	19	17	31	28	12	4.6	32
11	24	6.1	5.1	4.8	5.1	17	18	31	28	9.7	4.3	24
12	18	5.8	4.9	4.9	4.9	16	18	31	29	8.8	3.9	15
13	17	5.6	4.9	5.1	4.9	15	19	30	29	8.2	3.8	11
14	14	6.0	4.9	5.3	4.9	14	18	29	28	7.8	3.5	11
15	13	5.1	4.8	5.1	4.9	13	18	29	28	7.6	3.3	8.8
16	13	5.4	4.8	4.9	4.9	11	19	30	28	9.2	3.2	9.2
17	12	6.1	4.8	4.9	4.9	11	19	29	28	8.2	3.1	8.2
18	15	6.0	4.6	4.8	4.8	11	18	29	29	19	2.9	7.1
19	13	5.4	4.6	4.8	4.9	9.0	17	29	30	11	3.1	6.7
20	12	5.8	4.4	5.1	4.9	9.7	20	29	27	17	2.8	6.3
21	12	6.0	4.4	5.1	5.6	14	19	29	24	17	2.9	6.1
22	12	6.0	4.6	5.1	5.3	19	20	29	23	14	2.8	5.8
23	11	6.0	4.9	5.1	5.6	23	18	30	22	16	4.4	6.7
24	11	6.0	4.9	5.1	6.7	27	19	29	21	19	9.7	10
25	11	6.0	4.9	4.9	9.9	29	19	28	29	25	6.0	10
26	11	6.0	4.8	4.9	14	35	19	29	30	24	6.7	22
27	10	6.3	4.8	4.9	16	45	17	28	24	22	6.3	21
28	9.7	6.0	4.9	5.1	15	165	20	29	21	22	8.2	33
29	9.4	5.8	4.8	5.3	---	32	19	29	20	24	9.7	33
30	9.2	4.8	4.9	5.8	---	30	19	30	18	25	13	33
31	9.0	---	4.8	6.3	---	30	---	29	---	29	10	---
TOTAL	336.8	187.4	155.4	155.2	182.8	767.7	547	908	799	488.5	286.9	365.2
MEAN	10.9	6.25	5.01	5.01	6.53	24.8	18.2	29.3	26.6	15.8	9.25	12.2
MAX	24	8.8	6.0	6.3	16	165	20	32	30	29	27	33
MIN	3.9	4.8	4.4	4.6	4.8	9.0	15	19	18	7.6	2.8	3.8
AC-FT	668	372	308	308	363	1520	1080	1800	1580	969	569	724
CAL YR 1985	TOTAL	4944.0		MEAN	13.5	MAX	71	MIN	2.4	AC-FT	9810	
WTR YR 1986	TOTAL	5179.9		MEAN	14.2	MAX	165	MIN	2.8	AC-FT	10270	

09346000 NAVAJO RIVER AT EDITH, CO

LOCATION.--Lat 37°00'10", long 106°54'25", in NW¼NW¼ sec.24, T.32 N., R.1 W., Archuleta County, Hydrologic Unit 14080101, on right bank 290 ft downstream from highway bridge, 0.2 mi southeast of Edith, 0.5 mi upstream from Colorado-New Mexico State line, and 1.3 mi upstream from Coyote Creek.

DRAINAGE AREA.--172 mi².

PERIOD OF RECORD.--Streamflow records, September 1912 to current year. Monthly or yearly discharge only for some periods, published in WSP 1313. Water-quality data available, November 1970 to September 1974. Sediment data available April 1973 to September 1974.

REVISED RECORDS.--WSP 1243: 1943, 1945. WSP 1633: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 7,033.00 ft above National Geodetic Vertical Datum of 1929 (levels by U. S. Bureau of Reclamation). Prior to Jan. 1, 1929, nonrecording gage at site 240 ft upstream, at different datum. June 2, 1935, to June 27, 1941, water-stage recorder at sites 200 and 240 ft upstream, at datum 2.0 ft, higher. June 28, 1941, to June 20, 1961, at site 50 ft downstream at present datum.

REMARKS.--Estimated daily discharges: Dec. 12, 28-31, Jan. 1-31, Feb. 1-4, 7, 8, 11, 12. Records good except for estimated daily discharges, which are poor. Diversions for irrigation of about 1,700 acres upstream from station. Highwater diversions upstream from station into Heron Reservoir through Azotea tunnel began in March 1971. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--58 years (water years 1913-70), 155 ft³/s; 112,300 acre-ft/yr, prior to diversions through Azotea tunnel; 16 years (water years 1971-86), 83.7 ft³/s; 60,640 acre-ft/yr, subsequent to diversion through Azotea tunnel.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,840 ft³/s, Apr. 23, 1942, gage height, 6.55 ft, from rating curve extended above 1,100 ft³/s; minimum daily, 8.0 ft³/s, Sept. 25, 1953, Aug. 7, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Oct. 5, 1911, exceeded all other observed floods at this location.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 876 ft³/s at 1500 Apr. 2, gage height, 4.60 ft; maximum gage height, 4.66 ft, Jan. 11 (backwater from ice); minimum daily discharge, 33 ft³/s, Dec. 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	94	86	66	65	70	145	285	277	163	381	120	112
2	92	82	63	65	70	154	616	468	167	326	120	98
3	86	81	66	55	65	160	399	519	178	283	120	90
4	82	79	70	50	60	198	292	610	171	266	104	84
5	75	77	65	48	55	220	282	557	244	368	76	81
6	68	73	68	48	57	216	290	468	377	350	68	75
7	161	70	68	48	50	220	306	382	346	276	68	73
8	151	72	68	48	50	220	279	311	248	221	65	88
9	130	70	68	50	57	223	251	255	203	257	65	112
10	123	68	65	55	52	175	230	231	172	285	66	341
11	259	70	57	55	48	167	220	230	171	215	66	245
12	203	72	48	55	42	160	216	223	164	168	65	200
13	188	66	52	60	55	145	216	220	160	157	68	175
14	158	66	49	60	54	136	198	220	194	136	66	174
15	139	58	33	60	58	128	195	206	178	113	68	146
16	136	58	46	60	57	118	206	195	157	196	63	145
17	130	68	55	55	55	118	209	188	157	191	62	130
18	148	63	57	55	58	116	195	177	178	257	57	116
19	136	58	55	55	62	108	188	177	192	207	52	108
20	123	54	60	60	89	104	195	177	222	230	55	102
21	116	58	65	60	82	118	199	185	328	250	58	98
22	111	55	68	55	70	147	199	181	330	230	58	94
23	106	58	68	60	68	180	199	174	354	238	62	96
24	102	63	65	60	79	208	202	167	384	214	155	124
25	96	79	65	50	102	216	209	167	482	189	102	128
26	92	98	65	50	132	245	288	167	618	174	94	228
27	90	90	65	55	157	266	231	177	644	160	88	175
28	88	79	65	55	148	239	227	177	540	145	111	181
29	86	81	65	60	---	220	213	177	515	133	123	192
30	88	68	70	65	---	223	213	174	451	128	170	174
31	90	---	70	70	---	220	---	167	---	123	151	---
TOTAL	3747	2120	1910	1747	2002	5513	7448	8004	8688	6867	2666	4185
MEAN	121	70.7	61.6	56.4	71.5	178	248	258	290	222	86.0	140
MAX	259	98	70	70	157	266	616	610	644	381	170	341
MIN	68	54	33	48	42	104	188	167	157	113	52	73
AC-FT	7430	4210	3790	3470	3970	10940	14770	15880	17230	13620	5290	8300
CAL YR 1985 TOTAL		66965		MEAN	183	MAX	1250	MIN	29	AC-FT	132800	
WTR YR 1986 TOTAL		54897		MEAN	150	MAX	644	MIN	33	AC-FT	108900	

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LOCATION.--Lat 37°00'49", long 107°18'42", in SE¼SW¼ sec.17, T.32 N., R.4 W., Archuleta County, Hydrologic Unit 14080101, on right bank just upstream from flow line of Navajo Reservoir, 3 mi northwest of Carracas, 7.2 mi upstream from Piedra River, and at mile 332.8.

PERIOD OF RECORD.--Streamflow records, October 1961 to current year. Water-quality data available, July 1969 to August 1973. Sediment data available, August 1973.

REMARKS.--Estimated daily discharges: Oct. 21-30, Nov. 20-27, 30, Dec. 11 - Feb. 18, Apr. 4-10. Records good except for estimated daily discharges, which are poor. Diversions for irrigation of about 11,000 acres upstream from station. Highwater diversions upstream from station into Rio Grande basin through Azotea tunnel (station 08284160) began in March 1971. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,730 ft³/s, Sept. 6, 1970, gage height, 8.34 ft, from rating curve extended above 6,000 ft³/s, on basis of slope-area measurement of peak flow; minimum daily, about 5 ft³/s, Dec. 10, 1961, result of freezeup.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,500 ft³/s, and maximum (#):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Apr. 2	1900	*6,840	*7.02	June 7	0800	4,710	6.12
May 5	0600	4,250	5.83	June 26	0600	4,810	6.09
May 24	0700	3,240	5.31	July 5	2000	3,070	5.14

Minimum daily discharge, 210 ft³/s, Feb. 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	547	453	370	310	370	884	2050	1820	2350	2200	487	395
2	502	428	351	310	370	905	5010	2480	2310	2040	459	361
3	480	412	356	300	360	905	3550	2860	2560	1900	433	330
4	454	398	334	270	330	1070	2400	3400	2670	1870	405	305
5	428	383	301	250	320	1230	1400	3660	3130	2110	402	287
6	399	374	308	240	300	1190	1500	3340	3450	1880	393	279
7	457	351	329	240	280	1200	1600	2890	4100	1630	393	264
8	774	334	305	240	270	1180	1600	2500	3620	1390	357	264
9	678	338	325	250	280	1230	1600	2260	3230	1740	338	399
10	638	329	319	270	270	1030	1600	2070	2820	1990	334	1110
11	826	325	270	280	240	962	1540	2040	2690	1600	329	1080
12	1040	368	230	290	210	993	1460	2070	2780	1360	316	808
13	900	365	220	300	270	792	1470	2130	3010	1230	304	647
14	818	326	220	300	270	742	1360	2210	3190	1120	291	608
15	736	316	230	310	290	688	1300	2210	3190	1050	275	554
16	677	300	250	310	290	638	1340	2210	3150	1120	257	513
17	645	333	270	300	300	662	1440	2180	3130	1120	245	524
18	668	329	280	280	400	694	1320	2100	3170	1220	242	470
19	657	316	270	280	647	658	1230	2150	3220	1120	260	444
20	589	290	280	300	1270	586	1210	2410	3260	1300	229	413
21	560	320	290	320	890	582	1300	2680	3340	1290	218	389
22	540	290	310	300	600	649	1510	2820	3300	1190	242	374
23	520	320	310	300	536	752	1690	2950	3170	1170	245	379
24	480	360	320	300	587	918	1650	2950	3010	1140	390	504
25	480	380	330	280	680	962	1590	2640	2990	996	437	654
26	480	440	320	270	856	1070	1680	2850	3730	892	403	1180
27	480	430	330	290	1020	1240	1520	2950	3240	818	343	828
28	480	413	330	300	970	1430	1410	2850	3040	745	415	729
29	480	398	320	320	---	1540	1440	2840	2870	665	422	773
30	470	350	350	340	---	1680	1580	2700	2570	620	585	781
31	453	---	350	360	---	1830	---	2430	---	565	492	---
TOTAL	18336	10769	9378	9010	13476	30892	51350	79650	92290	41081	10941	16646
MEAN	591	359	303	291	481	997	1712	2569	3076	1325	353	555
MAX	1040	453	370	360	1270	1830	5010	3660	4100	2200	585	1180
MIN	399	290	220	240	210	582	1210	1820	2310	565	218	264
AC-FT	36370	21360	18600	17870	26730	61270	101900	158000	183100	81480	21700	33

09349800 PIEDRA RIVER NEAR ARBOLES, CO

LOCATION.--Lat 37°05'18", long 107°23'50", in NE¼SW¼ sec.21, T.33 N., R.5 W., Archuleta County, Hydrologic Unit 14080102, on left bank 3 mi downstream from Ignacio Creek, 4.6 mi northeast of Arboles Post Office, and 2.5 mi upstream from Navajo Reservoir.

DRAINAGE AREA.--629 mi².

PERIOD OF RECORD.--Streamflow records, August 1962 to current year. Gage operated 1895-99 and 1910-27 at site 7.5 mi downstream at altitude 6,000 ft. Low-flow records probably not equivalent. Water-quality data available, November to August 1973.

GAGE.--Water-stage recorder. Elevation of gage is 6,147.52 ft above National Geodetic Vertical Datum of 1929, Colorado State Highway Department benchmark.

REMARKS.--Estimated daily discharges: Oct. 1-30, Dec. 11-21, and Feb. 25 to Mar. 6. Records good except for estimated daily discharges, which are poor. Diversions for irrigation of about 2,800 acres upstream from station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--24 years, 407 ft³/s; 294,900 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,370 ft³/s, Sept. 6, 1970, gage height, 6.38 ft, recorded, 7.55 ft, from floodmarks, from rating curve extended above 4,400 ft³/s, on basis of slope-area measurement of peak flow; minimum discharge, 11 ft³/s, Dec. 9, 1963, Oct. 1, 1966.

EXTREMES OUTSIDE PERIOD OF RECORD.--Major floods occurred Sept. 5 or 6, 1909, and Oct. 5, 1911.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,500 ft³/s, and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Apr 2	1800	*3,800	*4.64	June 14	0400	1,920	3.48
May 4	0100	3,140	4.32	June 26	0400	1,730	3.33
May 27	0500	2,020	3.56	July 20	0300	1,740	3.29
June 7	0600	2,470	3.88				

Minimum daily discharge, 120 ft³/s, Dec. 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	340	249	218	146	164	430	1850	1890	1290	1000	356	187
2	300	229	225	143	173	470	3240	2090	1290	918	335	187
3	280	225	225	143	177	540	2390	2670	1460	869	317	170
4	260	221	213	137	161	630	1710	2830	1750	813	308	161
5	240	209	185	135	155	720	1340	2530	1980	859	321	149
6	220	209	194	137	152	710	1480	2130	2080	876	295	140
7	370	187	201	140	152	740	1600	1720	2290	729	273	132
8	420	184	191	140	152	733	1540	1420	2190	637	246	163
9	400	187	205	130	146	787	1460	1200	1960	1030	222	227
10	480	177	187	132	140	645	1370	1060	1610	1090	201	460
11	680	180	130	127	140	608	1330	1040	1390	849	201	450
12	640	204	120	127	127	589	1280	1030	1470	701	201	352
13	580	201	130	130	146	500	1270	1100	1670	623	209	295
14	520	174	130	130	143	475	1070	1190	1780	565	201	262
15	450	170	130	130	155	436	1000	1180	1730	529	180	238
16	430	167	140	132	204	415	1070	1100	1700	626	201	221
17	400	187	150	130	217	415	1200	1050	1650	595	209	217
18	390	180	150	130	233	430	1020	991	1680	620	198	198
19	360	161	150	127	280	391	886	1130	1610	839	187	184
20	340	143	150	130	600	380	853	1390	1430	1350	184	177
21	320	161	160	140	448	390	1010	1630	1400	1140	180	161
22	310	146	173	140	352	434	1390	1720	1340	1060	180	152
23	290	146	173	130	309	538	1620	1790	1290	1160	161	170
24	270	170	173	135	330	688	1680	1860	1210	1170	259	267
25	260	180	167	127	340	718	1550	1660	1230	960	257	343
26	260	279	164	125	360	881	1520	1830	1510	792	237	458
27	260	261	158	127	440	1040	1230	1900	1380	672	221	377
28	260	222	158	130	430	1230	1100	1830	1290	572	229	341
29	260	229	158	130	---	1310	1260	1860	1380	488	213	394
30	270	241	155	137	---	1430	1590	1630	1210	446	213	405
31	253	---	158	149	---	1590	---	1360	---	401	209	---
TOTAL	11113	5879	5221	4146	6826	21293	42909	49811	47250	24979	7204	7638
MEAN	358	196	168	134	244	687	1430	1607	1575	806	232	255
MAX	680	279	225	149	600	1590	3240	2830	2290	1350	356	460
MIN	220	143	120	125	127	380	853	991	1210	401	161	132
AC-FT	22040	11660	10360	8220	13540	42230	85110	98800	93720	49550	14290	15150
CAL YR 1985	TOTAL	255568		MEAN	700	MAX	2820	MIN	88	AC-FT	506900	
WTR YR 1986	TOTAL	234269		MEAN	642	MAX	3240	MIN	120	AC-FT	464700	

SAN JUAN RIVER BASIN

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09352900 VALLECITO CREEK NEAR BAYFIELD, CO
(Hydrologic bench-mark station)

LOCATION.--Lat 37°28'39", long 107°32'35", in NE¼NW¼ sec.16, T.37 N., R.6 W., La Plata County, Hydrologic Unit 14080101, on right bank 60 ft upstream from Fall Creek, 0.8 mi downstream from Bear Creek, 6.7 mi north of Vallecito Dam, and 18 mi north of Bayfield.

DRAINAGE AREA.--72.1 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1962 to current year.

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 7,906.80 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Nov. 14-16, 19-22, 29, Dec. 1, 4, 5, 10-20, Jan. 1, 2, 4-9, Feb. 10-Mar. 9, Apr. 8-10, 12. Records good except for estimated daily discharges, which are poor. No diversion upstream from station.

AVERAGE DISCHARGE.--24 years, 148 ft³/s; 107,200 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,050 ft³/s, Sept. 6, 1970, gage height, 5.51 ft, from water-stage recorder, 6.76 ft, from floodmarks, from rating curve extended above 1,400 ft³/s, on basis of slope-area measurement of peak flow; minimum daily, 6.7 ft³/s, Dec. 28, 1976.

EXTREMES OUTSIDE PERIOD OF RECORD.--Major floods occurred in October 1911 and June 1927.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ft³/s, and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 28	2300	1,020	2.85	June 12	2200	1,050	2.88
June 6	2200	*1,310	*3.15	June 28	2300	1,070	2.90

Minimum daily discharge, 36 ft³/s, Dec. 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	164	112	65	48	45	55	150	354	466	468	184	147
2	157	109	71	48	45	55	137	450	511	480	176	137
3	150	104	69	46	45	55	119	644	614	504	168	124
4	140	100	60	40	40	60	104	664	781	474	157	114
5	134	102	55	38	39	60	96	562	913	519	160	109
6	130	92	62	38	43	60	96	461	934	460	157	102
7	147	82	62	38	41	65	100	352	999	382	153	100
8	157	88	62	38	40	60	110	277	867	327	147	112
9	164	86	60	40	39	65	110	225	715	563	140	179
10	180	79	55	42	38	61	110	197	516	552	137	283
11	215	80	44	42	38	62	116	192	551	427	130	237
12	212	79	38	44	42	56	110	212	735	369	163	224
13	212	80	36	44	44	52	127	236	811	345	191	195
14	200	75	38	45	46	47	122	255	792	321	158	165
15	184	70	40	44	50	46	119	255	753	326	140	150
16	180	70	42	44	46	45	119	236	783	408	130	144
17	176	77	46	42	46	44	122	224	792	424	124	130
18	164	76	48	43	48	44	114	240	784	357	122	122
19	153	65	46	42	48	39	107	330	737	338	130	112
20	150	60	48	44	48	42	109	463	705	315	122	107
21	144	55	51	44	44	40	139	535	665	320	114	100
22	140	60	50	42	40	44	199	560	641	579	117	114
23	130	65	50	43	42	49	227	615	617	584	130	156
24	127	60	50	43	44	56	228	640	561	498	230	211
25	127	58	50	41	46	57	216	624	584	371	201	196
26	130	71	51	42	50	65	196	734	662	303	173	184
27	134	66	53	42	55	76	176	775	664	276	148	176
28	134	61	53	42	55	94	172	766	701	246	150	176
29	134	60	53	42	---	107	199	741	758	221	147	184
30	124	58	53	43	---	122	269	603	564	204	147	176
31	122	---	51	45	---	144	---	469	---	196	127	---
TOTAL	4815	2300	1612	1319	1247	1927	4318	13891	21176	12157	4673	4666
MEAN	155	76.7	52.0	42.5	44.5	62.2	144	448	706	392	151	156
MAX	215	112	71	48	55	144	269	775	999	584	230	283
MIN	122	55	36	38	38	39	96	192	466	196	114	100
AC-FT	9550	4560	3200	2620	2470	3820	8560	27550	42000	24110	9270	9260
CAL YR 1985 TOTAL		74156		MEAN	203	MAX	1290	MIN	22	AC-FT	147100	
WTR YR 1986 TOTAL		74101		MEAN	203	MAX	999	MIN	36	AC-FT	147000	

SAN JUAN RIVER BASIN

09352900 VALLECITO CREEK NEAR BAYFIELD, CO--Continued
(Hydrologic Bench-Mark Station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Chemical analyses: October 1963 to September 1968; October 1969 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: November 1962 to September 1982.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: (Water years 1963-82) Maximum, 20.0°C July 10, 1974; minimum, 0.0°C on many days during winter months each year

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	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 CAC03)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
NOV 25...	1130	52	56	6.5	0.0	1.0	10.7	K1	52	32	9.4	2.0
MAR 10...	1130	62	57	7.2	0.5	0.6	10.9	K1	53	33	10	2.0
MAY 19...	0930	304	65	7.5	3.0	1.5	10.4	K1	K150	33	9.9	1.9
AUG 26...	0930	184	44	7.0	10.0	0.5	9.5	K7	66	22	6.7	1.2

DATE	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE IT-FLD (MG/L AS HCO3)	CAR- BONATE IT-FLD (MG/L AS CO3)	ALKA- LINITY, CARBON- ATE IT-FLD (MG/L - CAC03)	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, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)
NOV 25...	1.1	0.1	0.9	29	0	24	7.0	0.3	0.2	3.9	30	39
MAR 10...	1.1	0.1	1.5	34	0	28	7.3	0.4	0.3	4.3	41	44
MAY 19...	0.7	0.1	0.6	34	0	28	12	2.4	0.2	3.7	--	48
AUG 26...	0.6	0.1	0.6	29	0	24	5.0	0.2	0.2	2.6	30	31

DATE	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (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 25...	0.04	4.2	<0.01	0.15	0.04	0.04	0.46	0.5	0.02	0.03	0.02
MAR 10...	0.06	6.9	<0.01	0.11	0.04	0.03	0.26	0.3	<0.01	<0.01	<0.01
MAY 19...	0.07	40	<0.01	0.12	0.03	0.03	0.17	0.2	0.02	0.01	0.01
AUG 26...	0.04	15	<0.01	<0.10	<0.01	<0.01	--	0.2	<0.01	<0.01	<0.01

K BASED ON NON-IDEAL COLONY COUNT

09352900 VALLECITO CREEK NEAR BAYFIELD, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	CADMIUM DIS- SOLVED (UG/L AS CD)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	COBALT, DIS- SOLVED (UG/L AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	IRON, DIS- SOLVED (UG/L AS FE)
NOV 25...	1130	30	<1	17	<0.5	<1	<1	<3	1	7
MAR 10...	1130	50	<1	18	<0.5	<1	4	<3	1	30

DATE	*LEAD, DIS- SOLVED (UG/L AS PB)	LITHIUM DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SILVER, DIS- SOLVED (UG/L AS AG)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, DIS- SOLVED (UG/L AS ZN)
NOV 25...	<1	<4	4	<10	1	<1	<1	29	<6	9
MAR 10...	<1	<4	<1	<10	<1	<1	<1	29	<6	9

RADIOCHEMICAL ANALYSES, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	GROSS ALPHA, DIS- SOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DIS- SOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DIS- SOLVED (PCI/L AS SR/ YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/ YT-90)	RADIUM 226, DIS- SOLVED, RADON METHOD (PCI/L)	URANIUM DIS- SOLVED, EXTRAC- TION (UG/L)
NOV 25...	1130	<0.4	<0.7	0.7	<0.6	0.6	<0.6	0.06	0.35

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDE (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
NOV 25...	1130	52	6	0.84	48
MAR 10...	1130	62	3	0.50	46
MAY 19...	0930	304	2	1.6	--
AUG 26...	0930	184	5	2.5	35

* The minimum reporting level for Lead was changed from <1 to <5 during June, 1986.

SAN JUAN RIVER BASIN

09353000 VALLECITO RESERVOIR NEAR BAYFIELD, CO

LOCATION.--Lat 37°23'00", long 107°34'30", in SW¼SW¼ sec.18, T.36 N., R.6 W., La Plata County, Hydrologic Unit 14080101, in gatehouse above outlet gates at Vallecito Dam on Los Pinos (Pine) River, 300 ft left of spillway, 0.4 mi upstream from Jack Creek, and 11 mi northeast of Bayfield.

PERIOD OF RECORD.--April 1941 to current year.

REVISED RECORDS.--WSP 959: 1941. WSP 1513: 1956.

GAGE.--Water-stage recorder. Elevation of gage is 7,580 ft above National Geodetic Vertical Datum of 1929 (levels by U.S. Bureau of Reclamation); gage readings have been reduced to elevations above National Geodetic Vertical Datum.

REMARKS.--Reservoir is formed by earth and rockfill dam; dam completed in March 1941. Capacity of reservoir, 126,300 acre-ft between elevations 7,580 ft, sill of outlet gate, and 7,665 ft, top of spillway gates. Dead storage, 3,395 acre-ft. Figures given are usable contents. Reservoir is used to store water for irrigation in Los Pinos (Pine) River basin.

COOPERATION.--Records provided by Pine River Irrigation District.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 128,200 acre-ft, July 27, 1957, elevation, 7,665.72 ft; minimum, 1,520 acre-ft, Oct. 24, 25, 1944, elevation, 7,584.10 ft. No usable storage prior to April 1941.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 123,250 acre-ft, June 28, elevation, 7,664.12 ft; minimum, 53,990 acre-ft, Jan. 2, elevation, 7,634.87 ft.

MONTHEND ELEVATION IN FEET NGVD AND CONTENTS, AT 0900, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

Date	Elevation	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.	7,645.68	77,010	-13,340
Oct. 31.	7,638.73	61,780	-15,230
Nov. 30.	7,635.27	54,780	-7,000
Dec. 31.	7,634.90	54,050	-730
CAL YR 1985	-	-	+3,400
Jan. 31.	7,636.23	56,680	+2,630
Feb. 29.	7,637.63	59,510	+3,830
Mar. 31.	7,642.00	68,770	+9,260
Apr. 30.	7,648.18	82,830	+14,060
May 31.	7,653.88	96,640	+13,810
June 30.	7,663.65	121,980	+25,340
July 31.	7,661.35	115,840	-6,140
Aug. 31.	7,652.27	92,660	-23,180
Sept. 30.	7,644.97	75,390	-17,270
WTR YR 1986	-	-	-1,620

09353500 LOS PINOS RIVER NEAR BAYFIELD, CO
(LOCALLY KNOWN AS PINE RIVER)

LOCATION.--Lat 37°22'58", long 107°34'37", in SW¼ sec.18, T.36 N., R.6 W., La Plata County, Hydrologic Unit 14080101, on left side of outlet flume from Vallecito Reservoir, 0.4 mi upstream from Jack Creek, 2.0 mi upstream from Red Creek, and 11 mi north of Bayfield.

DRAINAGE AREA.--270 mi², approximately.

PERIOD OF RECORD.--October 1927 to September 1986 (discontinued). Monthly discharge only for some periods, published in WSP 1313.

GAGE.--Water-stage recorder and concrete weir. Datum of gage is 7,582.54 ft above National Geodetic Vertical Datum of 1929 (levels by U.S. Bureau of Reclamation). See WSP 1713 or 1733 for history of changes prior to Aug. 18, 1956.

REMARKS.--No estimated daily discharge. Records good. Flow regulated by Vallecito Reservoir (station 09353000) since April 1941. Transmountain diversions upstream from station by Weminuche Pass and Pine River-Weminuche Pass ditches.

COOPERATION.--Gage-height record is provided by Pine River Irrigation District.

AVERAGE DISCHARGE.--13 years (water years 1928-40), 345 ft³/s; 250,000 acre-ft/yr, prior to completion of Vallecito Reservoir; 46 years (water years 1941-86), 366 ft³/s; 265,200 acre-ft/yr, subsequent to completion of Vallecito Reservoir.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,800 ft³/s, July 27, 1957, gage height, 12.2 ft, from floodmarks at supplementary gage, from rating curve extended above 2,500 ft³/s, on basis of slope-area measurement of peak flow (result of automatic spillway gates releasing from Vallecito Reservoir); no flow Apr. 15-25, 1982, Mar. 25-26, 1985 (result of no release from Vallecito Reservoir when concrete spillway was being repaired); minimum daily prior to construction of Vallecito Reservoir, 38 ft³/s, Dec. 21, 22, 1937.

EXTREMES OUTSIDE PERIOD OF RECORD.--Greatest flood since at least 1885 occurred Oct. 5, 1911.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,160 ft³/s at 1100 June 13, gage height, 4.23 ft; minimum daily, 27 ft³/s, Apr. 1-4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	613	570	142	142	64	64	27	689	1220	1900	781	715
2	613	570	142	142	64	64	27	1130	1220	1400	781	715
3	613	570	142	73	64	64	27	1470	996	1070	781	715
4	613	570	142	28	64	64	27	1580	849	1070	781	715
5	613	570	142	28	64	64	284	1650	849	1070	781	715
6	613	570	142	61	64	64	452	1650	849	1070	781	715
7	613	403	142	83	64	64	452	1650	952	1070	781	715
8	613	294	142	83	64	64	232	1650	1020	926	781	715
9	613	294	142	83	64	64	88	1650	1020	832	781	715
10	613	294	142	83	64	64	88	1650	1020	832	781	715
11	613	294	142	54	64	64	88	1650	1020	832	741	715
12	613	294	142	53	64	64	88	1650	1020	832	715	715
13	613	294	142	64	64	64	88	1650	1660	832	715	715
14	613	294	142	64	64	64	88	1650	2160	832	715	715
15	613	294	142	64	64	64	88	1350	2160	832	715	715
16	613	294	142	64	64	64	88	978	2160	832	715	693
17	613	294	142	64	64	64	88	792	2070	832	715	679
18	613	294	142	64	64	64	88	792	2010	832	715	679
19	613	294	142	64	64	64	88	792	2010	832	715	679
20	613	294	142	64	64	64	88	792	1920	832	715	679
21	613	294	142	64	64	64	318	792	1860	832	715	679
22	613	294	142	64	64	64	469	792	1860	994	715	679
23	613	294	142	64	64	64	469	792	1600	1320	715	679
24	483	294	142	64	64	64	217	792	1330	1320	715	679
25	200	202	142	64	64	64	79	792	1260	1320	715	679
26	580	142	142	64	64	64	448	792	1260	1320	715	679
27	580	142	142	64	64	64	689	792	1260	1320	715	679
28	580	142	142	64	64	64	689	792	1290	1090	715	679
29	575	142	142	64	---	64	689	1050	1580	932	715	679
30	575	142	142	64	---	64	689	1220	1900	841	715	679
31	570	---	142	64	---	42	---	1220	---	781	715	---
TOTAL	18242	9733	4402	2129	1792	1962	7340	36691	43385	31630	22851	20924
MEAN	588	324	142	68.7	64.0	63.3	245	1184	1446	1020	737	697
MAX	613	570	142	142	64	64	689	1650	2160	1900	781	715
MIN	200	142	142	28	64	42	27	689	849	781	715	679
AC-FT	36180	19310	8730	4220	3550	3890	14560	72780	86050	62740	45320	41500
CAL YR 1985	TOTAL	206088.40		MEAN	565	MAX	2560	MIN	.00	AC-FT	408800	
WTR YR 1986	TOTAL	201081		MEAN	551	MAX	2160	MIN	27	AC-FT	398800	

SAN JUAN RIVER BASIN

09354500 LOS PINOS RIVER AT LA BOCA, CO

LOCATION.--Lat 37°00'34", long 107°35'56", in NE¼NW¼ sec.22, T.32 N., R.7 W., La Plata County, Hydrologic Unit 14080101, on downstream end of right abutment of the Denver & Rio Grande Western Railroad Co. bridge, at southeast edge of La Boca, 0.1 mi upstream from Spring Creek, and 13 mi upstream from mouth.

DRAINAGE AREA.--510 mi², approximately.

PERIOD OF RECORD.--Streamflow records, October 1950 to current year. Monthly discharge only for some periods, published in WSP 1733. Water-quality data available, July 1969 to August 1973.

GAGE.--Water-stage recorder. Datum of gage is 6,143.58 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Nov. 10 to Feb. 18, Feb. 21 to Mar. 6, Apr. 3-10, Aug. 7 to Sept. 3, Sept. 9-30. Records good except for estimated daily discharges, which are poor. Flow regulated by Vallecito Reservoir (station 09353000) 24 mi upstream since April 1941. Diversions for irrigation of about 33,000 acres upstream from station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--36 years, 235 ft³/s; 170,300 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,400 ft³/s, July 27, 1957, gage height, 8.95 ft, from rating curve extended above 5,100 ft³/s; minimum daily, 6.1 ft³/s, May 1, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--A flood on Oct. 5, 1911 has not yet been exceeded.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,720 ft³/s at 0500 May 5, gage height, 6.14 ft; minimum daily, 48 ft³/s, Jan. 4-6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	406	592	180	170	90	150	443	772	795	1350	393	370
2	400	592	180	160	80	150	1560	960	773	1100	361	370
3	390	592	180	160	80	160	740	1600	678	673	360	370
4	385	586	180	48	80	170	540	1640	412	652	339	365
5	380	586	170	48	75	180	460	1680	371	707	326	350
6	380	586	170	48	75	190	460	1590	390	683	342	346
7	447	551	170	100	75	198	500	1570	406	653	360	334
8	419	331	160	100	75	202	480	1590	535	593	350	334
9	406	314	160	100	75	202	450	1590	591	538	330	510
10	418	310	170	100	75	187	410	1560	592	479	320	760
11	571	330	170	100	75	194	385	1540	574	437	320	760
12	486	380	180	55	75	202	365	1500	545	421	370	660
13	466	360	200	80	80	167	355	1420	801	418	470	620
14	460	320	220	80	85	157	323	1360	1610	400	430	560
15	542	310	210	85	85	151	302	1170	1640	442	390	520
16	615	310	200	85	85	145	306	827	1630	530	350	480
17	634	320	190	80	85	154	314	509	1590	509	330	450
18	652	320	170	75	100	151	294	443	1460	496	320	420
19	640	320	170	75	261	163	271	407	1440	600	320	400
20	622	310	180	70	486	142	258	339	1400	675	320	380
21	616	340	180	80	160	139	308	311	1290	641	310	360
22	616	350	180	75	95	154	663	302	1250	874	310	400
23	604	350	190	75	90	180	707	306	1120	1260	330	600
24	604	350	190	75	95	205	638	286	928	1210	380	780
25	504	360	190	85	110	210	290	282	925	1160	410	810
26	549	200	190	80	130	230	398	282	893	1150	390	760
27	579	190	180	80	150	242	788	286	822	1150	370	710
28	592	170	180	80	150	269	788	286	804	991	370	720
29	598	170	180	85	---	286	788	349	951	705	380	750
30	598	180	180	80	---	298	772	687	1260	629	390	700
31	598	---	170	85	---	333	---	763	---	458	370	---
TOTAL	16177	10980	5620	2699	3177	5961	15356	28207	28476	22584	11111	15949
MEAN	522	366	181	87.1	113	192	512	910	949	729	358	532
MAX	652	592	220	170	486	333	1560	1680	1640	1350	470	810
MIN	380	170	160	48	75	139	258	282	371	400	310	334
AC-FT	32090	21780	11150	5350	6300	11820	30460	55950	56480	44800	22040	31630
CAL YR 1985	TOTAL	174445	MEAN	478	MAX	2130	MIN	65	AC-FT	346000		
WTR YR 1986	TOTAL	166297	MEAN	456	MAX	1680	MIN	48	AC-FT	329900		

SAN JUAN RIVER BASIN

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09355000 SPRING CREEK AT LA BOCA, CO

LOCATION.--Lat 37°00'40", long 107°35'47", in SE¼SW¼ sec.15, T.32 N., R.7 W., La Plata County, Hydrologic Unit 14080101, on right bank in an excavated channel, 0.2 mi upstream from mouth, and 0.2 mi east of La Boca.

DRAINAGE AREA.--58 mi², approximately.

PERIOD OF RECORD.--Streamflow records, October 1950 to current year. Monthly discharge only for some periods, published in WSP 1733. Water-quality data available, May 1974.

GAGE.--Water-stage recorder. Elevation of gage is 6,160 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 16-30, Nov. 17-20, 22, 23, Dec. 11-30, Jan. 1-31, Feb. 1-4, 7-13, Apr. 6-10. Records good except for estimated daily discharges, which are poor. Part of flow is return waste from irrigation. Nearly all irrigation in this basin is water diverted for Los Pinos River near Bayfield which causes a considerable change in the annual pattern and natural flow. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--36 years, 31.6 ft³/s; 22,890 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,980 ft³/s, Sept. 6, 1970, gage height, 4.62 ft, from rating curve extended above 160 ft³/s, on basis of field estimate of peak flow; maximum gage height, 5.98 ft, Mar. 9, 1960 (backwater from ice); minimum daily discharge, 0.6 ft³/s, Nov. 27, 1959.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 434 ft³/s at 0800 Aug. 24, gage height, 2.13 ft; minimum daily, 4.2 ft³/s, Feb. 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	55	6.5	30	6.0	4.6	7.8	15	12	72	102	60	78
2	55	6.1	17	5.5	4.6	7.4	99	15	72	92	62	78
3	55	6.1	14	5.5	4.6	7.4	73	17	74	88	71	76
4	54	6.1	16	5.5	4.4	7.8	41	26	72	88	71	72
5	52	6.1	9.3	5.5	4.4	7.8	24	25	69	102	66	69
6	52	6.1	8.5	5.5	4.4	7.4	14	25	71	108	67	71
7	67	5.6	8.5	5.5	4.4	6.5	14	36	67	88	69	71
8	54	5.6	7.4	5.0	4.4	6.1	14	43	71	88	69	78
9	48	5.6	7.4	5.5	4.4	7.4	13	40	72	104	69	105
10	52	5.6	6.5	5.5	4.4	7.8	12	43	71	94	71	173
11	76	5.6	6.0	5.5	4.4	8.5	11	42	70	80	72	70
12	43	6.1	6.5	5.0	4.2	10	10	37	74	78	72	57
13	39	6.5	6.0	5.0	4.4	6.6	9.2	40	74	76	72	62
14	36	6.1	6.0	5.0	4.8	5.6	7.8	43	74	76	71	64
15	30	5.2	6.0	5.5	14	5.6	7.4	57	72	86	69	64
16	20	4.8	6.0	5.0	54	4.4	6.9	57	74	111	69	54
17	10	5.0	6.5	4.8	50	6.1	7.4	67	72	92	71	48
18	9.0	5.0	6.5	4.6	52	6.5	6.9	62	72	88	69	50
19	8.5	5.0	6.5	4.4	39	7.4	6.5	62	72	88	69	52
20	8.0	4.6	6.5	4.4	48	5.6	6.1	62	74	113	71	52
21	8.0	5.8	6.5	4.8	24	4.4	5.2	63	74	100	76	55
22	8.0	6.5	7.0	4.6	11	4.8	5.2	66	75	114	74	52
23	7.5	7.0	7.0	4.4	8.6	6.1	5.6	62	80	108	78	55
24	7.5	7.6	7.0	4.6	10	6.5	6.1	66	80	73	207	93
25	7.5	9.9	7.0	4.6	11	6.1	28	66	109	69	104	60
26	7.0	59	7.0	4.6	13	6.1	7.8	69	112	66	92	103
27	7.0	21	6.5	4.4	12	6.1	6.1	69	98	66	90	51
28	7.0	9.4	6.5	4.6	10	6.5	5.2	69	96	64	129	40
29	7.0	14	7.0	4.4	---	6.9	5.2	62	112	60	112	71
30	7.0	71	6.5	4.6	---	7.4	5.6	71	104	59	110	55
31	6.5	---	6.5	5.0	---	7.8	---	72	---	59	83	---
TOTAL	903.5	324.5	261.6	154.8	419.0	208.4	478.2	1546	2379	2680	2535	2079
MEAN	29.1	10.8	8.44	4.99	15.0	6.72	15.9	49.9	79.3	86.5	81.8	69.3
MAX	76	71	30	6.0	54	10	99	72	112	114	207	173
MIN	6.5	4.6	6.0	4.4	4.2	4.4	5.2	12	67	59	60	40
AC-FT	1790	644	519	307	831	413	949	3070	4720	5320	5030	4120
CAL YR 1985	TOTAL	14437.3	MEAN	39.6	MAX	235	MIN	3.6	AC-FT	28640		
WTR YR 1986	TOTAL	13969.0	MEAN	38.3	MAX	207	MIN	4.2	AC-FT	27710		

09361500 ANIMAS RIVER AT DURANGO, CO

LOCATION.--Lat 37°16'45", long 107°52'47", in SW¼SW¼ sec.20, T.35 N., R.9 W., La Plata County, Hydrologic Unit 14080104, on left bank at abandoned Power Company plant at Durango, 0.8 mi upstream from Lightner Creek.

DRAINAGE AREA.--692 mi².

PERIOD OF RECORD.--June to December 1895, April 1896 to December 1898, April 1899 to December 1900, March to May 1901, April to November 1902, March to April 1903 (gage heights only, erroneously stated as discredited in WSP 1563), May to October 1903, July 1904 to December 1905, January to December 1910 (gage heights only), January to September 1911, January 1912 to current year. Monthly or yearly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 764: Drainage area. WSP 929: 1927(M). WSP 1243: 1911, 1918(M). WSP 1563: 1911-25 (monthly figures only).

GAGE.--Water-stage recorder. Datum of gage is 6,501.57 ft above National Geodetic Vertical Datum of 1929. See WSP 1713 or 1733 for history of changes prior to Mar. 2, 1921.

REMARKS.--Estimated daily discharges: Dec. 11-17. Records good. Diversions for irrigation of about 4,000 acres upstream from station. Natural regulation by many lakes and regulation for power upstream from station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--81 years (water years 1897-1900, 1905, 1911-86), 848 ft³/s; 614,400 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 25,000 ft³/s, Oct. 5, 1911, gage height, 11 ft, present site and datum, from rating curve extended above 13,000 ft³/s; minimum daily, 94 ft³/s, Mar. 2, 1913.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1885, that of Oct. 5, 1911.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,000 ft³/s, and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 4	0800	4,740	5.90	June 7	1200	*6,160	*6.52
May 29	0700	4,700	5.91	June 15	0800	4,620	5.80

Minimum daily discharge, 235 ft³/s, Feb. 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	619	466	363	336	281	475	1100	2280	3370	2570	841	570
2	602	450	368	320	266	458	1190	2750	3230	2510	830	570
3	586	443	380	338	275	474	1050	3790	3500	2500	781	547
4	547	436	368	320	266	521	893	4420	4500	2320	741	523
5	538	458	356	310	254	553	830	3990	4990	2850	648	475
6	475	458	356	310	254	578	800	3330	5140	2710	646	451
7	522	436	344	308	258	578	966	2580	5750	2400	637	436
8	626	422	316	295	262	589	1100	2030	5460	2100	595	458
9	654	381	326	305	258	586	1170	1680	4790	2840	571	599
10	673	368	350	315	242	547	1150	1410	3510	3370	547	1180
11	778	376	330	305	260	530	1150	1330	2900	2720	530	1180
12	858	448	340	290	235	483	1090	1360	3120	2240	601	1060
13	772	395	310	293	261	416	1020	1560	3780	1990	786	952
14	760	339	330	295	270	429	903	1800	4180	1810	731	862
15	721	338	330	305	275	406	880	1830	4190	1790	621	801
16	700	350	340	276	290	363	900	1740	4120	1940	571	761
17	700	368	340	266	275	393	929	1640	4010	2040	539	701
18	674	368	345	266	280	408	864	1570	3950	1800	515	647
19	629	350	356	253	295	363	752	1790	3900	1630	530	611
20	595	332	362	242	316	368	701	2430	3410	1540	507	579
21	586	406	368	284	332	368	827	3050	3480	1430	490	539
22	547	381	374	259	306	374	1220	3110	3320	1570	498	562
23	546	394	374	254	295	380	1560	3350	3180	1750	522	851
24	520	401	380	262	285	435	1640	3560	2950	1870	626	1250
25	522	408	387	297	337	497	1620	3140	2620	1640	672	1310
26	522	429	384	285	373	522	1390	3840	2900	1440	611	1180
27	506	395	357	266	442	652	1180	4160	3420	1310	571	1090
28	506	339	356	290	481	754	1100	4130	3190	1170	578	1090
29	506	367	362	263	---	848	1280	4310	3400	1060	586	1160
30	483	387	362	266	---	889	1720	3640	2950	952	602	1100
31	482	---	356	304	---	1010	---	3200	---	881	563	---
TOTAL	18755	11889	10970	8978	8224	16247	32975	84800	113210	60743	19087	24095
MEAN	605	396	354	290	294	524	1099	2735	3774	1959	616	803
MAX	858	466	387	338	481	1010	1720	4420	5750	3370	841	1310
MIN	475	332	310	242	235	363	701	1330	2620	881	490	436
CAL YR 1985	TOTAL	440687		MEAN	1207	MAX	7250	MIN	180			
WTR YR 1986	TOTAL	409973		MEAN	1123	MAX	5750	MIN	235			

09363500 ANIMAS RIVER NEAR CEDAR HILL, NM

LOCATION.--Lat 37°02,17", long 107°52,25", in sec.7, T.32 N., R.9 W., La Plata County, Colorado, Hydrologic Unit 14080104, on right bank 0.8 mi downstream from Florida River, 2.5 mi upstream from Colorado-New Mexico State line, 8.5 mi north of Cedar Hill, and at mile 32.9.

DRAINAGE AREA.--1,090 mi², approximately.

PERIOD OF RECORD.--October 1933 to current year. Monthly discharge only for October and November 1933, published in WSP 1313.

REVISED RECORDS.--WSP 1563: 1940 and 1946 (monthly figures only).

GAGE.--Water-stage recorder. Elevation of gage is 5,960 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Sept. 14, 1937, at datum between 1.52 ft and 1.36 ft, higher. Sept. 15, 1937, to Sept. 30, 1946, at datum 1.36 ft, higher.

REMARKS.--Estimated daily discharges: Dec. 13-21, 25, and Jan. 1-11. Records good except for estimated daily discharges, which are poor. Diversions for irrigation of about 20,000 acres upstream from station. During water years 1944-49, Twin Rocks Canal diverted upstream from station for irrigation downstream. Slight regulation by Lemon Dam about 30 mi upstream on Florida River since November 1963 (capacity, 40,100 acre-ft).

AVERAGE DISCHARGE.--53 years, 921 ft³/s, 667,300 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,100 ft³/s, June 19, 1949, gage height, 11.45 ft; minimum, 63 ft³/s, Jan. 21, 1935.

EXTREMES OUTSIDE PERIOD OF RECORD.--A major flood occurred in October 1911 at this location.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage Height (ft)
May 4	1000	5,220	8.07	June 7	1630	*5,760	*8.38
May 29	1115	4,970	7.92	June 14	1115	4,720	7.80

Minimum daily discharge, 271 ft³/s, Feb. 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	690	508	470	367	372	559	1470	2570	3560	2540	923	835
2	656	447	439	356	343	536	2300	3040	3340	2420	914	844
3	657	482	459	357	344	545	1680	4140	3490	2350	869	795
4	586	464	439	359	331	595	1290	4970	4350	2220	852	773
5	612	504	414	337	302	622	1110	4840	4750	2690	768	722
6	533	477	412	350	295	644	1110	4280	4810	2540	739	680
7	571	477	420	346	307	663	1250	3540	5290	2240	792	651
8	653	451	377	350	299	664	1440	2880	5170	2010	742	651
9	695	415	384	357	297	684	1510	2460	4640	2420	721	808
10	745	405	406	356	275	625	1460	2040	3640	3090	704	1410
11	841	395	409	338	279	645	1510	1900	2990	2550	691	1570
12	893	494	340	328	271	591	1460	1910	3080	2130	751	1360
13	821	484	390	330	283	513	1370	2060	3800	1910	921	1270
14	796	403	370	343	318	488	1240	2200	4290	1750	956	1150
15	766	399	380	354	328	481	1210	2230	4280	1700	830	1050
16	731	415	390	333	427	434	1200	2120	4250	1810	771	1000
17	731	438	380	302	416	462	1290	2020	4100	1950	729	957
18	715	440	390	307	443	490	1230	1880	3990	1760	688	881
19	663	432	420	294	488	456	1110	2030	4020	1730	690	846
20	635	390	420	285	566	423	1030	2570	3540	1630	686	809
21	607	458	520	318	485	429	1120	3190	3440	1500	679	768
22	584	454	433	310	398	426	1490	3310	3320	1640	683	750
23	584	442	403	296	368	447	1990	3480	3200	1840	702	1050
24	558	453	411	305	363	515	2130	3790	2970	2020	880	1640
25	545	493	419	346	416	577	2100	3480	2630	1860	996	1770
26	546	606	415	339	458	609	1920	4070	2920	1690	897	1740
27	523	528	396	303	527	724	1700	4410	3370	1590	821	1480
28	520	418	380	349	564	837	1590	4510	3130	1460	883	1410
29	530	434	391	327	---	950	1700	4590	3240	1320	979	1480
30	517	522	394	323	---	1010	2090	4050	2910	1050	919	1460
31	503	---	397	372	---	1120	---	3510	---	962	828	---
TOTAL	20007	13728	12668	10337	10563	18764	45100	98070	112510	60372	25004	32610
MEAN	645	458	409	333	377	605	1503	3164	3750	1947	807	1087
MAX	893	606	520	372	566	1120	2300	4970	5290	3090	996	1770
MIN	503	390	340	285	271	423	1030	1880	2630	962	679	651
AC-FT	39680	27230	25130	20500	20950	37220	89460	194500	223200	119700	49600	64680
CAL YR 1985	TOTAL	496914	MEAN	1361	MAX	7710	MIN	210	AC-FT	985600		
WTR YR 1986	TOTAL	459733	MEAN	1260	MAX	5290	MIN	271	AC-FT	911900		

SAN JUAN RIVER BASIN

09365500 LA PLATA RIVER AT HESPERUS, CO

LOCATION.--Lat 37°17'23", long 108°02'24", in NE1SW1 sec.14, T.35 N., R.11 W., La Plata County, Hydrologic Unit 14080105, on right bank at Hesperus 700 ft downstream from U.S. Highway 160.

DRAINAGE AREA.--37 mi², approximately.

PERIOD OF RECORD.--June to August 1904, May 1905 to September 1906, August to November 1910, June 1917 to current year. Monthly discharge only for some periods, published in WSP 1313. Records for Nov. 11 to Dec. 31, 1910, published in WSP 289, have been found to be unreliable and should not be used.

REVISED RECORDS.--WSP 1243: 1906(M). WSP 1563: 1923 (monthly figures only). See also PERIOD OF RECORD.

GAGE.--Water-stage recorder. Datum of gage is 8,104.71 ft above National Geodetic Vertical Datum of 1929. Prior to May 1, 1920, nonrecording gage, and May 1, 1920, to May 24, 1927, water-stage recorder, at several sites about 600 ft downstream at different datums. May 25, 1927, to Sept. 30, 1938, water-stage recorder at site 60 ft downstream and Oct. 1, 1938, to Sept. 30, 1941, at present site at datum 1.00 ft, higher.

REMARKS.--Estimated daily discharges: Nov. 14, 15, 19-22, Dec. 10-29, Dec. 31 to Jan. 2, 4-22, 25-28, Feb. 4-12, 22, and Mar. 19. Records good except for estimated daily discharges, which are fair. Cherry Creek ditch exports water upstream from station for irrigation of about 2,000 acres in Cherry Creek drainage.

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

AVERAGE DISCHARGE.--70 years (water years 1906, 1918-86), 45.3 ft³/s; 32,820 acre-ft/yr.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum flood observed occurred Oct. 5, 1911.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 230 ft³/s, and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 4	0130	*590	*3.53	June 6	2200	450	3.48
May 26	2330	360	3.33				

Minimum daily discharge, 9.0 ft³/s, Dec. 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	21	13	10	14	16	126	258	161	61	24	24
2	18	20	13	10	14	19	120	320	170	58	23	22
3	17	19	12	12	15	22	100	464	233	54	21	19
4	17	18	11	10	12	26	88	457	310	53	20	18
5	16	17	10	10	12	33	82	380	340	58	18	17
6	16	16	10	10	13	46	88	276	340	48	23	16
7	17	16	10	10	13	50	100	198	310	44	25	16
8	18	15	10	10	11	50	102	148	254	44	21	17
9	18	14	10	10	11	48	107	120	217	66	19	31
10	20	14	10	11	10	44	110	98	151	58	18	51
11	27	14	9.5	11	11	40	110	93	142	50	18	47
12	25	15	9.5	12	13	36	105	102	161	46	22	43
13	26	14	9.0	11	16	33	98	136	177	44	23	39
14	25	12	9.5	12	15	31	86	180	184	42	18	36
15	24	10	9.5	10	15	31	82	167	174	46	16	33
16	24	11	9.5	10	15	29	84	139	167	40	15	31
17	24	12	9.5	11	14	28	84	123	170	44	14	29
18	23	12	10	11	14	26	76	123	191	34	13	27
19	23	10	10	11	14	24	72	154	161	34	12	25
20	22	11	10	11	15	25	72	221	139	35	12	23
21	21	11	10	11	14	26	82	290	126	32	13	22
22	20	10	10	10	13	27	128	254	110	39	12	23
23	19	11	10	12	12	31	158	258	95	46	12	31
24	19	11	10	12	12	33	158	268	82	44	15	70
25	19	12	10	10	12	40	139	237	90	39	15	56
26	21	12	10	10	14	48	123	305	105	36	16	47
27	22	12	10	11	14	60	107	286	98	33	17	36
28	23	12	10	11	15	78	98	290	88	30	26	36
29	22	14	10	13	---	102	131	290	80	27	32	42
30	22	13	12	14	---	112	194	272	70	25	30	38
31	22	---	10	14	---	120	---	177	---	25	23	---
TOTAL	649	409	317.0	341	373	1334	3210	7084	5096	1335	586	965
MEAN	20.9	13.6	10.2	11.0	13.3	43.0	107	229	170	43.1	18.9	32.2
MAX	27	21	13	14	16	120	194	464	340	66	32	70
MIN	16	10	9.0	10	10	16	72	93	70	25	12	16
CAL YR 1985 TOTAL	22533.0			MEAN	61.7	MAX	408	MIN	6.0			
WTR YR 1986 TOTAL	21699.0			MEAN	59.4	MAX	464	MIN	9.0			

09366500 LA PLATA RIVER AT COLORADO-NEW MEXICO STATE LINE

LOCATION.--Lat 36°59'51", long 108°11'17", in NW¼ sec.10, T.32 N., R.13 W., La Plata County, CO, Hydrologic Unit 14080105, on right bank at Colorado-New Mexico State line, 0.2 mi downstream from Ponds Arroyo, and 4.8 mi north of La Plata, NM.

DRAINAGE AREA.--331 mi².

PERIOD OF RECORD.--January 1920 to current year. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 1313: 1934(M), 1936(M).

GAGE.--Water-stage recorder. Datum of gage is 5,975.15 ft above National Geodetic Vertical Datum of 1929. See WSP 1713 or 1733 for history of changes prior to Mar. 17, 1934.

REMARKS.--Estimated daily discharges: Oct. 21 to Nov. 4, Dec. 11-16, Jan. 7-9, Feb. 10-12, and Apr. 2-11. Records good except for estimated daily discharges, which are fair. Diversions upstream from station for irrigation of about 15,000 acres, mostly upstream from station.

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

AVERAGE DISCHARGE.--66 years, 35.9 ft³/s; 26,010 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,750 ft³/s, Aug. 24, 1927, gage height, 11.36 ft, present datum, from rating curve extended above 750 ft³/s, on basis of slope-area measurement of peak flow; no flow at times in many years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, unknown, gage height, unknown; minimum daily, 5.2 ft³/s, Aug. 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	20	37	24	22	58	165	97	91	56	11	22
2	20	20	35	23	24	59	450	143	96	40	11	23
3	20	21	36	23	22	58	350	243	92	36	9.0	22
4	19	21	34	22	22	59	250	313	155	36	8.6	20
5	19	21	31	20	22	62	210	263	145	45	6.6	20
6	19	20	31	21	23	73	200	193	143	40	13	18
7	23	20	30	20	22	84	200	138	140	32	10	18
8	24	20	31	18	22	90	190	86	110	33	9.5	18
9	24	20	30	18	22	90	180	65	91	29	8.6	25
10	27	34	30	20	18	91	170	56	70	35	9.0	25
11	44	36	22	21	20	91	160	46	53	25	8.6	23
12	47	39	16	20	20	87	147	40	51	23	8.6	20
13	36	37	16	19	22	80	127	39	62	27	8.1	20
14	36	24	18	19	23	77	102	56	60	27	6.6	20
15	34	24	18	19	26	73	94	80	43	29	6.2	20
16	32	24	18	19	29	70	88	71	52	31	6.2	19
17	34	25	20	19	30	73	88	72	68	31	6.2	20
18	38	27	20	19	31	68	83	62	83	38	5.2	19
19	48	24	20	19	31	69	64	62	68	29	5.7	19
20	36	24	21	20	36	68	54	105	63	27	5.7	20
21	26	26	21	20	38	66	47	107	54	22	5.7	20
22	19	24	21	20	35	68	58	78	63	46	5.7	20
23	19	28	21	20	33	77	77	70	62	37	6.6	21
24	19	28	20	20	37	79	110	70	65	27	22	75
25	19	33	20	19	43	74	92	70	72	20	59	62
26	36	42	20	20	56	78	75	117	83	17	24	63
27	42	37	22	20	74	91	70	99	65	14	15	49
28	31	35	24	20	63	108	56	83	56	14	32	39
29	20	39	24	20	---	127	56	75	70	14	97	37
30	20	42	24	20	---	153	68	70	63	14	51	39
31	20	---	24	22	---	154	---	63	---	12	25	---
TOTAL	872	835	755	624	866	2555	4081	3132	2389	906	506.4	836
MEAN	28.1	27.8	24.4	20.1	30.9	82.4	136	101	79.6	29.2	16.3	27.9
MAX	48	42	37	24	74	154	450	313	155	56	97	75
MIN	19	20	16	18	18	58	47	39	43	12	5.2	18
CAL YR 1985	TOTAL	22537.5	MEAN	61.7	MAX	485	MIN	2.9				
WTR YR 1986	TOTAL	18357.4	MEAN	50.3	MAX	450	MIN	5.2				

SAN JUAN RIVER BASIN

09371000 MANCOS RIVER NEAR TOWAOC, CO

LOCATION.--Lat 37°01'39", long 108°44'27", Ute Indian Reservation, Montezuma County, Hydrologic Unit 14080107, on left bank 700 ft upstream from bridge on U.S. Highway 666, 2.0 mi north of Colorado-New Mexico State line, 6.0 mi upstream from Aztec Creek, and 12 mi south of Towaoc.

DRAINAGE AREA.--526 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Streamflow records, October 1920 to September 1943, February 1951 to current year. Monthly discharge only for some periods, published in WSP 1313. Water-quality data available, August 1969 to June 1972, October 1983 to current year. Sediment data available, April to December 1961.

REVISED RECORDS.--WSP 1733: 1924 (monthly figures only). WDR-CO-83-3: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 5,055.98 ft above National Geodetic Vertical Datum of 1929. See WSP 1713 or 1733 for history of changes prior to Mar. 11, 1954.

REMARKS.--Estimated daily discharges: Nov. 17-21, Dec. 13-27, 30, Jan. 2, 3, 7-15, 17-19, Feb. 7, Apr. 2-7, and Apr. 29 to May 15. Records good except for estimated daily discharges, which are poor. Diversions for irrigation of about 10,000 acres upstream from station. One diversion upstream from station for irrigation of about 100 acres downstream from station. Flow regulated by Jackson Gulch Reservoir, capacity, 10,000 acre-ft since March 1949. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--58 years, 53.6 ft³/s; 38,830 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,300 ft³/s, Oct. 14, 1941, gage height, 7.30 ft, present site and datum, from rating curve extended above 200 ft³/s, on basis of slope-area measurement of peak flow; maximum gage height, 8.50 ft, Sept. 6, 1970; no flow at times in most years.

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Apr. 3	unk	*2000	*5.80	Sept. 24	1300	1080	4.84
May 8	unk	1590	5.40				

Minimum daily discharge, 1.3 ft³/s, Aug. 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27	31	61	27	28	73	211	46	170	35	14	51
2	25	33	46	27	28	67	800	50	169	32	13	62
3	22	29	41	24	28	65	1300	85	175	23	14	45
4	22	28	47	21	25	62	900	100	294	26	11	37
5	24	28	40	15	20	62	540	95	370	41	7.1	34
6	25	28	34	12	18	66	350	100	357	55	6.7	33
7	27	28	33	18	17	67	270	150	339	50	6.4	27
8	34	27	30	18	15	68	233	370	301	40	6.1	24
9	37	27	32	20	19	70	219	300	269	55	4.5	37
10	37	27	28	20	12	77	209	290	243	110	4.3	118
11	105	24	15	20	13	73	203	280	196	57	3.4	75
12	101	24	13	22	16	69	195	230	171	32	3.0	53
13	57	24	15	22	33	64	183	150	169	25	6.6	44
14	51	21	16	22	30	59	165	140	169	17	4.8	37
15	50	15	17	22	33	57	179	180	155	26	2.8	31
16	44	15	19	23	48	58	167	223	135	52	2.5	27
17	40	16	19	20	54	58	169	217	115	46	2.2	24
18	40	15	20	20	49	58	169	195	115	47	2.2	21
19	44	14	19	20	93	65	165	193	126	36	1.7	20
20	43	12	20	21	116	69	189	227	107	36	1.3	20
21	40	12	22	23	123	70	193	259	86	83	3.2	19
22	38	16	22	21	68	80	195	204	72	91	8.7	19
23	36	28	22	21	50	103	197	187	62	89	20	24
24	36	34	22	22	51	128	207	185	58	83	34	393
25	34	36	24	20	61	135	199	214	52	77	21	180
26	33	62	22	16	81	130	183	228	76	48	49	108
27	33	83	22	17	98	149	164	250	75	37	36	82
28	31	51	22	20	86	165	147	245	55	27	41	58
29	33	40	25	22	---	177	110	228	43	21	110	50
30	32	59	30	22	---	208	75	215	38	19	140	54
31	31	---	30	24	---	215	---	199	---	18	54	---
TOTAL	1232	887	828	642	1313	2867	8486	6035	4762	1434	634.5	1807
MEAN	39.7	29.6	26.7	20.7	46.9	92.5	283	195	159	46.3	20.5	60.2
MAX	105	83	61	27	123	215	1300	370	370	110	140	393
MIN	22	12	13	12	12	57	75	46	38	17	1.3	19
AC-FT	2440	1760	1640	1270	2600	5690	16830	11970	9450	2840	1260	3580
CAL YR 1985	TOTAL	28400.31		MEAN	77.8	MAX	501	MIN	.00	AC-FT	56330	
WTR YR 1986	TOTAL	30927.5		MEAN	84.7	MAX	1300	MIN	1.3	AC-FT	61340	

SAN JUAN RIVER BASIN

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09371000 MANCOS RIVER NEAR TOWAOC, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Chemical analyses: October 1983 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	HARD- NESS (MG/L AS CACO3)	HARD- NESS NONCARB WH WAT TOT FLD 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 28...	1000	32	1430	7.8	12.0	590	430	130	64	67
NOV 15...	1330	9.8	1700	7.9	4.5	740	560	160	83	88
DEC 24...	1215	20	1750	7.9	0.0	780	600	170	86	90
JAN 14...	1010	5.6	1800	7.8	0.0	800	600	170	92	97
FEB 21...	1015	158	1330	6.8	3.5	550	400	120	60	85
MAR 20...	1300	95	1530	8.3	8.5	820	630	170	96	130
APR 08...	1100	243	566	7.8	7.0	270	160	64	27	32
MAY 16...	1000	226	382	8.3	11.0	170	80	44	15	16
JUN 17...	1000	110	570	8.2	18.0	250	130	63	22	22
JUL 15...	1030	15	1220	8.8	22.0	550	390	120	60	65
AUG 29...	1445	42	1230	8.0	22.0	620	460	140	66	67
SEP 16...	1000	27	1310	8.2	15.0	590	430	130	64	65

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)	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 DIS- SOLVED (MG/L AS N)
OCT 28...	1	2.4	156	500	11	6.2	870	1.2	75	<0.10
NOV 15...	1	3.0	184	660	13	6.7	1100	1.5	30	0.15
DEC 24...	1	2.7	181	760	11	8.4	1200	1.7	68	0.27
JAN 14...	2	2.6	204	790	13	8.7	1300	1.8	19	0.38
FEB 21...	2	4.2	147	540	12	7.4	920	1.2	391	0.26
MAR 20...	2	3.6	190	790	18	9.7	1300	1.8	343	0.33
APR 08...	0.9	2.1	109	230	4.8	8.6	430	0.59	285	0.12
MAY 16...	0.5	1.4	92	110	2.8	8.5	250	0.34	154	<0.10
JUN 17...	0.6	1.8	114	170	3.2	8.3	360	0.49	107	<0.10
JUL 15...	1	3.5	157	500	16	9.0	870	0.91	27	<0.10
AUG 29...	1	6.0	159	550	8.5	20	950	1.3	108	<0.10
SEP 16...	1	3.1	158	560	8.8	7.7	930	1.3	68	<0.10

SAN JUAN RIVER BASIN

09371400 HARTMAN DRAW AT CORTEZ, CO

LOCATION.--Lat 37°19'26", long 108°36'52", in NW¼NE¼ sec.4, T.35 N., R.16 W., Montezuma County, Hydrologic Unit 14080202, on left bank 600 ft upstream from mouth, 0.30 mi upstream from McElmo Fall, and 1.2 mi southwest of Cortez.

DRAINAGE AREA.--34.0 mi².

PERIOD OF RECORD.--April 1978 to September 1986 (discontinued). Water-quality data available, April 1978 to December 1981.

GAGE.--Water-stage recorder. Elevation of gage is 5,900 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 14-22, Dec. 9 - Jan. 14, 16-23, 26, 27, Feb. 3, 4, 9-12, Apr. 2-7. Records good except those for estimated daily discharges, which are poor. Diversions for irrigation upstream from station.

AVERAGE DISCHARGE.--8 years, 13.9 ft³/s; 10,070 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 172 ft³/s, July 12, 1981, gage height, 4.36 ft; minimum daily, 0.28 ft³/s, Apr. 30 to May 3, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 102 ft³/s at 1600 Sept. 24, gage height, 2.99 ft; maximum gage height, 3.12 ft, Apr. 3; minimum daily discharge, 3.7 ft³/s, May 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	15	29	8.5	12	13	14	3.7	8.0	25	16	26
2	13	14	24	8.5	10	13	30	3.9	14	21	18	20
3	12	14	24	8.5	10	13	60	6.2	13	21	18	17
4	11	14	24	8.5	10	12	38	6.6	20	22	18	15
5	11	14	20	8.0	10	12	26	9.1	17	26	20	14
6	11	15	19	8.0	10	12	20	6.1	13	30	21	13
7	14	15	19	8.5	9.9	12	17	14	11	28	20	12
8	13	16	19	8.0	9.9	12	15	16	11	27	18	15
9	11	17	16	8.5	8.5	13	15	11	14	38	13	27
10	14	17	14	9.0	8.0	16	14	11	25	25	10	57
11	38	18	11	9.5	7.5	17	14	10	16	19	9.7	24
12	25	20	12	8.5	9.0	19	14	9.7	15	16	9.7	17
13	23	20	10	8.5	10	16	13	8.9	15	15	9.7	15
14	31	15	11	8.5	12	15	13	7.3	15	13	10	14
15	23	14	11	8.5	20	15	13	7.8	11	19	8.9	13
16	21	15	13	8.5	30	15	9.7	9.9	9.2	34	8.2	12
17	20	15	13	8.0	22	15	9.0	13	8.1	26	9.4	11
18	20	15	11	8.0	17	16	9.0	11	10	18	9.6	11
19	19	15	11	7.5	19	18	8.7	9.9	8.7	18	9.0	12
20	17	15	11	7.5	18	22	8.0	8.5	6.2	17	9.0	12
21	17	14	11	8.0	17	20	8.3	7.3	6.0	20	9.2	12
22	16	15	11	8.0	16	16	8.3	6.8	6.2	25	9.7	15
23	16	15	11	7.5	15	15	8.3	7.3	5.7	45	11	20
24	16	17	12	8.5	14	15	8.9	8.2	8.1	40	13	66
25	16	30	11	8.2	13	14	7.5	9.9	18	27	12	47
26	16	56	11	7.0	13	14	6.8	9.7	23	23	15	27
27	16	33	10	7.5	13	13	6.1	9.2	17	21	14	16
28	14	24	9.5	8.0	13	13	5.0	9.7	17	20	15	13
29	14	27	10	9.9	---	13	4.7	10	16	18	20	13
30	14	51	12	10	---	14	4.5	11	26	16	27	12
31	14	---	10	11	---	13	---	8.4	---	15	16	---
TOTAL	529	595	440.5	260.6	376.8	456	428.8	281.1	403.2	728	427.1	598
MEAN	17.1	19.8	14.2	8.41	13.5	14.7	14.3	9.07	13.4	23.5	13.8	19.9
MAX	38	56	29	11	30	22	60	16	26	45	27	66
MIN	11	14	9.5	7.0	7.5	12	4.5	3.7	5.7	13	8.2	11
AC-FT	1050	1180	874	517	747	904	851	558	800	1440	847	1190
CAL YR 1985 TOTAL		5141.4		MEAN	14.1	MAX	56	MIN	4.2	AC-FT	10200	
WTR YR 1986 TOTAL		5524.1		MEAN	15.1	MAX	66	MIN	3.7	AC-FT	10960	

SAN JUAN RIVER BASIN

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09371420 McELMO CREEK ABOVE ALKALI CANYON, NEAR CORTEZ, CO

LOCATION.--Lat 37°19'38", long 108°38'55", in SE¼SE¼ sec.31, T.36 N., R.16 W., Montezuma County, Hydrologic Unit 14080202, on left bank 0.9 mi upstream from Alkali Canyon and 4.0 mi southwest of Cortez.

DRAINAGE AREA.--147 mi².

PERIOD OF RECORD.--October 1972 to September 1986 (discontinued).

GAGE.--Water-stage recorder. Elevation of gage is 5,750 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 1 to Nov. 20, Dec. 29 to Jan. 15, Mar. 17 to Apr. 6, and Sept. 27-30. Records good except for estimated daily discharges, which are poor. Diversions from tributaries upstream from station for irrigation. Low flows are mainly return flow from irrigated areas. Water is imported upstream from station from Dolores River basin for irrigation of about 33,000 acres upstream and downstream from station in Montezuma Irrigation District and for municipal use by city of Cortez. A small amount of water is diverted at times to Mancos River basin. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--14 years, 27.4 ft³/s; 19,850 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 864 ft³/s, July 15, 1981, gage height, 6.08 ft, from rating curve extended above 190 ft³/s, on basis of step-backwater method; minimum daily, 1.5 ft³/s, Sept. 21, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 623 ft³/s at 1400 Sept. 24, gage height, 5.27 ft; minimum daily, 12 ft³/s, May 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32	32	60	20	24	18	38	14	28	54	26	102
2	32	28	43	20	24	18	140	12	34	43	26	60
3	30	28	43	20	24	17	190	18	33	40	26	48
4	30	28	41	20	21	16	160	20	48	42	24	40
5	30	28	36	20	19	16	80	28	48	51	28	36
6	30	28	33	20	21	16	48	17	43	61	26	33
7	42	26	31	20	20	16	28	26	41	58	26	31
8	40	28	31	20	17	21	29	41	39	60	25	37
9	30	26	31	20	15	26	29	38	35	93	24	67
10	32	26	26	22	14	29	28	37	55	71	19	145
11	180	26	20	22	13	36	26	35	40	56	19	58
12	65	26	20	20	17	34	22	31	36	50	20	45
13	44	24	19	20	21	27	20	24	42	45	20	40
14	65	20	20	20	26	27	19	22	41	42	21	36
15	38	20	22	22	58	27	19	23	33	52	26	34
16	34	22	24	22	78	26	17	28	24	68	17	31
17	32	22	24	22	49	28	20	38	23	58	17	26
18	34	24	20	23	43	32	19	31	24	84	17	21
19	38	20	20	22	50	40	19	28	25	44	17	22
20	38	20	22	22	60	44	18	26	24	40	18	21
21	38	22	22	21	48	38	17	23	21	43	20	21
22	36	20	22	17	31	36	25	24	22	56	22	25
23	34	26	24	15	24	34	27	28	21	117	26	36
24	32	31	24	26	23	30	31	30	24	88	33	260
25	32	56	24	17	22	28	32	29	38	62	45	98
26	32	120	22	16	22	26	35	28	58	55	47	73
27	36	72	22	17	20	26	38	28	45	50	35	48
28	32	46	20	17	19	26	36	28	42	47	38	36
29	30	50	22	19	---	26	16	29	39	40	60	34
30	30	98	22	19	---	26	13	28	48	28	79	32
31	32	---	20	21	---	30	---	28	---	26	46	---
TOTAL	1260	1043	830	622	823	840	1239	840	1074	1724	893	1596
MEAN	40.6	34.8	26.8	20.1	29.4	27.1	41.3	27.1	35.8	55.6	28.8	53.2
MAX	180	120	60	26	78	44	190	41	58	117	79	260
MIN	30	20	19	15	13	16	13	12	21	26	17	21
AC-FT	2500	2070	1650	1230	1630	1670	2460	1670	2130	3420	1770	3170
CAL YR 1985	TOTAL	11514		MEAN	31.5	MAX	180	MIN	12	AC-FT	22840	
WTR YR 1986	TOTAL	12784		MEAN	35.0	MAX	260	MIN	12	AC-FT	25360	

SAN JUAN RIVER BASIN

09371492 MUD CREEK AT HIGHWAY 32 NEAR CORTEZ, CO

LOCATION.--Lat 37°18'46", long 108°39'38", in SW¼ sec.6, T.35 N., R.16 W., Montezuma County, Hydrologic Unit 14080202, on left bank 1 mi upstream from mouth, and 4.5 mi southwest of Cortez.

DRAINAGE AREA.--33.6 mi².

PERIOD OF RECORD.--October 1981 to September 1986 (discontinued).

GAGE.--Water-stage recorder. Elevation of gage is 5,765 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharge: Nov. 22, Dec. 13-Jan. 13, 22, 25-29, Feb. 5, 9-20, June 7-17, 23-30, July 1-14, Sept. 26-30. Records good except for estimated daily discharges, which are poor. Several observations of specific conductance and water temperature were obtained, and are published elsewhere in this report.

AVERAGE DISCHARGE.--5 years, 8.89 ft³/s, 6,440 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 598 ft³/s, Aug. 24, 1982, gage height, 8.53 ft; from rating curve extended above 36 ft³/s, on basis of slope-area measurement; minimum daily, 1.2 ft³/s, Feb. 13-14, 1982.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 77 ft³/s at 2200 Aug. 29, gage height, 3.12 ft, minimum daily, 2.1 ft³/s, Nov. 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	2.3	5.7	2.4	2.9	2.7	3.2	5.4	20	15	9.7	31
2	11	2.2	4.4	2.4	2.7	2.7	15	5.4	16	17	8.7	30
3	10	2.2	4.4	2.4	2.7	2.7	12	6.4	15	15	8.9	22
4	9.4	2.2	4.4	2.4	2.7	2.7	5.5	6.9	16	14	8.7	16
5	10	2.2	3.8	2.4	2.4	2.7	3.5	5.0	13	15	9.9	15
6	10	2.2	3.7	2.2	2.6	2.6	3.0	4.8	14	17	11	15
7	11	2.4	3.7	2.2	2.7	2.4	2.9	6.4	14	19	12	15
8	9.9	3.0	3.5	2.2	2.6	2.4	2.9	7.8	14	19	12	14
9	9.4	3.0	3.8	2.4	2.6	2.7	2.9	7.5	13	20	12	17
10	8.4	3.0	3.5	2.6	2.6	2.9	2.9	6.2	17	28	15	25
11	28	3.2	3.0	2.6	3.0	3.5	2.7	6.2	15	22	16	20
12	9.4	3.7	2.7	2.4	3.0	3.2	3.0	5.8	13	20	17	14
13	4.2	3.5	2.4	2.4	2.6	2.9	3.5	6.2	13	18	18	14
14	5.0	3.4	2.4	2.4	3.2	2.7	3.4	5.8	12	17	17	14
15	3.0	3.0	2.6	2.4	5.5	2.7	3.5	6.9	11	15	16	14
16	2.7	2.6	2.8	2.3	9.5	2.7	3.4	6.2	10	20	17	15
17	3.0	2.9	2.6	2.4	7.0	3.0	3.4	9.1	9.5	25	17	13
18	3.0	3.2	2.4	2.3	4.8	4.6	3.7	10	13	22	17	14
19	3.2	2.2	2.4	2.4	3.6	4.4	3.7	8.9	14	20	17	14
20	3.2	2.2	2.4	2.6	2.8	3.5	3.0	7.8	13	20	16	14
21	3.0	2.3	2.4	2.4	2.7	3.0	2.9	7.5	13	28	16	14
22	2.9	2.2	2.4	2.2	2.7	2.7	2.6	7.8	16	20	16	14
23	2.7	2.1	2.6	2.6	2.7	2.7	2.7	9.4	13	23	15	16
24	2.3	2.3	2.8	2.6	2.7	2.7	2.7	9.2	11	24	17	36
25	2.3	7.3	2.8	2.2	2.7	2.7	2.9	8.0	12	15	16	24
26	2.2	10	2.6	2.4	2.7	2.6	5.2	7.5	16	14	21	20
27	2.2	4.5	2.6	2.4	2.7	2.6	5.8	9.5	19	13	17	17
28	2.2	3.5	2.4	2.2	2.7	2.6	5.8	8.4	17	12	18	15
29	2.2	6.0	2.6	2.4	---	2.7	5.8	8.8	15	12	30	13
30	2.2	20	2.6	2.6	---	2.7	5.4	9.2	13	10	34	12
31	2.4	---	2.6	2.9	---	2.7	---	12	---	9.9	30	---
TOTAL	191.4	114.8	95.0	74.7	93.1	89.4	128.9	232.0	420.5	558.9	505.9	527
MEAN	6.17	3.83	3.06	2.41	3.32	2.88	4.30	7.48	14.0	18.0	16.3	17.6
MAX	28	20	5.7	2.9	9.5	4.6	15	12	20	28	34	36
MIN	2.2	2.1	2.4	2.2	2.4	2.4	2.6	4.8	9.5	9.9	8.7	12
AC-FT	380	228	188	148	185	177	256	460	834	1110	1000	1050
CAL YR 1985	TOTAL	3244.0	MEAN	8.89	MAX	32	MIN	1.8	AC-FT	6430		
WTR YR 1986	TOTAL	3031.6	MEAN	8.31	MAX	36	MIN	2.1	AC-FT	6010		

SAN JUAN RIVER BASIN

09371500 McELMO CREEK NEAR CORTEZ, CO

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LOCATION.--Lat 37°19'23", long 108°40'22", in NE¼ sec.1, T.35N., R.71 W., Montezuma County, Hydrologic Unit 14080202, on left bank 150 ft downstream from mouth of Mud Creek, and 4 mi southwest of Cortez.

DRAINAGE AREA.--230 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1926 to September 1929, April 1940 to September 1945, October 1950 to September 1954 (monthly discharge only for some periods, published in WSP 1313), January 1982 to current year.

REVISED RECORDS.--WSP 1313: 1927, 1927 (M).

GAGE.--Water-stage recorder. Elevation of gage is 5,700 ft above National Geodetic Vertical Datum of 1929, by barometer. Prior to Sept. 30, 1929, at site 3 mi downstream at different datum. Mar. 29, 1940 to Nov. 2, 1941, at site 150 ft upstream at datum 4.20 ft, higher. Nov. 3, 1941 to Sept. 30, 1945, at present site at datum 4.00 ft, higher. Oct. 1, 1950 to Sept. 30, 1954, at present site at datum 2.50 ft, higher, Jan. 1, 1982, to present, at former site at same datum.

REMARKS.--Estimated daily discharges: Oct. 24-27, Nov. 14-23, Dec. 10-31, Jan. 1-15, 17-20, 26, 27, Feb. 4, 5, 9-12, Mar. 26-31, Apr. 1-6, July 30, 31, Aug. 1-31, Sept. 1-15. Records good except for estimated daily discharges, which are poor. Diversions for irrigation of about 200 acres upstream from station. Flow is mainly return flows from irrigated lands for Montezuma Irrigation District (water imported from Dolores River basin).

AVERAGE DISCHARGE.--16 years (water years 1927-29, 1941-45, 1951-54, 1983-86), 55.3 ft³/s; 40,060 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,560 ft³/s, Sept. 9, 1927, gage height, 6.45 ft, from rating curve extended above 240 ft³/s, on basis of slope-area measurement at gage height, 5.72 ft; minimum not determined.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 990 ft³/s at 1500 Sept. 24, gage height, 7.27 ft; minimum daily, 22 ft³/s, Feb. 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	55	49	84	30	36	32	55	29	66	102	65	240
2	51	45	59	30	35	32	210	32	74	90	65	160
3	49	44	63	30	35	31	280	44	73	86	65	120
4	47	45	59	30	34	29	230	47	106	88	65	100
5	46	45	48	30	32	29	130	50	95	104	70	90
6	47	44	47	30	38	29	70	39	89	112	65	80
7	67	41	45	30	32	29	39	69	85	108	65	80
8	64	43	44	30	30	30	41	88	84	117	60	95
9	46	39	44	32	26	36	41	76	82	175	55	160
10	48	39	40	34	24	44	39	80	105	138	48	320
11	272	39	30	34	22	50	37	73	84	120	48	170
12	97	41	30	30	28	52	35	67	80	110	50	120
13	70	41	28	32	33	39	33	54	80	98	50	100
14	101	34	30	32	39	38	31	60	73	100	55	90
15	60	32	34	34	78	39	31	61	68	122	65	85
16	53	34	36	33	123	38	31	65	64	151	48	76
17	52	34	34	30	79	42	32	82	53	144	42	62
18	53	36	30	30	60	48	33	73	63	155	42	68
19	60	32	30	28	70	58	31	68	77	116	42	71
20	59	32	32	30	76	62	29	62	72	110	46	71
21	60	34	32	33	62	55	29	50	69	127	50	70
22	59	32	32	30	44	50	35	52	65	146	55	79
23	56	38	34	30	39	48	37	52	65	236	65	95
24	50	44	36	38	37	42	41	59	69	221	75	456
25	50	89	36	28	36	39	42	56	98	184	100	204
26	50	177	34	26	36	38	49	52	119	173	110	143
27	55	99	34	28	34	36	52	52	100	162	100	83
28	51	63	32	29	32	36	48	52	92	162	90	67
29	47	78	34	33	---	36	33	53	80	149	140	66
30	47	158	34	32	---	36	29	54	98	100	190	59
31	49	---	32	35	---	40	---	55	---	65	120	---
TOTAL	1971	1601	1217	961	1250	1243	1853	1806	2428	4071	2206	3680
MEAN	63.6	53.4	39.3	31.0	44.6	40.1	61.8	58.3	80.9	131	71.2	123
MAX	272	177	84	38	123	62	280	88	119	236	190	456
MIN	46	32	28	26	22	29	29	29	53	65	42	59
AC-FT	3910	3180	2410	1910	2480	2470	3680	3580	4820	8070	4380	7300
CAL YR 1985	TOTAL	21379	MEAN	58.6	MAX	272	MIN	19	AC-FT	42410		
WTR YR 1986	TOTAL	24287	MEAN	66.5	MAX	456	MIN	22	AC-FT	48170		

SAN JUAN RIVER BASIN

09371500 McELMO CREEK NEAR CORTEZ, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Jan. 1, 1982 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Feb. 6, 1982 to current year.

WATER TEMPERATURE: Feb. 6, 1982 to current year.

INSTRUMENTATION.--Water-quality monitor since January 1982.

REMARKS.--Daily maximum and minimum specific conductance data available in district office.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum 4,180 microsiemens Jan. 31, 1985; minimum, 847 microsiemens Aug. 24, 1982.

WATER TEMPERATURE: Maximum 26.5°C July 18,19 1985; minimum, 0.0°C many days during winter months.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum 3,810 microsiemens Feb. 10; minimum recorded, 1,400 microsiemens Jan. 27 (but may have been less during periods of missing record May 21 to Sept. 17).

WATER TEMPERATURE: Maximum recorded, 24.0°C June 27 (but may have been exceeded during period of missing record June 28 to Sept.17); minimum 0.0°C, many days during December and January.

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25 DEG. C, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1950	3060	3180	3000	2780	3060	2920	2730	---			---
2	2030	3050	3230	2980	2840	3080	2940	2200	---			---
3	2070	3010	3210	2970	2830	3100	2720	2290	---			---
4	2110	3010	3270	2970	2480	3130	2600	2160	---			---
5	2150	2980	3250	2980	2400	3140	2790	1930	---			---
6	2160	3010	3260	2790	2480	3130	2930	2040	---			---
7	2140	2950	3270	2940	2740	3140	3040	1950	---			---
8	2220	2820	3270	2720	2840	3130	2990	1800	---			---
9	2300	3010	3220	2370	2800	2850	2870	1750	---			---
10	2440	2960	3170	2970	2890	2960	2770	1650	---			---
11	2460	2930	3060	2920	2630	3060	2790	1650	---			---
12	2570	3030	3030	2890	2690	3120	2730	1590	---			---
13	2610	3110	2980	2890	2930	3180	2820	1640	---			---
14	2620	3120	2910	2890	2880	3100	2860	1630	---			---
15	2710	3130	2970	2710	2750	3030	2810	1630	---			---
16	2740	3130	3020	2680	2610	3060	2880	1530	---			---
17	2760	3200	2890	2650	2580	2980	2860	1600	---			---
18	2790	3170	2940	2650	2830	2970	2800	1600	1480			1830
19	2870	3070	3090	2660	2760	3160	2980	1590	1540			1840
20	2830	2970	3130	2700	2750	3100	2870	1550	1510			1850
21	2850	2880	3140	2710	2560	3020	2920	---	1490			1860
22	2860	2780	3130	2650	2750	2990	2890	---	1460			1880
23	2890	2980	3110	2770	2930	2860	2790	---	1460			2100
24	2900	3420	3090	2660	3030	2840	2690	---	1450			2000
25	2890	3430	3090	2490	3040	2920	2690	---	1480			1890
26	2900	3220	3110	2640	3060	2980	2440	---	1510			1830
27	2920	3190	3050	2410	3060	3010	2350	---	1440			1950
28	2900	3240	3070	2620	3060	3030	2260	---	---			1970
29	2920	3290	3040	2700	---	3060	2510	---	---			1950
30	2930	3140	2970	2750	---	3070	2730	---	---			1990
31	2970	---	2920	2790	---	3060	---	---	---			---
MEAN	2600	3080	3100	2760	2790	3040	2770					

SAN JUAN RIVER BASIN

09371500 McELMO CREEK NEAR CORTEZ, CO--Continued

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TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	13.0	7.0	9.0	5.0	5.0	3.0	1.0	.0	5.5	2.0	10.0	3.0
2	12.5	7.5	8.5	4.0	5.0	3.0	1.5	.0	6.5	3.0	10.0	3.5
3	14.0	7.5	9.5	5.0	6.0	4.5	2.0	.5	5.0	2.5	11.5	4.5
4	14.0	8.5	9.5	5.5	5.0	3.0	1.5	.0	4.0	.5	11.5	4.5
5	13.5	8.0	10.0	7.5	4.0	1.5	.0	.0	2.5	.5	11.5	4.5
6	13.0	8.0	8.0	5.0	4.5	2.0	.0	.0	1.5	.5	11.5	4.0
7	14.0	11.5	7.0	3.0	3.5	1.0	1.0	.0	2.0	.5	12.0	4.5
8	12.5	10.5	8.5	4.5	2.5	1.0	.0	.0	2.5	.5	9.5	5.5
9	13.0	9.5	8.0	5.5	1.0	.0	.0	.0	2.5	.5	8.0	5.5
10	14.0	9.5	8.0	5.0	.5	.0	.0	.0	1.0	.5	6.0	4.0
11	12.5	10.5	8.0	6.0	.0	.0	.0	.0	.5	.5	8.0	4.0
12	11.5	8.5	7.5	4.5	.0	.0	.0	.0	.5	.5	10.0	4.5
13	10.5	9.0	4.5	2.5	.0	.0	.0	.0	2.0	.5	10.0	5.0
14	10.5	8.0	2.5	.5	.0	.0	.0	.0	4.5	1.0	7.5	4.5
15	10.5	6.0	3.5	1.5	.0	.0	.5	.0	3.5	2.0	10.5	4.0
16	10.5	6.0	3.5	.5	.0	.0	1.0	.0	4.0	1.5	6.5	5.0
17	10.0	8.0	5.0	3.0	.0	.0	1.5	.0	4.0	2.0	5.0	2.0
18	13.0	9.0	3.5	1.5	1.5	.0	2.0	.0	6.5	3.0	8.0	1.0
19	12.0	8.5	1.0	.5	.0	.0	3.5	.0	7.5	5.0	8.0	2.0
20	12.0	8.0	.5	.5	.0	.0	4.0	.0	8.0	5.5	9.5	3.0
21	12.0	8.0	1.0	.5	.0	.0	3.0	.0	5.0	3.0	11.0	4.5
22	11.5	9.0	.5	.5	.0	.0	3.0	.0	6.0	1.5	12.0	5.0
23	11.0	6.5	2.5	.5	.0	.0	4.0	.5	8.5	2.5	13.0	6.0
24	11.5	6.0	4.5	2.5	.0	.0	3.0	.0	9.5	4.0	11.5	7.0
25	11.5	6.5	4.5	3.5	.0	.0	2.0	.5	10.5	4.0	13.5	6.0
26	12.0	7.5	4.5	3.5	.0	.0	1.5	.5	11.0	5.0	14.5	6.5
27	12.0	7.0	5.0	3.5	.0	.0	2.0	.5	11.0	5.0	15.5	7.0
28	12.0	9.0	4.0	3.0	.0	.0	3.0	.5	9.5	3.0	16.5	7.5
29	10.5	8.5	5.0	4.0	.0	.0	4.5	.5	---	---	15.0	9.0
30	11.0	7.0	4.5	3.0	.5	.0	4.5	1.0	---	---	17.5	9.0
31	9.5	7.5	---	---	1.0	.0	6.0	3.5	---	---	15.5	10.0
MONTH	14.0	6.0	10.0	.5	6.0	.0	6.0	.0	11.0	.5	17.5	1.0
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	12.0	9.5	19.5	11.0	20.0	14.0			---	---		
2	9.5	5.5	20.5	11.5	19.0	14.5			---	---		
3	7.5	4.5	21.0	13.0	20.5	15.5			---	---		
4	8.5	5.0	19.5	14.0	22.5	15.5			---	---		
5	12.5	6.0	17.5	10.0	22.5	17.0			---	---		
6	15.0	8.0	13.5	10.5	23.5	17.0			---	---		
7	15.0	11.0	10.5	7.5	22.0	15.5			---	---		
8	15.5	8.0	11.5	7.5	20.0	15.0			---	---		
9	16.0	8.5	12.5	8.5	17.5	14.5			---	---		
10	15.0	8.5	16.0	7.5	19.5	13.0			---	---		
11	16.0	9.5	18.0	10.0	21.5	13.5			---	---		
12	13.5	9.0	19.0	10.5	22.0	14.5			---	---		
13	12.5	8.0	19.5	10.5	22.5	15.0			---	---		
14	13.0	4.5	18.5	11.5	22.5	14.5			---	---		
15	17.0	8.0	16.5	12.5	22.5	14.5			---	---		
16	13.5	10.5	14.5	10.5	23.5	14.5			---	---		
17	11.0	7.0	17.0	10.0	19.0	16.0			---	---		
18	7.5	4.0	19.0	10.5	22.5	18.0					13.0	9.5
19	14.0	4.0	21.0	11.5	23.0	16.0					13.0	9.0
20	16.5	7.0	21.5	13.0	23.0	15.5					12.5	10.5
21	20.0	9.5	18.5	14.0	22.5	14.0					14.0	10.5
22	16.5	11.5	20.5	12.5	22.0	14.0					13.0	12.0
23	16.0	12.0	20.0	12.5	22.0	15.5					13.0	11.5
24	17.5	11.0	18.5	13.5	18.5	16.5					12.5	9.0
25	13.0	10.0	21.0	12.5	17.5	15.5					10.0	8.5
26	13.5	8.5	21.0	13.5	22.5	15.5					11.0	8.5
27	14.5	6.0	21.5	13.0	24.0	17.0					12.5	8.0
28	17.5	8.0	22.0	14.0	---	---					14.0	9.5
29	19.5	10.0	20.5	14.0	---	---					12.5	10.5
30	20.0	10.0	19.0	14.0	---	---					11.5	8.0
31	---	---	19.0	13.5	---	---					---	---
MONTH	20.0	4.0	22.0	7.5								

SAN JUAN RIVER BASIN

09372000 McELMO CREEK NEAR COLORADO-UTAH STATE LINE

LOCATION.--Lat 37°19'27", long 109°00'54", in NE¼ sec.2, T.35 N., R.20 W., Montezuma County, Hydrologic Unit 14080202, on right bank 1.5 mi upstream from Colorado-Utah State line, 2.0 mi upstream from Yellowjacket Creek, and 2.0 mi west of former town of McElmo.

DRAINAGE AREA.--346 mi².

PERIOD OF RECORD.--Streamflow records, March 1951 to current year. Water-quality data available, November 1977 to September 1981.

REVISED RECORDS.--WSP 1925: 1951-52 (M), 1957 (M). WRD Colo. 1972: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 4,890 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 14-19, 21-23, Dec. 11-15, 18-22, 28, Dec. 30 to Jan. 4, Jan. 8, 10, 12, 17-20, July 26-31, Aug. 1 to Sept. 1, and Sept. 10-30. Records good except for estimated daily discharges, which are poor. Diversions for irrigation of about 1,780 acres upstream from station. One diversion upstream from station for irrigation of about 60 acres downstream from station. Part of flow is return water from irrigated lands of Montezuma Irrigation District (water imported from Dolores River basin). Several observations of specific-conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--35 years, 48.3 ft³/s; 34,990 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,040 ft³/s, Aug. 7, 1967, gage height, 7.58 ft, from floodmark in gage well, from rating curve extended above 2,100 ft³/s; maximum gage height, 8.13 ft, Sept. 6, 1970; minimum daily discharge, 0.08 ft³/s, Sept. 9, 10, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 620 ft³/s, and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Sept. 9	1800	2,700	7.98	Sept. 24	unknown	*2,850	*a8.11

Minimum daily discharge, 12 ft³/s, May 1.

a-Outside highwater mark, by levels.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	84	64	142	36	47	24	28	12	40	107	75	280
2	78	58	92	36	47	23	193	13	57	87	75	146
3	76	53	75	36	46	22	304	23	51	79	75	141
4	71	51	81	36	51	21	202	26	78	79	75	113
5	68	53	70	34	44	21	114	25	86	97	80	97
6	70	51	61	35	53	20	76	27	83	111	75	86
7	81	49	58	37	49	19	60	40	84	97	75	81
8	100	50	53	36	40	19	53	96	97	107	70	81
9	79	49	52	37	37	24	51	78	81	207	65	659
10	70	44	50	42	35	34	50	76	104	176	55	800
11	292	46	34	43	30	36	47	73	91	123	55	320
12	191	49	36	38	39	50	43	59	79	104	55	220
13	124	50	32	40	51	32	39	40	76	83	60	180
14	143	42	34	39	50	26	34	37	62	62	65	170
15	96	38	34	46	74	27	28	42	63	98	75	150
16	76	40	42	43	161	27	29	50	54	123	55	140
17	73	40	40	40	139	32	30	71	37	119	48	110
18	70	42	36	40	80	56	32	78	40	131	48	120
19	70	40	36	38	79	56	32	57	57	133	48	130
20	75	40	38	38	76	56	28	43	50	105	50	130
21	68	42	38	43	71	49	21	35	43	111	55	130
22	65	40	38	40	47	40	23	30	50	116	65	140
23	64	55	40	39	35	40	27	29	43	210	75	170
24	61	62	43	44	29	35	28	28	44	223	90	900
25	62	85	43	40	28	29	27	35	67	152	120	470
26	62	223	40	35	27	26	35	30	138	140	130	260
27	64	163	39	40	27	22	44	24	113	140	110	180
28	62	98	38	40	25	21	39	24	95	140	100	140
29	61	89	40	40	---	21	28	24	84	130	160	120
30	62	182	40	42	---	21	18	23	86	110	220	120
31	62	---	38	42	---	21	---	24	---	75	140	---
TOTAL	2680	1988	1533	1215	1517	950	1763	1272	2133	3775	2544	6784
MEAN	86.5	66.3	49.5	39.2	54.2	30.6	58.8	41.0	71.1	122	82.1	226
MAX	292	223	142	46	161	56	304	96	138	223	220	900
MIN	61	38	32	34	25	19	18	12	37	62	48	81
AC-FT	5320	3940	3040	2410	3010	1880	3500	2520	4230	7490	5050	13460
CAL YR 1985	TOTAL	23771	MEAN	65.1	MAX	292	MIN	19	AC-FT	47150		
WTR YR 1986	TOTAL	28154	MEAN	77.1	MAX	900	MIN	12	AC-FT	55840		

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 8 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 NW $\frac{1}{4}$ sec.21, T.6 N., R.75 W., in Platte River basin. Two collection ditches beginning at headgates located in sec.28, T.5 N., R.76 W., and sec.29, T.6 N., R.75 W., intercept all tributaries upstream on each side of the Colorado River and converge at La Poudre Pass.

REVISIONS (WATER YEARS).--WSP 1313: 1912-27.

09013000 Alva B. Adams tunnel diverts water from Grand Lake and Shadow Mountain Lake in NW $\frac{1}{4}$ sec.9, T.3 N., R.75 W., in Colorado River basin, to Lake Estes (Big Thompson River) in sec.30, T.5 N., R.72 W., in Platte River basin. For daily discharge, see elsewhere in this report.

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 SE $\frac{1}{4}$ sec.14, T.13 S., R.69 W., in the Arkansas River basin. Collection conduits extending from the right bank of Crystal Creek (tributary to Spruce Creek) in sec.14, T.7 S., R.78 W., right bank of Spruce Creek in sec.23, T.7 S., R.78 W., right bank of McCullough Gulch in sec.26, T.7 S., R.78 W., right bank of Monte Cristo Creek in SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec.2, T.8 S., R.78 W., left bank of Bemrose Creek in SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.6, T.8 S., R.77 W., and intercepting intermediate tributaries, transport diversions to north portal of the tunnel.

REVISIONS (WATER YEARS).--WDR CO-86-1, WDR CO-86-2: 1984, 1985.

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 SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec.4, T.7 S., R.74 W., in Platte River basin. Figures include a small amount of ground-water inflow between Dillon Reservoir and east portal of tunnel.

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.

09077160 Charles H. Boustead tunnel diverts water from the main stem and tributaries of Fryingpan River (tributary to Roaring Fork River), in Colorado River basin, to Lake Fork in sec.10, T.9 S., R.81 W., in Arkansas River basin. Water is transported to west portal of tunnel (at lat 39°14'44", long 106°31'47"), by a series of collection conduits extending between headgates on right bank of Sawyer Creek at lat 39°15'58", long 106°38'19" and right bank of Fryingpan River at lat 39°14'40", long 106°31'49", and intercepting intermediate tributaries.

09077500 Busk-Ivanhoe tunnel diverts water from Ivanhoe Lake (Ivanhoe Creek), tributary to Fryingpan River in sec.13, T.9 S., R.82 W., in Roaring Fork River basin, to Busk Creek (tributary to Lake Fork) in sec. 20, T.9 S., R.81 W., in Arkansas River basin.

DIVERSIONS, IN ACRE-FEET, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
(SOME PREVIOUSLY UNPUBLISHED DIVERSIONS TO THE ARKANSAS RIVER BASIN ARE INCLUDED IN THIS TABLE)

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	11,420	8,800	3,140	560
Water year 1986, 23,940												
09013000	Diversions during water year 1986 for this tunnel will be published in a subsequent report.											
09021500	0	0	0	0	0	0	0	0	216	505	138	55
Water year 1986, 914												
09050590	0	0	0	0	0	0	0	980	0	0	0	0
Water year 1986, 980												
TO ARKANSAS RIVER BASIN												
09042000	1,870	0	0	0	0	0	0	982	1,730	765	783	1,360
Water year 1984, 7,490												
09042000	1,080	0	0	0	0	0	0	833	2,250	1,140	956	1,220
Water year 1985, 7,470												
09042000	178	0	0	0	0	0	0	961	5,560	2,540	1,800	1,840
Water year 1986, 12,880												
09063700	Diversions during water year 1986 for this tunnel will be published in a subsequent report.											
09077160	2,070	421	0	0	0	0	63	16,420	36,460	14,820	1,540	0
Water year 1985, 71,790												
09077160	0	0	0	0	0	0	0	4,190	21,430	4,880	1,320	0
Water year 1986, 31,820												
09077500	0	0	0	0	0	0	0	547	4,170	3,520	993	373

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
	09115000 Larkspur ditch	09351000 Pine River-Weminuche Pass ditch
		09351500 Weminuche Pass 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 simultaneous discharge of a nearby stream where continuous records are available, will give a picture of the low-flow potentiality of the stream. The column headed "Period of record" shows the water years in which measurements were made at the same, or practically the same, site.

DISCHARGE MEASUREMENTS MADE AT LOW-FLOW PARTIAL-RECORD STATIONS DURING WATER YEAR 1986

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	1965-86	10-08-85 8-05-86 8-26-86	0.22 .08 .18

*Also a crest-stage partial-record station.

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

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 1986

Station no.	Station name	Location	Drainage area (mi ²)	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	-	1965-86	10-8-85	1.06	0.22
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	-	1979-86	6-5-86	9.79	1,020
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	-	1979-86	unknown	10.77	100
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	-	1979-86	unknown	unknown	unknown
SAN JUAN RIVER BASIN								
09361400	Junction Creek near Durango, CO	Lat 37°20'04", long 107°54'35", sec.36, T.36N., R.10 W., La Plata County, on left bank 4.5 mi upstream from mouth and 4.5 mi northwest of Durango.	26.3	-	1959-65, 1972, 1979-86	5-6-86	3.40	510

*Also a low-flow partial-record station.

ANALYSES OF WATER QUALITY SAMPLES COLLECTED AT PARTIAL-RECORD STATIONS

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GREEN RIVER BASIN

Water-quality partial-record stations are particular sites where chemical-quality, biological and/or sediment data are collected systematically over a period of years for use in hydrologic analysis.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	PH (STAND- ARD UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY)
401540106502801 L. MORRISON C AB DAM SITE NR OAK CREEK, CO (LAT 40 15 40N LONG 106 50 28W)								
MAR 1986								
21...	1210	1.6	250	7.70	6.0	9.7	82	0.35
JUN								
10...	1210	3.2	154	8.10	11.0	9.6	267	2.3
JUL								
16...	1150	0.43	256	8.20	18.0	--	7	0.01
31...	1100	0.34	211	8.30	14.5	8.1	7	0.01
AUG								
19...	0945	0.16	290	8.40	10.5	8.6	20	0.01
SEP								
04...	1115	0.4	294	8.40	12.5	9.0	11	0.01
401608106513001 MIDDLE C AB DAM SITE NR OAK CREEK, CO (LAT 40 16 08N LONG 106 51 30W)								
MAR 1986								
21...	1115	0.28	428	8.00	2.0	9.0	11	0.01
JUN								
10...	1115	0.22	450	8.10	9.0	8.5	131	0.08
JUL								
16...	1055	0.16	452	8.30	16.5	--	33	0.01
31...	1036	0.09	420	8.20	8.0	10.8	7	0.0
AUG								
19...	0930	0.1	439	8.30	10.5	9.0	86	0.02
SEP								
04...	1045	0.08	440	8.40	7.5	9.6	51	0.01
401609106525201 YAMPA R AB DAM SITE NR OAK CREEK, CO (LAT 40 16 09N LONG 106 52 52W)								
MAR 1986								
21...	1030	63	511	8.20	3.0	11.2	63	11
JUN								
10...	1000	369	365	8.00	9.0	9.6	157	156
JUL								
16...	1000	149	439	8.20	15.5	--	53	21
31...	1400	142	377	8.60	16.5	8.8	15	5.8
AUG								
19...	1330	107	322	8.50	17.5	8.6	22	6.4
SEP								
04...	1345	94	347	8.60	15.5	9.6	26	6.6
401729106514601 MARTIN C AB DAM SITE NR OAK CREEK, CO (LAT 40 17 29N LONG 106 51 46W)								
MAR 1986								
21...	1245	0.15	313	7.70	4.0	9.3	16	0.01
JUN								
10...	1510	1.1	220	7.70	14.5	7.3	2	0.01
JUL								
16...	1400	0.07	--	--	16.5	--	41	0.01
31...	1125	0.02	284	7.90	13.5	7.2	11	0.0
AUG								
19...	1315	0.13	--	--	--	--	19	0.01
SEP								
04...	1330	0.1	423	7.80	13.5	8.2	19	0.01

SUPPLEMENTAL WATER-QUALITY DATA AT A MEASURING SITE

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE (DEG C)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE (DEG C)
402530107391500 WILLIAMS FORK ABOVE COAL MINE NEAR HAMILTON, CO. (LAT 40 25 30N LONG 107 39 15)									
OCT 1985					SEP 1986				
04...	0945	75	746	7.5	02...	1320	96	630	17.5
25...	1225	84	762	8.0	09...	1410	81	640	17.5
NOV					16...	1325	72	654	16.5
20...	1110	66	911	0.0					
AUG 1986									
18...	1430	71	627	22.0					
402537107394400 YAMPA RIVER BELOW COAL MINE NEAR CRAIG, CO. (LAT 40 25 37N LONG 107 39 44W)									
OCT 1985					SEP 1986				
04...	1505	405	555	11.5	02...	1525	432	--	19.0
25...	1525	555	600	9.5	09...	1600	382	505	18.0
NOV					16...	1545	422	470	17.0
19...	1405	463	776	0.5					
AUG 1986									
18...	1730	361	446	24.0					

SUPPLEMENTAL WATER-QUALITY DATA FOR GAGING STATIONS

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DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	STREAM- FLOW, INSTAN- TANEOUS (CFS)	DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	STREAM- FLOW, INSTAN- TANEOUS (CFS)
09010500 COLORADO R BELOW BAKER GULCH, NR GRAND LAKE, CO. (LAT 40 19 33N LONG 105 51 22)									
OCT 1985					MAY 1986				
02...	0950	80	2.0	20	21...	1510	60	9.5	242
NOV					JUN				
21...	0935	75	0.0	15	13...	1410	48	7.0	384
MAR 1986					JUL				
04...	1040	85	0.0	9.6	15...	1010	54	9.0	147
APR					AUG				
10...	0930	70	3.0	31	27...	1015	72	10.0	30
09011000 COLORADO RIVER NEAR GRAND LAKE, CO. (LAT 40 13 08N LONG 105 51 25W)									
OCT 1985					MAY 1986				
02...	1205	78	6.0	36	21...	1745	52	9.5	345
NOV					JUN				
21...	1235	80	0.0	29	13...	1145	48	7.0	453
JAN 1986					JUL				
16...	1530	92	0.0	18	15...	1330	60	19.0	63
MAR					AUG				
04...	1615	95	0.0	21	27...	1230	77	14.0	38
APR									
10...	1120	75	3.0	55					
09019500 COLORADO RIVER NEAR GRANBY, CO. (LAT 40 07 15N LONG 105 54 00W)									
OCT 1985					JUN 1986				
02...	1730	70	11.0	23	12...	1725	85	8.0	84
APR 1986					JUL				
10...	1630	105	3.0	38	16...	1300	64	11.0	261
MAY					AUG				
22...	0900	70	6.5	81	27...	1545	56	20.0	52
09022000 FRASER RIVER AT UPPER STA, NEAR WINTER PARK, CO. (LAT 39 50 45N LONG 105 45 05)									
OCT 1985					JUN 1986				
01...	1120	75	--	8.3	10...	1210	58	2.0	87
NOV					JUL				
20...	1135	64	0.5	4.5	14...	1215	50	9.0	33
MAR 1986					AUG				
03...	1145	120	0.0	2.4	25...	1320	65	8.5	12
APR									
11...	1340	120	1.0	4.0					
09024000 FRASER RIVER NEAR WINTER PARK, CO. (LAT 39 54 00N LONG 105 46 34W)									
OCT 1985					MAY 1986				
01...	1400	110	7.0	4.0	19...	1515	80	9.0	19
NOV					JUN				
20...	1400	100	0.5	3.9	11...	1610	72	9.5	63
JAN 1986					JUL				
13...	1430	--	0.0	3.6	14...	1440	64	14.5	16
MAR					AUG				
03...	1400	175	0.0	3.6	25...	1355	75	11.0	15
APR									
09...	1630	150	1.0	8.6					
09025000 VASQUEZ CREEK NEAR WINTER PARK, CO. (LAT 39 55 13N LONG 105 47 05W)									
OCT 1985					MAY 1986				
01...	1845	52	1.0	4.7	20...	1450	46	7.0	19
JAN 1986					JUN				
14...	1520	58	0.0	1.4	11...	1300	48	7.0	12
MAR					JUL				
03...	1740	70	0.0	2.2	17...	1620	40	11.0	7.8
APR					AUG				
11...	1130	75	2.0	3.1	25...	1900	50	11.0	6.4

SUPPLEMENTAL WATER-QUALITY DATA FOR GAGING STATIONS

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	STREAM- FLOW, INSTAN- TANEOUS (CFS)	DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	STREAM- FLOW, INSTAN- TANEOUS (CFS)
09025400 ELK CREEK NEAR FRASER, CO. (LAT 39 55 09N LONG 105 49 31W)									
OCT 1985					JUN 1986				
03...	0900	56	1.5	0.51	11...	1740	48	13.0	2.7
MAR 1986					JUL				
05...	0950	68	0.0	0.49	17...	1445	44	12.0	4.3
APR					AUG				
11...	0930	60	0.0	1.4	26...	1650	54	15.0	1.4
MAY									
20...	1250	50	9.0	8.1					
09026500 ST. LOUIS CREEK NEAR FRASER, CO. (LAT 39 54 36N LONG 105 52 40W)									
OCT 1985					MAY 1986				
01...	1700	84	7.0	9.5	20...	0950	100	4.0	34
JAN 1986					JUN				
13...	1700	94	0.0	7.3	11...	1000	80	3.0	87
MAR					JUL				
23...	1615	100	0.0	6.5	14...	1725	80	14.0	24
APR					AUG				
09...	1210	100	1.0	9.5	28...	1120	76	8.5	17
09032000 RANCH CREEK NEAR FRASER, CO. (LAT 39 57 00N LONG 105 45 54W)									
OCT 1985					MAY 1986				
03...	1410	54	3.5	4.3	20...	1700	48	7.0	22
NOV					JUN				
20...	1620	50	0.5	3.1	10...	1830	43	5.5	16
JAN 1986					JUL				
14...	1330	56	0.0	1.9	16...	1550	52	12.0	3.1
FEB					AUG				
28...	1500	60	0.0	2.3	26...	1425	52	12.0	5.5
APR									
09...	1335	60	1.0	3.1					
09032100 CABIN CREEK NEAR FRASER, CO. (LAT 39 59 09N LONG 105 44 40W)									
OCT 1985					JUN 1986				
03...	1130	42	1.5	4.3	10...	1535	28	2.5	60
FEB 1986					12...	0950	34	4.0	39
28...	1245	50	0.0	0.98	JUL				
MAY					17...	1300	40	9.0	12
22...	1230	30	5.0	1.2	AUG				
					26...	1120	48	11.0	3.9
09034250 COLORADO RIVER AT WINDY GAP, NEAR GRANBY, CO. (LAT 40 06 30N LONG 106 00 13W)									
OCT 1985					MAY 1986				
02...	1410	160	9.0	104	21...	1230	100	10.0	1050
NOV					JUN				
21...	1620	82	0.0	235	12...	1500	98	13.0	1340
MAR 1986					JUL				
04...	1400	165	0.0	79	16...	1030	115	13.0	571
APR					AUG				
10...	1335	180	3.0	355	27...	1740	130	16.0	125
09034900 BOBTAIL CREEK NEAR JONES PASS, CO. (LAT 39 45 37N LONG 105 54 21W)									
OCT 1985					MAY 1986				
16...	1205	58	0.5	5.3	14...	1250	46	0.0	7.7
APR 1986					JUN				
11...	1250	--	0.0	0.98	02...	1310	38	3.0	37
09035500 WILLIAMS FORK BELOW STEELMAN CREEK, CO. (LAT 39 46 44N LONG 105 55 40W)									
OCT 1985					MAY 1986				
16...	1400	85	0.0	1.7	14...	1335	--	0.5	29
DEC					JUN				
09...	1230	75	0.0	0.85	02...	1525	33	4.0	68
09035700 WILLIAMS FORK ABOVE DARLING CREEK, NR LEAL, CO. (LAT 39 47 22N LONG 106 01 18)									
OCT 1985					MAY 1986				
21...	0840	65	0.5	9.0	01...	1230	63	6.0	21
NOV					JUL				
21...	1130	32	0.5	7.4	18...	1400	49	12.0	59
DEC									
19...	1120	70	0.0	6.8					

SUPPLEMENTAL WATER-QUALITY DATA FOR GAGING STATIONS

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DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	STREAM- FLOW, INSTAN- TANEOUS (CFS)	DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	STREAM- FLOW, INSTAN- TANEOUS (CFS)
09035800 DARLING CREEK NEAR LEAL, CO. (LAT 39 48 17N LONG 106 01 11W)									
OCT 1985					MAY 1986				
21...	1240	--	1.5	4.7	01...	1035	75	1.0	5.0
DEC					JUN				
19...	1430	62	0.0	2.7	25...	1430	36	5.0	57
FEB 1986					JUL				
12...	1645	80	0.0	2.4	18...	1530	57	10.0	20
MAR									
19...	1440	85	0.0	2.2					
09035820 SO FK WILLIAMS FK AT UP STA NR PTARMIGAN PASS, C (LAT 39 42 30N LONG 105 56 49)									
MAR 1986					JUL 1986				
25...	1010	80	0.0	0.53	11...	1030	42	5.0	17
MAY					AUG				
12...	1000	56	0.5	3.6	25...	1000	62	7.0	3.4
JUN									
02...	1230	--	2.0	19					
05...	0945	42	2.0	26					
20...	0900	52	2.0	43					
09035845 SO FK WILLIAMS FK TRIB NR PTARMIGAN PASS, CO (LAT 39 42 10N LONG 105 59 06W)									
OCT 1985					AUG 1986				
18...	0925	82	4.5	--	25...	1300	72	9.0	--
JUN 1986									
05...	0930	43	1.0	--					
09035870 SO FK WILLIAMS FK BL SHORT CR NR PTARMIGAN PAS, (LAT 39 44 57N LONG 106 01 53)									
OCT 1985					JUL 1986				
18...	0905	73	5.0	--	11...	0945	53	--	--
MAR 1986					AUG				
25...	1400	81	0.5	--	25...	1015	62	8.0	--
JUN									
05...	1050	46	3.5	--					
09035880 S. FK. WILLIAMS FORK BLW OLD BALDY MT NR LEAL, C(LAT 39 45 32N LONG 106 02 08)									
OCT 1985					JUL 1986				
18...	0910	74	5.0	--	11...	1100	54	7.5	--
MAR 1986					AUG				
25...	1040	85	1.5	--	25...	0840	63	7.5	--
JUN									
05...	1145	48	4.5	--					
09035900 SOUTH FORK OF WILLIAMS FORK NEAR LEAL, CO. (LAT 39 47 44N LONG 106 01 49W)									
OCT 1985					MAY 1986				
21...	1045	80	1.0	14	01...	1650	75	6.0	27
NOV					JUN				
21...	1310	35	0.0	15	10...	1200	--	8.0	201
DEC					JUL				
19...	1300	90	0.0	11	18...	1310	53	9.5	76
MAR 1986									
19...	1315	98	0.0	4.4					
09036000 WILLIAMS FORK NEAR LEAL, CO. (LAT 39 49 53N LONG 106 03 15W)									
OCT 1985					MAR 1986				
21...	1510	75	5.5	34	19...	1650	98	1.0	21
NOV					MAY				
22...	1020	80	0.5	28	01...	1830	70	9.0	90
DEC					AUG				
17...	1650	80	0.5	25	25...	1530	76	--	62
FEB 1986									
19...	1220	115	1.0	17					
09039000 TROUBLESOME CREEK NEAR PEARMONT, CO. (LAT 40 13 03N LONG 106 18 45W)									
OCT 1985					APR 1986				
21...	1740	80	7.0	12	24...	1025	83	4.0	37
NOV					MAY				
20...	1310	90	0.5	12	22...	1025	77	6.5	241
DEC					JUN				
18...	0915	91	0.0	15	13...	1100	71	8.5	183
FEB 1986					JUL				
26...	0945	76	0.0	13	17...	1800	88	16.5	38
MAR									
27...	1200	87	3.5	16					

SUPPLEMENTAL WATER-QUALITY DATA FOR GAGING STATIONS

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	STREAM- FLOW, INSTAN- TANEOUS (CFS)	DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	STREAM- FLOW, INSTAN- TANEOUS (CFS)
09046490 BLUE RIVER AT BLUE RIVER, CO. (LAT 39 27 21N LONG 106 01 52W)									
OCT 1985					MAY 1986				
02...	1455	90	5.0	34	07...	1250	138	4.0	40
16...	1325	130	7.0	22	27...	1625	130	10.0	64
NOV					JUN				
06...	1615	60	7.0	17	18...	1345	126	8.0	84
DEC					JUL				
16...	1455	172	0.0	9.3	15...	1255	94	9.5	101
31...	1120	175	0.5	7.9	SEP				
FEB 1986					10...	1015	131	5.0	15
19...	1130	178	1.0	6.5					
MAR									
17...	1445	142	1.0	5.6					
09046600 BLUE RIVER NEAR DILLON, CO. (LAT 39 32 55N LONG 106 02 19W)									
OCT 1985					MAY 1986				
02...	1620	130	4.0	85	27...	1855	130	7.0	221
08...	1205	140	3.0	70	JUN				
16...	1050	120	5.0	69	04...	1515	127	6.5	280
NOV					18...	1130	105	8.0	326
06...	1445	85	7.0	56	JUL				
DEC					15...	1100	102	9.5	222
16...	1640	156	3.0	32	SEP				
FEB 1986					10...	1200	135	9.0	61
19...	1340	164	3.0	25					
MAR									
17...	1645	170	2.0	27					
09047500 SNAKE RIVER NEAR MONTEZUMA, CO. (LAT 39 36 20N LONG 105 56 33W)									
OCT 1985					APR 1986				
16...	1145	109	1.0	26	30...	1105	106	3.0	27
NOV					MAY				
14...	1220	126	0.0	23	27...	1410	75	6.0	183
DEC					JUN				
16...	1215	101	0.0	17	17...	1355	52	5.5	378
FEB 1986					JUL				
11...	1230	110	0.0	11	14...	1200	53	11.0	191
MAR					SEP				
17...	1120	130	0.0	12	08...	1400	81	8.0	59
17...	1130	130	0.0	12					
09047700 KEYSTONE GULCH NEAR DILLON, CO. (LAT 39 35 40N LONG 105 58 19W)									
OCT 1985					APR 1986				
16...	1345	85	0.5	4.7	30...	1330	81	6.0	6.0
16...	1345	85	0.5	4.7	30...	1330	81	6.0	6.0
NOV					MAY				
14...	1405	87	0.0	4.4	30...	1255	60	5.5	24
14...	1405	87	0.0	4.4	30...	1255	60	5.5	24
DEC					JUN				
31...	1355	87	0.0	2.6	18...	1535	54	7.0	22
31...	1355	87	0.0	2.6	18...	1535	54	7.0	22
FEB 1986					JUL				
11...	1500	85	0.0	2.5	16...	1830	67	8.5	10
11...	1500	85	0.0	2.5	16...	1830	67	8.5	10
MAR					SEP				
20...	1100	88	0.0	2.7	08...	1550	74	8.5	5.8
20...	1100	88	0.0	2.7	08...	1550	74	8.5	5.8
09050100 TENMILE CREEK BL NORTH TENMILE C, AT FRISCO, CO. (LAT 39 34 37N LONG 106 06 33)									
OCT 1985					APR 1986				
02...	1735	65	3.0	63	22...	1005	550	4.0	40
NOV					MAY				
06...	1050	60	5.0	33	20...	1400	470	8.0	280
DEC					JUN				
17...	1200	825	--	31	10...	1115	345	5.0	537
FEB 1986					JUL				
25...	1140	920	1.0	20	15...	1255	135	12.0	197
MAR					AUG				
25...	1010	800	1.0	21	28...	1115	540	9.0	69

SUPPLEMENTAL WATER-QUALITY DATA FOR GAGING STATIONS

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DATE	TIME	SPE-	TEMPER-	STREAM-	DATE	TIME	SPE-	TEMPER-	STREAM-
		CIFIC		FLOW,			CIFIC		FLOW,
		CON-	ATURE	INSTAN-			CON-	ATURE	INSTAN-
		DUCT-	WATER	TANEOUS			DUCT-	WATER	TANEOUS
		ANCE	(DEG C)	(CFS)			ANCE	(DEG C)	(CFS)
		(US/CM)					(US/CM)		
09050700 BLUE RIVER BELOW DILLON, CO. (LAT 39 37 32N LONG 106 03 57W)									
OCT 1985					APR 1986				
02...	1025	150	5.0	265	22...	1130	181	5.0	50
NOV					MAY				
06...	1250	130	9.0	104	20...	1540	194	5.5	49
DEC					JUN				
17...	1315	215	2.0	56	10...	1410	185	8.5	1760
FEB 1986					JUL				
25...	1010	188	2.5	48	15...	1025	183	14.5	692
MAR					AUG				
25...	1130	184	3.5	50	28...	1235	225	9.0	398
09052000 ROCK CREEK NEAR DILLON, CO. (LAT 39 43 23N LONG 106 07 41W)									
OCT 1985					MAY 1986				
18...	1430	56	3.0	9.6	30...	1040	48	3.5	63
NOV					JUN				
14...	1700	60	0.0	9.5	18...	1755	23	7.0	109
DEC					JUL				
17...	1530	65	0.0	5.6	16...	1600	26	9.0	69
FEB 1986					SEP				
11...	1805	68	0.0	4.6	11...	1000	40	4.0	23
APR									
29...	1830	58	5.5	21					
09052400 BOULDER CREEK AT UPPER STATION, NEAR DILLON, CO. (LAT 39 43 41N LONG 106 10 22)									
OCT 1985					MAY 1986				
17...	1730	45	3.0	7.5	02...	1155	41	1.0	15
NOV					29...	1035	35	4.0	63
22...	1400	57	0.0	3.6	JUN				
DEC					17...	1510	24	5.0	101
17...	1710	63	0.0	3.0	JUL				
FEB 1986					17...	1100	23	6.5	58
14...	1400	65	0.0	3.3	SEP				
APR					10...	1630	35	6.5	18
03...	1205	75	2.5	2.1					
09052800 SLATE CREEK AT UPPER STATION, NEAR DILLON, CO. (LAT 39 45 47N LONG 106 11 31W)									
OCT 1985					MAY 1986				
18...	1055	48	2.0	10	08...	1430	50	3.5	26
NOV					29...	1455	45	6.5	95
22...	1140	55	0.0	6.9	JUN				
DEC					20...	1410	21	7.0	146
18...	1145	65	0.0	3.9	JUL				
FEB 1986					16...	1305	18	10.0	100
13...	1245	72	0.0	2.9	SEP				
MAR					11...	1450	28	9.0	31
18...	1230	77	0.0	3.7					
09054000 BLACK CREEK BELOW BLACK LAKE, NEAR DILLON, CO. (LAT 39 47 59N LONG 106 16 04W)									
OCT 1985					APR 1986				
17...	1450	26	8.0	15	29...	1435	40	4.0	15
NOV					MAY				
21...	1840	29	3.5	6.6	28...	1720	31	6.5	105
DEC					JUN				
18...	1510	35	1.0	4.7	19...	1450	22	6.0	178
FEB 1986					JUL				
13...	1610	38	0.5	3.8	16...	1050	16	8.0	127
MAR					SEP				
18...	1550	42	0.5	3.9	09...	1215	19	11.0	40
09055300 CATARACT CREEK NEAR KREMMLING, CO. (LAT 39 50 07N LONG 106 18 57W)									
OCT 1985					JUN 1986				
17...	1040	47	6.0	7.4	19...	1210	24	7.0	152
NOV					JUL				
15...	1140	49	2.0	4.8	15...	1610	26	14.0	61
DEC					SEP				
18...	1710	51	1.0	2.6	09...	1100	34	11.0	13
MAY 1986									
07...	1720	74	7.0	27					
28...	1055	45	7.0	100					

SUPPLEMENTAL WATER-QUALITY DATA FOR GAGING STATIONS

DATE	TIME	SPE-	TEMPER-	STREAM-	DATE	TIME	SPE-	TEMPER-	STREAM-
		CIFIC		FLOW,			CIFIC		FLOW,
		CON-	ATURE	INSTAN-			CON-	ATURE	INSTAN-
		DUCT-	WATER	TANEOUS			DUCT-	WATER	TANEOUS
		ANCE	(DEG C)	(CFS)			ANCE	(DEG C)	(CFS)
		(US/CM)					(US/CM)		
09058000 COLORADO RIVER NEAR KREMMLING, CO. (LAT 40 02 12N LONG 106 26 22W)									
OCT 1985					MAY 1986				
30...	1345	205	9.0	917	21...	1515	192	11.5	3280
NOV					JUN				
26...	1315	210	1.0	599	10...	1910	240	11.5	4460
FEB 1986					JUL				
26...	1415	340	3.5	953	17...	1045	310	14.5	1680
MAR					AUG				
26...	1725	286	7.0	1210	26...	1530	275	18.5	800
APR									
23...	1315	280	--	2350					
09058500 PINEY RIVER BELOW PINEY LAKE, NEAR MINTURN, CO. (LAT 39 42 29N LONG 106 25 38)									
NOV 1985					JUN 1986				
05...	1005	--	3.0	7.3	12...	1045	32	10.0	104
JAN 1986					JUL				
24...	1105	140	1.0	2.2	30...	1635	40	20.0	21
MAR					SEP				
05...	1050	75	0.0	3.7	05...	1430	49	16.5	9.5
MAY									
27...	1504	43	9.5	117					
09058610 DICKSON CREEK NEAR VAIL, CO. (LAT 39 42 14N LONG 106 27 25W)									
NOV 1985					JUL 1986				
05...	1255	--	2.5	1.3	30...	1210	350	13.5	1.8
MAY 1986					AUG				
28...	0900	250	7.0	6.9	26...	1425	--	14.5	1.4
JUN									
13...	1024	280	9.0	6.0					
09058700 FREEMAN CREEK NEAR MINTURN, CO. (LAT 39 41 55N LONG 106 26 41W)									
NOV 1985					JUL 1986				
05...	1040	120	2.5	0.15	30...	1415	250	22.0	0.48
JUN 1986					SEP				
13...	1330	155	9.0	5.9	05...	1217	227	13.0	0.32
09058800 EAST MEADOW CREEK NEAR MINTURN CO. (LAT 39 43 54N LONG 106 25 36W)									
NOV 1985					MAY 1986				
05...	0835	--	7.0	1.5	27...	1820	45	3.0	48
APR 1986					JUL				
09...	1141	--	4.5	1.9	01...	1141	42	8.0	14
09059500 PINEY RIVER NEAR STATE BRIDGE, CO. (LAT 39 48 00N LONG 106 35 00W)									
OCT 1985					MAY 1986				
10...	1125	--	3.0	25	06...	1425	196	5.5	371
NOV					29...	1030	142	5.0	588
06...	1145	--	3.0	25	JUN				
DEC					26...	1220	190	12.0	349
09...	1310	170	1.0	30	JUL				
JAN 1986					23...	0955	180	11.0	96
21...	1345	--	1.0	23	AUG				
MAR					20...	0955	314	12.5	27
05...	1300	325	3.0	44					
APR									
30...	1005	232	3.0	173					
09060950 BIG ALKALI CREEK BELOW CASTLE CR NEAR BURNS, CO. (LAT 39 51 52N LONG 106 49 01)									
OCT 1985					APR 1986				
24...	0900	910	3.0	3.4	30...	1235	560	7.5	33
NOV					MAY				
19...	1600	950	0.5	2.7	29...	1315	498	10.0	51
DEC					JUN				
18...	0900	1010	0.0	2.1	25...	1500	720	15.5	14
JAN 1986					JUL				
15...	0900	1020	0.0	1.5	22...	1510	982	17.5	5.0
FEB					AUG				
11...	1400	1260	0.0	1.6	21...	1145	1180	14.5	3.7
MAR									
20...	1400	1190	5.0	3.4					

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	STREAM- FLOW, INSTAN- TANEOUS (CFS)	DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	STREAM- FLOW, INSTAN- TANEOUS (CFS)
09063000 EAGLE RIVER AT RED CLIFF, CO. (LAT 39 30 34N LONG 106 22 00W)									
OCT 1985					JUN 1986				
08...	0915	--	3.0	28	05...	1330	140	9.0	229
NOV					11...	2048	160	11.0	219
05...	1440	--	3.0	15	JUL				
MAR 1986					31...	1255	220	14.0	34
03...	1420	220	2.0	16	SEP				
APR					04...	1522	208	11.5	22
08...	1248	190	5.5	39					
MAY									
12...	1546	151	9.5	100					
09063200 WEARYMAN CREEK NEAR RED CLIFF, CO. (LAT 39 31 14N LONG 106 19 06W)									
OCT 1985					MAY 1986				
07...	1730	270	3.0	3.1	20...	1430	280	6.0	14
NOV					JUN				
04...	1635	240	2.0	2.2	11...	1803	230	5.0	69
JAN 1986					JUL				
23...	1045	220	1.0	1.6	31...	0950	270	5.5	9.1
MAR					SEP				
05...	1342	300	1.0	1.2	04...	1210	275	7.0	5.4
APR									
10...	1335	311	1.5	2.7					
09063400 TURKEY CREEK NEAR RED CLIFF, CO. (LAT 39 31 22N LONG 106 20 15W)									
OCT 1985					MAY 1986				
07...	1840	250	5.0	9.6	20...	1535	280	6.5	48
NOV					JUN				
04...	1720	220	3.0	7.1	11...	1911	190	7.0	164
MAR 1986					JUL				
05...	1427	280	1.0	4.0	31...	1144	250	8.0	24
APR					SEP				
10...	1435	283	3.0	11	04...	1400	269	9.5	9.4
09063900 MISSOURI CREEK NEAR GOLD PARK, CO. (LAT 39 23 25N LONG 106 28 10W)									
OCT 1985					MAY 1986				
07...	1355	<50	3.0	7.2	27...	1220	25	3.0	56
NOV					JUN				
04...	1300	<50	1.0	6.1	11...	1220	30	5.0	30
MAR 1986					JUL				
04...	1023	50	0.5	0.83	29...	1153	22	9.0	21
APR					AUG				
10...	0940	39	1.5	2.7	25...	1220	40	11.5	14
09064000 HOMESTAKE CREEK AT GOLD PARK, CO. (LAT 39 24 20N LONG 106 25 58W)									
OCT 1985					MAY 1986				
07...	1520	<50	4.0	29	12...	1216	30	4.5	75
NOV					JUN				
04...	1435	<50	3.0	22	05...	1040	24	4.5	283
MAR 1986					11...	1100	31	5.5	80
04...	1055	<50	0.5	10	JUL				
APR					29...	1340	24	13.0	52
10...	1031	39	1.5	24					
09064500 HOMESTAKE CREEK NEAR RED CLIFF, CO. (LAT 39 28 24N LONG 106 22 02W)									
OCT 1985					MAY 1986				
07...	1640	48	5.0	35	12...	1415	34	7.5	131
NOV					JUN				
04...	1535	60	4.0	19	05...	1225	26	7.0	388
MAR 1986					11...	1416	31	11.0	158
03...	1315	60	1.0	18	AUG				
APR					25...	1510	90	16.0	52
08...	1040	44	4.0	77					

SUPPLEMENTAL WATER-QUALITY DATA FOR GAGING STATIONS

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	STREAM- FLOW, INSTAN- TANEOUS (CFS)	DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	STREAM- FLOW, INSTAN- TANEOUS (CFS)
09065100 CROSS CREEK NEAR MINTURN, CO. (LAT 39 34 05N LONG 106 24 45W)									
NOV 1985					MAY 1986				
06...	0835	55	2.5	12	20...	1752	32	7.0	109
DEC					JUN				
09...	1520	--	1.0	7.1	11...	1614	28	9.0	185
JAN 1986					AUG				
21...	1455	--	1.0	4.9	08...	1119	37	11.5	56
MAR					SEP				
03...	1615	230	2.0	8.8	04...	1630	39	13.5	34
APR									
08...	1500	44	4.0	36					
09065500 GORE CREEK AT UPPER STATION, NEAR MINTURN, CO. (LAT 39 37 40N LONG 106 16 24W)									
OCT 1985					APR 1986				
03...	1125	<50	3.0	13	16...	1525	<50	1.0	17
NOV					MAY				
07...	1110	<50	1.0	9.9	14...	0910	65	3.0	54
DEC					JUN				
03...	1050	<50	0.0	8.9	18...	1015	65	5.0	159
FEB 1986					JUL				
05...	1410	<50	0.0	12	23...	1355	60	4.0	58
MAR					SEP				
13...	0930	<50	1.0	11	10...	1050	<50	9.0	17
09066000 BLACK GORE CREEK NEAR MINTURN, CO. (LAT 39 35 47N LONG 106 15 52W)									
OCT 1985					APR 1986				
03...	1345	<50	3.0	9.1	16...	1135	140	1.0	15
NOV					MAY				
07...	1405	<50	1.0	9.2	14...	1345	120	3.0	49
DEC					JUN				
03...	1445	<50	0.0	9.3	18...	1150	85	5.0	75
FEB 1986					JUL				
05...	1020	<50	0.0	9.0	23...	1205	80	5.0	15
MAR					SEP				
12...	1105	85	1.0	14	10...	1245	140	8.0	7.8
09066100 BIGHORN CREEK NEAR MINTURN, CO. (LAT 39 38 24N LONG 106 17 34W)									
OCT 1985					APR 1986				
03...	0745	<50	3.0	5.9	17...	1715	<50	1.0	5.7
NOV					MAY				
07...	1540	<50	1.0	2.9	14...	1545	<50	3.0	18
DEC					JUN				
04...	1010	<50	0.0	1.9	18...	1615	85	4.0	52
FEB 1986					JUL				
06...	1050	<50	0.0	3.2	23...	1545	65	5.0	17
MAR					SEP				
12...	1545	<50	1.0	3.0	10...	1350	60	8.0	6.3
17...	1600	<50	0.0	2.0					
09066150 PITKIN CREEK NEAR MINTURN, CO. (LAT 39 38 37N LONG 106 18 07W)									
OCT 1985					APR 1986				
03...	0950	<50	3.0	4.4	17...	1015	<50	1.0	5.7
NOV					MAY				
07...	0900	<50	2.0	4.7	15...	0955	<50	3.0	20
DEC					JUN				
04...	1250	<50	0.0	3.5	19...	1050	80	5.0	49
FEB 1986					JUL				
06...	1605	<50	0.0	6.8	23...	1710	<50	5.0	27
MAR					SEP				
13...	1130	<50	1.0	2.3	10...	1505	60	4.0	11
09066200 BOOTH CREEK NEAR MINTURN, CO. (LAT 39 39 02N LONG 106 19 16W)									
OCT 1985					MAY 1986				
03...	1525	<50	3.0	3.7	15...	1315	65	3.0	27
NOV					JUN				
07...	1715	<50	2.0	6.4	19...	1310	120	5.0	59
DEC					JUL				
04...	1530	<50	0.0	3.9	24...	1045	<50	6.0	11
FEB 1986					SEP				
06...	1425	60	0.0	8.4	10...	1610	80	8.0	9.2
MAR									
12...	1705	60	0.0	4.7					
17...	1300	85	1.0	4.3					

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	STREAM- FLOW, INSTAN- TANEOUS (CFS)	DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	STREAM- FLOW, INSTAN- TANEOUS (CFS)
09066300 MIDDLE CREEK NEAR MINTURN, CO. (LAT 39 38 50N LONG 106 22 48W)									
OCT 1985					APR 1986				
03...	1245	<50	4.0	3.1	17...	1520	<50	1.0	2.3
03...	1245	<50	4.0	3.1	17...	1520	<50	1.0	2.3
NOV					MAY				
07...	0955	<50	1.0	1.6	15...	1555	<50	3.0	15
07...	0955	<50	1.0	1.6	15...	1555	<50	3.0	15
DEC					JUN				
03...	1645	<50	0.0	1.8	19...	1525	90	5.0	51
03...	1645	<50	0.0	1.8	19...	1525	90	5.0	51
FEB 1986					JUL				
05...	1620	<50	0.0	2.7	24...	1435	<50	6.0	5.7
05...	1620	<50	0.0	2.7	24...	1435	<50	5.0	5.7
MAR					SEP				
13...	1725	<50	1.0	1.7	10...	1705	<50	7.0	4.1
13...	1725	<50	1.0	1.7	10...	1705	<50	7.0	4.1
09066400 RED SANDSTONE CREEK NEAR MINTURN, CO. (LAT 39 40 58N LONG 106 24 03W)									
MAR 1986					JUL 1986				
05...	0945	110	0.5	1.3	30...	1725	42	12.5	3.0
MAY					SEP				
21...	0945	65	2.0	40	05...	1530	104	10.0	1.6
JUN									
12...	1225	58	8.0	50					
09070000 EAGLE RIVER BELOW GYPSUM, CO. (LAT 39 38 58N LONG 106 57 11W)									
OCT 1985					APR 1986				
22...	1300	780	7.5	409	28...	1615	479	9.5	695
NOV					MAY				
18...	1400	840	1.5	322	27...	1640	208	9.5	2390
DEC					JUN				
18...	1200	920	1.0	255	09...	1625	172	9.0	3670
JAN 1986					24...	1325	206	12.0	2500
15...	1320	910	0.5	227	JUL				
FEB					21...	1550	365	16.5	1080
10...	1400	875	0.0	151	AUG				
MAR					18...	1505	759	21.0	353
19...	1100	895	3.0	238					
09070500 COLORADO RIVER NEAR DOTSERO, CO. (LAT 39 38 40N LONG 107 04 40W)									
OCT 1985					JUN 1986				
21...	1300	485	8.5	1750	09...	1400	193	10.0	10600
MAR 1986					24...	1300	226	12.5	7370
19...	1300	406	4.0	1580	JUL				
APR					21...	1400	363	16.0	3580
28...	1435	342	7.0	4070	AUG				
MAY					18...	1330	525	19.0	1530
27...	1435	195	11.0	8880					
09071300 GRIZZLY CREEK NEAR GLENWOOD SPRINGS, CO. (LAT 39 43 04N LONG 107 18 51W)									
OCT 1985					JUN 1986				
10...	1000	--	3.0	1.9	18...	1125	230	2.0	198
DEC					JUL				
17...	1110	80	0.0	2.2	31...	1430	240	14.0	5.6
FEB 1986					AUG				
27...	1200	305	0.0	0.98	20...	1350	242	13.5	2.9
APR									
15...	1308	300	0.0	0.93					
09073005 LINCOLN CREEK BL GRIZZLY RESERVOIR, NR ASPEN CO. (LAT 39 04 48N LONG 106 36 57)									
OCT 1985					JUN 1986				
01...	1415	78	4.0	3.7	03...	1030	<50	2.0	3.9
29...	1420	79	4.0	3.5	18...	1020	--	6.0	3.2
APR 1986					JUL				
02...	1115	113	1.0	4.0	08...	1055	75	4.0	3.0
MAY					30...	1130	82	9.0	48
07...	1125	--	1.0	3.2	AUG				
					27...	1143	100	9.5	22

SUPPLEMENTAL WATER-QUALITY DATA FOR GAGING STATIONS

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	STREAM- FLOW, INSTAN- TANEOUS (CFS)	DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	STREAM- FLOW, INSTAN- TANEOUS (CFS)
09073300 ROARING FORK RIVER AB DIFFICULT C NR ASPEN, CO. (LAT 39 08 28N LONG 106 46 25)									
OCT 1985					MAY 1986				
01...	1110	70	2.0	23	05...	1700	--	2.0	126
29...	1100	64	3.5	27	JUN				
JAN 1986					18...	1035	--	10.0	308
14...	1000	42	0.0	17	JUL				
FEB					08...	1545	85	10.0	114
25...	1200	73	1.5	19	AUG				
APR					27...	1345	70	12.5	104
08...	1100	70	4.0	35					
09074000 HUNTER CREEK NEAR ASPEN, CO. (LAT 39 12 21N LONG 106 47 49W)									
OCT 1985					JUN 1986				
01...	0850	<50	0.0	13	04...	0900	--	3.0	173
29...	0840	56	1.0	18	17...	0920	54	6.0	319
JAN 1986					JUL				
14...	1110	78	0.0	6.8	08...	0830	--	12.0	119
APR					28...	1520	<50	15.5	54
08...	0925	84	3.0	48	AUG				
MAY					26...	0940	54	10.0	51
06...	0855	--	2.0	112					
09074800 CASTLE CREEK ABOVE ASPEN, CO. (LAT 39 05 15N LONG 106 48 42W)									
OCT 1985					MAY 1986				
28...	1545	373	6.0	26	06...	1150	--	2.0	69
DEC					JUN				
09...	1540	--	0.5	22	04...	1200	220	6.0	164
JAN 1986					17...	1620	175	8.0	244
13...	1325	--	0.5	17	JUL				
FEB					28...	1635	70	11.0	71
24...	1540	--	3.0	13	AUG				
APR					26...	1125	290	8.5	73
07...	1535	--	5.0	21					
09075700 MAROON CREEK ABOVE ASPEN, CO. (LAT 39 07 25N LONG 106 54 17W)									
OCT 1985					JUL 1986				
01...	1620	548	7.5	58	09...	1303	240	10.0	364
28...	1445	577	6.0	44	30...	1410	250	13.0	140
APR 1986					AUG				
16...	0940	--	1.5	25	06...	0950	250	13.0	140
MAY					26...	1255	415	9.5	106
05...	1450	--	1.0	67					
JUN									
04...	1045	120	5.0	209					
14...	1045	120	5.0	209					
17...	1440	217	8.0	346					
09076520 OWL CREEK NEAR ASPEN, CO. (LAT 39 13 25N LONG 106 52 45W)									
OCT 1985					JUN 1986				
02...	0845	597	1.5	0.68	02...	1440	386	12.0	3.1
28...	1310	500	4.0	0.42	17...	1305	631	15.0	1.1
DEC					JUL				
09...	1415	--	0.0	0.65	29...	1645	85	14.0	2.0
APR 1986					AUG				
07...	1225	360	8.0	6.5	26...	1455	80	14.0	0.66
MAY									
05...	1315	--	6.0	36					
09080400 FRYINGPAN RIVER NEAR RUEDI, CO. (LAT 39 21 56N LONG 106 49 30W)									
OCT 1985					JUN 1986				
02...	1100	260	7.0	115	16...	1410	177	9.0	603
30...	0920	213	8.0	104	JUL				
DEC					09...	1710	120	8.0	429
10...	1305	--	2.0	196	AUG				
JAN 1986					28...	0939	186	9.0	122
14...	1350	268	4.5	189					
FEB									
25...	1430	288	5.5	208					

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	STREAM- FLOW, INSTAN- TANEOUS (CFS)	DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	STREAM- FLOW, INSTAN- TANEOUS (CFS)
09081600 CRYSTAL RIVER AB AVALANCHE C, NEAR REDSTONE, CO. (LAT 39 13 56N LONG 107 13 36)									
OCT 1985					JUN 1986				
02...	1355	422	7.5	165	05...	1110	240	12.0	1980
30...	1355	454	6.5	160	18...	1400	--	11.0	1860
DEC					JUL				
10...	1540	--	2.0	92	07...	1330	190	13.0	1360
JAN 1986					28...	1325	237	11.5	459
15...	0930	640	1.0	73	AUG				
FEB					27...	1700	412	15.0	243
25...	1625	--	7.0	118					
MAY									
06...	1625	--	5.0	875					
09085000 ROARING FORK RIVER AT GLENWOOD SPRINGS, CO. (LAT 39 32 37N LONG 107 19 44W)									
OCT 1985					JUN 1986				
02...	1615	553	10.0	994	10...	0925	231	8.0	5460
30...	1215	526	7.5	932	19...	0910	185	12.0	6110
DEC					JUL				
09...	1215	560	2.0	755	15...	1310	240	15.0	4200
JAN 1986					30...	1310	366	16.5	2000
14...	1405	580	2.0	666	AUG				
FEB					29...	1000	504	14.5	1190
24...	1120	580	5.0	688					
09085100 COLORADO RIVER BELOW GLENWOOD SPRINGS, CO. (LAT 39 33 18N LONG 107 20 13W)									
OCT 1985					MAY 1986				
24...	1300	650	8.5	2710	14...	1115	--	10.0	7610
DEC					JUN				
19...	1500	695	1.5	2160	09...	1320	259	12.5	18300
JAN 1986					JUL				
16...	1000	620	2.0	2200	30...	1610	726	20.0	4780
FEB					SEP				
13...	1200	745	2.0	--	02...	1400	720	14.5	3000
APR									
09...	1150	448	8.0	4540					
09085200 CANYON CREEK ABOVE NEW CASTLE, CO. (LAT 39 36 19N LONG 107 24 21W)									
OCT 1985					MAY 1986				
25...	0800	275	5.5	28	14...	1510	230	9.0	72
DEC					JUN				
18...	1600	--	4.0	20	10...	1220	--	9.5	314
JAN 1986					23...	1050	240	10.0	373
16...	0900	270	3.0	16	JUL				
FEB					10...	1130	280	12.0	53
13...	1300	360	2.5	16	31...	1305	309	14.5	40
MAR					AUG				
19...	1115	400	3.0	19	29...	1200	337	13.5	25
APR									
09...	1530	288	9.0	35					
09093000 PARACHUTE CREEK NEAR PARACHUTE CO. (LAT 39 34 01N LONG 108 06 37W)									
OCT 1985					JUN 1986				
22...	1010	740	8.0	20	06...	1300	777	12.5	90
NOV					13...	1300	812	12.0	91
18...	1200	940	6.0	16	JUL				
DEC					08...	1000	830	10.0	59
31...	1130	989	3.5	17	17...	1000	858	11.0	41
JAN 1986					30...	1300	690	14.0	32
21...	1400	990	6.5	13	AUG				
FEB					18...	1400	914	14.0	27
18...	1200	958	9.0	13	SEP				
APR					10...	0900	852	9.5	27
07...	1200	670	8.0	257					
MAY									
15...	1000	580	6.0	263					
23...	1100	570	6.5	242					
29...	1200	765	9.5	155					

SUPPLEMENTAL WATER-QUALITY DATA FOR GAGING STATIONS

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	STREAM- FLOW, INSTAN- TANEOUS (CFS)	DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	STREAM- FLOW, INSTAN- TANEOUS (CFS)
09093700 COLORADO RIVER NEAR DE BEQUE, CO. (LAT 39 21 45N LONG 108 09 07W)									
OCT 1985					MAY 1986				
01...	1505	730	17.0	2880	22...	1300	350	12.0	13900
NOV					JUN				
26...	1400	890	4.0	3050	10...	1000	315	11.5	18900
JAN 1986					JUL				
02...	0930	980	2.0	2200	08...	1200	440	15.0	10500
21...	1045	1020	3.0	2120	AUG				
FEB					18...	1000	965	19.0	2910
18...	1530	1010	6.0	2320					
APR									
11...	1000	565	9.0	5960					
090955285 GOV'T HIGHLINE CA AB CAMP #7 SPILL, NR MACK, CO. (LAT 39 16 21N LONG 108 49 56)									
NOV 1985									
13...	1300	988	6.0	203					
09105000 PLATEAU CREEK NEAR CAMEO, CO. (LAT 39 11 00N LONG 108 16 10W)									
MAR 1986					JUL 1986				
28...	1400	480	11.0	296	09...	1000	480	15.5	326
APR					16...	1500	650	18.0	217
10...	0800	442	7.5	431	23...	1300	693	19.0	190
23...	1000	360	10.5	758	AUG				
MAY					15...	1100	690	16.0	166
21...	1000	285	11.5	1300	SEP				
29...	0800	187	8.5	2090	04...	1400	734	19.0	170
JUN									
04...	1000	200	10.0	2240					
13...	1200	274	13.0	1250					
25...	1000	372	15.5	487					
09106104 KIEFER EXTENSION GRAND VALLEY CA NR FRUITA, CO. (LAT 39 13 31N LONG 108 46 28)									
OCT 1985					NOV 1985				
28...	1200	895	11.5	131	12...	1300	970	7.0	4.9
09106108 KIEFER EXTENSION GRAND VALLEY CANAL NR LOMA, CO. (LAT 39 13 40N LONG 108 49 06)									
OCT 1985					NOV 1985				
15...	1315	875	10.5	54	12...	1130	990	7.0	15
15...	1350	875	10.5	54					
09109000 TAYLOR RIVER BELOW TAYLOR PARK RESERVOIR, CO. (LAT 38 49 06N LONG 106 36 31W)									
OCT 1985					APR 1986				
08...	1325	70	10.5	326	23...	1200	160	4.0	350
NOV					MAY				
05...	1200	80	7.5	147	20...	1000	--	4.0	393
DEC					JUN				
10...	1200	75	3.5	91	03...	0900	80	4.5	388
JAN 1986					17...	1500	--	7.0	150
28...	1000	95	3.0	77	30...	1500	--	7.0	1180
MAR					SEP				
11...	1600	110	3.0	376	09...	1320	90	11.0	440
09110000 TAYLOR RIVER AT ALMONT, CO. (LAT 38 39 52N LONG 106 50 41W)									
OCT 1985					MAY 1986				
08...	1030	105	9.5	464	20...	1300	140	6.5	700
NOV					JUN				
05...	1000	115	6.0	227	03...	1200	130	6.0	981
DEC					17...	1300	140	9.0	821
10...	1000	140	0.0	131	30...	1700	100	10.0	1460
MAR 1986					SEP				
11...	1400	140	4.5	398	09...	1525	100	12.5	541
APR									
23...	1600	140	5.0	538					

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	STREAM- FLOW, INSTAN- TANEOUS (CFS)	DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	STREAM- FLOW, INSTAN- TANEOUS (CFS)
09112500 EAST RIVER AT ALMONT, CO. (LAT 38 39 52N LONG 106 50 50W)									
OCT 1985					APR 1986				
08...	0835	235	8.0	339	23...	1800	220	7.5	804
NOV					MAY				
05...	0805	215	4.5	177	20...	1425	290	8.0	1060
DEC					JUN				
10...	0840	280	0.0	102	03...	1320	110	8.0	1950
JAN 1986					17...	1140	180	8.0	1950
28...	0840	255	0.0	94	30...	2000	190	9.5	1520
MAR					SEP				
11...	0825	260	1.5	135	19...	1705	260	13.0	243
09114500 GUNNISON RIVER NEAR GUNNISON, CO. (LAT 38 32 31N LONG 106 56 57W)									
OCT 1985					MAY 1986				
09...	1410	165	11.5	882	20...	1650	--	9.0	1980
NOV					JUN				
06...	1420	170	8.0	438	02...	1850	180	10.5	2910
DEC					17...	1655	160	12.0	2930
11...	1535	110	0.0	305	JUL				
JAN 1986					01...	1130	170	9.5	2940
29...	1435	215	0.0	368	SEP				
MAR					10...	1100	170	10.5	1150
13...	0935	187	1.0	599					
APR									
24...	1600	190	8.0	1540					
09118450 COCHETOPA CREEK BELOW ROCK CREEK NR PARLIN, CO. (LAT 38 20 08N LONG 106 46 18)									
OCT 1985					MAY 1986				
07...	1515	180	13.0	55	19...	1345	270	12.0	18
NOV					JUN				
04...	1400	185	6.5	38	02...	1855	250	12.0	43
DEC					18...	1005	190	10.0	134
09...	1440	210	0.0	38	SEP				
MAR 1986					09...	1820	195	13.0	2.1
10...	1425	245	1.0	42					
APR									
21...	1630	210	5.5	45					
09119000 TOMICHI CREEK AT GUNNISON, CO. (LAT 38 31 18N LONG 106 56 25W)									
OCT 1985					MAY 1986				
09...	1545	215	13.5	156	19...	1555	240	14.0	214
NOV					JUN				
05...	1425	225	9.0	135	02...	1630	160	8.0	436
DEC					17...	1915	200	17.0	615
10...	1500	225	0.0	114	JUL				
MAR 1986					01...	0940	250	13.0	469
13...	0825	300	0.5	134	SEP				
APR					10...	0920	240	11.0	201
22...	1200	220	12.0	283					
09123400 LAKE FORK BELOW MILL GULCH NEAR LAKE CITY, CO. (LAT 37 54 23N LONG 107 23 03W)									
OCT 1985					APR 1986				
09...	0920	105	5.5	56	24...	1110	115	7.0	72
NOV					MAY				
06...	0925	85	4.0	26	21...	1100	--	1.0	211
DEC					JUN				
11...	1020	75	0.0	17	03...	1355	70	6.0	299
JAN 1986					18...	1410	75	8.0	427
29...	0950	120	0.0	11					
MAR									
12...	1030	150	3.0	15					
09124500 LAKE FORK AT GATEVIEW, CO. (LAT 38 17 56N LONG 107 13 46W)									
OCT 1985					APR 1986				
09...	1140	140	11.5	171	24...	1330	175	11.5	225
NOV					MAY				
06...	1145	130	--	105	21...	1400	--	9.0	598
DEC					JUN				
11...	1250	105	0.0	57	04...	0930	110	7.0	875
JAN 1986					18...	1645	90	11.0	1190
29...	1135	185	0.0	70	JUL				
FEB					01...	1410	85	12.0	920
25...	1000	190	12.0	331	SEP				
MAR					10...	1315	190	12.0	331
12...	1250	220	1.5	86					

SUPPLEMENTAL WATER-QUALITY DATA FOR GAGING STATIONS

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	STREAM- FLOW, INSTAN- TANEOUS (CFS)	DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	STREAM- FLOW, INSTAN- TANEOUS (CFS)
09126000 CIMARRON RIVER NEAR CIMARRON, CO. (LAT 38 15 45N LONG 107 32 39W)									
OCT 1985					MAY 1986				
07...	1155	115	9.0	44	21...	1450	--	6.0	318
NOV					JUN				
07...	0915	105	5.5	50	04...	1310	90	8.0	575
JAN 1986					18...	1935	80	8.5	462
30...	0940	135	0.0	30	JUL				
MAR					01...	1700	80	10.5	339
13...	1255	150	4.0	32	SEP				
APR					10...	1605	100	11.0	74
25...	1035	110	4.0	42					
09128000 GUNNISON RIVER BELOW GUNNISON TUNNEL, CO. (LAT 38 31 45N LONG 107 38 54W)									
OCT 1985					JUN 1986				
15...	1230	160	12.5	1740	04...	1500	170	12.0	1030
NOV					19...	1035	160	10.5	1100
08...	1000	160	11.0	1610	JUL				
DEC					01...	2000	160	10.5	2470
13...	1000	185	5.5	1960	SEP				
JAN 1986					11...	1400	170	13.0	1450
31...	1000	190	3.0	2740					
MAR									
14...	1000	214	4.5	2230					
09128500 SMITH FORK NEAR CRAWFORD, CO. (LAT 38 43 40N LONG 107 30 22W)									
OCT 1985					MAY 1986				
03...	1150	140	6.5	21	15...	1025	70	7.0	179
31...	0920	146	4.0	20	JUN				
JAN 1986					09...	1310	110	11.5	197
16...	1135	186	0.0	12	JUL				
FEB					08...	1225	125	--	52
26...	1140	190	3.0	21	29...	1135	165	21.0	17
APR					AUG				
14...	1200	125	7.0	113	26...	1115	205	20.0	7.6
09129600 SMITH FORK NEAR LAZEAR, CO. (LAT 38 42 27N LONG 107 42 35W)									
OCT 1985					MAY 1986				
04...	1035	3050	8.0	5.5	15...	1215	670	11.0	109
DEC					JUN				
11...	1200	--	0.5	7.8	09...	1510	920	17.0	134
JAN 1986					JUL				
16...	1150	1580	2.0	21	08...	1350	1600	26.0	24
FEB					29...	1340	2720	26.0	5.1
26...	1305	1180	8.0	50	AUG				
APR					26...	1315	2780	25.0	4.4
14...	1425	500	10.0	165					
09132500 NORTH FORK GUNNISON RIVER NEAR SOMERSET, CO. (LAT 38 55 45N LONG 107 26 53W)									
OCT 1985					MAY 1986				
03...	0955	187	5.5	273	06...	1230	95	7.5	3130
30...	--	148	8.0	134	20...	1105	120	10.5	2120
30...	1540	148	8.0	134	28...	1100	115	11.0	3230
DEC					JUN				
11...	--	--	0.5	131	10...	0935	145	10.5	2510
11...	0905	--	0.5	131	25...	1045	110	23.5	1560
JAN 1986					JUL				
15...	--	182	0.0	76	07...	1510	115	21.0	1050
15...	1110	182	0.0	76	17...	1310	150	10.5	583
FEB					28...	1415	180	--	305
26...	--	224	0.0	293	AUG				
26...	1000	224	0.0	293	25...	1345	170	23.0	263
APR									
15...	1125	190	8.0	1610					
28...	1230	115	8.5	1470					

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	STREAM- FLOW, INSTAN- TANEOUS (CFS)	DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	STREAM- FLOW, INSTAN- TANEOUS (CFS)
09134000 MINNESOTA CREEK NEAR PAONIA, CO. (LAT 38 52 13N LONG 107 30 06W)									
JAN 1986					JUN 1986				
02...	--	585	1.0	5.4	11...	0905	300	9.5	145
21...	1145	970	4.0	5.2	25...	1325	230	27.0	97
MAR					JUL				
03...	1140	1060	7.0	13	08...	1010	390	21.0	53
APR					29...	0900	395	16.0	30
15...	1350	455	13.0	64	AUG				
22...	1000	425	11.5	74	26...	0900	520	18.0	20
29...	1010	385	14.0	84					
MAY									
20...	1345	300	15.5	141					
09135900 LEROUX CREEK AT HOTCHKISS, CO. (LAT 38 47 53N LONG 107 43 53W)									
OCT 1985					MAY 1986				
04...	1250	918	11.5	54	15...	1410	300	10.5	43
31...	1133	1750	9.0	33	JUN				
31...	1335	1750	9.0	33	11...	1115	310	13.0	113
DEC					JUL				
11...	1340	--	1.0	23	09...	1540	1540	27.0	6.0
JAN 1986					31...	0915	1580	19.0	7.3
15...	1325	1170	3.0	14	AUG				
FEB					26...	1445	1430	26.0	5.1
26...	1410	870	8.0	16					
APR									
17...	0930	215	6.5	76					
09143500 SURFACE CREEK AT CEDAREDGE, CO. (LAT 38 54 06N LONG 107 55 14W)									
OCT 1985					MAY 1986				
16...	1145	125	6.0	14	06...	1100	--	8.0	477
NOV					16...	0945	95	--	83
13...	0925	170	4.0	2.7	29...	1245	75	--	255
DEC					JUN				
12...	1400	885	2.5	91	05...	1000	170	8.0	1180
17...	1300	150	0.0	7.1	11...	1345	105	12.0	170
JAN 1986					19...	0800	270	8.0	1260
22...	1305	205	0.0	6.0	24...	1335	70	21.5	65
30...	1400	750	7.5	103	JUL				
MAR					02...	1000	310	9.0	1020
05...	1215	215	7.0	12	09...	1115	85	21.0	67
13...	1600	842	8.5	109	30...	1045	100	19.0	20
APR					AUG				
21...	1300	--	15.0	195	27...	1050	102	20.0	14
21...	1345	130	13.0	66	SEP				
					11...	0950	320	9.0	575
09144200 TONGUE CREEK AT CORY, CO. (LAT 38 47 16N LONG 107 59 41W)									
OCT 1985					MAY 1986				
16...	1400	1220	12.5	85	07...	1005	455	8.0	212
NOV					16...	1145	475	10.0	293
13...	1100	1290	5.0	56	28...	1450	300	16.5	362
DEC					JUN				
16...	1405	1160	2.5	56	10...	1435	565	17.0	337
JAN 1986					JUL				
23...	0955	1350	4.0	51	09...	1330	1400	--	69
MAR					30...	1300	1880	26.0	42
05...	1355	865	10.5	85	AUG				
APR					27...	1240	2020	24.0	38
17...	1250	560	10.0	142					
09144250 GUNNISON RIVER AT DELTA, CO. (LAT 38 45 01N LONG 108 04 06W)									
OCT 1985					MAY 1986				
17...	1250	585	11.0	2660	21...	1115	400	11.5	7550
NOV					JUN				
14...	0925	535	6.0	2450	13...	0820	470	17.5	4940
DEC					JUL				
18...	0945	485	3.0	2580	10...	1000	455	23.0	6050
JAN 1986					31...	1045	890	21.0	2550
24...	0825	490	3.0	3490	AUG				
MAR					28...	0835	1030	18.0	1780
06...	1010	375	5.0	4050					
APR									
18...	1010	370	7.5	4470					

SUPPLEMENTAL WATER-QUALITY DATA FOR GAGING STATIONS

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	STREAM- FLOW, INSTAN- TANEOUS (CFS)	DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	STREAM- FLOW, INSTAN- TANEOUS (CFS)
09147500 UNCOMPAHGRE RIVER AT COLONA, CO. (LAT 38 19 53N LONG 107 46 44W)									
OCT 1985					MAY 1986				
10...	1125	640	11.5	212	06...	1100	--	8.0	477
NOV					JUN				
07...	1200	750	7.0	134	05...	1000	170	8.0	1180
DEC					19...	0800	270	8.0	1260
12...	1400	885	2.5	91	JUL				
JAN 1986					02...	1000	310	9.0	1020
30...	1400	750	7.5	103	SEP				
MAR					11...	0950	320	9.0	575
13...	1600	842	8.5	109					
APR									
21...	1300	--	15.0	195					
09149500 UNCOMPAHGRE RIVER AT DELTA, CO. (LAT 38 44 31N LONG 108 04 49W)									
OCT 1985					MAY 1986				
17...	1150	960	11.5	555	07...	1310	795	10.5	671
NOV					21...	1020	780	--	910
13...	1300	1160	8.0	439	JUN				
DEC					11...	1555	1250	22.5	685
17...	1415	1670	3.0	146	JUL				
JAN 1986					10...	0925	1070	24.0	1090
23...	1135	2060	4.5	94	30...	1455	1690	32.0	242
MAR					AUG				
06...	0920	1750	6.5	80	28...	0800	1930	18.0	292
APR					SEP				
18...	0910	815	9.5	324	17...	1045	1360	19.5	673
09151500 ESCALANTE CREEK NEAR DELTA, CO. (LAT 38 45 24N LONG 108 15 34W)									
OCT 1985					APR 1986				
18...	0945	495	10.5	21	23...	1025	130	10.0	582
NOV					29...	1335	165	13.0	354
14...	1320	475	4.0	11	MAY				
DEC					21...	1525	160	15.0	427
18...	1340	565	4.0	24	JUL				
JAN 1986					31...	1445	790	30.0	2.1
24...	1330	440	5.0	14	AUG				
					28...	1305	695	--	4.8
09153290 REED WASH NEAR MACK, CO. (LAT 39 12 41N LONG 108 48 11W)									
OCT 1985					MAY 1986				
03...	0935	1660	10.5	70	06...	1300	1080	11.5	67
NOV					JUN				
07...	1025	1550	8.0	79	12...	0800	1330	13.0	72
JAN 1986					JUL				
02...	1500	3910	4.0	6.1	07...	1400	1400	18.0	71
22...	0910	4260	3.0	5.7	AUG				
FEB					20...	1400	1870	23.0	79
21...	1400	4580	10.0	4.9					
APR									
08...	1200	960	12.5	69					
09163570 HAY PRESS C AB FRUITA RES #3, NR GLADE PARK, CO. (LAT 38 51 03N LONG 108 46 56)									
OCT 1985					JUN 1986				
03...	1150	145	8.0	0.05	05...	1300	59	9.5	3.5
APR 1986					12...	1200	69	9.0	1.7
09...	1100	90	0.0	0.65	JUL				
MAY					10...	1000	110	13.0	0.22
06...	1100	55	1.0	5.0	AUG				
22...	0900	50	1.5	5.6	27...	1300	157	17.0	0.07
					SEP				
					19...	1300	170	9.0	0.03
09166950 LOST CANYON CREEK NEAR DOLORES, CO. (LAT 37 26 45N LONG 108 28 03W)									
OCT 1985					APR 1986				
02...	1105	169	9.5	3.2	01...	0750	70	3.0	251
DEC					02...	1040	<50	3.0	683
03...	0940	207	1.0	3.5	28...	1005	77	3.5	101
JAN 1986					MAY				
30...	1215	200	2.0	3.3	07...	1315	64	3.0	166
MAR					JUN				
21...	0830	235	1.5	9.6	06...	1455	81	18.0	35
					JUL				
					08...	1015	364	18.0	1.4

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09168100 DISAPPOINTMENT CREEK NEAR DOVE CREEK, CO. (LAT 37 52 36N LONG 108 34 57W)									
OCT 1985					MAY 1986				
09...	1445	3060	15.0	11	05...	1120	750	7.0	177
DEC					23...	0810	800	7.0	133
19...	1300	2800	0.0	5.5	JUN				
JAN 1986					12...	0735	1090	11.0	56
22...	--	3440	0.5	5.7	JUL				
MAR					08...	1520	2700	21.0	13
12...	1110	2120	5.0	27	AUG				
APR					07...	0925	3220	20.0	7.5
10...	0915	1800	5.0	90	SEP				
					04...	1405	4500	25.0	4.3
09172500 SAN MIGUEL RIVER NEAR PLACERVILLE, CO. (LAT 38 02 05N LONG 108 07 15W)									
OCT 1985					MAY 1986				
09...	1010	343	6.0	188	06...	1155	258	6.0	675
29...	1520	400	--	138	21...	1355	220	10.0	615
DEC					JUN				
18...	1525	396	0.0	91	10...	1300	238	--	993
JAN 1986					16...	1445	210	12.0	1160
21...	1530	420	0.0	77	JUL				
MAR					07...	1815	220	11.0	766
05...	1335	400	4.0	100	AUG				
17...	1235	441	--	96	07...	1200	340	16.0	323
APR					SEP				
10...	1830	480	6.5	235	03...	1550	340	--	196
09177000 SAN MIGUEL RIVER AT URAVAN, CO. (LAT 38 21 26N LONG 108 42 44W)									
OCT 1985					MAY 1986				
30...	1155	550	12.0	215	06...	0900	297	8.0	1530
DEC					22...	1005	367	11.0	1550
18...	1720	1050	0.0	185	JUN				
JAN 1986					11...	1550	400	16.0	1120
22...	0915	950	0.0	88	JUL				
MAR					08...	1255	480	15.0	788
13...	0820	900	3.0	268	AUG				
APR					06...	1705	480	24.5	331
10...	1625	528	10.0	938	SEP				
					03...	1745	940	21.5	222
09236000 BEAR RIVER NEAR TOPONAS, CO. (LAT 40 02 38N LONG 107 04 18W)									
MAR 1986					JUN 1986				
06...	1030	113	2.0	17	18...	1500	82	8.0	188
09238700 FISH CR TRIB AB LONG LK, NR BUFFALO PASS, CO. (LAT 40 28 24N LONG 106 40 46W)									
JAN 1986					MAY 1986				
29...	0930	53	0.5	0.03	22...	1100	25	0.0	3.1
FEB					JUL				
26...	0720	56	0.5	0.08	24...	1415	31	10.5	1.0
MAR					AUG				
27...	--	57	0.5	0.0	08...	0950	37	10.0	0.27
09238710 FISH C TRIB BL LONG LK, NR BUFFALO PASS, CO. (LAT 40 28 36N LONG 106 41 13W)									
JAN 1986					MAR 1986				
29...	0950	27	1.0	0.26	27...	1045	29	0.5	0.04
FEB					JUL				
26...	0800	27	0.5	0.33	24...	1345	21	17.0	0.24
09238750 MD FK FISH C NR BUFFALO PASS, CO. (LAT 40 29 54N LONG 106 41 30W)									
JAN 1986					JUL 1986				
29...	1115	41	0.5	0.02	24...	1115	22	12.0	1.6
FEB					AUG				
26...	0940	38	0.5	0.13	08...	1230	31	14.5	0.22
MAR									
26...	1820	28	0.5	0.23					

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09238770 GRANITE C NR BUFFALO PASS, CO. (LAT 40 29 35N LONG 106 41 31W)									
JAN 1986					JUL 1986				
29...	1025	43	0.5	0.46	24...	1145	24	12.5	5.8
FEB					AUG				
26...	0845	49	0.5	0.76	08...	1140	31	14.0	2.2
MAR									
26...	1630	43	0.5	1.6					
09239500 YAMPA RIVER AT STEAMBOAT SPRINGS, CO. (LAT 40 29 01N LONG 106 49 54W)									
OCT 1985					APR 1986				
24...	1030	270	7.0	200	24...	1240	231	8.0	1060
NOV					JUN				
25...	1030	294	2.5	166	18...	0900	73	9.0	1630
JAN 1986					AUG				
27...	1030	310	0.5	104	25...	1100	245	17.0	1100
FEB									
25...	1040	330	1.0	152					
09241000 ELK RIVER AT CLARK, CO. (LAT 40 43 03N LONG 106 54 55W)									
NOV 1985					APR 1986				
25...	1030	88	0.5	134	24...	1040	80	3.5	839
JAN 1986					AUG				
28...	1530	110	0.0	58	07...	1545	58	14.5	186
MAR					SEP				
13...	1120	113	1.5	92	08...	1120	80	13.5	106
09244410 YAMPA RIVER BELOW DIVERSION, NEAR HAYDEN, CO. (LAT 40 29 18N LONG 107 09 33W)									
OCT 1985					MAY 1986				
10...	1315	377	7.0	338	08...	1240	212	--	4070
NOV					JUN				
21...	1330	386	0.0	314	05...	1200	135	8.5	7610
JAN 1986					AUG				
09...	1330	503	0.0	129	26...	1115	285	19.0	291
MAR					SEP				
04...	1130	649	1.0	495	08...	1135	353	17.0	253
09245000 ELKHEAD CREEK NEAR ELKHEAD, CO. (LAT 40 40 11N LONG 107 17 05W)									
FEB 1986					JUN 1986				
26...	1215	440	1.5	13	17...	1130	126	14.0	116
APR					JUL				
21...	1000	250	4.5	150	14...	1100	213	18.0	22
MAY					AUG				
30...	1530	120	12.0	318	26...	1330	252	20.5	6.8
09247600 YAMPA RIVER BELOW CRAIG, CO. (LAT 40 28 51N LONG 107 36 49W)									
OCT 1985					MAY 1986				
04...	1330	585	11.0	312	21...	1615	166	12.5	6970
25...	1100	590	6.5	449	JUL				
NOV					21...	1150	300	18.5	1140
19...	1125	753	0.5	357	AUG				
JAN 1986					18...	1140	382	20.5	281
09...	1200	782	0.0	301	SEP				
MAR					02...	1030	455	16.5	342
05...	1145	1000	3.5	1440	09...	1305	463	16.5	228
APR					16...	1100	435	14.5	351
15...	1335	475	7.5	3530					
09250000 MILK CREEK NEAR THORNBURGH, CO. (LAT 40 11 37N LONG 107 43 54W)									
NOV 1985					MAR 1986				
26...	1207	1640	1.0	21	24...	1100	992	5.0	66
JAN 1986					APR				
13...	1035	1370	0.0	6.0	15...	1230	734	6.0	105
FEB					MAY				
25...	1000	1440	1.5	25	21...	1230	323	--	266

SUPPLEMENTAL WATER-QUALITY DATA FOR GAGING STATIONS

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DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	STREAM- FLOW, INSTAN- TANEOUS (CFS)	DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	STREAM- FLOW, INSTAN- TANEOUS (CFS)
09250507 WILSON CREEK ABOVE TAYLOR CREEK NEAR AXIAL, CO. (LAT 40 18 53N LONG 107 47 58)									
OCT 1985					APR 1986				
03...	1405	1690	13.5	2.0	22...	1045	1140	9.0	33
NOV					MAY				
20...	1530	1940	--	4.2	28...	0930	1200	--	17
JAN 1986					JUL				
02...	1130	1970	0.0	1.5	03...	1100	1490	16.0	4.5
FEB					SEP				
04...	1000	1880	0.0	1.9	03...	1325	1710	19.0	2.0
MAR									
03...	1145	1690	7.0	4.1					
30...	1030	1250	8.0	16					
09250510 TAYLOR CREEK AT MOUTH NEAR AXIAL, CO. (LAT 40 18 48N LONG 107 47 57W)									
OCT 1985					APR 1986				
03...	1555	2290	13.5	0.36	22...	1115	1260	11.0	4.8
NOV					MAY				
20...	1420	1930	0.0	0.22	28...	1000	1390	--	2.8
JAN 1986					JUL				
02...	1230	2080	--	0.22	03...	1130	1530	17.0	1.3
FEB					SEP				
04...	1030	1900	0.0	0.23	03...	1225	1750	15.0	0.16
28...	1205	1960	7.5	0.34					
MAR									
31...	1130	1960	--	0.74					
09255000 SLATER FORK NEAR SLATER, CO. (LAT 40 58 54N LONG 107 22 58W)									
OCT 1985					APR 1986				
01...	1305	277	4.5	21	30...	1730	155	9.5	326
DEC					JUN				
04...	1435	287	0.0	32	03...	1150	85	8.0	542
JAN 1986					JUL				
16...	1535	282	0.0	23	16...	1300	203	17.0	59
MAR					SEP				
04...	1345	358	4.5	49	04...	1200	284	14.0	16
27...	0850	314	1.5	56					
09258000 WILLOW CREEK NEAR DIXON, WY. (LAT 40 54 56N LONG 107 31 16W)									
OCT 1985					APR 1986				
01...	1100	227	2.5	2.0	30...	1950	304	13.0	24
DEC					JUN				
04...	0815	322	0.0	3.9	03...	1605	82	15.0	63
JAN 1986					JUL				
17...	0955	312	0.0	3.2	17...	0740	122	12.5	7.3
MAR					SEP				
04...	1530	464	6.0	13	04...	1450	200	19.0	3.3
27...	1050	404	3.5	20					
09260050 YAMPA RIVER AT DEERLODGE PARK, CO. (LAT 40 27 02N LONG 108 31 20W)									
OCT 1985					JUN 1986				
02...	1150	800	11.0	574	06...	1315	156	15.5	14000
02...	1150	800	11.0	574	06...	1315	156	15.5	14000
JAN 1986					AUG				
15...	1315	967	0.0	606	05...	1245	548	20.0	747
15...	1315	967	0.0	606	05...	1245	548	20.0	747
MAR					SEP				
13...	1300	--	4.5	3190	05...	1040	750	19.0	476
13...	1300	--	4.5	3190	05...	1040	750	19.0	476
09302450 LOST CREEK NEAR BUFORD, CO. (LAT 40 03 01N LONG 107 28 06W)									
OCT 1985					MAY 1986				
17...	1515	390	8.5	4.5	21...	1155	157	7.5	214
NOV					JUN				
26...	1115	343	1.0	5.0	12...	1410	157	13.5	52
JAN 1986					JUL				
31...	0945	367	0.0	3.3	23...	1045	274	15.0	7.3
MAR					AUG				
07...	1420	337	5.5	7.9	21...	0915	241	13.0	8.3
APR									
15...	1050	288	3.0	53					

SUPPLEMENTAL WATER-QUALITY DATA FOR GAGING STATIONS

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09304200 WHITE RIVER ABOVE COAL CREEK, NEAR MEEKER, CO. (LAT 40 00 18N LONG 107 49 29W)									
OCT 1985					MAY 1986				
17...	1640	364	8.0	460	12...	1050	307	12.0	1550
DEC					29...	1200	230	8.0	3210
02...	1110	393	1.5	445	JUN				
JAN 1986					10...	1600	231	10.0	3360
31...	1305	407	3.5	364	JUL				
MAR					25...	0945	320	11.0	900
07...	1050	414	4.5	422	AUG				
APR					25...	1550	350	16.5	456
11...	0900	370	5.0	756					
09304500 WHITE RIVER NEAR MEEKER, CO. (LAT 40 02 01N LONG 107 51 42W)									
OCT 1985					MAY 1986				
31...	1155	478	4.5	526	12...	1410	320	8.0	1570
DEC					29...	1045	245	7.5	3350
02...	1210	548	2.0	481	JUN				
JAN 1986					10...	1440	244	9.5	3320
31...	1405	514	4.0	357	25...	1005	257	10.0	2200
MAR					JUL				
05...	1000	647	4.5	493	25...	1240	356	14.0	1110
APR					AUG				
11...	1045	537	6.5	766	25...	1700	465	18.0	482
					SEP				
					29...	1500	470	9.0	585
09339900 EF SAN JUAN R AB SAND CREEK, NR PAGOSA SPGS, CO. (LAT 37 23 23N LONG 106 50 26)									
OCT 1985					JUN 1986				
30...	1430	112	10.0	62	05...	1250	82	11.0	604
MAR 1986					26...	1250	63	10.0	510
06...	1135	113	1.0	69	AUG				
MAY					05...	1350	122	17.0	71
02...	1450	98	10.0	422	SEP				
05...	1400	--	7.5	223	03...	1405	133	17.5	39
22...	1440	95	10.5	540					
09346400 SAN JUAN RIVER NEAR CARRACAS, CO. (LAT 37 00 49N LONG 107 18 42W)									
OCT 1985					JUN 1986				
31...	0955	1580	9.0	455	06...	1040	101	12.0	3450
DEC					JUL				
03...	1300	270	2.0	350	01...	1310	101	16.0	2220
MAR 1986					AUG				
13...	1030	448	5.0	789	06...	0950	238	17.0	378
APR					SEP				
10...	1610	295	10.5	1610	04...	1000	238	16.0	305
MAY									
05...	1040	133	7.0	3810					
09349800 PIEDRA RIVER NEAR ARBOLES, CO. (LAT 37 05 18N LONG 107 23 50W)									
OCT 1985					MAY 1986				
31...	1135	179	9.0	252	05...	1240	144	7.5	2520
DEC					JUN				
11...	1330	--	0.0	154	05...	1610	122	13.0	1960
JAN 1986					JUL				
22...	1410	381	4.0	146	01...	1445	112	18.0	983
MAR					AUG				
12...	1530	340	8.5	550	06...	1135	257	18.0	284
APR					SEP				
10...	1330	260	9.0	1360	04...	1120	347	16.0	159
09371400 HARTMAN DRAW AT CORTEZ, CO. (LAT 37 19 26N LONG 108 36 52W)									
NOV 1985					JUN 1986				
20...	1405	2830	0.0	26	02...	1440	1960	17.0	15
JAN 1986					JUL				
15...	1450	2640	1.5	8.7	23...	1525	1950	19.0	59
APR									
08...	1415	2160	18.0	15					

SUPPLEMENTAL WATER-QUALITY DATA FOR GAGING STATIONS

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DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	STREAM- FLOW, INSTAN- TANEOUS (CFS)	DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM)	TEMPER- ATURE WATER (DEG C)	STREAM- FLOW, INSTAN- TANEOUS (CFS)
09371420 MCELMO CREEK ABOVE ALKALI CANYON, NR CORTEZ, CO. (LAT 37 19 38N LONG 108 38 55)									
NOV 1985					JUN 1986				
15...	1015	3000	0.0	25	02...	1005	1960	15.0	32
JAN 1986					JUL				
15...	1135	2720	0.0	18	23...	1255	1920	18.0	91
APR									
07...	1205	3010	13.0	29					
09371492 MUD CREEK AT STATE HIGHWAY 32, NEAR CORTEZ, CO. (LAT 37 18 46N LONG 108 39 38)									
NOV 1985					JUN 1986				
15...	1230	5000	1.5	3.4	02...	1340	2500	18.0	16
JAN 1986					JUL				
14...	1510	4740	1.0	3.2	23...	1435	4320	19.0	21
APR					SEP				
08...	1250	4760	17.0	2.8	30...	1020	3400	9.0	12

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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
<i>Length</i>		
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)
<i>Area</i>		
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)
<i>Volume</i>		
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)
<i>Flow</i>		
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)
<i>Mass</i>		
tons (short)	9.072×10^{-1}	megagrams (Mg) or metric tons

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