



Water Resources Data for Colorado

Volume 2. Colorado River Basin above
Dolores River

U.S. GEOLOGICAL SURVEY WATER-DATA REPORT CO-79-2

WATER YEAR 1979

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

CALENDAR FOR WATER YEAR 1979

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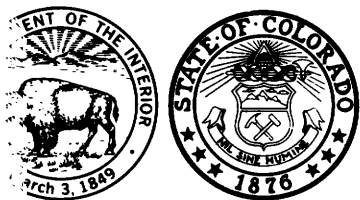
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UNITED STATES DEPARTMENT OF THE INTERIOR

CECIL D. ANDRUS, Secretary

GEOLOGICAL SURVEY

H. William Menard, Director

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Lakewood, CO 80225

1980

PREFACE

This report was prepared by the U.S. Geological Survey in cooperation with the State of Colorado and other agencies by personnel of the Colorado District of the Water Resources Division under the supervision of J. F. Blakey, District Chief, and Alfred Clebsch, Jr., Regional Hydrologist, Central Region.

This report is one of a series issued State by State under the direction of Philip Cohen, Chief Hydrologist, and the Assistant Chief Hydrologist for Scientific Publications and Data Management.

Data for Colorado are in three volumes as follows:

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

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[Letter after station name designates type and frequency of published data.

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WATER RESOURCES DATA FOR COLORADO, 1979

VOLUME 1: MISSOURI RIVER, ARKANSAS RIVER, AND RIO GRANDE BASINS
VOLUME 2: COLORADO RIVER BASIN ABOVE THE DOLORES RIVER
VOLUME 3: DOLORES, GREEN, AND SAN JUAN BASINS

INTRODUCTION

Water-resources data for the 1979 water year for Colorado consists of records of stage, discharge, and water quality of streams; stage, contents, and water quality of lakes and reservoirs; and water levels and water quality of wells and springs. This report (Volumes 1, 2, and 3) contains discharge records for about 460 streamflow-gaging stations, stage and contents of 22 lakes and reservoirs, 4 partial-record low-flow stations, 93 crest-stage partial-record stations, and 200 miscellaneous sites; water quality for 143 streamflow-gaging stations and 130 miscellaneous sites; and water levels for 55 observation wells. Locations of lake- and streamflow-gaging stations and water-quality stations are shown in figure 1, locations of crest-stage partial-record stations are shown in figure 2, and locations of observation wells are shown in figure 3. A few pertinent stations in bordering States also are included in this report. The records were collected and computed by the Colorado District. These data represent that part of the National Water Data System collected by the U.S. Geological Survey and cooperating State and Federal agencies in Colorado.

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." Through September 30, 1960, these water-supply papers were in an annual series and then in a 5-year series 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 Branch of Distribution, U.S. Geological Survey, 1200 Eads Street, Arlington, VA 22202.

Beginning with the 1961 water year, streamflow records and related data have been released by the Geological Survey in annual reports on a State-boundary basis. Beginning with the 1964 water year, water-quality records for surface and ground water have been similarly released in separate annual reports. These reports provided for rapid release of preliminary data shortly after the end of the water year. The final data were then released in the series of water-supply papers mentioned above. Beginning with the 1975 water year, water data will be released on a State-boundary basis in final form and will not be republished in the water-supply paper series. The 1975 and subsequent water year reports will be in a series which will 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 report is identified as "U.S. Geological Survey Water-Data Report CO-78-2." These reports are for sale by the National Technical Information Service, U.S. Department of Commerce, Springfield, VA 22161. For more information on available publications, see the section entitled, "PUBLICATIONS" on subsequent pages.

and water-quality studies.

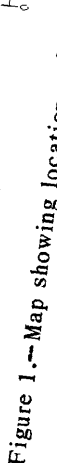
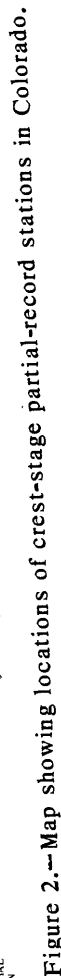
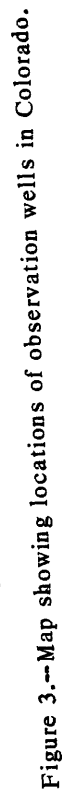


Figure 1.--Map showing locations of lake- and stream-gaging stations and water-quality stations.





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:

Colorado Division of Water Resources, J. A. Danielson, State Engineer.

Colorado Water Conservation Board, J. W. McDonald, Director.
Colorado Department of Highways, Jack Kinstlinger, Executive Director.

Arkansas River Compact Administration, Frank G. Cooley, Chairman and Federal Representative.

Colorado River Water Conservation District, Roland C. Fischer, Secretary-Engineer.

Metropolitan Denver Sewage Disposal District No. 1, William E. Korbitz, Manager.

Northern Colorado Water Conservation District, E. F. Phipps, Secretary-Manager.

Purgatoire River Water Conservancy District, Clyde Dawn, President.

Southwestern Water Conservation District, Robert H. Tyner, Manager.

Southeastern Colorado Water Conservancy District, C. L. Thomson, General Manager.

St. Vrain and Left Hand Water Conservancy District, James A. Cinea, Executive Director.

City and County of Denver, Board of Water Commissioners, Charles F. Brannan, President.

Eagle County Commissioners, Dale F. Grant, Chairman.

Pitkin County Board of County Commissioners, George Chhs, County Manager.

City of Aspen, Phillip Mahoney, City Manager.

City of Aurora, C. A. Wemlinger, Director of Utilities.

Colorado City Water and Sanitation District, W. T. Hambric, District Administrator.

City of Colorado Springs, Department of Public Utilities, James D. Phillips, Director.

City of Fort Collins, Roger E. Krempel, Director of Utilities.

City of Glenwood Springs, John D. West, Manager.

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

Some records have been collected and computed by contractors in accordance with U.S. Geological Survey specifications and under Geological Survey quality control.

HYDROLOGIC CONDITIONS

Water year 1979 was a year of above average runoff due to the heavy snow pack. The winter snowpack ranged from near 80 percent of normal in the Arkansas River basin to 220 percent of normal in Rio Grande basin. Streamflow varied from about 75 percent of normal in the southeast to about 260 percent of normal in the northeast part of the State.

Ground-water levels continued to decline in the northern High Plains, but remained constant in the alluvial river-channel aquifers.

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.

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, or 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 $35^{\circ}\text{C} \pm 1.0^{\circ}\text{C}$ 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 $44.5^{\circ}\text{C} \pm 0.2^{\circ}\text{C}$ 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 or 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 $0.45\ \mu\text{m}$ 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, $\mu\text{g/L}$) 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.

Table 1.--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.

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

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

Particle size is the diameter, in millimeters (mm), of suspended sediment or bed material determined either by sieve or sedimentation methods. Sedimentation methods (pipet, bottom-withdrawal tube, visual-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).

Table 2.--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	610-634	1.39
8.05- 24	1.01	218-232	1.14	427-440	1.27	636-650	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	331-345	1.21	540-554	1.34	740-762	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

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 (PCBs) 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 content in the water. Commonly, the concentration of dissolved solids (in milligrams per liter) is about 65 percent of the specific conductance (in micromhos). This relation is not constant from stream to stream or from well to well, and it may vary in the same source with changes in the composition of the water.

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

Streamflow is the discharge that occurs in a natural channel. Although the term "discharge" can be applied to the flow of a canal, the word "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 m 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 m 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 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, 1979, is called the "1979 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.

WDR is an abbreviation for "Water-Data Report" in the summary REVISIONS paragraph to refer to State annual basic-data reports published after 1974.

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

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

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

DOWNSTREAM ORDER AND STATION NUMBER

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

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

Gaps are left in the sequential allocation of numbers to allow for new stations that may be established; hence the numbers are not consecutive. The complete 8-digit number for each station, such as 07083000, which appears just to the left of the station name, includes the 2-digit part number "07" plus the 6-digit downstream order number "083000." In this report the records are listed in downstream order by parts. The part number refers to an area whose boundaries coincide with certain natural drainage lines. Records in this report are for Part 6 (Missouri River basin), Part 7 (Lower Mississippi River basin), and Part 8 (Western Gulf of Mexico basins). Records for Part 9 (Colorado River Basin) are in Volumes 2 and 3. All records for a drainage basin encompassing more than one State can be arranged in downstream order by assembling pages from the various State reports by station number to include all records in the basin.

SPECIAL NETWORKS AND PROGRAMS

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

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

Irrigation-network stations are water-quality stations located at or near certain streamflow gaging stations west of the main stem of the Mississippi River. Data collected at these stations are used to evaluate the chemical quality of surface waters used for irrigation and the changes resulting from the drainage of irrigated lands. Prior to water year 1966, the data for these stations were published in the annual Water-Supply Paper series, "Quality of Surface Water for Irrigation, Western States."

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 Geological Survey on the basis of experience in stream gaging since 1888. These methods are described in standard textbooks, in Water-Supply Paper 888, and in U.S. Geological Survey Techniques of Water Resources Investigations, book 3, chapter A6. Surface areas of lakes or reservoirs are determined from instrument surveys using standard methods. The configuration of the reservoir bottom is determined by sounding at many points.

For stream-gaging stations, rating tables giving the discharge for any stage are prepared from stage-discharge relation curves. If extensions to the rating curves are necessary to express discharge greater than measured, they are made on the basis of indirect measurements of peak discharge (such as slope-area or contracted-opening measurements, computation of flow over dams or weirs), step-backwater techniques, velocity-area studies, and logarithmic plotting. The daily mean discharge is computed from gage heights and rating tables, then the monthly and yearly mean discharge are computed from the daily figures. If the stage-discharge relation is subject to change because of frequent or continual change in the physical features that form the control, the daily mean discharge is computed by the shifting-control method, in which correction factors based on individual discharge measurements and notes by hydrologists and observers are used in applying the gage heights to the rating tables. If the stage-discharge relation for a station is temporarily changed by the presence of aquatic growth or debris on the control, the daily mean discharge is computed by what is basically the shifting-control method.

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

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

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

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

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

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

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

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

Information pertaining to the accuracy of the discharge records, to conditions which affect the natural flow of the gaging station, availability of water-quality records, and reservoir stations information on the dam forming the reservoir, the capacity, outlet works and spillway, and purpose and use of the reservoir, is given under "REMARKS."

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

The maximum discharge (or contents) and the maximum gage height, the minimum discharge if there is little or no regulation (or minimum contents), and the minimum gage height, if it is significant, are given under "EXTREMES." The minimum daily discharge is given if there is extensive regulation (also the minimum discharge and gage height if they are abnormally low). Under "EXTREMES" are given first, the extremes for the period of record, second, information available outside the period of record, and last, those for the current year. Unless otherwise qualified, the maximum discharge (or contents) is the instantaneous maximum corresponding to the crest stage obtained by use of a water-stage recorder (graphic or digital), a crest-stage gage, or a nonrecording gage read at the time of the crest. If the maximum gage height did not occur on the same day as the maximum discharge (or contents), it is given separately. Similarly, the minimum is the instantaneous minimum unless otherwise qualified. For some stations peak discharges are listed with EXTREMES FOR THE CURRENT YEAR; if they are, all independent peaks, including the maximum for the year, above the selected base with the time of occurrence and corresponding gage heights are published in tabular format. The base discharge, which is given in the table heading, is selected so that an average of about three peaks a year will be presented. Peak discharges are not published for any canals, ditches, drains, or for any stream for which the peaks are subject to substantial control by man. Time of day is expressed in 24-hour local standard time; for example, 12:30 a.m. is 0030, 1:30 p.m. is 1330. The minimums for these stations are published in a separate paragraph following the table of peaks.

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

Discharge for the month also may be expressed in acre-feet (line headed "AC-FT"). In the yearly summary below the monthly summary, the figures shown are the appropriate daily discharges for the calendar and water years.

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

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

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

Accuracy of field data and computed results

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

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

Figures of daily mean discharge in this report are shown to the nearest hundredth of a cubic foot per second (ft^3/s) for discharges of less than $1 \text{ ft}^3/\text{s}$; 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 Water and Power Resources Service, U.S. Department of the Interior.

EXPLANATION OF WATER-QUALITY RECORDS

Collection and Examination of Data

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

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

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

Water Analysis

Most methods for collecting and analyzing water samples are described in "U.S. Geological Survey Techniques of Water-Resources Investigations," which are listed on page 35.

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

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

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

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

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 at 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 3.--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=5/9(°F-32°) or °F=9/5(°C)+32°.

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

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

Solutes

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

Sediment

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

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

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

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

WATER-SUPPLY PAPERS

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

Table 4.--Water-Supply Paper numbers and parts,
water years 1941-71

Year	Part 6	Part 7	Part 8	Part 9	Irrigation ^a (1951-65) ^a
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	^b 2156	^b 2157	^b 2158	----
1971	2165	^b 2166	^b 2167	^b 2168	----

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

^b In preparation.

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

EXPLANATION OF GROUND-WATER-LEVEL RECORDS

Collection of Data

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

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

The latitude and longitude grid system is used to provide the geographic location of each well. The number consists of 15 digits. The first six digits denote the degrees, minutes, and seconds of latitude; N designates north; the next seven digits denote degrees, minutes, and seconds of longitude; and the last digit is a sequential number for wells within a 1-second grid, as shown below in figure 4.

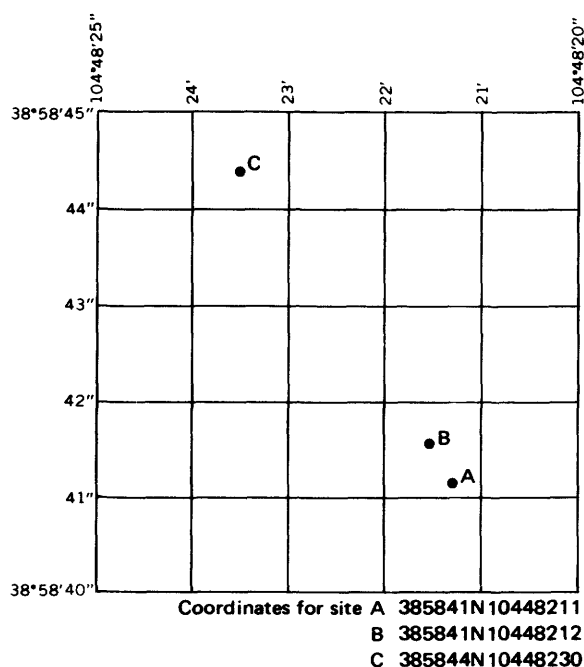


Figure 4.--System for numbering wells and miscellaneous sites (latitude and longitude).

The local well number locates a well within a 10-acre (4.0-ha) tract using the U.S. Bureau of Land Management system of land subdivision. The components of the local well number proceed from the largest to the smallest land subdivisions. This is in contrast to the legal description, which proceeds from the smallest to the largest land subdivision. The largest subdivision is the survey. Colorado is governed by three surveys: The Sixth Principal Meridian Survey (S), the New Mexico Survey (N), and the Ute Survey (U). Costilla County was not included in any of the above official surveys. This report follows the convention of the Costilla County Assessor in which the northern part of the county is governed by the Sixth Principal Meridian Survey and the southern part of the county is governed by a local system called the Costilla Survey (C). The first letter of the well location designates the survey.

A survey is subdivided into four quadrants formed by the intersection of the baseline and the principal meridian. The second letter of the well location designates the quadrant: A indicates the northeast quadrant, B the northwest, C the southwest, and D the southeast. A quadrant is subdivided in the north-south direction every 6 mi (10 km) by townships and is subdivided in the east-west direction every 6 mi (10 km) by ranges. The first number of the well location designates the township and the second number designates the range.

The 36-mi² (93-km²) area described by the township and range designation is subdivided into 1-mi² (2.59-km²) areas called sections. The sections are numbered sequentially. The third number of the well location designates the section. The section, which contains 640 acres (259 ha), is subdivided into quarter sections. The 160-acre (64.8-ha) area is designated by the first letter following the section: A indicates the northeast quarter, B the northwest, C the southwest, and D the southeast. The quarter section is subdivided into quarter-quarter sections. The 40-acre (16.2-ha) area is designated in the same manner by the second letter following the section. The quarter-quarter section is subdivided into quarter-quarter-quarter sections. The 10-acre (4.0-ha) area is designated in the same manner by the third letter following the section. If more than one well is located within the 10-acre (4.0-ha) tract, the wells are numbered sequentially in the order in which they were originally inventoried. If this number is necessary, it will follow the three-letter designation.

The local number is provided for continuity with older reports.

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

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

Water levels are reported to as many significant figures as can be justified by the local conditions. For example, in a measurement of a depth to water of several hundred feet, the error of determining the absolute value of the total depth to water may be a few tenths of a foot, whereas the error in determining the net change of water level between successive measurements may be only a hundredth or a few hundredths of a foot. For lesser depths to water, the accuracy is greater. Accordingly, most measurements are reported to a hundredth of a foot, but some are given only to a tenth of a foot or a larger unit.

Publications

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

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

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

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Thirty-four manuals by the U.S. Geological Survey have been published to date in the series on techniques describing procedures for planning and executing specialized work in water-resources investigations. The material is grouped under major subject headings called books and is further divided into sections and chapters. For example, Section A of Book 3 (Applications of Hydraulics) is on surface water. The chapter, the unit of publication, is limited to a narrow field of subject matter. This format permits flexibility in revision and publication as the need arises. The reports listed below are for sale by the U.S. Geological Survey, Branch of Distribution, 1200 South Eads Street, Arlington, VA 22202 (authorized agent of the Superintendent of Documents, Government Printing Office).

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

- 1-D1. *Water temperature--influential factors, field measurement, and data presentation*, by H. H. Stevens, Jr., J. F. Ficke, and G. F. Smoot: USGS--TWRI Book 1, Chapter D1. 1975. 65 pages.
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- 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.
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- 3-B2. *Introduction to ground-water hydraulics, a programed text for self-instruction*, by G. D. Bennett: USGS--TWRI Book 3, Chapter B2. 1976. 172 pages.
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- 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.
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- 5-A5. *Methods for determination of radioactive substances in water and fluvial sediments*, by L. L. Thatcher, V. J. Janzer, and K. W. Edwards: USGS--TWRI Book 5, Chapter A5. 1977. 95 pages.
- 5-C1. *Laboratory theory and methods for sediment analysis*, by H. P. Guy: USGS--TWRI Book 5, Chapter C1. 1969. 58 pages.
- 7-C1. *Finite difference model for aquifer simulation in two dimensions with results of numerical experiments*, by P. C. Trescott, G. F. Pinder, and S. P. Larson: USGS--TWRI Book 7, Chapter C1. 1976. 116 pages.
- 7-C2. *Computer model of two-dimensional solute transport and dispersion in ground water*, by L. F. Konikow and J. D. Bredehoeft: USGS--TWRI Book 7, Chapter C2. 1978. 90 pages.
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0901050D COLORADO RIVER BELOW BAKER GULCH, NEAR GRAND LAKE, CU

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	8.6	7.4	7.0	5.8	5.8	7.0	35	244	361	58	30
2	17	8.5	7.2	7.0	5.8	5.8	7.0	35	218	331	54	28
3	15	8.6	7.0	7.0	5.8	5.8	7.0	33	232	294	51	27
4	15	8.1	7.0	7.0	5.8	5.8	7.0	35	273	284	48	25
5	16	8.6	7.0	7.0	5.8	5.8	7.0	57	312	235	44	23
6	16	7.0	7.0	7.0	5.8	5.8	7.0	82	419	222	43	22
7	16	7.0	6.6	7.0	5.8	5.8	7.0	80	534	213	43	21
8	15	7.6	6.0	7.0	5.8	5.8	7.0	66	443	192	47	21
9	16	8.1	6.4	7.0	5.8	5.8	8.0	57	342	174	46	20
10	16	8.7	7.0	7.0	5.8	5.8	8.0	45	272	163	50	20
11	15	8.2	7.0	7.0	5.8	5.8	8.2	39	273	150	47	24
12	15	8.7	7.0	7.0	5.8	5.8	8.4	37	327	142	44	23
13	14	7.9	7.0	7.0	5.8	5.8	9.0	38	459	133	50	20
14	13	8.5	7.0	7.0	5.8	5.8	9.4	56	587	127	57	19
15	14	7.7	7.0	7.0	5.8	5.8	10	89	655	120	53	18
16	14	7.7	7.0	7.0	5.8	5.8	11	121	619	115	58	17
17	15	7.6	7.0	7.0	5.8	5.8	11	164	592	111	57	16
18	17	7.4	7.0	7.0	5.8	5.8	14	206	554	104	58	14
19	19	7.0	7.0	7.0	5.8	6.5	14	254	491	95	53	16
20	17	7.3	7.0	7.0	5.8	6.5	24	281	361	89	55	17
21	19	7.2	7.0	7.0	5.8	6.5	30	266	373	88	80	21
22	21	7.5	7.0	7.0	5.8	6.5	34	251	428	84	53	18
23	19	7.5	7.0	6.6	5.8	6.5	36	275	462	85	57	17
24	17	7.4	7.0	6.0	5.8	6.5	38	314	464	97	54	17
25	10	7.7	7.0	6.0	5.8	6.5	39	331	484	84	48	18
26	7.9	8.3	7.0	6.0	5.8	6.5	34	342	446	78	44	18
27	8.4	8.1	7.0	6.0	5.8	6.5	38	386	428	79	42	25
28	8.4	8.0	7.0	6.0	5.8	6.5	35	464	444	81	39	23
29	8.1	7.6	7.0	6.0	---	7.0	35	576	402	71	36	21
30	8.5	7.4	7.0	5.8	---	7.0	35	464	378	65	34	21
31	8.1	---	7.0	5.8	---	7.0	---	324	---	62	33	---
TOTAL	448.4	235.5	215.6	208.2	162.4	190.4	545.0	5803	12536	4530	1638	620
MEAN	14.5	7.85	6.95	6.72	5.80	6.14	18.2	187	418	146	52.8	20.7
MAX	21	8.7	7.4	7.0	5.8	7.0	39	576	655	361	53	30
MIN	7.9	7.0	6.0	5.8	5.8	5.0	7.0	33	218	62	33	14
AC-FT	889	467	428	413	322	378	1080	11510	24870	8990	3250	1230
CAL YR 1978	TOTAL	31254.1	MEAN	85.6	MAX	749	MIN	4.6	AC-FT	61990		
WTR YR 1979	TOTAL	27132.5	MEAN	74.3	MAX	655	MIN	5.6	AC-FT	53820		

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 (61 m) downstream from bridge on U.S. Highway 34, 400 ft (120 m) upstream from high-water line of Shadow Mountain Lake at elevation 8,367 ft (2,550.3 m), and 3.0 mi (4.8 km) southwest of town of Grand Lake.

DRAINAGE AREA.--102 mi² (264 km²).

PERIOD OF RECORD.--July 1904 to September 1918, October 1933 to current year. Monthly discharge only for some periods, published in WSP 1313. Published as Grand River (North Fork) near Grand Lake 1904 and as North Fork of Grand River near Grand Lake 1905-18.

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

GAGE.--Water-stage recorder. Altitude of gage is 8,380 ft (2,554 m), 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 (340 m) downstream at different datum.

REMARKS.--Records good except those for winter period, which are poor. Diversions above station for irrigation of about 200 acres (809,000 m²) of hay meadows above station and about 2,000 acres (8.09 km²) below. Trans-mountain diversion above station by Grand River ditch through La Poudre Pass to Cache la Poudre River basin (see elsewhere in this report). Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--60 years (water years 1905-18, 1934-79), 90.5 ft³/s (2.563 m³/s), 65,570 acre-ft/yr (80.8 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 1,840 ft³/s (52.1 m³/s) June 15, 16, 1918, gage height, 7.0 ft (2.13 m), from rating curve extended above 1,100 ft³/s (31 m³/s); maximum gage height, 8.21 ft (2.502 m) Apr. 20, 1971 (backwater from ice); minimum daily discharge, 1.7 ft³/s (0.048 m³/s) July 18, 19, 1934.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 774 ft³/s (21.9 m³/s) at 1200 May 29, gage height, 6.16 ft (1.878 m); minimum daily, 12 ft³/s (0.34 m³/s) Dec. 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	20	15	15	15	15	18	89	387	335	35	42
2	25	20	14	15	15	15	18	93	334	304	54	40
3	25	20	14	15	15	15	18	86	345	261	56	38
4	24	20	15	15	15	15	18	82	365	245	54	35
5	24	20	15	15	15	15	18	107	432	194	52	33
6	24	19	15	16	15	15	18	167	492	153	48	31
7	24	19	15	15	15	15	18	170	603	150	45	31
8	24	17	12	15	15	15	18	123	652	120	51	30
9	23	18	13	15	15	15	19	112	523	97	50	30
10	23	18	16	15	15	15	19	100	361	89	68	29
11	23	18	16	15	15	15	20	85	333	58	59	30
12	23	18	16	15	15	15	20	78	357	47	51	32
13	22	17	17	15	15	15	21	81	470	41	59	29
14	22	15	16	15	15	15	21	106	608	34	67	28
15	21	14	17	18	15	15	23	163	684	29	72	27
16	21	14	17	17	15	15	25	212	682	27	76	26
17	21	13	17	16	15	15	31	255	669	24	77	25
18	22	13	16	15	15	15	47	300	616	22	81	23
19	23	13	16	15	15	15	52	341	547	20	144	23
20	22	14	16	15	15	15	59	395	431	18	114	26
21	22	14	17	15	15	15	73	407	362	17	126	30
22	24	15	17	15	15	15	72	374	401	18	42	29
23	24	15	17	15	15	15	76	391	450	16	79	27
24	22	16	16	15	15	15	82	444	437	19	74	25
25	27	16	16	15	15	15	88	487	462	18	56	28
26	23	16	15	15	15	15	78	516	430	16	60	27
27	21	16	15	15	15	15	83	588	400	16	57	30
28	21	15	17	15	15	15	88	631	408	17	55	32
29	21	15	16	15	---	18	84	737	388	15	50	30
30	20	16	16	15	---	18	89	666	356	14	47	29
31	21	---	16	15	---	18	---	505	---	13	45	---
TOTAL	708	494	486	472	420	498	1314	8891	14005	2447	2074	895
MEAN	22.8	16.5	15.7	15.2	15.0	16.1	43.8	287	467	78.9	66.9	29.8
MAX	27	20	17	18	15	18	89	737	684	335	144	42
MIN	20	13	12	15	15	15	18	78	333	13	35	23
AC-FT	1400	980	964	936	833	988	2610	17640	27780	4850	4116	1760
CAL YR 1978 TOTAL	37254.0							73890				
WTR YR 1979 TOTAL	32704.0							64870				

GRAND LAKE OUTLET BASIN

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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.73 W., Larimer County, Hydrologic Unit 10190006, on right bank at upstream end of Aspen Creek siphon, 700 ft (210 m) downstream from east portal, and 4.5 mi (7.2 km) southwest of Estes Park.

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder and Parshall flume. Altitude of gage is 8,250 ft (2,515 m), from topographic map. Prior to Oct. 1, 1950, water-stage recorder and Parshall flume at different datum. Oct. 1, 1950, to Sept. 30, 1952, water-stage recorder and Cippoletti weir at different datum.

REMARKS.--Records excellent. This is a transmountain diversion from Grand Lake and Shadow Mountain Lake for power and irrigation developments in the South Platte River basin as part of the Colorado-Big Thompson project. Diversion point is at west portal near town of Grand Lake, 13.35 mi (21.48 km) west of east portal. The daily figures for water year 1978, inadvertently omitted from the 1978 report, are published herewith.

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

AVERAGE DISCHARGE.--32 years, 271 ft³/s (7.675 m³/s), 196,300 acre-ft/yr (242 hm³/yr); 33 years, 271 ft³/s (7.675 m³/s), 196,300 acre-ft/yr (242 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 592 ft³/s (16.8 m³/s) June 30, 1962; no flow at times in most years.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	278	284	437	423	502	546	553	503	171	56	382	536
2	277	284	415	421	498	544	546	403	388	71	361	502
3	288	342	408	485	502	542	548	287	423	134	445	542
4	275	290	419	421	453	548	546	275	325	221	451	542
5	377	335	425	461	400	551	553	263	170	260	454	533
6	289	339	498	457	396	540	551	80	131	89	490	508
7	281	288	487	425	485	449	548	46	309	86	468	508
8	276	284	496	415	485	469	516	314	1.0	147	480	510
9	261	324	441	451	473	342	542	411	167	.70	515	508
10	293	414	377	419	500	451	498	533	.50	198	464	512
11	311	336	360	449	451	557	504	421	1.0	1.0	454	542
12	341	291	393	500	425	534	521	371	.00	.50	470	465
13	381	287	512	500	475	333	500	381	.00	.70	484	81
14	483	288	512	419	538	351	491	314	.00	82	499	1.9
15	481	328	504	421	540	500	449	407	.00	184	458	297
16	485	346	489	451	506	433	376	221	.00	182	476	531
17	471	348	366	374	536	431	54	126	.00	201	497	538
18	294	345	385	361	538	508	75	102	.00	236	507	448
19	336	235	498	445	536	508	57	266	82	134	499	421
20	320	207	498	498	533	548	55	214	133	235	524	413
21	214	334	508	502	536	531	56	178	1.0	184	526	413
22	199	386	506	500	538	514	56	266	123	282	537	412
23	201	414	502	487	542	546	57	2.5	11	306	539	415
24	284	360	500	467	540	546	56	217	.00	308	543	421
25	284	295	500	500	538	523	56	164	1.0	327	538	412
26	291	210	498	500	536	538	.75	.80	.00	389	496	400
27	291	205	483	496	536	542	.50	212	129	374	498	402
28	375	280	459	494	544	542	128	221	273	394	493	429
29	301	302	489	500	---	548	355	348	183	402	515	413
30	281	311	455	500	---	548	411	351	137	314	542	408
31	288	---	419	479	---	553	---	48	---	389	548	---
TOTAL	9807	9292	14239	14221	14082	15616	9659.25	7946.30	3159.50	6187.90	15153	13063.9
MEAN	316	310	459	459	503	504	322	256	105	200	489	435
MAX	485	414	512	502	544	557	553	533	423	402	548	542
MIN	199	205	360	361	396	333	.50	.80	.00	.50	361	1.9
AC-FT	19450	18430	28240	28210	27930	30970	19160	15760	6270	12270	30060	25910
CAL YR 1977 TOTAL	138122.45			MEAN 378	MAX 548	MIN .50	AC-FT 274000					
WTR YR 1978 TOTAL	132426.85			MEAN 363	MAX 557	MIN .00	AC-FT 262700					

GRAND LAKE OUTLET BASIN

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

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	237	399	473	500	506	379	139	489	2.0	.00	273	116
2	388	371	491	500	496	377	58	492	.00	.00	254	6.1
3	449	379	496	451	224	339	58	492	1.0	136	265	.28
4	449	393	525	366	221	359	108	492	1.0	1.0	328	236
5	445	415	485	392	419	487	111	270	1.0	1.5	343	101
6	430	489	498	300	498	477	107	157	1.0	.50	343	266
7	267	389	527	267	428	346	1.5	224	.00	.50	392	242
8	303	391	529	330	333	378	.60	194	.30	.20	451	209
9	346	369	533	361	498	314	.60	211	.00	.20	357	208
10	443	392	433	295	224	339	.75	154	.00	.10	73	284
11	447	371	485	293	230	338	.75	159	.00	.60	322	231
12	447	381	496	297	443	340	.75	231	.00	.65	293	105
13	445	369	496	222	494	342	316	257	.00	246	312	235
14	447	380	461	290	491	326	341	195	.00	201	296	243
15	445	369	463	297	455	336	216	.60	.00	206	194	128
16	445	317	425	406	334	340	392	46	.00	159	182	125
17	441	380	423	383	219	329	489	28	.00	.70	234	186
18	408	354	502	421	216	359	494	1.3	.00	.10	162	139
19	423	491	496	307	314	347	491	1.3	.00	4.6	55	154
20	435	451	329	291	385	348	487	1.3	.00	.00	.50	94
21	410	449	540	284	383	347	479	2.1	.00	.30	.30	92
22	425	433	542	408	381	360	485	2.5	.00	.10	.40	140
23	410	467	496	419	371	429	485	2.5	.00	110	314	126
24	410	469	412	413	208	433	486	1.7	.00	196	2.9	102
25	408	475	410	445	210	429	490	3.0	.00	33	.42	214
26	412	477	483	389	338	396	494	3.0	.00	102	135	220
27	410	489	494	400	357	412	527	2.0	1.0	194	150	242
28	410	504	408	404	350	392	523	3.0	1.0	195	153	228
29	427	494	365	406	---	394	461	2.0	1.0	8.9	.51	206
30	408	489	506	404	---	338	489	2.0	.00	214	193	226
31	410	---	502	412	---	244	---	151	---	219	217	---
TOTAL	12680	12596	14724	11353	10026	11374	8730.95	4270.30	9.30	2295.30	6296.03	5104.38
MEAN	409	420	475	366	358	367	291	138	.31	74.0	203	170
MAX	449	504	542	500	506	487	527	492	2.0	246	451	284
MIN	237	317	329	222	208	244	.60	.60	.00	.00	.30	.28
AC-FT	25150	24980	29210	22520	19890	22560	17320	8470	18	4550	12490	10120
CAL YR 1978 TOTAL	139088.85			MEAN 381	MAX 557	MIN .00	AC-FT 275900					
WTR YR 1979 TOTAL	99459.26			MEAN 272	MAX 542	MIN .00	AC-FT 197300					

GRAND LAKE OUTLET BASIN

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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 1978 TO SEPTEMBER 1979

			TEMPER- ATURE (DEG C)						TEMPER- ATURE (DEG C)		
DATE		TIME				DATE		TIME			
OCT						MAR					
13...	0910	10.0				28...	0805	2.0			
19...	1325	10.0				APR					
NOV						18...	1230	3.0			
09...	1315	8.0				MAY					
28...	1220	4.0				10...	1130	3.0			
DEC						JUN					
20...	0915	2.0				07...	0830	5.0			
JAN						JUL					
11...	1345	1.5				12...	1200	9.0			
25...	0930	2.0				AUG					
FEB						08...	1345	12.0			
14...	1435	2.0				23...	0900	14.0			
22...	0845	2.0				SEP					
MAR						19...	0915	13.0			
14...	1500	1.0									

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	OXYGEN, DIS- SOLVED (MG/L)	COLI- FORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	HARD- NESS (MG/L AS CAC03)	HARD- NESS, NONCAR- BONATE (MG/L CAC03)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)
OCT												
13...	0910	445	46	7.6	8.1	K5	<1	18	0	5.4	1.1	2.0
NOV												
28...	1220	510	50	7.2	8.9	K10	<1	19	0	5.9	1.1	2.0
DEC												
20...	0915	200	55	7.3	11.1	K3	<1	21	0	6.4	1.3	2.1
JAN												
25...	0930	496	55	7.3	9.2	26	K1	25	5	7.5	1.4	2.6
FEB												
22...	0845	498	60	7.2	9.1	K8	<1	24	1	7.3	1.5	2.4
MAR												
28...	0805	494	60	7.2	9.0	K3	<1	27	4	8.3	1.4	2.4
APR												
18...	1230	491	60	7.1	8.6	K11	<1	23	4	7.0	1.4	2.3
MAY												
10...	1130	389	52	7.1	8.8	K13	K9	20	4	6.0	1.2	2.2
JUN												
07...	0830	15	30	7.0	8.4	37	K3	13	1	4.1	.6	2.7
JUL												
12...	1200	6.4	33	7.3	7.0	26	<1	12	0	3.5	.7	3.7
AUG												
23...	0900	417	20	7.2	7.5	38	<1	8	4	2.3	.5	1.1
SEP												
19...	0915	275	29	7.2	7.2	28	K1	14	6	4.5	.6	1.5

K BASED ON NON-IDEAL COLONY COUNT.

GRAND LAKE OUTLET BASIN

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	ALKA- LINITY (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)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)
OCT 13...	.2	.5	23	0	19	4.5	.4	.1	3.5	29	.02	.03
NOV 28...	.2	.7	25	0	21	5.8	.6	.1	4.2	33	.07	.10
DEC 20...	.2	.8	30	0	25	4.8	.4	.1	4.9	36	.09	.10
JAN 25...	.2	.9	--	--	20	5.5	1.3	.1	5.9	38	.12	.08
FEB 22...	.2	.8	--	--	23	4.2	.5	.1	6.0	37	.13	.13
MAR 28...	.2	.8	--	--	23	6.0	.5	.1	5.3	40	.12	.14
APR 18...	.2	.9	--	--	19	5.5	.4	.2	6.2	36	.14	.15
MAY 10...	.2	.9	--	--	16	2.6	.5	.1	5.8	30	.13	.14
JUN 07...	.3	.7	--	--	12	4.4	.4	.2	9.6	30	.05	.00
JUL 12...	.5	.6	--	--	13	--	.5	.2	3.5	--	.05	.02
AUG 23...	.2	.3	--	--	4	6.4	.4	.1	3.2	17	.00	.03
SEP 19...	.2	.6	--	--	8	5.1	.3	.1	3.7	21	.04	.00

DATE	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	CADMIUM DIS- SOLVED (UG/L AS CD)	COPPER, DIS- SOLVED (UG/L AS CU)	LEAD, DIS- SOLVED (UG/L AS PB)	NICKEL, DIS- SOLVED (UG/L AS NI)	ZINC, DIS- SOLVED (UG/L AS ZN)	PHOS- PHORUS, TOTAL (MG/L AS P)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
OCT 13...	.31	.33	<1	1	3	3	<3	.01	.00	--	70	<1
NOV 28...	.22	.29	--	--	--	--	--	.01	.01	.00	100	6
DEC 20...	.18	.27	--	--	--	--	--	.03	.02	--	160	3
JAN 25...	.22	.34	<1	2	7	1	<3	.03	.02	--	170	3
FEB 22...	.13	.26	--	--	--	--	--	.03	.03	--	200	0
MAR 28...	.26	.38	--	--	--	--	--	.02	.02	.02	190	0
APR 18...	.11	.25	2	2	1	0	<3	.02	.01	--	170	4
MAY 10...	.14	.27	--	--	--	--	--	.03	.01	--	120	5
JUN 07...	.15	.20	--	--	--	--	--	.01	.01	--	50	0
JUL 12...	.38	.43	3	0	19	0	<3	.02	.01	--	20	2
AUG 23...	.17	.17	--	--	--	--	--	.04	--	--	30	2
SEP 19...	.56	.60	--	--	--	--	--	.01	.01	.05	30	0

RESERVOIRS IN COLORADO RIVER BASIN, CO

09014500 SHADOW MOUNTAIN LAKE.--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 (1.6 km) upstream from Pole Creek and 3.2 mi (5.1 km) south of town of Grand Lake. DRAINAGE AREA, 185 mi² (479 km²). 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 Water and Power Resources Service); gage readings have been reduced to elevations NGVD. Supplementary water-stage recorder on Grand Lake, 800 ft (240 m) north of outlet gates and 2.9 mi (4.7 km) north of Shadow Mountain Dam.

Lake is formed by earth and rockfill dam and dikes. Storage began in April 1947. Capacity, 17,860 acre-ft (22.0 hm³), including usable capacity of Grand Lake above elevation 8,365 ft (2,549.7 m) between elevation 8,347 ft (2,544.2 m), sill of outlet gate, and 8,367 ft (2,550.3 m); maximum water surface. Dead storage in Shadow Mountain Lake, 506 acre-ft (624,000 m³). 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 (4,51 hm³) between elevations 8,365 ft (2,549.7 m), crest of tunnel inlet, and 8,367 ft (2,550.3 m), 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. Records furnished by Water and Power Resources Service.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 17,920 acre-ft (22.1 hm³) May 22, 1955, elevation, 8,367.03 ft (2,550.271 m); minimum since appreciable storage was first attained, 2,630 acre-ft (3.24 hm³) May 14, 1948.

EXTREMES FOR CURRENT YEAR: Maximum contents, 17,670 acre-ft (21.8 hm³) Sept. 18, elevation, 8,356.90 ft (2,550.231 m); minimum, 16,010 acre-ft (19.7 hm³) June 15, elevation, 8,365.84 ft (2,549.908 m).

09018500 LAKE GRANBY.--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 (4.0 km) north of Granby Dam on Colorado River and 7.5 mi (12.1 km) northeast of Granby. DRAINAGE AREA, 312 mi² (808 km²). 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 Water and Power Resources Service); gage readings have been reduced to elevations NGVD. Prior to Apr. 9, 1951, nonrecording gage at dam at present datum.

Reservoir is 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 (574 hm³) between elevations 8,186.00 ft (2,495.093 m), trash rack sill at outlet, and 8,280.00 ft (2,523.744 m), top of radial spillway gates. Dead storage, 74,190 acre-ft (91.5 hm³). 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. Records furnished by Water and Power Resources Service.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 465,900 acre-ft (574 hm³) July 13, 1962, elevation, 8,280.05 ft (2,523.759 m); minimum since appreciable storage was attained, 13,070 acre-ft (16.1 hm³) Apr. 16, 1978, elevation, 8,190.93 ft (2,496.595 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 334,200 acre-ft (412 hm³) Aug. 30, elevation, 8,260.74 ft (2,517.874 m); minimum, 86,210 acre-ft (106 hm³) May 5, elevation, 8,212.62 ft (2,503.207 m).

MONTHEND ELEVATION IN FEET NGVD AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

Date	Elevation	Contents (acre- feet)	Change in contents (acre-feet)	Elevation	Contents (acre- feet)	Change in contents (acre-feet)
09014500 SHADOW MOUNTAIN LAKE				09018500 LAKE GRANBY		
Sept. 30.	8,366.60	17,130	-	8,242.15	224,700	-
Oct. 31.	8,366.67	17,240	110	8,237.51	199,900	-24,800
Nov. 30.	8,366.72	17,320	+80	8,233.26	178,300	-21,600
Dec. 31.	8,366.73	17,340	+20	8,227.81	151,900	-26,400
CAL YR 1978			+60			+51,500
Jan. 31.	8,366.66	17,210	-130	8,223.55	132,400	-19,500
Feb. 28.	8,366.68	17,270	+60	8,219.37	114,000	-18,400
Mar. 31.	8,366.64	17,210	-60	8,214.39	93,280	-20,720
Apr. 30.	8,366.64	17,180	-30	8,212.91	87,360	-5,920
May 31.	8,366.56	17,060	-120	8,228.60	155,700	+68,340
June 30.	8,366.40	16,850	-210	8,253.47	289,400	+133,700
July 31.	8,366.52	17,030	+180	8,260.29	331,400	+42,000
Aug. 31.	8,366.55	17,070	+40	8,260.66	333,700	+2,300
Sept. 30.	8,366.70	17,310	+240	8,259.72	327,800	-5,900
WTR YR 1979			+180			+103,100

COLORADO RIVER BASIN
09018300 GRANBY PUMP CANAL NEAR GRAND LAKE, CO

WATER-QUALITY RECORDS

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	COLI- FORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)
OCT 04...	0915	600	60	7.3	12.0	6.8	34	<1	.33	.35	.02	.02
NOV 15...	1000	615	60	7.4	7.0	7.6	44	<1	.35	.43	.02	.08
DEC 13...	0915	300	55	7.3	2.0	12.0	K6	K3	.19	.28	.04	.09
JAN 17...	0920	314	60	7.4	2.0	9.2	51	<1	.35	.47	.04	.12
FEB 13...	1245	E300	55	7.4	2.5	8.8	K22	<1	.17	.29	.04	.12
MAR 14...	0840	E542	60	7.2	2.5	8.8	<1	<1	.14	.25	.02	.11
APR 26...	1140	500	60	7.3	4.0	9.0	<1	<1	.17	.28	.01	.11
AUG 09...	1230	374	60	--	10.0	4.7	K5	<1	.20	.28	.01	.08
SEP 25...	1330	121	60	5.3	10.0	3.0	24	<1	.46	.73	.08	.27

K BASED ON NON-IDEAL COLONY COUNT.

E ESTIMATED.

COLORADO RIVER BASIN

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09018500 LAKE GRANBY NEAR GRANBY, CO.--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1973 to June 1975 and June 1979.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	SAMP- LING DEPTH (FT)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	DATE	TIME	SAMP- LING DEPTH (FT)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)
JUN					JUN				
12...	1600	2.0	12.0	8.6	12...	1608	60	6.0	6.6
12...	1601	5.0	11.0	8.6	12...	1609	70	5.5	6.5
12...	1602	10	10.0	8.5	12...	1610	75	5.0	6.5
12...	1603	20	9.0	8.0	12...	1611	80	5.0	6.5
12...	1604	25	8.5	8.0	12...	1612	90	5.0	6.4
12...	1605	30	8.0	7.9	12...	1613	100	5.0	6.2
12...	1606	40	7.5	7.6					
12...	1607	50	7.0	7.2					

DATE	TIME	SAMP- LING DEPTH (FT)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	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)	PHYTO- PLANK- TON, TOTAL (CELLS PER ML)
JUN												
12...	1600	2.0	.01	.31	.32	.03	2	0	1	0	10	5700
12...	1613	100	.10	.30	.40	.03	5	0	6	0	10	--

PHYTOPLANKTON ANALYSES, OCTOBER 1978 TO JUNE 1979

DATE	JUN 12/79
TIME	1600
TOTAL CELLS/ML	5700
DIVERSITY:	
DIVISION	0.1
CLASS	0.1
ORDER	0.1
FAMILY	0.1
GENUS	0.1

ORGANISM	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)		
CHLOROPHYCEAE		
CHLOROCOCCALES		
OOCYSTACEAE		
CHODATELLA	39	1
SCENEDESMACEAE	*	0
SCENEDESMUS		
CHRYSOPHYTA		
BACILLARIOPHYCEAE		
CENTRALES		
COSCINODISCAEAE		
CYCLOTELLA	*	0
MELOSIRA	5600	99

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%
 * - OBSERVED ORGANISM; MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

LOCATION.--Lat 40°08'39", long 105°52'00", in SE¹SE⁴ sec.11, T.2 N., R.76 W., Grand County, Hydrologic Unit 14010001, on right bank 0.3 mi (0.5 km) downstream from Granby Dam, 1.0 mi (1.6 km) upstream from Walden Hollow, and 5.0 mi (8.0 km) northeast of Granby.

REVISED RECORDS.--WSP 2124: Drainage area.

REMARKS.--Records good. Seepage from Lake Granby, which varies from 2 to 8 ft³/s (0.06 to 0.23 m³/s) depending on elevation of Lake Granby, is not included in record. Flow completely regulated by Lake Granby (station 09018500). Several diversions for irrigation of hay meadows above station. Transmountain diversions by Eureka and Grand River ditches and Alva B. Adams tunnel (see elsewhere in this report). Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

EXTREMES FOR PERIOD OF RECORD:--Maximum discharge, 1,520 ft³/s (43.0 m³/s) June 27-30, 1971, gage height, 3.95 ft (1.204 m); maximum gage height, 4.09 ft (1.247 m) July 3, 1973; minimum daily discharge, 5.1 ft³/s (0.14 m³/s) Oct. 8, 9, 1970; Sept. 3, 1971.

EXTREMES FOR CURRENT YEAR--Maximum discharge, 93 ft³/s (2.63 m³/s) July 30 to Aug. 1, gage height, 1.80 ft (0.549 m); minimum daily, 12 ft³/s (0.34 m³/s) Sept. 13.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	18	18	19	19	21	20	44	89	80	59	14
2	29	18	18	19	19	21	20	64	89	79	56	14
3	29	18	18	19	19	20	20	64	89	77	43	14
4	29	18	18	18	19	20	20	65	89	76	39	14
5	29	18	18	18	19	20	20	66	89	77	39	14
6	29	18	18	18	19	20	20	66	89	78	39	14
7	29	18	18	18	19	20	20	66	90	79	39	14
8	29	18	18	18	19	20	20	66	75	79	39	14
9	29	18	18	18	19	20	20	66	65	84	39	14
10	29	18	18	18	20	20	20	68	65	89	39	16
11	28	18	18	18	20	20	20	69	75	89	39	17
12	28	18	18	18	20	20	20	69	83	91	39	13
13	28	18	18	18	20	20	20	69	85	92	38	12
14	26	18	19	19	20	20	20	69	85	93	37	13
15	25	18	19	19	20	20	20	69	84	92	37	13
16	25	18	19	19	20	20	20	69	84	92	37	13
17	25	18	19	19	20	20	20	70	85	89	37	13
18	25	18	19	19	20	20	20	67	85	87	37	13
19	20	18	19	19	20	20	20	65	79	89	37	13
20	18	18	19	19	20	20	20	65	77	91	34	13
21	18	18	19	19	20	20	20	65	81	92	33	19
22	18	18	19	19	20	20	20	65	84	92	33	24
23	18	18	19	19	20	20	20	65	84	92	34	24
24	18	18	19	19	20	20	20	68	84	92	34	16
25	18	18	18	19	20	20	20	70	78	92	34	13
26	18	18	18	19	20	20	20	70	75	92	34	13
27	18	18	18	19	20	20	20	70	77	92	32	13
28	18	18	18	19	20	20	20	71	79	92	32	13
29	18	18	18	19	---	20	20	84	79	92	32	13
30	18	18	19	19	---	20	20	91	80	92	32	13
31	18	---	19	19	---	20	---	92	---	93	19	---
TOTAL	736	540	571	579	551	622	600	2127	2452	2716	1162	436
MEAN	23.7	18.0	18.4	18.7	19.7	20.4	20.0	68.6	81.7	87.6	37.5	14.5
MAX	29	18	19	19	20	21	20	92	90	93	59	24
MIN	18	18	18	13	19	20	20	44	65	76	19	12
AC-FT	1460	1070	1130	1150	1090	1230	1190	4220	4860	5390	2300	865

CAL YR 1978	TOTAL	14543	MEAN	39.8	MAX	103	MIN	18	AC-FT	28850
WTR YR 1973	TOTAL	13092	MEAN	35.9	MAX	93	MIN	12	AC-FT	25970

COLORADO RIVER MAIN STEM

47

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 (0.5 km) upstream from bridge on U.S. Highway 34, 1.3 mi (2.1 km) upstream from Willow Creek, and 3.2 mi (5.1 km) northeast of Granby.

DRAINAGE AREA.--323 mi² (837 km²).

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

REVISED RECORDS.--WSP 2124: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 7,960 ft (2,426 m), from topographic map. June 10, 1908, to Sept. 30, 1911, and May 12 to June 10, 1934, nonrecording gage, at site 300 ft (91 m) upstream at different datums. June 11, 1934, to Sept. 30, 1953, water-stage recorder at present site and datum.

REMARKS.--Records good. Flow regulated by Lake Granby (station 09018500) since Sept. 13, 1949. Several diversions for irrigation of hay meadows above station. Transmountain diversions above station by Eureka and Grand River ditches and Alva B. Adams tunnel (see elsewhere in this report). Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

EXTREMES FOR PERIOD OF SEASONAL RECORD.--Maximum discharge, 1,460 ft³/s (41.3 m³/s) July 1, 1973, gage height, 4.25 ft (1.295 m); minimum daily, 9.7 ft³/s (0.27 m³/s) Sept. 22, 1975.

EXTREMES FOR PERIOD OF CONTINUOUS RECORD.--Maximum discharge observed, 4,100 ft³/s (116 m³/s) June 20, 1909, gage height, 5.5 ft (1.68 m), site and datum then in use; minimum daily, 6.6 ft³/s (0.19 m³/s) Jan. 29, 1950; minimum observed prior to starting construction of Shadow Mountain Lake, 20 ft³/s (0.57 m³/s) Apr. 6, 1936 (discharge measurement).

EXTREMES FOR CURRENT SEASON.--Maximum discharge, 112 ft³/s (3.17 m³/s) at 2300 June 7, gage height, 1.22 ft (0.372 m); minimum daily, 15 ft³/s (0.42 m³/s) Sept. 16, 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1							---	50	76	78	52	21
2							---	75	75	76	40	20
3							---	71	74	75	39	20
4							---	74	75	76	36	20
5							---	79	75	75	39	18
6							---	79	75	76	41	20
7							---	75	92	72	41	20
8							---	72	88	68	42	17
9							---	72	74	71	42	16
10							---	72	63	78	44	18
11							---	74	67	78	43	24
12							---	74	72	79	41	17
13							---	74	74	81	41	18
14							---	74	75	79	44	20
15							---	75	76	81	43	17
16							---	75	76	81	43	15
17							---	79	76	79	42	18
18							---	78	76	76	44	16
19							---	75	81	74	47	19
20							---	76	71	76	42	15
21							---	75	72	75	40	16
22							---	72	75	75	41	25
23							---	71	75	75	40	29
24							28	72	81	78	40	24
25							28	74	78	75	40	20
26							27	72	74	74	40	20
27							27	72	75	74	39	20
28							28	72	76	75	38	20
29							27	74	76	75	37	20
30							29	78	78	75	37	20
31							---	81	---	75	27	---
TOTAL							---	2286	2271	2355	1257	583
MEAN							---	73.7	75.7	76.0	40.9	19.4
MAX							---	81	92	81	52	29
MIN							---	50	63	68	27	15
AC-FT							---	4530	4500	4670	2510	1160

COLORADO RIVER BASIN

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 (5.1 km) upstream from mouth, and 4.2 mi (6.8 km) north of Granby.

DRAINAGE AREA--134 mi² (347 km²).

PERIOD OF RECORD--May 1953 to current year.

GAGE--water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Water and Power Resources Service); gage readings have been reduced to elevations NGVD.

REMARKS--Reservoir is formed by earth and rockfill dam; storage began March 1953. Dead storage pool filled May 3, 1953. Usable capacity, 9,060 acre-ft (11.2 hm³) between elevations 8,077.00 ft (2,461.870 m), trash rack sill at outlet, and 8,130.00 ft (2,478.024 m), crest of spillway. Dead storage, 1,490 acre-ft (1.84 hm³). Figures given represent usable contents. Water is pumped to Lake Granby for transmountain diversion for irrigation and power in South Platte River basin. Records are furnished by Water and Power Resources Service

EXTREMES FOR PERIOD OF RECORD--Maximum contents, 9,060 acre-ft (11.2 hm³) Aug. 3, 1953, elevation, 8,129.99 ft (2,478.021 m); minimum since first filling to spillway, 1,470 acre-ft (1.81 hm³) Apr. 24, 1974, elevation, 8,090.14 ft (2,465.875 m).

EXTREMES FOR CURRENT YEAR--Maximum contents, 8,930 acre-ft (11.0 hm³) June 8, elevation, 8,129.55 ft (2,477.887 m); minimum, 5,560 acre-ft (6.86 hm³) Nov. 27, elevation, 8,116.15 ft (2,473.803 m).

MONTHEND ELEVATION IN FEET NGVD AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.	8,125.21	7,700	-
Oct. 31.	8,126.40	8,160	+460
Nov. 30.	8,116.35	5,600	-2,560
Dec. 31.	8,118.55	6,060	+460
CAL YR 1978	-	-	-160
Jan. 31.	8,120.51	6,520	+440
Feb. 28.	8,121.83	6,840	+320
Mar. 31.	8,123.42	7,240	+400
Apr. 30.	8,120.85	6,600	-640
May 31.	8,128.44	8,600	+2,000
June 30.	8,125.50	7,780	-820
July 31.	8,120.35	6,490	-1,290
Aug. 31.	8,127.55	8,350	+1,860
Sept. 30.	8,122.85	7,090	-1,260
WTR YR 1979	-	-	-610

WILLOW CREEK BASIN

49

09021000 WILLOW CREEK BELOW WILLOW CREEK RESERVOIR, CO

LOCATION.--Lat 40°08'45", long 105°56'22", in SE¼ sec.7, T.2 N., R.76 W., Grand County, Hydrologic Unit 14010001, on left bank 1,000 ft (300 m) downstream from Willow Creek Dam, 0.8 mi (1.3 km) upstream from Bunte Highline Canal diversion, 4.0 mi (6.4 km) upstream from mouth, and 4.0 mi (6.4 km) north of Granby.

DRAINAGE AREA.--134 mi² (347 km²).

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

REVISED RECORDS.--WSP 1563: 1954-55.

GAGE.--Water-stage recorder and 10-ft (3-m) Parshall flume with overflow weirs. Datum of gage is 8,023.64 ft (2,443.605 m) National Geodetic Vertical Datum of 1929 (Levels by Water and Power Resources Service). Supplementary water-stage recorder and Parshall flume on McQueary ditch 500 ft (150 m) downstream from point of diversion at Willow Creek Dam. Datum of gage is 8,031.68 ft (2,448.056 m) National Geodetic Vertical Datum of 1929 (Levels by Water and Power Resources Service).

REMARKS.--Records good except those for winter period, which are poor. Records show combined flow of creek and McQueary ditch. Flow completely regulated by Willow Creek Reservoir (station 09020700). Diversions above station for irrigation of hay meadows. McQueary ditch diverts at Willow Creek Dam for irrigation below station. Diversion above station from Willow Creek Reservoir by Willow Creek Pump Canal to Lake Granby as part of the Colorado-Big Thompson project (see table below for figures of diversion). Prior to Oct. 1, 1962, records include priming and waste water from pump canal. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

COOPERATION.--Diversions, in acre-feet, by Willow Creek Pump Canal; furnished by Water and Power Resources Service.

AVERAGE DISCHARGE (COMBINED FLOW).--26 years, 29.2 ft³/s (0.827 m³/s), 21,160 acre-ft/yr (26.1 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 867 ft³/s (24.6 m³/s) June 7, 1957, gage height, 4.84 ft (1.475 m); no flow Sept. 17-24, 1963, May 1, 1965, May 2-10, Aug. 16-21, 1969.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 859 ft³/s (24.3 m³/s) at 1330 May 29, gage height, 4.81 ft (1.466 m); minimum daily, 0.14 ft³/s (0.004 m³/s) Aug. 11-16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.23	7.0	7.0	7.0	7.0	7.0	7.0	1.9	250	50	47	.33
2	4.3	7.0	7.0	7.0	7.0	7.0	7.0	.33	150	51	47	.33
3	7.3	7.0	7.0	7.0	7.0	7.0	7.0	.23	110	51	44	.23
4	7.3	7.0	7.0	7.0	7.0	7.0	7.0	.23	114	50	43	.23
5	7.0	7.0	7.0	7.0	7.0	7.0	7.0	.23	150	51	43	.23
6	7.0	7.0	7.0	7.0	7.0	7.0	7.0	.23	182	51	38	.23
7	7.0	7.0	7.0	7.0	7.0	7.0	7.0	.33	236	51	36	.23
8	7.0	7.0	7.0	7.0	7.0	7.0	7.0	.33	290	51	34	.23
9	7.0	7.0	7.0	7.0	7.0	7.0	7.0	.33	240	51	33	.23
10	7.0	7.0	7.0	7.0	7.0	7.0	7.0	.33	105	51	10	.23
11	7.0	7.0	7.0	7.0	7.0	7.0	7.0	.33	81	51	.14	.23
12	7.0	7.0	7.0	7.0	7.0	7.0	7.0	.33	92	52	.14	.23
13	7.0	7.0	7.0	7.0	7.0	7.0	7.0	.33	215	52	.14	.23
14	7.0	7.0	7.0	7.0	7.0	7.0	7.0	.33	289	52	.14	.23
15	7.0	7.0	7.0	7.0	7.0	7.0	7.0	.33	321	52	.14	.23
16	7.0	7.0	7.0	7.0	7.0	7.0	7.0	.33	274	53	.14	.23
17	7.0	7.0	7.0	7.0	7.0	7.0	7.0	.33	186	53	.23	.23
18	7.0	7.0	7.0	7.0	7.0	7.0	7.0	.33	118	53	.23	.23
19	7.0	7.0	7.0	7.0	7.0	7.0	7.0	.33	79	53	.23	.23
20	7.0	7.0	7.0	7.0	7.0	7.0	7.0	.33	54	52	.23	.23
21	7.0	7.0	7.0	7.0	7.0	7.0	7.0	169	49	52	.23	.23
22	7.0	7.0	7.0	7.0	7.0	7.0	7.0	382	50	52	.23	.23
23	7.0	7.0	7.0	7.0	7.0	7.0	7.0	417	50	52	.23	.23
24	7.0	7.0	7.0	7.0	7.0	7.0	7.0	514	50	52	.23	.23
25	7.0	7.0	7.0	7.0	7.0	7.0	7.0	598	50	53	.23	.23
26	7.0	7.0	7.0	7.0	7.0	7.0	7.7	514	51	54	.23	.23
27	7.0	7.0	7.0	7.0	7.0	7.0	7.3	535	50	51	.23	.23
28	7.0	7.0	7.0	7.0	7.0	7.0	7.3	584	50	47	.23	.23
29	7.0	7.0	7.0	7.0	---	7.0	7.3	755	50	47	.23	.23
30	7.0	7.0	7.0	7.0	---	7.0	7.3	688	50	47	.33	.23
31	7.0	---	7.0	7.0	---	7.0	---	447	---	47	.33	---
TOTAL	208.13	210.0	217.0	217.0	196.0	217.0	211.9	5610.77	4036	1585	379.49	7.10
MEAN	6.71	7.00	7.00	7.00	7.00	7.00	7.06	181	135	51.1	12.2	.24
MAX	7.3	7.0	7.0	7.0	7.0	7.0	7.7	755	321	54	47	.33
MIN	.23	7.0	7.0	7.0	7.0	7.0	7.0	.23	49	47	.14	.23
AC-FT	413	417	430	430	389	430	420	11130	8010	3140	753	14
a	0	2810	0	0	0	0	3490	17330	24100	5550	0	2320

CAL YR 1978 T.J.TAL 11753.59 MEAN 32.2 MAX 493 MIN .14 AC-FT 23310
WTR YR 1979 TOTAL 13095.39 MEAN 35.9 MAX 755 MIN .14 AC-FT 25970

a Diversions, in acre-feet, by Willow Creek Pump Canal, furnished by Water and Power Resources Service.
NOTE.--ND GAGE-HEIGHT RECORD OCT. 6 TO APR. 25.

FRASER RIVER BASIN

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 (152 m) downstream from bridge on U.S. Highway 40, 1.1 mi (1.8 km) northwest of Winter Park, 2.0 mi (3.2 km) upstream from Vasquez Creek, 3.5 mi (5.6 km) downstream from point of diversion for Moffat water tunnel, and 3.9 mi (6.3 km) southeast of Fraser.

DRAINAGE AREA.--27.6 mi² (71.5 km²).

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 (2,714.619 m) 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 (1.0 km) upstream at different datum.

REMARKS.--Records good except those for winter period, which are poor. Transmountain diversions above station through Berthoud Pass ditch (see elsewhere in this report) and to Moffat water tunnel (not known since 1958). 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 (23.2 m³/s) June 13, 1918, gage height, 2.9 ft (0.88 m); minimum daily determined, 2 ft³/s (0.06 m³/s) Mar. 30, Apr. 9, 1912, Jan 23, 1915.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 265 ft³/s (7.50 m³/s) at 2100 June 15, gage height, 2.15 ft (0.658 m); minimum daily, 3.9 ft³/s (0.11 m³/s) Mar. 31 to Apr. 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.8	5.0	5.0	5.6	5.2	5.2	3.9	11	28	116	8.0	9.5
2	5.8	5.0	5.0	5.0	5.2	5.2	3.9	11	26	103	7.7	9.4
3	5.8	4.9	5.2	4.9	5.2	5.2	3.9	9.3	26	89	7.9	10
4	5.8	5.0	5.2	5.3	5.2	5.2	3.9	11	26	111	7.4	11
5	5.5	4.9	5.2	5.2	5.2	5.2	3.9	14	26	95	7.5	9.0
6	5.5	5.0	5.2	5.2	5.2	5.2	4.5	17	26	72	6.0	9.7
7	5.7	4.9	5.2	5.2	5.2	5.2	4.9	14	30	43	7.8	9.3
8	5.5	4.9	5.2	5.2	5.2	5.2	5.0	12	32	37	8.1	8.7
9	5.5	5.3	5.3	5.2	5.2	5.2	5.1	11	30	30	9.0	11
10	5.4	4.9	5.2	5.2	5.2	5.0	4.5	9.3	29	22	11	11
11	5.1	4.9	5.2	5.2	5.2	5.0	4.4	8.9	25	16	8.6	11
12	5.2	5.4	4.9	5.2	5.2	5.0	5.1	8.9	25	14	7.4	11
13	5.1	4.7	4.9	5.2	5.2	5.0	4.9	11	47	12	8.8	10
14	5.1	4.7	4.9	5.2	5.2	5.0	4.4	13	150	11	9.6	10
15	6.0	4.7	5.2	5.5	5.2	5.0	5.5	15	224	11	9.1	9.8
16	6.5	4.7	5.0	5.3	5.2	5.0	6.9	19	224	11	9.6	8.2
17	5.9	4.7	5.1	5.2	5.2	5.0	7.4	20	234	10	9.4	6.2
18	6.6	4.7	5.2	5.2	5.2	5.0	9.2	20	237	9.5	9.1	5.7
19	6.8	4.7	5.2	5.3	5.2	5.0	9.6	22	197	7.9	10	5.7
20	5.4	4.7	5.2	5.2	5.2	5.0	9.5	25	169	7.3	10	6.0
21	5.0	4.7	5.2	5.2	5.2	5.0	9.6	24	157	7.5	9.8	5.8
22	5.2	4.7	5.2	5.2	5.2	5.0	8.9	24	156	7.3	9.7	5.4
23	5.2	4.7	5.2	5.2	5.2	4.3	10	24	167	8.0	9.3	5.1
24	5.2	4.7	5.2	5.2	5.2	4.2	12	25	181	7.7	11	5.1
25	5.6	4.9	5.2	5.2	5.2	4.2	11	24	161	9.9	10	5.6
26	5.4	4.8	5.5	5.2	5.2	4.2	14	28	176	7.1	10	5.8
27	5.4	4.8	5.5	5.2	5.2	4.2	11	29	184	8.0	9.6	5.8
28	5.2	4.8	5.6	5.2	5.3	4.2	11	28	169	8.2	9.6	5.8
29	5.5	4.8	5.6	5.2	---	4.1	11	29	134	9.3	9.5	5.7
30	5.0	4.9	5.5	5.2	---	4.1	11	29	118	8.6	9.5	5.7
31	5.0	---	5.6	5.2	---	3.9	---	28	---	8.2	9.6	---
TOTAL	171.7	145.5	161.8	161.7	145.7	149.2	219.9	574.4	3414	917.5	279.6	238.0
MEAN	5.54	4.85	5.22	5.22	5.20	4.81	7.33	18.5	114	29.6	9.02	7.93
MAX	6.8	5.4	5.6	5.6	5.3	5.2	14	29	237	116	11	11
MIN	5.0	4.7	4.9	4.9	5.2	3.9	3.9	8.9	25	7.1	6.0	5.1
AC-FT	341	289	321	321	289	296	436	1140	6770	1820	555	472
CAL YR 1978	TOTAL	4325.1	MEAN 11.8	MAX 77	MIN 4.7	AC-FT 8580						
WTR YR 1979	TOTAL	6579.0	MEAN 18.0	MAX 237	MIN 3.9	AC-FT 13050						

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 (9.1 m) (revised) downstream from bridge on U.S. Highway 40, 0.2 mi (0.3 km) upstream from mouth, 2.5 mi (4.0 km) northwest of Winter Park, 2.5 mi (4.0 km) southeast of Fraser, and 4.5 mi (7.2 km) downstream from Moffat water tunnel diversion.

DRAINAGE AREA.--27.8 mi² (72.0 km²).

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 259, 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 (2,672.633 m) National Geodetic Vertical Datum of 1929. June 1, 1907, to Oct. 31, 1907, nonrecording gage at site 0.8 mi (1.3 km) upstream at different datum.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 470 ft³/s (13.3 m³/s) June 10, 1952, gage height, 3.13 ft (0.954 m), from rating curve extended above 340 ft³/s (9.6 m³/s); no flow at times in 1944, 1946, 1956, 1960, 1966.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 226 ft³/s (6.40 m³/s) at 2100 June 16, gage height, 3.01 ft (0.917 m); minimum daily, 3.4 ft³/s (0.096 m³/s) Mar. 20-22, 31.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	10	5.0	4.5	4.5	4.0	3.7	6.0	13	13	11	9.8
2	11	10	5.0	4.5	4.5	4.0	3.8	6.0	12	11	11	9.7
3	11	10	5.0	4.5	4.5	4.0	3.8	5.0	10	5.9	11	9.8
4	11	10	5.0	4.5	4.5	4.0	3.8	6.1	8.9	5.2	11	9.8
5	11	10	5.0	4.5	4.5	4.0	3.8	8.6	7.6	4.4	10	9.7
6	11	9.7	5.0	4.5	4.5	4.0	3.8	10	9.0	5.2	10	9.6
7	11	9.9	5.0	4.5	4.5	4.0	3.8	9.0	11	7.6	10	9.7
8	9.8	10	5.0	4.5	4.5	4.0	3.8	7.2	13	7.1	10	9.7
9	9.8	6.3	5.0	4.5	4.5	4.1	3.8	6.4	10	7.0	10	9.6
10	9.8	7.3	5.0	4.5	4.3	4.0	4.1	5.8	20	5.5	11	9.7
11	9.8	7.1	5.0	4.5	4.3	3.7	4.0	5.6	68	5.7	11	9.3
12	9.8	6.6	5.0	4.5	4.3	3.7	4.2	6.1	8.0	6.2	12	9.8
13	9.8	6.6	5.0	4.5	4.3	3.7	4.4	7.3	57	6.5	12	10
14	9.8	6.6	5.0	4.5	4.3	3.7	4.5	10	165	8.4	14	10
15	9.8	6.6	5.0	4.5	4.3	3.7	4.8	14	133	7.3	13	9.4
16	9.8	6.6	5.0	4.5	4.3	3.7	5.7	20	148	7.8	14	6.3
17	9.5	6.6	5.0	4.5	4.3	3.7	5.7	22	175	7.8	14	4.8
18	9.5	6.6	5.0	4.5	4.3	3.7	6.3	22	155	8.2	12	4.5
19	9.5	6.6	5.0	4.5	4.3	3.6	6.2	25	148	8.8	12	4.2
20	9.5	5.8	5.0	4.5	4.3	3.4	5.7	25	141	9.1	12	5.9
21	9.5	5.8	5.0	4.6	4.3	3.4	5.0	25	113	9.9	12	5.9
22	9.5	5.8	5.0	4.5	4.3	3.4	5.4	25	44	9.0	12	5.7
23	9.5	5.8	5.0	4.5	4.3	3.6	6.2	25	5.6	8.0	11	5.7
24	9.5	5.8	5.0	4.5	4.3	3.6	6.9	25	20	8.5	11	5.6
25	9.7	5.8	5.0	4.5	4.3	3.5	6.6	25	38	8.5	11	5.7
26	8.5	5.8	5.0	4.5	4.3	3.5	5.5	24	40	7.9	10	5.9
27	9.8	5.8	5.0	4.5	4.3	3.5	6.0	22	27	7.5	10	6.3
28	10	5.0	5.0	4.5	4.0	3.5	6.3	21	15	8.8	10	6.1
29	10	5.0	5.0	4.5	---	3.5	5.1	19	16	8.8	10	6.0
30	11	5.0	4.5	4.5	---	3.5	5.4	18	15	8.1	10	5.9
31	11	---	4.5	4.5	---	3.4	---	16	---	9.6	10	---
TOTAL	311.2	214.5	154.0	139.6	121.9	115.1	148.1	472.3	1646.1	242.3	348	230.1
MEAN	10.0	7.15	4.97	4.50	4.35	3.71	4.94	15.2	54.9	7.82	11.2	7.67
MAX	11	10	5.0	4.6	4.5	4.1	6.9	25	175	13	14	10
MIN	8.5	5.0	4.5	4.5	4.0	3.4	3.7	5.0	5.6	4.4	10	4.2
AC-FT	617	425	305	277	242	228	294	937	3270	481	690	456

CAL YR 1978 TOTAL 2916.0 MEAN 7.99 MAX 60 MIN 1.6 AC-FT 5780
WTR YR 1979 TOTAL 4143.2 MEAN 11.4 MAX 175 MIN 3.4 AC-FT 8220

FRASER RIVER BASIN

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 left bank 100 ft (30 m) upstream from unnamed tributary 1,150 ft (350 m) downstream from West Elk Creek, 2.0 mi (3.2 km) southwest of Fraser, and 2.5 mi (4.0 km) upstream from mouth.

DRAINAGE AREA.--7.15 mi² (18.52 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 8,805 ft (2,684 m), from topographic map.

REMARKS.--Records good except those for winter period, which are poor. Transmountain diversions above station to Moffat water tunnel. Diversions for irrigation of about 100 acres (405,000 m²) of hay meadows above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 88 ft³/s (2.49 m³/s) May 8, 1974, gage height, 2.67 ft (0.814 m); minimum daily, 0.10 ft³/s (0.003 m³/s) Jan. 13, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 31 ft³/s (0.88 m³/s) at 2300 June 13, gage height, 2.23 ft (0.680 m); minimum daily, 0.40 ft³/s (0.011 m³/s) Oct. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.40	.80	.88	.78	.70	.74	.84	2.4	6.4	14	1.5	.86
2	.48	.80	.88	.78	.70	.74	.81	2.4	5.7	13	1.3	.83
3	.44	.81	.88	.78	.70	.74	.80	2.4	5.2	12	1.3	.82
4	.44	.86	.88	.78	.70	.74	.85	2.6	4.8	12	1.3	.80
5	.46	.87	.88	.78	.70	.74	.85	3.0	4.1	10	1.2	.75
6	.46	.86	.88	.78	.70	.74	.89	4.3	3.8	9.5	1.2	.73
7	.52	.86	.88	.78	.70	.74	.98	4.0	5.0	8.9	1.2	.72
8	.43	.86	.88	.78	.70	.74	.96	3.5	7.2	7.9	1.2	.70
9	.53	.86	.88	.78	.70	.74	.93	3.2	6.0	7.1	1.3	.68
10	.67	.86	.88	.78	.70	.74	.92	3.0	6.5	6.0	1.3	.66
11	.63	.86	.88	.78	.70	.80	.85	2.8	16	4.9	1.2	.65
12	.58	.86	.88	.78	.70	.80	.82	2.8	4.2	4.4	1.2	.65
13	.66	.86	.88	.78	.70	.80	.81	3.0	13	4.0	1.3	.67
14	.86	.86	.88	.78	.70	.80	.94	3.5	27	3.8	2.0	.69
15	.78	.86	.78	.78	.74	.80	1.1	4.5	27	3.3	2.0	.67
16	.86	.86	.78	.78	.74	.80	1.2	6.4	26	3.6	1.8	.68
17	.70	.86	.78	.78	.74	.80	1.4	8.0	24	3.4	1.9	.65
18	.75	.86	.78	.78	.74	.80	1.8	9.0	23	3.3	1.7	.65
19	.81	.86	.78	.78	.74	.80	2.0	9.4	20	3.4	2.0	.62
20	.75	.86	.78	.78	.74	.80	2.4	11	17	3.0	1.8	.69
21	.75	.86	.78	.78	.74	.80	2.1	14	18	3.5	1.9	.75
22	.81	.86	.78	.78	.74	.80	2.1	14	20	3.4	1.7	.68
23	.96	.88	.78	.78	.74	.80	2.3	13	20	2.7	1.4	.65
24	.75	.88	.78	.78	.74	.79	2.8	10	18	2.8	1.3	.63
25	.82	.88	.78	.78	.74	.76	3.2	9.9	16	2.6	1.2	.60
26	.80	.88	.78	.70	.74	.80	2.8	9.9	18	2.3	1.1	.60
27	.80	.88	.78	.70	.74	.80	2.4	9.0	18	2.4	1.1	.62
28	.80	.88	.78	.70	.74	.82	2.4	8.2	16	2.6	1.1	.60
29	.80	.88	.78	.70	---	.80	2.4	7.5	16	2.0	1.0	.64
30	.80	.88	.78	.70	---	.79	2.4	7.8	15	1.8	1.0	.64
31	.80	---	.78	.70	---	.84	---	7.8	---	1.7	1.0	---
TOTAL	21.10	25.80	25.58	23.70	20.16	24.20	47.05	202.3	426.9	165.3	43.5	20.58
MEAN	.68	.86	.83	.76	.72	.78	1.57	6.53	14.2	5.33	1.40	.69
MAX	.96	.88	.88	.78	.74	.84	3.2	14	27	14	2.0	.85
MIN	.40	.80	.78	.70	.70	.74	.80	2.4	3.8	1.7	1.0	.60
AC-FT	42	51	51	47	40	48	93	401	847	328	86	41

CAL YR 1978 TOTAL 824.89 MEAN 2.26 MAX 16 MIN .27 AC-FT 1640
WTR YR 1979 TOTAL 1046.17 MEAN 2.87 MAX 27 MIN .40 AC-FT 2080

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

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 (91 m) downstream from West St. Louis Creek and 4.1 mi (6.6 km) southwest of Fraser.

DRAINAGE AREA.--32.9 mi² (85.2 km²).

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 (2,737.156 m) National Geodetic Vertical Datum of 1929.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 470 ft³/s (13.3 m³/s) June 15, 1952, gage height, 2.89 ft (0.881 m); maximum gage height, 3.21 ft (0.978 m) 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, 223 ft³/s (6.32 m³/s) at 2000 June 16, gage height, 2.11 ft (0.643 m); minimum daily, 4.3 ft³/s (0.12 m³/s) Feb. 24 to Apr. 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.4	7.2	6.5	5.7	5.7	4.3	4.3	8.6	38	155	26	13
2	8.2	6.9	6.5	5.7	5.7	4.3	4.3	8.6	37	145	26	13
3	8.1	6.1	6.5	5.7	5.7	4.3	4.3	8.0	39	142	26	13
4	8.2	5.9	6.5	5.7	5.7	4.3	4.3	8.5	40	142	22	12
5	8.5	5.8	6.5	5.7	5.7	4.3	4.3	11	41	128	21	12
6	8.4	6.5	6.4	5.7	5.7	4.3	4.3	13	43	126	21	12
7	8.6	6.7	6.3	5.7	5.7	4.3	5.0	13	50	117	21	11
8	8.3	6.7	6.2	5.7	5.7	4.3	5.0	11	50	106	21	11
9	8.4	6.7	6.2	5.7	5.7	4.3	5.0	9.8	48	86	21	11
10	8.2	6.7	6.2	5.7	5.7	4.3	5.0	9.1	54	61	20	11
11	8.6	6.7	6.2	5.7	5.8	4.3	4.6	9.1	86	46	19	11
12	8.4	6.7	6.2	5.7	5.8	4.3	4.6	8.6	58	43	18	12
13	7.8	6.7	6.2	5.7	5.8	4.3	4.6	9.9	140	41	16	13
14	7.6	6.7	6.2	5.7	5.8	4.3	4.6	13	178	41	16	13
15	8.2	6.7	6.2	5.7	5.8	4.3	6.0	15	186	41	15	13
16	7.9	6.7	6.2	5.7	5.8	4.3	7.9	17	185	41	16	13
17	8.4	6.7	6.2	5.7	5.8	4.3	9.9	20	191	42	16	10
18	9.2	6.7	5.7	5.7	5.0	4.3	10	24	183	41	15	10
19	9.2	6.7	5.7	5.7	5.0	4.3	10	27	158	40	14	10
20	8.8	6.7	5.7	5.7	5.0	4.3	9.5	32	145	39	14	11
21	9.0	6.7	5.7	5.7	5.0	4.3	8.9	33	148	40	15	12
22	9.5	6.7	5.7	5.7	5.0	4.3	8.0	33	158	41	14	10
23	8.8	6.7	5.7	5.7	5.0	4.3	8.3	36	166	39	14	9.3
24	9.1	6.7	5.7	5.7	4.3	4.3	9.1	37	163	39	14	9.0
25	10	6.7	5.7	5.7	4.3	4.3	8.8	39	160	38	13	9.0
26	10	6.7	5.7	5.7	4.3	4.3	10	41	163	37	13	10
27	10	6.7	5.7	5.7	4.3	4.3	9.0	41	172	35	14	11
28	10	6.5	5.7	5.7	4.3	4.3	9.0	41	166	28	15	11
29	10	6.5	5.7	5.7	---	4.3	8.8	43	166	26	14	11
30	9.9	6.5	5.7	5.7	---	4.3	8.0	44	163	26	14	10
31	9.6	---	5.7	5.7	---	4.3	---	41	---	26	14	---
TOTAL	273.3	198.6	187.0	176.7	149.1	133.3	205.4	705.2	3575	1998	538	337.3
MEAN	8.82	6.62	6.03	5.70	5.33	4.30	6.85	22.7	119	64.5	17.4	11.2
MAX	10	7.2	6.5	5.7	5.8	4.3	10	44	191	155	26	13
MIN	7.6	5.8	5.7	5.7	4.3	4.3	4.3	8.0	37	26	13	9.0
AC-FT	542	394	371	350	296	264	407	1400	7090	3960	1070	669

CAL YR 1978 T.J.TAL 7351.5 MEAN 20.1 MAX 169 MIN 4.6 AC-FT 14580
WTR YR 1979 TOTAL 8476.9 MEAN 23.2 MAX 191 MIN 4.3 AC-FT 16810

FRASER RIVER BASIN

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 (137 m) downstream from Middle Fork and 2.7 mi (4.3 km) east of Fraser.

DRAINAGE AREA.--19.9 mi² (51.5 km²).

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

REVISED RECORDS.--WSP 1243: 1935.

GAGE.--Water-stage recorder. Altitude of gage is 8,685 ft (2,647 m), from topographic map.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 402 ft³/s (11.2 m³/s) June 28, 1957, gage height, 3.72 ft (1.134 m); minimum daily, 0.4 ft³/s (0.011 m³/s) Sept. 21, Oct. 6, 1960.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 245 ft³/s (6.94 m³/s) at 2200 June 17, gage height, 3.11 ft (0.948 m); minimum daily, 0.54 ft³/s (0.015 m³/s) Oct. 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.3	2.2	2.2	2.1	2.1	1.6	1.6	3.6	30	134	7.7	4.1
2	1.2	2.2	2.2	2.1	2.0	1.6	1.6	3.8	29	122	6.9	4.2
3	1.2	2.3	2.2	2.1	2.0	1.6	1.6	3.3	30	104	6.7	4.2
4	1.2	2.2	2.2	2.1	2.0	1.6	1.5	4.1	32	76	6.5	4.4
5	1.2	2.4	2.2	2.1	2.0	1.6	1.5	6.6	34	65	6.3	5.6
6	1.2	2.2	2.2	2.1	2.1	1.6	1.7	9.2	30	55	5.9	5.6
7	1.2	2.2	2.2	2.1	2.0	1.6	1.8	8.8	31	46	5.9	5.4
8	1.2	2.2	2.1	2.1	2.0	1.6	1.9	6.7	34	33	9.0	5.2
9	1.2	2.2	2.1	2.1	2.0	1.7	1.8	5.3	26	22	9.2	5.2
10	1.2	2.2	2.1	2.1	2.0	1.7	1.7	5.0	25	19	9.6	4.2
11	1.2	2.2	2.0	2.1	1.8	1.7	1.7	4.5	26	22	8.7	3.1
12	1.1	2.2	2.1	2.1	1.8	1.7	1.7	4.6	25	11	8.0	3.2
13	1.1	2.2	2.1	2.1	1.6	1.6	1.7	5.6	74	5.2	10	3.0
14	1.2	2.2	2.1	2.1	1.6	1.5	1.9	7.7	166	6.3	14	3.2
15	1.2	2.2	2.0	2.0	1.7	1.6	2.2	10	181	7.7	7.8	3.1
16	1.2	2.2	2.0	2.0	1.8	1.6	2.8	15	187	8.1	8.0	3.1
17	1.1	2.2	2.0	2.0	1.8	1.6	3.4	20	202	9.0	8.2	2.9
18	1.3	2.2	2.0	2.0	1.8	1.6	3.9	20	200	12	6.8	2.8
19	1.4	2.2	2.0	2.0	1.8	1.6	4.4	21	164	8.8	8.6	2.9
20	1.3	2.2	2.0	2.1	1.8	1.6	3.5	27	144	7.9	7.4	3.3
21	1.3	2.2	2.0	2.1	1.8	1.7	3.4	27	143	7.6	6.9	4.0
22	1.5	2.2	2.1	2.1	1.8	1.7	3.3	26	149	8.0	5.9	3.4
23	1.2	2.2	2.1	2.1	1.8	1.7	3.7	29	151	7.6	5.3	3.5
24	1.2	2.2	2.1	2.1	1.6	1.6	4.2	33	164	7.6	5.2	6.2
25	1.74	2.2	2.1	2.1	1.6	1.6	3.6	38	165	7.5	5.1	2.8
26	0.54	2.2	2.0	2.0	1.6	1.6	3.4	48	161	7.9	5.1	2.7
27	0.60	2.2	2.0	2.0	1.6	1.6	3.7	54	169	8.4	5.0	2.8
28	0.60	2.2	2.0	2.0	1.6	1.6	3.8	57	176	8.8	4.8	2.8
29	1.0	2.2	2.0	2.0	---	1.6	3.3	50	177	8.4	4.7	2.6
30	2.7	2.2	2.0	2.0	---	1.5	3.5	49	158	8.2	4.9	2.6
31	2.2	---	2.0	2.1	---	1.5	---	41	---	8.0	4.5	---
TOTAL	37.78	66.3	64.4	64.1	51.1	50.0	79.8	649.8	3283	863.0	218.6	112.1
MEAN	1.22	2.21	2.08	2.07	1.63	1.61	2.66	21.0	109	27.8	7.35	3.74
MAX	2.7	2.4	2.2	2.1	2.1	1.7	4.4	57	202	134	14	6.2
MIN	0.54	2.2	2.0	2.0	1.6	1.5	1.5	3.3	25	5.2	4.5	2.6
AC-FT	75	132	128	127	101	99	158	1290	6510	1710	434	222
CAL YR 1978 TOTAL	2812.28			7.70	MAX 130	MIN 0.54	AC-FT 5580					
WTR YR 1979 TOTAL	5539.98			MEAN 15.2	MAX 202	MIN 0.54	AC-FT 10990					

COLORADO RIVER MAIN STEM

55

09034500 COLORADO RIVER AT HOT SULPHUR SPRINGS, CO

LOCATION.--Lat 40°05'00", long 106°05'15", in NE¼ sec. 2, T. 1 N., R. 78 W., Grand County, Hydrologic Unit 14010001, on left bank about 1,000 ft (300 m) north of U.S. Highway 40, 1 mi (1.6 km) northeast of Hot Sulphur Springs, and 4.5 mi (7.2 km) upstream from Beaver Creek.

DRAINAGE AREA.--825 mi² (2,137 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1904 to current year. Monthly discharge only for some periods, published in WSP 1313. Prior to 1907 and 1914-18, published as Grand River at Hot Sulphur Springs, and as Grand River at Sulphur Springs 1907-13.

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

GAGE.--Water-stage recorder. Altitude of gage is 7,670 ft (2,338 m), from railroad elevations. July 28, 1934, to Apr. 16, 1906, nonrecording gage on bridge 1.7 mi (2.7 km) downstream at different datum. Apr. 17, 1906, to Sept. 18, 1930, nonrecording gage at bridge 1.4 mi (2.3 km) downstream at datum 7,651.26 ft (2,332.104 m) 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 (2.7 km) downstream, used for winter records some years.

REMARKS.--Records good except those for winter period, which are fair and those for period of no gage-height record, which are poor. Flow affected by transmountain diversions, storage reservoirs, and diversions above station for irrigation of about 13,000 acres (52.6 km²).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 10,300 ft³/s (292 m³/s) June 15, 1921, gage height, 8.7 ft (2.66 m), site and datum then in use; minimum daily, 33 ft³/s (0.93 m³/s) Sept. 27, 1956.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,580 ft³/s (44.7 m³/s) at 1300 June 15, gage height, 2.57 ft (0.783 m); minimum daily, 51 ft³/s (1.44 m³/s) Dec. 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	74	80	72	71	83	70	90	310	798	768	215	83
2	75	79	74	71	83	70	85	377	607	746	145	78
3	79	79	62	73	79	70	82	325	518	702	177	75
4	80	75	64	73	77	69	82	294	510	691	158	74
5	79	78	62	73	78	67	90	373	515	597	149	71
6	79	75	51	72	79	72	95	442	572	560	144	69
7	80	71	57	73	78	72	110	462	812	542	142	70
8	82	73	61	73	73	72	120	385	1120	466	146	69
9	83	74	62	73	73	72	130	345	1030	414	151	65
10	85	72	67	74	72	66	130	329	775	383	158	66
11	83	71	68	74	73	67	120	293	719	344	142	71
12	79	72	73	73	72	70	120	319	661	316	131	75
13	78	74	74	71	72	72	120	327	777	322	134	67
14	76	81	74	72	73	72	130	374	1290	317	151	68
15	77	70	73	72	72	72	160	400	1480	321	152	67
16	78	70	73	73	72	70	190	460	1450	339	159	61
17	78	70	73	73	71	70	230	560	1380	325	155	59
18	81	70	73	71	69	70	289	593	1310	335	146	56
19	89	70	70	73	69	70	331	614	1260	309	159	54
20	84	70	70	72	72	70	317	664	1070	288	153	55
21	85	70	71	71	72	70	315	776	955	280	149	59
22	93	70	72	72	72	70	313	1010	879	287	134	66
23	89	70	72	72	72	70	308	1030	817	274	124	64
24	84	70	71	74	71	72	341	1110	832	286	120	65
25	86	70	72	76	69	72	342	1260	839	278	118	57
26	80	70	69	78	69	75	281	1210	854	255	115	57
27	78	70	68	78	74	80	290	1220	885	253	111	59
28	80	70	71	78	72	85	319	1280	852	251	110	59
29	79	70	73	79	---	88	257	1430	836	238	105	58
30	80	70	72	80	---	90	272	1420	795	224	100	57
31	81	---	71	80	---	90	---	1180	---	222	99	---
TOTAL	2514	2174	2135	2288	2061	2265	6059	21172	27198	11933	4412	1954
MEAN	81.1	72.5	68.9	73.8	73.6	73.1	202	683	907	385	142	65.1
MAX	93	81	74	80	83	90	342	1430	1480	768	215	83
MIN	74	70	51	71	69	66	82	293	510	222	99	54
AC-FT	4990	4310	4230	4540	4090	4490	12020	41990	53920	23670	8750	3060
CAL YR 1978	TOTAL	79148	MEAN 217	MAX 1150	MIN 51	AC-FT 157000						
WTR YR 1979	TOTAL	86165	MEAN 236	MAX 1480	MIN 51	AC-FT 170900						

NOTE.--NO GAGE-HEIGHT RECORD MAR. 14 TO APR. 17.

COLORADO RIVER MAIN STEM

09034500 COLORADO RIVER AT HDT 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 TEMPERATURE: April 1949 to current year.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 400 micromhos Feb. 5, 1974; minimum daily, 48 micromhos June 2, 1947.

WATER TEMPERATURES: Maximum, 28°C July 17, 1971; minimum, freezing point on many days during winter months each year.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum daily, 200 micromhos several days during April; minimum daily, 70 micromhos Oct. 1, 25, Dec. 2.

WATER TEMPERATURES: Maximum daily, 23.0°C Aug. 13; minimum daily, 0.0°C many days during December to May.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLDW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	HARD- NESS (MG/L AS CaCO3)	HARD- NESS, NONCAR- BONATE (MG/L CaCO3)	CALCIUM DIS- SOLVED (MG/L AS Ca)
OCT									
04...	1545	82	140	8.5	11.0	8.4	51	0	16
NOV									
15...	1445	65	130	8.4	1.5	9.4	55	0	17
DEC									
13...	1530	78	130	7.2	.0	11.0	54	0	17
JAN									
18...	1350	72	130	7.3	.0	9.5	52	0	16
FEB									
13...	1630	74	125	7.2	.0	13.0	52	0	16
MAR									
14...	1550	67	135	7.6	.0	9.9	55	4	17
APR									
26...	1610	248	155	--	10.5	10.2	56	7	17
MAY									
24...	0920	1130	90	7.3	7.0	8.8	40	11	12
JUN									
13...	1730	881	100	8.1	16.0	--	39	4	12
JUL									
19...	1100	321	150	7.8	13.0	8.7	58	0	18
AUG									
09...	1100	158	140	7.8	14.0	8.4	59	2	19
SEP									
25...	1145	57	135	7.4	13.0	9.3	55	0	17

COLORADO RIVER MAIN STEM

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	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 (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	ALKA- LINITY (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
OCT 04...	2.8	6.3	.4	1.3	72	0	59	4.6	1.4
NOV 15...	3.0	6.5	.4	1.2	71	0	58	10	1.7
DEC 13...	2.9	6.7	.4	1.4	71	0	58	7.7	1.6
JAN 18...	2.9	7.0	.4	1.3	--	--	54	8.8	2.0
FEB 13...	2.9	6.1	.4	1.1	--	--	53	8.1	1.8
MAR 14...	3.1	6.7	.4	1.3	--	--	51	7.7	2.1
APR 26...	3.4	7.8	.5	2.3	--	--	49	15	2.7
MAY 24...	2.5	4.0	.3	1.2	--	--	29	9.3	1.3
JUN 13...	2.2	4.9	.3	1.2	--	--	35	7.4	1.1
JUL 19...	3.2	6.0	.3	1.2	--	--	62	12	1.0
AUG 09...	2.9	6.5	.4	1.3	--	--	57	11	1.2
SEP 25...	3.1	6.9	.4	1.7	--	--	60	8.4	1.5

DATE	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 DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
OCT 04...	.2	12	80	17.7	.02	.02	.01	190	0
NOV 15...	.2	11	87	15.4	.19	.03	.03	140	0
DEC 13...	.2	13	86	18.1	.18	.02	--	110	8
JAN 18...	.2	13	85	16.5	.22	.04	.01	140	20
FEB 13...	.2	13	82	16.4	.24	.01	--	130	20
MAR 14...	.2	12	82	14.8	.27	.05	.03	110	20
APR 26...	.2	13	91	60.9	.07	.02	.02	230	20
MAY 24...	.3	11	59	180	.01	.01	--	140	20
JUN 13...	.3	11	61	145	--	.02	--	160	20
JUL 19...	.2	14	93	80.6	.00	.32	--	170	20
AUG 09...	.2	4.8	86	36.7	.99	.07	--	190	20
SEP 25...	.3	12	89	13.7	.48	.04	--	170	20

COLORADO RIVER MAIN STEM

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

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	70		120	---	140	160	170	160	---	110	180	160
2	110		70	120	140	160	170	160	110	110	160	140
3	120		90	110	140	160	170	170	120	110	165	160
4	100		100	120	130	150	190	170	120	120	145	150
5	100		90	120	140	140	150	160	110	120	145	140
6	100		90	180	140	150	130	160	120	140	140	150
7	130		100	---	---	160	140	140	120	140	140	150
8	110		100	120	140	160	120	150	140	140	145	200
9	90		100	110	110	160	150	160	130	130	140	160
10	100		110	120	140	160	---	190	140	130	120	150
11	120		120	130	130	180	170	100	120	160	145	---
12	110		120	120	130	160	200	160	120	160	130	---
13	110		140	100	140	160	200	150	120	160	120	150
14	120		120	100	160	170	200	150	100	170	120	160
15	120		130	120	150	140	200	140	---	160	140	160
16	120		120	120	150	160	200	130	95	160	140	180
17	120		120	110	150	160	190	130	95	160	140	160
18	120		120	140	140	160	200	120	95	160	160	160
19	120		100	140	140	160	200	120	160	160	160	160
20	120		100	140	160	160	200	120	120	160	160	160
21	120		120	120	140	120	190	120	90	170	160	160
22	140		130	130	150	140	180	110	140	170	170	160
23	140		120	140	160	160	160	110	140	170	160	150
24	100		120	140	160	100	180	110	140	170	140	150
25	70		120	140	150	130	180	100	110	180	150	160
26	110		120	140	90	130	180	110	120	150	140	160
27	90		120	140	120	150	160	110	110	160	150	160
28	100		120	140	---	160	130	100	110	170	140	160
29	75		140	140	---	190	170	100	110	160	140	170
30	100		140	120	---	150	140	120	100	170	140	160
31	110		120	140	---	130	---	110	---	160	140	---

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12.0		3.0	---	.0	.0	1.0	6.0	---	16.0	19.0	19.0
2	13.0		3.0	.0	.0	.0	4.0	6.0	10.0	14.0	18.0	18.0
3	10.0		5.0	.0	.0	.0	2.0	7.0	15.0	15.0	20.0	20.0
4	9.0		3.0	.0	.0	.0	2.0	8.0	16.0	18.0	21.0	15.0
5	11.0		4.0	.0	.0	.0	4.0	9.0	15.0	17.0	19.0	22.0
6	10.0		4.0	.0	.0	.0	8.0	5.0	16.0	14.0	20.0	20.0
7	14.0		4.0	---	---	.0	6.0	.0	9.0	17.0	21.0	21.0
8	11.0		2.0	.0	.0	.0	12.0	.0	10.0	19.0	20.0	17.0
9	12.0		3.0	.0	.0	.0	12.0	3.0	7.0	15.0	19.0	19.0
10	11.0		.0	.0	.0	.0	---	.0	13.0	14.0	20.0	19.0
11	12.0		.0	.0	.0	.0	.0	10.0	13.0	12.0	21.0	---
12	12.0		.0	.0	.0	.0	7.0	13.0	16.0	14.0	18.0	---
13	10.0		1.0	.0	.0	.0	6.0	13.0	16.0	20.0	23.0	14.0
14	8.0		.0	.0	.0	.0	8.0	14.0	13.0	19.0	18.0	14.0
15	11.0		1.0	.0	.0	.0	7.0	14.0	---	19.0	19.0	14.0
16	10.0		.0	.0	.0	.0	10.0	17.0	13.0	15.0	20.0	16.0
17	8.0		.0	.0	.0	.0	4.0	13.0	14.0	17.0	19.0	19.0
18	8.0		.0	.0	.0	.0	5.0	12.0	12.0	14.0	16.0	18.0
19	12.0		.0	.0	.0	1.0	2.0	13.0	9.0	15.0	17.0	21.0
20	10.0		.0	.0	.0	1.0	4.0	12.0	7.0	15.0	13.0	18.0
21	9.0		.0	.0	.0	.0	7.0	12.0	9.0	18.0	17.0	16.0
22	6.0		.0	.0	.0	2.0	7.0	12.0	10.0	19.0	16.0	14.0
23	11.0		.0	.0	.0	.0	6.0	11.0	15.0	18.0	15.0	16.0
24	7.0		.0	.0	.0	5.0	4.0	12.0	15.0	19.0	22.0	14.0
25	6.0		.0	.0	.0	6.0	7.0	13.0	15.0	18.0	16.0	17.0
26	1.0		.0	.0	.0	5.0	3.0	12.0	15.0	17.0	21.0	15.0
27	10.0		.0	.0	.0	4.0	10.0	14.0	12.0	17.0	16.0	15.0
28	7.0		.0	.0	.0	2.0	7.0	12.0	12.0	18.0	15.0	14.0
29	6.0		.0	.0	---	8.0	9.0	10.0	16.0	19.0	19.0	8.0
30	8.0		.0	.0	---	9.0	11.0	9.0	15.0	17.0	17.0	12.0
31	10.0		.0	.0	---	4.0	---	7.0	---	18.0	16.0	---

WILLIAMS FORK BASIN

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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 (98 m) upstream from diversion dam and 0.4 mi (0.6 km) south of entrance to August P. Gumlick Tunnel.

DRAINAGE AREA.--5.49 mi² (14.21 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 10,430 ft (3,179 m), from topographic map.

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

AVERAGE DISCHARGE.--14 years, 9.74 ft³/s (0.276 m³/s), 7,050 acre-ft/yr (8.70 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 187 ft³/s (5.30 m³/s) June 20, 1968, gage height, 4.71 ft (1.436 m); maximum recorded gage height, 6.26 ft (1.908 m) May 16, 1978 (backwater from ice); minimum daily discharge, 0.44 ft³/s (0.012 m³/s) Feb. 11, 1972.

EXTREMES FOR CURRENT YEAR.--Peak discharge above base of 90 ft³/s (2.5 m³/s) and maximum (°):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
June 6	1900	91 2.58	4.11 1.253	June 25	1500	109 3.09	4.22 1.286
June 16	1600	112 3.17	4.25 1.295				

Minimum daily discharge, 0.50 ft³/s (0.014 m³/s) Mar. 5-28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.4	1.9	.90	.80	.60	.60	.56	1.2	22	80	15	5.0
2	1.4	1.9	.90	.70	.60	.60	.56	1.0	22	71	13	4.8
3	1.6	1.8	.90	.70	.60	.60	.56	.92	25	63	12	4.6
4	1.7	1.8	.90	.70	.60	.60	.56	.92	35	61	11	4.4
5	1.7	1.8	.90	.70	.60	.50	.56	1.3	50	54	10	4.2
6	1.6	1.8	.90	.70	.60	.50	.56	2.6	67	51	10	4.0
7	1.7	3.3	.90	.70	.60	.50	.56	4.0	65	49	9.7	3.8
8	1.6	2.6	.90	.70	.60	.50	.60	3.0	41	45	11	3.6
9	1.3	1.6	.90	.70	.60	.50	.66	3.0	31	42	10	3.6
10	1.4	1.2	.90	.70	.60	.50	.70	3.0	28	39	9.7	3.5
11	1.3	1.0	.90	.70	.60	.50	.70	3.0	32	36	8.9	3.5
12	1.2	1.4	.90	.70	.60	.50	.70	3.8	50	35	8.9	3.5
13	.92	1.0	.90	.70	.60	.50	.70	5.0	78	35	9.1	3.3
14	.92	.67	.90	.70	.60	.50	.70	6.0	85	33	14	2.9
15	1.2	.74	.90	.60	.60	.50	.78	7.8	85	32	12	2.7
16	.92	.80	.90	.60	.60	.50	.90	10	92	32	13	2.7
17	.92	.90	.90	.60	.60	.50	1.0	13	89	29	12	2.4
18	1.2	.90	.90	.60	.60	.50	1.0	16	76	26	12	2.1
19	1.4	.90	.90	.60	.60	.50	1.0	20	56	24	12	2.1
20	1.4	.90	.90	.60	.60	.50	1.0	25	50	23	11	2.4
21	1.2	.90	.90	.60	.60	.50	1.0	20	61	25	10	2.9
22	1.2	.90	.90	.60	.60	.50	1.0	18	75	24	9.7	2.4
23	2.2	.90	.90	.60	.60	.50	1.0	22	82	22	8.9	2.2
24	2.4	.90	.90	.60	.60	.50	1.0	26	63	22	8.4	2.1
25	2.3	.90	.90	.60	.60	.50	1.1	31	88	21	7.8	2.1
26	2.0	.90	.90	.60	.60	.50	1.2	37	83	20	7.6	2.4
27	2.0	.90	.90	.60	.60	.50	1.2	40	87	22	6.8	2.4
28	2.0	.90	.90	.60	.60	.50	1.2	44	87	20	6.4	2.1
29	2.0	.90	.90	.60	---	.56	1.2	49	84	19	5.9	1.9
30	2.0	.90	.90	.60	---	.56	1.2	36	84	18	5.9	1.9
31	1.9	---	.90	.60	---	.56	---	43	---	18	5.5	---
TOTAL	47.98	37.91	27.90	20.10	16.80	16.08	25.46	496.54	1893	1087	307.2	91.5
MEAN	1.55	1.26	.90	.65	.60	.52	.85	16.0	63.1	35.1	9.71	3.05
MAX	2.4	3.3	.90	.80	.60	.60	1.2	49	92	80	15	5.0
MIN	.92	.67	.90	.60	.60	.50	.56	.92	22	15	5.5	1.9
AC-FT	95	75	55	40	33	32	50	985	3750	2160	634	181
CAL YR 1978	TOTAL	4341.84	MEAN	11.9	MAX	138	MIN	.67	AC-FT	8013		
WTR YR 1979	TOTAL	4069.47	MEAN	11.1	MAX	92	MIN	.50	AC-FT	8070		

NOTE.--NJ GAGE-HEIGHT RECORD NOV. 28 TO APR. 30.

WILLIAMS FORK BASIN

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 (210 m) downstream from Steelman Creek and 6.5 mi (10.5 km) southeast of Leal.

DRAINAGE AREA.--16.3 mi² (42.2 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 9,800 ft (2,987 m), 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 (180 m) upstream at different datum.

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

AVERAGE DISCHARGE.--22 years, 25.3 ft³/s (0.716 m³/s), 18,330 acre-ft/yr (22.6 hm³/yr), including diversions to August P. Gumlick Tunnel.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 441 ft³/s (12.5 m³/s) June 21, 1938, gage height, 2.48 ft (0.756 m), site and datum then in use, from rating curve extended above 260 ft³/s (7.4 m³/s); maximum gage height, 5.66 ft (1.725 m) May 10, 1973 (backwater from ice); minimum daily discharge, 0.20 ft³/s (0.006 m³/s) Mar. 6, 1967.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, not determined; minimum daily, 0.28 ft³/s (0.008 m³/s) Sept. 23-25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.7	7.0	5.0	2.0	2.0	2.0	2.6	6.0	38	170	1.1	.42
2	4.7	7.0	5.0	2.0	2.0	2.0	2.6	6.0	28	170	.66	.39
3	4.7	7.0	5.0	2.0	2.0	2.0	2.6	6.0	35	165	.60	.42
4	4.7	7.0	5.0	3.5	2.0	2.0	2.6	6.0	45	159	.57	.42
5	4.7	7.0	5.0	3.5	2.0	2.0	3.0	6.5	62	143	.60	.36
6	4.5	7.0	5.0	3.5	2.0	2.0	3.2	7.0	90	138	.72	.39
7	4.7	7.0	5.0	3.5	2.0	2.0	3.6	7.0	130	127	.66	.36
8	5.6	7.0	5.0	3.5	2.0	2.0	4.0	6.6	98	117	.70	.45
9	4.7	2.0	4.0	3.5	2.0	2.0	3.9	6.2	70	110	.84	.42
10	4.7	2.0	3.5	3.5	2.0	2.0	3.9	6.0	82	100	.78	.42
11	4.7	2.0	3.5	3.5	2.0	2.0	3.8	6.0	100	42	.66	.39
12	4.5	2.0	3.5	3.5	2.0	2.0	3.8	6.0	125	8.5	.60	.33
13	4.3	5.0	3.5	1.5	2.0	2.0	3.8	6.6	167	6.8	.50	.33
14	4.3	5.0	3.5	1.5	2.0	2.0	3.8	7.8	170	5.6	1.1	.51
15	4.1	5.0	3.5	1.5	2.0	2.2	4.2	9.0	180	5.6	.90	.45
16	3.6	5.0	3.5	1.5	2.0	2.2	4.8	10	190	5.3	.96	.36
17	3.9	5.0	3.5	1.5	2.0	2.2	5.5	12	190	4.7	1.3	.33
18	4.7	5.0	3.5	1.5	2.0	2.2	6.2	13	160	4.7	.78	.45
19	4.5	5.0	3.5	1.5	2.0	2.2	7.4	15	140	4.7	.84	.39
20	4.3	5.0	3.5	1.5	2.0	2.2	7.2	18	130	4.3	.78	.45
21	5.0	5.0	3.5	1.5	2.0	2.4	6.8	21	140	4.3	.84	.39
22	5.3	5.0	3.5	1.5	2.0	2.4	6.0	25	150	4.3	.72	.29
23	6.2	5.0	3.5	2.5	2.0	2.4	6.0	29	160	3.4	.60	.28
24	7.0	5.0	2.0	2.5	2.0	2.4	6.0	34	160	3.4	.54	.28
25	7.0	5.0	2.0	2.5	2.0	2.6	6.0	40	165	3.2	.57	.28
26	7.0	5.0	2.0	2.5	2.0	2.6	6.0	45	165	3.0	.51	.96
27	7.0	5.0	2.0	2.5	2.0	2.6	6.0	50	165	3.0	.48	3.0
28	7.0	5.0	3.5	.70	2.0	2.6	6.0	54	170	3.0	.48	2.6
29	7.0	5.0	3.5	.70	---	2.6	6.0	60	170	2.8	.45	2.5
30	7.0	5.0	3.5	.70	---	2.6	6.0	53	170	2.6	.45	2.3
31	7.0	---	2.0	.70	---	2.6	---	28	---	2.6	.45	---
TOTAL	163.1	154.0	113.5	67.80	56.0	69.0	143.3	605.7	3845	1527.4	21.77	20.92
MEAN	5.26	5.13	3.66	2.19	2.00	2.23	4.78	19.5	128	49.3	.70	.70
MAX	7.0	7.0	5.0	3.5	2.0	2.6	7.4	60	190	170	1.1	3.0
MIN	3.6	2.0	2.0	.70	2.0	2.0	2.6	6.0	28	2.6	.45	.28
AC-FT	324	305	225	134	111	137	284	1200	7630	3030	43	41

CAL YR 1978 TOTAL 8101.45 MEAN 22.2 MAX 279 MIN .25 AC-FT 16070
WTR YR 1979 TOTAL 6787.49 MEAN 18.6 MAX 190 MIN .28 AC-FT 13460

NOTE.--NO GAGE-HEIGHT RECORD OCT. 23 TO MAY 29.

WILLIAMS FORK BASIN

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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 (1.6 km) upstream from Darling Creek and 1.9 mi (3.1 km) southeast of Leal.

DRAINAGE AREA.--34.7 mi² (89.9 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 8,970 ft (2,734 m), from topographic map. Prior to Oct. 1, 1972, at site 0.6 mi (1.0 km) downstream at different datum.

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

AVERAGE DISCHARGE.--14 years, 35.5 ft³/s (1.005 m³/s), 25,720 acre-ft/yr (31.7 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 677 ft³/s (19.2 m³/s) June 24, 1971, gage height, 7.12 ft (2.170 m), site and datum then in use, from rating curve extended above 430 ft³/s (12 m³/s); minimum daily, 2.7 ft³/s (0.076 m³/s) Apr. 5, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 296 ft³/s (8.38 m³/s) at 2100 June 16, gage height, 4.58 ft (1.396 m); minimum daily, 3.5 ft³/s (0.099 m³/s) Feb. 5 to Mar. 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.6	11	7.0	7.0	5.0	3.5	4.8	11	72	254	27	12
2	9.6	11	7.0	7.0	5.0	3.5	4.8	11	59	236	26	12
3	9.6	10	7.0	7.0	4.5	3.5	4.8	10	62	221	25	11
4	9.6	10	7.5	7.0	4.0	3.5	4.8	10	91	216	24	11
5	9.6	9.9	7.5	7.0	3.5	3.5	5.2	12	109	199	23	10
6	9.6	8.9	7.0	7.0	3.5	3.5	6.0	13	198	193	23	10
7	9.6	11	7.0	7.0	3.5	3.5	7.0	13	219	177	22	9.7
8	9.6	12	7.0	7.0	3.5	3.5	7.2	12	164	166	24	9.6
9	9.6	10	7.0	7.0	3.5	3.5	7.0	11	87	155	23	9.7
10	9.6	6.9	7.0	7.0	3.5	3.5	6.8	10	98	144	22	9.5
11	9.6	6.0	7.0	7.0	3.5	3.5	6.6	9.0	132	102	20	9.5
12	9.6	5.9	7.0	7.0	3.5	3.5	6.4	9.0	161	55	20	9.6
13	9.6	5.8	7.0	7.0	3.5	3.5	6.2	10	209	52	20	9.0
14	9.6	5.8	7.0	7.0	3.5	3.5	6.0	11	245	50	24	9.2
15	9.6	5.8	7.0	7.0	3.5	4.0	9.9	15	249	48	23	8.6
16	9.6	5.8	7.0	7.0	3.5	4.0	11	18	263	46	24	8.3
17	9.6	5.6	7.0	7.0	3.5	4.0	11	25	263	44	22	8.0
18	9.6	5.6	7.0	7.0	3.5	4.0	13	30	249	43	19	8.0
19	9.6	5.6	7.0	7.0	3.5	4.0	15	35	220	43	20	7.7
20	9.6	5.6	7.0	7.0	3.5	4.5	14	40	193	41	20	8.4
21	9.6	5.6	7.0	6.0	3.5	4.5	12	45	206	43	20	9.1
22	9.6	5.6	7.0	6.0	3.5	4.5	10	47	226	43	18	8.2
23	9.6	5.6	7.0	6.0	3.5	4.5	10	49	242	39	17	7.3
24	9.6	5.6	7.0	6.0	3.5	4.5	11	59	245	38	16	7.0
25	9.6	5.6	7.0	6.0	3.5	5.0	11	69	252	36	16	7.1
26	9.6	5.3	7.0	6.0	3.5	5.0	11	64	253	35	15	7.6
27	11	7.0	7.0	6.0	3.5	5.0	10	65	257	34	14	12
28	11	7.0	7.0	6.0	3.5	5.0	11	74	267	33	13	11
29	11	7.0	7.0	6.0	---	5.0	11	122	267	31	13	11
30	11	7.0	7.0	5.0	---	4.8	11	100	265	30	13	11
31	11	---	7.0	5.0	---	4.8	---	67	---	29	12	---
TOTAL	304.6	219.5	218.0	204.0	102.5	126.1	265.5	1076.0	5823	2873	618	282.1
MEAN	9.83	7.32	7.03	6.58	3.66	4.07	8.85	34.7	194	92.7	19.9	9.24
MAX	11	12	7.5	7.0	5.0	5.0	15	122	267	254	27	12
MIN	9.6	5.3	7.0	5.0	3.5	3.5	4.8	9.0	59	29	12	7.0
AC-FT	604	435	432	405	203	250	527	2130	11550	5700	1230	560

CAL YR 1978 TOTAL 13652.0 MEAN 37.4 MAX 34.7 MIN 4.0 AC-FT 27080
 ATR YR 1979 TOTAL 12112.3 MEAN 33.2 MAX 26.7 MIN 3.5 AC-FT 24020

NOTE.--NO GAGE-HEIGHT RECORD OCT. 1 TO NOV. 1, DEC. 2 TO MAR. 28.

WILLIAMS FORK BASIN

09035800 DARLING CREEK NEAR LEAL, CO

LOCATION.--Lat 39°48'17", long 106°01'11", in NE¼SW¼ sec.9, T.3 S., R.77 W., Grand County, Hydrologic Unit 14010001, on left bank 0.6 mi (1.0 km) upstream from mouth and 1.4 mi (2.3 km) southeast of Leal.

DRAINAGE AREA.--8.18 mi² (21.2 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 9,090 ft (2,771 m), from topographic map.

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

AVERAGE DISCHARGE.--14 years, 9.12 ft³/s (0.258 m³/s), 6,610 acre-ft/yr (8.15 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 224 ft³/s (6.34 m³/s) June 20, 1968, gage height, 3.62 ft (1.103 m), from rating curve extended above 80 ft³/s (2.3 m³/s); maximum gage height, 3.91 ft (1.192 m) June 25, 1971; minimum daily discharge, 1.0 ft³/s (0.028 m³/s) Jan. 12, 1975.

EXTREMES FOR CURRENT YEAR.--Maximum recorded discharge, 76 ft³/s (2.15 m³/s) at 2000 June 23, gage height, 3.42 ft (1.042 m); minimum daily, 1.7 ft³/s (0.048 m³/s) Feb. 17 to Apr. 4, Apr. 11-14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.5	2.5	2.5	2.0	2.0	1.7	1.7	2.4	20	53	7.4	3.6
2	2.5	2.4	2.5	2.0	2.0	1.7	1.7	2.3	17	51	6.9	3.4
3	2.5	2.5	2.5	2.0	2.0	1.7	1.7	2.3	19	46	6.4	3.1
4	2.6	2.3	2.5	2.0	2.0	1.7	1.7	2.5	25	44	6.0	3.0
5	2.6	2.6	2.5	2.0	2.0	1.7	1.9	3.1	30	41	6.1	2.7
6	2.6	2.2	2.5	2.1	2.0	1.7	2.0	3.8	45	38	5.8	2.5
7	2.6	2.2	2.4	2.5	2.0	1.7	1.9	3.6	48	35	5.7	2.4
8	2.5	2.6	2.3	2.5	2.0	1.7	2.0	2.8	35	32	8.3	2.3
9	2.6	2.4	2.2	2.5	2.0	1.7	2.0	2.6	22	30	6.9	2.3
10	2.5	2.4	2.2	2.5	2.0	1.7	1.9	2.5	21	28	6.5	2.3
11	2.5	2.4	2.2	2.5	2.0	1.7	1.7	2.4	26	26	5.7	2.2
12	2.4	2.3	2.2	2.5	2.0	1.7	1.7	2.3	35	24	5.7	2.3
13	2.4	2.2	2.2	2.5	2.0	1.7	1.7	2.5	50	23	7.3	2.4
14	2.3	2.2	2.2	2.5	2.0	1.7	1.7	3.2	60	22	11	2.4
15	2.4	2.2	2.2	2.5	2.0	1.7	2.1	4.4	65	21	8.8	2.4
16	2.4	2.2	2.2	2.5	2.0	1.7	2.6	6.1	66	20	9.1	2.3
17	2.4	2.2	2.2	2.5	1.7	1.7	2.8	7.8	66	18	7.8	2.2
18	2.8	2.2	2.2	2.5	1.7	1.7	3.2	9.0	58	17	7.6	2.3
19	2.6	2.2	2.2	2.5	1.7	1.7	3.3	11	40	16	8.4	2.3
20	2.5	2.5	2.2	2.5	1.7	1.7	2.9	13	35	15	8.3	3.0
21	2.8	2.5	2.2	2.5	1.7	1.7	2.8	14	50	16	8.3	2.9
22	2.8	2.5	2.2	2.5	1.7	1.7	2.6	16	58	15	7.2	2.3
23	2.5	2.5	2.2	2.0	1.7	1.7	2.8	19	61	14	6.3	2.5
24	2.6	2.5	2.2	2.0	1.7	1.7	3.1	22	62	14	5.9	2.5
25	2.5	2.5	2.2	2.0	1.7	1.7	2.7	24	60	12	6.0	2.5
26	2.6	2.5	2.1	2.0	1.7	1.7	2.5	29	61	11	5.6	2.6
27	2.7	2.5	2.0	2.0	1.7	1.7	2.6	29	60	11	5.1	2.7
28	2.6	2.5	2.0	2.0	1.7	1.7	2.5	33	61	10	4.7	2.8
29	2.6	2.5	2.0	2.0	---	1.7	2.3	37	59	9.0	4.2	2.8
30	2.5	2.5	2.0	2.0	---	1.7	2.3	32	57	8.1	4.6	2.8
31	2.5	---	2.0	2.0	---	1.7	---	25	---	8.0	4.3	---
TOTAL	78.9	71.7	69.2	70.1	52.4	52.7	68.4	369.6	1372	728.1	207.9	77.8
MEAN	2.55	2.39	2.23	2.26	1.87	1.70	2.28	11.9	45.7	23.5	6.71	2.59
MAX	2.8	2.6	2.5	2.5	2.0	1.7	3.3	37	66	53	11	3.6
MIN	2.3	2.2	2.0	2.0	1.7	1.7	1.7	2.3	17	8.0	4.2	2.2
AC-FT	156	142	137	139	104	105	136	733	2720	1440	412	154

CAL YR 1978 TOTAL 3750.8 MEAN 10.3 MAX 109 MIN 1.7 AC-FT 7440
WTR YR 1979 TOTAL 3218.8 MEAN 8.82 MAX 66 MIN 1.7 AC-FT 6380

NOTE.--NO GAGE-HEIGHT RECORD NOV. 15 TO APR. 4, MAY 31 TO JUNE 21.

09035900 SOUTH FORK OF WILLIAMS FORK NEAR LEAL, CO

LOCATION.--Lat 39°47'44", long 106°01'49", in NE¼ sec.17, T.3 S., R.77 W., Grand County, Hydrologic Unit 14010001, on left bank 800 ft (244 m) upstream from highway bridge, 0.6 mi (1.0 km) upstream from mouth, and 1.2 mi (1.9 km) southeast of Leal.

DRAINAGE AREA.--27.2 mi² (70.4 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 8,950 ft (2,728 m), from topographic map.

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

AVERAGE DISCHARGE.--14 years, 30.2 ft³/s (0.855 m³/s), 21,880 acre-ft/yr (27.0 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 464 ft³/s (13.1 m³/s) June 15, 1978, gage height 3.37 ft (1.027 m); maximum gage height, 4.22 ft (1.286 m) Nov. 22, 1979 (backwater from ice); minimum daily discharge, 2.6 ft³/s (0.074 m³/s) Mar. 6, 1967.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 200 ft³/s (5.7 m³/s) and maximum (°):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Nov. 22	0700	ice jam	4.22 1.286	June 16	2400	249 7.05	3.03 0.924
June 6	2000	228 6.46	2.95 0.899				

Minimum daily discharge, 4.4 ft³/s (0.12 m³/s) Dec. 1 to Feb. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	9.6	4.4	4.4	4.4	6.4	6.6	9.8	84	148	35	18
2	11	9.5	4.4	4.4	5.2	6.4	6.6	9.7	79	156	34	18
3	11	9.6	4.4	4.4	5.2	6.4	6.6	10	84	148	32	18
4	11	9.5	4.4	4.4	5.2	6.4	6.6	10	99	130	31	18
5	11	9.6	4.4	4.4	5.2	6.4	6.6	12	119	123	29	17
6	11	9.1	4.4	4.4	5.2	6.4	6.6	14	153	114	30	17
7	11	9.1	4.4	4.4	5.2	6.4	7.6	16	164	105	29	16
8	11	9.1	4.4	4.4	5.2	6.4	7.6	13	124	95	30	16
9	11	9.1	4.4	4.4	5.2	6.4	7.6	11	94	87	30	16
10	10	9.1	4.4	4.4	5.6	6.4	7.6	12	84	85	29	15
11	10	9.0	4.4	4.4	5.6	6.4	7.6	12	88	80	27	15
12	10	9.1	4.4	4.4	5.6	6.4	7.6	11	110	71	27	14
13	10	7.6	4.4	4.4	5.6	6.6	7.6	12	139	68	28	14
14	10	7.6	4.4	4.4	5.6	6.6	7.6	14	159	65	36	14
15	10	7.6	4.4	4.4	5.6	6.6	7.6	18	152	64	33	13
16	10	7.6	4.4	4.4	5.6	6.6	8.0	22	153	67	33	13
17	10	6.4	4.4	4.4	5.6	6.6	8.4	29	176	67	35	13
18	11	6.4	4.4	4.4	5.6	6.6	8.8	36	150	66	31	13
19	11	6.4	4.4	4.4	6.0	6.6	9.9	46	156	61	30	13
20	11	6.4	4.4	4.4	6.0	6.6	9.5	58	150	57	28	13
21	11	6.4	4.4	4.4	6.0	6.6	9.2	68	150	56	28	13
22	11	6.4	4.4	4.4	6.0	6.6	9.1	65	143	56	27	13
23	9.9	6.4	4.4	4.4	6.0	6.6	9.3	74	152	52	26	13
24	10	5.6	4.4	4.4	6.0	6.6	10	89	158	54	25	12
25	11	5.6	4.4	4.4	6.4	6.6	10	88	155	48	24	12
26	15	5.6	4.4	4.4	6.4	6.6	10	96	158	45	23	12
27	12	5.0	4.4	4.4	6.4	6.6	10	95	159	43	22	12
28	11	5.0	4.4	4.4	6.4	6.6	10	108	161	43	21	12
29	10	5.0	4.4	4.4	---	6.6	9.9	131	156	40	20	12
30	9.9	5.0	4.4	4.4	---	6.6	9.8	120	155	38	20	12
31	9.8	---	4.4	4.4	---	6.6	---	98	---	37	20	---
TOTAL	332.6	223.4	136.4	136.4	158.0	202.2	249.9	1407.5	4064	2375	873	429
MEAN	10.7	7.45	4.40	4.40	5.64	6.52	8.33	45.4	135	70.6	28.2	14.3
MAX	15	9.6	4.4	4.4	6.4	6.6	10	131	176	156	36	18
MIN	9.8	5.0	4.4	4.4	4.4	6.4	6.6	9.7	79	37	20	12
AC-FT	660	443	271	271	313	401	496	2790	8060	4710	1730	651

CAL YR 1978 TOTAL 12967.2 MEAN 35.5 MAX 355 MIN 4.4 AC-FT 25720
WTR YR 1979 TOTAL 10587.4 MEAN 29.0 MAX 176 MIN 4.4 AC-FT 21000

NOTE.--NO GAGE-HEIGHT RECORD NOV. 30 TO APR. 16.

WILLIAMS FORK BASIN

09036000 WILLIAMS FORK NEAR LEAL, CO

LOCATION.--Lat 39°49'53", long 106°03'15", in sec.31, T.2 S., R.77 W., Grand County, Hydrologic Unit 14010001, on right bank at downstream side of bridge, 100 ft (30 m) downstream from Kinney Creek, and 1.7 mi (2.7 km) northwest of Leal.

DRAINAGE AREA.--89.3 mi² (231.3 km²).

PERIOD OF RECORD.--July 1933 to current year. Records since May 10, 1940, equivalent to earlier records if diversion to August P. Gumlick Tunnel is added to flow past station. Prior to October 1958, published as Williams River near Leal.

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

GAGE.--Water-stage recorder. Altitude of gage is 8,790 ft (2,679 m), from topographic map. Prior to Aug. 15, 1953, at site 15 ft (5 m) downstream at present datum.

REMARKS.--Records good. Transmountain diversion above station through August P. Gumlick Tunnel (see table below for figures of diversion). Diversions for irrigation of about 200 acres (809,000 m²) of hay meadows above station and about 40 acres (162,000 m²) below. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

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

AVERAGE DISCHARGE.--46 years, 102 ft³/s (2.889 m³/s), 73,900 acre-ft/yr (91.1 hm³/yr), including diversions to August P. Gumlick Tunnel.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,720 ft³/s (48.7 m³/s) June 10, 1952, gage height, 4.23 ft (1.289 m); maximum gage height, 5.46 ft (1.664 m) June 29, 1971 (backwater from log); minimum daily discharge, 13 ft³/s (0.37 m³/s) at times in 1939, 1963, 1964, and 1967.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 780 ft³/s (22.1 m³/s) at 2300 June 16, gage height, 3.28 ft (1.000 m); minimum daily, 16 ft³/s (0.45 m³/s) Mar. 19, Mar. 31 to Apr. 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	27	26	19	18	18	16	40	224	651	80	40
2	29	27	26	19	18	18	16	39	194	612	76	38
3	28	27	25	19	18	18	16	34	207	576	73	37
4	28	25	25	19	18	17	16	37	268	559	67	35
5	29	27	24	20	18	18	16	47	329	509	60	34
6	29	24	23	20	18	18	16	57	515	484	58	34
7	29	23	23	21	18	18	18	59	619	452	57	33
8	29	26	23	23	17	17	19	44	509	414	53	32
9	29	25	22	20	17	17	18	39	347	383	57	31
10	26	24	22	19	18	17	19	36	315	358	56	28
11	26	23	22	19	18	17	18	32	372	308	60	29
12	26	24	22	19	18	17	17	30	435	213	58	32
13	26	19	22	19	18	17	17	32	560	201	65	31
14	26	20	22	19	18	17	18	44	670	190	85	31
15	26	20	21	19	18	17	19	56	682	180	82	30
16	26	20	21	19	18	17	22	73	700	169	84	26
17	26	20	21	19	18	17	27	92	696	156	80	26
18	30	21	21	19	17	17	40	110	669	147	73	25
19	31	21	22	18	18	16	45	131	593	137	75	25
20	30	22	22	18	18	17	40	162	494	132	69	25
21	32	22	22	18	18	17	38	182	520	128	71	31
22	35	23	22	18	18	17	35	177	578	134	64	27
23	27	22	22	18	18	17	37	198	627	124	58	25
24	30	19	21	19	18	17	43	239	647	127	54	27
25	34	22	20	19	17	17	42	257	662	115	52	27
26	26	23	20	19	18	17	35	281	662	105	50	28
27	29	21	20	19	18	17	37	312	672	102	47	33
28	29	20	21	18	18	17	39	343	688	103	45	33
29	29	24	21	18	---	17	33	410	698	91	44	31
30	29	20	22	18	---	17	35	378	685	85	44	27
31	28	---	21	18	---	16	---	265	---	83	43	---
TOTAL	886	687	687	589	500	531	807	4236	15837	8028	1970	913
MEAN	28.6	22.9	22.2	19.0	17.9	17.1	26.9	137	528	259	63.5	30.4
MAX	35	27	26	23	18	18	45	410	700	651	85	40
MIN	26	19	20	18	17	16	16	30	194	83	43	25
AC-FT	1760	1360	1360	1170	992	1050	1600	8400	31410	15920	3910	1810
a	0	29	13	65	62	59	104	1190	421	2440	1220	328

CAL YR 1978 TOTAL 39776 MEAN 109 MAX 1020 MIN 15 AC-FT 78900
WTR YR 1979 TOTAL 35671 MEAN 97.7 MAX 700 MIN 16 AC-FT 70750

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"N, long 106°10'45"W, in SW¼SW¼ sec.31, T.1 N., R.78 W., Grand County, Hydrologic Unit 14010001, on right bank 150 ft (46 m) downstream from bridge on State Highway 286, 3.7 mi (6.0 km) downstream from Skylark Creek, 3.9 mi (6.3 km) south of Parshall, and 4.2 mi (6.8 km) upstream from Williams Fork Reservoir Dam.

DRAINAGE AREA.--184 mi² (477 km²).

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 1953.

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

GAGE.--water-stage recorder. Datum of gage is 7,808.95 ft (2,380.168 m) (Denver Board of Water Commissioners Datum). See WSP 1733 for history of changes prior to Aug. 9, 1938.

REMARKS.--Records good except those for winter period, which are poor. Transmountain diversion above station through August P. Gumlick Tunnel (station 09036000). Diversions above station for irrigation of about 1,300 acres (5.26 km²) above station and about 2,500 acres (10.1 km²) below. About 150 acres (607,300 m²) above station irrigated by diversions into the drainage area. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--66 years, 136 ft³/s (3.852 m³/s), 98,530 acre-ft/yr (121 hm³/yr), including diversion to August P. Gumlick Tunnel.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 2,620 ft³/s (74.2 m³/s) June 14, 1918; gage height, 6.05 ft (1.884 m), site and datum then in use, from rating curve extended above 1,400 ft³/s (40 m³/s); minimum daily, 4.8 ft³/s (0.14 m³/s) May 6, 8-10, 1972.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 980 ft³/s (27.8 m³/s) at 0400 June 17, gage height, 4.39 ft (1.338 m); minimum daily, 15 ft³/s (0.42 m³/s) July 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38	43	41	27	27	27	25	71	210	592	10	52
2	35	43	41	27	27	27	26	74	172	520	66	51
3	36	41	34	27	27	27	26	70	157	455	71	50
4	36	38	37	27	27	27	26	67	188	420	73	48
5	36	41	39	27	27	27	26	82	235	360	69	42
6	36	38	34	27	27	27	28	100	412	328	71	39
7	36	33	34	27	27	27	35	111	726	306	70	41
8	36	37	34	27	27	27	38	90	694	254	71	44
9	36	39	34	27	27	27	38	81	546	223	79	43
10	35	40	30	27	27	27	37	77	416	198	76	40
11	35	38	30	27	28	27	35	72	426	170	71	39
12	34	40	30	27	29	27	32	74	456	101	57	41
13	34	34	30	27	30	27	31	77	602	79	71	40
14	39	32	30	27	30	27	33	98	825	62	86	41
15	40	33	30	27	30	27	39	115	844	47	97	45
16	41	34	30	27	28	27	48	136	847	40	101	43
17	40	34	30	27	27	27	56	173	856	27	88	42
18	43	38	30	27	27	27	68	197	793	19	82	41
19	47	41	30	27	27	27	78	221	684	17	90	41
20	44	40	30	27	27	27	73	239	520	17	80	42
21	45	42	30	27	27	27	70	262	508	15	82	48
22	52	42	30	27	27	27	69	263	574	20	75	45
23	45	43	30	27	27	27	70	265	634	87	69	42
24	44	44	30	27	27	26	78	286	652	126	69	42
25	49	37	30	27	27	27	81	265	658	109	66	42
26	39	35	27	27	27	27	68	283	652	95	54	42
27	43	37	27	27	27	29	70	320	664	90	62	44
28	44	38	27	27	27	29	76	354	658	90	60	41
29	44	44	27	27	---	29	66	409	670	83	56	39
30	45	43	27	27	---	26	66	411	634	78	55	37
31	45	---	27	25	---	27	---	288	---	75	56	---
TOTAL	1252	1162	970	835	769	843	1512	5631	16913	5103	2253	1287
MEAN	40.4	38.7	31.3	26.9	27.5	27.2	50.4	182	564	165	73.0	42.9
MAX	52	44	41	27	30	29	81	411	856	592	101	52
MIN	34	32	27	25	27	26	25	67	157	15	55	37
AC-FT	2480	2300	1920	1660	1530	1670	3000	11170	33550	10120	4490	2550
CAL YR 1978	TOTAL	38016	MEAN 104	MAX 1030	MIN 22	AC-FT 75400						
WTR YR 1979	TOTAL	38540	MEAN 106	MAX 856	MIN 15	AC-FT 76440						

COLORADO RIVER BASIN

09038000 WILLIAMS FORK RESERVOIR NEAR PARSHALL, CO

LOCATION.--Lat 40°02'06", long 106°12'17", in SE 1/4 sec. 23, T.1 N., R.79 W., Grand County, Hydrologic Unit 14010001, at dam on Williams Fork, 2.1 mi (3.4 km) upstream from mouth, and 2.2 mi (3.5 km) southwest of Parshall.

DRAINAGE AREA.--230 mi² (596 km²).

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

REVISED RECORDS.--WSP 2124: Drainage area.

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

REMARKS.--Reservoir is formed by concrete-arch dam completed in October 1938; storage began April 1939; dam was enlarged Dec. 5, 1956, to Apr. 22, 1959. Enlarged capacity, 96,820 acre-ft (119 hm³) between elevations 7,634 ft (2,326.8 m), invert of outlet, and 7,811 ft (2,380.8 m), 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 to supply decreed prior water rights. Records furnished by Denver Board of Water Commissioners.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 97,130 acre-ft (120 hm³) July 9, 1962, elevation, 7,811.19 ft (2,380.851 m); no contents at times in 1958 (construction) and 1966 (drained for repairs).

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 93,620 acre-ft (115 hm³) July 10, 11, elevation, 7,809.00 ft (2,380.183 m); minimum, 43,220 acre-ft (53.3 hm³) Apr. 6, elevation, 7,767.30 ft (2,367.473 m).

MONTHEND ELEVATION IN FEET NGVD AND CONTENTS, AT 0800, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

Date	Elevation	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.	7,793.75	71,950	-
Oct. 31.	7,782.80	58,820	-13,130
Nov. 30.	7,769.20	44,970	-13,850
Dec. 31.	7,768.66	44,470	-500
CAL YR 1978			+16,760
Jan. 31.	7,767.80	43,680	-790
Feb. 28.	7,767.73	43,610	-70
Mar. 31.	7,767.38	43,290	-320
Apr. 30.	7,769.95	45,680	+2,390
May 31.	7,781.63	57,530	+11,850
June 30.	7,806.50	89,750	+32,220
July 31.	7,805.86	88,790	-960
Aug. 31.	7,799.25	79,280	-9,510
Sept. 30.	7,789.81	66,990	-12,290
WTR YR 1979			-4,960

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 (120 m) downstream from Williams Fork Reservoir, 2.1 mi (3.4 km) upstream from mouth, and 2.1 mi (3.4 km) southwest of Parshall.

DRAINAGE AREA.--230 mi² (596 km²).

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 (2,321.05 m) (Denver Board of Water Commissioners Datum). See WSP 1713 or 1733 for history of changes prior to Oct. 21, 1959.

REMARKS.--Records good. Flow regulated by Williams Fork Reservoir (station 09038000). Transmountain diversion above station through August P. Gumluck Tunnel (station 09036000). Diversions above station for irrigation of about 3,200 acres (13.0 km²) above station and about 100 acres (405,000 m²) below. About 450 acres (1.82 km²) above station irrigated by diversion into the drainage area. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--27 years, 122 ft³/s (3.455 m³/s), 88,390 acre-ft/yr (109 hm³/yr), adjusted for storage in Williams Fork Reservoir.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,640 ft³/s (74.8 m³/s) June 20, 1953, gage height, 8.50 ft (2.591 m), site and datum then in use, from rating curve extended above 1,500 ft³/s (42 m³/s); no flow for part of Apr. 29, 1975.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 342 ft³/s (9.69 m³/s) at 0915 July 3, gage height, 2.76 ft (0.841 m); minimum daily, 11 ft³/s (0.31 m³/s) Apr. 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	260	272	49	55	43	35	44	13	29	237	246	249
2	260	273	49	56	39	35	44	14	29	235	246	249
3	259	274	49	57	39	35	44	14	28	296	246	248
4	260	275	48	55	39	35	44	14	28	328	247	248
5	260	272	48	54	40	35	43	14	28	304	249	249
6	261	270	49	54	39	36	43	13	28	252	248	250
7	261	274	49	53	39	39	43	13	29	233	247	250
8	260	274	49	53	37	43	43	13	29	231	246	251
9	260	273	48	55	34	44	43	13	29	231	247	252
10	261	274	50	55	34	44	43	13	29	231	247	251
11	262	275	51	54	34	44	43	13	29	233	247	252
12	263	277	51	53	35	45	61	13	29	233	250	253
13	262	276	45	53	35	45	70	13	29	233	248	254
14	262	275	50	53	35	45	70	23	29	233	248	254
15	262	274	50	53	35	46	71	28	29	233	247	253
16	262	275	48	54	35	45	72	28	26	235	248	252
17	264	277	48	54	35	44	82	28	24	235	248	250
18	265	277	48	54	35	45	108	28	23	235	248	252
19	265	279	48	54	35	45	71	28	23	225	246	253
20	264	280	48	54	35	45	14	28	24	233	247	254
21	265	280	48	54	36	45	14	28	23	233	248	256
22	266	278	50	51	36	45	14	28	23	234	248	254
23	267	277	54	50	36	45	14	28	23	239	248	254
24	267	282	55	50	36	45	14	28	23	241	248	255
25	266	282	55	50	36	45	14	28	23	241	248	257
26	268	280	55	47	36	45	11	28	23	241	248	257
27	268	278	55	44	36	45	12	28	24	241	246	256
28	270	282	55	45	35	45	13	28	25	241	248	256
29	270	285	55	45	---	45	13	28	168	243	248	257
30	271	255	55	46	---	45	13	29	237	246	249	258
31	272	---	55	47	---	44	---	29	---	246	250	---
TOTAL	8183	8275	1567	1612	1019	1324	1228	674	1143	7552	7677	7584
MEAN	264	276	50.5	52.0	36.4	42.7	40.9	21.7	38.1	244	248	253
MAX	272	285	55	57	43	46	108	29	237	328	250	258
MIN	259	255	45	44	34	35	11	13	23	225	246	248
AC-FT	16230	16410	3110	3200	2020	2630	2440	1340	2270	14980	15250	15340
CAL YR 1978	TOTAL	36571	MEAN 100	MAX 285	MIN 15	AC-FT	72540					
WTR YR 1979	TOTAL	47838	MEAN 131	MAX 328	MIN 11	AC-FT	94890					

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 (14 m) downstream from small tributary, 3 mi (5 km) north of Pearmont, 4 mi (6 km) downstream from Rabbit Ear Creek, 5.2 mi (8.4 km) upstream from East Fork, and 12 mi (19 km) northeast of Kremmling.

DRAINAGE AREA.--44.6 mi² (115.5 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 8,049 ft (2,453.3 m), from topographic map.

REMARKS.--Records good except those for winter period, which are poor. One diversion above station for irrigation of about 250 acres (1.01 km²) below. Flow partly regulated during irrigation season by one reservoir, capacity, 1,070 acre-ft (1.32 hm³) above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--26 years, 29.5 ft³/s (0.835 m³/s), 21,370 acre-ft/yr (26.3 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 507 ft³/s (14.4 m³/s) June 20, 1978, gage height, 2.63 ft (0.802 m); maximum gage height, 3.93 ft (1.198 m) Mar. 31, 1965 (backwater from ice); minimum daily discharge, 4.5 ft³/s (0.13 m³/s) Dec. 20-24, 1976.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 433 ft³/s (12.3 m³/s) at 1000 May 29, gage height, 2.49 ft (0.759 m); minimum daily, 7.0 ft³/s (0.20 m³/s) Dec. 11 to Jan. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	14	8.0	7.0	8.0	12	12	30	263	132	27	20
2	15	14	8.0	7.0	8.0	11	12	31	210	118	27	20
3	14	14	8.0	7.0	8.0	11	13	29	213	107	26	20
4	14	14	8.0	7.0	8.0	11	13	30	218	100	26	19
5	14	13	8.0	7.0	8.0	11	13	32	216	92	25	19
6	14	13	8.0	7.0	9.0	11	14	34	297	85	22	19
7	14	14	8.0	7.0	9.0	11	15	34	348	82	20	19
8	14	14	8.0	7.0	9.0	11	15	31	330	74	18	19
9	14	13	8.0	7.0	9.0	11	16	30	276	69	18	19
10	14	13	8.0	7.0	9.0	11	17	29	216	64	19	19
11	14	13	7.0	7.0	10	11	16	28	196	58	18	19
12	14	12	7.0	7.0	11	11	17	28	208	55	18	19
13	14	10	7.0	7.0	11	11	16	29	246	52	18	19
14	14	10	7.0	7.0	11	11	17	34	315	51	22	18
15	14	10	7.0	7.0	10	11	19	38	327	54	25	18
16	14	10	7.0	7.0	11	11	22	40	279	52	26	18
17	14	10	7.0	7.0	11	11	24	59	253	45	25	18
18	14	10	7.0	7.0	11	11	27	124	236	40	24	18
19	14	10	7.0	7.0	11	11	27	198	236	37	26	18
20	14	10	7.0	7.0	11	11	26	184	204	35	27	18
21	14	10	7.0	7.0	12	11	26	162	176	32	26	18
22	16	10	7.0	7.0	12	11	26	246	156	32	25	17
23	14	10	7.0	7.0	11	11	27	250	150	31	24	17
24	14	10	7.0	7.0	11	11	28	258	152	31	23	17
25	14	8.0	7.0	7.0	11	11	28	253	167	31	23	17
26	13	8.0	7.0	7.0	11	11	27	266	157	32	22	17
27	14	8.0	7.0	7.0	12	11	28	266	161	32	22	17
28	14	8.0	7.0	7.0	11	12	29	321	150	32	22	17
29	14	8.0	7.0	7.0	---	12	28	360	144	30	21	17
30	14	8.0	7.0	7.0	---	12	29	303	140	28	21	16
31	14	---	7.0	8.0	---	12	---	297	---	28	21	---
TOTAL	437	329.0	227.0	218.0	284.0	346	627	4054	6650	1741	737	546
MEAN	14.1	11.0	7.32	7.03	10.1	11.2	20.9	131	222	56.2	22.8	18.2
MAX	16	14	8.0	8.0	12	12	29	360	348	132	27	20
MIN	13	8.0	7.0	7.0	8.0	11	12	28	140	28	18	16
AC-FT	867	653	450	432	563	686	1240	8040	13190	3450	1430	1080
CAL YR 1978	TOTAL	16329.7	MEAN	44.7	MAX	454	MIN	7.0	AC-FT	32390		
WTR YR 1979	TOTAL	16166.0	MEAN	44.3	MAX	360	MIN	7.0	AC-FT	32070		

09040000 EAST FORK TROUBLESOME CREEK NEAR TROUBLESOME, CO

LOCATION.--Lat 40°09'27", long 106°16'58", in NW¼ sec.7, T.2 N., R.79 W., Grand County, Hydrologic Unit 14010001, on right bank 400 ft (120 m) upstream from mouth and 6.5 mi (10.5 km) north of Troublesome.

DRAINAGE AREA.--76.0 mi² (196.8 km²).

PERIOD OF RECORD.--April 1937 to September 1943, October 1953 to current year. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 1924: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 7,670 ft (2,338 m), from topographic map. See WSP 1733 for history of changes prior to Oct. 1, 1953. Oct. 1, 1953, to July 21, 1966, at site 100 ft (30 m) downstream at present datum.

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

AVERAGE DISCHARGE.--32 years, 28.7 ft³/s (0.813 m³/s), 20,790 acre-ft/yr (25.6 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 795 ft³/s (22.5 m³/s) May 25, 1978, gage height, 5.66 ft (1.725 m); minimum daily, 0.20 ft³/s (0.006 m³/s) Oct. 3, 1941, Sept. 2, 3, 26, 27, 1942.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 170 ft³/s (4.8 m³/s), and maximum (?):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
May 29	0100	635 18.0	6.00 1.829	June 15	0600	340 9.63	5.14 1.567
June 8	0100	330 9.35	5.26 1.603				

Minimum daily discharge, 2.4 ft³/s (0.068 m³/s) Sept. 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.9	5.2	4.3	5.2	5.6	5.4	5.2	85	195	54	14	7.0
2	4.9	5.2	4.4	5.4	5.6	5.7	5.4	82	150	50	12	6.8
3	4.8	5.2	4.3	5.8	5.6	5.6	5.4	72	137	47	12	6.5
4	4.9	5.1	5.2	6.0	5.6	5.6	5.4	71	152	46	11	6.2
5	5.0	5.2	5.4	5.9	5.6	5.6	5.4	90	169	42	9.9	5.8
6	5.1	5.6	5.1	5.7	5.6	5.6	5.2	119	220	38	9.3	4.9
7	5.2	5.7	5.7	5.2	5.6	5.6	6.7	130	261	40	9.2	2.4
8	5.3	5.2	5.1	5.4	5.6	5.6	7.3	100	255	36	9.7	2.8
9	5.5	6.0	4.9	5.4	5.6	5.7	7.7	75	186	34	11	5.7
10	5.4	4.9	4.9	5.5	5.6	5.6	9.5	61	144	32	13	5.7
11	5.4	4.9	4.9	5.7	5.6	5.6	8.1	48	153	30	12	6.4
12	5.4	4.9	4.9	6.0	5.6	5.6	9.0	44	185	29	9.9	6.4
13	5.4	4.9	4.9	5.7	5.6	5.6	7.7	45	258	28	9.9	6.0
14	5.4	4.9	4.8	6.0	5.6	5.6	8.8	60	319	27	11	5.9
15	5.2	4.9	4.7	6.1	5.6	5.6	11	95	322	26	13	5.8
16	5.4	4.9	4.7	6.1	5.6	5.6	15	148	279	26	15	5.6
17	5.3	4.9	4.5	6.0	5.6	5.6	22	223	220	26	16	5.3
18	5.7	4.9	4.7	6.0	5.6	5.6	31	292	177	25	13	5.1
19	5.8	4.9	5.0	5.9	5.6	5.6	49	370	163	24	18	5.0
20	5.7	4.9	5.0	5.8	5.6	5.0	49	350	125	23	18	5.2
21	5.7	4.9	5.0	5.9	5.6	5.0	51	310	101	23	21	5.9
22	9.0	4.9	4.9	5.9	5.6	5.0	55	400	92	21	14	5.9
23	7.8	4.9	4.9	5.7	5.6	5.0	59	408	92	19	11	5.5
24	6.5	4.9	5.1	5.6	5.6	5.0	66	453	70	21	10	5.6
25	6.4	4.9	4.9	5.6	5.6	5.0	68	415	83	20	9.3	5.6
26	6.0	4.8	5.1	5.6	5.6	4.5	65	410	76	19	8.3	5.6
27	5.4	4.5	5.2	5.6	6.0	4.1	68	459	71	18	7.9	6.2
28	5.6	4.5	5.7	5.6	5.7	4.5	76	515	66	19	7.8	6.3
29	5.5	4.5	5.6	5.6	---	4.7	70	541	62	17	7.4	6.0
30	5.3	4.4	5.6	5.6	---	5.5	75	429	58	15	7.1	5.9
31	5.4	---	5.6	5.6	---	5.3	---	294	---	14	7.7	---
TOTAL	174.3	149.5	155.0	177.3	157.3	165.0	926.8	7194	4861	889	358.4	169.0
MEAN	5.62	4.98	5.00	5.72	5.62	5.32	30.9	232	162	28.7	11.0	5.63
MAX	9.0	6.0	5.7	6.1	6.0	5.7	76	541	322	54	21	7.0
MIN	4.8	4.4	4.3	5.2	5.6	4.1	5.2	44	58	14	7.1	2.4
AC-FT	346	297	307	352	312	327	1840	14270	9640	1760	711	335

CAL YR 1978 TOTAL 20037.8 MEAN 54.9 MAX 623 MIN 3.0 AC-FT 39740
WTR YR 1979 TOTAL 15376.6 MEAN 42.1 MAX 541 MIN 2.4 AC-FT 30500

NOTE.--NO GAGE-HEIGHT RECORD JAN. 24 TO FEB. 26.

BLUE RIVER BASIN

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.78 W., Summit County, Hydrologic Unit 14010002, on left bank at entrance to Hoosier Pass tunnel, 1,800 ft (550 m) downstream from diversion point, 1.4 mi (2.3 km) northwest of Hoosier Pass, and 7 mi (11 km) southwest of Breckenridge.

PERIOD OF RECORD--October 1957 to current year.

GAGE--Water-stage recorder and Parshall flume. Altitude of gage is 10,986 ft (3,348.5 m), from topographic map.

REMARKS--Records good. This is a transmountain diversion from Monte Cristo Creek in Blue River basin through Hoosier Pass tunnel to South Platte River basin from which it is again diverted to South Catamount Creek in the Arkansas River basin. Water is for municipal use by city of Colorado Springs. Diversion point is in SW¼NE¼ sec.2, T.8 S., R.78 W. The entire flow is regulated by diversion gates.

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

EXTREMES FOR PERIOD OF RECORD--Maximum daily discharge, 70 ft³/s (1.98 m³/s) June 20, 1965; no flow for most of each year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.92	4.2	.00	12	23
2	.00	.00	.00	.00	.00	.00	.00	2.0	4.6	.00	11	22
3	.00	.00	.00	.00	.00	.00	.00	1.6	5.9	.00	9.5	22
4	.00	.00	.00	.00	.00	.00	.00	1.4	7.1	.00	10	22
5	.00	.00	.00	.00	.00	.00	.00	1.6	8.3	.00	9.5	22
6	.00	.00	.00	.00	.00	.00	.00	2.2	11	4.6	9.8	22
7	.00	.00	.00	.00	.00	.00	.00	2.3	10	5.7	9.5	22
8	.00	.00	.00	.00	.00	.00	.00	2.1	8.1	6.9	9.5	22
9	.00	.00	.00	.00	.00	.00	.00	1.8	6.1	21	10	21
10	.00	.00	.00	.00	.00	.00	.00	1.7	8.1	27	12	21
11	.00	.00	.00	.00	.00	.00	.00	1.5	9.1	28	9.8	21
12	.00	.00	.00	.00	.00	.00	.00	1.4	14	28	8.9	21
13	.00	.00	.00	.00	.00	.00	.00	1.3	16	37	8.9	21
14	.00	.00	.00	.00	.00	.00	.00	1.6	16	29	16	27
15	.00	.00	.00	.00	.00	.00	.00	2.5	15	9.3	20	37
16	.00	.00	.00	.00	.00	.00	.00	3.4	12	.00	19	36
17	.00	.00	.00	.00	.00	.00	.00	5.0	11	7.0	19	36
18	.00	.00	.00	.00	.00	.00	.00	6.9	9.5	9.8	4.3	35
19	.00	.00	.00	.00	.00	.00	.00	8.9	7.9	6.1	3.1	35
20	.00	.00	.00	.00	.00	.00	.00	7.1	8.5	13	5.8	35
21	.00	.00	.00	.00	.00	.00	.00	5.9	7.1	18	12	34
22	.00	.00	.00	.00	.00	.00	.00	8.5	8.5	23	8.9	29
23	.00	.00	.00	.00	.00	.00	.00	9.8	10	20	8.5	26
24	.00	.00	.00	.00	.00	.00	.00	12	10	21	7.9	30
25	.00	.00	.00	.00	.00	.00	.00	9.8	5.9	22	6.9	31
26	.00	.00	.00	.00	.00	.00	.00	10	2.1	20	22	30
27	.00	.00	.00	.00	.00	.00	.00	13	2.3	17	36	29
28	.00	.00	.00	.00	.00	.00	.00	14	.92	23	32	28
29	.00	.00	.00	.00	---	.00	.00	13	.00	18	18	27
30	.00	.00	.00	.00	---	.00	.00	8.7	.00	14	19	31
31	.00	---	.00	.00	---	.00	---	5.0	---	12	23	---
TOTAL	.00	.00	.30	.00	.00	.00	.00	166.92	234.92	440.40	411.8	818
MEAN	.000	.000	.000	.000	.000	.000	.000	5.38	7.83	14.2	13.3	27.3
MAX	.00	.00	.00	.00	.00	.00	.00	14	16	37	36	37
MIN	.00	.00	.00	.00	.00	.00	.00	.92	.00	.00	3.1	21
AC-FT	.00	.00	.00	.00	.00	.00	.00	331	456	874	817	1620
CAL YR 1978	TJIAL	1959.06	MEAN 5.37	MAX 42	MIN .00	AC-FT 3890						
WTR YR 1979	TJIAL	2072.04	MEAN 5.68	MAX 37	MIN .00	AC-FT 4110						

BLUE RIVER BASIN

71

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.78 W., Summit County, Hydrologic Unit 14010002, on right bank at entrance to Hoosier Pass tunnel, 1.4 mi (2.3 km) northwest of Hoosier Pass, 1.6 mi (2.6 km) downstream from diversion point on Bemrose Creek, and 7 mi (11 km) southwest of Breckenridge.

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

GAUGE.--Water-stage recorder and Parshall flume. Altitude of gage is 10,986 ft (3,348.5 m), from topographic map.

REMARKS.--Records good. This is a transmountain diversion from Bemrose and Hoosier Creeks in blue River basin through Hoosier Pass tunnel to South Platte River basin from which it is again diverted to South Catamount Creek in the Arkansas River basin. Water is for municipal use by city of Colorado Springs. Diversion points are in SW¼SW¼ sec.6, T.8 S., R.77 W., and in sec.12, T.8 S., R.78 W. The entire flow is regulated by diversion gates.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 44 ft³/s (1.25 m³/s) June 21, 1965; no flow for most of each year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.78	7.2	20	4.5	2.5
2	.00	.00	.00	.00	.00	.00	.00	.78	7.6	18	4.3	2.5
3	.00	.00	.00	.00	.00	.00	.00	.78	9.1	17	4.1	2.5
4	.00	.00	.00	.00	.00	.00	.00	.69	11	16	3.8	2.5
5	.00	.00	.00	.00	.00	.00	.00	.78	16	15	3.7	2.3
6	.00	.00	.00	.00	.00	.00	.00	.96	21	14	3.5	2.2
7	.00	.00	.00	.00	.00	.00	.00	.96	21	14	3.3	1.6
8	.00	.00	.00	.00	.00	.00	.00	.96	16	13	3.3	.00
9	.00	.00	.00	.00	.00	.00	.00	.87	12	12	3.8	.00
10	.00	.00	.00	.00	.00	.00	.00	.78	12	11	3.7	.00
11	.00	.00	.00	.00	.00	.00	.00	.69	14	10	3.2	.00
12	.00	.00	.00	.00	.00	.00	.00	.60	18	9.7	3.2	.00
13	.00	.00	.00	.00	.00	.00	.00	.69	24	9.7	3.2	.00
14	.00	.00	.00	.00	.00	.00	.00	1.0	29	9.3	4.1	.00
15	.00	.00	.00	.00	.00	.00	.00	1.4	31	9.1	3.7	.00
16	.00	.00	.00	.00	.00	.00	.00	1.5	32	8.6	3.5	.00
17	.00	.00	.00	.00	.00	.00	.00	2.2	29	8.2	3.7	.00
18	.00	.00	.00	.00	.00	.00	.00	2.5	28	7.6	4.3	.00
19	.00	.00	.00	.00	.00	.00	.00	3.3	23	7.4	4.1	.00
20	.00	.00	.00	.00	.00	.00	.00	3.3	20	7.2	3.5	.00
21	.00	.00	.00	.00	.00	.00	.00	3.7	21	7.6	3.2	.00
22	.00	.00	.00	.00	.00	.00	.00	4.8	22	7.2	3.0	.00
23	.00	.00	.00	.00	.00	.00	.00	5.7	24	6.5	3.0	.00
24	.00	.00	.00	.00	.00	.00	.00	6.7	24	5.3	3.0	.00
25	.00	.00	.00	.00	.00	.00	.00	6.1	22	5.9	3.2	.00
26	.00	.00	.00	.00	.00	.00	.00	8.2	22	5.7	3.0	.00
27	.00	.00	.00	.00	.00	.00	.00	9.3	22	5.7	3.0	.00
28	.00	.00	.00	.00	.00	.00	.00	.78	10	5.6	2.9	.00
29	.00	.00	.00	.00	.00	.00	.00	.78	12	5.2	2.9	.00
30	.00	.00	.00	.00	.00	.00	.00	.78	10	4.8	2.7	.00
31	.00	.00	.00	.00	.00	.00	.00	.78	10	4.7	2.6	.00
TOTAL	.00	.00	.00	.00	.00	.00	2.78	109.82	601.9	302.0	107.0	16.10
MEAN	.000	.000	.000	.000	.000	.000	.093	3.54	20.1	9.74	3.45	.54
MAX	.00	.00	.00	.00	.00	.00	.78	12	32	20	4.5	2.5
MIN	.00	.00	.00	.00	.00	.00	.00	.60	7.2	4.7	2.6	.00
AC-FT	.00	.00	.00	.00	.00	.00	5.5	218	1190	599	212	32
CAL YR 1978	TOTAL	1006.40	MEAN 2.76	MAX 30	MIN .00	AC-FT 2000						
WTR YR 1979	TOTAL	1139.60	MEAN 3.12	MAX 32	MIN .00	AC-FT 2260						

BLUE RIVER BASIN

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

LOCATION.--Lat 39°22'51", long 106°04'14", in NE¼ 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 (2.3 km) northwest of Hoosier Pass, 1.6 mi (2.6 km) downstream from diversion point on McCullough Gulch, and 7 mi (11 km) southwest of Breckenridge.

PERIOD OF RECORD.--October 1957 to current year. Prior to October 1961, published as McCullough diversion near Hoosier Pass.

GAGE.--Water-stage recorder and Parshall flume. Altitude of gage is 10,986 ft (3,348.5 m), from topographic map.

REMARKS.--Records good. 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 (3.48 m³/s) June 20, 1968; no flow for most of each year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	16	.00	4.5	8.5
2	.00	.00	.00	.00	.00	.00	.00	.00	16	.00	6.7	8.1
3	.00	.00	.00	.00	.00	.00	.00	.00	20	.00	8.3	7.6
4	.00	.00	.00	.00	.00	.00	.00	.00	33	.00	8.5	7.4
5	.00	.00	.00	.00	.00	.00	.00	.00	33	.00	7.4	7.0
6	.00	.00	.00	.00	.00	.00	.00	.10	43	.00	7.5	6.7
7	.00	.00	.00	.00	.00	.00	.00	.72	41	.00	7.4	5.6
8	.00	.00	.00	.00	.00	.00	.00	.50	23	.00	7.4	.00
9	.00	.00	.00	.00	.00	.00	.00	.45	16	.00	8.3	.00
10	.00	.00	.00	.00	.00	.00	.00	.35	16	.00	12	.00
11	.00	.00	.00	.00	.00	.00	.00	.30	28	.00	10	.00
12	.00	.00	.00	.00	.00	.00	.00	.15	45	.00	9.0	.00
13	.00	.00	.00	.00	.00	.00	.00	.20	80	.00	8.8	.00
14	.00	.00	.00	.00	.00	.00	.00	.25	96	.00	17	.00
15	.00	.00	.00	.00	.00	.00	.00	.40	88	.00	9.4	.00
16	.00	.00	.00	.00	.00	.00	.00	1.6	88	.00	.50	.00
17	.00	.00	.00	.00	.00	.00	.00	2.4	78	.00	.30	.00
18	.00	.00	.00	.00	.00	.00	.00	4.5	64	.00	.30	.00
19	.00	.00	.00	.00	.00	.00	.00	9.8	48	.00	.30	.00
20	.00	.00	.00	.00	.00	.00	.00	12	36	.00	.30	.00
21	.00	.00	.00	.00	.00	.00	.00	12	47	4.2	.00	.00
22	.00	.00	.00	.00	.00	.00	.00	13	70	10	3.8	.00
23	.00	.00	.00	.00	.00	.00	.00	17	78	9.5	9.0	.00
24	.00	.00	.00	.00	.00	.00	.00	22	2.2	10	9.4	.00
25	.00	.00	.00	.00	.00	.00	.00	22	1.3	6.5	11	.00
26	.00	.00	.00	.00	.00	.00	.00	23	.00	4.4	9.2	.00
27	.00	.00	.00	.00	.00	.00	.00	28	.00	4.2	8.5	.00
28	.00	.00	.00	.00	.00	.00	.00	27	.00	4.4	8.5	.00
29	.00	.00	.00	.00	.00	.00	.00	28	.00	4.4	7.4	.00
30	.00	.00	.00	.00	.00	.00	.00	23	.00	4.0	8.1	.00
31	.00	.00	.00	.00	.00	.00	.00	18	.00	3.9	8.5	.00
TOTAL	.00	.00	.00	.00	.00	.00	.00	266.72	1106.50	65.50	216.70	50.90
MEAN	.000	.000	.000	.000	.000	.000	.000	8.60	36.9	2.11	6.79	1.70
MAX	.00	.00	.00	.00	.00	.00	.00	28	96	10	17	8.5
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.30	.00
AC-FT	.00	.00	.00	.00	.00	.00	.00	529	2190	130	430	101

CAL YR 1978 TOTAL 2055.31 MEAN 5.63 MAX 116 MIN .00 AC-FT 4080
WTR YR 1979 TOTAL 1706.32 MEAN 4.67 MAX 96 MIN .00 AC-FT 3380

09046600 BLUE RIVER NEAR DILLON, CO

LOCATION--Lat 39°32'55"N, long 106°02'19"W, in NW¼NE¼ sec.7, T.6 S., R.77 W., Summit County, Hydrologic Unit 14010002, on right bank 0.2 mi (0.3 km) downstream from Swan River and 5.5 mi (8.8 km) south of Dillon.

DRAINAGE AREA--119 mi² (308 km²).

PERIOD OF RECORD--October 1957 to current year.

REVISED RECORDS--WSP 2124: Drainage area.

GAGE--Water-stage recorder. Altitude of gage is 9,120 ft (2,780 m), from topographic map.

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

AVERAGE DISCHARGE--22 years, 97.9 ft³/s (2,773 m³/s), 70,930 acre-ft/yr (87.5 hm³/yr), including diversion to Hoosier Pass tunnel.

EXTREMES FOR PERIOD OF RECORD--Maximum discharge, 1,250 ft³/s (35.4 m³/s) June 17, 1965, gage height, 5.38 ft (1.640 m), from rating curve extended above 610 ft³/s (17 m³/s); minimum daily, 17 ft³/s (0.48 m³/s) Mar. 21, 1961, Feb. 24-26, 1978.

EXTREMES FOR CURRENT YEAR--Maximum discharge, 552 ft³/s (15.6 m³/s) at 1800 June 16, gage height, 4.47 ft (1.362 m); minimum daily, 21 ft³/s (0.59 m³/s) Mar. 19-21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	49	39	30	25	22	22	22	52	321	494	147	74
2	48	39	31	24	22	22	22	53	273	484	142	72
3	45	39	31	24	22	22	22	52	250	453	136	70
4	43	39	31	24	22	22	22	52	253	423	130	67
5	41	38	30	24	22	22	22	57	277	402	123	63
6	41	37	30	24	22	22	23	68	323	379	117	61
7	40	36	30	23	22	22	23	76	419	368	114	59
8	39	35	29	23	22	22	24	76	479	344	112	58
9	39	34	30	24	22	22	24	73	423	325	108	57
10	38	34	30	23	22	22	25	66	348	312	108	55
11	38	33	29	22	22	22	25	60	329	299	110	57
12	37	33	29	23	22	22	25	57	327	287	111	58
13	38	33	30	23	22	22	24	56	356	278	134	58
14	37	33	29	23	22	22	24	59	425	275	101	58
15	37	33	30	23	22	22	25	67	493	272	110	57
16	39	33	29	23	22	22	27	77	529	280	136	57
17	40	33	28	23	22	22	40	89	532	278	139	55
18	40	33	28	23	22	22	32	113	509	262	155	54
19	40	32	28	23	22	21	33	143	472	245	177	53
20	40	32	28	23	22	21	35	169	419	231	185	52
21	41	31	27	23	22	21	38	194	389	220	155	51
22	41	31	27	23	22	22	40	202	381	213	145	51
23	40	30	27	23	22	22	42	204	393	205	129	51
24	38	31	26	23	22	22	46	222	412	198	116	51
25	39	31	26	23	22	22	51	244	473	192	134	51
26	39	31	26	23	22	22	51	252	471	184	94	52
27	39	31	26	23	22	22	53	261	481	179	89	51
28	39	30	25	23	22	22	54	311	490	173	86	48
29	39	30	25	22	---	22	51	371	497	172	82	48
30	39	30	26	22	---	22	51	406	491	165	79	48
31	39	---	25	22	---	22	---	388	---	155	76	---
TOTAL	1242	1004	876	717	616	679	996	4570	12235	8748	3730	1697
MEAN	40.1	33.5	28.3	23.1	22.0	21.9	33.2	147	408	282	120	56.6
MAX	49	39	31	25	22	22	54	406	532	494	185	74
MIN	37	30	25	22	22	21	22	52	250	155	76	48
AC-FT	2460	1990	1740	1420	1220	1350	1980	9060	24270	17350	7400	3370

CAL YR 1978 TOTAL 37956 MEAN 104 MAX 682 MIN 17 AC-FT 75290
WTR YR 1979 TOTAL 37110 MEAN 102 MAX 532 MIN 21 AC-FT 73610

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 (61 m) downstream from North Fork and 4.5 mi (7.2 km) northwest of Montezuma.

DRAINAGE AREA.--57.7 mi² (149 km²).

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

REVISED RECORDS.--WSP 2124: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 9,320 ft (2,841 m), from topographic map. Prior to Jct. 14, 1943, nonrecording gage at present site and datum.

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

AVERAGE DISCHARGE.--32 years, 59.8 ft³/s (1.694 m³/s), 43,330 acre-ft/yr (53.4 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,250 ft³/s (35.4 m³/s) June 10, 1952, gage height, 3.51 ft (1.070 m); maximum gage height, 3.88 ft (1.183 m) June 6, 1972; minimum discharge not determined.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 511 ft³/s (14.5 m³/s) at 2000 June 16, gage height, 3.32 ft (1.012 m), only peak base of 500 ft³/s (14 m³/s); minimum daily, 8.0 ft³/s (0.23 m³/s) Jan. 31 to Feb. 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	18	12	11	8.0	10	11	18	140	329	76	44
2	21	18	13	11	8.0	10	11	18	136	309	73	43
3	20	17	12	11	8.0	10	11	16	154	286	70	41
4	20	17	12	11	8.0	10	11	17	183	271	67	39
5	20	16	12	11	8.0	10	11	21	236	250	55	37
6	20	16	12	11	8.0	10	11	26	322	238	62	36
7	20	16	12	11	8.0	10	11	26	345	220	62	33
8	20	16	12	11	8.0	10	11	23	255	209	54	33
9	20	16	12	11	8.0	10	12	20	203	198	55	33
10	19	16	12	11	8.0	10	13	19	189	186	54	33
11	19	16	13	11	8.0	10	13	19	210	178	50	33
12	19	15	13	11	8.0	10	13	19	263	168	58	33
13	18	15	12	11	8.0	10	13	20	365	166	50	32
14	19	15	12	11	9.0	10	14	24	433	165	68	33
15	18	15	12	10	10	11	15	29	445	163	78	32
16	18	15	12	10	10	11	16	34	440	164	75	30
17	18	15	12	10	10	11	17	40	433	147	83	29
18	20	14	11	10	10	11	18	51	382	135	78	28
19	19	14	11	10	10	11	19	60	309	128	73	28
20	19	14	11	10	10	11	20	77	279	123	73	29
21	19	14	11	10	10	11	18	86	295	119	58	31
22	20	13	11	10	10	11	17	95	326	115	64	29
23	21	13	11	10	10	11	18	112	353	108	61	27
24	20	12	11	10	10	11	20	136	362	105	58	26
25	20	12	10	9.6	10	11	20	145	353	102	57	25
26	20	13	11	9.2	10	11	20	166	338	97	55	26
27	19	13	11	8.8	10	11	19	205	342	95	53	26
28	19	13	11	8.6	10	11	19	237	342	93	50	24
29	18	13	11	8.4	---	11	18	254	344	88	48	22
30	18	12	11	8.2	---	11	18	225	344	82	44	23
31	18	---	11	8.0	---	11	---	169	---	80	45	---
TOTAL	600	442	360	314.8	253.0	327	458	2407	9121	5117	1977	738
MEAN	19.4	14.7	11.6	10.2	9.04	10.5	15.3	77.6	304	165	64.4	31.3
MAX	21	18	13	11	10	11	20	254	445	329	98	44
MIN	18	12	10	8.0	8.0	10	11	16	136	80	44	22
AC-FT	1190	877	714	624	502	649	908	4770	18090	10150	3950	1860
CAL YR 1978	TOTAL	24006.8	MEAN	65.8	MAX	564	MIN	6.6	AC-FT	47620		
4TR YR 1979	TOTAL	22334.8	MEAN	61.2	MAX	445	MIN	8.0	AC-FT	44300		

NOTE.--NO GAGE-HEIGHT RECORD JAN. 4 TO APR. 17.

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 (1.1 km) upstream from mouth and 4.7 mi (7.6 km) southeast of Dillon.

DRAINAGE AREA.--9.10 mi² (23.6 km²).

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

REVISED RECORDS.--WSP 2124: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 9,350 ft (2,850 m), from topographic map.

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

AVERAGE DISCHARGE.--22 years, 5.52 ft³/s (0.156 m³/s), 4,000 acre-ft/yr (4.93 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 90 ft³/s (2.55 m³/s) June 5, 1958, gage height, 2.75 ft (0.838 m), from rating curve extended above 28 ft³/s (0.80 m³/s); minimum not determined.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 36 ft³/s (1.02 m³/s) at 2300 June 14, gage height, 2.28 ft (0.695 m), only peak above base of 35 ft³/s (0.99 m³/s); minimum daily, 2.0 ft³/s (0.057 m³/s) Nov. 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.0	2.4	2.5	2.5	2.2	2.2	2.1	3.3	16	18	5.2	3.6
2	3.0	2.4	2.5	2.5	2.2	2.2	2.1	3.2	16	17	5.2	3.5
3	2.9	2.4	2.5	2.5	2.2	2.2	2.1	3.2	17	15	5.1	3.5
4	2.9	2.2	2.5	2.5	2.2	2.2	2.1	3.5	17	15	4.9	3.5
5	2.9	2.2	2.5	2.5	2.2	2.2	2.4	4.2	19	13	4.9	3.2
6	2.8	2.2	2.5	2.5	2.2	2.2	2.4	4.9	21	13	4.8	3.1
7	2.8	2.2	2.5	2.5	2.2	2.2	2.4	4.7	22	12	4.7	3.1
8	2.8	2.3	2.5	2.5	2.2	2.2	2.4	4.1	22	11	4.9	3.1
9	2.8	2.4	2.5	2.5	2.2	2.2	2.6	3.9	19	10	4.8	3.1
10	2.8	2.3	2.5	2.5	2.2	2.2	2.8	3.9	20	9.3	4.8	3.1
11	2.8	2.2	2.5	2.5	2.2	2.2	3.0	4.2	22	8.5	4.6	3.1
12	2.7	2.0	2.5	2.5	2.2	2.2	3.0	3.8	24	8.0	4.5	3.1
13	2.6	2.5	2.5	2.5	2.2	2.2	3.0	3.9	27	7.6	4.4	3.0
14	2.6	2.5	2.5	2.5	2.2	2.2	3.0	4.6	30	7.5	5.5	2.9
15	2.6	2.5	2.5	2.5	2.2	2.2	3.2	5.2	32	7.5	5.1	2.9
16	2.6	2.5	2.5	2.5	2.2	2.2	3.3	5.9	33	7.3	5.1	2.9
17	2.6	2.5	2.5	2.5	2.2	2.1	3.4	6.5	32	7.1	5.7	2.8
18	2.6	2.5	2.5	2.5	2.2	2.1	3.4	7.1	30	7.1	5.3	2.8
19	2.6	2.5	2.5	2.5	2.2	2.1	3.4	8.0	27	7.1	5.0	2.8
20	2.6	2.5	2.5	2.5	2.2	2.1	3.2	9.8	26	7.1	4.9	2.8
21	2.6	2.5	2.5	2.5	2.2	2.1	3.0	9.4	26	7.1	4.7	2.9
22	2.6	2.5	2.5	2.5	2.2	2.1	3.0	10	25	7.1	4.6	2.8
23	2.4	2.5	2.5	2.5	2.2	2.1	3.2	12	24	7.1	4.4	2.7
24	2.4	2.5	2.5	2.5	2.2	2.1	3.6	13	23	7.0	4.3	2.7
25	2.4	2.5	2.5	2.5	2.2	2.1	3.6	12	22	6.9	4.1	2.7
26	3.2	2.5	2.5	2.5	2.2	2.1	3.6	14	21	6.7	3.9	2.7
27	3.1	2.5	2.5	2.5	2.2	2.1	3.3	10	20	6.7	3.7	2.7
28	2.9	2.5	2.5	2.5	2.2	2.1	3.4	19	19	6.7	3.4	2.7
29	2.8	2.5	2.5	2.5	---	2.1	3.3	20	16	6.5	3.8	2.7
30	2.6	2.5	2.5	2.5	---	2.1	3.2	20	17	6.4	3.8	2.6
31	2.4	---	2.5	2.5	---	2.1	---	17	---	5.9	3.8	---
TOTAL	84.4	72.2	77.5	77.5	61.6	66.7	88.5	260.3	687	282.2	144.4	89.1
MEAN	2.72	2.41	2.50	2.50	2.20	2.15	2.95	8.40	22.9	9.10	4.66	2.97
MAX	3.2	2.5	2.5	2.5	2.2	2.2	3.6	20	33	18	5.7	3.6
MIN	2.4	2.0	2.5	2.5	2.2	2.1	2.1	3.2	16	5.9	3.7	2.6
AC-FT	167	143	154	154	122	132	176	516	1360	560	236	177

CAL YR 1978 TOTAL 2415.7 MEAN 6.62 MAX 62 MIN 1.6 AC-FT 4790
WTR YR 1979 TOTAL 1991.4 MEAN 5.46 MAX 33 MIN 2.0 AC-FT 3950

NOTE.--NO GAGE-HEIGHT RECORD NOV. 13 TO APR. 17.

BLUE RIVER BASIN

09049200 WEST TENMILE CREEK AT COPPER MOUNTAIN, CO

LOCATION.--Lat 39°30'01", long 106°09'56", in NE¼ sec.25, T.6 S., R.79 W., Summit County, Hydrologic Unit 14010002, on left bank 200 ft (61 m) upstream from Union Gulch, 0.8 mi (1.3 km) west of Copper Mountain, and 6.3 mi (10.1 km) southwest of Frisco.

DRAINAGE AREA.--21 mi² (54 km²), approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1973 to September 1979 (discontinued). Prior to October 1975, published as West Tenmile Creek at Wheeler Junction.

GAGE.--Water-stage recorder and automatic sediment sampler. Altitude of gage is 9,835 ft (2,998 m), from topographic map.

REMARKS.--Records fair except those for winter period, which are poor.

AVERAGE DISCHARGE.--6 years, 29.3 ft³/s (0.830 m³/s), 21,230 acre-ft/yr (26.2 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 669 ft³/s (18.9 m³/s) June 15, 1978, gage height, 3.31 ft (1.009 m); minimum daily, 2.1 ft³/s (0.059 m³/s) Feb. 23, 1975.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 606 ft³/s (17.2 m³/s) at 1900 May 24, gage height, 3.15 ft (0.960 m); only peak above base of 500 ft³/s (14.2 m³/s); minimum daily, 2.2 ft³/s (0.062 m³/s) Apr. 4, 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

JAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.5	9.0	5.6	3.4	2.9	2.7	2.3	8.2	72	175	24	9.1
2	8.5	10	5.5	3.4	2.9	2.9	2.3	8.2	87	158	23	8.8
3	8.4	9.3	5.3	3.4	2.9	2.7	2.3	7.5	126	144	22	8.5
4	8.7	9.0	4.8	3.3	2.9	2.3	2.2	7.7	161	134	21	8.1
5	8.7	8.2	4.6	3.3	2.9	2.3	2.2	12	214	121	20	7.6
6	8.4	8.2	4.5	3.2	2.9	2.4	2.3	17	264	111	18	7.3
7	8.1	9.0	4.4	3.2	2.9	2.5	2.3	17	228	102	17	7.2
8	7.9	10	4.2	3.2	2.9	2.6	2.3	11	134	95	18	7.1
9	7.7	10	4.1	3.2	2.9	2.5	2.3	10	102	87	18	7.1
10	7.5	11	4.1	3.2	2.9	2.5	2.4	7.8	100	79	18	6.9
11	7.4	9.4	4.1	3.2	2.9	2.5	2.5	7.7	139	73	18	6.9
12	7.4	6.1	4.4	3.1	2.9	2.6	2.5	6.9	172	69	16	6.9
13	7.3	7.9	4.4	3.1	2.9	2.6	2.6	7.9	242	64	16	6.6
14	8.3	10	4.3	3.1	2.9	2.5	2.7	14	278	60	19	6.7
15	8.4	9.7	4.2	3.1	2.9	2.5	3.5	21	302	59	20	6.6
16	8.1	9.4	4.2	3.1	2.9	2.6	4.7	24	300	57	18	6.6
17	7.8	7.3	4.2	3.0	2.9	2.6	5.3	30	267	53	20	6.3
18	8.1	7.0	4.2	3.0	2.9	2.5	6.5	36	213	50	21	6.1
19	8.6	7.0	4.2	3.0	2.9	2.4	7.5	40	166	46	22	6.1
20	7.8	7.0	4.2	3.0	2.9	2.4	7.6	39	149	42	19	6.3
21	7.8	7.0	4.0	3.0	2.9	2.5	7.6	39	183	43	19	6.5
22	8.5	7.0	3.9	3.0	2.9	2.5	9.1	38	220	43	16	6.1
23	9.3	7.0	3.8	2.9	2.9	2.4	8.9	80	227	40	14	6.0
24	8.8	7.0	3.8	2.9	2.9	2.4	10	326	232	38	13	5.8
25	8.2	7.0	3.8	2.9	2.9	2.4	10	271	223	36	13	5.8
26	8.0	7.0	3.7	2.9	2.9	2.4	9.2	151	208	34	12	6.1
27	8.0	6.0	3.6	2.9	2.9	2.4	8.9	176	206	33	11	6.5
28	8.4	6.0	3.6	2.9	2.9	2.4	7.5	205	202	32	10	6.0
29	9.0	6.0	3.6	2.9	---	2.4	7.6	208	193	30	9.7	5.7
30	9.6	6.1	3.6	2.9	---	2.3	7.7	148	186	28	10	5.6
31	9.5	---	3.6	2.9	---	2.3	---	92	---	26	10	---
TOTAL	256.7	241.5	130.5	95.6	81.2	77.2	154.8	2066.9	5796	2162	525.7	202.9
MEAN	8.28	8.05	4.21	3.08	2.90	2.49	5.16	66.7	193	69.7	17.0	6.76
MAX	9.6	11	5.6	3.4	2.9	2.9	10	326	302	175	24	9.1
MIN	7.3	6.0	3.6	2.9	2.9	2.3	2.2	6.9	72	26	9.7	5.6
AC-FT	509	479	259	190	161	153	307	4100	11500	4293	1040	402

CAL YR 1978 TOTAL 14730.2 MEAN 40.4 MAX 418 MIN 3.5 AC-FT 29220
WTR YR 1979 TOTAL 11791.0 MEAN 32.3 MAX 326 MIN 2.2 AC-FT 23390

NOTE.--NO GAGE-HEIGHT RECORD JAN. 26 TO MAR. 7, JULY 19 TO AUG. 15.

09049200 WEST TENMILE CREEK AT COPPER MOUNTAIN, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1973 to current year (discontinued).

PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT DISCHARGE: October 1973 to current year.

INSTRUMENTATION.--Pumping sediment sampler since October 1973.

REMARKS.--Daily sediment records for 1978 are included in this report.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SEDIMENT CONCENTRATIONS: Maximum daily, 2,000 mg/L May 29, 1974; minimum daily, 1 mg/L May 1, 1974, several days during March 1976, many days during 1977-79.

SEDIMENT LOADS: Maximum daily, 1,620 tons (1,470 t) May 29, 1974; minimum daily, 0.01 ton (0.01 t) several days during March 1976 and many days during winter months in 1977.

EXTREMES FOR 1978 WATER YEAR.--

SEDIMENT CONCENTRATIONS: Maximum daily, 107 mg/L June 10; minimum daily, 1 mg/L many days during year.

SEDIMENT LOADS: Maximum daily, 107 tons (97 t) June 10; minimum daily, 0.02 ton (0.02 t) Mar. 14, 28 and Sept. 8.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATIONS: Maximum daily, 89 mg/L June 15; minimum daily, 1 mg/L many days during year.

SEDIMENT LOADS: Maximum daily, 73 tons (66 t) June 15; minimum daily, 0.02 ton (0.02 t) many days during year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	HARD- NESS (MG/L AS CaCO3)	HARD- NESS, NONCAR- BONATE (MG/L CaCO3)
NOV								
01...	1305	14	160	8.0	1.0	--	86	--
DEC								
12...	1115	5.3	160	7.6	.0	10.0	94	--
JAN								
25...	1215	2.8	150	7.6	.0	9.8	92	--
MAR								
01...	1500	3.0	201	7.8	.0	9.2	100	--
APR								
03...	1230	2.7	226	8.1	.0	9.4	130	--
MAY								
04...	1205	6.3	220	7.9	2.0	9.7	99	--
11...	1215	12	199	7.9	5.0	9.7	100	87
18...	1400	35	140	7.9	5.0	9.6	67	--
23...	1100	71	100	7.8	2.0	9.6	49	--
31...	1015	98	80	7.6	2.0	9.4	60	--
JUN								
08...	1400	140	81	8.0	5.0	9.6	43	--
14...	1015	201	60	7.2	4.0	9.7	37	--
21...	0830	134	80	7.6	5.0	9.2	40	40
28...	0830	152	90	7.9	5.0	9.5	43	43
JUL								
05...	1030	119	90	7.9	7.0	9.3	53	53
12...	1000	53	100	7.5	4.0	9.6	51	51
AUG								
02...	1430	24	130	7.6	8.0	9.3	75	75
15...	1315	19	137	8.1	4.0	9.6	74	0
30...	1345	11	194	8.0	3.0	9.4	89	0

BLUE RIVER BASIN

09049200 WEST TENMILE CREEK AT COPPER MOUNTAIN, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)
NOV								
01...	30	2.6	1.8	101	.14	3.90	.12	.01
DEC								
12...	33	2.8	2.2	112	.15	1.60	.17	.00
JAN								
25...	32	3.0	1.6	96	.13	.74	.12	.01
MAR								
01...	35	3.3	4.0	120	.16	.97	.16	.04
APR								
03...	42	6.0	8.4	128	.17	.93	.15	.00
MAY								
04...	34	3.5	10	119	.16	2.02	.17	.00
11...	35	3.0	8.4	105	.14	3.40	.17	.00
18...	23	2.4	3.3	74	.10	6.99	.12	.00
23...	17	1.6	2.1	71	.10	13.6	.13	.05
31...	22	1.3	1.3	59	.08	15.6	.03	.05
JUN								
08...	15	1.3	1.3	69	.09	26.1	.01	.01
14...	13	1.1	1.0	55	.07	29.8	.06	.00
21...	14	1.3	1.2	60	.08	21.7	.00	.05
28...	14	2.0	.6	55	.07	22.6	.00	.03
JUL								
05...	19	1.4	.8	73	.10	23.5	.00	.00
12...	18	1.5	.8	64	.09	9.23	.00	.00
AUG								
02...	26	2.5	.8	78	.11	5.10	.18	.00
15...	26	2.3	1.3	100	.14	5.24	.06	--
30...	31	2.7	5.5	--	--	--	.04	.00

BLUE RIVER BASIN

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09049200 WEST TENMILE CREEK AT COPPER MOUNTAIN, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
OCTOBER			NOVEMBER			DECEMBER			
1	6.5		.10	5.7	---	.10	2.5		.05
2	6.3		.10	5.7	---	.10	2.5		.05
3	6.0		.10	5.7	---	.10	2.5		.05
4	5.7		.10	5.7	---	.10	3.0		.05
5	6.3		.10	5.7	---	.10	3.5		.05
6	7.5		.10	5.5	---	.10	3.5		.05
7	9.5		.15	5.0	---	.10	3.5		.05
8	9.1		.10	4.5	---	.10	3.5		.05
9	9.0		.10	4.0	---	.10	3.5		.05
10	8.1		.10	3.5	13	.12	3.5		.05
11	10		.15	3.0	---	.10	3.5		.05
12	16		.20	2.5	---	.05	3.5		.05
13	15		.20	2.5	---	.05	3.5		.05
14	10		.15	2.5	---	.05	3.5		.05
15	8.4		.10	2.5	---	.05	3.5		.05
16	7.4		.10	2.5	---	.05	3.5		.05
17	7.1		.10	2.5	---	.05	3.5		.05
18	7.1		.10	2.5	---	.05	3.5		.05
19	6.6		.10	2.5	---	.05	3.5		.05
20	6.6		.10	2.5	---	.05	3.5		.05
21	6.3		.10	2.5	---	.05	3.5		.05
22	6.2		.10	2.5	---	.05	3.5		.05
23	6.3		.10	2.5	---	.05	3.5		.05
24	7.0		.10	2.5	---	.05	3.5		.05
25	6.8		.10	2.5	---	.05	3.5		.05
26	6.7		.10	2.5	---	.05	3.5		.05
27	6.4		.10	2.5	---	.05	3.5		.05
28	6.2		.10	2.5	---	.05	3.5		.05
29	6.0		.10	2.5	---	.05	3.5		.05
30	5.6		.10	2.5	---	.05	3.5		.05
31	5.5		.05	---	---	---	3.5		.05
TOTAL	237.2		3.40	101.5	---	2.07	105.0		1.55

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
JANUARY			FEBRUARY			MARCH			
1	3.5		.05	3.5	---	.05	3.5	---	.05
2	3.5		.05	3.5	---	.05	3.5	---	.05
3	3.5		.05	3.5	---	.05	3.5	---	.05
4	3.5		.05	3.5	---	.05	3.5	---	.05
5	3.5		.05	3.5	---	.05	3.5	---	.05
6	3.5		.05	3.5	---	.05	3.5	---	.05
7	3.5		.05	3.5	---	.05	3.5	---	.05
8	3.5		.05	3.5	---	.05	3.5	---	.05
9	3.5		.05	3.5	---	.05	3.5	---	.05
10	3.5		.05	3.5	---	.05	3.5	---	.05
11	3.5		.05	3.5	---	.05	3.5	---	.05
12	3.5		.05	3.5	---	.05	3.5	---	.05
13	3.5		.05	3.5	---	.05	3.5	---	.05
14	3.5		.05	3.5	---	.05	3.5	2	.02
15	3.5		.05	3.5	---	.05	3.5	---	.05
16	4.0		.05	3.5	---	.05	3.5	---	.05
17	4.0		.05	3.5	---	.05	3.5	---	.05
18	4.0		.05	3.5	---	.05	3.5	---	.05
19	4.0		.05	3.5	---	.05	3.5	---	.05
20	4.0		.05	3.5	---	.05	3.5	---	.05
21	4.0		.05	3.5	5	.05	3.5	---	.05
22	4.0		.05	3.5	---	.05	3.5	---	.05
23	4.0		.05	3.5	---	.05	3.7	---	.05
24	4.0		.05	3.5	---	.05	3.7	---	.05
25	4.0		.05	3.5	---	.05	3.8	---	.05
26	3.5		.05	3.5	---	.05	3.9	---	.05
27	3.5		.05	3.5	---	.05	4.3	---	.05
28	3.5		.05	3.5	---	.05	4.6	2	.02
29	3.5		.05	---	---	---	4.9	---	.05
30	3.5		.05	---	---	---	5.9	---	.05
31	3.5		.05	---	---	---	7.3	---	.05
TOTAL	113.5		1.55	98.0	---	1.40	119.1	---	1.49

BLUE RIVER BASIN

09049200 WEST TENMILE CREEK AT COPPER MOUNTAIN, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

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	8.0	---	.10	15	10	.41	176	---	15
2	9.4	---	.10	15	10	.41	197	---	15
3	10	---	.10	16	7	.30	209	---	20
4	8.9	---	.10	18	6	.29	220	---	20
5	9.4	---	.10	17	11	.50	159	20	8.6
6	8.3	---	.10	14	12	.45	164	30	13
7	8.5	---	.10	16	---	.60	200	53	29
8	9.0	---	.10	12	6	.19	181	56	27
9	9.0	---	.10	19	23	1.2	242	92	60
10	8.6	---	.10	18	14	.68	369	107	107
11	6.3	---	.10	22	14	.83	418	81	91
12	9.0	4	.10	20	---	.60	364	45	44
13	7.4	---	.10	22	27	1.6	391	---	55
14	9.1	---	.15	37	60	6.0	384	52	54
15	10	---	.20	61	66	11	406	22	24
16	16	9	.39	94	63	16	383	20	21
17	11	---	.25	104	57	16	317	---	15
18	10	---	.25	63	16	2.7	286	---	15
19	10	6	.16	65	27	4.7	292	---	15
20	10	10	.27	87	13	3.1	286	---	15
21	10	12	.32	95	---	4.0	306	---	20
22	10	---	.25	96	---	4.0	338	24	22
23	10	---	.25	125	17	5.7	323	---	20
24	11	---	.35	159	92	39	318	---	15
25	14	---	.50	164	53	23	297	---	15
26	21	---	.85	149	43	17	239	---	15
27	25	---	1.0	147	39	15	208	---	10
28	22	10	.59	119	20	6.4	197	19	10
29	17	10	.46	107	38	11	192	8	4.2
30	17	8	.37	154	---	15	199	16	8.6
31	---	---	---	169	34	16	---	---	---
TOTAL	344.9	---	7.91	2219	---	223.66	8261	---	803.4
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)
JULY			AUGUST			SEPTEMBER			
1	174	---	7.0	29	5	.39	11	---	.10
2	154	---	5.5	27	1	.07	9.9	---	.10
3	141	---	4.0	25	2	.14	10	---	.10
4	125	---	2.5	24	3	.19	9.6	---	.10
5	110	6	1.8	22	1	.06	9.3	---	.10
6	96	11	2.9	21	1	.06	8.9	7	.17
7	89	14	3.4	20	4	.22	9.1	4	.10
8	83	3	.67	20	4	.22	9.2	1	.02
9	85	4	.92	19	5	.26	8.9	8	.19
10	86	3	.70	18	---	.20	9.2	5	.12
11	80	4	.86	18	---	.20	9.9	9	.24
12	74	4	.80	19	---	.20	9.4	4	.10
13	66	3	.53	20	---	.20	9.1	---	.10
14	60	4	.65	21	---	.20	9.1	---	.10
15	57	4	.62	21	---	.20	8.8	---	.10
16	56	---	.60	17	---	.15	8.9	---	.10
17	61	---	.65	15	---	.10	9.6	---	.10
18	52	---	.55	14	1	.04	9.5	---	.10
19	49	4	.53	14	---	.10	10	---	.10
20	49	6	.79	13	---	.10	12	---	.15
21	46	2	.25	13	---	.10	13	---	.15
22	41	4	.44	13	---	.10	12	---	.15
23	38	2	.21	13	---	.10	11	---	.10
24	36	3	.29	12	---	.10	10	---	.10
25	34	4	.37	13	4	.14	10	---	.10
26	33	2	.18	12	5	.16	9.6	2	.05
27	31	5	.42	11	6	.18	9.3	---	.10
28	31	2	.17	10	5	.14	9.2	6	.15
29	31	5	.42	10	5	.14	8.9	---	.15
30	31	3	.25	10	1	.03	8.6	---	.15
31	30	1	.08	10	1	.03	---	---	---
TOTAL	2129	---	39.05	524	---	4.52	293.0	---	3.49
YEAR	14545.2		1093.49						

09049200 WEST TENMILE CREEK AT COPPER MOUNTAIN, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
OCTOBER			NOVEMBER			DECEMBER			
1	8.5	---	.15	9.9	3	.08	5.6	---	.02
2	8.5	---	.15	10	1	.03	5.5	---	.02
3	8.4	---	.15	9.3	1	.03	5.3	---	.02
4	8.7	8	.19	9.0	---	.02	4.8	---	.02
5	8.7	7	.16	8.2	---	.02	4.6	---	.02
6	8.4	---	.15	8.2	---	.02	4.5	---	.02
7	8.1	---	.15	9.0	---	.02	4.4	---	.02
8	7.9	---	.10	10	---	.03	4.2	---	.02
9	7.7	---	.10	10	---	.03	4.1	---	.02
10	7.5	---	.10	11	---	.03	4.1	---	.02
11	7.4	---	.10	9.4	---	.03	4.1	---	.02
12	7.4	---	.10	6.1	---	.02	4.4	2	.02
13	7.3	---	.10	7.9	---	.02	4.4	7	.08
14	8.3	---	.10	10	---	.03	4.3	---	.02
15	8.4	---	.10	9.7	1	.03	4.2	---	.02
16	8.1	---	.10	9.4	1	.03	4.2	---	.02
17	7.8	---	.10	7.3	---	.02	4.2	---	.02
18	8.1	---	.10	7.0	---	.02	4.2	---	.02
19	8.6	3	.07	7.0	---	.02	4.2	---	.02
20	7.8	---	.05	7.0	---	.02	4.2	---	.02
21	7.8	---	.05	7.0	---	.02	4.0	---	.02
22	8.5	---	.05	7.0	---	.02	3.9	---	.02
23	9.3	---	.10	7.0	---	.02	3.8	---	.02
24	8.8	---	.05	7.0	---	.02	3.8	---	.02
25	8.2	---	.05	7.0	---	.02	3.8	---	.02
26	8.0	---	.05	7.0	---	.02	3.7	---	.02
27	8.0	---	.05	6.0	---	.02	3.6	---	.02
28	8.4	---	.05	6.0	---	.02	3.6	---	.02
29	9.0	---	.05	6.0	---	.02	3.6	---	.02
30	9.6	---	.10	6.1	---	.02	3.6	---	.02
31	9.5	---	.10	---	---	---	3.6	---	.02
TOTAL	256.7	---	3.02	241.5	---	0.75	130.5	---	0.68

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
JANUARY			FEBRUARY			MARCH			
1	3.4	---	.03	2.9	---	.03	2.9	4	.03
2	3.4	---	.03	2.9	---	.03	2.9	2	.02
3	3.4	---	.03	2.9	---	.03	2.7	---	.02
4	3.3	---	.03	2.9	---	.03	2.3	---	.02
5	3.3	---	.03	2.9	---	.03	2.3	---	.02
6	3.2	---	.03	2.9	---	.03	2.4	---	.02
7	3.2	---	.03	2.9	---	.03	2.5	---	.02
8	3.2	---	.03	2.9	---	.03	2.6	---	.02
9	3.2	---	.03	2.9	---	.03	2.5	---	.02
10	3.2	---	.03	2.9	---	.03	2.5	---	.02
11	3.2	---	.03	2.9	---	.03	2.5	---	.02
12	3.1	---	.03	2.9	---	.03	2.6	---	.02
13	3.1	---	.03	2.9	---	.03	2.6	---	.02
14	3.1	---	.03	2.9	---	.03	2.5	---	.02
15	3.1	---	.03	2.9	---	.03	2.5	---	.02
16	3.1	---	.03	2.9	---	.03	2.6	---	.02
17	3.0	---	.03	2.9	---	.03	2.6	---	.02
18	3.0	---	.03	2.9	---	.03	2.5	---	.02
19	3.0	---	.03	2.9	---	.03	2.4	---	.02
20	3.0	---	.03	2.9	---	.03	2.4	---	.02
21	3.0	---	.03	2.9	---	.03	2.5	---	.02
22	3.0	---	.03	2.9	---	.03	2.5	---	.02
23	2.9	---	.03	2.9	---	.03	2.4	4	.03
24	2.9	---	.03	2.9	---	.03	2.4	6	.04
25	2.9	4	.03	2.9	---	.03	2.4	10	.06
26	2.9	---	.03	2.9	---	.03	2.4	6	.04
27	2.9	---	.04	2.9	---	.03	2.4	7	.05
28	2.9	---	.04	2.9	---	.03	2.4	---	.03
29	2.9	---	.04	---	---	---	2.4	---	.03
30	2.9	---	.05	---	---	---	2.3	---	.02
31	2.9	6	.05	---	---	---	2.3	---	.02
TOTAL	95.6	---	1.00	81.2	---	0.84	77.2	---	0.77

BLUE RIVER BASIN

09049200 WEST TENMILE CREEK AT COPPER MOUNTAIN, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
APRIL			MAY			JUNE			
1	2.3	---	.02	8.2	---	.20	72	26	5.1
2	2.3	---	.02	8.2	---	.20	87	42	9.9
3	2.3	4	.02	7.5	---	.15	126	---	15
4	2.2	---	.03	7.7	10	.21	161	---	20
5	2.2	---	.03	12	10	.32	214	---	25
6	2.3	7	.04	17	32	1.5	264	---	30
7	2.3	---	.04	17	17	.78	228	---	25
8	2.3	---	.04	11	17	.50	134	45	16
9	2.3	---	.04	10	14	.38	102	---	8.0
10	2.4	---	.04	7.8	---	.15	100	---	8.0
11	2.5	---	.05	7.7	7	.15	139	---	8.0
12	2.5	---	.05	6.9	7	.13	172	---	10
13	2.6	---	.05	7.9	11	.23	242	---	15
14	2.7	---	.05	14	---	.40	278	27	20
15	3.5	---	.05	21	---	.60	302	89	73
16	4.7	---	.10	24	---	.70	300	---	70
17	5.3	---	.10	30	---	.90	267	---	20
18	6.5	---	.15	36	11	1.1	213	---	10
19	7.5	---	.15	40	---	1.0	166	---	5.0
20	7.6	---	.15	39	---	1.0	149	---	4.0
21	7.6	---	.15	39	---	1.0	183	12	5.9
22	9.1	---	.20	38	---	1.0	220	6	3.6
23	8.9	---	.20	80	17	3.7	227	2	1.2
24	10	---	.25	326	26	23	232	13	8.1
25	10	---	.25	271	27	20	223	9	5.4
26	9.2	---	.20	151	57	23	208	8	4.5
27	8.9	---	.20	176	61	29	206	7	3.9
28	7.5	---	.15	205	34	19	202	5	2.7
29	7.6	---	.15	208	21	12	193	---	2.5
30	7.7	---	.15	148	24	9.6	186	---	2.5
31	---	---	---	92	8	2.0	---	---	---
TOTAL	154.8	---	3.12	2066.9	---	153.90	5796	---	437.3

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
JULY			AUGUST			SEPTEMBER			
1	175	---	2.5	24	---	.20	9.1	3	.07
2	158	---	2.0	23	3	.19	8.8	1	.02
3	144	---	2.0	22	10	.59	8.5	---	.05
4	134	---	2.0	21	4	.23	8.1	---	.04
5	121	6	2.1	20	16	.86	7.6	---	.04
6	111	---	2.0	18	6	.29	7.3	---	.04
7	102	---	1.5	17	2	.09	7.2	---	.04
8	95	---	1.5	18	1	.05	7.1	---	.04
9	87	---	1.5	18	21	1.0	7.1	---	.04
10	79	---	1.5	18	21	1.0	6.9	3	.06
11	73	---	1.0	18	7	.34	6.9	5	.09
12	69	6	1.1	16	22	.95	6.9	2	.04
13	64	---	1.0	16	14	.60	6.6	2	.04
14	60	---	.80	19	11	.56	6.7	2	.04
15	59	---	.80	20	4	.22	6.6	2	.04
16	57	---	.75	18	7	.34	6.6	1	.02
17	53	4	.57	20	2	.11	6.3	3	.05
18	50	---	.50	21	2	.11	6.1	9	.15
19	46	---	.50	22	4	.24	6.1	3	.05
20	42	---	.45	19	2	.10	6.3	---	.05
21	43	---	.45	19	3	.15	6.5	---	.05
22	43	---	.45	16	2	.09	6.1	---	.03
23	40	---	.45	14	2	.08	6.0	---	.03
24	38	---	.40	13	2	.07	5.8	2	.03
25	36	---	.40	13	1	.04	5.8	---	.03
26	34	---	.35	12	1	.03	6.1	---	.03
27	33	---	.35	11	8	.24	6.5	---	.04
28	32	---	.35	10	4	.11	6.0	---	.03
29	30	---	.30	9.7	---	.10	5.7	---	.03
30	28	---	.30	10	2	.05	5.6	---	.03
31	26	---	.30	10	4	.11	---	---	---
TOTAL	2162	---	30.17	525.7	---	9.14	202.9	---	1.34
YEAR	11791.0		642.03						

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

LOCATION.--Lat 39°34'37", long 106°06'33", in SW¼NE¼ sec.34, T.5 S., R.78 W., Summit County, Hydrologic Unit 14010002, on left bank 600 ft (180 m) downstream from bridge on U.S. Highway 6, 850 ft (260 m) downstream from North Tenmile Creek, and 0.6 mi (1.0 km) west of Frisco.

DRAINAGE AREA.--93.3 mi² (241.6 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 9,090 ft (2,771 m), from topographic map.

REMARKS.--Records good except those for winter period, which are poor. Natural flow of stream affected by a few small diversions above station for irrigation and municipal use and transbasin diversion from Robinson Reservoir, capacity, 2,520 acre-ft (3.11 hm³) in Eagle River basin. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--22 years, 93.0 ft³/s (2.634 m³/s), 67,380 acre-ft/yr (83.1 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,910 ft³/s (54.1 m³/s) June 16, 1965, gage height, 6.15 ft (1.875 m), from rating curve extended above 750 ft³/s (21 m³/s); minimum daily, 7 ft³/s (0.20 m³/s) Mar. 6, 14, 1960.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 928 ft³/s (26.3 m³/s) at 2400 June 13, gage height, 5.01 ft (1.527 m), only peak above base of 700 ft³/s (20 m³/s); maximum gage height, 5.03 ft (1.533 m) at 0100 June 7; minimum daily discharge, 13 ft³/s (0.37 m³/s) Jan. 2 to Mar. 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

OAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	21	14	14	13	13	14	50	415	508	137	50
2	22	20	14	13	13	13	14	54	414	478	134	50
3	22	20	14	13	13	13	14	54	442	451	78	49
4	23	20	14	13	13	13	14	56	501	421	93	50
5	24	22	14	13	13	13	14	65	582	396	88	44
6	24	21	14	13	13	13	15	81	700	377	85	39
7	23	20	14	13	13	13	15	87	799	354	83	38
8	22	21	14	13	13	13	16	87	606	345	88	37
9	22	21	14	13	13	13	16	92	533	325	88	37
10	21	21	14	13	13	13	17	98	492	302	86	36
11	21	20	14	13	13	13	17	101	535	290	81	38
12	21	16	14	13	13	13	17	99	586	277	78	39
13	21	14	14	13	13	13	17	106	688	272	78	39
14	21	14	14	13	13	13	17	123	810	263	102	39
15	20	14	14	13	13	13	19	140	808	255	134	39
16	20	14	14	13	13	13	21	168	823	251	95	40
17	19	14	14	13	13	13	25	196	745	228	122	41
18	20	14	14	13	13	14	29	250	673	213	120	40
19	21	14	14	13	13	14	35	329	577	196	117	39
20	21	14	14	13	13	14	39	383	491	165	108	39
21	22	14	14	13	13	14	40	404	511	183	97	39
22	23	14	14	13	13	14	41	388	562	188	87	38
23	21	14	14	13	13	14	42	429	617	173	75	37
24	22	14	14	13	13	14	45	471	631	168	55	37
25	23	14	14	13	13	14	49	466	617	159	52	36
26	21	14	14	13	13	14	44	495	592	151	52	38
27	21	14	14	13	13	14	43	560	577	146	52	39
28	21	14	14	13	13	14	47	606	574	140	59	38
29	20	14	14	13	---	14	45	614	553	129	57	35
30	20	14	14	13	---	14	45	557	529	123	56	36
31	21	---	14	13	---	14	---	455	---	114	56	---
TOTAL	666	495	434	404	364	417	826	8064	17983	8061	2653	1196
MEAN	21.5	16.5	14.0	13.0	13.0	13.5	27.5	260	599	260	85.9	39.9
MAX	24	22	14	14	13	14	49	614	823	508	122	50
MIN	19	14	14	13	13	13	14	50	414	114	56	35
AC-FT	1320	982	861	801	722	827	1640	15990	55670	15990	5280	2370
CAL YR 1978 TOTAL	43021.8											
WTR YR 1979 TOTAL	41573.0											
MEAN 118												
MAX 1080												
MIN 8.5												
AC-FT 85330												
AC-FT 82460												

NOTE.--NO GAGE-HEIGHT RECORD NOV. 17 TO APR. 18.

BLUE RIVER BASIN

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 (1.3 km) upstream from Straight Creek, about 1.3 mi (2.1 km) southwest of Dillon, and 3.5 mi (5.6 km) northeast of Frisco. DRAINAGE AREA, 335 mi² (868 km²). PERIOD OF RECORD, September 1963 to current year. GAGE, nonrecording gage read once daily. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Denver Board of Water Commissioners); gage readings have been reduced to elevations NGVD.

Reservoir is earth and rockfill dam. Dam completed and storage began Sept. 3, 1963; dead storage pool filled Sept. 12, 1963. Capacity, 254,000 acre-ft (313 hm³) between elevations 8,829.00 ft (2,691.079 m), invert of outlet valve, and 9,017.00 ft (2,748.382 m), crest of spillway. Dead storage, 3,270 acre-ft (4.03 hm³). Figures given represent usable contents. Reservoir stores water for transmountain diversion to South Platte River basin through Harold D. Roberts tunnel for municipal use by city of Denver. Records furnished by Denver Board of Water Commissioners.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 261,300 acre-ft (322 hm³) June 25, 1971, elevation, 9,019.20 ft (2,749.052 m); minimum since appreciable storage was attained in July 1964, 45,310 acre-ft (55.9 hm³) Apr. 20, 1965, elevation, 8,904.16 ft (2,713.988 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 260,400 acre-ft (321 hm³) June 29, elevation, 9,018.92 ft (2,748.967 m); minimum, 159,500 acre-ft (197 hm³) Apr. 5-9, elevation, 8,981.54 ft (2,737.573 m).

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 (1 km) upstream from Elliott Creek, and 13 mi (21 km) southeast of Kremmling. DRAINAGE AREA, 598 mi² (1,549 km²), includes 15.3 mi² (39.6 km²) 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 water and Power Resources Service); gage readings have been reduced to elevations NGVD.

Reservoir is formed by an earth and rockfill dam. Dam completed and storage began November 1942. Capacity, 146,900 acre-ft (181 hm³) between elevations 7,800 ft (2,377.4 m), sill of outlet gate, and 7,950 ft (2,423.2 m), top of radial spillway gates. Dead storage, 7,760 acre-ft (9.57 hm³). Figures given represent usable contents. Reservoir is used for power development and storage for replacement of water diverted to South Platte River basin. Water released to fill decrees during late irrigation season when flow of Colorado River is deficient. Records furnished by Water and Power Resources Service.

EXTREMES FOR PERIOD OF RECORD: Maximum contents, 148,900 acre-ft (184 hm³) July 10, 1947, elevation, 7,950.95 ft (2,423.450 m); minimum since appreciable storage was attained, 388 acre-ft (478,000 hm³) Jan. 12, 1963, elevation, 7,801.70 ft (2,377.958 m).

EXTREMES FOR CURRENT YEAR: Maximum contents, 146,500 acre-ft (181 hm³) July 23, elevation, 7,949.81 ft (2,423.102 m); minimum, 52,380 acre-ft (64.5 hm³) Apr. 16, elevation, 7,889.78 ft (2,404.814 m).

MONTHEND ELEVATION IN FEET NGVD AND CONTENTS, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

Date	Elevation	Contents (acre- feet)	Change in contents (acre-feet)	Elevation	Contents (acre- feet)	Change in contents (acre-feet)
09050600 DILLON RESERVOIR				09057000 GREEN MOUNTAIN RESERVOIR		
Sept. 30.	9,000.86	206,400	-	7,935.27	117,600	-
Oct. 31.	8,994.60	190,000	-16,400	7,928.14	104,900	-12,700
Nov. 30.	8,991.33	181,900	-8,100	7,921.13	93,380	-11,520
Dec. 31.	8,988.71	175,600	-6,300	7,914.61	83,520	-9,860
CAL YR 1978			+47,000			+27,220
Jan. 31.	8,986.09	169,600	-6,000	7,907.30	73,340	-10,180
Feb. 28.	8,983.64	164,100	-5,500	7,899.46	63,360	-9,980
Mar. 31.	8,981.58	159,600	-4,500	7,892.05	54,830	-8,530
Apr. 30.	8,982.92	162,500	+2,900	7,893.97	56,960	+2,130
May 31.	8,996.52	194,900	+32,400	7,916.03	85,600	+28,640
June 30.	9,018.91	260,400	+65,500	7,943.92	134,300	+48,700
July 31.	9,017.32	255,100	-5,300	7,948.81	144,400	+10,100
Aug. 31.	9,017.03	254,100	-1,000	7,949.14	145,100	+700
Sept. 30.	9,014.81	247,000	-7,100	7,941.25	129,000	-16,100
WTR YR 1979			+40,600			+11,400

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 (0.5 km) downstream from Dillon Dam, 0.1 mi (0.2 km) upstream from Straight Creek, and 1.1 mi (1.8 km) west of Dillon.

DRAINAGE AREA.--335 mi² (868 km²).

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

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 8,760 ft (2,670 m), from topographic map.

REMARKS.--Records good. Flow regulated since Sept. 3, 1963, by Dillon Reservoir, 0.3 mi (0.5 km) upstream (station 09050600). Natural flow of stream affected by transmountain diversions, transbasin diversions, and diversions above station for irrigation of about 400 acres (1.62 km²) of hay meadows. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--16 years (water years 1964-79), 186 ft³/s (5,268 m³/s), 134,800 acre-ft/yr (165 hm³/yr), since completion of Dillon Reservoir.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,800 ft³/s (51.0 m³/s) May 23, 1970, gage height, 3.63 ft (1.106 m); maximum gage height, 3.68 ft (1.122 m) June 26, 1971; no flow Sept. 4 to Nov. 19, 1963.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,460 ft³/s (41.3 m³/s) at 0700 June 30, gage height, 3.22 ft (0.981 m); minimum daily, 13 ft³/s (0.37 m³/s) Nov. 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	56	50	63	67	67	72	67	44	44	1440	136	172
2	55	50	72	67	67	72	76	44	46	1420	76	165
3	53	50	72	67	67	72	84	44	46	1380	81	161
4	53	50	72	70	67	74	84	44	44	1320	81	140
5	53	50	72	70	67	74	81	44	46	1250	65	123
6	53	50	74	70	70	74	81	44	46	1150	60	95
7	53	50	76	70	70	74	81	44	46	1070	56	87
8	53	50	76	70	72	74	81	44	46	986	56	106
9	53	48	76	67	72	74	79	46	46	937	56	109
10	53	48	74	67	72	72	79	46	46	874	53	116
11	53	48	74	67	72	72	79	46	44	811	53	116
12	51	48	72	67	72	72	79	46	44	744	53	116
13	51	29	72	76	72	72	76	46	44	673	55	119
14	51	14	55	84	72	70	76	44	44	624	56	119
15	51	13	60	87	72	70	76	44	44	594	56	119
16	51	28	60	87	72	70	76	44	44	576	74	123
17	53	44	60	87	72	67	74	44	44	570	143	123
18	55	44	60	89	72	67	114	44	46	546	247	123
19	55	44	60	89	72	67	103	44	48	518	257	95
20	53	44	70	79	72	67	46	44	48	485	283	56
21	53	44	76	72	72	67	44	44	43	465	291	56
22	53	46	76	72	72	95	44	44	44	455	283	56
23	55	48	76	72	72	109	46	43	43	440	271	56
24	53	50	79	72	72	109	46	43	165	430	255	55
25	51	50	81	72	72	84	46	43	594	410	243	56
26	50	50	81	67	72	70	44	43	1000	385	231	55
27	50	50	81	67	72	70	44	43	1260	340	208	55
28	50	51	81	67	72	67	44	43	1380	304	193	55
29	50	51	76	67	---	70	44	43	1420	259	186	55
30	50	51	72	67	---	70	44	44	1440	193	193	55
31	50	---	67	67	---	70	---	44	---	140	175	---
TOTAL	1624	1343	2226	2259	1987	2307	2038	1367	8295	21789	4496	2937
MEAN	52.4	44.8	71.8	72.9	71.0	74.4	67.9	44.1	277	703	145	97.9
MAX	56	51	81	89	72	109	114	46	1440	1440	291	172
MIN	50	13	60	67	67	67	44	43	43	140	53	55
AC-FT	3220	2660	4420	4480	3940	4580	4040	2710	16450	43220	8920	5830
CAL YR 1978	TOTAL	23978	MEAN	65.7	MAX	251	MIN	13	AC-FT	47560		
WTR YR 1979	TOTAL	52668	MEAN	144	MAX	1440	MIN	13	AC-FT	104500		

BLUE RIVER BASIN

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 (150 m) upstream from bridge on State Highway 9, 1,100 ft (340 m) upstream from mouth, 1,200 ft (370 m) downstream from confluence of North and South Rock Creeks, and 8 mi (13 km) northwest of Dillon.

DRAINAGE AREA.--15.8 mi² (40.9 km²).

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 (2,591.568 m) (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 (150 m) downstream at datum 28.76 ft (8.766 m) lower.

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

AVERAGE DISCHARGE.--27 years (water years 1943-56, 1967-79), 22.8 ft³/s (0.646 m³/s), 16,520 acre-ft/yr (20.4 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 289 ft³/s (8.18 m³/s) June 10, 1973, gage height, 4.35 ft (1.326 m), from rating curve extended above 154 ft³/s (4.4 m³/s); maximum gage height, 4.36 ft (1.329 m) June 24, 1971; minimum daily discharge, 2.2 ft³/s (0.062 m³/s) Apr. 13, 17, 1945.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 160 ft³/s (4.5 m³/s) and maximum (°):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
May 28	2200	170 4.81	4.05 1.234	June 13	2400	201 5.69	4.12 1.256
June 7	0200	203 5.75	4.13 1.259	June 28	0100	196 5.55	4.09 1.241

Minimum daily discharge, 3.5 ft³/s (0.099 m³/s) Feb. 1 to Apr. 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.4	6.0	4.3	3.8	3.5	3.5	3.5	8.1	54	144	37	16
2	6.4	6.0	4.5	3.8	3.5	3.5	3.5	8.1	54	137	36	15
3	6.4	5.9	4.3	3.8	3.5	3.5	3.5	6.9	71	127	34	15
4	6.3	5.6	4.0	3.8	3.5	3.5	3.5	7.3	93	123	34	15
5	6.4	5.6	4.1	3.8	3.5	3.5	4.0	9.9	119	117	34	15
6	6.2	5.5	4.2	3.8	3.5	3.5	4.0	13	144	109	34	14
7	6.2	6.9	4.2	3.8	3.5	3.5	4.0	13	172	101	35	14
8	6.2	6.5	4.0	3.8	3.5	3.5	4.1	11	111	100	32	13
9	6.0	6.5	4.0	3.8	3.5	3.5	4.4	9.6	78	95	32	13
10	5.9	5.8	4.0	3.8	3.5	3.5	4.7	8.5	66	90	32	13
11	5.7	5.3	3.8	3.8	3.5	3.5	5.0	7.9	75	90	30	14
12	5.8	5.4	3.8	3.8	3.5	3.5	5.0	7.1	103	95	28	14
13	5.7	5.6	3.8	3.8	3.5	3.5	5.0	7.7	144	98	28	13
14	6.0	5.8	3.8	3.8	3.5	3.5	5.0	11	168	95	32	12
15	5.9	6.0	3.8	3.8	3.5	3.5	6.0	16	161	93	31	11
16	5.9	6.0	3.8	3.8	3.5	3.5	7.0	21	155	86	30	10
17	5.7	6.3	3.8	3.8	3.5	3.5	8.5	28	147	84	30	9.5
18	7.0	6.0	3.8	3.8	3.5	3.5	9.6	35	133	74	29	9.2
19	7.1	6.0	3.8	3.8	3.5	3.5	8.5	46	116	67	26	9.1
20	6.5	5.8	3.8	3.8	3.5	3.5	9.0	64	87	63	24	9.5
21	6.6	5.3	3.8	3.8	3.5	3.5	9.0	78	88	62	23	10
22	9.1	6.1	3.8	3.8	3.5	3.5	8.5	73	111	72	21	10
23	7.2	6.5	3.8	3.8	3.5	3.5	8.9	80	136	71	19	9.8
24	7.0	6.2	3.8	3.8	3.5	3.5	9.7	91	145	67	18	9.4
25	7.4	6.1	3.8	3.8	3.5	3.5	9.4	95	140	64	17	9.3
26	8.0	5.0	3.8	3.8	3.5	3.5	8.2	99	152	61	17	9.5
27	8.4	4.1	3.8	3.8	3.5	3.5	8.2	116	158	57	16	9.8
28	7.6	3.8	3.8	3.8	3.5	3.5	8.5	144	156	60	16	9.5
29	7.3	3.9	3.8	3.8	---	3.5	7.5	137	145	56	17	9.0
30	6.7	4.0	3.8	3.8	---	3.5	7.6	113	146	51	17	8.7
31	6.1	---	3.8	3.8	---	3.5	---	74	---	43	18	---
TOTAL	205.1	169.6	121.4	117.8	98.0	108.5	193.3	1439.1	3628	2652	827	349.4
MEAN	6.62	5.65	3.92	3.80	3.50	3.50	6.44	46.4	121	85.5	26.7	11.6
MAX	9.1	6.9	4.5	3.8	3.5	3.5	9.7	144	172	144	37	15
MIN	5.7	3.8	3.8	3.8	3.5	3.5	3.5	6.9	54	43	16	8.7
AC-FT	407	336	241	234	194	215	383	2850	7200	5260	1640	693

CAL YR 1978 TOTAL 9995.3 MEAN 27.4 MAX 194 MIN 2.8 AC-FT 19830
WTR YR 1979 TOTAL 9909.2 MEAN 27.1 MAX 172 MIN 3.5 AC-FT 19650

NOTE.--NO GAGE-HEIGHT RECORD DEC. 11 TO APR. 19.

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 (1.9 km) downstream from Boulder Lake, 3.2 mi (5.1 km) upstream from mouth, and 9.4 mi (15.1 km) northwest of Dillon.

DRAINAGE AREA.--8.56 mi² (22.2 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 9,460 ft (2,883 m), from topographic map.

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

AVERAGE DISCHARGE.--13 years, 16.1 ft³/s (0.456 m³/s), 11,660 acre-ft/yr (14.4 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 254 ft³/s (7.19 m³/s) July 4, 1975, gage height, 3.27 ft (0.997 m); minimum daily, 0.80 ft³/s (0.023 m³/s) Jan. 6, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 120 ft³/s (3.4 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
June 7	0400	143 4.05	2.74 0.835	June 28	0100	*151 4.28	2.77 0.844
June 14	2200	129 3.65	2.67 0.814				

Minimum daily discharge, 1.1 ft³/s (0.031 m³/s) Feb. 6 to Mar. 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.4	3.2	1.7	1.6	1.2	1.1	1.5	4.0	42	89	34.7	14
2	4.4	3.2	1.7	1.6	1.2	1.1	1.5	4.5	33	81	33	13
3	4.4	3.2	1.7	1.6	1.2	1.1	1.5	4.0	40	77	33	12
4	4.1	3.1	1.7	1.6	1.2	1.1	1.5	3.5	54	73	33	12
5	3.9	3.1	1.7	1.6	1.2	1.1	1.5	3.0	75	70	33	12
6	3.9	2.9	1.7	1.6	1.1	1.1	1.5	3.6	102	67	33	11
7	3.8	2.8	1.7	1.6	1.1	1.1	1.5	4.5	121	64	32	11
8	3.8	2.8	1.7	1.6	1.1	1.1	1.5	5.4	73	64	30	10
9	3.8	2.8	1.7	1.6	1.1	1.1	1.6	5.0	51	64	31	10
10	3.8	2.8	1.6	1.6	1.1	1.1	1.7	4.6	42	64	30	10
11	3.6	2.8	1.6	1.6	1.1	1.1	1.8	4.2	43	63	29	10
12	3.6	2.8	1.6	1.6	1.1	1.1	1.9	3.9	67	62	26	10
13	3.5	2.8	1.6	1.6	1.1	1.1	1.9	3.5	100	60	26	10
14	3.5	2.8	1.6	1.6	1.1	1.1	1.9	4.7	119	59	27	8.9
15	3.5	2.8	1.6	1.6	1.1	1.1	2.0	6.6	121	58	28	8.3
16	3.4	2.8	1.6	1.6	1.1	1.1	2.2	9.0	119	56	26	7.8
17	3.4	2.8	1.6	1.6	1.1	1.1	2.3	13	111	55	26	6.6
18	3.4	2.8	1.6	1.6	1.1	1.2	2.4	18	105	54	24	6.1
19	3.5	2.8	1.6	1.6	1.1	1.3	2.6	25	86	53	23	6.0
20	3.5	2.3	1.6	1.6	1.1	1.4	2.7	35	58	52	22	6.0
21	3.5	2.1	1.6	1.6	1.1	1.5	2.9	32	54	50	20	6.0
22	4.1	2.1	1.6	1.6	1.1	1.5	3.0	30	73	58	17	5.7
23	3.8	2.1	1.6	1.6	1.1	1.5	3.2	36	87	60	16	5.5
24	3.8	2.1	1.6	1.4	1.1	1.5	3.3	45	109	51	15	5.2
25	3.8	2.1	1.6	1.4	1.1	1.5	3.5	58	113	50	14	5.2
26	3.8	2.1	1.6	1.4	1.1	1.5	3.5	68	113	48	14	5.2
27	3.8	2.1	1.6	1.4	1.1	1.5	3.5	78	127	46	13	5.2
28	3.8	2.1	1.6	1.4	1.1	1.5	3.5	85	123	46	13	5.2
29	3.6	2.1	1.6	1.4	---	1.5	3.5	82	103	46	13	5.0
30	3.5	1.8	1.6	1.4	---	1.5	3.5	66	94	44	13	5.0
31	3.4	---	1.6	1.4	---	1.5	---	52	---	38	14	---
TOTAL	116.1	78.1	50.5	48.0	31.3	39.1	70.4	797.0	2558	1824	741	247.9
MEAN	3.75	2.60	1.63	1.55	1.12	1.26	2.35	25.7	85.3	58.8	23.9	8.26
MAX	4.4	3.2	1.7	1.6	1.2	1.5	3.5	85	127	89	34	14
MIN	3.4	1.8	1.6	1.4	1.1	1.1	1.5	3.0	33	38	13	5.0
AC-FT	230	155	100	95	62	78	140	1580	5070	3610	1470	492

CAL YR 1978 TOTAL 7157.2 MEAN 19.6 MAX 174 MIN 1.1 AC-FT 14200
WTR YR 1979 TOTAL 6599.4 MEAN 18.1 MAX 127 MIN 1.1 AC-FT 13090

NOTE.--NO GAGE-HEIGHT RECORD NOV. 7 TO JUNE 1.

BLUE RIVER BASIN

09052800 SLATE CREEK AT UPPER STATION, NEAR DILLON, CO

LOCATION.--Lat 39°45'47", long 106°11'31", in SW¼NW¼ sec.25, T.3 S., R.79 W., Summit County, Hydrologic Unit 14010002, on left bank 0.2 mi (0.3 km) upstream from unnamed tributary, 2.7 mi (4.3 km) upstream from mouth, and 12 mi (19.3 km) northwest of Dillon.

DRAINAGE AREA.--14.2 mi² (36.8 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 9,040 ft (2,755 m), from topographic map.

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

AVERAGE DISCHARGE.--13 years, 24.6 ft³/s (0.697 m³/s) 17,820 acre-ft/yr (22.0 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 266 ft³/s (7.53 m³/s) June 19, 1974, gage height, 5.56 ft (1.695 m), from rating curve extended above 170 ft³/s (4.8 m³/s); maximum gage height, 6.56 ft (1.999 m) May 2, 1975 (backwater from beaver dam and ice); minimum daily discharge, 1.0 ft³/s (0.028 m³/s) Mar. 14, 1974, Jan. 12, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 160 ft³/s (4.5 m³/s) and maximum (%):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
May 28	0100	203 5.75	5.00 1.524	June 15	0400	236 6.68	5.18 1.579
June 7	0500	*252 7.14	5.28 1.609	June 28	0500	219 6.20	5.05 1.539

Minimum daily discharge, 2.3 ft³/s (0.065 m³/s) Jan. 31 to Apr. 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.2	3.6	3.2	3.0	2.3	2.3	2.3	9.4	58	179	58	19
2	5.1	3.6	3.2	3.0	2.3	2.3	2.3	9.0	52	177	56	18
3	5.2	3.5	3.3	3.0	2.3	2.3	2.3	7.6	63	157	50	16
4	5.0	3.4	3.9	3.0	2.3	2.3	2.3	6.7	83	157	50	15
5	4.8	3.4	4.2	3.0	2.3	2.3	2.3	9.2	123	147	50	15
6	4.5	3.2	4.0	3.0	2.3	2.3	2.3	13	164	138	49	15
7	4.1	3.0	3.9	3.0	2.3	2.3	2.3	16	218	127	50	14
8	3.8	3.1	3.7	3.0	2.3	2.3	2.4	14	138	129	46	13
9	3.7	3.0	3.8	2.7	2.3	2.3	2.8	11	88	131	49	11
10	3.6	2.9	3.6	2.7	2.3	2.3	3.3	11	63	124	49	11
11	3.9	2.8	3.4	2.7	2.3	2.3	3.4	8.7	66	124	47	12
12	3.5	3.0	3.2	2.7	2.3	2.3	3.4	6.6	93	130	42	12
13	3.6	3.2	3.1	2.7	2.3	2.3	3.4	7.0	149	136	41	11
14	3.7	3.4	3.1	2.7	2.3	2.3	3.4	11	202	141	45	11
15	3.7	3.6	3.0	2.7	2.3	2.3	3.7	17	202	134	44	8.9
16	3.6	3.8	3.0	2.7	2.3	2.3	4.0	27	181	130	45	8.2
17	3.5	3.8	3.0	2.7	2.3	2.3	4.3	37	171	126	41	7.8
18	3.5	3.9	3.0	2.7	2.3	2.3	4.6	50	160	110	42	7.5
19	3.5	4.0	3.0	2.7	2.3	2.3	5.1	59	131	96	39	7.2
20	3.5	3.5	3.0	2.7	2.3	2.3	5.5	68	87	93	34	7.4
21	3.7	3.0	3.0	2.7	2.3	2.3	6.0	69	79	94	31	7.4
22	5.0	2.7	3.0	2.7	2.3	2.3	6.5	70	114	111	27	6.7
23	4.7	2.6	3.0	2.5	2.3	2.3	7.0	87	147	113	24	6.0
24	4.4	2.5	3.0	2.5	2.3	2.3	7.5	102	165	102	22	6.3
25	4.8	2.4	3.0	2.5	2.3	2.3	7.7	108	174	101	20	6.3
26	4.3	2.4	3.0	2.5	2.3	2.3	7.7	127	166	93	19	6.5
27	4.3	2.6	3.0	2.5	2.3	2.3	7.7	162	184	83	17	7.1
28	4.1	3.0	3.0	2.5	2.3	2.3	7.7	178	187	90	17	6.9
29	4.0	3.2	3.0	2.5	---	2.3	7.7	179	183	88	17	6.8
30	3.6	3.2	3.0	2.5	---	2.3	8.4	148	180	77	18	6.4
31	3.8	---	3.0	2.3	---	2.3	---	85	---	62	20	---
TOTAL	127.7	95.3	100.6	84.1	64.4	71.3	139.3	1713.2	4071	3700	1159	306.4
MEAN	4.12	3.18	3.25	2.71	2.30	2.30	4.64	55.3	136	119	37.4	10.2
MAX	5.2	4.0	4.2	3.0	2.3	2.3	8.4	179	218	179	58	19
MIN	3.5	2.4	3.0	2.3	2.3	2.3	2.3	6.6	52	62	17	6.0
AC-FT	253	189	200	167	128	141	276	3400	8070	7340	2300	608

CAL YR 1978 TOTAL 10006.3 MEAN 27.4 MAX 209 MIN 2.0 AC-FT 19850
WTR YR 1979 TOTAL 11632.3 MEAN 31.9 MAX 218 MIN 2.3 AC-FT 23070

NOTE.--NO GAGE-HEIGHT RECORD DEC. 28 TO MAY 7.

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 (180 m) upstream from bridge, 0.3 mi (0.5 km) downstream from Black Lake, 4.5 mi (7.2 km) upstream from high-water line of Green Mountain Reservoir at elevation 7,950 ft (2,423.2 m), and 17 mi (27 km) northwest of Dillon.

DRAINAGE AREA:--15.0 mi² (38.8 km²).

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

REVISED RECORDS:--WSP 2124: Drainage area, WOR CD-77-2: 1976.

GAGE:--Water-stage recorder. Altitude of gage is 8,750 ft (2,667 m), 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 503 ft (180 m) downstream at different datums.

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

AVERAGE DISCHARGE:--20 years, 31.4 ft³/s (0.889 m³/s), 22,750 acre-ft/yr (28.1 hm³/yr).

EXTREMES FOR PERIOD OF RECORD:--Maximum discharge, 384 ft³/s (10.9 m³/s) July 1, 1943, gage height, 4.72 ft (1.439 m), site and datum then in use, from rating curve extended above 260 ft³/s (7.4 m³/s); minimum daily, 1.3 ft³/s (0.037 m³/s) Feb. 22, 1976, Jan. 10, 1977.

EXTREMES FOR CURRENT YEAR:--Peak discharges above base of 160 ft³/s (4.5 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
May 28	0300	233 6.60	3.84 1.170	June 14	0300	4277 7.84	3.94 1.201
June 7	0500	262 7.42	3.96 1.207	June 30	0200	254 7.19	3.86 1.177

Minimum daily discharge, 1.4 ft³/s (0.040 m³/s) Feb. 2 to Mar. 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.7	4.0	3.1	3.0	1.5	1.4	2.0	9.4	52	206	66	30
2	6.1	3.9	3.2	3.0	1.4	1.4	2.0	10	46	192	68	26
3	5.6	3.8	3.2	3.0	1.4	1.4	2.0	8.4	63	174	61	24
4	5.3	3.8	3.4	3.0	1.4	1.4	2.0	7.4	97	182	54	24
5	5.1	4.0	4.3	3.0	1.4	1.4	2.3	7.0	139	168	55	23
6	4.7	3.8	4.4	3.0	1.4	1.4	2.3	15	174	156	67	22
7	4.6	3.7	4.0	3.0	1.4	1.4	2.3	22	227	147	68	22
8	4.4	3.6	3.8	3.0	1.4	1.4	2.3	19	146	149	55	21
9	4.4	3.7	3.7	3.0	1.4	1.4	2.5	14	99	151	55	19
10	4.2	3.6	3.5	2.7	1.4	1.4	3.0	13	70	142	63	19
11	4.2	4.0	3.5	2.5	1.4	1.4	3.5	9.7	84	146	51	20
12	4.1	3.7	3.5	2.5	1.4	1.4	3.5	8.6	144	156	53	20
13	3.8	3.7	3.5	2.5	1.4	1.4	3.5	7.8	209	168	53	19
14	3.8	3.4	3.5	2.5	1.4	1.4	3.5	9.2	241	160	50	16
15	3.6	3.6	3.5	2.5	1.4	1.4	3.5	17	234	148	59	14
16	3.8	3.7	3.5	2.5	1.4	1.4	4.0	26	202	148	58	12
17	3.6	3.8	3.5	2.5	1.4	1.4	4.3	37	190	143	58	11
18	3.6	3.6	3.5	2.5	1.4	1.5	4.6	50	176	129	54	9.2
19	3.6	3.7	3.5	2.5	1.4	1.6	5.0	65	145	102	49	8.1
20	3.6	3.6	3.5	2.5	1.4	1.7	5.4	82	94	104	42	8.1
21	3.4	3.6	3.5	2.5	1.4	1.9	5.8	87	102	104	38	7.8
22	3.6	3.7	3.5	2.5	1.4	2.0	6.4	79	151	155	33	8.1
23	3.9	3.2	3.5	2.5	1.4	2.0	6.8	85	181	137	28	7.2
24	4.0	3.2	3.5	2.0	1.4	2.0	7.5	122	194	118	27	6.9
25	5.1	3.2	3.0	2.0	1.4	2.0	8.0	136	194	111	27	7.0
26	4.7	3.2	3.0	2.0	1.4	2.0	8.0	147	194	104	25	7.1
27	4.7	3.0	3.0	2.0	1.4	2.3	8.0	176	208	94	25	7.6
28	4.7	3.0	3.0	2.0	1.4	2.0	8.0	201	217	97	26	7.7
29	4.5	3.0	3.0	2.0	---	2.0	8.0	180	213	98	27	7.3
30	4.3	3.0	3.0	2.0	---	2.0	8.0	155	213	84	28	6.7
31	4.2	---	3.0	2.0	---	2.0	---	81	---	72	33	---
TOTAL	135.9	106.8	106.6	78.2	39.3	50.5	138.0	1886.5	4699	4245	1516	440.8
MEAN	4.38	3.56	3.44	2.52	1.40	1.63	4.60	60.9	157	137	48.9	14.7
MAX	6.7	4.0	4.4	3.0	1.5	2.0	8.0	201	241	206	58	30
MIN	3.4	3.0	3.0	2.0	1.4	1.4	2.0	7.0	46	72	25	6.7
AC-FT	270	212	211	155	78	100	274	3740	9320	6420	3010	874
CAL YR 1978 TOTAL	11414.7											
WTR YR 1979 TOTAL	13442.6											
MEAN 31.3												
MAX 227												
MIN 2.2												
AC-FT 22640												
WTR YR 1979 TOTAL	13442.6											
MEAN 36.8												
MAX 241												
MIN 1.4												
AC-FT 26660												

NOTE:--NO GAGE-HEIGHT RECORD DEC. 8 TO MAY 9.

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 (21 m) downstream from lower Cataract Lake, 2.8 mi (4.5 km) upstream from high-water line of Green Mountain Reservoir at elevation 7,950 ft (2,423.2 m), and 17 mi (27 km) south of Kremmling.

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

GAGE.--Water-stage recorder. Altitude of gage is 8,605 ft (2,623 m), from topographic map.

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

AVERAGE DISCHARGE.--13 years, 19.5 ft³/s (0.552 m³/s), 14,130 acre-ft/yr (17.4 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 321 ft³/s (9.09 m³/s) June 21, 1967, gage height, 5.43 ft (1.655 m), from rating curve extended above 180 ft³/s (5.1 m³/s); minimum daily, 0.28 ft³/s (0.008 m³/s) Oct. 7, 1971.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 160 ft³/s (4.5 m³/s) and maximum (°):

Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)		Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)	
May 29	2400	170	4.81	4.37	1.332	June 15	0400	209	5.92	4.60	1.402
June 7	0200	244	6.91	4.79	1.460	June 28	0500	192	5.44	4.49	1.369

Minimum daily discharge, 0.70 ft³/s (0.020 m³/s) Feb. 6-13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.7	1.7	1.1	1.1	.80	.75	1.0	8.0	65	155	30	6.3
2	2.5	1.7	1.2	1.1	.80	.75	1.0	9.0	58	141	28	6.3
3	2.5	1.7	1.2	1.1	.80	.78	.98	8.4	64	128	26	6.0
4	2.4	1.5	1.3	1.1	.80	.75	1.0	7.4	77	117	25	5.7
5	2.3	1.2	1.4	1.1	.80	.75	1.1	7.2	105	108	24	5.6
6	2.3	1.2	1.6	1.1	.70	.75	1.1	10	142	100	22	5.4
7	2.3	1.3	1.6	1.1	.70	.75	1.1	16	200	95	21	5.3
8	2.2	1.3	1.7	1.1	.70	.75	1.1	14	132	101	23	5.1
9	2.2	1.2	1.7	1.1	.70	.78	1.2	14	96	98	23	4.9
10	2.1	1.1	1.5	1.0	.70	.78	1.3	12	66	87	21	4.4
11	1.9	1.1	1.5	1.0	.70	.75	1.5	9.8	66	85	20	4.1
12	1.8	1.1	1.5	1.0	.70	.78	1.5	8.7	87	87	19	4.0
13	1.8	1.0	1.4	1.0	.70	.78	1.5	7.7	137	90	18	4.0
14	1.8	1.1	1.3	1.0	.78	.78	1.4	8.5	191	85	19	3.9
15	2.5	1.2	1.3	1.0	.75	.78	1.5	14	193	77	21	3.9
16	1.9	1.3	1.2	1.0	.75	.78	1.7	26	179	69	22	3.8
17	1.6	1.3	1.2	1.0	.75	.75	2.1	33	161	69	23	3.6
18	1.5	1.4	1.2	1.0	.75	.87	2.5	44	159	64	23	3.4
19	1.6	1.4	1.3	1.0	.75	.90	3.3	53	113	55	21	3.2
20	1.6	1.3	1.3	1.0	.75	.91	3.8	59	75	52	19	2.9
21	1.6	1.3	1.3	1.0	.75	.95	4.2	56	69	51	16	2.7
22	1.8	1.2	1.3	1.0	.75	1.0	4.7	54	108	64	13	2.6
23	1.9	1.2	1.3	1.0	.75	1.0	5.5	59	143	65	11	2.5
24	2.0	1.1	1.3	.90	.72	1.0	6.7	77	152	55	9.5	2.4
25	1.9	1.1	1.2	.90	.72	.99	7.9	104	145	51	8.5	2.3
26	2.0	1.1	1.2	.90	.72	1.0	7.8	115	156	47	7.8	2.2
27	2.0	1.1	1.2	.90	.75	.99	7.3	132	163	43	7.0	1.9
28	1.9	1.1	1.1	.90	.75	.99	7.5	149	166	42	6.7	1.9
29	1.6	1.1	1.1	.90	---	.99	7.5	153	158	42	6.4	2.1
30	1.5	1.0	1.1	.90	---	.95	7.3	143	161	38	6.3	2.4
31	1.6	---	1.1	.90	---	.98	---	91	---	33	6.4	---
TOTAL	61.3	37.4	40.6	31.10	20.79	26.57	98.08	1502.7	3767	2394	546.6	114.8
MEAN	1.98	1.25	1.31	1.00	.74	.86	3.27	48.5	126	77.2	17.6	3.83
MAX	2.7	1.7	1.7	1.1	.80	1.0	7.9	153	200	155	30	6.3
MIN	1.5	1.0	1.1	.90	.70	.75	.98	7.2	58	33	6.3	1.9
AC-FT	122	74	81	62	41	53	195	2980	7470	4750	1080	228

CAL YR 1978	TOTAL	8143.66	MEAN	22.3	MAX	211	MIN	.90	AC-FT	16150
WTR YR 1979	TOTAL	8640.94	MEAN	23.7	MAX	200	MIN	.70	AC-FT	17140

NOTE.--NO GAGE-HEIGHT RECORD JAN. 12 TO FEB. 14.

BLUE RIVER BASIN

91

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 (0.5 km) upstream from Elliott Creek, 0.3 mi (0.5 km) downstream from Green Mountain Dam, and 13 mi (21 km) southeast of Kremmling.

DRAINAGE AREA.--599 mi² (1,551 km²); includes 15.3 mi² (39.6 km²) of Elliott Creek above diversion for Elliott Creek feeder canal.

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

REVISED RECORDS.--WSP 2124: Drainage area.

GAGE.--water-stage recorder. Datum of gage is 7,682.66 ft (2,341.675 m), National Geodetic Vertical Datum of 1929 (levels by Water and Power Resources Service). Prior to Oct. 1, 1951, water-stage recorder at site 3.7 mi (6.0 km) downstream at different datum.

REMARKS.--Records good. Flow regulated by Green Mountain Reservoir (station 09057000). Diversions for irrigation of about 5,000 acres (20.2 km²) above station. Transmountain diversions above station (see elsewhere in this report). Several observations of specific conductance and water temperatures were obtained and are published elsewhere in this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,000 ft³/s (113 m³/s) June 4, 1938, gage height, 5.93 ft (1.807 m), site and datum then in use, from rating curve extended above 3,000 ft³/s (85 m³/s); minimum daily (prior to construction of Green Mountain Reservoir), 80 ft³/s (2.27 m³/s) Feb. 18-24, 1938, Feb. 18, 19, 1940; no flow at times in 1943.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,860 ft³/s (52.7 m³/s) at 1315 July 3, gage height, 7.54 ft (2.298 m); minimum daily, 57 ft³/s (1.61 m³/s) May 10-14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	338	280	284	285	287	290	242	58	62	684	508	332
2	335	279	283	280	289	292	242	58	61	818	475	336
3	338	284	284	281	289	289	248	59	59	1340	424	331
4	334	284	283	283	287	287	248	59	59	1500	385	335
5	334	284	282	284	287	287	248	61	61	1830	385	335
6	337	284	281	282	285	279	248	61	61	1860	385	333
7	335	281	282	286	288	265	248	61	61	1840	385	517
8	334	286	283	285	286	262	245	59	59	1840	335	534
9	333	285	282	282	289	264	250	56	59	1740	385	529
10	333	285	281	286	290	264	245	57	59	1540	330	531
11	334	284	286	286	287	256	242	57	61	1460	288	525
12	334	282	283	284	292	264	248	57	61	1450	288	529
13	310	284	281	284	283	269	248	57	61	1450	290	528
14	287	282	281	285	290	268	248	57	61	1450	288	526
15	286	282	282	284	296	269	245	58	427	1390	238	530
16	286	282	281	283	288	267	197	58	700	1300	286	529
17	286	282	280	287	290	238	182	58	700	1250	249	536
18	286	284	282	283	292	278	165	58	856	1200	245	528
19	287	283	281	282	291	278	112	58	980	1040	328	529
20	288	285	287	282	292	258	63	58	980	927	479	526
21	289	283	286	281	289	240	59	58	799	928	516	527
22	288	285	284	285	288	241	61	61	680	945	593	526
23	287	285	284	285	291	242	61	61	680	1030	573	521
24	286	286	285	290	290	244	61	62	680	1070	573	512
25	285	284	287	287	287	242	61	62	680	1070	572	480
26	286	284	285	287	290	243	61	62	676	1060	538	479
27	285	282	288	287	289	241	59	62	680	1070	437	481
28	285	282	285	288	293	240	59	62	680	1020	344	479
29	285	282	285	287	---	239	58	62	680	981	346	479
30	284	282	282	288	---	234	58	62	680	864	335	458
31	283	---	283	289	---	235	---	62	---	674	337	---
TOTAL	9478	8497	8783	8828	8095	8065	5012	1841	12403	38621	12422	14341
MEAN	306	283	283	285	289	260	167	59.4	413	1246	401	478
MAX	338	286	288	290	296	292	250	62	980	1860	593	536
MIN	283	279	280	280	283	234	58	56	59	674	245	331
AC-FT	18800	16850	17420	17510	16060	16000	9940	3650	24600	76600	24640	28450

CAL YR 1978 TOTAL 97690 MEAN 268 MAX 912 MIN 51 AC-FT 193800
WTR YR 1979 TOTAL 136386 MEAN 374 MAX 1860 MIN 56 AC-FT 270500

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 (4.8 km) southwest of Kremmling, and 3.8 mi (6.1 km) downstream from Blue River.

DRAINAGE AREA.--2,382 mi² (6,169 km²).

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

REVISED RECORDS.--WSP 2124: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 7,320 ft (2,231 m), from topographic map. See WSP 1313 for history of changes prior to Oct. 1, 1961.

REMARKS.--Records good except those for winter period, which are fair. Natural flow of stream affected by transmountain diversions, storage reservoirs, diversions for irrigation of about 40,000 acres (162 km²) above station, and return flow from irrigated areas. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 21,500 ft³/s (609 m³/s) June 7, 1912, gage height, 21.8 ft (6.64 m), datum then in use, from rating curve extended above 14,000 ft³/s (400 m³/s); minimum observed, 166 ft³/s (1.70 m³/s) Dec. 19, 1907.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,120 ft³/s (117 m³/s) at 1000 May 30, gage height, 10.25 ft (3.124 m); minimum daily, 421 ft³/s (11.9 m³/s) Dec. 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	765	751	646	500	521	469	523	967	2780	2110	1270	778
2	761	747	529	500	531	466	490	1110	2220	2090	1130	757
3	741	750	481	500	527	467	477	1150	1970	2460	1080	750
4	727	752	504	500	519	448	481	1040	1900	2720	992	738
5	727	746	539	500	496	456	487	1080	1850	3070	959	731
6	726	745	421	500	551	459	514	1250	1910	3050	926	717
7	738	736	537	500	545	457	584	1420	2120	3040	918	707
8	743	740	539	500	539	468	651	1330	2800	2940	936	867
9	746	743	493	500	520	448	681	1210	3030	2780	938	862
10	749	748	500	500	533	436	687	1240	2590	2460	910	845
11	769	749	500	500	518	432	654	1100	2170	2280	842	835
12	772	753	500	500	527	431	591	1080	2080	2210	818	847
13	755	754	500	529	537	441	586	1070	2030	2180	813	858
14	715	743	500	531	543	441	595	1150	2380	2170	826	866
15	712	728	500	518	521	432	677	1340	2880	2080	862	865
16	711	719	500	545	500	445	792	1550	3440	2030	841	870
17	720	720	500	541	492	459	855	1800	3300	1970	882	860
18	727	724	524	534	516	463	928	2000	3180	1950	854	860
19	735	722	534	540	487	455	1020	2290	3270	1840	868	852
20	741	731	544	518	488	449	832	2600	3170	1670	912	855
21	745	731	544	517	485	439	786	2830	2750	1670	1050	857
22	786	732	536	521	498	451	813	3110	2340	1700	1080	863
23	788	739	547	498	495	450	817	3280	2180	1690	1110	871
24	768	736	550	508	475	450	874	3330	2190	1800	1070	866
25	760	752	559	526	461	459	951	3560	2200	1800	1050	861
26	758	762	526	541	470	464	867	3600	2120	1750	1050	826
27	750	739	534	532	472	475	822	3580	2120	1730	1010	826
28	748	724	574	502	474	504	906	3690	2080	1720	917	837
29	752	721	557	524	---	523	889	3900	2070	1630	836	835
30	750	750	544	523	---	534	909	4070	2160	1570	795	831
31	754	---	524	488	---	547	---	3580	---	1320	795	---
TOTAL	23139	22187	16286	15936	14241	14318	21739	66307	73280	65480	29400	24793
MEAN	746	740	525	514	509	462	725	2139	2443	2112	948	826
MAX	788	762	646	545	551	547	1020	4070	3440	3070	1270	871
MIN	711	719	421	488	461	431	477	967	1850	1320	795	707
AC-FT	45900	44010	32300	31610	28250	28400	43120	131500	145400	129900	58310	49180
CAL YR 1978	TOTAL	326390	MEAN	894	MAX	3060	MIN	380	AC-FT	647400		
WTR YR 1979	TOTAL	387106	MEAN	1061	MAX	4070	MIN	421	AC-FT	767800		

PINEY RIVER BASIN

93

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 (2.3 km) upstream from Dickson Creek, 2.0 mi (3.2 km) downstream from Piney Lake, and 8.5 mi (13.7 km) north of Minturn.

DRAINAGE AREA.--13.0 mi² (33.7 km²).

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 (2,787.472 m), National Geodetic Vertical Datum of 1929 (levels by Water and Power Resources Service). Prior to October 1963, water-stage recorder at site 15 ft (5 m) upstream at present datum.

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

AVERAGE DISCHARGE.--23 years, 24.1 ft³/s (0.682 m³/s), 17,460 acre-ft/yr (21.5 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 413 ft³/s (11.7 m³/s) July 5, 1975, gage height, 5.47 ft (1.667 m); maximum gage height observed, 6.44 ft (1.963 m) Apr. 13, 1977; minimum not determined.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 150 ft³/s (4.25 m³/s), and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Apr. 21	1600	ice jam	*5.22 1.591	June 14	0500	222 6.29	4.83 1.472
May 28	0400	208 5.89	4.74 1.445	June 28	0600	202 5.72	4.78 1.457
June 7	0700	*242 6.85	4.90 1.494				

Minimum daily discharge, 0.94 ft³/s (0.027 m³/s) Nov. 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	Aug	SEP
1	3.3	1.9	1.1	1.5	1.4	1.3	1.5	32	55	156	29	7.5
2	3.3	1.8	1.2	1.5	1.4	1.2	1.5	30	52	151	28	6.0
3	3.5	1.8	1.2	1.5	1.4	1.2	1.6	26	78	135	26	6.0
4	2.9	1.8	1.3	1.4	1.4	1.2	1.6	26	99	132	26	5.3
5	2.4	1.7	1.3	1.5	1.4	1.2	1.6	32	116	119	25	4.7
6	2.3	1.7	1.4	1.5	1.4	1.2	1.7	38	151	115	24	4.0
7	2.3	1.6	1.4	1.5	1.4	1.2	1.7	40	210	106	23	3.7
8	2.3	1.5	1.4	1.5	1.4	1.2	1.8	33	126	124	21	3.2
9	2.3	1.5	1.5	1.5	1.4	1.2	1.9	28	87	124	21	3.0
10	2.3	1.4	1.5	1.5	1.4	1.2	1.9	26	64	114	20	3.0
11	2.3	1.3	1.5	1.5	1.4	1.2	2.0	22	74	117	19	3.0
12	2.3	1.3	1.6	1.5	1.3	1.2	2.1	20	102	119	18	3.0
13	2.3	1.2	1.6	1.5	1.3	1.2	2.0	21	148	122	17	2.8
14	2.3	1.2	1.6	1.5	1.3	1.2	2.0	29	188	118	19	2.8
15	2.3	1.0	1.6	1.5	1.3	1.2	1.9	41	166	105	23	2.7
16	2.2	1.0	1.6	1.5	1.3	1.2	2.0	39	167	99	21	2.5
17	2.3	1.0	1.6	1.5	1.3	1.2	3.1	46	155	82	21	2.3
18	2.2	1.0	1.6	1.5	1.3	1.2	3.6	68	140	74	19	2.0
19	2.2	.98	1.6	1.5	1.3	1.2	4.4	95	115	60	21	1.9
20	2.2	.98	1.6	1.5	1.3	1.2	6.0	107	76	59	19	1.9
21	2.2	.96	1.6	1.5	1.3	1.2	33	105	87	57	20	1.9
22	2.2	.96	1.6	1.5	1.3	1.2	30	92	119	79	17	1.9
23	2.2	.94	1.6	1.5	1.3	1.2	29	112	143	70	15	1.9
24	2.2	.96	1.6	1.5	1.3	1.2	29	138	146	61	13	2.0
25	2.2	.98	1.6	1.5	1.3	1.3	32	147	139	56	11	1.9
26	2.1	.98	1.6	1.5	1.3	1.3	29	162	138	51	9.8	1.9
27	2.1	1.0	1.6	1.5	1.3	1.3	30	180	158	44	8.6	2.0
28	2.0	1.0	1.6	1.5	1.3	1.4	31	176	168	45	7.8	2.1
29	2.0	1.0	1.6	1.4	---	1.4	29	151	167	44	7.1	2.1
30	1.9	1.1	1.5	1.4	---	1.5	30	116	167	38	6.5	2.1
31	1.9	---	1.5	1.4	---	1.5	---	80	---	32	8.0	---
TOTAL	72.5	37.54	46.6	46.1	37.5	38.6	347.9	2258	3801	2808	563.8	91.1
MEAN	2.34	1.25	1.50	1.49	1.34	1.25	11.6	72.8	127	90.6	18.2	3.04
MAX	3.5	1.9	1.6	1.5	1.4	1.5	33	180	210	156	29	7.5
MIN	1.9	.94	1.1	1.4	1.3	1.2	1.5	20	52	32	6.5	1.9
AC-FT	144	74	92	91	74	77	690	4480	7540	5570	1120	181
CAL YR 1978	TOTAL	10551.14	MEAN	28.9	MAX	256	MIN	.94	AC-FT	20930		
WTR YR 1979	TOTAL	10148.64	MEAN	27.8	MAX	210	MIN	.94	AC-FT	20130		

NOTE.--ND GAGE-HEIGHT RECORD NOV. 17 TO APR. 5.

PINEY RIVER BASIN

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 (1.0 km) upstream from Freeman Creek, 1.0 mi (1.6 km) upstream from mouth, and 6 mi (9.7 km) northwest of Vail.

DRAINAGE AREA.--3.41 mi² (8.83 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 9,245 ft (2,818 m), from topographic map.

REMARKS.--Records good except those for period of no gage height record, which are poor. Diversion by Willy N. ditch 75 ft (23 m) above station for irrigation of hay meadows below station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--8 years, 2.70 ft³/s (0.076 m³/s), 1,960 acre-ft/yr (2.42 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 48 ft³/s (1.36 m³/s) May 6, 1979, gage height, 2.75 ft (0.838 m); maximum gage height recorded, 2.92 ft (0.890 m) Nov. 16, 1973 (backwater from ice); no flow at times some years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 48 ft³/s (1.36 m³/s) at 2200 May 6, gage height, 2.75 ft (0.838 m); minimum daily, 0.44 ft³/s (0.012 m³/s) Jan. 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.3	1.3	.62	.58	.50	.72	.84	16	11	5.8	.90	.96
2	1.3	1.3	.64	.58	.50	.72	.84	19	11	5.1	.90	.96
3	1.3	1.2	.64	.58	.50	.72	.84	19	12	4.8	1.0	.96
4	1.2	1.3	.64	.58	.50	.78	.88	20	13	4.2	1.0	1.0
5	1.2	1.3	.66	.58	.50	.80	.90	29	14	3.7	1.1	1.0
6	1.2	1.3	.66	.54	.50	.78	.94	42	17	4.0	1.0	.96
7	1.2	1.3	.64	.44	.50	.76	1.0	41	22	4.0	1.0	.96
8	1.3	1.3	.66	.45	.50	.74	4.5	31	20	2.8	1.0	.96
9	1.3	1.3	.66	.45	.52	.74	5.8	24	16	2.5	1.0	.96
10	1.3	1.3	.68	.46	.52	.74	5.4	7.9	15	2.2	.96	1.1
11	1.3	1.4	.60	.47	.54	.78	4.8	.96	14	2.5	1.0	1.0
12	1.3	1.5	.60	.47	.58	.80	4.2	1.1	15	1.8	1.0	1.0
13	1.3	1.5	.58	.48	.58	.80	4.0	1.6	17	1.7	1.1	.96
14	1.2	1.5	.58	.47	.58	.80	4.5	5.4	20	1.6	1.2	1.0
15	.84	1.3	.58	.47	.58	.80	6.5	5.4	19	1.6	1.2	.96
16	1.1	1.2	.58	.45	.60	.80	7.2	3.7	19	1.6	1.4	.90
17	1.0	1.0	.58	.47	.60	.80	6.8	5.4	17	1.7	1.1	.96
18	1.3	.76	.60	.47	.60	.80	6.1	7.6	16	1.6	1.1	.84
19	1.0	.66	.60	.47	.60	.80	6.5	9.8	14	1.6	1.1	.90
20	1.1	.60	.60	.47	.60	.80	8.6	10	12	1.5	1.2	.84
21	1.1	.56	.58	.47	.60	.80	9.8	10	10	1.6	1.1	.72
22	1.5	.60	.58	.47	.60	.82	10	11	9.8	1.7	1.0	.84
23	1.3	.50	.58	.47	.60	.82	9.8	12	9.8	1.5	1.0	.84
24	1.3	.52	.58	.48	.60	.82	8.6	12	9.8	1.6	.90	.90
25	1.5	.54	.58	.50	.66	.82	7.2	11	9.0	1.5	1.0	.84
26	1.2	.60	.62	.48	.68	.84	8.6	12	9.0	1.4	1.0	1.0
27	1.3	.70	.66	.48	.76	.84	11	13	7.9	1.4	.96	1.0
28	1.2	.66	.64	.50	.76	.84	13	15	7.2	1.3	.96	1.2
29	1.2	.66	.58	.50	---	.86	12	17	6.8	1.3	.90	1.2
30	1.3	.62	.58	.50	---	.84	12	16	6.5	1.1	.90	1.2
31	1.3	---	.58	.50	---	.84	---	13	---	1.0	.90	---
TOTAL	38.24	30.28	18.96	15.28	16.16	24.62	183.14	441.86	399.8	71.7	31.88	28.92
MEAN	1.23	1.01	.61	.49	.58	.79	6.10	14.3	13.3	2.31	1.03	.96
MAX	1.5	1.5	.68	.58	.76	.86	13	42	22	5.8	1.4	1.2
MIN	.84	.50	.58	.44	.50	.72	.84	.96	6.5	1.0	.90	.72
AC-FT	76	60	38	30	32	49	363	876	793	142	63	57

CAL YR 1978 TOTAL 1170.15 MEAN 3.21 MAX 24 MIN .40 AC-FT 2320
WTR YR 1979 TOTAL 1300.84 MEAN 3.56 MAX 42 MIN .44 AC-FT 2580

NOTE.--NO GAGE-HEIGHT RECORD NOV. 17 TO APR. 6.

PINEY RIVER BASIN

95

09058700 FREEMAN CREEK NEAR MINTURN, CO

LOCATION.--Lat 39°41'55", Long 106°26'41", Eagle County, Hydrologic Unit 14210001, on right bank 0.8 mi (1.3 km) upstream from mouth and 7.5 mi (12.1 km) north of Minturn.

DRAINAGE AREA.--2.94 mi² (7.61 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 9,335 ft (2,845 m), from topographic map.

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

AVERAGE DISCHARGE.--15 years, 1.23 ft³/s (0.0348 m³/s), 891 acre-ft/yr (1.10 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 35 ft³/s (0.99 m³/s) May 28, 1976, gage height, 2.60 ft (0.792 m); maximum gage height, 3.51 ft (1.070 m) May 18, 1973 (backwater from ice); no flow for many days most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 24 ft³/s (0.680 m³/s) at 1900 May 28, gage height, 2.36 ft (0.719 m), no peak above base of 25 ft³/s (0.71 m³/s); minimum daily, 0.02 ft³/s (0.001 m³/s) Jan. 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.17	.23	.11	.06	.04	.06	.08	1.4	10	3.1	.38	.17
2	.20	.22	.11	.06	.04	.06	.08	1.1	11	2.8	.34	.14
3	.19	.18	.11	.04	.04	.06	.08	1.0	13	2.5	.30	.13
4	.18	.18	.11	.04	.04	.07	.24	1.1	14	2.3	.27	.13
5	.18	.19	.11	.05	.04	.06	.33	1.2	15	2.1	.24	.11
6	.18	.17	.11	.04	.04	.06	.24	1.6	16	2.4	.22	.10
7	.17	.16	.10	.04	.04	.06	.24	1.9	19	2.2	.22	.09
8	.16	.18	.08	.02	.04	.06	.30	1.9	18	1.6	.22	.09
9	.19	.17	.07	.03	.04	.06	.30	1.8	16	1.4	.22	.05
10	.18	.16	.07	.03	.05	.06	.24	1.8	15	1.3	.23	.06
11	.17	.17	.07	.03	.05	.07	.24	1.8	14	1.1	.21	.08
12	.17	.16	.07	.03	.05	.07	.22	1.9	14	1.1	.21	.11
13	.18	.15	.07	.03	.05	.07	.22	1.9	16	.98	.28	.10
14	.18	.16	.07	.03	.05	.07	.25	2.1	17	.81	.37	.11
15	.15	.16	.07	.03	.05	.07	.30	2.5	16	.74	.38	.09
16	.14	.16	.07	.03	.05	.07	.54	3.1	15	.78	.57	.08
17	.15	.15	.06	.03	.05	.07	.80	3.7	13	.74	.41	.09
18	.22	.14	.06	.03	.05	.07	1.2	5.0	12	.76	.29	.09
19	.23	.14	.06	.03	.05	.07	1.2	7.7	11	.70	.29	.08
20	.22	.13	.06	.03	.05	.07	.98	10	9.2	.66	.31	.12
21	.23	.12	.06	.03	.05	.07	1.5	10	7.6	.63	.30	.15
22	.44	.12	.06	.03	.05	.07	1.2	11	6.7	.92	.25	.14
23	.33	.14	.06	.03	.05	.08	1.0	12	6.2	.65	.24	.12
24	.29	.08	.06	.03	.05	.08	1.3	14	6.0	.60	.21	.11
25	.34	.11	.06	.03	.05	.08	1.1	14	5.5	.60	.17	.09
26	.29	.14	.05	.03	.06	.08	1.0	15	5.2	.60	.17	.11
27	.28	.13	.05	.04	.07	.08	1.1	16	4.8	.58	.16	.15
28	.24	.12	.06	.04	.06	.08	1.3	19	4.2	.58	.15	.16
29	.25	.12	.06	.04	---	.08	1.1	18	3.7	.54	.14	.15
30	.26	.10	.06	.04	---	.08	1.3	14	3.4	.48	.16	.14
31	.25	---	.06	.04	---	.08	---	12	---	.42	.22	---
TOTAL	6.81	4.54	2.28	1.09	1.35	2.17	19.98	209.5	337.5	36.67	8.13	3.34
MEAN	.22	.15	.074	.035	.048	.070	.67	6.76	11.3	1.18	.26	.11
MAX	.44	.23	.11	.06	.07	.08	1.5	19	19	3.1	.57	.17
MIN	.14	.08	.05	.02	.04	.06	.08	1.0	3.4	.42	.14	.05
AC-FT	14	9.0	4.5	2.2	2.7	4.3	40	416	669	73	16	616

CAL YR 1978 TOTAL 458.46 MEAN 1.26 MAX 13 MIN .02 AC-FT 909
WTR YR 1979 TOTAL 633.36 MEAN 1.74 MAX 19 MIN .02 AC-FT 1260

NOTE.--NO GAGE-HEIGHT RECORD NOV. 17 TO APR. 2.

PINEY RIVER BASIN

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 (2.3 km) upstream from mouth and 10 mi (16 km) north of Minturn.

DRAINAGE AREA.--3.61 mi² (9.35 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 9,455 ft (2,882 m), from topographic map.

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

AVERAGE DISCHARGE.--15 years, 4.37 ft³/s (0.124 m³/s), 3,170 acre-ft/yr (3.91 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 74 ft³/s (2.10 m³/s) July 4, 1975, gage height, 2.13 ft (0.649 m); maximum gage height, 2.22 ft (0.677 m) May 12, 1970 (backwater from ice); minimum daily discharge, 0.32 ft³/s (0.009 m³/s) Jan. 7, 1979.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 40 ft³/s (1.1 m³/s) and maximum (?):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
June 7	0400	45 1.27	1.71 0.521	June 16	1830	47 1.33	1.73 0.527

Minimum daily discharge, 0.32 ft³/s (0.009 m³/s) Jan. 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.1	.68	.48	.41	.37	.50	.62	3.2	20	33	2.5	1.2
2	1.1	.68	.48	.38	.37	.54	.66	2.8	21	31	2.5	1.1
3	1.1	.68	.47	.39	.37	.58	.90	2.6	24	29	2.4	1.1
4	.98	.65	.47	.41	.37	.58	1.0	3.6	26	26	2.2	1.0
5	.92	.65	.47	.35	.37	.54	1.0	4.4	29	23	2.1	1.0
6	.98	.62	.47	.34	.37	.54	.90	5.0	33	21	2.0	.98
7	.92	.62	.48	.32	.37	.54	.94	5.0	39	20	2.0	.98
8	.92	.62	.50	.33	.37	.56	1.0	3.8	31	17	1.9	.98
9	.92	.62	.46	.33	.42	.56	.96	3.4	26	15	1.9	.98
10	.92	.59	.42	.33	.42	.58	.80	3.0	23	13	1.5	.98
11	.92	.54	.42	.34	.42	.58	.78	2.8	26	12	1.5	.98
12	.92	.58	.42	.34	.42	.58	.70	2.6	32	12	1.5	1.0
13	.86	.60	.42	.34	.42	.58	1.1	2.8	38	10	1.8	.98
14	.98	.64	.42	.34	.42	.58	1.4	4.4	40	9.5	2.1	.98
15	.98	.64	.42	.33	.42	.62	1.9	5.0	40	8.0	2.1	.98
16	.98	.64	.44	.33	.44	.60	2.2	5.7	40	7.7	2.6	.98
17	.86	.50	.43	.34	.46	.58	2.8	6.7	39	7.3	2.2	.92
18	.92	.48	.42	.34	.46	.58	2.8	9.0	36	6.7	2.4	.86
19	.92	.46	.42	.34	.46	.58	2.6	14	31	5.7	2.2	.86
20	.98	.44	.42	.34	.46	.58	3.2	16	28	5.4	2.1	.92
21	.98	.44	.42	.34	.46	.58	3.6	13	29	5.4	2.0	.86
22	1.1	.36	.42	.35	.46	.62	2.6	14	33	7.3	1.9	.86
23	1.0	.40	.42	.35	.50	.62	3.0	18	33	5.0	1.6	.80
24	1.0	.50	.41	.34	.50	.62	3.2	20	35	4.5	1.5	.80
25	1.1	.50	.40	.34	.50	.62	3.0	20	36	4.3	1.4	.86
26	.92	.48	.41	.35	.58	.62	2.8	24	37	3.6	1.3	.92
27	.92	.46	.42	.37	.54	.62	3.0	27	37	3.4	1.3	.98
28	.92	.46	.42	.37	.50	.60	3.2	29	37	3.2	1.3	.98
29	.92	.44	.42	.37	---	.60	2.8	31	36	3.2	1.3	.92
30	.86	.44	.42	.37	---	.60	3.0	29	36	3.2	1.3	.92
31	.74	---	.42	.37	---	.60	---	22	---	2.8	1.2	---
TOTAL	29.64	16.41	13.51	10.89	12.22	18.08	58.46	352.8	971	358.2	57.6	28.66
MEAN	.96	.55	.44	.35	.44	.58	1.95	11.4	32.4	11.6	1.86	.96
MAX	1.1	.68	.50	.41	.58	.62	3.6	31	40	33	2.6	1.2
MIN	.74	.36	.40	.32	.37	.50	.62	2.6	20	2.8	1.2	.80
AC-FT	59	33	27	22	24	36	116	700	1930	710	114	57

CAL YR 1978 TOTAL 1855.79 MEAN 5.08 MAX 48 MIN .34 AC-FT 3680
WTR YR 1979 TOTAL 1927.47 MEAN 5.28 MAX 40 MIN .32 AC-FT 3820

NOTE.--NO GAGE-HEIGHT RECORD NOV. 11 TO MAY 15.

PINEY RIVER BASIN

97

09059500 PINEY RIVER NEAR STATE BRIDGE, CD

LOCATION.--Lat 39°48'00", long 106°35'00", in sec.16, T.3 S., R.82 W., Eagle County, Hydrologic Unit 14010001, on left bank at downstream side of private bridge at Perry Olsen Ranch 1.2 mi (1.9 km) downstream from Rock Creek, and 6.0 mi (9.7 km) southeast of State Bridge.

DRAINAGE AREA.--86.2 mi² (223.3 km²).

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 (2,216.612 m), 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 (0.725 m) higher.

REMARKS.--Records good except for period of no gage-height record, which are poor. Diversions above station for irrigation of about 400 acres (1.62 km²) of hay meadows above and below station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--35 years, 74.2 ft³/s (2.101 m³/s) 53,760 acre-ft/yr (66.3 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,110 ft³/s (31.4 m³/s) June 8, 1952, gage height, 5.61 ft (1.710 m); minimum daily, 1.9 ft³/s (0.054 m³/s) Sept. 1, 18, 19, 1954.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 690 ft³/s (19.5 m³/s) at 0530 June 7, gage height, 4.7ⁿ ft (1.460 m) from peak stage indicator, only peak above base of 520 ft³/s (15 m³/s); minimum daily, 4.5 ft³/s (0.127 m³/s) Oct. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.4	7.8	11	11	11	9.8	13	85	345	387	55	21
2	6.4	8.0	11	11	10	9.8	13	86	346	361	51	19
3	4.5	8.2	11	11	10	9.8	14	77	398	325	46	19
4	5.8	8.4	11	11	10	9.8	14	75	459	298	45	18
5	6.0	8.3	11	11	10	9.6	14	96	487	271	44	17
6	6.0	8.2	11	11	10	9.6	15	118	537	260	42	17
7	6.0	8.2	11	10	10	9.6	17	117	620	235	41	16
8	6.0	8.2	11	9.6	10	9.6	19	90	535	231	40	16
9	5.8	8.4	11	10	10	9.6	21	77	462	219	39	15
10	5.8	8.7	11	10	10	9.6	20	71	397	199	37	15
11	5.8	9.4	11	11	10	9.6	21	64	417	187	36	15
12	5.8	11	11	11	10	9.6	18	62	473	183	35	15
13	5.6	11	11	11	10	9.6	18	66	542	181	36	14
14	5.6	11	11	11	10	9.6	19	96	609	172	37	14
15	5.6	11	11	11	10	9.6	26	153	587	157	40	13
16	5.6	10	11	11	10	9.6	32	208	589	146	43	13
17	5.6	10	11	11	10	9.6	39	247	538	133	40	13
18	5.4	10	11	11	10	9.6	48	306	519	124	38	12
19	5.4	9.8	12	11	10	9.6	50	354	483	111	38	11
20	6.1	9.8	11	11	10	9.6	47	383	392	105	36	12
21	7.5	9.6	11	11	10	9.8	47	368	382	100	36	12
22	10	9.2	11	11	10	9.8	57	371	440	118	35	12
23	9.4	9.0	11	10	10	10	64	405	481	106	32	13
24	9.8	9.2	11	10	10	10	70	448	489	98	30	12
25	10	9.8	11	11	10	11	70	463	469	92	29	11
26	8.9	10	10	11	10	11	64	490	466	87	27	10
27	8.4	10	9.4	11	10	11	68	532	466	78	26	11
28	8.0	11	9.2	11	9.8	12	76	528	449	76	24	11
29	7.8	11	10	11	---	12	70	537	433	73	23	11
30	7.7	11	11	11	---	12	74	507	416	67	21	11
31	7.6	---	11	11	---	12	---	422	---	60	21	---
TOTAL	212.3	285.2	336.6	334.6	280.8	313.4	1138	7902	14226	5240	1123	419
MEAN	6.85	9.51	10.9	10.8	10.0	10.1	37.9	255	474	169	36.2	14.0
MAX	10	11	12	11	11	12	76	537	620	387	55	21
MIN	4.5	7.8	9.2	9.6	9.8	9.6	13	62	345	60	21	10
AC-FT	421	566	668	664	557	622	2260	15670	28220	10390	2230	831

CAL YR 1978 TOTAL 34192.0 MEAN 93.7 MAX 738 MIN 4.3 AC-FT 67820
WTR YR 1979 TOTAL 31810.9 MEAN 87.2 MAX 620 MIN 4.5 AC-FT 63100

NOTE.--NO GAGE-HEIGHT RECORD OCT. 5 TO APR. 2.

ROCK CREEK BASIN

09060500 ROCK CREEK NEAR TOPONAS, CO

LOCATION.--Lat 40°02'28", long 106°39'19", in NW¼ sec.24, T.1 N., R.83 W., Routt County, Hydrologic Unit 14010001, on right bank 0.1 mi (0.2 km) upstream from Horse Creek, 0.8 mi (1.3 km) downstream from Shoe and Stacking Creek, and 8 mi (13 km) east of Toponas.

DRAINAGE AREA.--47.6 mi² (123.3 km²).

PERIOD OF RECORD.--October 1952 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 8,544 ft (2,604 m), from topographic map.

REMARKS.--Records poor. No regulation or diversion above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--27 years, 33.0 ft³/s (0.935 m³/s), 23,910 acre-ft/yr (29.5 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 494 ft³/s (14.0 m³/s) May 21, 1976, gage height, 4.77 ft (1.454 m), from rating curve extended above 300 ft³/s (8.5 m³/s); maximum gage height, 5.49 ft (1.673 m) Apr. 18, 1962 (backwater from ice); minimum daily discharge, 2.2 ft³/s (0.062 m³/s) Aug. 30, 31, Sept. 2, 1954.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 200 ft³/s (5.7 m³/s) and maximum (°):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
April 20	0200	490 13.9	4.79 1.460	June 6	2400	318 9.01	4.05 1.234
May 29	0200	394 11.2	4.39 1.338				

Minimum daily discharge, 4.7 ft³/s (0.13 m³/s) Sept. 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.5	8.6	7.6	7.6	7.6	7.6	7.6	146	250	45	13	6.6
2	5.5	8.2	7.6	7.6	7.6	7.6	7.6	146	236	42	13	6.5
3	5.5	8.1	7.6	7.6	7.6	7.6	7.6	144	236	42	12	6.4
4	5.5	7.9	7.6	7.6	7.6	7.6	7.6	140	238	42	12	6.3
5	5.5	7.9	7.6	7.6	7.6	7.6	7.6	132	234	42	12	6.2
6	5.5	6.7	7.6	7.6	7.6	7.6	7.6	129	260	40	12	6.1
7	5.7	7.4	7.6	7.6	7.6	7.6	7.6	134	276	38	12	5.8
8	5.8	8.2	7.6	7.6	7.6	7.6	7.6	120	272	33	12	5.7
9	5.8	8.0	7.6	7.6	7.6	7.6	7.6	114	222	30	12	5.6
10	5.8	7.4	7.6	7.6	7.6	7.6	7.6	110	190	27	12	5.6
11	5.8	7.2	7.6	7.6	7.6	7.6	7.6	101	160	23	11	5.5
12	5.8	7.7	7.6	7.6	7.6	7.6	7.6	96	150	21	11	5.5
13	5.8	7.5	7.6	7.6	7.6	7.6	7.6	105	160	21	11	5.4
14	5.6	7.6	7.6	7.6	7.6	7.6	7.6	118	170	21	10	5.4
15	5.9	7.6	7.6	7.6	7.6	7.6	10	103	150	21	10	5.3
16	6.0	7.6	7.6	7.6	7.6	7.6	20	154	140	21	10	5.3
17	6.1	7.6	7.6	7.6	7.6	7.6	50	188	130	22	13	5.2
18	6.9	7.6	7.6	7.6	7.6	7.6	129	216	120	25	11	5.2
19	6.9	7.6	7.6	7.6	7.6	7.6	308	252	110	28	13	5.1
20	6.7	7.6	7.6	7.6	7.6	7.6	474	274	100	19	16	5.0
21	7.2	7.6	7.6	7.6	7.6	7.6	428	274	90	18	19	5.0
22	11	7.6	7.6	7.6	7.6	7.6	360	308	80	19	12	4.9
23	9.5	7.6	7.6	7.6	7.6	7.6	280	324	70	18	9.8	4.9
24	9.4	7.6	7.6	7.6	7.6	7.6	276	326	70	17	8.8	4.8
25	9.3	7.6	7.6	7.6	7.6	7.6	248	322	65	16	7.8	4.8
26	8.0	7.6	7.6	7.6	7.6	7.6	192	326	60	15	7.2	4.7
27	8.4	7.6	7.6	7.6	7.6	7.6	178	335	55	15	7.1	4.9
28	9.1	7.6	7.6	7.6	7.6	7.6	167	353	50	15	7.0	4.9
29	9.0	7.6	7.6	7.6	---	7.6	159	364	47	14	6.9	4.8
30	9.2	7.6	7.6	7.6	---	7.6	151	326	45	13	6.3	4.8
31	8.4	---	7.6	7.6	---	7.6	---	280	---	13	6.7	---
TOTAL	216.1	230.0	235.6	235.6	212.8	235.6	3536.4	6460	4436	776	336.6	162.2
MEAN	6.97	7.67	7.60	7.60	7.60	7.60	118	208	148	25.0	10.9	5.41
MAX	11	8.6	7.6	7.6	7.6	7.6	474	364	276	45	19	6.6
MIN	5.5	6.7	7.6	7.6	7.6	7.6	7.6	96	45	13	6.3	4.7
AC-FT	429	456	467	467	422	467	7010	12810	8800	1540	658	322
CAL YR 1978 TOTAL	12183.8											
WTR YR 1979 TOTAL	17072.9											
MEAN 33.4												
MAX 295												
MIN 5.0												
AC-FT 24170												
MIN 4.7												

NOTE.--NO GAGE-HEIGHT RECORD NOV. 14 TO APR. 18, JUNE 10 TO JULY 16, JULY 22 TO AUG. 15.

EAGLE RIVER BASIN

99

09063000 EAGLE RIVER AT RED CLIFF, CO

LOCATION.--Lat 39°30'34", Long 106°22'00", in NW¼SW¼ sec.20, T.6 S., R.80 W., Eagle County, Hydrologic Unit 14010003, on left bank at Red Cliff, 0.3 mi (0.5 km) upstream from Turkey Creek.

DRAINAGE AREA.--70.0 mi² (181.3 km²).

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 8,648.48 ft (2,636.057 m), National Geodetic Vertical Datum of 1929 (levels by Water and Power Resources Service). Jan. 8, 1911, to Sept. 30, 1925, nonrecording gage at bridge 0.2 mi (0.3 km) downstream at different datum. May 25, 1944, to Oct. 12, 1952, water-stage recorder at site 200 ft (61 m) upstream at datum 3.54 ft (1.079 m) higher.

REMARKS.--Records good except those for winter period, which are poor. Transmountain diversions above station by Columbine, Ewing, and Wurtz ditches (see elsewhere in this report). Transbasin diversion above station from Robinson Reservoir, capacity, 2,520 acre-ft (3.11 hm³) to Tenmile Creek for mining development. Small diversions for irrigation of 400 acres (1.62 km²) above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--50 years (water years 1911-25, 1945-79), 48.8 ft³/s (1.382 m³/s), 35,360 acre-ft/yr (43.6 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 1,010 ft³/s (28.6 m³/s) June 5, 1912, gage height, 4.0 ft (1.22 m), site and datum then in use, from rating curve extended above 500 ft³/s (14 m³/s); maximum gage height recorded, 4.23 ft (1.289 m) Nov. 28, 1972 (backwater from ice); minimum daily discharge, 1.0 ft³/s (0.028 m³/s) Oct. 15, 1917.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 676 ft³/s (19.1 m³/s) at 1030 June 17, gage height, 4.44 ft (1.353 m), from peak stage indicator, only peak above base of 280 ft³/s (7.9 m³/s); minimum daily, 7.0 ft³/s (0.198 m³/s) Jan. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	12	10	8.0	9.6	9.4	7.4	29	236	162	26	14
2	13	12	8.6	7.0	9.6	9.2	7.4	30	217	145	25	14
3	13	12	8.6	8.4	9.6	9.0	7.4	27	230	131	24	14
4	13	11	9.4	9.0	9.2	8.2	7.8	27	270	115	23	13
5	13	11	9.0	9.0	8.2	8.6	8.2	33	306	108	21	13
6	13	11	8.8	9.0	9.2	9.6	9.3	41	354	101	21	12
7	13	11	9.2	9.0	9.6	11	10	44	455	97	21	12
8	13	11	9.6	8.0	9.4	9.6	12	40	450	90	20	12
9	13	11	8.4	8.6	9.4	9.4	12	34	362	89	20	12
10	13	11	8.6	9.0	9.4	9.0	11	32	336	81	20	12
11	13	11	9.0	10	9.6	10	10	30	372	74	20	11
12	13	11	9.4	11	9.8	11	9.7	29	415	69	19	12
13	12	13	9.4	9.2	11	12	10	31	430	65	19	11
14	12	13	9.4	9.6	12	12	9.6	41	470	62	22	11
15	12	12	9.4	10	11	10	12	56	480	58	24	12
16	12	11	9.4	12	11	11	16	62	500	55	21	12
17	12	11	9.4	10	10	10	19	72	505	52	21	12
18	13	11	10	10	9.8	9.0	23	95	455	49	23	11
19	13	11	11	10	9.4	9.0	25	126	415	47	25	11
20	13	12	11	10	9.4	9.0	24	161	336	45	21	12
21	13	11	10	9.8	9.4	8.8	25	184	291	44	20	13
22	14	11	10	9.6	9.4	8.8	25	183	269	44	19	12
23	13	11	10	9.0	9.4	8.8	28	213	261	40	18	12
24	14	11	9.8	11	9.4	8.8	30	266	255	38	18	12
25	14	12	9.6	12	9.4	9.4	31	266	251	36	17	11
26	13	10	8.6	11	9.6	10	26	275	232	34	16	11
27	13	9.8	8.0	10	10	10	26	290	207	33	16	13
28	12	9.4	9.0	8.8	9.6	9.8	29	327	184	31	15	13
29	12	10	9.0	9.8	---	8.8	26	362	171	30	15	12
30	12	10	9.0	9.0	---	8.0	26	366	168	29	15	12
31	12	---	9.0	8.2	---	7.6	---	295	---	27	15	---
TOTAL	397	334.2	289.6	295.0	272.4	294.8	522.8	4067	9883	2081	620	364
MEAN	12.8	11.1	9.34	9.52	9.73	9.51	17.4	131	329	67.1	20.0	12.1
MAX	14	13	11	12	12	12	31	366	505	162	26	14
MIN	12	9.4	8.0	7.0	8.2	7.6	7.4	27	168	27	15	11
AC-FT	787	663	574	585	540	585	1040	8070	19600	4130	1230	722
CAL YR 1978	TOTAL	17347.1	MEAN	47.5	MAX	386	MIN	7.2	AC-FT	34410		
WTR YR 1979	TOTAL	19420.8	MEAN	53.2	MAX	505	MIN	7.0	AC-FT	38520		

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 (0.6 km) upstream from mouth and 2.5 mi (4.0 km) east of Red Cliff.

DRAINAGE AREA.--8.78 mi² (22.74 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 9,158 ft (2,791.4 m), from topographic map.

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

AVERAGE DISCHARGE.--15 years, 8.21 ft³/s (0.233 m³/s), 5,950 acre-ft/yr (7.34 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 140 ft³/s (4.0 m³/s) June 18, 1965, gage height, 3.23 ft (0.985 m); minimum daily, 0.30 ft³/s (0.008 m³/s) Feb. 21, 1967.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 104 ft³/s (2.95 m³/s) at 2000 June 16, gage height, 3.19 ft (0.972 m) only peak above base of 70 ft³/s (2.0 m³/s); minimum daily, 0.92 ft³/s (0.026 m³/s) Jan. 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.0	2.5	1.3	1.0	.98	.96	1.1	2.2	16	71	9.5	3.3
2	3.0	2.4	1.3	.96	.98	.96	1.1	2.1	16	67	8.7	3.3
3	3.0	2.3	1.3	1.0	.98	.96	1.1	2.1	17	66	8.4	3.2
4	3.0	2.1	1.3	1.0	.98	.96	1.2	2.2	19	64	7.9	3.1
5	3.0	2.1	1.3	1.0	.98	.96	1.3	2.5	23	61	7.9	3.3
6	3.0	2.1	1.3	1.0	.98	.96	1.2	2.8	28	56	7.3	3.1
7	3.0	2.1	1.3	1.0	.98	.96	1.1	2.9	48	50	7.1	3.1
8	3.0	2.0	1.3	.92	.98	.96	1.1	2.7	58	44	6.8	3.1
9	3.0	2.0	1.2	.98	.98	.96	1.1	2.8	39	40	6.5	3.0
10	3.0	2.0	1.2	1.0	.98	.96	1.1	2.7	39	37	6.1	3.0
11	2.9	2.0	1.2	1.0	.98	.96	1.1	2.4	37	32	5.8	2.9
12	2.9	1.9	1.1	1.0	.98	.96	1.1	2.4	42	32	5.5	2.9
13	2.9	1.9	1.1	1.0	.98	.98	1.2	2.6	44	30	5.5	2.9
14	2.9	1.8	1.1	1.0	.98	1.0	1.5	3.3	48	29	6.0	2.9
15	2.8	1.7	1.1	1.0	.98	1.0	1.7	4.4	56	27	5.6	2.9
16	2.7	1.7	1.1	1.0	.98	1.0	2.0	5.6	58	25	5.4	2.8
17	2.7	1.7	1.1	1.0	.98	1.0	2.2	7.3	82	24	5.5	2.8
18	2.8	1.6	1.1	1.0	.98	1.0	2.2	9.6	78	22	5.2	2.8
19	2.8	1.5	1.1	1.0	.98	1.0	2.2	12	61	21	4.8	2.8
20	2.8	1.5	1.1	1.0	.96	1.0	2.1	15	64	20	4.4	2.8
21	2.8	1.5	1.1	1.0	.96	1.0	2.1	18	61	19	4.2	2.8
22	2.9	1.5	1.1	1.0	.96	1.0	2.1	16	60	17	4.0	2.8
23	2.8	1.5	1.1	1.0	.96	1.0	2.0	15	66	15	3.9	2.7
24	2.8	1.5	1.1	1.0	.96	1.1	2.2	17	73	15	3.8	2.7
25	2.8	1.6	1.1	.98	.96	1.1	2.2	17	83	14	3.7	2.7
26	5.7	1.5	1.1	.98	.96	1.1	2.1	18	88	13	3.7	2.7
27	2.6	1.4	1.1	.98	.96	1.1	2.1	21	81	13	3.5	2.8
28	2.5	1.3	1.1	.98	.96	1.1	2.2	23	84	13	3.5	2.7
29	2.5	1.2	1.0	.98	---	1.1	2.2	23	81	11	3.4	2.6
30	2.5	1.2	1.0	.98	---	1.1	2.2	22	77	11	3.5	2.6
31	2.5	---	1.0	.98	---	1.1	---	18	---	10	3.4	---
TOTAL	90.6	53.1	35.7	30.72	27.26	31.30	50.1	297.6	1627	969	170.5	87.1
MEAN	2.92	1.77	1.15	.99	.97	1.01	1.67	9.60	54.2	31.3	5.50	2.90
MAX	5.7	2.5	1.3	1.0	.98	1.1	2.2	23	88	71	9.5	3.3
MIN	2.5	1.2	1.0	.92	.96	.96	1.1	2.1	16	10	3.4	2.6
AC-FT	180	105	71	61	54	62	99	590	3230	1920	338	173

CAL YR. 1978 TOTAL 3281.50 MEAN 8.99 MAX 130 MIN 1.0 AC-FT 6510
WTR YR 1979 TOTAL 3469.98 MEAN 9.51 MAX 88 MIN .92 AC-FT 6880

NOTE.--NO GAGE-HEIGHT RECORD NOV. 3 TO APR. 17.

EAGLE RIVER BASIN

101

09063400 TURKEY CREEK NEAR RED CLIFF, CO

LOCATION.--Lat 39°31'22", long 106°20'08", in NW¼SW¼ sec.16, T.6 S., R.80 W., Eagle County, Hydrologic Unit 14010003, on right bank 400 ft (120 m) downstream from Lime Creek, 1.9 mi (3.1 km) northeast of Red Cliff, and 2.0 mi (3.2 km) upstream from mouth.

DRAINAGE AREA.--23.9 mi² (61.9 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 8,885 ft (2,708 m), from topographic map (revised).

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

AVERAGE DISCHARGE.--16 years, 21.8 ft³/s (0.617 m³/s), 15,790 acre-ft/yr (19.5 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 515 ft³/s (14.6 m³/s) June 17, 1965, gage height, 3.03 ft (0.924 m), from rating curve extended above 230 ft³/s (6.5 m³/s); minimum not determined.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 160 ft³/s (4.5 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
June 16	2230	*340 9.63	2.54 0.774	June 24	2000	285 8.07	2.43 0.741

Minimum daily discharge, 2.4 ft³/s (0.068 m³/s) Jan. 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.2	5.2	3.4	2.9	2.6	2.5	2.9	8.2	92	146	17	7.8
2	6.1	5.1	3.4	2.6	2.6	2.5	2.9	8.3	77	106	16	7.7
3	6.1	4.9	3.4	2.8	2.6	2.5	2.9	8.0	79	107	15	7.6
4	6.1	5.0	3.4	2.9	2.6	2.5	3.3	7.8	92	107	15	7.4
5	6.1	4.9	3.3	2.9	2.6	2.5	3.8	9.0	111	102	14	7.2
6	6.1	4.8	3.3	2.9	2.6	2.5	3.6	11	121	89	14	7.0
7	6.1	4.7	3.3	2.6	2.6	2.5	3.5	12	140	83	14	7.0
8	6.0	4.4	3.3	2.4	2.6	2.5	3.5	11	141	83	14	7.0
9	5.9	4.3	3.2	2.7	2.6	2.5	3.4	9.9	124	86	13	6.9
10	5.8	4.3	3.2	2.8	2.6	2.5	3.3	9.6	119	93	13	6.9
11	5.8	4.2	3.2	2.8	2.6	2.5	3.3	8.9	118	87	13	6.7
12	5.8	4.2	3.2	2.8	2.6	2.5	3.2	8.7	125	77	12	6.7
13	5.8	4.0	3.2	2.8	2.6	2.5	3.2	9.1	142	65	12	6.7
14	5.7	3.9	3.2	2.8	2.6	2.5	5.0	12	195	57	13	6.6
15	5.7	3.9	3.2	2.8	2.6	2.6	6.0	17	242	53	12	6.5
16	5.6	3.9	3.1	2.8	2.6	2.6	6.8	21	273	50	12	6.4
17	5.6	3.8	3.1	2.8	2.6	2.6	7.5	27	249	46	12	6.3
18	6.0	3.8	3.1	2.8	2.6	2.7	7.8	35	203	43	12	6.2
19	5.8	3.7	3.1	2.8	2.6	2.7	7.9	42	156	41	11	6.2
20	5.8	3.7	3.1	2.8	2.6	2.7	7.6	51	101	40	11	6.3
21	5.8	3.7	3.1	2.8	2.5	2.7	7.1	56	98	38	10	6.2
22	6.0	3.6	3.1	2.8	2.5	2.8	7.2	58	112	34	9.6	6.4
23	5.7	3.6	3.1	2.8	2.5	2.8	7.5	65	130	29	9.2	6.2
24	5.7	3.6	3.1	2.8	2.5	2.8	8.3	69	178	27	8.9	6.2
25	5.8	3.5	3.1	2.7	2.5	2.9	8.2	75	208	25	8.9	6.3
26	5.7	3.5	3.0	2.7	2.5	2.9	7.7	83	210	24	8.7	6.5
27	6.0	3.5	3.0	2.7	2.5	2.9	7.8	99	197	23	8.3	6.4
28	5.5	3.5	3.0	2.7	2.5	2.9	8.5	111	186	22	8.1	6.0
29	5.4	3.5	3.0	2.7	---	2.9	8.2	119	191	20	8.0	5.9
30	5.2	3.4	2.9	2.7	---	2.9	7.8	133	192	19	7.9	6.0
31	5.2	---	2.9	2.7	---	2.9	---	119	---	18	7.3	---
TOTAL	180.1	122.1	98.0	85.6	72.0	82.3	169.7	1313.5	4602	1840	359.9	199.2
MEAN	5.81	4.07	3.16	2.76	2.57	2.65	5.66	42.4	153	59.4	11.6	6.64
MAX	6.2	5.2	3.4	2.9	2.6	2.9	8.5	133	273	146	17	7.8
MIN	5.2	3.4	2.9	2.4	2.5	2.5	2.9	7.8	77	18	7.3	5.9
AC-FT	357	242	194	170	143	163	337	2610	9130	3650	714	395

CAL YR 1978 TOTAL 9817.0 MEAN 26.9 MAX 257 MIN 1.7 AC-FT 19470
WTR YR 1979 TOTAL 9124.4 MEAN 25.0 MAX 273 MIN 2.4 AC-FT 18100

NOTE.--NO GAGE-HEIGHT RECORD NOV. 15 TO APR. 17.

EAGLE RIVER BASIN

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 (15 m) downstream from road culvert, 0.6 mi (1.0 km) upstream from Fancy Creek, 2.2 mi (3.5 km) southwest of Gold Park, and 10 mi (16 km) southwest of Red Cliff.

DRAINAGE AREA.--6.42 mi² (16.63 km²).

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

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 9,980 ft (3,042 m), from topographic map.

REMARKS.--Records fair except those for periods of no gage-height record or ice effect, which are poor.

Transmountain diversion above station to Arkansas River basin through Homestake 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, 6.59 ft³/s (0.187 m³/s) 4,770 acre-ft/yr (5.88 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 300 ft³/s (8.50 m³/s) July 4, 1975, gage height, 3.19 ft (0.972 m), from rating curve extended above 35 ft³/s (1.0 m³/s); minimum daily, 0.24 ft³/s (0.007 m³/s) Feb. 12, 13, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 82 ft³/s (2.32 m³/s) sometime during period June 12-26, gage height, 2.85 ft (0.869 m), from crest-stage gage; minimum daily, 0.31 ft³/s (0.009 m³/s) Mar. 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.4	.90	.66	.40	.48	.46	.32	2.2	11	34	16	4.3
2	1.2	.88	.66	.47	.48	.43	.35	2.1	9.0	28	15	3.9
3	1.2	.88	.66	.49	.48	.48	.37	2.0	10	20	15	3.9
4	1.1	.86	.64	.50	.49	.50	.40	1.9	11	15	15	3.8
5	1.1	.82	.64	.52	.49	.47	.42	2.5	13	13	15	3.5
6	1.1	.80	.62	.52	.49	.42	.41	3.0	25	9.3	15	3.3
7	1.0	.80	.62	.52	.48	.38	.39	3.0	50	12	15	3.3
8	1.0	.80	.60	.52	.48	.43	.37	2.8	25	10	15	3.1
9	1.0	.78	.60	.52	.47	.46	.44	2.4	18	5.7	14	3.2
10	1.0	.78	.60	.52	.47	.48	.50	2.0	10	5.2	12	3.3
11	.98	.78	.58	.52	.47	.43	.60	1.5	11	4.8	11	3.1
12	.96	.78	.58	.52	.47	.37	.80	1.5	13	5.0	11	2.6
13	.96	.76	.58	.52	.47	.33	1.1	1.6	30	5.3	12	2.2
14	.96	.76	.58	.52	.46	.32	1.7	1.9	55	5.4	13	2.0
15	.94	.76	.58	.52	.46	.32	2.5	2.2	50	5.6	12	1.8
16	.94	.76	.58	.52	.45	.32	2.0	2.7	40	5.4	11	1.7
17	.96	.74	.58	.52	.45	.32	1.7	3.3	30	5.3	11	1.7
18	1.0	.74	.58	.52	.46	.32	1.7	5.6	16	5.3	12	1.6
19	1.2	.74	.58	.52	.46	.32	2.1	8.1	10	5.5	9.9	1.7
20	1.2	.74	.58	.52	.45	.32	2.3	12	7.5	5.7	8.9	1.8
21	1.1	.72	.58	.52	.45	.33	2.1	14	12	5.7	7.9	1.6
22	1.2	.72	.58	.52	.45	.33	2.1	13	18	5.7	7.2	1.5
23	1.3	.72	.58	.54	.46	.33	2.2	15	35	11	6.3	1.4
24	1.4	.72	.58	.56	.46	.32	2.3	16	30	16	6.3	1.4
25	1.4	.70	.58	.54	.47	.32	2.4	15	20	15	5.8	1.5
26	1.2	.70	.58	.52	.49	.32	2.1	30	20	13	5.5	2.2
27	1.0	.70	.58	.52	.52	.32	2.2	65	34	12	5.3	1.9
28	.94	.70	.58	.52	.49	.32	2.2	47	32	12	5.4	1.6
29	.90	.68	.58	.50	---	.32	2.2	30	30	12	5.2	1.5
30	.90	.68	.60	.49	---	.32	2.2	18	28	13	4.9	1.4
31	.90	---	.60	.49	---	.31	---	15	---	17	4.8	---
TOTAL	33.44	22.90	18.52	15.90	13.20	11.42	42.47	342.3	703.5	337.9	323.4	71.8
MEAN	1.08	.76	.60	.51	.47	.37	1.42	11.0	23.5	10.9	10.4	2.39
MAX	1.4	.90	.66	.56	.52	.50	2.5	65	55	34	16	4.3
MIN	.90	.68	.58	.40	.45	.31	.32	1.5	7.5	4.8	4.8	1.4
AC-FT	66	45	37	32	26	23	84	679	1400	670	641	142

CAL YR 1978 TOTAL 2677.64 MEAN 7.34 MAX 85 MIN .54 AC-FT 5310
WTR YR 1979 TOTAL 1936.75 MEAN 5.31 MAX 65 MIN .31 AC-FT 3840

NOTE.--NO GAGE-HEIGHT RECORD OCT. 3 TO MAR. 13, MAR. 17 TO APR. 17, MAY 26 TO JUNE 18.

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LOCATION.--Lat 39°24'20", long 106°25'58", Eagle County, Hydrologic Unit 14010003, on left bank at Gold Park, 400 ft (120 m) downstream from ford, 0.5 mi (0.8 km) downstream from French Creek, and 8 mi (13 km) southwest of Red Cliff.

PERIOD OF RECORD.--October 1947 to September 1954, August 1972 to current year.

GAGE.—Water-stage recorder. Altitude of gage is 9,200 ft (2,804 m), from topographic map. Prior to Aug. 1, 1972, water-stage recorder at site 1,500 ft (460 m) upstream at datum 9,245 ft (2,817.9 m), National Geodetic Vertical Datum of 1929 (river-profile survey).

REMARKS.--Records good except those for periods of ice effect, which are poor. Flow regulated by Homestake Lake, capacity, 44,360 acre-ft (54.7 hm³) since June 7, 1966. Transmountain diversion above station to Arkansas River basin 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.--7 years (water years 1948-54), 63.4 ft³/s (1.795 m³/s), 45,930 acre-ft/yr (56.6 hm³/yr), prior to diversion through Homestake tunnel; 7 years (water years 1973-79), 22.5 ft³/s (0.637 m³/s), 16,300 acre-ft/yr (20.1 hm³/yr), subsequent to diversion through Homestake tunnel.

EXTREMES FOR PERIOD OF RECORD--Maximum discharge, 1,080 ft³/s (30.6 m³/s) June 13, 1953, gage height, 6.84 ft (2.085 m), site and datum then in use, from rating curve extended above 700 ft³/s (20 m³/s); minimum not determined.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 513 ft³/s (14.5 m³/s) at 2230 June 13, gage height, 5.60 ft (1.707 m), from rating curve extended above 110 ft³/s (3.1 m³/s); minimum daily, 5.4 ft³/s (0.15 m³/s) Jan. 9.

OAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	9.4	7.2	6.2	6.8	8.4	6.1	18	44	103	31	17
2	9.7	9.2	7.2	6.2	6.8	7.7	6.0	18	40	74	29	16
3	9.5	9.2	7.0	6.2	6.8	7.4	6.0	15	50	50	26	15
4	9.5	9.3	7.0	6.2	6.8	8.4	6.0	14	69	44	27	15
5	9.3	9.0	7.0	6.4	6.8	8.8	5.7	19	108	38	26	14
6	9.2	8.9	7.0	6.2	6.8	7.9	5.8	26	185	31	27	14
7	9.2	9.0	7.0	6.0	6.8	6.7	5.8	25	203	30	27	14
8	9.2	9.0	7.0	5.8	6.8	6.3	6.1	16	82	30	27	13
9	9.0	8.8	6.8	5.4	6.8	8.2	6.2	14	57	28	27	13
10	9.0	8.6	6.8	5.6	6.8	8.4	6.3	15	50	26	25	13
11	8.9	8.2	6.8	6.0	6.8	9.0	6.4	11	55	26	23	14
12	8.9	8.1	6.8	6.8	6.8	8.8	6.5	11	100	29	22	14
13	8.8	8.0	6.8	6.4	6.8	7.1	7.1	12	205	30	23	13
14	8.6	7.8	6.8	6.2	6.8	6.7	8.0	18	238	28	39	13
15	8.6	7.8	6.8	6.2	6.8	6.1	9.0	27	215	25	44	12
16	8.6	7.8	6.6	6.3	6.8	5.9	10	40	193	30	42	12
17	8.6	7.6	6.6	6.4	6.8	5.8	12	51	130	38	39	12
18	9.2	7.6	6.6	6.4	7.0	5.9	14	63	81	35	43	11
19	9.3	7.6	6.6	6.4	7.0	5.8	16	90	44	30	43	11
20	9.2	7.6	6.4	6.4	7.0	6.0	20	125	34	29	35	12
21	9.2	7.6	6.4	6.2	7.0	5.9	19	124	38	29	32	13
22	11	7.6	6.4	6.2	7.0	6.1	18	98	71	37	27	12
23	11	7.6	6.4	6.6	7.0	6.1	19	114	110	31	25	11
24	10	7.4	6.4	6.6	7.0	6.2	20	137	105	30	23	11
25	11	7.4	6.2	6.6	7.0	6.0	21	119	91	29	21	11
26	17	7.4	6.2	6.6	7.4	5.9	18	175	91	27	20	11
27	17	7.4	6.2	6.6	8.0	5.9	18	287	106	24	19	13
28	13	7.2	6.2	6.8	7.8	5.8	19	269	105	24	18	13
29	12	7.2	6.2	6.8	---	5.8	19	211	91	23	18	12
30	10	7.2	6.2	6.8	---	5.8	17	124	93	24	18	11
31	9.5	---	6.2	6.8	---	5.7	---	61	---	33	17	---
TOTAL	313.0	242.5	205.8	196.3	194.8	210.5	357.0	2347	3084	1065	863	386
MEAN	10.1	8.08	6.64	6.33	6.96	6.79	11.9	75.7	103	34.4	27.8	12.9
MAX	17	9.4	7.2	6.8	8.0	9.0	21	287	238	103	44	17
MIN	8.6	7.2	6.2	5.4	6.8	5.7	5.7	11	34	23	17	11
AC-FT	621	481	408	389	386	418	708	4660	6120	2110	1710	766
CAL YR 1978	TOTAL	10898.2	MEAN	29.9	MAX	347	MIN	3.9	AC-FT	21620		
WTR YR 1979	TOTAL	9464.9	MEAN	25.9	MAX	287	MIN	5.4	AC-FT	18770		

EAGLE RIVER BASIN

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 (3.9 km) south of Red Cliff, and 3.0 mi (4.8 km) upstream from mouth.

DRAINAGE AREA.--58.3 mi² (151.0 km²).

PERIOD OF RECORD.--October 1910 to September 1918, May 1944 to current year. Published as "at Red Cliff" October 1910 to September 1916.

REVISED RECORDS.--WSP 2124: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 8,783 ft (2,677.1 m) National Geodetic Vertical Datum of 1929 (river-profile survey). See WSP 1713 or 1733 for history of changes prior to May 8, 1961.

REMARKS.--Records good except those for winter period, which are poor. Flow regulated by Homestake Lake (capacity, 44,360 acre-ft or 54.7 hm³) since June 7, 1966. Transmountain diversions above station through Homestake tunnel (see elsewhere in this report) since June 6, 1967. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--30 years (water years 1911-18, 1945-66), 86.6 ft³/s (2,453 m³/s), 62,740 acre-ft/yr (77.4 hm³/yr), prior to diversion through Homestake tunnel; 13 years (water years 1967-79), 37.5 ft³/s (1,062 m³/s), 27,170 acre-ft/yr (33.5 hm³/yr), subsequent to diversion through Homestake tunnel.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 1,300 ft³/s (36.8 m³/s) June 24, 1918, gage height, 6.2 ft (1.8 m), site and datum then in use; minimum observed, 0.60 ft³/s (0.017 m³/s) Jan. 25, 1915 (discharge measurement).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 425 ft³/s (12.0 m³/s) at 0300 June 14, gage height, 3.17 ft (0.966 m); minimum daily, 7.0 ft³/s (0.20 m³/s) Jan. 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	9.4	8.0	7.2	8.3	9.4	9.0	56	125	154	36	17
2	12	9.1	8.0	7.4	8.3	9.4	9.6	57	115	129	34	17
3	12	8.2	8.2	8.0	8.3	10	9.8	51	126	106	31	17
4	12	8.1	8.2	8.2	8.3	9.0	9.2	52	146	93	31	15
5	11	8.0	8.2	8.4	8.4	8.4	10	68	183	84	29	15
6	11	7.9	8.2	8.2	8.4	9.8	12	85	256	74	29	14
7	10	8.0	8.0	7.6	8.4	10	14	84	318	67	29	14
8	10	7.9	7.2	7.0	8.4	9.8	16	61	218	65	29	13
9	10	7.8	8.0	7.2	8.4	9.2	19	51	177	57	31	13
10	9.7	7.7	9.0	7.6	8.4	9.6	20	50	156	53	29	13
11	9.4	7.6	9.0	8.4	8.4	11	19	41	172	50	27	13
12	9.4	7.2	9.0	9.6	9.0	10	18	40	202	51	25	13
13	9.4	7.8	8.4	8.8	9.2	9.8	18	50	275	51	25	13
14	9.1	8.1	8.4	8.2	11	9.4	21	73	325	47	40	13
15	8.2	8.2	8.4	7.8	9.6	9.0	25	97	305	44	47	13
16	8.2	8.2	8.4	8.0	9.2	9.0	32	120	290	45	43	12
17	8.2	8.0	8.2	8.2	8.8	9.0	37	142	236	53	41	13
18	8.8	8.0	8.2	8.2	8.8	9.0	46	164	186	51	45	12
19	9.4	8.0	8.2	8.2	8.6	9.0	56	205	146	45	45	12
20	9.4	8.0	8.2	8.2	8.4	9.0	51	243	119	44	38	13
21	9.4	8.0	8.0	8.2	8.4	9.0	50	241	114	44	37	16
22	12	7.8	8.0	8.2	8.4	9.0	50	199	134	49	32	14
23	11	7.4	8.0	8.2	8.4	9.0	52	215	172	44	29	13
24	10	7.2	8.0	8.2	8.4	9.0	57	237	175	42	27	12
25	12	8.0	8.0	8.2	8.4	9.0	58	223	156	40	25	12
26	14	9.0	7.4	8.2	8.6	9.0	51	226	159	37	24	13
27	16	9.0	7.4	8.3	9.6	9.0	54	324	161	34	22	16
28	15	8.6	8.0	8.3	9.4	8.8	56	346	166	33	20	16
29	13	8.2	8.0	8.3	---	8.8	53	319	150	32	19	15
30	11	7.8	8.0	8.3	---	8.8	51	249	147	31	19	14
31	9.9	---	8.0	8.3	---	8.8	---	164	---	38	19	---
TOTAL	333.5	242.2	252.2	251.1	244.2	287.0	983.6	4533	5610	1787	957	416
MEAN	10.8	8.07	8.14	8.10	8.72	9.26	32.8	146	187	57.6	30.9	13.9
MAX	16	9.4	9.0	9.6	11	11	58	346	325	154	47	17
MIN	8.2	7.2	7.2	7.0	8.3	8.4	9.0	40	114	31	19	12
AC-FT	661	480	500	498	484	569	1950	8990	11130	3540	1900	825

CAL YR 1978 TOTAL 17207.7 MEAN 47.1 MAX 369 MIN 6.0 AC-FT 34130
WTR YR 1979 TOTAL 15896.8 MEAN 43.6 MAX 346 MIN 7.0 AC-FT 31530

NOTE.--NO GAGE-HEIGHT RECORD NOV. 14 TO APR. 16.

EAGLE RIVER BASIN

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09065100 CROSS CREEK NEAR MINTURN, CO

LOCATION.--Lat 39°34'05", long 106°24'45", in SW¼ sec.36, T.5 S., R.81 W., Eagle County, Hydrologic Unit 14010003, on right bank 0.4 mi (0.6 km) upstream from mouth and 1.5 mi (2.4 km) southeast of Minturn.

DRAINAGE AREA.--33.5 mi² (86.8 km²).

PERIOD OF RECORD.--May 1956 to September 1963, October 1967 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 7,990 ft (2,435 m), from topographic map. Prior to July 18, 1956, nonrecording gage at site 0.3 mi (0.5 km) downstream at different datum.

REMARKS.--Records good except those for winter period, which are poor. Bolts ditch exports water from above station to tailings ponds and recreation lake along Eagle River. Diversion above station for water supply of school 0.2 mi (0.3 km) above station 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.--19 years, 50.6 ft³/s (1,433 m³/s), 36,660 acre-ft/yr (45.2 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 754 ft³/s (21.4 m³/s) June 30, 1957, gage height, 5.45 ft (1.661 m); maximum gage height, 5.54 ft (1.689 m) July 18, 1957; minimum daily discharge, 0.1 ft³/s (0.003 m³/s) Dec. 27-31, 1962, Jan. 6-8, 11-15, 1963.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 400 ft³/s (11 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
May 29	0400	486 13.8	4.76 1.451	June 15	0500	542 15.3	4.94 1.506
June 7	0700	550 15.6	4.94 1.506				

Minimum daily discharge, 1.0 ft³/s (0.028 m³/s) Feb. 2-5, 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.2	5.5	3.0	1.4	1.1	1.3	2.5	29	128	401	74	21
2	5.7	5.3	3.0	1.3	1.0	1.4	2.4	35	120	390	71	19
3	5.5	5.1	2.9	1.1	1.0	1.3	2.2	30	152	333	64	18
4	5.3	4.8	2.8	1.2	1.0	1.2	2.0	27	201	298	64	17
5	5.2	4.8	2.7	1.4	1.0	1.1	1.7	38	315	271	60	16
6	4.9	4.7	2.6	1.3	1.1	1.1	3.4	50	410	249	60	15
7	4.6	4.6	2.6	1.2	1.3	1.3	5.3	53	488	223	62	14
8	4.4	4.5	2.5	1.1	1.2	1.6	3.7	43	334	244	60	13
9	4.7	4.4	2.4	1.2	1.3	1.7	11	35	232	226	68	13
10	5.2	4.0	2.6	1.3	1.3	1.5	6.1	36	160	218	59	12
11	5.2	3.8	2.7	1.3	1.3	1.6	8.1	27	182	221	53	12
12	5.1	3.8	2.8	1.3	1.3	1.8	7.7	26	247	221	49	12
13	4.8	3.6	2.8	1.1	1.2	1.9	6.8	31	358	234	50	11
14	4.5	3.6	2.8	1.1	1.2	1.9	6.3	46	446	218	56	11
15	4.5	3.6	2.8	1.3	1.1	1.8	9.9	63	466	208	63	9.5
16	4.4	3.6	2.9	1.3	1.1	1.9	15	80	453	188	63	8.5
17	4.3	3.5	2.9	1.3	1.0	2.0	19	94	396	175	62	7.7
18	5.3	3.5	3.0	1.3	1.1	2.1	28	110	339	153	73	7.3
19	6.3	3.5	4.1	1.3	1.4	2.1	41	131	237	125	80	6.7
20	5.6	3.4	4.0	1.2	1.4	1.6	43	157	153	124	66	6.8
21	5.7	3.4	3.6	1.1	1.3	1.7	39	175	178	133	62	6.9
22	8.7	3.4	3.4	1.2	1.2	1.8	35	177	271	165	51	6.9
23	8.3	3.4	3.3	1.1	1.2	1.8	35	222	357	144	43	6.3
24	7.0	3.3	3.1	1.1	1.1	2.1	38	272	356	128	38	5.9
25	8.5	3.3	2.9	1.3	1.2	2.1	39	279	342	125	34	5.9
26	7.7	3.2	2.5	1.2	1.2	2.1	32	271	370	117	31	6.1
27	8.2	3.2	2.1	1.1	1.3	1.9	31	382	351	105	28	7.6
28	7.9	3.2	1.8	1.1	1.3	2.2	35	434	368	104	26	7.8
29	7.5	3.1	1.8	1.2	---	2.6	29	419	358	101	24	7.1
30	6.8	3.1	1.6	1.1	---	2.6	27	313	368	91	24	6.2
31	5.8	---	1.5	1.1	---	2.7	---	184	---	81	25	---
TOTAL	183.8	116.2	85.5	37.6	33.2	55.8	565.1	4269	9136	6014	1643	317.2
MEAN	5.93	3.87	2.76	1.21	1.19	1.80	18.8	138	305	194	53.0	10.6
MAX	8.7	5.5	4.1	1.4	1.4	2.7	43	434	488	401	80	21
MIN	4.3	3.1	1.5	1.1	1.0	1.1	1.7	26	120	81	24	5.9
AC-FT	365	230	170	75	66	111	1120	8470	18120	11930	3260	629

CAL YR 1978	TOTAL	22928.4	MEAN 62.8	MAX 503	MIN 1.5	AC-FT 45480
WTR YR 1979	TOTAL	22456.4	MEAN 61.5	MAX 488	MIN 1.0	AC-FT 44540

EAGLE RIVER BASIN

09065500 GORE CREEK AT UPPER STATION, NEAR MINTURN, CO

LOCATION.--Lat 39°37'40"N, long 106°16'24"W, in NE¼NW¼ sec.18, T.5 S., R.79 W., Eagle County, Hydrologic Unit 14010003, on left bank 100 ft (30 m) downstream from bridge on U.S. Highway 6, 0.4 mi (0.6 km) upstream from Black Gore Creek, 4.5 mi (7.2 km) east of Vail, and 8.5 mi (13.7 km) northeast of Minturn.

DRAINAGE AREA.--14.3 mi² (37.0 km²).

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

REVISED RECORDS.--WSP 2124: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 8,675 ft (2,644 m), from topographic map. Prior to Aug. 26, 1952, at present site; Aug. 26, 1952, to Sept. 30, 1956, at site 20 ft (6 m) downstream; and Oct. 1, 1963, to Sept. 30, 1971, at site 40 ft (12 m) downstream; all at datum 1.45 ft (0.442 m) lower. Oct. 1, 1971, to June 9, 1972, at present site at datum 1.00 ft (0.305 m) higher.

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

AVERAGE DISCHARGE.--25 years, 29.0 ft³/s (0.821 m³/s), 21,010 acre-ft/yr (25.9 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 588 ft³/s (16.7 m³/s) June 10, 1952, gage height, 6.58 ft (2.006 m), datum then in use, from rating curve extended above 260 ft³/s (7.4 m³/s); maximum gage height, 6.65 ft (2.027 m), June 18, 1951, datum then in use; minimum daily discharge, 1.2 ft³/s (0.034 m³/s) Mar. 5, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 200 ft³/s (5.7 m³/s) and maximum (%):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
June 6	2030	417 11.8	3.12 0.951	June 15	2215	357 10.1	2.93 0.893

Minimum daily discharge, 2.1 ft³/s (0.059 m³/s) Jan. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.6	4.6	3.0	2.3	3.6	3.6	3.5	21	119	227	54	14
2	5.9	4.1	3.8	2.1	3.6	3.6	3.3	20	120	221	51	12
3	5.9	4.4	4.0	2.6	3.6	3.6	3.3	17	151	221	47	12
4	5.7	4.0	3.6	2.6	3.6	3.8	3.3	18	200	230	45	12
5	5.7	4.3	3.6	2.6	3.6	3.8	3.3	26	257	224	43	11
6	5.5	3.0	3.6	2.6	3.6	3.8	3.6	34	290	208	41	11
7	5.3	3.5	3.6	2.6	3.6	3.8	4.0	33	302	195	36	10
8	5.0	3.8	3.5	2.6	3.6	3.8	4.5	27	215	208	34	9.8
9	4.8	3.6	3.5	2.6	3.6	3.8	5.0	23	180	182	33	9.5
10	4.8	3.6	3.2	3.0	3.6	3.8	4.5	20	145	178	32	9.5
11	4.6	3.2	3.2	3.2	3.6	3.8	4.0	17	159	175	31	9.5
12	4.4	2.8	3.2	3.2	3.6	3.8	4.0	17	195	175	30	9.2
13	4.3	2.9	3.0	3.2	3.6	3.8	4.0	20	248	168	29	8.4
14	4.1	2.5	3.0	3.2	3.6	3.8	4.3	30	272	165	33	7.9
15	4.3	2.5	3.0	3.2	3.6	3.8	5.0	45	266	147	34	7.6
16	4.1	2.5	3.0	3.2	3.6	3.8	6.0	65	293	143	31	7.1
17	4.1	2.5	3.0	3.2	3.6	3.8	7.2	79	272	131	31	6.4
18	5.0	2.5	3.0	3.6	3.6	3.8	8.0	101	245	120	30	5.9
19	5.5	2.4	3.0	3.6	3.6	3.8	9.0	125	205	106	31	5.9
20	5.3	2.5	3.0	3.6	3.6	3.8	10	133	168	101	28	6.1
21	4.8	2.6	3.0	3.6	3.6	3.8	11	131	195	95	25	5.4
22	5.9	2.6	3.3	3.6	3.6	3.8	12	135	230	106	22	5.9
23	5.3	2.6	3.3	3.6	3.6	3.8	13	155	251	104	21	5.5
24	5.7	2.4	3.3	3.6	3.6	3.8	14	180	239	95	19	5.3
25	5.5	2.4	3.3	3.6	3.6	3.8	15	170	239	92	16	5.0
26	4.8	2.6	3.3	3.6	3.6	3.8	16	210	239	83	17	4.8
27	5.3	2.6	3.3	3.6	3.6	3.8	17	221	239	79	16	5.0
28	5.3	2.6	3.3	3.6	3.6	3.8	18	236	233	83	15	4.8
29	4.4	2.6	3.3	3.6	---	3.8	19	233	275	73	15	4.4
30	4.4	2.8	3.0	3.6	---	3.8	20	200	245	63	15	4.3
31	4.4	---	2.6	3.6	---	3.8	---	143	---	58	15	---
TOTAL	156.7	91.0	100.8	98.4	100.8	117.2	254.8	2885	6687	4456	923	236.2
MEAN	5.05	3.03	3.25	3.17	3.60	3.76	8.49	93.1	223	144	29.8	7.87
MAX	6.6	4.6	4.0	3.6	3.6	3.8	20	236	302	230	54	14
MIN	4.1	2.4	2.6	2.1	3.6	3.6	3.3	17	119	58	15	4.3
AC-FT	311	180	200	195	200	232	505	5720	13260	8840	1830	469
CAL YR 1978	TOTAL	16020.9	MEAN 43.9	MAX 365	MIN 2.0	AC-FT 31780						
WTR YR 1979	TOTAL	16106.9	MEAN 44.1	MAX 302	MIN 2.1	AC-FT 31950						

NOTE.--NO GAGE-HEIGHT RECORD DEC. 21 TO MAY 1.

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 (61 m) from U.S. Highway 6, 0.3 mi (0.5 km) upstream from Timber Creek, 2.5 mi (4.0 km) upstream from mouth, and 9 mi (14 km) east of Minturn.

DRAINAGE AREA.--11.8 mi² (30.6 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 9,150 ft (2,789 m), from topographic map. Prior to October 1963, at site 15 ft (5 m) upstream at present datum.

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

AVERAGE DISCHARGE.--25 years, 16.7 ft³/s (0.473 m³/s), 12,100 acre-ft/yr (14.9 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 365 ft³/s (10.3 m³/s) June 7, 1952, gage height, 5.42 ft (1.652 m); maximum gage height, 6.00 ft (1.829 m) Mar. 30, 1968 (backwater from ice); minimum daily discharge, 0.90 ft³/s (0.025 m³/s) Feb. 22, 1968, Jan. 30, 1970, Feb. 4 to Mar. 5, 1979.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 150 ft³/s (4.2 m³/s) and maximum (°):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
May 28	2200	150 4.25	3.80 1.158	June 15	2200	225 6.37	4.02 1.225
June 6	2200	198 5.61	4.00 1.219				

Minimum daily, 0.90 ft³/s (0.025 m³/s) Feb. 4 to Mar. 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.5	4.9	4.0	1.2	1.0	.90	2.5	13	67	104	16	7.9
2	3.4	4.3	3.5	1.0	1.0	.90	2.7	13	67	95	16	7.6
3	3.4	4.2	3.0	1.0	.98	.90	3.0	11	80	88	15	7.6
4	3.4	4.2	3.0	1.0	.90	.90	3.0	10	98	82	15	7.1
5	3.4	4.0	3.0	1.0	.90	.90	3.2	13	120	74	15	6.9
6	3.5	3.9	3.0	1.0	.90	.90	3.2	17	144	71	14	6.5
7	3.5	3.8	2.5	1.0	.90	1.1	3.5	18	160	67	13	6.5
8	3.5	4.2	2.5	1.0	.90	1.5	4.2	15	128	62	14	6.3
9	3.5	4.2	2.5	1.0	.90	1.5	4.6	13	108	58	13	6.3
10	3.5	3.9	2.5	1.0	.90	1.5	4.0	12	97	54	13	6.3
11	3.5	3.9	2.5	1.0	.90	1.5	3.5	10	104	51	12	6.3
12	3.6	3.8	2.5	1.0	.90	1.5	3.2	9.7	120	47	12	6.3
13	3.6	3.8	2.5	1.0	.90	1.5	2.8	10	150	44	13	6.0
14	3.5	3.8	2.5	1.0	.90	1.5	3.8	14	170	41	15	6.0
15	3.5	3.8	2.5	1.0	.90	1.5	4.8	17	179	41	14	5.8
16	3.5	3.8	2.5	1.0	.90	1.5	6.0	21	189	40	14	5.8
17	3.5	3.8	2.5	1.0	.90	1.5	8.0	25	187	37	14	5.6
18	4.0	4.0	2.2	1.0	.90	1.5	16	35	160	35	13	5.6
19	4.5	3.8	2.0	1.0	.90	1.5	15	43	140	32	13	5.6
20	4.0	4.0	2.0	1.0	.90	1.5	14	48	118	30	13	5.8
21	4.5	3.8	2.0	1.0	.90	1.5	14	54	120	30	13	5.6
22	4.5	3.9	2.0	1.0	.90	1.7	12	55	126	30	11	5.4
23	4.5	3.9	2.0	1.0	.90	2.0	13	64	138	26	10	5.4
24	4.5	3.7	2.0	1.0	.90	2.5	16	77	134	24	9.7	5.2
25	4.5	3.9	2.0	1.0	.90	2.5	15	77	134	22	9.7	5.2
26	4.5	4.0	2.0	1.0	.90	2.5	12	93	130	21	9.7	5.6
27	4.5	4.0	2.0	1.0	.90	2.5	12	104	124	21	8.9	5.6
28	4.5	4.0	2.0	1.0	.90	2.5	12	128	122	20	8.9	5.4
29	4.5	4.0	2.0	1.0	---	2.5	11	130	118	18	8.9	5.2
30	4.5	3.9	2.0	1.0	---	2.5	12	112	112	17	8.9	6.2
31	4.5	---	1.6	1.0	---	2.5	---	82	---	17	8.9	---
TOTAL	121.3	119.2	74.8	31.2	25.48	51.20	240.0	1343.7	3844	1399	384.6	182.6
MEAN	3.91	3.97	2.41	1.01	.91	1.65	8.00	43.3	126	45.1	12.4	6.09
MAX	4.5	4.9	4.0	1.2	1.0	2.5	16	130	189	104	16	7.9
MIN	3.4	3.7	1.6	1.0	.90	.90	2.5	9.7	67	17	6.9	5.2
AC-FT	241	236	148	62	51	102	476	2670	7620	2770	753	302

CAL YR 1978 TOTAL 8828.50 MEAN 24.2 MAX 248 MIN 1.2 AC-FT 17510
WTR YR 1979 TOTAL 7817.08 MEAN 21.4 MAX 189 MIN .90 AC-FT 15510

NOTE.--NO GAGE-HEIGHT RECORD DEC. 2 TO APR. 18.

EAGLE RIVER BASIN

09066050 BLACK GORE CREEK NEAR VAIL, CO

LOCATION.--Lat 39°37'26" (revised), long 106°16'47", in SW¼NE¼ sec.18, T.5 S., R.79 W., Eagle County, Hydrologic Unit 14010003, on left bank 600 ft (183 m) upstream from mouth, 1.9 mi (3.1 km) downstream from mouth of Timber Creek, and 5.4 mi (8.7 km) southeast of Vail.

DRAINAGE AREA.--19.6 mi² (50.8 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1973 to September 1979 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 8,570 ft (2,612 m), from topographic map. Prior to Oct. 1, 1976, water-stage recorder at site 200 ft (61 m) upstream at datum 7.33 ft (2.234 m) higher.

REMARKS.--Records fair except those for winter period, which are poor. No diversion above station. Natural regulation by two small recreation lakes above station.

AVERAGE DISCHARGE.--6 years, 28.6 ft³/s (0.810 m³/s), 20,720 acre-ft/yr (25.5 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 422 ft³/s (12.0 m³/s) June 15, 1978, gage height, 3.77 ft (1.149 m); minimum daily, 2.0 ft³/s (0.057 m³/s) Feb. 16 to Mar. 7, 1979.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 250 ft³/s (7.1 m³/s) and maximum (°):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
May 28	2215	302 8.55	3.28 1.000	June 16	2200	*334 9.46	3.43 1.045
June 7	0330	310 8.78	3.35 1.021				

Minimum daily discharge, 2.0 ft³/s (0.057 m³/s) Feb. 16 to Mar. 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.4	6.0	6.0	3.5	3.0	2.0	2.5	18	140	191	20	8.4
2	6.4	6.2	6.0	3.0	3.0	2.0	2.5	18	130	173	20	8.0
3	6.4	5.9	6.0	3.0	2.5	2.0	2.5	15	151	158	21	8.0
4	6.3	5.6	6.0	3.0	2.5	2.0	2.5	15	178	147	20	7.6
5	6.3	5.6	6.0	3.0	2.5	2.0	2.5	20	212	133	19	7.2
6	6.2	5.5	6.0	3.0	2.5	2.0	3.0	26	253	122	18	7.0
7	6.2	5.9	6.0	3.0	2.5	2.0	4.5	28	286	110	18	7.0
8	6.2	5.6	6.0	3.0	2.5	2.5	6.0	23	221	100	17	6.8
9	6.2	5.6	6.0	3.0	2.5	2.5	6.5	21	187	90	17	6.8
10	6.2	5.8	6.0	3.0	2.5	2.5	6.0	21	159	84	16	6.8
11	6.2	5.5	6.0	3.0	2.5	2.5	5.5	20	165	78	16	6.8
12	6.2	5.5	6.0	3.0	2.5	2.5	5.0	21	184	72	15	6.8
13	6.0	5.0	6.0	3.0	2.5	2.5	4.5	24	229	68	15	6.6
14	5.9	5.0	6.0	3.0	2.5	2.5	7.0	32	270	62	17	6.4
15	6.0	5.0	6.0	3.0	2.5	2.5	11	39	277	62	16	6.4
16	5.8	5.0	6.0	3.0	2.0	2.5	15	46	298	56	15	6.4
17	5.9	5.0	6.0	3.0	2.0	2.5	18	54	293	50	15	6.2
18	6.4	5.0	6.0	3.0	2.0	2.5	19	70	260	47	15	6.2
19	6.4	5.0	6.0	3.0	2.0	2.5	19	87	224	44	15	6.2
20	6.0	5.0	5.0	3.0	2.0	2.5	18	100	189	41	14	6.2
21	6.2	5.5	4.5	3.0	2.0	2.5	17	109	189	37	14	6.2
22	6.8	6.0	4.5	3.0	2.0	2.5	18	110	204	37	13	6.0
23	6.3	6.0	4.5	3.0	2.0	2.5	20	131	221	34	12	5.9
24	6.3	6.0	4.5	3.0	2.0	2.5	21	159	228	32	11	5.9
25	6.5	6.0	4.5	3.0	2.0	2.5	20	164	226	29	11	5.7
26	6.5	6.0	4.5	3.0	2.0	2.5	16	193	221	28	10	5.8
27	6.5	6.0	4.5	3.0	2.0	2.5	17	223	218	27	10	6.0
28	6.4	6.0	4.5	3.0	2.0	2.5	17	258	215	25	9.7	5.6
29	6.2	6.0	4.5	3.0	---	2.5	16	260	213	23	9.4	5.6
30	6.0	6.0	4.5	3.0	---	2.5	17	229	206	22	9.8	5.8
31	6.2	---	4.0	3.0	---	2.5	---	176	---	21	9.6	---
TOTAL	193.5	168.2	168.0	93.5	64.5	74.0	339.5	2707	6447	2203	458.5	196.3
MEAN	6.24	5.61	5.42	3.02	2.30	2.39	11.3	87.3	215	71.1	14.8	6.34
MAX	6.8	6.2	6.0	3.5	3.0	2.5	21	260	298	191	21	8.4
MIN	5.8	5.0	4.0	3.0	2.0	2.0	2.5	15	130	21	9.4	5.6
AC-FT	384	334	333	185	128	147	673	5370	12790	4370	939	389

CAL YR 1978 TOTAL 13928.4 MEAN 38.2 MAX 342 MIN 2.5 AC-FT 27630
WTR YR 1979 TOTAL 13113.0 MEAN 35.9 MAX 298 MIN 2.0 AC-FT 26010

NOTE.--NO GAGE-HEIGHT RECORD NOV. 16 TO APR. 23.

EAGLE RIVER BASIN

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09066050 BLACK GORE CREEK NEAR VAIL, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1973 to current year (discontinued).

PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT DISCHARGE: October 1973 to current year.

INSTRUMENTATION.--Pumping sediment sampler since October 1973.

REMARKS.--Daily sediment records for 1978 are included in this report.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SEDIMENT CONCENTRATIONS: Maximum daily, 1,720 mg/L May 30, 1974; minimum daily, 1 mg/L May 2, July 29, Aug. 2, 1974, many days during winter months in 1977 and 1979.

SEDIMENT LOADS: Maximum daily, 1,290 tons (1,170 t) May 30, 1974; minimum daily, 0.01 ton (0.01 t) many days during winter months in 1977 and 1979.

EXTREMES FOR 1978 WATER YEAR.--

SEDIMENT CONCENTRATIONS: Maximum daily, 130 mg/L June 13; minimum daily, 2 mg/L Mar. 14, Sept. 27.

SEDIMENT LOADS: Maximum daily, 110 tons (100 t) June 13; minimum daily, 0.02 ton (0.02 t) Mar. 14.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATIONS: Maximum daily, 63 mg/L May 24; minimum daily, 1 mg/L many days during the year.

SEDIMENT LOADS: Maximum daily, 43 tons (39 t) June 16; minimum daily, 0.01 ton (0.01 t) many days during the year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHDS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	HARD- NESS (MG/L AS CAC03)	HARD- NESS, NONCAR- BONATE (MG/L CAC03)
NOV								
02...	1405	6.0	211	8.3	5.0	9.3	100	--
DEC								
12...	1630	6.8	212	7.6	.0	9.8	110	--
JAN								
24...	1600	2.6	216	7.8	.0	9.9	110	--
FEB								
28...	0915	2.2	241	7.9	.0	9.2	120	--
APR								
05...	1000	2.4	260	8.4	.0	9.6	150	--
MAY								
03...	0900	14	240	8.2	2.0	9.5	110	--
10...	1215	136	160	7.9	5.5	9.5	100	85
17...	1000	32	160	7.8	5.0	9.5	81	--
23...	1700	125	140	8.0	5.0	9.5	57	57
JUN								
01...	1015	101	120	7.9	3.0	9.4	62	--
07...	1300	270	94	7.9	5.0	9.4	48	--
14...	1915	270	100	7.2	4.0	9.6	51	--
21...	1115	140	118	7.8	5.0	9.6	61	61
28...	1240	162	110	7.8	5.0	9.8	51	51
JUL								
05...	1415	101	100	7.9	7.5	9.1	62	62
12...	1800	87	122	7.7	4.0	9.3	70	70
AUG								
02...	1015	14	171	7.7	7.5	9.4	93	93
15...	1430	16	185	8.1	4.0	9.7	16	0
30...	1330	8.0	190	8.0	3.0	9.6	100	0

EAGLE RIVER BASIN

09066050 BLACK GORE CREEK NEAR VAIL, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)
NOV								
02...	35	3.8	3.1	122	.17	1.98	.15	.00
DEC								
12...	36	3.9	2.0	118	.16	2.17	.21	.00
JAN								
24...	36	4.1	3.3	113	.15	.79	.16	.01
FEB								
28...	41	4.3	11	139	.19	.83	.23	.04
APR								
05...	52	4.3	21	159	.22	1.05	.28	.00
MAY								
03...	35	4.3	15	139	.19	5.40	.54	.02
10...	34	4.0	9.4	109	.15	40.0	.24	.01
17...	27	3.3	7.8	98	.13	8.49	.30	.00
23...	19	2.2	3.7	70	.10	23.6	.17	.05
JUN								
01...	21	2.4	2.2	67	.09	18.3	.14	.05
07...	16	2.0	1.4	67	.09	48.8	.10	.00
14...	17	2.0	1.4	62	.08	45.2	.10	.00
21...	20	2.6	1.8	73	.10	27.6	.04	.00
28...	17	2.0	.9	63	.09	27.6	.00	.04
JUL								
05...	21	2.3	1.2	66	.09	18.0	.00	.00
12...	24	2.5	1.1	73	.10	17.1	.00	.00
AUG								
02...	34	1.9	1.9	93	.13	3.52	.20	.00
15...	--	4.0	2.2	104	.14	4.52	.09	--
30...	35	4.1	3.1	109	.15	2.35	.12	.00

EAGLE RIVER BASIN

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09066050 BLACK GORE CREEK NEAR VAIL, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
OCTOBER				NOVEMBER			DECEMBER		
1	6.1		.10	6.2		.10	4.0		.05
2	5.9		.10	4.8		.10	4.0		.05
3	6.0		.10	5.8		.10	4.0		.05
4	6.2		.10	7.0		.10	4.0		.05
5	6.8		.10	6.9		.10	4.0		.05
6	7.6		.10	6.0		.10	4.0		.05
7	11		.20	5.0		.10	4.0		.05
8	8.8		.15	4.0		.05	4.0		.05
9	8.2		.15	4.0		.05	4.0		.05
10	8.2		.15	4.0		.05	4.0		.05
11	8.2		.15	4.0		.05	4.0		.05
12	8.5		.15	4.1		.05	4.0		.05
13	7.9		.15	4.3		.05	4.0		.05
14	7.5		.10	3.9		.05	4.0		.05
15	7.5		.10	4.3		.05	4.0		.05
16	7.5		.10	4.0		.05	4.0		.05
17	7.6		.10	4.0		.05	4.0		.05
18	7.3		.10	4.0		.05	4.0		.05
19	7.1		.10	4.0		.05	4.0		.05
20	7.1		.10	4.0		.05	4.0		.05
21	7.4		.10	4.0		.05	4.0		.05
22	8.2		.15	4.0		.05	4.0		.05
23	7.6		.10	4.0		.05	4.0		.05
24	7.1		.10	4.0		.05	4.0		.05
25	7.0		.10	4.0		.05	4.0		.05
26	6.8		.10	4.0		.05	4.0		.05
27	6.9		.10	4.0		.05	4.0		.05
28	6.7		.10	4.0		.05	4.0		.05
29	6.8		.10	4.0		.05	4.0		.05
30	7.2		.10	4.0		.05	4.0		.05
31	6.8		.10	---		---	4.0		.05
TOTAL	229.5		3.55	134.3		1.85	124.0		1.55

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
JANUARY				FEBRUARY			MARCH		
1	3.5	---	.05	3.5	---	.05	3.8	---	.05
2	3.5	---	.05	3.5	---	.05	3.8	---	.05
3	3.5	---	.05	3.5	---	.05	3.8	---	.05
4	3.5	---	.05	3.5	---	.05	3.8	---	.05
5	3.5	---	.05	3.5	---	.05	3.8	---	.05
6	3.5	---	.05	3.5	---	.05	3.8	---	.05
7	3.5	---	.05	3.5	---	.05	3.8	---	.05
8	3.5	---	.05	3.5	---	.05	3.8	---	.05
9	3.5	---	.05	3.5	---	.05	3.8	---	.05
10	3.5	---	.05	3.5	---	.05	4.0	---	.05
11	3.5	---	.05	3.5	---	.05	4.0	---	.05
12	3.5	---	.05	3.5	---	.05	4.0	---	.05
13	3.5	---	.05	3.2	---	.05	4.0	---	.05
14	3.5	---	.05	3.2	---	.05	4.0	2	.02
15	3.5	---	.05	3.2	---	.05	4.0	---	.05
16	3.5	---	.05	3.2	---	.05	4.0	---	.05
17	3.5	---	.05	2.5	---	.05	4.0	---	.05
18	3.5	---	.05	2.5	---	.05	4.0	---	.05
19	3.5	---	.05	3.5	---	.05	4.5	---	.05
20	3.5	---	.05	3.8	---	.05	4.5	---	.05
21	3.5	---	.05	3.8	4	.04	4.5	---	.05
22	3.5	---	.05	3.8	---	.05	4.5	---	.05
23	3.5	---	.05	3.8	---	.05	5.4	---	.05
24	3.5	12	.11	3.8	---	.05	5.3	---	.05
25	3.5	---	.05	3.8	---	.05	5.1	---	.05
26	3.5	---	.05	3.8	---	.05	5.5	---	.05
27	3.5	---	.05	3.8	---	.05	8.0	---	.15
28	3.5	---	.05	3.8	---	.05	9.5	13	.33
29	3.5	---	.05	---	---	---	10	---	.70
30	3.5	---	.05	---	---	---	15	---	1.5
31	3.5	---	.05	---	---	---	18	---	2.0
TOTAL	108.5	---	1.61	97.5	---	1.39	170.0	---	5.95

EAGLE RIVER BASIN

09066050 BLACK GORE CREEK NEAR VAIL, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

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	20	---	2.5	26	14	.98	142	---	10
2	18	---	2.0	26	17	1.2	150	---	10
3	17	---	2.0	26	9	.63	159	---	10
4	15	---	1.5	23	8	.50	166	---	10
5	16	---	1.5	21	8	.45	148	---	10
6	15	---	1.5	19	7	.36	159	---	10
7	19	---	2.0	18	4	.19	182	---	15
8	21	---	2.5	17	10	.46	184	---	15
9	23	---	2.5	20	12	.65	222	---	20
10	20	---	2.5	22	20	1.2	282	---	50
11	18	---	2.0	24	11	.71	298	---	70
12	20	47	2.5	24	11	.71	306	---	80
13	16	---	1.5	29	9	.70	322	130	110
14	18	---	2.0	47	30	3.8	334	---	100
15	18	---	2.0	74	31	6.2	342	---	100
16	22	46	2.7	96	41	11	338	---	90
17	26	---	3.0	95	62	16	306	---	70
18	20	---	2.5	71	27	5.2	282	---	50
19	18	---	2.0	66	25	4.5	264	---	40
20	20	---	2.5	76	26	5.3	252	---	25
21	21	---	2.5	88	30	7.1	255	37	25
22	21	---	2.5	88	32	7.6	261	28	20
23	19	---	2.0	144	34	13	264	42	30
24	21	---	2.5	138	---	10	261	43	30
25	26	---	3.0	140	---	10	255	28	19
26	31	---	2.5	136	---	10	228	23	14
27	34	20	1.8	136	---	10	213	39	22
28	30	19	1.5	120	---	9.0	199	40	21
29	28	13	.98	112	---	8.5	189	23	12
30	28	27	2.0	130	---	10	192	23	12
31	---	---	---	138	---	10	---	---	---
TOTAL	639	---	64.48	2190	---	165.94	7155	---	1100

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)
JULY			AUGUST			SEPTEMBER			
1	166	19	8.5	25	---	.40	9.7	---	.20
2	159	17	7.3	23	---	.35	8.9	---	.20
3	152	---	6.0	22	---	.35	8.9	---	.20
4	142	---	4.5	21	---	.35	8.7	---	.20
5	132	9	3.2	21	---	.35	8.5	---	.20
6	125	---	3.0	21	---	.35	8.3	8	.18
7	112	---	3.0	20	---	.30	8.3	---	.20
8	105	11	3.1	20	---	.30	8.4	---	.20
9	104	9	2.5	19	---	.30	7.9	---	.15
10	98	6	1.6	19	---	.30	8.2	---	.20
11	90	9	2.2	18	---	.30	8.7	---	.20
12	84	9	2.0	18	---	.30	8.3	---	.20
13	76	10	2.1	17	---	.30	7.7	---	.15
14	70	16	3.0	17	---	.30	7.6	---	.15
15	66	12	2.1	16	---	.25	7.4	---	.15
16	61	12	2.0	16	---	.25	7.2	---	.10
17	60	15	2.4	15	---	.25	7.7	---	.10
18	53	18	2.6	14	---	.25	7.7	---	.10
19	50	---	1.5	14	---	.25	7.9	---	.10
20	46	---	1.0	13	---	.20	8.3	---	.15
21	43	---	1.0	13	---	.20	7.9	---	.10
22	39	---	.90	13	---	.20	8.1	---	.10
23	37	---	.80	13	---	.20	7.6	---	.10
24	35	---	.70	12	---	.20	7.1	---	.10
25	33	---	.60	13	10	.35	6.8	---	.05
26	31	6	.50	12	---	.25	6.8	---	.05
27	29	---	.45	11	---	.25	6.6	2	.04
28	28	---	.45	10	---	.20	6.5	---	.05
29	28	---	.45	10	---	.20	6.4	---	.05
30	29	---	.45	9.8	---	.20	6.2	---	.05
31	26	---	.40	9.6	---	.20	---	---	---
TOTAL	2309	---	70.30	495.4	---	8.45	234.3	---	4.02
YEAR	13886.5		1429.09						

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

09066050 BLACK GORE CREEK NEAR VAIL, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TNS/DAY), WATER YEAR OCTOBER 1976 TO SEPTEMBER 1979

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TNS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TNS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TNS/DAY)
OCTOBER			NOVEMBER			DECEMBER			
1	6.4	---	.05	6.0	---	.05	6.0	28	.45
2	6.4	---	.05	6.2	3	.05	6.0	---	.50
3	6.4	---	.05	5.9	---	.05	6.0	---	.55
4	6.3	25	.43	5.6	---	.05	6.0	42	.68
5	6.3	23	.39	5.6	---	.05	6.0	---	.65
6	6.2	18	.30	5.5	---	.05	6.0	---	.65
7	6.2	---	.25	5.9	---	.05	6.0	---	.60
8	6.2	---	.25	5.6	---	.05	6.0	---	.60
9	6.2	---	.25	5.6	---	.05	6.0	---	.60
10	6.2	---	.25	5.8	---	.05	6.0	34	.55
11	6.2	---	.25	5.5	---	.25	6.0	---	.60
12	6.2	---	.25	5.5	---	.25	6.0	---	.60
13	6.0	---	.25	5.0	---	.25	6.0	---	.65
14	5.9	---	.20	5.0	---	.25	6.0	---	.65
15	6.0	---	.25	5.0	21	.28	6.0	---	.70
16	5.8	---	.20	5.0	30	.41	6.0	44	.71
17	5.9	---	.20	5.0	48	.65	6.0	---	.70
18	6.4	13	.22	5.0	---	.40	6.0	---	.70
19	6.4	9	.16	5.0	---	.40	6.0	---	.70
20	6.0	14	.23	5.0	---	.40	5.0	---	.60
21	6.2	16	.30	5.5	---	.60	4.5	43	.52
22	6.8	22	.40	6.0	79	1.3	4.5	---	.50
23	6.3	5	.10	6.0	---	1.0	4.5	---	.50
24	6.3	---	.10	6.0	---	.85	4.5	---	.50
25	6.5	---	.10	6.0	47	.76	4.5	---	.50
26	6.5	---	.10	6.0	---	.75	4.5	---	.50
27	6.5	---	.10	6.0	---	.75	4.5	---	.50
28	6.4	---	.10	6.0	42	.68	4.5	---	.50
29	6.2	---	.10	6.0	---	.60	4.5	---	.50
30	6.0	---	.10	6.0	---	.50	4.5	---	.50
31	6.2	---	.10	---	---	---	4.0	---	.30
TOTAL	193.5	---	6.08	168.2	---	11.83	168.0	---	17.76

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TNS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TNS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TNS/DAY)
JANUARY			FEBRUARY			MARCH			
1	3.5	---	.20	3.0	---	.05	2.0	---	.01
2	3.0	---	.05	3.0	---	.05	2.0	---	.01
3	3.0	---	.05	2.5	---	.02	2.0	---	.01
4	3.0	---	.05	2.5	---	.02	2.0	---	.01
5	3.0	---	.05	2.5	---	.02	2.0	---	.01
6	3.0	---	.05	2.5	---	.02	2.0	---	.01
7	3.0	---	.05	2.5	---	.02	2.0	---	.01
8	3.0	---	.05	2.5	---	.02	2.5	---	.01
9	3.0	---	.05	2.5	---	.02	2.5	---	.01
10	3.0	---	.05	2.5	---	.02	2.5	---	.01
11	3.0	---	.05	2.5	---	.02	2.5	---	.01
12	3.0	---	.05	2.5	---	.02	2.5	---	.01
13	3.0	---	.05	2.5	---	.02	2.5	---	.01
14	3.0	---	.05	2.5	---	.02	2.5	---	.01
15	3.0	---	.05	2.5	---	.02	2.5	---	.01
16	3.0	---	.05	2.0	---	.01	2.5	---	.01
17	3.0	---	.05	2.0	---	.01	2.5	---	.01
18	3.0	---	.05	2.0	---	.01	2.5	---	.01
19	3.0	---	.05	2.0	---	.01	2.5	---	.01
20	3.0	---	.05	2.0	---	.01	2.5	---	.01
21	3.0	---	.05	2.0	---	.01	2.5	---	.01
22	3.0	---	.05	2.0	---	.01	2.5	---	.01
23	3.0	---	.05	2.0	---	.01	2.5	---	.01
24	3.0	8	.06	2.0	---	.01	2.5	---	.01
25	3.0	---	.05	2.0	---	.01	2.5	---	.01
26	3.0	---	.05	2.0	---	.01	2.5	---	.01
27	3.0	---	.05	2.0	---	.01	2.5	---	.01
28	3.0	---	.05	2.0	---	.01	2.5	---	.01
29	3.0	---	.05	---	---	---	2.5	---	.01
30	3.0	---	.05	---	---	---	2.5	---	.01
31	3.0	---	.05	---	---	---	2.5	---	.01
TOTAL	93.5	---	1.71	64.5	---	0.49	74.0	---	0.31

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
APRIL			MAY			JUNE			
1	2.5	---	.01	18	---	1.5	140	12	4.5
2	2.5	---	.01	18	35	1.7	130	---	3.5
3	2.5	---	.01	15	5	.20	151	---	6.0
4	2.5	---	.01	15	7	.28	178	---	9.5
5	2.5	1	.01	20	---	.50	212	---	15
6	3.0	---	.02	26	---	1.0	253	---	20
7	4.5	---	.04	28	---	2.0	286	34	26
8	6.0	---	.10	23	---	.90	221	32	19
9	6.5	---	.10	21	---	.50	187	---	15
10	6.0	---	.10	21	9	.51	159	34	15
11	5.5	---	.05	20	2	.11	165	18	8.0
12	5.0	---	.05	21	---	.10	184	14	7.0
13	4.5	---	.04	24	---	.25	229	---	15
14	7.0	---	.10	32	---	.45	270	32	23
15	11	---	.30	39	---	.65	277	32	24
16	15	---	.50	46	---	.75	298	54	43
17	18	---	.70	54	7	1.0	293	---	35
18	19	16	.82	70	11	2.1	260	33	23
19	19	---	.60	87	---	4.0	224	---	20
20	18	---	.45	100	---	5.5	189	---	15
21	17	---	.30	109	---	7.5	189	27	14
22	18	---	.25	110	---	9.0	204	20	11
23	20	5	.27	131	36	13	221	13	7.8
24	21	---	.30	159	63	27	228	---	7.5
25	20	---	.25	164	---	25	226	---	6.5
26	16	---	.20	190	---	25	221	10	6.0
27	17	---	.25	223	38	23	218	8	4.7
28	17	---	.25	258	---	30	215	6	3.5
29	16	---	.20	260	---	30	213	10	5.8
30	17	---	.25	229	---	20	206	13	7.2
31	---	---	---	176	---	9.5	---	---	---
TOTAL	339.5	---	6.54	2707	---	243.00	6447	---	420.5
DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
JULY			AUGUST			SEPTEMBER			
1	191	8	4.1	20	---	.05	8.4	---	.02
2	173	---	3.5	20	1	.05	8.0	---	.02
3	158	---	2.5	21	---	.05	8.0	---	.02
4	147	---	1.0	20	---	.05	7.6	---	.02
5	133	2	.72	19	---	.05	7.2	---	.02
6	122	---	.65	18	1	.05	7.0	---	.02
7	110	---	.60	18	---	.05	7.0	---	.02
8	100	---	.55	17	---	.04	6.8	---	.02
9	90	---	.50	17	---	.04	6.8	---	.02
10	84	---	.45	16	1	.04	6.8	---	.02
11	78	1	.21	16	---	.04	6.8	---	.02
12	72	3	.58	15	1	.04	6.8	---	.02
13	68	---	.55	15	---	.04	6.6	---	.02
14	62	---	.50	17	---	.04	6.4	---	.02
15	62	---	.50	16	1	.04	6.4	---	.02
16	56	---	.30	15	---	.04	6.4	---	.02
17	50	2	.27	15	---	.04	6.2	---	.02
18	47	---	.25	15	1	.04	6.2	---	.02
19	44	---	.15	15	---	.04	6.2	1	.02
20	41	1	.11	14	---	.04	6.2	---	.02
21	37	---	.10	14	1	.04	6.2	---	.02
22	37	---	.10	13	---	.04	6.0	---	.02
23	34	1	.09	12	---	.04	5.9	---	.02
24	32	---	.10	11	1	.03	5.9	---	.02
25	29	---	.10	11	---	.03	5.7	---	.02
26	28	1	.08	10	1	.03	5.8	---	.02
27	27	---	.05	10	---	.03	6.0	---	.02
28	25	---	.05	9.7	---	.03	5.6	---	.02
29	23	---	.05	9.4	1	.03	5.6	---	.02
30	22	1	.06	9.8	2	.05	5.8	---	.02
31	21	---	.05	9.6	---	.03	---	---	---
TOTAL	2203	---	18.82	458.5	---	1.25	196.3	---	0.60
YEAR	13113.0	---	728.89						

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 (0.5 km) upstream from U.S. Highway 6, 0.4 mi (0.6 km) upstream from mouth, 4.5 mi (7.2 km) east of Vail, and 8.5 mi (13.7 km) northeast of Minturn.

DRAINAGE AREA.--4.37 mi² (11.32 km²).

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

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 8,625 ft (2,629 m), from topographic map.

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

AVERAGE DISCHARGE.--16 years, 8.76 ft³/s (0.248 m³/s), 6,350 acre-ft/yr (7.83 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 225 ft³/s (6.37 m³/s) June 10, 1973, gage height, 3.62 ft (1.164 m), from rating curve extended above 82 ft³/s (2.3 m³/s); minimum daily determined, 0.10 ft³/s (0.003 m³/s) Feb. 8, 1967, Jan. 30, 1970.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 50 ft³/s (1.4 m³/s) and maximum (°):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
May 29	0100	134 3.79	3.56 1.085	June 13	2145	144 4.08	3.59 1.094
June 7	0300	±160 4.53	3.62 1.103	June 27	0500	122 3.46	3.49 1.064

Minimum daily discharge, 0.25 ft³/s (0.007 m³/s) Feb. 18 to Mar. 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.6	1.7	.84	.50	.35	.25	.50	7.6	40	97	15	6.2
2	2.5	1.6	.78	.50	.35	.25	.52	7.6	39	94	14	5.8
3	2.5	1.7	.74	.50	.35	.25	.56	6.8	58	84	14	5.4
4	2.4	1.6	.70	.50	.35	.25	.60	6.4	80	84	14	5.4
5	2.2	1.6	.70	.50	.35	.25	1.0	8.0	94	80	14	5.2
6	2.1	1.6	.70	.52	.35	.25	1.5	10	107	72	13	5.0
7	2.1	1.5	.70	.54	.35	.27	2.1	10	113	72	13	4.6
8	2.1	1.4	.70	.56	.35	.30	2.5	9.0	68	74	13	4.5
9	2.0	1.4	.70	.58	.35	.35	2.6	7.6	47	72	12	4.2
10	2.0	1.4	.70	.60	.35	.35	2.4	6.4	38	68	12	4.3
11	1.9	1.4	.68	.60	.35	.35	2.2	5.6	50	68	12	4.2
12	1.8	1.4	.66	.60	.35	.36	2.0	5.2	72	68	11	4.0
13	1.8	1.4	.64	.60	.35	.38	1.8	5.0	102	70	11	3.7
14	1.8	1.5	.62	.60	.35	.40	2.3	6.6	89	64	12	3.2
15	1.8	1.6	.60	.60	.35	.40	3.8	9.9	87	58	11	3.0
16	1.7	1.6	.60	.58	.31	.40	5.2	17	102	51	11	2.8
17	1.7	1.5	.60	.57	.28	.40	7.2	24	97	45	10	2.7
18	1.8	1.4	.60	.56	.25	.40	8.6	29	89	40	9.3	2.7
19	1.9	1.3	.60	.54	.25	.40	8.6	44	62	33	8.6	2.6
20	1.9	1.2	.60	.52	.25	.40	8.4	55	53	31	8.8	2.5
21	1.8	1.2	.60	.50	.25	.41	8.0	60	74	31	8.3	2.5
22	2.0	1.2	.60	.47	.25	.42	8.0	58	92	36	7.6	2.2
23	1.8	1.1	.60	.45	.25	.43	8.4	64	94	33	7.6	2.1
24	1.9	1.1	.60	.42	.25	.44	9.4	76	84	30	7.3	2.1
25	1.9	1.1	.60	.40	.25	.45	8.6	72	102	28	7.0	2.1
26	1.6	1.0	.59	.40	.25	.48	8.0	80	100	25	6.6	2.1
27	1.7	.96	.58	.40	.25	.50	8.0	92	105	24	6.6	2.2
28	1.7	.90	.56	.40	.25	.50	9.0	102	100	24	6.6	1.9
29	1.6	.90	.54	.40	---	.50	8.2	113	102	23	6.6	1.8
30	1.6	.90	.52	.40	---	.50	7.2	92	97	19	6.8	1.8
31	1.7	---	.50	.38	---	.50	---	59	---	10	6.4	---
TOTAL	59.9	40.16	19.75	15.69	8.59	11.79	147.18	1148.7	2437	1614	317.1	102.8
MEAN	1.93	1.34	.64	.51	.31	.38	4.91	37.1	81.2	52.1	10.2	3.43
MAX	2.6	1.7	.84	.60	.35	.50	9.4	113	113	97	15	6.2
MIN	1.6	.90	.50	.38	.25	.25	.50	5.0	38	10	6.4	1.8
AC-FT	119	80	39	31	17	23	292	2280	4830	3200	629	204

CAL YR 1978 TOTAL 4859.61 MEAN 13.3 MAX 156 MIN .50 AC-FT 9640
WTR YR 1979 TOTAL 5922.66 MEAN 16.2 MAX 113 MIN .25 AC-FT 11750

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

EAGLE RIVER BASIN

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 (30 m) downstream from Pitkin ditch headgate, 1,000 ft (300 m) upstream from U.S. Highway 6, 1,200 ft (370 m) upstream from mouth, 4.0 mi (6.4 km) east of Vail, and 8 mi (13 km) northeast of Minturn.

DRAINAGE AREA---5.39 mi² (13.96 km²).

PERIOD OF RECORD---Annual maximum and occasional low-flow measurements water years 1964-66. October 1966 to current year.

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

GAGE---Water-stage recorder and concrete control. Altitude of gage is 8,525 ft (2,598 m), from topographic map, Oct. 1, 1964, to Sept. 30, 1966, crest-stage gage at datum 0.98 ft (0.299 m) lower.

REMARKS---Records fair except those for winter period, which are poor. Diversions above station by Pitkin ditch for irrigation downstream. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE---13 years, 10.8 ft³/s (0.306 m³/s), 7,820 acre-ft/yr (9.64 hm³/yr).

EXTREMES FOR PERIOD OF RECORD---Maximum discharge, 221 ft³/s (6.26 m³/s) June 15, 1978, gage height, 2.55 ft (0.777 m); maximum gage height, 2.79 ft (0.850 m) June 20, 1968; minimum daily discharge, 0.24 ft³/s (0.007 m³/s) Oct. 29 to Nov. 1, 1972.

EXTREMES FOR CURRENT YEAR---Peak discharges above base of 60 ft³/s (1.7 m³/s) and maximum (±):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
May 29	0400	91 2.58	2.39 0.728	June 7	1100	±101 2.86	2.43 0.741

Minimum daily discharge, 1.4 ft³/s (0.040 m³/s) Dec. 15-31, Feb. 16 to Mar. 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

OAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.6	2.3	1.7	1.5	1.6	1.4	2.3	7.0	44	80	21	4.2
2	3.6	2.1	1.7	1.5	1.6	1.4	2.5	7.0	44	74	21	4.2
3	3.6	2.1	1.7	1.5	1.6	1.4	2.6	7.2	50	71	18	3.9
4	3.6	2.1	1.7	1.5	1.6	1.4	2.8	7.4	61	69	21	3.9
5	3.6	2.1	1.7	1.5	1.6	1.5	2.9	7.4	74	61	18	3.9
6	3.3	2.1	1.6	1.5	1.6	1.5	3.2	7.4	88	59	17	3.6
7	3.3	2.0	1.6	1.5	1.6	1.5	3.5	8.6	85	59	16	3.3
8	3.3	2.0	1.6	1.5	1.6	1.5	4.0	8.6	59	61	15	3.3
9	3.0	2.0	1.6	1.5	1.6	1.5	4.6	8.6	52	59	14	3.3
10	3.0	2.0	1.6	1.5	1.5	1.5	4.4	8.6	48	59	14	3.3
11	2.8	1.9	1.5	1.5	1.5	1.5	4.1	7.4	50	58	13	3.3
12	2.8	1.9	1.5	1.5	1.5	1.5	3.9	6.9	63	63	12	3.3
13	2.6	1.8	1.5	1.5	1.5	1.5	3.8	6.4	80	61	11	3.0
14	2.6	1.8	1.5	1.5	1.5	1.6	4.0	5.9	85	56	11	3.0
15	2.6	1.8	1.4	1.6	1.5	1.8	4.2	8.0	88	54	10	2.8
16	2.6	1.8	1.4	1.7	1.4	1.9	4.4	13	80	54	10	2.8
17	2.6	1.8	1.4	1.8	1.4	2.1	4.9	19	80	50	10	2.6
18	2.8	1.8	1.4	1.9	1.4	2.2	5.6	24	80	48	10	2.5
19	2.8	1.8	1.4	1.9	1.4	2.2	6.6	41	63	46	10	2.6
20	2.8	1.8	1.4	1.8	1.4	2.3	7.2	46	56	44	9.3	2.5
21	2.8	1.7	1.4	1.9	1.4	2.3	6.8	46	59	41	9.3	2.5
22	2.6	1.7	1.4	2.0	1.4	2.3	7.0	46	68	46	8.0	2.6
23	2.8	1.7	1.4	2.0	1.4	2.3	7.2	52	74	44	7.4	2.5
24	2.6	1.7	1.4	2.0	1.4	2.3	7.2	54	74	41	6.9	2.4
25	2.6	1.7	1.4	2.0	1.4	2.2	7.4	56	74	41	5.9	2.5
26	2.6	1.7	1.4	2.0	1.4	2.2	6.7	59	74	38	5.9	2.6
27	2.6	1.6	1.4	1.9	1.4	2.2	6.7	77	77	36	5.9	2.7
28	2.6	1.6	1.4	1.9	1.4	2.2	6.8	83	77	36	5.0	2.6
29	2.6	1.6	1.4	1.8	---	2.2	6.9	83	80	36	4.6	2.5
30	2.5	1.7	1.4	1.8	---	2.2	7.0	69	80	30	4.2	2.4
31	2.3	---	1.4	1.7	---	2.2	---	52	---	24	4.6	---
TOTAL	89.5	55.7	46.3	52.7	41.6	57.8	151.2	932.4	2067	1601	349.0	90.6
MEAN	2.89	1.86	1.49	1.70	1.49	1.86	5.04	30.1	68.9	51.6	11.3	3.02
MAX	3.6	2.3	1.7	2.0	1.6	2.3	7.4	83	88	80	21	4.2
MIN	2.3	1.6	1.4	1.5	1.4	1.4	2.3	5.9	44	24	4.2	2.4
AC-FT	178	110	92	105	83	115	300	1850	4100	3180	692	180
CAL YR 1978	TOTAL	5810.7	MEAN	15.9	MAX	186	MIN	1.2	AC-FT	11530		
WTR YR 1979	TOTAL	5534.8	MEAN	15.2	MAX	88	MIN	1.4	AC-FT	10980		

NOTE---NO GAGE-HEIGHT RECORD NOV. 9 TO MAY 3.

09066200 BOOTH CREEK NEAR MINTURN, CO

LOCATION.--Lat 39°39'02", long 106°19'16", at west line of Sec. 2, T. 5 S., R. 80 W., Eagle County, Hydrologic Unit 14010003, on left bank 0.2 mi (0.3 km) upstream from U.S. Highway 6, 0.4 mi (0.6 km) upstream from mouth, 3.0 mi (4.8 km) northeast of Vail, and 7.0 mi (11.3 km) northeast of Minturn.

DRAINAGE AREA.--6.03 mi² (15.62 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 8,413 ft (2,564 m), from topographic map.

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

AVERAGE DISCHARGE.--15 years, 11.6 ft³/s (0.329 m³/s), 8,400 acre-ft/yr (10.4 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 355 ft³/s (10.1 m³/s) June 15, 1978, gage height, 4.07 ft (1.241 m); maximum gage height, 4.29 ft (1.308 m) July 4, 1975 (backwater from debris); minimum daily discharge, 0.20 ft³/s (0.006 m³/s) Feb. 8, 1967, Jan. 29, 1970.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 80 ft³/s (2.3 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
May 28	2200	123 3.48	3.76 1.146	June 13	1800	135 3.82	3.61 1.100
June 5	1800	*135 3.82	*4.02a 1.225				

a Backwater from debris.

Minimum daily discharge, 0.70 ft³/s (0.020 m³/s) Mar. 4 to Apr. 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.3	1.5	1.0	.90	.90	.80	.70	5.8	40	88	17	3.0
2	1.0	1.4	1.0	.90	.90	.80	.70	5.6	41	82	15	2.8
3	1.1	1.4	1.0	.90	.90	.75	.70	5.3	58	76	15	2.7
4	1.3	1.3	1.0	.90	.90	.73	.70	5.3	80	78	15	2.5
5	1.3	1.4	1.0	.90	.90	.70	.70	6.6	110	74	15	2.5
6	1.3	1.3	1.0	.90	.90	.70	.90	8.3	82	71	13	2.3
7	1.3	1.4	1.0	.90	.90	.70	2.0	8.9	90	71	12	2.2
8	1.4	1.6	1.0	.90	.90	.70	2.7	7.7	56	72	12	2.0
9	1.4	1.4	1.0	.90	.90	.70	3.0	6.7	43	72	11	1.9
10	1.3	1.4	1.0	.90	.90	.70	2.8	5.6	40	69	10	1.8
11	1.3	1.6	1.0	.90	.90	.70	2.5	4.8	44	69	9.7	1.8
12	1.3	1.6	1.0	.90	.90	.70	2.3	4.2	60	67	9.0	1.7
13	1.4	1.6	1.0	.90	.90	.70	1.7	4.2	90	67	9.0	1.7
14	1.3	1.7	1.0	.90	.90	.70	1.8	6.0	99	65	9.4	1.7
15	1.3	1.8	1.0	.90	.90	.70	3.0	9.8	86	58	8.6	1.6
16	1.3	1.8	.99	.94	.86	.73	4.5	15	88	54	8.5	1.5
17	1.3	1.7	.97	.98	.82	.70	7.2	18	80	48	7.5	1.4
18	1.6	1.5	.92	1.0	.80	.70	8.9	26	69	44	7.1	1.4
19	1.7	1.5	.90	1.0	.80	.73	8.9	35	58	42	7.9	1.4
20	1.6	1.5	.90	1.0	.80	.70	7.7	40	50	41	7.3	1.4
21	1.6	1.5	.90	1.0	.80	.70	7.3	41	56	40	7.5	1.3
22	1.9	1.5	.90	1.0	.80	.70	7.3	37	69	43	6.6	1.3
23	1.7	1.4	.90	1.0	.80	.73	7.7	43	78	38	5.8	1.2
24	1.7	1.3	.90	1.0	.80	.70	8.5	46	78	36	5.3	1.2
25	1.8	1.3	.90	1.0	.80	.70	7.7	44	80	33	4.8	1.1
26	1.7	1.2	.90	1.0	.80	.70	6.6	54	84	30	4.2	1.1
27	1.8	1.1	.90	.94	.80	.70	6.7	71	84	26	3.8	1.0
28	1.8	1.0	.90	.90	.80	.73	7.5	95	95	25	3.4	1.0
29	1.7	1.0	.90	.90	---	.70	8.4	103	84	24	3.3	1.0
30	1.7	1.0	.90	.90	---	.70	5.6	71	78	20	3.4	.96
31	1.6	---	.90	.90	---	.70	---	44	---	18	3.3	---
TOTAL	45.8	42.7	29.58	28.96	23.98	21.95	134.70	877.8	2150	1643	270.4	50.76
MEAN	1.48	1.42	.95	.93	.86	.71	4.49	28.3	71.7	53.0	8.72	1.69
MAX	1.9	1.8	1.0	1.0	.90	.80	8.9	103	110	84	17	3.0
MIN	1.0	1.0	.90	.90	.80	.70	.70	4.2	40	18	3.3	.96
AC-FT	91	85	59	57	48	44	267	1740	4260	3260	536	101
CAL YR 1978	TOTAL	6484.08	MEAN 17.8	MAX 218	MIN .70	AC-FT	12860					
WTR YR 1979	TOTAL	5319.63	MEAN 14.6	MAX 110	MIN .70	AC-FT	10550					

EAGLE RIVER BASIN

09066250 GORE CREEK AT VAIL, CO

LOCATION.--Lat 39°38'35"N, long 106°20'44"W, in NW¼NE¼ sec.9, T.5 S., R.80 W., Eagle County, Hydrologic Unit 14010003, on left bank 650 ft (198 m) north of Vail golf course clubhouse, 1.4 mi (2.3 km) downstream from mouth of Booth Creek, and 1.5 mi (2.4 km) east of Interstate Highway 70 turnoff at Vail.

DRAINAGE AREA.--55 mi² (142 km²), approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1973 to September 1979 (discontinued).

GAGE.--Water-stage recorder and automatic sediment sampler. Altitude of gage is 8,250 ft (2,515 m), from topographic map.

REMARKS.--Records good except those for winter period and those for periods of no gage-height record, which are poor. No diversion or regulation above station.

AVERAGE DISCHARGE.--6 years, 95.6 ft³/s (2,707 m³/s), 69,260 acre-ft/yr (85.4 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,510 ft³/s (42.8 m³/s) June 15, 1978, gage height, 4.41 ft (1.344 m); minimum daily, 3.2 ft³/s (0.091 m³/s) Dec. 30, 1976.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 900 ft³/s (25 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
June 6	2345	1,110 31.4	4.07 1.241	June 15	2115	1,120 31.7	4.05 1.234

Minimum daily discharge, 4.0 ft³/s (0.11 m³/s) Jan. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	13	7.6	4.0	7.1	5.6	9.4	68	330	727	112	31
2	17	13	7.6	4.5	7.0	5.9	9.4	66	323	675	108	28
3	17	13	6.2	4.5	7.0	5.4	9.4	62	382	630	101	27
4	17	12	6.2	4.5	7.0	5.4	9.4	57	478	610	101	26
5	17	12	6.2	4.5	7.0	5.9	11	68	599	577	91	24
6	16	11	6.2	4.5	7.0	5.9	12	86	786	538	86	24
7	16	12	6.2	4.5	7.0	5.9	18	97	850	516	86	23
8	16	13	6.2	5.2	7.0	5.9	22	84	588	511	80	21
9	15	14	6.0	5.5	7.0	5.9	24	77	486	491	77	21
10	15	13	6.0	5.5	7.6	6.2	23	63	414	464	72	20
11	15	13	6.0	5.5	7.6	6.4	21	56	450	460	70	20
12	14	12	6.0	5.5	7.6	7.1	19	54	533	450	68	20
13	14	10	6.0	5.5	7.6	8.1	16	54	756	455	68	19
14	14	13	5.7	5.5	7.6	8.4	18	69	864	437	74	21
15	14	14	5.4	5.5	7.6	9.1	30	99	885	414	74	21
16	13	11	5.4	6.5	7.0	8.4	45	124	878	394	69	19
17	13	8.4	5.4	7.5	6.4	9.1	55	157	831	358	63	20
18	15	11	5.2	7.8	5.8	9.4	69	195	772	326	63	19
19	16	10	5.2	7.8	5.6	9.5	79	250	656	295	62	15
20	14	9.5	4.7	7.8	5.6	9.5	74	281	528	278	59	17
21	14	11	4.7	7.8	5.6	9.3	70	281	555	250	55	18
22	17	9.8	4.5	8.0	5.6	9.0	69	270	656	236	47	17
23	14	9.2	4.5	8.4	5.6	8.5	70	312	740	225	43	17
24	16	9.0	4.5	8.4	5.6	8.5	75	402	760	210	39	16
25	17	8.6	4.5	8.4	5.6	8.5	77	437	786	201	37	15
26	14	7.6	4.5	7.5	5.6	8.5	63	486	792	180	34	15
27	16	7.6	4.5	7.0	5.6	9.0	60	566	818	168	33	16
28	16	7.6	4.5	6.8	5.6	9.4	69	630	857	160	32	15
29	15	7.6	4.5	6.6	---	9.4	62	649	812	157	31	14
30	14	7.6	4.5	6.4	---	9.4	62	528	772	141	31	14
31	13	---	4.5	6.4	---	9.4	---	394	---	128	33	---
TOTAL	472	323.5	169.1	193.8	183.9	241.9	1250.6	7022	19947	11662	1999	593
MEAN	15.2	10.8	5.45	6.25	6.57	7.80	41.7	227	665	376	64.5	19.8
MAX	18	14	7.6	8.4	7.6	9.5	74	649	885	727	112	31
MIN	13	7.6	4.5	4.0	5.6	5.4	9.4	54	323	128	31	14
AC-FT	936	642	335	384	365	480	2480	13930	39560	23130	3970	1180
CAL YR 1978 TOTAL	44069.9											
WTR YR 1979 TOTAL	44057.8											

CAL YR 1978 TOTAL 44069.9 MEAN 121 MAX 1080 MIN 4.5 AC-FT 87410
WTR YR 1979 TOTAL 44057.8 MEAN 121 MAX 885 MIN 4.0 AC-FT 87390

NOTE.--NO GAGE-HEIGHT RECORD DEC. 27 TO JAN. 30, FEB. 2 TO MAR. 1.

09066250 GORE CREEK AT VAIL, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1973 to current year (discontinued).

PERIOD OF DAILY RECORD.--

SUSPENDED-SEDIMENT DISCHARGE: October 1973 to current year.

INSTRUMENTATION.--Pumping sediment sampler since October 1973.

REMARKS.--Daily sediment records for 1978 are included in this report.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SEDIMENT CONCENTRATIONS: Maximum daily, 280 mg/L July 21, 1974; minimum daily, 1 mg/L many days during 1977 and 1979.

SEDIMENT LOADS: Maximum daily, 435 tons (395 t) June 24, 1978; minimum daily, 0.01 ton (0.01 t) many days during winter months in 1977 and 1979.

EXTREMES FOR 1978 WATER YEAR.--

SEDIMENT CONCENTRATIONS: Maximum daily, 155 mg/L June 24; minimum daily, 2 mg/L several days during the year.

SEDIMENT LOADS: Maximum daily, 435 tons (395 t) June 24; minimum daily, 0.04 ton (0.04 t) Feb. 24.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATIONS: Maximum daily, 74 mg/L June 14; minimum daily, 1 mg/L many days during the year.

SEDIMENT LOADS: Maximum daily, 212 tons (192 t) June 14; minimum daily, 0.01 ton (0.01 t) estimated, many days during the year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	HARD- NESS, MG/L AS CaCO3)	HARD- NESS, NDNCAP- BONATE (MG/L CaCO3)
NOV								
02...	1150	18	160	7.7	5.0	9.2	75	--
27...	1300	8.7	149	7.5	3.0	--	81	13
DEC								
13...	1430	6.0	160	7.7	.0	9.9	86	--
JAN								
24...	1115	9.2	170	7.6	.0	9.9	84	--
FEB								
27...	1300	5.5	187	7.9	.0	9.2	92	--
APR								
05...	1400	13	180	8.4	.0	9.7	99	--
MAY								
03...	1400	58	160	7.7	2.0	9.8	71	--
10...	1530	60	140	7.6	5.0	9.4	110	97
17...	1300	160	100	7.8	5.5	9.4	51	--
24...	1745	500	80	7.9	5.0	9.4	43	43
JUN								
01...	1050	400	110	8.5	3.0	9.3	57	--
07...	1425	870	66	7.8	5.0	9.5	33	33
14...	2000	859	80	7.1	4.0	9.5	40	--
21...	2030	800	70	7.8	5.5	9.8	110	110
28...	1340	606	65	7.9	5.0	9.7	31	31
JUL								
05...	1615	565	90	7.8	7.0	9.2	32	32
12...	2110	500	57	7.5	4.0	9.4	29	29
AUG								
02...	1250	101	87	7.5	7.0	9.5	47	130
15...	1915	64	99	8.0	4.0	9.5	53	0
30...	1430	34	100	7.6	3.0	9.3	64	0

EAGLE RIVER BASIN

09066250 GORE CREEK AT VAIL, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, ORTHOPHOS- PHATE, DIS- SOLVED (MG/L AS P)
NOV								
02...	24	3.6	2.1	90	.12	4.47	.17	.03
27...	26	3.8	2.0	--	.12	2.06	.22	.01
DEC								
13...	28	3.8	1.7	102	.14	1.65	.26	.00
JAN								
24...	27	4.0	2.1	97	.13	2.42	.20	.01
FEB								
27...	30	4.2	4.2	112	.15	1.66	.28	.04
APR								
05...	34	3.3	10	110	.15	3.86	.23	.00
MAY								
03...	22	4.0	7.3	92	.13	14.5	.25	.01
10...	39	3.4	6.6	91	.12	14.7	.21	.01
17...	16	2.8	2.6	60	.08	25.9	.17	.01
24...	14	2.0	1.4	46	.06	62.1	.13	.05
JUN								
01...	19	2.3	1.8	65	.09	70.2	.13	.05
07...	10	2.0	.8	52	.07	122	.17	.00
14...	13	1.8	1.0	54	.07	125	.12	.00
21...	41	2.0	1.0	41	.06	88.6	.11	.00
28...	9.4	1.9	.6	43	.06	70.4	.01	.01
JUL								
05...	10	1.7	.6	52	.07	79.3	.00	.00
12...	8.9	1.6	.5	34	.05	45.9	.08	.00
AUG								
02...	15	2.3	.6	43	.06	11.7	.00	.00
15...	17	2.5	.9	53	.07	9.20	.12	--
30...	20	3.4	1.2	64	.09	5.88	.15	.01

DATE	TIME	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	ALKA- LINITY (MG/L AS CaCO3)
NOV							
27...	1300	2.8	.1	.8	82	0	67

DATE	SULFATE DIS- SOLVED (MG/L AS SO4)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
NOV							
27...	5.4	.1	5.1	87	.03	10	6

EAGLE RIVER BASIN

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09066250 GORE CREEK AT VAIL, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
OCTOBER				NOVEMBER			DECEMBER		
1	19		.25	12		.15	8.4		.10
2	18		.25	15		.20	9.0		.10
3	18		.25	15		.20	9.0		.10
4	18		.25	16		.20	9.0		.10
5	21		.30	16		.20	9.0		.10
6	37		.50	15		.20	9.0		.10
7	29		.40	13		.20	9.0		.10
8	24		.30	7.8		.10	9.0		.10
9	26		.35	12		.15	9.0		.10
10	20		.25	12		.15	10		.15
11	21		.30	12		.15	11		.15
12	23		.30	12		.15	9.8		.15
13	23		.30	12		.15	10		.15
14	22		.30	12		.15	9.8		.15
15	20		.25	12		.15	9.8		.15
16	20		.25	12		.15	9.8		.15
17	19		.25	11		.15	9.1		.10
18	18		.25	11		.15	9.8		.15
19	18		.25	11		.15	10		.15
20	16		.20	9.1		.10	9.5		.15
21	18		.25	12		.15	9.5		.15
22	19		.25	13		.20	10		.15
23	18		.25	12		.15	8.4		.10
24	16		.20	11		.15	9.1		.10
25	16		.20	11		.15	9.8		.15
26	15		.20	12		.15	9.1		.10
27	14		.20	12		.15	8.4		.10
28	14		.20	13		.20	8.1		.10
29	14		.20	12		.15	8.1		.10
30	14		.20	9.8		.15	8.1		.10
31	13		.20	---			8.1		.10
TOTAL	601		8.10	365.7		4.80	285.7		3.75
DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
JANUARY				FEBRUARY			MARCH		
1	7.8	---	.10	8.0	18	.39	8.0	---	.10
2	6.7	---	.10	8.0	19	.41	8.0	---	.10
3	8.1	---	.15	8.0	9	.19	8.0	---	.10
4	7.8	---	.15	8.0	20	.43	8.0	---	.10
5	7.4	---	.15	8.0	19	.41	8.0	---	.10
6	7.6	---	.15	8.0	8	.17	8.0	---	.10
7	8.0	---	.20	8.0	11	.24	8.0	---	.10
8	8.0	---	.20	8.0	17	.37	7.0	---	.10
9	8.0	---	.20	8.0	10	.22	7.0	---	.10
10	8.0	---	.20	8.0	12	.26	9.0	---	.10
11	8.0	---	.20	8.0	25	.54	9.0	2	.05
12	8.0	---	.20	8.0	23	.50	9.0	16	.39
13	8.0	---	.20	7.0	15	.28	9.0	2	.05
14	8.0	---	.20	7.0	29	.55	9.0	2	.05
15	8.0	---	.20	7.0	25	.47	9.0	---	.05
16	8.0	---	.20	7.0	39	.74	9.0	---	.05
17	8.0	---	.20	6.0	25	.41	9.0	---	.05
18	8.0	---	.20	6.0	15	.24	9.0	---	.05
19	8.0	---	.20	6.5	18	.32	10	---	.05
20	8.0	---	.20	6.5	14	.25	10	---	.05
21	8.0	---	.20	6.5	6	.11	11	---	.05
22	8.0	---	.20	6.5	---	.10	14	---	.10
23	8.0	---	.20	7.0	7	.13	12	---	.05
24	8.0	---	.20	7.5	2	.04	10	---	.05
25	8.0	9	.19	8.0	---	.10	9.5	---	.05
26	8.1	---	.20	8.0	---	.10	10	---	.05
27	7.8	---	.20	8.0	---	.10	15	---	.10
28	8.0	---	.20	8.0	---	.10	20	2	.11
29	8.0	---	.20	---	---	---	26	---	.20
30	8.0	---	.20	---	---	---	35	---	.50
31	8.0	18	.39	---	---	---	46	---	.60
TOTAL	245.3	---	5.98	208.5	---	8.17	379.5	---	3.70

EAGLE RIVER BASIN

09066250 GORE CREEK AT VAIL, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1977 TO SEPTEMBER 1978

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
APRIL			MAY			JUNE			
1	55	---	.70	68	---	1.5	326	18	16
2	44	---	.50	69	---	1.5	362	---	20
3	42	---	.45	74	---	1.5	394	---	25
4	41	---	.45	75	---	1.5	410	---	30
5	42	---	.45	68	3	.55	370	10	10
6	40	---	.45	63	---	.70	374	44	44
7	48	---	.50	60	---	.65	460	64	79
8	56	---	.60	55	---	.60	446	72	87
9	60	---	.65	56	4	.60	550	94	140
10	54	---	.60	63	---	.70	831	102	229
11	50	---	.55	74	---	1.0	945	115	293
12	56	4	.60	74	---	1.0	915	106	262
13	56	---	.60	80	---	2.0	915	101	250
14	54	---	.60	128	---	4.0	1020	107	295
15	56	---	.90	212	---	10	1080	38	111
16	57	9	1.4	298	---	25	968	42	110
17	62	---	1.5	306	---	30	885	32	76
18	56	---	1.5	225	27	16	818	---	65
19	48	---	1.0	186	---	8.0	798	---	60
20	50	---	1.0	198	---	6.5	812	---	65
21	54	---	1.0	228	---	6.0	900	---	70
22	52	---	1.0	225	---	5.5	945	30	77
23	47	---	1.0	274	8	5.9	1030	67	186
24	48	---	1.0	326	---	8.0	1040	155	435
25	57	---	1.5	358	---	15	1000	---	300
26	72	---	1.5	334	---	9.0	950	85	218
27	84	---	2.0	334	---	9.0	850	---	130
28	79	---	2.0	302	---	7.5	700	33	62
29	72	---	1.5	270	---	6.0	630	---	55
30	72	---	1.5	312	---	7.5	656	---	55
31	---	---	---	320	9	7.8	---	---	---
TOTAL	1664	---	29.00	5715	---	200.50	22380	---	3855
DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
JULY			AUGUST			SEPTEMBER			
1	630	---	55	125	---	1.0	32	---	.40
2	594	---	45	115	---	1.0	31	---	.40
3	550	---	40	110	---	.60	30	---	.40
4	506	---	40	105	---	.60	30	---	.40
5	473	---	35	100	1	.27	29	---	.40
6	442	---	35	95	5	1.3	29	9	.70
7	410	---	30	85	5	1.1	27	2	.15
8	414	---	30	80	8	1.7	26	---	.30
9	394	---	30	75	5	1.0	24	---	.25
10	366	---	25	72	4	.78	26	---	.30
11	378	---	30	69	---	.75	29	---	.30
12	370	---	25	66	---	.70	29	4	.31
13	350	26	25	69	---	.75	26	---	.30
14	326	---	20	74	---	.80	23	---	.25
15	309	---	20	75	---	.80	22	---	.25
16	302	---	15	62	---	.70	22	---	.25
17	323	---	20	56	---	.70	24	---	.25
18	295	---	10	54	5	.73	25	---	.25
19	267	13	9.4	48	5	.65	26	---	.25
20	246	3	2.0	46	2	.25	27	---	.30
21	228	13	8.0	46	2	.25	25	---	.25
22	210	4	2.3	48	2	.26	24	---	.25
23	190	15	7.7	47	1	.13	23	---	.25
24	175	4	1.9	45	2	.24	22	---	.25
25	160	---	1.5	43	5	.58	21	---	.25
26	150	3	1.2	42	---	.60	20	---	.20
27	143	---	1.0	39	---	.55	20	2	.11
28	143	---	1.0	36	---	.50	20	7	.38
29	135	---	1.0	34	---	.45	19	---	.20
30	130	---	1.0	32	---	.40	18	---	.20
31	130	---	1.0	32	---	.40	---	---	---
TOTAL	9739	---	569.0	2025	---	20.54	749	---	8.75
YEAR	44357.7		4717.29						

EAGLE RIVER BASIN

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09066250 GORE CREEK AT VAIL, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
OCTOBER				NOVEMBER			DECEMBER		
1	18	---	.20	13	8	.28	7.6	3	.06
2	17	---	.20	13	2	.07	7.6	---	.05
3	17	---	.20	13	4	.14	6.2	---	.05
4	17	---	.20	12	1	.03	6.2	---	.05
5	17	---	.20	12	1	.03	6.2	---	.05
6	16	---	.15	11	1	.03	6.2	---	.05
7	16	---	.15	12	1	.03	6.2	---	.05
8	16	---	.15	13	1	.04	6.2	---	.05
9	15	---	.15	14	---	.10	6.0	---	.05
10	15	---	.15	13	---	.10	6.0	4	.06
11	15	---	.15	13	---	.10	6.0	---	.05
12	14	---	.15	12	---	.15	6.0	---	.03
13	14	---	.15	10	5	.14	6.0	1	.02
14	14	---	.15	13	3	.11	5.7	---	.02
15	14	---	.15	14	4	.15	5.4	---	.01
16	13	---	.10	11	7	.21	5.4	---	.01
17	13	---	.10	8.4	1	.02	5.4	---	.01
18	15	3	.12	11	---	.03	5.2	---	.01
19	16	6	.26	10	---	.03	5.2	---	.01
20	14	11	.42	9.5	1	.03	4.7	---	.01
21	14	8	.30	11	---	.03	4.7	---	.01
22	17	5	.23	9.8	1	.03	4.5	---	.01
23	14	5	.19	9.2	---	.02	4.5	---	.01
24	16	6	.26	9.0	---	.02	4.5	---	.01
25	17	6	.28	8.6	1	.02	4.5	---	.01
26	14	5	.19	7.6	---	.03	4.5	---	.01
27	16	9	.39	7.6	---	.03	4.5	---	.01
28	16	11	.48	7.6	2	.04	4.5	---	.01
29	15	8	.32	7.6	---	.04	4.5	---	.01
30	14	8	.30	7.6	---	.04	4.5	---	.01
31	13	4	.14	---	---	---	4.5	---	.01
TOTAL	472	---	6.58	323.5	---	2.12	169.1	---	0.81

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
JANUARY				FEBRUARY			MARCH		
1	4.0	---	.01	7.1	---	.02	5.6	---	.02
2	4.5	---	.01	7.0	---	.02	5.9	---	.02
3	4.5	---	.01	7.0	---	.02	5.4	---	.02
4	4.5	---	.01	7.0	---	.02	5.4	---	.02
5	4.5	---	.01	7.0	---	.02	5.9	---	.02
6	4.5	---	.01	7.0	---	.02	5.9	---	.02
7	4.5	---	.01	7.0	---	.02	5.9	---	.02
8	5.2	---	.01	7.0	---	.02	5.9	---	.02
9	5.5	---	.01	7.0	---	.02	5.9	---	.02
10	5.5	---	.01	7.6	---	.02	6.2	---	.02
11	5.5	---	.01	7.6	---	.02	6.4	---	.02
12	5.5	---	.01	7.6	---	.02	7.1	---	.02
13	5.5	---	.01	7.6	---	.02	8.1	---	.02
14	5.5	---	.01	7.6	---	.02	8.4	---	.02
15	5.5	---	.01	7.6	---	.02	9.1	---	.02
16	6.5	---	.04	7.0	---	.02	8.4	---	.02
17	7.5	---	.04	6.4	---	.02	9.1	---	.02
18	7.8	---	.05	5.8	---	.02	9.4	---	.03
19	7.8	---	.05	5.6	---	.02	9.5	---	.03
20	7.8	---	.05	5.6	---	.02	9.5	---	.03
21	7.8	---	.05	5.6	---	.02	9.3	---	.03
22	8.0	---	.10	5.6	---	.02	9.0	---	.02
23	8.4	---	.10	5.6	---	.02	8.5	---	.02
24	8.4	4	.09	5.6	---	.02	8.5	---	.02
25	8.4	---	.10	5.6	---	.02	8.5	---	.02
26	7.5	---	.05	5.6	---	.02	8.5	---	.02
27	7.0	---	.04	5.6	1	.02	9.0	---	.02
28	6.8	---	.04	5.6	---	.02	9.4	---	.03
29	6.6	---	.04	---	---	---	9.4	---	.03
30	6.4	1	.02	---	---	---	9.4	---	.03
31	6.4	1	.02	---	---	---	9.4	---	.03
TOTAL	193.8	---	1.03	183.9	---	0.56	241.9	---	0.70

EAGLE RIVER BASIN

09066250 GORE CREEK AT VAIL, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
APRIL				MAY				JUNE	
1	9.4	---	.03	66	1	.18	330	12	11
2	9.4	---	.03	66	1	.18	323	---	10
3	9.4	1	.03	62	2	.33	382	---	20
4	9.4	1	.03	57	2	.31	478	---	35
5	11	1	.03	68	---	.75	599	---	60
6	12	---	.03	86	---	1.5	786	---	100
7	18	---	.10	97	---	2.0	850	58	133
8	22	---	.10	84	---	1.5	588	30	48
9	24	---	.15	77	---	1.5	486	---	35
10	23	---	.10	63	10	1.7	414	27	30
11	21	---	.10	56	3	.45	450	20	24
12	19	---	.10	54	---	.45	533	35	50
13	16	---	.10	54	---	.45	766	---	100
14	18	---	.10	69	---	.95	864	74	212
15	30	---	.25	99	---	1.5	885	50	152
16	45	---	.50	124	---	3.5	878	56	158
17	55	---	.90	157	20	8.5	831	38	85
18	69	---	1.5	195	26	14	772	19	40
19	79	---	2.0	250	67	45	656	16	28
20	74	---	1.5	281	51	39	528	13	19
21	70	---	1.0	281	40	30	555	25	37
22	69	---	.75	270	44	32	656	15	27
23	70	---	.75	312	28	24	740	14	28
24	75	---	1.0	402	40	43	760	30	62
25	77	---	1.5	437	57	67	786	14	30
26	63	---	.50	486	---	70	792	7	15
27	60	---	.30	566	49	75	818	12	27
28	69	---	.75	630	---	95	857	7	16
29	62	---	.15	649	---	100	812	24	53
30	62	---	.15	528	---	50	772	47	98
31	---	---	---	394	12	13	---	---	---
TOTAL	1250.6	---	14.53	7022	---	722.75	19947	---	1743

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
JULY				AUGUST				SEPTEMBER	
1	727	25	49	112	---	1.0	31	2	.17
2	675	21	38	108	4	1.2	28	2	.15
3	630	22	37	101	5	1.4	27	3	.22
4	610	19	31	101	14	3.8	26	6	.42
5	577	17	26	91	3	.74	24	13	.84
6	538	7	10	86	4	.93	24	17	1.1
7	516	7	9.8	86	6	1.4	23	13	.81
8	511	4	5.5	80	7	1.5	21	6	.34
9	491	4	5.3	77	5	1.0	21	3	.17
10	464	4	5.0	72	7	1.4	20	3	.16
11	460	6	7.5	70	3	.57	20	6	.32
12	450	4	4.9	68	12	2.2	20	9	.49
13	455	4	4.9	68	5	.92	19	8	.41
14	437	4	4.7	74	9	1.8	21	17	.96
15	414	4	4.5	74	3	.60	21	11	.62
16	394	5	5.3	69	2	.37	19	17	.87
17	358	5	4.8	63	9	1.5	20	6	.32
18	326	9	7.9	63	2	.34	19	10	.51
19	295	6	4.8	62	3	.50	15	4	.16
20	278	6	4.5	59	3	.48	17	3	.14
21	250	7	4.7	55	1	.15	18	3	.15
22	236	6	3.8	47	1	.13	17	3	.14
23	225	8	4.9	43	1	.12	17	5	.22
24	210	9	5.1	39	1	.11	16	3	.13
25	201	9	4.9	37	1	.10	15	1	.04
26	180	10	4.9	34	3	.28	15	4	.16
27	168	7	3.2	33	3	.27	16	3	.13
28	160	12	5.2	32	1	.09	15	3	.12
29	157	16	6.8	31	2	.17	14	1	.04
30	141	13	4.9	31	3	.25	14	1	.04
31	128	4	1.4	33	5	.45	---	---	---
TOTAL	11662	---	320.2	1999	---	25.77	593	---	10.36
YEAR	44057.8		2848.41						

EAGLE RIVER BASIN

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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 (61 m) upstream from Interstate Highway 70, 0.2 mi (0.3 km) upstream from mouth, and 5.0 mi (8.0 km) northeast of Minturn. Prior to Oct. 1, 1977, at site 700 ft (210 m) upstream.

DRAINAGE AREA.--5.97 mi² (15.46 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 8,200 ft (2,499 m), from topographic map.

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

AVERAGE DISCHARGE.--15 years, 5.62 ft³/s (0.159 m³/s), 4,070 acre-ft/yr (5.02 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 116 ft³/s (3.29 m³/s) June 20, 1974, gage height, 2.65 ft (0.808 m) datum then in use; maximum gage height, 3.23 ft (0.985 m) datum then in use, July 4, 1975 (backwater from debris); no flow at times most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 71 ft³/s (2.01 m³/s) at 2200 June 28, gage height, 2.95 ft (0.899 m), only peak above base of 60 ft³/s (1.7 m³/s); minimum daily, 0.15 ft³/s (0.004 m³/s) Feb. 18 to Apr. 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.80	.80	.40	.30	.17	.15	.15	1.0	24	61	8.4	6.4
2	.76	.78	.40	.20	.17	.15	.15	1.1	24	59	8.2	7.0
3	.74	.80	.40	.20	.17	.15	.15	1.0	27	56	7.8	6.9
4	.74	.80	.40	.20	.17	.15	.15	1.0	33	52	7.4	7.0
5	.80	.80	.40	.20	.17	.15	.15	1.3	41	47	7.0	7.0
6	.80	.70	.40	.20	.17	.15	.15	1.7	53	45	6.9	6.9
7	.80	.70	.40	.20	.17	.15	.19	1.7	62	44	6.9	6.9
8	.80	.70	.40	.20	.17	.15	.29	2.1	56	43	6.7	6.9
9	.80	.70	.40	.20	.17	.15	.31	1.7	44	40	6.5	6.9
10	.80	.70	.40	.20	.17	.15	.27	1.5	39	39	6.0	6.9
11	.80	.57	.40	.20	.17	.15	.22	1.4	37	37	5.8	6.9
12	.80	.50	.40	.20	.17	.15	.19	1.4	42	36	5.7	6.9
13	.80	.50	.40	.20	.17	.15	.17	1.4	59	34	5.8	7.0
14	.80	.40	.40	.20	.17	.15	.26	1.8	55	31	6.5	6.9
15	.80	.30	.40	.20	.17	.15	.41	2.7	55	28	6.2	7.0
16	.80	.25	.40	.17	.17	.15	.63	4.1	60	26	6.0	7.2
17	.80	.25	.40	.17	.17	.15	.80	5.5	57	24	6.0	7.0
18	.80	.25	.40	.17	.15	.15	.97	6.7	52	22	6.0	7.0
19	.74	.28	.40	.17	.15	.15	1.0	9.7	46	20	6.5	7.0
20	.70	.29	.40	.17	.15	.15	.97	12	41	18	6.2	7.4
21	.70	.32	.40	.17	.15	.15	.94	14	41	17	6.4	7.6
22	.70	.32	.40	.17	.15	.15	.94	14	43	17	6.4	7.8
23	.70	.34	.40	.17	.15	.15	.97	17	51	15	6.5	7.6
24	.70	.32	.40	.17	.15	.15	1.1	20	54	14	6.5	7.4
25	.70	.31	.40	.17	.15	.15	1.0	22	56	13	6.5	7.6
26	.70	.32	.40	.17	.15	.15	.97	28	58	12	6.5	7.6
27	.70	.34	.40	.17	.15	.15	.97	35	58	11	6.7	7.8
28	.70	.40	.40	.17	.15	.15	1.1	48	61	11	6.7	7.8
29	.70	.40	.40	.17	---	.15	1.0	47	63	10	6.4	7.6
30	.80	.40	.40	.17	---	.15	1.0	36	61	9.7	6.4	7.6
31	.80	---	.40	.17	---	.15	---	29	---	9.0	7.2	---
TOTAL	23.58	14.54	12.40	5.82	4.54	4.65	17.57	370.8	1443	900.7	204.7	215.5
MEAN	.76	.48	.40	.19	.16	.15	.59	12.0	48.1	29.1	6.50	7.18
MAX	.80	.80	.40	.30	.17	.15	1.1	48	63	61	8.4	7.8
MIN	.70	.25	.40	.17	.15	.15	.15	1.0	24	9.0	5.7	6.4
AC-FT	47	29	25	12	9.0	9.2	35	735	2860	1790	406	427

CAL YR 1978 TOTAL 2804.01 MEAN 7.68 MAX 81 MIN .04 AC-FT 5560
WTR YR 1979 TOTAL 3217.80 MEAN 8.82 MAX 63 MIN .15 AC-FT 6380

NOTE.--NO GAGE-HEIGHT RECORD OCT. 1 TO NOV. 1.

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 (46 m) upstream from road culvert, 1,400 ft (430 m) upstream from Indian Creek, and 6.8 mi (10.9 km) north of Minturn.

DRAINAGE AREA.--7.27 mi² (18.83 km²).

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

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 9,212 ft (2,809 m), from topographic map (revised).

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

AVERAGE DISCHARGE.--16 years, 8.75 ft³/s (0.248 m³/s), 6,340 acre-ft/yr (7.82 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 207 ft³/s (5.86 m³/s) June 10, 1973, gage height, 4.41 ft (1.344 m), from rating curve extended above 120 ft³/s (3.4 m³/s); minimum daily, 0.20 ft³/s (0.006 m³/s) Jan. 30, 1970.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 146 ft³/s (4.13 m³/s) at 0100 June 7, gage height, 4.17 ft (1.271 m), only peak above base of 70 ft³/s (2.0 m³/s); minimum daily, 0.52 ft³/s (0.015 m³/s) Jan. 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.4	1.2	.72	.67	.60	.81	1.0	5.3	51	48	3.6	1.8
2	1.4	1.1	.74	.67	.60	.81	1.0	4.7	52	43	3.4	1.7
3	1.3	1.0	.74	.60	.60	.80	1.0	4.2	64	37	3.2	1.7
4	1.3	1.0	.74	.60	.60	.80	1.5	4.9	72	33	2.9	1.6
5	1.3	.98	.74	.65	.60	.88	1.7	6.5	81	30	2.7	1.5
6	1.3	.96	.74	.58	.60	.88	1.4	8.4	99	29	2.7	1.5
7	1.2	.96	.74	.56	.60	.88	1.5	8.1	110	27	2.6	1.4
8	1.2	.94	.74	.52	.60	.88	1.6	6.2	80	25	2.5	1.4
9	1.2	.96	.70	.54	.60	.88	1.6	5.3	59	22	2.5	1.4
10	1.2	.94	.70	.54	.67	.88	1.3	4.9	56	20	2.6	1.4
11	1.2	.85	.68	.55	.67	.95	1.3	4.2	59	19	2.8	1.4
12	1.2	.87	.67	.60	.67	.95	1.2	4.0	71	18	2.7	1.4
13	1.2	.90	.67	.55	.67	.95	1.2	4.9	91	17	2.9	1.3
14	1.2	.92	.67	.55	.67	.95	1.7	7.8	99	16	3.9	1.4
15	1.2	.92	.67	.55	.67	.95	2.3	13	103	15	3.6	1.3
16	1.1	.90	.67	.54	.67	.95	2.9	16	107	14	3.7	1.3
17	1.1	.88	.67	.54	.74	.95	3.7	18	98	12	3.3	1.3
18	1.3	.84	.71	.55	.74	.95	4.7	26	81	11	3.6	1.2
19	1.3	.76	.68	.55	.74	.95	4.7	33	66	9.8	4.1	1.2
20	1.2	.73	.67	.55	.74	.95	4.2	41	59	9.0	3.3	1.3
21	1.2	.68	.67	.55	.74	.95	6.2	38	59	8.7	3.3	1.3
22	1.5	.66	.67	.55	.74	.95	4.2	37	67	10	2.8	1.3
23	1.4	.72	.67	.55	.74	1.0	4.7	46	69	8.1	2.5	1.2
24	1.4	.58	.67	.54	.81	1.0	5.3	56	67	8.1	2.4	1.2
25	1.3	.72	.67	.55	.81	1.0	4.9	59	66	7.0	2.3	1.2
26	1.3	.81	.66	.55	.81	1.0	4.2	70	65	6.2	2.2	1.2
27	1.2	.75	.66	.58	.80	1.0	4.7	80	62	5.7	2.1	1.3
28	1.2	.73	.67	.60	.80	1.0	5.3	91	63	5.3	2.0	1.2
29	1.2	.74	.67	.60	---	1.0	4.4	88	57	4.8	1.9	1.2
30	1.2	.68	.67	.60	---	1.0	4.7	74	53	4.4	1.9	1.2
31	1.2	---	.67	.60	---	1.0	---	58	---	4.0	2.1	---
TOTAL	38.9	25.68	21.41	17.73	19.30	28.90	90.1	923.4	2186	527.1	88.1	40.8
MEAN	1.25	.86	.69	.57	.69	.93	3.00	29.8	72.9	17.0	2.84	1.36
MAX	1.5	1.2	.74	.67	.81	1.0	6.2	91	110	48	4.1	1.8
MIN	1.1	.58	.66	.52	.60	.80	1.0	4.0	51	4.0	1.9	1.2
AC-FT	77	51	42	35	38	57	179	1830	4340	1050	175	81
CAL YR 1978	TOTAL	3860.01	MEAN	10.6	MAX	113	MIN	.58	AC-FT	7660		
WTR YR 1979	TOTAL	4007.42	MEAN	11.0	MAX	110	MIN	.52	AC-FT	7950		

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LOCATION.--Lat 39°37'47", long 106°31'20", in NEXSW sec.12, T.5 S., R.82 W., Eagle County, Hydrologic Unit 14010003, on left bank at Avon, 550 ft (170 m) upstream from U.S. Highways 6 and 24, and 700 ft (210 m) upstream from mouth.

WATER-DISCHARGE RECORDS

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 119 ft³/s (3.37 m³/s) at 2100 June 15, gage height, 2.37 ft (0.722 m), only peak above base of 80 ft³/s (2.3 m³/s); minimum daily, 1.6 ft³/s (0.045 m³/s) Feb. 18, 25.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.2	3.2	2.5	1.9	1.9	1.8	2.0	8.0	49	90	17	8.2
2	3.2	3.1	2.7	1.7	2.1	2.0	1.9	8.3	46	85	16	7.5
3	3.2	3.0	3.2	2.1	2.1	1.8	2.0	7.7	48	81	15	6.9
4	3.3	2.8	3.4	2.3	1.9	1.7	2.2	7.5	52	76	7.8	6.9
5	3.3	3.0	2.6	2.4	1.7	1.8	2.4	8.9	59	67	7.0	6.1
6	3.2	2.8	2.3	2.3	1.8	1.9	2.7	10	70	65	11	5.6
7	3.2	2.9	2.0	2.1	1.9	2.4	3.1	11	84	62	14	5.4
8	3.1	2.8	1.7	1.8	1.9	2.2	4.0	11	75	60	15	5.3
9	3.0	2.9	1.9	2.0	1.7	2.0	4.8	9.4	70	59	17	5.0
10	3.0	2.8	2.0	2.4	1.9	1.8	5.0	9.9	63	55	14	5.1
11	2.9	3.0	2.2	2.5	1.9	1.9	4.0	9.0	66	50	13	4.9
12	2.9	2.9	2.2	2.6	2.0	2.1	2.3	8.8	70	48	12	5.0
13	2.8	2.7	2.2	2.4	2.2	2.3	2.2	9.8	84	45	12	5.0
14	2.7	2.6	2.2	1.9	2.4	2.5	2.8	11	96	42	13	5.0
15	2.8	2.6	2.1	2.4	2.2	2.5	4.4	13	109	40	14	4.9
16	2.8	2.6	2.1	2.5	2.1	2.6	5.9	15	105	38	14	4.6
17	2.8	2.5	2.1	2.5	1.9	2.7	6.6	17	92	35	16	4.2
18	3.2	2.4	2.0	2.6	1.6	2.5	8.2	21	90	33	17	4.0
19	3.2	2.4	2.6	2.5	1.8	2.4	7.8	24	86	31	17	3.9
20	3.2	2.4	2.5	2.4	2.0	2.3	7.2	26	75	29	16	4.1
21	3.3	2.5	2.4	2.0	1.9	2.3	7.3	27	76	28	15	4.1
22	4.7	2.5	2.3	2.1	2.0	2.3	7.2	28	80	28	13	4.3
23	4.0	2.5	2.3	1.8	1.9	2.2	7.9	30	88	24	12	4.1
24	3.8	2.4	2.2	1.9	1.7	2.1	8.2	33	88	22	11	3.6
25	4.4	2.5	2.2	2.2	1.6	2.0	8.6	35	88	24	11	3.5
26	3.6	2.4	2.4	2.4	1.7	2.0	7.2	39	89	24	10	3.5
27	3.8	2.3	2.6	2.2	1.8	2.1	7.5	41	88	23	10	4.6
28	3.6	2.2	2.7	1.9	1.8	2.5	8.0	60	89	22	9.4	4.5
29	3.4	2.4	2.6	2.2	---	2.4	7.5	67	91	20	8.7	4.0
30	3.4	2.4	2.4	1.9	---	2.2	7.6	66	93	20	9.0	3.8
31	3.4	---	2.1	1.8	---	2.1	---	57	---	18	8.9	---
TOTAL	102.4	79.5	72.7	67.7	53.4	67.4	158.5	729.3	2359	1344	395.8	147.6
MEAN	3.30	2.65	2.35	2.18	1.91	2.17	5.28	23.5	78.6	43.4	12.8	4.92
MAX	4.7	3.2	3.4	2.6	2.4	2.7	8.6	67	109	90	17	8.2
MIN	2.7	2.2	1.7	1.7	1.6	1.7	1.9	7.5	46	18	7.0	3.5
AC-FT	203	158	144	134	106	134	314	1450	4680	2670	785	293
WTR YR 1978	TOTAL	5286.6	MEAN	14.5	MAX	154	MIN	1.4	AC-FT	10490		
CAL YR 1979	TOTAL	5577.3	MEAN	15.3	MAX	109	MIN	1.6	AC-FT	11060		

EAGLE RIVER BASIN

09067000 BEAVER CREEK AT AVON, CO--Continued

WATER-QUALITY RECORDS

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

INSTRUMENTATION.--Turbidity recorder since September 1974.

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)
OCT											
05...	1000	3.4	210	7.3	2.0	10.2	85	34	25	5.4	2.0
NOV											
16...	1000	2.6	282	7.1	.0	10.8	140	65	39	9.2	2.6
DEC											
06...	1000	2.1	249	7.1	.0	10.4	120	44	35	7.5	2.3
JAN											
03...	1000	2.2	274	7.4	.0	11.2	130	57	36	8.6	2.8
MAR											
27...	0930	2.0	326	7.7	1.0	11.3	160	81	47	11	2.6
APR											
19...	1045	6.7	350	7.4	3.5	10.6	170	100	50	12	2.6
MAY											
15...	1030	12	265	7.5	4.0	10.2	130	63	38	8.6	1.9
JUN											
05...	1015	55	115	6.6	5.0	16.4	46	19	13	3.4	1.4
19...	1015	85	100	7.2	4.5	13.4	36	15	10	2.6	1.8
JUL											
10...	1015	56	75	7.0	8.0	10.4	29	11	8.0	2.3	1.5
AUG											
14...	0945	12	155	7.1	11.0	8.8	60	25	17	4.3	1.7

DATE	SODIUM AD- SORP- TION RATIO	BICAR- BONATE (MG/L AS HCO3)	ALKA- LINIT (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT											
05...	.1	62	51	39	.7	118	.16	1.08	.01	.00	--
NOV											
16...	.1	86	71	64	.9	176	.24	1.25	.03	.01	--
DEC											
06...	.1	90	74	58	1.0	157	.21	.90	.06	.01	--
JAN											
03...	.1	83	68	62	1.4	153	.21	.91	.05	.01	--
MAR											
27...	.1	99	81	82	.8	203	.28	1.10	.07	.00	--
APR											
19...	.1	90	74	91	1.4	235	.32	4.25	.27	.00	--
MAY											
15...	.1	82	67	56	.9	172	.23	5.62	.17	.02	--
JUN											
05...	.1	34	28	15	.8	69	.09	10.3	.04	.01	11
19...	.1	25	21	13	.9	51	.07	11.7	.00	.00	--
JUL											
10...	.1	23	19	14	.8	41	.06	6.23	.00	.01	--
AUG											
14...	.1	43	35	28	.7	88	.12	2.85	.04	.00	--

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 (120 m) upstream from Gypsum Creek, about 520 ft (160 m) upstream from bridge on U.S. Highways 6 and 24, and about 550 ft (170 m) upstream from gaging station.

DRAINAGE AREA.--944 mi² (2,445 km²), 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).

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 1,850 micromhos Aug. 6, 1949; minimum daily, 130 micromhos June 9, 10, 1976.

WATER TEMPERATURES: Maximum, 24°C Aug. 24, 1949; minimum, freezing point on many days during winter months.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum daily, 1,200 micromhos Oct. 1; minimum daily, 175 micromhos June 18, 19.

WATER TEMPERATURES: Maximum daily, 20.0°C Aug. 31; minimum daily, freezing point on many days during November to March.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW- INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN- DIS- SOLVED (MG/L)	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
OCT										
05...	1245	202	1000	8.1	9.5	10.4	440	300	140	22
NOV										
16...	1245	220	1130	8.1	3.5	12.4	370	230	110	22
DEC										
06...	1245	187	926	7.8	.5	12.0	360	230	110	20
JAN										
03...	1300	172	1170	7.7	.5	11.6	400	250	120	24
MAR										
27...	1300	198	900	8.0	9.0	10.2	410	270	120	26
APR										
19...	1330	455	500	7.8	11.0	8.8	210	130	60	15
MAY										
15...	1330	794	410	7.7	12.0	8.6	180	95	52	12
JUN										
05...	1315	2800	175	7.5	9.0	10.4	81	32	24	5.2
19...	1300	3560	210	7.7	6.5	10.8	96	44	28	6.3
JUL										
10...	1315	1790	240	7.7	12.0	9.2	100	48	30	6.7
AUG										
14...	1300	407	675	8.0	15.0	9.2	250	140	77	15

EAGLE RIVER BASIN

09069000 EAGLE RIVER AT GYPSUM, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	ALKA- LINITY (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)
OCT									
05...	66	1.4	3.3	170	0	140	280	95	.2
NOV									
16...	69	1.6	3.0	170	0	140	230	100	.1
DEC									
06...	56	1.3	3.1	160	0	130	220	86	.1
JAN									
03...	76	1.7	4.1	--	--	150	260	120	.1
MAR									
27...	60	1.3	3.3	--	--	140	270	76	.2
APR									
19...	24	.7	1.9	--	--	83	130	26	.1
MAY									
15...	14	.5	1.8	--	--	--	110	13	--
JUN									
05...	4.4	.2	.9	--	--	49	31	4.2	.1
19...	5.1	.2	.9	--	--	52	40	4.8	.1
JUL									
10...	7.8	.3	1.0	--	--	55	45	8.0	.1
AUG									
14...	26	.7	2.0	--	--	110	170	32	.1
DATE	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, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
OCT									
05...	8.4	699	.95	381	.08	.01	.00	10	40
NOV									
16...	7.6	626	.85	372	.19	.01	.01	10	50
DEC									
06...	8.9	585	.80	295	.40	.05	.04	30	70
JAN									
03...	10	707	.96	328	.56	.11	.08	0	30
MAR									
27...	7.4	650	.88	347	.54	.05	.05	10	100
APR									
19...	8.1	317	.43	389	.43	.02	.00	140	330
MAY									
15...	--	262	.36	562	--	--	--	160	--
JUN									
05...	5.7	106	.14	801	.11	.02	--	120	30
19...	5.5	122	.17	1170	.08	.02	--	80	20
JUL									
10...	5.9	138	.19	667	.05	.01	--	120	40
AUG									
14...	7.0	396	.54	435	.13	.00	--	20	40

EAGLE RIVER BASIN

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09069000 EAGLE RIVER AT GYPSUM, CO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1					---	950	1000	460	250	---	320	500
2					---	950	1000	460	250	---	360	500
3					1000	940	1000	480	240	---	365	500
4					1010	940	1000	480	220	---	400	520
5					990	940	1000	420	260	---	400	520
6					975	940	950	420	180	---	380	520
7					975	930	1000	340	170	---	380	540
8					975	920	925	400	200	---	380	540
9					980	925	850	360	240	---	380	530
10					980	920	700	500	260	---	380	540
11					1000	900	900	500	260	---	380	540
12					1000	900	---	540	200	---	380	550
13					975	910	900	520	200	---	400	560
14					960	910	900	480	200	---	430	560
15					960	910	850	420	180	---	395	560
16					980	920	800	360	---	---	410	560
17					980	920	520	325	170	---	400	580
18					980	910	600	300	180	---	380	600
19					1000	900	510	255	---	300	350	640
20					1010	900	500	240	---	300	380	645
21					1030	900	500	220	---	300	380	645
22					1010	890	550	240	---	280	400	640
23					1000	890	480	230	---	280	440	640
24					990	900	420	200	---	280	400	600
25					980	900	440	200	---	270	440	600
26					980	890	480	200	---	280	460	600
27					975	880	520	180	---	300	460	600
28					975	---	500	170	---	---	480	600
29					---	---	480	160	---	---	500	650
30					---	---	480	180	---	320	480	650
31					---	---	---	230	---	320	480	---

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1					---	1.0	4.5	9.0	10.0	12.0	18.0	19.0
2					---	1.0	7.0	7.0	10.0	12.0	17.0	19.0
3					.0	1.0	8.0	10.0	11.0	12.0	17.0	19.0
4					.0	1.0	8.0	13.0	12.0	12.0	18.0	18.0
5					.0	1.0	10.0	11.0	10.0	12.0	17.0	18.0
6					.0	1.0	12.0	12.0	11.0	11.0	19.0	19.0
7					.0	1.0	6.0	4.5	7.0	12.0	20.0	18.0
8					.0	1.0	6.0	7.0	8.0	13.0	19.0	18.0
9					.0	2.0	12.0	8.0	6.0	13.0	20.0	19.0
10					.0	2.0	8.0	8.0	10.0	14.0	19.0	18.0
11					.0	1.0	6.0	10.0	10.0	14.0	19.0	18.0
12					.0	2.0	5.0	12.0	12.0	16.0	18.0	16.0
13					1.0	2.0	9.0	11.0	11.0	16.0	19.0	14.0
14					1.0	2.0	12.0	10.0	10.0	16.0	16.0	16.0
15					1.0	2.0	12.0	14.0	11.0	15.0	17.0	16.0
16					1.0	1.0	8.0	12.0	11.0	15.0	16.0	16.0
17					.0	2.0	14.0	13.0	11.0	15.0	17.0	17.0
18					.0	2.0	14.0	13.0	10.0	14.0	16.0	17.0
19					1.0	2.0	10.0	8.0	7.0	15.0	15.0	15.0
20					1.0	2.0	7.0	11.0	11.0	16.0	16.0	15.0
21					1.0	2.0	11.0	10.0	12.0	17.0	16.0	15.0
22					1.0	3.0	5.0	10.0	11.0	17.0	17.0	15.0
23					1.0	3.0	12.0	11.0	12.0	18.0	18.0	15.0
24					1.0	3.0	11.0	9.0	11.0	18.0	15.0	15.0
25					1.0	3.0	9.0	10.0	12.0	18.0	16.0	15.0
26					1.0	2.0	11.0	10.0	12.0	17.0	17.0	15.0
27					1.0	2.0	13.0	9.0	12.0	18.0	18.0	15.0
28					1.0	---	5.0	8.0	12.0	---	17.0	15.0
29					---	---	7.0	8.0	12.0	---	19.0	14.0
30					---	---	12.0	8.0	12.0	17.0	18.0	13.0
31					---	---	---	9.0	---	18.0	18.0	---

EAGLE RIVER BASIN

09070000 EAGLE RIVER BELOW GYPSUM, CO

LOCATION.--Lat 39°38'58", long 106°57'11", in SW¼NW¼ sec.5, T.5 S., R.85 W., Eagle County, Hydrologic Unit 14010003, on right bank 30 ft (9 m) downstream from bridge on U.S. Highways 6 and 24 at Gypsum and 150 ft (46 m) downstream from Gypsum Creek.

DRAINAGE AREA.--944 mi² (2,445 km²).

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

REVISED RECORDS.--WSP 2124: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 6,275 ft (1,913 m), from topographic map.

REMARKS.--Records good. Transmountain diversions above station (see elsewhere in this report). Transbasin diversions above station from Robinson Reservoir, capacity, 2,520 acre-ft (3.11 hm³) 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.--33 years, 563 ft³/s (15.94 m³/s), 407,900 acre-ft/yr (503 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,580 ft³/s (186 m³/s) June 11, 1952, gage height, 9.15 ft (2.789 m); maximum gage height, 9.17 ft (2.795 m) June 29, 1957; minimum daily discharge, 110 ft³/s (3.12 m³/s) Feb. 21, 1955, Feb. 3, 1956, Dec. 26, 27, 1962.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,900 ft³/s (139 m³/s) at 0800 June 16, gage height, 8.15 ft (2.484 m), only peak above base of 3,500 ft³/s (99 m³/s); minimum daily, 157 ft³/s (4.45 m³/s) Dec. 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	212	250	245	217	169	172	256	472	2030	3180	556	297
2	204	246	255	191	179	168	257	515	1820	3020	535	286
3	200	250	220	191	186	168	268	481	1910	2770	508	289
4	200	246	216	209	191	162	253	436	2220	2550	479	280
5	200	240	261	212	188	163	223	484	2670	2320	456	267
6	202	237	214	200	181	172	240	591	3230	2140	452	265
7	208	231	175	215	172	175	260	729	4110	2000	448	256
8	205	232	157	185	171	185	280	671	3590	1950	441	252
9	203	233	161	179	178	177	310	577	3070	1820	455	248
10	199	227	172	191	174	164	331	565	2470	1710	445	246
11	192	233	201	207	180	167	305	494	2440	1650	426	242
12	189	266	222	199	178	176	290	475	2710	1620	412	239
13	183	259	282	195	172	183	280	483	3320	1600	438	232
14	180	243	291	210	178	186	280	588	4140	1520	415	231
15	180	234	292	187	176	187	300	753	4310	1450	481	233
16	181	220	264	190	178	197	353	943	4500	1350	473	223
17	182	212	256	197	169	204	399	1130	4330	1300	498	215
18	192	212	252	188	171	208	429	1340	4050	1190	526	209
19	200	212	266	191	170	195	453	1670	3660	1060	598	204
20	201	216	258	197	173	198	444	1900	2990	985	581	211
21	206	220	241	197	173	219	428	2040	2750	950	534	215
22	272	230	239	192	170	217	438	1950	2950	1060	484	218
23	248	230	231	200	170	207	445	2050	3300	1040	438	213
24	235	225	218	176	164	207	475	2370	3390	914	434	205
25	243	230	211	181	163	195	519	2470	3360	900	379	195
26	253	235	208	193	168	187	449	2410	3430	825	357	194
27	234	225	196	193	173	184	425	2900	3340	757	349	203
28	243	192	202	192	174	185	481	3260	3400	738	323	205
29	255	220	214	177	---	185	446	3470	3300	700	335	203
30	255	240	208	206	---	200	443	3230	3260	646	295	203
31	253	---	199	180	---	226	---	2560	---	601	303	---
TOTAL	6610	6946	7027	6038	4889	5820	10760	44007	96050	46316	13794	6980
MEAN	213	232	227	195	175	188	359	1420	3202	1494	445	233
MAX	272	266	292	217	191	226	519	3470	4500	3180	598	297
MIN	180	192	157	176	163	162	223	436	1820	601	295	194
AC-FT	13110	13780	13940	11980	9700	11543	21340	87290	190500	91870	27330	13840
CAL YR 1978 TOTAL	234349				4590	120	AC-FT	464800				
WTR YR 1979 TOTAL	255237				4500	157	AC-FT	506300				

COLORADO RIVER MAIN STEM

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09070500 COLORADO RIVER NEAR DOTSERO, CO

LOCATION.--Lat 39°38'40", long 107°04'40", in sec.6, T.5 S., R.86 W., Eagle County, Hydrologic Unit 14010001, on left bank about 500 ft (150 m) south of U.S. Highways 6 and 24, 1.5 mi (2.4 km) west of Dotsero, and 1.5 mi (2.4 km) downstream from Eagle River.

DRAINAGE AREA.--4,394 mi² (11,380 km²).

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Altitude of gage is 6,130 ft (1,868 m), from topographic map.

REMARKS.--Records good. Natural flow of stream affected by transmountain diversions, storage reservoirs, power development, diversions for irrigation of 68,000 acres (275 km²) above station, and return flow from irrigated areas.

COOPERATION.--Gage-height record collected in cooperation with the Public Service Co. of Colorado.

AVERAGE DISCHARGE.--39 years, 2,084 ft³/s (59.02 m³/s), 1,510,000 acre-ft/yr (1,860 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 19,100 ft³/s (541 m³/s) June 8, 1952, gage height, 11.56 ft (3.523 m); minimum daily, 350 ft³/s (9.91 m³/s) Jan. 5, 1944.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 11,800 ft³/s (334 m³/s) at 1100 May 29, gage height, 9.27 ft (2.825 m); minimum daily, 520 ft³/s (14.7 m³/s) Dec. 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1200	1280	1330	800	680	924	966	1820	8000	6670	2230	1330
2	1180	1280	1290	610	700	882	930	2030	6510	6470	2100	1320
3	1160	1260	960	560	680	867	893	2170	6100	6170	1950	1280
4	1150	1250	810	620	710	877	892	2060	6330	6370	1840	1280
5	1140	1250	1090	890	710	872	889	2050	6890	6320	1740	1250
6	1150	1280	870	960	700	870	914	2400	7730	6290	1690	1240
7	1150	1190	620	860	770	886	1240	2870	9470	6140	1650	1220
8	1160	1210	520	730	840	914	1200	2970	9720	5980	1640	1210
9	1170	1200	550	630	820	888	1260	2690	9310	5730	1690	1340
10	1170	1210	540	580	790	831	1350	2650	7870	5360	1630	1330
11	1170	1200	590	690	820	840	1410	2530	6880	4970	1560	1310
12	1180	1340	660	870	840	862	1200	2400	6840	4770	1480	1310
13	1180	1320	660	940	840	883	1020	2470	7640	4640	1450	1310
14	1160	1260	730	830	890	888	1010	2700	9060	4490	1430	1330
15	1130	1200	650	800	920	900	1130	3110	10000	4320	1520	1330
16	1140	1150	670	880	890	909	1500	3690	10700	4110	1560	1330
17	1130	1140	640	860	890	943	1790	4320	10500	3990	1600	1320
18	1140	1120	680	870	810	959	1960	4990	9710	3810	1630	1310
19	1140	1140	880	860	750	943	2190	5930	8880	3680	1670	1310
20	1150	1170	970	840	870	920	2110	6830	7800	3400	1680	1300
21	1170	1200	890	770	870	941	1730	7390	7000	3190	1710	1310
22	1400	1220	850	710	850	938	1580	7560	6720	3320	1770	1320
23	1400	1220	930	710	830	900	1740	8140	6940	3330	1720	1320
24	1360	1210	920	670	892	881	1760	8920	7000	3230	1690	1320
25	1310	1240	910	620	930	881	1740	9510	7040	3210	1640	1310
26	1360	1290	840	750	943	890	1640	9510	7090	3100	1620	1310
27	1310	1260	690	770	881	905	1550	10400	6990	2980	1610	1300
28	1280	1150	780	730	908	944	1650	10900	7020	2920	1540	1290
29	1280	1150	880	710	---	989	1730	11400	6740	2790	1450	1290
30	1330	1310	950	650	---	969	1690	11400	6760	2660	1370	1280
31	1330	---	880	630	---	982	---	9990	---	2460	1340	---
TOTAL	37680	36700	25230	23400	23024	28078	42664	167800	235240	136870	51200	39010
MEAN	1215	1223	814	755	822	906	1422	5413	7841	4415	1652	1300
MAX	1400	1340	1330	960	943	989	2190	11400	10700	6670	2230	1340
MIN	1130	1120	520	560	680	831	889	1820	6100	2460	1340	1210
AC-FT	74740	72790	50040	46410	45670	55690	84620	332800	466600	271500	101600	77380
CAL YR 1978 TOTAL	750865			2057	MAX 10800	MIN 520	AC-FT 1489000					
WTR YR 1979 TOTAL	846896			2320	MAX 11400	MIN 520	AC-FT 1680000					

COLORADO RIVER MAIN STEM

09070500 COLORADO RIVER NEAR DJTSERO, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Partial-record station May 1962 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
OCT 05...	1630	1140	450	8.1	12.0	10.1	180	84	55	11
NOV 30...	1620	1270	425	7.9	1.5	--	150	59	44	9.6
JAN 03...	1415	800	395	7.8	.0	11.4	140	46	42	9.5
APR 19...	1630	2020	405	7.8	11.5	9.0	170	70	45	13
JUL 10...	1630	5380	260	7.9	17.0	8.5	110	35	31	7.3

DATE	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	ALKA- LINITY (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)
OCT 05...	23	.7	2.1	120	0	98	96	24	.3
NOV 30...	21	.7	2.3	110	--	90	67	31	.2
JAN 03...	24	.9	2.4	--	--	98	61	28	.2
APR 19...	27	.9	2.7	--	--	96	96	16	.2
JUL 10...	11	.5	1.6	--	--	72	40	7.4	.2

DATE	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTITU- ENTS, 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, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
OCT 05...	9.0	280	.38	862	.02	.00	.00	100	10
NOV 30...	9.6	239	.33	820	.09	.02	.01	30	20
JAN 03...	11	238	.32	514	.15	.02	.01	10	20
APR 19...	12	271	.37	1480	.18	.02	.00	60	50
JUL 10...	10	152	.21	2210	.02	.01	--	60	10

09071100 COLORADO RIVER NEAR GLENWOOD SPRINGS, CO
(Irrigation Network Station)

LOCATION.--Lat 39°34'12", long 107°13'34", Garfield County, Hydrologic Unit 14010001, at Shoshone power plant, 6 mi (10 km) upstream from Glenwood Springs, and 6.5 mi (10.5 km) upstream from Roaring Fork River.

DRAINAGE AREA.--4,560 mi² (11,810 km²), approximately.

PERIOD OF RECORD.--October 1941 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1941 to current year.

WATER TEMPERATURES: May 1949 to current year.

REMARKS.--Discharge obtained by subtracting the daily mean flow in Roaring Fork River at Glenwood Springs (station 09085000) from the daily mean flow in Colorado River below Glenwood Springs (station 09085100).

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 2,260 micromhos Aug. 10, 1947; minimum daily, 153 micromhos May 24, 1948.

WATER TEMPERATURES: Maximum, 22°C July 31, 1954; Aug. 19, 1955; July 31, 1976; minimum, freezing point on many days during winter months.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum daily, 900 micromhos Dec. 9; minimum daily, 185 micromhos May 29.

WATER TEMPERATURES: Maximum daily, 20.0°C Aug. 8; minimum daily, 1.0°C several days during November to January.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	HARD- NESS (MG/L AS CAC03)	HARD- NESS, NONCAR- BONATE (MG/L AS CAC03)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
OCT										
06...	0745	1150	700	7.2	10.5	8.8	190	88	58	12
NOV										
15...	1500	1390	730	7.3	3.0	10.6	180	77	52	11
DEC										
05...	1515	1380	705	7.3	.0	11.3	200	84	58	13
JAN										
03...	1515	800	920	7.7	.0	11.4	210	90	61	14
MAR										
28...	0745	900	700	7.5	11.0	10.2	220	110	63	14
APR										
20...	0745	2100	470	7.3	8.5	9.7	170	79	48	13
MAY										
16...	0745	3200	420	7.2	12.0	8.6	160	63	46	10
JUN										
06...	0745	7200	245	7.1	11.5	9.4	95	31	28	6.1
20...	0800	9000	265	7.5	8.5	10.6	100	38	29	6.8
JUL										
09...	1615	5400	295	7.4	14.5	10.1	110	40	32	7.3
AUG										
13...	1515	1600	610	7.4	19.0	8.0	180	79	53	11

DATE	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE (MG/L AS HC03)	CAR- BONATE (MG/L AS CO3)	ALKA- LITY (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)
OCT									
06...	57	1.8	2.6	130	0	110	91	85	.3
NOV									
15...	61	2.0	2.4	120	0	98	91	81	.2
DEC									
05...	60	1.9	2.9	140	0	110	100	90	.2
JAN									
03...	99	3.0	3.7	--	--	120	110	150	.2
MAR									
28...	74	2.2	2.8	--	--	110	120	99	.3
APR									
20...	38	1.3	2.7	--	--	94	100	42	.2
MAY									
16...	26	.9	2.3	--	--	--	--	26	--
JUN									
06...	11	.5	1.3	--	--	64	32	13	.2
20...	12	.5	1.3	--	--	62	39	12	.2
JUL									
09...	18	.7	1.5	--	--	70	44	15	.2
AUG									
13...	49	1.6	2.4	--	--	99	110	65	.2

COLORADO RIVER MAIN STEM

09071100 COLORADO RIVER NEAR GLENWOOD SPRINGS, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SILICA, DIS- SOLVED (MG/L AS SIO ₂)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITRO- GEN, NO ₂ +NO ₃ DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
OCT 06...	9.0	379	.52	1180	.02	.00	.00	30	30
NOV 15...	9.9	368	.50	1380	.05	.01	.01	160	20
DEC 05...	10	404	.55	1510	.14	.02	.01	50	60
JAN 03...	11	522	.71	1130	.20	.03	.01	10	30
MAR 28...	9.0	449	.61	1090	.14	.01	.01	10	50
APR 20...	11	313	.43	1770	.24	.02	.00	70	50
MAY 16...	--	249	.34	2150	--	--	--	100	--
JUN 06...	8.5	139	.19	2700	.13	.03	--	110	10
JUL 20...	8.1	147	.20	3570	.18	.02	--	80	10
AUG 09...	9.0	169	.23	2460	.07	.01	--	70	10
AUG 13...	9.6	360	.49	1560	.07	.00	--	20	30

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	600	590	560	700	700	710	710	450	250	260	490	600
2	560	610	610	700	700	680	745	385	270	265	480	600
3	590	600	700	810	690	710	740	440	265	270	480	650
4	670	590	760	800	660	740	750	450	265	270	520	640
5	660	600	650	710	670	725	780	490	260	280	560	650
6	650	590	730	650	680	700	770	410	230	280	560	640
7	650	600	830	660	710	640	780	360	215	280	585	640
8	660	600	850	730	650	670	730	370	220	280	570	620
9	640	600	900	790	690	650	690	400	240	290	700	600
10	640	610	840	750	650	700	650	460	285	300	580	580
11	630	560	850	650	670	700	650	480	270	350	550	580
12	640	600	800	650	690	720	680	525	265	320	565	590
13	610	590	750	650	600	700	710	520	245	320	640	580
14	600	590	690	690	600	700	710	490	230	320	600	580
15	640	590	710	680	670	660	680	420	220	325	605	580
16	640	580	750	650	690	650	650	360	210	330	590	570
17	620	590	760	650	620	650	640	320	215	350	590	610
18	600	580	710	600	740	670	590	300	220	350	520	600
19	590	620	670	620	740	650	560	300	230	350	595	600
20	620	620	670	710	640	650	500	260	245	380	560	610
21	610	610	660	760	720	710	510	250	260	400	560	590
22	620	600	700	630	660	680	530	250	260	395	560	590
23	620	580	600	700	680	710	470	240	250	390	565	580
24	620	600	660	740	700	750	500	210	220	380	555	600
25	630	600	640	680	750	800	470	220	260	380	530	535
26	600	590	660	670	645	780	450	255	240	395	560	540
27	640	580	710	660	700	750	500	225	250	380	550	560
28	590	610	740	660	760	800	440	200	240	400	570	580
29	600	590	710	650	---	710	450	185	240	410	600	600
30	610	600	660	690	---	700	470	210	340	410	580	620
31	600	---	640	690	---	700	---	225	---	460	600	---

09071100 COLORADO RIVER NEAR GLENWOOD SPRINGS, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
ONCE-DAILY

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

GRIZZLY CREEK BASIN

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 (0.8 km) west of Grizzly Cow Camp and 14 mi (23 km) north of Glenwood Springs.

DRAINAGE AREA.--5.73 mi² (14.84 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 10,450 ft (3,185 m), from topographic map. Prior to Oct. 19, 1978, at site 600 ft (183 m) upstream at datum 1.30 ft (0.396 m) higher.

REMARKS.--Records fair except those for period of no gage-height record or ice effect, 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 daily discharge, about 200 ft³/s (5.66 m³/s), probably occurred June 15, 1978; maximum gage height, 6.41 ft (1.954 m) May 8, 1977 (backwater from ice); no flow Jan. 1 to Mar. 25, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 190 ft³/s (5.38 m³/s), June 16; minimum daily, 0.05 ft³/s (0.001 m³/s) Jan. 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.1	.80	.30	.20	.10	.10	.10	8.4	86	86	3.8	2.0
2	1.1	.80	.30	.16	.10	.10	.10	8.6	80	74	3.8	1.9
3	1.1	.76	.30	.16	.10	.10	.10	9.0	90	57	3.6	1.9
4	1.1	.72	.30	.16	.10	.10	.10	9.0	100	47	3.5	1.8
5	1.1	.70	.30	.16	.10	.10	.10	9.4	110	40	3.4	1.7
6	1.1	.60	.30	.10	.10	.10	.10	10	120	38	3.4	1.8
7	1.1	.55	.30	.05	.10	.10	.10	10	130	34	3.3	1.7
8	1.0	.55	.30	.08	.10	.10	.10	9.0	120	30	3.3	1.7
9	.99	.55	.20	.10	.10	.10	.20	8.6	110	25	3.6	1.5
10	1.0	.55	.20	.10	.10	.10	.20	8.4	105	22	3.3	1.6
11	.98	.55	.20	.10	.10	.10	.20	8.0	110	20	3.2	1.7
12	.96	.50	.20	.10	.10	.10	.20	7.8	115	19	3.0	1.5
13	.96	.40	.20	.10	.10	.10	.20	7.6	120	16	2.9	1.5
14	.92	.40	.20	.10	.10	.10	.20	9.8	140	14	2.7	1.5
15	.91	.40	.20	.10	.10	.10	.20	13	178	12	2.8	1.5
16	.89	.40	.20	.10	.10	.10	.20	18	190	10	3.0	1.4
17	.88	.40	.20	.10	.10	.10	.30	24	170	9.0	2.9	1.5
18	.96	.35	.20	.10	.10	.10	.30	30	140	9.1	2.8	1.3
19	1.2	.35	.20	.10	.10	.10	.30	45	110	8.5	2.8	1.4
20	1.0	.35	.20	.10	.10	.10	.40	50	90	7.5	2.7	1.4
21	1.0	.35	.20	.10	.10	.10	.50	48	100	7.2	2.8	1.4
22	1.2	.35	.20	.10	.10	.10	.50	46	110	5.0	2.6	1.4
23	1.1	.30	.20	.10	.10	.10	.60	50	110	4.9	2.5	1.3
24	1.0	.20	.20	.10	.10	.10	1.0	58	110	5.4	2.4	1.3
25	1.0	.30	.20	.10	.10	.10	2.5	70	110	4.8	2.3	1.3
26	.96	.30	.20	.10	.10	.10	4.0	80	110	4.6	2.2	1.4
27	.88	.30	.20	.10	.10	.10	5.0	90	110	4.4	2.2	1.5
28	.88	.30	.20	.10	.10	.10	6.0	110	106	4.5	2.1	1.5
29	.84	.30	.20	.10	---	.10	7.0	100	99	4.3	2.1	1.5
30	.84	.30	.20	.10	---	.10	8.0	96	92	4.1	2.0	1.4
31	.84	---	.20	.10	---	.10	---	90	---	3.9	2.1	---
TOTAL	30.89	13.68	7.00	3.37	2.80	3.10	38.80	1141.6	3471	631.2	89.1	46.3
MEAN	1.00	.46	.23	.11	.10	.10	1.29	36.8	116	20.4	2.87	1.54
MAX	1.2	.80	.30	.20	.10	.10	8.0	110	190	86	3.8	2.0
MIN	.84	.20	.20	.05	.10	.10	.10	7.6	80	3.9	2.0	1.3
AC-FT	61	27	14	6.7	5.6	6.1	77	2260	6880	1250	177	92

CAL YR 1978 TOTAL 6292.17 MEAN 17.2 MAX 200 MIN .00 AC-FT 12480
WTR YR 1979 TOTAL 5478.84 MEAN 15.0 MAX 190 MIN .05 AC-FT 10870

NOTE.--NO GAGE-HEIGHT RECORD NOV. 22 TO JUNE 27.

ROARING FORK RIVER BASIN

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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 (8 m) upstream from private bridge, 115 ft (35 m) upstream from Salvation ditch headgate, 1.0 mi (1.6 km) southeast of Aspen, and 2.0 mi (3.2 km) upstream from Hunter Creek.

DRAINAGE AREA.--108 mi² (280 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 8,014.01 ft (2,442.670 m) National Geodetic Vertical Datum of 1929. Prior to Apr. 25, 1968, at site 85 ft (26 m) upstream at datum 1.16 ft (0.354 m) higher.

REMARKS.--Records good except those for winter period, which are fair. Transmountain diversion 14 mi (23 km) upstream through Twin Lakes tunnel to Arkansas River basin since May 24, 1935 (see elsewhere in this report). Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--15 years, 138 ft³/s (3,908 m³/s), 99,980 acre-ft/yr (123 hm³/yr), including diversion by Twin Lakes tunnel.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,310 ft³/s (37.1 m³/s) July 1, 1965, gage height, 5.20 ft (1.585 m), site and datum then in use, from rating curve extended above 770 ft³/s (22 m³/s); minimum daily, 12 ft³/s (0.34 m³/s) Nov. 28, 1976.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,270 ft³/s (36.0 m³/s) at 0800 July 1, gage height, 4.56 ft (1.390 m); minimum daily, 17 ft³/s (0.48 m³/s) Dec. 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	23	26	21	21	19	18	20	53	244	1200	68	43
2	23	25	20	20	19	18	20	59	240	1070	65	43
3	23	25	20	21	19	18	19	51	252	885	62	42
4	22	24	20	22	14	18	18	47	285	705	60	41
5	23	24	20	21	18	18	18	53	340	687	61	40
6	23	22	19	21	19	19	19	59	430	638	60	38
7	22	22	17	20	20	18	21	68	544	589	59	38
8	22	25	18	19	20	19	23	58	433	603	59	43
9	22	25	19	20	19	19	26	53	363	568	62	48
10	22	26	19	21	19	18	26	50	288	527	58	51
11	22	26	20	20	20	19	25	44	311	493	56	50
12	22	27	21	20	20	20	23	45	351	462	54	48
13	22	23	21	20	19	19	22	46	420	413	52	46
14	21	24	21	19	19	19	23	55	497	199	60	46
15	22	24	21	20	18	19	28	62	515	166	63	45
16	21	23	22	20	19	19	33	89	556	164	62	44
17	21	25	22	20	19	20	40	112	533	157	63	44
18	22	27	23	20	18	20	47	156	473	153	74	44
19	22	26	24	20	18	20	51	206	404	140	73	43
20	22	27	23	19	19	19	48	228	326	130	66	43
21	22	24	22	20	19	20	48	259	326	121	66	46
22	27	24	22	19	19	20	48	229	372	119	60	45
23	25	23	22	19	19	20	51	245	434	107	56	43
24	26	23	22	19	18	20	56	272	463	100	53	43
25	28	23	22	19	18	20	60	273	470	98	50	43
26	25	23	22	19	18	21	50	310	478	93	49	44
27	28	23	22	19	18	20	50	360	474	90	50	45
28	27	21	22	19	19	21	56	382	514	85	48	44
29	27	22	21	18	---	21	49	403	657	79	45	43
30	27	22	21	19	---	22	48	390	765	76	45	42
31	27	---	21	19	---	22	---	297	---	71	46	---
TOTAL	731	724	650	613	528	604	1066	5014	12758	10988	1805	1318
MEAN	23.6	24.1	21.0	19.8	18.9	19.5	35.5	162	425	354	58.2	43.9
MAX	28	27	24	22	20	22	60	403	765	1200	74	51
MIN	21	21	17	18	18	18	18	44	240	71	45	38
AC-FT	1450	1440	1290	1220	1050	1200	2110	9950	25310	21790	3580	2610
CAL YR 1978	TOTAL	28644	MEAN	78.5	MAX	576	MIN	15	AC-FT	56820		
WTR YR 1979	TOTAL	36799	MEAN	101	MAX	1200	MIN	17	AC-FT	72990		

ROARING FORK RIVER BASIN

09073700 HUNTER CREEK ABOVE MIDWAY CREEK, NEAR ASPEN, CO

LOCATION.--Lat 39°12'50", long 106°39'19", Pitkin County, Hydrologic Unit 14010004, on right bank 2.8 mi (4.5 km) upstream from Midway Creek and 9 mi (14 km) east of Aspen.

DRAINAGE AREA.--6.18 mi² (16.01 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 10,500 ft (3,200 m), from topographic map.

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

AVERAGE DISCHARGE.--15 years, 14.4 ft³/s (0.408 m³/s), 10,430 acre-ft/yr (12.9 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 580 ft³/s (16.4 m³/s) June 26, 1973, gage height, 3.18 ft (0.969 m), from rating curve extended above 130 ft³/s (3.7 m³/s); minimum daily determined, 0.30 ft³/s (0.008 m³/s) Nov. 28, 1976.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 150 ft³/s (4.2 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
June 6	2100	192 5.44	2.46 0.750	June 29	2200	*239 6.77	2.75 0.838
June 15	2200	202 5.72	2.52 0.768				

Minimum daily discharge, 0.77 ft³/s (0.022 m³/s) Nov. 11, 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.2	1.3	1.1	.86	.94	.84	1.1	2.7	27	139	12	4.3
2	1.1	1.2	1.1	.88	.98	.88	1.0	3.3	38	107	11	4.0
3	1.1	1.1	.94	1.0	1.0	.88	1.0	4.6	50	92	10	3.8
4	1.1	1.1	1.0	1.2	1.1	.88	1.0	5.6	71	86	9.8	3.6
5	1.1	1.1	1.0	1.1	1.0	.88	1.0	7.0	93	70	10	3.2
6	1.1	1.1	.94	1.1	.96	.90	1.0	8.8	119	66	11	3.0
7	1.0	1.0	.88	.98	.98	.90	1.1	11	105	68	10	2.9
8	1.0	.91	.85	.88	1.0	.88	1.1	12	52	67	9.6	2.9
9	.96	.89	.92	.89	1.0	.88	1.0	9.8	34	63	9.0	2.7
10	.95	.84	1.1	.95	1.0	.88	1.0	10	27	60	9.0	2.6
11	.92	.77	1.0	.91	1.0	.88	1.1	11	36	59	8.2	2.7
12	.90	.77	1.0	.86	.93	.86	1.1	12	65	60	7.7	2.6
13	.89	.79	1.0	.82	.93	.84	1.1	11	102	60	7.9	2.1
14	.94	.80	1.0	.82	.94	.90	1.1	10	113	57	13	1.9
15	.97	.84	.99	.83	.94	.90	1.1	12	124	48	12	1.8
16	.91	.90	.98	.86	.88	.89	1.2	11	128	48	11	1.6
17	.91	.98	1.0	.93	.88	.90	1.3	11	113	42	14	1.5
18	1.1	.99	1.1	.91	.90	.90	1.3	12	92	35	19	1.4
19	1.1	.96	1.0	1.0	.87	.90	1.3	12	64	30	14	1.3
20	1.1	1.0	1.0	.98	.86	.90	1.4	11	46	29	14	1.4
21	1.1	1.0	1.0	.95	.88	.96	1.5	9.4	71	29	12	1.9
22	1.7	1.0	1.1	.94	.88	.96	1.9	9.6	108	36	9.2	1.8
23	1.6	1.0	1.1	.96	.88	.96	1.7	14	124	27	8.2	1.5
24	1.7	1.0	.97	.98	.88	.96	1.6	18	129	30	7.3	1.3
25	1.9	1.0	.98	1.0	.88	.96	1.9	18	135	27	6.7	1.2
26	2.2	1.0	.90	1.0	.88	.97	1.9	14	114	24	5.9	1.3
27	2.1	.98	.85	.98	.89	.99	1.9	12	131	21	5.5	2.0
28	2.0	.94	.86	.98	.84	1.0	1.6	11	139	20	5.3	1.8
29	1.9	1.0	.90	.98	---	1.0	1.5	9.8	145	18	5.1	1.4
30	1.7	1.1	.91	.94	---	1.0	2.0	10	128	15	5.2	1.2
31	1.4	---	.94	.93	---	1.0	---	11	---	13	5.0	---
TOTAL	39.65	29.36	30.41	29.40	26.10	28.43	39.8	324.6	2723	1546	297.6	66.7
MEAN	1.28	.98	.98	.95	.93	.92	1.33	10.5	90.8	49.9	9.60	2.22
MAX	2.2	1.3	1.1	1.2	1.1	1.0	2.0	18	145	139	19	4.3
MIN	.89	.77	.85	.82	.84	.84	1.0	2.7	27	13	5.0	1.2
AC-FT	79	58	60	58	52	56	79	644	5400	3070	590	132
CAL YR 1978	TOTAL	5591.22	MEAN	15.3	MAX	172	MIN	.77	AC-FT	11090		
WTR YR 1979	TOTAL	5181.05	MEAN	14.2	MAX	145	MIN		AC-FT	10280		

NOTE.--NO GAGE-HEIGHT RECORD NOV. 30 TO JUNE 2.

ROARING FORK RIVER BASIN

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09073800 MIDWAY CREEK NEAR ASPEN, CO

LOCATION.--Lat 39°11'47", long 106°41'22", Pitkin County, Hydrologic Unit 14010004, on right bank 1,707 ft (520 m) upstream from mouth and 5.7 mi (9.2 km) east of Aspen.

DRAINAGE AREA.--8.62 mi² (22.33 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 10,080 ft (3,072 m), from topographic map.

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

AVERAGE DISCHARGE.--8 years (water years 1971-76, 1978-79), 13.5 ft³/s (0.382 m³/s), 9,780 acre-ft/yr (12.1 hm³/yr). Water year 1977 omitted because of a diversion around the gage during construction of a diversion structure 0.2 mi (0.3 km) upstream.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 290 ft³/s (8.21 m³/s) June 17, 1971, gage height, 3.17 ft (0.966 m), from floodmarks, from rating curve extended above 140 ft³/s (4.0 m³/s); minimum daily, 0.20 ft³/s (0.006 m³/s) Nov. 28, 1976.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 90 ft³/s (2.5 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
June 6	2300	136 3.85	2.33 0.710	July 1	1900	*149 4.22	2.38 0.725
June 15	2230	132 3.74	2.32 0.707				

Minimum daily discharge, 0.42 ft³/s (0.012 m³/s) Nov. 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	A'G	SEP
1	1.5	.74	.68	.66	.58	.88	.99	5.0	24	118	10	3.5
2	1.4	.74	.66	.66	.58	.84	.99	4.8	30	92	9.6	3.3
3	1.4	.74	.64	.58	.58	.84	.99	5.0	43	76	8.6	3.0
4	1.4	.70	.64	.60	.58	.90	1.0	4.4	61	75	7.7	2.8
5	1.3	.60	.64	.64	.58	.90	1.2	4.4	77	66	7.2	2.8
6	1.3	.50	.64	.56	.58	.88	1.6	5.5	96	63	7.7	2.7
7	1.3	.48	.64	.54	.58	.86	1.5	6.5	94	63	7.7	2.5
8	1.3	.42	.70	.54	.58	.86	1.4	8.5	53	62	7.7	2.5
9	1.4	.44	.76	.54	.58	.86	1.5	7.5	38	60	7.2	2.4
10	1.4	.48	.76	.54	.60	.86	1.6	6.0	29	57	6.3	2.4
11	1.3	.50	.68	.54	.64	.88	1.4	5.5	37	55	5.8	2.2
12	1.4	.54	.68	.54	.66	.92	1.3	4.8	54	54	5.6	2.2
13	1.5	.60	.66	.52	.66	.96	1.2	4.4	80	52	5.4	2.0
14	1.4	.70	.66	.52	.66	.96	1.2	4.0	94	49	7.7	2.0
15	1.3	.96	.66	.50	.66	.96	1.3	7.0	100	43	5.6	2.0
16	1.2	.90	.66	.52	.66	.94	1.9	9.0	108	42	7.2	1.9
17	1.2	.84	.64	.52	.66	.94	2.6	15	100	40	7.7	1.8
18	1.4	.80	.64	.52	.66	.90	3.2	17	78	32	13	1.6
19	1.4	.76	.66	.54	.70	.90	4.0	24	58	25	12	1.6
20	1.3	.72	.66	.54	.74	.94	4.6	30	47	24	10	1.7
21	1.4	.70	.66	.54	.74	.92	4.2	36	61	22	10	2.0
22	1.3	.68	.66	.54	.74	.94	4.8	40	83	25	6.7	1.8
23	1.3	.68	.66	.54	.74	.96	6.0	38	95	20	5.8	1.5
24	1.3	.60	.66	.56	.76	1.0	4.2	36	98	20	5.4	1.5
25	1.3	.70	.66	.56	.80	1.0	4.8	40	102	19	4.9	1.5
26	1.3	.80	.64	.54	.80	1.0	5.0	42	94	17	4.7	1.5
27	1.1	.78	.64	.54	.84	1.0	4.6	57	103	16	4.3	1.8
28	.90	.74	.66	.56	.90	1.0	4.2	68	110	15	4.2	1.6
29	.80	.74	.66	.56	---	1.0	5.0	68	113	14	3.8	1.5
30	.72	.72	.66	.58	---	.98	4.8	55	109	13	3.8	1.4
31	.72	---	.66	.58	---	.98	---	36	---	11	3.8	---
TOTAL	39.24	20.30	20.58	17.22	18.84	28.76	83.07	694.3	2269	1340	221.1	63.0
MEAN	1.27	.68	.66	.56	.67	.93	2.77	22.4	75.6	43.2	7.13	2.10
MAX	1.5	.96	.76	.66	.90	1.0	6.0	68	113	118	13	3.5
MIN	.72	.42	.64	.50	.58	.84	.99	4.0	24	11	3.8	1.4
AC-FT	78	40	41	34	37	57	165	1380	4500	2660	439	125
CAL YR 1978 TOTAL	5749.12			MEAN 15.8	MAX 163	MIN .42	AC-FT 11400					
WTR YR 1979 TOTAL	4815.41			MEAN 13.2	MAX 118	MIN .42	AC-FT 9550					

NOTE.--NO GAGE-HEIGHT RECORD NOV. 13 TO MAY 25.

ROARING FORK RIVER BASIN

09073900 NO NAME CREEK NEAR ASPEN, CO

LOCATION--Lat 39°11'20", long 106°43'04", Pitkin County, Hydrologic Unit 14010004, on right bank 0.6 mi (1.0 km) upstream from mouth and 4.5 mi (7.2 km) east of Aspen.

DRAINAGE AREA--6.54 mi² (16.94 km²).

PERIOD OF RECORD--October 1970 to current year. Low-flow records not equivalent prior to Aug. 2, 1972, due to inflow between the sites.

GAGE--Water-stage recorder. Altitude of gage is 10,000 ft (3,048 m), from topographic map. Prior to Aug. 2, 1972, at site 0.5 mi (0.8 km) downstream at different datum.

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

AVERAGE DISCHARGE--9 years, 8.59 ft³/s (0.243 m³/s), 6,220 acre-ft/yr (7.67 hm³/yr).

EXTREMES FOR PERIOD OF RECORD--Maximum discharge, 163 ft³/s (4.62 m³/s) June 17, 1971, gage height, 5.48 ft (1.670 m), site and datum then in use, from rating curve extended above 85 ft³/s (2.4 m³/s); minimum daily, 0.16 ft³/s (0.005 m³/s) Nov. 28, 1976.

EXTREMES FOR CURRENT YEAR--Maximum discharge, 91 ft³/s (2.58 m³/s) at 2000 June 22, gage height, 2.65 ft (0.808 m), only peak above base of 90 ft³/s (2.5 m³/s); maximum gage height, 3.21 ft (0.978 m) May 24, 1979 (backwater from ice); minimum daily discharge, 0.40 ft³/s (0.011 m³/s) Jan. 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.80	.86	.56	.50	.45	.62	.78	4.0	36	60	2.8	1.6
2	.83	.78	.56	.46	.45	.62	.76	3.4	42	54	2.7	1.5
3	.86	.74	.56	.44	.44	.66	.80	3.2	48	50	2.5	1.4
4	.83	.70	.56	.48	.44	.68	1.2	3.8	53	46	2.3	1.3
5	.86	.68	.56	.46	.45	.68	1.3	4.8	58	37	2.0	1.2
6	.86	.68	.56	.42	.45	.68	1.0	6.5	67	36	2.0	1.2
7	.89	.68	.56	.42	.45	.68	1.1	6.5	67	34	2.0	1.1
8	.89	.68	.58	.40	.46	.68	1.2	4.6	53	32	3.0	1.1
9	.89	.68	.58	.42	.46	.66	1.2	4.0	44	30	2.9	1.1
10	.89	.68	.54	.42	.48	.70	.98	3.8	41	27	2.1	1.0
11	.86	.62	.52	.42	.50	.72	.98	3.0	46	25	1.9	1.0
12	.86	.60	.50	.42	.50	.72	.90	3.2	54	23	1.8	1.0
13	.83	.62	.50	.42	.52	.72	.90	3.6	66	21	1.9	.98
14	.78	.64	.50	.42	.52	.70	1.6	4.6	71	19	3.2	.98
15	.80	.64	.52	.42	.52	.72	2.2	7.0	72	16	3.0	.98
16	.78	.64	.52	.41	.52	.72	2.8	10	74	17	2.8	.92
17	.80	.64	.52	.41	.56	.72	3.2	15	73	14	7.9	.89
18	.83	.58	.52	.42	.56	.72	3.4	20	64	13	18	.86
19	.89	.56	.50	.42	.56	.72	3.4	24	54	11	13	.86
20	.86	.52	.50	.42	.56	.70	3.0	26	51	10	8.0	.86
21	.89	.52	.50	.42	.56	.70	4.6	28	62	9.0	6.4	.95
22	.86	.48	.50	.42	.56	.72	3.2	28	69	10	4.0	.89
23	.86	.50	.50	.42	.58	.76	3.6	32	72	7.5	3.0	.86
24	.86	.48	.50	.41	.60	.76	3.8	36	73	6.9	2.6	.83
25	.86	.44	.48	.42	.62	.76	3.4	39	67	5.7	2.4	.83
26	.86	.52	.50	.42	.62	.76	3.2	48	65	5.2	2.2	.86
27	.86	.58	.50	.44	.66	.76	3.8	54	65	4.8	2.0	.92
28	.86	.56	.50	.46	.70	.76	4.0	58	64	4.3	1.9	.95
29	.86	.54	.50	.46	---	.78	3.4	58	63	3.9	1.7	.83
30	.86	.52	.50	.45	---	.76	3.8	52	61	3.4	1.7	.80
31	.86	---	.50	.45	---	.76	---	40	---	3.1	1.8	---
TOTAL	26.38	18.36	16.20	13.37	14.75	22.10	69.50	634.0	1795	638.8	115.5	30.55
MEAN	.85	.61	.52	.43	.53	.71	2.32	20.5	59.8	20.6	3.73	1.02
MAX	.89	.86	.58	.50	.70	.78	4.6	58	74	60	18	1.6
MIN	.78	.44	.48	.40	.44	.62	.76	3.0	36	3.1	1.7	.80
AC-FT	52	36	32	27	29	44	138	1260	3560	1270	229	61

CAL YR 1978 TOTAL 3503.51 MEAN 9.60 MAX 89 MIN .44 AC-FT 6950
WTR YR 1979 TOTAL 3394.51 MEAN 9.30 MAX 74 MIN .40 AC-FT 6730

NOTE--NO GAGE-HEIGHT RECORD OCT. 27 TO MAY 20.

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 (85 m) upstream from headgate of Red Mountain ditch, 1.5 mi (2.4 km) upstream from mouth, and 1.5 mi (2.4 km) northeast of Aspen.

DRAINAGE AREA.--41.1 mi² (106.4 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 8,610 ft (2,624 m), from topographic map. Prior to Sept. 1, 1969, at site 220 ft (67 m) downstream at different datum.

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

AVERAGE DISCHARGE.--16 years (water years 1951-56, 1970-79), 50.7 ft³/s (1.436 m³/s), 36,730 acre-ft/yr (45.3 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,010 ft³/s (28.6 m³/s) June 13, 1953, gage height, 7.02 ft (2.140 m), site and datum then in use, from rating curve extended above 580 ft³/s (16 m³/s); minimum not determined.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 450 ft³/s (13 m³/s) and maximum (%):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
June 7	0100	*684 19.4	2.59 0.789	June 25	0100	618 17.5	2.53 0.771

Minimum daily discharge, 3.8 ft³/s (0.11 m³/s) Jan. 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.2	8.5	5.5	4.4	4.4	4.8	5.9	23	186	408	38	16
2	9.6	8.5	5.0	4.0	4.8	4.8	5.5	25	210	344	35	16
3	6.8	8.8	4.8	4.8	4.6	4.8	5.5	23	262	304	30	15
4	6.8	8.5	4.4	5.5	4.4	4.8	6.2	22	328	292	29	14
5	7.4	9.2	6.0	5.5	4.4	4.8	5.9	28	380	210	26	14
6	6.8	7.4	5.0	5.5	4.8	5.0	6.5	32	470	231	28	14
7	6.5	6.2	4.6	4.6	4.8	5.0	8.1	39	500	220	30	13
8	6.5	6.8	4.4	3.8	4.8	5.0	8.8	31	360	217	29	13
9	6.8	6.2	5.0	4.6	4.6	4.8	9.2	26	262	200	30	13
10	6.8	6.8	5.5	5.0	4.8	4.8	9.2	22	234	192	24	12
11	6.2	7.4	5.5	5.0	5.0	4.8	9.2	18	276	186	22	12
12	6.2	6.8	5.0	5.5	5.0	5.0	9.0	18	348	178	21	12
13	6.5	6.5	5.0	4.8	5.0	5.0	8.5	20	460	178	21	12
14	5.9	6.5	5.0	4.0	5.0	5.0	7.8	30	470	168	31	12
15	5.9	6.5	5.0	4.8	5.0	5.0	10	39	515	154	38	12
16	6.5	6.0	5.0	4.8	5.0	5.0	12	50	525	144	30	12
17	6.8	5.5	5.5	4.8	5.0	5.6	14	65	485	133	39	11
18	7.4	5.5	6.0	4.8	4.8	5.6	17	87	400	116	70	10
19	7.8	5.5	6.0	4.8	4.8	5.9	18	113	316	96	59	10
20	7.4	5.5	6.0	5.0	5.0	5.3	19	154	259	87	47	10
21	7.8	5.5	5.5	4.4	5.0	5.6	20	192	300	80	47	11
22	10	5.3	5.5	5.0	4.8	5.6	21	186	396	100	35	12
23	9.2	5.3	5.5	4.0	4.6	5.6	22	217	440	77	26	11
24	9.9	5.5	5.0	4.0	4.6	5.9	22	256	450	77	23	11
25	11	5.9	5.0	4.4	4.6	5.9	22	242	455	77	22	10
26	8.1	5.5	4.8	4.4	4.6	5.9	18	270	400	70	21	10
27	9.6	5.0	4.6	4.6	4.8	5.9	18	328	400	67	19	10
28	9.2	4.6	5.5	4.2	4.8	6.2	22	368	416	59	18	11
29	9.2	5.5	5.5	4.6	---	6.2	22	368	408	54	18	11
30	9.6	5.5	5.5	4.2	---	5.9	21	280	388	49	17	10
31	9.6	---	5.0	4.0	---	6.5	---	231	---	41	18	---
TOTAL	243.0	192.2	161.6	143.8	133.8	166.0	403.3	3803	11299	4809	941	360
MEAN	7.84	6.41	5.21	4.64	4.78	5.35	13.4	123	377	155	30.4	12.0
MAX	11	9.2	6.0	5.5	5.0	6.5	22	368	525	408	70	16
MIN	5.9	4.6	4.4	3.8	4.4	4.8	5.5	18	186	41	17	10
AC-FT	482	381	321	285	265	329	800	7540	22410	9540	1870	714
CAL YR 1978	TOTAL	20764.3	MEAN	56.9	MAX	540	MIN	3.8	AC-FT	41190		
WTR YR 1979	TOTAL	22655.7	MEAN	62.1	MAX	525	MIN	3.8	AC-FT	44940		

NOTE.--NO GAGE-HEIGHT RECORD FEB. 2 TO MAR. 5.

ROARING FORK RIVER BASIN
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 (0.6 km) downstream from Forest Service bridge, 0.4 mi (0.6 km) upstream from Sandy Creek, and 7 mi (11 km) south of Aspen.

DRAINAGE AREA.--32.2 mi² (83.4 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 9,100 ft (2,774 m), from topographic map.

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

AVERAGE DISCHARGE.--10 years, 38.6 ft³/s (1.093 m³/s), 27,970 acre-ft/yr (34.5 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 428 ft³/s (12.1 m³/s) June 14, 1973; gage height, 3.75 ft (1.143 m); maximum gage height, 3.88 ft (1.183 m) June 23, 1970; minimum daily discharge, 6.5 ft³/s (0.18 m³/s) Mar. 15, 25, 1978.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 200 ft³/s (5.7 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
June 7	0300	274 7.76	3.39 1.033	July 1	2300	382 10.8	3.78 1.152

Minimum daily discharge, 8.0 ft³/s (0.23 m³/s) Jan. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	13	11	8.0	9.3	8.7	9.3	16	86	328	71	32
2	14	12	12	8.4	9.3	8.6	9.2	16	89	274	68	32
3	14	12	10	9.0	9.3	8.7	9.4	15	105	242	64	31
4	14	12	11	9.6	9.3	8.8	9.3	16	133	204	64	30
5	14	12	12	9.4	9.3	8.8	9.4	17	158	212	62	29
6	14	12	11	9.4	9.3	8.9	9.4	18	200	200	62	28
7	14	12	9.6	9.6	9.1	8.9	9.5	19	234	176	60	28
8	14	12	10	8.2	8.9	8.9	9.6	18	148	196	60	27
9	14	13	11	9.4	8.6	8.7	9.8	17	107	180	60	27
10	14	12	11	9.3	8.7	9.3	9.6	17	88	170	58	27
11	14	13	11	9.3	8.8	8.9	9.6	17	88	172	55	26
12	14	13	11	9.1	8.7	9.0	9.5	17	110	172	51	25
13	14	13	11	8.8	8.7	8.9	9.4	18	160	174	52	26
14	14	13	11	8.6	8.3	8.9	9.5	20	212	168	63	25
15	14	12	11	8.8	8.0	9.1	10	22	226	162	68	24
16	13	12	11	8.7	8.1	9.2	11	25	244	162	77	23
17	13	12	11	8.4	8.1	9.2	11	34	232	148	69	23
18	13	12	11	8.7	8.7	9.3	12	47	204	128	59	22
19	13	13	11	8.7	8.1	9.0	12	59	154	115	56	21
20	13	12	11	8.7	8.2	9.3	11	74	123	114	51	22
21	14	12	11	8.9	8.1	9.3	11	79	138	108	49	22
22	15	12	11	8.7	8.4	9.3	12	79	188	143	45	21
23	14	12	11	8.9	8.3	9.2	12	87	240	120	42	22
24	14	12	11	8.8	8.5	9.1	13	101	260	113	39	21
25	14	12	10	9.1	8.6	9.1	13	106	280	113	38	21
26	13	12	10	8.4	8.5	9.2	13	129	272	106	36	21
27	13	11	10	8.7	8.5	9.2	14	153	268	100	34	21
28	13	11	10	8.9	8.7	9.3	14	169	286	98	33	21
29	13	12	10	9.1	---	9.2	14	170	284	91	34	21
30	13	12	10	9.3	---	9.4	14	141	282	83	35	20
31	13	---	10	9.3	---	9.4	---	99	---	74	35	---
TOTAL	425	365	332.6	276.2	242.4	280.8	329.5	1815	5599	4846	1650	739
MEAN	13.7	12.2	10.7	8.91	8.66	9.06	11.0	58.5	187	156	53.2	24.6
MAX	15	13	12	9.6	9.3	9.4	14	170	286	328	77	32
MIN	13	11	9.6	8.0	8.0	8.6	9.2	15	86	74	33	20
AC-FT	843	724	660	548	481	557	654	3600	11110	9610	3270	1470
CAL YR 1978	TOTAL	13380.3	MEAN 36.7	MAX 262	MIN 6.5	AC-FT 26540						
WTR YR 1979	TOTAL	16900.5	MEAN 46.3	MAX 328	MIN 8.0	AC-FT 33520						

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LOCATION.--Lat 39°07'25", long 106°54'17", Pitkin County, Hydrologic Unit 14010004, on left bank 0.3 mi (0.5 km) upstream from Silver Queen Forest Service campground, 1.2 mi (1.9 km) downstream from confluence of East and West Maroon Creeks, and 7.2 mi (11.6 km) southwest of Aspen.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 716 ft³/s (20.3 m³/s) June 29, 1973, gage height, 3.33 ft (1.015 m), from rating curve extended above 350 ft³/s (9.9 m³/s); maximum gage height, 4.53 ft (1.381 m) Feb. 3, 1972 (backwater from ice); minimum daily discharge, 9.0 ft³/s (0.25 m³/s) Mar. 29, 1975.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35	23	19	14	12	12	10	16	206	370	180	65
2	34	23	19	13	11	12	10	16	193	363	173	63
3	34	23	19	13	11	12	10	16	181	366	162	61
4	33	23	18	13	10	11	10	16	189	326	158	59
5	33	23	18	13	10	11	9.8	17	202	278	152	57
6	33	23	18	13	11	11	10	17	204	264	148	56
7	33	22	17	13	11	11	10	18	207	290	146	55
8	32	22	17	12	11	11	10	18	204	254	143	53
9	32	22	19	12	11	12	10	17	210	253	139	52
10	29	21	18	12	11	12	10	17	209	257	134	51
11	27	22	18	13	12	12	10	16	199	246	130	50
12	26	23	18	13	12	12	10	16	199	257	127	50
13	26	22	17	12	12	12	10	17	211	283	124	49
14	26	22	17	12	12	11	10	17	219	281	126	48
15	26	22	17	12	12	11	10	19	230	282	122	47
16	26	22	18	13	12	11	11	21	281	285	121	46
17	26	22	19	13	12	11	11	24	325	299	118	46
18	25	21	20	13	11	11	12	26	338	291	116	45
19	25	21	17	13	12	11	12	29	296	277	114	45
20	25	20	16	11	12	11	13	37	226	289	109	44
21	26	20	16	10	12	11	14	57	201	277	104	45
22	27	20	16	12	12	11	14	63	221	295	96	44
23	26	20	16	11	11	11	15	78	255	270	92	44
24	26	20	15	11	12	11	15	87	266	261	87	44
25	26	20	15	12	11	11	15	101	293	258	85	43
26	25	20	15	12	12	11	14	129	350	251	81	42
27	25	19	15	11	12	11	15	167	362	236	76	42
28	25	19	15	11	12	11	16	212	366	228	73	41
29	25	20	15	12	---	11	15	211	373	219	71	41
30	25	19	15	11	---	11	16	211	352	206	70	40
31	24	---	15	10	---	10	---	221	---	193	68	---
TOTAL	866	639	527	376	322	348	357.8	1927	7568	8505	3645	1468
MEAN	27.9	21.3	17.0	12.1	11.5	11.2	11.9	62.2	252	274	118	48.9
MAX	35	23	20	14	12	12	16	221	373	370	180	65
MIN	24	19	15	10	10	10	9.8	16	181	193	68	40
AC-FT	1720	1270	1050	746	639	690	710	3820	15010	16870	7230	2910
CAL YR 1978	TOTAL	24032.5	MEAN 65.8	MAX 441	MIN 9.5	AC-FT 47670						
WTR YR 1979	TOTAL	26548.8	MEAN 72.7	MAX 373	MIN 9.8	AC-FT 52660						

ROARING FORK RIVER BASIN

09076520 OWL CREEK NEAR ASPEN, CO

LOCATION.--Lat 39°13'25", long 106°52'45", in NE¼ sec. 33, T.9 S., R.85 W., Pitkin County, Hydrologic Unit 14010004, on left bank 1.2 mi (1.9 km) upstream from mouth and 3.8 mi (6.1 km) northwest of Aspen.

DRAINAGE AREA.--6.60 mi² (17.09 km²).

PERIOD OF RECORD.--October 1974 to current year.

GAGE.--Water-stage recorder with V-notch concrete control. Altitude of gage is 7,870 ft (2,399 m), from topographic map.

REMARKS.--Records good except those for winter period, which are poor. Several small diversions above station for irrigation of hay meadows. Water imported above station, at times, from West Willow Creek through Willow and Owl ditches. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--5 years, 2.00 ft³/s (0.057 m³/s), 1,450 acre-ft/yr (1.79 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 42 ft³/s (1.19 m³/s) May 25, 1979, gage height, 1.82 ft (0.555 m); no flow Feb. 9 to Mar. 6, Sept. 10, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 42 ft³/s (1.19 m³/s) at 0230 May 25, gage height, 1.82 ft (0.555 m); minimum daily, 0.14 ft³/s (0.004 m³/s) Oct. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.15	.19	.21	.19	.17	.23	.50	8.2	24	2.9	1.7	1.0
2	.15	.19	.21	.18	.17	.22	.48	7.9	21	2.5	2.1	.95
3	.14	.19	.19	.17	.17	.23	.48	6.6	19	2.2	2.9	.88
4	.15	.22	.19	.17	.17	.26	.55	6.6	18	2.5	2.0	.82
5	.15	.22	.21	.18	.17	.24	.75	7.9	16	2.4	1.8	.75
6	.15	.21	.21	.16	.16	.24	2.2	8.4	16	2.2	1.5	.68
7	.15	.21	.21	.15	.16	.26	4.2	9.6	20	2.8	1.6	.68
8	.15	.22	.21	.15	.16	.26	4.1	9.6	24	2.8	2.4	.61
9	.16	.22	.22	.15	.16	.30	3.4	8.8	25	2.8	2.8	.68
10	.16	.21	.22	.15	.17	.30	2.9	8.2	24	3.1	1.7	.68
11	.16	.22	.19	.15	.18	.30	2.1	7.9	24	3.3	1.4	.68
12	.16	.30	.19	.15	.19	.30	2.5	9.3	25	2.9	1.4	.61
13	.16	.27	.19	.15	.19	.32	1.2	9.3	22	2.8	1.3	.61
14	.16	.22	.19	.15	.19	.35	2.0	10	18	2.4	1.9	.48
15	.16	.22	.19	.15	.19	.35	4.1	13	15	2.4	1.7	.48
16	.18	.32	.19	.15	.19	.40	6.0	18	14	2.2	1.8	.48
17	.18	.38	.19	.15	.19	.40	7.2	19	13	2.4	1.8	.48
18	.18	.40	.20	.15	.20	.40	8.3	26	12	2.8	1.9	.45
19	.19	.40	.19	.15	.20	.40	7.4	30	14	2.2	2.0	.45
20	.19	.34	.19	.15	.20	.40	6.2	34	10	2.0	2.4	.45
21	.19	.28	.19	.15	.20	.43	5.7	35	7.7	2.9	1.9	.48
22	.43	.25	.19	.15	.20	.48	5.5	35	6.8	4.6	1.5	.55
23	.32	.27	.19	.15	.21	.45	5.1	39	4.6	2.9	1.2	.45
24	.27	.19	.19	.15	.22	.32	5.1	40	4.9	2.9	1.2	.45
25	.27	.19	.19	.15	.23	.40	6.4	40	4.9	2.9	1.1	.48
26	.25	.19	.18	.15	.23	.45	5.3	39	5.3	2.8	1.1	.48
27	.21	.19	.18	.16	.24	.55	5.7	38	4.9	2.0	1.0	.45
28	.19	.18	.19	.16	.26	.55	6.0	38	4.8	1.9	.82	.43
29	.19	.18	.19	.17	---	.50	5.9	36	4.8	1.9	.95	.43
30	.16	.19	.19	.17	---	.50	6.4	33	2.9	2.0	1.2	.40
31	.19	---	.19	.16	---	.50	---	30	---	1.9	1.4	---
TOTAL	5.90	7.26	6.06	4.87	5.37	11.29	123.66	661.3	425.6	80.3	51.47	17.50
MEAN	.19	.24	.20	.16	.19	.36	4.12	21.3	14.2	2.59	1.66	.58
MAX	.43	.40	.22	.19	.26	.55	8.3	40	25	4.6	2.9	1.0
MIN	.14	.18	.18	.15	.16	.22	.48	6.6	2.9	1.9	.82	.40
AC-FT	12	14	12	9.7	11	22	245	1310	844	159	102	35

CAL YR 1978 TOTAL 648.42 MEAN 1.78 MAX 20 MIN .04 AC-FT 1290
WTR YR 1979 TOTAL 1400.58 MEAN 3.84 MAX 40 MIN .14 AC-FT 2780

NOTE.--NO GAGE-HEIGHT RECORD DEC. 6 TO MAR. 8.

ROARING FORK RIVER BASIN

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09077150 FRYINGPAN RIVER FEEDER CANAL NEAR NORRIE, CO

LOCATION.--Lat 39°14'42", long 106°31'47", Pitkin County, Hydrologic Unit 14010004, on right bank 210 ft (64 m) downstream from diversion point on Fryingpan River and 9.1 mi (14.6 km) southeast of Norrie.

PERIOD OF RECORD.--October 1971 to current year.

GAGE.--Water-stage recorder and Parshall flume. Datum of gage is 9,955.91 ft (3,034.561 m) National Geodetic Vertical Datum of 1929 (levels by Water and Power Resources Service).

REMARKS.--Records good. This is a transmountain diversion from Marten Creek and Fryingpan River in Roaring Fork River basin through Charles H. Boustead tunnel to Arkansas River basin. Water is for municipal and irrigation use in the Southeastern Colorado Water Conservancy District. The entire flow is regulated by diversion gates.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 269 ft³/s (7.62 m³/s) June 15, 1978; no flow for most of each year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	73	213	22	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	80	192	22	.00
3	.00	.00	.00	.00	.00	.00	.00	.00	101	167	16	.00
4	.00	.00	.00	.00	.00	.00	.00	.00	134	156	12	.00
5	.00	.00	.00	.00	.00	.00	.00	.00	169	145	2.2	.00
6	.00	.00	.00	.00	.00	.00	.00	.00	203	132	8.8	.00
7	.00	.00	.00	.00	.00	.00	.00	.00	172	132	8.8	.00
8	.00	.00	.00	.00	.00	.00	.00	.00	121	125	11	.00
9	.00	.00	.00	.00	.00	.00	.00	.00	88	116	8.0	.00
10	.00	.00	.00	.00	.00	.00	.00	.00	87	113	7.3	.00
11	.00	.00	.00	.00	.00	.00	.00	.00	106	110	4.4	.00
12	.00	.00	.00	.00	.00	.00	.00	.00	143	112	1.7	.00
13	.00	.00	.00	.00	.00	.00	.00	.00	191	109	.00	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	203	104	.00	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	235	96	8.5	.00
16	.00	.00	.00	.00	.00	.00	.00	3.8	212	96	15	.00
17	.00	.00	.00	.00	.00	.00	.00	11	199	89	17	.00
18	.00	.00	.00	.00	.00	.00	.00	19	182	79	20	.00
19	.00	.00	.00	.00	.00	.00	.00	26	142	68	19	.00
20	.00	.00	.00	.00	.00	.00	.00	41	127	66	20	.00
21	.00	.00	.00	.00	.00	.00	.00	57	144	67	14	.00
22	.00	.00	.00	.00	.00	.00	.00	72	179	67	10	.00
23	.00	.00	.00	.00	.00	.00	.00	84	198	58	6.8	.00
24	.00	.00	.00	.00	.00	.00	.00	100	207	58	2.8	.00
25	.00	.00	.00	.00	.00	.00	.00	114	210	54	.00	.00
26	.00	.00	.00	.00	.00	.00	.00	116	196	46	.00	.00
27	.00	.00	.00	.00	.00	.00	.00	152	212	37	.00	.00
28	.00	.00	.00	.00	.00	.00	.00	158	206	34	.00	.00
29	.00	.00	.00	.00	---	.00	.00	161	210	29	.00	.00
30	.00	.00	.00	.00	---	.00	.00	153	224	21	.00	.00
31	.00	---	.00	.00	---	.00	---	120	---	20	.00	---
TOTAL	.00	.00	.00	.00	.00	.00	.00	1387.80	4954	2911	267.30	.00
MEAN	.000	.000	.000	.000	.000	.000	.000	44.8	165	93.9	8.62	.000
MAX	.00	.00	.00	.00	.00	.00	.00	161	235	213	22	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	73	20	.00	.00
AC-FT	.00	.00	.00	.00	.00	.00	.00	2750	9830	5770	530	.00
CAL YR 1978	TOTAL	9772.90	MEAN 26.8	MAX 269	MIN .00	AC-FT 19380						
WTR YR 1979	TOTAL	9520.10	MEAN 26.1	MAX 235	MIN .00	AC-FT 18880						

ROARING FORK RIVER BASIN

09077200 FRYINGPAN RIVER NEAR IVANHOE LAKE, CO

LOCATION.--Lat 39°14'42", long 106°31'50", Pitkin County, Hydrologic Unit 14010004, on left bank 100 ft (30 m) downstream from diversion dam, 2.0 mi (3.2 km) southwest of Ivanhoe Lake, and 9.1 mi (14.6 km) southeast of Norrie.

DRAINAGE AREA.--18.7 mi² (48.4 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 9,945 ft (3,031 m), from topographic map. Prior to May 15, 1967, at site 200 ft (61 m) downstream at different datum. May 16 to Aug. 24, 1967, at site 1,000 ft (320 m) downstream at datum 9,895.01 ft (3,015.999 m) Aug. 25, 1967, to Sept. 30, 1973, at site 1,100 ft (340 m) downstream at datum 9,892.49 ft (3,015.231 m) (water and Power Resources Service bench mark).

REMARKS.--Records good except those for winter period, which are poor. Transmountain diversion above station through Charles H. Boustead tunnel since May 16, 1972 (see station 09077150 for figures of diversion). 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.--8 years (water years 1964-71), 34.2 ft³/s (0.969 m³/s), 24,780 acre-ft/yr (30.6 hm³/yr), prior to diversion through Charles H. Boustead tunnel; 8 years (water years 1972-79), 10.3 ft³/s (0.292 m³/s), 7,460 acre-ft/yr (9.20 hm³/yr), subsequent to diversion through Charles H. Boustead tunnel.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 391 ft³/s (11.1 m³/s) June 22, 1965, gage height, 3.02 ft (0.920 m), site and datum then in use, from rating curve extended above 230 ft³/s (6.5 m³/s); maximum gage height, 4.62 ft (1.408 m) June 19, 1971; minimum discharge not determined.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 50 ft³/s (1.42 m³/s) at 0900 Aug. 12, gage height, 1.60 ft (0.488 m); minimum daily, 1.5 ft³/s (0.042 m³/s) Jan. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	7.0	3.5	3.0	2.5	2.5	4.0	9.4	12	14	23	18
2	9.7	7.0	3.5	1.5	3.0	2.5	4.0	10	13	14	20	16
3	9.7	7.0	3.0	2.5	2.5	2.5	4.0	9.0	13	14	20	16
4	9.7	6.0	3.0	3.0	2.5	2.0	4.0	9.7	14	13	24	16
5	9.0	6.5	3.5	3.5	2.5	2.0	4.0	11	14	13	26	15
6	9.0	5.0	3.5	3.5	2.5	3.0	4.0	14	14	13	26	15
7	9.0	4.0	3.0	3.0	3.0	3.5	4.5	14	14	13	26	14
8	9.0	4.5	2.0	2.5	3.0	4.0	5.0	12	12	13	26	14
9	8.7	4.0	2.5	2.5	2.5	3.5	5.5	11	12	12	26	14
10	8.7	4.5	2.5	3.0	3.0	3.0	5.5	10	12	12	26	14
11	8.4	4.5	2.5	3.5	3.0	3.5	5.5	9.4	12	12	26	14
12	8.4	4.5	3.0	3.5	3.0	3.5	5.0	9.0	12	12	29	13
13	8.4	3.5	3.0	3.5	3.0	3.5	4.5	9.7	13	12	31	13
14	8.1	3.5	3.0	3.0	3.5	3.5	5.0	12	13	12	39	13
15	8.1	3.0	3.0	3.0	3.0	4.0	5.5	15	13	12	30	13
16	8.1	3.0	3.0	3.5	3.0	4.0	6.5	16	13	12	18	12
17	7.4	3.0	3.0	3.0	3.0	4.5	7.5	15	13	12	18	12
18	7.4	3.5	3.5	3.0	3.0	4.0	9.0	15	13	12	16	12
19	7.4	3.5	4.0	3.0	3.0	4.0	9.5	15	13	12	14	11
20	7.1	3.5	3.0	3.0	2.5	4.0	9.0	15	13	12	13	12
21	6.8	3.5	3.0	3.0	2.5	4.0	9.0	14	13	12	14	12
22	7.8	3.5	3.0	2.5	3.0	4.5	9.0	14	14	13	16	12
23	7.1	4.0	3.0	2.5	2.5	4.5	9.5	14	14	12	16	11
24	7.8	3.5	3.0	2.5	2.5	4.5	10	13	14	12	21	11
25	7.8	3.5	3.5	2.5	2.5	4.0	9.5	13	14	13	23	11
26	6.8	3.5	3.0	2.5	2.5	4.5	8.5	13	14	15	22	11
27	7.1	3.5	3.0	2.5	2.5	4.0	9.0	14	14	18	21	12
28	7.1	3.0	3.0	2.5	2.5	4.0	9.5	14	14	22	20	11
29	7.1	3.5	3.0	2.5	---	4.0	8.5	14	14	22	19	11
30	7.1	3.5	3.0	2.5	---	4.0	8.5	14	14	25	20	11
31	7.1	---	3.0	2.5	---	4.0	---	13	---	28	19	---
TOTAL	250.9	126.0	94.5	88.0	77.5	113.0	202.5	391.2	397	443	688	390
MEAN	8.09	4.20	3.05	2.84	2.77	3.65	6.75	12.6	13.2	14.3	22.2	13.0
MAX	10	7.0	4.0	3.5	3.5	4.5	10	16	14	28	39	18
MIN	6.8	3.0	2.0	1.5	2.5	2.0	4.0	9.0	12	12	13	11
AC-FT	498	250	187	175	154	224	402	776	787	879	1350	774

LAL YR 1978 TOTAL 3304.3 MEAN 9.05 MAX 33 MIN 2.0 AC-FT 6550
WTR YR 1979 TOTAL 3261.6 MEAN 8.04 MAX 29 MIN 1.5 AC-FT 6470

NOTE.--NO GAGE-HEIGHT RECORD OCT. 26 TO APR. 30.

ROARING FORK RIVER BASIN

09077250 LILY PAD CREEK FEEDER CANAL NEAR NORRIE, CO

LOCATION.--Lat 39°15'32", long 106°32'15", Pitkin County, Hydrologic Unit 14010004, on left bank at concrete diversion structure, 200 ft (61 m) downstream from diversion point on Lily Pad Creek, and 7.7 mi (12.4 km) southwest of Norrie.

PERIOD OF RECORD.--October 1973 to current year.

GAGE.--Water-stage recorder and sharp-crested weir. Datum of gage is 10,200.50 ft (3,109.112 m) National Geodetic Vertical Datum of 1929 (levels by Water and Power Resources Service).

REMARKS.--Records good. This a transmountain diversion from Lily Pad Creek in Roaring Fork River basin through Charles H. Boustead tunnel to Arkansas River basin. Water is for municipal and irrigation use in the Southeastern Water Conservancy District. The entire flow is regulated by diversion gates.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 25 ft³/s (0.70 m³/s) June 16, 1979; no flow for most of each year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG
1	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
11	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
26	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
29	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
31	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
TOTAL	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
MEAN	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0000
MAX	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
CAL YR 1978	TOTAL 748.90	MEAN 2.05	MAX 32	MIN .00	AC-FT 1490						
WTR YR 1979	TOTAL 755.97	MEAN 2.07	MAX 25	MIN .00	AC-FT 1500						

ROARING FORK RIVER BASIN

09077605 IVANHOE CREEK FEEDER CANAL NEAR NAST, CO

LOCATION---Lat 39°17'14", long 106°33'31", unsurveyed, Pitkin County, Hydrologic Unit 14010004, on left bank about 300 ft (91 m) downstream from diversion point on Ivanhoe Creek, 2.3 mi (3.7 km) east of Nast, and 5.8 mi (9.3 km) southeast of Norrie.

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

GAGE---Water-stage recorder. Datue of gage, 10,004.00 ft (3,049.219 m) National Geodetic Vertical Datum of 1929 (levels by Water and Power Resources Service).

REMARKS---Records good. Flow regulated by diversion gates to Arkansas River basin.

EXTREMES FOR PERIOD OF RECORD---Maximum daily discharge, 99 ft³/s (2.80 m³/s) June 27, 1979; no flow most of each year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	25	79	.00	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	31	70	.00	.00
3	.00	.00	.00	.00	.00	.00	.00	.00	41	63	.00	.00
4	.00	.00	.00	.00	.00	.00	.00	.00	52	56	.00	.00
5	.00	.00	.00	.00	.00	.00	.00	.00	59	34	.00	.00
6	.00	.00	.00	.00	.00	.00	.00	.00	73	16	.00	.00
7	.00	.00	.00	.00	.00	.00	.00	3.0	74	13	.00	.00
8	.00	.00	.00	.00	.00	.00	.00	1.7	41	12	.00	.00
9	.00	.00	.00	.00	.00	.00	.00	.00	28	10	.00	.00
10	.00	.00	.00	.00	.00	.00	.00	.00	25	9.2	.00	.00
11	.00	.00	.00	.00	.00	.00	.00	.00	33	8.6	.00	.00
12	.00	.00	.00	.00	.00	.00	.00	.00	46	7.6	.00	.00
13	.00	.00	.00	.00	.00	.00	.00	.00	60	6.7	.00	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	70	5.7	.00	.00
15	.00	.00	.00	.00	.00	.00	.00	4.3	75	5.4	.00	.00
16	.00	.00	.00	.00	.00	.00	.00	9.5	70	4.4	.00	.00
17	.00	.00	.00	.00	.00	.00	.00	13	61	4.1	.00	.00
18	.00	.00	.00	.00	.00	.00	.00	21	50	3.4	.00	.00
19	.00	.00	.00	.00	.00	.00	.00	31	37	2.8	.00	.00
20	.00	.00	.00	.00	.00	.00	.00	45	30	2.0	.00	.00
21	.00	.00	.00	.00	.00	.00	.00	52	37	1.9	.00	.00
22	.00	.00	.00	.00	.00	.00	.00	50	48	.44	.00	.00
23	.00	.00	.00	.00	.00	.00	.00	61	53	.00	.00	.00
24	.00	.00	.00	.00	.00	.00	.00	72	56	.00	.00	.00
25	.00	.00	.00	.00	.00	.00	.00	65	65	.00	.00	.00
26	.00	.00	.00	.00	.00	.00	.00	70	85	.00	.00	.00
27	.00	.00	.00	.00	.00	.00	.00	86	99	.00	.00	.00
28	.00	.00	.00	.00	.00	.00	.00	88	98	.00	.00	.00
29	.00	.00	.00	.00	.00	.00	.00	87	94	.00	.00	.00
30	.00	.00	.00	.00	.00	.00	.00	61	85	.00	.00	.00
31	.00	.00	.00	.00	.00	.00	.00	35	.00	.00	.00	.00
TOTAL	.00	.00	.00	.00	.00	.00	.00	855.50	1701	415.24	.00	.00
MEAN	.000	.000	.000	.000	.000	.000	.000	27.6	56.7	13.4	.000	.000
MAX	.00	.00	.00	.00	.00	.00	.00	88	99	79	.00	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	25	.00	.00	.00
AC-FT	.00	.00	.00	.00	.00	.00	.00	1700	3370	824	.00	.00

CAL YR 1978 TOTAL 2770.77 MEAN 7.59 MAX 94 MIN .00 AC-FT 5500
WTR YR 1979 TOTAL 2971.74 MEAN 8.14 MAX 99 MIN .00 AC-FT 5890

ROARING FORK RIVER BASIN

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09077610 IVANHOE CREEK NEAR NAST, CO

LOCATION--Lat 39°17'13", long 106°33'31", unsurveyed, Pitkin County, Hydrologic Unit 14010004, on left bank 60 ft (18 m) upstream from culvert under Nast Tunnel, about 300 ft (91 m) downstream from diversion dam, 2.3 mi (3.7 km) east of Nast and 5.8 mi (9.3 km) southeast of Norrie.

DRAINAGE AREA--9.43 mi² (24.42 km²).

PERIOD OF RECORD--October 1975 to current year.

GAGE--Water-stage recorder. Altitude of gage is 9,980 ft (3,042 m), from topographic map.

REMARKS--Records good except those for winter period, which are poor. Transmountain diversions above station through Busk-Ivanhoe and Charles H. Bousted tunnels to Arkansas River basin (see elsewhere in this report). 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.

EXTREMES FOR PERIOD OF RECORD--Maximum discharge, 55 ft³/s (1.56 m³/s) May 23, 1977, gage height, 2.13 ft (0.649 m); minimum daily, 0.18 ft³/s (0.005 m³/s) Oct. 17, 1978.

EXTREMES FOR CURRENT YEAR--Maximum discharge, 32 ft³/s (0.91 m³/s) at 1000 June 24, gage height, 1.73 ft (0.527 m); minimum daily, 0.18 ft³/s (0.005 m³/s) Oct. 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.46	.68	.50	.40	.40	.30	1.0	4.0	2.3	2.5	1.5	.50
2	.46	.56	.50	.30	.40	.30	1.0	4.1	2.7	2.2	1.4	.43
3	.40	.56	.40	.40	.30	.40	1.0	3.8	3.1	2.4	1.2	.43
4	.40	.56	.40	.40	.30	.40	1.0	4.1	3.0	2.4	1.2	.36
5	.40	.56	.50	.40	.30	.40	1.0	4.4	3.4	2.3	1.3	.32
6	.40	.56	.40	.40	.30	.50	1.5	4.6	4.6	2.4	.98	.29
7	.40	.56	.30	.30	.30	.60	1.5	4.4	5.0	2.4	1.3	.29
8	.40	.62	.30	.30	.30	.70	1.5	4.6	2.8	2.4	1.3	.26
9	.36	.62	.30	.30	.30	.80	1.5	5.3	2.2	2.3	1.2	.26
10	.36	.50	.30	.40	.30	.70	1.5	5.2	2.4	2.2	.98	.26
11	.32	.50	.40	.30	.30	.90	1.5	4.7	3.0	2.2	.92	.26
12	.32	.50	.40	.30	.30	1.0	1.5	4.1	3.8	2.2	.86	.26
13	.29	.50	.50	.30	.30	.90	1.5	3.8	4.6	2.1	1.1	.26
14	.26	.40	.50	.30	.30	1.0	1.5	5.8	4.8	2.1	1.1	.29
15	.22	.40	.50	.40	.30	1.0	2.0	4.4	4.8	2.0	1.7	.29
16	.22	.40	.50	.40	.40	1.0	2.0	2.5	4.0	2.0	1.4	.32
17	.18	.40	.50	.40	.40	1.0	2.5	2.5	3.6	2.1	1.5	.26
18	.29	.50	.50	.40	.40	1.0	3.0	2.7	3.2	2.2	2.2	.26
19	.40	.50	.50	.40	.40	1.0	3.5	2.7	2.6	2.3	2.2	.26
20	.40	.50	.50	.40	.40	1.0	3.5	2.7	2.4	2.3	2.1	.29
21	.36	.50	.40	.40	.30	1.0	3.5	2.5	2.6	2.3	2.1	.46
22	.62	.50	.40	.30	.30	1.0	3.5	2.5	3.6	2.2	1.6	.40
23	.46	.50	.40	.30	.30	1.0	4.0	2.7	4.8	2.1	1.3	.36
24	.56	.50	.40	.40	.30	1.0	4.5	2.7	4.6	2.7	1.2	.36
25	.56	.50	.40	.40	.30	1.0	4.0	2.5	3.6	2.7	1.3	.32
26	.62	.50	.40	.40	.40	1.0	3.5	3.3	3.4	2.4	1.3	.36
27	.80	.40	.40	.30	.40	1.0	3.5	3.2	3.2	2.4	.92	.56
28	.74	.40	.50	.30	.30	1.0	4.0	3.1	3.0	2.3	.86	.46
29	.74	.50	.40	.30	---	1.0	3.5	3.3	2.7	1.9	.74	.32
30	.68	.50	.40	.20	---	1.0	3.5	2.4	2.7	1.7	.58	.29
31	.68	---	.40	.30	---	1.0	---	2.0	---	1.6	.74	---
TOTAL	13.76	15.18	13.20	10.80	9.30	25.90	72.5	110.6	102.5	69.3	98.98	10.04
MEAN	.44	.51	.43	.35	.33	.84	2.42	3.57	3.42	2.24	1.26	.33
MAX	.80	.68	.50	.40	.40	1.0	4.5	5.8	5.0	2.7	2.2	.56
MIN	.18	.40	.30	.20	.30	.30	1.0	2.0	2.2	1.6	.58	.26
AC-FT	27	30	26	21	18	51	144	219	203	137	77	20
CAL YR 1978	TOTAL 484.97	MEAN 1.33	MAX 14	MIN .16	AC-FT 962							
WTR YR 1979	TOTAL 492.06	MEAN 1.35	MAX 5.8	MIN .18	AC-FT 976							

NOTE--NO GAGE-HEIGHT RECORD NOV. 12 TO MAY 1.

ROARING FORK RIVER BASIN

09077750 SOUTH FORK FRYINGPAN RIVER FEEDER CANAL NEAR MORRIE, CO

LOCATION---Lat 39°14'20", Long 106°35'22", Pitkin County, Hydrologic Unit 14010004, on right bank 110 ft (34 m) downstream from diversion point on South Fork Fryingpan River and 7.2 mi (11.6 km) southeast of Norrie.

PERIOD OF RECORD---October 1971 to current year.

GAGE---Water-stage recorder and Parshall flume. Datum of gage is 9,997.80 ft (3,047.329 m), National Geodetic Vertical Datum of 1929 (levels by Water and Power Resources Service).

REMARKS---Records good. This is a transmountain diversion from South Fork Fryingpan River in Roaring Fork River basin through Charles M. Boustead tunnel to Arkansas River basin. Water is for municipal and irrigation use in the Southeastern Colorado Water Conservancy District. The entire flow is regulated by diversion gates.

EXTREMES FOR PERIOD OF RECORD---Maximum daily discharge, 188 ft³/s (5.32 m³/s) June 25, 1978; no flow for most of each year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	39	156	7.6	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	45	130	12	.00
3	.00	.00	.00	.00	.00	.00	.00	.00	63	113	11	.00
4	.00	.00	.00	.00	.00	.00	.00	.00	84	110	5.2	.00
5	.00	.00	.00	.00	.00	.00	.00	.00	106	101	.00	.00
6	.00	.00	.00	.00	.00	.00	.00	.00	129	94	.00	.00
7	.00	.00	.00	.00	.00	.00	.00	.00	127	91	.00	.00
8	.00	.00	.00	.00	.00	.00	.00	.00	80	87	.00	.00
9	.00	.00	.00	.00	.00	.00	.00	.00	57	81	.00	.00
10	.00	.00	.00	.00	.00	.00	.00	.00	48	78	.00	.00
11	.00	.00	.00	.00	.00	.00	.00	.00	54	76	.00	.00
12	.00	.00	.00	.00	.00	.00	.00	.00	78	75	.00	.00
13	.00	.00	.00	.00	.00	.00	.00	.00	113	75	.00	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	134	71	.00	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	142	64	4.5	.00
16	.00	.00	.00	.00	.00	.00	.00	.00	146	61	7.0	.00
17	.00	.00	.00	.00	.00	.00	.00	.00	139	56	7.0	.00
18	.00	.00	.00	.00	.00	.00	.00	.00	124	49	12	.00
19	.00	.00	.00	.00	.00	.00	.00	.00	98	42	12	.00
20	.00	.00	.00	.00	.00	.00	.00	.00	74	38	13	.00
21	.00	.00	.00	.00	.00	.00	.00	13	90	37	11	.00
22	.00	.00	.00	.00	.00	.00	.00	32	126	43	6.0	.00
23	.00	.00	.00	.00	.00	.00	.00	40	143	36	2.1	.00
24	.00	.00	.00	.00	.00	.00	.00	50	154	36	.00	.00
25	.00	.00	.00	.00	.00	.00	.00	57	153	34	.00	.00
26	.00	.00	.00	.00	.00	.00	.00	65	142	30	.00	.00
27	.00	.00	.00	.00	.00	.00	.00	87	160	23	.00	.00
28	.00	.00	.00	.00	.00	.00	.00	91	152	19	.00	.00
29	.00	.00	.00	.00	---	.00	.00	95	156	17	.00	.00
30	.00	.00	.00	.00	---	.00	.00	78	148	11	.00	.00
31	.00	---	.00	.00	---	.00	---	50	---	6.0	.00	---
TOTAL	.00	.00	.00	.00	.00	.00	.00	658.00	3304	1940.0	110.40	.00
MEAN	.0000	.0000	.0000	.0000	.0000	.0000	.0000	21.2	110	62.6	3.56	.0000
MAX	.00	.00	.00	.00	.00	.00	.00	95	160	156	13	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	39	6.0	.00	.00
AC-FT	.00	.00	.00	.00	.00	.00	.00	1310	6550	3850	219	.00
CAL YR 1978	TOTAL	6182.54	MEAN	16.9	MAX	188	MIN	.00	AC-FT	12260		
WTR YR 1979	TOTAL	6012.40	MEAN	16.5	MAX	160	MIN	.00	AC-FT	11930		

09077800 SOUTH FORK FRYINGPAN RIVER AT UPPER STATION, NEAR NORRIE, CO

LOCATION--Lat 39°14'20", Long 106°35'24", Pitkin County, Hydrologic Unit 14010004, on right bank 300 ft (91 m) downstream from diversion dam, 5.2 mi (8.4 km) upstream from mouth, and 7.2 mi (11.6 km) southeast of Norrie.

DRAINAGE AREA--11.5 mi² (29.8 km²).

PERIOD OF RECORD--October 1963 to current year.

GAGE--Water-stage recorder. Altitude of gage is 9,990 ft (3,045 m), from topographic map. Prior to Oct. 1, 1973, at site 0.2 mi (0.3 km) downstream at different datum.

REMARKS--Records good except those for periods of no gage-height record, which are poor. Transmountain diversion above station through Charles H. Boustead tunnel since May 16, 1972 (see station 09077750 for figures of diversion). 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--8 years (water years 1964-71), 21.6 ft³/s (0.612 m³/s), 15,650 acre-ft/yr (19.3 hm³/yr), prior to diversion through Charles H. Boustead tunnel; 8 years (water years 1972-79), 6.37 ft³/s (0.180 m³/s), 4,620 acre-ft/yr (5.70 hm³/yr), subsequent to diversion through Charles H. Boustead tunnel.

EXTREMES FOR PERIOD OF RECORD--Maximum discharge, 326 ft³/s (9.23 m³/s) June 24, 1971, gage height, 3.35 ft (1.021 m), site and datum then in use, from rating curve extended above 180 ft³/s (5.1 m³/s); maximum gage height, 4.40 ft (1.341 m) sometime during period Nov. 15, 1978 to May 21, 1979 (backwater from ice); minimum daily discharge, 0.5 ft³/s (0.014 m³/s) Dec. 22, 1976.

EXTREMES FOR CURRENT YEAR--Maximum discharge, 30 ft³/s (0.85 m³/s) at 1100 Aug. 1, gage height, 2.45 ft (0.747 m); minimum daily, 1.0 ft³/s (0.028 m³/s) Jan. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.9	5.5	2.5	2.0	1.5	2.0	2.5	6.5	6.2	11	20	11
2	5.9	5.5	3.0	1.0	2.0	2.0	2.5	7.0	5.9	10	12	9.9
3	6.2	5.5	2.5	2.0	2.0	2.0	2.5	6.5	5.9	9.9	12	9.9
4	6.2	4.5	2.5	2.5	1.5	1.5	2.5	7.0	5.9	8.6	18	9.6
5	6.2	5.0	3.0	2.5	1.5	1.5	2.5	7.5	6.2	7.6	23	9.6
6	6.2	4.0	3.0	3.0	1.5	2.0	2.5	8.5	6.4	7.3	23	8.9
7	6.2	3.0	2.5	2.5	2.0	3.0	3.0	8.5	6.7	7.0	23	8.6
8	6.2	3.5	1.5	2.0	2.0	3.0	3.5	8.0	6.2	7.0	23	7.9
9	6.2	3.0	2.0	2.0	1.5	2.5	4.0	7.5	5.9	7.0	22	7.9
10	6.2	3.0	2.0	2.5	2.0	2.5	4.0	7.5	5.9	7.0	21	7.9
11	6.2	3.0	2.0	2.5	2.0	2.5	3.5	7.0	5.6	7.0	20	7.9
12	6.2	3.0	2.5	3.0	2.0	3.0	3.0	6.5	5.6	7.0	19	7.3
13	6.4	2.5	2.5	2.5	2.0	2.5	2.5	7.0	5.9	7.0	18	7.0
14	6.4	2.5	2.5	2.0	2.5	2.5	2.5	10	6.4	6.4	22	6.7
15	6.7	2.5	2.5	2.0	2.0	3.0	3.5	15	6.4	6.4	18	6.4
16	6.4	2.0	2.5	2.5	2.0	3.0	4.5	17	6.4	6.4	13	6.4
17	6.2	2.0	2.5	2.5	2.0	3.5	5.5	21	6.4	5.9	12	6.2
18	5.9	2.5	3.0	2.5	2.0	3.0	6.0	25	6.2	5.6	11	6.2
19	5.9	2.5	3.0	2.5	2.0	3.0	6.0	31	6.2	7.6	8.6	6.2
20	5.9	2.5	2.5	2.5	1.5	3.0	6.5	35	5.9	9.6	7.6	6.2
21	5.9	2.5	2.5	2.0	2.0	3.0	6.5	25	5.9	9.6	7.6	6.2
22	5.9	2.5	2.5	2.0	2.0	3.5	6.5	7.6	7.3	9.2	9.2	6.2
23	6.4	3.0	2.5	2.0	1.5	3.5	7.0	7.6	8.6	8.9	12	6.2
24	7.0	2.5	2.5	2.0	1.5	3.5	8.0	7.6	8.6	8.3	14	5.9
25	7.0	2.5	3.0	2.0	1.5	3.0	7.0	7.6	8.3	7.9	13	5.6
26	6.0	2.5	2.5	2.0	1.5	3.5	5.0	7.6	7.9	9.6	13	5.6
27	6.0	2.5	2.5	2.0	2.0	3.0	6.5	7.6	7.9	12	12	5.6
28	6.0	2.5	2.5	2.0	1.5	3.0	7.5	7.0	7.3	14	12	5.6
29	6.0	2.5	2.5	2.0	---	3.0	6.0	7.0	8.9	15	11	5.6
30	6.0	2.5	2.5	2.0	---	3.0	6.0	6.7	10	18	11	5.6
31	6.0	---	2.5	2.0	---	2.5	---	6.4	---	22	11	---
TOTAL	191.8	93.0	78.0	68.5	51.0	85.5	139.0	346.7	202.9	285.8	472.0	215.8
MEAN	6.19	3.10	2.52	2.21	1.62	2.76	4.63	11.2	6.76	9.22	15.2	7.19
MAX	7.0	5.5	3.0	3.0	2.5	3.5	8.0	35	10	22	23	11
MIN	5.9	2.0	1.5	1.0	1.5	1.5	2.5	6.4	5.6	5.6	7.6	5.6
AC-FT	380	184	155	136	101	170	276	688	402	567	936	428

CAL YR 1978 TJTAL 2375.1 MEAN 6.51 MAX 25 MIN 1.5 AC-FT 4710
WTR YR 1979 TJTAL 2230.0 MEAN 6.11 MAX 35 MIN 1.0 AC-FT 4420

NOTE--NO GAGE-HEIGHT RECORD NOV. 15 TO MAY 21.

ROARING FORK RIVER BASIN

09077940 CHAPMAN GULCH FEEDER CANAL NEAR NORRIE, CO

LOCATION.--Lat 39°14'47", long 106°37'45", Pitkin County, Hydrologic Unit 14010D04, on right bank 187 ft (55 m) downstream from diversion point on Chapman Gulch and 4.9 mi (7.9 km) south of Norrie.

PERIOD OF RECORD.--October 1971 to current year.

GAGE.--Water-stage recorder and Parshall flume. Datum of gage is 10,032.60 ft (3,057.936 m) National Geodetic Vertical Datum of 1929 (levels by Water and Power Resources Service).

REMARKS.--Records good. This is a transmountain diversion from Chapman Gulch and Sawyer Creek Feeder Canal in Roaring Fork River basin through Charles H. Boustead tunnel to Arkansas River basin. Water is for municipal and irrigation use in the Southeastern Colorado Conservancy District. The entire flow is regulated by diversion gates.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 144 ft³/s (4.08 m³/s) June 24, 1978; no flow for most of each year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	31	122	9.8	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	35	105	9.0	.00
3	.00	.00	.00	.00	.00	.00	.00	.00	45	94	7.7	.00
4	.00	.00	.00	.00	.00	.00	.00	.00	60	90	7.3	.00
5	.00	.00	.00	.00	.00	.00	.00	.00	78	81	7.3	.00
6	.00	.00	.00	.00	.00	.00	.00	.00	100	74	7.3	.00
7	.00	.00	.00	.00	.00	.00	.00	.00	103	71	7.3	.00
8	.00	.00	.00	.00	.00	.00	.00	.00	64	69	7.7	.00
9	.00	.00	.00	.00	.00	.00	.00	.00	45	66	7.7	.00
10	.00	.00	.00	.00	.00	.00	.00	.00	37	62	7.0	.00
11	.00	.00	.00	.00	.00	.00	.00	.00	43	60	2.6	.00
12	.00	.00	.00	.00	.00	.00	.00	.00	66	59	.00	.00
13	.00	.00	.00	.00	.00	.00	.00	.00	97	57	.00	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	112	53	2.9	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	115	48	5.2	.00
16	.00	.00	.00	.00	.00	.00	.00	.00	116	47	2.3	.00
17	.00	.00	.00	.00	.00	.00	.00	.00	109	42	.00	.00
18	.00	.00	.00	.00	.00	.00	.00	.00	94	39	11	.00
19	.00	.00	.00	.00	.00	.00	.00	.00	74	33	19	.00
20	.00	.00	.00	.00	.00	.00	.00	.00	57	31	18	.00
21	.00	.00	.00	.00	.00	.00	.00	5.1	69	30	8.5	.00
22	.00	.00	.00	.00	.00	.00	.00	19	94	37	.00	.00
23	.00	.00	.00	.00	.00	.00	.00	25	113	30	.00	.00
24	.00	.00	.00	.00	.00	.00	.00	32	122	25	.00	.00
25	.00	.00	.00	.00	.00	.00	.00	34	122	21	.00	.00
26	.00	.00	.00	.00	.00	.00	.00	40	119	19	.00	.00
27	.00	.00	.00	.00	.00	.00	.00	55	126	17	.00	.00
28	.00	.00	.00	.00	.00	.00	.00	65	127	16	.00	.00
29	.00	.00	.00	.00	---	.00	.00	73	129	14	.00	.00
30	.00	.00	.00	.00	---	.00	.00	61	122	12	.00	.00
31	.00	---	.00	.00	---	.00	---	39	---	11	.00	---
TOTAL	.00	.00	.00	.00	.00	.00	.00	448.10	2624	1535	147.60	.00
MEAN	.000	.000	.000	.000	.000	.000	.000	14.5	87.5	49.5	4.76	.000
MAX	.00	.00	.00	.00	.00	.00	.00	73	129	122	19	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	31	11	.00	.00
AC-FT	.00	.00	.00	.00	.00	.00	.00	889	5200	3040	293	.00
CAL YR 1978	TOTAL	4960.16	MEAN	13.6	MAX	144	MIN	.00	AC-FT	9840		
WTR YR 1979	TOTAL	4754.70	MEAN	13.0	MAX	129	MIN	.00	AC-FT	9430		

09077945 CHAPMAN GULCH NEAR NAST, CO

LOCATION.--Lat 39°15'51", long 106°37'54", Pitkin County, Hydrologic Unit 14010004, on left bank 700 ft (210 m) downstream from Chapman diversion tunnel, 2.5 mi (4.0 km) northwest of Nast, 3.3 mi (5.3 km) upstream from mouth, and 4.3 mi (6.9 km) south of Norrie.

DRAINAGE AREA.--5.96 mi² (15.44 km²) (revised).

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

GAGE.--Water-stage recorder. Datum of gage is 9,982.76 ft (3,042.745 m), National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except those for period of no gage-height record, which are poor. Transmountain diversion above station to Charles M. Boustead tunnel by Chapman Gulch feeder canal (station 09077940). 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.--7 years, 3.17 ft³/s (0.090 m³/s), 2,300 acre-ft/yr (2.84 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 53 ft³/s (1.50 m³/s) July 24, 1977, gage height, 3.36 ft (1.024 m); minimum daily, 0.20 ft³/s (0.006 m³/s) Dec. 22, 1976.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 30 ft³/s (0.850 m³/s) at 2100 Aug. 17, gage height, 3.02 ft (0.920 m); minimum daily, 0.40 ft³/s (0.001 m³/s) Jan. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.7	2.5	.80	.70	.60	.60	1.0	1.5	3.9	4.3	5.2	5.7
2	2.6	2.5	.80	.40	.80	.60	1.0	1.6	3.9	4.1	5.1	5.5
3	2.6	2.5	.70	.60	.60	.60	1.0	1.4	3.9	4.3	5.1	5.4
4	2.6	2.5	.70	.80	.60	.50	1.0	1.6	3.9	4.4	5.1	5.1
5	2.5	2.5	.80	.90	.60	.50	1.0	2.0	4.0	4.3	5.1	5.0
6	2.5	2.0	.80	.90	.60	.80	1.0	2.2	4.2	4.2	5.1	4.9
7	2.5	2.0	.70	.80	.80	.90	1.0	2.3	4.7	4.1	5.0	4.8
8	2.5	2.0	.50	.60	.80	1.0	1.0	1.9	4.5	4.0	5.0	4.8
9	2.5	2.0	.60	.70	.60	.90	1.0	1.6	4.4	3.9	5.0	4.8
10	2.5	2.0	.60	.80	.80	.80	1.0	1.6	4.4	3.9	5.0	4.8
11	2.0	2.0	.60	.90	.80	.90	1.0	1.6	4.3	3.9	7.8	4.8
12	2.0	2.5	.70	.90	.80	.90	1.0	1.5	4.6	3.8	9.2	4.6
13	2.0	2.5	.70	.90	.80	.90	1.0	1.8	4.6	3.8	9.4	4.3
14	2.0	2.5	.70	.90	.90	.90	1.0	2.4	4.5	3.8	9.9	4.3
15	2.0	2.5	.70	.80	.80	1.0	1.0	3.2	4.5	3.9	9.0	4.2
16	2.0	2.0	.70	.90	.80	1.0	1.5	3.8	4.5	3.8	10	4.0
17	2.0	2.0	.70	.80	.80	1.0	1.5	4.4	4.3	3.8	15	3.9
18	2.0	2.0	.80	.80	.80	1.0	1.5	6.0	4.4	3.8	10	3.8
19	2.0	2.0	.90	.80	.80	1.0	1.5	8.4	4.8	3.8	4.6	3.8
20	2.0	2.0	.70	.80	.60	1.0	1.5	9.5	4.8	3.7	4.5	3.9
21	1.5	1.5	.70	.80	.60	1.0	1.5	8.4	4.7	3.7	7.2	4.0
22	2.0	1.5	.70	.80	.80	1.0	1.5	4.2	4.6	3.8	8.2	3.9
23	2.0	1.5	.70	.60	.60	1.0	2.0	4.4	4.4	3.7	7.3	3.6
24	2.0	1.0	.70	.60	.60	1.0	2.0	4.3	4.3	3.6	7.0	3.5
25	2.0	1.0	.80	.60	.60	1.0	1.6	4.2	4.2	3.6	6.7	3.5
26	1.5	1.0	.70	.60	.60	1.0	1.4	4.2	4.0	4.4	6.4	3.7
27	2.0	1.0	.70	.60	.60	1.0	1.4	4.3	4.0	5.0	6.3	4.0
28	2.5	1.0	.70	.60	.60	1.0	1.6	4.3	4.0	5.2	6.1	3.8
29	2.5	1.0	.70	.60	---	1.0	1.4	4.3	4.3	5.4	6.0	3.6
30	3.0	1.0	.70	.60	---	1.0	1.4	4.2	4.5	5.4	6.1	3.5
31	3.0	---	.70	.60	---	1.0	---	4.0	---	5.2	6.0	---
TOTAL	69.5	56.0	22.00	22.70	19.70	27.80	38.3	111.1	130.1	128.6	213.4	129.5
MEAN	2.24	1.87	.71	.73	.70	.90	1.28	3.58	4.34	4.15	6.88	4.32
MAX	3.0	2.5	.90	.90	.90	1.0	2.0	9.5	4.8	5.4	15	5.7
MIN	1.5	1.0	.50	.40	.60	.50	1.0	1.4	3.9	3.6	4.5	3.5
AC-FT	138	111	44	45	39	55	76	220	258	255	423	257

CAL YR 1978 TOTAL 1138.85 MEAN 3.12 MAX 19 MIN .50 AC-FT 2260
WTR YR 1979 TOTAL 968.70 MEAN 2.65 MAX 15 MIN .40 AC-FT 1920

NOTE.--NO GAGE-HEIGHT RECORD OCT. 10 TO APR. 23.

ROARING FORK RIVER BASIN

09077960 SAWYER CREEK FEEDER CANAL NEAR NORRIE, CO

LOCATION--Lat 39°15'44", long 106°37'39", Pitkin County, Hydrologic Unit 14010004, on left bank 3,100 ft (940 m) downstream from diversion point on Sawyer Creek and 4.9 mi (7.9 km) south of Norrie.

PERIOD OF RECORD--October 1971 to current year.

GAGE--Water-stage recorder and Parshall flume. Datum of gage is 10,047.00 ft (3,062.326 m) National Geodetic Vertical Datum of 1929 (levels by Water and Power Resources Service).

REMARKS--Records good. This is a transmountain diversion from Sawyer Creek in Roaring Fork River basin through Charles M. Boustead tunnel to Arkansas River basin. Water is diverted to Chapman Gulch and is rediverted by Chapman Gulch feeder canal. Water is for municipal and irrigation use in the Southeastern Colorado Water Conservancy District. The entire flow is regulated by diversion gates.

EXTREMES FOR PERIOD OF RECORD--Maximum daily discharge, 37 ft³/s (1.05 m³/s) June 24, 25, 1978; no flow for most of each year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	9.0	36	.00	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	9.1	32	.00	.00
3	.00	.00	.00	.00	.00	.00	.00	.00	11	29	.00	.00
4	.00	.00	.00	.00	.00	.00	.00	.00	14	27	.00	.00
5	.00	.00	.00	.00	.00	.00	.00	.00	20	24	.00	.00
6	.00	.00	.00	.00	.00	.00	.00	.00	27	22	.00	.00
7	.00	.00	.00	.00	.00	.00	.00	.00	28	21	.00	.00
8	.00	.00	.00	.00	.00	.00	.00	.00	20	20	.00	.00
9	.00	.00	.00	.00	.00	.00	.00	.00	15	19	.00	.00
10	.00	.00	.00	.00	.00	.00	.00	.00	12	18	.00	.00
11	.00	.00	.00	.00	.00	.00	.00	.00	12	18	.00	.00
12	.00	.00	.00	.00	.00	.00	.00	.00	17	17	.00	.00
13	.00	.00	.00	.00	.00	.00	.00	.00	26	16	.00	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	32	15	.00	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	34	14	.00	.00
16	.00	.00	.00	.00	.00	.00	.00	.00	34	13	.00	.00
17	.00	.00	.00	.00	.00	.00	.00	.00	32	12	.00	.00
18	.00	.00	.00	.00	.00	.00	.00	.00	27	10	.00	.00
19	.00	.00	.00	.00	.00	.00	.00	.00	22	9.1	2.7	.00
20	.00	.00	.00	.00	.00	.00	.00	.00	18	8.0	4.3	.00
21	.00	.00	.00	.00	.00	.00	.00	.00	20	7.3	1.7	.00
22	.00	.00	.00	.00	.00	.00	.00	1.8	28	8.5	.00	.00
23	.00	.00	.00	.00	.00	.00	.00	3.7	33	7.5	.00	.00
24	.00	.00	.00	.00	.00	.00	.00	4.2	35	2.9	.00	.00
25	.00	.00	.00	.00	.00	.00	.00	4.2	35	.00	.00	.00
26	.00	.00	.00	.00	.00	.00	.00	5.6	35	.00	.00	.00
27	.00	.00	.00	.00	.00	.00	.00	7.2	36	.00	.00	.00
28	.00	.00	.00	.00	.00	.00	.00	10	36	.00	.00	.00
29	.00	.00	.00	.00	.00	.00	.00	14	35	.00	.00	.00
30	.00	.00	.00	.00	.00	.00	.00	14	36	.00	.00	.00
31	.00	.00	.00	.00	.00	.00	.00	11	.00	.00	.00	.00
TOTAL	.00	.00	.00	.00	.00	.00	.00	75.70	748.1	406.30	8.70	.00
MEAN	.000	.000	.000	.000	.000	.000	.000	2.44	24.9	13.1	.28	.000
MAX	.00	.00	.00	.00	.00	.00	.00	14	36	36	4.3	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	9.0	.00	.00	.00
AC-FT	.00	.00	.00	.00	.00	.00	.00	150	1480	806	17	.00

CAL YR 1978 TOTAL 1263.30 MEAN 3.46 MAX 37 MIN .00 AC-FT 2510
WTR YR 1979 TOTAL 1238.80 MEAN 3.39 MAX 36 MIN .00 AC-FT 2460

ROARING FORK RIVER BASIN

157

09078000 FRYINGPAN RIVER AT NORRIE, CO

LOCATION.--Lat 39°19'51", long 106°39'27", in NE¼NE¼ sec.28, T.8 S., R.83 W., Pitkin County, Hydrologic Unit 14010004, on right bank 200 ft (61 m) west of county road at Norrie, 1.2 mi (1.9 km) upstream from North Fork, and 2.1 mi (3.4 km) downstream from Chapman Gulch.

DRAINAGE AREA.--90.6 mi² (234.7 km²).

PERIOD OF RECORD.--October 1910 to March 1917, October 1947 to current year. Prior to October 1960, published as Fryingpan Creek at Norrie.

REVISED RECORDS.--WSP 1924: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 8,410 ft (2,563 m), from topographic map. February 1911 to March 1917, nonrecording gages at site 200 ft (61 m) upstream at different datums.

REMARKS.--Records good except those for winter period, which are poor. Transmountain diversions above station to Arkansas River basin through Busk-Ivanhoe tunnel since June 1925 and Charles H. Boustead tunnel since May 16, 1972 (see elsewhere in this report). Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--30 years (water years 1911-16, 1947-71), 123 ft³/s (3,483 m³/s) 89,110 acre-ft/yr (110 hm³/yr), prior to diversion through Charles H. Boustead tunnel; 8 years (water years 1972-79), 58.5 ft³/s (1,657 m³/s), 42,380 acre-ft/yr (52.3 hm³/yr), subsequent to diversion through Charles H. Boustead tunnel.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,780 ft³/s (50.4 m³/s) June 30, 1957, gage height, 5.37 ft (1.637 m); maximum gage height, 5.55 ft (1.692 m) June 28, 1957; minimum daily discharge, 8.0 ft³/s (0.23 m³/s) Dec. 26, 1962, but may have been less during periods of no gage-height record.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 368 ft³/s (10.4 m³/s) at 1600 June 8, gage height, 3.25 ft (0.991 m); minimum daily, 13 ft³/s (0.37 m³/s) Jan. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	24	22	16	15	17	18	72	196	200	68	35
2	23	24	22	13	17	17	17	79	190	179	53	34
3	23	24	19	18	17	17	17	66	193	159	51	33
4	23	24	18	20	16	16	17	65	207	150	55	29
5	23	24	18	20	15	15	18	85	232	135	65	27
6	24	22	18	20	15	17	18	106	256	127	63	28
7	23	24	18	18	17	18	19	113	334	122	62	27
8	23	22	17	14	17	19	19	83	334	113	60	26
9	23	22	16	16	16	20	19	74	298	103	62	27
10	24	22	20	18	16	21	19	68	278	99	59	27
11	23	22	20	19	17	20	20	58	282	94	58	27
12	23	22	20	19	17	20	20	59	286	87	60	26
13	23	22	20	18	18	20	20	66	302	85	65	25
14	23	22	20	15	18	20	21	94	322	76	77	25
15	23	22	19	18	18	20	26	116	326	74	74	24
16	23	22	18	19	18	20	37	135	310	76	55	24
17	23	22	18	19	18	20	53	162	286	74	63	22
18	25	22	19	19	17	20	70	200	266	68	72	21
19	25	22	20	19	16	20	76	238	260	66	50	22
20	24	22	20	18	17	20	60	274	232	65	39	23
21	25	22	19	16	17	19	60	302	214	63	41	24
22	30	22	18	18	17	18	65	266	218	66	45	24
23	26	22	18	14	17	18	76	266	232	59	41	22
24	27	22	18	14	17	18	87	263	232	62	47	22
25	29	21	18	17	16	17	74	252	224	62	50	22
26	25	22	17	18	16	18	63	263	218	60	45	22
27	27	20	18	17	17	18	68	294	218	68	42	24
28	26	18	20	15	17	18	76	310	221	72	40	24
29	26	22	20	17	---	18	62	330	204	68	37	22
30	26	22	20	17	---	18	60	314	200	68	38	22
31	24	---	19	15	---	17	---	249	---	74	38	---
TOTAL	760	665	587	534	469	574	1275	5322	7571	2874	1675	760
MEAN	24.5	22.2	18.9	17.2	16.8	18.5	42.5	172	252	92.7	54.0	25.3
MAX	30	24	22	20	18	21	87	330	334	200	77	35
MIN	23	18	16	13	15	15	17	58	190	59	37	21
AC-FT	1510	1320	1160	1060	930	1140	2530	10560	15020	5700	3320	1510
CAL YR 1978 TOTAL	21415			MEAN 58.7	MAX 314	MIN 10	AC-FT 42480					
WTR YR 1979 TOTAL	23066			MEAN 63.2	MAX 334	MIN 13	AC-FT 45750					

ROARING FORK RIVER BASIN

09078050 MORMON CREEK FEEDER CANAL NEAR NORRIE, CO

LOCATION.--Lat 39°21'20", long 106°32'00", Pitkin County, Hydrologic Unit 14010004, on left bank, 0.5 mi (0.8 km) upstream from unnamed tributary, 1.0 mi (1.6 km) upstream from Carter Creek, and 6.8 mi (10.9 km) northeast of Norrie.

PERIOD OF RECORD.--June to September 1979.

GAGE.--Water-stage recorder and rectangular weir. Altitude of gage is 10,090 ft (3,075 m) from topographic map.

REMARKS.--Records good. This is a transmountain diversion from Mormon Creek in the Roaring Fork River basin through Charles H. Boustead tunnel to the Arkansas River basin. Water is for municipal and irrigation use in the Southeastern Colorado Conservancy District. The entire flow is regulated by diversion gates.

COOPERATION.--Records collected by Water and Power Resources Service, computed by Colorado Division of Water Resources, and reviewed by U.S. Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 57 ft³/s (1.61 m³/s) June 29, 1979; no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1									.00	51	.00	.00
2									.00	42	.00	.00
3									.00	36	.00	.00
4									4.1	34	.00	.00
5									11	33	.00	.00
6									11	31	.00	.00
7									11	29	.00	.00
8									11	29	.00	.00
9									7.9	28	.00	.00
10									5.7	26	.00	.00
11									12	26	.00	.00
12									29	26	.00	.00
13									29	25	.00	.00
14									22	23	.00	.00
15									22	20	.00	.00
16									22	20	.00	.00
17									22	16	.00	.00
18									27	13	.00	.00
19									26	5.5	.00	.00
20									21	.00	.00	.00
21									28	.00	.00	.00
22									35	.00	.00	.00
23									43	.00	.00	.00
24									45	.00	.00	.00
25									44	.00	.00	.00
26									43	.00	.00	.00
27									51	.00	.00	.00
28									52	.00	.00	.00
29									57	.00	.00	.00
30									53	.00	.00	.00
31									---	.00	.00	---
TOTAL									744.70	513.50	.00	.00
MEAN									24.8	16.6	.000	.000
MAX									57	51	.00	.00
MIN									.00	.00	.00	.00
AC-FT									1480	1020	.00	.00

ROARING FORK RIVER BASIN

159

09078100 NORTH FORK FRYINGPAN RIVER ABOVE CUNNINGHAM CREEK, NEAR NORRIE, CO

LOCATION.--Lat 39°21'32", Long 106°34'04", Pitkin County, Hydrologic Unit 14010004, on left bank 1.7 mi (2.7 km) upstream from Cunningham Creek and 5.5 mi (8.8 km) east of Norrie.

DRAINAGE AREA.--12.0 mi² (31.1 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 9,420 ft (2,871 m), from topographic map.

REMARKS.--Records good except those for winter period, which are poor. Transmountain diversion above station to Arkansas River basin through Charles M. Boustead Tunnel since June 4, 1979. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--15 years (water years 1964-78), 20.2 ft³/s (0.572 m³/s), 14,630 acre-ft/yr (18.0 hm³/yr), prior to diversion through Charles M. Boustead tunnel.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 381 ft³/s (10.8 m³/s) July 4, 1975, gage height, 4.07 ft (1.241 m); maximum gage height recorded, 4.24 ft (1.292 m) Apr. 22, 1965 (backwater from ice); minimum daily discharge, 0.40 ft³/s (0.011 m³/s) Feb. 17, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 282 ft³/s (7.99 m³/s) at 2300 June 15, gage height, 3.70 ft (1.155 m); maximum gage height, 4.07 ft (1.241 m) June 13 (backwater from log); minimum daily discharge, 0.80 ft³/s (0.023 m³/s) Jan. 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.4	1.8	1.3	.84	.96	1.0	1.6	8.8	52	91	9.5	2.9
2	1.3	1.8	1.2	1.0	.96	.98	1.7	8.5	55	81	9.2	2.7
3	1.3	1.8	1.0	1.1	.96	.94	1.7	7.5	80	68	7.5	2.6
4	1.2	1.7	1.2	1.2	.90	.88	2.4	9.0	109	57	7.5	2.4
5	1.2	1.6	1.4	1.2	.90	.88	2.8	11	138	55	7.5	2.3
6	1.2	1.4	1.2	1.2	.96	1.0	2.4	14	177	40	7.2	2.4
7	1.2	1.3	1.1	1.0	1.0	1.1	2.4	14	198	44	6.9	2.3
8	1.1	1.4	1.0	.80	.96	1.1	2.6	9.5	117	49	6.9	2.0
9	1.1	1.3	1.0	1.0	.96	1.2	2.6	8.5	74	46	7.2	1.9
10	1.1	1.2	1.2	1.1	.98	1.2	2.2	7.5	56	44	6.5	2.0
11	1.1	1.4	1.2	1.1	1.0	1.2	2.2	7.0	64	42	6.0	2.0
12	1.1	1.4	1.2	1.1	1.0	1.2	2.0	7.0	84	43	5.5	2.0
13	.99	1.4	1.2	1.1	1.0	1.2	2.0	10	147	43	5.5	1.8
14	.99	1.3	1.2	.90	1.1	1.2	2.6	13	198	41	7.2	1.7
15	.99	1.3	1.1	1.0	1.0	1.2	3.8	22	208	36	7.5	1.6
16	.99	1.2	1.1	1.1	1.0	1.2	5.5	26	196	32	6.9	1.3
17	.99	1.2	1.1	1.1	1.0	1.2	7.5	30	161	29	6.9	1.2
18	1.1	1.2	1.1	1.1	1.0	1.2	8.0	44	118	27	8.2	1.1
19	1.2	1.3	1.2	1.1	.92	1.2	7.5	55	72	25	9.5	1.1
20	1.2	1.3	1.2	1.0	.96	1.2	7.5	70	50	29	7.2	1.1
21	1.2	1.3	1.1	.90	1.0	1.2	10	65	57	29	6.5	1.4
22	1.9	1.3	1.1	1.0	1.0	1.2	7.0	85	90	38	5.5	1.4
23	1.8	1.2	1.1	.88	1.0	1.3	8.0	99	114	31	4.9	1.3
24	1.9	1.2	1.1	.90	.96	1.3	9.0	115	107	27	4.7	1.2
25	2.2	1.3	1.2	1.0	.94	1.4	7.5	106	93	24	4.2	1.1
26	2.2	1.2	1.0	1.1	.96	1.4	7.0	125	104	21	3.8	1.3
27	2.4	1.1	1.1	1.0	1.0	1.4	8.0	159	98	17	3.5	2.0
28	2.3	1.3	1.2	.90	1.0	1.4	9.0	167	107	17	3.2	2.0
29	2.2	1.3	1.2	1.0	---	1.4	8.0	172	98	16	3.2	1.8
30	2.0	1.3	1.2	.90	---	1.5	8.0	126	91	14	3.2	1.4
31	1.9	---	1.1	.86	---	1.5	---	77	---	11	3.2	---
TOTAL	44.75	40.8	35.6	31.48	27.38	37.28	152.5	1678.3	3313	1167	192.2	53.3
MEAN	1.44	1.36	1.15	1.02	.98	1.20	5.08	54.1	110	37.6	6.20	1.78
MAX	2.4	1.8	1.4	1.2	1.1	1.5	10	172	208	91	9.5	2.9
MIN	.99	1.1	1.0	.80	.90	.88	1.6	7.0	50	11	3.2	1.1
AC-FT	89	81	71	62	54	74	302	3330	6570	2310	381	106
CAL YR 1978 TOTAL	9250.33											
WTR YR 1979 TOTAL	6773.59											
MEAN 25.3												
MAX 262												
MIN .98												
AC-FT 18350												
MIN .80												
AC-FT 13440												

NOTE.--NO GAGE-HEIGHT RECORD NOV. 1 TO MAY 2.

ROARING FORK RIVER BASIN

09078140 CUNNINGHAM CREEK FEEDER CANAL NEAR NORRIE, CO

LOCATION.--Lat 39°20'12", long 106°32'31", Pitkin County, Hydrologic Unit 14010004, on left bank, 0.8 mi (1.29 km) upstream from Middle Cunningham Creek, 6.2 mi (10.0 km) east of Norrie.

PERIOD OF RECORD.--June to September 1979.

GAGE.--Water-stage recorder and rectangular weir. Altitude of gage is 10,100 ft (3,078 m) from topographic map.

REMARKS.--Records good. This is a transmountain diversion from Cunningham Creek in the Roaring Fork basin through the Charles M. Boustead tunnel to the Arkansas River basin. Water is for municipal and irrigation use in the Southeastern Colorado Conservancy District. The entire flow is regulated by diversion gates.

COOPERATION.--Records collected by Water and Power Resources Service, computed by Colorado Division of Water Resources, and reviewed by U.S. Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 26 ft³/s (0.74 m³/s) June 29, 1979; no flow for many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1									.00	24	.00	.00
2									.00	20	.00	.00
3									.00	18	.00	.00
4									.00	18	.00	.00
5									.00	16	.00	.00
6									.00	16	.00	.00
7									.00	16	.00	.00
8									.00	16	.00	.00
9									.00	15	.00	.00
10									.00	15	.00	.00
11									.00	14	.00	.00
12									.00	14	.00	.00
13									.00	14	.00	.00
14									8.5	12	.00	.00
15									18	10	.00	.00
16									18	9.8	.00	.00
17									17	7.3	.00	.00
18									17	5.4	.00	.00
19									14	2.0	.00	.00
20									10	.00	.00	.00
21									14	.00	.00	.00
22									18	.00	.00	.00
23									19	.00	.00	.00
24									19	.00	.00	.00
25									19	.00	.00	.00
26									21	.00	.00	.00
27									23	.00	.00	.00
28									25	.00	.00	.00
29									26	.00	.00	.00
30									24	.00	.00	.00
31									---	.00	.00	---
TOTAL									310.50	262.50	.00	.00
MEAN									10.4	8.47	.000	.000
MAX									26	24	.00	.00
MIN									.00	.00	.00	.00
AC-FT									616	521	.00	.00

09078150 MIDDLE CUNNINGHAM CREEK FEEDER CANAL NEAR NORRIE, CO

LOCATION.--Lat 39°19'43", long 106°33'06", Pitkin County, Hydrologic Unit 14010004, on left bank, 0.4 mi (0.6 km) upstream from Cunningham Creek, 5.7 mi (9.2 km) east of Norrie.

PERIOD OF RECORD.--June to September 1979.

GAGE.--Water-stage recorder and rectangular weir. Altitude of gage is 10,050 ft (3,063 m) from topographic map.

REMARKS.--Records good. This is a transmountain diversion from Middle Cunningham Creek in the Roaring Fork River basin through Charles M. Boustead tunnel to the Arkansas River basin. Water is for municipal and irrigation use in the Southeastern Colorado Conservancy District. The entire flow is regulated by diversion gates.

COOPERATION.--Records collected by Water and Power Resources Service, computed by Colorado Division of Water Resources, and reviewed by U.S. Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 31 ft³/s (0.87 m³/s) June 24, 29, 1979, no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1									2.6	29	.00	.00
2									6.4	26	.00	.00
3									9.8	22	.00	.00
4									14	20	.00	.00
5									19	18	.00	.00
6									23	17	.00	.00
7									22	17	.00	.00
8									13	16	.00	.00
9									9.3	15	.00	.00
10									8.1	14	.00	.00
11									10	13	.00	.00
12									15	12	.00	.00
13									23	11	.00	.00
14									26	10	.00	.00
15									28	8.3	.00	.00
16									28	7.7	.00	.00
17									26	6.4	.00	.00
18									23	5.4	.00	.00
19									18	2.3	.00	.00
20									14	.00	.00	.00
21									18	.00	.00	.00
22									24	.00	.00	.00
23									28	.00	.00	.00
24									31	.00	.00	.00
25									28	.00	.00	.00
26									28	.00	.00	.00
27									30	.00	.00	.00
28									28	.00	.00	.00
29									31	.00	.00	.00
30									30	.00	.00	.00
31									---	.00	.00	---
TOTAL									614.2	270.10	.00	.00
MEAN									20.5	8.71	.000	.000
MAX									31	29	.00	.00
MIN									2.6	.00	.00	.00
AC-FT									1220	536	.00	.00

ROARING FORK RIVER BASIN

09078200 CUNNINGHAM CREEK NEAR NORRIE, CO

LOCATION.--Lat 39°20'03", long 106°34'29", Pitkin County, Hydrologic Unit 14010004, on left bank 0.4 mi (0.6 km) upstream from unnamed tributary, 1.5 mi (2.4 km) upstream from mouth, and 4.5 mi (7.2 km) east of Norrie.

DRAINAGE AREA.--7.12 mi² (18.44 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 9,550 ft (2,911 m), from topographic map.

REMARKS.--Records good except those for period of no gage-height records, which are poor. Transmountain diversion above station to Arkansas River basin through Charles H. Boustead Tunnel since June 4, 1979. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--15 years (water years 1964-78), 10.8 ft³/s (0.306 m³/s), 7,820 acre-ft/yr (9.64 hm³/yr), prior to diversion through Charles H. Boustead tunnel.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 335 ft³/s (9.49 m³/s) July 4, 1975, gage height, 2.89 ft (0.881 m), from rating curve extended above 160 ft³/s (4.5 m³/s); maximum gage height, 3.62 ft (1.103 m) July 5, 1975 (backwater from debris); minimum daily discharge, 0.10 ft³/s (0.003 m³/s) Feb. 16, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 86 ft³/s (2.44 m³/s) at 0200 May 29, gage height, 2.22 ft (0.677 m); minimum daily, 0.58 ft³/s (0.016 m³/s) Feb. 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.2	1.2	1.0	.81	.75	.65	.71	5.2	27	30	2.9	1.4
2	1.2	1.1	.92	.85	.74	.64	.71	4.9	26	24	2.7	1.3
3	1.2	1.1	.93	.96	.72	.63	.73	4.2	35	20	2.3	1.2
4	1.2	1.0	.93	.98	.72	.65	.72	4.2	43	17	2.3	1.1
5	1.2	1.0	.88	.80	.70	.66	.72	5.5	52	15	2.3	.98
6	1.2	.98	.84	.76	.66	.64	.74	6.8	64	14	2.2	1.0
7	1.2	.99	.82	.71	.68	.63	.82	6.9	69	13	2.2	1.0
8	1.1	1.1	.83	.74	.66	.64	.98	5.4	45	12	2.2	.92
9	1.1	1.1	.89	.79	.66	.66	1.1	4.5	33	11	2.2	.90
10	1.1	1.1	.99	.80	.62	.68	1.1	3.9	28	10	2.0	.94
11	1.1	1.1	1.0	.80	.62	.68	1.0	3.3	25	9.6	1.8	.94
12	1.1	1.0	.99	.78	.64	.68	.98	3.2	45	9.1	1.7	.84
13	1.1	1.0	1.0	.76	.66	.68	.96	3.5	59	8.5	1.9	.78
14	1.1	.94	.98	.77	.62	.68	.98	5.1	59	7.9	2.3	.76
15	1.1	.92	.96	.80	.62	.68	1.2	7.4	51	7.3	2.3	.74
16	1.1	.93	.97	.78	.62	.68	1.8	10	53	6.7	2.2	.72
17	1.1	.96	1.0	.77	.60	.68	2.6	14	47	6.4	2.3	.70
18	1.2	.98	1.0	.76	.58	.68	3.7	22	40	5.8	2.8	.66
19	1.3	.99	1.1	.80	.62	.68	4.0	30	34	7.3	3.0	.62
20	1.2	.98	.99	.86	.63	.68	3.6	37	28	9.6	2.6	.62
21	1.2	.96	1.0	.80	.64	.68	3.7	40	30	9.1	2.4	.70
22	1.7	.96	1.0	.77	.64	.69	3.9	36	36	10	2.2	.70
23	1.8	.97	.98	.72	.64	.67	4.5	44	42	7.5	2.1	.68
24	1.8	.99	.86	.78	.65	.66	4.7	55	47	6.9	1.9	.64
25	1.6	1.0	.83	.80	.65	.67	4.1	53	47	6.8	1.8	.62
26	1.5	.93	.85	.72	.64	.68	3.9	57	36	5.5	1.7	.66
27	1.4	.90	.93	.73	.64	.68	4.2	72	36	5.4	1.6	.70
28	1.3	.95	.87	.76	.64	.71	4.3	73	37	5.2	1.5	.74
29	1.3	1.0	.81	.78	---	.69	3.9	77	36	4.6	1.4	.72
30	1.2	1.0	.84	.80	---	.68	4.0	60	33	3.9	1.4	.62
31	1.2	---	.78	.79	---	.68	---	40	---	3.2	1.4	---
TOTAL	39.1	30.13	28.77	24.53	18.26	20.77	70.35	794.0	1253	312.3	65.6	24.90
MEAN	1.26	1.00	.93	.79	.65	.67	2.35	25.6	41.8	10.1	2.12	.83
MAX	1.8	1.2	1.1	.98	.75	.71	4.7	77	69	30	3.0	1.4
MIN	1.1	.90	.78	.71	.58	.63	.71	3.2	26	3.2	1.4	.62
AC-FT	78	60	57	49	36	41	140	1570	2490	619	130	49

CAL YR 1978 TOTAL 4842.02 MEAN 13.3 MAX 134 MIN .78 AC-FT 9600
WTR YR 1979 TOTAL 2681.71 MEAN 7.35 MAX 77 MIN .58 AC-FT 5320

NOTE.--NO GAGE-HEIGHT RECORD NOV. 6 TO MAY 1, JULY 25 TO SEPT. 30.

09078500 NORTH FORK FRYINGPAN RIVER NEAR NORRIE, CO

LOCATION--Lat 39°20'34", long 106°39'55", in SE¼NW¼ sec.21, T.8 S., R.83 W., Pitkin County, Hydrologic Unit 14010004, on left bank 800 ft (240 m) upstream from bridge on county road, 0.4 mi (0.6 km) upstream from mouth, 0.5 mi (0.8 km) downstream from Last Chance Creek, and 1.3 mi (2.1 km) northwest of Norrie.

DRAINAGE AREA--42.0 mi² (108.8 km²).

PERIOD OF RECORD--October 1910 to March 1917, October 1947 to current year. Prior to October 1960, published as North Fork Fryingpan Creek near Norrie.

REVISED RECORDS--WSP 1924: Drainage area.

GAGE--Water-stage recorder. Altitude of gage is 8,330 ft (2,539 m), from topographic map. Feb. 18, 1911, to Mar. 31, 1917, nonrecording gage at site 10 ft (3 m) downstream at different datum. Oct. 1, 1947, to Sept. 30, 1949, water-stage recorder at present site at datum 2.00 ft (0.610 m) higher.

REMARKS--Records good except those for winter period, which are poor. One small diversion bypasses station for domestic use and irrigation of pasture. Low flow slightly regulated since 1968 by small recreation reservoir 2.0 mi (3.2 km) upstream. 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--38 years (water years 1911-16, 1948-79), 51.1 ft³/s (1.447 m³/s), 37,020 acre-ft/yr (45.6 hm³/yr).

EXTREMES FOR PERIOD OF RECORD--Maximum discharge, 1,320 ft³/s (37.4 m³/s) June 6, 1958, gage height, 4.98 ft (1.518 m), from rating curve extended above 700 ft³/s (20 m³/s); maximum gage height, 5.80 ft (1.768 m) May 21, 1948 (present datum); minimum daily discharge, 0.5 ft³/s (0.014 m³/s) Nov. 1, 1950.

EXTREMES FOR CURRENT YEAR--Maximum discharge, 568 ft³/s (16.1 m³/s) at 0400 June 16, gage height, 4.77 ft (1.454 m), only peak above base of 420 ft³/s (12 m³/s); minimum daily, 1.5 ft³/s (0.042 m³/s) Jan. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALJES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.4	4.0	3.5	2.5	2.5	3.0	6.0	47	186	270	35	9.5
2	3.2	4.0	3.5	1.5	3.0	3.5	6.0	49	178	231	32	8.9
3	3.0	4.3	3.0	2.5	3.0	3.0	6.0	43	222	197	29	8.5
4	3.0	3.8	3.0	3.0	2.5	3.0	6.0	40	290	172	28	7.7
5	2.8	4.0	3.5	3.0	2.5	3.0	6.0	52	354	156	26	7.3
6	2.8	3.2	3.5	3.5	2.5	4.0	6.5	64	419	147	26	6.9
7	2.8	2.8	3.0	3.0	3.0	5.0	7.0	68	484	131	26	6.5
8	3.0	4.0	2.0	2.5	3.0	5.5	9.0	55	371	131	25	6.1
9	2.8	3.4	2.5	2.5	3.0	4.5	13	46	275	122	26	5.9
10	2.5	3.7	2.5	3.0	3.0	4.5	11	41	226	113	23	5.7
11	2.5	3.8	2.5	3.0	3.0	4.5	10	37	275	112	21	5.9
12	2.6	4.0	3.0	3.5	3.0	5.0	8.0	37	332	107	19	5.9
13	2.6	3.6	3.0	3.0	3.0	5.0	7.0	41	407	104	20	5.4
14	2.5	3.5	3.0	2.5	3.5	5.0	8.0	60	470	101	25	5.4
15	2.6	3.0	3.0	2.5	3.0	5.5	13	83	470	91	30	5.2
16	2.6	3.0	3.0	3.0	3.0	5.5	20	104	484	84	28	4.8
17	2.8	3.0	3.0	3.0	3.0	6.0	35	124	419	77	27	4.4
18	3.4	3.0	3.5	3.0	3.0	6.0	45	147	354	73	32	4.2
19	3.8	3.0	4.0	3.0	3.0	5.5	55	197	265	67	36	3.8
20	3.4	3.0	3.0	3.0	2.5	6.0	48	226	211	77	29	3.8
21	3.4	3.0	3.0	2.5	3.0	6.0	46	265	226	75	25	4.6
22	5.9	3.0	3.0	2.5	3.0	6.0	46	247	290	90	21	4.6
23	4.8	3.5	3.0	2.5	2.5	6.0	47	290	326	79	18	4.2
24	4.8	3.5	3.0	2.5	2.5	6.0	52	338	326	72	16	3.8
25	5.9	3.5	3.5	2.5	2.5	6.0	49	321	316	68	14	3.7
26	3.4	3.5	3.0	2.5	2.5	6.0	41	321	305	62	14	3.7
27	4.9	3.0	3.0	2.5	3.0	6.0	45	413	290	54	13	5.5
28	4.6	3.0	3.0	2.5	2.5	5.5	50	419	305	51	11	6.1
29	4.0	3.0	3.0	2.5	---	5.5	41	438	290	50	10	4.9
30	4.2	3.5	3.0	2.5	---	5.5	40	365	280	46	10	4.3
31	4.3	---	3.0	2.0	---	5.5	---	260	---	39	11	---
TOTAL	108.3	102.6	94.5	83.5	79.5	157.0	782.5	5238	9646	3249	738	167.2
MEAN	3.49	3.42	3.05	2.69	2.84	5.05	26.1	169	322	105	22.8	5.57
MAX	5.9	4.3	4.0	3.5	3.5	6.0	55	438	484	270	36	9.5
MIN	2.5	2.8	2.0	1.5	2.5	3.0	6.0	37	178	39	10	3.7
AC-FT	215	204	187	166	158	311	1550	10390	19130	6440	1430	332
CAL YR 1978	TOTAL	22775.8	MEAN 62.4	MAX 546	MIN 2.0	AC-FT 45180						
WTR YR 1979	TOTAL	20416.1	MEAN 55.9	MAX 484	MIN 1.5	AC-FT 40500						

NOTE--NO GAGE-HEIGHT RECORD NOV. 14 TO APR. 19.

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 (120 m) upstream from private bridge, 400 ft (120 m) downstream from North Fork, 1.6 mi (2.6 km) southeast of Thomasville, and 1.7 mi (2.7 km) northwest of Norrie.

DRAINAGE AREA--134 mi² (347 km²).

PERIOD OF RECORD--October 1975 to current year.

GAGE--Water-stage recorder. Altitude of gage is 8,210 ft (2,502 m), from topographic map.

REMARKS--Records good except those for winter period, which are poor. Transmountain diversions above station to Arkansas River basin through Busk-Ivanhoe tunnel since June 1925 and Charles H. Boustead tunnel since May 16, 1972 (see elsewhere in this report). 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.

EXTREMES FOR PERIOD OF RECORD--Maximum discharge, 1,060 ft³/s (30.02 m³/s) June 16, 1978, gage height, 3.94 ft (1.201 m); minimum daily, 10 ft³/s (0.28 m³/s) Nov. 28, 1976, Jan. 2, 1979.

EXTREMES FOR CURRENT YEAR--Maximum discharge, 930 ft³/s (26.3 m³/s) at 0030 June 16, gage height, 3.77 ft (1.149 m); minimum daily, 10 ft³/s (0.28 m³/s) Jan. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	28	22	15	13	14	23	122	411	480	104	54
2	28	27	22	10	15	15	23	136	388	430	88	53
3	27	27	21	14	14	14	23	115	436	383	82	51
4	27	25	22	17	13	13	23	113	508	350	84	48
5	27	27	23	18	13	13	23	147	585	313	93	44
6	27	24	21	19	13	18	24	179	676	299	93	44
7	27	21	19	16	15	22	27	193	829	275	93	43
8	26	24	14	14	16	24	32	147	698	266	88	42
9	26	22	14	15	14	20	36	128	592	240	91	44
10	26	24	15	16	15	19	37	115	529	227	88	44
11	26	24	15	18	15	20	34	104	564	215	84	44
12	26	25	16	19	15	22	30	104	613	204	86	42
13	25	21	16	18	17	21	28	115	712	200	93	40
14	24	22	16	15	18	21	31	163	797	182	108	38
15	24	19	16	15	17	23	41	208	797	172	115	38
16	24	18	16	18	16	23	63	244	789	160	90	37
17	23	18	17	16	16	26	90	294	705	150	99	34
18	26	20	18	17	16	25	115	350	620	139	117	31
19	26	20	20	17	16	24	128	436	550	133	101	33
20	26	20	17	16	14	25	113	508	467	142	78	33
21	26	21	16	15	15	25	113	564	461	136	77	38
22	34	21	16	14	16	26	115	515	515	156	78	36
23	28	22	17	14	14	26	128	550	571	136	72	34
24	29	21	17	13	14	26	144	592	564	128	78	32
25	34	21	18	14	13	25	128	564	550	128	80	30
26	25	21	15	15	13	26	108	571	536	120	75	32
27	28	19	16	14	15	25	117	698	515	117	72	38
28	28	19	16	13	14	24	130	728	536	120	64	37
29	27	21	17	13	---	24	108	781	501	115	60	34
30	28	21	17	13	---	24	106	690	487	110	58	34
31	28	---	17	12	---	23	---	529	---	110	63	---
TOTAL	835	663	542	473	415	676	2141	10703	17502	6336	2152	1182
MEAN	26.9	22.1	17.5	15.3	14.8	21.8	71.4	345	583	204	84.5	39.4
MAX	34	28	23	19	18	26	144	781	829	480	117	54
MIN	23	18	14	10	13	13	23	104	388	110	58	30
AC-FT	1660	1320	1080	938	823	1340	4250	21230	34720	12570	5260	2340

CAL YR 1978 TOTAL 45752 MEAN 125 MAX 904 MIN 14 AC-FT 90750
WTR YR 1979 TOTAL 44120 MEAN 121 MAX 829 MIN 10 AC-FT 87510

NOTE--NO GAGE-HEIGHT RECORD DEC. 9 TO MAR. 12.

09080100 FRYINGPAN RIVER AT MEREDITH, CO

LOCATION.--Lat 39°21'45", long 106°43'55", in SESEX sec.11, T.8 S., R.84 W., Eagle County, Hydrologic Unit 14010004, on left bank at Meredith, 0.1 mi (0.2 km) downstream from Waterbury Creek, and 0.7 mi (1.1 km) downstream from Jakeman Creek.

DRAINAGE AREA.--191 mi² (495 km²).

PERIOD OF RECORD.--October 1910 to February 1915 (published as Fryingpan Creek at Thomasville); October 1966 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 7,780 ft (2,371 m), from topographic map. Oct. 1, 1910, to Feb. 25, 1915, nonrecording gage at site 0.6 mi (1.0 km) upstream at different datum.

REMARKS.--Records good except those for winter period, which are poor. Diversion for irrigation of hay meadows above station. Transmountain diversions above station to Arkansas River basin through Busk-Ivanhoe tunnel since June 1925 and Charles H. Boustead tunnel since May 16, 1972 (see elsewhere in this report). Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--9 years (water years 1911-14, 1967-71), 234 ft³/s (6.627 m³/s), 169,500 acre-ft/yr (209 hm³/yr), prior to diversion through Charles H. Boustead tunnel; 8 years (water years 1972-79), 144 ft³/s (4.078 m³/s), 104,300 acre-ft/yr (129 hm³/yr), subsequent to diversion through Charles H. Boustead tunnel.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 2,120 ft³/s (60.0 m³/s) June 5, 6, 8, 1912, gage height, 4.3 ft (1.31 m), site and datum then in use; minimum daily, 15 ft³/s (0.42 m³/s) Mar. 29, 1975.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,440 ft³/s (40.8 m³/s) at 2300 June 15, gage height, 4.74 ft (1.445 m); minimum daily, 24 ft³/s (0.68 m³/s) many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	41	44	39	29	30	25	27	148	548	724	153	69
2	40	43	38	30	29	25	27	164	515	666	130	66
3	38	44	33	35	27	24	28	140	575	590	120	65
4	40	41	37	37	27	24	27	135	679	533	117	61
5	39	43	36	37	27	26	27	171	842	478	124	55
6	40	40	34	30	27	24	28	207	1030	446	122	56
7	39	36	31	29	25	24	31	228	1260	411	120	56
8	39	40	30	26	26	24	37	180	1040	395	117	53
9	39	40	33	29	26	24	41	154	839	369	121	54
10	39	42	36	30	25	24	42	139	725	345	120	54
11	38	42	35	30	25	25	39	123	777	331	113	53
12	38	43	35	30	25	25	37	123	881	319	111	53
13	38	39	35	30	25	25	36	138	1090	309	116	51
14	37	42	35	28	25	25	37	192	1230	292	128	49
15	37	41	34	29	25	25	47	246	1260	274	147	48
16	38	39	34	30	25	25	67	298	1250	250	112	48
17	38	37	36	30	25	26	93	358	1100	230	121	46
18	41	37	40	29	24	26	121	453	955	220	146	42
19	42	38	41	29	24	26	141	572	829	208	140	43
20	41	38	42	29	24	26	123	694	682	211	113	44
21	42	37	38	32	25	26	123	789	653	199	105	46
22	53	37	39	30	25	27	128	744	729	222	105	45
23	46	37	40	29	25	26	142	824	838	210	94	43
24	47	37	34	29	25	26	162	891	835	198	94	41
25	53	38	32	30	26	26	151	880	810	193	94	39
26	43	37	32	31	25	27	128	873	816	180	89	42
27	47	38	32	29	25	26	138	1070	796	174	83	46
28	47	36	31	29	25	28	154	1090	804	172	79	46
29	45	40	31	29	---	27	127	1150	764	167	76	42
30	45	39	30	29	---	27	127	1000	737	162	76	41
31	46	---	32	30	---	26	---	733	---	160	77	---
TOTAL	1296	1185	1085	933	717	790	2436	14907	25889	9638	3443	1497
MEAN	41.8	39.5	35.0	30.1	25.6	25.5	81.2	481	863	311	112	49.9
MAX	53	44	42	37	30	28	162	1150	1260	724	153	69
MIN	37	36	30	26	24	24	27	123	515	160	76	39
AC-FT	2570	2350	2150	1850	1420	1570	4830	29570	51350	19120	6870	2970

CAL YR 1978 TOTAL 60193 MEAN 165 MAX 1170 MIN 26 AC-FT 119400
WTR YR 1979 TOTAL 63836 MEAN 175 MAX 1260 MIN 24 AC-FT 126600

ROARING FORK RIVER BASIN

09080190 RUEOI 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 (21 km) east of Basalt.

DRAINAGE AREA.--223 mi² (578 km²).

PERIOD OF RECORD.--May 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Water and Power Resources Service); gage readings have been reduced to elevations NGVD.

REMARKS.--Reservoir is formed by an earthfill dam. Storage began in May 1968; dam completed July 16, 1968. Capacity, 102,300 acre-ft (126 hm³), 1969 survey, between elevations 7,540.00 ft (2,298.192 m), sill of auxiliary outlet, and 7,766.00 ft (2,367.377 m), crest of spillway. Dead storage below elevation 7,540.00 ft (2,298.192 m), 61 acre-ft (75,200 m³). Figures given are total contents.

COOPERATION.--Records furnished by Water and Power Resources Service.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 103,900 acre-ft (128 hm³) July 15, 1973, elevation, 7,767.56 ft (2,367.552 m); minimum after first filling, 48,000 acre-ft (59.2 hm³) May 13, 1971, elevation, 7,693.03 ft (2,346.360 m).

EXTREMES FOR CURRENT YEAR.--Maximum contents, 101,800 acre-ft (126 hm³) Aug. 20, elevation, 7,765.42 ft (2,366.900 m); minimum, 52,200 acre-ft (64.4 hm³) May 13, elevation, 7,704.60 ft (2,348.362 m).

MONTHEND ELEVATION IN FEET NGVD AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

Date	Elevation	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.	7,761.90	98,300	-
Oct. 31.	7,758.21	94,800	-3,500
Nov. 30.	7,753.37	90,300	-4,500
Dec. 31.	7,748.43	85,800	-4,500
CAL YR 1978			+1,350
Jan. 31.	7,743.34	81,400	-4,400
Feb. 28.	7,731.81	71,800	-9,600
Mar. 31.	7,715.27	59,500	-12,300
Apr. 30.	7,705.22	52,600	-6,900
May 31.	7,728.41	69,200	+16,600
June 30.	7,762.47	98,900	+29,700
July 31.	7,764.64	101,000	+2,100
Aug. 31.	7,754.27	100,700	-300
Sept. 30.	7,762.05	98,500	-2,200
WTR YR 1979			+200

ROARING FORK RIVER BASIN

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09080300 ROCKY FORK CREEK NEAR MEREDITH, CO

LOCATION--Lat 39°21'42", long 106°49'12", in NW¼NW¼ sec.18, T.8 S., R.84 W., Pitkin County, Hydrologic Unit 14010004, on right bank at upstream end of flume constructed to carry Rocky Fork Creek across spillway and auxiliary outlet of Ruedi Dam on Fryingpan River and 4.6 mi (7.4 km) west of Meredith.

DRAINAGE AREA--12.3 mi² (31.9 km²).

PERIOD OF RECORD--September 1959 to July 1967 (discharge measurements only), October 1968 to current year.

GAGE--Water-stage recorder and V-notch sharp-crested weir. Datum of gage is 7,494.50 ft (2,284.324 m) Water and Power Resources Service bench mark.

REMARKS--Records good. No diversion or regulation above station.

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

AVERAGE DISCHARGE--11 years (water years 1969-79), 9.51 ft³/s (0.269 m³/s), 6,890 acre-ft/yr (8.57 hm³/yr).

EXTREMES FOR PERIOD OF RECORD--Maximum discharge, 101 ft³/s (2.86 m³/s) June 14, 1978, gage height, 1.74 ft (0.530 m); minimum daily, 1.4 ft³/s (0.040 m³/s) Jan. 5-7, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD--A discharge of 82.1 ft³/s (2.33 m³/s) was measured June 7, 1962, and a discharge of 0.24 ft³/s (0.007 m³/s) was measured Apr. 26, 1966.

EXTREMES FOR CURRENT YEAR--Maximum discharge, 90 ft³/s (2.55 m³/s) at 2200 June 15, gage height, 1.56 ft (0.506 m), only peak above base of 50 ft³/s (1.4 m³/s); minimum daily, 2.7 ft³/s (0.076 m³/s) Oct. 18-21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.2	3.0	2.8	3.0	3.0	2.8	3.4	9.8	44	65	9.8	5.7
2	3.4	3.0	2.8	3.0	3.0	2.8	3.4	9.8	41	58	9.8	5.7
3	3.6	3.0	2.8	3.0	3.0	2.8	3.4	9.8	41	54	9.5	5.7
4	3.6	3.2	2.8	3.0	3.0	2.8	3.4	10	46	50	9.1	5.2
5	3.4	3.2	2.8	3.0	3.0	2.8	3.4	10	50	45	8.4	5.5
6	3.4	3.2	3.0	3.0	3.0	3.0	3.6	13	59	42	9.1	6.2
7	3.4	3.2	3.0	3.0	3.0	3.0	3.6	12	72	38	9.1	6.0
8	3.4	3.2	3.0	3.0	3.0	3.0	3.8	12	69	33	9.5	6.0
9	3.4	3.2	3.0	3.0	3.0	3.0	3.8	12	64	31	9.8	5.2
10	3.4	3.2	3.0	3.0	3.0	3.0	4.0	12	50	29	9.5	5.0
11	3.4	3.2	3.0	3.0	3.0	3.2	3.8	12	51	27	9.8	4.5
12	3.4	3.2	3.0	3.0	3.0	3.2	3.6	11	56	26	9.8	4.3
13	3.4	3.2	3.0	3.0	3.0	3.2	3.4	11	66	23	10	5.0
14	3.4	3.2	3.0	3.0	3.0	3.2	4.0	12	76	22	8.8	4.5
15	3.4	3.2	3.0	3.0	2.8	3.2	5.0	13	82	21	8.4	4.0
16	3.2	3.2	3.0	3.0	2.8	3.2	6.0	17	87	20	8.1	4.0
17	3.0	3.2	3.0	3.0	2.8	3.4	7.1	20	87	20	9.5	4.0
18	2.7	3.2	3.0	3.0	2.8	3.4	7.4	24	83	18	12	3.8
19	2.7	3.2	3.0	3.0	2.8	3.4	7.8	30	77	18	10	3.8
20	2.7	3.2	2.8	3.0	2.8	3.4	7.8	31	68	16	9.5	4.0
21	2.7	3.2	2.8	3.0	2.8	3.4	7.8	31	65	16	9.5	4.3
22	2.8	3.0	2.8	3.0	2.8	3.4	8.1	32	68	16	8.8	4.3
23	2.8	2.8	2.8	3.0	2.8	3.4	8.4	35	72	14	8.4	4.3
24	2.8	2.8	2.8	3.0	2.8	3.4	10	39	77	14	7.8	4.5
25	2.8	2.8	2.8	3.0	2.8	3.4	10	41	80	13	7.1	4.7
26	2.8	2.8	2.8	3.0	2.8	3.4	11	44	78	12	7.1	4.7
27	3.0	2.8	2.8	3.0	2.8	3.4	11	48	77	12	7.1	4.5
28	3.0	2.8	2.8	3.0	2.8	3.4	10	50	75	12	7.1	4.5
29	3.0	2.8	2.8	3.0	---	3.4	10	54	72	11	7.1	4.7
30	3.0	2.8	2.8	3.0	---	3.4	9.5	56	64	11	6.2	4.5
31	3.0	---	2.8	3.0	---	3.4	---	50	---	11	6.2	---
TOTAL	97.2	92.0	89.6	93.0	81.2	99.2	187.5	771.4	2002	798	271.9	143.1
MEAN	3.14	3.07	2.89	3.00	2.90	3.20	6.25	24.9	66.7	25.7	8.77	4.77
MAX	3.6	3.2	3.0	3.0	3.0	3.4	11	56	87	65	12	6.2
MIN	2.7	2.8	2.8	3.0	2.8	2.8	3.4	9.8	41	11	6.2	3.8
AC-FT	193	182	178	184	161	197	372	1530	3970	1580	539	284
CAL YR 1978	TOTAL	3906.1	MEAN	10.7	MAX	88	MIN	1.8	AC-FT	7750		
WTR YR 1979	TOTAL	4726.1	MEAN	12.9	MAX	87	MIN	2.7	AC-FT	9370		

ROARING FORK RIVER BASIN

169

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 (1.9 km) upstream from Avalanche Creek and 3.6 mi (5.8 km) north of Redstone.

DRAINAGE AREA.--167 mi² (433 km²).

PERIOD OF RECORD.--October 1955 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,905 ft (2,015 m), from river-profile map.

REMARKS.--Records good. A few small diversions for irrigation above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--24 years, 284 ft³/s (8.043 m³/s), 205,800 acre-ft/yr (254 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,980 ft³/s (113 m³/s) July 1, 1957, gage height, 5.65 ft (1.722 m); minimum daily, 22 ft³/s (0.62 m³/s) Dec. 5, 1955, Feb. 15, 1964, Jan. 2, Feb. 17, 18, 1978.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,000 ft³/s (56.6 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
May 28	0030	*2,630 74.5	5.02 1.530	June 15	2400	2,540 71.9	4.95 1.509
June 7	0100	2,550 72.2	4.96 1.512	July 1	2230	2,500 70.8	*5.04 1.536

Minimum daily discharge, 34 ft³/s (0.963 m³/s) Jan. 2, 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	73	60	56	36	44	44	54	410	1070	2190	314	112
2	72	60	58	34	43	45	51	420	1030	2000	294	110
3	71	60	48	46	43	43	51	360	1130	1700	270	108
4	69	59	53	53	41	38	49	322	1360	1350	262	106
5	68	59	63	52	40	42	51	365	1750	1270	250	104
6	66	58	51	51	44	45	59	424	2110	1250	243	100
7	65	56	46	47	44	48	75	470	2290	1160	250	100
8	64	57	42	35	44	54	95	398	1720	1230	247	97
9	64	55	41	41	41	51	118	332	1280	1170	247	93
10	63	53	53	49	43	46	122	300	1020	1090	219	95
11	64	58	50	49	46	51	104	263	950	1080	206	97
12	63	70	50	50	45	59	86	256	1100	1060	191	95
13	62	58	50	47	47	61	75	278	1550	1040	188	91
14	62	59	50	37	47	61	78	344	2040	1010	191	85
15	61	58	49	48	46	64	110	463	2190	954	185	84
16	60	54	49	50	47	66	169	599	2260	946	222	84
17	59	54	49	49	47	63	229	727	2090	934	226	82
18	60	53	62	50	42	60	282	891	1840	808	185	78
19	59	54	73	49	45	57	326	1090	1320	689	180	78
20	57	55	61	45	46	57	306	1240	1020	651	177	78
21	61	54	59	39	44	58	298	1370	987	628	177	82
22	84	54	58	47	44	56	322	1410	1220	758	156	78
23	72	53	57	34	43	52	365	1550	1570	656	146	76
24	68	53	54	37	44	51	410	1600	1750	596	141	76
25	74	55	52	48	40	52	375	1630	1850	551	136	75
26	66	55	43	47	45	54	335	1840	2060	508	129	75
27	65	52	44	43	45	56	350	2160	2030	466	122	76
28	64	45	53	37	44	67	395	2300	2000	460	120	75
29	62	58	53	44	---	62	385	2260	1960	436	120	75
30	62	56	52	40	---	60	365	1900	1940	385	122	73
31	62	---	50	37	---	60	---	1360	---	330	120	---
TOTAL	2022	1685	1629	1371	1234	1683	6090	29332	48487	29356	6036	2638
MEAN	65.2	56.2	52.5	44.2	44.1	54.3	203	946	1616	947	195	87.9
MAX	84	70	73	53	47	67	410	2300	2290	2190	314	112
MIN	57	45	41	34	40	38	49	256	950	330	120	73
AC-FT	4010	3340	3230	2720	2450	3340	12080	58180	96170	58230	11970	5230
CAL YR 1978	TOTAL	109981	MEAN 301	MAX 2300	MIN 22	AC-FT 218100						
WTR YR 1979	TOTAL	131563	MEAN 360	MAX 2300	MIN 34	AC-FT 261000						

ROARING FORK RIVER BASIN

09082800 NORTH THOMPSON CREEK NEAR CARBONDALE, CO

LOCATION.--Lat 39°19'47", long 107°19'58", in NW¼SE¼ sec.28, T.8 S., R.89 W., Pitkin County, Hydrologic Unit 14010004, on right bank 0.4 mi (0.6 km) downstream from Yank Creek and 8.5 mi (13.7 km) southwest of Carbondale.

DRAINAGE AREA.--26.8 mi² (69.4 km²).

PERIOD OF RECORD.--October 1963 to September 1979 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 8,120 ft (2,475 m), from topographic map.

REMARKS.--Records good except those for period of no gage-height record, which are poor. Transbasin diversion above station by Thompson Creek feeder ditch for irrigation in West Divide Creek basin. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--16 years, 16.7 ft³/s (0.473 m³/s), 12,100 acre-ft/yr (14.9 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 365 ft³/s (10.3 m³/s) May 22, 1970, gage height, 4.00 ft (1.219 m), from rating curve extended above 170 ft³/s (4.8 m³/s); maximum gage height, 4.05 ft (1.234 m) May 17, 1964; no flow Aug. 12, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 281 ft³/s (7.96 m³/s) at 2300 May 28, gage height, 3.92 ft (1.195 m), only peak above base of 160 ft³/s (4.5 m³/s); minimum daily, 0.72 ft³/s (0.020 m³/s) Sept. 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.90	1.6	1.7	1.2	1.3	1.4	2.0	49	171	30	2.6	2.0
2	.84	1.6	1.6	1.3	1.3	1.4	2.0	46	163	26	2.4	1.8
3	.86	1.7	1.5	1.5	1.3	1.4	2.0	40	159	24	2.4	1.8
4	.88	1.5	1.5	1.6	1.3	1.3	1.8	40	157	22	2.6	1.4
5	.88	1.7	1.7	1.6	1.2	1.7	1.4	50	163	17	2.0	1.8
6	.93	1.4	1.6	1.5	1.3	2.0	1.2	62	180	17	1.8	1.1
7	.93	1.3	1.5	1.4	1.3	2.3	1.8	64	192	16	1.8	1.1
8	1.0	1.6	1.4	1.2	1.3	2.6	2.0	55	171	13	2.2	1.1
9	1.1	1.6	1.3	1.4	1.3	2.1	2.2	49	143	11	2.4	1.1
10	1.1	1.7	1.5	1.6	1.3	1.8	2.9	46	125	11	1.8	1.1
11	.98	1.8	1.5	1.6	1.4	2.1	3.5	40	124	9.8	1.6	1.0
12	.98	2.2	1.5	1.6	1.4	2.4	3.8	40	131	8.9	1.6	.93
13	.97	1.9	1.5	1.5	1.4	2.8	5.0	49	145	8.1	1.2	.93
14	.96	1.8	1.5	1.3	1.4	2.5	4.7	62	158	8.1	2.0	.93
15	1.0	1.8	1.5	1.4	1.4	2.0	6.4	81	158	7.7	2.2	.93
16	1.0	1.7	1.5	1.5	1.4	3.2	10	99	147	7.2	3.5	.93
17	1.0	1.7	1.6	1.5	1.3	2.9	12	115	129	6.8	3.3	1.0
18	1.2	1.7	1.8	1.4	1.3	1.8	16	151	117	6.4	4.1	.72
19	1.2	1.7	1.9	1.4	1.3	3.3	20	176	110	6.1	5.2	.83
20	1.2	1.7	1.7	1.3	1.3	1.0	25	180	90	5.5	5.2	.83
21	1.5	1.7	1.7	1.4	1.3	.83	27	194	83	5.5	3.5	1.0
22	3.5	1.7	1.7	1.3	1.3	1.8	27	207	80	6.1	2.4	1.1
23	2.2	1.7	1.7	1.2	1.3	2.2	36	216	78	5.2	2.0	1.1
24	2.1	1.7	1.6	1.3	1.3	2.4	43	221	75	5.2	2.4	1.2
25	2.3	1.7	1.5	1.4	1.2	2.2	40	210	66	4.7	2.2	1.0
26	1.6	1.6	1.4	1.3	1.3	1.0	36	213	54	4.4	2.0	2.0
27	1.5	1.6	1.4	1.3	1.4	1.0	38	226	46	4.1	1.8	2.6
28	1.5	1.4	1.5	1.3	1.4	1.0	44	240	42	3.8	2.0	1.8
29	1.5	1.6	1.7	1.3	---	1.8	42	251	37	3.3	2.0	1.6
30	1.7	1.7	1.7	1.3	---	1.0	42	230	32	3.1	2.2	1.4
31	1.7	---	1.5	1.2	---	1.8	---	194	---	2.9	2.9	---
TOTAL	41.01	50.1	48.7	43.1	37.0	59.03	500.7	3896	3526	309.9	77.3	38.13
MEAN	1.32	1.67	1.57	1.39	1.32	1.90	16.7	126	118	10.0	2.49	1.27
MAX	3.5	2.2	1.9	1.6	1.4	3.3	44	251	192	30	5.2	2.6
MIN	.84	1.3	1.3	1.2	1.2	.83	1.2	40	32	2.9	1.2	.72
AC-FT	81	99	97	85	73	117	993	7730	6990	615	153	76

CAL YR 1978 TOTAL 6988.00 MEAN 19.1 MAX 214 MIN .61 AC-FT 13860
WTR YR 1979 TOTAL 8626.97 MEAN 23.6 MAX 251 MIN .72 AC-FT 17110

NOTE.--NO GAGE-HEIGHT RECORD DEC. 4 TO MAR. 11.

ROARING FORK RIVER BASIN

171

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 (640 m) upstream from mouth.

DRAINAGE AREA.--1,451 mi² (3,758 km²).

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 (1,743.679 m), National Geodetic Vertical Datum of 1929. Prior to Nov. 20, 1915, nonrecording gage on highway bridge 800 ft (240 m) downstream at different datum. Nov. 20, 1915, to Oct. 26, 1917, nonrecording gage at present site and datum.

REMARKS.--Records good. Diversions above station for irrigation of about 35,000 acres (142 km²). Transmountain diversions to Arkansas River basin through Busk-Ivanhoe tunnel since 1925, Twin Lakes tunnel since 1935, and Charles H. Boustead tunnel since 1972 (see elsewhere in this report). Natural flow of stream affected by storage in Ruedi Reservoir on Fryingpan River (station 09080190) since May 1968. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--65 years (water years 1906-9, 1911-71), 1,368 ft³/s (38.74 m³/s), 991,100 acre-ft/yr (1,220 hm³/yr), prior to diversion through Charles H. Boustead tunnel; 8 years (water years 1972-79), 1,120 ft³/s (31.72 m³/s), 811,400 acre-ft/yr (1,000 hm³/yr), subsequent to diversions through Charles H. Boustead tunnel.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 19,000 ft³/s (538 m³/s) July 1, 1957, gage height, 5.55 ft (2.633 m); maximum gage height, 6.7 ft (2.65 m) June 14, 1921, from floodmarks; minimum discharge, 145 ft³/s (4.11 m³/s) Jan. 21, 1935, gage height, 0.65 ft (0.198 m); minimum daily, 179 ft³/s (5.07 m³/s) Jan. 21, 1935.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 9,430 ft³/s (267 m³/s) at 0400 July 2, gage height, 6.43 ft (1.951 m); minimum daily, 370 ft³/s (10.5 m³/s) Jan. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	410	605	560	370	486	532	658	1260	3720	8220	1530	878
2	410	598	575	380	512	526	658	1340	3460	8400	1470	852
3	405	590	532	442	552	506	665	1250	3600	7450	1370	792
4	400	590	519	538	519	480	665	1140	3980	6030	1230	767
5	405	590	568	538	486	486	658	1200	4580	5550	1250	727
6	447	582	575	493	582	526	672	1300	5450	5310	1230	719
7	452	582	538	464	526	545	727	1490	6650	4980	1230	719
8	452	590	493	420	512	575	751	1510	5720	5160	1250	719
9	452	605	447	425	493	568	792	1360	4540	4940	1300	703
10	452	598	582	532	526	545	826	1350	3600	4560	1200	703
11	469	605	582	506	538	552	775	1250	3180	4390	1140	703
12	469	672	598	474	532	582	735	1220	3400	4230	1120	695
13	469	635	628	458	545	605	703	1260	4190	4130	1120	688
14	480	605	620	415	552	620	695	1370	5480	3740	1140	672
15	480	598	650	469	545	620	751	1550	5930	3560	1200	658
16	480	582	642	464	538	635	860	1780	6340	3380	1240	650
17	442	582	650	447	552	642	980	2080	6420	3400	1290	635
18	442	582	680	458	519	642	1080	2440	6080	3010	1250	598
19	493	582	650	458	532	642	1170	3120	5200	2700	1290	560
20	500	582	532	442	560	642	1110	3540	4100	2560	1230	545
21	512	575	506	425	532	658	1090	3880	3860	2390	1270	538
22	665	582	519	474	526	665	1110	3880	4320	2650	1190	526
23	635	575	506	425	519	650	1180	4190	5110	2520	1120	519
24	605	568	486	405	519	650	1300	4500	5670	2310	1080	506
25	628	568	469	500	500	650	1280	4520	5980	2210	1030	506
26	628	568	458	500	532	658	1190	4720	6580	2120	1010	519
27	620	545	469	474	538	650	1180	5480	6630	2000	1000	532
28	620	519	519	442	519	680	1250	6080	6920	2010	960	519
29	612	560	474	474	---	695	1260	6390	7060	1910	914	519
30	612	568	458	469	---	672	1200	5890	7120	1770	914	519
31	612	---	420	464	---	688	---	4670	---	1610	941	---
TOTAL	15758	17583	16905	14245	14792	18787	27971	67010	154870	119200	34569	19186
MEAN	508	566	545	460	528	606	932	2407	5162	3845	1130	640
MAX	665	672	680	538	582	695	1300	6390	7120	6400	1530	878
MIN	400	519	420	370	486	480	658	1140	3180	1610	914	506
AC-FT	31260	34880	33530	28250	29340	37260	55480	172600	307200	236400	72530	38660
CAL YR 1978	TOTAL	438002	MEAN	1200	MAX	7230	MIN	280	AC-FT	868800		
WTR YR 1979	TOTAL	542876	MEAN	1487	MAX	8400	MIN	370	AC-FT	1077000		

COLORADO RIVER MAIN STEM

09085100 COLORADO RIVER BELOW GLENWOOD SPRINGS, CO

LOCATION.--Lat 39°33'18", long 107°20'13", in NW¼NW¼ sec.9, T.6 S., R.89 W., Garfield County, Hydrologic Unit 14010005, on left bank 0.6 mi (1.0 km) downstream from Roaring Fork River and 1.0 mi (1.6 km) northwest of Post Office in Glenwood Springs.

DRAINAGE AREA.--6,013 mi² (15,574 km²).

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

GAGE.--Water-stage recorder. Datum of gage is 5,700.75 ft (1,737.589 m) Colorado State Highway Department datum.

REMARKS.--Records good. Natural flow of stream affected by transmountain diversions, storage reservoirs, power development, and diversions for irrigation of 110,000 acres (445 km²). Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--13 years, 3,310 ft³/s (93.74 m³/s), 2,398,000 acre-ft/yr (2,960 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 20,500 ft³/s (581 m³/s) June 15, 1973, gage height, 9.48 ft³/s (2.890 m); minimum daily, 910 ft³/s (25.8 m³/s) Mar. 12, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 17,700 ft³/s (501 m³/s) at 1300 June 16, gage height, 8.95 ft (2.728 m); minimum daily, 1,170 ft³/s (33.1 m³/s) Jan. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1770	2080	2070	1350	1340	1550	1810	3560	11400	14400	4120	2500
2	1790	2070	2050	1170	1380	1570	1740	3860	9810	14400	3920	2450
3	1760	2040	1670	1180	1400	1530	1680	3900	9410	13300	3650	2290
4	1730	2030	1510	1340	1400	1440	1620	3660	9830	12400	3430	2250
5	1730	2030	1840	1610	1370	1420	1640	3630	11000	11900	3250	2140
6	1790	2050	1630	1630	1450	1510	1770	4030	12600	11700	3120	2130
7	1810	1960	1340	1500	1470	1570	1770	4700	15000	11300	3110	2120
8	1840	1990	1190	1330	1520	1650	2010	4840	14700	11200	3080	2050
9	1820	1990	1180	1230	1480	1650	2170	4310	13300	10800	3240	2280
10	1820	2000	1300	1290	1490	1560	2260	4150	11300	10100	3060	2280
11	1810	1990	1350	1380	1530	1540	2280	4000	10100	9610	2960	2240
12	1810	2200	1440	1520	1540	1590	2110	3730	10200	9320	2800	2220
13	1830	2140	1470	1580	1560	1660	1900	3780	11800	9100	2740	2200
14	1840	2050	1530	1430	1610	1700	1840	4060	14300	8640	2760	2230
15	1800	1990	1480	1450	1630	1750	1960	4600	15800	8300	2920	2190
16	1790	1920	1490	1520	1600	1660	2350	5430	17000	7940	3050	2200
17	1730	1910	1470	1490	1610	1820	2760	6340	17100	7870	3130	2170
18	1770	1890	1540	1510	1500	1850	3100	7300	15900	7340	3150	2110
19	1840	1910	1710	1500	1450	1830	3420	8620	14300	6890	3270	2050
20	1860	1940	1680	1460	1600	1620	3420	9690	12400	6510	3220	2030
21	1910	1970	1580	1370	1570	1820	3170	10500	11500	6090	3270	2040
22	2250	1990	1550	1360	1550	1790	3150	10700	11600	6410	3280	2050
23	2220	1990	1620	1320	1520	1720	3340	11500	12500	6330	3170	2050
24	2160	1970	1590	1250	1530	1710	3530	12500	13100	6000	3100	2040
25	2140	2000	1560	1300	1520	1700	3630	13000	13300	5920	3010	2020
26	2180	2050	1480	1430	1510	1720	3530	13300	13700	5690	2960	2080
27	2110	2000	1340	1420	1580	1740	3360	14800	13700	5400	2940	2060
28	2090	1860	1480	1350	1530	1810	3460	16000	13900	5350	2830	2050
29	2080	1900	1530	1360	---	1910	3560	16800	13800	5140	2670	2040
30	2120	2070	1590	1300	---	1840	3410	16500	13700	4810	2570	2060
31	2110	---	1480	1270	---	1850	---	14200	---	4500	2600	---
TOTAL	59310	59980	47740	43200	42240	52080	77750	247990	388050	264660	96380	64620
MEAN	1913	1999	1540	1394	1509	1680	2592	8000	12940	8537	3109	2154
MAX	2250	2200	2070	1630	1630	1910	3630	16800	17100	14400	4120	2500
MIN	1730	1860	1180	1170	1340	1420	1620	3560	9410	4500	2570	2020
AC-FT	117600	119000	94690	85690	83780	103300	154200	491900	769700	525000	191200	128200
CAL YR 1978 TOTAL	1257464			MEAN 3445	MAX 18300	MIN 913	AC-FT 2494000					
WTR YR 1979 TOTAL	1444000			MEAN 3956	MAX 17100	MIN 1170	AC-FT 2864000					

CANYON CREEK BASIN

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09085200 CANYON CREEK ABOVE NEW CASTLE, CO

LOCATION.--Lat 39°36'19", long 107°24'21", in NW¼NW¼ sec.24, T.5 S., R.90 W., Garfield County, Hydrologic Unit 14010005, on right bank 200 ft (61 m) upstream from diversion headgate, 0.4 mi (0.6 km) upstream from East Canyon Creek, and 5.0 mi (8.0 km) northeast of New Castle.

DRAINAGE AREA.--23.8 ei² (61.6 km²).

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

REVISED RECORDS.--WRD Colo. 1973: 1972(M).

GAGE.--Water-stage recorder. Altitude of gage is 6,180 ft (1,884 m), from topographic map.

REMARKS.--Records fair. A few small diversions for irrigation of hay meadows above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--10 years, 50.6 ft³/s (1.433 m³/s), 36,660 acre-ft/yr (45.2 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 932 ft³/s (26.4 m³/s) June 8, 1975, gage height, 4.86 ft (1.481 m); maximum gage height, 5.04 ft (1.536 m) June 5, 1975; minimum daily discharge, 2.6 ft³/s (0.07 m³/s) Jan. 2, 1979.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 350 ft³/s (9.9 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
May 28	2030	*650 18.4	5.33 1.625	June 14	0030	620 17.6	4.96 1.512
June 7	0500	435 12.3	4.78 1.457				

Minimum daily discharge, 2.6 ft³/s (0.074 m³/s) Jan. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	26	21	5.7	13	11	8.0	51	165	224	22	17
2	15	25	16	2.6	12	12	6.8	57	167	210	21	17
3	16	24	12	8.4	12	11	5.7	57	188	178	22	17
4	16	23	10	16	11	9.0	5.8	55	223	156	22	16
5	17	24	15	14	11	11	5.5	59	284	146	22	15
6	16	23	18	11	11	11	6.4	68	327	134	22	15
7	17	23	17	8.0	11	12	8.8	78	367	122	25	15
8	17	22	13	11	12	12	10	79	262	111	26	15
9	16	22	15	12	11	9.8	11	75	214	100	26	15
10	16	21	18	13	11	7.5	12	72	197	91	24	16
11	16	22	17	13	11	10	12	69	215	81	23	16
12	16	26	15	14	11	10	10	68	277	76	23	16
13	16	20	13	12	11	9.7	9.4	71	374	70	24	16
14	16	21	13	12	12	9.6	8.9	84	394	64	24	16
15	16	22	12	11	12	10	11	106	375	57	24	16
16	18	21	11	11	12	11	15	142	357	50	24	16
17	17	21	13	12	12	11	21	166	323	47	23	16
18	17	22	19	11	11	11	25	157	277	44	23	15
19	17	21	11	11	11	9.5	31	186	226	39	24	15
20	18	21	6.5	10	11	10	29	154	190	35	23	15
21	20	21	19	10	11	11	29	169	196	32	23	15
22	23	18	17	11	12	11	31	199	248	28	21	15
23	22	12	16	8.5	12	9.0	36	227	252	25	21	15
24	21	12	15	12	12	8.6	41	257	249	25	20	15
25	21	16	16	13	10	8.4	38	272	250	24	20	15
26	21	21	13	11	11	9.2	37	281	261	23	19	15
27	21	17	15	10	11	9.6	40	347	259	23	19	16
28	21	15	14	10	11	14	43	449	244	23	18	15
29	21	20	12	11	---	11	43	314	229	23	17	15
30	23	22	12	9.6	---	10	43	234	227	22	18	15
31	26	---	12	8.8	---	10	---	196	---	22	18	---
TOTAL	569	624	446.5	333.6	319	319.9	633.3	4799	7817	2305	641	466
MEAN	18.4	20.8	14.4	10.8	11.4	10.3	21.1	155	261	74.4	22.0	15.5
MAX	26	26	21	16	13	14	43	449	394	224	26	17
MIN	15	12	6.5	2.6	10	7.5	5.5	51	165	22	17	15
AC-FT	1130	1240	886	662	633	635	1260	9520	15510	4570	1350	924
CAL YR 1978 TOTAL	23691.9							46990				
WTR YR 1979 TOTAL	19313.3							38310				

CANYON CREEK BASIN

09085300 EAST CANYON CREEK NEAR NEW CASTLE, CO

LOCATION--Lat 39°36'33", long 107°26'03", in SE~~SE~~ sec.13, T.5 S., R.90 W., Garfield County, Hydrologic Unit 14010005, on left bank at upstream side of Forest Service stock trail bridge, 0.6 mi (1.0 km) upstream from Possum Creek, 0.9 mi (1.4 km) upstream from mouth, and 6.0 mi (9.7 km) northeast of New Castle.

DRAINAGE AREA--15.1 mi² (39.1 km²).

PERIOD OF RECORD--March 1969 to current year.

GAGE--Water-stage recorder. Altitude of gage is 6,280 ft (1,914 m), from topographic map.

REMARKS--Records good except those for winter period, which are poor. Small diversions above station for irrigation of hay meadows. Diversion by Buster No. 1 ditch about 100 ft (30 m) above gage began May 16, 1974; capacity of ditch, about 1.5 ft³/s (0.04 m³/s). Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE--10 years, 23.3 ft³/s (0.660 m³/s), 16,880 acre-ft/yr (20.8 hm³/yr).

EXTREMES FOR PERIOD OF RECORD--Maximum discharge, 956 ft³/s (27.1 m³/s) June 11, 1978, gage height, 3.42 ft (1.042 m), from rating curve extended above 210 ft³/s (5.9 m³/s); minimum daily, 2.0 ft³/s (0.057 m³/s) Jan. 2, 1979.

EXTREMES FOR CURRENT YEAR--Maximum discharge, 250 ft³/s (7.08 m³/s) at 2000 June 17, gage height, 2.69 ft (0.820 m), only peak above base of 150 ft³/s (4.2 m³/s); minimum daily, 2.0 ft³/s (0.057 m³/s) Jan. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.9	7.0	5.0	4.3	4.5	4.1	3.8	22	171	137	8.0	6.7
2	5.6	6.8	4.8	2.0	4.4	4.5	3.7	22	171	121	7.6	6.5
3	5.6	6.2	4.6	3.6	4.2	4.2	3.5	18	185	108	7.6	6.7
4	5.0	6.0	4.4	5.0	4.0	4.0	3.4	15	197	89	7.8	6.6
5	5.3	5.9	4.7	4.6	3.8	4.2	3.5	17	191	79	8.0	6.4
6	5.3	5.6	4.8	4.3	4.0	4.3	3.8	22	180	74	8.2	6.5
7	5.6	5.5	4.6	3.9	4.2	4.7	5.0	22	150	69	8.4	6.3
8	5.6	5.5	4.5	4.2	4.4	4.7	5.3	21	143	59	7.9	6.5
9	5.3	5.3	5.0	4.3	4.4	4.3	6.2	18	118	53	9.8	6.4
10	5.2	5.4	5.5	4.6	4.4	3.9	6.5	16	111	50	8.4	6.7
11	5.3	5.5	5.1	4.9	4.3	4.0	5.4	14	113	46	7.3	6.8
12	5.3	5.9	5.1	4.8	4.3	4.0	4.6	13	132	42	7.3	6.7
13	5.3	5.6	5.0	4.6	4.3	4.3	4.0	12	162	39	7.2	6.9
14	5.2	6.3	5.0	4.3	4.4	4.4	4.5	16	163	36	7.4	6.9
15	4.7	5.8	4.8	4.2	4.4	4.6	6.0	23	171	31	7.4	6.6
16	4.6	5.4	4.9	4.2	4.4	4.6	8.2	37	175	29	7.9	4.3
17	4.7	5.1	4.9	4.1	4.2	4.6	10	50	176	27	7.8	3.7
18	5.0	5.0	5.2	4.1	4.1	4.6	12	74	175	24	7.3	4.0
19	5.0	5.1	4.9	4.1	4.2	4.3	13	96	146	21	8.0	4.5
20	5.3	4.7	4.0	4.1	4.3	4.3	10	112	120	19	8.0	5.1
21	5.4	4.6	5.0	3.7	4.3	4.3	10	113	123	17	7.6	5.5
22	6.3	4.6	4.9	3.9	4.4	4.4	11	118	140	15	7.3	5.5
23	5.7	4.5	4.8	3.7	4.4	4.0	13	119	157	13	6.7	5.1
24	5.9	4.5	4.8	4.4	4.0	4.0	13	134	147	12	6.9	5.2
25	6.0	4.6	4.7	4.6	4.1	3.8	12	157	145	11	6.6	5.2
26	6.0	4.7	4.7	4.3	4.2	3.9	12	157	150	10	6.3	5.1
27	6.1	4.3	4.7	4.2	4.2	4.0	13	179	154	9.2	6.5	7.0
28	6.0	4.4	4.6	4.3	4.1	4.7	14	193	145	8.8	6.3	6.5
29	6.0	4.5	4.6	4.4	---	4.2	15	205	142	8.4	6.3	6.3
30	6.0	4.9	4.6	3.9	---	4.0	18	177	140	8.0	7.1	6.4
31	6.6	---	4.6	4.4	---	4.1	---	185	---	8.0	7.0	---
TOTAL	170.8	159.2	148.8	130.0	118.9	132.0	253.4	2377	4593	1273.4	231.9	178.8
MEAN	5.51	5.31	4.80	4.19	4.25	4.26	8.45	76.7	153	41.1	7.48	5.96
MAX	6.6	7.0	5.5	5.0	4.5	4.7	18	205	197	137	9.8	7.0
MIN	4.6	4.3	4.0	2.0	3.8	3.0	3.4	12	111	8.0	6.3	3.7
AC-FT	339	316	295	258	236	262	503	4710	9110	2530	460	355

CAL YR 1978 TOTAL 12802.8 MEAN 35.1 MAX 680 MIN 2.9 AC-FT 25390
WTR YR 1979 TOTAL 9767.2 MEAN 26.8 MAX 205 MIN 2.0 AC-FT 19370

NOTE--NO GAGE-HEIGHT RECORD JAN. 23 TO MAR. 5.

09085400 POSSUM CREEK NEAR NEW CASTLE, CO

LOCATION.--Lat 39°35'52", long 107°25'24", in SW¼ sec.19, T.5 S., R.89 W., Garfield County, Hydrologic Unit 14010005, on right bank 1.0 mi (1.6 km) upstream from mouth and 6.0 mi (9.7 km) northeast of New Castle.

DRAINAGE AREA.--6.41 mi² (16.60 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 6,410 ft (1,954 m), from topographic map.

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

AVERAGE DISCHARGE.--10 years, 5.75 ft³/s (0.163 m³/s), 4,170 acre-ft/yr (5.14 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 85 ft³/s (2.41 m³/s) Aug. 25, 1977, gage height, 2.49 ft (0.759 m), from floodmarks in well; minimum daily, 0.44 ft³/s (0.012 m³/s) Feb. 22, 1978.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 30 ft³/s (0.85 m³/s) and maximum (±):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
June 7	0600	*70 1.982	2.35 0.716	June 14	0200	61 1.728	2.29 0.698

Minimum daily discharge, 1.0 ft³/s (0.028 m³/s) Nov. 28, Dec. 3, Mar. 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.7	2.4	2.4	1.5	1.6	1.5	1.3	6.5	38	20	6.5	4.9
2	2.7	2.4	2.3	1.3	1.6	1.5	1.2	6.8	33	20	6.5	4.8
3	2.7	2.4	1.0	1.7	1.6	1.5	1.2	6.1	37	18	6.4	4.6
4	2.7	2.4	1.2	1.9	1.6	1.1	1.2	5.3	41	16	6.2	4.5
5	2.7	2.4	1.8	1.9	1.5	1.5	1.3	5.1	44	15	6.4	4.5
6	2.7	2.4	1.9	1.8	1.5	1.5	1.4	6.1	55	15	6.4	4.4
7	2.7	2.3	1.9	1.7	1.5	1.5	1.6	6.7	65	14	6.4	4.6
8	2.6	2.3	1.9	1.4	1.4	1.5	1.9	6.1	47	14	6.3	4.6
9	2.6	2.3	1.9	1.4	1.4	1.4	2.1	5.3	33	14	6.2	4.5
10	2.5	2.3	2.3	1.7	1.5	1.0	2.2	4.9	27	12	6.1	4.6
11	2.5	2.3	2.4	1.8	1.5	1.4	1.9	4.2	28	12	6.0	4.5
12	2.5	2.6	2.4	1.8	1.5	1.6	1.5	3.9	35	12	5.9	4.5
13	2.5	2.3	2.4	1.8	1.5	1.6	1.4	4.0	48	12	6.2	4.5
14	2.6	2.3	2.3	1.4	1.5	1.5	1.7	4.9	55	11	6.0	4.5
15	2.6	2.2	2.3	1.5	1.5	1.6	2.2	6.4	51	10	6.0	4.4
16	2.6	2.1	2.1	1.8	1.5	1.6	2.8	8.9	47	9.8	6.0	4.3
17	2.6	1.7	2.2	1.9	1.5	1.6	3.5	9.9	41	9.8	5.9	4.2
18	2.5	1.6	2.5	1.9	1.4	1.6	4.1	12	36	9.8	5.7	4.1
19	2.5	1.7	2.3	1.7	1.5	1.6	4.4	16	30	9.0	5.7	4.0
20	2.5	2.2	2.2	1.7	1.5	1.6	3.5	21	26	8.6	5.6	4.0
21	2.5	2.6	1.7	1.7	1.5	1.6	3.4	25	24	8.6	5.5	4.1
22	2.7	2.4	2.2	1.8	1.5	1.6	3.8	28	26	8.2	5.5	4.0
23	2.6	2.3	2.2	1.7	1.5	1.5	4.3	32	27	8.2	5.5	4.0
24	2.5	2.3	2.1	1.6	1.5	1.5	4.4	35	27	7.0	5.3	4.2
25	2.5	2.3	2.1	1.6	1.4	1.5	4.1	36	25	7.4	5.3	4.1
26	2.4	2.3	1.8	1.6	1.5	1.5	4.1	36	25	7.3	5.2	4.2
27	2.4	1.8	1.9	1.6	1.5	1.6	4.4	44	24	7.1	5.1	4.3
28	2.4	1.0	1.8	1.6	1.5	1.8	4.7	54	21	7.0	5.0	4.0
29	2.4	1.7	1.6	1.6	---	1.6	5.0	59	20	6.8	4.9	4.0
30	2.3	2.2	1.6	1.6	---	1.6	5.7	55	20	6.8	5.2	3.9
31	2.3	---	1.6	1.6	---	1.6	---	47	---	6.7	4.9	---
TOTAL	79.0	65.5	62.3	51.6	42.0	47.1	86.3	601.1	1056	343.1	179.8	129.8
MEAN	2.55	2.18	2.01	1.66	1.50	1.52	2.88	19.4	35.2	11.1	5.80	4.33
MAX	2.7	2.6	2.5	1.9	1.6	1.8	5.7	59	65	20	6.5	4.9
MIN	2.3	1.0	1.0	1.3	1.4	1.0	1.2	3.9	20	6.7	4.9	3.9
AC-FT	157	130	124	102	83	93	171	1190	2090	681	357	257

CAL YR 1978 TOTAL 2716.05 MEAN 7.44 MAX 65 MIN 4.44 AC-FT 5390
WTR YR 1979 TOTAL 2743.60 MEAN 7.52 MAX 65 MIN 1.0 AC-FT 5440

DIVIDE CREEK BASIN

09089500 WEST DIVIDE CREEK NEAR RAVEN, CO

LOCATION.--Lat 39°19'52", long 107°34'46", in W½ sec. 29, T. 8 S., R. 91 W., Mesa County, Hydrologic Unit 14010005, on left bank 10 ft (3 m) downstream from private road bridge, 0.8 mi (1.3 km) upstream from Brook Creek, 8 mi (13 km) south of Raven, and 16 mi (26 km) south of Silt.

DRAINAGE AREA.--64.6 mi² (167.3 km²).

PERIOD OF RECORD.--October 1955 to current year.

REVISED RECORDS.--WSP 2124: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 7,050 ft (2,149 m), from topographic map.

REMARKS.--Records good except those for winter periods, which are fair, and those for period of no gage-height record, which are poor. Natural flow of stream affected by water imported from Thompson Creek (Raring 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.--24 years, 31.1 ft³/s (0.881 m³/s), 22,530 acre-ft/yr (27.8 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 790 ft³/s (22.4 m³/s) May 12, 1962, gage height, 5.41 ft (1.649 m), from rating curve extended above 350 ft³/s (9.9 m³/s); maximum gage height, 5.45 ft (1.661 m) May 18, 1970; no flow at times in most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 577 ft³/s (16.3 m³/s) at 2400 May 18, gage height, 5.07 ft (1.545 m); only peak above base of 160 ft³/s (4.53 m³/s); minimum daily, 0.10 ft³/s (0.003 m³/s) Sept. 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.33	1.1	1.4	1.1	1.4	1.3	1.6	131	302	103	8.1	3.0
2	.35	1.0	1.5	1.0	1.3	1.3	1.5	135	290	97	7.4	2.2
3	.35	1.0	1.5	1.2	1.2	1.2	1.7	111	294	88	6.7	1.8
4	.41	.98	1.4	1.5	1.2	1.1	2.5	101	293	84	6.1	1.5
5	.41	.96	1.5	1.6	1.2	1.2	3.5	125	290	83	5.4	1.1
6	.42	.95	1.5	1.5	1.3	1.4	4.9	154	299	78	4.9	.91
7	.44	.95	1.5	1.4	1.3	1.5	7.3	164	302	79	4.7	.55
8	.44	.99	1.4	1.3	1.3	1.6	8.8	129	269	79	4.3	.32
9	.45	1.1	1.3	1.2	1.3	1.5	11	110	215	74	4.3	.31
10	.46	1.3	1.3	1.4	1.3	1.4	11	100	181	71	4.3	.26
11	.46	1.6	1.3	1.6	1.3	1.5	9.4	93	173	68	4.1	.19
12	.46	4.1	1.3	1.7	1.4	1.8	11	104	181	63	4.1	.19
13	.50	2.2	1.4	1.6	1.4	1.9	10	129	209	58	4.3	.16
14	.51	2.1	1.4	1.3	1.4	1.9	10	184	218	53	4.3	.18
15	.51	2.0	1.4	1.4	1.4	2.0	16	240	200	48	5.0	.18
16	.48	2.1	1.4	1.5	1.4	1.9	25	272	183	43	9.2	.15
17	.49	2.0	1.4	1.5	1.3	1.9	33	291	156	40	13	.13
18	.50	1.4	1.6	1.5	1.2	1.8	52	373	136	36	7.5	.12
19	.63	1.0	2.7	1.5	1.3	1.7	54	462	129	31	10	.11
20	.73	1.2	2.0	1.5	1.4	1.7	49	450	116	27	13	.10
21	.76	1.1	1.9	1.4	1.3	1.7	50	464	117	26	10	.12
22	3.6	1.1	1.7	1.5	1.3	1.6	57	460	118	36	7.0	.13
23	2.3	1.2	1.7	1.5	1.3	1.6	76	473	112	26	5.1	.13
24	2.4	1.2	1.7	1.4	1.2	1.6	81	473	115	23	4.2	.13
25	1.8	1.3	1.6	1.4	1.2	1.6	74	429	115	20	3.8	.13
26	1.6	1.5	1.6	1.5	1.3	1.6	72	411	125	17	3.5	.17
27	1.4	1.4	1.6	1.4	1.4	1.7	79	440	121	15	3.5	.77
28	1.3	1.1	1.7	1.2	1.3	2.0	94	475	114	14	3.0	1.0
29	1.3	1.4	1.7	1.2	---	1.9	104	472	109	12	2.3	.65
30	1.2	1.4	1.7	1.2	---	1.9	111	400	104	10	2.4	.71
31	1.2	---	1.6	1.3	---	1.8	---	337	---	9.0	4.5	---
TOTAL	28.19	42.73	48.7	43.3	36.6	50.6	1121.2	8692	5586	1511.0	180.0	17.40
MEAN	.91	1.42	1.57	1.40	1.31	1.63	37.4	280	186	48.7	5.81	.58
MAX	3.6	4.1	2.7	1.7	1.4	2.0	111	475	302	103	13	3.0
MIN	.33	.95	1.3	1.0	1.2	1.1	1.5	93	104	9.0	2.3	.10
AC-FT	56	85	97	86	73	100	2220	17240	11080	3000	357	35

CAL YR 1978 TOTAL 12750.44 MEAN 34.9 MAX 344 MIN .09 AC-FT 25290
WTR YR 1979 TOTAL 17357.72 MEAN 47.6 MAX 475 MIN .10 AC-FT 34430

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

09092500 BEAVER CREEK NEAR RIFLE, CO

LOCATION.--Lat 39°28'19", long 107°49'55", in NW¼NE¼ sec.1, T.7 S., R.94 W., Garfield County, Hydrologic Unit 14010005, on left bank 150 ft (46 m) upstream from unnamed tributary, 200 ft (61 m) upstream from road bridge, 4.0 mi (6.4 km) upstream from mouth, and 4.8 mi (7.7 km) southwest of Rifle.

DRAINAGE AREA.--7.90 mi² (20.46 km²).

PERIOD OF RECORD.--October 1952 to current year.

REVISED RECORDS.--WSP 1924: Drainage area.

GAGE.--Water-stage recorder and plank control. Altitude of gage is 6,685 ft (2,038 m), from topographic map.

REMARKS.--Records good except those for winter period, which are fair. Diversions above station for irrigation of about 170 acres (688,000 m²) below station and about 380 acres (1,54 km²) in Mann Creek basin. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--27 years, 4.54 ft³/s (0.129 m³/s), 3,290 acre-ft/yr (4.06 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 85 ft³/s (2.41 m³/s) May 24, 1964, gage height, 4.00 ft (1.219 m), from rating curve extended above 52 ft³/s (1.5 m³/s); minimum daily, 0.24 ft³/s (0.007 m³/s) Dec. 21, 1973.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 80 ft³/s (2.27 m³/s) at 1930 May 28, gage height, 3.90 ft (1.189 m), only peak above base of 25 ft³/s (0.71 m³/s); minimum daily, 0.49 ft³/s (0.014 m³/s) Nov. 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.0	.82	.93	1.0	.70	.66	.51	4.3	33	32	3.1	1.2
2	1.0	.82	1.0	1.1	.80	.66	.51	4.4	33	28	3.0	1.2
3	1.0	.82	.90	1.2	.79	.66	.51	3.8	33	26	2.9	1.2
4	1.0	.78	.96	1.1	.75	.62	.51	3.4	35	23	2.7	1.2
5	1.0	.80	1.0	.93	.70	.58	.62	3.8	37	20	2.6	1.2
6	.98	.69	1.4	.93	.70	.62	.72	4.4	47	18	2.6	1.2
7	.96	.49	1.3	.93	.72	.72	.93	4.5	57	16	2.3	1.2
8	.98	.64	1.2	.84	.77	.82	1.0	4.1	45	15	2.9	1.2
9	.93	.60	1.3	.90	.81	.72	1.0	3.6	34	13	2.6	1.0
10	.93	.74	1.3	1.0	.86	.62	1.0	3.3	26	12	2.2	1.1
11	.93	.81	1.3	.82	.94	.62	.75	3.2	26	10	2.1	1.1
12	.93	1.1	1.3	.82	1.0	.72	.70	3.3	33	9.5	2.0	1.0
13	.92	.61	1.2	.82	1.1	.72	.64	3.9	41	8.9	1.9	1.0
14	.88	.96	1.2	.82	1.2	.72	.76	4.8	45	8.1	2.1	1.0
15	.90	.86	1.2	.93	1.2	.82	1.2	5.4	50	7.3	2.4	.93
16	.88	.89	1.2	.93	1.1	.72	1.6	6.2	48	6.7	2.1	.93
17	.84	.82	1.2	.82	1.0	.72	2.0	7.3	42	6.1	2.0	.93
18	.90	.62	1.4	.82	.90	.72	2.6	12	36	5.6	2.4	.93
19	.92	.62	1.5	.82	.86	.72	2.2	17	29	5.2	2.4	.93
20	.90	.82	1.3	.82	.86	.62	1.7	21	24	4.4	2.0	.93
21	1.0	.82	1.2	.82	.85	.62	1.6	26	26	5.2	1.8	.93
22	1.4	.72	1.2	.75	.81	.62	2.0	30	31	6.0	1.6	.93
23	1.1	.72	1.2	.70	.76	.64	2.6	38	32	5.6	1.5	.93
24	1.0	1.0	1.2	.70	.73	.67	3.3	43	33	5.7	1.4	.91
25	1.0	.93	1.2	.76	.72	.70	3.3	50	36	5.1	1.3	.82
26	.79	.93	1.2	.76	.70	.72	2.7	53	39	4.7	1.3	.82
27	.90	1.0	1.2	.72	.68	.72	3.1	58	40	4.4	1.3	.82
28	.78	1.0	1.2	.69	.67	.72	3.4	51	39	4.2	1.2	.82
29	.78	1.0	1.2	.67	---	.72	3.2	53	37	3.9	1.2	.82
30	.82	.93	1.2	.64	---	.62	3.6	46	35	3.7	1.5	.82
31	.82	---	1.1	.64	---	.60	---	38	---	3.4	1.4	---
TOTAL	29.17	24.36	37.19	26.20	23.68	21.13	50.26	609.7	1102	326.7	63.8	30.00
MEAN	.94	.81	1.20	.85	.85	.68	1.68	19.7	36.7	10.5	2.05	1.00
MAX	1.4	1.1	1.5	1.2	1.2	.82	3.6	58	57	32	3.1	1.2
MIN	.78	.49	.90	.64	.67	.58	.51	3.2	24	3.4	1.2	.82
AC-FT	58	48	74	52	47	42	100	1210	2190	648	127	60
CAL YR 1978	TOTAL	2241.38	MEAN	6.14	MAX	58	MIN	.33	AC-FT	4450		
WTR YR 1979	TOTAL	2344.19	MEAN	6.42	MAX	58	MIN	.49	AC-FT	4650		

PARACHUTE CREEK BASIN

09092830 NORTHWATER CREEK NEAR ANVIL POINTS, CO

LOCATION.--Lat 39°37'13", long 108°00'44", in NE¼ sec.14, T.5 S., R.95 W., in Garfield County, Hydrologic Unit 14010006, on right bank 50 ft (15 m) downstream from mouth of Bear Gulch, 750 ft (229 m) upstream from mouth, and 8.5 mi (14 km) southwest of Rio Blanco.

DRAINAGE AREA.--12.6 mi² (32.6 km²).

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Altitude of gage is 7,420 ft (2,262 m), from topographic map.

REMARKS.--Records poor. No diversions or regulation above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 225 ft³/s (6.37 m³/s) May 17, 1979, gage height, 3.30 ft (1.006 m); minimum daily, 0.01 ft³/s (<0.001 m³/s) Aug. 7, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 225 ft³/s (6.37 m³/s) May 17, gage height, 3.30 ft (1.006 m) from rating curve extended above 92 ft³/s (2.61 m³/s); minimum daily, 0.20 ft³/s (0.006 m³/s) Dec. 8, Jan. 1, 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.72	.66	.60	.20	.50	.81	1.1	24	32	3.7	2.1	1.2
2	.68	.67	.55	.20	.50	.81	1.1	26	27	3.7	2.1	1.1
3	.70	.64	.50	.40	.45	.78	1.3	24	24	3.5	1.9	1.1
4	.69	.64	.55	.55	.45	1.1	1.2	19	23	3.5	1.9	1.0
5	.69	.62	.55	.55	.40	1.2	.76	19	20	3.3	1.9	1.0
6	.68	.60	.45	.55	.45	1.0	1.2	28	18	3.3	1.8	1.0
7	.69	.61	.45	.45	.50	.55	1.7	33	17	3.2	1.8	1.0
8	.67	.63	.20	.35	.50	.40	1.8	32	16	3.1	1.8	.95
9	.68	.63	.30	.45	.50	.70	2.0	29	14	3.1	1.8	.95
10	.67	.66	.40	.50	.50	.75	1.8	22	13	3.0	1.7	.95
11	.67	.79	.40	.50	.50	1.2	1.5	18	12	3.0	1.7	.95
12	.67	.89	.45	.50	.50	1.5	1.3	17	11	3.0	1.7	.95
13	.67	.77	.45	.50	.50	1.5	1.2	17	9.6	2.8	1.7	.85
14	.67	.72	.50	.50	.50	1.1	1.5	24	8.8	2.8	1.5	.85
15	.68	.72	.50	.55	.55	1.3	2.4	42	8.0	2.8	1.7	.85
16	.67	.68	.45	.55	.55	1.4	3.3	92	7.6	2.8	2.1	.85
17	.67	.70	.50	.55	.55	1.4	4.4	130	7.2	2.8	1.7	.85
18	.67	.70	.50	.50	.55	1.4	6.8	127	6.2	2.8	1.9	.85
19	.67	.60	.55	.50	.55	1.5	8.5	120	6.2	2.8	1.9	.85
20	.68	.70	.65	.50	.55	1.4	6.8	115	5.9	2.8	1.8	.85
21	.68	.65	.65	.50	.55	1.3	6.8	110	5.6	2.8	1.7	.85
22	.75	.65	.65	.45	.60	1.2	9.5	109	5.3	2.8	1.5	.85
23	.68	.65	.65	.45	.60	.80	13	108	5.0	2.8	1.5	.75
24	.68	.60	.65	.40	.60	1.0	17	108	4.7	2.8	1.4	.75
25	.68	.65	.60	.45	.60	1.0	19	107	4.4	2.5	1.4	.75
26	.62	.65	.55	.45	.60	1.2	17	100	4.1	2.5	1.4	.85
27	.63	.60	.50	.25	.60	.80	18	82	4.1	2.4	1.4	.95
28	.64	.60	.50	.25	.80	.90	19	68	3.9	2.4	1.2	.85
29	.65	.60	.50	.25	---	.90	20	56	3.9	2.2	1.2	.75
30	.65	.60	.50	.25	---	1.0	22	45	3.7	2.2	1.4	.75
31	.66	---	.35	.25	---	1.0	---	37	---	2.1	1.2	---
TOTAL	20.91	19.88	15.60	13.30	15.00	32.90	212.96	1888	331.2	89.4	51.8	27.05
MEAN	.67	.66	.50	.43	.54	1.06	7.10	60.9	11.0	2.88	1.57	.90
MAX	.75	.89	.65	.55	.80	1.5	22	130	32	3.7	2.1	1.2
MIN	.62	.60	.20	.20	.40	.40	.76	17	3.7	2.1	1.2	.75
AC-FT	41	39	31	26	30	65	422	3740	657	177	103	54

CAL YR 1978 TOTAL 1543.56 MEAN 4.23 MAX 84 MIN .20 AC-FT 3060
WTR YR 1979 TOTAL 2718.00 MEAN 7.45 MAX 130 MIN .20 AC-FT 5390

NOTE.--NO GAGE-HEIGHT RECORD NOV. 17 TO FEB. 28, MAR. 7 TO APR. 4, MAY 15 TO JUNE 18.

PARACHUTE CREEK BASIN

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09092830 NORTHWATER CREEK NEAR ANVIL POINTS, CO--Continued

WATER-QUALITY RECORDS

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEDUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
OCT										
02...	1445	.71	480	8.3	12.0	--	230	0	55	21
NOV										
20...	1400	.72	524	8.1	1.0	--	230	0	55	22
DEC										
07...	1535	.47	542	8.0	.0	--	240	0	58	23
JAN										
30...	1510	.26	697	7.9	.0	--	290	--	72	27
FEB										
28...	1415	.82	550	7.7	3.0	--	240	0	60	22
APR										
25...	1100	17	427	8.0	4.0	--	200	7	45	20
MAY										
16...	1100	92	380	7.9	7.0	--	170	0	43	14
JUN										
18...	1340	6.5	440	8.2	6.0	--	210	0	52	18
JUL										
12...	1530	2.9	480	8.6	18.5	7.1	200	0	49	18
AUG										
13...	1030	1.7	520	8.5	14.0	7.7	220	0	53	20
SEP										
10...	1110	1.1	540	8.0	12.5	8.9	220	0	53	20

DATE	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	ALKA- LINITY (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)
OCT										
02...	35	1.0	.7	310	0	250	41	2.4	.2	16
NOV										
20...	38	1.1	.6	320	0	260	36	2.2	.2	15
DEC										
07...	38	1.1	.7	330	0	270	39	2.4	.2	16
JAN										
30...	49	1.3	.8	--	0	--	48	3.0	.2	19
FEB										
28...	36	1.0	.4	320	0	260	37	2.0	.2	13
APR										
25...	51	1.6	.9	230	0	190	91	5.5	.2	17
MAY										
16...	26	.9	1.0	260	0	210	23	2.3	.1	15
JUN										
18...	29	.9	.6	280	0	230	30	2.0	.2	14
JUL										
12...	31	1.0	.9	280	1	230	33	1.9	.3	15
AUG										
13...	33	1.0	.8	300	0	250	37	1.8	.3	17
SEP										
10...	34	1.0	.6	--	--	250	38	1.6	.2	17

PARACHUTE CREEK BASIN

09092830 NORTHWATER CREEK NEAR ANVIL POINTS, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

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 DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BORON, DIS- SOLVED (UG/L AS B)	CADMIUM DIS- SOLVED (UG/L AS CD)
OCT 02...	326	.44	.63	.05	.04	5	0	120	2
NOV 20...	329	.45	.64	.26	.04	4	90	70	<1
DEC 07...	343	.47	.44	.30	.04	4	90	70	<1
JAN 30...	--	.50	--	.38	.38	6	100	60	2
FEB 28...	330	.45	.73	.09	.00	3	0	80	0
APR 25...	351	.48	16.1	1.4	.03	3	90	60	<1
MAY 16...	260	.35	64.6	1.6	.00	3	100	30	0
JUN 18...	287	.39	5.04	.47	--	4	100	50	0
JUL 12...	289	.39	2.26	.01	.03	4	70	50	3
AUG 13...	312	.42	1.43	.00	.01	4	90	60	<1
SEP 10...	316	.43	.94	.13	.04	4	90	50	<1

DATE	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)	MERCURY DIS- SOLVED (UG/L AS HG)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	ZINC, DIS- SOLVED (UG/L AS ZN)
OCT 02...	1	20	13	9	0	.0	0	960	10
NOV 20...	1	10	7	5	5	.0	1	840	7
DEC 07...	0	10	8	6	5	.0	1	960	3
JAN 30...	2	50	7	9	9	.0	1	1200	<3
FEB 28...	0	310	10	5	20	.0	0	910	10
APR 25...	3	20	3	8	3	.0	1	790	<3
MAY 16...	0	0	0	5	0	.0	1	630	10
JUN 18...	0	10	0	0	0	1.8	1	810	10
JUL 12...	1	10	0	5	4	.0	0	810	<3
AUG 13...	2	10	8	6	5	.9	0	920	<3
SEP 10...	14	10	2	9	5	.0	1	910	80

PARACHUTE CREEK BASIN

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09092830 NORTHWATER CREEK NEAR ANVIL POINTS, CO--Continued

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDEO (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDEO (T/DAY)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDEO (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDEO (T/DAY)
JUN 18...	1500	6.2	61	1.0	SEP 10...	1120	1.1	22	.07
AUG 13...	1045	1.7	11	.05					

PARACHUTE CREEK BASIN

09092850 EAST MIDDLE FORK PARACHUTE CREEK NEAR RIO BLANCO, CO

LOCATION.--Lat 39°37'15", long 108°01'46" in NW¼NW¼ sec.14, T.5 S., R.95 W., Garfield County, Hydrologic Unit 14010006, on right bank 0.5 mi (0.8 km) upstream from mouth of Corral Gulch, 1.1 mi (1.8 km) downstream from mouth of Northwater Creek, and 9 mi (14 km) southwest of Rio Blanco.

DRAINAGE AREA.--22.1 mi² (57.2 km²).

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Altitude of gage is 7,400 ft (2,256 m), from topographic map.

REMARKS.--Records good except those for periods of ice effect, which are poor. Numerous beaver dams are located upstream. No regulation or diversion above station.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 186 ft³/s (5.27 m³/s) at 1530 May 17, gage height, 3.39 ft (1.033 m); minimum daily, 0.26 ft³/s (0.007 m³/s) Jan. 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.82	.99	.66	.28	.56	.66	2.2	50	32	6.0	6.0	1.8
2	.90	.99	.61	.28	.56	.66	2.3	56	28	5.2	5.0	1.8
3	.90	.98	.56	.46	.51	.82	2.6	59	26	6.0	5.0	1.7
4	.90	.97	.66	.61	.51	1.1	2.4	41	24	6.0	4.0	1.7
5	.90	.96	.66	.61	.52	.99	3.6	40	23	6.2	4.0	1.6
6	.90	.95	.66	.61	.52	.99	5.9	53	22	6.0	3.5	1.6
7	.90	.94	.51	.51	.53	1.1	8.3	96	21	6.2	3.5	1.5
8	.90	.93	.28	.40	.53	1.2	9.4	96	21	6.2	3.3	1.5
9	.82	.92	.40	.51	.54	1.4	11	90	18	5.7	3.3	1.4
10	.82	.90	.46	.56	.55	1.5	11	81	16	5.0	3.1	1.3
11	.82	1.1	.46	.56	.55	2.5	10	74	15	5.0	3.1	1.6
12	.82	1.2	.51	.56	.56	3.4	9.4	72	14	5.0	3.1	1.6
13	.82	.99	.51	.56	.56	3.4	9.1	66	14	5.0	2.9	1.6
14	.82	.99	.56	.56	.57	2.3	10	87	14	4.7	2.6	1.5
15	.82	.90	.56	.61	.58	2.7	13	110	14	4.7	2.4	1.5
16	.82	.77	.51	.61	.58	2.8	19	131	12	4.4	2.4	1.5
17	.77	.77	.56	.61	.59	2.8	29	150	12	4.7	2.3	1.5
18	.82	.61	.56	.56	.59	2.8	32	149	11	5.0	2.3	1.5
19	.82	.66	.61	.56	.60	2.7	33	149	10	5.2	2.2	1.5
20	.82	.72	.72	.55	.61	2.8	28	129	10	5.0	2.2	1.4
21	.82	.72	.72	.54	.61	2.6	30	128	9.7	4.7	2.2	1.4
22	.82	.72	.72	.53	.62	2.5	32	120	8.7	5.0	2.2	1.4
23	.90	.72	.72	.51	.62	1.7	34	112	8.4	5.2	2.2	1.4
24	.90	.66	.72	.46	.63	2.0	36	114	7.7	5.2	2.1	1.4
25	.90	.72	.66	.51	.64	2.3	39	97	7.7	5.2	2.1	1.4
26	.90	.72	.61	.51	.64	2.4	40	86	7.4	5.2	2.1	1.3
27	.90	.70	.56	.28	.65	1.7	40	79	7.0	5.2	2.1	1.3
28	.90	.68	.56	.28	.65	2.0	42	63	7.0	6.0	2.0	1.3
29	.99	.66	.56	.26	---	1.8	41	53	6.2	6.4	2.0	1.3
30	.99	.66	.56	.28	---	2.0	43	46	6.0	6.4	1.9	1.3
31	.99	---	.42	.40	---	2.0	---	36	---	6.0	1.9	---
TOTAL	26.92	25.20	17.83	15.13	16.18	61.62	628.2	2713	432.8	168.7	89.0	44.6
MEAN	.87	.84	.58	.49	.58	1.99	20.9	87.5	14.4	5.44	2.87	1.49
MAX	.99	1.2	.72	.61	.65	3.4	43	150	32	6.4	6.0	1.8
MIN	.77	.61	.28	.26	.51	.66	2.2	36	6.0	4.4	1.9	1.3
AC-FT	53	50	35	30	32	122	1250	5380	858	335	177	88
CAL YR 1978	TOTAL	2668.60	MEAN	7.31	MAX	95	MIN	.18	AC-FT	5290		
WTR YR 1979	TOTAL	4239.18	MEAN	11.6	MAX	150	MIN	.26	AC-FT	8410		

PARACHUTE CREEK BASIN

09092850 EAST MIDDLE FORK PARACHUTE CREEK NEAR RIO BLANCO, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD--October 1976 to current year.

PERIOD OF DAILY RECORD--

SPECIFIC CONDUCTANCE: October 1976 to current year.

WATER TEMPERATURE: October 1976 to current year.

INSTRUMENTATION--Water-quality monitor since October 1976. Pumping sediment sampler since April 1977.

EXTREMES FOR PERIOD OF DAILY RECORD--

SPECIFIC CONDUCTANCE: Maximum, 615 micromhos Dec. 18, 1976; minimum, 262 micromhos Mar. 23, 1977.

WATER TEMPERATURES: Maximum, 24.5°C July 18, Aug. 9, 14, 1977.

SEDIMENT CONCENTRATIONS: Maximum daily, 5,360 mg/L May 16, 1979; minimum daily, 2 mg/L Nov. 20.

SEDIMENT LOADS: Maximum daily, 1,980 tons (1,800 t) May 16, 1979; minimum daily, less than 0.005 ton (0.005 t) several days during 1979 water year.

EXTREMES FOR CURRENT YEAR--

SPECIFIC CONDUCTANCE: Maximum, 584 micromhos Oct. 20; minimum, 339 micromhos Apr. 22.

WATER TEMPERATURES: Maximum, 22.0°C July 16; minimum, freezing point on many days during November to May.

SEDIMENT CONCENTRATIONS: Maximum daily, 5,360 mg/L May 16; minimum daily, 2 mg/L Nov. 20.

SEDIMENT LOADS: Maximum daily, 1,980 tons (1,800 t) May 16; minimum daily, less than 0.005 ton (0.005 t) several days during year.

REMARKS--Daily Sediment data for 1977 water year published in this volume.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	HARD- NESS (MG/L AS CaCO3)	HARD- NESS, NONCAR- BONATE (MG/L AS CaCO3)	CALCIUM DIS- SOLVED (MG/L AS Ca)	MAGNE- SIUM, DIS- SOLVED (MG/L AS Mg)
OCT										
02...	1225	.85	557	8.2	8.0	--	230	0	57	22
NOV										
20...	1200	.72	560	8.1	2.0	--	220	0	54	21
DEC										
07...	1330	.51	520	8.1	.5	--	250	0	59	24
JAN										
30...	1600	.69	510	7.8	.0	--	220	0	53	22
FEB										
28...	1600	.68	550	7.3	1.0	--	230	0	57	22
APR										
25...	1325	.39	485	8.0	4.0	--	180	0	42	17
MAY										
16...	1200	.135	420	7.7	7.5	--	170	0	44	15
JUN										
18...	1600	.11	470	8.4	10.0	--	200	0	51	18
JUL										
12...	1130	4.9	500	8.1	16.5	8.3	180	0	43	18
AUG										
13...	1300	2.6	540	8.6	15.0	7.5	210	0	51	20
SEP										
10...	1330	1.1	550	8.1	17.0	9.8	210	0	50	20

DATE	SODIUM, DIS- SOLVED (MG/L AS Na)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	ALKA- LINITY (MG/L AS CaCO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS Cl)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)
OCT										
02...	37	1.1	.9	320	0	260	42	2.3	.2	16
NOV										
20...	35	1.0	.6	320	0	260	43	2.5	.2	15
DEC										
07...	41	1.1	.9	340	0	280	48	3.1	.2	16
JAN										
30...	36	1.1	1.1	310	0	250	46	2.6	.2	15
FEB										
28...	37	1.1	.6	310	0	250	43	2.2	.2	12
APR										
25...	34	1.1	1.0	240	0	200	35	2.1	.2	17
MAY										
16...	27	.9	1.4	220	0	180	26	2.6	.2	15
JUN										
18...	30	.9	.7	270	0	220	36	2.1	.2	15
JUL										
12...	33	1.1	1.0	290	0	240	38	2.2	.3	14
AUG										
13...	35	1.1	1.0	280	13	250	43	2.3	.2	17
SEP										
10...	37	1.1	1.4	--	--	250	46	2.0	.3	17

PARACHUTE CREEK BASIN

09092850 EAST MIDDLE FORK PARACHUTE CREEK NEAR RIO BLANCO, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

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 DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BORON, DIS- SOLVED (UG/L AS B)	CADMIUM DIS- SOLVED (UG/L AS CD)
OCT 02...	337	.46	.77	.04	.04	5	100	110	1
NOV 20...	331	.45	.64	.15	.04	4	80	60	<1
DEC 07...	362	.49	.50	.16	.05	4	90	60	<1
JAN 30...	331	.45	.62	.20	.00	4	80	70	2
FEB 28...	329	.45	.60	.27	.00	4	0	60	0
APR 25...	274	.37	29.1	1.5	.03	4	200	60	<1
MAY 16...	248	.34	90.4	1.6	.00	4	100	30	0
JUN 18...	289	.39	8.58	.42	--	6	200	40	1
JUL 12...	294	.40	3.89	.03	.03	4	80	60	3
AUG 13...	322	.44	2.26	.00	.03	4	90	60	<1
SEP 10...	325	.44	.97	.03	.04	4	90	60	<1

DATE	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)	MERCURY DIS- SOLVED (UG/L AS HG)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	ZINC, DIS- SOLVED (UG/L AS ZN)
OCT 02...	1	20	2	9	20	.0	0	880	10
NOV 20...	0	10	7	5	6	.0	1	900	4
DEC 07...	1	0	3	5	5	.0	1	900	<3
JAN 30...	1	40	7	<4	5	.0	1	800	<3
FEB 28...	0	0	0	7	20	.0	1	810	10
APR 25...	4	30	2	5	6	.0	1	690	<3
MAY 16...	0	0	0	5	10	.0	1	600	10
JUN 18...	1	10	2	0	0	.0	1	700	20
JUL 12...	2	10	1	5	2	.0	0	790	5
AUG 13...	2	10	7	6	3	.2	0	790	<3
SEP 10...	17	<10	3	9	6	.0	1	830	20

PARACHUTE CREEK BASIN

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09092850 EAST MIDDLE FORK PARACHUTE CREEK NEAR RIO BLANCO, CO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	568	---	---	512	552	549	447	421	484	525	560
2	578	571	---	---	513	551	545	422	427	486	525	560
3	579	568	---	---	520	556	530	454	432	486	520	560
4	578	567	---	---	521	562	549	442	434	484	525	560
5	577	568	---	---	526	558	550	433	441	486	525	555
6	578	571	---	---	525	556	532	---	443	488	530	560
7	577	570	---	---	527	548	516	---	442	487	530	560
8	572	571	---	---	530	543	533	---	438	489	530	560
9	573	570	---	---	533	548	536	---	445	488	530	560
10	573	568	---	---	536	552	531	---	459	491	535	562
11	574	548	---	---	536	547	539	---	462	496	535	569
12	580	525	---	---	536	544	549	---	465	505	535	572
13	580	544	---	---	536	548	548	---	467	520	540	568
14	581	549	---	---	539	559	536	---	467	525	545	570
15	581	555	---	---	545	557	504	---	468	515	540	571
16	581	556	---	---	548	555	457	375	472	510	535	571
17	581	563	---	---	551	555	480	354	480	510	545	573
18	582	564	---	---	551	558	388	367	485	505	540	571
19	582	567	---	---	531	558	401	361	485	515	545	571
20	584	560	---	---	528	556	381	359	489	520	540	569
21	582	---	---	---	529	557	354	356	493	520	545	565
22	574	---	---	---	531	556	339	353	493	515	550	558
23	577	---	---	---	532	559	363	353	493	525	545	566
24	578	---	---	---	532	552	468	348	493	520	545	566
25	572	---	---	---	538	549	479	347	492	520	550	566
26	568	---	---	---	541	550	482	351	491	520	555	561
27	568	---	---	---	544	546	470	353	489	520	555	555
28	568	---	---	---	551	529	480	357	487	520	555	557
29	568	---	---	---	---	535	483	340	487	525	555	559
30	568	---	---	---	511	---	464	---	488	520	550	559
31	568	---	---	---	511	---	543	---	---	525	560	---

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	12.5	5.0	7.5	2.5	---	---	---	---	1.0	.5	3.0	.5
2	11.5	5.5	6.5	3.0	---	---	---	---	1.5	.5	3.5	.5
3	10.5	3.0	6.5	3.0	---	---	---	---	1.0	.0	3.0	.5
4	10.5	3.5	6.0	1.5	---	---	---	---	1.0	.0	2.0	.5
5	10.5	3.5	5.0	2.0	---	---	---	---	1.0	.0	2.5	.5
6	10.5	3.0	5.5	.5	---	---	---	---	1.5	.5	3.5	.5
7	10.5	3.5	5.5	.5	---	---	---	---	2.0	.0	4.0	1.5
8	10.5	4.0	4.5	1.0	---	---	---	---	1.5	.0	4.5	.5
9	11.0	4.5	5.0	.5	---	---	---	---	1.5	.0	3.0	.0
10	10.5	4.5	5.0	2.0	---	---	---	---	1.5	.0	2.5	.0
11	10.5	4.5	5.0	3.0	---	---	---	---	2.0	.0	2.5	.5
12	10.5	4.5	3.0	.0	---	---	---	---	1.0	.0	3.0	.0
13	9.0	3.5	3.0	.5	---	---	---	---	2.5	.5	3.0	.5
14	9.0	2.5	2.5	.5	---	---	---	---	3.0	.5	3.0	.0
15	9.0	3.0	3.5	1.0	---	---	---	---	2.0	.0	4.5	.5
16	8.5	2.5	3.5	.0	---	---	---	---	2.0	.0	3.5	.5
17	8.5	3.5	4.0	.0	---	---	---	---	2.5	.0	4.0	1.0
18	10.0	5.5	2.5	.0	---	---	---	---	1.5	.5	4.5	1.5
19	9.0	4.0	2.5	.0	---	---	---	---	2.0	.5	4.5	.0
20	8.5	4.0	2.0	.0	---	---	---	---	3.0	.5	3.5	.0
21	9.0	6.5	---	---	---	---	---	---	2.0	.5	4.5	1.0
22	7.0	5.0	---	---	---	---	---	---	1.5	.0	3.5	.0
23	8.0	3.5	---	---	---	---	---	---	1.5	.0	4.5	.0
24	8.0	3.5	---	---	---	---	---	---	2.0	.0	5.0	.0
25	7.0	2.5	---	---	---	---	---	---	1.5	.5	4.5	.5
26	6.5	1.5	---	---	---	---	---	---	2.0	.5	5.5	1.0
27	7.0	1.5	---	---	---	---	---	---	2.0	.5	4.0	1.5
28	6.5	1.5	---	---	---	---	---	---	2.5	.5	4.5	1.0
29	6.5	1.5	---	---	---	---	---	---	---	---	3.5	.5
30	7.0	2.0	---	---	---	---	.5	.0	---	---	6.0	1.5
31	7.0	2.5	---	---	---	---	1.0	.0	---	---	4.0	.5

PARACHUTE CREEK BASIN

09092850 EAST MIDDLE FORK PARACHUTE CREEK NEAR RIO BLANCO, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	3.0	.5	8.0	3.0	14.0	5.0	20.0	10.0	21.0	8.5	18.5	7.0
2	4.0	.5	5.0	2.5	14.0	4.0	17.5	9.0	19.5	8.5	18.5	7.5
3	4.0	.5	5.5	.5	15.5	4.5	16.0	8.5	20.5	8.5	18.0	7.5
4	4.0	.5	10.5	.5	15.0	5.5	19.0	7.5	21.0	8.5	17.5	8.0
5	8.0	1.5	9.0	2.0	17.0	5.5	19.5	7.5	21.5	10.5	18.0	7.0
6	8.0	.0	7.5	2.5	17.5	6.5	15.5	8.0	21.5	11.0	18.0	7.5
7	7.5	1.5	3.0	1.0	9.5	7.0	20.5	7.5	21.5	11.5	18.0	2.0
8	9.0	1.5	5.0	.5	7.5	5.5	19.5	7.5	21.0	11.5	18.0	8.0
9	8.5	1.5	6.0	1.5	12.0	4.5	20.5	7.0	19.5	11.0	18.0	8.5
10	4.5	1.5	7.5	1.0	17.0	4.0	20.5	7.5	21.0	11.0	18.0	10.5
11	4.5	.0	8.0	1.0	18.0	5.5	21.0	7.5	19.5	9.5	17.5	9.0
12	7.0	.5	11.0	.0	19.0	6.5	21.5	8.0	19.5	10.0	16.5	7.0
13	8.5	.0	12.5	1.5	19.0	7.0	21.5	8.5	17.0	11.5	13.5	6.5
14	10.5	1.5	11.5	2.5	17.0	7.5	20.5	8.5	14.0	9.5	15.5	7.0
15	11.0	1.5	11.5	3.0	17.0	7.5	20.5	9.5	14.5	9.5	15.5	5.5
16	10.0	2.0	11.0	3.0	18.0	5.5	22.0	10.5	16.5	10.5	15.5	6.5
17	9.5	3.0	10.5	4.5	17.0	6.0	19.5	10.0	15.0	8.5	16.0	6.5
18	8.5	2.5	11.0	4.5	10.5	7.0	19.5	9.0	14.5	8.5	16.0	7.5
19	8.5	2.5	8.5	4.5	10.5	6.0	21.0	8.0	15.0	8.0	15.5	7.0
20	10.0	1.0	9.0	7.0	18.0	5.0	21.0	9.0	16.0	9.0	13.5	7.5
21	11.0	2.0	9.5	6.0	19.0	6.0	21.5	10.0	16.0	7.5	14.0	7.5
22	10.0	2.5	10.5	5.5	19.5	6.5	21.0	10.5	17.5	7.0	15.0	7.0
23	10.5	2.5	11.5	5.5	19.0	7.0	21.0	10.5	18.0	8.0	15.0	7.0
24	8.5	4.0	11.0	5.5	19.0	7.0	20.5	10.5	18.0	8.0	15.0	7.5
25	8.0	2.0	9.0	6.5	20.5	7.0	21.5	9.5	15.0	8.0	15.0	7.5
26	9.5	.5	12.0	5.5	19.5	8.0	19.5	10.0	15.0	8.0	13.5	8.0
27	10.0	1.0	12.0	5.5	20.5	8.0	21.0	11.0	18.5	8.0	14.0	8.0
28	8.0	2.0	12.0	6.5	21.0	7.5	21.5	10.5	19.0	9.0	15.0	7.0
29	9.0	1.0	11.0	6.5	21.5	8.0	21.0	10.5	18.5	8.0	14.5	7.0
30	9.0	1.5	9.5	5.5	19.0	9.5	19.5	8.5	15.0	8.5	14.5	6.5
31	---	---	11.0	5.0	---	---	20.5	8.5	18.5	8.5	---	---

09092850 EAST MIDDLE FORK PARACHUTE CREEK NEAR RIO BLANCO, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

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)
OCTOBER				NOVEMBER			DECEMBER		
1	.90			.86			.38		
2	1.0			.78			.38		
3	1.1			.67			.38		
4	1.2			.62			.36		
5	1.0			.62			.38		
6	.90			.72			.38		
7	.90			.68			.38		
8	.90			.72			.38		
9	1.0			.78			.38		
10	.95			.76			.38		
11	.90			.64			.38		
12	.90			.54			.38		
13	.95			.47			.38		
14	.95			.50			.38		
15	1.0			.53			.38		
16	1.0			.58			.38		
17	1.0			.60			.38		
18	.95			.67			.38		
19	.90			.62			.38		
20	.85			.67			.38		
21	.80			.53			.38		
22	.80			.53			.38		
23	.85			.50			.38		
24	.85			.48			.38		
25	.80			.40			.38		
26	.80			.30			.37		
27	.90			.30			.36		
28	.95			.35			.35		
29	.80			.37			.34		
30	.75			.38			.33		
31	.80			---			.33		
TOTAL	28.35			17.17			11.58		

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)
JANUARY				FEBRUARY			MARCH		
1	.34			.38			.36		
2	.36			.38			.34		
3	.36			.39			.34		
4	.32			.40			.34		
5	.30			.40			.36		
6	.28			.42			.38		
7	.28			.42			.40		
8	.26			.42			.44		
9	.22			.42			.42		
10	.26			.42			.40		
11	.28			.42			.36		
12	.32			.42			.34		
13	.34			.42			.38		
14	.36			.42			.38		
15	.36			.42			.38		
16	.36			.42			.38		
17	.36			.42			.38		
18	.36			.42			.38		
19	.36			.42			.36		
20	.36			.42			.34		
21	.36			.42			.36		
22	.36			.44			.38		
23	.38			.42			.44		
24	.38			.40			.44		
25	.38			.38			.38		
26	.38			.38			.38		
27	.38			.36			.36		
28	.38			.36			.34		
29	.38			---			.34		
30	.38			---			.36		
31	.38			---			.44		
TOTAL	10.58			11.41			11.68		

PARACHUTE CREEK BASIN

09092850 EAST MIDDLE FORK PARACHUTE CREEK NEAR RIO BLANCO, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1976 TO SEPTEMBER 1977

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	.58	---	.02	1.9	---	.04	.28	---	.03
2	.72	---	.02	1.6	10	.04	.28	---	.03
3	1.0	---	.03	1.5	---	.04	.29	---	.03
4	1.2	---	.03	1.5	---	.04	.32	---	.03
5	1.5	---	.03	1.5	---	.04	.33	---	.03
6	2.0	---	.03	1.6	---	.04	.38	---	.03
7	2.0	---	.03	1.6	---	.04	.41	---	.03
8	2.0	---	.03	1.5	---	.03	.44	---	.03
9	2.0	---	.03	1.6	---	.03	.50	---	.03
10	2.0	---	.04	1.6	---	.03	.54	---	.03
11	2.0	---	.04	1.6	---	.03	.58	---	.03
12	2.3	7	.04	1.5	---	.03	.64	---	.03
13	1.9	---	.04	1.4	---	.02	.68	---	.04
14	2.7	---	.04	1.5	---	.02	.70	---	.04
15	2.0	---	.04	1.8	---	.02	.68	---	.04
16	2.0	---	.04	1.5	---	.02	.68	---	.04
17	2.0	---	.04	1.4	5	.02	.66	---	.04
18	2.2	---	.04	.78	---	.02	.63	---	.04
19	2.3	---	.04	.62	---	.02	.61	---	.04
20	2.4	---	.04	.53	---	.02	.57	---	.04
21	2.5	---	.04	.45	---	.02	.53	25	.04
22	2.8	---	.06	.39	---	.02	.45	---	.04
23	3.2	---	.10	.37	---	.02	.45	---	.04
24	6.0	---	.80	.35	---	.02	.45	---	.04
25	10	---	22	.33	---	.03	.45	---	.04
26	6.0	---	.80	.32	---	.03	.45	---	.03
27	3.0	---	.10	.32	---	.03	.42	---	.03
28	2.6	---	.05	.31	---	.03	.39	---	.03
29	2.4	---	.04	.30	---	.03	.36	32	.03
30	2.2	---	.04	.28	---	.03	.33	34	.03
31	---	---	---	.27	---	.03	---	---	---
TOTAL	77.50	---	24.72	32.22	---	0.88	14.48	---	1.03
JULY			AUGUST			SEPTEMBER			
1	.36	32	.03	.28	---	.02	.33	---	.04
2	.36	31	.03	.28	---	.02	.33	42	.04
3	.45	36	.04	.28	---	.02	.33	---	.04
4	.36	50	.05	.28	---	.02	.33	---	.04
5	.36	41	.04	.28	---	.02	.30	---	.04
6	.36	29	.03	.28	---	.02	.27	---	.03
7	.36	32	.03	.28	---	.02	.27	---	.03
8	.36	32	.03	.28	---	.02	.27	---	.03
9	.36	44	.04	.28	---	.02	.27	---	.03
10	.36	38	.04	.28	---	.03	.27	---	.03
11	.36	30	.03	.28	---	.03	.36	---	.03
12	.36	36	.03	.28	---	.03	.45	---	.03
13	.36	42	.04	.28	---	.03	.36	---	.02
14	.36	26	.03	.28	---	.03	.30	---	.02
15	.36	---	.03	.28	---	.03	.36	---	.02
16	.31	15	.01	.28	---	.03	.33	---	.02
17	.31	32	.03	.28	46	.03	.30	---	.02
18	.31	30	.03	.27	66	.05	.27	---	.02
19	.31	13	.01	.57	---	.05	.27	---	.02
20	.31	29	.02	.78	---	.05	.27	---	.01
21	.31	26	.02	.67	---	.05	.24	---	.01
22	.31	50	.04	.62	---	.05	.24	---	.01
23	.31	38	.03	.53	---	.05	.36	---	.01
24	.31	---	.03	.49	---	.05	.33	---	.01
25	.31	38	.03	.78	---	.05	.30	---	.01
26	.29	15	.01	.53	---	.04	.27	---	.01
27	.28	---	.01	.78	---	.04	.24	---	.00
28	.28	---	.01	.57	---	.04	.22	---	.00
29	.28	---	.01	.49	---	.04	.22	---	.00
30	.28	---	.01	.42	---	.04	.20	---	.00
31	.28	---	.02	.36	---	.04	---	---	---
TOTAL	10.28	---	0.84	12.62	---	1.06	8.86	---	0.62
YEAR	246.73	---	29.15						

PARACHUTE CREEK BASIN

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09092850 EAST MIDDLE FORK PARACHUTE CREEK NEAR RIO BLANCO, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

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)
OCTOBER			NOVEMBER			DECEMBER			
1	.82	21	.05	.99	---	.08	.66	---	.02
2	.90	31	.08	.99	---	.08	.61	---	.02
3	.90	36	.09	.98	---	.08	.56	---	.02
4	.90	42	.10	.97	---	.08	.66	---	.02
5	.90	35	.09	.96	---	.06	.66	---	.02
6	.90	35	.09	.95	---	.06	.66	---	.03
7	.90	40	.10	.94	---	.06	.51	22	.03
8	.90	42	.10	.93	---	.06	.28	---	.01
9	.82	38	.08	.92	---	.05	.40	---	.01
10	.82	39	.09	.90	---	.05	.46	---	.01
11	.82	40	.09	1.1	---	.06	.46	---	.01
12	.82	41	.09	1.2	---	.06	.51	---	.01
13	.82	34	.08	.99	---	.04	.51	---	.01
14	.82	36	.08	.99	---	.04	.56	---	.02
15	.82	43	.10	.90	---	.04	.56	---	.02
16	.82	38	.08	.77	---	.03	.51	---	.01
17	.77	37	.08	.77	---	.02	.56	---	.02
18	.82	42	.09	.61	---	.02	.56	---	.02
19	.82	40	.09	.66	---	.01	.61	---	.02
20	.82	38	.08	.72	2	.00	.72	---	.02
21	.82	38	.08	.72	---	.01	.72	---	.02
22	.82	38	.08	.72	---	.02	.72	---	.02
23	.90	40	.10	.72	---	.02	.72	---	.02
24	.90	43	.10	.66	---	.02	.72	---	.02
25	.90	41	.10	.72	---	.02	.66	---	.02
26	.90	---	.10	.72	---	.02	.61	---	.02
27	.90	---	.10	.70	---	.02	.56	---	.02
28	.90	---	.08	.68	---	.02	.56	---	.02
29	.99	---	.09	.66	---	.02	.56	---	.02
30	.99	---	.09	.66	---	.02	.56	---	.02
31	.99	---	.09	---	---	---	.42	---	.01
TOTAL	26.92	---	2.74	25.20	---	1.17	17.83	---	0.56

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)
JANUARY			FEBRUARY			MARCH			
1	.28	---	.01	.56	---	.02	.66	---	.02
2	.28	---	.01	.56	---	.02	.66	---	.02
3	.46	---	.01	.51	---	.01	.82	---	.03
4	.61	---	.02	.51	---	.01	1.1	---	.06
5	.61	---	.02	.52	---	.01	.99	---	.07
6	.61	---	.02	.52	---	.01	.99	---	.08
7	.51	---	.01	.53	---	.01	1.1	---	.10
8	.40	---	.01	.53	---	.01	1.2	---	.20
9	.51	---	.01	.54	---	.01	1.4	---	.20
10	.56	---	.02	.55	---	.01	1.5	---	.20
11	.56	---	.02	.55	---	.01	2.5	---	.50
12	.56	---	.02	.56	---	.02	3.4	---	.80
13	.56	---	.02	.56	---	.02	3.4	---	.80
14	.56	---	.02	.57	---	.02	2.3	---	.40
15	.61	---	.02	.58	---	.02	2.7	---	.60
16	.61	---	.02	.58	---	.02	2.8	---	.60
17	.61	---	.02	.59	---	.02	2.8	---	.60
18	.56	---	.02	.59	---	.02	2.8	---	.60
19	.56	---	.02	.60	---	.02	2.7	---	.60
20	.55	---	.01	.61	---	.02	2.8	---	.60
21	.54	---	.01	.61	---	.02	2.6	---	.50
22	.53	---	.01	.62	---	.02	2.5	---	.50
23	.51	---	.01	.62	---	.02	1.7	---	.30
24	.46	---	.01	.63	---	.02	2.0	---	.40
25	.51	---	.01	.64	---	.02	2.3	---	.40
26	.51	---	.01	.64	---	.02	2.4	---	.50
27	.28	---	.00	.65	---	.02	1.7	---	.30
28	.28	---	.00	.65	---	.02	2.0	---	.40
29	.26	---	.00	---	---	---	1.8	---	.30
30	.28	---	.00	---	---	---	2.0	---	.40
31	.40	---	.01	---	---	---	2.0	---	.40
TOTAL	15.13	---	0.40	16.18	---	0.47	61.62	---	11.48

PARACHUTE CREEK BASIN

09092850 EAST MIDDLE FORK PARACHUTE CREEK NEAR RIO BLANCO, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
APRIL			MAY			JUNE			
1	2.2	---	.40	50	---	70	32	60	5.2
2	2.3	---	.40	56	---	110	28	60	4.5
3	2.6	---	.50	59	---	130	26	84	5.9
4	2.4	---	.50	41	---	40	24	80	5.2
5	3.6	---	.80	40	---	37	23	83	5.2
6	5.9	---	.80	53	---	90	22	110	6.5
7	8.3	---	1.5	96	---	590	21	88	5.0
8	9.4	---	1.9	96	---	590	21	46	2.6
9	11	---	2.6	90	---	460	18	77	3.7
10	11	---	2.6	81	---	350	16	50	2.2
11	10	---	2.2	74	---	260	15	46	1.9
12	9.4	---	1.9	72	---	240	14	64	2.4
13	9.1	---	1.8	66	---	180	14	170	6.4
14	10	---	2.2	87	---	430	14	42	1.6
15	13	---	3.7	110	---	900	14	36	1.4
16	19	---	7.0	131	5360	1980	12	46	1.5
17	29	---	18	150	4810	1970	12	58	1.9
18	32	---	22	149	---	1800	11	21	.62
19	33	---	23	149	---	1800	10	9	.24
20	28	---	17	129	---	1200	10	13	.35
21	30	---	20	128	1740	612	9.7	12	.31
22	32	---	22	120	907	294	8.7	18	.42
23	34	---	25	112	764	228	8.4	16	.36
24	36	---	28	114	693	214	7.7	14	.29
25	39	255	28	97	481	126	7.7	13	.27
26	40	325	36	86	---	110	7.4	10	.20
27	40	---	37	79	---	110	7.0	14	.26
28	42	---	41	63	---	71	7.0	22	.42
29	41	---	40	53	---	43	6.2	23	.38
30	43	---	44	46	---	27	6.0	15	.24
31	---	---	---	36	---	12	---	---	---
TOTAL	628.2	---	431.80	2713	---	15074	432.8	---	67.46
JULY			AUGUST			SEPTEMBER			
1	6.0	7	.11	6.0	15	.24	1.8	60	.29
2	6.2	3	.05	5.0	17	.23	1.8	60	.29
3	6.0	30	.49	5.0	18	.24	1.7	60	.28
4	6.0	46	.74	4.0	21	.23	1.7	60	.28
5	6.2	36	.60	4.0	22	.24	1.6	75	.32
6	6.0	30	.49	3.5	24	.23	1.6	75	.32
7	6.2	50	.84	3.5	27	.26	1.5	75	.30
8	6.2	6	.10	3.3	---	.28	1.5	90	.36
9	5.7	25	.38	3.3	---	.30	1.4	72	.27
10	5.0	---	.27	3.1	---	.42	1.3	90	.32
11	5.0	---	.27	3.1	---	.45	1.6	57	.25
12	5.0	30	.40	3.1	---	.47	1.6	129	.56
13	5.0	33	.45	2.9	69	.54	1.6	159	.69
14	4.7	31	.39	2.6	54	.38	1.5	159	.64
15	4.7	35	.44	2.4	42	.27	1.5	156	.63
16	4.4	34	.40	2.4	69	.45	1.5	141	.57
17	4.7	19	.24	2.3	60	.37	1.5	129	.52
18	5.0	18	.24	2.3	57	.35	1.5	99	.40
19	5.2	20	.28	2.2	66	.39	1.5	96	.39
20	5.0	23	.31	2.2	60	.36	1.4	87	.33
21	4.7	18	.23	2.2	72	.43	1.4	108	.41
22	5.0	20	.27	2.2	66	.39	1.4	---	.39
23	5.2	16	.22	2.2	48	.28	1.4	123	.46
24	5.2	16	.22	2.1	30	.17	1.4	114	.43
25	5.2	21	.30	2.1	39	.22	1.4	111	.42
26	5.2	20	.28	2.1	42	.24	1.3	90	.32
27	5.2	13	.18	2.1	120	.68	1.3	---	.25
28	6.0	6	.10	2.0	45	.24	1.3	---	.21
29	6.4	18	.31	2.0	45	.24	1.3	39	.14
30	6.4	24	.42	1.9	60	.31	1.3	66	.18
31	6.0	23	.37	1.9	60	.31	---	---	---
TOTAL	168.7	---	10.39	89.0	---	10.21	44.6	---	11.22
YEAR	4239.18		15621.90						

PARACHUTE CREEK BASIN

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09092960 EAST FORK PARACHUTE CREEK NEAR ANVIL POINTS, CO

LOCATION---Lat 39°33'18", long 107°58'56", in SW¼NE¼ sec.3, T.6 S., R.95 W., Garfield County, Hydrologic Unit 14010006, on right bank 700 ft (213 m) downstream from first Anvil Creek and 4.2 mi (6.8 km) northwest of Anvil Points.

DRAINAGE AREA---14.5 mi² (37.6 km²).

WATER-DISCHARGE RECORDS

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

GAGE---Water-stage recorder. Altitude of gage is 7,860 ft (2,396 m), from topographic map.

REMARKS---Records good except those for winter period and those for period of no gage-height record, which are fair. No diversions or regulation.

EXTREMES FOR PERIOD OF RECORD---Maximum discharge, 226 ft³/s (6.40 m³/s) May 22, 1979, gage height, 3.60 ft (1.097 m); minimum daily, 0.07 ft³/s (0.002 m³/s) Aug. 9-11, 1977.

EXTREMES FOR CURRENT YEAR---Maximum discharge, 226 ft³/s (6.40 m³/s) at 0800 May 22, gage height, 3.60 ft (1.097 m); minimum daily, 0.39 ft³/s (0.011 m³/s) Jan. 31.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.5	.68	.78	.58	.42	.74	2.2	86	37	4.4	2.3	1.6
2	1.5	.68	.76	.51	.49	.73	2.2	93	32	4.6	2.3	1.4
3	1.4	.68	.69	.52	.56	.69	2.4	96	27	4.6	2.2	1.3
4	1.4	.68	.59	.55	.58	.66	2.6	89	23	4.3	2.1	1.2
5	1.3	.67	.58	.58	.56	.68	3.1	89	20	4.2	2.1	1.2
6	1.2	.67	.64	.61	.52	.72	3.7	104	15	4.2	2.1	1.2
7	1.2	.68	.54	.58	.51	.75	4.4	118	13	4.6	2.1	1.1
8	1.2	.68	.49	.53	.52	.82	5.3	110	13	4.3	1.9	1.1
9	1.1	.68	.46	.49	.54	.91	6.3	100	12	4.2	2.5	1.1
10	.99	.72	.45	.52	.56	.90	6.9	92	11	4.0	2.4	1.1
11	.91	.82	.46	.58	.60	.85	6.4	84	9.2	4.0	2.1	1.0
12	.91	1.5	.49	.63	.66	.86	5.9	83	8.2	4.2	2.1	1.0
13	.90	.90	.52	.64	.70	.90	6.6	88	7.3	4.3	2.1	1.0
14	.88	.78	.55	.58	.73	.95	9.6	97	6.8	4.1	2.3	1.0
15	.86	.72	.60	.55	.76	1.1	22	124	6.5	4.3	2.3	1.0
16	.83	.70	.60	.57	.76	1.0	35	170	6.3	4.0	3.0	1.0
17	.81	.70	.59	.62	.73	.98	43	156	5.8	3.8	2.7	1.0
18	.77	.68	.60	.68	.68	.93	50	165	5.6	3.8	2.5	1.0
19	.76	.66	.65	.74	.66	.94	45	170	6.1	3.7	2.9	1.0
20	.72	.65	.68	.72	.63	1.0	36	180	5.7	3.7	2.5	1.0
21	.71	.66	.66	.68	.67	.97	35	174	5.3	3.6	2.4	1.0
22	.69	.67	.60	.66	.76	.96	40	171	4.9	3.5	2.4	1.0
23	.68	.68	.58	.65	.76	1.0	50	143	4.6	3.3	2.0	1.0
24	.68	.70	.60	.62	.70	1.2	57	130	4.6	3.1	1.9	1.0
25	.67	.70	.58	.66	.66	1.3	55	115	4.7	3.3	1.7	.91
26	.67	.68	.53	.64	.68	1.4	53	105	4.3	3.1	1.7	.95
27	.67	.66	.51	.56	.71	1.5	55	95	4.3	2.9	1.7	1.1
28	.67	.66	.54	.50	.74	1.9	59	84	4.0	2.6	1.6	1.1
29	.67	.69	.58	.50	---	2.2	66	74	4.0	2.3	1.4	1.0
30	.68	.72	.63	.45	---	2.3	75	52	4.1	2.5	1.7	1.0
31	.69	---	.61	.39	---	2.3	---	42	---	2.5	1.8	---
TOTAL	28.62	21.75	18.14	18.09	17.85	34.14	843.6	3479	315.3	116.0	66.8	32.36
MEAN	.92	.73	.59	.58	.64	1.10	28.1	112	10.5	3.74	2.15	1.08
MAX	1.5	1.5	.78	.74	.76	2.3	75	180	37	4.6	3.0	1.6
MIN	.67	.65	.45	.39	.42	.66	2.2	42	4.0	2.3	1.4	.91
AC-FT	57	43	36	36	35	68	1670	6900	625	230	132	64

CAL YR 1978 TOTAL 2530.88 MEAN 6.93 MAX 119 MIN .17 AC-FT 5020
WTR YR 1979 TOTAL 4991.65 MEAN 13.7 MAX 180 MIN .39 AC-FT 9900

NOTE---NO GAGE-HEIGHT RECORD DEC. 9 TO FEB. 25.

PARACHUTE CREEK BASIN

09092960 EAST FORK PARACHUTE CREEK NEAR ANVIL POINTS, CO--Continued

WATER-QUALITY RECORDS

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	HARD- NESS (MG/L AS CaCO3)	HARD- NESS, NONCAR- BONATE (MG/L CaCO3)	CALCIUM, DIS- SOLVED (MG/L AS Ca)	MAGNE- SIUM, DIS- SOLVED (MG/L AS Mg)
OCT 10...	1400	1.1	550	7.9	7.0	9.6	250	0	62	23
MAY 22...	1115	159	388	7.4	5.0	9.5	180	0	47	15
JUN 14...	1145	6.6	480	8.3	11.0	--	210	0	52	19
JUL 12...	1345	4.4	488	8.2	20.0	7.6	220	0	50	22
AUG 16...	1100	2.6	480	7.8	13.0	7.2	230	0	57	22

DATE	SODIUM, DIS- SOLVED (MG/L AS Na)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	ALKA- LITY (MG/L AS CaCO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS Cl)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)
OCT 10...	23	.6	.6	320	0	260	27	1.1	.2	14
MAY 22...	15	.5	.9	220	0	180	14	1.5	.2	15
JUN 14...	12	.4	.6	260	--	210	22	1.4	.3	14
JUL 12...	22	.7	.9	290	0	240	23	1.5	.2	16
AUG 16...	22	.6	.9	300	0	250	28	1.4	.2	16

DATE	SOLIDS, SUM OF CONSTITU- ENTS, DIS- SOLVED (MG/L)	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)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BORON, DIS- SOLVED (UG/L AS B)	CAUMIUM DIS- SOLVED (UG/L AS CD)	COPPER, DIS- SOLVED (UG/L AS CU)
OCT 10...	310	.92	.11	.03	4	0	50	1	1
MAY 22...	225	96.6	1.6	.06	3	0	30	4	0
JUN 14...	255	4.54	1.1	.01	3	100	30	1	0
JUL 12...	280	3.33	.24	.01	3	80	40	5	0
AUG 16...	297	2.09	.22	.03	3	90	50	<1	4

DATE	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)	MERCURY DIS- SOLVED (UG/L AS HG)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	ZINC, DIS- SOLVED (UG/L AS ZN)	CARBON, ORGANIC TOTAL (MG/L AS C)
OCT 10...	20	3	10	0	.0	0	670	10	--
MAY 22...	30	39	3	0	.0	1	440	10	--
JUN 14...	10	0	0	0	.0	1	500	0	--
JUL 12...	<0	21	<4	<1	.0	0	660	<3	--
AUG 16...	10	4	<4	1	.0	1	680	<3	3.3

PARACHUTE CREEK BASIN

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09092970 EAST FORK PARACHUTE CREEK NEAR RULISON, CO

LOCATION.--Lat 39°34'03", long 108°01'14", in SE¼NW¼ sec.35, T.5 S., R.95 W., Garfield County, Hydrologic Unit 14010006, on right bank 0.3 mi (0.8 km) below East Fork Falls and 6.4 mi (10.3 km) northwest of Rulison.

DRAINAGE AREA.--20.4 mi² (52.8 km²).

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Altitude of gage is 6,880 ft (2,100 m), from topographic map.

REMARKS.--Records poor. No regulation or diversion above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 121 ft³/s (3.42 m³/s) May 17, gage height, 3.49 ft (1.064 m); no flow many days.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, not determined; minimum daily, 0.26 ft³/s (0.007 m³/s) Jan. 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.74	.34	.32	.40	.29	.30	3.5	56	42	8.0	2.2	1.8
2	.82	.34	.32	.43	.30	.30	3.2	55	36	7.9	2.0	1.7
3	.91	.34	.29	.43	.30	.29	3.0	54	33	7.7	1.9	1.6
4	.99	.34	.31	.40	.28	.28	3.5	51	31	7.5	1.8	1.6
5	.99	.32	.32	.45	.28	.30	4.0	42	29	7.2	1.8	1.6
6	.99	.32	.32	.50	.30	.32	4.5	52	27	7.2	1.7	1.5
7	.91	.32	.32	.53	.30	.34	5.5	71	25	7.2	1.7	1.5
8	.82	.32	.32	.40	.29	.40	6.5	66	24	6.6	1.7	1.4
9	.74	.32	.32	.38	.28	.44	9.2	59	20	6.0	1.8	1.5
10	.63	.33	.35	.43	.30	.40	11	52	18	5.6	1.9	1.5
11	.55	.34	.35	.43	.31	.40	11	40	16	5.6	2.0	1.4
12	.50	.52	.35	.43	.31	.45	13	35	14	5.3	1.9	1.4
13	.45	.45	.35	.42	.30	.48	9.2	41	13	5.1	1.8	1.3
14	.42	.37	.35	.40	.28	.50	4.8	50	12	5.0	1.8	1.3
15	.40	.35	.35	.40	.28	.58	9.0	73	13	4.7	1.9	1.3
16	.39	.33	.37	.40	.28	.55	18	107	14	4.7	1.9	1.3
17	.38	.32	.39	.40	.28	.52	24	143	13	4.7	2.0	1.2
18	.37	.33	.43	.43	.28	.48	32	168	13	4.7	2.1	1.2
19	.37	.35	.46	.43	.28	.45	42	190	12	4.7	2.0	1.2
20	.37	.36	.42	.40	.28	.47	30	212	12	4.5	1.8	1.2
21	.37	.36	.37	.28	.29	.50	22	220	11	4.2	2.0	1.1
22	.37	.36	.37	.31	.29	.65	28	202	10	4.0	1.9	1.1
23	.37	.36	.40	.26	.29	.85	37	198	10	4.0	1.8	1.1
24	.37	.36	.41	.30	.28	1.1	37	172	9.2	3.9	1.7	1.0
25	.37	.35	.39	.31	.29	1.4	37	160	9.0	3.8	1.6	.96
26	.36	.32	.42	.32	.30	1.8	35	142	9.3	3.5	1.5	.93
27	.34	.32	.45	.30	.30	2.2	34	118	9.8	3.3	1.5	.93
28	.34	.30	.48	.29	.29	2.3	36	100	8.6	3.1	1.4	.99
29	.34	.32	.45	.29	---	2.3	42	82	8.0	2.8	1.5	1.0
30	.34	.32	.45	.29	---	3.1	49	65	8.0	2.6	1.6	1.0
31	.34	---	.40	.29	---	3.8	---	52	---	2.4	1.7	---
TOTAL	16.65	10.38	11.60	11.73	8.13	28.25	603.9	3128	509.9	157.5	55.9	38.61
MEAN	.54	.35	.37	.38	.29	.91	20.1	101	17.0	5.08	1.80	1.29
MAX	.99	.52	.48	.53	.31	3.8	49	220	42	8.0	2.2	1.8
MIN	.34	.30	.29	.26	.28	.28	3.0	35	8.0	2.4	1.4	.93
AC-FT	33	21	23	23	16	56	1200	6200	1010	312	111	77

CAL YR 1978 TOTAL 2694.81 MEAN 7.38 MAX 107 MIN .00 AC-FT 5350
WTR YR 1979 TOTAL 4580.55 MEAN 12.5 MAX 220 MIN .26 AC-FT 9090

NOTE.--NO GAGE-HEIGHT RECORD OCT. 12 TO DEC. 12, JAN. 27 TO APR. 9, MAY 19 TO SEPT. 30.

09092970 EAST FORK PARACHUTE CREEK NEAR RULISON, CO--Continued

WATER-QUALITY RECORDS

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

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1976 to current year.

WATER TEMPERATURE: October 1976 to current year.

INSTRUMENTATION.--Water-quality monitor since October 1976. Pumping sediment sampler since December 1976.

REMARKS.--Water-quality monitor inoperative entire year.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 580 micromhos May 3, 1977; minimum, 180 micromhos Aug. 25, 1977.

WATER TEMPERATURES: Maximum, 15.5°C July 16, 17, 1978; minimum, 0.0°C several days during year.

SEDIMENT CONCENTRATIONS: Maximum daily, 1,680 mg/L May 17, 1978; minimum daily, 6 mg/L Sept. 1, 1978.

SEDIMENT LOADS: Maximum daily, 485 tons (440 t) May 17, 1978; minimum daily, 0.01 ton (0.01 t) on many days during 1978 water year.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Not determined.

WATER TEMPERATURES: Not determined.

SEDIMENT CONCENTRATIONS: Maximum daily, 1,680 mg/L May 17; minimum daily, 6 mg/L Sept. 1.

SEDIMENT LOADS: Maximum daily, 485 tons (440 t) May 17; minimum daily, 0.01 ton (0.01 t) on many days during period.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS M3)
OCT										
11...	1245	.58	520	7.8	4.5	9.8	240	0	57	23
NOV										
08...	1100	.34	675	7.6	.0	10.2	250	0	57	25
MAY										
05...	1215	37	410	8.4	6.0	--	180	0	43	17
JUN										
21...	1030	12	470	8.0	8.0	9.4	230	0	55	22
AUG										
20...	1115	2.2	440	7.9	10.0	8.8	230	0	54	22

DATE	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	ALKA- LINITY (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)
OCT									
11...	25	.7	.8	300	0	250	29	1.7	.2
NOV									
08...	27	.8	.8	320	0	260	30	1.7	.2
MAY									
05...	22	.7	.6	230	--	190	20	1.8	.2
JUN									
21...	20	.6	.6	280	0	230	26	1.6	.2
AUG									
20...	25	.7	.8	290	0	240	31	1.4	.2

DATE	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTITU- ENTS, DIS- SOLVED (MG/L)	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)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BORON, DIS- SOLVED (UG/L AS B)	CADMIUM DIS- SOLVED (UG/L AS CD)
OCT									
11...	14	300	.47	.02	.02	4	0	80	2
NOV									
08...	14	315	.29	.04	.02	4	80	80	5
MAY									
05...	17	244	24.4	1.9	.03	4	70	0	1
JUN									
21...	14	282	9.14	.81	.05	3	0	90	1
AUG									
20...	16	295	1.75	.14	.05	4	80	50	10

PARACHUTE CREEK BASIN

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09092970 EAST FORK PARACHUTE CREEK NEAR RULISON, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	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)	MERCURY DIS- SOLVED (UG/L AS HG)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	ZINC, DIS- SOLVED (UG/L AS ZN)
OCT 11...	1	30	2	0	0	.0	0	680	10
NOV 08...	2	10	35	5	1	.0	1	690	5
MAY 05...	0	10	10	4	1	.0	1	610	20
JUN 21...	0	0	1	0	0	.0	1	420	10
AUG 20...	4	<10	4	<4	<1	.0	0	720	<3

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---							---	---	---	
2	---	---							---	---	---	
3	---	---							---	---	---	
4	---	---							---	---	---	
5	---	---							---	---	---	
6	---	---							---	---	---	
7	---	---							---	---	---	
8	---	675							---	---	---	
9	---	---							---	---	---	
10	---	---							---	---	---	
11	---	---							---	---	---	
12	520	---							---	---	---	
13	---	---							---	---	---	
14	---	---							---	---	---	
15	---	---							---	---	---	
16	---	---							---	---	---	
17	---	---							---	---	---	
18	---	---							---	---	---	
19	---	---							---	---	---	
20	---	---							---	---	440	
21	---	---							470	---	---	
22	---	---							---	---	---	
23	---	---							---	---	---	
24	---	---							---	455	---	
25	---	---							---	---	---	
26	---	---							---	---	---	
27	---	---							---	---	---	
28	---	---							---	---	---	
29	---	---							---	---	---	
30	---	---							---	---	---	
31	---	---							---	---	---	

PARACHUTE CREEK BASIN

09092970 EAST FORK PARACHUTE CREEK NEAR RULISON, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---					---	---	---	---	
2	---	---	---					---	---	---	---	
3	---	---	---					---	---	---	---	
4	---	---	---					---	---	---	---	
5	---	---	---					---	---	---	---	
6	---	---	---					6.0	---	---	---	
7	---	---	---					---	---	---	---	
8	---	.0	---					---	---	---	---	
9	---	---	---					---	---	---	---	
10	---	---	---					---	---	---	---	
11	4.5	---	---					---	---	---	---	
12	---	---	---					---	---	---	---	
13	---	---	.0					---	---	---	---	
14	---	---	---					---	---	---	---	
15	---	---	---					---	---	---	---	
16	---	---	---					---	---	---	---	
17	---	---	---					---	---	---	---	
18	---	---	---					---	---	---	---	
19	---	---	---					---	---	---	---	
20	---	---	---					---	---	---	10.0	
21	---	---	---					---	8.0	---	---	
22	---	---	---					---	---	---	---	
23	---	---	---					---	---	---	---	
24	4.0	---	---					---	---	13.0	---	
25	---	---	---					---	---	---	---	
26	---	---	---					---	---	---	---	
27	---	---	---					---	---	---	---	
28	---	---	---					---	---	---	---	
29	---	---	---					---	---	---	---	
30	---	---	---					---	---	---	---	
31	---	---	---					---	---	---	---	

09092970 EAST FORK PARACHUTE CREEK NEAR RULISON, CO--Continued
 SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

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)
OCTOBER			NOVEMBER			DECEMBER			
1	.74			.34			.32		
2	.82			.34			.32		
3	.91			.34			.29		
4	.99			.34			.31		
5	.99			.32			.32		
6	.99			.32			.32		
7	.91			.32			.32		
8	.82			.32			.32		
9	.74			.32			.32		
10	.63			.33			.35		
11	.55			.34			.35		
12	.50			.52			.35		
13	.45			.45			.35		
14	.42			.37			.35		
15	.40			.35			.35		
16	.39			.33			.37		
17	.38			.32			.39		
18	.37			.33			.43		
19	.37			.35			.46		
20	.37			.36			.42		
21	.37			.36			.37		
22	.37			.36			.37		
23	.37			.36			.40		
24	.37			.36			.41		
25	.37			.35			.39		
26	.36			.32			.42		
27	.34			.32			.45		
28	.34			.30			.48		
29	.34			.32			.45		
30	.34			.32			.45		
31	.34			---			.40		
TOTAL	16.65			10.38			11.60		

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)
JANUARY			FEBRUARY			MARCH			
1	.40			.29			.30		
2	.43			.30			.30		
3	.43			.30			.29		
4	.40			.28			.28		
5	.45			.28			.30		
6	.50			.30			.32		
7	.53			.30			.34		
8	.40			.29			.40		
9	.38			.28			.44		
10	.43			.30			.40		
11	.43			.31			.40		
12	.43			.31			.45		
13	.42			.30			.48		
14	.40			.28			.50		
15	.40			.28			.58		
16	.40			.28			.55		
17	.40			.28			.52		
18	.43			.28			.48		
19	.43			.28			.45		
20	.40			.28			.47		
21	.28			.29			.50		
22	.31			.29			.65		
23	.26			.29			.85		
24	.30			.28			1.1		
25	.31			.29			1.4		
26	.32			.30			1.8		
27	.30			.30			2.2		
28	.29			.29			2.3		
29	.29			---			2.3		
30	.29			---			3.1		
31	.29			---			3.8		
TOTAL	11.73			8.13			28.25		

PARACHUTE CREEK BASIN

09092970 EAST FORK PARACHUTE CREEK NEAR RULISON, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TDNS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
APRIL				MAY			JUNE		
1	3.5			56			42		
2	3.2			55			36		
3	3.0			54			33		
4	3.5			51			31		
5	4.0			42			29		
6	4.5			52			27		
7	5.5			71			25		
8	6.5			66			24		
9	9.2			59			20		
10	11			52			18		
11	11			40			16		
12	13			35			14		
13	9.2			41			13		
14	4.8			50			12		
15	9.0			73			13		
16	18			107			14		
17	24			143			13		
18	32			168			13		
19	42			190			12		
20	30			212			12		
21	22			220			11		
22	26			202			10		
23	37			198			10		
24	37			172			9.2		
25	37			160			9.0		
26	35			142			9.3		
27	34			118			9.8		
28	36			100			8.6		
29	42			82			8.0		
30	49			65			8.0		
31	---			52			---		
TOTAL	603.9			3128			509.9		
DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
JULY				AUGUST			SEPTEMBER		
1	8.0			2.2			1.8		
2	7.9			2.0			1.7		
3	7.7			1.9			1.6		
4	7.5			1.8			1.6		
5	7.2			1.8			1.6		
6	7.2			1.7			1.5		
7	7.2			1.7			1.5		
8	6.6			1.7			1.4		
9	6.0			1.8			1.5		
10	5.6			1.9			1.5		
11	5.6			2.0			1.4		
12	5.3			1.9			1.4		
13	5.1			1.8			1.3		
14	5.0			1.8			1.3		
15	4.7			1.9			1.3		
16	4.7			1.9			1.3		
17	4.7			2.0			1.2		
18	4.7			2.1			1.2		
19	4.7			2.0			1.2		
20	4.5			1.8			1.2		
21	4.2			2.0			1.1		
22	4.0			1.9			1.1		
23	4.0			1.8			1.1		
24	3.9			1.7			1.0		
25	3.8			1.6			.96		
26	3.5			1.5			.93		
27	3.3			1.5			.93		
28	3.1			1.4			.99		
29	2.8			1.5			1.0		
30	2.6			1.6			1.0		
31	2.4			1.7			---		
TOTAL	157.5			55.9			38.61		
YEAR	4580.55		4580.55						

PARACHUTE CREEK BASIN

199

09092980 BEN GOOD CREEK NEAR RULISON, CO

LOCATION.--Lat 39°35'25", long 108°02'26", in NE¼NW¼ sec.27, T.5 S., R.95 W., Garfield County, Hydrologic Unit 14010006, on left bank 0.2 mi (0.3 km) upstream from East Fork Parachute Creek and 8.3 mi (13.4 km) northwest of Rulison.

DRAINAGE AREA.--4.04 mi² (10.46 km²).

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Altitude of gage is 6,520 ft (1,990 m), from topographic map.

REMARKS.--Records fair. No regulation or diversions above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 12 ft³/s (0.34 m³/s) May 16, 1979, gage height, 2.67 ft (0.820 m); no flow many days each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 12 ft³/s (0.34 m³/s) at 0200 May 16, gage height, 2.69 ft (0.820 m); no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.10	.09	.08	.03	.00	.00	.00	4.9	5.5	.87	.44	.30
2	.10	.09	.08	.03	.00	.00	.00	5.3	5.0	.81	.47	.30
3	.10	.09	.08	.03	.00	.00	.00	5.2	4.7	.81	.47	.29
4	.10	.10	.07	.03	.00	.00	.00	4.4	4.2	.81	.43	.27
5	.10	.10	.06	.02	.00	.00	.00	4.0	3.8	.80	.43	.27
6	.10	.10	.06	.02	.00	.00	.00	5.4	3.4	.80	.43	.27
7	.10	.10	.06	.02	.00	.00	.00	8.4	3.1	.80	.43	.27
8	.10	.10	.05	.02	.00	.00	.00	6.0	2.9	.80	.42	.29
9	.10	.10	.05	.02	.00	.00	.00	5.4	2.7	.78	.38	.27
10	.10	.10	.05	.02	.00	.00	.01	5.0	2.6	.76	.39	.27
11	.10	.11	.05	.02	.00	.00	.02	4.8	2.4	.74	.43	.27
12	.10	.13	.05	.02	.00	.00	.01	4.6	2.3	.72	.40	.27
13	.10	.11	.05	.02	.00	.00	.02	4.4	2.2	.66	.39	.27
14	.10	.11	.05	.02	.00	.00	.05	6.4	2.0	.62	.38	.26
15	.10	.11	.05	.02	.00	.00	.12	9.4	1.9	.58	.38	.23
16	.10	.10	.05	.02	.00	.00	.19	10	1.7	.62	.39	.23
17	.10	.10	.05	.02	.00	.00	.30	11	1.6	.61	.39	.23
18	.10	.10	.05	.02	.00	.00	2.1	11	1.5	.55	.39	.22
19	.10	.09	.04	.02	.00	.00	3.9	10	1.4	.52	.39	.22
20	.10	.09	.04	.01	.00	.00	2.7	10	1.3	.50	.39	.22
21	.10	.07	.04	.01	.00	.00	2.6	11	1.3	.49	.41	.23
22	.10	.08	.04	.00	.00	.00	3.2	11	1.2	.50	.37	.23
23	.10	.08	.04	.00	.00	.00	3.9	11	1.2	.52	.34	.23
24	.10	.08	.04	.00	.00	.00	4.6	11	1.1	.53	.33	.22
25	.10	.08	.04	.00	.00	.00	4.3	11	1.1	.49	.30	.22
26	.10	.08	.04	.00	.00	.00	4.0	10	1.0	.47	.30	.22
27	.10	.08	.04	.00	.00	.00	3.6	9.2	.88	.46	.34	.22
28	.10	.08	.04	.00	.00	.00	3.7	8.8	.83	.45	.33	.22
29	.09	.08	.04	.00	---	.00	4.1	8.0	.80	.46	.30	.22
30	.09	.08	.04	.00	---	.00	4.4	7.2	.84	.46	.33	.22
31	.09	---	.04	.00	---	.00	---	6.3	---	.46	.33	---
TOTAL	3.07	2.81	1.56	.44	.00	.00	47.82	240.1	66.45	19.46	11.90	7.45
MEAN	.099	.094	.050	.014	.000	.000	1.59	7.75	2.22	.63	.38	.25
MAX	.10	.13	.08	.03	.00	.00	4.6	11	5.5	.87	.47	.30
MIN	.09	.07	.04	.00	.00	.00	.00	4.0	.80	.46	.30	.22
AC-FT	6.1	5.6	3.1	.9	.00	.00	95	476	132	39	24	15

CAL YR 1978 TOTAL 143.18 MEAN .39 MAX 7.0 MIN .00 AC-FT 284
WTR YR 1979 TOTAL 401.06 MEAN 1.10 MAX 11 MIN .00 AC-FT 796

NOTE.--NO GAGE-HEIGHT RECORD DEC. 2 TO APR. 9, MAY 27 TO JULY 23, JULY 31 TO AUG. 20.

PARACHUTE CREEK BASIN

09092980 BEN GOOD CREEK NEAR RULISON, CO--Continued

WATER-QUALITY RECORDS

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW- INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
MAY 05...	1330	2.6	540	8.4	8.0	--	200	0	45	21
JUN 26...	1130	1.0	640	8.1	11.0	9.4	250	0	49	30
JUL 24...	1400	.52	620	8.1	16.5	9.4	240	0	48	29
AUG 20...	1400	.32	590	8.0	12.5	--	220	0	43	28

DATE	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	ALKA- LINITY (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)
MAY 05...	44	1.4	1.0	290	--	240	49	3.6	.3
JUN 26...	53	1.5	1.0	330	0	270	69	3.5	.5
JUL 24...	49	1.4	1.2	310	0	250	68	3.2	.5
AUG 20...	48	1.4	1.0	310	0	250	68	3.1	.5

DATE	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTITU- ENTS, DIS- SOLVED (MG/L)	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)	ARSENIC DIS- SOLVED (UG/L AS AS)	BARIUM, DIS- SOLVED (UG/L AS BA)	BORON, DIS- SOLVED (UG/L AS B)	CADMIUM DIS- SOLVED (UG/L AS CD)
MAY 05...	20	335	2.35	1.5	.02	3	90	50	7
JUN 26...	19	393	1.06	.86	.00	1	90	60	2
JUL 24...	19	375	.53	.61	.00	2	90	130	<1
AUG 20...	20	368	.32	.42	.04	2	90	100	4

DATE	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)	MERCURY DIS- SOLVED (UG/L AS HG)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	ZINC, DIS- SOLVED (UG/L AS ZN)
MAY 05...	0	0	130	10	<1	.1	1	1300	20
JUN 26...	1	0	9	20	<1	.0	1	1500	<3
JUL 24...	1	<0	0	20	<1	.0	1	1400	<3
AUG 20...	4	<10	4	20	<1	.0	1	1400	<3

PARACHUTE CREEK BASIN

201

09093000 PARACHUTE CREEK NEAR GRAND VALLEY, CO

LOCATION.--Lat 39°34'02", long 108°06'37", in SE¼SE¼ sec.35, T.5 S., R.96 W., Garfield County, Hydrologic Unit 14010006, on left bank 0.3 mi (0.5 km) upstream from Gardner Gulch, 0.6 mi (1.0 km) downstream from confluence of West and East Forks, and 8.5 mi (13.7 km) north of Grand Valley.

DRAINAGE AREA.--141 mi² (365 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1948 to September 1954, October 1964 to September 1970, April 1975 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 5,730 ft (1,747 m), from topographic map. Prior to Apr. 1, 1975, at sites 0.4 mi (0.6 km) downstream at different datums.

REMARKS.--Records good except those for winter periods which are fair. Diversions for irrigation of about 75 acres (304,000 m²) above station. One diversion from East Fork bypasses station for irrigation of about 100 acres (405,000 m²) below station.

AVERAGE DISCHARGE.--16 years (water years 1949-54, 1965-70, 1976-79), 20.1 ft³/s (0.569 m³/s), 14,560 acre-ft/yr (18.0 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,310 ft³/s (65.4 m³/s) Aug. 19, 1977, gage height, 6.11 ft (1.862 m), from highwater mark from rating curve extended above 150 ft³/s (4.2 m³/s), on basis of slope-area measurements at gage heights 4.25 ft (1.295 m) and 6.11 ft (1.862 m); no flow Dec. 2, 1948, many days 1964-67 and 1976-77.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 944 ft³/s (26.7 m³/s) at 1600 May 18, gage height, 4.69 ft (1.430 m), only peak above base of 150 ft³/s (4.2 m³/s); minimum daily, 0.18 ft³/s (0.005 m³/s) Jan. 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALJES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.1	.86	.89	.60	.60	.70	4.1	163	241	52	22	9.4
2	2.0	.86	.90	.35	.65	.70	4.0	192	223	52	21	9.3
3	2.1	.85	.70	1.0	.65	.70	4.2	201	204	51	21	9.3
4	2.3	.87	.68	1.3	.55	.55	4.8	180	193	51	20	9.2
5	2.2	.88	.91	1.3	.45	.65	5.5	193	180	50	19	9.0
6	2.2	.87	.92	1.2	.65	.80	6.6	240	168	49	18	8.7
7	2.3	.87	.80	.90	.70	1.0	8.1	324	162	49	17	8.5
8	2.2	.86	.60	.40	.70	1.6	10	297	159	46	17	8.2
9	1.9	.86	.55	.75	.55	1.9	12	242	148	45	17	8.1
10	1.7	.87	1.3	1.0	.60	1.5	13	211	135	44	16	8.6
11	1.6	1.1	1.2	1.0	.80	1.6	13	187	126	43	16	8.1
12	1.6	3.6	1.1	.90	.80	2.1	11	175	113	40	16	7.9
13	1.6	1.8	1.1	.50	.85	2.2	11	196	103	37	13	7.8
14	1.6	1.3	1.1	.33	.90	2.3	13	280	97	35	11	7.0
15	1.5	1.1	1.1	.60	.80	2.5	17	471	93	37	11	7.1
16	1.5	1.0	1.1	.65	.90	2.5	26	573	91	35	11	7.2
17	1.3	.88	1.2	.65	1.0	2.3	57	685	87	34	11	7.2
18	1.1	.85	1.7	.70	.80	2.2	99	847	83	32	10	6.9
19	1.1	.84	2.1	.72	.70	2.0	100	797	79	30	10	6.9
20	1.0	.83	1.4	.70	.95	2.1	84	744	76	28	10	6.9
21	.97	.80	.80	.45	.75	2.2	83	678	72	28	10	6.8
22	.95	.80	.80	.80	.70	2.1	89	645	67	28	9.7	6.4
23	.87	.80	1.0	.18	.60	2.0	99	602	64	29	9.1	6.3
24	.88	.86	1.2	.25	.50	2.2	114	547	60	29	8.9	6.0
25	.87	.99	1.1	.80	.60	2.5	125	509	57	27	8.9	5.9
26	.86	.96	.80	.90	.65	2.8	125	448	60	27	9.0	5.8
27	.84	.95	.40	.70	.70	2.7	122	398	65	26	9.1	6.1
28	.80	.75	1.3	.35	.65	3.7	130	356	54	25	9.0	6.0
29	.81	.91	1.3	.65	---	4.5	135	329	52	24	8.9	5.8
30	.83	.89	1.3	.55	---	4.3	140	298	52	24	9.4	5.6
31	.84	---	1.1	.30	---	4.2	---	266	---	23	9.5	---
TOTAL	44.42	30.66	32.85	21.48	19.75	65.10	1665.3	12275	3364	1132	408.5	222.0
MEAN	1.43	1.02	1.06	.69	.71	2.10	55.5	396	112	36.5	13.2	7.40
MAX	2.3	3.6	2.1	1.3	1.0	4.5	140	847	241	52	22	9.4
MIN	.80	.75	.55	.18	.45	.55	4.0	163	52	23	8.9	5.6
AC-FT	88	61	65	43	39	129	3300	24350	6670	2250	810	440

CAL YR 1978 TOTAL 8621.78 MEAN 23.6 MAX 291 MIN .28 AC-FT 17100
WTK YR 1979 TOTAL 19281.06 MEAN 52.8 MAX 847 MIN .18 AC-FT 38240

NOTE.--NO GAGE-HEIGHT RECORD DEC. 9 TO MAR. 22.

PARACHUTE CREEK BASIN

09093000 PARACHUTE CREEK NEAR GRAND VALLEY, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD--November 1974 to current year.

PERIOD OF DAILY RECORD--

SPECIFIC CONDUCTANCE: April 1975 to current year.

WATER TEMPERATURE: April 1975 to current year.

INSTRUMENTATION--Water-quality monitor since April 1975.

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

EXTREMES FOR PERIOD OF DAILY RECORD--

SPECIFIC CONDUCTANCE: Maximum, 1,560 micromhos Oct. 27, 1977; minimum, 239 micromhos May 16, 1975.

WATER TEMPERATURES: Maximum, 34.0°C July 30, 1977; minimum, 0.0°C Mar. 30, and many days during winter months.

EXTREMES FOR CURRENT YEAR--

SPECIFIC CONDUCTANCE: Maximum, 994 micromhos Jan. 10; minimum, 254 micromhos May 24.

WATER TEMPERATURES: Maximum, 16.0°C Aug. 6, 7; minimum, 0.0°C many days during November to March.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (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											
02...	1200	1.6	760	7.9	10.0	9.4	320	7	61	40	63
NOV											
05...	1130	.70	825	7.4	5.0	10.7	310	3	60	40	64
MAR											
23...	1045	2.1	770	7.8	6.5	10.9	320	25	59	42	68
APR											
16...	1200	23	675	7.7	9.5	9.7	270	0	50	34	57
MAY											
05...	1545	189	550	8.3	10.0	--	200	0	45	22	38
JUN											
27...	1215	60	800	7.8	12.0	9.0	300	11	60	36	60
JUL											
11...	1515	42	760	8.0	14.0	9.6	340	24	67	41	29
AUG											
17...	0945	12	775	7.6	10.0	8.6	320	16	62	40	64

DATE	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	ALKA- LINITY (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)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)
OCT											
02...	1.5	2.6	380	0	310	140	7.4	.7	17	521	.71
NOV											
05...	1.6	2.5	380	0	310	130	7.0	.7	19	511	.70
MAR											
23...	1.7	3.1	360	0	300	140	7.8	.7	16	514	.70
APR											
16...	1.5	2.0	330	0	270	110	4.7	.5	17	439	.60
MAY											
05...	1.2	1.8	270	--	220	61	3.6	.3	18	323	.44
JUN											
27...	1.5	2.6	350	0	290	140	6.4	.5	18	496	.67
JUL											
11...	.7	2.7	380	0	310	133	6.8	.5	10	477	.65
AUG											
17...	1.6	2.7	370	0	300	120	6.4	.6	20	498	.68

PARACHUTE CREEK BASIN

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09093000 PARACHUTE CREEK NEAR GRAND VALLEY, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SOLIDS, DIS- SOLVED (TONS PER DAY)	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)	NITRO- GEN, TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	BORON, DIS- SOLVED (UG/L AS B)	IRON, DIS- SOLVED (UG/L AS FE)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)
OCT 02...	2.28	1.0	.01	--	--	--	.01	130	20	--	4.1
NOV 05...	.97	1.1	.01	.49	.50	1.6	.00	150	30	--	2.9
MAR 23...	2,96	.90	.04	.33	.37	1.3	.00	160	10	5.3	3.6
APR 16...	27.3	1.0	.01	.51	.52	1.5	.07	90	0	15	6.0
MAY 05...	165	1.8	.01	.79	.80	2.6	.59	70	10	13	6.8
JUN 27...	80.5	2.0	.02	.42	.44	2.4	.62	50	20	--	6.8
JUL 11...	54.7	1.9	.02	.03	.05	2.0	.02	110	10	--	7.0
AUG 17...	16.1	1.8	.00	.17	.17	2.0	.02	110	10	--	9.6

DATE	TIME	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	ALUM- INUM, DIS- SOLVED (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)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)
OCT 02...	1200	40	0	4	4	0	0	0	0	1
APR 16...	1200	3100	0	4	3	100	80	0	<1	1

DATE	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)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	LEAD, DIS- SOLVED (UG/L AS PB)
OCT 02...	1	0	0	0	0	5	1	4	5
APR 16...	3	20	0	2	<3	11	0	66	32

DATE	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)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI)
OCT 02...	30	30	0	10	.0	.0	19	17	1
APR 16...	10	20	80	4	.0	.0	14	15	14

DATE	NICKEL, DIS- SOLVED (UG/L AS NI)	SELE- NIUM, TOTAL (UG/L AS SE)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	STRON- TIUM, TOTAL RECOV- ERABLE (UG/L AS SR)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, DIS- SOLVED (UG/L AS ZN)	CYANIDE TOTAL (MG/L AS CN)
OCT 02...	0	2	2	--	1300	5.2	10	10	.00
APR 16...	0	2	2	960	1200	7.1	40	<3	.00

PARACHUTE CREEK BASIN

09093000 PARACHUTE CREEK NEAR GRAND VALLEY, CO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	757	758	782	796	722	597	806	507	393	790	755	839
2	765	762	788	747	713	589	810	501	407	784	754	844
3	799	768	852	774	721	594	811	514	419	781	756	846
4	802	767	798	798	724	599	808	529	458	775	758	848
5	807	768	800	855	720	596	797	542	509	773	759	848
6	810	780	799	896	710	589	783	529	555	770	763	850
7	814	788	824	806	710	570	753	508	591	764	764	849
8	818	792	892	895	715	561	712	536	620	766	762	850
9	825	788	877	989	712	562	708	557	648	765	756	851
10	831	786	867	991	709	576	704	585	676	763	759	852
11	835	743	873	988	702	580	716	570	692	763	759	853
12	839	710	875	980	695	574	738	571	707	761	758	857
13	835	759	875	975	682	572	741	572	700	763	762	861
14	828	769	875	964	672	572	720	600	705	761	771	868
15	827	769	874	949	674	565	689	572	718	757	775	875
16	826	762	873	947	667	557	645	568	727	751	770	881
17	829	765	863	940	665	552	533	521	737	746	775	888
18	840	771	825	927	664	556	469	485	748	749	764	892
19	838	770	842	917	652	595	442	450	750	746	749	894
20	834	770	863	916	644	634	465	410	764	755	758	897
21	835	768	858	908	638	672	476	375	774	757	763	898
22	829	769	855	892	630	711	461	340	781	761	778	902
23	762	766	853	800	628	750	385	305	786	762	791	904
24	718	775	850	686	632	789	377	268	791	749	797	906
25	728	778	847	679	632	784	400	320	796	758	802	908
26	740	788	850	683	617	784	426	323	800	760	809	908
27	748	789	841	704	614	784	428	385	806	756	816	909
28	747	821	840	697	606	763	472	388	789	758	821	912
29	748	792	841	698	---	769	501	387	794	755	824	916
30	749	787	838	718	---	787	502	402	794	756	827	919
31	754	---	851	723	---	797	---	407	---	755	835	---

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	15.0	6.0	10.0	4.5	5.5	2.5	0.0	0.0	.5	0.0	7.5	2.5
2	8.0	6.0	11.0	5.0	2.5	0.0	0.0	0.0	3.0	.5	8.5	3.0
3	12.5	4.0	11.5	6.0	.5	0.0	0.0	0.0	1.5	0.0	9.0	0.0
4	13.0	4.0	9.5	4.0	3.0	0.0	0.0	0.0	3.0	0.0	7.5	0.0
5	13.0	4.5	10.0	5.0	3.5	.5	0.0	0.0	1.0	0.0	7.5	0.0
6	13.0	4.5	8.0	2.0	.5	.5	0.0	0.0	4.0	1.0	9.5	4.0
7	12.5	5.0	8.5	2.0	.5	0.0	0.0	0.0	4.5	1.0	12.5	4.5
8	12.0	5.0	8.5	2.5	.5	0.0	0.0	0.0	5.0	0.0	10.5	2.0
9	13.5	5.5	8.5	2.0	.5	0.0	2.5	0.0	4.5	0.0	11.0	.5
10	13.5	5.5	8.0	5.5	1.0	0.0	4.0	2.0	5.0	0.0	10.0	0.0
11	13.5	6.0	8.5	6.5	2.0	0.0	4.0	2.5	5.5	1.0	12.0	0.0
12	13.5	6.0	7.0	2.5	2.5	0.0	4.5	3.0	6.5	1.5	13.0	1.0
13	11.0	5.0	6.5	2.5	3.5	.5	4.0	.5	7.0	3.0	13.5	1.5
14	11.5	4.0	6.5	2.5	3.0	0.0	1.5	0.0	6.5	2.0	12.0	1.5
15	12.0	4.5	6.5	3.0	3.0	0.0	4.0	1.0	7.5	.5	13.5	3.0
16	11.5	4.5	6.5	1.0	3.0	0.0	5.0	2.5	7.5	.5	8.5	3.0
17	10.5	5.0	5.5	0.0	2.0	0.0	5.0	2.0	8.0	.5	12.5	4.5
18	12.0	7.5	5.5	.5	3.0	1.0	5.5	2.5	6.0	0.0	9.5	3.0
19	12.5	5.5	6.0	.5	4.5	2.5	5.0	1.5	6.5	0.0	---	---
20	9.5	5.5	6.5	1.0	4.0	1.0	4.0	0.0	8.0	2.5	---	---
21	10.5	8.0	7.0	1.5	3.0	.5	2.5	0.0	5.5	2.0	---	---
22	8.5	6.0	7.5	2.0	3.0	0.0	3.0	0.0	4.5	.5	---	---
23	11.0	2.0	6.0	1.0	3.5	1.0	.5	0.0	7.0	0.0	---	---
24	9.5	5.0	5.5	1.0	4.0	1.0	.5	0.0	8.0	0.0	14.5	1.5
25	8.5	3.5	6.0	1.5	3.0	0.0	2.0	0.0	6.5	0.0	15.0	2.0
26	9.0	1.5	5.5	2.5	1.5	0.0	2.0	0.0	7.0	.5	14.0	3.5
27	9.5	2.5	5.5	0.0	1.5	0.0	.5	0.0	6.5	2.0	9.0	5.0
28	10.0	2.5	3.0	0.0	3.5	1.5	.5	0.0	9.0	.5	10.5	5.0
29	10.0	2.5	4.0	1.0	3.5	1.0	1.0	0.0	---	---	6.5	4.5
30	9.0	4.5	5.5	1.5	3.0	.5	.5	0.0	---	---	10.5	4.5
31	10.0	4.0	---	---	.5	0.0	0.0	0.0	---	---	8.0	3.0

PARACHUTE CREEK BASIN

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09093000 PARACHUTE CREEK NEAR GRAND VALLEY, CO--Continued

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

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

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

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					MAY				
02...	1115	2.0	2	.01	05...	1545	189	1370	699
NOV					22...	1145	599	2580	4170
06...	1050	1.4	12	.05	JUN				
DEC					27...	1200	27	1	.07
04...	1100	1.9	22	.11	JUL				
MAR					11...	1445	16	1	.04
23...	1140	2.1	1	.01	AUG				
APR					17...	0930	12	16	.52
16...	1100	23	168	10					

PARACHUTE CREEK BASIN

09093500 PARACHUTE CREEK AT GRAND VALLEY, CO

LOCATION.--Lat 39°27'11", long 108°03'33", in SE¼NW¼ sec.12, T.7 S., R.96 W., Garfield County, Hydrologic Unit 14010006, on left bank 1,300 ft (396 m) upstream from cemetery bridge in Grand Valley, 2,000 ft (610 m) downstream from headgate of Diamond ditch, and 1.4 mi (2.3 km) upstream from mouth.

DRAINAGE AREA.--198 mi² (513 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1921 to September 1927, October 1948 to September 1954, October 1974 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 5,100 ft (1,554 m), from topographic map (revised). Nonrecording gage Apr. 7, 1921, to Sept. 30, 1927; water-stage recorder Oct. 1, 1948, to Sept. 30, 1954, at site 75 ft (23 m) upstream at different datum; and October 1974 to December 23, 1975, at site 0.5 mi (0.8 km) downstream at different datum.

REMARKS.--Records good except those for period of no gage-height records, which are fair. Diversions above station for irrigation of 1,400 acres (5.67 km²) and 400 acres (1.62 km²) along Colorado River.

AVERAGE DISCHARGE.--17 years (water years 1922-27, 1949-54, 1975-79), 30.1 ft³/s (0.852 m³/s), 21,810 acre-ft/yr (26.9 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,600 ft³/s (73.6 m³/s) July 31, 1976, gage height, 9.47 ft (2.886 m), from high-water marks, result of slope-area measurement; no flow for short periods 1926-27, 1949.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 200 ft³/s (5.7 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
May 8	1300	384 10.9	5.03 1.533	May 21	1000	*804 22.8	6.55 1.996

Minimum daily discharge, 3.1 ft³/s (0.088 m³/s) Oct. 4, 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.3	9.8	7.1	8.8	8.6	11	16	300	174	36	17	6.6
2	3.2	9.8	6.6	8.6	8.8	10	16	330	158	37	17	6.9
3	3.2	9.5	6.5	9.0	8.5	9.4	16	310	141	38	17	7.0
4	3.1	9.2	6.5	9.6	7.8	8.8	16	254	134	41	16	6.7
5	3.2	8.9	6.0	10	7.6	8.8	17	260	117	42	13	6.7
6	3.1	8.6	5.3	11	7.6	9.8	19	287	105	44	13	6.7
7	3.4	8.4	4.5	11	7.6	11	24	349	99	43	12	6.5
8	4.1	8.5	4.2	10	7.8	12	26	355	95	42	12	6.2
9	3.9	8.8	4.2	10	8.2	12	31	271	96	44	13	6.4
10	4.0	9.5	4.3	10	8.6	12	33	223	89	44	12	6.5
11	3.9	10	4.4	11	9.2	12	31	189	78	44	12	6.2
12	3.9	9.2	4.7	12	9.7	13	31	156	65	45	12	6.4
13	4.8	8.4	5.0	12	10	14	30	151	53	46	12	6.3
14	4.6	8.0	5.2	11	10	15	30	201	48	45	12	6.2
15	4.7	8.4	5.4	11	9.8	16	32	304	47	43	12	5.5
16	5.1	8.0	5.7	12	9.4	15	37	409	48	43	12	5.5
17	5.0	7.6	6.3	12	9.0	14	51	547	51	43	11	5.5
18	4.8	7.6	7.2	12	9.0	14	94	629	48	38	11	5.5
19	5.0	7.8	8.1	12	9.0	15	148	743	49	36	13	5.3
20	5.7	7.9	7.4	11	9.3	17	144	763	46	34	11	5.3
21	6.3	7.8	7.8	10	9.3	17	138	776	45	59	9.6	5.4
22	6.1	7.5	8.2	9.6	9.2	14	150	699	44	28	8.8	5.1
23	9.0	7.2	8.0	9.2	9.0	14	183	607	42	22	8.3	5.0
24	12	7.0	6.9	9.4	9.3	14	222	541	37	22	8.1	5.0
25	12	7.2	6.7	9.4	9.9	14	218	472	33	20	7.8	5.0
26	12	6.9	6.8	9.1	10	15	241	424	33	19	8.2	5.0
27	11	6.6	7.4	8.6	11	16	250	350	32	18	8.0	5.3
28	11	6.7	8.5	8.5	11	18	262	306	30	16	8.0	5.3
29	11	6.8	9.4	8.4	---	20	249	279	33	16	7.8	5.1
30	10	7.1	9.9	7.9	---	20	261	250	38	16	7.5	4.8
31	10	---	9.8	8.2	---	21	---	212	---	16	7.2	---
TOTAL	192.4	244.7	204.0	312.3	254.2	432.8	3016	11947	2108	1080	349.3	174.9
MEAN	6.21	8.16	6.58	10.1	9.08	14.0	101	385	70.3	34.8	11.3	5.83
MAX	12	10	9.9	12	11	21	262	776	174	59	17	7.0
MIN	3.1	6.6	4.2	7.9	7.6	8.8	16	151	30	16	7.2	4.8
AC-FT	382	485	405	619	504	858	5980	23700	4180	2140	693	347
CAL YR 1978	TOTAL	11023.24	MEAN	30.2	MAX	307	MIN	.56	AC-FT	21860		
WTR YR 1979	TOTAL	20315.60	MEAN	55.7	MAX	776	MIN	3.1	AC-FT	40300		

NOTE.--NO GAGE-HEIGHT RECORD NOV. 8 TO APR. 10.

09093500 PARACHUTE CREEK AT GRAND VALLEY, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1974 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: January 1975 to current year.

WATER TEMPERATURE: January 1975 to current year.

SUSPENDED-SEDIMENT DISCHARGE: October 1974 to current year.

INSTRUMENTATION.--Water-quality monitor since January 1975. Pumping sediment sampler since October 1974.

REMARKS.--Prior to Dec. 23, 1975, station was 0.5 mi (0.8 km) downstream from present location. Since May 1976, daily samples of suspended sediment have been collected by an observer to better define the pumping sediment record.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 3,440 micromhos June 4, 1977; minimum, 381 micromhos May 27, 1975.

WATER TEMPERATURES: Maximum, 32.0°C June 26, 1977, July 26, 27, 30, 1978; minimum, 0.0°C Mar. 5, Dec. 20-23, 1977, Feb. 6, 7, 9, 1979.

SEDIMENT CONCENTRATIONS: Maximum daily, 95,000 mg/L Aug. 25, 1977; minimum daily, 3 mg/L July 18, 1977.

SEDIMENT LOADS: Maximum daily, 82,000 tons (74,400 t) July 31, 1976; minimum daily, less than 0.005 ton (0.005 t) on many days during 1977.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 1,600 micromhos April 1; minimum, 441 micromhos May 22.

WATER TEMPERATURES: Maximum, 23.5°C July 30, 31; minimum, 0.0°C several days during winter months.

SEDIMENT CONCENTRATIONS: Maximum daily, 28,300 mg/L Mar. 8; minimum daily, 7 mg/L Sept. 28.

SEDIMENT LOADS: Maximum daily, 12,300 tons (11,200 t), May 18, minimum daily, 0.01 ton (0.01 t) Sept. 28, 30.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	HARD- NESS (MG/L AS CACD3)	HARD- NESS, NONCAR- BONATE (MG/L 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
DCT 03...	1315	3.0	1580	7.9	15.0	9.4	640	230	120	82	150	2.6
NOV 07...	1145	8.8	1520	7.7	8.5	10.4	560	170	98	77	140	2.6
30...	1545	12	1200	8.2	6.0	--	460	120	80	62	120	2.4
DEC 11...	1330	4.4	1400	7.4	.0	11.7	490	120	90	65	130	2.6
JAN 09...	1200	12	1300	7.7	.0	12.1	490	110	89	65	120	2.4
MAR 30...	1200	20	1400	7.7	9.0	10.2	590	250	120	69	160	2.9
APR 17...	1045	55	825	7.8	9.5	9.4	340	37	60	46	83	2.0
MAY 05...	1615	250	610	8.2	10.5	--	260	33	57	29	44	1.2
JUL 13...	1130	42	1050	8.1	16.0	10.8	430	75	75	58	96	2.0
AUG 21...	1200	10	1310	7.9	15.0	9.0	530	140	99	67	130	2.5
DATE	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	ALKA- LINITY (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)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)	ARSENIC DIS- SOLVED (UG/L AS AS)
OCT 03...	4.6	500	0	410	470	14	.9	17	1110	.47	.00	3
NOV 07...	4.4	480	0	390	400	16	.8	14	990	.25	.02	3
30...	4.7	410	0	340	300	19	.7	17	809	.70	.01	--
DEC 11...	4.4	460	0	380	340	14	.9	18	895	.81	.02	3
JAN 09...	4.7	470	0	390	340	16	.8	18	888	.26	.00	3
MAR 30...	4.8	410	0	340	520	17	.8	16	1120	1.2	.01	3
APR 17...	3.0	370	0	300	190	8.0	.6	17	597	1.2	.00	4
MAY 05...	2.2	280	--	230	100	4.5	.7	17	401	1.7	--	4
JUL 13...	4.3	430	0	350	270	10	.7	18	750	1.0	.01	3
AUG 21...	4.5	470	0	390	360	13	.8	22	933	.71	.05	3

PARACHUTE CREEK BASIN

09093500 PARACHUTE CREEK AT GRAND VALLEY, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	BARIUM, DIS- SOLVED (UG/L AS BA)	BORON, DIS- SOLVED (UG/L AS B)	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)	LITHIUM, DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY, DIS- SOLVED (UG/L AS HG)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	ZINC, DIS- SOLVED (UG/L AS ZN)
OCT 03...	0	410	3	1	20	0	50	30	.0	3	1900	30
NOV 07...	0	170	8	2	50	63	40	20	.0	3	1700	20
30...	--	--	--	--	10	--	--	30	--	--	--	--
DEC 11...	60	160	<1	0	10	10	40	30	.0	4	1500	6
JAN 09...	50	150	1	1	10	50	40	30	.0	1	1500	7
MAR 30...	0	130	3	4	50	15	60	20	.0	7	ND	20
APR 17...	60	110	6	0	20	58	30	20	.1	3	1200	3
MAY 05...	100	60	3	0	40	46	10	0	.0	2	850	10
JUL 13...	90	140	<1	0	10	11	40	20	.1	3	1600	4
AUG 21...	80	160	2	4	20	4	40	30	.0	3	1700	6

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1590	1490	1410	1320	1240	1270	1600	473	738	1080	1100	1330
2	1590	1440	1410	1310	1210	1270	1550	600	762	1060	1110	1330
3	1580	1560	1410	1310	1200	1270	1490	610	754	953	1120	1340
4	1580	1430	1410	1310	1210	1260	1420	615	742	1020	1130	1340
5	1570	1430	1400	1300	1220	1260	1380	896	750	894	1140	1340
6	1570	1430	1400	1300	1240	1260	1330	574	758	938	1150	1350
7	1550	1490	1400	1290	1330	1190	1290	541	765	1010	1150	1350
8	1550	1490	1390	1290	1340	1100	1250	530	770	880	1160	1360
9	1540	1480	1390	1280	1280	1180	1190	612	786	979	1170	1360
10	1530	1480	1390	1240	1220	1220	1150	591	802	886	1180	1370
11	1520	1480	1390	1250	1220	1290	1110	632	856	956	1190	1370
12	1520	1470	1380	1260	1220	1280	1070	639	920	1050	1200	1380
13	1520	1470	1380	1230	1250	1280	1030	650	938	1050	1210	1380
14	1520	1470	1380	1270	1290	1270	987	581	954	1030	1210	1390
15	1510	1470	1370	1230	1310	1320	941	548	918	1010	1220	1390
16	1500	1460	1370	1240	1290	1360	893	547	869	1010	1230	1400
17	1500	1460	1370	1240	1310	1380	861	559	925	1040	1240	1400
18	1500	1460	1360	1200	1290	1380	729	573	986	1050	1250	1410
19	1520	1450	1360	1250	1300	1360	682	563	985	1050	1260	1410
20	1520	1450	1360	1240	1340	1370	712	530	992	1050	1270	1410
21	1520	1450	1350	1210	1410	1390	715	446	1000	1060	1280	1420
22	1500	1440	1350	1180	1300	1380	695	441	950	1060	1280	1420
23	1490	1440	1350	1190	1270	1360	664	548	1030	1070	1280	1430
24	1460	1440	1340	1210	1270	1340	619	586	954	1070	1290	1430
25	1430	1430	1340	1200	1300	1330	642	583	914	1080	1290	1440
26	1340	1430	1340	1190	1320	1340	641	596	912	1080	1300	1440
27	1410	1430	1340	1220	1310	1360	623	611	992	1070	1300	1450
28	1410	1420	1330	1230	1270	1380	604	626	1020	1070	1310	1450
29	1420	1420	1330	1220	---	1390	596	637	1010	1080	1310	1460
30	1450	1420	1330	1230	---	1410	571	653	1100	1090	1320	1460
31	1450	---	1320	1260	---	1580	---	695	---	1100	1320	---

09093500 PARACHUTE CREEK AT GRAND VALLEY, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

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

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	9.0	3.5	10.5	7.5	13.0	7.0	19.0	12.5				
2	9.5	3.5	9.0	7.0	14.0	7.5	19.5	12.0				
3	10.5	2.5	7.5	5.5	14.5	8.5	19.5	11.0				
4	10.0	3.5	12.0	4.0	15.5	9.5	20.0	11.0				
5	14.5	6.5	11.0	4.0	15.5	10.0	17.0	11.5				
6	15.5	6.0	10.5	6.5	16.5	10.5	20.5	11.0				
7	15.0	6.5	6.5	5.0	11.0	9.5	20.5	11.5				
8	15.5	6.5	7.0	3.5	10.5	7.5	20.0	11.0				
9	14.5	6.5	7.5	5.0	14.0	7.5	20.0	11.5				
10	10.0	6.5	9.0	4.5	15.5	7.5	20.5	11.5				
11	10.0	5.0	9.0	4.5	17.0	9.0	21.5	12.0				
12	11.5	4.0	11.0	5.0	18.0	10.5	---	---				
13	14.0	3.5	13.5	6.0	18.5	11.0	---	---				
14	16.5	5.0	14.5	7.0	17.5	11.0	20.5	13.0				
15	17.5	6.5	14.0	7.0	16.0	9.5	21.0	14.0				
16	17.5	7.0	13.0	7.5	18.0	9.5	20.0	14.0				
17	15.0	7.0	13.5	7.0	17.5	10.0	19.5	13.0				
18	14.0	7.0	15.0	8.0	13.0	9.0	21.0	12.5				
19	12.0	5.5	14.5	7.5	14.5	9.0	21.5	11.0				
20	11.5	3.5	14.5	7.5	18.0	9.5	22.0	12.0				
21	12.0	4.5	12.5	8.5	19.0	10.5	---	---				
22	12.5	5.5	12.0	9.0	19.5	10.5	---	---				
23	13.5	6.0	14.5	8.0	19.5	11.0	---	---				
24	10.5	7.0	14.0	8.5	19.5	11.0	---	---				
25	10.5	6.5	13.0	10.0	20.5	11.5	---	---				
26	10.5	4.5	15.5	9.5	18.5	11.0	---	---				
27	12.0	5.0	15.5	9.0	19.5	11.0	---	---				
28	12.0	6.5	15.0	10.5	20.0	11.0	---	---				
29	12.5	5.0	13.5	9.5	20.0	12.5	23.5	13.0				
30	12.0	5.5	11.5	7.5	18.5	13.0	23.5	13.0				
31	---	---	12.0	7.0	---	---	---	---				

PARACHUTE CREEK BASIN

09093500 PARACHUTE CREEK AT GRAND VALLEY, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

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)
OCTOBER				NOVEMBER				DECEMBER	
1	3.3	---	.85	9.8	26	.69	7.1	121	2.3
2	3.2	---	.55	9.8	29	.77	6.6	210	3.7
3	3.2	65	.56	9.5	30	.77	6.5	259	4.5
4	3.1	86	.72	9.2	11	.27	6.5	195	3.4
5	3.2	---	.55	8.9	10	.24	6.0	186	3.0
6	3.1	---	.30	8.6	15	.35	5.3	354	5.1
7	3.4	---	.35	8.4	22	.50	4.5	---	9.0
8	4.1	---	.55	8.5	16	.37	4.2	680	7.7
9	3.9	---	.40	8.8	15	.36	4.2	210	2.4
10	4.0	---	.50	9.5	20	.51	4.3	152	1.8
11	3.9	---	.40	10	---	59	4.4	181	2.2
12	3.9	34	.36	9.2	14600	363	4.7	720	9.1
13	4.8	28	.36	8.4	2000	45	5.0	2100	28
14	4.6	33	.41	8.0	183	4.0	5.2	---	50
15	4.7	38	.48	8.4	138	3.1	5.4	---	73
16	5.1	30	.41	8.0	116	2.5	5.7	4180	64
17	5.0	23	.31	7.6	95	1.9	6.3	1610	27
18	4.8	49	.64	7.6	91	1.9	7.2	---	8.9
19	5.0	44	.59	7.8	89	1.9	8.1	---	6.6
20	5.7	51	.78	7.9	84	1.8	7.4	---	6.0
21	6.3	30	.51	7.8	250	5.3	7.8	---	6.3
22	6.1	25	.41	7.5	409	8.3	8.2	---	6.6
23	9.0	21	.51	7.2	---	5.5	8.0	---	6.5
24	12	21	.68	7.0	167	3.2	6.9	---	5.6
25	12	21	.68	7.2	81	1.6	6.7	306	5.5
26	12	43	1.4	6.9	68	1.3	6.6	142	2.6
27	11	44	1.3	6.6	69	1.2	7.4	480	10
28	11	31	.92	6.7	98	1.8	8.5	870	20
29	11	27	.80	6.8	201	3.7	9.4	610	15
30	10	24	.65	7.1	230	4.4	9.9	---	14
31	10	16	.43	---	---	---	9.8	476	13
TOTAL	192.4	---	18.36	244.7	---	525.23	204.0	---	422.8
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)
JANUARY				FEBRUARY				MARCH	
1	8.8	390	9.3	8.6	182	4.2	11	310	9.2
2	8.6	236	5.5	8.8	188	4.5	10	320	8.6
3	9.0	200	4.9	8.5	---	3.5	9.4	410	10
4	9.6	320	8.3	7.8	---	1.0	8.8	1870	44
5	10	424	11	7.6	27	.55	8.8	2640	63
6	11	330	9.8	7.6	23	.47	9.8	3200	85
7	11	130	3.9	7.6	24	.49	11	10700	319
8	10	---	4.6	7.8	23	.48	12	28300	917
9	10	124	3.3	8.2	---	.44	12	---	470
10	10	76	2.0	8.6	22	.51	12	4800	156
11	11	53	1.6	9.2	---	.80	12	3250	105
12	12	55	1.8	9.7	---	1.3	13	5800	204
13	12	117	3.8	10	---	1.9	14	6600	249
14	11	78	2.3	10	---	2.6	15	6380	258
15	11	92	2.7	9.8	157	4.2	16	6240	270
16	12	87	2.8	9.4	285	7.2	15	---	230
17	12	90	2.9	9.0	153	3.7	14	---	180
18	12	97	3.1	9.0	64	1.6	14	---	130
19	12	95	3.1	9.0	115	2.8	15	2000	81
20	11	114	3.4	9.3	178	4.5	17	2360	108
21	10	---	3.5	9.3	183	4.6	17	1800	83
22	9.6	---	3.8	9.2	261	6.5	14	4200	159
23	9.2	161	4.0	9.0	302	7.3	14	1280	48
24	9.4	---	4.2	9.3	730	18	14	2660	100
25	9.4	164	4.2	9.9	1270	34	14	2100	79
26	9.1	154	3.8	10	580	16	15	2100	85
27	8.6	184	4.3	11	400	12	16	27000	1170
28	8.5	192	4.4	11	330	9.8	18	24000	1170
29	8.4	183	4.2	---	---	---	20	6600	356
30	7.9	---	3.9	---	---	---	20	3320	179
31	8.2	---	4.0	---	---	---	21	4100	232
TOTAL	312.3	---	134.4	254.2	---	154.94	432.8	---	7557.8

09093500 PARACHUTE CREEK AT GRAND VALLEY, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
APRIL			MAY			JUNE			
1	16	1240	54	300	2870	2320	174	828	389
2	16	1020	44	330	3340	2980	158	700	299
3	16	960	41	310	3280	2740	141	641	244
4	16	740	32	254	2420	1660	134	554	200
5	17	1020	47	260	2000	1400	117	486	154
6	19	1400	72	287	2560	1980	105	460	130
7	24	1220	79	349	3660	3450	99	420	112
8	26	1020	72	355	3520	3370	95	494	127
9	31	1240	103	271	2340	1710	96	400	104
10	33	1840	164	223	1820	1100	89	389	93
11	31	1220	102	189	1380	704	78	336	71
12	31	720	60	156	1240	522	65	338	59
13	30	640	52	151	1220	497	53	265	38
14	30	560	45	201	2080	1130	48	197	26
15	32	760	66	304	4980	4090	47	213	27
16	37	1560	156	409	6800	7510	48	263	34
17	51	4180	576	547	6800	10000	51	237	33
18	94	4380	1110	629	7240	12300	48	192	25
19	148	3520	1410	743	7620	15300	49	197	26
20	144	1840	715	763	6200	12800	46	178	22
21	138	1620	604	776	5260	11000	45	177	22
22	150	1600	648	699	4380	8270	44	177	21
23	183	1800	889	607	3680	6030	42	162	18
24	222	2280	1370	541	4120	6020	37	116	12
25	218	2280	1340	472	2900	3700	33	182	16
26	241	1940	1260	424	2140	2450	33	143	13
27	250	1760	1190	350	1580	1490	32	129	11
28	262	1920	1360	306	1560	1290	30	120	9.7
29	249	2040	1370	279	1200	904	33	49	4.4
30	261	2400	1690	250	1060	716	38	64	6.6
31	---	---	---	212	960	550	---	---	---
TOTAL	3016	---	16721	11947	---	129983	2108	---	2346.7

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
JULY			AUGUST			SEPTEMBER			
1	36	73	7.1	17	159	7.3	6.6	123	2.2
2	37	---	4.4	17	178	8.2	6.9	89	1.7
3	38	42	4.3	17	193	8.9	7.0	69	1.3
4	41	39	4.3	16	213	9.2	6.7	50	.90
5	42	34	3.9	13	252	8.8	6.7	32	.58
6	44	39	4.6	13	170	6.0	6.7	36	.65
7	43	52	6.0	12	227	7.4	6.5	31	.54
8	42	20	2.3	12	103	3.3	6.2	40	.67
9	44	20	2.4	13	166	5.8	6.4	29	.50
10	44	18	2.1	12	117	3.8	6.5	33	.58
11	44	30	3.6	12	162	5.2	6.2	31	.52
12	45	27	3.3	12	130	4.2	6.4	23	.40
13	46	25	3.1	12	99	3.2	6.3	24	.41
14	45	31	3.8	12	59	1.9	6.2	55	.92
15	43	25	2.9	12	106	3.4	5.5	44	.65
16	43	23	2.7	12	159	5.2	5.5	24	.36
17	43	33	3.8	11	218	6.5	5.5	26	.39
18	38	29	3.0	11	206	6.1	5.5	19	.28
19	36	38	3.7	13	5820	359	5.3	15	.21
20	34	29	2.7	11	900	27	5.3	17	.24
21	59	9730	5490	9.6	304	7.9	5.4	16	.23
22	28	2400	181	8.8	245	5.8	5.1	11	.15
23	22	411	24	8.3	217	4.9	5.0	18	.24
24	22	305	18	8.1	240	5.2	5.0	16	.22
25	20	453	24	7.8	261	5.5	5.0	32	.43
26	19	324	17	8.2	217	4.8	5.0	15	.20
27	18	196	9.5	8.0	151	3.3	5.3	16	.23
28	16	146	6.3	8.0	140	3.0	5.3	7	.10
29	16	141	6.1	7.8	99	2.1	5.1	13	.18
30	16	148	6.4	7.5	101	2.0	4.8	8	.10
31	16	123	5.3	7.2	40	.78	---	---	---
TOTAL	1080	---	5861.6	349.3	---	535.68	174.9	---	16.08
YEAR	20315.6		164277.59						

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 (4.8 km) downstream from Alkali Creek and 3.8 mi (6.1 km) northeast of De Beque.

DRAINAGE AREA.--7,370 mi² (19,088 km²).

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Altitude of gage is 4,940 ft (1,506 m), from topographic map.

REMARKS.--Records good except those for winter periods which are poor. Natural flow of stream affected by transmountain diversions, storage reservoirs, power development, and diversions for irrigation of about 158,000 acres (639 km²).

AVERAGE DISCHARGE.--13 years, 3,579 ft³/s (101.4 m³/s), 2,593,000 acre-ft/yr (3,200 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 22,500 ft³/s (637 m³/s) June 15, 1973, gage height, 11.07 ft (3.374 m); minimum daily, 914 ft³/s (25.9 m³/s) Dec. 22, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 21,200 ft³/s (600 m³/s) at 1900 May 29, gage height, 10.96 ft (3.341 m); minimum daily, 1,080 ft³/s (30.6 m³/s) Jan. 3, 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1600	1880	1930	1280	1230	1500	1880	3970	14900	15900	3830	2340
2	1570	1860	1980	1150	1230	1510	1830	4380	12700	16000	3650	2260
3	1560	1850	1790	1080	1280	1500	1790	4640	12000	14700	3400	2160
4	1530	1840	1490	1080	1310	1450	1790	4310	12400	13000	3170	2050
5	1530	1830	1500	1180	1290	1420	1800	4030	13600	12300	2900	2000
6	1540	1830	1500	1300	1290	1420	1850	4310	15300	11900	2870	1930
7	1570	1840	1400	1400	1330	1460	1900	5290	17600	11700	2810	1930
8	1590	1820	1250	1320	1380	1480	1860	6120	18500	11000	2780	1900
9	1600	1750	1200	1200	1400	1520	1950	5430	16300	10800	2920	1910
10	1590	1840	1190	1170	1400	1550	2130	4950	14100	10300	2900	2040
11	1600	1860	1200	1200	1380	1610	2200	4630	12400	9570	2750	2040
12	1590	2050	1260	1240	1400	1690	2150	4270	12200	9040	2650	2010
13	1600	2100	1320	1300	1430	1800	2050	4190	13800	8720	2540	2000
14	1630	1950	1360	1390	1460	1860	1950	4470	16500	8490	2550	2010
15	1620	1900	1400	1320	1500	1900	1950	5170	18500	7960	2660	1980
16	1600	1840	1380	1360	1520	1790	2050	6240	19600	7670	2800	1980
17	1580	1810	1360	1350	1500	1800	2200	7380	20100	7380	2900	1970
18	1550	1810	1380	1300	1480	1860	2500	8620	19100	7090	2900	1910
19	1580	1790	1420	1300	1470	1830	2900	10300	17200	6750	3000	1860
20	1630	1810	1500	1300	1450	1880	3250	11800	15000	6230	3120	1830
21	1680	1820	1440	1290	1460	1930	3200	13100	13500	5800	3000	1830
22	1780	1830	1430	1300	1510	1850	3100	13600	13300	5540	3130	1830
23	2030	1860	1410	1250	1500	1780	3250	14300	14100	5900	3000	1820
24	1930	1840	1450	1180	1470	1710	3500	15400	15000	5470	2900	1820
25	1890	1870	1400	1150	1450	1720	3700	16300	15700	5480	2830	1790
26	1920	1900	1350	1180	1460	1740	3850	16500	15900	5350	2760	1810
27	1900	1880	1300	1220	1480	1760	3820	17900	16000	5100	2730	1850
28	1870	1820	1240	1270	1500	1900	3770	19400	15800	4970	2700	1850
29	1860	1740	1320	1300	---	1960	4010	20700	15700	4870	2540	1820
30	1870	1840	1380	1300	---	1900	3950	20600	15400	4540	2420	1830
31	1880	---	1400	1260	---	1940	---	18400	---	4290	2410	---
TOTAL	52270	55660	43930	38920	39560	53020	78130	300700	462200	263810	90000	58360
MEAN	1686	1855	1417	1255	1413	1710	2604	9700	15410	8510	2900	1945
MAX	2030	2100	1980	1400	1520	1960	4010	20700	20100	16000	3830	2340
MIN	1530	1740	1190	1080	1230	1420	1790	3970	12000	4290	2410	1790
AC-FT	103700	110400	87140	77200	78470	105200	155000	596400	916800	523300	178500	115800
CAL YR 1978 TOTAL	1293160			3543			19400					
MEAN				4210								
MAX							20700					
MIN							1080					
AC-FT									2565000			
WTR YR 1979 TOTAL	1536560											
MEAN												
MAX												
MIN												
AC-FT									3048000			

09093700 COLORADO RIVER NEAR DE BEQUE, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD--August 1973 to current year.

PERIOD OF DAILY RECORD--

SPECIFIC CONDUCTANCE: August 1973 to current year.

WATER TEMPERATURE: August 1973 to current year.

SUSPENDED-SEDIMENT DISCHARGE: October 1974 to September 1976.

EXTREMES FOR PERIOD OF DAILY RECORD--

SPECIFIC CONDUCTANCE: Maximum daily, 1,600 micromhos Nov. 9, 10, 1977; minimum daily, 260 micromhos May 29, 1979.

WATER TEMPERATURES: Maximum daily, 25.0°C July 1-4, 18-20, 1977; minimum daily, freezing point on many days during winter months each year.

SEDIMENT CONCENTRATIONS: Maximum daily, 2,090 mg/L Mar. 9, 1975; minimum daily, 2 mg/L Dec. 7, 17, 1975, Feb. 22, 1976.

SEDIMENT LOADS: Maximum daily, 41,300 tons (37,500 t) May 17, 1975; minimum daily, 8.4 tons (7.6 t) Feb. 22, 1976.

EXTREMES FOR CURRENT YEAR--

SPECIFIC CONDUCTANCE: Maximum daily, 1,400 micromhos Dec. 16-21; minimum daily, 260 micromhos May 29.

WATER TEMPERATURES: Maximum daily, 19.0°C several days in July; minimum daily, 0.0°C many days during December, January, and February.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	HARD- NESS (MG/L AS CaCO3)	HARD- NESS, NONCAR- BONATE (MG/L CaCO3)	CALCIUM DIS- SOLVED (MG/L AS Ca)	MAGNE- SIUM, DIS- SOLVED (MG/L AS Mg)
OCT										
10...	1215	1590	1090	8.1	13.5	9.0	250	120	74	17
NOV										
20...	1300	1800	1000	8.5	4.5	11.5	290	51	90	16
DEC										
01...	1130	1930	980	7.9	3.0	--	210	150	62	14
12...	1400	1260	1370	8.3	.5	11.2	340	170	100	23
JAN										
23...	1330	1200	1200	8.2	.0	11.9	270	130	79	17
MAR										
30...	1230	1860	1050	8.2	8.0	9.7	270	130	77	19
APR										
26...	1130	4000	660	8.2	10.5	9.2	--	--	--	--
MAY										
29...	1420	18900	260	8.2	12.0	8.9	100	26	31	6.5
JUN										
21...	1245	13400	340	8.0	13.5	8.6	130	50	37	8.2
JUL										
26...	1300	5290	550	8.2	19.0	8.4	150	50	42	10
AUG										
21...	1245	3090	820	8.2	16.0	7.9	210	82	62	14

DATE	SODIUM, DIS- SOLVED (MG/L AS Na)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	RICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	ALKA- LINITY (MG/L AS CaCO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLOR- IDE, DIS- SOLVED (MG/L AS Cl)	FLUOR- IDE, DIS- SOLVED (MG/L AS F)
OCT									
10...	140	3.8	4.2	170	0	140	130	190	.3
NOV									
20...	120	3.1	3.8	290	1	240	160	170	.3
DEC									
01...	97	2.9	3.7	81	0	66	110	170	.2
12...	170	4.0	6.7	210	0	170	190	260	.3
JAN									
23...	140	3.7	5.0	--	--	140	170	190	.2
MAR									
30...	110	2.9	4.0	--	--	140	170	160	.3
APR									
26...	--	--	--	--	--	110	100	76	.2
MAY									
29...	13	.6	1.5	--	--	78	33	13	.2
JUN									
21...	22	.9	1.7	--	--	76	53	24	.2
JUL									
26...	48	1.7	2.3	--	--	96	72	62	.2
AUG									
21...	78	2.3	3.1	--	--	130	120	110	.3

E ESTIMATED.

COLORADO RIVER MAIN STEM

09093700 COLORADO RIVER NEAR DE BEQUE, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	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, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
OCT 10...	8.1	648	.88	2780	.05	.00	.00	20	10
NOV 20...	8.6	713	.97	3470	.10	.01	.01	20	10
DEC 01...	7.7	505	.69	2630	.17	.04	.00	20	9
12...	10	865	1.18	2940	.40	.02	.00	30	0
JAN 23...	9.5	696	.95	2260	.28	.01	.01	10	10
MAR 30...	8.6	634	.86	3180	.25	.03	.01	10	20
APR 26...	--	--	--	--	.33	.02	.02	--	--
MAY 29...	7.6	154	.21	7860	.18	.02	--	20	10
JUN 21...	7.5	200	.27	7240	.11	.03	--	30	10
JUL 26...	7.5	302	.41	4310	.01	.01	--	10	4
AUG 21...	.4	467	.64	3900	.21	.02	--	10	5

SPECIFIC CONDUCTANCE (MICROHMOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1200	1100	1100	1300	1300					300		
2	1200	1100	1100	1300	1300					300		
3	1200	1100	1100	1300	1300					300		
4	1200	1100	1100	1300	1300					325		
5	1200	1100	1100	1200	1300					325		
6	1200	1100	1100	1200	1200					350		
7	1200	1100	1100	1200	1200					350		
8	1250	1100	1100	1200	1200					350		
9	1250	1100	1200	1200	---					350		
10	1200	1100	1200	1200	---					375		
11	1200	---	1200	1200	1200					375		
12	1200	---	1300	1200	1200					375		
13	1200	---	1300	1200	1200					375		
14	1200	---	1300	1200	1200					375		
15	1200	1100	1350	1200	1300					400		
16	1200	1100	1400	1200	1300					400		
17	1200	1100	1400	1200	1300					400		
18	1200	1100	1400	1200	1300					400		
19	1250	1100	1400	1200	1300					450		
20	1250	1100	1400	1200	1300					450		
21	---	1100	1400	1200	1300					450		
22	---	1100	1300	1200	1300					500		
23	---	1100	1300	1200	1300					500		
24	---	1100	1300	1200	1300					500		
25	1200	---	1300	1200	1300					525		
26	1200	---	1300	1200	1300					525		
27	1200	---	1300	1200	1300					525		
28	1200	1100	1300	1300	1300					550		
29	1150	1100	1300	1300	---					550		
30	1100	1100	1300	1300	---					600		
31	1100	---	1300	1300	---					600		

COLORADO RIVER MAIN STEM

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09093700 COLORADO RIVER NEAR DE BEQUE, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
ONCE-DAILY

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

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

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					JUL				
10...	1215	1590	6	26	26...	1245	5290	190	2710
11...	1215	1600	6	26	AUG				
NOV					21...	1230	3090	448	3740
20...	1230	1680	8	36					
APR									
26...	1100	4000	363	3920					

ROAN CREEK BASIN

09095000 ROAN CREEK NEAR DE BEQUE, CO

LOCATION.--Lat 39°27'12", Long 108°18'59", in NE¼NW¼ sec.15, T.7 S., R.98 W., Garfield County, Hydrologic Unit 14010006, on left bank 5.0 ft (2 m) downstream from bridge, 0.7 mi (1.1 km) downstream from Kimball Creek, and 10 mi (16 km) northwest of De Beque.

DRAINAGE AREA.--321 mi² (831 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1921 to September 1926, October 1962 to September 1972, October 1974 to current year.

REVISED RECORDS.--WSP 1924: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 5,380 ft (1,640 m), from topographic map. Prior to October 1962, nonrecording gage at different datum.

REMARKS.--Records fair. Diversions above station for irrigation of about 2,800 acres (11.3 km²) above and about 570 acres (2.31 km²) below station.

AVERAGE DISCHARGE.--20 years (water years 1922-26, 1963-72, 1975-79), 38.8 ft³/s (1.099 m³/s), 28,110 acre-ft/yr (34.7 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,900 ft³/s (53.8 m³/s) Sept. 19, 1972, gage height, 7.07 ft (2.155 m), from rating curve extended above 130 ft³/s (3.7 m³/s), on basis of slope-area measurements at gage heights 4.30 and 6.09 ft (1.311 and 1.856 m); maximum gage height, 9.16 ft (2.792 m) May 19, 1979; minimum daily discharge, 3.2 ft³/s (0.091 m³/s) Nov. 25, 1963, but may have been less during periods of no gage-height record.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 100 ft³/s (2.8 m³/s) and maximum (%):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
May 19	1345	1,190 33.7	9.16 2.792	June 8	1645	260 7.36	7.45 2.271

Minimum daily discharge, 9.6 ft³/s (0.272 m³/s) Jan. 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	16	19	12	10	14	37	321	91	89	35	21
2	13	16	19	13	11	14	33	351	117	83	32	20
3	12	15	18	14	11	15	32	347	140	80	32	21
4	13	15	17	15	12	15	30	355	155	78	28	20
5	13	15	16	16	11	15	32	372	152	77	30	19
6	12	14	16	17	11	15	36	396	179	74	32	19
7	12	14	16	13	11	18	36	504	206	72	32	20
8	11	15	14	13	11	25	37	528	240	70	28	17
9	11	16	14	12	12	23	37	498	244	68	23	16
10	10	17	15	13	12	22	44	456	236	66	25	16
11	10	18	16	14	13	24	46	432	232	63	23	16
12	10	20	17	14	13	28	46	432	216	59	23	16
13	10	20	18	15	12	31	46	444	213	57	23	16
14	10	18	18	15	12	30	46	456	216	56	23	16
15	11	16	18	15	12	31	49	480	192	54	23	17
16	11	15	18	16	12	32	53	617	182	51	26	18
17	11	16	18	17	12	37	68	832	188	46	22	18
18	12	16	20	16	13	34	72	950	179	48	21	17
19	12	17	21	15	13	33	82	1130	167	49	23	17
20	14	18	18	14	13	33	95	961	138	50	23	17
21	13	18	17	12	13	36	125	823	140	48	23	17
22	13	20	16	11	13	35	150	673	145	46	23	17
23	13	20	15	11	13	33	170	498	140	46	23	18
24	13	20	15	11	13	34	212	345	140	47	23	15
25	13	19	15	11	13	36	216	260	130	39	23	14
26	12	17	15	11	13	36	247	161	132	38	25	16
27	13	17	15	10	13	37	265	179	128	38	23	18
28	13	17	15	9.6	14	49	271	152	113	38	23	20
29	13	19	16	9.9	---	58	284	128	107	38	23	17
30	14	19	17	10	---	43	293	98	102	38	23	14
31	15	---	16	10	---	43	---	83	---	34	23	---
TOTAL	377	513	518	405.5	342	929	3190	14262	4960	1740	782	523
MEAN	12.2	17.1	16.7	13.1	12.2	30.0	106	460	165	56.1	25.2	17.4
MAX	15	20	21	17	14	58	293	1130	244	89	35	21
MIN	10	14	14	9.6	10	14	30	83	91	34	21	14
AC-FT	748	1020	1030	804	678	1840	6330	28290	9840	3450	1550	1040

CAL YR 1978 TOTAL 18808.8 MEAN 51.5 MAX 659 MIN 6.8 AC-FT 37310
WTR YR 1979 TOTAL 28541.5 MEAN 78.2 MAX 1130 MIN 9.6 AC-FT 56610

09095000 ROAN CREEK NEAR DE BEQUE, CD--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD--February 1975 to current year.

PERIOD OF DAILY RECORD--

SPECIFIC CONDUCTANCE: February 1975 to current year.

WATER TEMPERATURE: February 1975 to current year.

SUSPENDED-SEDIMENT DISCHARGE: March 1975 to current year.

INSTRUMENTATION--Water-quality monitor since February 1975. Pumping sediment sampler since March 1975.

EXTREMES FOR PERIOD OF DAILY RECORD--

SPECIFIC CONDUCTANCE: Maximum daily, 2,480 micromhos Sept. 19, 1975; minimum daily, 459 micromhos May 21, 1979.

WATER TEMPERATURES: Maximum daily, 29.0°C several days during July 1977; minimum daily, freezing point on many days during winter months most years.

SEDIMENT CONCENTRATIONS: Maximum daily, 47,900 mg/L Aug. 25, 1977; minimum daily, 5 mg/L, estimated Sept. 28-30, 1978.

SEDIMENT LOADS: Maximum daily, 12,600 tons (11,400 t) Aug. 25, 1977; minimum daily, 0.14 ton (0.13 t), estimated Sept. 28-30, 1978.

EXTREMES FOR CURRENT YEAR--

SPECIFIC CONDUCTANCE: Maximum, 1,760 micromhos Aug. 18; minimum, 459 micromhos May 21.

WATER TEMPERATURES: Maximum, 22.5°C several days during July and August; minimum, 0.0°C many days during December, January, February, and March.

SEDIMENT CONCENTRATIONS: Maximum daily, 10,000 mg/L estimated May 20; minimum daily, 28 mg/L Sept. 13.

SEDIMENT LOADS: Maximum daily, 30,100 tons (27,300 t) May 19; minimum daily, 1.0 ton (0.91 t), Sept. 13.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	HARD- NESS (MG/L CaCO3)	HARD- NESS, NONCAR- BONATE (MG/L 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 05...	1230	14	1390	8.0	11.5	9.4	560	120	87	82	140	2.6
20...	1045	13	1320	8.0	9.5	9.2	510	53	81	75	140	2.7
NOV 13...	1230	18	1410	8.2	7.5	9.1	540	95	88	77	140	2.6
DEC 11...	1200	15	1240	8.4	1.5	10.6	480	42	78	70	140	2.8
JAN 23...	1230	9.6	1380	8.2	1.5	10.6	520	65	84	74	140	2.7
MAR 28...	1300	53	1120	8.3	6.5	9.6	430	120	80	55	110	2.3
APR 24...	1230	208	840	8.4	9.0	8.8	290	14	51	40	81	1.6
MAY 05...	1330	366	750	8.3	8.5	--	290	3	53	38	57	1.5
14...	1400	451	784	8.3	12.0	8.4	240	0	63	19	62	1.8
JUN 19...	1230	169	940	8.2	10.0	8.5	380	31	69	51	87	1.9
JUL 25...	1215	47	1490	8.2	16.5	8.4	440	17	65	66	110	2.3
AUG 16...	1200	26	1620	8.1	14.0	8.3	580	120	89	86	150	2.7

ROAN RIVER BASIN

09095000 ROAN CREEK NEAR OE BEQUE, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	ALKA- LINITY (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)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, ORTHOP, DIS- SOLVED (MG/L AS P)	ARSENIC DIS- SOLVED (UG/L AS AS)
OCT 05...	3.5	530	0	430	380	10	.7	16	985	.59	.00	2
20...	3.9	560	0	460	340	12	1.0	16	949	.46	.01	3
NOV 13...	3.6	540	0	440	350	10	.6	15	955	.52	.04	3
DEC 11...	3.8	540	0	440	320	13	.8	17	915	1.0	.01	2
JAN 23...	4.0	550	0	450	340	13	.7	17	950	.97	.01	2
MAR 28...	5.1	370	0	300	320	8.9	.6	11	778	.80	.01	3
APR 24...	2.1	340	0	280	120	4.6	.4	17	471	1.3	.01	3
MAY 05...	1.9	350	--	290	120	4.8	.4	18	473	1.3	.01	4
14...	2.0	--	0	430	130	5.1	.5	15	565	1.3	.02	3
JUN 19...	2.7	430	0	350	180	7.5	.6	16	633	1.3	.03	1
JUL 25...	3.7	510	0	420	310	9.2	.6	15	837	.86	.00	2
AUG 16...	4.2	560	0	460	420	14	.6	17	1060	.82	.00	2

DATE	BARIUM, DIS- SOLVED (UG/L AS BA)	BORON, DIS- SOLVED (UG/L AS B)	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)	LITHIUM, DIS- SOLVED (UG/L AS LI)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MERCURY, DIS- SOLVED (UG/L AS HG)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	STRON- TIUM, DIS- SOLVED (UG/L AS SR)	ZINC, DIS- SOLVED (UG/L AS ZN)
OCT 05...	0	250	1	1	20	6	60	40	.0	4	1500	10
20...	60	270	2	4	10	0	50	40	.0	4	1400	<3
NOV 13...	0	250	1	1	10	10	50	50	.0	5	1400	10
DEC 11...	60	230	3	1	10	12	50	30	.0	6	1300	4
JAN 23...	100	200	4	2	10	4	50	30	.0	4	1400	0
MAR 28...	0	180	1	0	30	0	50	20	.0	4	1000	20
APR 24...	70	110	2	0	<1	32	20	10	.0	2	830	<3
MAY 05...	70	130	4	0	10	54	20	3	.0	3	860	30
14...	100	100	3	0	0	19	30	10	.1	3	850	10
JUN 19...	0	100	7	0	0	56	30	10	.0	3	1100	10
JUL 25...	80	230	3	10	<1	33	50	10	.1	7	1400	<3
AUG 16...	0	280	5	3	10	32	50	30	.0	4	1500	4

ROAN RIVER BASIN

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09095000 ROAN CREEK NEAR DE BEQUE, CO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1370	1330	1240	1230	1130	1210	1090	770	900	1090	1480	1500
2	1360	1320	1280	1240	1100	1190	1060	765	915	1090	1510	1400
3	1360	1330	1310	1160	1100	1210	1040	771	925	1100	1580	1400
4	1370	1330	1300	1130	1100	1220	1020	760	934	1110	1530	1400
5	1370	1320	1300	1120	1120	1220	1020	756	860	1120	1490	1400
6	1390	1320	1320	1110	1160	1210	1010	759	715	1140	1490	1300
7	1380	1330	1310	1110	1140	1190	1000	753	697	1150	1510	1300
8	1410	1340	1320	1160	1150	1160	1010	735	690	1150	1520	1300
9	1390	1360	1270	1120	1150	1200	1020	746	763	1170	1570	1300
10	1370	1350	1260	1080	1200	1230	1110	769	959	1190	1600	1200
11	1330	1370	1250	1070	1220	1220	1230	796	961	1220	1640	1200
12	1340	1310	1240	1040	1200	1200	1260	814	966	1240	1630	1200
13	1350	1370	1240	1030	1170	1170	1280	832	911	1240	1630	1200
14	1350	1350	1220	1040	1210	1180	1240	835	831	1250	1630	1160
15	1340	1380	1210	1010	1190	1180	1220	832	832	1250	1620	1090
16	1340	1440	1230	1050	1210	1190	1230	834	809	1250	1680	1090
17	1330	1480	1230	1060	1210	1170	1110	880	801	1260	1740	1020
18	1320	1540	1130	1040	1220	1210	976	838	795	1250	1760	985
19	1330	1410	1060	1040	1210	1220	874	645	873	1220	1720	934
20	1300	1310	1220	1030	1200	1200	876	488	969	1230	1690	910
21	1310	1320	1240	1120	1200	1210	889	459	993	1270	1720	920
22	1290	1310	1250	1090	1180	1220	903	525	1000	1300	1700	1010
23	1300	1310	1220	1150	1200	1250	942	589	1000	1300	1670	1440
24	1300	1330	1200	1160	1190	1200	843	649	1010	1270	1610	1580
25	1290	1320	1200	1160	1220	1190	795	642	1020	1220	1600	1600
26	1310	1300	1230	1110	1200	1220	787	813	1020	1170	1600	1440
27	1330	1320	1230	1150	1200	1220	786	850	1030	1160	1600	1170
28	1320	1330	1180	1160	1200	1230	788	850	1050	1260	1500	1350
29	1330	1320	1190	1110	---	1160	784	849	1070	1370	1500	1720
30	1320	1260	1170	1120	---	1100	783	865	1080	1410	1500	1190
31	1320	---	1200	1190	---	1090	---	880	---	1470	1500	---

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

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

ROAN RIVER BASIN

09095000 ROAN CREEK NEAR DE BEQUE, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	7.5	3.0	11.0	8.5	14.0	6.0	18.5	12.5	22.0	10.5	15.0	12.0
2	8.0	1.5	9.5	8.0	15.0	6.5	18.0	11.0	22.0	10.5	15.0	12.0
3	9.5	1.5	8.0	7.0	15.5	7.0	16.0	10.0	22.0	10.5	15.0	12.0
4	9.0	1.5	11.5	6.0	16.0	8.5	18.0	9.5	22.5	10.5	15.0	12.5
5	14.5	5.0	11.0	7.5	16.5	8.5	19.0	9.5	22.5	11.0	15.0	12.0
6	15.0	4.5	10.0	8.0	17.0	9.0	17.0	10.5	22.5	13.0	16.5	12.0
7	15.0	5.0	8.5	6.5	13.0	9.5	20.0	9.5	22.5	13.5	17.0	11.0
8	16.0	5.5	7.5	5.0	10.0	8.0	20.0	10.5	21.5	13.5	18.0	11.0
9	12.0	5.0	8.0	6.0	13.5	7.0	20.0	9.5	21.5	12.5	19.0	11.5
10	9.0	5.0	8.5	6.0	16.0	7.0	20.5	10.0	22.0	12.5	19.5	13.0
11	8.5	4.5	8.5	6.0	17.5	8.0	21.5	10.0	21.0	11.0	19.5	12.0
12	10.5	3.5	10.0	6.5	18.0	9.0	22.0	10.5	21.0	12.0	18.0	10.5
13	12.0	3.5	11.5	7.0	18.5	9.5	22.0	11.0	19.0	13.0	16.0	9.5
14	16.5	4.5	11.5	8.0	17.0	10.0	21.5	11.0	15.0	11.5	17.0	9.5
15	17.0	5.5	11.5	8.5	17.5	10.0	22.0	12.5	16.5	11.0	17.5	8.5
16	17.0	6.0	11.0	9.0	17.5	8.5	22.0	12.0	14.5	12.5	18.0	8.5
17	15.0	7.0	10.0	8.5	16.5	8.0	20.5	11.5	14.5	12.5	18.0	8.5
18	14.5	7.0	11.5	8.5	12.0	9.5	19.0	11.0	13.5	12.5	19.0	9.0
19	13.0	6.0	13.0	8.5	14.5	8.0	21.5	10.0	13.5	12.0	18.0	9.0
20	12.5	4.0	15.0	7.0	17.5	7.5	20.0	11.0	13.5	12.0	16.0	10.0
21	13.0	5.0	14.0	7.0	18.0	8.5	19.0	11.5	14.5	11.5	17.0	9.0
22	12.5	6.0	14.0	7.0	18.5	8.5	21.0	12.0	15.0	12.0	18.0	8.5
23	14.0	6.0	13.0	7.0	18.5	9.5	21.0	12.5	15.0	12.5	17.5	9.5
24	12.0	7.0	13.0	7.5	18.5	9.5	21.5	12.5	15.0	13.0	17.0	10.0
25	11.0	6.5	13.0	8.5	19.5	9.5	21.5	11.5	15.0	13.0	16.5	10.0
26	11.5	4.5	16.0	8.0	18.0	10.0	20.5	12.5	14.0	12.5	16.5	10.5
27	12.5	5.5	15.5	8.0	19.5	10.0	22.0	13.0	15.0	12.0	16.5	10.0
28	11.5	7.0	15.0	9.0	20.0	10.0	22.5	13.0	15.0	13.0	17.0	9.0
29	10.0	7.0	13.0	8.5	20.0	10.0	22.5	11.5	15.0	12.5	17.0	9.0
30	11.0	6.5	11.5	7.0	19.0	12.0	20.0	11.0	14.5	12.5	16.0	9.0
31	---	---	13.0	6.0	---	---	22.0	10.5	14.5	12.0	---	---

ROAN RIVER BASIN

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09095000 ROAN CREEK NEAR DE BEQUE, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
OCTOBER			NOVEMBER			DECEMBER			
1	14	---	5.5	16		8.0	19	---	12
2	13	---	4.5	16		8.0	19	---	12
3	12	---	3.5	15		6.5	18	---	11
4	13	---	4.5	15		6.5	17	---	9.0
5	13	---	4.5	15		6.5	16	---	8.0
6	12	95	3.1	14		5.5	16	---	8.0
7	12	76	2.5	14		5.5	16	---	8.0
8	11	58	1.7	15		6.5	14	---	5.5
9	11	69	2.0	16		8.0	14	---	5.5
10	10	123	3.3	17		9.0	15	---	6.5
11	10	108	2.9	18		11	16	205	8.9
12	10	75	2.0	20		14	17	---	9.0
13	10	40	1.1	20		14	18	---	11
14	10	142	3.8	18		11	18	---	11
15	11	103	3.1	16		8.0	18	---	11
16	11	90	2.7	15		6.5	18	---	11
17	11	79	2.3	16		8.0	18	---	11
18	12	67	2.2	16		8.0	20	---	14
19	12	114	3.7	17		9.0	21	---	16
20	14	52	2.0	18		11	18	---	11
21	13	---	4.5	18		12	17	---	9.0
22	13	---	4.5	20		14	16	---	8.0
23	13	---	4.5	20		14	15	---	6.5
24	13	---	4.5	20		14	15	---	6.5
25	13	---	4.5	19		12	15	---	6.5
26	12	---	3.5	17		9.0	15	---	6.5
27	13	---	4.5	17		9.0	15	---	6.5
28	13	---	4.5	17		9.0	15	---	6.5
29	13	---	4.5	19		12	16	---	8.0
30	14	---	5.5	19		12	17	---	9.0
31	15	---	6.5	---			16	---	8.0
TOTAL	377	---	112.4	513		287.5	518	---	280.4

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
JANUARY			FEBRUARY			MARCH			
1	12	---	3.5	10		2.0	14	---	5.5
2	13	---	4.5	11		3.0	14	---	5.5
3	14	---	5.5	11		3.0	15	---	6.5
4	15	---	6.5	12		3.5	15	---	6.5
5	16	---	8.0	11		3.0	15	---	6.5
6	17	---	9.0	11		3.0	15	---	6.5
7	13	---	4.5	11		3.0	18	---	11
8	13	---	4.5	11		3.0	25	---	23
9	12	---	3.5	12		3.5	23	---	19
10	13	---	4.5	12		3.5	22	---	18
11	14	---	5.5	13		4.5	24	---	21
12	14	---	5.5	13		4.5	28	---	30
13	15	---	6.5	12		3.5	31	---	36
14	15	---	6.5	12		3.5	30	303	25
15	15	---	6.5	12		3.5	31	---	37
16	16	---	8.0	12		3.5	32	---	39
17	17	---	9.0	12		3.5	37	---	53
18	16	---	8.0	13		4.5	34	---	44
19	15	---	6.5	13		4.5	33	---	42
20	14	---	5.5	13		4.5	33	---	42
21	12	---	3.5	13		4.5	36	---	50
22	11	---	3.0	13		4.5	35	---	47
23	11	147	4.4	13		4.5	33	---	42
24	11	---	3.0	13		4.5	34	---	44
25	11	---	3.0	13		4.5	36	---	50
26	11	---	3.0	13		4.5	36	---	50
27	10	---	2.0	13		4.5	37	---	53
28	9.6	---	2.0	14		5.5	49	---	96
29	9.9	---	2.0	---			58	---	131
30	10	---	2.0	---			43	---	72
31	10	---	2.0	---			43	---	72
TOTAL	405.5	---	151.4	342		107.5	929	---	1184.0

ROAN RIVER BASIN

09095000 ROAN CREEK NEAR DE BEQUE, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
APRIL			MAY			JUNE			
1	37	---	53	321	1570	1360	91	1870	460
2	33	510	45	351	1380	1310	117	1740	550
3	32	455	39	347	1430	1340	140	1540	582
4	30	440	36	355	1320	1270	155	2450	1030
5	32	1120	97	372	1500	1510	152	3280	1350
6	36	1520	148	396	1310	1400	179	2550	1230
7	36	1230	120	504	2100	2860	206	1820	1010
8	37	750	75	528	2270	3240	240	1640	1060
9	37	850	85	498	2210	2970	244	1200	791
10	44	1320	157	456	2400	2950	236	960	612
11	46	780	97	432	1860	2170	232	840	526
12	46	790	98	432	1550	1810	216	730	426
13	46	600	75	444	1590	1910	213	650	374
14	46	590	73	456	1630	2010	216	580	338
15	49	860	114	480	2530	3280	192	680	353
16	53	1070	153	617	---	6400	182	650	319
17	68	3880	712	832	---	12000	188	730	371
18	72	4050	787	950	---	19000	179	720	348
19	82	3450	764	1130	9870	30100	167	540	243
20	95	2200	564	961	---	26000	138	440	164
21	125	1850	624	823	9480	21100	140	445	168
22	150	1970	798	673	7630	13900	145	340	133
23	170	2440	1120	498	6600	8870	140	300	113
24	212	2880	1650	345	6220	5790	140	310	117
25	216	2980	1740	260	5180	3640	130	310	109
26	247	2180	1450	161	5290	2300	132	460	164
27	265	1970	1410	179	4300	2080	128	345	119
28	271	1850	1350	152	4170	1710	113	320	98
29	284	1610	1230	128	4170	1440	107	295	85
30	293	1570	1240	98	3130	828	102	255	70
31	---	---	---	83	2170	486	---	---	---
TOTAL	3190	---	16904	14262	---	187034	4960	---	13313
DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
JULY			AUGUST			SEPTEMBER			
1	89	285	68	35	125	12	21	86	5.0
2	83	315	71	32	105	9.0	20	100	5.5
3	80	265	57	32	128	11	21	72	4.0
4	78	235	49	28	135	10	20	86	4.5
5	77	200	42	30	190	15	19	72	3.5
6	74	225	45	32	88	7.5	19	100	5.0
7	72	260	51	32	73	6.5	20	85	4.5
8	70	1430	270	28	57	4.5	17	90	4.0
9	68	645	118	23	120	7.5	16	62	2.5
10	66	370	66	25	118	8.0	16	66	3.0
11	63	335	57	23	118	7.5	16	85	3.5
12	59	320	51	23	134	8.5	16	46	2.0
13	57	260	40	23	60	4.0	16	28	1.0
14	56	185	28	23	65	4.0	16	44	2.0
15	54	170	25	23	155	9.5	17	56	2.5
16	51	135	19	26	302	21	18	81	4.0
17	46	255	32	22	112	6.5	18	51	2.5
18	48	575	75	21	120	7.0	17	90	4.0
19	49	300	40	23	257	16	17	85	4.0
20	50	205	28	23	173	11	17	91	4.0
21	48	220	29	23	190	12	17	50	2.5
22	46	185	23	23	227	14	17	41	2.0
23	46	160	20	23	370	23	18	65	3.0
24	47	195	25	23	438	27	15	308	12
25	39	145	15	23	168	10	14	73	3.0
26	38	100	10	25	178	12	16	82	3.5
27	38	120	12	23	118	7.5	18	117	5.5
28	38	100	10	23	96	6.0	20	85	4.5
29	38	145	15	23	106	6.5	17	64	3.0
30	38	105	11	23	98	6.0	14	41	1.5
31	34	145	13	23	98	6.0	---	---	---
TOTAL	1740	---	1415	782	---	316.0	523	---	111.5
YEAR	28541.5		221216.7						

09095400 DRY FORK NEAR DE BEQUE, CO

LOCATION.--Lat 39°22'08", long 108°15'41", in SE¼SW¼ sec.7, T.8 S., R.97 W., Garfield County, Hydrologic Unit 14010006, on right bank 0.4 mi (0.6 km) upstream from mouth and 3.4 mi (5.5 km) northwest of De Beque.

DRAINAGE AREA.--109 mi² (282 km²).

PERIOD OF RECORD.--October 1974 to current year.

REVISED RECORDS.--WDR CO-76-2: 1975(M).

GAGE.--Water-stage recorder. Altitude of gage is 5,085 ft (1,550 m), from topographic map.

REMARKS.--Records good except those for periods of no gage-height record or those for periods of ice effect, which are poor. Diversions above station for irrigation of hay meadows. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--5 years 3.22 ft³/s (0.092 m³/s) 2,330 acre-ft/yr (2.87 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 784 ft³/s (22.2 m³/s) Oct. 27, 1974, gage height, 7.11 ft (2.167 m), from floodmarks, from rating curve extended above 47 ft³/s (1.3 m³/s), on basis of slope-area measurement of peak flow at gage height 6.93 ft (2.112 m); no flow Aug. 10, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 50 ft³/s (1.4 m³/s) and maximum (%):

Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)		Date	Time	Discharge (ft ³ /s) (m ³ /s)		Gage height (ft) (m)	
Mar. 28	0600	68	1.93	3.93	1.198	May 21	1200	69	1.95	4.09	1.234
Apr. 5	1930	53	1.50	3.90	1.189	Aug. 16	1130	370	10.5	5.75	1.753

Minimum daily discharge, 0.07 ft³/s (0.002 m³/s) Dec. 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.6	3.3	3.6	.10	.37	2.2	8.5	13	28	13	5.0	3.8
2	3.6	3.3	3.8	.15	.36	3.2	8.8	16	26	12	5.7	3.8
3	2.8	3.2	.98	.30	.36	3.5	7.3	19	24	12	6.1	3.6
4	2.8	3.2	1.4	.41	.35	2.9	8.8	19	23	12	6.1	3.6
5	2.6	3.3	1.6	.52	.33	2.7	13	19	22	12	6.3	3.3
6	2.3	3.3	.88	.20	.35	3.6	15	22	21	11	6.3	3.2
7	2.1	3.3	.52	.25	.36	11	16	28	20	11	5.5	2.8
8	2.2	3.5	.31	.40	.35	21	15	43	21	10	4.6	3.2
9	2.4	3.3	.18	.56	.35	15	13	45	20	10	3.2	3.2
10	3.2	3.3	.11	.58	.37	5.9	10	33	19	10	1.8	3.2
11	3.2	4.6	.07	.61	.46	6.6	9.1	33	19	10	1.9	3.2
12	2.9	8.5	.09	.40	.62	9.7	10	34	20	10	2.6	3.2
13	2.3	4.6	.20	.50	.84	13	9.4	36	19	9.7	2.8	3.2
14	1.4	4.1	.26	.56	1.1	10	10	32	19	9.4	2.8	3.3
15	1.4	3.8	.26	.55	1.5	14	13	35	18	9.4	2.9	3.5
16	1.4	3.8	.11	.60	2.0	9.7	15	39	17	9.1	15	3.6
17	1.4	3.2	.14	.65	3.0	15	17	44	17	8.2	3.0	3.6
18	1.4	3.2	.18	.69	2.7	6.8	21	52	17	9.4	2.9	3.6
19	1.4	3.2	.26	.40	2.3	4.3	16	52	17	9.1	3.5	4.1
20	1.4	3.5	.23	.40	2.2	15	13	54	17	8.8	3.6	4.1
21	3.2	3.3	.24	.45	2.6	20	10	54	17	8.8	3.5	4.1
22	3.2	3.3	.25	.57	2.3	20	9.7	50	16	8.5	3.3	4.5
23	3.2	3.8	.26	.55	2.1	10	11	47	16	8.2	3.3	4.5
24	3.2	3.5	.27	.56	2.1	10	11	48	15	8.5	3.3	4.6
25	3.3	3.8	.25	.58	2.1	12	13	49	15	7.9	3.3	4.6
26	3.3	4.0	.23	.55	2.1	16	11	50	15	6.6	3.3	5.2
27	3.3	3.5	.24	.50	2.2	17	10	43	14	5.0	3.8	6.1
28	3.5	1.9	.28	.45	2.1	34	11	43	14	5.0	4.0	6.3
29	3.5	3.5	.29	.43	---	8.8	11	38	13	4.8	4.0	6.3
30	3.3	3.6	.34	.40	---	9.1	12	33	13	3.6	4.0	6.6
31	3.3	---	.36	.38	---	8.5	---	33	---	4.0	4.0	---
TOTAL	83.1	109.7	18.19	14.25	37.87	340.5	358.6	1156	552	277.0	131.4	121.9
MEAN	2.68	3.66	.59	.46	1.35	11.0	12.0	37.3	18.4	8.94	4.24	4.06
MAX	4.6	8.5	3.8	.69	3.0	34	21	54	28	13	15	6.6
MIN	1.4	1.9	.07	.10	.33	2.2	7.3	13	13	3.6	1.8	2.8
AC-FT	165	218	36	28	75	675	711	2290	1090	549	261	242

CAL YR 1978	TOTAL	1826.71	MEAN 5.00	MAX 46	MIN .02	AC-FT 3620
WTR YR 1979	TOTAL	3200.51	MEAN 8.77	MAX 54	MIN .07	AC-FT 6350

NOTE.--NO GAGE-HEIGHT RECORD JAN. 2 TO FEB. 16.

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 (30 m) north of U.S. Highways 6 and 24, 0.5 mi (0.8 km) upstream from Jackson Canyon, 5.9 mi (9.5 km) upstream from Grand Valley project diversion dam, and 7 mi (11 km) northeast of Cameo.

DRAINAGE AREA.--8,050 mi² (20,850 km²), 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 (1,467.225 m). 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 (16 km) downstream at different datum. Oct. 10, 1934, to Feb. 27, 1958, water-stage recorder at site 3.0 mi (4.8 km) downstream at datum 22.55 ft (6.873 m) lower.

REMARKS.--Records good except those for winter period, which are fair. Natural flow of stream affected by transmountain diversions, storage reservoirs, power development, and diversion for irrigation of about 160,000 acres (648 km²).

AVERAGE DISCHARGE.--46 years, 3,811 ft³/s (107.9 m³/s), 2,761,000 acre-ft/yr (3,404 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 36,000 ft³/s (1,020 m³/s) June 16, 1935, gage height, 10.91 ft (3.325 m), site and datum then in use; maximum gage height, 11.60 ft (3.536 m) June 8, 1952, site and datum then in use; minimum daily discharge, 700 ft³/s (19.8 m³/s) Dec. 29, 1939.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 21,600 ft³/s (612 m³/s) at 2100 May 29, gage height, 10.58 ft (3.225 m); minimum daily, 1,130 ft³/s (32.0 m³/s) Jan. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1740	1890	1940	1400	1300	1620	2050	4110	15000	14900	3810	2430
2	1700	1880	2000	1250	1320	1650	1960	4450	13200	15600	3610	2370
3	1690	1870	1840	1130	1380	1610	1900	4690	12100	14400	3430	2310
4	1670	1850	1580	1180	1400	1570	1830	4440	12500	13300	3210	2210
5	1660	1840	1610	1300	1400	1530	1860	4140	13600	12500	3060	2160
6	1660	1830	1520	1400	1360	1540	1880	4320	15200	12200	2950	2100
7	1700	1840	1500	1530	1400	1580	2000	5120	17300	11900	2860	2090
8	1720	1810	1300	1450	1480	1600	2060	6160	18600	11400	2830	2070
9	1720	1780	1250	1300	1500	1670	2280	5590	16400	11100	2900	2060
10	1720	1810	1230	1210	1540	1700	2410	4950	14200	10400	2910	2210
11	1710	1830	1280	1300	1500	1610	2480	4570	12100	9750	2780	2210
12	1690	2000	1320	1320	1530	1680	2440	4320	11800	9160	2690	2180
13	1710	2070	1370	1400	1580	1860	2270	4220	13300	8810	2640	2160
14	1720	1920	1420	1500	1600	1890	2130	4410	15900	8380	2610	2150
15	1720	1900	1480	1400	1620	1940	2190	4990	17800	7860	2700	2150
16	1700	1850	1430	1420	1650	1940	2380	6000	18900	7470	2820	2160
17	1680	1810	1410	1500	1660	1950	2740	7300	19400	7330	2890	2140
18	1640	1800	1430	1400	1600	1950	3190	8550	18700	6890	2910	2050
19	1660	1780	1500	1400	1570	1940	3580	10500	17000	6510	2980	2000
20	1700	1810	1620	1380	1550	1940	3750	12300	14800	5980	3000	1970
21	1730	1830	1580	1400	1600	2000	3620	13800	13100	5580	2970	1970
22	1790	1850	1520	1400	1650	2130	3490	14700	12900	5380	3000	1970
23	2030	1880	1500	1310	1600	1930	3620	15300	13700	5660	2950	1970
24	1950	1870	1550	1260	1600	1840	3940	16100	14400	5330	2890	1970
25	1920	1890	1500	1200	1550	1850	4140	17000	14700	5170	2800	1950
26	1920	1910	1470	1250	1560	1870	4180	17200	15000	5030	2750	1970
27	1920	1920	1400	1300	1600	1900	4060	18200	15100	4820	2720	1990
28	1880	1860	1300	1370	1610	2120	3990	19600	15100	4660	2700	2000
29	1870	1790	1400	1400	---	2240	4180	20900	14900	4590	2590	1970
30	1880	1840	1480	1400	---	2090	4140	19900	14700	4330	2500	1980
31	1890	---	1500	1350	---	2200	---	18000	---	4130	2470	---
TOTAL	54690	55810	46230	41810	42710	56940	86740	305830	451400	260520	89930	62920
MEAN	1764	1860	1491	1349	1525	1837	2891	9865	15050	8404	2901	2097
MAX	2030	2070	2000	1530	1660	2240	4180	20900	19400	15600	3810	2430
MIN	1640	1780	1230	1130	1300	1530	1830	4110	11800	4130	2470	1950
AC-FT	108500	110700	91700	82930	84720	112900	172000	606600	895400	516700	178400	124800

CAL YR 1978 TOTAL 1318060 MEAN 3611 MAX 19300 MIN 1120 AC-FT 2614000
WTR YR 1979 TOTAL 1555930 MEAN 4262 MAX 20900 MIN 1130 AC-FT 3085000

NOTE.--NO GAGE-HEIGHT RECORD JAN. 29 TO MAR. 10.

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.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 1,970 micromhos Jan. 19, 1940; minimum daily, 235 micromhos May 26, 1936.

WATER TEMPERATURES: Maximum, 24°C Aug. 16, 1962; minimum, freezing point on many days during winter months.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum daily, 1,450 micromhos Dec. 16-17; minimum daily, 290 micromhos June 18.

WATER TEMPERATURES: Maximum daily, 18.0°C Aug. 15; minimum daily, 0.0°C many days during December to January.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
OCT										
11...	0930	1960	1100	8.2	11.0	9.4	260	120	74	18
NOV										
14...	1330	1950	975	8.4	7.0	9.9	260	120	74	18
29...	1045	1790	1160	8.1	1.5	--	250	110	70	18
DEC										
12...	1230	1320	1430	8.1	.5	11.8	350	170	100	25
MAR										
12...	1330	1680	1190	8.2	6.0	10.4	280	130	79	19
APR										
27...	1100	4050	700	8.3	10.5	9.1	--	--	--	--
MAY										
23...	1245	15400	375	8.1	13.0	8.9	140	21	40	10
JUN										
18...	1300	18500	290	8.0	12.0	8.6	110	38	31	7.2
JUL										
11...	1200	9550	400	8.0	16.0	8.4	120	41	35	8.1
AUG										
15...	1130	2720	1050	8.3	18.0	8.1	250	110	76	14

DATE	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	ALKA- LINITY (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)
OCT									
11...	150	4.1	4.2	170	0	140	160	190	.3
NOV									
14...	110	3.0	3.6	170	0	140	140	150	.2
29...	120	3.3	3.5	170	0	140	150	170	.2
DEC									
12...	190	4.4	6.5	220	0	180	210	270	.3
MAR									
12...	150	3.9	4.0	--	--	150	200	190	.3
APR									
27...	--	--	--	--	--	120	110	74	.2
MAY									
23...	22	.8	1.8	--	--	120	48	18	.2
JUN									
18...	16	.7	1.3	--	--	69	42	15	.2
JUL									
11...	30	1.2	1.7	--	--	80	53	36	.2
AUG									
15...	49	1.4	4.0	--	--	140	170	130	.3

COLORADO RIVER MAIN STEM

09095500 COLORADO RIVER NEAR CAMEO, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	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, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
OCT									
11...	8.2	689	.94	3650	.04	.00	.00	10	10
NOV									
14...	9.5	590	.80	3110	.15	.01	.03	20	10
29...	8.8	625	.85	3020	.17	.00	.00	70	10
DEC									
12...	10	921	1.25	3280	.14	.02	.01	40	40
MAR									
12...	8.2	742	1.01	3370	.27	.02	.02	40	400
APR									
27...	--	--	--	--	.38	.02	.03	--	--
MAY									
23...	8.9	223	.30	9270	.35	.02	--	20	10
JUN									
18...	6.9	162	.22	8090	.12	.02	--	50	0
JUL									
11...	7.7	220	.30	5670	.10	.01	--	40	10
AUG									
15...	9.4	537	.73	3940	.02	.01	--	40	10

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1030	1100	975	605	1130	1150	1050	650	300		---	
2	1030	1100	975	604	1130	1150	1050	650	300		---	
3	1030	1100	1000	602	1130	1150	1050	650	300		605	
4	1030	1100	1000	604	1130	1150	1050	650	300		602	
5	1030	1050	1000	607	1130	1150	1050	650	325		607	
6	1030	1050	1000	606	1130	1150	950	650	325		604	
7	1030	1050	1100	604	1130	1150	950	650	325		606	
8	1030	1050	1150	606	1130	1150	900	650	325		598	
9	1030	1000	1260	1300	1130	1100	900	675	350		597	
10	1030	1000	1300	1200	1100	1100	900	675	350		593	
11	1030	1000	1300	1100	1100	1100	900	675	350		596	
12	1030	1000	1350	1100	1100	1100	900	700	350		593	
13	1030	1000	1400	1100	1050	1100	850	700	375		597	
14	1030	1000	1400	1050	1050	1100	800	700	375		594	
15	1030	1000	1400	1050	1000	1100	800	700	375		595	
16	1030	1000	1450	1050	1000	1100	750	650	375		593	
17	1030	1000	1450	1050	1000	1100	750	650	375		---	
18	1000	1000	1300	1030	1000	1100	750	650	375		---	
19	1000	1000	1200	1030	1000	1100	750	600	375		---	
20	1000	1000	1150	1030	1000	1100	725	600	350		---	
21	1000	1000	1150	1050	1050	1050	725	500	350		---	
22	1000	1050	1150	1050	1050	1050	700	500	325		---	
23	1000	1050	1150	1050	1100	1050	700	450	325		---	
24	1000	1050	1150	1050	1100	1050	650	450	300		---	
25	1000	1050	1150	1100	1150	1050	650	400	300		---	
26	1000	1050	1150	1100	1150	1050	650	400	300		---	
27	1000	1000	1150	1100	1150	1050	650	300	300		---	
28	1000	1000	1150	1130	1150	1050	650	300	300		---	
29	1000	975	1150	1130	---	1050	650	300	300		---	
30	1000	975	1200	1130	---	1050	650	300	300		---	
31	1000	---	1250	1130	---	1050	---	300	---		---	

COLORADO RIVER MAIN STEM

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09095500 COLORADO RIVER NEAR CAMEO, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
ONCE-DAILY

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

COLORADO RIVER BASIN

09095526 GOVERNMENT HIGHLINE CANAL AT 16 ROAD, NEAR LOMA, CO

LOCATION.--Lat 39°15'25"N, long 108°45'22"W, in NE¼SE¼ sec.12, T.2 N., R.3 W., Ute Meridian, Mesa County, Hydrologic Unit 14010005, on right bank 200 ft (61 m) downstream from county bridge on 16 Road, 0.4 mi (0.6 km) north of Q Road, and 5.1 mi (8.2 km) northeast of Loma.

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

GAGE.--Water-stage recorder. Altitude of gage is 4,740 ft (1,445 m), from topographic map. Prior to Mar. 30, 1976, nonrecording gage at site 200 ft (61 m) upstream at present datum.

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 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, 376 ft³/s (10.6 m³/s) Aug. 20, 1979; no flow for part of each year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	253	.00	.00	.00	.00	.00	.00	228	339	283	298	306
2	246	.00	.00	.00	.00	.00	.00	241	343	289	305	310
3	239	.00	.00	.00	.00	.00	.00	262	358	290	306	313
4	230	.00	.00	.00	.00	.00	.00	271	357	296	302	307
5	227	.00	.00	.00	.00	.00	.00	247	349	305	307	296
6	250	.00	.00	.00	.00	.00	.00	230	336	298	303	286
7	251	.00	.00	.00	.00	.00	.00	235	330	301	298	295
8	250	.00	.00	.00	.00	.00	.00	299	340	309	284	312
9	250	.00	.00	.00	.00	.00	.00	357	337	303	279	325
10	246	.00	.00	.00	.00	.00	.00	298	343	306	283	330
11	239	.00	.00	.00	.00	.00	.00	290	345	306	307	342
12	237	.00	.00	.00	.00	.00	.00	283	337	290	328	353
13	242	.00	.00	.00	.00	.00	.00	277	313	290	320	353
14	252	.00	.00	.00	.00	.00	.00	273	291	299	302	367
15	249	.00	.00	.00	.00	.00	.00	249	290	289	313	368
16	244	.00	.00	.00	.00	.00	.00	221	284	295	329	369
17	246	.00	.00	.00	.00	.00	.00	217	290	306	349	366
18	249	.00	.00	.00	.00	.00	.00	256	301	304	369	363
19	254	.00	.00	.00	.00	.00	.00	253	316	313	373	320
20	265	.00	.00	.00	.00	.00	.00	243	315	304	376	303
21	282	.00	.00	.00	.00	.00	.00	220	291	299	372	306
22	292	.00	.00	.00	.00	.00	.00	223	285	298	371	319
23	301	.00	.00	.00	.00	.00	.00	273	283	304	366	313
24	326	.00	.00	.00	.00	.00	7.2	288	273	314	345	310
25	240	.00	.00	.00	.00	.00	252	294	259	328	347	312
26	79	.00	.00	.00	.00	.00	233	302	243	320	346	317
27	10	.00	.00	.00	.00	.00	214	318	243	307	339	326
28	.00	.00	.00	.00	.00	.00	182	300	250	299	322	308
29	.00	.00	.00	.00	---	.00	186	298	253	315	308	302
30	.00	.00	.00	.00	---	.00	181	316	267	320	300	300
31	.00	---	.00	.00	---	.00	---	334	---	310	300	---
TOTAL	6449.00	.00	.00	.00	.00	.00	1255.20	8396	9161	9390	10047	9697
MEAN	208	.000	.000	.000	.000	.000	41.8	271	305	303	324	323
MAX	326	.00	.00	.00	.00	.00	252	357	358	328	376	369
MIN	.00	.00	.00	.00	.00	.00	.00	217	243	283	279	286
AC-FT	12790	.00	.00	.00	.00	.00	2490	16650	18170	18630	19030	19230
CAL YR 1978	TOTAL	58069.00	MEAN	159	MAX	360	MIN	.00	AC-FT	115200		
WTR YR 1979	TOTAL	54395.20	MEAN	149	MAX	376	MIN	.00	AC-FT	107900		

COLORADO RIVER BASIN

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09095528 LATERAL NO. 48 NEAR MACK, CO

LOCATION.--Lat 39°16'17", long 108°49'59", in NE¼SE¼ sec.5, T.2 N., R.3 W., Ute Meridian, Mesa County, Hydrologic Unit 14010005, on left bank 400 ft (120 m) downstream from headgate on Government Highline Canal and 3.7 mi (6.0 km) north of Mack.

PERIOD OF RECORD.--April 1973 to current year.

GAGE.--Water-stage recorder and sharp-crested weir. Altitude of gage is 4,720 ft (1,439 m), from topographic map.

REMARKS.--Records good. Water is used for irrigation of lands below gage along Mack Wash and Reed Wash. One small ditch diverts water about 10 ft (3 m) above gage. 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, 47 ft³/s (1.33 m³/s) Sept. 2, 1976; no flow many days each year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	.00	.00	.00	.00	.00	.00	9.6	36	39	43	42
2	26	.00	.00	.00	.00	.00	.00	12	36	37	41	42
3	26	.00	.00	.00	.00	.00	.00	12	37	39	41	42
4	26	.00	.00	.00	.00	.00	.00	15	38	39	40	41
5	26	.00	.00	.00	.00	.00	.00	19	37	39	40	43
6	26	.00	.00	.00	.00	.00	.00	22	37	39	39	43
7	26	.00	.00	.00	.00	.00	.00	23	36	39	42	43
8	26	.00	.00	.00	.00	.00	.00	21	35	39	44	44
9	27	.00	.00	.00	.00	.00	.00	14	31	38	45	43
10	32	.00	.00	.00	.00	.00	.00	14	29	41	44	41
11	34	.00	.00	.00	.00	.00	.00	15	28	45	44	37
12	34	.00	.00	.00	.00	.00	.00	15	26	43	45	34
13	32	.00	.00	.00	.00	.00	.00	15	24	44	44	34
14	29	.00	.00	.00	.00	.00	.00	15	24	44	43	34
15	29	.00	.00	.00	.00	.00	.00	15	25	45	41	33
16	27	.00	.00	.00	.00	.00	.00	15	30	45	39	32
17	27	.00	.00	.00	.00	.00	.00	15	32	46	38	29
18	26	.00	.00	.00	.00	.00	.00	15	31	46	39	28
19	26	.00	.00	.00	.00	.00	.00	14	34	43	39	27
20	27	.00	.00	.00	.00	.00	.00	14	34	44	38	28
21	26	.00	.00	.00	.00	.00	.00	22	36	46	37	24
22	25	.00	.00	.00	.00	.00	.00	28	36	46	37	22
23	25	.00	.00	.00	.00	.00	.00	30	38	45	35	22
24	26	.00	.00	.00	.00	.00	.00	32	41	45	36	21
25	27	.00	.00	.00	.00	.00	.00	33	40	46	37	20
26	12	.00	.00	.00	.00	.00	.00	33	43	45	38	22
27	3.2	.00	.00	.00	.00	.00	.00	34	43	42	36	23
28	1.0	.00	.00	.00	.00	.00	.00	36	42	41	36	23
29	.50	.00	.00	.00	---	.00	.00	35	40	41	38	21
30	.00	.00	.00	.00	---	.00	.00	36	40	43	39	20
31	.00	---	.00	.00	---	.00	---	37	---	45	41	---
TOTAL	703.70	.00	.00	.00	.00	.00	.00	665.6	1039	1319	1239	958
MEAN	22.7	.000	.000	.000	.000	.000	.000	21.5	34.6	42.5	40.0	31.9
MAX	34	.00	.00	.00	.00	.00	.00	37	43	46	45	44
MIN	.00	.00	.00	.00	.00	.00	.00	9.6	24	37	35	20
AC-FT	1400	.00	.00	.00	.00	.00	.00	1320	2060	2620	2460	1900
CAL YR 1978	TOTAL	6763.50	MEAN	18.5	MAX	45	MIN	.00	AC-FT	13420		
WTR YR 1979	TOTAL	5924.30	MEAN	16.2	MAX	46	MIN	.00	AC-FT	11750		

COLORADO RIVER BASIN

09095529 CAMP NO. 7 SPILLWAY NEAR MACK, CO

LOCATION.--Lat 39°16'22", Long 108°49'56", in NE¼SE¼ sec.5, T.2 N., R.3 W., Ute Meridian, Mesa County, Hydrologic Unit 10410005, on right bank at dam on spillway, 10 ft (3 m) downstream from headgates on Government Highline Canal, and 3.7 mi (6.0 km) north of Mack.

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

GAGE.--Water-stage recorder and concrete weir. Altitude of gage is 4,720 ft (1,439 m), from topographic map. Prior to Mar. 30, 1976, nonrecording gage at present site and datum.

REMARKS.--Records fair. Government Highline Canal diverts from Colorado River in SW¼NW¼ sec.13, T.10 S., R.98 W. Water flowing past this gage is waste water into Highline Lake. Flow is regulated by a diversion gate.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 121 ft³/s (3.43 m³/s) Apr. 7, 1976; no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	57	.00	.00	.00	.00	.00	.00	67	40	.00	.00	36
2	57	.00	.00	.00	.00	.00	.00	72	40	.00	.00	37
3	55	.00	.00	.00	.00	.00	.00	70	41	.00	.00	40
4	47	.00	.00	.00	.00	.00	.00	77	42	.00	.00	33
5	42	.00	.00	.00	.00	.00	.00	72	42	.00	.00	6.5
6	56	.00	.00	.00	.00	.00	.00	64	39	.00	.00	.00
7	56	.00	.00	.00	.00	.00	.00	57	37	.00	.20	.00
8	56	.00	.00	.00	.00	.00	.00	72	46	.00	.00	.00
9	57	.00	.00	.00	.00	.00	.00	85	49	.00	.00	.00
10	51	.00	.00	.00	.00	.00	.00	89	54	.00	.00	.00
11	47	.00	.00	.00	.00	.00	.00	92	54	.00	.46	.00
12	47	.00	.00	.00	.00	.00	.00	95	54	.00	3.4	.00
13	50	.00	.00	.00	.00	.00	.00	102	48	.00	2.3	.00
14	57	.00	.00	.00	.00	.00	.00	98	29	.00	.21	.00
15	56	.00	.00	.00	.00	.00	.00	84	26	.00	.22	.00
16	56	.00	.00	.00	.00	.00	.00	64	8.0	.00	17	.00
17	56	.00	.00	.00	.00	.00	.00	51	.80	.00	34	.00
18	60	.00	.00	.00	.00	.00	.00	59	.90	.00	46	.00
19	60	.00	.00	.00	.00	.00	.00	63	10	.00	48	.00
20	62	.00	.00	.00	.00	.00	.00	56	16	.00	51	.00
21	68	.00	.00	.00	.00	.00	.00	34	.33	.00	53	30
22	72	.00	.00	.00	.00	.00	.00	13	.00	.00	52	68
23	75	.00	.00	.00	.00	.00	.00	35	.00	.00	54	67
24	83	.00	.00	.00	.00	.00	36	21	.00	.46	52	67
25	51	.00	.00	.00	.00	.00	119	26	.00	5.0	51	67
26	31	.00	.00	.00	.00	.00	99	24	.00	4.1	50	65
27	.00	.00	.00	.00	.00	.00	94	32	.00	.46	51	57
28	.00	.00	.00	.00	.00	.00	80	26	.00	.00	50	66
29	.00	.00	.00	.00	---	.00	73	24	.00	.00	41	66
30	.00	.00	.00	.00	---	.00	64	32	.00	.00	27	56
31	.00	---	.00	.00	---	.00	---	37	---	.00	13	---
TOTAL	1465.00	.00	.00	.00	.00	.00	565.00	1793	677.03	10.02	696.79	781.50
MEAN	47.3	.000	.000	.000	.000	.000	18.8	57.8	22.6	.32	22.5	26.1
MAX	83	.00	.00	.00	.00	.00	119	102	54	5.0	54	68
MIN	.00	.00	.00	.00	.00	.00	.00	13	.00	.00	.00	.00
AC-FT	2910	.00	.00	.00	.00	.00	1120	3560	1340	20	1380	1550
CAL YR 1978	TOTAL	5294.94	MEAN 14.5	MAX 90	MIN .00	AC-FT 10500						
WTR YR 1979	TOTAL	5988.34	MEAN 16.4	MAX 119	MIN .00	AC-FT 11880						

COLORADO RIVER BASIN

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09095530 GOVERNMENT HIGHLINE CANAL NEAR MACK, CO

LOCATION.--Lat 39°17'09", long 108°49'46", in NE¼SE¼ sec.12, T.9 S., R.103 W., Sixth Principal Meridian, Mesa County, Hydrologic Unit 14010005, on right bank 50 ft (15 m) upstream from flume over Mack Wash, 1.1 mi (1.8 km) downstream from headgate of Lateral No. 48, and 4.6 mi (7.4 km) north of Mack.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1973 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 4,717 ft (1,438 m), 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 West Salt Creek and Badger Wash. Water can be wasted into Mack Wash from flume below gage. The entire flow is regulated by diversion gates.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 168 ft³/s (4.76 m³/s) July 25, 1979; no flow for part of each year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	124	.00	.00	.00	.00	.00	.00	54	145	146	148	155
2	124	.00	.00	.00	.00	.00	.00	53	146	150	153	155
3	124	.00	.00	.00	.00	.00	.00	60	146	148	154	155
4	124	.00	.00	.00	.00	.00	.00	55	146	151	152	156
5	124	.00	.00	.00	.00	.00	.00	48	146	154	158	162
6	124	.00	.00	.00	.00	.00	.00	56	140	150	159	159
7	124	.00	.00	.00	.00	.00	.00	68	140	149	159	160
8	124	.00	.00	.00	.00	.00	.00	71	142	154	150	162
9	125	.00	.00	.00	.00	.00	.00	74	144	154	144	158
10	125	.00	.00	.00	.00	.00	.00	74	144	153	148	156
11	125	.00	.00	.00	.00	.00	.00	84	146	152	157	153
12	125	.00	.00	.00	.00	.00	.00	85	146	149	165	154
13	125	.00	.00	.00	.00	.00	.00	85	146	148	163	153
14	125	.00	.00	.00	.00	.00	.00	84	145	150	155	154
15	125	.00	.00	.00	.00	.00	.00	83	146	146	158	154
16	125	.00	.00	.00	.00	.00	.00	86	148	148	157	155
17	126	.00	.00	.00	.00	.00	.00	91	153	156	155	156
18	126	.00	.00	.00	.00	.00	.00	99	156	156	156	156
19	126	.00	.00	.00	.00	.00	.00	100	155	161	155	153
20	126	.00	.00	.00	.00	.00	.00	100	148	158	156	154
21	126	.00	.00	.00	.00	.00	.00	105	147	150	156	150
22	126	.00	.00	.00	.00	.00	.00	126	144	148	156	141
23	126	.00	.00	.00	.00	.00	.00	126	147	154	156	138
24	127	.00	.00	.00	.00	.00	.00	146	141	161	156	133
25	126	.00	.00	.00	.00	.00	39	144	138	168	156	129
26	77	.00	.00	.00	.00	.00	46	151	127	167	155	129
27	25	.00	.00	.00	.00	.00	55	148	124	162	156	129
28	4.8	.00	.00	.00	.00	.00	45	147	129	158	156	128
29	2.0	.00	.00	.00	---	.00	39	146	132	162	156	128
30	1.4	.00	.00	.00	---	.00	46	144	137	159	156	128
31	.00	---	.00	.00	---	.00	---	142	---	153	159	---
TOTAL	3237.20	.00	.00	.00	.00	.00	270.00	3035	4294	4775	4820	4453
MEAN	104	.000	.000	.000	.000	.000	9.00	97.9	143	154	155	148
MAX	127	.00	.00	.00	.00	.00	55	151	156	168	165	162
MIN	.00	.00	.00	.00	.00	.00	.00	48	124	146	144	128
AC-FT	6420	.00	.00	.00	.00	.00	536	6020	8520	9470	9560	8830
CAL YR 1978 TOTAL	26145.20			MEAN 71.6	MAX 158	MIN .00	AC-FT 51860					
WTR YR 1979 TOTAL	24884.20			MEAN 68.2	MAX 168	MIN .00	AC-FT 49360					

COLORADO RIVER BASIN

09095530 GOVERNMENT HIGHLINE CANAL NEAR MACK, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD--August 1973 to current year.

PERIOD OF DAILY RECORD--

SPECIFIC CONDUCTANCE: August 1973 to current year.

WATER TEMPERATURES: August 1973 to current year.

INSTRUMENTATION--Water-quality monitor since August 1973.

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

EXTREMES FOR PERIOD OF DAILY RECORD--

SPECIFIC CONDUCTANCE: Maximum, 2,130 micromhos Oct. 2, 1974; minimum 277 micromhos June 18, 19, 1979.

WATER TEMPERATURE: Maximum, 27.5°C July 30 and Aug. 11, 1978; minimum 1.5°C Apr. 11-14, 1976.

EXTREMES FOR CURRENT YEAR--

SPECIFIC CONDUCTANCE: Maximum, 1,180 micromhos Sept. 29; minimum, 277 micromhos June 18, 19.

WATER TEMPERATURES: Maximum, 28.5°C Aug. 8, 10; minimum, not determined.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
OCT 23...	1145	E125	1060	8.2	12.0	7.9	250	110	72	17
MAY 15...	0930	82	700	7.7	15.5	7.3	230	89	62	18
JUL 23...	1230	145	580	7.9	22.0	6.9	230	130	64	17

DATE	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	RICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	ALKA- LITY (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)
OCT 23...	140	3.9	4.1	170	0	140	140	190	.3
MAY 15...	66	1.9	3.0	--	--	140	120	67	.2
JUL 23...	63	1.8	3.6	--	--	100	130	59	.3

DATE	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, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
OCT 23...	.8	648	.88	219	.01	.00	.01	20	5
MAY 15...	9.6	433	.59	95.9	.59	.01	--	30	10
JUL 23...	8.5	348	.47	136	.43	.04	--	30	2

E ESTIMATED.

COLORADO RIVER BASIN

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09095530 GOVERNMENT HIGHLINE CANAL NEAR MACK, CO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1070						---	640	318	431	617	919
2	1080						---	644	319	357	634	937
3	1100						---	647	332	409	674	948
4	1110						---	651	338	346	697	947
5	1110						---	655	343	355	717	963
6	1120						---	656	342	473	743	993
7	1110						---	662	340	378	786	1010
8	1120						---	668	331	387	832	1020
9	1110						---	660	316	392	843	1040
10	1090						---	650	312	397	850	1060
11	1100						---	663	328	401	860	1070
12	1100						---	682	340	406	840	1040
13	1110						---	694	359	411	850	1030
14	1100						---	711	362	414	850	1020
15	1100						---	728	331	414	860	1030
16	1090						---	713	305	422	850	1010
17	1090						---	678	294	430	853	1020
18	1100						---	640	285	442	860	1040
19	1100						---	589	291	441	840	1040
20	1100						---	535	313	459	820	1050
21	1090						---	468	353	474	859	1060
22	1090						---	430	376	493	846	1080
23	1090						---	430	390	577	843	1100
24	1070						---	409	433	592	835	1100
25	1030						724	401	454	573	835	1100
26	1000						700	390	460	586	836	1100
27	1080						656	383	468	588	855	1100
28	1060						645	373	470	592	867	1100
29	1100						642	359	468	597	869	1140
30	1100						643	347	470	604	874	1080
31	---						---	332	---	603	886	---

COLORADO RIVER BASIN

09095530 GOVERNMENT HIGHLINE CANAL NEAR MACK, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

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	14.5	7.5										
9	---	---										
10	---	---										
11	---	---										
12	---	---										
13	---	---										
14	---	---										
15	---	---										
16	---	---										
17	---	---										
18	---	---										
19	---	---										
20	---	---										
21	---	---										
22	---	---										
23	---	---										
24	---	---										
25	---	---										
26	---	---										
27	---	---										
28	---	---										
29	15.5	7.0										
30	---	---										
31	---	---										

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	17.0	14.0	16.0	12.0	---	---	26.0	22.0	24.0	19.5
2	---	---	15.0	13.5	16.5	12.5	---	---	26.0	23.0	23.0	20.0
3	---	---	15.0	12.0	16.5	12.0	---	---	26.5	22.5	23.5	20.0
4	---	---	15.5	11.0	18.5	14.5	---	---	26.5	23.0	23.0	21.0
5	---	---	15.5	12.0	19.5	15.0	---	---	26.5	23.5	23.5	20.5
6	---	---	16.0	12.0	19.0	15.0	---	---	27.5	24.0	23.5	20.5
7	---	---	14.0	11.0	18.0	14.0	---	---	28.0	25.5	23.0	21.0
8	---	---	12.5	10.5	15.5	12.5	---	---	28.5	25.0	23.5	21.5
9	---	---	11.5	9.0	15.5	11.0	---	---	---	---	23.5	21.5
10	---	---	11.0	8.5	16.0	11.0	---	---	28.5	25.0	24.5	22.0
11	---	---	12.5	9.0	17.0	13.0	---	---	27.5	25.0	24.5	22.0
12	---	---	14.0	11.0	18.5	13.0	---	---	---	---	24.0	21.5
13	---	---	15.5	12.0	19.5	15.5	24.5	23.0	27.5	24.5	23.0	20.0
14	---	---	17.0	14.0	20.0	16.0	25.0	22.0	---	---	21.5	19.0
15	---	---	18.0	15.0	19.5	16.0	25.0	22.5	---	---	21.0	17.5
16	---	---	18.0	16.0	19.5	15.0	25.0	22.0	---	---	21.0	18.0
17	---	---	18.0	14.5	19.0	14.5	24.5	21.5	---	---	21.5	18.0
18	---	---	19.0	15.5	---	---	25.5	21.5	---	---	21.5	18.0
19	---	---	19.5	16.5	---	---	25.0	21.5	---	---	21.5	18.5
20	---	---	19.0	17.0	---	---	24.0	21.0	22.0	20.5	20.5	19.0
21	---	---	19.5	17.0	---	---	24.5	21.5	22.0	18.5	21.5	19.0
22	---	---	19.5	17.0	---	---	25.5	21.5	23.0	19.5	21.5	18.5
23	---	---	18.5	16.5	---	---	25.0	22.5	23.5	20.0	21.5	19.0
24	---	---	17.5	15.0	---	---	26.5	22.5	24.0	20.5	21.5	19.0
25	16.5	9.5	18.5	14.0	---	---	27.0	23.0	23.5	20.5	21.5	18.5
26	15.5	12.0	18.5	15.5	---	---	27.0	23.5	24.0	21.0	21.0	19.0
27	16.0	12.0	18.5	15.5	---	---	27.5	23.5	24.0	20.0	21.0	18.0
28	17.0	13.0	19.0	16.5	---	---	26.5	23.0	24.5	20.0	21.0	17.5
29	17.0	13.5	19.0	15.5	---	---	27.5	23.5	23.5	20.0	20.5	17.5
30	17.5	12.5	17.5	14.5	---	---	27.0	23.5	23.0	20.0	21.0	17.5
31	---	---	16.0	12.5	---	---	26.5	23.0	24.0	19.0	---	---

PLATEAU CREEK BASIN

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09096100 VEGA RESERVOIR NEAR COLLBRAN, CO

LOCATION.--Lat 39°13'30", long 107°48'40", in sec.6, T.10 S., R.93 W., Mesa County, Hydrologic Unit 14010005, at dam on Plateau Creek, 10 mi (16 km) southeast of Collbran.

DRAINAGE AREA.--24.4 mi² (63.2 km²).

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

GAGE.--Nonrecording gage read once daily. Datum of gage is 7,906 ft (2,409.7 m) National Geodetic Vertical Datum of 1929 (levels by Water and Power Resources Service); gage readings have been reduced to elevations NGVD.

REMARKS.--Reservoir is formed by an earth and rockfill dam. Dam completed by Water and Power Resources Service in 1960. Usable storage began in May 1958 while dam was under construction. Capacity of reservoir, 32,930 acre-ft (40.6 hm³) between elevations 7,906 ft (2,409.7 m), bottom of outlet gate, and 7,984 ft (2,433.5 m), crest of spillway. Dead storage, 823 acre-ft (1.01 hm³). Figures given are usable contents. Reservoir is used to store water for irrigation and power development.

COOPERATION.--Records furnished by Water and Power Resources Service.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 35,220 acre-ft (43.4 hm³) June 17, 1975, elevation, 7,985.5 ft (2,434.29 m); minimum since first filling in May 1962, 850 acre-ft (1.05 hm³) Aug. 19 to Sept. 30, 1977, Oct. 1 to Nov. 30, 1978, elevation, 7,914.6 ft (2,442.37 m).

EXTREMES FOR CURRENT YEAR.--Maximum contents, not determined; minimum, not determined; daily readings not available.

MONTHEND ELEVATION IN FEET NGVD AND CONTENTS, AT 1000, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

Date	Elevation	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.	7,945.3	8,580	-
Oct. 31.	7,943.3	8,080	-500
Nov. 30.	7,944.5	8,500	+420
Dec. 31.	7,947.5	9,440	+940
CAL YR 1978		-	+8,510
Jan. 31.	7,948.6	9,900	+460
Feb. 28.	7,948.9	10,000	+100
Mar. 31.	7,949.6	10,300	+300
Apr. 30.	7,950.7	10,800	+500
May 31.	7,969.4	21,300	+10,500
June 30.	7,985.8	34,600	+13,300
July 31.	7,981.2	30,500	-4,100
Aug. 31.	7,965.4	18,700	-11,800
Sept. 30.	7,952.2	11,500	-7,200
WTR YR 1979			+2,920

PLATEAU CREEK BASIN

09096500 PLATEAU CREEK NEAR COLLEBRAN, CO

LOCATION.--Lat 39°15'02", long 107°50'24", in SE¼NE¼ sec.26, T.9 S., R.94 W., Mesa County, Hydrologic Unit 14010005, on right bank 10 ft (3 m) downstream from private bridge, 1.5 mi (2.4 km) downstream from Leon Creek, and 6.6 mi (10.6 km) east of Collbran.

DRAINAGE AREA.--80.4 mi² (208.2 km²).

PERIOD OF RECORD.--September 1921 to current year. Prior to October 1933, monthly discharge only, published in MSP 1313.

REVISED RECORDS.--MSP 1243: 1922(M), 1935(M). MSP 1924: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 7,130 ft (2,173 m), from topographic map.

REMARKS.--Records good except those for winter period, which are fair. Natural flow of stream affected by storage in Vega Reservoir (station 09096100) since May 1958, transbasin diversion to Surface Creek in Gunnison River basin, diversions above station for irrigation of about 800 acres (3.24 km²) above and about 8,400 acres (34.0 km²) below station and about 550 acres (2.23 km²) in Buzzard Creek drainage, and for power development. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--39 years (water years 1922-60), 92.2 ft³/s (2.61 m³/s), 66,800 acre-ft/yr (82.4 mm³/yr), prior to completion of Vega Reservoir; 19 years (water years 1961-79), 31.1 ft³/s (0.881 m³/s), 22,530 acre-ft/yr (27.8 mm³/yr), subsequent to completion of Vega Reservoir.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,080 ft³/s (87.2 m³/s) May 27, 1922, gage height, 5.90 ft (2.103 m), from rating curve extended above 1,300 ft³/s (37 m³/s); minimum daily, 1.4 ft³/s (0.040 m³/s) Oct. 19, 20, 1973 (result of storage in Vega Reservoir); minimum daily prior to construction of Vega Reservoir, 3.0 ft³/s (0.085 m³/s) Sept. 21, 1926.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,220 ft³/s (34.6 m³/s) at 2000 June 15, gage height, 5.13 ft (1.564 m); minimum daily, 3.3 ft³/s (0.094 m³/s) Feb. 27, Mar. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	5.1	5.1	4.6	4.1	3.3	3.8	12	59	267	20	18
2	12	5.1	5.2	4.5	4.1	3.4	3.7	12	74	249	19	17
3	12	5.5	5.3	4.5	4.1	3.5	3.7	11	85	217	19	18
4	12	6.0	5.3	4.5	3.8	3.5	3.9	11	127	185	22	17
5	12	6.0	5.4	4.4	3.6	3.5	4.0	11	292	159	23	16
6	12	6.0	5.5	4.6	3.5	3.5	4.2	11	514	132	24	15
7	12	6.0	5.7	4.3	3.6	3.7	4.4	12	686	110	26	15
8	12	6.0	5.4	4.3	4.2	3.8	4.2	12	594	87	31	16
9	12	6.0	5.4	4.1	3.7	4.1	3.9	11	441	74	32	18
10	12	5.8	5.4	4.1	3.7	4.1	3.7	12	313	69	29	18
11	12	5.9	5.5	4.1	3.7	4.2	3.6	11	316	62	29	18
12	13	7.1	5.4	4.0	3.5	4.3	3.6	12	400	55	28	18
13	10	6.2	5.3	3.7	3.6	4.5	3.7	14	738	50	28	17
14	12	6.0	5.3	3.5	3.5	4.4	4.0	20	897	46	27	18
15	11	7.2	5.3	3.7	3.5	4.1	4.3	27	919	46	27	18
16	12	8.0	5.3	3.6	3.8	4.1	4.6	28	726	45	29	17
17	12	8.2	5.1	3.6	3.5	4.0	5.0	28	606	44	28	17
18	12	7.4	5.0	3.5	3.4	4.0	5.4	31	454	43	27	17
19	12	7.9	5.0	3.5	3.4	4.4	4.7	32	335	41	29	16
20	12	7.6	4.9	3.4	3.4	4.1	4.4	34	284	40	34	15
21	12	6.3	5.0	4.1	3.4	4.1	4.7	51	255	43	28	14
22	13	5.1	5.1	3.7	3.4	4.1	5.0	44	247	39	23	13
23	12	5.0	5.0	3.8	3.4	4.1	5.4	80	245	33	21	13
24	12	5.0	4.9	5.3	3.5	4.1	5.8	83	224	29	21	13
25	8.5	5.0	4.8	4.9	3.6	4.1	6.1	62	232	26	21	13
26	5.1	5.3	4.7	4.4	3.7	4.1	6.3	75	246	24	21	13
27	5.1	5.2	5.2	4.0	3.3	4.3	9.2	124	259	24	20	14
28	5.1	5.2	5.1	3.9	3.8	4.4	9.4	259	243	21	20	13
29	5.1	5.3	5.2	3.7	---	4.5	9.6	229	218	23	19	13
30	5.1	5.1	5.3	3.6	---	4.0	10	146	209	21	19	13
31	5.1	---	4.9	3.9	---	4.0	---	66	---	19	20	---
TOTAL	326.1	181.5	161.0	125.8	101.8	124.3	154.3	1571	11238	2323	764	471
MEAN	10.5	6.05	5.19	4.06	3.64	4.01	5.14	50.7	375	74.9	24.6	15.7
MAX	13	8.2	5.7	5.3	4.2	4.5	10	259	919	267	34	18
MIN	5.1	5.0	4.7	3.4	3.3	3.3	3.6	11	59	19	19	13
AC-FT	647	360	319	250	202	247	306	3120	22290	4610	1520	934
CAL YR 1978	TOTAL	7404.0	MEAN	20.3	MAX	243	MIN	3.9	AC-FT	14690		
WTR YR 1979	TOTAL	17541.8	MEAN	48.1	MAX	919	MIN	3.3	AC-FT	34790		

PLATEAU CREEK BASIN

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09097500 BUZZARD CREEK NEAR COLLEBRAN, CO

LOCATION.--Lat 39°16'20"N, long 107°51'00"W, in SE¼SW¼ sec-14, T-9 S., R-94 W., Mesa County, Hydrologic Unit 14010005, on right bank 150 ft (46 m) upstream from county bridge, 1.1 mi (1.8 km) upstream from Brush Creek, and .7 mi (1.1 km) east of Collebran.

DRAINAGE AREA.--143 mi² (370 km²).

PERIOD OF RECORD.--September 1921 to current year. Prior to October 1933, monthly discharges only, published in WSP 1313.

REVISED RECORDS.--WSP 1313: 1922(M). WRD Colo. 1974: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 6,955 ft (2,120 m), from topographic map.

REMARKS.--Records good except those for period of no gage-height record and ice effect, which are poor. Diversions for irrigation of about 1,300 acres (5.26 km²) above station. Erie Canal imports water from Plateau Creek for irrigation of about 280 acres (1.13 km²) above station. Small diversions above station from Middleton and Uhl Creeks to West Mamm Creek (Mamm Creek basin). Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--58 years, 46.5 ft³/s (1.317 m³/s), 33,690 acre-ft/yr (41.5 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,630 ft³/s (46.2 m³/s) May 14, 1941, gage height, 7.80 ft (2.377 m), from rating curve extended above 900 ft³/s (25 m³/s); no flow for many days in 1959-60, 1963, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 350 ft³/s (9.9 m³/s) and maximum (±):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
Apr. 18	2200	550 15.6	4.81 1.466	June 7	1000	367 10.4	3.88 1.183
May 19	0230	878 24.9	5.82 1.774				

Minimum daily discharge, 0.73 ft³/s (0.021 m³/s) Oct. 11, Sept. 20, 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.5	7.0	4.0	2.6	2.8	5.6	5.4	214	291	138	1.9	4.4
2	1.4	6.6	4.1	1.9	3.3	6.0	5.0	239	262	132	2.1	4.2
3	1.2	6.1	4.0	2.8	3.5	6.5	4.7	191	266	110	2.6	4.1
4	1.1	6.1	3.6	3.3	3.2	5.7	4.2	145	255	109	2.1	3.2
5	1.1	6.1	3.7	3.5	3.0	5.2	4.4	184	262	86	1.6	2.8
6	1.0	5.6	3.8	3.4	3.5	6.3	12	216	296	75	1.6	3.0
7	1.0	5.4	3.6	3.1	3.8	8.7	33	245	342	81	1.8	2.3
8	.97	5.4	3.0	2.3	3.7	10	57	198	320	66	2.5	1.8
9	.92	4.9	2.5	2.5	3.6	11	71	166	256	61	2.4	2.1
10	.82	4.7	2.9	2.8	3.9	11	81	159	196	55	2.0	2.6
11	.73	4.4	3.1	3.1	4.4	11	91	157	183	47	1.8	2.0
12	1.2	4.3	3.5	2.9	4.6	11	44	206	200	40	1.8	1.7
13	1.3	4.3	4.4	2.2	5.0	7.6	28	276	221	30	2.2	1.1
14	1.2	4.2	4.8	2.4	5.1	5.1	40	317	263	23	2.6	1.2
15	1.1	4.2	3.9	2.6	5.0	4.3	99	345	265	21	3.2	1.7
16	1.1	3.6	3.4	2.6	4.6	4.4	164	363	264	22	3.6	1.6
17	1.2	3.2	3.7	2.7	4.9	4.6	241	381	223	21	4.5	1.5
18	1.6	3.1	4.1	3.1	5.0	6.0	316	504	196	21	5.8	.88
19	1.8	2.9	4.8	3.2	4.9	5.2	239	646	172	18	5.3	.96
20	1.9	3.1	5.0	3.4	4.9	4.6	162	592	145	16	5.9	.73
21	1.9	3.1	3.1	3.4	5.0	5.1	160	587	127	16	3.2	.91
22	3.4	3.6	3.1	3.6	5.0	4.9	182	554	139	20	5.5	.73
23	3.6	3.2	3.5	3.2	5.0	4.7	240	545	147	19	3.8	.80
24	7.0	3.4	3.1	3.1	5.0	4.4	269	531	136	22	3.8	1.2
25	11	3.3	3.0	3.3	4.6	4.7	216	503	133	22	3.7	1.2
26	11	3.2	2.8	3.6	5.0	7.1	169	509	135	18	3.9	1.2
27	11	3.1	2.9	3.6	5.3	9.5	173	509	137	13	3.7	2.0
28	9.7	3.0	3.8	2.6	5.4	11	200	563	123	11	3.0	2.0
29	9.2	3.5	3.7	3.0	---	13	180	591	111	6.3	2.7	2.4
30	8.4	3.8	3.5	2.5	---	10	182	493	115	5.2	4.1	2.2
31	7.5	---	3.2	2.2	---	8.3	---	370	---	4.2	5.1	---
TOTAL	107.84	128.4	111.6	90.5	123.0	222.5	3672.7	11499	6181	1328.7	59.8	58.51
MEAN	3.48	4.28	3.60	2.92	4.39	7.18	122	371	206	42.9	3.22	1.95
MAX	11	7.0	5.0	3.6	5.4	13	316	646	342	138	5.9	4.4
MIN	.73	2.9	2.5	1.9	2.8	4.3	4.2	145	111	4.2	1.6	.73
AC-FT	214	255	221	180	244	441	7280	22810	12260	2640	198	116
CAL YR 1978 TOTAL	15319.42											
WTR YR 1979 TOTAL	23623.55											
MEAN	42.0											
MAX	378											
MIN	.36											
AC-FT	30390											
WTR YR 1979 TOTAL	46860											

NOTE.--NO GAGE-HEIGHT RECORD JAN. 22 TO FEB. 26.

PLATEAU CREEK BASIN

09105000 PLATEAU CREEK NEAR CAMEO, COLO.

LOCATION.--Lat 39°11'01", long 108°16'06", in NW¼SW¼ sec.18, T.10 S., R.97 W., Mesa County, Hydrologic Unit 14010005, on left bank 300 ft (91 m) from State Highway 65, 1.1 mi (1.8 km) upstream from mouth, and 4.0 mi (6.4 km) northeast of Cameo.

DRAINAGE AREA.--592 mi² (1,533 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1935 to current year. Prior to May 1936, monthly discharge only, published in WSP 1313.

REVISED RECORDS.--WSP 979: 1942. WSP 2124: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 4,836 ft (1,474 m), from topographic map. Prior to Aug. 27, 1936, nonrecording gage.

REMARKS.--Records good except those for period of no gage-height record and those for winter period, which are poor. Natural flow of stream affected by storage reservoirs, diversions for irrigation of about 25,000 acres (101 km²), return flow from irrigated areas, and for power development.

AVERAGE DISCHARGE.--44 years, 180 ft³/s (5,098 m³/s), 130,400 acre-ft/yr (161 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,580 ft³/s (158 m³/s) June 15, 1973, gage height, 7.99 ft (2.435 m); minimum daily, 8.2 ft³/s (0.23 m³/s) Aug. 15, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,600 ft³/s (45.3 m³/s) at 0300 June 16, gage height, 5.69 ft (1.734 m); minimum daily, 35 ft³/s (0.99 m³/s) Jan. 30, Feb. 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	62	87	88	50	38	60	95	332	628	535	101	94
2	63	86	93	46	40	63	87	361	589	527	98	90
3	63	83	98	49	43	59	84	320	604	482	96	92
4	63	84	87	51	38	56	88	255	595	466	95	92
5	62	81	97	53	35	60	100	306	686	414	92	94
6	61	83	88	54	40	65	110	343	923	362	89	85
7	62	81	77	46	39	65	130	406	1190	342	90	84
8	64	82	60	38	40	67	150	447	1150	300	84	82
9	66	93	58	39	44	61	160	337	965	265	97	83
10	72	110	63	45	45	63	195	313	758	249	95	90
11	68	109	71	47	40	70	220	277	727	224	76	85
12	71	120	78	50	45	75	200	310	816	212	77	80
13	74	123	85	48	52	78	170	385	999	181	84	80
14	73	121	80	45	55	80	180	472	1240	171	77	84
15	76	117	81	48	54	80	250	494	1260	158	107	81
16	85	116	83	52	50	82	360	523	1330	152	120	82
17	78	110	86	57	48	77	450	533	1090	146	115	86
18	80	81	92	60	47	78	530	661	888	141	111	82
19	77	82	88	55	46	74	480	864	718	137	108	81
20	80	91	85	50	47	71	400	889	622	134	114	82
21	84	96	76	45	49	72	360	936	553	139	109	79
22	102	105	74	42	51	77	380	903	544	136	99	80
23	107	100	69	39	48	82	420	912	550	127	96	81
24	101	81	68	41	41	87	380	946	517	125	91	83
25	116	89	68	46	44	93	310	877	513	118	92	84
26	124	92	64	47	47	100	293	865	524	111	94	93
27	126	82	60	49	50	110	285	897	519	110	94	94
28	126	72	63	45	53	112	325	1180	487	107	91	93
29	127	84	65	38	---	115	293	1240	459	102	85	92
30	115	87	64	35	---	105	296	1000	446	100	88	90
31	90	---	60	38	---	110	---	765	---	100	100	---
TOTAL	2618	2828	2339	1448	1269	2447	7781	19349	22890	6873	2965	2578
MEAN	84.5	94.3	75.5	46.7	45.3	78.9	259	624	763	222	95.6	85.9
MAX	127	123	97	60	55	115	530	1240	1330	535	120	94
MIN	61	72	58	35	35	56	84	255	446	100	76	79
AC-FT	5190	5610	4640	2870	2520	4850	15430	38380	45400	13630	5880	5110
CAL YR 1978	TOTAL	46572	MEAN 128	MAX 696	MIN 37	AC-FT 92380						
WTK YR 1979	TOTAL	75385	MEAN 207	MAX 1330	MIN 35	AC-FT 149500						

NOTE.--NO GAGE-HEIGHT RECORD MAR. 14 TO APR. 25.

PLATEAU CREEK BASIN

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09105000 PLATEAU CREEK NEAR CAMEO, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD--November 1969 to current year (discontinued).

PERIOD OF DAILY RECORD--

SPECIFIC CONDUCTANCE: October 1971 to March 1975.

WATER TEMPERATURES: October 1971 to March 1975.

EXTREMES FOR PERIOD OF DAILY RECORD--

SPECIFIC CONDUCTANCE: Maximum daily, 1,000 micromhos Oct. 17, Dec. 10, 1973; minimum daily, 190 micromhos June 15, 1973.

WATER TEMPERATURES: Maximum, 28.0°C July 13, 14, 1974; minimum, freezing point on many days during winter months.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
OCT										
06...	0910	60	800	8.4	8.5	9.6	320	0	57	42
NOV										
29...	1015	84	910	7.5	1.5	--	330	0	65	40
MAR										
13...	1145	78	804	8.6	4.5	10.8	280	24	61	32
APR										
25...	1530	359	370	8.2	9.5	9.0	--	--	--	--
AUG										
01...	1400	105	600	8.7	20.0	--	230	0	45	28

DATE	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	ALKA- LINITY (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)
OCT									
06...	73	1.8	6.2	420	0	340	100	8.1	.5
NOV									
29...	77	1.9	5.4	420	0	340	120	12	.5
MAR									
13...	77	2.0	4.2	--	--	--	130	9.0	.5
APR									
25...	--	--	--	--	--	140	35	3.6	.2
AUG									
01...	41	1.2	5.1	--	--	280	65	5.9	.6

DATE	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, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, ORTHOD, DIS- SOLVED (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
OCT									
06...	30	524	.71	85.6	.02	.01	.04	20	10
NOV									
29...	30	560	.76	127	.62	.01	.01	20	10
MAR									
13...	22	494	.67	105	.46	.04	.02	20	20
APR									
25...	--	--	--	--	.62	.06	.04	--	--
AUG									
01...	24	383	.52	109	.00	.03	--	10	10

COLORADO RIVER BASIN

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 (91 m) upstream from small timber bridge, 1,050 ft (320 m) upstream from Golden Hill Canal headgate, 1,100 ft (340 m) north of O Road, and 5.0 mi (8.0 km) north of Fruita.

PERIOD OF RECORD--October 1975 to current year.

GAGE--Water-stage recorder. Altitude of gage is 4,595 ft (1,401 m), from topographic map.

REMARKS--Records good. Grand Valley Canal diverts water from Colorado River in SE¼NE¼ sec.3, T.1 S., R.2 E. Water flowing past this gage is used for irrigation in Reed Wash basin. Entire flow is regulated by diversion gates. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

EXTREMES FOR PERIOD OF RECORD--Maximum daily discharge, 152 ft³/s (4.30 m³/s), June 2, 1977; no flow for part of each year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	132	38	.00	.00	.00	.00	.00	106	116	130	136	136
2	131	3.9	.00	.00	.00	.00	.00	102	123	130	134	137
3	131	1.0	.00	.00	.00	.00	.00	104	124	131	137	132
4	133	.50	.00	.00	.00	.00	.00	106	123	132	139	130
5	136	.00	.00	.00	.00	.00	.00	112	121	128	139	127
6	135	.00	.00	.00	.00	.00	.00	113	121	124	137	129
7	136	.00	.00	.00	.00	.00	.00	117	120	128	136	130
8	138	.00	.00	.00	.00	.00	.00	118	125	126	135	130
9	138	.00	.00	.00	.00	.00	.00	123	122	121	134	129
10	135	.00	.00	.00	.00	.00	.00	115	123	122	134	128
11	136	.00	.00	.00	.00	.00	.00	113	127	121	131	128
12	143	.00	.00	.00	.00	.00	.00	117	125	104	128	131
13	145	.00	.00	.00	.00	.00	.00	119	126	58	131	133
14	140	.00	.00	.00	.00	.00	.00	117	123	106	134	136
15	140	.00	.00	.00	.00	.00	.00	115	121	112	136	136
16	138	.00	.00	.00	.00	.00	.00	116	117	122	139	138
17	132	.00	.00	.00	.00	.00	.00	116	119	125	142	135
18	133	.00	.00	.00	.00	.00	.00	114	123	122	141	130
19	135	.00	.00	.00	.00	.00	.00	114	123	127	139	134
20	136	.00	.00	.00	.00	.00	.00	109	124	131	133	136
21	137	.00	.00	.00	.00	.00	.00	109	121	131	137	132
22	137	.00	.00	.00	.00	.00	.00	106	119	129	135	132
23	138	.00	.00	.00	.00	.00	.00	108	119	124	134	133
24	138	.00	.00	.00	.00	.00	56	111	121	130	131	131
25	137	.00	.00	.00	.00	.00	104	111	126	130	129	130
26	129	.00	.00	.00	.00	.00	108	113	127	130	136	128
27	122	.00	.00	.00	.00	.00	105	117	122	132	138	132
28	125	.00	.00	.00	.00	.00	103	111	123	135	130	132
29	131	.00	.00	.00	---	.00	104	114	121	136	128	129
30	132	.00	.00	.00	---	.00	100	117	127	133	129	126
31	128	---	.00	.00	---	.00	---	115	---	136	133	---
TOTAL	4177	43.40	.00	.00	.00	.00	680.00	3498	3672	3846	4175	3950
MEAN	135	1.45	.000	.000	.000	.000	22.7	113	122	124	135	132
MAX	145	38	.00	.00	.00	.00	108	123	127	136	142	138
MIN	122	.00	.00	.00	.00	.00	.00	102	116	58	128	126
AC-FT	8290	86	.00	.00	.00	.00	1350	6940	7280	7630	8280	7830
CAL YR 1978	TOTAL	26387.40	MEAN	72.3	MAX	145	MIN	.00	AC-FT	52340		
WTR YR 1979	TOTAL	24041.40	MEAN	65.9	MAX	145	MIN	.00	AC-FT	47690		

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LOCATION.--Lat 39°13'40", long 108°49'06", in NW¼SE¼ sec.21, T.2 N., R.3 S., Ute Meridian, Mesa County, Hydrologic Unit 14010005, on left bank 600 ft (180 m) south of 0th Road, 1,800 ft (550 m) west of 13 Road, and 2.5 mi (4.0 km) north of Loma.

GAGE.--Water-stage recorder. Altitude of gage is 4,585 ft (1,398 m), from topographic map.

REMARKS.--Records good. Grand Valley Canal diverts water from Colorado River in SE $\frac{1}{4}$ sec. 3, T.1 S., R.2 E. Water flowing past this gage is used for irrigation in lower Reed Wash basin. Surplus flows are wasted into Reed Wash. Entire flow regulated by diversion gages. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 85 ft³/s (2.41 m³/s), May 15, 25, 1977; no flow part of each year.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	66	41	.00	.00	.00	.00	.00	49	70	79	69	73
2	67	15	.00	.00	.00	.00	.00	51	71	80	58	75
3	69	6.0	.00	.00	.00	.00	.00	55	71	80	73	74
4	69	1.0	.00	.00	.00	.00	.00	54	70	79	75	71
5	69	.00	.00	.00	.00	.00	.00	56	72	76	73	71
6	66	.00	.00	.00	.00	.00	.00	57	73	76	72	72
7	68	.00	.00	.00	.00	.00	.00	62	74	77	72	72
8	73	.00	.00	.00	.00	.00	.00	69	76	75	72	72
9	72	.00	.00	.00	.00	.00	.00	67	70	73	72	72
10	70	.00	.00	.00	.00	.00	.00	48	67	75	73	71
11	71	.00	.00	.00	.00	.00	.00	46	76	79	73	73
12	71	.00	.00	.00	.00	.00	.00	53	73	73	73	73
13	69	.00	.00	.00	.00	.00	.00	59	71	47	75	72
14	72	.00	.00	.00	.00	.00	.00	59	72	63	77	75
15	72	.00	.00	.00	.00	.00	.00	56	71	72	71	72
16	75	.00	.00	.00	.00	.00	.00	59	70	79	72	69
17	70	.00	.00	.00	.00	.00	.00	60	72	78	74	71
18	70	.00	.00	.00	.00	.00	.00	65	76	77	75	71
19	72	.00	.00	.00	.00	.00	.00	65	77	75	73	72
20	74	.00	.00	.00	.00	.00	.00	65	77	74	59	69
21	76	.00	.00	.00	.00	.00	.00	67	76	76	58	67
22	76	.00	.00	.00	.00	.00	.00	69	74	76	68	66
23	77	.00	.00	.00	.00	.00	.00	67	75	72	68	67
24	78	.00	.00	.00	.00	.00	42	67	78	76	66	65
25	76	.00	.00	.00	.00	.00	46	66	77	73	59	61
26	71	.00	.00	.00	.00	.00	48	64	78	74	72	64
27	69	.00	.00	.00	.00	.00	48	68	78	74	74	65
28	68	.00	.00	.00	.00	.00	47	72	78	72	71	64
29	69	.00	.00	.00	---	.00	48	72	74	72	72	63
30	66	.00	.00	.00	---	.00	48	75	77	70	71	64
31	66	---	.00	.00	---	.00	---	72	---	70	71	---
TOTAL	2197	63.00	.00	.00	.00	.00	327.00	1914	2213	2292	2221	2086
MEAN	70.9	2.10	.0000	.0000	.0000	.0000	10.9	61.7	73.8	73.9	71.6	69.5
MAX	78	41	.00	.00	.00	.00	48	75	78	80	77	75
MIN	66	.00	.00	.00	.00	.00	.00	46	67	47	56	61
AC-FT	4360	125	.00	.00	.00	.00	649	3800	4390	4550	4410	4140
CAL YR 1978	TOTAL	14686.00	MEAN	40.2	MAX	80	MIN	.00	AC-FT	29130		
WTR YR 1979	TOTAL	13313.00	MEAN	36.5	MAX	83	MIN	.00	AC-FT	26410		

LEWIS WASH BASIN

09106200 LEWIS WASH NEAR GRAND JUNCTION, CO

LOCATION.---Lat 39°03'38", long 108°28'38", in NW¼NW¼ sec.22, T.1 S., R.1 E., Ute Meridian, Mesa County, Hydrologic Unit 14010005, on left bank at upstream side of bridge on 31 Road, 700 ft (210 m) upstream from mouth, and 4.5 mi (7.2 km) east of city hall in Grand Junction.

DRAINAGE AREA.---4.72 mi² (12.22 km²).

PERIOD OF RECORD.---April 1973 to September 1979 (discontinued).

GAGE.---Water-stage recorder. Altitude of gage is 4,610 ft (1,405 m), from topographic map.

REMARKS.---Records good. Flow is mostly return flow and waste water from lands irrigated under the Government Highline Canal and Price and Stub ditches. At times overflow from water delivered by the Grand Valley Canal to Mesa County ditch flows past station.

AVERAGE DISCHARGE.---6 years (water years 1974-79), 8.28 ft³/s (0.234 m³/s), 6,000 acre-ft/yr (7.40 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.---Maximum discharge, 152 ft³/s (4.30 m³/s) Sept. 7, 1978, gage height, 4.17 ft (1.271 m), from rating curve extended above 116 ft³/s (3.29 m³/s); minimum daily, 0.20 ft³/s (0.006 m³/s) Nov. 7, 1976, Mar. 16-19, 1978, Jan. 14-17, 1979.

EXTREMES FOR CURRENT YEAR.---Maximum discharge, 97 ft³/s (2.75 m³/s) at 0800 Aug. 20, gage height, 3.78 ft (1.152 m); minimum daily, 0.20 ft³/s (0.006 m³/s) Jan. 14-17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	6.3	.87	.36	.30	.71	.97	4.0	11	11	12	17
2	14	3.5	1.3	.36	.36	1.3	.84	6.9	10	13	13	16
3	15	1.9	1.1	.36	.36	1.4	.84	12	7.4	13	13	16
4	16	1.7	1.1	.42	.36	.64	.84	12	7.3	14	11	14
5	16	1.5	1.1	.42	.36	.74	.84	9.2	6.3	18	8.7	13
6	17	1.4	1.1	.40	.36	.76	.84	7.7	6.2	17	7.8	14
7	17	1.3	1.0	.30	.33	.55	.84	5.7	6.3	16	7.0	13
8	18	1.2	.97	.30	.30	.51	.97	17	15	19	6.5	13
9	18	1.1	.97	.30	.30	.51	.97	24	16	19	6.7	12
10	17	1.1	.97	.30	.30	.39	1.1	19	13	17	6.6	14
11	17	1.1	.97	.27	.30	.36	1.1	15	14	16	6.9	14
12	17	1.5	.87	.25	.28	.36	.97	15	13	17	12	12
13	17	1.2	.84	.25	.55	.36	.84	12	12	10	30	12
14	18	1.1	.84	.20	.91	.36	.84	15	11	11	19	12
15	19	1.1	.84	.20	.97	.36	.84	12	14	12	15	12
16	20	1.1	.84	.20	1.6	.36	.84	8.7	14	12	13	12
17	20	1.1	.84	.20	1.5	.36	.84	8.0	11	12	16	12
18	21	1.1	.71	.37	1.5	.36	.84	7.8	9.6	11	19	12
19	24	1.1	.60	.89	1.1	.36	.84	7.6	9.7	15	47	11
20	26	1.1	.60	.96	.69	.64	1.7	9.4	9.8	19	43	11
21	30	1.1	.60	.67	.74	1.6	1.6	8.9	11	19	18	11
22	31	1.1	.60	.51	1.1	1.0	1.3	6.6	11	18	18	11
23	31	1.1	.60	.51	.93	.46	1.3	4.6	11	17	16	12
24	32	.97	.60	.44	.94	.33	3.7	5.1	11	15	17	16
25	24	1.1	.57	.40	.87	.43	5.8	5.9	11	15	16	16
26	17	1.1	.51	.36	.70	.38	6.0	6.7	10	13	17	15
27	13	.90	.51	.36	.60	.36	6.3	6.5	10	9.8	16	13
28	13	.84	.49	.35	.56	.37	6.3	6.3	11	8.8	18	12
29	13	.84	.42	.30	---	.57	6.3	9.5	12	8.7	17	12
30	13	.84	.42	.30	---	.41	4.2	12	11	9.5	18	12
31	11	---	.36	.30	---	1.1	---	13	---	9.5	17	---
TOTAL	585	42.39	24.11	11.81	19.17	18.40	61.50	313.1	325.0	435.3	501.2	392
MEAN	18.9	1.41	.78	.38	.68	.59	2.05	10.1	10.8	14.0	16.2	13.1
MAX	32	6.3	1.3	.96	1.6	1.6	6.3	24	16	19	47	17
MIN	10	.84	.36	.20	.28	.33	.84	4.0	6.2	8.7	6.5	11
AC-FT	1160	84	48	23	38	36	122	621	645	863	994	778
CAL YR 1978	TOTAL	2790.38	MEAN	7.64	MAX	58	MIN	.20	AC-FT	5530		
WTR YR 1979	TOTAL	2728.98	MEAN	7.48	MAX	47	MIN	.20	AC-FT	5410		

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 (26 km) northeast of Almont.

DRAINAGE AREA.--254 mi² (658 km²).

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 or twice daily. Datum of gage is 9,187 ft (2,800.2 m), National Geodetic Vertical Datum of 1929 (levels by Water and Power Resources Service); gage readings have been reduced to elevations NGVD.

REMARKS.--Reservoir is formed by an earth and rockfill dam. Dam completed by Water and Power Resources Service in September 1937. Capacity of reservoir, 106,200 acre-ft (131 hm³) between elevations 9,187 ft (2,800.2 m), bottom of outlet gates, and 9,330 ft (3,843.8 m), crest of spillway. No dead storage. Water used for irrigation in Uncompahgre Valley. Figures given are usable contents.

COOPERATION.--Records furnished by Uncompahgre Valley Water Users Association.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 111,000 acre-ft (137 hm³) July 1, 1957, elevation, 9,332.35 ft (2,844.500 m); minimum after first filling, 8,780 acre-ft (10.8 hm³) Oct. 19, 20, 1956, elevation, 9,240.70 ft (2,816.565 m).

EXTREMES FOR CURRENT YEAR.--Maximum contents, 109,200 acre-ft (135 hm³) July 3-5, elevation, 9,331.40 ft (2,844.211 m); minimum, 39,070 acre-ft (48.2 hm³), May 14, elevation, 9,286.70 ft (2,830.586 m).

MONTHEND ELEVATION IN FEET NGVD AND CONTENTS, AT 1830, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

Date	Elevation	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.	9,305.80	63,090	-
Oct. 31.	9,302.70	58,650	-4,440
Nov. 30.	9,302.90	58,910	+260
Dec. 31.	9,303.50	59,730	+820
CAL YR 1978			+23,030
Jan. 31.	9,304.80	61,580	+1,850
Feb. 28.	9,305.50	62,630	+1,050
Mar. 31.	9,298.00	52,630	-10,000
Apr. 30.	9,389.20	41,890	+16,360
May 31.	9,302.40	58,250	+16,360
June 30.	9,331.20	103,700	+50,450
July 31.	9,330.20	106,600	-2,100
Aug. 31.	9,329.50	105,200	-1,400
Sept. 30.	9,321.10	88,890	-16,310
WTR YR 1979			+25,800

GUNNISON RIVER BASIN

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 1,070 ft (300 m) downstream from Taylor Park Reservoir Dam, 3.4 mi (5.5 km) upstream from Lottis Creek, and 17 mi (27 km) northeast of Almont.

DRAINAGE AREA.--254 mi² (658 km²).

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 (2,794.915 m) National Geodetic Vertical Datum of 1929 (levels by Water and Power Resources Service). Prior to Nov. 11, 1952, at site 1,600 ft (490 m) downstream at datum 1.00 ft (0.305 m) lower. Oct. 15, 1946, to May 4, 1952, supplementary nonrecording gage just downstream from reservoir outlet at different sites and datums used during winter months.

REMARKS.--Records good, except those for period of no gage-height record, which are fair. Flow regulated by Taylor Park Reservoir (station 09108500) since 1937. One small diversion for irrigation from Willow Creek above reservoir. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--5 years (water years 1930-34), 156 ft³/s (4,418 m³/s), 113,000 acre-ft/yr (139 hm³/yr); 41 years (water years 1939-79), 191 ft³/s (5,409 m³/s), 138,400 acre-ft/yr (171 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,270 ft³/s (64.3 m³/s) July 1, 1957, gage height, 7.56 ft (2.304 m); no flow May 1 to July 3, 1940, May 7-22, 1942, May 5-21, 1943.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 946 ft³/s (26.8 m³/s) July 2, gage height, 5.63 ft (1.716 m); minimum daily, 42 ft³/s (1.19 m³/s) Oct. 15, 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	252	47	54	62	58	102	283	272	119	883	241	223
2	251	49	54	62	57	116	283	272	120	928	244	223
3	254	60	56	62	57	126	283	272	121	873	248	224
4	260	56	57	62	57	138	280	272	130	840	241	225
5	260	55	58	61	57	150	280	272	139	769	236	222
6	233	53	60	61	57	160	280	272	136	697	225	229
7	199	48	60	61	57	160	280	272	124	669	243	279
8	186	60	61	61	57	160	280	272	137	633	242	298
9	169	70	62	61	57	168	280	272	138	601	240	298
10	152	67	65	61	56	174	280	272	141	569	240	321
11	134	70	67	61	56	185	278	270	141	585	235	377
12	112	61	67	60	56	195	278	270	130	564	220	379
13	87	56	67	60	56	202	278	270	123	527	218	385
14	62	54	67	60	56	212	278	270	140	504	225	384
15	42	53	66	60	56	222	278	270	154	485	229	380
16	51	55	66	60	55	232	278	270	190	475	218	380
17	48	58	66	60	55	240	278	281	207	469	221	381
18	45	58	66	60	55	248	278	282	207	450	235	380
19	45	57	66	59	55	255	278	267	231	434	231	379
20	45	58	66	59	55	265	278	269	260	410	221	377
21	50	59	66	59	55	270	275	271	269	391	227	377
22	53	60	64	52	55	278	275	271	240	384	227	374
23	55	60	64	59	54	286	275	273	152	375	227	374
24	51	60	64	59	54	286	275	275	102	357	227	379
25	44	61	64	59	62	286	275	279	113	344	227	376
26	55	56	64	58	72	286	275	280	118	330	227	376
27	57	56	64	58	83	286	275	278	120	318	226	377
28	42	56	64	58	94	283	275	278	368	311	226	374
29	49	56	62	58	---	283	275	259	647	296	226	367
30	52	56	62	58	---	283	275	198	797	285	226	365
31	48	---	62	58	---	283	---	134	---	274	223	---
TOTAL	3443	1725	1951	1849	1654	6820	8339	8235	6014	16030	7172	10083
MEAN	111	57.5	62.9	59.6	59.1	220	278	266	200	517	231	336
MAX	260	70	67	62	94	286	283	282	797	928	241	385
MIN	42	47	54	52	54	102	275	134	102	274	218	222
AC-FT	6830	3420	3870	3670	3280	13530	16540	16330	11930	31800	14230	20000

CAL YR 1978 TOTAL 52625 MEAN 144 MAX 285 MIN 42 AC-FT 104400
WTR YR 1979 TOTAL 73315 MEAN 201 MAX 928 MIN 42 AC-FT 145400

NOTE.--NO GAGE-HEIGHT RECORD NOV. 21 TO MAY 16.

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 (5 m) downstream from bridge on State Highway 306, and 800 ft (240 m) upstream from confluence with East River.

DRAINAGE AREA---477 mi² (1,235 km²).

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 (2,441.680 m), National Geodetic Vertical Datum of 1929. Prior to Apr. 16, 1922, nonrecording gage at same site and datum.

REMARKS---Records good except those for winter period, which are poor. Flow partly regulated since September 1937 by Taylor Park Reservoir (station 09108500), 24 mi (39 km) above station. Diversions for irrigation of about 360 acres (1.46 km²) above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE---69 years, 334 ft³/s (9.459 m³/s), 242,000 acre-ft/yr (298 hm³/yr).

EXTREMES FOR PERIOD OF RECORD---Maximum discharge observed, 3,760 ft³/s (106 m³/s) June 9, 1920, gage height, 5.00 ft (1.524 m), from rating curve extended above 2,300 ft³/s (65 m³/s); maximum gage height, 5.32 ft (1.622 m) July 1, 1957; minimum discharge observed before storage began in Taylor Park Reservoir, 50 ft³/s (1.42 m³/s) for several days in August 1913, gage height, 1.2 ft (0.366 m); minimum daily, 24 ft³/s (0.68 m³/s) Mar. 12, 1938.

EXTREMES FOR CURRENT YEAR---Maximum discharge, 1,840 ft³/s (52.1 m³/s) at 0730 July 1, gage height, 4.02 ft (1.225 m) from peak stage indicator; minimum daily, 98 ft³/s (2.78 m³/s) Oct. 29, Nov. 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

OAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	336	109	168	140	144	157	350	419	714	1690	374	339
2	336	106	167	140	140	163	347	419	673	1670	366	336
3	337	117	138	140	136	185	349	404	691	1550	360	330
4	346	116	144	144	129	181	355	400	724	1420	352	329
5	344	114	151	151	128	190	370	414	773	1280	345	327
6	324	108	138	158	128	200	380	430	862	1110	332	324
7	286	102	135	140	131	211	385	456	948	1050	353	380
8	263	98	139	133	138	231	405	439	1020	974	359	398
9	248	131	141	135	130	231	436	419	875	915	359	398
10	231	116	151	133	127	231	449	408	724	855	356	408
11	205	125	164	148	126	241	441	396	683	844	355	477
12	191	127	165	150	126	254	423	393	707	820	342	475
13	166	104	150	141	132	258	405	402	780	760	346	483
14	144	117	150	136	144	269	392	426	895	720	363	484
15	120	110	149	139	139	287	370	469	903	689	403	482
16	104	112	149	149	129	320	348	520	945	666	385	480
17	125	120	150	141	121	309	320	560	924	663	368	475
18	115	130	156	149	121	304	297	604	852	632	381	475
19	108	138	160	141	121	310	310	630	830	610	387	475
20	109	140	153	132	127	349	301	660	795	580	370	475
21	113	139	150	122	137	342	302	664	767	555	377	471
22	124	140	150	100	131	341	310	687	764	542	366	467
23	119	143	156	127	125	350	323	725	677	518	360	466
24	119	150	149	129	127	350	341	772	609	485	358	471
25	107	157	141	130	132	350	344	773	606	467	352	470
26	110	146	145	141	139	370	327	827	598	452	359	466
27	114	139	145	132	158	371	329	971	571	436	358	468
28	107	137	150	130	150	392	357	1080	752	427	353	466
29	98	144	158	139	---	390	397	1120	1160	415	346	457
30	112	158	149	133	---	389	397	1050	1450	403	345	451
31	113	---	141	133	---	386	---	831	---	386	345	---
TOTAL	5674	3793	4652	4256	3716	8912	10860	18768	24272	24584	11175	13003
MEAN	183	126	150	137	133	287	362	605	809	793	360	433
MAX	346	158	168	158	158	392	449	1120	1450	1690	403	484
MIN	98	98	135	100	121	157	297	393	571	386	332	324
AC-FT	11250	7520	9230	8440	7370	17680	21540	37230	48140	48760	22170	25790

CAL YR 1978 TOTAL 93905 MEAN 257 MAX 894 MIN 98 AC-FT 186300
WTR YR 1979 TOTAL 133665 MEAN 366 MAX 1690 MIN 98 AC-FT 265100

NOTE---NO GAGE-HEIGHT RECORD NOV. 18 TO APR. 17.

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 (61 m) upstream from bridge on State Highway 135, and 400 ft (120 m) upstream from confluence with Taylor River.

DRAINAGE AREA.--289 mi² (749 km²).

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 (2,440.317 m), 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 (61 m) downstream at different datums. Oct. 1, 1934, to Sept. 22, 1954, water-stage recorder at present site at datum 2.00 ft (0.610 m) higher.

REMARKS.--Records good except those for winter period, which are fair. Diversions for irrigation of about 7,400 acres (29.9 km²) above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--57 years (water years 1911-22, 1935-79), 336 ft³/s (9,516 m³/s), 243,400 acre-ft/yr (300 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 6,500 ft³/s (184 m³/s) June 15, 1921, gage height, 6.6 ft (2.01 m), site and datum then in use, from rating curve extended above 3,000 ft³/s (85 m³/s); minimum daily, 19 ft³/s (0.54 m³/s) Aug. 13, 1913.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,300 ft³/s (93.5 m³/s) at 0600 May 29, gage height, 7.00 ft (2.134 m), only peak above base of 1,600 ft³/s (45 m³/s); minimum daily, 48 ft³/s (1.36 m³/s) Jan. 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	96	86	104	70	61	66	62	555	1800	2030	438	202
2	94	85	96	66	60	62	59	560	1600	1880	415	198
3	94	88	84	70	61	59	61	490	1600	1690	378	192
4	95	89	95	80	58	54	63	468	1700	1480	378	183
5	88	89	103	79	56	58	66	520	1920	1380	370	179
6	85	89	97	77	61	69	68	570	2220	1320	351	174
7	82	90	97	71	61	61	79	645	2530	1210	369	168
8	77	96	97	54	61	58	93	575	2500	1190	375	160
9	75	96	97	57	58	57	106	505	1950	1120	375	153
10	73	93	95	66	61	55	113	450	1530	1050	376	149
11	72	94	91	67	64	58	102	409	1330	1010	327	141
12	72	104	89	67	62	58	97	396	1380	1000	310	137
13	72	98	90	65	66	58	92	418	1690	943	292	125
14	72	97	90	51	66	57	98	520	2140	926	319	120
15	72	94	88	65	64	59	111	665	2170	896	343	118
16	72	86	89	70	65	56	141	830	2250	880	366	118
17	70	86	92	69	65	60	178	1030	2150	901	346	117
18	69	87	100	66	60	62	213	1250	1970	834	313	113
19	69	87	109	67	62	59	247	1530	1850	757	329	106
20	69	89	110	62	65	66	247	1770	1370	722	327	109
21	70	89	105	55	69	67	267	1760	1280	697	325	114
22	88	93	103	64	62	67	303	1810	1410	744	295	113
23	87	97	100	48	63	61	347	1950	1600	697	281	115
24	87	94	96	50	66	62	414	2040	1710	634	264	114
25	93	105	90	65	64	61	427	2040	1740	611	247	109
26	88	109	79	64	69	69	391	2420	1800	577	235	92
27	87	91	79	59	63	70	391	2710	1740	560	229	92
28	87	90	92	51	63	72	440	3020	1770	537	218	92
29	87	107	95	60	---	73	463	3100	1770	514	210	92
30	87	100	94	57	---	72	490	2900	1770	482	209	92
31	86	---	90	53	---	72	---	2240	---	454	209	---
TOTAL	2515	2798	2936	1965	1756	1938	6229	40146	54240	29726	9839	3987
MEAN	81.1	93.3	94.7	63.4	62.7	62.5	208	1295	1808	959	317	133
MAX	96	109	110	80	69	73	490	3100	2530	2030	438	202
MIN	69	85	79	48	56	54	59	396	1280	454	209	92
AC-FT	4990	5550	5820	3900	3480	3840	12360	79630	107600	58960	19520	7910
CAL YR 1978	TOTAL	145193	MEAN 398	MAX 2620	MIN 42	AC-FT 288000						
WTR YR 1979	TOTAL	158075	MEAN 433	MAX 3100	MIN 48	AC-FT 313500						

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 (1.1 km) downstream from Antelope Creek and 1.2 mi (1.9 km) west of Gunnison.

DRAINAGE AREA.--1,012 mi² (2,621 km²).

PERIOD OF RECORD.--October 1910 to December 1928, October 1944 to current year. Monthly discharges only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 1313: 1911, 1916.

GAGE.--Water-stage recorder. Altitude of gage is 7,655 ft (2,333 m), 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 (1.0 km) downstream at various datums. Oct. 1, 1944, to July 28, 1970, water-stage recorder at sites 0.4 mi (0.6 km) upstream at different datum.

REMARKS.--Records fair except those for periods of no gage-height record, which are poor. Flow regulated by Taylor Park Reservoir (station 09108500), 37 mi (60 km) above station. Diversions for irrigation of about 22,000 acres (89.0 km²) above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--53 years (water years 1911-28, 1945-79), 757 ft³/s (21.44 m³/s) 548,500 acre-ft/yr (676 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 11,400 ft³/s (323 m³/s) June 13, 1918, gage height, 4.05 ft (1.234 m), site and datum then in use, from rating curve extended above 5,000 ft³/s (140 m³/s); minimum daily, 80 ft³/s (2.27 m³/s) Dec. 27, 1962.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,640 ft³/s (160 m³/s) May 28, gage height, 5.14 ft (1.567 m); minimum daily, 190 ft³/s (5.38 m³/s) Jan. 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	456	250	287	250	253	277	260	1350	3600	3700	900	558
2	464	250	287	230	249	270	256	1500	3300	3740	852	556
3	464	270	250	230	251	256	269	1410	3000	3360	834	557
4	464	270	262	250	242	237	277	1290	3000	3080	825	550
5	464	260	294	250	237	241	284	1300	3200	2780	771	520
6	447	250	209	250	253	298	305	1430	3300	2550	744	540
7	398	240	198	250	255	267	355	1530	3760	2480	708	595
8	390	260	203	220	255	256	412	1660	4080	2220	717	598
9	374	290	250	230	244	248	460	1450	3600	2100	735	601
10	358	270	260	240	250	243	470	1290	2720	1910	717	590
11	322	290	260	250	266	254	436	1130	2200	1760	690	580
12	301	270	243	250	261	252	405	1060	2130	1700	672	580
13	301	240	260	240	274	255	382	1080	2630	1600	654	570
14	270	240	262	210	277	251	409	1120	3400	1540	654	560
15	250	238	260	240	268	258	459	1410	3460	1510	663	540
16	240	238	260	260	270	246	514	1710	3360	1510	681	540
17	270	250	260	260	275	260	665	1880	3320	1570	681	540
18	250	250	270	260	251	270	803	2610	3080	1600	654	520
19	240	244	270	260	261	257	881	3360	2840	1540	690	520
20	250	250	280	250	271	286	820	3560	2610	1450	699	500
21	250	250	280	228	286	291	839	3840	2260	1320	717	500
22	280	256	280	263	268	290	885	3960	2190	1430	672	500
23	280	244	270	190	266	269	953	3560	2610	1380	618	490
24	260	250	260	209	277	271	1110	3720	2720	1260	583	490
25	240	268	250	268	272	269	1150	3880	2700	1200	590	490
26	250	274	240	265	287	297	1090	4230	2650	1200	580	500
27	260	262	230	247	271	305	1030	4440	2570	1160	565	480
28	240	244	250	213	269	314	1100	4810	2690	1070	560	500
29	240	256	250	249	---	319	1200	4850	3100	1020	558	480
30	250	274	250	237	---	316	1250	4630	3220	1000	560	480
31	260	---	250	222	---	312	---	4000	---	940	560	---
TOTAL	9783	7698	7935	7471	7359	8435	19729	79050	89300	56680	21104	16025
MEAN	316	257	256	241	263	272	658	2550	2977	1828	681	534
MAX	464	290	294	268	287	319	1250	4850	4080	3740	900	601
MIN	240	238	198	190	237	237	256	1060	2130	940	558	480
AC-FT	19400	15270	15740	14820	14600	16730	39130	156800	177100	112400	41860	31790

CAL YR 1978 TOTAL 271628 MEAN 744 MAX 4270 MIN 170 AC-FT 538800
WTR YR 1979 TOTAL 330569 MEAN 906 MAX 4850 MIN 190 AC-FT 655700

NOTE.--NO GAGE-HEIGHT RECORD OCT. 13 TO NOV. 14, DEC. 14 TO APR. 17, AUG. 25 TO SEPT. 30.

GUNNISON RIVER BASIN

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 (91 m) downstream from highway bridge, 1.8 mi (2.9 km) southwest of Post Office in Gunnison, and 2.0 mi (3.2 km) upstream from mouth.

DRAINAGE AREA.--1,061 mi² (2,748 km²).

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 (2,325.191 m), National Geodetic Vertical Datum of 1929. Nov. 25 to Dec. 24, 1910, nonrecording gage 300 ft (91 m) upstream at different datum. Apr. 20, 1938, to Oct. 2, 1940, water-stage recorder at present site at datum 1.00 ft (0.305 m) higher.

REMARKS.--Records good except those for winter period, which are poor. Diversions for irrigation of about 24,000 acres (97.1 km²) above station. Water diverted above station by Larkspur ditch to Arkansas River basin since 1935 and by Tarbell ditch to Rio Grande basin since 1914 (see elsewhere in this report). Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--42 years (water years 1938-79), 166 ft³/s (4,701 m³/s), 120,300 acre-ft/yr (148 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,900 ft³/s (53.8 m³/s) June 8, 1957, gage height, 4.10 ft (1.250 m); maximum gage height, 4.18 ft (1.274 m) May 23, 1970; minimum daily discharge, 2.6 ft³/s (0.074 m³/s) Sept. 30, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,100 ft³/s (31.2 m³/s) at 1400 May 31, gage height, 3.86 ft (1.177 m) from maximum stage indicator; minimum daily, 16.0 ft³/s (0.453 m³/s) Sept. 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	47	84	84	44	33	40	140	324	983	408	136	99
2	44	83	84	39	33	40	150	334	848	494	139	94
3	43	84	84	35	32	39	140	327	749	551	143	93
4	43	84	78	35	32	40	160	320	706	464	146	91
5	43	89	84	39	32	50	170	281	706	409	147	79
6	44	88	78	41	30	62	190	252	757	358	152	67
7	47	83	70	41	30	74	210	265	807	355	174	65
8	53	83	66	36	31	83	200	318	956	333	185	62
9	54	84	60	34	32	86	230	342	1070	298	190	62
10	54	84	54	34	32	80	220	353	944	269	182	60
11	53	85	50	38	32	78	210	333	811	240	167	58
12	53	97	54	38	33	92	210	278	698	208	158	56
13	54	94	54	36	35	100	220	249	665	171	146	50
14	54	80	50	35	40	100	260	229	720	167	158	50
15	54	89	46	37	41	130	290	220	791	159	196	49
16	55	95	44	38	39	130	330	216	819	185	206	50
17	56	92	45	38	39	120	390	210	816	193	200	50
18	60	94	48	38	38	110	430	199	755	202	184	47
19	61	101	53	38	40	100	406	235	729	222	189	46
20	62	105	52	37	42	120	340	341	676	215	188	44
21	64	100	52	36	42	140	302	438	581	192	174	42
22	84	94	50	38	40	130	307	480	483	177	163	43
23	94	91	52	37	39	130	318	563	451	173	143	41
24	87	93	48	37	39	140	337	675	462	185	131	42
25	98	99	45	37	38	150	346	694	457	181	126	32
26	97	102	45	39	40	160	311	750	426	171	117	16
27	86	92	43	38	41	160	281	786	413	159	116	20
28	88	80	43	37	40	170	297	854	401	153	114	23
29	86	82	43	36	---	160	342	938	381	146	110	27
30	85	84	45	33	---	150	339	1020	354	144	107	26
31	84	---	45	32	---	140	---	1070	---	142	108	---
TOTAL	1987	2695	1749	1151	1015	3304	8076	13894	20415	7724	4705	1584
MEAN	64.1	89.8	56.4	37.1	36.3	107	269	448	681	249	155	52.8
MAX	98	105	84	44	42	170	430	1070	1070	551	206	99
MIN	43	80	43	32	30	39	140	199	354	142	107	16
AC-FT	3940	5350	3470	2280	2010	6550	16020	27560	40490	15320	9510	3140

CAL YR 1978 TOTAL 51380 MEAN 141 MAX 751 MIN 34 AC-FT 101900
WTR YR 1979 TOTAL 68389 MEAN 187 MAX 1070 MIN 16 AC-FT 135600

NOTE.--NO GAGE-HEIGHT RECORD NOV. 28 TO APR. 18.

GUNNISON RIVER BASIN

249

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 (8 m) downstream from private bridge, 0.2 mi (0.3 km) upstream from Indian Creek, and 6.3 mi (10.1 km) upstream from waterline of Blue Mesa Reservoir at elevation 7,519 ft (2,291.8 m).

DRAINAGE AREA.--334 mi² (865 km²).

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 (2,385.871 m), National Geodetic Vertical Datum of 1929. Prior to Oct. 1, 1938, at datum 2.00 ft (0.610 m) higher, and Oct. 1, 1938, to Sept. 30, 1945, at datum 1.00 ft (0.305 m) higher.

REMARKS.--Records good except those for winter period, which are fair. Diversions for irrigation of about 1,600 acres (6.48 km²) above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--42 years, 235 ft³/s (6.655 m³/s) 170,300 acre-ft/yr (210 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,700 ft³/s (76.5 m³/s) June 29, 1957, gage height, 4.30 ft (1.311 m); minimum daily, 22 ft³/s (0.62 m³/s) Jan. 21, 1976.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,830 ft³/s (51.8 m³/s) at 0530 June 16, gage height, 3.12 ft (0.951 m), from peak stage indicator, only peak above base of 1,400 ft³/s (40 m³/s); minimum daily, 36.0 ft³/s (1.02 m³/s) Dec. 16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	64	56	62	46	43	46	70	182	881	1130	309	111
2	62	55	64	44	44	46	68	195	869	1110	292	108
3	61	58	62	42	44	46	68	214	936	1050	272	105
4	57	59	60	41	44	44	70	207	1080	936	255	101
5	55	58	58	46	44	44	72	221	1100	839	241	96
6	55	57	60	49	41	44	80	249	1270	839	232	91
7	56	54	58	49	40	48	84	288	1510	807	232	86
8	58	54	50	47	40	52	82	292	1420	816	232	85
9	57	53	46	45	42	60	88	259	1090	788	236	85
10	57	52	42	48	42	64	90	216	860	754	222	86
11	56	54	39	50	42	60	90	192	789	737	216	84
12	55	75	38	52	43	64	90	172	920	715	214	83
13	54	60	39	49	45	70	90	162	1190	699	244	81
14	54	52	38	46	49	74	98	177	1520	694	231	77
15	53	54	37	47	49	82	110	248	1580	683	230	83
16	53	53	36	50	49	86	140	374	1610	636	208	81
17	54	68	38	52	48	82	180	457	1490	610	201	79
18	54	65	40	51	48	74	167	728	1290	587	198	77
19	52	59	47	49	48	68	161	802	1040	569	191	76
20	52	58	48	48	49	60	144	813	842	537	175	76
21	53	58	48	49	50	62	139	824	817	512	166	85
22	66	58	48	48	50	59	155	832	919	507	154	83
23	70	57	49	48	48	59	183	880	1070	486	147	79
24	67	60	49	48	47	62	229	973	1140	462	140	76
25	68	56	48	49	45	64	223	959	1200	465	134	73
26	62	58	47	50	46	70	202	938	1210	454	129	72
27	61	56	46	52	46	74	189	1170	1230	443	127	71
28	60	56	46	50	45	76	190	1250	1210	422	124	71
29	59	56	47	48	---	78	181	1220	1190	400	119	68
30	59	58	49	46	---	66	176	1260	1150	391	116	67
31	57	---	48	44	---	64	---	1060	---	337	118	---
TOTAL	1801	1727	1487	1483	1271	1948	3909	17814	34423	20415	6105	2496
MEAN	58.1	57.6	48.0	47.8	45.4	62.8	130	575	1147	659	197	83.2
MAX	70	75	64	52	50	86	229	1260	1610	1130	309	111
MIN	52	52	36	41	40	44	68	162	789	337	116	67
AC-FT	3570	3430	2950	2940	2520	3860	7750	35330	68280	40490	12110	4950

CAL YR 1978 TOTAL 88711 MEAN 243 MAX 1770 MIN 32 AC-FT 176000
WTR YR 1979 TOTAL 94879 MEAN 260 MAX 1610 MIN 36 AC-FT 188200

NOTE.--NO GAGE-HEIGHT RECORD DEC. 12 TO APR. 17.

GUNNISON RIVER BASIN

09124600 BLUE MESA RESERVOIR NEAR SAPINERO, CO

LOCATION.--Lat 38°21'13", long 107°20'00", in NW¼ sec. 4, T. 48 N., R. 4 W., Gunnison County, Hydrologic Unit 14020002, in intake tower of Blue Mesa Dam, 0.5 mi (0.8 km) upstream from Pine Creek and 1.7 mi (2.7 km) west of Sapinero.

DRAINAGE AREA.--3,426 mi² (8,873 km²).

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

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Water and Power Resources Service); gage readings have been reduced to elevations NGVD.

REMARKS.--Reservoir is formed by earth and rockfill dam. Storage began Oct. 26, 1965. Usable capacity, 829,600 acre-ft (1,020 hm³) between elevations 7,358.00 ft (2,242.718 m), sill of outlet gate, and 7,519.40 ft (2,291.913 m), top of radial spillway gates. Dead storage, 111,200 acre-ft (137 hm³). Reservoir is used for power development and to provide storage replacement to meet downstream requirements under the Colorado River Compact of 1922. Figures given are usable contents. Figures published prior to October 1969 were total contents.

COOPERATION.--Records furnished by Water and Power Resources Service.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 831,700 acre-ft (1,030 hm³) July 8, 1970, elevation, 7,519.64 ft (2,291.986 m); minimum since appreciable storage was attained, 187,800 acre-ft (232 hm³) Oct. 10-17, 1966, elevation, 7,424.35 ft (2,262.942 m).

EXTREMES FOR CURRENT YEAR.--Maximum contents, 821,200 acre-ft (1,010 hm³) July 28, elevation, 7,518.50 ft (2,291.639 m); minimum, 270,200 acre-ft (333 hm³) Apr. 18, 23, elevation, 7,442.17 ft (2,268.373 m).

MONTH-END ELEVATION IN FEET NGVD AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

Date	Elevation	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.	7,507.93	727,700	-
Oct. 31.	7,503.32	685,900	-41,800
Nov. 30.	7,500.17	662,500	-23,400
Dec. 31.	7,491.69	594,300	-68,200
CAL YR 1978			+359,100
Jan. 31.	7,482.38	523,200	-71,100
Feb. 28.	7,467.75	420,400	-102,800
Mar. 31.	7,449.87	311,400	-109,000
Apr. 30.	7,443.02	274,600	-36,800
May 31.	7,472.40	451,800	+177,200
June 30.	7,510.32	748,400	+296,600
July 31.	7,518.31	819,500	+71,100
Aug. 31.	7,513.80	779,000	-40,500
Sept. 30.	7,505.89	710,300	-68,700
WTR YR 1979			-17,400

09125400 MORROW POINT RESERVOIR NEAR CIMARRON, CO

LOCATION.--Lat 38°27'05", long 107°32'12", in NW¼ sec. 4, T. 48 N., R. 6 W., Montrose County, Hydrologic Unit 14020002, in recorder house at Morrow Point Dam on Gunnison River, 2,000 ft (610 m) upstream from Cimarron River and 1.2 mi (1.9 km) northeast of Cimarron.

DRAINAGE AREA.--3,637 mi² (9,420 km²).

PERIOD OF RECORD.--January 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (Water and Power Resources Service bench mark); gage readings have been reduced to elevations NGVD.

REMARKS.--Reservoir is formed by double-curvature thin concrete-arch dam. Storage began Jan. 24, 1968. Capacity, 121,200 acre-ft (149 hm³) at elevation 7,165.00 ft (2,183.892 m), crest of dam. Dead storage, 165 acre-ft (203,000 hm³) below elevation 6,808.00 ft (2,075.078 m), invert of steel liner in outlet works. Reservoir is used for power development. Figures given are usable contents.

COOPERATION.--Records furnished by Water and Power Resources Service.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 118,900 acre-ft (147 hm³) May 19, 1970, elevation, 7,162.27 ft (2,183.060 m); minimum since appreciable storage was attained, 24,530 acre-ft (30.2 hm³) Nov. 6, 1959, elevation, 6,988.10 ft (2,129.973 m).

EXTREMES FOR CURRENT YEAR.--Maximum contents, 116,200 acre-ft (143 hm³) Feb. 7, elevation, 7,158.94 ft (2,182.045 m); minimum, 112,000 acre-ft (138 hm³) Apr. 7, elevation, 7,153.72 ft (2,180.454 m).

MONTHEND ELEVATION IN FEET NGVD AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

Date	Elevation	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.	7,156.73	114,400	-
Oct. 31.	7,158.39	115,500	+1,100
Nov. 30.	7,157.57	115,000	-500
Dec. 31.	7,157.56	115,000	0
CAL YR 1978			+1,100
Jan. 31.	7,157.60	115,100	+100
Feb. 28.	7,157.55	115,000	-100
Mar. 31.	7,155.65	113,500	-1,500
Apr. 30.	7,156.15	113,900	+400
May 31.	7,157.51	115,000	+1,100
June 30.	7,157.91	115,300	+300
July 31.	7,157.00	114,600	-700
Aug. 31.	7,158.09	115,500	+900
Sept. 30.	7,158.19	115,500	0
WTR YR 1979			+1,100

GUNNISON RIVER BASIN

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 (30 m) upstream from Forest Service bridge, 0.6 mi (1.0 km) upstream from headgate on Cimarron ditch, 2.1 mi (3.4 km) downstream from Silver Jack Dam, and 13 mi (21 km) south of Cimarron.

DRAINAGE AREA.--66.6 mi² (172.5 km²).

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 (2,630.875 m) National Geodetic Vertical Datum of 1929. Prior to Oct. 12, 1972, at site 0.2 mi (0.3 km) downstream at different datum.

REMARKS.--Records good except those for winter period, which are poor. Diversion above station through Owl Creek ditch into Uncompahgre River basin. Flow regulated by Silver Jack Dam, total capacity, 13,520 acre-ft (16.7 hm³), 2.1 mi (3.4 km) upstream since Dec. 23, 1970. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--16 years (water years 1955-70), 88.6 ft³/s (2,509 m³/s), 64,190 acre-ft/yr (79.1 hm³/yr), prior to completion of Silver Jack Dam; 9 years (water years 1971-79), 89.4 ft³/s (2,532 m³/s), 64,770 acre-ft/yr (79.9 hm³/yr), subsequent to completion of Silver Jack Dam.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,790 ft³/s (50.7 m³/s) June 28, 1957, gage height, 8.32 ft (2.536 m), 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 (0.23 m³/s) Dec. 27, 28, 1962, Jan. 13, 1963; minimum daily, 4.4 ft³/s (0.12 m³/s) Apr. 20, 21, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 904 ft³/s (25.6 m³/s) at 0100 June 16, gage height, 5.33 ft (1.624 m); minimum daily, 13 ft³/s (0.37 m³/s) Dec. 23 to Jan. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	55	39	19	13	14	15	15	30	392	485	116	104
2	61	39	19	13	14	15	15	31	387	460	113	104
3	66	39	17	13	14	15	15	29	385	429	113	105
4	65	39	17	14	14	15	15	31	441	409	113	105
5	65	39	17	16	14	15	15	35	602	319	111	104
6	64	39	17	16	14	15	17	41	683	274	107	104
7	64	39	16	16	14	16	16	43	790	314	105	104
8	64	39	16	15	14	16	16	37	767	315	106	104
9	72	28	16	15	14	18	16	30	576	295	104	103
10	79	17	16	16	14	15	16	27	435	291	104	124
11	79	17	16	16	14	15	15	25	416	289	104	148
12	78	17	16	16	14	16	15	25	458	265	104	148
13	78	17	17	16	15	16	17	28	642	249	110	147
14	78	17	14	16	16	16	16	34	768	246	119	147
15	76	19	14	16	16	16	17	40	755	250	124	148
16	67	18	14	16	16	16	18	43	774	247	126	147
17	57	18	14	16	16	15	20	45	701	249	124	145
18	57	18	14	16	16	15	22	51	570	240	124	144
19	57	18	14	16	16	15	22	52	475	193	124	67
20	57	17	14	15	16	15	22	53	381	154	125	16
21	57	17	14	15	16	15	23	54	362	152	123	16
22	60	17	14	15	16	15	24	54	395	151	124	16
23	57	16	13	15	16	15	26	91	448	139	123	15
24	57	16	13	15	15	15	26	132	496	122	122	15
25	58	17	13	15	15	15	23	133	494	117	122	15
26	56	17	13	16	15	15	23	134	488	117	122	15
27	55	17	13	16	15	15	25	136	495	117	115	16
28	55	17	13	16	15	15	28	292	518	117	105	16
29	55	17	13	15	---	15	28	410	492	115	106	16
30	48	19	13	15	---	15	28	402	479	115	106	16
31	40	---	13	14	---	15	---	396	---	117	104	---
TOTAL	1937	703	462	473	418	475	594	2964	16065	7352	3548	2474
MEAN	62.5	23.4	14.9	15.3	14.9	15.3	19.8	95.6	536	237	114	82.5
MAX	79	39	19	16	16	18	28	410	790	485	126	148
MIN	40	16	13	13	14	15	15	25	362	115	104	15
AC-FT	3840	1390	916	938	829	942	1180	5880	31860	14580	7040	4910
CAL YR 1978	TOTAL	48847.3	MEAN	134	MAX	987	MIN	6.6	AC-FT	96890		
WTR YR 1979	TOTAL	37465.0	MEAN	103	MAX	790	MIN	13	AC-FT	74310		

NOTE.--NO GAGE-HEIGHT RECORD JAN. 16 TO MAR. 7.

09127600 CRYSTAL RESERVOIR NEAR CIMARRON, CO

LOCATION.--Lat 38°30'38", long 107°37'25", in NW¼ sec.14, T.49 N., R.7 W., Montrose County, Hydrologic Unit 14020002, located in powerplant at base of Crystal Dam on the Gunnison River 20 mi (32 km) east of Montrose, 1.5 mi (2.4 km) upstream from the east portal of the Gunnison Tunnel.

DRAINAGE AREA.--3,960 mi² (10,256 km²).

PERIOD OF RECORD.--October 1978 to September 1979.

GAGE.--Water-stage recorder. Datum of gage is National Geodetic Vertical Datum of 1929 (levels by Water and Power Resources Service); gage readings have been reduced to NGVD.

REMARKS.--Reservoir is formed by double-curvature thin concrete-arch dam. Storage began March 14, 1977. Capacity, 25,200 acre-ft (31.1 hm³) at elevation 6,755.00 ft (2,059 m) crest of dam. Dead storage 8,300 acre-ft (10.2 hm³). Reservoir is used for power development. Figures given represent usable contents.

COOPERATION.--Records furnished by Water and Power Resources Service.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 17,680 acre-ft (21.8 km³) July 31, elevation 6,755.28 ft (2,059.009 m); minimum, 13,830 acre-ft (17.1 km³) Jan. 21, elevation 6,741.74 ft (2,054.882 m).

MONTHEND ELEVATION AND CONTENTS AT 2400, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.	6,752.56	16,870	-
Oct. 31.	6,750.41	16,250	-620
Nov. 30.	6,750.41	16,250	0
Dec. 31.	6,749.88	16,100	-150
CAL YR 1978	-	-	-
Jan. 31.	6,751.44	16,540	+440
Feb. 28.	6,752.29	16,790	+250
Mar. 31.	6,753.68	17,200	+410
Apr. 30.	6,751.36	16,520	-680
May 31.	6,752.36	16,810	+290
June 30.	6,752.81	16,940	+130
July 31.	6,755.28	17,680	+740
Aug. 31.	6,753.61	17,180	-500
Sept. 30.	6,752.34	16,810	-370
WTR YR 1979	-	-	-60

GUNNISON RIVER BASIN

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 (0.6 km) downstream from east portal of Gunnison tunnel, 4.7 mi (7.6 km) downstream from Crystal Creek, and 12 mi (19 km) northeast of Montrose.

DRAINAGE AREA.--3,965 mi² (10,269 km²).

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 (1,989.143 m) National Geodetic Vertical Datum of 1929. Apr. 9, 1905, to Aug. 20, 1915, nonrecording gage at site 300 ft (91 m) 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 (150 m) 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 (0.30 m) higher.

REMARKS.--Records good. Natural flow of stream affected by transmountain diversions, transbasin diversion through Gunnison tunnel for irrigation of about 75,000 acres (304 km²) 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, diversions for irrigation of about 63,000 acres (255 km²), and return flow from irrigated areas. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

COOPERATION.--Diversions, in acre-feet, through Gunnison tunnel; furnished by Uncompahgre Valley Water Users Association.

AVERAGE DISCHARGE.--76 years, 1,370 ft³/s (38.80 m³/s), 992,600 acre-ft/yr (1,220 hm³/yr), unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 19,000 ft³/s (538 m³/s) June 15, 1921, gage height, about 15.8 ft (4.81 m), present datum, from rating curve extended above 14,000 ft³/s (396 m³/s); no flow Sept. 25, 26, 1936; Oct. 8, 1949; Sept. 5, 6, 15, 16, 1950.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,670 ft³/s (75.6 m³/s) at 0800 Apr. 13, gage height, 5.40 ft (1.646 m); maximum gage height, 5.43 ft (1.655 m) Mar. 1, 13, 26; minimum daily discharge, 154 ft³/s (4.36 m³/s) Nov. 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	744	1140	1080	1680	1810	2540	2500	1910	1630	1390	916	986
2	812	1100	1100	1680	1780	2480	2480	1890	1670	1410	886	980
3	560	1180	1100	1680	1770	2530	2480	1900	1700	1640	872	940
4	314	1080	1130	1700	1790	2550	2590	1430	1720	2060	879	889
5	289	1080	1200	1720	1870	2550	2500	1860	1720	2040	916	994
6	289	600	1560	1720	2020	2540	2520	1880	1640	1640	919	977
7	226	680	1580	1720	2020	2550	2440	1850	1620	1880	918	991
8	205	1090	1580	1690	2000	2550	2440	1690	1670	1880	949	975
9	212	1020	1540	1720	1990	2520	2440	1790	1720	1890	945	948
10	216	1080	1450	1690	2040	2560	2420	1850	1720	1820	953	964
11	219	1120	1420	1690	1870	2560	2410	1900	1710	1720	945	980
12	219	1320	1220	1710	1880	2560	2420	1900	1700	1690	943	1020
13	296	240	1260	1720	1890	2540	2430	1890	438	1550	955	951
14	632	154	1290	1700	2170	2550	2370	1880	985	1480	981	944
15	644	592	1590	1730	2290	2540	2360	1620	1610	1490	966	948
16	524	1140	1660	1730	2420	2520	2370	1360	1660	1450	949	978
17	592	745	1680	1710	2440	2570	2370	1370	1640	1210	926	948
18	624	205	1700	1690	2450	2600	2380	1440	1700	970	928	1030
19	670	208	1580	1700	2500	2590	2300	1440	1700	963	921	1140
20	660	725	1510	1680	2540	2490	2380	1440	1690	939	963	1110
21	660	1150	1380	1840	2530	2550	2310	1520	1680	918	1030	1120
22	1040	1130	1680	1840	2520	2540	2280	1650	1680	912	1020	1200
23	1250	1140	1670	1790	2520	2530	2250	1660	1690	950	1130	1180
24	1060	790	1630	1730	2530	2500	2240	1650	1600	923	1040	1170
25	1180	380	1660	1730	2500	2570	2270	1670	1620	923	1050	1190
26	1260	392	1700	1740	2530	2590	2180	1710	1490	933	1010	1190
27	1320	715	1660	1720	2480	2600	2050	1720	1490	923	1010	1190
28	1080	1010	1680	1720	2510	2580	1870	1720	1490	907	1010	1190
29	1270	946	1660	1710	---	2490	1900	1690	1430	916	990	1190
30	1100	1000	1630	1720	---	2440	1900	1580	1380	916	965	1200
31	1070	---	1690	1730	---	2480	---	1640	---	916	952	---
TOTAL	21237	25152	46270	53330	61660	78760	69850	52500	47243	41249	29867	31513
MEAN	685	838	1493	1720	2202	2541	2328	1694	1575	1331	953	1050
MAX	1320	1320	1700	1840	2540	2600	2590	1910	1720	2060	1130	1200
MIN	205	154	1080	1680	1770	2440	1870	1360	438	907	872	889
AC-FT	42120	49890	91780	105800	122300	156200	138500	104100	93710	81820	59240	62510
a	31900	5320	0	0	0	464	18530	42080	30690	55110	62070	53890

CAL YR 1978 TOTAL 253924 MEAN 696 MAX 2550 MIN 154 AC-FT 503700
WTR YR 1979 TOTAL 558631 MEAN 1530 MAX 2600 MIN 154 AC-FT 1108000

a Diversions in acre-feet, through Gunnison Tunnel, furnished by Uncompahgre Valley Water Users Association.

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LOCATION.--Lat 38°43'40", long 107°30'22", in SW¼ sec.24, T.15 S., R.91 W., Delta County, Hydrologic Unit 14020002, on left bank 20 ft (6 m) upstream from Forest Service bridge, 0.4 mi (0.6 km) upstream from Second Creek, 6 mi (10 km) northeast of Crawford, and 6.5 mi (10.5 km) upstream from Iron Creek.

PERIOD OF RECORD.--October 1935 to current year. Monthly discharge only for some periods, published in WSP 1313.

GAGE.--Water-stage recorder. Altitude of gage is 7,091 ft (2,161 m), from topographic map. Prior to Nov. 16, 1938, nonrecording gage at same site and datum.

AVERAGE DISCHARGE.--44 years, 40.7 ft³/s (1.153 m³/s), 29,500 acre-ft/yr (36.3 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,180 ft³/s (33.4 m³/s) May 28, 1979, gage height, 6.90 ft (2.103 m); minimum daily discharge determined, 1.8 ft³/s (0.051 m³/s) July 30, 31, Aug. 1, 1963, Sept. 5, 6, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,180 ft³/s (33.4 m³/s) at 1300 May 28, gage height, 6.90 ft (2.103 m), only peak above base of 260 ft³/s (7.4 m³/s); minimum daily, 4.3 ft³/s (0.12 m³/s) several days.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.9	8.1	7.1	4.6	4.6	4.8	9.5	112	293	78	11	6.9
2	5.9	8.0	7.0	4.4	4.6	4.9	8.8	113	256	72	10	6.6
3	5.9	8.0	6.8	4.3	4.6	4.8	8.8	94	250	70	9.7	6.4
4	5.9	7.8	6.6	4.4	4.5	4.6	8.8	81	260	69	9.1	6.2
5	5.9	7.7	6.8	4.8	4.4	4.5	8.8	90	272	58	9.8	6.0
6	5.9	7.7	6.4	5.2	4.3	4.5	14	108	306	55	12	5.8
7	5.9	7.4	6.0	4.8	4.3	4.7	26	112	362	51	11	5.7
8	5.9	7.3	5.8	4.8	4.3	6.2	37	100	352	47	9.7	5.6
9	6.0	7.4	5.4	4.8	4.5	9.6	48	80	268	45	9.6	5.6
10	6.2	7.4	5.2	5.0	4.5	8.0	47	69	201	43	8.9	5.6
11	6.3	7.7	5.0	5.2	4.5	7.4	39	61	181	40	8.6	5.4
12	6.2	10	5.2	5.0	4.5	9.0	31	59	193	41	8.5	5.4
13	6.2	8.3	5.4	4.8	4.6	11	28	58	238	38	9.0	5.4
14	6.2	8.0	5.2	4.7	5.8	13	33	77	274	34	9.6	5.4
15	6.3	7.1	4.7	4.8	5.4	12	55	96	281	32	10	5.6
16	6.3	7.9	5.0	5.4	5.4	13	89	121	257	30	12	5.4
17	6.3	6.7	5.2	5.6	5.2	13	99	183	225	28	12	5.3
18	6.3	6.7	6.0	5.6	5.0	12	105	198	194	27	11	5.1
19	6.3	6.5	6.2	5.2	5.2	11	123	356	163	24	11	5.0
20	6.3	7.0	5.8	5.0	5.4	10	93	432	102	21	11	6.6
21	6.9	7.0	5.6	5.0	5.4	10	89	495	95	19	10	5.6
22	13	7.2	5.8	5.1	5.4	9.6	111	663	93	18	9.0	5.4
23	9.8	7.2	6.0	4.8	5.2	9.0	123	715	96	17	8.5	5.3
24	9.6	7.0	5.6	4.7	5.0	8.7	121	730	100	16	8.0	5.1
25	13	7.2	5.4	4.9	4.8	8.7	100	787	104	14	8.0	4.9
26	11	7.3	5.0	5.0	4.9	11	83	789	102	15	8.0	5.2
27	9.6	6.8	4.8	4.9	4.9	12	83	920	95	14	7.8	5.3
28	9.0	6.7	4.5	4.7	4.8	12	97	1060	90	13	7.4	5.4
29	8.7	7.3	4.4	4.6	---	11	98	829	85	13	7.1	5.3
30	8.5	7.1	4.9	4.5	---	10	100	684	76	12	7.7	6.2
31	8.3	---	5.0	4.5	---	11	---	436	---	11	7.7	---
TOTAL	229.5	223.5	173.8	151.1	136.0	281.0	1916.7	10708	5864	1065	292.7	168.7
MEAN	7.40	7.45	5.61	4.87	4.86	9.06	63.9	345	195	34.4	9.44	5.62
MAX	13	10	7.1	5.6	5.8	13	123	1060	362	78	12	6.9
MIN	5.9	6.5	4.4	4.3	4.3	4.5	8.8	58	76	11	7.1	4.9
AC-FT	455	443	345	300	270	557	3800	21240	11630	2110	581	335
CAL YR 1978	TOTAL	19343.2	MEAN	53.0	MAX	480	MIN	1.8	AC-FT	38370		
WTR YR 1979	TOTAL	21210.0	MEAN	58.1	MAX	1060	MIN	4.3	AC-FT	42070		

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 (8 m) downstream from bridge, 1.8 mi (2.9 km) upstream from Diamond Joe Gulch, and 6.4 mi (10.3 km) southeast of Lazear.

DRAINAGE AREA.--166 mi² (430 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 5,830 ft (1,777 m), from topographic map.

REMARKS.--Records good except those for periods of ice effect and those for periods of no gage-height record, which are poor. Natural flow of stream affected by reservoirs, diversions into basin, diversions for irrigation, and return flow from irrigated areas. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge measured, 459 ft³/s (13.0 m³/s) May 25, 1979, gage height, 5.45 ft (1.661 m); minimum daily, 0.10 ft³/s (0.003 m³/s) Aug. 12-14, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge measured, 459 ft³/s (13.0 m³/s) May 25, gage height, 5.45 ft (1.661 m); minimum daily, 0.90 ft³/s (0.025 m³/s) Oct. 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

OAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.5	3.2	3.7	2.4	1.8	2.3	7.4	184	250	53	2.2	3.6
2	1.2	3.2	3.6	2.2	2.1	2.5	7.7	222	220	48	2.2	3.5
3	1.2	3.2	3.3	2.4	2.0	2.5	7.7	189	210	46	2.3	3.4
4	.90	3.2	3.2	2.6	1.8	2.2	8.0	156	210	44	2.3	3.2
5	1.2	3.2	3.5	2.7	1.7	2.0	8.0	156	220	39	2.1	2.6
6	1.3	3.2	3.4	2.8	2.0	2.5	8.0	168	240	36	2.1	3.0
7	1.2	3.2	3.1	2.9	2.1	2.7	8.0	182	250	33	2.1	3.2
8	1.3	2.9	2.6	2.6	2.2	2.9	8.0	158	220	30	2.2	4.3
9	1.2	3.1	2.5	2.8	2.1	4.1	8.3	95	180	25	2.5	4.9
10	2.1	3.1	2.5	2.9	2.1	4.0	8.5	77	140	22	2.8	5.3
11	3.1	3.1	2.7	2.9	2.2	3.7	9.3	62	130	20	3.6	5.7
12	2.9	4.1	2.8	2.9	2.3	3.9	9.3	53	130	15	4.0	5.4
13	2.9	3.9	2.9	2.9	2.4	4.3	9.6	56	140	10	3.5	5.4
14	2.9	3.9	3.0	2.6	2.7	4.8	9.6	60	150	6.1	4.1	5.3
15	3.1	3.7	2.5	2.9	2.6	4.6	9.9	101	160	2.7	4.0	5.1
16	3.1	3.7	2.5	2.9	2.5	4.8	20	149	150	2.6	4.1	5.0
17	3.2	3.7	2.8	2.8	2.5	5.0	58	195	110	2.6	4.3	4.1
18	3.2	3.6	3.2	2.9	2.5	5.2	67	275	100	4.8	3.3	2.1
19	3.2	3.7	3.3	3.1	2.5	5.2	94	310	84	6.6	3.8	2.2
20	3.2	3.7	3.1	2.8	2.6	5.7	62	350	76	6.9	4.1	2.1
21	3.2	3.7	2.6	2.4	2.7	5.7	59	390	76	6.0	4.0	2.1
22	4.1	3.7	2.7	2.6	2.7	6.0	71	430	75	6.2	3.6	2.0
23	3.7	3.9	3.3	2.2	2.6	6.4	91	450	75	5.3	3.4	2.0
24	3.6	3.9	3.0	2.1	2.5	6.7	148	480	76	4.4	3.9	1.9
25	3.6	3.9	2.7	1.9	2.5	6.6	128	490	78	3.2	4.2	2.0
26	3.6	3.9	2.6	1.9	2.4	6.7	103	520	72	2.9	4.1	2.2
27	3.1	3.9	2.7	1.8	2.4	6.9	110	640	68	2.6	4.3	2.3
28	3.1	3.6	2.8	1.8	2.4	6.9	152	750	64	2.2	3.9	2.2
29	3.1	3.8	2.9	2.0	---	7.2	175	600	56	2.2	3.7	2.3
30	3.1	3.7	2.8	1.8	---	7.2	176	430	56	2.3	4.1	2.4
31	3.1	---	2.7	1.6	---	7.4	---	340	---	2.8	4.3	---
TOTAL	81.20	106.6	91.0	77.1	64.9	148.6	1641.3	8718	4066	493.4	105.1	100.8
MEAN	2.62	3.55	2.94	2.49	2.32	4.79	54.7	281	136	15.9	3.39	3.36
MAX	4.1	4.1	3.7	3.1	2.7	7.4	176	750	250	53	4.3	5.7
MIN	.90	2.9	2.5	1.6	1.7	2.0	7.4	53	56	2.2	2.1	1.9
AC-FT	161	211	180	153	129	295	3260	17290	8060	979	208	200

CAL YR 1978 TOTAL 7268.15 MEAN 19.9 MAX 280 MIN .63 AC-FT 14420
WTR YR 1979 TOTAL 15694.00 MEAN 43.0 MAX 750 MIN .90 AC-FT 31130

NOTE.--NO GAGE-HEIGHT RECORD JAN. 31 TO MAR. 14, MAY 19 TO JULY 10.

09131100 COW CREEK NEAR PAONIA, CO

LOCATION.--Lat 39°06'15", long 107°35'00", Delta County, Hydrologic Unit 14020004, on left bank 150 ft (46 m) downstream from road culvert, 1.8 mi (2.9 km) upstream from Beaver Creek, and 16 mi (26 km) north of Paonia.

DRAINAGE AREA.--12.0 mi² (31.1 km²).

PERIOD OF RECORD.--October 1968 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 9,060 ft (2,761 m), from topographic map. Prior to Nov. 9, 1974, at site 150 ft (46 m) upstream at different datum.

REMARKS.--Records fair except those for winter period and those for period of no gage-height record, which are fair. Flow regulated by Overland Reservoir, capacity, 6,280 acre-ft (7.74 hm³). Diversions by Overland ditch 3.6 mi (5.8 km) above station for use outside drainage. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--11 years, 7.65 ft³/s (0.217 m³/s), 5,540 acre-ft/yr (6.83 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 172 ft³/s (4.87 m³/s), June 14, 1975, gage height, 3.01 ft (0.917 m); maximum gage height, 6.95 ft (2.118 m), site and datum then in use, Oct. 4, 1974 (backwater from beaver dam); no flow June 20-24, July 31, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 168 ft³/s (4.76 m³/s) July 1, gage height, 2.84 ft (0.866 m), from float tape indicator; maximum gage height, 3.77 ft (1.149 m), from float tape indicator, Apr. 28, (ice jam); minimum daily discharge, 0.09 ft³/s (0.002 m³/s) Sept. 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.4	4.2	1.0	.92	1.0	1.1	1.4	8.2	60	111	.39	.26
2	1.2	3.3	.94	.78	1.0	1.1	1.4	8.3	61	91	.41	.18
3	1.0	2.9	.84	.84	1.0	1.0	1.4	7.2	65	108	.39	.11
4	1.4	2.8	.92	1.0	1.0	.96	1.5	7.5	65	85	.38	.18
5	1.3	2.7	.98	1.0	.90	1.0	1.6	9.1	66	92	.38	.24
6	1.5	2.6	.92	.98	.98	1.1	1.9	11	67	83	.37	.24
7	1.3	2.5	.86	.94	1.0	1.3	2.6	11	70	46	.31	.25
8	1.4	2.5	.80	.80	1.0	1.3	3.3	9.3	71	30	1.1	.28
9	1.6	2.4	.76	.88	.94	1.2	4.3	8.4	68	22	.98	.28
10	1.5	2.4	.90	.98	1.0	1.1	4.7	7.3	85	22	.53	.28
11	1.4	2.5	.90	1.0	1.1	1.2	4.2	7.2	120	20	.43	.37
12	1.4	2.8	.88	1.0	1.1	1.3	4.0	7.4	123	4.0	1.1	.28
13	1.7	2.2	.86	1.0	1.1	1.3	4.0	7.5	117	3.5	1.2	.25
14	4.8	1.6	.84	.82	1.1	1.4	4.4	8.8	101	3.4	1.1	.21
15	3.7	1.6	.82	.93	1.1	1.5	5.2	11	101	3.2	.99	.35
16	4.1	1.5	.82	.98	1.1	1.5	6.3	13	96	3.2	.95	.22
17	1.3	1.1	.84	1.0	1.0	1.4	7.0	16	94	2.9	.67	.10
18	1.5	1.1	.90	1.0	.94	1.4	7.9	22	96	2.9	.80	.09
19	1.8	1.1	1.1	1.0	1.0	1.4	8.5	25	97	2.4	.69	.11
20	1.8	1.1	1.1	.94	1.1	1.3	8.8	28	75	2.0	.50	.29
21	2.7	.96	1.0	.82	1.1	1.3	8.0	32	11	1.4	.46	.39
22	4.6	.92	.98	.96	1.0	1.2	8.0	37	9.5	1.1	.43	1.9
23	4.3	.94	.96	.80	1.0	1.2	8.8	40	8.8	.93	.40	1.7
24	4.2	.96	.96	.92	1.0	1.2	10	41	8.1	.84	.36	1.6
25	4.7	.94	.95	1.0	.96	1.2	9.6	39	7.7	.67	.34	1.4
26	12	.96	.84	.96	1.1	1.2	7.2	42	7.2	.67	.35	1.5
27	13	.86	.84	.90	1.1	1.3	7.8	46	6.6	.71	.35	1.8
28	12	.82	.92	.84	1.1	1.6	8.4	60	12	.58	.31	1.8
29	12	.96	.98	.94	---	1.5	8.4	91	78	.51	.26	1.6
30	7.9	.96	1.0	.90	---	1.5	7.3	76	93	.55	.29	1.5
31	5.7	---	.98	.84	---	1.5	---	63	---	.48	.29	---
TOTAL	120.2	54.18	28.39	28.67	28.82	39.56	167.9	800.2	1939.9	745.94	17.51	19.76
MEAN	3.88	1.81	.92	.92	1.03	1.28	5.60	25.8	64.7	24.1	.56	.66
MAX	13	4.2	1.1	1.0	1.1	1.6	10	91	123	111	1.2	1.9
MIN	1.0	.82	.76	.78	.90	.96	1.4	7.2	6.6	.48	.26	.09
AC-FT	238	107	56	57	57	78	333	1590	3850	1480	35	39

CAL YR 1978 TOTAL 2965.95 MEAN 8.13 MAX 125 MIN .10 AC-FT 5880
WTR YR 1979 TOTAL 3991.03 MEAN 10.9 MAX 123 MIN .09 AC-FT 7920

NOTE.--NO GAGE-HEIGHT RECORD NOV. 21 TO MAR. 28.

GUNNISON RIVER BASIN

09132050 ANTHRACITE CREEK NEAR SOMERSET, CO

LOCATION.--Lat 38°57'18", long 107°16'11", in SE¼NW¼ sec.6, T.1 S., R.88 W., Gunnison County, Hydrologic Unit 14020004, on right bank 300 ft (91 m) upstream from county bridge 0.1 mi (0.2 km) downstream from Munsey Creek, 5 mi (8.0 km) east of Paonia Reservoir Dam, and 10 mi (16 km) northeast of Somerset.

DRAINAGE AREA.--94.6 mi² (245.0 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1977 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,800 ft (2,073 m), from topographic map.

REMARKS.--Records poor. Natural flow of stream affected by small diversions for irrigation of hay meadows. 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.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,400 ft³/s (68.0 m³/s) about May 27, 1979, gage height, 7.20 ft (2.195 m) (from floodmark); minimum daily, 12 ft³/s (0.340 m³/s) Dec. 21, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,400 ft³/s (68.0 m³/s) about May 27, gage height, 7.20 ft (2.195 m) (from floodmark); only peak above base of 500 ft³/s (14.2 m³/s); minimum daily, 14 ft³/s (0.40 m³/s) Dec. 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	21	21	17	17	23	32	504	900	948	94	38
2	24	21	18	16	17	23	29	511	900	780	90	36
3	23	21	18	16	17	23	26	353	1000	643	79	36
4	23	20	20	17	16	21	25	272	1100	530	76	33
5	23	20	23	18	15	21	23	381	1300	501	72	33
6	22	20	20	18	16	22	31	482	1600	492	68	31
7	21	20	19	17	16	24	61	549	1700	474	72	31
8	20	20	14	18	16	31	91	384	1450	483	79	33
9	20	20	15	18	16	31	112	280	936	456	76	33
10	19	20	17	19	16	29	117	278	698	429	65	34
11	19	20	20	18	16	29	102	271	632	420	61	34
12	18	25	21	19	16	34	86	260	720	396	61	49
13	18	23	20	17	18	38	79	264	1100	388	54	46
14	18	23	20	17	20	42	92	313	1440	372	58	44
15	18	21	20	16	20	44	163	525	1470	332	58	28
16	18	23	21	15	19	49	256	668	1440	332	76	26
17	18	22	22	21	19	47	306	696	1230	308	79	24
18	18	18	26	20	18	45	361	975	948	268	72	24
19	17	18	27	19	18	40	305	1150	654	239	79	23
20	17	19	23	18	19	37	304	1410	494	225	83	21
21	19	20	21	18	19	35	314	1660	520	232	83	21
22	32	22	20	19	19	34	312	1460	732	253	68	21
23	27	23	19	18	18	31	466	1640	960	225	65	21
24	26	20	19	18	19	30	608	1540	1040	197	58	19
25	31	20	19	18	21	32	413	1510	1090	179	51	19
26	27	20	17	18	23	38	293	2000	1070	168	51	19
27	25	17	22	17	24	45	348	3000	988	152	49	19
28	23	17	21	17	23	49	426	3500	960	146	46	19
29	22	22	20	17	---	46	423	2000	900	130	41	19
30	22	21	19	17	---	39	399	1500	828	117	41	19
31	22	---	19	17	---	36	---	1000	---	104	41	---
TOTAL	674	617	621	548	511	1068	6603	31336	30800	10919	2746	853
MEAN	21.7	20.6	20.0	17.7	18.3	34.5	220	1011	1027	352	65.0	28.4
MAX	32	25	27	21	24	49	608	3500	1700	948	94	49
MIN	17	17	14	15	15	21	23	260	494	104	41	19
AC-FT	1340	1220	1230	1090	1010	2120	13100	62150	61090	21660	4960	1690

CAL YR 1978 TOTAL 75451 MEAN 207 MAX 1400 MIN 13 AC-FT 149700
WTR YR 1979 TOTAL 86596 MEAN 237 MAX 3500 MIN 14 AC-FT 171800

NOTE.--NO GAGE-HEIGHT RECORD MAY 26 TO JUNE 7.

GUNNISON RIVER BASIN

259

09132050 ANTHRACITE CREEK NEAR SOMERSET, CO--Continued

PERIOD OF RECORD.--October 1977 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	TEMPER- ATURE (DEG C)	DATE	TIME	TEMPER- ATURE (DEG C)
OCT 03...	1015	5.0	APR 23...	1300	8.0
16...	1645	9.0	MAY 14...	1230	9.5
NOV 13...	1230	2.0	JUN 18...	1250	7.5
DEC 13...	0945	.0	JUL 23...	1240	12.5
JAN 22...	1330	.5	AUG 20...	1240	9.0
MAR 12...	1300	3.0			

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, (COLS. PER 100 ML)	HARD- NESS (MG/L AS CaCO3)
OCT 03...	1015	20	140	8.0	20	9.1	23	<1	K6	69
NOV 13...	1230	22	150	8.3	--	10.0	3	K6	K7	66
DEC 13...	0945	19	170	7.6	--	11.4	5	<1	3	65
JAN 22...	1330	22	150	7.5	--	9.4	12	K17	K1	65
MAR 12...	1300	40	140	8.6	--	--	5	K2	K2	53
APR 23...	1300	393	90	7.9	7.2	11.0	14	K2	K6	37
MAY 14...	1230	379	90	8.0	--	10.8	9	<1	K1	36
JUN 18...	1250	800	58	7.8	--	--	10	K3	K4	22
JUL 23...	1240	217	85	8.2	--	--	--	K2	K7	45
AUG 20...	1240	81	100	8.7	--	9.7	10	K8	28	46

K BASED ON NON-IDEAL COLONY COUNT.

GUNNISON RIVER BASIN

09132050 ANTHRACITE CREEK NEAR SOMERSET, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	HARD- NESS- NONCAR- BONATE (MG/L 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)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	ALKA- LINITY (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)
OCT 03...	5	22	3.4	4.1	.2	.5	78	0	64	17
NOV 13...	9	21	3.3	4.1	.2	.5	69	0	57	17
DEC 13...	11	21	3.1	4.2	.2	1.9	66	0	54	17
JAN 22...	15	21	3.0	4.5	.2	.3	61	0	50	15
MAR 12...	6	17	2.6	3.8	.2	.5	58	0	48	15
APR 23...	10	12	1.6	2.5	.2	.6	33	0	27	10
MAY 14...	7	12	1.5	2.7	.2	.7	35	0	29	8.7
JUN 18...	4	8.7	--	--	--	.4	22	0	18	7.0
JUL 23...	20	13	3.1	--	--	--	--	--	25	13
AUG 20...	11	15	2.0	2.8	.2	.6	42	0	34	16

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 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, AMMONIA TOTAL (MG/L AS N)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)
OCT 03...	1.1	.1	6.7	96	93	.13	5.18	.04	.00	.15
NOV 13...	1.3	.1	6.2	95	88	.13	5.64	.08	.01	.14
DEC 13...	2.8	.1	6.5	93	89	.13	4.77	.12	.00	.06
JAN 22...	1.5	.1	7.1	89	83	.12	5.29	.08	.02	.20
MAR 12...	1.2	.1	7.0	90	76	.12	9.72	.08	.01	.13
APR 23...	.7	.1	7.4	55	51	.07	58.4	.11	.01	.13
MAY 14...	1.1	.1	6.9	61	51	.08	62.4	.04	.01	.17
JUN 18...	.3	.1	5.2	45	33	.06	97.2	.05	.03	.54
JUL 23...	--	.1	5.4	57	--	.08	33.4	.06	.01	.16
AUG 20...	.3	.1	6.3	65	64	.09	14.3	.02	.00	.21

GUNNISON RIVER BASIN

09132050 ANTHRACITE CREEK NEAR SOMERSET, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDEO (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDEO (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	DATE	TIME	STREAM- FLOW, INSTAN- TANEDUS (CFS)	SEDI- MENT, SUS- PENDEO (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDEO (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
DCT						APR					
03...	1015	20	1	.05	--	23...	1300	396	53	57	72
03...	1020	28	1	.08	--	JUN					
NDV						18...	1430	1970	68	362	--
13...	1230	23	1	.06	--	AUG					
DEC						20...	1240	82	14	3.1	--
13...	1210	20	1	.05	--						
MAR											
12...	1235	40	2	.22	--						

09132050 ANTHRACITE CREEK NEAR SOMERSET, CO--Continued

PHYTOPLANKTON ANALYSES, OCTOBER 1978 TO AUGUST 1979

DATE TIME	OCT 16,78 1645	NOV 13,78 1230	DEC 13,78 0945	JAN 22,79 1330	MAR 12,79 1307
TOTAL CELLS/ML	96	3900	56	25	250
DIVERSITY: DIVISION	0.0	0.5	0.0	0.0	1.0
..CLASS	0.0	0.5	0.0	0.0	1.0
..ORDER	0.0	0.5	0.0	0.0	1.7
...FAMILY	1.6	0.6	1.5	1.5	2.3
....GENUS	1.6	0.6	1.5	1.5	2.3

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)										
..CHLOROPHYCEAE										
...CHLOROCOCCALES										
...SCENEDESMACEAE										
....SCENEDESMUS	--	-	--	-	--	-	--	-	--	-
...VOLVOCALES										
...CHLAMYDOMONADACEAE										
....CHLAMYDOMONAS	--	-	--	-	--	-	--	-	5	2
CHRYSTOPHYTA										
..BACILLARIOPHYCEAE										
...CENTRALES										
...COSCINODISCAEAE										
....CYCLOTELLA	--	-	--	-	--	-	--	-	91#	37
...PENNALES										
...ACHNANTHACEAE										
....ACHNANTHES	65#	69	220	6	14#	25	--	-	--	-
....COCCONEIS	--	-	22	1	--	-	--	-	10	4
...CYMBELLACEAE										
....CYMBELLA	5	6	44	1	14#	25	5#	20	10	4
...FRAGILARIACEAE										
....FRAGILARIA	--	-	--	-	--	-	10#	40	30	12
....HANNAEA	--	-	22	1	--	-	--	-	--	-
...SYNEDRA	11	11	22	1	--	-	--	-	--	-
...GOMPHONEMACEAE										
....GOMPHONEMA	2	2	44	1	--	-	--	-	5	2
...MERIDIONACEAE										
....MERIDION	--	-	--	-	--	-	--	-	--	-
...NAVICULACEAE										
....NAVICULA	7	7	--	-	28#	50	--	-	--	-
...NITZSCHIAEAE										
....NITZSCHIA	5	6	--	-	--	-	10#	40	15	6
CYANOPHYTA (BLUE-GREEN ALGAE)										
..CYANOPHYCEAE										
...CHROOCOCCALES										
...CHROOCOCCACEAE										
....GOMPHOSPHERIA	--	-	--	-	--	-	--	-	81#	33
...HORMOGONALES										
...OSCILLATORIAEAE										
....OSCILLATORIA	--	-	3500#	90	--	-	--	-	--	-
...RIVULARIAEAE										
....RAPHIDIOPSIS	--	-	--	-	--	-	--	-	--	-

NOTE: # = DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%

* = OBSERVED ORGANISM; MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

GUNNISON RIVER BASIN

09132050 ANTHRACITE CREEK NEAR SOMERSET, CO--Continued

PHYTOPLANKTON ANALYSES, OCTOBER 1978 TO AUGUST 1979

DATE TIME	APR 23,79 1300	MAY 14,79 1230	JUN 18,79 1250	JUL 23,79 1240	AUG 27,79 1240
TOTAL CELLS/ML	380	590	13	13	13
DIVERSITY: DIVISION	0.8	0.7	0.0	0.0	0.0
..CLASS	0.8	0.7	0.0	0.0	0.0
..ORDER	0.8	0.7	0.0	0.0	0.0
...FAMILY	1.9	0.7	0.0	0.0	0.0
....GENUS	1.9	0.7	0.0	0.0	0.0

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)										
..CHLOROPHYCEAE										
...CHLOROCOCCALES										
...SCENEDESMACEAE										
....SCENEDESMUS	--	-	51	9	--	-	--	-	--	-
...VOLVOCALES										
...CHLAMYDOMONADACEAE										
....CHLAMYDOMONAS	--	-	--	-	--	-	--	-	--	-
CHRYSTOPHYTA										
..BACILLARIOPHYCEAE										
...CENTRALES										
...COSCINODISCAEAE										
....CYCLOTELLA	--	-	--	-	--	-	--	-	--	-
...PENNALES										
...ACHNANTHACEAE										
....ACHNANTHES	28	7	--	-	--	-	--	-	--	-
...COCCONEIS	--	-	--	-	--	-	--	-	--	-
...CYMBELLACEAE										
....CYMBELLA	28	7	--	-	--	-	--	-	--	-
...FRAGILARIACEAE										
....FRAGILARIA	--	-	13	2	--	-	--	-	--	-
...HANNAEA	--	-	--	-	--	-	--	-	--	-
...SYNEDRA	--	-	--	-	--	-	13#100		--	-
...GOMPHONEMACEAE										
....GOMPHONEMA	--	-	--	-	--	-	--	-	--	-
...MERIDIONACEAE										
....MERIDION	14	4	--	-	--	-	--	-	--	-
...NAVICULACEAE										
....NAVICULA	--	-	--	-	--	-	--	-	13#100	
...NITZSCHACEAE										
....NITZSCHIA	14	4	13	2	13#100		--	-	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)										
..CYANOPHYCEAE										
...CHROOCOCCALES										
...CHROOCOCCACEAE										
...GOMPHOSPHAERIA	--	-	--	-	--	-	--	-	--	-
...HORMOGONALES										
...OSCILLATORIACEAE										
....OSCILLATORIA	180#	48	510#	87	--	-	--	-	--	-
...RIVULARIACEAE										
....RAPIDIOPSIS	110#	30	--	-	--	-	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%

* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

09132500 NORTH FORK GUNNISON RIVER NEAR SOMERSET, CO

LOCATION--Lat 38°55'45", long 107°26'53", in SW¼SE¼ sec.9, T.13 S., R.90 W., Gunnison County, Hydrologic Unit 14020004, on right bank 1.5 mi (2.4 km) east of Somerset and 4.5 mi (7.2 km) upstream from Hubbard Creek.

DRAINAGE AREA--531 mi² (1,375 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD--October 1933 to current year. Monthly discharge only for some periods, published in WSP 1313.

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

GAGE--Water-stage recorder. Datum of gage is 6,038.91 ft (1,840.660 m) National Geodetic Vertical Datum of 1929. Prior to July 22, 1971, at site 100 ft (30 m) downstream at datum 0.31 ft (0.094 m) lower.

REMARKS--Records good except those for winter period, which are poor. Natural flow of stream affected by small diversions for irrigation in nearby drainage areas, irrigation of about 3,000 acres (12.1 km²) above station, storage in Overland Reservoir, capacity, 6,280 acre-ft (7.74 hm³), and storage in Paonia Reservoir, capacity, 18,300 acre-ft (22.6 hm³) since February 1961. See table below for contents of Paonia Reservoir.

COOPERATION--Monthend contents, in acre-feet, in Paonia Reservoir; furnished by Water and Power Resources Service.

AVERAGE DISCHARGE--46 years, 432 ft³/s (12.24 m³/s), 313,000 acre-ft/yr (386 hm³/yr).

EXTREMES FOR PERIOD OF RECORD--Maximum discharge, 7,860 ft³/s (223 m³/s) June 4, 1957, gage height, 5.83 ft (1.777 m), present datum; minimum daily, 17 ft³/s (0.48 m³/s) Nov. 10, 1950.

EXTREMES FOR CURRENT YEAR--Maximum discharge, 6,720 ft³/s (190 m³/s) at 0200 May 28, gage height, 6.73 ft (2.051 m); minimum daily, 25 ft³/s (0.71 m³/s) Jan. 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	62	56	56	45	32	60	97	1480	2700	2020	269	232
2	62	55	59	35	35	68	92	1780	2600	1770	276	228
3	62	55	56	35	35	72	86	1840	2620	1550	264	224
4	62	55	48	40	32	60	80	1770	2710	1380	258	221
5	62	55	54	46	28	62	80	1680	2820	1250	252	220
6	62	52	55	47	30	70	101	1580	3090	1210	247	210
7	64	50	54	46	37	78	166	1650	3310	1120	252	200
8	64	51	50	46	38	80	254	1480	3160	1030	271	190
9	62	51	42	36	38	76	468	1310	2580	947	286	180
10	64	52	46	38	36	71	725	1470	2160	862	276	180
11	64	52	49	39	37	72	629	1560	2030	828	270	180
12	64	66	52	40	42	76	675	1520	2120	776	262	170
13	53	60	52	39	49	80	773	1270	2470	731	260	170
14	52	56	52	32	54	86	782	1210	2650	693	265	170
15	52	51	52	34	50	96	898	1540	2610	651	268	180
16	51	55	48	37	47	103	1060	2080	2630	618	294	170
17	51	47	55	35	46	101	1150	2500	2460	591	299	160
18	51	46	60	41	47	97	1420	2750	2240	540	276	150
19	50	47	63	45	50	88	1310	3280	1900	477	294	140
20	50	52	62	32	54	85	756	3530	1520	428	277	190
21	52	53	56	29	58	86	796	3790	1360	409	234	150
22	88	56	50	35	56	84	1070	3640	1530	459	214	150
23	73	55	50	26	52	78	1690	4080	1750	415	234	140
24	66	52	57	26	58	78	1990	3860	1820	373	233	140
25	71	52	54	28	52	84	1890	3910	1820	343	257	130
26	65	52	52	31	54	95	1790	4340	1810	321	258	140
27	60	46	50	25	58	107	1800	4780	1730	299	254	150
28	58	41	50	28	60	126	1860	5820	1720	283	248	140
29	57	44	58	30	---	127	1600	5010	1710	265	241	140
30	56	50	58	30	---	107	1110	4510	1740	255	239	140
31	56	---	52	28	---	110	---	3340	---	244	240	---
TOTAL	1866	1565	1652	1104	1265	2663	27198	84360	67370	23138	8068	5185
MEAN	60.2	52.2	53.3	35.6	45.2	85.9	907	2721	2246	746	260	173
MAX	88	66	63	47	60	127	1990	5820	3310	2020	299	232
MIN	50	41	42	25	28	60	80	1210	1360	244	214	130
AC-FT	3700	3100	3280	2190	2510	5280	53950	167300	133600	45890	16000	10280
a	1480	2520	3700	N/A	4620	7460	5470	N/A	18400	18500	12600	2000
CAL YR 1978	TOTAL	176658	MEAN 484	MAX 3090	MIN 21	AC-FT 350400						
WTR YR 1979	TOTAL	225434	MEAN 618	MAX 5820	MIN 25	AC-FT 447100						

a MONTHEND CONTENTS, IN ACRE-FEET, IN PAONIA RESERVOIR, FURNISHED BY WATER AND POWER RESOURCES SERVICE.

GUNNISON RIVER BASIN

09132500 NORTH FORK GUNNISON RIVER NEAR SOMERSET, CO--Continued

PERIOD OF RECORD.--October 1977 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	HARD- NESS (MG/L AS CaCO3)	HARD- NESS, NONCAR- BONATE (MG/L CaCO3)	CALCIUM DIS- SOLVED (MG/L AS Ca)	MAGNE- SIUM, DIS- SOLVED (MG/L AS Mg)	SODIUM, DIS- SOLVED (MG/L AS Na)
OCT 03...	1330	62	170	8.6	11.0	8.5	71	0	22	3.8	8.0
NOV 15...	0915	45	180	8.0	1.0	13.4	74	1	23	4.1	8.2
DEC 13...	1330	57	180	7.5	1.5	7.2	74	2	23	3.9	8.0
JAN 23...	1000	26	150	7.6	.0	9.5	81	1	25	4.5	10
APR 24...	1545	1910	170	8.0	7.0	9.4	65	1	20	3.6	7.2
JUN 20...	1000	1520	110	7.8	6.0	10.2	41	3	13	2.0	3.4
JUL 25...	1015	353	118	7.9	14.0	8.1	48	3	15	2.5	4.8
AUG 22...	1030	210	150	8.5	7.0	10.0	54	4	17	2.8	5.3

DATE	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	ALKA- LINITY (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)
OCT 03...	.4	.8	96	0	79	11	1.2	.1	9.2	104	.14
NOV 15...	.4	.7	90	0	74	17	2.0	.1	8.9	108	.15
DEC 13...	.4	.7	87	--	71	11	2.3	.1	9.3	101	.14
JAN 23...	.5	.6	97	0	80	12	2.6	.1	10	113	.15
APR 24...	.4	1.4	78	0	64	9.3	1.7	.1	9.2	91	.12
JUN 20...	.2	.6	46	0	38	8.7	.7	.1	7.6	59	.08
JUL 25...	.3	1.0	55	--	45	14	1.1	.1	9.0	75	.10
AUG 22...	.3	.7	61	0	50	13	.7	.2	9.0	79	.11

DATE	SOLIDS, DIS- SOLVED (TONS PER OAY)	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)	NITRO- GEN, TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	BORON, DIS- SOLVED (UG/L AS B)	IRON, DIS- SOLVED (UG/L AS FE)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)
OCT 03...	17.4	.02	.00	.31	.31	.33	.01	40	20	2.8	2.4
NOV 15...	13.2	.04	.01	.34	.35	.39	.00	30	10	2.2	--
DEC 13...	15.5	.07	.01	.14	.15	.22	.02	20	10	2.1	2.0
JAN 23...	7.93	.10	.02	.12	.14	.24	.01	10	0	1.8	1.9
APR 24...	469	.29	.03	.41	.44	.73	.13	20	50	5.8	5.3
JUN 20...	242	.05	.03	.18	.21	.26	.05	10	40	3.3	3.5
JUL 25...	71.5	.02	.00	.12	.12	.14	.12	110	10	5.0	4.0
AUG 22...	44.8	.01	.00	.30	.30	.31	.04	10	30	3.7	3.3

09132500 NORTH FORK GUNNISON RIVER NEAR SOMERSET, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS- SOLVED (UG/L AS AS)	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)
OCT 03...	1330	320	10	0	0	0	<1	0	<1
JAN 23...	1000	80	0	0	0	0	<1	1	<1
APR 24...	1545	4000	30	1	1	0	<1	3	2
AUG 22...	1030	320	0	0	0	0	<1	2	2

DATE	TIME	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)	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 TOTAL RECOV- ERABLE (UG/L AS HG)
OCT 03...	0	0	0	3	1	8	5	50	9	.0
JAN 23...	0	0	0	3	1	5	3	0	2	.0
APR 24...	10	0	0	2	2	51	7	100	20	.2
AUG 22...	0	0	0	1	1	18	11	10	3	.1

DATE	TIME	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)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, DIS- SOLVED (UG/L AS ZN)
OCT 03...		.0	1	0	0	0	.9	10	<3
JAN 23...		.0	3	0	0	0	.3	10	<3
APR 24...		.0	10	0	1	0	.9	20	<3
AUG 22...		.2	2	1	0	0	1.0	0	<3

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDED (T/DAY)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDED (T/DAY)
NOV 15...	0930	45	6	.73	MAY 16...	0940	1650	329	1470
DEC 13...	1310	57	15	2.3	JUN 20...	1030	1520	44	181
JAN 23...	1030	26	8	.56	JUL 25...	1015	353	6	5.7
MAR 13...	1255	86	30	7.0	AUG 22...	1030	210	204	116
APR 24...	1415	1910	182	939					

GUNNISON RIVER BASIN

09134050 MINNESOTA CREEK AT PAONIA, CO

LOCATION--Lat 38°52'27", long 107°35'18", in SW¼SW¼ sec.32, T.13 S., R.91 W., Delta County, Hydrologic Unit 14020004, on left bank at downstream side of bridge 0.1 mi (0.2 km) north of Paonia city limits and 0.5 mi (0.8 km) upstream from mouth.

DRAINAGE AREA--53.5 mi² (138.6 km²)

PERIOD OF RECORD--May 1976 to September 1979 (discontinued).

GAGE--Water-stage recorder. Altitude of gage is 5,660 ft (1,725 m), from topographic map.

REMARKS--Records good except those for winter period and period of no gage-height record, which are poor. Natural flow of stream affected by irrigation and return flow from areas above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

EXTREMES FOR PERIOD OF RECORD--Maximum discharge, 453 ft³/s (12.8 m³/s), Apr. 1, 1978, gage height, 5.00 ft (1.524 m), from floodmarks; minimum daily, 0.24 ft³/s (0.007 m³/s) Sept. 14, 1977.

EXTREMES FOR CURRENT YEAR--Maximum discharge, 220 ft³/s (6.23 m³/s), June 9, gage height, 3.33 ft (1.015 m); minimum daily, 1.2 ft³/s (0.034 m³/s) Feb. 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.2	3.8	4.4	2.6	2.2	3.0	21	39	135	66	3.4	3.2
2	2.4	3.7	4.8	2.3	2.4	4.1	21	44	117	60	3.8	3.3
3	2.2	3.7	4.1	2.4	2.3	4.6	21	38	102	54	3.8	3.0
4	2.0	3.6	3.7	2.8	2.1	4.8	20	33	105	47	3.8	2.6
5	1.9	3.7	4.1	3.4	1.9	4.8	20	38	108	39	3.7	2.9
6	1.8	3.5	3.8	3.3	2.1	5.6	24	43	119	38	3.7	3.0
7	1.9	3.5	3.6	3.0	2.0	8.9	36	47	137	33	3.7	3.1
8	2.0	3.6	3.1	2.6	2.3	13	42	54	175	30	3.7	3.0
9	1.9	3.6	3.1	2.5	2.3	11	43	53	172	27	3.5	2.9
10	1.8	3.5	3.4	2.6	2.1	9.3	41	49	122	24	3.3	2.9
11	1.8	3.9	3.7	3.1	2.2	10	38	43	104	18	3.0	2.9
12	1.9	8.6	3.9	3.9	2.3	13	38	36	104	17	3.1	2.7
13	1.8	4.2	3.7	3.6	2.4	14	38	32	96	12	3.5	3.0
14	1.7	3.9	3.6	3.1	2.0	13	40	34	125	11	3.0	3.1
15	1.8	3.5	3.4	3.4	1.5	16	50	42	141	10	3.2	2.9
16	1.8	4.1	3.1	4.0	2.2	16	46	51	147	9.4	3.5	2.9
17	1.7	3.2	3.3	3.7	1.3	16	53	51	138	8.9	3.7	2.9
18	1.6	3.8	4.0	4.1	2.0	15	57	53	127	8.4	3.5	2.9
19	1.6	4.1	4.7	4.4	2.2	15	40	92	116	7.6	3.5	2.8
20	1.6	4.0	4.0	2.9	1.4	15	29	101	79	6.9	3.8	2.8
21	1.7	3.9	3.3	2.9	1.2	15	30	157	64	6.6	3.7	2.8
22	2.7	4.1	3.0	3.4	1.6	15	31	156	61	6.2	3.3	2.6
23	1.8	3.9	3.3	2.4	1.9	16	36	173	59	6.0	2.8	2.3
24	1.9	3.8	3.8	2.3	1.9	16	41	187	53	5.6	3.2	2.3
25	3.4	4.2	3.5	2.3	3.3	16	35	208	56	8.0	3.5	2.2
26	4.3	4.2	3.2	2.6	2.8	16	30	200	55	23	3.6	2.3
27	4.1	3.8	3.0	2.2	2.4	16	31	196	55	3.7	3.4	2.2
28	4.2	4.4	3.0	2.3	2.6	18	38	168	54	3.6	3.4	2.1
29	4.1	4.8	3.1	2.5	---	22	36	190	58	3.5	3.2	2.1
30	4.0	4.3	3.5	2.3	---	21	35	196	59	3.1	3.6	2.1
31	3.8	---	3.2	2.0	---	21	---	181	---	2.9	3.7	---
TOTAL	73.4	120.9	111.4	90.9	58.9	404.1	1061	2985	3043	599.4	107.6	81.8
MEAN	2.37	4.03	3.59	2.93	2.10	13.0	35.4	96.3	101	19.3	3.47	2.73
MAX	4.3	8.6	4.8	4.4	3.3	22	57	208	175	66	3.8	3.3
MIN	1.6	3.2	3.0	2.0	1.2	3.0	20	32	53	2.9	2.8	2.1
AC-FT	146	240	221	180	117	802	2100	5920	6040	1190	213	162

CAL YR 1978 TOTAL 5608.0 MEAN 15.4 MAX 137 MIN 1.2 AC-FT 11120
WTR YR 1979 TOTAL 8737.4 MEAN 23.9 MAX 208 MIN 1.2 AC-FT 17330

NOTE--NO GAGE-HEIGHT RECORD DEC. 6 TO FEB. 12.

GUNNISON RIVER BASIN

269

09134200 COTTONWOOD CREEK NEAR HOTCHKISS, CO

LOCATION.--Lat 38°48'22", long 107°41'12", in NW¼SW¼ sec.28, T.14 S., R.92 W., Delta County, Hydrologic Unit 14020004, on right bank at upstream side of bridge, 0.8 mi (1.3 km) upstream from mouth, and 1.7 mi (2.7 km) east of Hotchkiss.

DRAINAGE AREA.--41.0 mi² (106.2 km²).

PERIOD OF RECORD.--June 1976 to September 1979 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 5,385 ft (1,641 m), from topographic map.

REMARKS.--Records fair except those for winter period and periods of no gage-height record, which are poor. Natural flow of stream affected by diversions for irrigation and return flow from irrigation of about 1,200 acres (6.0 km²) above station. After early snowmelt in Juniper, Pinon, and Sage area, most flow would be return flow from irrigation above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 946 ft³/s (26.8 m³/s) July 20, 1977, gage height, 8.33 ft (2.539 m), from floodmarks, from rating curve extended above 21 ft³/s (0.6 m³/s), on basis of slope-area measurement of peak flow; minimum daily, 0.48 ft³/s (0.014 m³/s) July 1, 2, 16, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, unknown; minimum daily, 1.4 ft³/s (0.040 m³/s) Dec. 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.2	8.3	2.6	3.3	4.7	5.4	13	9.8	40	16	10	9.8
2	7.8	7.4	2.8	3.2	5.0	5.6	9.5	11	37	15	11	9.8
3	7.4	6.6	2.9	3.4	5.0	6.2	8.6	10	35	17	10	9.6
4	7.2	6.0	2.4	3.5	4.5	6.9	7.7	9.0	35	21	11	8.0
5	6.6	6.4	2.7	3.7	4.2	7.0	7.7	9.6	36	19	10	8.4
6	6.0	5.0	2.5	4.0	4.4	7.3	11	12	38	18	10	8.6
7	5.0	3.2	2.2	4.0	4.5	8.2	15	16	43	20	10	9.0
8	4.4	2.6	2.0	3.5	4.8	11	15	18	48	19	10	8.8
9	4.4	8.6	1.7	3.2	4.9	9.2	14	16	49	18	11	8.6
10	4.7	6.8	1.4	3.1	4.7	8.0	19	15	39	16	10	8.2
11	4.8	4.4	1.5	3.5	4.6	8.8	16	13	37	15	9.0	8.4
12	4.8	3.8	1.8	3.8	4.9	10	13	12	35	13	9.0	8.0
13	4.8	3.7	2.0	4.1	4.6	11	13	12	33	12	9.8	8.6
14	4.8	3.5	2.1	4.5	3.9	13	26	13	36	12	10	9.2
15	4.8	3.4	2.1	4.7	3.6	24	20	14	41	13	9.5	8.6
16	4.8	3.3	1.9	4.9	4.4	32	19	16	44	12	10	8.4
17	4.8	3.3	2.3	4.7	3.1	22	17	18	44	12	11	8.3
18	4.8	3.3	2.6	5.0	4.2	14	15	18	38	11	10	8.4
19	4.8	3.2	2.8	5.4	5.2	8.9	10	22	32	11	9.8	8.0
20	5.0	3.5	2.7	5.4	3.7	10	7.3	30	27	10	11	8.0
21	5.0	3.5	2.4	4.8	3.1	34	7.4	40	26	9.6	11	8.0
22	4.8	3.5	2.2	5.6	3.5	23	8.0	42	23	9.6	10	8.0
23	4.4	3.5	2.9	5.4	4.0	13	8.8	45	21	9.4	8.6	7.6
24	4.2	3.5	3.3	5.2	4.3	10	9.8	48	19	9.2	9.6	7.0
25	6.6	2.8	3.1	5.4	5.9	11	7.9	50	18	14	10	7.0
26	21	2.7	2.9	5.4	5.5	12	6.4	50	20	18	11	7.6
27	12	2.6	2.8	4.9	5.2	12	7.0	47	22	10	10	7.2
28	6.0	2.8	2.8	5.2	5.2	13	8.4	43	23	9.8	10	7.0
29	5.0	3.0	3.0	5.4	---	11	8.4	47	21	9.8	9.4	6.8
30	5.4	2.6	3.5	4.8	---	10	8.0	51	18	9.4	11	6.8
31	8.9	---	3.5	4.6	---	17	---	47	---	9.3	11	---
TOTAL	192.2	126.8	77.4	137.6	125.6	394.5	356.9	804.4	978	418.1	313.7	245.7
MEAN	6.20	4.23	2.50	4.44	4.49	12.7	11.9	25.9	32.6	13.5	10.1	8.19
MAX	21	8.6	3.5	5.6	5.9	34	26	51	49	21	11	9.8
MIN	4.2	2.6	1.4	3.1	3.1	5.4	6.4	9.0	18	9.2	8.6	6.8
AC-FT	381	252	154	273	249	782	708	1600	1940	829	622	487

CAL YR 1978 TOTAL 1865.75 MEAN 5.11 MAX 21 MIN .95 AC-FT 3700
WTR YR 1979 TOTAL 4170.90 MEAN 11.4 MAX 51 MIN 1.4 AC-FT 8270

NOTE.--NO GAGE-HEIGHT RECORD APR. 19 TO JUNE 21, JULY 16 TO SEPT. 30.

GUNNISON RIVER BASIN

09135900 LEROUX CREEK AT HOTCHKISS, CO

LOCATION.--Lat 38°47'53", long 107°43'53", in NW¼NE¼ sec.36, T.14 S., R.93 W., Delta County, Hydrologic Unit 14020004, on left bank at upstream side of culvert, 0.3 mi (0.5 km) west of Hotchkiss city limits, and 0.5 mi (0.8 km) upstream from mouth.

DRAINAGE AREA.--66.7 mi² (172.8 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 5,315 ft (1,620 m), from topographic map.

REMARKS.--Records good except those for periods of no gage-height record, which are poor. Natural flow of stream is affected by diversions above station for irrigation and by return flow from irrigated area above station. Mostly return flow after June. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 689 ft³/s (19.5 m³/s) June 10, 1978; maximum gage height, 7.72 ft (2.353 m) June 10, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, unknown; minimum daily, 2.8 ft³/s (0.079 m³/s) May 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.8	9.6	11	8.8	11	10	6.1	9.4	110	9.0	5.8	6.1
2	7.8	9.6	12	8.8	10	11	6.1	6.7	140	8.6	5.8	6.0
3	7.8	9.6	12	8.9	10	11	5.1	1.4	170	8.0	5.8	6.0
4	7.8	9.6	11	9.4	10	10	5.1	4.4	210	7.2	5.8	6.0
5	7.9	9.6	11	10	9.7	10	5.4	28	260	6.4	6.1	6.0
6	7.5	9.6	11	10	10	11	5.8	58	340	6.0	7.1	6.0
7	7.5	9.6	11	11	10	11	9.9	70	210	5.6	7.9	6.0
8	7.5	9.6	11	11	9.7	11	11	32	130	5.4	7.2	6.0
9	7.5	9.6	11	9.8	9.7	11	14	56	80	4.8	5.5	6.5
10	7.0	9.6	11	9.6	9.5	10	32	3.9	56	4.5	5.6	7.6
11	6.6	9.6	10	10	9.5	10	22	3.6	80	4.5	5.8	9.2
12	7.2	11	10	10	9.4	10	16	3.1	120	4.3	5.8	8.4
13	7.3	10	10	10	10	6.7	14	2.8	140	4.3	5.8	7.3
14	8.0	9.9	10	9.8	10	6.1	16	11	140	3.9	5.8	7.3
15	6.4	9.9	10	9.8	10	6.3	32	62	110	4.1	5.8	7.3
16	7.2	9.8	10	10	10	6.1	55	107	70	4.3	5.8	7.3
17	7.9	9.6	9.8	11	10	6.0	78	300	50	4.3	5.8	7.3
18	7.9	9.6	9.8	11	10	5.6	94	400	30	4.4	5.8	8.2
19	8.0	9.6	9.8	11	10	5.6	82	500	10	4.7	5.8	9.2
20	8.2	9.6	10	11	10	5.6	63	400	8.8	4.9	6.1	9.2
21	8.3	9.6	10	10	10	6.2	72	200	9.0	5.2	5.6	9.2
22	11	9.6	10	10	10	6.2	90	220	9.4	6.6	5.3	9.2
23	10	9.8	11	9.6	10	5.7	113	300	9.2	5.7	5.5	9.2
24	9.7	9.6	11	9.8	10	5.6	109	380	9.0	5.1	5.5	8.2
25	9.9	11	10	10	9.9	5.1	81	300	9.0	4.1	5.2	7.4
26	9.9	11	9.8	10	9.9	5.1	62	340	9.0	4.0	5.1	8.3
27	9.9	11	9.6	10	10	5.2	67	400	8.8	4.9	5.2	9.2
28	9.9	11	9.2	10	10	5.5	79	450	8.2	5.1	5.6	9.2
29	9.9	11	8.4	10	---	5.6	72	520	8.0	5.5	5.8	9.2
30	9.9	11	8.6	10	---	5.6	69	340	7.4	5.5	5.9	9.2
31	9.9	---	9.0	9.9	---	6.0	---	200	---	5.6	6.0	---
TOTAL	259.1	299.2	318.0	310.2	278.3	235.8	1386.5	5866.8	2551.8	166.7	181.6	231.2
MEAN	8.36	9.97	10.3	10.0	9.94	7.61	46.2	189	85.1	5.38	5.86	7.71
MAX	11	11	12	11	11	11	113	520	340	9.0	7.9	9.2
MIN	6.4	9.6	8.4	8.8	9.4	5.1	5.1	2.8	7.4	3.9	5.1	6.0
AC-FT	514	593	631	615	552	468	2750	11640	5060	331	360	459

CAL YR 1978 TOTAL 10861.8 MEAN 29.8 MAX 451 MIN 1.5 AC-FT 21540
WTR YR 1979 TOTAL 12085.2 MEAN 33.1 MAX 520 MIN 2.8 AC-FT 23970

NOTE.--NO GAGE-HEIGHT RECORD DEC. 9 TO JAN. 16, MAY 15 TO JULY 12.

GUNNISON RIVER BASIN

271

09136200 GUNNISON RIVER NEAR LAZEAR, CO

LOCATION.--Lat 38°46'59", long 107°50'14", in NE¼NE¼ sec.1, T.15 S., R.94 W., Delta County, Hydrologic Unit 14020005, on left bank 300 ft (91 m) downstream from North Fork Gunnison River and 3.0 mi (4.8 km) west of Lazear.

DRAINAGE AREA.--5,241 mi² (13,574 km²).

PERIOD OF RECORD.--May 1962 to current year.

REVISED RECORDS.--WSP 2124: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 5,090 ft (1,551 m), from topographic map.

REMARKS.--Records good. Natural flow of stream affected by transmountain and transbasin diversions, storage reservoirs, power development, and diversions for irrigation of about 150,000 acres (607 km²), part of which is in the Uncompahgre River basin. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,800 ft³/s (419 m³/s) May 13, 1962, gage height, 6.30 ft (1.920 m), from recorded range in stage; minimum daily, 115 ft³/s (3.26 m³/s) Oct. 6, 1963.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 9,210 ft³/s (261 m³/s) at 0700 May 28, gage height, 5.85 ft (1.783 m); minimum daily, 344 ft³/s (9.74 m³/s) Nov. 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	868	1130	1210	1930	1950	2620	2580	4170	5330	3230	984	1030
2	863	1180	1330	1880	1910	2570	2510	4590	5000	3110	979	1010
3	836	1130	1260	1890	1870	2570	2500	4280	5040	2930	964	1020
4	476	1220	1240	1910	1910	2590	2580	3750	5160	3130	946	913
5	423	1120	1330	1950	1910	2570	2510	4080	5390	2990	965	1010
6	417	1000	1680	1930	2120	2550	2550	4070	5580	2660	950	1020
7	404	454	1760	1980	2160	2620	2530	4260	5710	2750	946	1040
8	352	835	1750	1880	2110	2670	2630	3620	6160	2620	956	1030
9	348	1120	1770	1930	2070	2660	2770	3350	5040	2530	987	1010
10	347	1110	1730	1910	2190	2600	3050	3380	3910	2390	994	1000
11	347	1120	1570	1910	1970	2600	2970	3480	3640	2220	989	1010
12	349	1420	1510	1920	1970	2620	2880	3390	3660	2130	985	1040
13	347	1260	1270	1910	1980	2620	3050	3300	3290	2020	991	1010
14	647	369	1430	1890	2180	2580	2970	3160	3400	1890	1020	986
15	714	523	1700	1920	2440	2660	3120	3530	4520	1890	1040	989
16	689	1160	1780	1930	2550	2610	3430	4030	4630	1830	1050	1010
17	624	1150	1820	1900	2580	2610	3760	4870	4260	1690	1050	1000
18	673	414	1900	1890	2590	2620	4220	5440	3970	1330	1040	1010
19	755	344	2030	1860	2620	2580	4620	6650	3640	1260	1050	1160
20	764	515	1840	1850	2680	2520	3560	6690	3200	1190	1120	1130
21	775	1130	1740	1970	2670	2620	3470	6870	3030	1140	1100	1120
22	904	1120	1960	2000	2660	2620	3830	6750	3090	1200	1100	1180
23	976	1160	1970	1940	2630	2530	4820	6880	3240	1200	1140	1190
24	1300	1130	1940	1890	2640	2500	5540	6770	3300	1140	1070	1150
25	1280	566	1930	1880	2600	2560	5180	6730	3240	1110	1070	1200
26	1370	556	1990	1880	2600	2620	4820	6910	3180	1110	1070	1190
27	1480	682	1950	1880	2580	2620	4790	7270	3110	1070	1050	1210
28	1230	1130	1980	1840	2560	2670	4850	8340	3050	1040	1050	1220
29	1230	1070	1950	1850	---	2620	4540	8010	2980	1020	1040	1200
30	1250	1120	1890	1830	---	2500	3630	7550	2960	1010	1010	1190
31	1120	---	1960	1830	---	2560	---	6630	---	991	1020	---
TOTAL	24158	28238	53170	58960	64700	80460	106260	162800	121710	57821	31746	32278
MEAN	779	941	1715	1902	2311	2595	3542	5252	4057	1865	1024	1076
MAX	1480	1420	2030	2000	2680	2670	5540	8340	6160	3230	1140	1220
MIN	347	344	1210	1830	1870	2500	2500	3160	2960	991	946	913
AC-FT	47920	56010	105500	116900	128300	159600	210800	322900	241400	114700	62970	64020
CAL YR 1978	TOTAL	484942	MEAN	1329	MAX	6170	MIN	251	AC-FT	961900		
WTR YR 1979	TOTAL	822301	MEAN	2253	MAX	8340	MIN	344	AC-FT	1631000		

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 (0.3 km) downstream from Dry Creek, 0.4 mi (0.6 km) upstream from mouth, 0.7 mi (1.1 km) northeast of Austin, and 2.4 mi (3.9 km) northeast of Read.

DRAINAGE AREA.--56.9 mi² (147.4 km²).

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

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 5,035 ft (1,535 m), from topographic map.

REMARKS.--Records good except those for period of no gage-height record, which are poor. Natural flow of stream affected by diversions for irrigation and return flow from irrigated areas. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 285 ft³/s (8.07 m³/s) May 19, 1979, gage height, 4.83 ft (1.472 m), no flow Aug. 2, 4, 5, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 285 ft³/s (8.07 m³/s) at 0400 May 19, gage height, 4.83 ft (1.472 m), no flow Aug. 2, 4, 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.3	2.6	5.6	1.9	2.0	4.0	8.5	91	48	5.6	.08	1.2
2	1.2	2.5	6.3	1.9	2.1	3.3	7.0	84	61	7.7	.00	.81
3	1.1	2.1	3.9	2.2	1.9	2.5	6.5	40	63	6.3	.04	.32
4	1.2	2.7	3.4	2.4	1.9	2.1	6.1	26	55	7.5	.00	.51
5	1.4	2.8	3.9	2.5	2.1	2.6	5.8	44	47	6.3	.00	.74
6	1.6	2.6	3.4	2.3	2.1	3.2	5.9	38	68	4.5	.02	.92
7	1.4	2.4	2.9	2.0	2.5	3.5	6.7	42	72	5.6	.03	1.1
8	1.9	3.1	2.3	1.9	2.4	3.5	12	6.7	88	3.9	.03	.90
9	1.9	2.7	2.8	2.1	2.4	3.3	20	5.8	67	2.1	.04	.55
10	1.9	2.7	3.2	2.2	2.3	3.7	29	4.4	42	1.7	.04	.76
11	2.1	2.6	3.4	2.4	2.4	5.0	16	3.9	39	1.1	.09	1.1
12	1.2	3.9	3.0	2.4	3.4	6.0	10	3.4	45	1.7	.33	1.3
13	1.1	3.6	2.8	2.4	5.0	7.8	8.2	2.4	47	2.5	.17	1.8
14	1.1	3.2	2.8	2.2	4.3	8.0	8.3	5.4	49	2.3	.49	1.5
15	1.3	3.4	2.8	2.4	3.7	8.0	21	13	52	.47	.92	1.3
16	1.4	4.0	3.2	2.6	3.9	8.2	58	57	50	.10	1.3	1.1
17	1.5	3.8	3.6	2.6	3.3	8.4	97	33	37	.05	.74	1.7
18	1.4	3.5	3.8	2.5	3.6	8.3	100	65	22	.04	.20	1.9
19	1.4	3.4	3.6	2.3	3.6	7.3	95	112	20	.04	.37	1.9
20	1.5	3.8	3.4	2.1	3.1	7.0	61	95	13	.04	.46	2.2
21	1.6	4.5	3.1	2.1	3.7	11	64	95	11	.05	.59	2.0
22	2.2	4.4	3.2	1.9	3.8	9.7	69	76	8.6	.04	.39	1.9
23	1.8	4.4	2.8	1.8	3.8	7.8	83	96	3.9	.03	.20	2.0
24	1.8	4.4	3.0	1.9	3.6	6.6	113	70	2.4	.08	.41	2.0
25	2.2	5.6	3.0	1.9	3.7	6.5	66	44	2.1	.21	.51	2.1
26	2.9	5.5	2.8	1.9	3.8	6.5	44	36	1.6	.06	.77	2.1
27	3.2	5.1	2.9	1.8	3.8	6.9	57	41	1.6	.15	.94	2.5
28	2.6	4.4	2.9	1.9	4.2	7.6	73	71	1.5	.34	.82	2.9
29	2.6	5.0	2.8	1.8	---	7.4	67	80	1.1	.26	.75	3.1
30	2.7	5.3	2.7	1.6	---	6.9	67	90	1.7	.15	.84	3.3
31	2.8	---	2.3	1.8	---	8.4	---	77	---	.12	1.2	---
TOTAL	55.3	110.0	101.6	65.7	88.4	191.0	1285.0	1548.0	1020.5	61.03	12.77	47.51
MEAN	1.78	3.67	3.28	2.12	3.16	6.16	42.8	49.9	34.0	1.97	.41	1.58
MAX	3.2	5.6	6.3	2.6	5.0	11	113	112	88	7.7	1.3	3.3
MIN	1.1	2.1	2.3	1.6	1.9	2.1	5.8	2.4	1.1	.03	.00	.32
AC-FT	110	218	202	130	175	379	2550	3070	2020	121	25	94
CAL YR 1978 TOTAL	1687.42			MEAN 4.62	MAX 79	MIN .03	AC-FT 3350					
WTR YR 1979 TOTAL	4586.81			MEAN 12.6	MAX 113	MIN .00	AC-FT 9100					

NOTE.--NO GAGE-HEIGHT RECORD DEC. 7 TO MAR. 15.

09143000 SURFACE CREEK NEAR CEDAREGE, 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 (2 m) downstream from private bridge, 1.4 mi (2.3 km) downstream from Caesar Creek, and 7.0 mi (11.3 km) northeast of Cedaredge.

DRAINAGE AREA.--26.7 mi² (69.2 km²).

PERIOD OF RECORD.--July 1939 to current year. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 1924: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 8,261 ft (2,518 m), from topographic map.

REMARKS.--Records good except those for period of no gage-height record, 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.--40 years, 40.9 ft³/s (1.158 m³/s), 29,630 acre-ft/yr (36.5 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 624 ft³/s (17.7 m³/s) May 18, 1973, gage height, 3.21 ft (0.978 m), from rating curve extended above 310 ft³/s (8.8 m³/s); maximum gage height, 5.10 ft (1.554 m) Apr. 13, 1958 (ice jam); minimum daily discharge, 0.80 ft³/s (0.023 m³/s) Jan. 15, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 346 ft³/s (9.80 m³/s) at 1800 May 26, gage height, 2.77 ft (0.850 m); minimum daily, 1.5 ft³/s (0.042 m³/s) Jan. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	17	2.2	1.7	2.5	3.2	4.0	80	150	173	53	65
2	17	8.5	2.4	1.5	2.9	3.4	3.8	62	220	158	70	63
3	17	6.2	2.5	1.6	2.9	3.4	4.9	44	189	134	70	62
4	18	5.5	2.3	2.0	2.7	2.8	4.0	47	210	121	61	43
5	12	5.5	2.3	2.2	2.5	2.8	4.6	64	242	108	60	41
6	13	5.0	2.5	2.2	2.7	3.4	6.4	78	276	103	60	60
7	13	4.3	2.5	2.0	3.3	3.4	11	68	273	99	82	61
8	12	3.3	2.3	1.9	3.4	3.4	10	52	214	90	89	38
9	13	3.1	2.3	2.0	3.3	3.2	13	45	177	84	111	33
10	18	2.2	2.3	2.3	3.4	3.0	11	36	156	85	112	33
11	18	2.0	2.3	2.5	3.5	3.0	8.1	31	171	79	75	42
12	16	2.2	2.3	2.5	3.7	3.2	7.0	30	201	80	70	44
13	15	2.5	2.3	2.4	3.9	3.3	8.8	41	248	75	69	41
14	12	2.8	2.3	2.0	3.9	3.4	7.5	66	256	80	77	39
15	12	2.9	2.3	2.2	3.5	4.1	13	103	248	78	78	40
16	12	3.0	2.2	2.5	3.5	4.0	21	119	238	76	75	44
17	23	3.1	2.2	2.4	3.6	3.8	26	148	231	99	71	43
18	24	3.3	2.2	2.6	3.7	3.8	29	214	214	97	59	59
19	44	4.5	2.5	2.6	3.3	3.7	27	234	198	87	59	63
20	43	5.0	2.2	2.5	3.4	3.5	26	231	168	83	58	65
21	41	5.8	2.0	2.3	3.7	3.5	30	224	165	87	51	62
22	42	5.2	2.0	2.4	3.5	3.6	36	248	168	85	49	34
23	40	4.3	2.0	2.1	3.5	3.5	46	259	168	81	52	30
24	24	4.1	1.9	2.2	3.3	3.6	48	252	162	67	50	30
25	24	3.7	1.8	2.6	3.1	4.0	42	252	162	63	45	30
26	31	3.5	1.8	2.6	3.3	3.8	41	256	159	61	45	30
27	31	2.7	1.9	2.5	3.5	3.7	56	238	154	61	45	26
28	26	2.4	2.1	2.2	3.3	3.8	62	231	148	58	80	25
29	25	2.4	2.1	2.6	---	3.8	62	224	141	56	82	15
30	25	2.4	2.1	2.4	---	3.8	71	210	141	56	84	14
31	20	---	2.0	2.2	---	3.9	---	168	---	55	82	---
TOTAL	697	128.4	68.1	69.7	92.8	108.8	740.1	4355	5848	2719	2124	1275
MEAN	22.5	4.28	2.20	2.25	3.31	3.51	24.7	140	195	87.7	68.5	42.5
MAX	44	17	2.5	2.6	3.9	4.1	71	259	276	173	112	65
MIN	12	2.0	1.8	1.5	2.5	2.8	3.8	30	141	55	45	14
AC-FT	1380	255	135	138	184	216	1470	8640	11600	5390	4210	2530

CAL YR 1978 TOTAL 17491.6 MEAN 47.9 MAX 290 MIN 1.6 AC-FT 34690
WTR YR 1979 TOTAL 18225.9 MEAN 49.9 MAX 276 MIN 1.5 AC-FT 36150

NOTE.--NO GAGE-HEIGHT RECORD DEC. 20 TO MAR. 19.

GUNNISON RIVER BASIN

09143500 SURFACE CREEK AT CEDAREDEGE, CO

LOCATION.--Lat 38°54'06", long 107°55'14", in SW¼SE¼ sec.20, T.13 S., R.94 W., Delta County, Hydrologic Unit 14020005, on left bank at Cedaredge, 700 ft (210 m) east of State Highway 65, and 8.5 mi (13.7 km) upstream from mouth.

DRAINAGE AREA.--39.5 mi² (102.3 km²).

PERIOD OF RECORD.--October 1916 to current year. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 1924: Drainage area.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 6,220 ft (1,896 m), from topographic map. Prior to June 8, 1917, nonrecording gage at present site at datum 0.50 ft (0.152 m) higher.

REMARKS.--Records good except those for periods of no gage-height record or indefinite stage-discharge relation, 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.--63 years, 26.9 ft³/s (0.762 m³/s), 19,490 acre-ft/yr (24.0 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,190 ft³/s (33.7 m³/s) May 13, 1941, gage height, 2.50 ft (0.762 m), from rating curve extended above 640 ft³/s (18 m³/s); no flow Sept. 25, 1939, and practically no flow at times in some winters.

EXTREMES FOR CURRENT YEAR.--Maximum estimated discharge, 360 ft³/s (10.2 m³/s) May 27, gage height, unknown; minimum daily, 1.8 ft³/s (0.051 m³/s) Nov. 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.7	7.0	3.0	3.3	3.2	3.2	3.9	78	130	109	14	26
2	9.1	5.7	2.7	2.6	3.3	3.4	3.9	50	175	87	27	28
3	9.8	5.2	2.7	2.8	3.1	3.4	4.6	22	153	65	30	27
4	10	4.7	2.9	3.3	2.9	3.0	4.3	28	163	60	23	32
5	9.1	4.6	3.3	3.6	2.9	3.3	3.5	53	192	55	21	34
6	8.0	4.7	3.2	3.6	3.2	3.5	4.9	62	223	61	20	37
7	9.8	4.3	2.9	3.3	3.3	3.8	7.5	53	226	71	20	36
8	8.9	3.5	2.7	3.0	3.3	3.8	9.7	36	180	69	21	27
9	8.6	3.0	3.0	3.1	3.3	3.7	14	44	136	65	42	24
10	8.8	3.3	3.5	3.3	3.4	3.5	14	34	109	61	51	24
11	9.3	2.9	3.8	3.6	3.5	3.7	8.1	33	115	49	35	25
12	6.8	4.2	3.9	3.6	3.7	3.7	6.0	32	141	49	31	24
13	6.4	1.8	4.0	3.4	3.9	4.1	5.6	44	165	50	30	21
14	6.3	3.7	4.0	2.8	3.9	4.6	6.9	70	170	53	39	19
15	7.2	4.2	4.1	2.8	3.5	4.7	17	86	164	53	42	16
16	7.3	4.0	4.1	3.2	3.4	4.6	28	93	169	53	42	17
17	12	5.1	4.2	3.1	3.6	4.5	36	103	154	53	40	17
18	12	6.7	4.3	3.2	3.7	4.4	44	192	132	43	28	20
19	25	7.3	4.4	3.2	3.3	4.6	43	205	114	42	27	21
20	24	4.7	3.5	3.0	3.3	4.3	36	212	97	37	28	24
21	21	3.1	3.6	2.7	3.5	4.3	42	218	90	34	23	21
22	23	2.9	3.7	3.0	3.5	4.3	53	229	81	32	22	14
23	22	2.8	3.4	2.6	3.4	4.2	67	260	77	27	28	12
24	10	2.9	3.4	2.7	3.3	4.2	69	241	81	27	28	10
25	10	3.2	3.4	3.0	3.2	4.5	49	226	79	27	22	13
26	13	3.2	3.3	3.0	3.4	4.6	43	238	73	24	19	15
27	12	3.0	3.4	3.0	3.5	4.5	56	257	67	20	19	13
28	11	2.8	3.7	2.7	3.3	4.4	65	235	69	19	29	12
29	13	2.6	3.6	3.2	---	4.4	65	227	73	17	25	10
30	13	2.8	3.7	2.8	---	4.1	70	221	83	15	23	8.2
31	8.7	---	3.6	2.7	---	4.1	---	156	---	16	20	---
TOTAL	364.8	119.9	109.0	95.2	94.8	125.4	879.9	4038	3881	1443	869	627.2
MEAN	11.8	4.00	3.52	3.07	3.39	4.05	29.3	130	129	46.5	28.0	20.9
MAX	25	7.3	4.4	3.6	3.9	4.7	70	260	226	109	51	37
MIN	6.3	1.8	2.7	2.6	2.9	3.0	3.5	22	67	15	14	8.2
AC-FT	724	238	216	189	188	249	1750	8010	7700	2860	1720	1240

CAL YR 1978 TOTAL 11616.8 MEAN 31.8 MAX 218 MIN 1.8 AC-FT 23040
WTR YR 1979 TOTAL 12647.2 MEAN 34.6 MAX 260 MIN 1.8 AC-FT 25090

NOTE.--NO GAGE-HEIGHT RECORD JAN. 8 TO MAR. 20.

09144200 TONGUE CREEK AT CORY, CO

LOCATION.--Lat 38°47'16", long 107°59'41", in SW¼SW¼ sec.34, T.14 S., R.95 W., Delta County, Hydrologic Unit 14020005, on left bank at downstream side of bridge, 500 ft (150 m) upstream from North Delta canal headgate, 0.5 mi (0.8 km) west of Cory, and 1.0 mi (1.6 km) upstream from mouth.

DRAINAGE AREA.--196 mi² (508 km²).

PERIOD OF RECORD.--October 1957 to September 1968, May 1976 to current year.

REVISED RECORDS.--WSP 2124: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 5,030 ft (1,533 m), from topographic map.

REMARKS.--Records good except those for ice affected periods and those for period of no gage-height record, which are poor. Natural flow of stream affected by many small storage reservoirs, diversions for irrigation, and return flow from irrigated areas. Diversions to and from nearby streams. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--14 years (water years 1958-68, 1977-79), 28.7 ft³/s (0.813 m³/s), 20,790 acre-ft/yr (25.6 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 748 ft³/s (21.2 m³/s) June 7, 1958, gage height, 5.32 ft (1.622 m); minimum daily, 0.35 ft³/s (0.010 m³/s) July 22, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 517 ft³/s (14.6 m³/s) at 0500 May 30, gage height, 5.32 ft (1.622 m); maximum gage height, 5.34 ft (1.628 m) at 0300 May 29; minimum daily discharge, 8.1 ft³/s (0.23 m³/s) Aug. 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	26	36	25	22	25	38	150	205	132	12	12
2	14	25	43	20	25	24	35	95	247	105	12	12
3	13	26	31	21	25	24	32	44	238	44	13	13
4	14	28	29	27	24	24	29	35	239	58	13	14
5	15	28	33	29	22	25	28	66	267	47	14	14
6	16	27	29	29	24	28	29	77	329	37	11	13
7	17	27	24	27	25	28	34	76	383	48	9.3	13
8	14	27	22	24	26	28	42	51	369	37	8.2	16
9	14	27	24	26	25	26	56	42	243	32	9.4	18
10	15	25	28	27	25	26	66	28	170	29	8.1	17
11	15	25	29	28	27	29	49	27	157	25	8.5	18
12	15	41	30	28	27	31	38	28	192	23	9.2	17
13	15	31	29	27	28	31	32	44	229	19	10	18
14	16	33	28	27	28	33	40	68	245	18	11	18
15	15	32	27	27	23	32	70	83	227	18	12	19
16	15	31	29	27	24	35	160	96	234	18	12	21
17	16	29	30	27	26	32	210	99	204	20	13	26
18	17	29	30	29	27	30	210	195	162	15	15	24
19	16	30	29	30	25	29	170	321	123	13	16	25
20	14	30	28	28	24	32	155	309	87	12	17	27
21	20	31	29	28	27	47	155	301	69	12	16	24
22	34	30	30	28	25	41	183	300	58	14	15	26
23	27	30	32	25	25	33	219	316	51	14	14	27
24	27	31	31	28	27	31	227	292	53	13	15	25
25	26	38	30	28	24	31	128	315	44	14	18	25
26	24	33	28	27	26	33	82	316	42	17	17	24
27	24	31	29	25	28	34	95	368	29	15	19	25
28	25	29	31	23	26	34	125	380	27	15	18	24
29	27	31	32	27	---	34	92	442	22	13	13	23
30	26	33	31	24	---	33	107	433	35	13	12	20
31	26	---	29	20	---	34	---	291	---	12	14	---
TOTAL	587	894	920	816	710	957	2936	5688	4980	902	406.7	598
MEAN	18.9	29.8	29.7	26.3	25.4	30.9	97.9	183	166	29.1	13.1	19.9
MAX	34	41	43	30	28	47	227	442	383	132	19	27
MIN	13	25	22	20	22	24	28	27	22	12	8.1	12
AC-FT	1160	1770	1820	1620	1410	1900	5820	11280	9880	1790	803	1190

CAL YR 1978 TOTAL 15131.8 MEAN 41.5 MAX 377 MIN 4.0 AC-FT 30010
WTR YR 1979 TOTAL 20392.7 MEAN 55.9 MAX 442 MIN 8.1 AC-FT 40450

NOTE.--NO GAGE-HEIGHT RECORD JAN. 26 TO MAR. 15.

GUNNISON RIVER BASIN

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 (14,577 km²).

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 (1,499.607 m) National Weather Service Datum (levels by National Weather Service). Prior to May 1976 nonrecording gage at present site and datum.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,400 ft³/s (294 m³/s) May 28, 1979, gage height, 9.72 ft (2.963 m); minimum daily, 208 ft³/s (5.89 m³/s) Aug. 11, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum gage height observed, 13.5 ft (4.11 m) June 6, 1957, from National Weather Service wire-weight gage at same datum (discharge not determined).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 10,400 ft³/s (294 m³/s) at 1000 May 28, gage height, 9.72 ft (2.963 m); minimum daily, 430 ft³/s (12.2 m³/s) Oct. 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	940	1250	1390	1930	2020	2870	2650	4050	5790	3290	1090	1080
2	940	1310	1540	1910	2000	2790	2580	4610	5410	3260	1090	1100
3	910	1270	1430	1970	1980	2790	2560	4280	5410	2960	1090	1080
4	710	1360	1410	1930	2020	2790	2590	3870	5560	3360	1070	1000
5	520	1280	1520	1970	2080	2800	2540	3930	5750	3230	1090	960
6	480	1250	1720	1960	2200	2800	2540	3990	6230	2830	1090	1050
7	470	641	1860	1980	2200	2800	2590	4300	6490	2950	1090	1080
8	450	862	1850	1910	2180	2880	2700	3750	6910	2800	1030	1080
9	440	1280	1840	1940	2140	2900	2800	3410	6080	2700	1090	1080
10	430	1220	1810	1930	2210	2900	3060	3340	4930	2580	1090	1080
11	437	1250	1650	1930	2100	2900	3010	3550	4540	2360	1090	1060
12	439	1500	1700	1930	2100	2900	2850	3440	4610	2280	1090	1060
13	440	1450	1470	1940	2100	2900	2980	3420	4440	2180	1090	1080
14	659	583	1600	1920	2200	2800	2890	3220	4450	2040	1100	1060
15	811	482	1810	1940	2400	2800	3060	3630	5240	2010	1100	1060
16	817	1230	1940	1960	2600	2800	3410	4050	5300	1980	1150	1060
17	710	1270	1970	1920	2680	2830	3840	4830	4870	1920	1150	1060
18	765	716	2050	1930	2700	2820	4250	5460	4500	1510	1150	1060
19	860	495	2150	1900	2700	2790	4820	6770	4110	1450	1150	1080
20	866	491	1950	1900	2800	2720	3680	7020	3540	1350	1290	1180
21	884	1360	1850	1930	2800	2800	3600	7210	3160	1270	1290	1180
22	1160	1390	1830	2020	2800	2840	3840	7120	3180	1310	1290	1180
23	1630	1390	1990	1960	2800	2710	4570	7480	3360	1340	1290	1200
24	1420	1400	1960	1940	2800	2660	5390	7400	3420	1270	1290	1200
25	1380	937	1920	1940	2780	2670	5000	7350	3350	1190	1150	1180
26	1430	772	1960	1940	2800	2740	4570	7520	3220	1150	1150	1200
27	1490	790	1930	1930	2800	2730	4490	7990	3100	1130	1130	1200
28	1390	1320	1960	1910	2780	2750	4610	9230	3060	1110	1100	1220
29	1310	1270	1970	1930	---	2730	4440	9080	2970	1100	1100	1250
30	1410	1310	1900	1900	---	2570	3620	8500	2930	1100	1090	1250
31	1260	---	1960	1980	---	2630	---	7200	---	1060	1090	---
TOTAL	27858	33129	55890	60080	67770	86410	105530	171000	135910	62070	34440	33410
MEAN	899	1104	1803	1938	2420	2787	3518	5516	4530	2002	1111	1114
MAX	1630	1500	2150	2020	2800	2900	5390	9230	6910	3360	1290	1250
MIN	430	482	1390	1900	1980	2570	2540	3220	2930	1060	1030	960
AC-FT	55260	65710	110900	119200	134400	171400	209300	339200	269600	123100	68310	66270

CAL YR 1978 TOTAL 530313 MEAN 1453 MAX 5870 MIN 299 AC-FT 1052000
WTR YR 1979 TOTAL 873497 MEAN 2393 MAX 9230 MIN 430 AC-FT 1733000

NOTE.--NO GAGE-HEIGHT RECORD OCT. 1-10, JAN. 30 TO MAR. 16, JULY 29 TO SEPT. 30.

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 (5 m) upstream from bridge, 0.2 mi (0.3 km) downstream from Dry Creek, 0.5 mi (0.8 km) upstream from Dallas Creek, and 2.3 mi (3.7 km) north of Ridgway.

DRAINAGE AREA.--149 mi² (386 km²).

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 (2,096.286 m), National Geodetic Vertical Datum of 1929 (levels by Water and Power Resources Service).

REMARKS.--Records good. Diversions for irrigation above station. Water is imported above station in some years by Red Mountain ditch from Mineral Creek in San Juan River basin. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--21 years, 158 ft³/s (4.475 m³/s), 114,500 acre-ft/yr (141 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,890 ft³/s (53.5 m³/s) Sept. 6, 1970, gage height, 5.38 ft (1.640 m); minimum daily, 26 ft³/s (0.74 m³/s) Jan. 13, 1963.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,000 ft³/s (28 m³/s) and maximum (%):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
May 28	0030	1,060 30.0	4.47 1.362	June 16	0030	1,600 45.3	5.12 1.561
June 8	0030	1,340 37.9	4.85 1.478	June 29	0200	1,070 30.3	4.47 1.362

Minimum daily discharge, 30 ft³/s (0.85 m³/s) Dec. 15, 16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	61	48	54	38	36	38	58	145	494	938	273	103
2	60	48	56	36	37	39	54	158	486	914	249	99
3	64	50	50	34	36	38	55	169	530	824	228	96
4	64	49	47	35	36	35	54	154	625	650	212	92
5	63	49	52	39	36	36	59	186	740	580	205	89
6	64	47	49	42	34	37	65	228	926	585	238	84
7	64	47	42	42	34	40	70	240	1160	585	212	81
8	60	47	40	38	34	49	67	212	1140	650	243	80
9	55	47	38	38	35	55	75	174	830	635	218	80
10	55	48	34	39	36	49	74	147	560	605	232	75
11	55	48	31	42	35	48	72	132	515	585	195	65
12	52	64	32	43	36	56	70	126	660	575	210	61
13	51	54	33	40	38	61	74	124	971	570	215	63
14	50	52	32	38	42	61	77	156	1220	555	210	63
15	51	54	30	41	41	70	91	220	1290	506	215	64
16	49	55	30	42	41	71	112	306	1290	478	230	61
17	48	52	32	42	41	65	143	312	1100	458	183	59
18	48	52	37	43	40	59	158	374	824	462	181	59
19	48	51	41	42	41	55	150	474	640	430	174	59
20	48	49	41	41	42	58	136	530	510	406	155	56
21	50	49	40	40	42	61	145	560	540	398	154	55
22	91	49	40	42	41	58	163	570	665	422	147	55
23	65	47	42	41	40	55	183	600	800	402	141	58
24	63	46	40	40	40	58	195	506	884	386	141	58
25	77	50	40	40	38	63	172	515	878	378	139	56
26	65	48	38	43	39	70	143	610	884	362	134	59
27	60	48	38	43	39	68	143	914	866	326	122	59
28	54	47	39	42	38	74	154	854	920	306	114	58
29	51	48	40	40	---	67	147	776	926	318	112	59
30	50	52	41	38	---	63	136	776	872	306	114	60
31	49	---	40	36	---	61	---	600	---	282	112	---
TOTAL	1785	1495	1239	1240	1068	1719	3295	11848	24746	15877	5628	2066
MEAN	57.6	49.8	40.0	40.0	38.1	55.5	110	382	825	512	142	68.9
MAX	91	64	56	43	42	74	195	914	1290	938	273	103
MIN	48	46	30	34	34	36	54	124	486	282	112	55
AC-FT	3540	2970	2460	2460	2120	3410	6540	23500	49080	31490	11150	4100
CAL YR 1978	TOTAL	68794	MEAN 188	MAX 1390	MIN 30	AC-FT 136500						
WTR YR 1979	TOTAL	72006	MEAN 197	MAX 1290	MIN 30	AC-FT 142800						

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 (5 m) downstream from county highway bridge, 0.2 mi (0.3 km) north of Colona, and 1.0 mi (1.6 km) upstream from Beaton Creek.

DRAINAGE AREA.--443 mi² (1,147 km²).

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 (1,925.970 m), National Geodetic Vertical Datum of 1929. See WSP 1713 or 1733 for history of changes prior to Sept. 30, 1949.

REMARKS.--Records good except those for periods of no gage-height record, which are poor. Natural flow of stream affected by water diverted from West Fork Cimarron Creek, Mineral Creek (San Juan River basin), and Leopard Creek (Dolores River basin), diversions for irrigation of about 19,000 acres or 76.9 km² (part of which is below station), and return flow from irrigated areas. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--69 years (water years 1904-5, 1913-79), 263 ft³/s (7.448 m³/s), 190,500 acre-ft/yr (235 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 4,080 ft³/s (116 m³/s) June 13, 14, 1921; minimum daily, 12 ft³/s (0.34 m³/s) Sept. 19, 1956, May 7, 1967.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,810 ft³/s (51.3 m³/s) at 0600 June 15, gage height, 4.95 ft (1.509 m); minimum daily, 49 ft³/s (1.388 m³/s) Oct. 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	58	95	99	98	70	70	199	416	712	1370	354	130
2	56	95	106	88	72	73	187	420	670	1360	344	123
3	55	107	91	90	70	75	193	406	616	1190	344	117
4	52	98	87	94	66	77	187	383	697	1010	341	110
5	49	94	85	98	60	79	193	427	991	871	345	104
6	50	97	83	98	64	82	259	490	1150	855	349	97
7	50	95	80	92	66	86	304	504	1390	826	358	90
8	50	98	66	88	68	100	318	465	1370	916	361	83
9	52	99	72	96	72	137	340	391	1130	900	367	80
10	52	98	80	98	72	141	313	351	742	825	371	79
11	52	100	84	96	74	134	275	315	669	783	354	76
12	53	139	82	96	70	134	252	307	699	755	327	70
13	53	107	80	96	68	161	259	307	1040	741	309	57
14	54	107	80	88	72	184	344	333	1640	727	282	59
15	54	103	88	94	76	181	403	399	1620	675	263	60
16	54	104	90	90	80	214	470	480	1340	622	243	59
17	55	96	80	94	78	202	541	483	1180	570	249	58
18	55	95	90	96	76	178	589	549	1070	560	265	56
19	55	94	96	92	74	156	450	715	959	501	267	56
20	56	97	88	90	72	146	362	877	765	433	256	55
21	57	98	94	90	72	151	354	1010	783	420	246	51
22	172	100	100	84	70	151	398	889	908	429	220	50
23	113	96	102	80	70	141	470	1160	1060	422	209	50
24	112	91	102	82	62	164	516	1000	1240	402	191	52
25	157	107	100	80	60	208	431	994	1330	399	175	52
26	126	98	102	80	66	244	344	1220	1330	390	172	51
27	128	96	104	76	66	259	332	1530	1310	369	168	52
28	117	84	100	76	66	241	418	1390	1340	365	159	53
29	108	98	98	76	---	255	418	1170	1370	357	147	52
30	100	94	100	66	---	205	379	1320	1300	362	141	51
31	98	---	96	64	---	227	---	1010	---	359	138	---
TOTAL	2353	2980	2805	2726	1952	4856	10498	21711	32421	20764	8315	2133
MEAN	75.9	99.3	90.5	87.9	69.7	157	350	700	1081	670	268	71.1
MAX	172	139	106	98	80	259	589	1530	1640	1370	371	130
MIN	49	84	66	64	60	70	187	307	616	357	138	50
AC-FT	4670	5910	5560	5410	3870	9630	20820	43060	64310	41190	16490	4230
CAL YR 1978 TOTAL	92723			MEAN 254	MAX 1610	MIN 44	AC-FT 183900					
WTR YR 1979 TOTAL	113514			MEAN 311	MAX 1640	MIN 49	AC-FT 225200					

NOTE.--NO GAGE-HEIGHT RECORD DEC. 4 TO MAR. 9, AUG. 26 TO SEPT. 30.

LOCATION.--Lat 38°23'32", long 107°56'40", in NW¼NW¼ sec.26, T.48 N., R.10 W., Montrose County, Hydrologic Unit 14020006, on left bank 7.2 mi (11.6 km) southwest of Montrose.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1977 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 5,570 ft (1,698 m), from topographic map. Prior to Nov. 23, 1977, nonrecording gage at same site and datum.

REMARKS.--Records good.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 233 ft³/s (6.60 m³/s) May 21, 1979, gage height, 3.63 ft (1.106 m); no flow many days each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 233 ft³/s (6.60 m³/s) at 0200 May 21, gage height, 3.63 ft (1.106 m), only peak above base of 100 ft³/s (2.83 m³/s); no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.40	.60	.70	.73	.99	85	112	6.1	.00	.00
2	.00	.01	.40	.50	.70	.74	.87	91	96	5.4	.00	.00
3	.00	.01	.35	.50	.80	.66	.83	81	83	4.7	.00	.00
4	.00	.10	.35	.50	.80	.70	.70	84	79	4.8	.00	.00
5	.00	.20	.40	.55	.80	.66	.79	72	76	4.1	.00	.00
6	.00	.20	.40	.60	.90	.69	.93	96	79	4.1	.00	.00
7	.00	.25	.35	.60	1.0	.87	2.9	118	82	4.4	.00	.00
8	.00	.25	.30	.50	1.1	1.4	4.1	117	84	3.1	.00	.00
9	.00	.30	.25	.50	1.1	1.4	5.4	99	75	2.7	.00	.00
10	.00	.30	.30	.50	1.2	1.2	6.9	89	62	2.3	.00	.00
11	.00	.35	.35	.50	1.2	1.2	4.7	71	58	1.9	.00	.00
12	.00	.40	.35	.55	1.2	1.2	3.2	63	51	1.5	.00	.00
13	.00	.45	.40	.60	1.3	1.2	2.7	61	49	1.4	.00	.00
14	.00	.40	.40	.55	1.7	1.3	3.7	63	44	1.2	.00	.00
15	.00	.33	.40	.60	1.3	1.4	9.7	77	38	1.2	.01	.00
16	.00	.31	.40	.65	1.1	1.5	19	108	33	1.3	.20	.00
17	.00	.31	.40	.70	.94	1.3	37	129	32	1.2	.24	.00
18	.00	.24	.50	.80	1.1	1.2	46	143	29	1.0	.26	.00
19	.00	.31	.70	.90	.96	.85	35	160	25	.96	.24	.00
20	.01	.25	.65	.80	.79	1.1	26	201	18	.87	.34	.00
21	.02	.29	.60	.80	.72	1.3	28	227	14	1.3	.42	.00
22	.20	.31	.60	.80	.74	.94	36	210	11	1.2	.25	.00
23	.01	.34	.60	.70	.74	.77	48	218	11	.96	.15	.00
24	.03	.40	.60	.70	.74	.79	59	212	11	.72	.10	.00
25	.10	.54	.60	.70	.72	.91	60	208	11	.55	.06	.00
26	.00	.46	.60	.80	.73	1.0	57	193	10	.45	.04	.00
27	.00	.40	.60	.80	.68	1.2	54	194	9.3	.39	.03	.00
28	.00	.35	.60	.70	.73	1.4	64	196	7.9	.12	.00	.00
29	.00	.35	.65	.70	---	1.6	69	184	7.3	.12	.00	.00
30	.00	.35	.65	.70	---	1.2	75	170	7.2	.09	.00	.00
31	.00	---	.65	.60	---	1.4	---	135	---	.03	.00	---
TOTAL	.37	8.76	14.80	20.00	26.49	33.81	761.41	4155	1304.7	60.16	2.34	.00
MEAN	.012	.29	.48	.65	.95	1.09	25.4	134	43.5	1.94	.075	.000
MAX	.20	.54	.70	.90	1.7	1.6	75	227	112	6.1	.42	.00
MIN	.00	.00	.25	.50	.68	.66	.70	61	7.2	.03	.00	.00
AC-FT	.7	17	29	40	53	67	1510	8240	2590	119	4.6	.00
CAL YR 1978	TOTAL	4305.67	MEAN	11.8	MAX	188	MIN	.00	AC-FT	8540		
WTR YR 1979	TOTAL	6387.84	MEAN	17.5	MAX	227	MIN	.00	AC-FT	12670		

GUNNISON RIVER BASIN

09149400 SPRING CREEK NEAR BEAVER HILL, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--July 1977 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

			TEMPER- ATURE (DEG C)						TEMPER- ATURE (DEG C)		
DATE		TIME	DATE		TIME	DATE		TIME	DATE		TIME
NOV			MAY			JUN			JUL		
14...			11...			19...			16...		
20...			15...			19...			24...		
JAN			JUN			AUG			AUG		
03...			19...			21...			21...		
FEB			19...			22...			22...		
15...			JUL			1415					
MAR			16...								
06...			24...								
27...			27...								
APR			AUG								
10...			21...								
25...			22...								
27...											
DATE		TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, (COLS. PER 100 ML)	HARD- NESS (MG/L AS CACO3)
APR	25...	1000	58	140	7.9	100	10.3	82	K27	K43	59
MAY	15...	0845	68	120	7.9	--	10.6	27	<1	K39	46
JUL	24...	0940	.40	625	--	--	7.8	--	480	420	200
AUG	21...	0900	.30	700	8.4	--	8.6	15	120	270	240
DATE		HARD- NESS, NONCAR- BONATE (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)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	ALKA- LINITY (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)
APR	25...	13	16	4.5	4.1	.2	1.8	56	0	46	15
MAY	15...	13	13	3.4	3.2	.2	1.3	41	0	34	13
JUL	24...	44	62	12	48	1.5	4.4	--	--	160	160
AUG	21...	110	73	14	56	1.6	4.7	160	0	130	180

K BASED ON NON-IDEAL COLONY COUNT.

GUNNISON RIVER BASIN

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09149400 SPRING CREEK NEAR BEAVER HILL, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	CHLORIDE, DIS- SOLVED (MG/L AS CL)	FLUORIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C SOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (TONS PER AC-FT)	SOLIDS, DIS- SOLVED (TONS PER DAY)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	NITROGEN, AMMONIA TOTAL (MG/L AS N)	NITROGEN, ORGANIC TOTAL (MG/L AS N)
APR 25...	1.9	.1	7.2	98	79	.13	15.3	.22	.02	.81
MAY 15...	1.5	.1	5.6	86	62	.08	11.4	.07	.03	.36
JUL 24...	3.7	.3	7.8	396	395	.54	.43	.03	.04	.95
AUG 21...	5.5	.4	7.4	474	420	.57	.34	.00	.05	.38

DATE	NITROGEN, KJELDAHL, TOTAL (MG/L AS N)	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, DIS- SOLVED (MG/L AS P)	BORON, DIS- SOLVED (UG/L AS B)	IRON, DIS- SOLVED (UG/L AS FE)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC SUSPENDED TOTAL (MG/L AS C)	PHYTOPLANKTON, TOTAL (CELLS PER ML)
APR 25...	.83	1.1	.09	.02	30	150	7.7	2.0	230
MAY 15...	.39	.46	.03	.02	40	400	7.0	.6	51
JUL 24...	.99	1.0	.02	.17	140	10	7.9	.3	13
AUG 21...	.43	.43	.02	.00	130	10	7.1	.4	0

DATE	TIME	ALUMINUM, DIS- SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS- SOLVED (UG/L AS AS)	ARSENIC IN BOT- TOM MA- TERIAL (UG/G AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	BARIUM, DIS- SOLVED (UG/L AS BA)	BARIUM, RECOVERABLE FM BOT- TOM MA- TERIAL (UG/G AS BA)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	BERYLLIUM, DIS- SOLVED (UG/L AS BE)	BERYLLIUM, RECOVERABLE FM BOT- TOM MA- TERIAL (UG/G)
APR 25...	1000	140	1	1	10	200	90	160	0	<1	1
AUG 21...	0900	0	--	2	--	--	200	--	--	<1	--

DATE	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM DIS- SOLVED (UG/L AS CD)	CADMIUM RECOVERABLE FM BOT- TOM MA- TERIAL (UG/G AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, DIS- SOLVED (UG/L AS CR)	CHROMIUM, RECOVERABLE FM BOT- TOM MA- TERIAL (UG/G)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COBALT, DIS- SOLVED (UG/L AS CO)	COBALT, RECOVERABLE FM BOT- TOM MA- TERIAL (UG/G AS CO)	COPPER, DIS- SOLVED (UG/L AS CU)	COPPER, RECOVERABLE FM BOT- TOM MA- TERIAL (UG/G AS CU)
APR 25...	1	<1	0	10	0	3	0	<3	0	2	3
AUG 21...	--	4	--	--	10	--	--	<3	--	1	--

GUNNISON RIVER BASIN

09149400 SPRING CREEK NEAR BEAVER HILL, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	LEAD, DIS- SOLVED (UG/L AS PB)	LEAD, RECOV. FM BOT- TOM MA- TERIAL (UG/G 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)	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY DIS- SOLVED (UG/L AS HG)
APR 25...	25	21	0	3	10	90	10	150	.1	.0
AUG 21...	--	35	--	--	170	--	20	--	--	.0

DATE	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G AS HG)	MOLYB- DENUM, TOTAL RECOV- ERABLE (UG/L AS MO)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)	MOLYB- DENUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI)	NICKEL, DIS- SOLVED (UG/L AS NI)	NICKEL, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS NI)	SELE- NIUM, TOTAL RECOV- ERABLE (UG/L AS SE)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SELE- NIUM, TOTAL IN BOT- TOM MA- TERIAL (UG/G)
APR 25...	.03	1	<10	0	6	1	0	0	0	0
AUG 21...	--	--	<10	--	--	3	--	--	0	--

DATE	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, DIS- SOLVED (UG/L AS ZN)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS ZN)	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)
APR 25...	1.7	20	<3	14	<1.4	11	2.3	4.9	2.1	4.6
AUG 21...	<1.0	--	<3	--	--	--	--	--	--	--

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

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 25...	1000	58	295	46	58
MAY 15...	0845	68	129	24	--
JUN 19...	0930	29	19	1.5	50

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
JUL 24...	0940	.40	50	.05	--
AUG 21...	0900	.30	2	.00	--

09149400 SPRING CREEK NEAR BEAVER HILL, CO--Continued

PHYTOPLANKTON ANALYSES, OCTOBER 1978 TO AUGUST 1979

DATE TIME	APR 25,79 1000	MAY 15,79 0845	JUN 19,79 0915	JUL 24,79 0940	AUG 21,79 0900					
TOTAL CELLS/ML	230	51	64	13	0					
DIVERSITY: DIVISION	1.3	0.0	0.0	0.0	0.0					
..CLASS	1.3	0.0	0.0	0.0	0.0					
...ORDER	1.3	0.0	0.0	0.0	0.0					
...FAMILY	1.9	0.0	0.0	0.0	0.0					
...GENUS	1.9	0.0	0.0	0.0	0.0					
ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)										
..CHLOROPHYCEAE										
...CHLOROCOCCALES										
...SCENEDESMACEAE										
....SCENEDESMUS	--	-	51#100	--	-	--	-	--	-	
CHRYSOPHYTA										
..BACILLARIOPHYCEAE										
...PENNACEAE										
....ACHNANTHACEAE										
....ACHNANTHES	29	13	--	-	64#100	--	-	--	-	
...GOMPHONEMACEAE										
....GOMPHONEMA	58#	25	--	-	--	-	--	-	--	-
...NITZSCHACEAE										
....NITZSCHIA	15	6	--	-	--	-	13#100	--	-	
CYANOPHYTA (BLUE-GREEN ALGAE)										
..CYANOPHYCEAE										
...HORMOGONALES										
...OSCILLATORIAEAE										
....OSCILLATORIA	120#	50	--	-	--	-	--	-	--	-
EUGLENOPHYTA (EUGLENOIDS)										
..EUGLENOPHYCEAE										
...EUGLENALES										
...EUGLENACEAE										
....TRACHELOMONAS	15	6	--	-	--	-	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%

* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

GUNNISON RIVER BASIN

09149420 SPRING CREEK NEAR MONTROSE, CO

LOCATION.--Lat 38°31'26", long 107°58'15", in NE¼SE¼ sec.10, T.49 N., R.10 W., Montrose County, Hydrologic Unit 14020006, on left bank 0.8 mi (1.3 km) upstream from mouth and 3.2 mi (5.1 km) northwest of Montrose.

DRAINAGE AREA.--76.6 mi² (198.4 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1977 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 5,570 ft (1,698 m), from topographic map. Prior to Nov. 10, 1977, nonrecording gage at same site and datum.

REMARKS.--Records good except those for period of no gage-height record, which are poor. Natural flow of stream affected by diversions and return flow from irrigated areas. Most flow is return flow.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 295 ft³/s (8.35 m³/s) May 17, 1978, gage height, 3.78 ft (1.152 m); minimum daily, 7.3 ft³/s (0.207 m³/s) Mar. 17, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 290 ft³/s (8.21 m³/s) at 0400 May 23, gage height, 3.64 ft (1.109 m); minimum daily, 8.9 ft³/s (0.25 m³/s) Feb. 4, 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	58	42	20	13	9.3	16	13	126	176	94	91	88
2	56	42	20	12	9.2	19	14	133	147	93	91	88
3	52	41	20	12	9.1	19	13	126	123	98	88	88
4	50	38	20	12	8.9	17	14	119	123	101	85	88
5	50	36	20	12	8.9	17	14	122	125	101	84	88
6	53	38	20	12	9.5	18	15	140	116	99	85	88
7	55	36	19	12	9.6	15	15	169	126	99	82	88
8	59	36	17	11	9.6	15	15	188	163	98	83	88
9	61	36	17	11	9.2	14	16	157	168	92	84	91
10	59	36	18	12	9.6	13	22	142	151	92	80	96
11	59	36	17	12	9.6	14	25	133	140	86	78	90
12	64	41	17	12	9.8	14	19	126	137	91	79	83
13	66	35	16	12	9.9	14	28	119	135	93	82	84
14	65	29	16	13	12	13	35	116	135	89	86	89
15	69	28	16	13	14	13	50	114	125	91	88	90
16	64	26	16	13	14	13	60	116	111	92	90	90
17	57	26	16	12	15	12	74	135	98	91	90	89
18	55	25	16	13	15	11	83	144	98	86	96	95
19	57	24	17	13	13	11	75	226	106	85	97	92
20	55	23	16	12	12	11	57	268	99	81	104	89
21	58	22	15	12	13	13	61	253	87	81	99	84
22	80	22	15	12	12	13	72	258	81	80	102	81
23	42	22	14	11	12	13	82	274	85	86	99	77
24	40	21	15	11	12	12	129	256	88	87	90	75
25	41	22	14	11	12	12	118	234	88	89	90	66
26	40	22	13	11	13	12	111	239	87	92	89	70
27	37	21	13	11	14	13	110	236	87	97	89	79
28	43	20	13	10	16	12	116	237	89	97	89	79
29	47	20	13	10	---	11	118	240	85	98	89	76
30	47	20	13	10	---	13	122	224	90	94	89	73
31	44	---	14	9.8	---	12	---	210	---	91	89	---
TOTAL	1683	886	506	362.8	321.2	425	1696	5580	3469	2844	2757	2542
MEAN	54.3	29.5	16.3	11.7	11.5	13.7	56.5	180	116	91.7	88.9	84.7
MAX	80	42	20	13	16	19	129	274	176	101	104	96
MIN	37	20	13	9.8	8.9	11	13	114	81	80	78	66
AC-FT	3340	1760	1000	720	637	843	3360	11070	6880	5640	5470	5040
CAL YR 1978	TOTAL	18169.2	MEAN	49.8	MAX	253	MIN	7.3	AC-FT	36040		
WTR YR 1979	TOTAL	23072.0	MEAN	63.2	MAX	274	MIN	8.9	AC-FT	45760		

GUNNISON RIVER BASIN

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09149420 SPRING CREEK NEAR MONTROSE, CO--Continued

PERIOD OF RECORD.--December 1977 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	TEMPER- ATURE (DEG C)	DATE	TIME	TEMPER- ATURE (DEG C)
OCT			MAR		
02...	1100	11.0	27...	1055	8.0
03...	1050	11.0	APR		
16...	1135	10.0	20...	1435	13.0
31...	1045	10.0	24...	0930	7.0
NOV			27...	1440	12.0
14...	0900	6.0	MAY		
14...	1635	8.5	11...	1500	10.0
20...	1530	10.0	15...	1200	9.0
DEC			JUN		
08...	1115	.5	19...	1115	12.5
12...	0900	1.0	19...	1300	12.0
20...	1435	6.0	JUL		
JAN			16...	1555	21.0
03...	1510	5.0	24...	1220	17.0
16...	1305	5.0	AUG		
24...	0930	.0	15...	1730	17.0
30...	1430	5.0	21...	1215	13.0
FEB			22...	1120	15.5
15...	1505	9.5	SEP		
MAR			07...	1455	18.0
06...	1350	10.5	25...	1135	10.0
13...	0830	4.5			

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TUR- BID- ITY (NTU)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN DEMAND, CHEM- ICAL (HIGH LEVEL) (MG/L)	COLI- FORM, FECAL, U./ UM-MF (COLS./ 100 ML)	STREP- TOCOCCI FECAL, (COLS. PER 100 ML)	HARD- NESS (MG/L AS CaCO3)
OCT										
02...	1100	48	800	8.5	1.2	8.0	40	180	120	520
NOV										
14...	0900	27	1250	8.4	--	11.4	44	K40	140	720
DEC										
12...	0900	12	1200	8.2	--	11.6	17	172	800	740
JAN										
24...	0930	11	1350	7.6	--	6.8	19	K37	K44	800
MAR										
13...	0830	14	1500	7.8	--	--	10	K47	128	830
APR										
24...	0930	134	400	8.2	220	9.2	48	720	1800	160
MAY										
15...	1200	118	540	8.2	--	8.6	22	5000	4400	250
JUN										
19...	1300	112	680	8.1	--	9.2	19	760	1600	350
JUL										
24...	1220	91	700	--	--	8.4	17	K670	200	--
AUG										
21...	1215	95	860	8.3	--	9.6	21	480	2000	440

K BASED ON NON-IDEAL COLONY COUNT.

GUNNISON RIVER BASIN

09149420 SPRING CREEK NEAR MONTROSE, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	HARD- NESS, NONCAR- BONATE (MG/L CAC03)	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 (MG/L AS HC03)	CAR- BONATE (MG/L AS C03)	ALKA- LINITY (MG/L AS CAC03)	SULFATE DIS- SOLVED (MG/L AS SO4)
OCT 02...	300	140	41	28	.5	2.9	270	0	270	340
NOV 14...	--	190	59	46	.7	2.8	290	--	--	520
DEC 12...	530	190	65	46	.7	2.9	260	0	210	570
JAN 24...	520	200	73	53	.8	2.8	340	0	280	590
MAR 13...	600	210	73	56	.8	2.9	280	0	230	650
APR 24...	73	44	13	12	.4	2.7	110	0	90	99
MAY 15...	140	71	18	15	.4	2.3	140	0	110	160
JUN 19...	190	97	25	20	.5	2.5	190	0	160	220
JUL 24...	--	--	--	--	--	--	--	--	200	270
AUG 21...	240	120	33	29	.6	2.9	240	0	200	300

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, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)
OCT 02...	5.7	.6	17	769	709	1.05	99.7	1.3	.03
NOV 14...	8.6	.8	20	1030	--	--	75.9	1.8	.01
DEC 12...	9.2	.8	20	1130	1030	1.54	36.9	2.6	.04
JAN 24...	11	.8	22	1180	1120	1.60	35.0	3.0	.00
MAR 13...	15	.9	17	1210	1160	1.65	46.4	2.4	.03
APR 24...	3.0	.3	11	260	240	.35	94.1	.50	.03
MAY 15...	3.5	.3	9.8	362	349	.49	115	.55	.02
JUN 19...	3.8	.4	12	490	474	.67	148	.96	.05
JUL 24...	5.1	.6	--	632	--	.86	156	1.3	.01
AUG 21...	4.6	.6	19	660	628	.90	170	1.2	.01

09149420 SPRING CREEK NEAR MONTRUSE, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

		NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN, KJEL- DAHL, TOTAL (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)	BORON, DIS- SOLVED (UG/L AS B)	IRON, DIS- SOLVED (UG/L AS FE)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	PHYTO- PLANK- TON, TOTAL (CELLS PFR ML)		
DATE												
OCT 02...		.45	.48	1.8	.04	.04	130	20	--	0		
NOV 14...		.44	.45	2.3	.01	.01	160	10	3.1	380		
DEC 12...		.82	.86	3.5	.03	.02	180	10	3.7	470		
JAN 24...		.61	.61	3.6	.01	.01	150	10	4.0	230		
MAR 13...		.34	.37	2.8	.01	.01	160	20	2.4	1100		
APR 24...		1.2	1.2	1.7	.22	.02	60	40	6.5	600		
MAY 15...		.63	.65	1.2	.08	.01	80	40	5.5	840		
JUN 19...		.54	.59	1.6	.20	.04	60	40	4.6	230		
JUL 24...		.65	.66	2.0	.10	.05	100	--	8.5	260		
AUG 21...		.99	1.0	2.2	.02	.01	90	10	5.7	1600		
DATE	TIME	ALUM- INUM, DIS- SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS- SOLVED (UG/L AS AS)	ARSENIC TOTAL IN BOT- TOM MA- TERIAL (UG/G AS AS)	BARIUM, TOTAL RECOV- ERABLE (UG/L AS BA)	BARIUM, DIS- SOLVED (UG/L AS BA)	BARIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS BA)	BERYL- LIUM, TOTAL RECOV- ERABLE (UG/L AS BE)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE)	BERYL- LIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS BE)	CADMIUM TOTAL RECOV- ERABLE (UG/L AS CD)
OCT 02...	1100	0	1	1	4	0	0	60	0	0	0	0
JAN 24...	0930	0	--	1	--	--	40	--	--	<1	--	--
APR 24...	0930	30	3	1	--	300	70	--	0	<1	--	3
AUG 21...	1215	0	--	1	--	--	60	--	--	<1	--	--
DATE		CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CD)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COBALT, TOTAL RECOV- ERABLE (UG/L AS CO)	COBALT, DIS- SOLVED (UG/L AS CO)	COBALT, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CO)	COPPER, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS CU)	COPPER, DIS- SOLVED (UG/L AS CU)	LEAD, TOTAL RECOV- ERABLE (UG/L AS P2)	LEAD, DIS- SOLVED (UG/L AS P8)
OCT 02...	1	0	0	0	2	0	0	1	4	2	3	4
JAN 24...	3	--	--	0	--	--	<3	--	2	--	--	4
APR 24...	2	--	10	0	--	4	<3	--	3	--	100	27
AUG 21...	3	--	--	0	--	--	<3	--	1	--	--	6

GUNNISON RIVER BASIN

09149420 SPRING CREEK NEAR MONTROSE, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	LEAD, RECOV. FM BOT- TOM MA- TERIAL (UG/G 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)	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY DIS- SOLVED (UG/L AS HG)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G AS HG)	MOLYB- DENUM, TOTAL RECOV- ERABLE (UG/L AS MO)	MOLYB- DENUM, DIS- SOLVED (UG/L AS MO)
OCT 02...	12	60	70	40	20	120	.0	.0	.01	5	2
JAN 24...	--	--	110	--	70	--	--	.0	--	--	0
APR 24...	--	40	20	460	2	--	.1	.0	--	2	<10
AUG 21...	--	--	60	--	20	--	--	.0	--	--	<10

DATE	MOLYB- DENUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI)	NICKEL, DIS- SOLVED (UG/L AS NI)	NICKEL, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS NI)	SELE- NIUM, TOTAL (UG/L AS SE)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	SELE- NIUM, TOTAL IN BOT- TOM MA- TERIAL (UG/G)	VANA- DIUM, DIS- SOLVED (UG/L AS V)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, DIS- SOLVED (UG/L AS ZN)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G AS ZN)
OCT 02...	5	1	0	4	1	2	0	.2	20	20	15
JAN 24...	--	--	1	--	--	3	--	.0	--	3	--
APR 24...	--	34	0	--	1	1	--	1.0	90	<3	--
AUG 21...	--	--	2	--	--	1	--	1.0	--	<3	--

DATE	TIME	GROSS ALPHA, DIS- SOLVED (UG/L AS U-NAT)	GROSS BETA, DIS- SOLVED (PCI/L AS CS-137)	GROSS BETA, DIS- SOLVED (PCI/L AS SR/ YT-90)
OCT 02...	1100	10	<4.7	<4.6
APR 24...	0930	<5.2	2.7	2.4

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT 02...	1100	56	23	3.5	--	APR 24...	0930	112	1500	454	63
NOV 14...	0905	29	22	1.7	--	MAY 15...	1200	118	372	119	--
DEC 12...	0830	16	55	2.4	47	JUN 19...	1330	112	244	74	66
JAN 24...	0930	11	90	2.7	--	JUL 24...	1220	92	480	119	--
MAR 13...	0830	14	74	2.8	--	AUG 21...	1215	96	4	1.0	--

09149420 SPRING CREEK NEAR MONTROSE, CO--Continued

PHYTOPLANKTON ANALYSES, OCTOBER 1978 TO AUGUST 1979

DATE TIME	OCT 2,78 1100	NOV 14,78 0900	DEC 12,78 0900	JAN 24,79 0930	MAR 13,79 0830	
TOTAL CELLS/ML	0	380	470	230	1100	
DIVERSITY: DIVISION	0.0	1.3	0.0	0.3	0.7	
..CLASS	0.0	1.3	0.0	0.3	0.7	
..ORDER	0.0	1.3	0.0	0.3	1.3	
...FAMILY	0.0	1.5	1.3	1.9	2.4	
...GENUS	0.0	1.5	1.3	1.9	2.4	
ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)						
..CHLOROPHYCEAE						
...CHLOROCOCCALES						
...OOCYSTACEAE						
....ANKISTRODESMUS	--	-	--	-	--	-
....SCENEDESMACEAE						
....SCENEDESMUS	--	-	--	-	10	4
...VOLVOCALES						
...CHLAMYDOMONADACEAE						
....CHLAMYDOMONAS	--	-	160#	41	--	-
CHRYSPHYTA						
..BACILLARIOPHYCEAE						
...CENTRALES						
...COSCINOIDISACEAE						
....CYCLOTELLA	--	-	--	-	--	-
...PENNALES						
....ACHNANTHACEAE						
....COCCONEIS	--	-	--	-	19	2
...CYMBELLACEAE						
....CYMBELLA	--	-	--	-	19	2
...DIATOMACEAE						
....DIATOMA	--	-	--	-	5	2
...FRAGILARIACEAE						
....ASTERIONELLA	--	-	--	-	--	-
....SYNEDRA	--	-	--	-	--	-
...GOMPHONEMACEAE						
....GOMPHONEMA	--	-	22	6	42	9
...MERIDIONACEAE						
....MERIDION	--	-	--	-	35#	15
...NAVICULACEAE						
....NAVICULA	--	-	180#	47	360#	76
...NITZSCHACEAE						
....NITZSCHIA	--	-	--	-	14	3
...SURIPELLACEAE						
....SURIPELLA	--	-	--	-	14	3
CYANOPHYTA (BLUE-GREEN ALGAE)						
..CYANOPHYCEAE						
...CHROOCOCCALES						
...CHROOCOCCACEAE						
....ANACYSTIS	--	-	--	-	--	-
...HORMOGONALES						
...OSCILLATORACEAE						
....OSCILLATORIA	--	-	--	-	--	-
EUGLENOPHYTA (EUGLENOIDS)						
..EUGLENOPHYCEAE						
...EUGLENALES						
...EUGLENACEAE						
....EUGLENA	--	-	22	6	--	-
...TRACHELOMONAS	--	-	--	-	--	-
PYRRHOPHYTA (FIRE ALGAE)						
..DINOPHYCEAE						
...PERIDINIALES						
...GLENODINIACEAE						
....GLENODINIUM	--	-	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%

* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

GUNNISON RIVER BASIN

09149420 SPRING CREEK NEAR MONTROSE, CO--Continued
PHYTOPLANKTON ANALYSES, OCTOBER 1978 TO AUGUST 1979

DATE TIME	APR 24,79 0930	MAY 15,79 1200	JUN 19,79 1300	JUL 24,79 1220	AUG 21,79 1215					
TOTAL CELLS/ML	600	840	230	260	1600					
DIVERSITY: DIVISION	0.6	1.2	0.0	0.0	0.2					
..CLASS	0.6	1.2	0.0	0.0	0.2					
...ORDER	1.5	1.8	0.5	0.0	0.2					
...FAMILY	1.9	2.0	2.2	1.0	0.2					
...GENUS	1.9	2.0	2.2	1.0	0.2					
ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)										
..CHLOROPHYCEAE										
...CHLOROCOCCALES										
...OOCYSTACEAE										
....ANKISTRODESMUS	43	7	--	-	--	-	--	-	--	-
...SCENEDESMACEAE										
....SCENEDESMUS	--	-	260#	31	--	-	--	-	--	-
...VOLVOCALES										
...CHLAMYDOMONADACEAE										
....CHLAMYDOMONAS	--	-	--	-	--	-	--	-	--	-
CHRYSOPHYTA										
..BACILLARIOPHYCEAE										
...CENTRALES										
....COSCINODISACEAE										
....CYCLOTELLA	330#	55	320#	38	26	11	--	-	--	-
...PENNALES										
....ACHNANTHACEAE										
....COCCONEIS	--	-	--	-	--	-	--	-	--	-
...CYMBELLACEAE										
....CYMBELLA	--	-	--	-	--	-	--	-	--	-
...DIATOMACEAE										
....DIATOMA	--	-	--	-	--	-	--	-	--	-
...FRAGILARIACEAE										
....ASTERIONELLA	--	-	130#	15	--	-	--	-	--	-
...SYNEDRA	--	-	--	-	52#	22	--	-	--	-
...GOMPHONEMACEAE										
....GOMPHONEMA	43	7	--	-	26	11	--	-	--	-
...MERIDIONACEAE										
....MERIDION	--	-	--	-	--	-	--	-	--	-
...NAVICULACEAE										
....NAVICULA	130#	21	65	8	52#	22	100#	40	--	-
...NITZSCHACEAE										
....NITZSCHIA	29	5	--	-	77#	33	150#	60	64	4
...SURIRELLACEAE										
....SURIRELLA	--	-	--	-	--	-	--	-	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)										
..CYANOPHYCEAE										
...CHROOCOCCALES										
....CHROOCOCCACEAE										
....ANACYSTIS	--	-	--	-	--	-	--	-	--	-
...HORMOGONALES										
....OSCILLATORIACEAE										
....OSCILLATORIA	--	-	--	-	--	-	--	-	1500#	96
EUGLENOPHYTA (EUGLENOIDS)										
..EUGLENOPHYCEAE										
...EUGLENALES										
....EUGLENACEAE										
....EUGLENA	--	-	--	-	--	-	--	-	--	-
....TRACHELOMONAS	29	5	--	-	--	-	--	-	--	-
PYRRHOPHYTA (FIRE ALGAE)										
..DINOPHYCEAE										
...PERIDINIALES										
....GLENODINIACEAE										
....GLENODINIUM	--	-	65	8	--	-	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%

* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

09149500 UNCOMPAHGRE RIVER AT DELTA, CO

LOCATIONIDN.--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 (160 m) downstream from 5th Street Bridge at west edge of Delta and 1.1 mi (1.8 km) upstream from mouth.

DRAINAGE AREA.--1,129 mi² (2,924 km²).

WATER-DISCHARGE RECORDS

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 (1,501.594 m), National Geodetic Vertical Datum of 1929. Feb. 18, 1960, to Mar. 26, 1963, water-stage recorder at site 750 ft (230 m) upstream at datum 3.43 ft (1.045 m) higher. Mar. 27, 1963, to May 12, 1965, water-stage recorder at site 1,050 ft (320 m) upstream at datum 6.08 ft (1.849 m) higher. See WSP 1733 or 1924 for history of changes prior to Feb. 18, 1960.

REMARKS.--Records good except for period of no gage-height record, 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 (364 km²) above station, and return flow from irrigated areas.

AVERAGE DISCHARGE.--43 years (water years 1908, 1921, 1939-79), 277 ft³/s (7.845 m³/s), 200,700 acre-ft/yr (247 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge recorded, 3,730 ft³/s (106 m³/s) May 5, 1941, gage height, 5.90 ft (1.798 m), site and datum then in use, from rating curve extended above 1,900 ft³/s (54 m³/s); no flow at times in 1908; minimum daily determined since beginning of diversion through Gunnison tunnel, 7 ft³/s (0.20 m³/s) July 10-15, 17, 21, 24-28, 1910.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,210 ft³/s (62.6 m³/s) at 1300 June 8, gage height, 5.99 ft (1.826 m); minimum daily, 93 ft³/s (2.63 m³/s) Apr. 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	159	280	194	139	150	190	211	433	695	670	205	227
2	152	283	256	117	160	210	206	456	542	680	187	220
3	122	282	194	160	140	210	178	368	452	620	184	214
4	134	276	172	168	120	180	153	277	524	510	167	208
5	143	267	187	157	120	200	93	313	611	385	158	200
6	150	261	187	176	140	250	138	469	802	382	154	199
7	149	242	186	171	160	220	176	664	1180	492	160	199
8	173	235	163	138	160	230	302	714	1800	477	145	200
9	199	250	189	135	150	278	297	562	1700	520	145	203
10	202	257	187	159	140	200	283	478	858	406	138	200
11	187	245	192	162	160	160	252	423	660	343	137	191
12	196	279	203	151	190	160	158	355	510	280	146	189
13	201	205	189	153	220	169	156	355	690	257	148	198
14	227	176	200	137	220	186	185	364	920	380	163	205
15	254	157	200	169	180	192	324	367	1600	357	209	220
16	294	163	199	162	170	206	448	470	1480	331	233	252
17	309	160	200	142	170	199	516	560	1200	306	280	281
18	313	152	210	171	190	165	597	584	780	283	320	314
19	252	147	220	166	170	135	688	802	500	267	559	306
20	245	143	210	148	190	130	441	1080	450	217	520	295
21	253	141	204	142	230	176	312	1290	400	198	456	279
22	589	135	198	149	210	172	407	914	420	220	367	298
23	420	137	199	126	190	132	491	962	470	221	314	310
24	209	130	188	127	200	112	655	802	510	202	276	300
25	217	151	184	160	180	105	544	842	600	202	272	264
26	202	166	172	150	210	120	347	778	640	187	270	258
27	191	187	163	130	220	158	260	1140	660	187	255	244
28	216	200	187	130	210	162	350	1530	660	200	225	244
29	296	191	179	150	---	153	530	1370	670	192	202	236
30	298	199	171	120	---	162	439	1350	670	207	220	229
31	289	---	168	120	---	219	---	1110	---	199	262	---
TOTAL	7241	6097	5951	4585	4950	5541	10137	22182	23654	10378	7477	7183
MEAN	234	203	192	148	177	179	338	716	788	335	241	239
MAX	589	283	256	176	230	278	688	1530	1800	680	559	314
MIN	122	130	163	117	120	105	93	277	400	187	137	189
AC-FT	14360	12090	11800	9090	9820	10990	20110	44000	46920	20580	14930	14250

CAL YR 1978 TOTAL 91529 MEAN 251 MAX 1300 MIN 45 AC-FT 181500
WTR YR 1979 TOTAL 115376 MEAN 316 MAX 1800 MIN 93 AC-FT 228800

NOTE.--NO GAGE-HEIGHT RECORD JAN. 25 TO MAR. 8, JUNE 11 TO JULY 4.

GUNNISON RIVER BASIN

09149500 UNCOMPAHGRE RIVER AT DELTA, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Partial-record station May 1962 to current year (discontinued).

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
NOV										
17...	0945	162	2140	7.8	4.5	--	1000	790	260	89
28...	1045	214	2000	8.3	2.5	--	970	740	250	85
JAN										
23...	1430	101	2000	8.1	.2	--	940	690	240	83
APR										
25...	0800	700	800	8.1	6.0	10.0	300	200	82	23
AUG										
21...	1415	480	1400	8.2	17.0	8.6	620	420	170	47

DATE	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	ALKA- LITY (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)
NOV									
17...	160	2.2	5.0	280	--	230	1100	21	.8
28...	150	2.1	4.8	280	0	230	1000	19	.7
JAN									
23...	180	2.6	6.3	--	--	250	990	20	.6
APR									
25...	46	1.2	3.8	--	--	100	270	6.2	.3
AUG									
21...	92	1.6	3.7	--	--	200	630	9.6	.6

DATE	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTITU- ENTS, 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, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
NOV									
17...	18	1810	2.46	792	3.7	.01	.01	10	80
28...	17	1680	2.28	971	3.5	.02	.00	30	80
JAN									
23...	16	1700	2.31	464	3.4	.06	.03	10	120
APR									
25...	11	509	.69	962	1.4	.03	--	60	20
AUG									
21...	19	1110	1.51	1440	2.9	.01	--	10	40

09150500 ROUBIDEAU CREEK AT MOUTH, NEAR DELTA, CO

LOCATION.--Lat 38°44'06", long 108°09'40", in SE $\frac{1}{4}$ sec. 19, T.15 S., R.96 W., Delta County, Hydrologic Unit 14020005, on left bank 90 ft (27 m) upstream from railroad bridge, 0.3 mi (0.5 km) upstream from mouth, and 5.0 mi (8.0 km) west of Delta.

DRAINAGE AREA.--242 mi² (627 km²).

PERIOD OF RECORD.--October 1938 to September 1954, May 1976 to current year. Prior to April 1939, monthly discharge only, published in WSP 1313.

GAGE.--Water-stage recorder. Datum of gage is 4,864.34 ft (1,482.651 m), National Geodetic Vertical Datum of 1929. Prior to Oct. 27, 1948, at site 0.2 mi (0.3 km) upstream at datum 4.86 ft (1.481 m) higher.

REMARKS.--Records good except those for winter period, which are poor. Part of discharge is return flow from lands irrigated under lower end of Ironstone Canal from Uncompahgre River. Diversions for irrigation of a few hundred acres above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--19 years (water years 1939-54, 1977-79), 120 ft³/s (3.398 m³/s), 86,940 acre-ft/yr (107 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,950 ft³/s (83.5 m³/s) Aug. 5, 1945, gage height, 7.76 ft (2.365 m), site and datum then in use, from rating curve extended above 1,300 ft³/s (37 m³/s); minimum observed, 9.6 ft³/s (0.27 m³/s) Apr. 7, 1977 (discharge measurement).

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 810 ft³/s (23 m³/s) and maximum (*):

Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)	Date	Time	Discharge (ft ³ /s) (m ³ /s)	Gage height (ft) (m)
May 7	0700	988 28.0	3.98 1.213	June 8	0700	1,310 37.1	4.64 1.414
May 23	0600	2,150 60.9	5.47 1.667				

Minimum daily discharge, 16 ft³/s (0.453 m³/s) Jan. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	64	87	55	16	23	29	56	528	602	116	59	82
2	62	86	52	18	24	29	51	639	519	122	58	87
3	62	96	37	20	24	29	51	497	512	125	56	87
4	64	91	33	23	25	27	53	401	519	130	59	87
5	65	90	37	25	22	26	54	484	493	130	60	81
6	61	89	39	26	24	28	60	705	526	117	60	83
7	63	94	31	25	25	29	72	874	537	109	56	78
8	75	97	27	23	25	31	79	656	869	102	50	79
9	72	102	23	21	26	33	82	475	644	99	47	84
10	73	104	25	24	26	29	107	374	531	80	45	84
11	73	110	28	25	26	29	104	304	457	77	43	86
12	79	133	30	26	26	29	116	272	449	74	47	92
13	84	112	32	27	26	31	107	276	443	71	50	96
14	80	88	33	25	27	34	90	297	409	68	54	99
15	83	79	32	23	27	33	100	376	342	65	60	98
16	85	77	32	22	27	34	116	580	313	69	64	100
17	83	70	36	22	27	33	130	739	253	64	77	100
18	78	63	38	23	26	34	148	870	208	62	81	98
19	75	66	39	23	27	34	185	1390	180	62	85	97
20	76	65	34	22	27	34	180	1750	161	60	88	98
21	78	65	32	23	27	46	174	1770	141	58	87	99
22	98	65	27	21	27	47	233	1440	131	60	86	98
23	73	70	29	26	27	41	301	1600	125	62	86	98
24	56	70	30	27	27	40	387	1180	118	59	87	98
25	56	79	29	19	27	41	388	1440	114	51	88	94
26	61	79	27	25	27	42	340	1290	111	50	88	89
27	63	61	27	29	28	43	323	1420	112	52	89	87
28	74	55	29	26	29	46	360	1380	114	58	83	87
29	80	56	30	23	---	49	431	1240	110	64	75	84
30	83	59	32	22	---	46	442	1140	107	71	72	81
31	89	---	30	23	---	53	---	787	---	71	79	---
TOTAL	2268	2458	1015	723	729	1109	5320	27174	10150	2458	2119	2711
MEAN	73.2	81.9	32.7	23.3	26.0	35.8	177	877	338	79.3	68.4	90.4
MAX	98	133	55	29	29	53	442	1770	869	130	89	100
MIN	56	55	23	16	22	26	51	272	107	50	43	78
AC-FT	4500	4880	2010	1430	1450	2200	10550	53900	20130	4880	4200	5380
CAL YR 1978	TOTAL	36458	MEAN	99.9	MAX	871	MIN	23	AC-FT	72310		
WTR YR 1979	TOTAL	58234	MEAN	160	MAX	1770	MIN	16	AC-FT	115500		

GUNNISON RIVER BASIN

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 (0.3 km) upstream from mouth, and 10.5 mi (16.9 km) west of Delta.

DRAINAGE AREA.--209 mi² (541 km²).

PERIOD OF RECORD.--April 1922 to September 1923, May 1976 to current year.

REVISED RECORDS.--WSP 1313: 1923 (monthly runoff).

GAGE.--Water-stage recorder. Altitude of gage is 4,810 ft (1,463 m), from topographic map. Prior to September 1923, nonrecording gage at different datum operated by State Engineer of Colorado.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,050 ft³/s (58.1 m³/s) July 24, 1977, gage height, 8.54 ft (2.603 m), from floodmarks, from rating curve extended above 320 ft³/s (9.1 m³/s), on basis of slope-area measurement of peak flow; minimum daily, 0.02 ft³/s (0.001 m³/s) July 3, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,050 ft³/s (29.7 m³/s) at 0300 May 25, gage height, 6.18 ft (1.884 m); minimum daily, 0.18 ft³/s (0.005 m³/s) Sept. 24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.6	5.9	9.9	27	47	13	18	503	444	30	3.6	3.5
2	8.1	5.5	13	39	36	16	16	577	422	28	2.9	3.2
3	8.0	6.2	10	45	21	13	15	351	410	28	2.9	3.1
4	7.7	9.5	13	59	29	10	15	284	405	29	3.3	3.3
5	6.2	9.1	11	71	39	11	15	388	373	30	3.5	3.8
6	4.1	8.9	29	80	30	14	15	548	373	31	3.5	4.0
7	4.1	9.0	17	71	22	16	18	533	363	32	4.0	4.0
8	4.1	8.9	14	80	25	24	22	312	457	33	4.8	4.1
9	4.0	9.0	21	91	32	19	25	228	396	33	5.3	4.3
10	4.1	8.8	35	93	40	14	34	182	324	36	5.4	4.4
11	4.0	8.8	34	85	29	14	31	153	274	30	5.4	3.9
12	4.1	28	36	79	23	16	26	134	251	26	6.0	3.6
13	4.0	18	47	70	21	17	25	159	232	22	5.5	3.4
14	4.1	13	58	72	102	18	27	198	207	18	6.2	3.5
15	4.1	12	66	72	109	19	35	296	183	14	6.6	3.4
16	4.2	10	65	62	35	19	61	430	159	11	6.6	3.2
17	4.3	9.4	71	51	20	18	105	313	136	8.5	6.7	2.8
18	4.2	8.4	87	51	16	15	162	637	102	6.1	7.0	2.8
19	4.2	8.9	133	59	16	14	214	784	92	4.5	7.1	2.3
20	4.4	9.4	100	33	16	17	196	806	77	2.8	8.0	2.1
21	4.5	9.6	81	36	14	29	206	802	63	3.0	6.6	5.9
22	4.3	9.8	74	35	13	19	257	770	53	3.0	5.6	4.8
23	4.5	9.4	63	30	12	15	343	825	47	3.0	5.4	3.2
24	4.3	9.5	53	43	12	15	422	792	43	3.0	5.9	1.8
25	4.7	11	47	57	12	15	361	812	38	2.9	5.4	3.1
26	4.5	10	40	34	12	16	327	762	34	2.3	4.5	1.4
27	4.7	9.4	42	39	12	17	320	816	28	2.5	3.8	1.9
28	4.5	7.2	52	41	11	20	361	755	26	4.9	3.5	1.9
29	4.7	9.4	52	43	---	21	433	723	25	4.9	3.3	1.7
30	4.9	10	52	29	---	17	440	685	26	4.7	3.6	1.9
31	5.3	---	43	44	---	20	---	533	---	4.7	3.2	---
TOTAL	150.5	302.0	1468.9	1721	806	521	4545	16091	6063	491.8	155.1	79.38
MEAN	4.85	10.1	47.4	55.5	28.8	16.8	152	519	202	15.9	5.00	2.65
MAX	8.1	28	133	93	109	29	440	825	457	36	8.0	4.4
MIN	4.0	5.5	9.9	27	11	10	15	134	25	2.3	2.9	1.8
AC-FT	299	599	2910	3410	1600	1030	9020	31920	12030	975	308	157

CAL YR 1978 TOTAL 17307.45 MEAN 47.4 MAX 603 MIN 24 AC-FT 34330
WTR YR 1979 TOTAL 32394.68 MEAN 88.8 MAX 825 MIN 18 AC-FT 64250

NOTE.--NO GAGE-HEIGHT RECORD OCT. 1-31.

GUNNISON RIVER BASIN

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09152000 KANNAH CREEK NEAR WHITEWATER, CO

LOCATION.--Lat 38°57'42", long 108°13'47", in NW¼SW¼ sec.34, T.12 S., R.97 W., Mesa County, Hydrologic Unit 14020005, on right bank at downstream side of county bridge, 0.2 mi (0.3 km) downstream from intake of pipeline for Grand Junction water supply, and 12 mi (19 km) east of Whitewater.

DRAINAGE AREA.--61.9 mi² (160.3 km²).

PERIOD OF RECORD.--October 1917 to September 1921, September 1922 to current year. Monthly discharge only for some periods, published in WSP 1313. Prior to October 1960, published as Kannah Creek near Whitewater.

REVISED RECORDS.--WSP 1924: Drainage area.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 6,060 ft (1,847 m), from topographic map. Prior to Sept. 30, 1932, nonrecording gage, and Sept. 30, 1932, to Oct. 14, 1935, water-stage recorder, at site 300 ft (91 m) upstream at different datum.

REMARKS.--Records good except those for periods of no gage-height record and indefinite stage-discharge relation, which are poor. Diversion above station for municipal supply of Grand Junction and minor diversion by Raber ditch for irrigation of about 60 acres (243,000 m²) below station. Records of municipal supply furnished by Colorado Division of Water Resources and monthly figures are adjusted to show total flow of stream. Daily figures are for stream below city and Raber ditch diversions. Regulation by a few small reservoirs above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE (COMBINED FLOW).--61 years (water years 1918-21, 1923-79), 37.8 ft³/s (1.070 m³/s), 27,390 acre-ft/yr (33.8 hm³/yr).

EXTREMES (COMBINED FLOW) FOR PERIOD OF RECORD.--Maximum discharge observed, 1,640 ft³/s (46.4 m³/s) June 6, 1921, gage height, 4.5 ft (1.37 m), site and datum then in use, from rating curve extended above 700 ft³/s (20 m³/s); minimum daily, 3.4 ft³/s (0.096 m³/s) Nov. 27, 1976.

EXTREMES (COMBINED FLOW) FOR CURRENT YEAR.--Maximum discharge, 448 ft³/s (12.7 m³/s) at 2300 May 28, gage height, 2.25 ft (0.689 m); minimum daily, 5.9 ft³/s (0.167 m³/s) Mar. 9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.0	3.0	2.2	.70	.54	.48	1.1	23	265	78	14	3.0
2	5.0	3.0	2.3	.62	.54	.49	1.2	18	260	78	14	2.5
3	4.6	3.2	3.8	.72	.50	.46	3.5	14	260	68	20	2.5
4	5.0	2.5	3.5	.74	.44	.42	1.2	15	260	62	21	2.0
5	3.2	2.5	3.0	.67	.40	.44	1.0	21	255	51	21	1.5
6	3.2	2.2	2.6	.62	.43	.46	1.8	22	305	50	23	1.5
7	3.0	2.0	2.2	.54	.44	.45	3.2	23	305	44	31	13
8	3.8	1.8	1.7	.49	.47	.45	3.8	20	224	42	34	18
9	4.6	2.0	1.7	.54	.48	.43	4.6	18	170	39	33	21
10	4.3	2.0	1.9	.59	.50	.42	4.0	16	135	36	28	20
11	4.3	2.3	2.0	.62	.49	.41	3.0	15	123	37	26	19
12	4.3	4.3	2.0	.56	.49	.43	2.2	14	138	34	23	15
13	4.0	2.3	2.1	.53	.50	.45	2.8	15	166	32	24	12
14	5.0	2.3	2.1	.54	.50	.50	3.8	16	182	31	22	10
15	6.6	1.8	2.1	.58	.48	.50	6.2	20	186	30	24	9.0
16	6.2	3.5	2.2	.58	.46	.50	9.7	27	178	28	24	8.0
17	5.8	4.0	2.2	.62	.44	.70	14	28	160	27	24	7.0
18	5.8	2.2	3.0	.58	.43	.90	17	41	123	21	23	5.0
19	5.4	2.5	2.7	.56	.45	.80	14	88	98	19	24	4.0
20	4.0	3.5	2.5	.54	.47	1.1	11	95	82	18	23	18
21	3.5	3.0	1.9	.51	.47	1.2	12	105	82	19	20	12
22	5.4	2.2	1.7	.49	.47	1.0	14	163	88	17	13	9.0
23	3.8	2.2	1.5	.48	.44	1.4	17	246	88	13	13	7.0
24	3.8	2.2	1.6	.49	.40	1.2	18	246	75	17	9.0	6.0
25	3.8	2.3	1.4	.55	.38	1.4	14	270	70	17	8.0	5.0
26	3.5	2.3	1.3	.54	.44	1.4	11	275	65	15	7.0	5.0
27	3.5	2.8	1.2	.52	.46	1.2	10	290	55	14	6.0	6.0
28	3.0	4.0	1.2	.57	.45	1.2	16	360	58	14	5.0	6.0
29	3.0	3.8	1.2	.53	---	1.2	16	378	70	14	6.0	6.0
30	3.0	2.3	1.2	.51	---	1.0	19	344	65	13	5.0	15
31	3.2	---	1.0	.50	---	1.1	---	300	---	14	5.0	---
TOTAL	132.6	80.0	63.0	17.63	12.96	24.09	256.1	3526	4591	992	573.0	269.0
MEAN	4.28	2.67	2.03	.57	.46	.78	8.54	114	153	32.0	18.5	8.97
MAX	6.6	4.3	3.8	.74	.54	1.4	19	378	305	78	34	21
MIN	3.0	1.8	1.0	.48	.38	.41	1.0	14	55	13	5.0	1.5
AC-FT	263	159	125	35	26	48	508	6990	9110	1970	1140	534
ADJUSTED FOR DIVERSIONS												
MEAN	12.0	10.1	9.77	8.76	8.46	8.41	16.6	123	164	42.9	27.6	16.5
AC-FT	738	601	601	539	470	517	988	7560	9760	2640	1700	982
OBSERVED												
CAL YR 1978	TOTAL 10903.92			MEAN 29.9	MAX 384	MIN .03	AC-FT 21630	ADJUSTED				
WTR YR 1979	TOTAL 10537.38			MEAN 28.9	MAX 373	MIN .38	AC-FT 20900	MEAN 37.1	AC-FT 26860			
								MEAN 37.4	AC-FT 27080			

NOTE.--NO GAGE-HEIGHT RECORD DEC. 7 TO MAR. 13.

GUNNISON RIVER BASIN

09152500 GUNNISON RIVER NEAR GRAND JUNCTION, CO

LOCATION.--Lat 38°59'00", long 108°27'00", near center of sec.14, T.2 S., R.1 E., Ute Meridian, Mesa County, Hydrologic Unit 14020005, on right bank 180 ft (55 m) upstream from bridge on State Highway 141, 0.4 mi (0.6 km) downstream from Whitewater Creek, 0.5 mi (0.8 km) south of Whitewater, and 8 mi (13 km) southeast of Grand Junction.

DRAINAGE AREA.--7,928 mi² (20,534 km²).

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 (1,410.651 m), National Geodetic Vertical Datum of 1929. See WSP 1733 or 1924 for history of changes prior to October 1959.

REMARKS.--Records good, except those for period of no gage-height record, which are fair. Records show flow that enters Colorado River from Gunnison River basin except for about 60 ft³/s (1.7 m³/s) diverted below gage during irrigation season. Natural flow of river affected by diversions for irrigation of about 233,000 acres (943 km²) above station, storage reservoirs, and return flow from irrigated lands.

AVERAGE DISCHARGE.--71 years (water years 1897-99, 1902-6, 1917-79), 2,529 ft³/s (71.62 m³/s), 1,832,000 acre-ft/yr (2,260 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 35,700 ft³/s (1,010 m³/s) May 23, 1920, gage height, 14.95 ft (4.557 m), site and datum then in use, from rating curve extended above 22,000 ft³/s (623 m³/s); minimum daily, 106 ft³/s (3.00 m³/s) July 20, 1934.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 13,500 ft³/s (382 m³/s) at 1800 May 29, gage height, 9.36 ft (2.853 m); minimum daily, 490 ft³/s (13.9 m³/s) Oct. 9-13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1200	1620	1670	2180	2320	3100	3030	5990	8240	4600	1500	1650
2	1200	1620	1950	2110	2330	3140	2980	6950	7150	4500	1470	1680
3	1200	1660	1840	2190	2170	3150	3000	6410	6950	4300	1450	1690
4	1150	1660	1700	2330	2200	3140	2930	5860	7100	4600	1430	1560
5	650	1700	1790	2470	2370	3080	2920	5610	7330	4450	1430	1550
6	600	1500	1930	2300	2510	3060	3060	6190	8010	4300	1440	1600
7	570	1100	2250	2280	2500	3200	3310	6850	8620	4500	1380	1630
8	550	840	2340	2180	2450	3320	3500	6370	10400	4200	1400	1650
9	490	1300	2240	2190	2430	3460	3830	5690	10200	4000	1370	1660
10	490	1570	2210	2260	2490	3230	3900	5050	8320	3900	1410	1640
11	490	1580	2070	2290	2290	3170	3550	5210	6860	3700	1350	1640
12	490	1750	2150	2230	2320	3170	3200	4930	6580	3500	1320	1690
13	490	2000	1850	2230	2390	3200	3300	4970	6770	3300	1350	1790
14	520	1300	1790	2170	2900	3220	3580	4720	6720	3100	1420	1790
15	940	900	1980	2250	3060	3290	3980	5210	7820	3050	1540	1820
16	1000	1410	2420	2280	3210	3240	4620	5850	8050	2950	1640	1880
17	960	1920	2670	2240	3240	3220	5260	7180	7700	2900	1760	1960
18	900	1620	2550	2290	3200	3200	5770	8100	6880	2280	1830	1920
19	1000	913	2680	2240	3250	3140	6760	9900	6180	1980	2070	2050
20	1050	867	2470	2200	3350	3070	5340	10900	5270	1840	2160	2080
21	1080	1310	2200	2200	3300	3150	4990	11400	4440	1670	2120	2060
22	1170	1770	2040	2380	3250	3310	5280	11100	4270	1750	1950	2120
23	1300	1770	2410	2240	3150	3110	6110	11000	4410	1850	1920	2230
24	1500	1770	2310	2340	3150	2980	7430	10900	4800	1850	1880	2130
25	1800	1570	2200	2270	3200	2950	7210	10100	4800	1750	1740	2070
26	1900	1050	2250	2250	3150	3040	6540	11500	4750	1580	1760	2050
27	2000	1060	2320	2180	3100	3080	6180	13000	4650	1570	1730	2100
28	2100	1360	2390	2210	3000	3160	6340	13200	4500	1570	1690	2100
29	1900	1630	2310	2190	---	3150	6560	13200	4400	1560	1570	2050
30	1750	1630	2260	2130	---	2990	6040	12500	4400	1570	1540	2050
31	1730	---	2190	2220	---	3070	---	10900	---	1540	1710	---
TOTAL	34170	43750	67430	69520	78280	97790	140500	256740	196570	90210	50320	55890
MEAN	1102	1458	2175	2243	2796	3155	4683	8282	6552	2910	1623	1863
MAX	2100	2000	2680	2470	3350	3460	7430	13200	10400	4600	2160	2230
MIN	490	840	1670	2110	2170	2950	2920	4720	4270	1540	1320	1550
AC-FT	67780	86780	133700	137900	155300	194000	278700	509200	389900	178900	99810	110900

CAL YR 1978 TOTAL 736788 MEAN 2019 MAX 7510 MIN 490 AC-FT 1461000
WTR YR 1979 TOTAL 1181170 MEAN 3236 MAX 13200 MIN 490 AC-FT 2343000

NOTE.--NO GAGE-HEIGHT RECORD OCT. 1 TO NOV. 15.

GUNNISON RIVER BASIN

09152500 GUNNISON RIVER NEAR GRAND JUNCTION, CO--Continued
(Irrigation network station)
(National stream-quality accounting network station)

WATER-QUALITY RECORDS

PERIOD OF RECORD--October 1931 to current year.

PERIOD OF DAILY RECORD--

SPECIFIC CONDUCTANCE: November 1935 to September 1974, September 1975 to current year.

WATER TEMPERATURES: April 1949 to September 1974, September 1975 to current year.

INSTRUMENTATION--Water-quality monitor since September 1975.

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

EXTREMES FOR PERIOD OF DAILY RECORD--

SPECIFIC CONDUCTANCE: Maximum, 3,000 micromhos on several days during July and September 1974; minimum, 194 micromhos June 6, 1979.

WATER TEMPERATURES: Maximum, 30.0°C Aug. 13, 1958; minimum, freezing point on many days during winter months most years.

EXTREMES FOR CURRENT YEAR--

SPECIFIC CONDUCTANCE: Maximum, 2,030 micromhos Sept. 6; minimum, 194 micromhos June 6.

WATER TEMPERATURES: Maximum, 24.5°C Aug. 7, 10; minimum, 0.0°C many days during December to February.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (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, (COLS. PER 100 ML)	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L CACO3)
OCT 04...	1210	1330	1040	8.3	13.0	3.0	9.9	K15	54	460	440
NOV 15...	1330	973	1240	8.5	7.5	12	11.8	K10	320	560	390
29...	1500	1600	900	8.4	3.0	--	--	--	--	380	230
DEC 13...	1030	2180	700	8.2	.5	4.0	12.0	22	150	320	190
FEB 02...	1230	2450	600	8.4	.5	6.5	13.7	<1	32	240	140
MAR 22...	1330	3410	780	8.3	6.0	130	9.9	140	K2100	300	180
APR 30...	1200	5980	340	8.0	10.0	140	9.7	200	380	130	55
MAY 31...	1430	12000	350	7.8	11.5	230	8.9	350	920	140	77
JUN 20...	1340	5260	537	7.9	14.0	130	8.7	400	400	210	130
AUG 02...	1130	1460	1200	8.4	19.0	7.6	10.4	52	K5	450	310
20...	1245	2130	1100	8.2	16.0	100	7.6	--	--	490	340

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 (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	ALKA- LINITY (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)
OCT 04...	120	38	65	1.3	3.5	--	--	17	450	58	.5
NOV 15...	140	51	98	1.8	4.5	--	--	170	560	17	.5
29...	99	32	64	1.4	3.3	170	4	150	390	7.8	.3
DEC 13...	79	29	50	1.2	3.5	--	--	130	270	6.6	.3
FEB 02...	61	22	38	1.1	2.7	--	--	100	210	5.7	.2
MAR 22...	74	27	55	1.4	3.2	--	--	120	270	7.6	.3
APR 30...	35	11	18	.7	2.2	--	--	78	90	3.5	.2
MAY 31...	39	11	16	.6	2.1	--	--	66	110	2.9	.2
JUN 20...	55	18	28	.8	2.3	--	--	80	170	4.4	.3
AUG 02...	120	37	66	1.4	4.2	--	--	140	460	9.2	.5
20...	130	40	64	1.3	4.0	--	--	150	470	9.3	.5

K BASED ON NON-IDEAL COLONY COUNT.

GUNNISON RIVER BASIN

09152500 GUNNISON RIVER NEAR GRAND JUNCTION, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	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)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N)	NITRO- GEN+AM- MONIA + ORGANIC TOTAL (MG/L AS N)
OCT 04...	12	825	757	1.12	2960	.98	--	.02	.54	.56
NOV 15...	16	1050	989	1.43	2760	1.5	--	.01	.52	.53
29...	12	--	701	.95	3030	--	.96	--	--	--
DEC 13...	14	578	531	.79	3400	.85	--	.01	.34	.35
FEB 02...	12	421	412	.57	2790	.53	--	.01	.22	.23
MAR 22...	12	543	521	.74	5000	.65	--	.03	.20	.23
APR 30...	11	232	218	.32	3750	--	--	--	--	--
MAY 31...	9.5	234	230	.32	7580	.32	--	.05	.75	.80
JUN 20...	12	363	338	.49	5160	.46	--	.03	1.4	1.4
AUG 02...	14	804	795	1.09	3170	1.1	--	.00	.06	.06
20...	5.9	633	814	.86	3640	1.4	--	.04	.42	.46

DATE	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)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	PHYTO- PLANK- TON, TOTAL (CELLS PER ML)
OCT 04...	.64	1.5	.03	.00	--	10	10	--	5.4	--
NOV 15...	.46	2.0	.03	.01	--	--	--	4.0	--	--
29...	--	--	--	.00	.01	10	20	--	--	--
DEC 13...	.32	1.2	.03	.01	--	--	--	3.7	--	--
FEB 02...	.17	.76	.02	.01	--	10	20	--	3.2	--
MAR 22...	.18	.88	.01	.02	--	--	--	5.1	--	1500
APR 30...	.40	--	.20	.01	--	20	7	--	5.5	--
MAY 31...	.20	1.1	.21	.01	--	--	--	36	--	260
JUN 20...	.01	1.9	.05	.01	--	--	--	8.1	--	370
AUG 02...	.01	1.2	--	.09	--	0	20	--	4.2	1900
20...	.47	1.9	.19	.04	--	--	--	9.1	--	1900

GUNNISON RIVER BASIN

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09152500 GUNNISON RIVER NEAR GRANO JUNCTION, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

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)
OCT 04...	1210	1	1	0	0	0	1	0
FEB 02...	1230	1	1	0	50	1	2	20
APR 30...	1200	2	1	200	70	3	<1	10
AUG 02...	1130	--	1	100	60	2	4	0

DATE	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)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	LEAD, DIS- SOLVED (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)
OCT 04...	0	0	0	8	4	300	14	14	30
FEB 02...	0	2	<3	58	6	440	22	23	40
APR 30...	10	4	<3	12	2	5200	65	9	190
AUG 02...	0	0	<3	4	2	240	19	32	40

DATE	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY DIS- SOLVED (UG/L AS HG)	SELE- NIUM, TOTAL (UG/L AS SE)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	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)
OCT 04...	.0	.0	13	5	0	0	20	10
FEB 02...	.0	.0	7	4	1	0	30	5
APR 30...	--	.0	--	0	0	0	50	20
AUG 02...	--	.0	7	8	0	0	30	<3

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	17.0	13.5	12.0	9.0	---	---	---	---			9.0	---
2	17.0	14.0	12.0	9.5	---	---	---	---			9.5	7.0
3	16.0	13.0	12.0	9.5	---	---	---	---			10.0	7.0
4	15.0	11.5	12.0	9.5	---	---	---	---			10.0	6.5
5	15.0	12.0	11.5	9.0	---	---	---	---			10.5	7.0
6	15.0	12.0	10.5	8.5	---	---	---	---			14.5	10.0
7	15.0	12.0	10.0	8.0	---	---	---	---			13.5	9.5
8	15.0	12.5	9.5	7.5	---	---	---	---			13.5	9.5
9	16.0	13.0	9.0	7.5	---	---	---	---			12.0	9.0
10	16.0	13.0	9.5	8.0	---	---	---	---			11.5	8.5
11	16.0	13.0	9.0	4.0	---	---	---	---			---	8.0
12	16.0	13.0	---	---	---	---	---	---			---	---
13	14.5	12.0	---	---	1.0	.0	---	---			---	---
14	14.5	11.5	---	---	---	---	---	---			---	---
15	14.0	10.5	7.5	---	---	---	---	---			---	---
16	13.0	10.5	6.5	5.0	---	---	---	---			---	---
17	13.0	10.5	7.0	5.0	---	---	---	---			---	---
18	14.0	12.0	7.0	5.0	---	---	---	---			---	---
19	14.0	11.5	6.5	5.0	---	---	---	---			---	---
20	12.5	11.0	6.5	4.5	---	---	---	---			---	---
21	12.0	10.5	6.5	4.5	---	---	---	---			---	---
22	12.0	11.0	7.5	5.0	---	---	---	---			---	---
23	---	---	7.0	5.5	---	---	---	---			---	---
24	---	---	---	---	---	---	1.0	.5			---	---
25	---	---	---	---	---	---	1.0	.0			---	---
26	---	---	---	---	---	---	---	---			9.0	---
27	10.5	---	---	---	---	---	---	---			7.5	6.5
28	11.0	8.5	---	---	---	---	---	---			8.5	5.5
29	11.0	9.0	3.5	2.5	---	---	---	---			8.5	5.5
30	10.5	9.0	---	---	---	---	---	---			7.0	5.0
31	11.0	8.5	---	---	---	---	---	---			7.0	5.5

GUNNISON RIVER BASIN

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09152500 GUNNISON RIVER NEAR GRAND JUNCTION, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	6.0	4.5	13.5	12.0	16.0	14.5	18.5	17.0	23.5	20.0	21.0	17.0
2	7.0	4.5	14.5	9.0	16.5	15.0	18.0	16.5	23.5	19.5	20.5	17.0
3	---	---	11.0	9.5	16.5	15.0	17.5	15.5	23.5	19.5	21.0	17.0
4	---	---	11.5	10.0	17.5	15.5	16.0	14.0	23.5	19.5	21.0	17.5
5	---	---	13.0	10.5	17.5	16.5	17.5	15.0	24.0	20.5	21.0	13.5
6	---	---	11.5	10.0	18.5	10.5	18.0	7.0	24.0	21.0	20.5	17.0
7	---	---	11.5	6.5	17.5	15.5	---	---	24.5	21.0	21.0	17.0
8	---	---	9.0	7.5	15.5	6.0	---	---	23.5	21.5	20.5	17.0
9	---	---	8.0	7.5	16.0	13.5	---	---	24.0	20.5	21.0	16.5
10	---	---	9.0	7.5	16.0	6.5	---	---	24.5	20.5	21.0	17.5
11	5.5	---	9.0	8.0	18.5	14.5	---	---	23.5	20.5	---	---
12	6.5	5.0	10.5	9.0	19.0	16.5	---	---	23.0	20.0	---	---
13	7.5	5.5	---	---	19.5	17.5	---	---	22.0	20.5	---	---
14	9.5	7.0	---	---	19.5	17.0	---	---	21.0	19.0	---	---
15	---	---	---	---	19.0	17.5	---	---	19.0	---	---	---
16	---	---	---	---	18.0	16.0	---	---	20.0	17.5	---	---
17	---	---	---	---	18.0	16.0	---	---	20.5	17.5	---	---
18	---	---	---	---	17.0	7.0	22.5	18.0	19.0	17.5	---	---
19	---	---	---	---	14.0	5.5	22.5	19.0	19.0	16.0	---	---
20	---	---	---	---	15.5	13.0	22.0	19.0	18.0	16.0	---	---
21	---	---	---	---	17.5	7.0	21.5	19.5	19.5	15.5	---	---
22	---	---	---	---	18.5	16.0	23.0	19.5	22.0	17.0	---	---
23	---	---	---	---	18.5	16.5	23.0	20.0	21.5	16.0	---	---
24	---	---	---	---	19.0	16.5	23.5	20.0	21.0	18.0	---	---
25	---	---	---	---	19.0	16.5	24.0	20.5	20.0	17.5	---	---
26	---	---	16.5	7.0	18.5	16.5	24.0	21.0	19.0	16.5	---	---
27	---	---	17.5	8.0	19.0	16.5	23.5	21.0	20.5	16.5	---	---
28	---	---	17.0	15.0	19.5	17.0	23.0	20.0	21.0	17.0	---	---
29	---	---	15.0	14.0	19.5	17.5	23.5	20.0	21.0	17.5	---	---
30	---	---	15.0	6.5	19.0	18.0	23.5	20.0	20.0	17.5	---	---
31	---	---	16.0	13.5	---	---	23.5	19.5	20.5	17.0	---	---

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDED (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT						MAR					
04...	1210	1330	22	79	--	22...	1300	3410	284	2610	--
04...	1300	1150	22	68	--	APR					
NOV						30...	1145	5980	443	7150	--
15...	1300	970	92	241	91	AUG					
FEB						02...	1115	1460	68	268	--
02...	1225	2490	54	363	--						

GUNNISON RIVER BASIN

09152500 GUNNISON RIVER NEAR GRAND JUNCTION, CO--Continued

PHYTOPLANKTON ANALYSES, OCTOBER 1978 TO AUGUST 1979

DATE TIME	MAR 22,79 1330	MAY 31,79 1430	JUN 20,79 1340	AUG 2,79 1130	AUG 20,79 1245
TOTAL CELLS/ML	1500	260	370	1500	1900
DIVERSITY: DIVISION	1.1	0.0	1.3	0.9	1.0
..CLASS	1.1	0.0	1.3	0.9	1.0
..ORDER	1.4	1.0	1.6	1.4	1.0
...FAMILY	2.6	1.0	1.7	2.4	1.4
....GENUS	2.6	1.0	1.7	2.6	1.4

ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)										
..CHLOROPHYCEAE										
...CHLOROCOCCALES										
...MICRACTINIACEAE										
....MICRACTINIUM	--	-	--	-	210#	55	57	4	--	-
...DOCYSTACEAE							14	1	--	-
....ANKISTRODESMUS	--	-	--	-	--	-			--	-
...SCENEDESMACEAE										
....SCENEDESMUS	570#	38	--	-	--	-	370#	25	720#	38
...ZYGNEMATALES										
...DESMIDIACEAE							14	1	--	-
....CLOSTERIUM	--	-	--	-	--	-			--	-
CHRYSOPHYTA										
..BACILLARIOPHYCEAE										
...CENTRALES										
...COSCINODISCACEAE										
....CYCLOTELLA	110	7	150#	60	90#	24	160	10	--	-
...PENNALES										
...ACHNANTHACEAE							14	1	--	-
....ACHNANTHES	--	-	--	-	--	-			--	-
...CYMBELLACEAE										
....CYMBELLA	35	2	--	-	--	-	--	-	--	-
...EPITHEMIA	35	2	--	-	--	-	--	-	--	-
...DIATOMACEAE										
....DIATOMA	140	10	--	-	--	-	86	6	--	-
...FRAGILARIACEAE										
....SYNEDRA	--	-	--	-	--	-	29	2	--	-
...NAVICULACEAE										
....NAVICULA	280#	19	--	-	39	10	560#	37	900#	48
...PINNULARIA	--	-	--	-	--	-	29	2	--	-
...NITZSCHACEAE										
....NITZSCHIA	140	10	100#	40	13	3	170	11	270	14
...SURIRELLACEAE										
....SURIRELLA	140	10	--	-	--	-	--	-	--	-
CYANOPHYTA (BLUE-GREEN ALGAE)										
..CYANOPHYCEAE										
...CHROOCOCCALES										
...CHROOCOCCACEAE										
....ANACYSTIS	--	-	--	-	26	7	--	-	--	-
EUGLENOPHYTA (EUGLENOIDS)										
..EUGLENOPHYCEAE										
...EUGLENALES										
...EUGLENACEAE										
....TRACHELOMONAS	35	2	--	-	--	-	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%

* - OBSERVED ORGANISM, MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

09152600 ORCHARD MESA DRAIN AT GRANO JUNCTION, CO

LOCATION.--Lat 39°02'49", long 108°34'17", in NE¼NE¼ sec.27, T.1 S., R.1 W., Ute Meridian, Mesa County, Hydrologic Unit 14020005, on right bank 350 ft (110 m) upstream from mouth and 1.6 mi (2.6 km) south of city hall in Grand Junction.

DRAINAGE AREA.--3.70 mi² (9.58 km²).

PERIOD OF RECORD.--April 1973 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 4,565 ft (1,391 m), from topographic map.

REMARKS.--Records good except those for winter periods, which are fair. Orchard Mesa Canal imports water from the Colorado River into basin above station for irrigation. Flow is mostly waste water from canal and return flow from land irrigated under the canal. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--6 years (water years 1974-79), 7.76 ft³/s (0.2198 m³/s), 5,620 acre-ft/yr (6.93 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 42 ft³/s (1.19 m³/s) Aug. 8, 1977, gage height, 4.94 ft (1.506 m); maximum gage height, 4.95 ft (1.509 m) May 6, 1973; minimum daily discharge, 0.48 ft³/s (0.014 m³/s) Apr. 2, 3, 5, 6, 1976, Mar. 18, 20, 1977, Apr. 8, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 29 ft³/s (0.82 m³/s) at 2200 May 28, gage height, 4.78 ft (1.457 m); minimum daily, 0.76 ft³/s (0.022 m³/s) Apr. 16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	2.8	1.8	.94	.96	1.1	1.4	9.5	14	12	5.8	12
2	15	2.9	2.1	.94	.96	1.3	1.3	10	14	13	6.7	12
3	16	2.9	1.5	.92	.94	1.3	1.3	12	15	14	6.2	12
4	17	3.0	1.6	.92	.92	1.2	1.3	12	14	12	7.0	13
5	17	2.9	1.6	.88	.90	1.2	1.2	13	13	11	7.4	12
6	18	2.8	1.5	.86	.90	1.4	1.2	9.7	12	9.8	6.2	12
7	18	2.7	1.4	.84	.88	1.5	1.0	9.9	13	11	6.1	12
8	17	2.7	1.3	.87	.86	1.6	1.1	14	17	10	8.3	14
9	17	2.7	1.3	.98	.84	1.5	1.1	13	18	10	7.5	15
10	17	2.7	1.2	.96	.82	1.3	1.4	10	16	9.3	8.2	15
11	18	2.6	1.2	.95	.84	1.4	1.3	10	15	9.2	9.4	13
12	17	2.5	1.2	1.0	.84	1.5	1.1	11	14	9.7	10	13
13	17	2.3	1.2	.92	.87	1.4	.95	11	15	9.6	10	16
14	17	2.2	1.1	.90	.81	1.4	.92	10	15	11	11	15
15	17	2.1	1.1	.93	.86	1.3	.81	11	15	10	14	13
16	15	2.1	1.3	.91	1.1	1.3	.76	13	13	9.0	18	12
17	15	2.1	1.6	.96	1.1	1.2	2.3	13	10	8.5	17	14
18	15	2.1	1.8	1.2	1.4	1.1	2.5	11	9.5	8.8	16	14
19	15	2.1	1.2	1.1	1.1	1.1	4.8	9.8	8.2	7.9	12	15
20	14	2.0	1.1	.91	.93	.90	11	11	7.4	8.4	19	15
21	14	2.0	1.1	.92	1.1	2.2	12	11	8.4	8.5	14	15
22	7.9	1.9	1.0	.94	1.1	1.6	7.8	11	8.5	8.8	14	15
23	4.6	1.9	1.0	.96	1.1	1.3	7.3	12	11	8.4	12	15
24	4.0	1.8	.98	.96	1.0	1.3	10	13	11	6.9	14	13
25	3.6	2.1	.96	.98	1.4	1.3	13	14	10	7.1	12	15
26	3.3	2.0	.96	.98	1.1	1.3	9.5	13	9.0	7.3	13	17
27	3.3	1.8	.96	.98	1.1	1.3	9.7	12	11	7.6	11	14
28	3.3	1.7	.96	1.0	.99	1.2	10	18	8.5	7.3	9.8	16
29	3.2	2.1	.96	1.0	---	1.3	9.1	23	8.6	6.9	9.3	18
30	3.1	2.1	.96	.98	---	1.2	8.3	18	9.5	6.5	13	18
31	2.7	---	.94	.96	---	2.3	---	15	---	5.4	12	---
TOTAL	381.0	69.6	38.88	29.55	27.72	42.30	135.44	383.9	363.6	284.9	339.9	425
MEAN	12.3	2.32	1.25	.95	.99	1.36	4.51	12.4	12.1	9.19	11.0	14.2
MAX	18	3.0	2.1	1.2	1.4	2.3	13	23	18	14	19	18
MIN	2.7	1.7	.94	.84	.81	.90	.76	9.5	7.4	5.4	5.8	12
AC-FT	756	138	77	59	55	84	269	761	721	565	674	843
CAL YR 1978	TOTAL	2557.71	MEAN 7.01	MAX 18	MIN .48	AC-FT 5070						
WTR YR 1979	TOTAL	2521.79	MEAN 6.91	MAX 23	MIN .76	AC-FT 5000						

LEACH CREEK BASIN

09152650 LEACH CREEK AT DURHAM, CO

LOCATION.--Lat 39°05'27", long 108°36'25", in NW¼NW¼ sec.9, T.1 S., R.1 W., Ute Meridian, Mesa County, Hydrologic Unit 1401005, on left bank 40 ft (12 m) downstream from culvert on U.S. Highways 6 and 50, 0.5 mi (0.8 km) northwest of Durham, and 2.9 mi (4.7 km) northwest of city hall in Grand Junction.

DRAINAGE AREA.--24.8 mi² (64.2 km²).

PERIOD OF RECORD.--April 1973 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 4,540 ft (1,384 m), from topographic map.

REMARKS.--Records good except those for winter period, which are fair. Flow is mostly return flow and waste water from lands irrigated under the 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.--6 years (water years 1974-79), 31.1 ft³/s (0.881 m³/s), 22,530 acre-ft/yr (27.8 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 632 ft³/s (17.9 m³/s) July 18, 1974, gage height, 6.76 ft (2.060 m); minimum daily, 4.4 ft³/s (0.12 m³/s) Mar. 30, 1976.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 131 ft³/s (3.71 m³/s) at 2000 Apr. 30, gage height, 3.07 ft (0.936 m); minimum daily, 6.0 ft³/s (0.17 m³/s) Jan. 31.

CORRECTION.--CO-77-2: Date of maximum gage height should be Mar. 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40	41	13	7.6	7.0	7.6	8.8	25	55	56	41	58
2	40	25	14	7.0	7.0	9.6	8.2	28	54	53	41	60
3	39	18	12	7.3	6.7	12	7.2	30	47	50	42	60
4	37	14	12	7.5	6.6	10	7.2	30	45	55	43	59
5	37	13	13	7.5	6.4	11	7.2	32	44	56	45	59
6	37	13	13	7.7	6.8	16	7.4	31	46	52	47	53
7	37	13	12	7.5	6.7	17	7.4	36	46	54	45	52
8	49	12	11	7.4	6.6	14	7.4	54	60	52	45	52
9	40	13	10	7.2	6.6	10	7.8	57	61	51	46	52
10	36	13	9.8	7.2	6.6	7.8	9.0	55	58	49	49	57
11	36	12	9.4	7.6	6.5	7.4	8.1	50	50	49	50	56
12	36	13	9.2	7.8	6.5	7.4	7.8	48	43	39	51	54
13	36	12	9.2	7.6	7.3	7.2	7.7	47	40	28	51	57
14	38	12	9.0	7.5	7.3	6.6	7.9	48	41	49	47	59
15	40	12	9.0	7.6	7.5	7.3	8.3	48	43	54	51	58
16	42	12	9.0	7.6	7.7	7.0	8.4	42	41	46	55	58
17	44	12	10	7.6	7.9	6.8	9.0	42	42	44	59	58
18	45	11	11	8.1	7.8	6.6	9.3	40	44	45	62	52
19	46	11	12	8.1	7.5	6.5	9.1	38	36	45	73	53
20	48	11	9.8	7.6	7.2	9.3	9.3	39	34	43	88	53
21	45	12	8.9	7.4	7.5	11	41	35	32	42	82	52
22	45	12	8.9	7.5	7.9	8.8	78	37	33	48	64	50
23	43	11	8.7	7.1	7.3	7.3	55	39	38	55	55	50
24	42	12	8.5	7.0	7.5	6.7	22	40	41	48	52	49
25	38	13	8.4	6.8	7.1	6.8	19	42	44	48	53	49
26	35	13	8.3	6.8	7.6	6.8	27	43	47	49	55	50
27	33	12	8.2	6.9	7.2	6.8	25	42	48	48	51	51
28	33	12	8.2	6.8	7.3	7.0	23	43	47	48	52	52
29	34	12	8.2	7.1	---	8.1	25	49	48	49	51	51
30	33	12	8.0	6.9	---	7.3	38	52	50	49	57	49
31	36	---	7.9	6.0	---	11	---	57	---	47	57	---
TOTAL	1220	414	309.6	227.3	199.6	274.7	515.5	1299	1358	1501	1660	1623
MEAN	39.4	13.8	9.99	7.33	7.13	8.86	17.2	41.9	45.3	48.4	53.5	54.1
MAX	49	41	14	8.1	7.9	17	78	57	61	56	88	60
MIN	33	11	7.9	6.0	6.4	6.5	7.2	25	32	28	41	49
AC-FT	2420	821	614	451	396	545	1020	2580	2690	2980	3290	3220
CAL YR 1978	TOTAL	8792.0	MEAN	24.1	MAX	62	MIN	5.8	AC-FT	17440		
WTR YR 1979	TOTAL	10601.7	MEAN	29.0	MAX	88	MIN	6.0	AC-FT	21030		

09152900 ADOBE CREEK NEAR FRUITA, CO

LOCATION--Lat 39°08'13" N, long 108°41'48" W, in SW¼SW¼ sec.22, T.1 N., R.2 W., Ute Meridian, Mesa County, Hydrologic Unit 14010005, on right bank 30 ft (9 m) downstream from bridge on U.S. Highways 6 and 50, 0.8 mi (1.3 km) upstream from mouth, and 2.4 mi (3.9 km) southeast of Fruita.

DRAINAGE AREA--15.4 mi² (39.9 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD--April 1973 to current year.

REVISED RECORDS--WDR CO-77-2: 1973-76(M).

GAGE--Water-stage recorder. Altitude of gage is 4,520 ft (1,378 m) from topographic map.

REMARKS--Records good except those for periods of ice effect, which are fair. Flow is mostly return flow and waste water from lands irrigated under the Government Highline and Grand Valley Canals.

AVERAGE DISCHARGE--6 years, 21.2 ft³/s (0.600 m³/s), 15,360 acre-ft/yr (18.9 hm³/yr).

EXTREMES FOR PERIOD OF RECORD--Maximum discharge, 173 ft³/s (4.90 m³/s) July 4, 1977, gage height, 5.68 ft (1.731 m), from rating curve extended above 95 ft³/s (2.7 m³/s); minimum daily, 1.3 ft³/s (0.037 m³/s) Apr. 2, 3, 1976.

EXTREMES FOR CURRENT YEAR--Maximum discharge, 66 ft³/s (1.87 m³/s) at 1900 May 7, gage height, 3.33 ft (1.015 m); minimum daily, 1.4 ft³/s (0.040 m³/s) Jan. 31.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	41	11	4.0	2.3	1.7	2.2	4.5	40	42	50	42	42
2	40	9.1	4.1	2.0	2.1	5.2	3.3	44	43	47	43	40
3	38	8.7	3.4	2.3	2.2	3.8	2.8	36	40	49	42	38
4	39	8.5	3.4	2.6	2.2	3.0	2.7	32	40	40	46	37
5	38	6.9	3.7	2.6	2.2	3.2	2.7	35	43	37	44	41
6	44	6.0	3.6	2.6	2.2	6.0	2.7	38	43	36	39	42
7	42	5.3	3.4	2.3	2.2	7.8	2.6	49	49	34	41	46
8	43	5.3	2.5	1.8	2.2	8.4	2.5	35	49	38	38	48
9	41	5.3	2.9	2.1	2.3	5.7	2.6	34	43	44	40	47
10	42	5.1	3.2	2.2	2.3	4.1	2.8	26	48	44	44	47
11	42	5.2	3.4	2.2	2.3	5.9	2.9	32	45	44	42	49
12	43	5.4	3.5	2.3	2.2	7.4	2.8	32	42	30	38	41
13	42	4.9	3.5	2.1	2.3	5.0	2.6	27	45	28	41	46
14	37	4.7	3.5	1.6	1.9	2.7	2.6	27	40	39	44	45
15	38	4.6	3.5	1.9	1.9	2.8	2.5	32	42	45	47	46
16	37	4.4	3.5	2.0	2.2	2.6	2.4	36	43	43	47	42
17	35	4.4	3.4	2.1	2.4	2.5	2.5	36	45	40	41	40
18	36	4.3	4.1	2.3	2.2	2.3	2.5	34	45	42	44	41
19	37	4.3	5.1	2.3	1.9	2.3	2.4	34	45	46	43	45
20	39	4.3	2.9	2.1	1.8	2.6	2.2	36	42	45	44	42
21	41	4.3	2.7	1.8	2.2	3.6	2.2	36	37	48	43	44
22	43	4.2	2.5	2.0	2.2	4.6	2.3	41	35	41	44	44
23	45	4.0	2.7	1.7	2.1	2.6	2.4	43	40	48	44	46
24	48	4.1	2.7	1.5	1.9	2.4	2.4	46	42	39	42	49
25	43	4.2	2.6	1.5	1.8	2.5	5.4	49	39	44	44	52
26	38	4.0	2.2	1.5	1.9	2.4	16	44	37	41	46	48
27	27	3.7	2.6	1.6	2.1	2.4	24	41	38	45	49	49
28	27	3.8	2.6	1.7	1.9	2.8	26	40	37	49	48	46
29	28	3.8	2.5	1.6	---	8.7	28	44	40	46	45	48
30	26	3.8	2.5	1.5	---	3.9	31	41	47	42	41	46
31	25	---	2.4	1.4	---	3.7	---	39	---	43	40	---
TOTAL	1185	157.6	98.6	61.5	58.8	125.1	194.3	1159	1266	1307	1336	1337
MEAN	38.2	5.25	3.18	1.98	2.10	4.06	6.48	37.4	42.2	42.2	43.1	44.6
MAX	48	11	5.1	2.6	2.4	8.7	31	49	49	50	49	52
MIN	25	3.7	2.2	1.4	1.7	2.2	2.2	26	35	28	38	37
AC-FT	2350	313	196	122	117	248	385	2300	2510	2590	2650	2650

CAL YR 1978 TOTAL 8079.6 MEAN 22.1 MAX 52 MIN 1.6 AC-FT 16030
WTR YR 1979 TOTAL 8285.9 MEAN 22.7 MAX 52 MIN 1.4 AC-FT 16440

ADDBE CREEK BASIN

09152900 ADOBE CREEK NEAR FRUITA, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1973 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: April 1973 to current year.

WATER TEMPERATURES: April 1973 to current year.

INSTRUMENTATION.--Water-quality monitor since April 1973.

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

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 9,380 micromhos Apr. 12, 1979; minimum, 750 micromhos Mar. 4, 5, 1974.

WATER TEMPERATURES: Maximum, 33.0°C Apr. 11, 1973; minimum, 0.5°C on several days during November 1975 to January 1976, Jan. 25, 1978, and December 1978 to January 1979.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 9,380 micromhos Apr. 12; minimum, 839 micromhos June 20.

WATER TEMPERATURE: Maximum, 25.5°C July 28, Aug. 5-9; minimum, 0.5°C several days during December and January.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
NOV 15...	1245	4.5	4400	8.5	9.0	9.8	1800	1500	410	190
MAR 15...	1100	2.4	5000	7.8	8.0	9.7	2100	1800	380	280
MAY 11...	1130	30	1550	7.6	10.0	9.4	550	380	130	55
JUL 24...	0750	50	1200	7.6	20.0	7.0	470	330	130	36

DATE	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	ALKA- LINITY (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)
NOV 15...	350	3.6	8.4	350	0	290	1900	240	.3
MAR 15...	500	4.7	11	--	--	300	2600	200	.3
MAY 11...	130	2.4	4.0	--	--	170	510	92	.3
JUL 24...	95	1.9	4.4	--	--	140	390	80	.3

DATE	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTITU- ENTS, 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, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
NOV 15...	13	3320	4.52	40.5	7.3	.01	.01	20	200
MAR 15...	9.4	4190	5.70	27.2	7.0	.04	.03	50	470
MAY 11...	9.7	1040	1.41	84.5	1.9	.04	--	20	70
JUL 24...	8.2	835	1.14	113	1.6	.07	--	30	20

ADOBE CREEK BASIN

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09152900 ADOBE CREEK NEAR FRUITA, CO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1430	2490	4170	4600	4660	4420	7140	1540	969	919	1420	1740
2	1430	2770	4110	4680	4560	3760	7060	1510	940	932	1460	1780
3	1470	2820	4210	4570	4570	3280	6950	1610	965	906	1490	1730
4	1500	2830	4200	4480	4660	3550	6910	1610	1020	1000	1400	1700
5	1540	3060	4220	4490	4740	3620	6790	1580	1020	1050	1410	1480
6	1500	3240	4210	4440	4660	3030	6550	1560	1020	1080	1460	1500
7	1490	3410	4260	4450	4660	2610	6290	1680	1010	1110	1550	1510
8	1470	3470	4370	4600	4660	2700	6090	2020	948	1060	1540	1530
9	1500	3520	4390	4620	4620	2980	5860	1920	961	971	1580	1540
10	1460	3550	4340	4470	4620	3340	6100	1950	893	976	1490	1550
11	1460	3570	4350	4480	4600	3150	7550	1480	947	1000	1440	1570
12	1460	4050	4350	4520	4560	3230	7300	1510	1040	1210	1530	1580
13	1500	4220	4360	4540	4500	3570	6700	1470	1040	1470	1470	1590
14	1500	4230	4370	4570	4510	4200	6310	1410	1110	1160	1470	1610
15	1500	4260	4400	4590	4540	4700	5990	1320	1080	1060	1440	1620
16	1500	4250	4400	4610	4380	4890	5800	1240	1060	1100	1500	1650
17	1500	4230	4390	4640	4120	5050	5870	1220	1050	1110	1590	1660
18	1540	4210	4230	4660	3980	5140	5820	1220	1000	1080	1590	1660
19	1560	4190	4180	4680	4240	4950	5650	1220	939	1050	1590	1630
20	1560	4170	4350	4710	4480	4960	5120	1160	978	1060	1530	1620
21	1580	4160	4460	4730	4440	5590	5310	1140	1050	1070	1440	1620
22	1600	4160	4450	4760	4280	5440	5540	1110	1080	1160	1410	1650
23	1680	4130	4460	4780	4470	5350	5390	1100	1020	1200	1380	1680
24	1740	4120	4450	4820	4400	5620	4970	1070	999	1400	1360	1700
25	1750	4100	4460	4670	4420	5600	3940	1410	1010	1360	1450	1740
26	1780	4110	4470	4580	4430	5570	1930	1080	1030	1390	1490	1750
27	2030	4100	4470	4660	4530	5500	1650	1090	1030	1360	1530	1800
28	1960	4100	4460	4740	4400	5940	1630	1070	1050	1310	1540	1800
29	1850	4120	4480	4640	---	5360	1610	997	1050	1330	1590	1790
30	1880	4140	4490	4720	---	5730	1640	974	949	1350	1640	1750
31	1890	---	4510	4830	---	6920	---	1000	---	1360	1690	---

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	18.0	---	13.5	9.5	7.5	6.0	1.0	1.0	2.0	2.0	5.5	4.0
2	17.5	---	13.5	10.5	8.0	4.5	1.0	1.0	2.0	2.0	6.5	4.0
3	16.5	---	13.5	10.5	4.5	2.5	1.0	.5	2.0	2.0	7.0	3.5
4	16.5	---	12.5	9.5	5.5	3.0	1.0	.5	2.0	2.0	5.5	1.5
5	17.0	---	12.5	9.5	7.0	5.0	1.0	.5	2.0	1.5	6.0	2.0
6	17.0	---	11.5	8.5	6.5	3.5	1.0	1.0	2.0	2.0	6.0	3.5
7	16.5	---	10.5	7.5	3.0	1.0	2.5	1.5	2.0	1.5	7.0	2.5
8	16.5	---	10.0	7.5	1.5	1.0	1.0	.5	2.0	1.5	7.0	2.5
9	17.0	---	10.0	7.0	1.0	1.0	1.0	1.0	2.0	1.5	6.5	1.5
10	---	---	12.0	9.0	1.0	1.0	1.0	1.0	2.0	1.5	7.0	1.5
11	---	---	12.0	11.0	1.0	.5	2.5	1.0	2.0	1.5	8.0	2.0
12	---	---	11.5	9.5	1.0	.5	3.5	3.0	2.0	1.5	8.0	1.5
13	---	---	9.5	8.0	1.0	.5	---	---	3.0	2.0	9.0	2.0
14	---	---	9.5	8.5	1.0	.5	---	---	4.5	3.0	8.0	4.5
15	---	---	8.5	7.5	1.0	.5	---	---	5.0	3.5	9.5	6.5
16	---	---	7.5	6.0	1.0	.5	---	---	5.0	3.0	9.0	6.5
17	---	---	7.5	5.5	.5	.5	---	---	5.5	3.0	10.0	7.0
18	---	---	7.0	5.0	.5	.5	---	---	5.0	2.0	10.0	6.0
19	---	---	7.0	5.0	3.5	.5	---	---	4.5	2.5	9.0	5.5
20	---	---	7.0	5.0	3.5	2.5	---	---	6.0	4.0	8.5	7.5
21	---	---	7.0	5.0	2.0	1.0	---	---	6.0	4.5	8.0	7.0
22	---	---	7.5	5.5	1.5	1.0	---	---	6.0	4.0	9.0	6.0
23	---	---	7.0	5.5	1.5	1.0	2.0	2.0	6.0	3.5	10.0	5.5
24	---	---	7.5	5.5	2.0	1.0	2.0	2.0	6.5	3.5	11.0	5.5
25	12.5	9.5	8.0	6.5	1.5	1.0	2.0	2.0	5.0	2.0	12.0	6.0
26	11.5	8.0	8.0	7.0	1.0	1.0	2.0	2.0	4.5	2.5	11.5	7.5
27	11.5	7.5	7.0	5.0	1.0	1.0	2.0	2.0	6.0	3.5	9.5	8.5
28	11.5	7.5	5.5	4.0	2.0	1.0	2.0	2.0	5.5	3.5	13.0	8.0
29	11.5	7.5	5.5	4.5	2.0	1.0	2.0	2.0	---	---	10.0	7.0
30	11.0	8.5	6.5	5.5	2.5	1.5	2.0	2.0	---	---	9.5	6.5
31	12.5	9.0	---	---	2.0	1.0	2.0	2.0	---	---	8.5	7.0

ADOBE CREEK BASIN

09152900 ADOBE CREEK NEAR FRUITA, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	8.0	5.0	17.5	11.0	19.5	10.0	21.0	16.0	24.5	16.0	---	---
2	8.0	4.5	14.5	10.5	19.0	10.5	21.0	15.5	24.5	16.0	---	---
3	9.5	4.5	19.0	8.0	18.5	12.5	---	---	24.5	16.0	---	---
4	9.0	5.5	19.0	9.5	21.0	13.5	22.0	14.0	25.0	16.0	---	---
5	14.0	7.5	17.5	10.5	20.5	14.5	23.5	15.5	25.5	17.5	---	---
6	15.5	7.5	16.0	10.0	20.5	14.5	21.5	14.5	25.5	19.0	---	---
7	14.5	8.0	12.0	6.5	18.0	14.0	23.5	15.0	25.5	19.5	---	---
8	15.5	8.0	12.0	8.0	14.0	11.5	23.0	14.5	25.5	20.0	---	---
9	13.0	8.0	13.0	7.5	18.0	9.5	23.5	15.0	25.5	18.5	---	---
10	11.0	7.5	---	---	20.0	10.0	24.5	15.0	25.0	18.5	---	---
11	9.0	6.5	15.0	---	21.0	11.0	24.5	15.0	24.5	17.5	---	---
12	10.5	5.5	16.5	7.5	22.0	12.5	---	---	22.5	18.0	19.5	13.0
13	12.0	5.5	19.0	9.0	22.5	14.0	24.5	15.5	22.5	18.5	20.0	14.0
14	15.5	7.0	20.0	10.5	21.5	15.0	24.5	16.0	20.0	17.5	20.0	14.0
15	17.0	8.5	20.0	11.5	22.0	14.5	24.5	16.0	19.5	16.5	19.0	14.5
16	18.0	9.5	18.0	13.0	22.0	12.0	25.0	18.0	19.0	17.0	19.5	14.5
17	18.5	11.0	21.5	11.5	21.0	12.0	22.5	16.5	20.0	15.5	20.0	14.0
18	17.0	11.0	21.5	13.0	16.0	12.5	23.5	16.0	19.0	15.5	19.5	14.0
19	16.0	9.5	21.0	13.0	20.0	10.5	22.5	15.5	18.5	14.5	20.0	14.0
20	15.5	8.0	22.0	13.5	22.5	11.0	22.0	15.5	19.5	14.5	19.5	14.5
21	15.5	9.0	21.5	13.5	23.0	11.5	21.0	16.0	20.5	15.0	18.5	14.5
22	16.0	9.5	22.0	13.5	23.0	12.5	23.0	17.0	21.0	16.0	19.0	14.0
23	18.0	10.5	22.0	13.5	23.5	13.5	---	---	22.0	15.5	---	---
24	16.0	11.5	18.0	14.0	23.5	14.5	25.0	---	22.0	19.5	18.0	13.5
25	15.0	10.5	21.5	13.5	24.0	14.5	25.0	17.5	22.0	15.5	18.0	13.0
26	14.0	8.5	22.0	13.5	21.5	15.0	25.0	17.5	21.0	16.0	---	---
27	---	---	22.0	13.5	24.0	14.0	24.5	18.5	21.5	15.0	---	---
28	18.5	10.0	21.5	14.5	23.5	14.0	25.5	18.0	21.5	14.5	---	---
29	19.0	10.5	21.0	14.0	24.0	14.5	25.0	18.0	20.5	---	---	---
30	19.0	12.0	18.5	12.5	22.0	17.0	24.5	17.0	---	---	---	---
31	---	---	19.0	10.0	---	---	24.5	16.5	---	---	---	---

09153290 REED WASH NEAR MACK, CO

LOCATION.--Lat 39°12'41"N, long 108°48'11"W, in SE¼SW¼ sec.27, T.2 N., R.3 W., Ute Meridian, Mesa County, Hydrologic Unit 14010005, on right bank 250 ft (76 m) upstream from unnamed tributary, 0.4 mi (0.6 km) downstream from Peck and Beede Wash, and 3.5 mi (5.6 km) east of Mack.

DRAINAGE AREA.--15.7 mi² (40.7 km²).

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

GAGE.--Water-stage recorder. Altitude of gage is 4,505 ft (1,373 m), from topographic map.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 264 ft³/s (7.48 m³/s) July 24, 1979, gage height, 6.09 ft (1.856 m); minimum daily, 2.0 ft³/s (0.057 m³/s) Jan. 31, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 264 ft³/s (7.48 m³/s) at 0200 July 24, gage height, 6.09 ft (1.856 m); minimum daily, 2.0 ft³/s (0.057 m³/s) Jan. 31.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	105	32	8.8	8.8	5.7	4.6	6.2	78	76	96	81	86
2	90	19	9.1	7.1	5.7	8.6	6.0	70	74	92	72	86
3	88	18	8.0	9.6	5.4	9.3	5.8	78	76	95	75	88
4	89	18	8.0	9.6	4.6	17	5.6	76	76	102	82	88
5	88	18	8.0	9.3	2.4	21	5.4	75	78	96	80	90
6	93	17	8.0	9.3	5.4	31	5.4	71	80	97	76	88
7	91	16	7.7	8.3	6.8	59	5.6	74	81	102	74	86
8	96	16	3.3	7.8	8.0	60	5.8	93	106	104	70	88
9	87	17	5.7	8.3	5.2	49	5.8	98	106	93	70	86
10	92	16	6.6	8.6	5.4	39	6.1	104	104	93	70	84
11	93	15	6.6	8.6	4.9	29	6.6	105	110	83	72	84
12	93	16	6.4	8.6	4.6	22	5.8	87	97	67	74	86
13	102	15	6.6	8.0	4.6	14	5.8	77	95	51	78	86
14	89	15	6.8	8.3	4.4	8.8	5.8	68	86	73	80	94
15	96	14	6.8	8.3	4.6	7.0	5.6	62	88	75	84	98
16	96	14	7.1	7.7	4.9	6.2	5.6	58	79	77	88	100
17	92	13	7.4	7.4	4.9	5.8	5.6	65	81	81	92	96
18	92	10	8.7	8.3	4.6	5.8	5.6	67	86	81	96	90
19	93	10	13	7.7	4.4	5.8	5.4	74	97	87	130	94
20	97	10	10	7.7	4.6	5.6	6.0	72	92	86	90	90
21	102	10	8.0	7.4	4.9	5.2	6.3	70	89	96	86	90
22	102	10	8.0	7.4	4.6	5.4	6.6	64	84	93	82	90
23	100	9.6	8.0	7.4	4.3	6.0	7.1	66	83	101	82	88
24	103	9.6	8.1	7.7	4.0	5.6	26	68	83	127	82	86
25	106	9.6	8.3	7.4	3.8	5.4	68	72	88	108	34	84
26	100	9.7	8.4	7.1	3.8	5.4	70	72	80	106	90	84
27	75	9.0	8.3	6.8	4.0	5.4	63	72	76	100	92	88
28	64	9.0	8.6	7.4	4.0	5.6	69	72	81	94	84	90
29	71	9.0	8.9	7.1	---	5.8	64	74	82	102	80	88
30	73	8.7	9.3	7.1	---	6.2	61	76	81	82	84	90
31	71	---	9.0	2.0	---	6.4	---	76	---	80	86	---
TOTAL	2829	413.2	245.5	242.1	134.5	470.9	556.5	2334	2595	2820	2536	2666
MEAN	91.3	13.8	7.92	7.81	4.80	15.2	18.6	75.3	86.5	91.0	81.8	88.9
MAX	106	32	13	9.6	8.0	60	70	105	110	127	130	100
MIN	64	8.7	3.3	2.0	2.4	4.6	5.4	58	74	51	70	84
AC-FT	5610	820	487	480	267	934	1100	4630	5150	5590	5030	5290

CAL YR 1978 TOTAL 19733.8 MEAN 54.1 MAX 138 MIN 3.3 AC-FT 39140
WTR YR 1979 TOTAL 17842.7 MEAN 48.9 MAX 127 MIN 2.0 AC-FT 35390

NOTE.--NO GAGE-HEIGHT RECORD MAR. 8 TO APR. 9, AUG. 4 TO SEPT. 30.

REED WASH BASIN

09153300 REED WASH NEAR LOMA, CO

LOCATION.--Lat 39°11'01", long 108°47'12", in NE¼SW¼ sec.2, T.1 N., R.3 W., Ute Meridian, Mesa County, Hydrologic Unit 14010005, on right bank 40 ft (12 m) upstream from bridge on U.S. Highways 6 and 50, 1.6 mi (2.6 km) upstream from mouth, and 1.7 mi (2.7 km) southeast of Loma.

DRAINAGE AREA.--29.3 mi² (75.9 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1973 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 4,470 ft (1,362 m), from topographic map.

REMARKS.--Records good. Flow is mostly return flow and waste water from lands irrigated under the Government Highline and Grand Valley Canals.

AVERAGE DISCHARGE.--6 years, 93.7 ft³/s (2.654 m³/s), 67,890 acre-ft/yr (83.7 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 297 ft³/s (8.41 m³/s) July 21, 1973, gage height, 6.48 ft (1.975 m); minimum daily, 6.1 ft³/s (0.17 m³/s) Feb. 27, 1974.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 287 ft³/s (8.13 m³/s) at 0500 July 24, gage height, 5.80 ft (1.768 m); minimum daily, 6.4 ft³/s (0.18 m³/s) Jan. 31.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	192	76	24	14	9.2	11	12	105	168	172	184	185
2	193	46	25	13	9.4	30	11	122	163	171	180	189
3	189	43	22	14	9.7	32	11	127	168	191	176	191
4	188	41	21	14	8.4	31	10	121	177	203	185	193
5	191	41	22	14	7.2	31	10	112	183	212	187	187
6	197	38	22	14	9.4	49	11	115	185	199	182	188
7	187	36	20	13	10	83	11	127	186	194	177	192
8	184	36	15	14	10	119	11	174	215	191	167	193
9	183	35	16	14	10	92	11	160	218	179	166	187
10	179	34	17	13	10	64	11	163	203	172	160	188
11	171	33	18	13	9.2	59	11	149	196	165	159	183
12	178	36	18	13	9.1	41	10	135	188	153	162	178
13	189	32	18	11	9.6	23	9.9	132	183	119	168	184
14	189	32	18	13	9.9	14	10	126	180	146	170	190
15	188	30	18	12	11	12	9.9	128	180	158	184	204
16	187	29	18	12	12	11	9.9	128	170	158	197	211
17	172	29	18	12	14	11	9.8	127	170	159	196	213
18	173	28	22	13	13	11	9.6	129	181	164	208	195
19	174	28	34	13	11	10	9.4	143	192	169	220	198
20	179	28	24	12	9.8	10	9.3	136	187	177	208	199
21	189	27	17	12	10	11	9.5	133	188	181	199	197
22	187	27	17	12	11	11	9.5	124	183	188	187	194
23	187	26	16	12	10	11	9.5	134	176	183	185	189
24	188	26	16	13	9.5	10	32	145	177	209	180	188
25	190	27	16	11	9.2	10	86	150	176	193	178	188
26	189	26	16	11	9.4	10	92	148	167	192	185	181
27	158	24	15	10	9.7	10	95	155	165	188	193	177
28	140	24	15	10	11	11	99	151	160	182	181	187
29	141	24	15	9.8	---	11	101	150	153	190	170	192
30	144	23	15	9.4	---	11	94	159	153	182	174	185
31	143	---	15	6.4	---	12	---	169	---	178	184	---
TOTAL	5539	985	583	377.6	281.7	862	835.3	4277	5393	5518	5452	5726
MEAN	179	32.8	18.8	12.2	10.1	27.8	27.8	138	180	178	182	191
MAX	197	76	34	14	14	119	101	174	218	212	220	213
MIN	140	23	15	6.4	7.2	10	9.3	105	153	119	159	177
AC-FT	10990	1950	1160	749	559	1710	1660	8480	10700	10940	11210	11360
CAL YR 1978	TOTAL	36504.6	MEAN	100	MAX	242	MIN	9.1	AC-FT	72410		
WTR YR 1979	TOTAL	36029.6	MEAN	98.7	MAX	220	MIN	6.4	AC-FT	71460		

REED WASH BASIN

09153300 REED WASH NEAR LOMA, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1973 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: April 1973 to current year.

WATER TEMPERATURES: April 1973 to current year.

INSTRUMENTATION.--Water-quality monitor since April 1973.

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

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 10,500 micromhos Jan. 21, 22, 1974; minimum, 680 micromhos May 27, 1979.

WATER TEMPERATURES: Maximum, 28.0°C June 9, July 9, 10, 1973; minimum, freezing point on many days during winter months most years.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 5,690 micromhos Sept. 1; minimum, 680 micromhos May 27.

WATER TEMPERATURES: Maximum, 26.0°C July 10, 24, 25, Aug. 8; minimum, 0.0°C Nov. 10.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCTY- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	HARD- NESS (MG/L AS CaCO3)	HARD- NESS, NONCAR- BONATE (MG/L CaCO3)	CALCIUM DIS- SOLVED (MG/L AS Ca)	MAGNE- SIUM, DIS- SOLVED (MG/L AS Mg)
NOV 15...	1130	24	4600	8.6	9.0	9.8	2100	1800	460	240
MAR 15...	1215	12	4980	8.5	9.0	9.5	2200	1900	480	240
MAY 11...	0915	152	1140	7.7	9.5	9.6	400	260	100	36
JUL 24...	0915	220	1750	7.8	20.5	6.5	670	520	170	59

DATE	SODIUM, DIS- SOLVED (MG/L AS Na)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	ALKA- LINITY (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)
NOV 15...	330	3.1	11	370	0	300	2300	50	.3
MAR 15...	390	3.6	12	--	--	300	2400	230	.3
MAY 11...	87	1.9	3.6	--	--	140	320	70	.3
JUL 24...	110	1.9	7.3	--	--	150	620	93	.3

DATE	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTITU- ENTS, 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, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS Fe)	MANGA- NESE, DIS- SOLVED (UG/L AS Mn)
NOV 15...	11	3620	4.92	237	7.3	.01	.01	10	100
MAR 15...	9.8	3980	5.41	129	9.2	.06	.04	60	240
MAY 11...	9.2	716	.97	294	1.2	.02	--	10	20
JUL 24...	9.0	1170	1.59	695	2.2	.12	--	40	30

REED WASH BASIN

09153300 REED WASH NEAR LOMA, CO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1850	2420	4450	5200	5020	4240	4830	1270	861	1310	1690	1770
2	1840	3240	4420	5270	5000	3540	4870	1220	924	1330	1690	1670
3	1850	3510	4490	5210	5020	2640	4900	1230	974	1320	1690	1680
4	1860	3690	4500	5170	5010	2820	4900	1200	1020	1340	1690	1840
5	1870	3890	4500	5200	5040	2980	4930	1230	1060	1360	1690	1500
6	1860	3850	4520	5180	5020	3060	4930	1230	1100	1390	1700	1600
7	1880	3560	4550	5180	5000	3020	4960	1190	1120	1430	1700	1380
8	1890	3600	4570	5200	5000	3000	4990	1190	1120	1460	1630	1350
9	1880	3600	4570	5200	4980	3040	5020	1160	1130	1570	1490	1970
10	1900	4120	4550	5170	4980	3220	4920	1120	1180	1590	1590	1880
11	1690	4320	4580	5190	4980	3440	4900	986	1250	1630	1570	1520
12	1500	4280	4620	5200	4960	3700	4980	875	1100	1660	1640	1420
13	1250	4370	4650	5190	4940	4030	4960	920	1130	1780	1690	1510
14	1290	4490	4680	5180	4900	4390	4950	1030	1160	1440	1870	1440
15	1270	4630	4710	5170	4840	4750	4940	1050	1180	1220	1940	1600
16	1400	4410	4730	5170	4650	5000	4910	1010	1220	1260	2090	1830
17	1460	4620	4740	5160	4520	5010	4860	1040	1250	1300	2070	1920
18	1500	4590	4670	5140	4420	5000	4850	994	1100	1370	1910	1640
19	1530	4710	4110	5150	4540	5010	4920	964	906	1420	1770	1600
20	1600	4740	4000	5140	4710	4940	4980	990	921	1460	1710	1640
21	1660	4720	4530	5150	4740	4940	5030	1010	952	1510	1640	1610
22	1700	4690	4780	5160	4650	4970	5070	1080	992	1560	1360	1640
23	1960	4660	4850	5170	4700	5010	5130	1030	1050	1630	1370	---
24	1860	4600	4880	5170	4760	5020	4530	1010	1070	1640	1390	---
25	1850	4510	4910	5120	4790	5020	1690	993	1110	1640	1440	---
26	1670	4470	4940	5090	4830	4990	1320	1020	1160	1650	1320	---
27	1860	4430	4980	5080	4840	4970	1270	812	1200	1650	1390	---
28	1850	4440	5020	5090	4690	4910	1250	746	1240	1660	1440	---
29	1880	4420	5050	5070	---	4800	1240	782	1350	1660	1500	---
30	1990	4430	5080	5070	---	4820	1250	802	1320	1660	1470	---
31	2010	---	5140	5120	---	4780	---	822	---	1670	1470	---

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

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

09153300 REED WASH NEAR LOMA, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	9.0	6.5	17.5	14.0	20.5	12.0	22.0	18.0	---	---	---	---
2	10.5	5.5	15.0	13.0	20.5	12.0	22.5	17.0	---	---	---	---
3	11.0	6.0	14.0	12.0	---	---	20.0	16.5	---	---	---	---
4	10.5	6.5	16.5	9.5	22.0	14.5	22.0	16.0	---	---	---	---
5	15.5	8.0	16.0	11.5	22.0	15.5	22.5	16.5	---	---	---	---
6	16.5	8.5	17.0	12.0	22.0	16.0	21.0	17.5	---	---	---	---
7	16.0	9.0	13.5	10.5	19.0	16.5	23.0	17.0	---	---	---	---
8	17.0	9.0	11.5	8.5	16.0	13.5	23.0	17.5	26.0	21.5	23.0	18.0
9	14.5	9.0	11.5	9.0	18.0	11.0	23.0	16.5	24.0	20.0	---	---
10	12.0	8.5	12.5	8.5	19.5	12.0	26.0	17.5	24.0	19.5	22.5	19.5
11	10.0	7.5	13.0	8.5	21.0	13.5	23.5	17.0	23.5	18.5	---	---
12	12.5	6.5	15.5	9.5	21.5	14.5	23.5	17.5	22.5	19.0	---	---
13	14.0	7.0	17.5	10.5	22.5	16.0	24.0	17.5	22.5	19.5	---	---
14	16.5	8.0	18.5	13.0	22.0	17.0	24.5	18.0	21.0	19.0	20.0	16.5
15	18.0	9.5	20.0	14.0	22.0	16.5	24.5	19.0	20.0	17.5	---	---
16	18.5	10.0	19.0	15.0	22.0	14.5	25.5	20.0	20.0	18.0	---	---
17	19.0	12.0	20.5	14.0	20.5	14.5	23.5	18.5	20.5	17.0	---	---
18	17.5	11.5	21.0	15.0	17.0	14.5	24.5	18.5	19.5	17.0	20.5	16.5
19	17.0	10.0	21.5	15.0	19.0	12.5	24.0	18.5	19.5	16.5	20.5	16.0
20	17.0	8.5	22.0	16.0	21.0	13.0	23.5	18.5	20.0	16.0	21.5	17.5
21	17.0	9.5	22.5	16.0	21.5	14.0	23.0	19.0	20.5	15.5	20.5	17.0
22	17.5	9.5	22.5	15.5	---	---	24.5	19.0	21.5	16.0	20.0	16.0
23	18.5	10.5	22.0	15.5	23.0	15.5	24.5	19.5	21.5	16.5	---	---
24	17.0	12.0	19.5	16.0	23.0	16.5	26.0	20.0	22.5	17.0	---	---
25	15.5	12.5	21.5	15.0	23.0	16.5	26.0	20.0	20.5	17.0	---	---
26	15.0	10.5	23.0	15.5	22.0	16.5	---	---	21.0	17.5	---	---
27	16.5	11.0	22.5	16.5	23.0	16.0	---	---	21.5	17.0	---	---
28	16.0	12.0	22.0	16.5	23.5	16.0	---	---	22.0	17.0	---	---
29	17.5	12.0	21.5	16.0	23.5	17.0	---	---	22.0	16.5	---	---
30	17.5	12.0	19.5	14.5	22.0	19.0	---	---	---	---	---	---
31	---	---	20.0	12.5	---	---	---	---	21.0	16.0	---	---

SALT CREEK BASIN

09153400 WEST SALT CREEK NEAR MACK, CO

LOCATION---Lat 39°18'31", long 108°58'59", in SW¼NE¼ sec.3, T.9 S., R.104 W., Sixth Principal Meridian, Mesa County, Hydrologic Unit 14010005, on right bank at upstream side of bridge, 0.8 mi (1.3 km) downstream from Prairie Canyon, and 8.7 mi (14.0 km) northwest of Mack.

DRAINAGE AREA---168 mi² (435 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD---August 1973 to current year.

REVISED RECORDS---WDR CD-75-2: 1974.

GAGE---Water-stage recorder. Altitude of gage is 4,740 ft (1,445 m), from topographic map.

REMARKS---Records fair. No diversion above station. A few stock ponds on tributaries above station.

AVERAGE DISCHARGE---6 years, 0.44 ft³/s (0.012 m³/s), 319 acre-ft/yr (393,000 m³/yr).

EXTREMES FOR PERIOD OF RECORD---Maximum discharge, 1,400 ft³/s (39.6 m³/s) Aug. 8, 1974, gage height, 7.3 ft (2.13 m), from floodmarks, from rating curve extended above 110 ft³/s (3.1 m³/s); no flow most of time each year.

EXTREMES FOR CURRENT YEAR---Maximum discharge, 608 ft³/s (17.2 m³/s) at 2230 Aug. 16, gage height, 4.93 ft (1.494 m) from outside highwater mark, only peak above base of 300 ft³/s (8.5 m³/s); no flow most of time.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALJES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.05	.00	.00	.81	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	.50	.13	.62	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	10	.00	3.1	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	18	.00	.04	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	2.6	.00	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	3.1	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	11	.09	.08	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	4.6	.67	2.2	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	2.2	.78	4.2	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	1.8	5.9	1.9	.00	.00	.00	.00
11	.00	7.8	.00	.00	.00	3.9	.96	1.0	.00	.00	.00	.00
12	.00	10	.00	.00	.00	5.7	.04	.90	.00	.00	.00	.00
13	.00	.33	.00	.00	.00	31	.00	.80	.00	.00	.00	.00
14	.00	.14	.00	.00	.00	2.4	.00	.70	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	4.6	.00	.60	.00	.00	.00	.00
16	.00	.00	.00	.00	.00	2.0	.09	.50	.00	.00	11	.00
17	.00	.00	.00	.00	.00	3.1	.42	.50	.00	.00	9.5	.00
18	.00	.00	4.0	.00	.00	.40	.94	.50	.00	.00	.34	.00
19	.00	.00	8.0	.00	.00	.03	.99	.50	.00	.00	.00	.00
20	.00	.00	4.0	.00	.00	.11	.26	.50	.00	.00	.00	.00
21	.00	.00	1.0	.00	.00	1.5	.02	.48	.00	.00	.00	.00
22	.00	.00	.00	.52	.00	2.7	.00	.40	.00	.00	.00	.00
23	.00	.00	.00	.25	.00	.16	.00	.18	.00	.00	.00	.00
24	.00	.00	.01	.20	.00	.00	.00	.16	.00	.00	.00	.00
25	.00	.00	.01	.20	.00	.00	.00	.32	.00	.00	.00	.00
26	.00	.00	.00	.15	.00	.08	.00	.28	.00	.00	.00	.00
27	.00	.00	.00	.15	.00	.12	.00	.00	.00	.00	.00	.00
28	.00	.00	.01	.10	.00	8.8	.00	.00	.00	.00	.00	.00
29	.00	.00	.01	.10	---	24	.00	.19	.00	.00	.00	.00
30	.00	.00	.10	.05	---	11	.00	.20	.00	.00	.00	.00
31	.00	---	.20	.01	---	4.6	---	.00	---	.00	.00	---
TOTAL	.00	18.27	17.34	1.78	.00	160.00	12.10	20.85	.00	.00	20.84	.00
MEAN	.000	.61	.56	.057	.000	5.16	.40	.67	.000	.000	.57	.000
MAX	.00	10	8.0	.52	.00	31	5.9	4.2	.00	.00	11	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.00	36	34	3.5	.00	317	24	41	.00	.00	41	.00
CAL YR 1978	TOTAL	136.01	MEAN	.37	MAX	40	MIN	.00	AC-FT	270		
WTR YR 1979	TOTAL	251.18	MEAN	.69	MAX	31	MIN	.00	AC-FT	498		

SALT CREEK BASIN

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09153400 WEST SALT CREEK NEAR MACK, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--September 1973 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: September 1973 to current year.

WATER TEMPERATURES: September 1973 to current year.

INSTRUMENTATION.--Water-quality monitor since September 1973.

REMARKS.--No flow during most of period of record. Daily maximum and minimum specific-conductance data available in district office.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 12,600 micromhos Mar. 10, 1974; minimum, 260 micromhos Nov. 11, 1979.

WATER TEMPERATURES: Maximum, 24.5°C July 19, 1974; minimum, 0.0°C many days during winter months.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 12,000 micromhos Nov. 11-14; minimum, 260 micromhos Nov. 11.

WATER TEMPERATURES: Maximum, 29.0°C May 20, 23; minimum, 0.0°C many days during November to January.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	HARD- NESS, (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)
JAN 22...	1000	.52	1150	7.6	2.0	11.0	540	460	190
MAR 13...	1830	.47	1500	8.8	9.0	8.0	650	570	160
APR 11...	1100	.77	6400	7.8	10.0	9.0	1800	1500	110

DATE	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 (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)
JAN 22...	15	40	.8	13	80	490	15	.1	5.0
MAR 13...	60	120	2.1	7.0	78	780	13	.2	4.0
APR 11...	370	890	9.1	9.5	270	3400	7.2	.5	6.6

DATE	SOLIDS, SUM OF CONSTITU- ENTS, 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, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
JAN 22...	834	1.13	1.17	4.0	.04	.01	50	60
MAR 13...	1200	1.63	153	1.0	.03	.01	70	20
APR 11...	4960	6.75	10.3	1.2	.03	.04	70	60

SALT CREEK BASIN

09153400 WEST SALT CREEK NEAR MALK, CO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		---		---		---	---	---				
2		---		---		---	---	7180				
3		---		---		---	---	4920				
4		---		---		---	---	3700				
5		---		---		---	---	---				
6		---		---		---	---	---				
7		---		---		---	---	5640				
8		---		---		---	---	5420				
9		---		---		---	---	5430				
10		---		---		---	---	4280				
11		7450		---		---	6730	4840				
12		4620		---		---	7300	4730				
13		2310		---		1500	---	5160				
14		3910		---		1200	---	4470				
15		---		---		2690	---	3440				
16		---		---		3550	---	3400				
17		---		---		5140	---	3190				
18		---		---		6140	---	3680				
19		---		---		6340	---	3630				
20		---		---		5800	---	3500				
21		---		---		5700	---	4830				
22		---		1500		5310	---	5840				
23		---		---		4920	---	6210				
24		---		---		---	---	6690				
25		---		---		---	---	6520				
26		---		---		2730	---	6460				
27		---		---		2660	---	6570				
28		---		---		2860	---	---				
29		---		---		3120	---	4260				
30		---		---		5210	---	5250				
31		---		---		5910	---	---				

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1			---	---	---	---	.5	.0			---	---
2			---	---	---	---	---	---			---	---
3			---	---	---	---	---	---			---	---
4			---	---	---	---	---	---			---	---
5			---	---	---	---	---	---			---	---
6			---	---	---	---	---	---			---	---
7			---	---	---	---	---	---			---	---
8			---	---	---	---	---	---			---	---
9			---	---	---	---	---	---			---	---
10			---	---	---	---	---	---			---	---
11			9.5	6.0	---	---	---	---			---	---
12			11.0	.5	---	---	---	---			---	---
13			6.5	.0	---	---	---	---			---	---
14			10.5	.5	---	---	---	---			---	---
15			---	---	---	---	---	---			19.5	4.5
16			---	---	---	---	---	---			15.0	3.0
17			---	---	---	---	---	---			20.5	4.5
18			---	---	.5	.0	---	---			21.0	2.5
19			---	---	.5	.0	---	---			15.5	2.0
20			---	---	.5	.0	---	---			14.0	5.0
21			---	---	.5	.0	---	---			11.5	5.5
22			---	---	---	---	2.0	.0			16.0	4.0
23			---	---	---	---	2.0	.0			19.5	3.0
24			---	---	.5	.0	1.5	.0			---	---
25			---	---	.5	.0	1.5	.0			---	---
26			---	---	---	---	1.5	.0			22.0	10.5
27			---	---	---	---	1.0	.0			13.0	6.5
28			---	---	.5	.0	1.0	.0			18.5	7.5
29			---	---	.5	.0	1.0	.0			8.5	5.0
30			---	---	.5	.0	1.0	.0			15.0	5.0
31			---	---	.5	.0	1.0	.0			10.5	5.5

SALT CREEK BASIN

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09153400 WEST SALT CREEK NEAR MACK, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	11.5	2.5	---	---								
2	---	---	10.5	9.0								
3	---	---	17.5	7.5								
4	---	---	19.0	2.5								
5	---	---	---	---								
6	---	---	---	---								
7	---	---	6.0	6.0								
8	---	---	15.0	4.5								
9	---	---	16.5	5.0								
10	---	---	17.0	3.0								
11	---	---	20.5	2.5								
12	11.5	2.0	24.0	3.5								
13	---	---	25.0	4.0								
14	---	---	16.5	6.5								
15	---	---	23.0	8.0								
16	25.5	8.0	24.0	10.0								
17	21.0	5.0	25.5	8.5								
18	19.0	5.5	26.0	8.5								
19	17.5	4.0	27.0	8.5								
20	22.0	1.5	29.0	10.0								
21	11.0	5.0	27.5	11.0								
22	---	---	28.0	9.0								
23	---	---	29.0	10.5								
24	---	---	24.5	12.0								
25	---	---	27.5	12.0								
26	---	---	28.5	11.5								
27	---	---	15.5	14.0								
28	---	---	---	---								
29	---	---	23.0	11.5								
30	---	---	25.5	8.0								
31	---	---	---	---								

SALT CREEK BASIN

09160000 BADGER WASH OBSERVATION RESERVOIR 4-A NEAR MACK, CO

LOCATION.--Lat 39°19'52", long 108°55'49", in NE¼NE¼ sec.36, T.8 S., R.104 W., Sixth Principal Meridian, Mesa County, Hydrologic Unit 14010005, on right bank just upstream from Prairie Dog Reservoir and 8 mi (12.9 m) northwest of Mack.

DRAINAGE AREA.--0.022 mi² (0.057 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1976 to current year. Records of annual maximums previously published for water years 1954-73.

GAGE.--Water-stage recorder and 18-inch Parshall flume. Altitude of gage is 4,940 ft (1,506 m), from topographic map.

REMARKS.--Records good. No diversions above station.

COOPERATION.--Maximum discharge for period of record furnished by U.S. Bureau of Land Management.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 48 ft³/s (1.36 m³/s) July 12, 1965; no flow most of each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1.5 ft³/s (0.042 m³/s) Nov. 11; no flow most of year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

			NOV. 11	0.02		
CAL YR 1978	TOTAL 0.02	MEAN .000	MAX .02	MIN .00	AC-FT .04	
WTR YR 1979	TOTAL 0.02	MEAN .000	MAX .02	MIN .00	AC-FT .04	

09160500 BADGER WASH OBSERVATION RESERVOIR 12 NEAR MACK, CO

LOCATION.--Lat 39°19'24", long 108°55'48", in NE¼NE¼ sec.36, T.8 S., R.104 W., Sixth Principal Meridian, Mesa County, Hydrologic Unit 14010005, on right bank just upstream from Middle Basin Reservoir and 7.5 mi (12.1 km) northwest of Mack.

DRAINAGE AREA.--0.092 mi² (0.238 km²).

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder and 18-inch Parshall flume. Altitude of gage is 4,865 ft (1,483 m), from topographic map.

REMARKS.--Records poor. No diversions above gage.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 25 ft³/s (0.71 m³/s) Oct. 6, 1977; no flow most of period.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1.9 ft³/s (0.054 m³/s) Nov. 11; no flow most of year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 78 TO SEPTEMBER 1979
MEAN VALUES

	NOV. 11	0.07		NOV. 12	0.02	
CAL YR 1978	TOTAL 0.24	MEAN 0.001		MAX 0.14	MIN .00	AC-FT 0.5
WTR YR 1979	TOTAL 0.09	MEAN 0.000		MAX 0.07	MIN .00	AC-FT 0.2

SALT CREEK BASIN

09160500 BADGER WASH OBSERVATION RESERVOIR 12 NEAR MACK, CO--Continued

WATER-QUALITY RECORDS

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

INSTRUMENTATION.--Pumping sampler.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	HARD- NESS (MG/L AS CAC03)	HARD- NESS, NONCAR- BONATE (MG/L CAC03)	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												
11...	2105	.01	523	5.0	250	140	89	7.0	18	.5	5.3	
11...	2115	.01	636	5.0	250	120	96	2.7	6.9	.2	5.1	
11...	2125	.20	480	5.0	260	100	100	2.6	9.9	.3	4.7	
11...	2135	.32	595	5.0	290	180	110	2.5	4.5	.1	4.8	
11...	2145	1.8	621	5.0	290	190	110	3.2	9.7	.2	4.8	
11...	2155	1.9	587	5.0	290	200	110	2.5	4.2	.1	4.7	
12...	0335	1.1	491	5.0	200	90	79	1.8	5.4	.2	4.1	
12...	0350	1.2	365	5.0	180	83	69	2.2	4.0	.1	3.5	
12...	0400	.23	599	5.0	260	170	100	2.4	4.0	.1	4.3	
DATE		BICAR- BONATE (MG/L AS HC03)	ALKA- LINITY (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 CONSTITUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
NOV												
11...	140	110	180	2.6	.1	1.9	373	.09	.21	50	20	
11...	160	130	210	7.4	.2	2.1	412	.53	.02	30	10	
11...	190	160	230	2.3	.1	1.6	448	.73	.01	60	20	
11...	130	110	210	2.0	.2	10	411	.57	.01	30	30	
11...	120	98	240	2.1	.1	2.0	434	.63	.00	40	60	
11...	99	81	230	1.9	.1	1.6	404	.08	.00	20	10	
12...	140	110	140	5.7	.1	2.1	308	.24	.03	50	20	
12...	120	98	130	1.3	.1	1.9	273	.49	.02	30	0	
12...	110	90	240	2.2	.1	1.9	410	.12	.00	30	20	

09161000 BADGER WASH OBSERVATION RESERVOIR 2-A NEAR MACK, CO

LOCATION.--Lat 39°19'46", long 108°56'33", in NW¼NW¼ sec.36, T.8 S., R.104 W., Sixth Principal Meridian, Mesa County, Hydrologic Unit 14010005, on left bank just upstream from West Twin Reservoir and 8.3 mi (13.4 km) northwest of Mack.

DRAINAGE AREA.--0.148 mi² (0.383 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1976 to current year. Records of annual maximums previously published for water years 1954-73.

GAGE.--Water-stage recorder and 2-ft Parshall flume. Altitude of gage is 4,935 ft (1,504 m), from topographic map.

REMARKS.--Records poor. No diversions above station.

COOPERATION.--Maximum discharge for period of record furnished by U.S. Bureau of Land Management.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 262 ft³/s (7.42 m³/s) July 25, 1965; no flow most of each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, about 1.0 ft³/s (0.028 m³/s) Nov. 11; no flow most of year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

			NOV. 11	0.03			
CAL YR 1978	TOTAL 0.05	MEAN 0.000	MAX 0.03	MIN .00	AC-FT 0.1		
WTR YR 1979	TOTAL .03	MEAN .000	MAX .03	MIN .00	AC-FT .06		

LOCATION.--Lat 39°17'36", long 108°55'59", in NE¼NW¼ sec.7, T.9 S., R.103 W., Sixth Principal Meridian, Mesa County, Hydrologic Unit 14010D05, on left bank 250 ft (76 m) upstream from bridge, 2.9 mi (4.7 km) upstream from mouth, and 6.0 mi (9.7 km) northwest of Mack.

WATER-DISCHARGE RECORDS

REMARKS.--Records good. Flow is mostly water wasted into creek 300 ft (91 m) above gage from Government Highline Canal. Natural flow of stream affected by numerous small detention reservoirs on tributaries upstream. No known diversion above gage.

EXTREMES FOR PERIOD OF RECORD--Maximum discharge, 618 ft³/s (17.5 m³/s) July 4, 1977, gage height, 4.75 ft (1.448 m); from peak indicator, from rating curve extended above 60 ft³/s (1.7 m³/s); no flow for many days each year.

EXTREMES FOR CURRENT YEAR---Maximum discharge, 195 ft³/s (5.52 m³/s) May 9, gage height, 3.80 ft (1.158 m) from pmak stage indicator; no flow many days.

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27	.00	.00	.00	.00	.00	.00	22	17	5.3	6.3	1.4
2	28	.00	.00	.00	.00	.23	.00	20	18	12	5.5	1.8
3	28	.00	.00	.00	.00	.40	.00	20	15	12	4.1	2.7
4	28	.00	.00	.00	.00	.33	.00	22	18	15	3.1	1.3
5	30	.00	.00	.00	.00	.20	.00	12	17	14	6.4	.22
6	33	.00	.00	.00	.00	.13	.00	9.9	14	12	6.5	.53
7	34	.00	.00	.00	.00	.20	.00	20	13	9.0	6.1	1.3
8	35	.00	.00	.00	.00	.20	.00	24	17	12	2.1	2.5
9	35	.00	.00	.00	.00	.10	.00	23	19	4.8	.34	2.8
10	34	.00	.00	.00	.00	.00	.00	24	19	2.4	.56	2.1
11	33	.00	.00	.00	.00	.00	.00	24	21	1.9	2.1	1.9
12	33	.00	.00	.00	.00	.00	.00	30	25	1.7	5.9	5.8
13	33	.00	.00	.00	.00	.00	.00	35	27	2.0	5.5	5.7
14	33	.00	.00	.00	.00	.00	.00	38	28	1.6	3.1	5.8
15	32	.00	.00	.00	.00	.00	.00	31	27	.79	2.9	9.7
16	30	.00	.00	.00	.00	.00	.00	35	24	1.1	3.4	11
17	30	.00	.00	.00	.00	.00	.00	35	26	4.5	1.5	13
18	34	.00	.00	.00	.00	.00	.00	41	27	3.5	1.2	17
19	33	.00	.00	.00	.00	.00	.00	52	26	4.5	1.3	19
20	32	.00	.00	.00	.00	.00	.00	46	20	4.2	.55	22
21	34	.00	.00	.00	.00	.00	.00	21	18	2.2	.38	26
22	36	.00	.00	.00	.00	.00	.00	20	13	3.2	1.1	24
23	38	.00	.00	.00	.00	.00	.00	9.7	9.2	4.2	1.8	22
24	39	.00	.00	.00	.00	.00	.00	18	5.2	7.3	2.4	22
25	41	.00	.00	.00	.00	.00	22	18	1.8	11	2.2	24
26	36	.00	.00	.00	.00	.00	40	19	.07	13	2.1	25
27	14	.00	.00	.00	.00	.00	35	16	.01	12	2.2	25
28	.19	.00	.00	.00	.00	.00	54	15	.06	7.7	.92	24
29	.13	.00	.00	.00	---	.00	30	17	.08	9.6	.92	20
30	.13	.00	.00	.00	---	.00	25	18	.41	8.7	.58	16
31	.13	---	.00	.00	---	.00	---	17	---	8.3	1.8	---
TOTAL	873.58	.00	.00	.00	.00	1.70	206.00	752.6	465.83	211.49	84.65	355.55
MEAN	28.2	.000	.000	.000	.000	.055	6.87	24.3	15.5	6.82	2.73	11.9
MAX	41	.00	.00	.00	.00	.40	54	52	28	15	6.6	26
MIN	.13	.00	.00	.00	.00	.00	.00	9.7	.01	.79	.34	.22
AC-FT	1730	.00	.00	.00	.00	3.4	409	1490	924	419	168	705
CAL YR 1978	TOTAL	2532.84	MEAN 6.94	MAX 49	MIN .00	AC-FT 5020						
WTR YR 1979	TOTAL	2951.40	MEAN 8.09	MAX 54	MIN .00	AC-FT 5850						

SALT CREEK BASIN

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09163050 BADGER WASH NEAR MACK, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--June 1973 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: June 1973 to current year.

WATER TEMPERATURES: June 1973 to current year.

INSTRUMENTATION.--water-quality monitor since June 1973.

REMARKS.--No flow during most of period November to April each year. Daily maximum and minimum specific-conductance data available in district office.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 2,920 micromhos Nov. 1, 1974; minimum, 228 micromhos June 14, 1978.

WATER TEMPERATURES: Maximum, 33.5°C July 20, 1978; minimum, 4.0°C Oct. 29, 1978.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 1,510 micromhos Sept. 4, 5; minimum 330 micromhos June 1.

WATER TEMPERATURES: Maximum, 32.5°C Aug. 9; minimum, 4.0°C Oct. 29.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEDUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
OCT 23...	0950	E35	1020	8.2	11.0	9.6	250	110	72	18
MAY 14...	1030	36	700	7.6	14.5	9.0	240	96	63	19
JUL 23...	0930	3.5	540	7.7	21.0	7.3	170	70	48	12

DATE	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SOMP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	ALKA- LINITY (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)
OCT 23...	140	3.8	4.4	170	0	140	150	190	.3
MAY 14...	65	1.8	8.5	--	--	140	150	68	.2
JUL 23...	50	1.7	2.3	--	--	99	85	56	.2

DATE	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, SUM OF CONSTITU- ENTS, 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, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
OCT 23...	7.8	667	.91	63.0	.06	.01	.00	20	5
MAY 14...	9.5	469	.64	45.6	.42	.01	--	30	10
JUL 23...	7.1	322	.44	3.04	.45	.03	--	30	4

E ESTIMATED.

09163050 BADGER WASH NEAR MACK, CO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM. AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1040						---	573	342	500	606	1020
2	1040						---	670	349	450	625	1050
3	1040						---	701	362	450	674	1060
4	1040						---	689	382	300	725	1220
5	1010						---	699	392	350	728	1160
6	930						---	698	384	350	748	1080
7	908						---	698	385	340	780	1050
8	903						---	701	350	340	861	1060
9	910						---	673	349	330	984	1080
10	908						---	660	350	383	949	1100
11	910						---	669	356	393	873	1110
12	920						---	684	366	406	946	1080
13	924						---	697	370	419	881	1070
14	950						---	659	385	437	900	1060
15	958						---	614	340	462	921	1070
16	969						---	615	325	469	955	1050
17	969						---	610	310	450	980	1060
18	975						---	589	290	472	1010	1080
19	1020						---	565	280	470	977	1080
20	1020						---	495	320	488	975	1090
21	1020						---	438	330	521	998	1100
22	1040						---	436	340	533	891	1120
23	1010						---	439	350	603	889	1140
24	922						---	427	375	591	878	1140
25	889						907	416	400	571	883	1140
26	878						834	393	750	584	899	1140
27	888						799	402	1000	602	915	1140
28	950						792	395	700	607	954	1150
29	1160						633	400	700	590	968	1180
30	1220						579	375	600	589	990	1120
31	1260						---	360	---	590	996	---

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY	MARCH
1	19.0	14.5								
2	18.5	14.5								
3	18.0	13.0								
4	17.5	12.0								
5	17.5	12.0								
6	15.5	11.5								
7	15.5	11.5								
8	15.5	11.5								
9	15.5	11.5								
10	16.0	11.5								
11	15.5	11.5								
12	15.5	11.5								
13	15.5	11.5								
14	14.0	11.0								
15	14.5	10.5								
16	13.5	10.0								
17	13.0	10.5								
18	13.0	11.0								
19	13.0	9.5								
20	11.5	10.5								
21	12.0	10.5								
22	13.0	10.5								
23	12.5	9.0								
24	10.5	10.0								
25	11.0	9.0								
26	10.0	6.5								
27	10.0	6.5								
28	14.0	5.0								
29	14.0	4.0								
30	12.0	6.0								
31	15.0	7.0								

09163050 BADGER WASH NEAR MACK, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1			---	---	18.0	13.5	20.5	13.0	25.5	21.0	25.0	18.0
2			---	---	18.0	13.5	18.5	13.5	27.0	19.5	22.5	18.0
3			---	---	18.5	14.0	19.0	14.0	26.5	20.0	25.5	18.5
4			---	---	20.5	15.0	20.0	13.5	28.5	19.5	28.0	17.5
5			---	---	20.5	15.5	20.0	14.5	29.0	21.0	28.0	15.5
6			---	---	20.0	16.0	21.0	14.5	29.0	22.0	26.0	16.5
7			---	---	19.0	15.0	22.0	13.5	30.0	22.0	28.5	18.5
8			---	---	15.5	12.5	21.0	13.5	31.5	21.0	29.0	19.0
9			---	---	15.5	10.5	24.0	17.5	32.5	20.0	---	---
10			---	---	16.5	11.5	25.0	18.0	29.5	20.0	---	---
11			---	---	18.0	12.5	25.5	17.5	27.5	21.0	---	---
12			---	---	19.5	13.0	25.5	18.5	27.0	22.0	---	---
13			---	---	---	---	25.5	19.0	26.5	22.0	---	---
14			---	---	---	---	27.0	19.0	23.5	20.0	---	---
15			21.0	15.5	---	---	28.5	19.5	22.0	19.5	---	---
16			21.0	17.5	---	---	30.0	20.0	23.5	19.0	---	---
17			21.5	16.5	---	---	25.5	19.0	22.0	18.0	---	---
18			22.0	17.5	---	---	27.0	19.0	23.5	19.0	---	---
19			22.5	17.5	16.5	12.5	25.0	19.0	23.5	18.0	---	---
20			22.5	17.5	18.0	13.0	25.5	19.0	24.5	17.5	---	---
21			23.0	18.0	18.5	13.0	24.0	19.0	27.0	17.5	---	---
22			23.0	19.0	19.5	13.0	26.5	19.0	24.5	17.5	---	---
23			23.0	18.5	18.5	13.0	25.5	20.0	23.5	18.5	---	---
24			20.5	18.0	17.5	13.0	26.0	20.5	25.5	19.0	---	---
25			21.5	16.0	20.5	13.0	26.5	21.0	24.0	18.5	---	---
26			22.0	17.5	---	---	26.5	21.0	23.5	19.0	---	---
27			22.0	17.5	---	---	28.0	21.0	24.0	19.0	---	---
28			22.0	17.5	---	---	28.0	21.0	25.5	19.5	---	---
29			21.5	17.0	21.5	---	28.0	20.5	26.0	18.5	---	---
30			20.0	15.0	23.0	15.0	26.5	21.0	24.0	18.5	---	---
31			18.0	14.0	---	---	27.0	20.0	25.0	18.0	---	---

SALT CREEK BASIN

09163310 EAST SALT CREEK NEAR MACK, CO

LOCATION.--Lat 39°17'50", long 108°51'58", in SE¼ sec. 3, T. 9 S., R. 103 W., Sixth Principal Meridian, Mesa County, Hydrologic Unit 14010005, on right bank 100 ft (30 m) upstream from bridge, 200 ft (61 m) downstream from Dry Canyon Wash, and 5.0 mi (8.0 km) north of Mack.

DRAINAGE AREA.--197 mi² (510 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1973 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 4,650 ft (1,417 m) from topographic map.

REMARKS.--Records good except those for period Aug. 28 to Sept. 30, when the stage-discharge relationship was indefinite, which are fair. Some regulation by several small detention reservoirs and stock ponds on tributaries above station. A few small diversions for irrigation of hay meadows above station.

AVERAGE DISCHARGE.--6 years, 4.47 ft³/s (0.126 m³/s), 3,243 acre-ft/yr (3.99 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,630 ft³/s (74.5 m³/s) July 18, 1974, gage height, 9.95 ft (3.033 m), from floodmarks, from rating curve extended above 240 ft³/s (6.8 m³/s), on basis of slope-area measurement of peak flow; minimum daily, 0.06 ft³/s (0.002 m³/s) Mar. 16, 1978.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Sept. 19, 1972, reached a stage of 8.9 ft (2.71 m), from floodmarks (discharge, 2,160 ft³/s or 61.2 m³/s).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 198 ft³/s (5.61 m³/s) at 1300 May 20, gage height, 4.45 ft (1.356 m), no peak above base of 350 ft³/s (9.9 m³/s); minimum daily, 0.09 ft³/s (0.003 m³/s) July 24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.50	.49	.42	.43	.21	.68	12	66	41	.84	.20	.38
2	.44	.49	.41	.30	.27	1.8	8.5	66	34	.83	.28	.38
3	.44	.50	.41	.37	.32	2.0	5.6	70	33	.53	.30	.33
4	.44	.46	.41	.41	.26	.89	4.4	43	30	.49	.33	.38
5	.50	.43	.44	.40	.22	.71	4.0	37	29	.60	.37	.28
6	.50	.42	.42	.41	.27	.95	5.0	42	29	.55	.40	.24
7	.44	.34	.38	.41	.31	3.5	6.8	66	28	.42	.43	.24
8	.38	.34	.36	.40	.31	18	10	113	19	.48	.39	.24
9	.38	.35	.33	.40	.31	24	12	84	13	.44	.33	.20
10	.38	.37	.34	.41	.31	8.6	14	67	10	.26	.28	.20
11	.31	.40	.34	.39	.28	12	15	50	9.5	.19	.28	.24
12	.32	.42	.35	.40	.30	27	8.5	52	11	.22	.28	.24
13	.37	3.3	.32	.40	.31	32	6.0	48	11	.18	.38	.33
14	.41	1.2	.28	.40	.32	17	6.3	46	11	.12	.44	.33
15	.57	.69	.28	.39	.35	17	12	48	11	.17	.38	.50
16	.53	.57	.27	.39	.39	8.8	22	78	9.4	.11	.44	.44
17	.88	.48	.26	.38	.44	12	50	126	8.2	.13	.44	.33
18	.85	.48	.42	.39	.41	9.0	84	159	5.8	.12	.44	.28
19	.66	.62	17	.40	.36	3.2	83	179	3.6	.14	.50	.38
20	.84	.63	.44	.38	.32	5.9	43	180	3.0	.12	.50	.40
21	.60	.60	1.5	.38	.34	10	37	154	2.4	.13	.44	.43
22	.47	.56	1.2	.37	.34	14	43	132	2.1	.14	.50	.45
23	.55	.55	.67	.30	.35	7.2	50	129	2.0	.11	.52	.47
24	.59	.54	.40	.27	.34	3.8	57	108	2.1	.09	.86	.49
25	.61	.51	.35	.30	.32	4.8	56	103	1.8	.10	.44	.52
26	.53	.54	.33	.28	.30	7.4	54	97	.92	.11	.44	.54
27	.51	.55	.36	.27	.41	9.5	51	85	.39	.12	.38	.56
28	.48	.57	.38	.27	.52	15	58	75	.39	.13	.44	.59
29	.46	.49	.40	.24	---	49	62	64	.74	.14	.44	.61
30	.47	.45	.42	.20	---	35	66	61	.66	.15	.38	.63
31	.42	---	.44	.15	---	32	---	48	---	.17	.38	---
TOTAL	15.83	59.92	38.07	10.89	9.19	392.73	946.1	2676	363.00	8.33	12.71	11.63
MEAN	.51	2.00	1.23	.35	.33	12.7	31.5	86.3	12.1	.27	.41	.39
MAX	.88	.42	.17	.43	.52	.49	.84	180	.41	.84	.86	.63
MIN	.31	.34	.26	.15	.21	.68	4.0	37	.39	.09	.20	.20
AC-FT	31	119	76	22	18	779	1880	5310	720	17	25	23
CAL YR 1978	TOTAL	2240.70	MEAN	6.14	MAX	87	MIN	.06	AC-FT	4440		
WTR YR 1979	TOTAL	4544.40	MEAN	12.5	MAX	180	MIN	.09	AC-FT	9010		

SALT CREEK BASIN

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09163310 EAST SALT CREEK NEAR MACK, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD--July 1973 to current year.

PERIOD OF DAILY RECORD--

SPECIFIC CONDUCTANCE: July 1973 to current year.

WATER TEMPERATURES: July 1973 to current year.

INSTRUMENTATION--Water-quality monitor since July 1973.

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

EXTREMES FOR PERIOD OF DAILY RECORD--

SPECIFIC CONDUCTANCE: Maximum, 13,500 micromhos Apr. 26, 1974; minimum, 488 micromhos May 13, 1973.

WATER TEMPERATURES: Maximum, 33.5°C June 28, 1979; minimum, freezing point on many days during winter months most years.

EXTREMES FOR CURRENT YEAR--

SPECIFIC CONDUCTANCE: Maximum, 8,350 micromhos Apr. 1; minimum, 752 micromhos Apr. 26.

WATER TEMPERATURES: Maximum, 33.5°C June 28; minimum, freezing point several days during December and January.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	HARD- NESS (MG/L AS CACD3)	HARD- NESS, NONCAR- BONATE (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
NOV 15...	0815	.56	5600	7.5	6.0	8.0	2000	1600	400	240
MAR 13...	1030	2.1	2400	8.5	1.0	11.1	680	390	120	93
MAY 09...	1145	80	1490	8.2	9.0	9.4	240	0	80	8.6
JUL 23...	1030	1.0	5200	7.5	21.0	7.6	1900	1500	450	200

DATE	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	ALKA- LINITY (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)
NOV 15...	630	6.2	7.3	530	0	430	2700	56	.3
MAR 13...	330	5.5	7.0	--	--	290	970	58	.3
MAY 09...	160	4.5	2.9	--	--	260	310	13	.3
JUL 23...	590	5.8	6.6	--	--	400	2600	230	.3

DATE	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, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
NOV 15...	19	4320	5.88	6.53	1.1	.03	.01	40	680
MAR 13...	6.8	1770	2.41	10.1	1.2	.02	.01	50	70
MAY 09...	15	751	1.02	162	1.1	.01	--	60	10
JUL 23...	14	4340	5.90	11.7	1.3	.04	--	60	340

SALT CREEK BASIN

09163310 EAST SALT CREEK NEAR MACK, CO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4100	4820	5730	6790	6910	4150	6130	1100	1760	4630	5170	4710
2	4290	4820	5190	6920	6830	3380	4100	1240	1890	4820	5170	4700
3	4380	4780	4950	6820	6770	2600	3450	1380	1710	5220	5200	4350
4	4460	4860	4830	6740	6860	3610	3510	1190	1700	5520	5230	4620
5	4380	4850	4770	6750	6900	4660	3710	1230	1750	5460	5240	4790
6	4710	4840	5460	5430	6810	4730	2860	1180	1790	5670	5270	4810
7	4810	4820	4930	5630	6810	3060	2150	1160	1820	5920	5290	4810
8	4840	4880	5000	5710	6790	2060	1720	1500	1840	5300	5360	4780
9	4860	4890	5100	5800	6770	2120	1350	1480	1890	4900	5270	4770
10	4810	4820	5280	5880	6780	2300	1220	1460	1880	5310	5170	4720
11	4770	4800	5540	5960	6740	2440	2940	1410	1500	4580	5070	4660
12	4760	3210	5930	6040	6680	2230	4190	1390	1560	3840	4950	4630
13	4580	4660	6290	6120	6640	1220	4090	1300	1660	3210	4730	4520
14	4400	5000	6350	6200	6650	1480	3940	1190	1740	3140	4490	4350
15	3850	6880	6410	6290	6620	1500	3070	1220	1820	2780	4680	4090
16	3780	5330	6450	6370	6630	1990	2450	1180	1940	3080	4290	4060
17	3480	5340	6460	6460	6570	2500	2280	1060	2740	3260	4410	4160
18	3600	5330	6040	6540	6260	3070	2120	1030	2630	3530	4340	4660
19	3560	5350	4470	6620	6100	3600	1950	1020	2620	3740	4160	4680
20	3370	5350	2940	6700	6310	4100	1780	997	2750	3920	4160	4680
21	3500	5360	3600	6780	6430	3510	1620	950	2920	4370	4140	4660
22	3970	5380	4100	6870	6070	3000	1450	941	3070	4820	4170	4790
23	4620	5370	5250	6950	5970	2140	1280	1020	3200	5080	3620	4830
24	4380	5370	5820	7120	6080	1610	1120	1070	3320	5220	3490	4860
25	4180	5290	6340	7070	6290	1090	950	1180	3390	5160	3750	4920
26	4230	5360	6440	7030	6220	1470	785	1230	3510	5050	3700	4980
27	4510	5490	6530	7020	6320	2010	947	1300	3910	4800	3950	5140
28	4710	5590	6600	7050	5550	2420	1110	1380	4240	5030	4090	5160
29	4740	5660	6600	7000	---	2590	1100	1460	4300	5100	4070	5230
30	4760	5700	6640	6990	---	3000	1080	1520	4410	5130	4620	5220
31	4760	---	6730	7040	---	4500	---	1630	---	5160	4650	---

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	19.5	9.5	16.0	10.0	7.0	5.0	1.0	.0	2.0	1.5	9.0	4.0
2	19.5	10.5	16.0	10.0	---	---	1.0	.0	2.5	1.0	9.5	3.0
3	18.0	9.0	16.0	10.0	---	2.5	1.0	.0	3.0	1.0	7.0	2.5
4	18.5	8.5	15.0	9.0	---	3.0	2.0	.0	2.5	1.0	9.5	2.5
5	19.0	8.0	15.0	10.0	---	---	---	.5	2.0	1.0	11.0	2.5
6	18.5	9.0	15.0	8.0	---	---	---	.0	2.5	1.0	11.5	3.0
7	18.5	9.0	14.0	7.0	---	---	.0	.0	2.5	1.0	7.5	1.5
8	18.5	9.0	14.0	7.0	---	.0	---	---	2.0	1.0	4.5	1.0
9	18.5	9.5	14.0	7.0	---	.0	---	---	2.5	1.0	3.5	1.5
10	18.0	11.0	12.5	8.5	---	.0	---	---	2.5	1.0	3.5	1.0
11	18.0	10.0	11.0	10.0	---	.0	---	---	3.0	1.0	5.0	1.0
12	18.0	10.0	8.0	5.0	---	.5	---	---	3.0	1.0	4.0	1.0
13	16.0	10.0	9.0	4.0	3.0	1.0	---	---	5.0	1.5	9.5	1.0
14	16.0	9.0	11.0	6.0	3.0	1.0	---	---	6.0	1.5	10.0	1.0
15	16.0	8.0	11.0	6.0	3.0	1.0	---	---	7.5	1.0	10.5	3.0
16	15.0	8.0	11.0	5.0	3.0	1.0	---	---	8.0	1.5	7.0	3.0
17	15.0	9.0	10.0	4.0	2.0	1.0	---	---	8.0	1.0	11.0	4.0
18	16.0	12.0	9.0	4.0	3.5	.0	---	---	7.0	1.0	10.5	3.0
19	16.0	10.0	9.0	4.0	1.0	.0	---	---	6.0	1.0	10.0	3.0
20	12.0	10.0	9.0	4.0	1.0	.0	---	---	6.5	2.5	8.5	6.5
21	16.0	11.0	10.0	5.0	1.0	.0	---	---	7.0	2.0	7.5	6.0
22	17.0	10.0	9.0	5.0	1.0	.0	---	---	9.0	1.5	10.0	3.0
23	14.0	11.0	9.0	4.0	2.5	.0	2.0	.5	17.0	3.5	10.5	3.5
24	15.0	10.0	9.0	5.0	3.5	1.0	2.5	.5	17.5	3.5	13.0	4.0
25	14.0	8.0	9.0	6.0	3.0	.0	3.0	1.5	10.0	3.0	14.0	4.5
26	15.0	8.0	9.0	6.0	3.0	.0	4.0	1.5	6.5	2.5	16.5	5.5
27	15.0	8.0	8.0	4.0	3.0	.0	3.0	1.0	11.5	3.0	9.5	7.5
28	16.0	8.0	7.0	3.0	4.0	.0	3.0	1.0	10.0	3.0	13.0	6.5
29	15.0	9.0	6.0	4.0	4.5	.0	3.0	1.5	---	---	7.5	3.0
30	15.0	9.0	9.0	5.0	4.5	.0	2.5	1.0	---	---	9.0	3.0
31	16.0	10.0	---	---	2.5	.0	2.5	1.0	---	---	8.5	5.0

09163310 EAST SALT CREEK NEAR MACK, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1978-10 SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	8.0	2.0	16.5	11.0	18.5	9.5	28.0	18.0	30.0	18.0	26.0	17.5
2	12.0	1.0	11.5	9.5	20.5	10.5	30.5	17.0	30.5	18.0	25.5	18.0
3	13.5	1.0	11.5	8.5	21.5	11.5	26.0	16.5	30.5	18.0	26.5	18.0
4	12.5	2.0	15.5	7.0	23.0	13.0	31.0	15.5	31.0	18.0	25.5	17.5
5	18.5	5.0	14.5	9.5	24.0	14.5	32.5	16.0	31.0	19.0	26.0	17.5
6	18.5	6.0	15.0	9.0	24.5	15.0	27.5	18.0	30.5	20.5	26.0	18.0
7	17.5	7.0	10.0	6.5	21.0	16.0	33.0	16.5	31.0	20.5	26.0	18.0
8	18.5	7.0	7.5	5.5	15.5	12.0	31.0	17.0	30.5	21.0	27.0	19.0
9	15.0	7.0	9.5	6.5	21.0	9.0	30.5	16.5	31.0	20.0	26.5	19.0
10	9.0	5.5	11.5	7.0	23.5	11.0	31.0	16.5	30.0	19.5	27.5	20.5
11	8.5	4.5	12.0	7.0	26.0	13.0	32.0	16.5	30.5	19.0	26.5	20.0
12	15.0	3.0	15.5	7.0	27.5	14.5	31.5	16.0	28.5	20.0	24.5	18.5
13	16.0	3.5	17.5	9.0	28.0	15.5	32.0	17.0	28.0	20.5	22.5	17.0
14	20.0	5.0	19.0	10.0	25.0	16.5	32.0	17.5	21.5	19.0	23.0	17.0
15	19.5	7.5	19.5	11.0	25.0	16.0	32.0	19.5	22.5	18.0	22.5	15.5
16	19.0	8.5	16.0	13.0	26.0	13.0	31.5	19.5	24.0	19.0	22.5	15.0
17	14.5	9.5	16.0	10.5	24.5	12.5	29.0	18.0	24.0	18.0	23.5	16.0
18	14.0	8.5	16.5	11.5	21.5	13.0	31.0	17.5	23.5	18.0	24.0	17.5
19	14.0	8.0	15.5	11.0	21.5	11.5	31.0	17.5	25.5	18.5	23.5	17.5
20	15.0	6.0	16.0	10.5	26.0	11.5	31.5	18.0	23.5	18.0	22.5	19.0
21	16.0	7.5	16.5	11.5	27.5	13.0	27.5	19.0	26.5	17.0	23.5	18.0
22	16.0	8.0	16.5	11.5	28.5	13.5	29.5	18.5	27.0	17.0	23.5	17.5
23	16.5	9.0	17.5	13.0	30.0	15.5	31.0	19.0	28.0	17.5	23.5	17.5
24	14.0	9.5	15.0	12.5	30.5	16.0	31.5	18.5	27.5	17.5	24.0	18.0
25	14.5	8.5	19.0	13.5	31.0	16.5	31.5	18.0	24.5	17.0	24.0	18.0
26	16.5	9.5	19.0	13.0	28.0	16.5	31.5	18.5	25.0	18.5	23.5	19.0
27	18.5	12.0	18.5	14.0	32.0	16.0	30.5	19.5	26.0	17.5	24.0	18.0
28	17.5	11.5	19.0	15.0	33.5	15.5	30.0	18.5	26.5	18.5	23.5	17.5
29	16.0	9.5	18.0	14.0	33.0	16.5	30.5	19.0	27.0	17.5	23.5	17.0
30	15.5	9.0	16.5	10.5	26.0	19.5	30.5	18.0	24.0	19.0	23.0	16.5
31	---	---	18.0	10.0	---	---	30.5	17.5	25.5	18.0	---	---

SALT CREEK BASIN

09163340 MACK WASH NEAR MACK, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--July 1973 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: August 1973 to current year.

WATER TEMPERATURES: July 1973 to current year.

INSTRUMENTATION.--Water-quality monitor since July 1973.

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

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 5,450 micromhos July 14, 1975; minimum, 709 micromhos June 6, 1979.

WATER TEMPERATURES: Maximum, 26.0°C July 22, 24, 1976; minimum, 1.5°C Feb. 17-19, 1978.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 4,950 micromhos Nov. 15; minimum, 709 micromhos June 6.

WATER TEMPERATURES: Maximum, 23.5°C May 26; minimum, 2.0°C Mar. 19.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
NOV 15...	0930	1.8	4600	7.9	12.0	8.0	1900	1700	520	150
MAR 13...	1600	1.7	3620	8.1	15.0	9.8	1800	1600	520	130
MAY 10...	1145	190	900	7.2	13.0	9.3	290	160	78	23
JUL 23...	1130	2.0	3850	7.7	18.0	7.7	1900	1700	530	140

DATE	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	ALKA- LINITY (MG/L AS CACO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUD- RIDE, DIS- SOLVED (MG/L AS F)
NOV 15...	240	2.4	7.1	280	0	230	1900	180	.3
MAR 13...	240	2.4	6.8	--	--	200	1800	180	.3
MAY 10...	83	2.1	3.4	--	--	130	200	92	.2
JUL 23...	53	.5	7.6	--	--	230	1400	180	.3

DATE	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, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
NOV 15...	12	3160	4.30	15.8	3.2	.01	.01	50	80
MAR 13...	10	3020	4.11	13.9	2.2	.00	.00	40	70
MAY 10...	8.4	568	.77	291	.34	.01	--	10	10
JUL 23...	10	2480	3.37	13.4	3.8	.04	--	20	70

SALT CREEK BASIN

09163340 MACK WASH NEAR MACK, CO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1410	4000	3700	3700	3710	4300	3720	1420	813	3600	3800	1360
2	1400	4300	3700	3700	3800	4190	3720	1360	804	3620	3810	1300
3	1410	4400	3700	3720	3810	4170	3720	1330	786	3610	3810	1260
4	1410	4400	3700	3740	3790	4100	3730	1280	784	3620	3810	1290
5	1410	4420	3700	3750	3750	4080	3730	1240	785	3640	3820	1300
6	1420	4420	3700	3770	3700	4010	3740	1190	764	3640	3830	1340
7	1380	4450	3700	3790	3630	3930	3740	1140	769	3660	3820	1420
8	1340	4480	3700	3810	3660	3870	3740	1100	768	3670	3620	1510
9	1290	4450	3700	3830	3610	3830	3760	1050	796	3660	3440	1570
10	1250	4480	3700	3840	3740	3780	3760	953	836	3680	3260	1430
11	1280	4500	3700	3860	3790	3720	3830	917	880	3610	3070	1250
12	1250	4550	3700	3880	3770	3680	3860	908	920	3640	2870	1190
13	1220	4550	3700	3890	3780	3580	3900	892	951	3630	2690	1170
14	1200	4550	3700	3920	3750	3500	3950	922	1030	3620	2500	1170
15	1200	4600	3700	3940	3700	3510	3960	866	1130	3710	2300	1170
16	1210	4550	3700	3950	3790	3510	4110	864	1290	3710	2120	1190
17	1220	4450	3700	3970	3840	3530	4040	872	1730	3720	1930	1220
18	1220	4230	3700	3990	3880	3530	4080	875	2350	3720	1730	1260
19	1230	4200	3700	4010	3930	3550	4100	879	2680	3720	1500	1310
20	1230	4100	3700	4030	3980	3560	4130	869	1390	3670	1150	1350
21	1240	4000	3700	4040	4020	3580	4150	859	1660	3590	1100	1360
22	1250	3900	3700	4060	4070	3620	4190	950	2250	3530	1090	1340
23	1250	3900	3700	4080	4120	3640	4220	898	2770	3730	1080	1330
24	1260	3900	3700	3660	4160	3640	4260	918	3140	3740	1090	1330
25	1260	3850	3700	3450	4210	3640	3360	906	3450	3750	1120	1320
26	1460	3850	3700	3530	4260	3660	1780	959	3540	3760	1130	1310
27	1860	3800	3700	3560	4300	3660	1590	882	3570	3770	1130	1300
28	2440	3700	3700	3680	4350	3680	1560	866	3580	3770	1140	1300
29	3300	3700	3700	3630	---	3690	1520	911	3590	3770	1190	1300
30	3780	3700	3700	3680	---	3670	1470	882	3600	3780	1260	1290
31	3910	---	3700	3700	---	3710	---	851	---	3780	1500	---

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	18.5	---	15.5	11.0	---	---	---	---	13.5	8.0	11.5	8.5
2	18.0	---	15.0	12.0	---	---	---	---	12.5	8.0	12.5	8.5
3	17.5	---	16.0	11.0	---	---	---	---	12.5	8.5	13.5	8.0
4	---	---	15.5	11.5	---	---	---	---	---	---	13.0	7.5
5	17.5	---	16.0	11.5	---	---	---	---	---	---	13.0	8.0
6	17.5	15.0	15.5	11.5	---	---	---	---	---	---	13.5	8.5
7	17.0	---	15.5	11.5	---	---	---	---	---	---	14.0	8.0
8	17.5	---	15.5	11.0	---	---	---	---	---	---	13.5	8.5
9	17.0	---	15.5	11.5	---	---	---	---	14.0	9.0	14.0	8.0
10	17.0	14.5	---	---	---	---	---	---	13.0	8.5	13.5	7.5
11	17.0	14.5	---	---	---	---	---	---	12.5	10.0	14.0	8.0
12	16.5	14.5	---	---	---	---	---	---	13.0	9.0	14.5	8.0
13	16.0	14.0	---	---	---	---	---	---	13.0	8.5	14.5	8.0
14	16.0	13.5	---	---	---	---	---	---	14.0	9.0	14.0	8.5
15	16.0	13.5	15.5	10.5	---	---	---	---	14.0	9.5	13.5	9.0
16	16.0	13.5	---	---	---	---	---	---	---	---	12.0	2.5
17	15.0	13.5	15.5	11.0	---	---	---	---	---	---	14.0	9.0
18	14.5	13.5	14.0	9.5	---	---	---	---	---	---	14.5	8.5
19	15.5	13.0	13.5	9.5	---	---	---	---	---	---	13.5	2.0
20	14.0	13.5	13.5	9.5	---	---	---	---	---	---	12.5	9.5
21	14.0	12.5	13.0	9.0	---	---	---	---	---	---	11.0	9.5
22	14.0	11.5	12.5	8.5	---	---	---	---	---	---	13.5	9.0
23	14.5	12.0	12.0	8.5	---	---	12.0	8.0	---	---	14.0	9.0
24	13.5	11.0	---	---	---	---	14.0	9.0	---	---	15.5	8.5
25	14.0	11.0	---	---	---	---	14.0	9.0	---	---	15.5	8.5
26	14.0	11.0	---	---	---	---	14.0	---	---	---	16.0	9.0
27	14.0	11.0	---	---	---	---	14.0	7.5	---	---	11.5	9.5
28	14.5	10.5	10.0	8.5	---	---	14.0	8.5	---	---	15.0	9.5
29	15.0	10.5	10.5	8.5	---	---	---	---	---	---	10.5	9.0
30	14.5	11.0	---	---	---	---	---	---	---	---	14.0	9.0
31	15.5	11.0	---	---	---	---	14.0	7.5	---	---	12.0	8.5

SALT CREEK BASIN

09163340 MACK WASH NEAR MACK, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	8.5	8.5	---	---	20.0	9.5	18.5	13.0	19.5	12.5	22.0	19.5
2	8.5	8.5	---	---	20.5	18.5	19.5	12.5	20.0	12.5	22.0	20.0
3	8.5	8.5	---	---	20.5	19.0	17.5	11.5	20.0	12.0	22.0	20.0
4	8.5	8.5	---	---	22.0	19.0	19.0	11.5	20.0	12.0	22.0	20.0
5	8.5	8.5	---	---	22.0	20.0	19.5	11.5	20.0	12.5	22.0	19.5
6	8.5	8.5	---	---	21.5	16.5	17.5	12.0	20.5	13.5	21.5	17.5
7	8.5	8.5	---	---	20.5	19.0	20.0	12.0	20.0	13.5	21.0	16.5
8	8.5	8.5	---	---	19.0	17.5	19.0	12.0	20.0	13.5	21.5	16.0
9	15.5	8.5	---	---	19.0	17.0	14.0	11.5	20.5	13.5	22.0	16.5
10	10.5	9.0	---	---	20.5	17.5	19.5	11.5	20.5	13.0	23.0	19.5
11	12.0	8.5	13.0	11.5	21.0	18.0	20.0	12.0	20.0	12.5	23.0	20.5
12	15.5	7.5	13.5	11.5	21.5	19.5	20.0	12.0	18.5	13.0	22.0	21.0
13	15.5	8.5	15.0	13.0	21.0	17.5	20.0	12.5	19.0	13.5	21.5	20.5
14	18.0	8.5	16.5	12.5	22.0	16.0	20.0	13.0	16.5	14.0	21.5	20.0
15	18.5	9.5	17.5	14.5	21.5	16.5	20.0	13.0	16.5	13.5	21.5	19.5
16	15.5	9.0	18.0	15.5	22.0	17.5	20.5	13.0	17.0	13.5	21.0	19.5
17	12.5	12.0	18.0	16.0	20.0	14.5	19.5	12.5	17.0	12.5	21.5	19.5
18	12.5	12.0	18.0	14.0	18.0	13.5	20.0	12.0	17.0	13.0	21.0	19.5
19	12.0	12.0	19.5	17.5	18.5	12.0	19.5	12.0	21.5	13.0	21.5	19.0
20	12.0	12.0	20.0	18.5	19.5	15.0	20.0	12.5	22.5	21.0	21.5	19.0
21	12.0	12.0	20.0	17.0	21.5	15.5	18.5	14.0	23.0	21.0	21.5	19.0
22	12.0	12.0	21.0	18.0	21.5	15.0	20.0	14.0	22.5	21.0	21.5	19.0
23	12.0	12.0	22.0	19.5	21.5	13.5	19.5	12.5	23.0	21.0	21.5	19.0
24	12.0	12.0	21.0	16.5	20.5	13.0	19.5	13.0	22.5	21.0	20.0	19.0
25	15.0	12.0	22.0	19.0	20.5	12.0	20.0	12.5	22.0	21.0	20.5	19.0
26	15.0	12.5	23.5	20.5	17.5	12.0	19.5	13.0	22.5	21.0	20.5	19.0
27	15.0	---	22.5	20.5	20.0	11.5	19.5	13.5	22.0	20.5	20.5	19.0
28	---	---	22.0	18.5	20.0	11.5	20.0	12.5	22.5	20.5	19.5	18.5
29	---	---	21.0	19.0	20.5	11.5	20.0	13.0	22.5	20.5	19.5	18.5
30	---	---	20.0	18.0	17.0	12.5	20.0	12.5	22.0	20.5	---	---
31	---	---	19.5	18.0	---	---	19.5	12.0	21.5	19.5	---	---

SALT CREEK BASIN

09163490 SALT CREEK NEAR MACK, CO

LOCATION.--Lat 39°13'18", long 108°53'32", in NE¼NW¼ sec.4, T.10 S., R.103 W., Sixth Principal Meridian, Mesa County, Hydrologic Unit 14010005, on right bank 800 ft (240 m) downstream from bridge on Interstate Highway 70, 1.4 mi (2.3 km) west of Mack, and 2.1 mi (3.4 km) upstream from mouth.

DRAINAGE AREA.--436 mi² (1,129 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1973 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 4,440 ft (1,353 m), from topographic map.

REMARKS.--Records good except those for winter period, which are poor. Flow is mostly return flow and waste water from lands irrigated under the Government Highline Canal. Some regulation by many small detention reservoirs and stock ponds on tributaries above station and by Highline Lake, capacity, 3,400 acre-ft (4.19 hm³) on Mack Wash above station. A few small diversions for irrigation of hay meadows above station.

AVERAGE DISCHARGE.--6 years, 89.8 ft³/s (2,543 m³/s), 65,060 acre-ft/yr (80.2 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,580 ft³/s (44.7 m³/s) Aug. 8, 1974, gage height, 5.57 ft (1.698 m), from rating curve extended above 240 ft³/s (6.8 m³/s), on basis of slope-area measurement at gage height 5.69 ft (1.734 m); minimum daily, 4.2 ft³/s (0.12 m³/s) Jan. 24, 1974.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage of 5.69 ft (1.73 m) Sept. 19, 1972, from floodmarks, discharge, 1,680 ft³/s (47.6 m³/s), by slope-area measurement of peak flow.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 396 ft³/s (11.2 m³/s) at 2400 May 9, gage height, 3.07 ft (0.936 m); minimum daily, 5.0 ft³/s (0.14 m³/s) Jan. 31.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	160	45	21	9.0	7.0	10	27	274	203	84	136	241
2	160	43	27	8.0	7.2	23	21	296	202	100	130	236
3	160	42	22	11	6.6	26	21	314	205	99	103	247
4	150	43	21	12	6.4	22	20	309	204	103	132	197
5	150	43	21	11	6.4	18	17	298	195	106	106	123
6	150	43	21	10	6.6	30	20	273	183	106	137	114
7	150	41	17	9.0	7.2	73	23	281	173	99	137	111
8	140	40	13	8.0	7.0	142	24	331	187	107	132	123
9	140	40	15	8.2	7.0	94	25	360	198	103	88	126
10	140	40	16	8.5	7.2	53	32	367	195	96	87	136
11	147	75	16	9.0	7.2	60	31	314	195	95	90	140
12	146	84	17	9.4	8.0	64	22	306	200	88	134	151
13	146	30	17	7.2	9.5	91	16	292	200	77	136	165
14	153	25	18	6.7	10	52	15	289	186	79	135	171
15	160	25	18	8.4	9.0	41	20	273	171	76	132	184
16	161	25	18	9.0	9.2	33	29	261	159	80	106	196
17	160	25	18	9.0	9.0	34	39	270	148	93	130	203
18	165	24	30	9.0	9.0	25	54	291	144	99	138	209
19	170	23	40	9.0	9.2	18	59	306	145	99	110	213
20	175	23	30	8.0	10	19	41	302	141	105	134	210
21	180	23	27	7.4	10	22	36	290	136	101	150	206
22	190	23	22	7.0	10	28	38	264	117	98	150	214
23	200	23	18	6.5	10	19	43	241	107	101	178	217
24	230	22	17	7.2	8.0	16	47	233	103	111	198	220
25	212	23	16	8.6	7.8	17	73	237	98	110	218	220
26	138	25	15	7.6	8.3	17	245	222	89	111	236	223
27	81	23	13	6.6	8.8	19	294	220	75	112	238	225
28	54	21	12	7.0	9.5	26	284	216	74	109	247	222
29	48	20	11	6.6	---	79	277	204	76	115	237	209
30	46	20	11	6.0	---	59	280	201	79	118	237	198
31	45	---	10	5.0	---	76	---	200	---	115	239	---
TOTAL	4507	1002	588	254.9	231.1	1306	2173	8535	4588	3095	4441	5647
MEAN	145	33.4	19.0	8.22	8.25	42.1	72.4	275	153	99.8	143	188
MAX	230	84	40	12	10	142	294	367	205	118	247	247
MIN	45	20	10	5.0	6.4	13	15	200	74	76	87	111
AC-FT	8940	1990	1170	506	458	2590	4310	16930	9100	6140	8810	11200
CAL YR 1978	TOTAL	31698.3	MEAN	86.8	MAX	250	MIN	8.8	AC-FT	62870		
WTR YR 1979	TOTAL	36368.0	MEAN	99.6	MAX	367	MIN	5.0	AC-FT	72140		

SALT CREEK BASIN

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09163490 SALT CREEK NEAR MACK, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1973 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: April 1973 to current year.

WATER TEMPERATURES: April 1973 to current year.

INSTRUMENTATION.--Water-quality monitor since April 1973.

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

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 6,760 micromhos Jan. 8, 1977; minimum, 622 micromhos Apr. 28, 1979.

WATER TEMPERATURES: Maximum, 36.5°C July 17, 1976; minimum, freezing point on many days during winter months most years.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 5,980 micromhos Jan. 23, 24; minimum, 622 micromhos Apr. 28.

WATER TEMPERATURES: Maximum, 29.5°C July 25; minimum, 0.0°C many days during December to February.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)
NOV 14...	1115	24	4320	7.4	8.0	9.4	2100	1800	450	240
MAR 13...	0830	26	2570	7.6	1.0	11.8	870	700	190	95
MAY 09...	0810	352	1600	7.6	8.0	9.6	560	370	100	75
JUL 23...	0815	96	1700	7.7	18.5	7.8	740	570	190	64

DATE	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	ALKA- LITY (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)
NOV 14...	420	4.0	9.9	360	0	300	2300	240	.3
MAR 13...	230	3.4	8.0	--	--	170	1100	74	.2
MAY 09...	160	2.9	4.2	--	--	190	580	61	.3
JUL 23...	120	2.0	4.9	--	--	170	700	98	.3

DATE	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, DIS- SOLVED (MG/L AS P)	PHOS- PHORUS, ORTHOD, DIS- SOLVED (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
NOV 14...	12	4880	5.28	256	6.7	.06	.01	90	200
MAR 13...	6.4	1810	2.46	127	2.0	.03	.00	20	100
MAY 09...	11	1110	1.51	1060	.96	.01	--	40	10
JUL 23...	7.8	1300	1.77	337	2.0	.06	--	90	10

SALT CREEK BASIN

09163490 SALT CREEK NEAR MACK, CO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2000	1900	4640	4860	4980	4140	4230	872	1090	1370	1570	1790
2	2000	2100	4630	4800	4920	3930	4680	954	1100	1330	1660	1860
3	2000	2300	4680	4820	4960	3020	4950	1110	1130	1370	1720	1900
4	2100	2500	4620	4790	4980	3160	5060	1130	1070	1390	1790	1660
5	2100	2700	4700	4800	4960	3360	5130	1200	1030	1410	1820	1200
6	2100	2900	4670	4920	4910	3300	4920	1290	1060	1470	1860	1200
7	2100	3050	4920	4940	4720	2810	4640	1360	1070	1540	1770	1250
8	2200	3290	4820	4890	4720	2320	4580	1490	1070	1530	1800	1250
9	2200	3440	4800	4830	4730	2130	4620	1620	1090	1580	1880	1260
10	2200	3680	4770	4890	4730	2300	4660	1560	1100	1430	1890	1260
11	2200	3820	4760	4900	4720	2380	4800	1470	1110	1210	1890	1290
12	2200	4060	4770	4950	4720	2350	4350	1560	1090	1210	1830	1270
13	2100	4210	4800	4970	4710	2090	3680	1550	1100	1310	1830	1230
14	2100	4460	4810	4960	4720	1380	3630	1550	1130	1360	1840	1260
15	2100	4420	4770	4980	4730	1660	3320	1550	1160	1420	1870	1260
16	2000	4450	4420	4950	4730	1950	2880	1520	1180	1440	1890	1270
17	2000	4470	2580	4960	4710	2350	2540	1330	1190	1440	2120	1280
18	2000	4490	2880	5040	4640	2660	2220	1370	1160	1460	1970	1300
19	1900	4520	3920	5100	4770	3030	2010	1390	1100	1520	1940	1330
20	1900	4540	4290	4800	4840	3350	2000	1180	955	1540	1690	1350
21	1800	4560	4390	4800	4870	3570	2020	1020	716	1620	1400	1370
22	1800	4590	4450	4900	4820	3550	1980	924	819	1720	1400	1390
23	1800	4610	4540	5510	4910	3650	1850	939	1180	1420	1400	1410
24	1700	4630	4590	5480	4880	3820	1690	957	1140	1220	1410	1440
25	1750	4660	4620	5120	4890	3980	1510	974	1100	1210	1450	1460
26	1750	4680	4570	5200	4960	4060	1620	994	1170	1270	1500	1480
27	1800	4710	4610	5330	4540	4060	951	1020	1310	1300	1540	1510
28	1800	4750	4630	5260	4340	3950	642	1030	1350	1360	1600	1550
29	1800	4570	4710	5170	---	3510	699	1050	1400	1390	1660	1600
30	1850	4630	4790	5230	---	3490	771	1070	1390	1430	1710	1630
31	1850	---	4930	5190	---	3770	---	1080	---	1480	1770	---

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	19.0	12.0	---	---	6.5	4.5	.0	.0	1.0	.0	---	---
2	19.0	13.5	---	---	6.5	3.0	.0	.0	1.5	.0	6.0	1.5
3	---	---	---	---	3.0	1.0	.0	.0	1.0	.0	8.0	1.5
4	---	---	---	---	3.0	1.0	.0	.0	1.0	.0	7.0	.5
5	---	---	---	---	1.0	.5	.0	.0	1.0	.5	7.5	.5
6	---	---	---	---	.5	.0	.0	.0	1.5	.0	6.5	2.0
7	---	---	---	---	.5	.0	.0	.0	.5	.5	7.5	1.0
8	---	---	---	---	.5	.0	.0	.0	1.0	.0	5.5	.5
9	---	---	---	---	.5	.0	.0	.0	1.0	.0	7.5	.5
10	---	---	---	---	.5	.0	.0	.0	1.5	.0	8.0	.5
11	---	---	---	---	.5	.0	.5	.0	1.5	.0	8.0	.5
12	---	---	---	---	.5	.0	.0	.0	.5	.0	10.0	.5
13	---	---	---	---	.5	.0	.5	.0	1.0	.0	10.5	.5
14	---	---	9.0	6.5	.5	.0	1.0	.5	1.0	.5	9.0	1.0
15	---	---	9.0	5.0	.5	.0	1.5	.5	2.0	.0	11.0	4.0
16	---	---	---	---	.5	.0	2.5	.5	3.0	.5	9.5	4.0
17	---	---	---	---	.5	.0	3.0	1.0	3.5	.5	12.5	4.5
18	---	---	---	---	.5	.0	1.5	.0	3.0	.5	13.0	4.0
19	---	---	---	---	.0	.0	.5	.0	3.0	.5	11.5	3.0
20	---	---	---	---	.0	.0	---	---	5.0	2.0	10.0	6.0
21	---	---	---	---	.0	.0	---	---	5.0	2.0	8.5	6.0
22	---	---	---	---	.0	.0	---	---	5.5	1.0	10.0	5.5
23	---	---	---	---	.5	.0	1.0	.0	5.5	1.0	14.0	4.5
24	---	---	---	---	.5	.0	1.0	.0	7.0	.5	16.0	3.5
25	---	---	---	---	.0	.0	.5	.5	5.5	.5	15.0	4.0
26	---	---	---	---	.0	.0	.5	.5	4.0	.5	17.0	6.0
27	---	---	---	---	.0	.0	1.0	.0	---	---	10.5	7.5
28	---	---	---	---	.0	.0	.5	.0	---	---	15.0	7.0
29	---	---	5.0	2.5	.0	.0	.5	.5	---	---	9.5	5.5
30	---	---	7.0	4.0	.0	.0	.5	.0	---	---	11.5	4.5
31	---	---	---	---	.0	.0	.5	.5	---	---	8.5	5.0

09163490 SALT CREEK NEAR MACK, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	9.5	3.5	19.0	12.5	21.0	10.0	25.0	17.0	27.5	16.5	23.0	13.5
2	10.5	3.0	15.5	11.5	22.5	10.5	24.0	16.0	26.5	15.5	22.5	14.5
3	12.5	2.5	15.5	10.5	24.0	12.0	22.0	15.0	27.5	17.0	21.0	14.5
4	12.0	3.0	18.5	9.5	25.0	13.5	25.5	14.0	28.5	16.5	23.5	14.0
5	18.0	5.5	17.0	12.0	24.0	15.0	25.5	14.5	28.5	17.5	23.0	14.0
6	18.5	5.5	18.0	11.0	24.5	15.0	23.0	16.0	28.5	18.5	24.0	13.5
7	16.0	7.0	12.5	9.0	21.0	16.0	27.0	15.0	28.0	19.5	22.5	14.0
8	19.0	7.0	12.0	7.5	16.5	13.0	25.5	15.5	27.5	20.0	21.5	15.5
9	15.5	7.0	13.5	9.0	20.5	10.5	26.0	14.5	29.0	18.5	23.5	15.0
10	9.5	6.5	13.5	8.5	23.0	11.0	26.0	18.5	29.0	18.0	25.5	18.0
11	10.0	5.5	15.5	8.5	24.0	12.5	25.0	15.0	27.5	17.0	23.5	16.5
12	13.5	3.5	17.5	8.0	24.0	14.5	27.5	15.5	25.0	17.5	23.0	14.5
13	16.0	4.0	19.5	9.5	26.5	15.0	28.0	16.0	26.5	19.0	21.5	13.5
14	20.5	5.5	20.0	10.5	24.5	15.5	28.0	16.5	21.0	17.5	20.5	14.0
15	20.5	6.5	22.0	12.5	24.5	15.0	28.0	17.5	21.0	17.0	21.0	12.5
16	20.0	7.5	20.0	13.5	24.0	13.0	27.5	18.0	22.0	17.5	21.5	12.0
17	16.5	8.5	21.5	12.0	23.5	12.5	25.5	17.0	21.5	14.5	23.0	13.0
18	16.5	9.0	20.5	13.5	21.0	13.5	26.0	17.0	22.0	15.5	23.0	14.0
19	15.5	8.0	21.5	13.0	22.0	11.5	26.5	17.0	22.0	15.5	23.5	14.0
20	17.0	5.5	21.5	14.0	23.5	11.5	26.0	17.0	22.5	15.5	20.5	15.5
21	18.0	6.5	21.5	14.5	25.0	12.0	24.0	17.5	23.5	15.5	22.0	14.5
22	18.0	7.5	21.0	13.5	23.5	12.0	26.0	17.5	25.0	15.0	22.0	14.0
23	19.0	8.5	21.5	14.5	27.0	15.0	27.5	17.5	25.5	15.5	21.5	14.5
24	16.5	9.0	18.0	14.0	27.5	14.5	28.5	18.0	24.0	15.0	22.5	14.5
25	16.0	8.5	22.0	13.5	27.5	15.0	29.5	17.0	22.5	15.5	21.5	15.0
26	16.0	9.0	23.5	14.0	23.5	15.5	28.0	17.5	23.5	16.0	21.5	15.5
27	17.0	10.0	23.5	15.0	25.5	14.0	27.5	19.5	24.5	15.5	21.5	15.5
28	18.0	12.0	22.5	15.5	27.5	14.0	28.5	18.0	23.5	16.5	21.5	14.0
29	18.5	10.5	22.5	15.0	27.5	15.0	29.0	18.0	25.0	14.5	21.5	13.5
30	19.0	10.5	19.5	12.0	23.0	17.5	27.5	18.5	22.0	15.5	21.0	13.0
31	---	---	21.5	10.5	---	---	27.5	16.5	22.5	15.0	---	---

COLORADO RIVER MAIN STEM

09163500 COLORADO RIVER NEAR COLORADO-UTAH STATE LINE

LOCATION.--Lat 39°10'00", long 108°57'26", in SE¼SE¼ sec.23, T.10 S., R.104 W., Mesa County, Hydrologic Unit 14010005, on right bank 4.8 mi (7.7 km) downstream from Salt Creek, 6.3 mi (10.1 km) southwest of Mack, Colo., and 7.2 mi (11.6 km) upstream from Colorado-Utah State line.

DRAINAGE AREA.--17,764 mi² (46,009 km²).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1951 to current year.

REVISED RECORDS.--WRD Colo. 1974: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 4,365 ft (1,330 m), from topographic map.

REMARKS.--Records good. Natural flow of stream affected by transmountain diversions, storage reservoirs, power development, and diversions for irrigation. (Records include all return flow from irrigated areas.)

AVERAGE DISCHARGE.--28 years, 5,737 ft³/s (162.5 m³/s), 4,156,000 acre-ft/yr (5,120 hm³/yr).

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 56,800 ft³/s (1,610 m³/s) June 9, 1957, gage height, 16.43 ft (4.999 m); minimum daily, 960 ft³/s (27.2 m³/s) Sept. 7, 1956.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 36,000 ft³/s (1,020 m³/s) at 0830 May 30, gage height, 12.55 ft (3.825 m); maximum gage height, 14.58 ft (4.444 m) at 1930 Jan. 11 (backwater from ice); minimum daily discharge, 2,310 ft³/s (65.4 m³/s) Oct. 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2990	4600	4000	3800	3850	5060	5830	9990	28000	19200	5420	3810
2	2990	4310	4290	3450	3900	5150	5550	11000	23000	20600	4880	3680
3	2860	4290	4360	3550	3750	5300	5300	11600	20900	19700	4750	3650
4	2880	4340	3840	3800	3800	5220	5180	10800	20800	18600	4440	3520
5	2470	4410	3640	4200	3950	5080	5180	9900	21700	17700	4170	3290
6	2330	4260	3870	4100	4150	5060	5160	10400	23800	16700	3990	3290
7	2310	4170	4060	3900	4150	5320	5320	11600	26200	16200	3900	3230
8	2360	3720	3640	3700	4150	6000	5600	13300	30100	15600	3730	3250
9	2380	3700	3200	3600	4100	6240	5950	13000	29900	15200	3720	3240
10	2380	4130	3200	3700	4200	5680	6410	11600	25900	14500	3920	3270
11	2380	4240	3100	3900	4000	5320	7070	10800	21800	13400	3820	3400
12	2360	4550	3000	3900	4050	5280	6670	10400	20000	12700	3680	3400
13	2390	5030	3630	4000	4150	5450	6340	10100	20800	12100	3610	3450
14	2440	4700	3200	3800	4700	5760	6200	10100	22600	11400	3580	3510
15	2690	3520	3350	3900	4900	5620	6210	10600	26200	10900	3690	3590
16	2990	3330	3350	4000	4500	5820	7020	12100	27900	10500	4080	3620
17	3020	4060	3350	4000	5000	5650	8030	14400	28800	10100	4380	3700
18	2910	4020	3780	4000	5150	5620	9230	16800	27400	9790	4540	3720
19	2930	3370	4790	3950	5050	5520	10500	19700	25100	8910	4770	3690
20	3020	3170	5030	3850	5100	5520	10300	23100	22100	8400	5330	3790
21	3130	3170	4650	3750	5150	5420	9290	25000	18900	7830	5260	3720
22	3320	3950	4220	3950	5180	6060	9170	26000	17500	7410	5020	3750
23	4170	4020	4290	3750	5080	5790	9720	26000	17900	7730	4940	3800
24	4670	4060	4310	3800	5060	5320	10900	27300	19100	7750	4840	3870
25	4340	4060	4260	3800	5010	5180	11700	28300	19500	7260	4580	3770
26	4620	3620	4040	3900	4890	5220	11200	28900	19600	7050	4380	3710
27	4500	3410	3780	3800	4890	5350	10600	29400	19800	6760	4350	3780
28	4460	3330	3500	3750	4940	5600	10400	32200	19300	6460	4230	3810
29	4340	3910	3680	3750	---	6150	10700	35100	19300	6380	4040	3810
30	4360	3800	3820	3650	---	5880	10700	35400	18900	6260	3740	3710
31	4500	---	3800	3700	---	5760	---	33400	---	5800	3730	---
TOTAL	99490	119250	118830	118700	126800	171400	237430	578290	682800	358890	133540	107830
MEAN	3209	3975	3833	3829	4529	5529	7914	18650	22760	11580	4308	3594
MAX	4670	5030	5030	4200	5180	6240	11700	35400	30100	20600	5420	3870
MIN	2310	3170	3000	3450	3750	5060	5160	9900	17500	5800	3580	3230
AC-FT	197300	236500	235700	235400	251500	340000	470900	1147000	1354000	711900	264900	213900
CAL YR 1978	TOTAL	2079720	MEAN	5698	MAX	27200	MIN	1790	AC-FT	4125000		
WTR YR 1979	TOTAL	2853250	MEAN	7817	MAX	35400	MIN	2310	AC-FT	5659000		

09163530 COLORADO RIVER BELOW COLORADO-UTAH STATE LINE
(National stream-quality accounting network station)

LOCATION.--Lat 39°05'1d", long 109°06'01" in NE¼NW¼ sec.12, T.20 S., R.25 E., Grand County, Hydrologic Unit 14030001, on right bank 0.3 mi (0.5 km) downstream from Bitter Creek, 1.0 mi (1.6 km) northeast of Westwater, UT, and 4.0 mi (6.4 km) downstream from Colorado-Utah State line.

DRAINAGE AREA.--18,034 mi² (46,708 km²).

PERIOD OF RECORD.--May 1962 to June 1969, October 1972 to current year (discontinued).

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: May 1962 to June 1969, October 1972 to current year.

WATER TEMPERATURES: May 1962 to June 1969, October 1972 to current year.

INSTRUMENTATION.--Water-quality monitor since October 1972.

REMARKS.--Records of discharge given for Colorado River near Colorado-Utah State line (station 09163503). Daily maximum and minimum specific-conductance data available in district office.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 5,140 micromhos Mar. 17, 1969; minimum, 357 micromhos June 22, 1965.

WATER TEMPERATURES: Maximum, 28.0°C July 30, 1966, July 13, 1968; minimum, freezing point on many days during winter months most years.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 1,660 micromhos Oct. 15; minimum, 385 micromhos June 25.

WATER TEMPERATURES: Maximum, 25.0°C Aug. 7, 8; minimum, freezing point several days during December to February.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (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, (COLS. PER 100 ML)	HARD- NESS (MG/L AS CaCO3)	HARD- NESS, NONCAR- BONATE (MG/L CaCO3)
OCT											
04...	1015	E3100	1440	8.4	13.5	16	8.6	100	450	510	350
NOV											
13...	1045	3850	1110	7.7	7.5	25	9.4	K90	620	390	240
30...	0900	3810	1310	8.4	2.5	--	--	--	--	450	280
DEC											
11...	1030	E3000	1140	7.8	.5	8.0	11.8	62	160	370	220
JAN											
03...	1015	E3000	1120	8.0	.5	9.4	13.2	29	55	340	190
FEB											
27...	1130	E5100	870	7.8	6.0	110	10.4	K80	800	280	160
MAR											
12...	1000	E6000	910	8.4	6.0	540	10.1	800	>10000	300	180
APR											
12...	1115	E6100	830	7.7	8.0	260	10.8	K350	600	280	140
MAY											
07...	0945	12000	560	7.8	10.0	170	10.0	K120	420	180	78
JUN											
04...	0945	E22000	440	7.7	15.0	93	8.5	170	260	170	78
JUL											
10...	1045	17000	520	7.7	18.5	38	8.6	K51	510	190	100
AUG											
06...	1045	E3000	1150	7.9	25.0	18	6.8	K30	64	380	240

E ESTIMATED.

COLORADO RIVER MAIN STEM

09163530 COLORADO RIVER BELOW COLORADO-UTAH STATE LINE

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

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 (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	ALKA- LINITY (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)
DCT 04...	130	44	130	2.5	4.4	--	--	160	450	99	.5
NOV 13...	100	33	99	2.2	4.0	--	--	150	320	90	.3
30...	110	42	120	2.5	4.2	200	1	170	410	99	.3
DEC 11...	93	33	98	2.2	4.5	--	--	150	330	80	.3
JAN 03...	87	30	94	2.2	4.5	--	--	150	270	96	.3
FEB 27...	74	24	82	2.1	4.0	--	--	120	230	74	.3
MAR 12...	79	26	91	2.3	3.6	--	--	120	260	68	.4
APR 12...	69	26	70	1.8	3.1	--	--	140	220	50	.3
MAY 07...	45	16	42	1.4	2.8	--	--	100	120	33	.2
JUN 04...	46	13	30	1.0	5.7	--	--	90	110	17	.3
JUL 10...	52	15	36	1.1	2.0	--	--	87	140	26	.2
AUG 06...	100	32	86	1.9	4.6	--	--	140	340	77	.3

DATE	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS, RESIDUE AT 180 DEG. C OIS- SOLVED (MG/L)	SOLIDS, SUM OF CONSTI- TUENTS, OIS- SOLVED (MG/L)	SOLIDS, OIS- SOLVED (TONS PER AC-FT)	SOLIDS, OIS- SOLVED (TONS PER DAY)	NITRO- GEN, NO2+NO3 DIS- 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)
DCT 04...	11	1030	965	1.40	8620	.91	--	.02	.65	.67
NOV 13...	13	793	750	1.08	8240	.75	--	.21	2.2	2.4
30...	11	--	901	1.23	9270	--	1.1	--	--	--
DEC 11...	13	787	742	1.07	6370	.90	--	.05	.90	.95
JAN 03...	12	735	684	1.00	5950	.78	--	.02	.39	.41
FEB 27...	10	573	570	.78	7890	.61	--	.19	.75	.94
MAR 12...	10	641	610	.87	10400	.71	--	.19	.57	.76
APR 12...	9.8	554	532	.75	9120	.55	--	.07	.93	1.0
MAY 07...	11	349	330	.47	11300	.52	--	.02	.78	.80
JUN 04...	9.4	284	286	.39	16900	.33	--	.02	.67	.69
JUL 10...	10	310	334	.42	14200	.47	--	.04	.60	.64
AUG 06...	8.7	763	733	1.04	6180	.67	--	.01	.29	.30

COLORADO RIVER MAIN STEM

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09163530 COLORADO RIVER BELOW COLORADO-UTAH STATE LINE

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	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)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	PHYTO- PLANK- TON, TOTAL (CELLS PER ML)
OCT 04...	.50	1.6	.040	.020	--	--	--	5.6	--	--
NOV 13...	.61	3.2	.590	.020	--	40	10	--	5.5	1870
NOV 30...	--	--	--	.010	.00	10	20	--	--	--
DEC 11...	.67	1.9	.040	.050	--	--	--	6.2	--	--
JAN 03...	.43	1.2	.050	.010	--	--	--	4.0	--	--
FEB 27...	.52	1.6	.030	.050	--	--	--	4.7	--	--
MAR 12...	.48	1.5	.180	.070	--	20	20	--	6.2	430
APR 12...	.77	1.6	.310	.020	--	--	--	8.6	--	--
MAY 07...	.47	1.3	.260	.030	--	0	<1	--	8.7	430
JUN 04...	.27	1.0	.090	.020	--	--	--	5.2	--	77
JUL 10...	.43	1.1	.210	.010	--	20	9	--	4.7	220
AUG 06...	.28	.97	.050	.000	--	--	--	4.6	--	4590

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)
NOV 13...	1045	2	1	100	100	3	1	20
MAR 12...	1000	3	1	100	0	1	1	20
MAY 07...	0945	--	2	200	60	1	<1	20
JUL 10...	1045	--	1	100	50	1	6	10

DATE	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)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB)	LEAD, DIS- SOLVED (UG/L AS PB)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)
NOV 13...	0	3	0	22	8	5900	21	3	130
MAR 12...	10	7	2	19	3	10000	33	2	240
MAY 07...	0	4	<3	2	1	6900	29	0	230
JUL 10...	10	1	<3	3	1	1200	13	6	40

DATE	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY DIS- SOLVED (UG/L AS HG)	SELE- NIUM, TOTAL (UG/L AS SE)	SELE- NIUM, DIS- SOLVED (UG/L AS SE)	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 13...	.2	.0	18	12	0	0	120	20
MAR 12...	.1	.0	9	6	0	0	70	20
MAY 07...	--	.0	--	3	0	0	60	30
JUL 10...	--	.0	--	3	0	0	20	10

COLORADO RIVER MAIN STEM

09163530 COLORADO RIVER BELOW COLORADO-UTAH STATE LINE

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1270	1080	1200	989	1020	924	927	538	513	409	975	1260
2	1280	1090	1190	1000	999	915	944	537	507	409	1030	1300
3	1280	1090	1140	1030	1010	943	951	525	444	412	1040	1300
4	1340	1080	1160	988	1010	943	922	532	545	426	1040	1290
5	1370	1080	1180	979	1000	948	924	558	587	442	1120	1310
6	1410	1090	1140	1030	988	910	895	559	554	450	1160	1320
7	1480	1090	1160	1000	968	899	901	565	514	478	1180	1340
8	1550	1100	1130	988	949	898	902	565	488	524	1180	1320
9	1560	1100	1090	985	938	912	888	617	524	516	1210	1330
10	1560	1110	1100	992	925	931	868	657	548	532	1200	1330
11	1560	1110	1100	963	915	938	844	665	567	492	1190	1320
12	1590	1110	1150	994	903	890	830	674	569	573	1220	1310
13	1600	1120	1200	1000	908	850	837	689	550	607	1230	1280
14	1580	1110	1190	1000	906	859	814	692	505	628	1230	1270
15	1610	1130	1210	1010	901	879	804	699	459	658	1240	1260
16	1570	1150	1150	977	897	877	812	663	424	692	1240	1260
17	1500	1200	1060	976	896	871	768	619	405	723	1240	1260
18	1450	1200	984	973	918	861	707	565	396	759	1230	1250
19	1470	1270	941	969	917	874	635	497	397	792	1220	1240
20	1490	1270	941	1000	914	862	597	465	430	845	1220	1240
21	1500	1340	994	998	912	853	611	448	466	891	1210	1220
22	1490	1340	1030	1000	915	852	618	450	491	931	1240	1200
23	1450	1380	1040	991	913	938	610	451	481	1010	1190	1210
24	1400	1380	1000	1020	914	952	588	445	446	937	1180	1230
25	1260	1450	977	1010	905	925	554	447	430	821	1180	1200
26	1180	1430	975	997	906	905	547	455	442	821	1190	1210
27	1170	1410	978	1030	904	896	553	458	436	847	1210	1200
28	1160	1410	967	1050	914	885	549	453	439	886	1220	1190
29	1120	1400	961	1020	---	880	546	459	445	909	1230	1210
30	1120	1290	983	1000	---	931	534	461	444	924	1250	1200
31	1120	---	992	1030	---	926	---	484	---	947	1240	---

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	16.0	13.0	9.5	8.0	3.0	2.5	2.0	2.0	1.0	.5	4.5	3.5
2	16.5	13.0	9.5	8.5	3.0	2.5	2.0	1.5	1.0	.5	4.5	3.5
3	15.0	12.0	---	---	2.5	1.0	2.5	1.5	1.0	.5	4.5	3.0
4	14.5	10.5	---	---	1.0	.5	1.5	1.0	.5	.5	4.0	3.0
5	14.0	11.0	---	---	1.0	.5	1.5	1.0	1.0	.5	4.5	2.5
6	14.0	10.5	---	---	.5	.0	1.5	1.5	1.0	.5	6.0	3.5
7	14.0	11.0	---	---	.5	.0	1.5	1.0	1.0	.5	6.0	4.0
8	14.0	11.0	---	---	1.0	.0	1.5	1.0	1.0	.0	6.0	4.5
9	14.5	11.0	---	---	1.0	.0	1.5	1.0	1.0	.5	6.5	5.0
10	14.5	11.0	---	---	.5	.0	1.5	1.0	1.0	.0	6.0	5.0
11	14.5	11.0	---	---	1.0	.0	1.5	1.0	1.0	.0	6.5	4.0
12	14.5	11.0	---	---	1.5	.0	1.5	1.0	1.0	.5	7.0	5.0
13	14.0	11.0	---	---	1.5	1.5	1.0	1.0	1.0	1.0	7.0	5.0
14	13.0	10.0	6.0	5.5	1.5	.5	1.5	.0	.5	.0	7.0	6.0
15	12.0	9.5	5.5	5.0	1.5	1.5	1.5	1.0	1.0	.0	7.5	6.0
16	12.0	9.5	---	---	1.5	1.5	1.5	1.0	1.0	.0	7.0	6.5
17	10.5	9.5	---	---	1.5	1.5	1.0	1.0	1.5	.0	8.0	6.5
18	11.0	10.0	---	---	2.0	1.5	1.5	1.0	3.0	.5	7.5	6.0
19	12.0	9.5	---	---	2.0	1.5	1.0	1.0	1.5	1.0	7.5	6.0
20	10.0	9.5	---	---	1.5	1.5	1.5	1.0	2.5	1.5	7.0	6.5
21	10.0	9.5	---	---	1.5	1.5	1.0	.5	3.0	1.5	6.5	6.0
22	10.0	9.0	---	---	2.0	1.5	.0	.0	3.0	2.0	6.5	5.5
23	9.5	8.0	---	---	2.0	1.5	1.0	.5	3.0	2.0	6.5	5.0
24	10.0	9.0	---	---	2.0	2.0	1.0	.5	3.5	2.0	7.5	6.0
25	10.0	9.5	---	---	2.0	2.0	1.0	.5	3.5	2.0	8.5	7.0
26	9.0	8.0	---	---	2.0	2.0	1.0	.5	3.0	2.5	9.5	8.0
27	8.5	7.5	---	---	2.0	2.0	1.0	.5	4.0	2.0	9.0	8.0
28	8.5	7.0	---	---	2.0	2.0	1.0	.5	3.5	2.0	8.5	7.5
29	8.5	7.0	2.0	1.5	2.5	2.0	1.0	.5	---	---	8.5	7.0
30	8.5	7.5	3.0	2.0	2.5	2.0	1.0	.5	---	---	7.5	6.5
31	9.0	7.5	---	---	2.0	2.0	1.0	.5	---	---	7.0	6.5

COLORADO RIVER MAIN STEM

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09163530 COLORADO RIVER BELOW COLORADO-UTAH STATE LINE

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	6.5	5.5	14.0	12.0	13.0	11.0	17.5	16.5	23.0	21.5	20.5	18.5
2	6.0	5.5	12.5	11.0	13.5	11.5	17.5	16.0	23.5	21.5	21.0	19.0
3	6.5	4.5	11.5	10.0	15.0	12.5	16.0	15.5	23.5	22.0	21.0	19.5
4	7.0	6.0	12.0	9.5	16.0	13.5	16.5	15.0	23.5	22.0	21.0	19.5
5	9.0	6.5	12.5	11.0	16.0	9.5	17.5	15.5	24.0	22.0	21.0	19.0
6	10.0	8.5	13.0	11.5	16.5	15.0	17.5	16.5	24.5	23.0	21.5	19.0
7	10.5	9.0	12.0	10.0	16.0	13.5	18.0	16.0	25.0	23.0	21.5	19.5
8	11.5	9.5	10.5	9.0	13.0	10.5	18.5	16.5	25.0	23.5	21.5	19.5
9	11.0	9.5	9.0	7.5	11.5	9.5	19.0	17.0	24.5	23.0	21.5	20.0
10	10.0	8.5	9.5	7.5	13.0	10.5	19.5	17.5	25.0	22.5	22.0	20.5
11	8.5	7.5	10.5	8.5	14.5	11.5	19.5	17.5	24.0	22.5	22.0	21.0
12	8.5	6.5	12.5	9.5	17.0	14.0	20.0	18.0	24.0	22.5	21.0	19.5
13	9.0	7.0	14.5	11.0	17.5	16.0	21.0	18.5	23.5	22.0	20.0	18.0
14	11.0	8.5	16.0	12.5	17.0	16.0	21.0	19.0	22.0	20.0	18.5	17.0
15	13.0	10.0	17.0	14.0	16.5	15.0	21.5	19.5	20.0	19.0	18.5	16.5
16	13.5	11.0	17.5	14.5	15.5	14.0	21.0	19.5	20.0	19.0	18.5	16.5
17	13.5	11.5	15.0	12.5	15.0	13.5	21.0	20.0	20.0	18.5	18.5	17.0
18	13.0	11.5	15.5	13.0	14.5	13.0	21.5	20.0	20.0	19.0	19.0	17.5
19	12.5	10.5	16.0	13.5	13.0	11.5	21.0	20.0	19.5	18.5	19.0	17.5
20	11.0	9.5	15.5	13.0	13.5	12.0	21.0	20.0	19.5	17.5	18.5	17.5
21	11.0	10.5	15.5	13.0	15.5	13.0	21.0	20.0	19.0	17.0	18.5	17.0
22	11.0	10.5	15.0	12.5	17.0	14.5	22.0	20.5	20.5	18.5	18.5	17.5
23	11.5	10.5	15.0	12.5	17.5	16.0	22.0	21.0	21.5	19.5	18.5	17.0
24	12.0	11.0	14.5	12.5	17.5	16.5	22.5	21.5	21.5	20.0	19.0	17.5
25	11.5	10.5	14.5	12.5	17.5	16.5	23.0	21.5	20.5	18.5	19.0	17.5
26	10.5	9.5	15.0	13.0	17.0	16.0	23.0	22.0	20.0	19.0	18.5	17.5
27	12.0	10.0	16.0	13.5	17.0	15.5	23.5	22.5	20.5	19.0	18.0	17.0
28	12.5	10.5	15.5	14.0	17.5	16.0	23.0	22.0	21.0	19.5	17.5	16.0
29	12.5	11.0	14.5	13.0	18.0	16.5	23.0	22.0	21.5	19.5	17.5	16.0
30	13.0	11.0	13.5	12.0	18.0	17.0	23.0	22.0	20.5	19.5	17.5	16.0
31	---	---	12.5	11.0	---	---	23.0	21.5	20.0	18.0	---	---

COLORADO RIVER MAIN STEM

09163530 COLORADO RIVER BELOW COLORADO-UTAH STATE LINE

SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDEO (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDEO (T/DAY)	DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SEDI- MENT, SUS- PENDEO (MG/L)	SEDI- MENT DIS- CHARGE, SUS- PENDEO (T/DAY)
OCT					MAY				
03...	1115	2860	142	1100	17...	1030	14000	1740	65800
NOV					JUN				
30...	1040	3800	222	2280	05...	1040	22000	863	51300
DEC					JUL				
13...	1115	3430	140	1300	12...	1115	17000	261	12000
MAR					AUG				
14...	1100	5720	656	10100	14...	1140	3000	145	1170
APR					SEP				
10...	1110	6110	713	11800	11...	1050	3000	108	875

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS)	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. SIEVE DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .125 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .250 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .500 MM
OCT									
03...	1115	2860	--	--	--	78	--	--	--
NOV									
30...	1040	3800	--	--	--	62	--	--	--
DEC									
13...	1115	3430	--	--	--	70	--	--	--
MAR									
14...	1100	5720	45	55	69	84	92	98	100
APR									
10...	1110	6110	--	--	--	98	--	--	--
MAY									
17...	1030	14000	--	--	--	71	--	--	--
JUN									
05...	1040	22000	--	--	--	34	--	--	--
JUL									
12...	1115	17000	--	--	--	53	--	--	--
AUG									
14...	1140	3000	--	--	--	89	--	--	--
SEP									
11...	1050	3000	--	--	--	74	--	--	--

COLORADO RIVER MAIN STEM

09163530 COLORADO RIVER BELOW COLORADO-UTAH STATE LINE
PHYTOPLANKTON ANALYSES, OCTOBER 1978 TO AUGUST 1979

DATE TIME	NOV 13,78 1145	MAR 12,79 1000	MAY 7,79 0945	JUN 4,79 0945	JUL 10,79 1045	AUG 6,79 1045				
TOTAL CELLS/ML	1800	430	430	77	220	4500				
DIVERSITY: DIVISION	1.6	0.0	0.6	0.7	0.9	1.4				
..CLASS	1.7	0.0	0.6	0.7	0.9	1.6				
...ORER	2.2	0.0	1.3	1.5	1.4	2.3				
...FAMILY	3.4	0.9	2.9	2.3	1.4	3.0				
....GENUS	3.5	0.9	2.9	2.3	1.8	3.2				
ORGANISM	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT	CELLS /ML	PER- CENT
CHLOROPHYTA (GREEN ALGAE)										
..CHLOROPHYCEAE										
...CHLOROCOCCALES										
....MICRACTINIACEAE										
.....MICRACTINIUM	44	2	--	-	--	-	--	-	--	-
...OOCYSTACEAE										
....ANKISTRODESMUS	22	1	--	-	--	-	--	-	56	1
....KIRCHNERIELLA	--	-	--	-	--	-	--	-	84	2
....OOCYSTIS	89	5	--	-	--	-	--	-	310	7
...SCENEDESMACEAE										
....ACTINASTRUM	--	-	--	-	56	13	--	-	--	-
...SCENEDESMUS	130	7	--	-	--	-	77#	35	670	15
...TETRASPORALES										
...PALMELLACEAE										
...SPHAEROCYSTIS	110	6	--	-	--	-	--	-	--	-
...VOLVOCALES										
...CHLAMYDOMONADACEAE										
....CARTERIA	22	1	--	-	--	-	--	-	--	-
....CHLAMYDOMONAS	--	-	--	-	--	-	13#	17	220	5
CHRYSPHYTA										
..BACILLARIOPHYCEAE										
...CENTRALES										
...COSCINODISCAEAE										
....CYCLOTELLA	66	4	--	-	98#	23	26#	33	26	12
....HELOSIRA	--	-	--	-	--	-	--	-	90#	41
...PENNIALES										
...ACHNANTHACEAE										
....ACHNANTHES	--	-	--	-	14	3	--	-	--	-
...RHODOSIPHENIA	240	14	--	-	--	-	--	-	--	-
...CYMBELLACEAE										
....CYMBELLA	44	2	--	-	14	3	--	-	--	-
...DIATOMACEAE										
....DIATOMA	--	-	--	-	14	3	--	-	--	-
...FRAGILARIACEAE										
....SYNEDRA	--	-	--	-	--	-	--	-	--	-
...GOMPHONEMACEAE										
....GOMPHONEMA	22	1	140#	33	56	13	13#	17	--	-
...NAVICULACEAE										
....NAVICULA	220	13	290#	67	84#	19	13#	17	--	-
...PINNULARIA	44	2	--	-	--	-	--	-	--	-
...NITZSCHIAEAE										
....NITZSCHIA	180	10	--	-	56	13	13#	17	26	12
...SURIPELLACEAE										
....SURIPELLA	44	2	--	-	42	10	--	-	--	-
..CHRYSPHYCEAE										
...CHRYSDOMONADALES										
...OCHROMONADACEAE										
....OCHROMONAS	22	1	--	-	--	-	--	-	84	2
CRYPTOPHYTA (CRYPTOMONADS)										
..CRYPTOPHYCEAE										
...CRYPTOMONADALES										
...CRYPTOCHRYSIDACEAE										
....CHROOMONAS	--	-	--	-	--	-	--	-	28	1
CYANOPHYTA (BLUE-GREEN ALGAE)										
..CYANOPHYCEAE										
...CHROOCOCCALES										
....CHROOCOCCACEAE										
.....ANACYSTIS	--	-	--	-	--	-	--	-	360	8
...HORMOGONALES										
...OSCILLATORIACEAE										
....LYNGBYA	420#	24	--	-	--	-	--	-	--	-
....OSCILLATORIA	--	-	--	-	--	-	--	-	310	7
EUGLENOPHYTA (EUGLENOIDS)										
..EUGLENOPHYCEAE										
...EUGLENALES										
...EUGLENACEAE										
....TRACHELOMONAS	44	2	--	-	--	-	--	-	--	-

NOTE: # - DOMINANT ORGANISM; EQUAL TO OR GREATER THAN 15%

* - OBSERVED ORGANISM; MAY NOT HAVE BEEN COUNTED; LESS THAN 1/2%

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 of these diversions are given in the following list.

09010000 Grand River ditch diverts water from tributaries of Colorado River to La Poudre Pass Creek (tributary to Cache la Poudre River) in NW¼ sec.21, T.6 N., R.75 W., in Platte River basin. Two collection ditches beginning at headgates located in sec.28, T.5 N., R.76 W., and sec.29, T.6 N., R.75 W., intercept all tributaries upstream on each side of the Colorado River and converge at La Poudre Pass.

REVISIONS (WATER YEARS).--WSP 1313: 1912-27.

09012000 Eureka ditch diverts water from tributaries of Tonahutu Creek between headgate in sec.7, T.4 N., R.74 W., and Sprague Pass, in Colorado River basin, to Spruce Creek (tributary to Big Thompson River) in sec.16, T.4 N., R.74 W., in Platte River basin.

REVISIONS (WATER YEARS).--WSP 1313: 1949.

09013000 Alva B. Adams tunnel diverts water from Grand Lake and Shadow Mountain Lake in NW¼ sec.9, T.3 N., R.75 W., in Colorado River basin, to Lake Estes (Big Thompson River) in sec.30, T.5 N., R.72 W., in Platte River basin. For daily discharge, see elsewhere in this report.

09021500 Berthoud Pass ditch diverts water from tributaries of Fraser River between headgate in sec.33, T.2 S., R.75 W., and Berthoud Pass, in Colorado River basin, to Hoop Creek (tributary to West Fork Clear Creek) in sec.10, T.3 S., R.75 W., in Platte River basin.

09022500 Moffat water tunnel diverts water from tributaries of Williams Fork (via August P. Gumlick and Vasquez tunnels, beginning in 1959) between headgates (in secs.20 and 29, T.3 S., R.76 W.) and west portal of August P. Gumlick tunnel (in sec.28, T.3 S., R.76 W.) and from the main stem and tributaries of Fraser River between headgates (in sec.8, T.2 S., R.76 W., and sec.24, T.1 S., R.75 W.) and west portal of Moffat tunnel (in sec.11, T.2 S., R.75 W.), in Colorado River basin, to South Boulder Creek, in sec.2, T.2 S., R.74 W., in Platte River basin. (See station 09036000 in Volume 2 for diversions by August P. Gumlick tunnel.)

09042000 Hoosier Pass tunnel diverts water from tributaries of Blue River in Colorado River basin to Montgomery Reservoir (Middle Fork South Platte River) in sec.14, T.8 S., R.78 W., in Platte River basin; this water is again diverted to South Catamount Creek (tributary to Catamount Creek) in SE¼ sec.14, T.13 S., R.69 W., in the Arkansas River basin. Collection conduits extending from the right bank of Crystal Creek (tributary to Spruce Creek) in sec.14, T.7 S., R.78 W., right bank of Spruce Creek in sec.23, T.7 S., R.78 W., right bank of McCullough Gulch in sec.26, T.7 S., R.78 W., right bank of Monte Cristo Creek in SW¼NE¼ sec.2, T.8 S., R.78 W., left bank of Bemrose Creek in SW¼SW¼ sec.6, T.8 S., R.77 W., and intercepting intermediate tributaries, transport diversions to north portal of the tunnel.

09046000 Boreas Pass ditch diverts water from tributaries of Blue River between headgate in sec.26, T.7 S., R.77 W., and Boreas Pass, in Colorado River basin, to Tarryall Creek in sec.26, T.7 S., R.77 W., in Platte River basin.

REVISIONS (WATER YEARS).--WSP 1733: 1958.

09047300 Vidler tunnel diverts water from tributaries of Peru Creek (tributary to Snake River) in sec.9, T.5 S., R.75 W., in Blue River basin, to Leavenworth Creek (tributary to South Clear Creek) in sec.10, T.5 S., R.75 W., in Platte River basin.

09050590 Harold D. Roberts tunnel diverts water from Dillon Reservoir (Blue River) in sec.18, T.5 S., R.77 W., in Blue River basin, to North Fork South Platte River (tributary to South Platte River) in SW¼SW¼ sec.4, T.7 S., R.74 W., in Platte River basin. Figures include a small amount of ground-water inflow between Dillon Reservoir and east portal of tunnel.

09061500 Columbine ditch diverts water from tributaries of Eagle River in sec.5, T.8 S., R.79 W., in Colorado River basin to Chalk Creek (tributary to East Fork Arkansas River) in NW¼ sec.9, T.8 S., R.79 W., in Arkansas River basin.

09062000 Ewing ditch diverts water from Piney Creek in sec.11, T.8 S., R.80 W., in Eagle River basin, to Thayer Gulch (tributary to Tennessee Creek) in sec.11, T.8 S., R.80 W., in Arkansas River basin.

TRANSMOUNTAIN DIVERSIONS

TRANSMOUNTAIN DIVERSIONS FROM COLORADO RIVER BASIN IN COLORADO--Continued

09062500 Wurtz ditch diverts water from tributaries of Eagle River between headgate in sec.32, T.7 S., R.80 W., and Tennessee Pass, in Colorado River basin, to West Tennessee Creek (tributary to Tennessee Creek) sec.17, T.8 S., R.80 W., in Arkansas River basin.

09063700 Homestake tunnel diverts water from Homestake Lake (Middle Fork Homestake Creek), in sec.17, T.8 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 imp 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.

09073000 Twin Lakes tunnel diverts water from tributaries of Roaring Fork River between headgates (in sec T.11 S., R.83 W., and sec.2, T.11 S., R.83 W.), and west portal of Twin Lakes tunnel (in sec.24, T.11 S., R.8 in Colorado River basin, to North Fork Lake Creek in sec.22, T.11 S., R.82 W., in Arkansas River basin.

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 collection conduits extending between headgates on right bank of Sawyer Creek at lat 39°15'58", long 106°38'1 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.

09115000 Larkspur ditch diverts water from tributaries of Tomichi Creek between headgates (in sec.11, T.4 R.6 E., and sec.1, T.47 N., R.6 E.), and Marshall Pass, in Gunnison River basin, to Poncha Creek (tributary to South Arkansas River) in SE¼ sec.24, T.48 N., R.6 E., in Arkansas River basin.

09118200 Tarbell ditch diverts water from Lake Fork Cochetopa Creek (tributary to Cochetopa Creek), in NW sec.18, T.43 N., R.2 E., in Gunnison River basin, to Lake Fork Saguache Creek (tributary to Middle Fork Sagu Creek) in NE¼ sec.18, T.43 N., R.2 E., in Rio Grande basin. All records available prior to October 1960 published in WSP 1733.

REVISIONS (WATER YEARS)--WSP 1733: 1949-51.

09121000 Tabor ditch diverts water from tributaries of Cebolla Creek in secs.29 and 36, T.43 N., R.3 W., Gunnison River basin, to Big Spring Creek (tributary to North Clear Creek) in sec.35, T.43 N., R.3 W., in Rio Grande basin.

09341000 Treasure Pass diversion ditch diverts water from tributaries of Wolf Creek between headgates (in sec.31, T.38 N., R.2 E., and sec.6, T.37 N., R.3 E.), and Wolf Creek Pass, in San Juan River basin, to tribut of South Fork Rio Grande in sec.31, T.38 N., R.2 E., in Rio Grande basin.

09347000 Don La Font ditches 1 and 2 divert water from tributaries of Piedra River between headgates in N sec.4, T.38 N., R.1 W., and SW¼ sec.33, T.39 N., R.1 W., and Piedra Pass, in San Juan River basin, to South River in sec.4, T.38 N., R.1 W., in Rio Grande basin.

09348000 Williams Creek-Squaw Pass ditch diverts water from Williams Creek (tributary to Piedra River) in sec.13, T.39 N., R.3 W., in San Juan River basin, to Squaw Creek in sec.10, T.39 N., R.3 W., in Rio Grande basin.

09351000 Pine River-Weminuche Pass ditch diverts water from North Fork Los Pinos River (tributary to Los Pinos River) in sec.4, T.39 N., R.4 W., in San Juan River basin, to Weminuche Creek in sec.33, T.40 N., R.4 W. in Rio Grande basin.

09351500 Weminuche Pass ditch diverts water from left bank of Rincon la Vaca Creek (tributary to Los Pinos River) in sec.5, T.39 N., R.4 W., in San Juan River basin, to Weminuche Creek in sec.33, T.40 N., R.4 W., in Rio Grande basin.

TRANSMOUNTAIN DIVERSIONS FROM COLORADO RIVER BASIN IN COLORADO

DIVERSIONS, IN ACRE-FEET, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

Diversion	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Water year
TO PLATTE RIVER BASIN													
09010000 Grand River ditch...	0	0	0	0	0	0	0	0	4,980	8,850	3,350	751	17,940
09012000 Eureka ditch.....	0	0	0	0	0	0	0	0	0	14	34	12	60
09013000 Alva B. Adams tunnel	25,150	24,980	29,210	22,520	19,890	22,560	17,340	8,880	332	4,940	12,590	10,140	198,500
09021500 Berthoud Pass ditch.	0.4	0	0	0	0	0	0	0	0	241	123	8.6	373
09022500 Moffat water tunnel.	1,910	769	614	442	321	389	613	10,170	14,710	15,450	6,770	3,570	55,740
09046000 Boreas Pass ditch...	0	0	0	0	0	0	0	0	69	76	8.4	0	154
09047300 Vidler tunnel.....	0.8	0	0	0	0	0	0	0	0	278	235	114	627
09050590 Harold D. Roberts tunnel.....	19,340	9,970	6,410	6,380	5,720	4,860	0	0	0	5,400	7,410	8,370	73,850
Total.....	46,400	35,720	36,230	29,340	25,930	27,810	17,950	19,050	20,090	35,250	30,520	22,970	347,300
TO ARKANSAS RIVER BASIN													
09042000 Hoosier Pass tunnel.	0	0	0	0	0	0	0.4	1,050	3,940	1,660	1,510	1,760	9,910
09061500 Columbine ditch.....	0	0	0	0	0	0	0	182	1,350	424	59	19	2,040
09062000 Ewing ditch.....	0	0	0	0	0	0	0	162	955	322	99	53	1,590
09062500 Wurtz ditch.....	0	0	0	0	0	0	0	626	2,690	851	130	12	4,310
09063700 Homestake tunnel...	0	0	0	0	45	17,460	13,280	0	0	0	0	0	30,780
09073000 Twin Lakes tunnel...	413	284	213	177	157	155	264	8,320	27,300	6,150	3,190	436	47,060
09077160 Charles H. Bousteed Tunnel.....	0	0	0	0	0	0	0	6,870	29,430	16,510	1,210	0	54,020
09077500 Busk-Ivanhoe tunnel.	36	43	0	0	0	0	0	447	3,950	2,070	143	22	6,710
09115000 Larkspur ditch.....	0	0	0	0	0	0	0	16	138	42	26	18	241
Total.....	449	327	213	177	202	17,620	13,540	17,670	69,750	28,030	6,370	2,320	156,700
TO RIO GRANDE BASIN													
09118200 Tarbell ditch.....	0	0	0	0	0	0	0	0	0	50.6	201	45	296
09121000 Tabor ditch.....	0	0	0	0	0	0	0	169	726	284	93	29	1,300
09341000 Treasure Pass diver- sion ditch.....	0	0	0	0	0	0	0	0	100	290	2.4	0	392
09347000 Don La Font ditches Nos. 1 and 2.....	0	0	0	0	0	0	0	0	0	157	39	0	196
09348000 Williams Creek-Squew Pass ditch.....	0	0	0	0	0	0	0	0	0	0	0	0	0
09351000 Pine River-Weminuche Pass ditch.....	0	0	0	0	0	0	0	0	77	134	18	0	228
09351500 Weminuche Pass ditch	0	0	0	0	0	0	0	0	262	842	134	0	1,240
Total.....	0	0	0	0	0	0	0	169	1,160	1,760	487	74	3,650
Grand Total.....	46,850	36,050	36,440	29,520	26,130	45,430	31,490	36,890	91,000	65,040	37,380	25,360	563,290

NOTE: Due to method of computing water year figures and rounding procedures, totals do not agree.

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 storm precipitation and related runoff from storm-runoff partial-record stations. 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 1979

Station no.	Station name	Location	Drainage area (mi ²)	Period of record	Measurements	
					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 (2.4 km) upstream from mouth, 7.5 mi (12.1 km) north of Minturn.	0.76	1965-79	10-04-78	0.02
					11-16-78	0.03
					6-15-79	9.37
					6-28-79	4.72

*Also a crest-stage partial-record station.

CREST-STAGE PARTIAL-RECORD STATIONS

The following table contains annual maximum discharge for crest-stage stations. A crest-stage gage is a device which will register the peak stage occurring between inspections of the gage. A stage-discharge relation for each gage is developed from discharge measurements made by indirect measurements of peak flow or by current meter. The date of the maximum discharge is not always certain but is usually determined by comparison with nearby continuous-record stations, weather records, or local inquiry. Only the maximum discharge for each water year is given. Information on some lower floods may have been obtained, but is not published herein. The years given in the period of record represent water years for which the annual maximum has been determined.

ANNUAL MAXIMUM DISCHARGE AT CREST-STAGE PARTIAL-RECORD STATIONS DURING WATER YEAR 1979

					Annual maximum		
Station number	Station name	Location	Drainage area (mi ²)	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 (2.4 km) upstream from mouth, 7.5 mi (12.1 km) north of Minturn.	0.76	1965-79	(a)	2.36	(a)
GUNNISON RIVER BASIN							
09151700	Deer Creek tributary near Dominguez, CO	Lat 38°51'30", long 108°18'53", in NE¼ sec. 36, T.3 S., R.2 E., Ute Meridian, Mesa County, at culvert at U.S. Highway 50, 4 mi (6 km) north of Dominguez.	b4	1971-79	1979 (c)		<12
LITTLE SALT WASH BASIN							
09153200	Little Salt Wash tributary near Fruita, CO	Lat 39°13'16", long 108°38'57", in NE¼NE¼ sec. 25, T.2 N., R.2 W., Ute Meridian, Mesa County, 200 ft (61 m) below bridge on 21 Rd., 6 mi (10 km) northeast of Fruita.	2.88	1971-79	1979 (c)		<15
SALT CREEK BASIN							
09163300	East Salt Creek tributary near Mack, CO	Lat 39°21'24", long 108°48'58", in SW¼SE¼ sec. 18, T.8 S., R.102 W., Mesa County, at culvert at State Highway 139, 10 mi (16 km) northeast of Mack.	1.67	1971-79	1979 (c)		<5

*Also a low-flow partial-record station.

a Not determined.

b Approximately.

c Peak stage did not reach bottom of gage.

d Revised.

DISCHARGE MEASUREMENTS MADE AT MISCELLANEOUS SITES DURING WATER YEARS 1976-79

Station no.	Stream	Tributary to	Location	Date	Discharge (ft ³ /s)	°Celsius	Specific conductance
	Colorado River below Rifle		Lat 39°29'39", Long 107°56'18"	09-27-76 04-08-77	2,860 1,560	13.C 11.C	1200
	Taylor River below Beaver Creek near Harmels Resort	Gunnison River	Lat 38°42'48", Long 106°47'26"	08-18-77	283	12.C	
	Taylor River at Gunnison County Highway Bridge	Gunnison River	Lat 38°42'28", Long 106°48'08"	08-18-77	252		
	Cement Creek at upper site at guard station	East River	Lat 39°49'09", Long 106°51'59"	08-18-77	11.0		
	Copper Creek at upper station at road crossing	East River	Lat 39°58'17", Long 107°57'50"	08-18-77	9.61		
	Cement Creek at lower site	East River	Lat 39°49'03", Long 106°52'24"	08-18-77	13.8		
	Northwater Creek	East Middle Fork Parachute Creek	Lat 39°37'07", Long 107°54'38"	09-26-78	0.004	11.5	560
	Northwater Creek	East Middle Fork Parachute Creek	Lat 39°36'46", Long 107°54'59"	09-26-78	0.01	9.5	520
	Tributary from right bank	Northwater Creek	Lat 39°36'38", Long 107°55'31"	09-26-78	0.01	9.5	350
	Tributary spring on right bank 0.05 mi. above drill pad	Northwater Creek	Lat 39°36'39", Long 107°56'00"	09-26-78	0.005	7.5	540
	Northwater Creek	East Middle Fork Parachute Creek	Lat 39°36'46", Long 107°56'17"	09-26-78	0.09	8.5	500
	Northwater Creek	East Middle Fork Parachute Creek	Lat 39°36'56", Long 107°56'17"	09-26-78	0.26	7.0	325
	Northwater Creek	East Middle Fork Parachute Creek	Lat 39°36'48", Long 107°57'48"	09-26-78	0.21	7.0	470
	Spring on left bank	Northwater Creek	Lat 39°36'47", Long 107°57'47"	09-26-78	0.02	7.5	500
	Northwater Creek above Raspberry Creek	East Middle Fork Parachute Creek	Lat 39°36'37", Long 107°58'13"	09-26-78	0.29	8.0	490
	Raspberry Creek at mouth	Northwater Creek	Lat 39°36'37", Long 107°58'14"	09-26-78	0.04	7.5	580
	Spring on left bank	Northwater Creek	Lat 39°36'32", Long 107°58'23"	09-26-78	0.001	4.5	540
	Yellowjacket Creek at mouth	Northwater Creek	Lat 39°36'31", Long 107°58'25"	09-26-78	0.12	9.0	540
	Northwater Creek below mouth of Yellowjacket Creek	East Middle Fork Parachute Creek	Lat 39°36'32", Long 107°58'26"	09-26-78	0.66	8.08	520
	Spring on left bank 100 ft below Yellowjacket Creek	Northwater Creek	Lat 39°36'28", Long 107°58'38"	09-26-78	0.002	6.5	560
	Buck Gulch at mouth	Northwater Creek	Lat 39°36'48", Long 108°00'09"	09-26-78	0.008	6.5	500
	Northwater Creek below Buck Gulch	East Middle Fork Parachute Creek	Lat 39°36'49", Long 108°00'09"	09-26-78	0.75	7.0	510
	Northwater Creek between Buck	East Middle Fork	Lat 39°36'57",	09-26-78	0.79	11.0	490

DISCHARGE MEASUREMENTS MADE AT MISCELLANEOUS SITES DURING WATER YEARS 1976-79--Continued

Station no.	Stream	Tributary to	Location	Date	Discharge (ft ³ /s)	°Celsius	Specific conductance
	and Bear Gulches	Parachute Creek	Long 108°00'24"				
	Spring on right bank	Northwater Creek	Lat 39°37'08", Long 108°00'41"	09-26-78	0.10	12.0	600
09092830	Northwater Creek near Anvil Points	East Middle Fork Parachute Creek	Lat 39°37'13", Long 108°00'44"	09-26-78	0.80	10.5	520
	Trappers Creek	East Middle Fork Parachute Creek	Lat 39°38'37", Long 107°57'09"	09-26-78	0.021	14.0	470
	Trappers Creek	East Middle Fork Parachute Creek	Lat 39°37'58", Long 107°58'31"	09-26-78	0.067	17.5	500
	Trappers Creek	East Middle Fork Parachute Creek	Lat 39°37'41", Long 107°59'33"	09-26-78	0.30	16.0	530
	Tributary side canyon just below previous site	Trappers Creek	Lat 39°37'27", Long 108°00'26"	09-26-78	0.024	17.5	560
	Trappers Creek	East Middle Fork Parachute Creek	Lat 39°37'27", Long 108°00'22"	09-26-78	0.21	14.0	530
	Trappers Creek at mouth	East Middle Fork Parachute Creek	Lat 39°37'20", Long 108°00'41"	09-26-78	0.19	17.5	510
	East Middle Fork Parachute Creek 50 ft. below confluence of Northwater and Trappers Creeks	East Middle Fork Parachute Creek	Lat 39°37'21", Long 108°00'42"	09-26-78	1.03	16.0	500
09092850	East Middle Fork Parachute near Rio Blanco	Middle Fork Parachute Creek	Lat 39°37'15", Long 108°01'46"	09-26-78	0.90	13.5	540
	Corral Gulch at mouth	East Middle Fork Parachute Creek	Lat 39°37'12", Long 108°02'22"	09-26-78	0.24	13.5	600
	East Middle Fork Parachute Creek below Corral Gulch	Middle Fork Parachute Creek	Lat 39°37'09", Long 108°02'24"	09-26-78	1.72	12.0	580
	Schutte Creek at spring at headwaters	Middle Fork Parachute Creek	Lat 39°39'30", Long 108°05'25"	09-26-78	0.03		
	Schutte Creek 200 ft below spring	Middle Fork Parachute Creek	Lat 39°39'27", Long 108°05'23"	09-26-78	0.16		
	Schutte Creek at contractors gage house	Middle Fork Parachute Creek	Lat 39°38'57", Long 108°05'34"	09-26-78	0.08		
	Schutte Creek near falls	Middle Fork Parachute Creek	Lat 39°38'12", Long 108°05'52"	09-26-78	0.31		
	Ben Good Creek	East Fork Parachute Creek	Lat 39°35'17", Long 107°58'48"	09-26-78	0.005	6.5	460
	Ben Good Creek	East Fork Parachute Creek	Lat 39°35'25", Long 107°59'33"	09-26-78	0.014	13.0	400
	Tributary	Ben Good Creek	Lat 39°35'18", Long 108°00'23"	09-26-78	0.007	20.5	540

DISCHARGE MEASUREMENTS MADE AT MISCELLANEOUS SITES DURING WATER YEARS 1976-79--Continued

Station no.	Stream	Tributary to	Location	Date	Discharge (ft ³ /s)	°Celsius	Specific conductance
J-Q-S. Gulch		East Fork Parachute Creek	Lat 39°34'44", Long 107°54'02"	09-25-78	0.002	16.5	
J-Q-S. Gulch		East Fork Parachute Creek	Lat 39°35'38", Long 107°54'20"	09-25-78	0.014	12.0	
J-Q-S. Gulch		East Fork Parachute Creek	Lat 39°35'30", Long 107°54'37"	09-25-78	0.014	11.0	
Draw coming in on right bank	J-Q-S. Gulch		Lat 39°35'25", Long 107°54'44"	09-25-78	0.006	18.5	
J-Q-S. Gulch		East Fork Parachute Creek	Lat 39°35'23", Long 107°54'43"	09-25-78	0.05	14.5	435
East Fork Parachute Creek		Parachute Creek	Lat 39°34'59", Long 107°55'06"	09-25-78	0.08		
East Fork Parachute Creek		Parachute Creek	Lat 39°34'57", Long 107°55'17"	09-25-78	0.08	11.5	465
East Fork Parachute Creek		Parachute Creek	Lat 39°34'43", Long 107°55'51"	09-25-78	0.30	15.0	
East Fork Parachute Creek		Parachute Creek	Lat 39°34'38", Long 107°55'54"	09-25-78	0.27	14.5	480
East Fork Parachute Creek		Parachute Creek	Lat 39°34'27", Long 107°56'26"	09-25-78	0.34	13	
Third Water Gulch at mouth		East Fork Parachute Creek	Lat 39°34'28", Long 107°56'28"	09-25-78	0.05 0.05	12 12.5	470 480
East Fork Parachute Creek		Parachute Creek	Lat 39°34'25", Long 107°56'28"	09-25-78	0.46	14.5	460
Second Anvil Creek at mouth		East Fork Parachute Creek	Lat 39°34'05", Long 107°56'52"	09-25-78	0.03	14.5	490
East Fork Parachute below Second Anvil Creek		Parachute Creek	Lat 39°34'04", Long 107°56'54"	09-25-78	0.63	14.5	480
Timber Gulch at mouth		East Fork Parachute Creek	Lat 39°33'53", Long 107°57'07"	09-25-78	No flow		
East Fork Parachute Creek at Timber Gulch		Parachute Creek	Lat 39°33'54", Long 107°57'05"	09-25-78	0.50	16.5	500
East Fork Parachute Creek between Timber and J-V. Gulches		Parachute Creek	Lat 39°33'42", Long 107°57'33"	09-25-78	0.51	14.5	470
J-V. Gulch at mouth		East Fork Parachute Creek	Lat 39°33'32", Long 107°58'10"	09-25-78	0.01	9.5	530
East Fork Parachute Creek below J-V. Gulch		Parachute Creek	Lat 39°33'33", Long 107°58'11"	09-25-78	0.66	14.5	460
Camp Gulch at mouth		East Fork Parachute Creek	Lat 39°33'29", Long 107°58'26"	09-25-78	0.065	13.0	480
East Fork Parachute Creek above mouth Grassy Gulch		Parachute Creek	Lat 39°33'22", Long 107°58'42"	09-25-78	0.75	11.0	480
Grassy Gulch at mouth		East Fork Parachute Creek	Lat 39°33'22", Long 107°58'43"	09-25-78	0.029	9.0	510

DISCHARGE MEASUREMENTS MADE AT MISCELLANEOUS SITES DURING WATER YEARS 1976-79--Continued

Station no.	Stream	Tributary to	Location	Date	Discharge (ft ³ /s)	°Celsius	Specific conductance
09092960	East Fork Parachute Creek below First Anvil Creek	Parachute Creek	Lat 39°33'21"N, Long 107°58'43"W	09-25-78	0.97	10.5	480
	First Anvil Creek at mouth	East Fork Parachute Creek	Lat 39°33'18"N, Long 107°58'44"W	09-25-78	0.16	9.5	450
	East Fork Parachute Creek above First Anvil Creek	Parachute Creek	Lat 39°33'21"N, Long 107°58'43"W	09-25-78	0.92	10.0	480
	East Fork Parachute Creek near Anvil Points, CO	Parachute Creek	Lat 39°33'20"N, Long 107°58'52"W	09-25-78	1.21	10.0	530
	East Fork Parachute Creek below Spring Gulch	Parachute Creek	Lat 39°33'20"N, Long 108°00'01"W	09-25-78	1.03	12.0	500
	East Fork Parachute Creek below Sheeptrail Hollow	Parachute Creek	Lat 39°33'21"N, Long 108°00'06"W	09-25-78	1.14	13.0	410
	East Fork Parachute Creek below Trail Gulch	Parachute Creek	Lat 39°33'40"N, Long 108°00'49"W	09-25-78	1.05	13.5	510
	East Fork Parachute Creek above falls	Parachute Creek	Lat 39°33'47"N, Long 108°00'49"W	09-25-78	1.20	11.5	505
	Tributary	Clear Creek	Lat 39°38'31"N, Long 108°38'12"W	10-31-78	0.10	6.5	580
	Tributary	Clear Creek	Lat 39°38'27"N, Long 108°28'56"W	10-31-78	0.002	3.0	535
	Clear Creek	Roan Creek	Lat 39°38'18"N, Long 108°29'46"W	10-31-78	0.43	9.0	615
	Tributary	Clear Creek	Lat 39°38'04"N, Long 108°29'23"W	10-31-78	0.001	1.5	590
	Clear Creek	Roan Creek	Lat 39°37'53"N, Long 108°28'44"W	10-31-78	0.70	8.0	500
	Tributary	Clear Creek	Lat 39°37'53"N, Long 108°28'26"W	10-31-78	0.004	5.5	645
	Tributary	Clear Creek	Lat 39°37'48"N, Long 108°28'02"W	10-31-78	0.004	6.0	830
	Clear Creek	Roan Creek	Lat 39°37'43"N, Long 108°27'51"W	10-31-78	0.72	8.4	510
	Tributary	Clear Creek	Lat 39°37'43"N, Long 108°27'46"W	10-31-78	0.004	12.5	830
	Tributary	Clear Creek	Lat 39°37'36"N, Long 108°27'35"W	10-31-78	0.001	13.5	800
	Tributary	Clear Creek	Lat 39°37'15"N, Long 108°26'29"W	10-31-78	0.001	14.5	910
	Clear Creek	Roan Creek	Lat 39°37'11"N, Long 108°26'22"W	10-31-78	0.88	7.5	655
	No Name Creek	Willow Creek	Lat 39°40'17"N, Long 108°26'43"W	11-01-78	4 gpm		
	No Name Creek	Willow Creek	Lat 39°40'12"N, Long 108°26'35"W	11-01-78	5 gpm	7.0	725
	No Name Creek	Willow Creek	Lat 39°40'02"N, Long 108°26'17"W	11-01-78	3 gpm		
	No Name Creek	Willow Creek	Lat 39°39'37"N, Long 108°25'49"W	11-01-78	23gpm	12.5	630
	No Name Creek	Willow Creek	Lat 39°39'18"N, Long 108°25'35"W	11-01-78	0.16	10.0	750

DISCHARGE MEASUREMENTS MADE AT MISCELLANEOUS SITES DURING WATER YEARS 1976-79--Continued

Station no.	Stream	Tributary to	Location	Date	Discharge (ft ³ /s)	°Celsius	Specific conductance
	No Name Creek	Willow Creek	Lat 39°38'51", Long 108°25'18"	11-01-78	0.13		
	No Name Creek	Willow Creek	Lat 39°38'54", Long 108°25'06"	11-01-78	0.093		
	Mud Springs	Cottonwood Creek	Lat 39°40'07", Long 108°24'51"	11-02-78	0.024	12.5	670
	Mud Springs	Cottonwood Creek	Lat 39°39'44", Long 108°24'46"	11-02-78	0.096	12.0	685
	Mud Springs	Cottonwood Creek	Lat 39°39'25", Long 108°24'42"	11-02-78	0.09	10.0	690
	Mud Springs	Cottonwood Creek	Lat 39°38'27", Long 108°23'52"	11-02-78	0.30	9.0	700
	Mud Springs	Cottonwood Creek	Lat 39°37'57", Long 108°23'28"	11-02-78	0.285	9.0	725
	Cottonwood Creek	Clear Creek	Lat 39°38'23", Long 108°23'02"	11-02-78	0.092	5.0	650
	Cottonwood Creek	Clear Creek	Lat 39°37'56", Long 108°23'26"	11-02-78	0.141	5.5	750
	Cottonwood Creek	Clear Creek	Lat 39°37'28", Long 108°23'26"	11-02-78	0.267	8.0	725
	Tributary	Brush Creek (trib. to Roan)	Lat 39°40'44", Long 108°34'12"	10-31-78	0.008	7.0	600
	Tributary	Brush Creek	Lat 39°39'59", Long 108°33'51"	10-31-78	0.055	9.5	650
	Tributary	Brush Creek	Lat 39°39'57", Long 108°35'56"	10-31-78	No flow		
	Tributary	Brush Creek	Lat 39°39'26", Long 108°33'16"	10-31-78	0.029	10.0	625
	Tributary	Brush Creek	Lat 39°39'11", Long 108°33'08"	10-31-78	0.249	9.5	600
	West Willow Creek	Willow Creek	Lat 39°39'06", Long 108°27'25"	11-02-78	0.28	5.0	670
	East Willow Creek	Willow Creek	Lat 39°41'12", Long 108°28'37"	11-01-78	0.017	7.0	700
	East Willow Creek	Willow Creek	Lat 39°41'02", Long 108°28'23"	11-01-78	0.05	9.0	700
	East Willow Creek	Willow Creek	Lat 39°41'23", Long 108°28'04"	11-01-78	0.14	10.0	750
	East Willow Creek	Willow Creek	Lat 39°39'58", Long 108°27'39"	11-01-78	0.086	9.5	750
	East Willow Creek	Willow Creek	Lat 39°39'32", Long 108°27'28"	11-01-78	0.317	11.0	625
	East Willow Creek	Willow Creek	Lat 39°39'12", Long 108°27'21"	11-02-78	0.49	2.5	1,190
	Willow Creek	Clear Creek	Lat 39°38'28", Long 108°26'41"	11-02-78	0.40	7.0	395
	Willow Creek	Clear Creek	Lat 39°38'17", Long 108°25'57"	11-02-78	0.01	1.0	610
09091100	Mann Creek near Rifle, CO	Colorado River	Lat 39°32'06", Long 107°42'53"	05-16-79	34.9		
	Unnamed tributary at Paraho Oil plant near Rifle, upper site	Colorado River	Lat 39°31'39", Long 107°55'18"	07-06-79	0.06	14.5	1300

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

DISCHARGE MEASUREMENTS MADE AT MISCELLANEOUS SITES DURING WATER YEARS 1976-79--Continued

Station no.	Stream	Tributary to	Location	Date	Discharge (ft ³ /s)	°Celsius	Specific conductance
	Unnamed tributary at Paraho Dil plant near Rifle, lower site	Colorado River	Lat 39°31'19", Long 107°55'05"	07-06-79	0.04	19.5	2000
	East Fork Parachute Creek near mouth	Colorado River	Lat 39°34'39", Long 108°06'24"	05-25-79 05-30-79 06-02-79 07-24-79	220 29.5 22.8 8.13		
	Coal Creek at Crested Butte	Slate River	Lat 38°52'08", Long 106°59'18"	05-30-79 08-14-79	404 11.0		
	Myers Gulch near Sapinero	Gunnison River	Lat 38°28'22", Long 107°28'03"	04-18-79 05-22-79 06-28-79	2.20 33.1 2.19	0.5 7.5 8.0	75 70
	Mesa Creek near Sapinero	Gunnison River	Lat 38°28'45", Long 107°30'55"	04-18-79 05-22-79 06-28-79	2.74 88.2 4.27	1.0 7.5 12.0	75 50
	Long Gulch near Maher	Gunnison River	Lat 38°29'08", Long 107°32'24"	04-19-79 05-22-79 06-28-79	0.74 12.5 0.30	4.5 8.5 13.0	75 60
	Crystal Creek near Maher	Gunnison River	Lat 38°31'50", Long 107°33'32"	04-18-79 05-22-79 06-28-79	40.9 75.7 4.77	10.0 12.0 2.0	160 110
	North Fork Gunnison at Paonia	Gunnison River	Lat 38°52'26", Long 107°35'51"	05-30-79	5.640		
09149450	Dry Creek near Olathe	Gunnison River	Lat 38°33'19", Long 108°02'43"	05-15-79	140		
	Salt Creek near Gateway	Dolores River	Lat 38°30'06", Long 108°58'55"	07-19-79	0.07		
	Salt Creek near Gateway	Dolores River	Lat 38°31'26", Long 108°58'52"	07-19-79	0.003		
	Salt Creek near Gateway	Dolores River	Lat 38°31'36", Long 108°58'40"	07-19-79	0.08		
	Salt Creek near Gateway	Dolores River	Lat 38°31'41", Long 108°58'33"	07-19-79	0.06		
	Salt Creek near Gateway	Dolores River	Lat 38°31'53", Long 108°58'22"	07-19-79	0.11		
	Salt Creek near Gateway	Dolores River	Lat 38°32'21", Long 108°57'48"	07-19-79	0.10		
	Salt Creek near Gateway	Dolores River	Lat 38°32'26", Long 108°57'30"	07-19-79	0.04		
09179200	Salt Creek near Gateway	Dolores River	Lat 38°32'47", Long 108°57'04"	07-19-79 07-19-79	0.08 0.04		
	Salt Creek near Gateway	Dolores River	Lat 38°33'00", Long 108°56'43"	07-19-79	0.06		
	Salt Creek near Gateway	Dolores River	Lat 38°33'12", Long 108°56'18"	07-19-79	0.06		
	Salt Creek near Gateway	Dolores River	Lat 38°33'28", Long 108°55'52"	07-19-79	0.08		
	Salt Creek near Gateway	Dolores River	Lat 38°33'37", Long 108°55'31"	07-19-79	0.02		
	Salt Creek near Gateway	Dolores River	Lat 38°33'29", Long 108°55'19"	07-19-79	No flow		
	Salt Creek near Gateway	Dolores River	Lat 38°33'42", Long 108°55'10"	07-19-79	No flow		
	Salt Creek near Gateway	Dolores River	Lat 38°33'49", Long 108°55'00"	07-19-79	No flow		

SUMMARY OF FLOOD DISCHARGE

The following table contains the record of peak flows at selected sites for floods which occurred during 1978. Indirect discharge measurements were made to determine the flood peaks.

Stream	Tributary to	Location	Drainage area	Date	Discharge (ft ³ /s)
Red Canyon	Colorado River	Lat 39°04'13", long 108°36'57", in SW¼NE¼ sec.17, T.1 S., R.1 W., Mesa County, 0.7 mi (1.1 km) upstream from mouth and on arch culvert on State Highway 340, 3.5 mi (5.6 km) west of Grand Junction	4.35	09-07-78	2,850
No Thoroughfare Canyon	Colorado River	Lat 39°03'28", long 108°35'30", in SE¼NE¼ sec.21, T.1 S., R.1 W., Mesa County, 0.8 mi (1.3 km) upstream from mouth and 2.4 mi (3.9 km) southwest of Grand Junction	18.8	09-07-78	9,290

SPECIFIC CONDUCTANCE AND TEMPERATURE DATA AT SELECTED SITES

09010500 - COLORADO R BELOW BAKER GULCH, NR GRAND LAKE, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT 03...	70	7.0	MAR 14...	75	--
NOV 14...	85	1.0	APR 26...	80	.5
DEC 12...	70	.0	MAY 23...	55	10.0
JAN 17...	75	.0	JUN 13...	--	9.5
FEB 13...	80	.0	AUG 21...	80	9.0

09011000 - COLORADO RIVER NEAR GRAND LAKE, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT 04...	80	5.0	APR 26...	80	3.5
NOV 15...	100	.0	MAY 23...	<50	7.0
DEC 13...	--	.0	JUN 13...	40	7.0
JAN 17...	90	.0	JUL 18...	90	6.0
FEB 12...	95	2.0	AUG 21...	60	9.5
MAR 13...	90	3.5			

09019000 - COLORADO RIVER BELOW LAKE GRANBY, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT 03...	55	12.5	JUN 12...	65	11.0
JAN 16...	60	3.0	JUL 17...	65	9.0
MAR 13...	55	4.0	AUG 21...	65	9.5
MAY 23...	65	8.0			

09019500 - COLORADO RIVER NEAR GRANBY, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT 04...	60	10.0	JUN 12...	90	14.0
APR 25...	85	11.0	JUL 18...	75	10.0
MAY 22...	75	12.0	AUG 22...	80	9.0

09021000 - WILLOW CREEK BELOW WILLOW CREEK RESERVOIR, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT 03...	100	13.0	MAR 13...	120	4.5
NOV 14...	100	6.0	APR 25...	140	6.0
DEC 12...	100	2.5	MAY 22...	100	6.5
JAN 16...	120	3.0	JUN 12...	70	7.5
FEB 12...	120	3.0	JUL 17...	85	9.0

SPECIFIC CONDUCTANCE AND TEMPERATURE DATA AT SELECTED SITES

09024000 - FRASER RIVER NEAR WINTER PARK, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT			APR		
02...	--	5.5	27...	120	4.0
31...	95	3.0	MAY		
DEC			21...	80	4.5
04...	80	.0	JUN		
JAN			18...	<50	5.0
15...	100	.0	JUL		
FEB			19...	90	9.0
13...	65	.0	AUG		
MAR			22...	80	10.5
22...	120	.0			

09025000 - VASQUEZ CREEK NEAR WINTER PARK, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT			MAR		
02...	50	5.0	21...	60	.5
12...	125	3.0	APR		
19...	60	1.5	27...	70	4.0
24...	65	.5	MAY		
31...	50	1.0	23...	<50	4.0
DEC			JUN		
04...	<50	.0	18...	<50	5.0
JAN			JUL		
15...	60	.0	16...	<50	9.5
FEB			AUG		
13...	55	.0	20...	50	7.5

09025400 - FLK CREEK NEAR FRASER, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT			APR		
02...	55	9.5	27...	60	4.0
31...	55	4.5	MAY		
DEC			21...	60	5.5
07...	<50	.0	JUN		
JAN			19...	<50	4.0
17...	60	.0	JUL		
FEB			16...	<50	12.5
13...	60	.0	AUG		
MAR			20...	60	9.0
21...	60	.5			

09026500 - ST. LOUIS CREEK NEAR FRASER, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT			APR		
02...	85	8.5	17...	--	1.0
31...	80	3.5	MAY		
DEC			21...	70	4.0
04...	<50	.0	JUN		
JAN			19...	60	2.0
17...	95	.0	JUL		
FEB			16...	60	12.0
15...	95	.5	AUG		
MAR			20...	80	8.5
21...	100	.5			

09032000 - RANCH CREEK NEAR FRASER, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT			MAY		
02...	55	7.5	03...	60	2.0
NOV			21...	50	3.0
03...	55	1.0	JUN		
DEC			18...	<50	5.0
07...	60	.0	JUL		
JAN			16...	<50	11.0
15...	60	.0	AUG		
FEB			20...	60	9.0
15...	60	.5			
MAR					
21...	60	.5			

09034900 - BOBTAIL CREEK NEAR JONES PASS, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT			APR		
12...	<50	3.0	30...	80	.0
NOV			MAY		
08...	<50	1.0	29...	<50	1.0
DEC			JUL		
19...	65	.0	02...	37	7.0
JAN			16...	35	9.5
26...	--	.0	AUG		
MAR			01...	50	14.0
09...	78	.0	SEP		
APR			13...	65	8.5
06...	70	.5			

SPECIFIC CONDUCTANCE AND TEMPERATURE DATA AT SELECTED SITES

09035500 - WILLIAMS FORK BELOW STEELMAN CREEK, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT 12...	<50	4.0	MAY 29...	<50	.5
NOV 08...	<50	.5	JUL 02...	37	7.5
DEC 19...	<50	.0	16...	56	10.5
JAN 26...	65	.0	AUG 01...	65	9.5
MAR 09...	70	.0	SEP 13...	90	6.0
APR 06...	90	.0			

09035700 - WILLIAMS FORK ABOVE DARLING CREEK, NR LEAL, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT 03...	60	7.5	MAY 02...	70	4.5
NOV 01...	65	3.0	23...	60	4.0
DEC 05...	<50	.0	31...	50	2.0
JAN 11...	<50	.0	JUN 21...	50	5.5
FEB 27...	70	.0	JUL 18...	<50	9.0
MAR 28...	<50	3.0	AUG 17...	75	9.0

09035800 - DARLING CREEK NEAR LEAL, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT 03...	85	1.5	MAY 03...	85	2.0
NOV 01...	80	1.0	31...	60	2.5
DEC 06...	<50	.0	JUN 21...	<50	6.5
JAN 11...	<50	.0	JUL 18...	<50	9.0
FEB 27...	<50	.0	AUG 17...	60	8.5
MAR 29...	80	1.0			

09035900 - SOUTH FORK OF WILLIAMS FORK NEAR LEAL, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT 03...	85	6.0	MAY 03...	70	1.5
NOV 01...	80	3.5	31...	<50	2.0
DEC 06...	<50	.0	JUN 21...	50	4.0
JAN 11...	70	.0	JUL 18...	50	9.5
FEB 27...	<50	.0	AUG 16...	60	9.0
MAR 29...	80	3.0			

09036000 - WILLIAMS FORK NEAR LEAL, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT 03...	85	5.0	MAY 02...	85	5.0
NOV 01...	80	2.5	31...	65	1.0
DEC 05...	60	.0	JUN 20...	50	7.0
JAN 09...	<50	.0	JUL 18...	70	11.0
FEB 14...	90	2.0	AUG 16...	80	12.0
MAR 28...	85	3.0			

09037500 - WILLIAMS FORK NEAR PARSHALL, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT 04...	90	10.5	MAR 28...	100	1.5
NOV 03...	95	2.5	MAY 02...	100	5.5
28...	100	.0	JUN 01...	70	3.0
DEC 05...	95	.0	20...	60	5.0
JAN 16...	110	.0	JUL 17...	110	14.0
FEB 14...	80	.0	AUG 16...	100	13.0

SPECIFIC CONDUCTANCE AND TEMPERATURE DATA AT SELECTED SITES

09038500 - WILLIAMS FORK BELOW WILLIAMS FORK RESERVOIR, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT 04...	95	10.5	MAY 02...	120	4.0
NOV 02...	110	--	JUN 01...	120	5.0
DEC 07...	95	2.0	19...	120	5.0
JAN 09...	100	1.0	JUL 19...	110	7.0
FEB 14...	130	3.0	AUG 16...	120	11.0
MAR 27...	120	3.0			

09039000 - TROUBLESOME CREEK NEAR PEARMONT, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT 04...	70	2.0	MAR 27...	100	3.0
NOV 02...	100	--	MAY 01...	100	4.5
DEC 06...	90	.0	22...	90	5.5
JAN 08...	--	.0	30...	75	6.5
FEB 26...	120	.0	JUL 17...	80	10.5
			AUG 28...	110	15.0

09040000 - EAST FORK TROUBLESOME C NEAR TROUBLESOME, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT 04...	210	3.5	MAY 01...	160	5.0
NOV 02...	195	--	22...	130	6.0
DEC 06...	--	.0	30...	90	6.0
JAN 16...	200	.0	JUN 14...	95	9.0
FEB 26...	200	.0	JUL 17...	90	11.0
MAR 27...	190	3.5	AUG 28...	--	13.5

SPECIFIC CONDUCTANCE AND TEMPERATURE DATA AT SELECTED SITES

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09046600 - BLUE RIVER NEAR DILLON, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT			APR		
02...	--	9.5	23...	--	5.0
NOV			27...	<50	3.0
13...	--	4.0	MAY		
DEC			23...	150	7.0
12...	--	2.0	JUN		
JAN			14...	130	8.0
11...	--	2.0	JUL		
FEB			17...	135	10.5
12...	--	3.0	AUG		
MAR			30...	100	--
19...	--	3.0			

09047500 - SNAKE RIVER NEAR MONTEZUMA, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT			APR		
02...	80	4.0	17...	130	4.0
NOV			MAY		
13...	--	.0	31...	80	2.0
DEC			JUN		
11...	130	.0	14...	60	7.0
JAN			JUL		
08...	130	.0	17...	85	7.5
FEB			AUG		
12...	120	.0	27...	52	8.5
MAR					
19...	135	1.0			

09047700 - KEYSTONE GULCH NEAR DILLON, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT			APR		
02...	<50	4.0	17...	80	.5
NOV			MAY		
13...	--	.0	31...	70	3.5
DEC			JUN		
11...	<50	.0	14...	60	7.0
JAN			JUL		
08...	90	.0	17...	80	9.5
FEB			AUG		
12...	<50	.0	27...	85	11.0
MAR					
23...	105	.5			

SPECIFIC CONDUCTANCE AND TEMPERATURE DATA AT SELECTED SITES

09050100 - TENMILE CREEK BL NORTH TENMILE C, AT FRISCO, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT 02...	250	4.5	APR 18...	330	5.0
NOV 17...	--	.0	MAY 31...	330	6.5
DEC 12...	240	.0	JUN 14...	175	4.0
JAN 11...	250	.0	JUL 17...	170	12.5
FEB 14...	220	.0	AUG 15...	100	5.0
MAR 23...	345	2.0			

09050700 - BLUE RIVER BELOW DILLON, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT 04...	185	7.0	APR 23...	160	4.5
NOV 15...	--	6.0	JUN 21...	250	7.0
DEC 11...	150	3.0	JUN 28...	160	11.0
JAN 08...	150	3.0	JUL 20...	150	14.0
FEB 14...	160	4.0	AUG 30...	230	7.5
MAR 23...	160	3.0			

09052000 - ROCK CREEK NEAR DILLON, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT 05...	60	1.5	APR 18...	75	3.0
NOV 16...	--	.0	MAY 30...	<50	7.0
DEC 14...	<50	.0	JUN 07...	<50	3.0
JAN 11...	80	.0	JUL 19...	32	6.0
FEB 16...	<50	.0	AUG 27...	46	11.0
MAR 20...	80	.5			

SPECIFIC CONDUCTANCE AND TEMPERATURE DATA AT SELECTED SITES

09052400 - BOULDER CREEK AT UPPER STATION, NEAR DILLON, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT 04...	<50	6.0	MAR 22...	70	.0
NOV 15...	--	.0	JUN 01...	<50	7.0
DEC 12...	<50	.0	JUN 12...	35	10.0
JAN 10...	<50	.0	JUL 19...	28	12.5
FEB 15...	<50	.0	AUG 30...	43	8.5

09052800 - SLATE CREEK AT UPPER STATION, NEAR DILLON, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT 06...	<50	3.0	MAY 07...	<50	.5
NOV 16...	--	.0	JUN 05...	<50	8.0
DEC 15...	<50	.0	JUN 06...	<50	8.0
JAN 12...	<50	.0	JUL 20...	26	11.0
FEB 16...	<50	.0	AUG 31...	36	9.0
MAR 20...	70	.0			

09054000 - BLACK CREEK BELOW BLACK LAKE, NEAR DILLON, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT 05...	<50	10.5	MAY 08...	<50	2.0
NOV 15...	--	4.0	JUN 06...	<50	8.0
DEC 14...	<50	1.0	JUN 13...	29	7.0
JAN 10...	<50	.0	JUL 19...	22	9.5
FEB 15...	<50	.0	AUG 29...	23	14.5
MAR 22...	<50	1.0			

SPECIFIC CONDUCTANCE AND TEMPERATURE DATA AT SELECTED SITES

09055300 - CATARACT CREEK NEAR KREMMLING, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT 05...	<50	10.5	MAY 08...	<50	4.0
NOV 14...	--	3.5	JUN 01...	<50	5.0
DEC 14...	<50	2.0	JUL 12...	37	8.0
JAN 12...	<50	1.5	JUL 18...	28	13.0
FEB 14...	<50	1.0	AUG 29...	33	15.0
MAR 21...	<50	1.0			

09057500 - BLUE RIVER BELOW GREEN MOUNTAIN RESERVDIR, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT 03...	135	12.0	APR 25...	190	4.5
NOV 14...	--	8.0	MAY 30...	170	7.0
DEC 13...	150	3.0	JUN 21...	170	7.5
JAN 09...	180	2.0	JUL 06...	150	10.5
FEB 13...	165	3.0	AUG 29...	145	12.5
MAR 21...	170	3.0			

09058000 - COLDRAO RIVER NEAR KREMMLING, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT 03...	190	9.0	MAY 30...	200	9.0
NOV 14...	--	3.5	JUN 06...	240	10.5
NOV 29...	190	1.0	JUL 06...	325	12.0
MAR 21...	240	4.0	JUL 18...	400	13.5
APR 25...	380	9.0	AUG 28...	210	12.0

SPECIFIC CONDUCTANCE AND TEMPERATURE DATA AT SELECTED SITES
09058500 - PINEY RIVER BELOW PINEY LAKE, NEAR MINTURN, CO.

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WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT 05...	52	2.0	APR 06...	75	.5
NOV 17...	70	.0	MAY 16...	54	3.0
DEC 13...	--	.0	JUN 28...	23	6.0
JAN 23...	44	.0	JUL 11...	24	9.5
MAR 15...	73	.5			

09058610 - DICKSON CREEK NEAR VAIL, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT 04...	400	4.0	MAY 16...	260	4.5
NOV 16...	450	1.0	JUN 28...	240	9.5
MAR 16...	390	.5	JUL 11...	280	9.0
APR 03...	400	.5			

09058700 - FREEMAN CREEK NEAR MINTURN, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT 04...	240	4.0	MAY 16...	110	.5
NOV 16...	250	.5	JUN 28...	150	13.0
MAR 16...	280	.5	JUL 11...	180	14.0
APR 03...	280	.5			

SPECIFIC CONDUCTANCE AND TEMPERATURE DATA AT SELECTED SITES

09058800 - EAST MEADOW CREEK NEAR MINTURN CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT 04...	--	2.5	JUN 15...	--	2.0
NOV 16...	75	.0	28...	38	8.0
MAR 15...	--	.0	JUL 11...	37	7.5

09060500 - ROCK CREEK NEAR TOPONAS, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
AUG 15...	325	15.0

09063000 - EAGLE RIVER AT RED CLIFF, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT 05...	260	4.5	APR 05...	220	5.5
NOV 14...	250	1.0	19...	185	1.0
27...	235	.5	MAY 15...	180	9.0
DEC 12...	250	.0	JUN 29...	140	6.0
JAN 25...	200	.0	JUL 10...	160	12.0
MAR 14...	220	.5			

09063200 - WEARYMAN CREEK NEAR RED CLIFF, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT 03...	300	3.0	MAY 15...	280	3.5
NOV 14...	310	.0	JUN 11...	220	6.5
DEC 12...	--	.0	12...	--	5.5
JAN 24...	--	.0	26...	150	5.0
MAR 14...	290	.5	JUL 09...	200	7.5
APR 18...	290	1.5	AUG 07...	240	9.0

SPECIFIC CONDUCTANCE AND TEMPERATURE DATA AT SELECTED SITES

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09063400 - TURKEY CREEK NEAR RED CLIFF, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT 03...	300	4.0	APR 18...	260	3.0
NOV 14...	320	1.0	MAY 15...	240	2.0
DEC 12...	--	.0	JUN 26...	160	6.5
JAN 24...	--	.0	JUL 09...	180	9.0
MAR 14...	--	.5			

09063900 - MISSOURI CREEK NEAR GOLD PARK, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT 03...	28	2.5	MAY 17...	45	2.0
NOV 14...	38	.0	JUN 12...	30	2.5
JAN 24...	--	.0	JUL 26...	20	3.5
MAR 13...	41	.5	AUG 10...	25	4.5
APR 17...	38	.0	AUG 06...	20	13.0

09064000 - HOMESTAKE CREEK AT GOLD PARK, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT 03...	35	1.5	MAY 17...	40	4.0
NOV 14...	40	.0	JUN 12...	30	5.5
JAN 24...	--	.0	JUL 26...	22	8.0
MAR 13...	42	.0	AUG 10...	25	9.0
APR 17...	42	2.0	AUG 07...	23	11.5

SPECIFIC CONDUCTANCE AND TEMPERATURE DATA AT SELECTED SITES

09064500 - HOMESTAKE CREEK NEAR RED CLIFF, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT 03...	37	1.5	APR 17...	44	2.0
NOV 14...	40	1.0	MAY 17...	40	3.0
27...	<50	.5	JUN 12...	31	10.5
DEC 12...	--	.0	26...	22	5.5
JAN 24...	--	.0	JUL 10...	28	11.5
MAR 13...	42	.5			

09065100 - CROSS CREEK NEAR MINTURN, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT 02...	44	12.0	APR 16...	48	2.0
NOV 13...	56	1.5	MAY 18...	32	2.0
27...	50	.0	JUN 11...	28	9.0
DEC 13...	--	.0	25...	20	8.5
JAN 25...	--	.0	JUL 10...	21	11.0
MAR 14...	61	1.0			

09065500 - GORE CREEK AT UPPER STATION, NEAR MINTURN, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
NOV 02...	38	.0	MAY 01...	80	2.0
DEC 27...	110	.0	23...	60	5.0
JAN 23...	80	.0	JUN 14...	60	4.0
FEB 28...	80	.0	JUL 17...	110	8.0
APR 04...	85	.0	AUG 15...	85	4.5

SPECIFIC CONDUCTANCE AND TEMPERATURE DATA AT SELECTED SITES
09066000 - BLACK GORE CREEK NEAR MINTURN, CO.

373

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
NOV 01...	120	1.0	MAY 23...	110	7.0
DEC 28...	110	.0	JUN 08...	180	2.0
JAN 23...	125	.0	15...	240	5.0
APR 03...	200	.0	JUL 12...	120	7.0
18...	220	3.0	AUG 15...	110	4.0

09066100 - RIGHORN CREEK NEAR MINTURN, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT 04...	88	5.0	MAY 01...	110	3.0
NOV 02...	88	5.0	24...	130	3.0
15...	125	.0	JUN 08...	120	5.0
DEC 13...	145	.0	15...	70	2.0
JAN 23...	120	.0	JUL 12...	85	8.0
MAR 01...	85	.0	AUG 16...	85	4.0

09066150 - PITKIN CREEK NEAR MINTURN, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT 04...	80	5.0	APR 04...	120	.0
NOV 03...	90	5.0	MAY 03...	125	3.0
15...	120	.0	24...	85	3.0
DEC 13...	180	.0	JUN 15...	95	2.0
JAN 25...	110	.0	JUL 12...	85	6.0
FEB 28...	80	.0	AUG 16...	100	4.0

SPECIFIC CONDUCTANCE AND TEMPERATURE DATA AT SELECTED SITES

09066200 - BOOTH CREEK NEAR MINURN, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT 04...	90	5.0	APR 04...	85	.0
NOV 03...	90	5.0	18...	130	4.0
15...	120	.0	MAY 24...	90	3.0
DEC 13...	120	.0	JUN 14...	50	4.0
JAN 25...	120	.0	JUL 12...	85	5.0
MAR 01...	90	.0	AUG 15...	90	4.0

09066300 - MIDDLE CREEK NEAR MINURN, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT 04...	80	5.0	APR 05...	100	1.0
NOV 01...	100	1.0	MAY 04...	90	1.0
15...	120	.0	JUN 08...	120	5.0
DEC 13...	110	.0	15...	90	2.0
JAN 24...	110	.0	JUL 13...	80	6.0
FEB 27...	60	.0	AUG 16...	85	4.0

09070000 - EAGLE RIVER BELOW GYPSUM, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT 05...	1000	9.5	APR 19...	500	11.0
NOV 16...	1130	--	MAY 15...	410	12.0
27...	950	2.5	JUN 05...	175	9.0
DEC 06...	1120	.5	19...	210	6.5
JAN 03...	1170	--	JUL 10...	240	12.0
MAR 27...	900	9.0	AUG 14...	675	15.0

SPECIFIC CONDUCTANCE AND TEMPERATURE DATA AT SELECTED SITES
09071300 - GRIZZLY CREEK NEAR GLENWOOD SPRINGS, CO.

375

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT 06...	--	4.0	JUN 27...	170	4.5
APR 04...	380	.5	JUL 12...	--	9.0
JUN 13...	190	2.5			

09073400 - ROARING FORK RIVER NEAR ASPEN, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT 03...	70	4.0	MAY 02...	70	5.0
NOV 14...	80	3.0	23...	45	5.0
DEC 06...	90	.0	JUN 19...	38	3.5
JAN 18...	120	.5	JUL 02...	30	10.5
MAR 06...	85	2.0	19...	36	8.0

09073700 - HUNTER CREEK ABOVE MIDWAY CREEK, NEAR ASPEN, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT 11...	28	2.0	JUL 18...	20	5.0
JUN 20...	24	6.5			

09073800 - MIDWAY CREEK NEAR ASPEN, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT 11...	34	2.0	JUN 21...	24	5.5
MAY 03...	38	.3	JUL 18...	24	8.5

SPECIFIC CONDUCTANCE AND TEMPERATURE DATA AT SELECTED SITES
09073900 - NO NAME CREEK NEAR ASPEN, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT 12...	30	1.0	JUN 21...	17	6.5
MAY 04...	32	.5			

09074000 - HUNTER CREEK NEAR ASPEN, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT 03...	280	5.0	MAR 06...	75	.5
NOV 14...	60	1.0	MAY 02...	47	3.0
DEC 06...	--	.0	JUN 18...	22	5.5
JAN 17...	--	.5	JUL 26...	19	13.5

09074800 - CASTLE CREEK ABOVE ASPEN, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT 10...	260	9.0	MAY 03...	400	6.0
NOV 13...	380	1.0	JUN 18...	160	7.5
DEC 05...	--	.5	JUL 03...	160	4.5
JAN 18...	480	1.0	JUL 19...	210	7.0
MAR 09...	410	1.0			

09075700 - MAROON CREEK ABOVE ASPEN, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT 10...	500	8.0	APR 20...	750	4.0
NOV 14...	530	--	JUN 19...	230	5.5
DEC 28...	530	2.5	JUL 03...	180	7.0
DEC 05...	620	1.0	JUL 23...	125	14.5
MAR 09...	760	1.5			

SPECIFIC CONDUCTANCE AND TEMPERATURE DATA AT SELECTED SITES
09076520 - OWL CREEK NEAR ASPEN, CO.

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WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT			MAY		
02...	580	9.0	03...	300	7.0
NOV			23...	120	5.5
14...	300	.0	JUN		
DEC			19...	280	7.0
05...	500	.5	JUL		
JAN			23...	360	16.0
18...	--	.5			
MAR					
06...	600	.5			

09077200 - FRYINGPAN RIVER NEAR IVANHOE LAKE, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT			JUL		
02...	--	3.5	05...	--	6.0
16...	--	.5	17...	--	6.0
30...	--	.5	31...	--	7.0
MAY			AUG		
22...	--	1.0	13...	--	7.0
29...	--	3.0	27...	--	4.5
JUN			SEP		
06...	--	3.0	11...	--	6.0
21...	--	8.0			

09077610 - IVANHOE CREEK NEAR NAST, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT			JUL		
02...	--	5.0	31...	--	10.0
16...	--	1.5	AUG		
30...	--	.5	13...	--	7.0
JUN			27...	--	7.0
06...	--	2.0	SEP		
21...	--	1.5	11...	--	9.0
JUL			24...	--	4.0
03...	--	5.0			
16...	--	6.0			

SPECIFIC CONDUCTANCE AND TEMPERATURE DATA AT SELECTED SITES
09077800 - SF FRYINGPAN R AT UPPER STATION, NR NORRIE, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT 03...	--	4.0	JUL 31...	--	9.0
16...	--	4.0	AUG 14...	--	11.0
30...	--	.5	23...	--	10.0
MAY 21...	--	1.0	28...	--	6.5
JUN 29...	--	6.0	SEP 12...	--	5.0
JUL 03...	--	7.0	24...	--	4.5
16...	--	6.0			

09077945 - CHAPMAN GULCH NEAR NAST, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT 03...	--	7.5	APR 26...	--	1.0
25...	--	.5	MAY 15...	--	1.0
31...	--	.5	22...	--	2.0
NOV 09...	--	.5	29...	--	1.5
13...	--	.5	JUN 06...	--	4.0
27...	--	.5	21...	--	3.0
DEC 11...	--	.0	JUL 03...	--	7.0
27...	--	.5	16...	--	7.0
JAN 09...	--	.5	AUG 07...	--	10.0
FEB 14...	--	.5	13...	--	6.5
28...	--	.5	27...	--	8.0
MAR 13...	--	.5	SEP 11...	--	9.0
27...	--	1.0	24...	--	4.5

09078000 - FRYINGPAN RIVER AT NORRIE, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
NOV 15...	70	.0	MAY 02...	65	3.0
DEC 07...	90	.0	JUN 27...	<50	7.0
JAN 16...	110	.0	JUL 16...	40	16.5
MAR 07...	85	.5			

SPECIFIC CONDUCTANCE AND TEMPERATURE DATA AT SELECTED SITES

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09078100 - NF FRYINGPAN R AB CUNNINGHAM C, NR NORRIE, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
NOV			MAY		
15...	28	.0	01...	36	1.0
DEC			22...	26	2.5
07...	--	.0	JUN		
JAN			26...	<50	4.0
26...	--	.0	JUL		
MAR			25...	17	8.5
07...	42	1.0			

09078200 - CUNNINGHAM CREEK NEAR NORRIE, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
NOV			MAY		
15...	26	.0	22...	18	1.5
DEC			JUN		
14...	--	.0	26...	<50	6.5
MAR			JUL		
07...	44	.5	25...	20	10.5
MAY					
01...	33	.5			

09078500 - NORTH FORK FRYINGPAN RIVER NEAR NORRIE, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT			APR		
17...	--	3.0	19...	--	1.0
31...	--	.0	30...	--	3.0
NOV			MAY		
14...	--	.5	17...	--	4.0
DEC			JUL		
11...	--	.0	12...	--	6.0
26...	--	.5	AUG		
JAN			07...	--	15.0
12...	--	1.0	14...	--	11.0
24...	--	.0	28...	--	10.0
FEB			SEP		
14...	--	1.0	12...	--	9.0
28...	--	.5	25...	--	8.0
MAR					
13...	--	.5			
27...	--	.5			

SPECIFIC CONDUCTANCE AND TEMPERATURE DATA AT SELECTED SITES
09078600 - FRYINGPAN RIVER NEAR THOMASVILLE, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT			MAR		
02...	--	9.5	27...	--	.5
17...	--	5.0	APR		
31...	--	2.0	19...	--	2.5
NOV			30...	--	5.5
14...	--	1.0	MAY		
27...	--	.0	15...	--	7.0
DEC			JUL		
12...	--	.5	05...	--	11.0
27...	--	.5	12...	--	7.0
JAN			AUG		
12...	--	1.0	07...	--	13.0
24...	--	.0	14...	--	13.0
FEB			28...	--	8.5
09...	--	1.0	SEP		
28...	--	.5	12...	--	8.5
MAR			25...	--	8.0
12...	--	1.0			

09080100 - FRYINGPAN RIVER AT MEREDITH, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
NOV			MAY		
15...	130	.0	02...	80	3.5
DEC			JUN		
07...	--	.0	26...	75	10.5
JAN			JUL		
16...	--	.5	16...	70	15.5
MAR					
08...	165	1.5			

09080400 - FRYINGPAN RIVER NEAR RUEDI, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT			MAY		
13...	300	6.0	02...	340	4.5
NOV			JUN		
16...	240	10.0	27...	300	7.0
28...	275	7.5	JUL		
DEC			25...	190	9.0
08...	300	4.5	27...	170	8.5
JAN			AUG		
18...	360	4.0	08...	230	9.5
MAR					
08...	340	2.0			

SPECIFIC CONDUCTANCE AND TEMPERATURE DATA AT SELECTED SITES

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09081600 - CRYSTAL RIVER AB AVALANCHE C, NEAR HEDSTONE, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT 06...	500	5.0	MAY 04...	350	8.0
NOV 13...	560	4.0	24...	190	9.0
DEC 04...	620	3.0	JUN 19...	200	5.0
JAN 15...	700	3.5	JUL 26...	250	9.5
MAR 08...	--	7.5			

09082800 - NORTH THOMPSON CREEK NEAR CARBONDALE, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT 02...	200	9.0	MAY 23...	85	9.5
NOV 13...	180	1.0	JUN 19...	100	8.0
DEC 04...	--	.5	25...	120	11.0
MAR 12...	--	2.0	JUL 03...	--	11.5
APR 19...	140	4.0	26...	110	16.5

09085000 - ROARING FORK RIVER AT GLENWOOD SPRINGS, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
UCT 04...	880	10.0	APR 18...	445	9.5
NOV 15...	750	5.5	MAY 14...	430	11.5
29...	630	3.0	JUN 04...	275	10.0
DEC 05...	790	2.0	18...	235	8.0
JAN 02...	595	.5	JUL 09...	240	11.0
MAR 26...	570	8.5	AUG 13...	560	15.5

SPECIFIC CONDUCTANCE AND TEMPERATURE DATA AT SELECTED SITES
09085100 - COLORADO RIVER BELOW GLENWOOD SPRINGS, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT 04...	1170	12.5	APR 18...	640	11.5
NOV 15...	1120	6.0	MAY 14...	550	13.0
29...	940	3.0	JUN 04...	295	11.5
DEC 05...	1080	2.5	18...	245	9.0
JAN 02...	1650	1.0	JUL 09...	290	13.0
MAR 26...	960	9.5	AUG 13...	820	17.0

09085200 - CANYON CREEK ABOVE NEW CASTLE, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT 05...	300	9.0	MAY 24...	200	7.5
NOV 28...	380	4.0	JUN 06...	220	7.0
DEC 15...	--	.5	18...	190	7.0
JAN 19...	330	4.0	JUL 02...	200	9.5
MAR 05...	270	3.5	24...	265	15.5
APR 30...	240	7.5	AUG 07...	290	17.0

09085300 - EAST CANYON CREEK NEAR NEW CASTLE, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT 05...	360	8.0	APR 30...	250	6.5
NOV 28...	420	.0	MAY 24...	170	5.0
DEC 14...	--	.0	JUN 18...	180	7.0
JAN 19...	420	2.5	JUL 24...	280	12.5
MAR 05...	--	2.0			

SPECIFIC CONDUCTANCE AND TEMPERATURE DATA AT SELECTED SITES
09085400 - POSSUM CREEK NEAR NEW CASTLE, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT 05...	320	8.0	APR 30...	330	8.0
NOV 28...	400	3.0	MAY 24...	300	5.5
DEC 14...	--	.0	JUN 25...	340	8.0
JAN 19...	400	3.0	JUL 24...	325	10.0
MAR 05...	--	1.5	JUL 27...	330	11.0

09089500 - WEST DIVIDE CREEK NEAR RAVEN, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT 06...	570	2.5	MAY 16...	215	5.0
NOV 17...	820	.0	MAY 25...	160	5.5
DEC 12...	1000	.0	JUN 06...	170	9.5
JAN 10...	500	.0	JUN 20...	220	6.5
APR 04...	405	2.0	JUL 11...	150	14.5
APR 20...	260	2.0	AUG 15...	380	13.5

09092500 - BEAVER CREEK NEAR RIFLE, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT 06...	470	6.5	MAY 17...	--	5.5
NOV 17...	560	.0	MAY 25...	180	7.5
DEC 12...	520	.0	JUN 06...	180	10.0
JAN 04...	520	.0	JUN 20...	205	8.0
APR 20...	310	6.5	JUL 11...	180	16.0
			AUG 15...	270	14.0

SPECIFIC CONDUCTANCE AND TEMPERATURE DATA AT SELECTED SITES

09095400 - DRY FORK NEAR DE BEQUE, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT 05...	1850	17.0	APR 24...	1500	14.5
NOV 13...	1600	5.5	JUN 19...	1100	17.5
DEC 11...	3300	2.5	JUL 25...	1550	26.5
JAN 23...	2050	1.0	AUG 16...	1850	18.5
MAR 14...	975	4.5			
28...	950	7.5			

09095526 - GOVERNMENT HIGHLINE CA AT 16 ROAD, NR LOMA, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT 02...	1000	15.5	JUN 07...	340	16.5
APR 26...	700	11.0	JUL 13...	390	20.5
MAY 15...	700	15.5	AUG 02...	670	20.0

09095528 - LATERAL NO. 48 NEAR MACK, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT 02...	1000	15.5	JUL 09...	375	19.0
MAY 11...	600	10.0	AUG 03...	650	23.0
JUN 07...	340	17.0			

09096500 - PLATEAU CREEK NEAR COLLBRAN, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT 06...	145	7.5	APR 25...	350	6.5
NOV 16...	200	1.0	MAY 16...	180	7.0
DEC 14...	120	.5	JUN 11...	120	13.5
JAN 25...	280	.5	27...	125	15.5
MAR 27...	210	4.5	AUG 01...	110	12.5
			14...	140	12.0

SPECIFIC CONDUCTANCE AND TEMPERATURE DATA AT SELECTED SITES
09097500 - BUZZARD CREEK NEAR COLLBRAN, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT 06...	750	13.0	APR 25...	260	5.5
NOV 16...	600	3.0	MAY 15...	260	9.5
DEC 14...	435	.5	21...	--	7.0
JAN 25...	600	.5	JUN 11...	--	11.0
MAR 27...	540	4.5	AUG 01...	510	18.0
			14...	575	19.0

09106104 - KIEFER EXTENSION GRAND VALLEY CANAL NR FRUITA, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT 02...	950	15.5	JUN 07...	360	16.5
APR 26...	780	11.0	JUL 13...	410	21.0
MAY 15...	690	15.5	AUG 02...	640	21.0

09106108 - KIEFER EXTENSION GRAND VALLEY CANAL NR LOMA, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT 02...	950	15.5	JUN 07...	340	17.5
APR 26...	680	14.0	JUL 09...	380	19.0
MAY 14...	600	14.5	AUG 03...	700	24.0

09109000 - TAYLOR RIVER BELOW TAYLOR PARK RESERVOIR, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT 02...	75	11.0	APR 16...	130	8.0
NOV 13...	120	5.0	MAY 16...	120	8.0
27...	120	4.0	JUN 18...	100	5.5
DEC 11...	110	4.0	JUL 16...	120	6.5
JAN 22...	170	3.0	AUG 13...	160	7.0
MAR 05...	120	7.0			

SPECIFIC CONDUCTANCE AND TEMPERATURE DATA AT SELECTED SITES
09110000 - TAYLOR RIVER AT ALMONT, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT 02...	130	13.5	APR 16...	130	8.0
NOV 13...	260	1.0	MAY 16...	140	8.0
27...	140	.0	JUN 18...	150	9.0
DEC 12...	220	1.5	JUL 16...	145	12.0
JAN 22...	240	1.0	AUG 13...	150	11.5
MAR 05...	150	1.0			

09112500 - EAST RIVER AT ALMONT CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT 02...	280	13.0	APR 17...	320	7.0
NOV 14...	320	1.0	MAY 16...	220	6.0
27...	340	2.0	30...	240	6.5
DEC 12...	340	1.0	JUN 19...	230	5.5
JAN 23...	380	4.5	JUL 17...	225	12.0
MAR 08...	380	1.0	AUG 14...	320	12.0

09114500 - GUNNISON RIVER NEAR GUNNISON, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT 03...	200	12.0	MAY 17...	280	7.0
NOV 14...	280	3.0	31...	190	6.5
DEC 12...	140	.5	JUN 19...	230	7.5
JAN 23...	350	5.0	JUL 17...	210	13.0
MAR 06...	240	1.5	AUG 14...	260	11.5
APR 17...	220	9.5			

SPECIFIC CONDUCTANCE AND TEMPERATURE DATA AT SELECTED SITES
09119000 - TOMICHI CREEK AT GUNNISON, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT 03...	320	8.5	APR 18...	300	8.0
NOV 14...	530	2.0	MAY 17...	250	10.0
30...	300	1.5	30...	240	11.0
DEC 12...	490	1.0	JUN 19...	270	12.0
JAN 23...	320	.5	JUL 17...	240	20.0
MAR 06...	380	2.0	AUG 14...	300	17.0

09124500 - LAKE FORK AT GATEVIEW, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT 03...	160	11.5	MAY 17...	160	12.5
NOV 14...	180	.5	31...	130	10.5
DEC 12...	190	1.5	JUN 20...	140	6.5
JAN 23...	230	3.0	JUL 17...	90	17.0
MAR 06...	230	3.0	AUG 15...	150	13.5
APR 17...	170	9.0			

09126000 - CIMARRON RIVER NEAR CIMARRON, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT 03...	140	10.5	MAY 18...	95	5.5
NOV 15...	120	.0	JUN 20...	100	8.0
DEC 13...	160	1.0	JUL 18...	80	9.0
MAR 07...	170	4.0	AUG 15...	100	13.5
APR 18...	135	4.5			

SPECIFIC CONDUCTANCE AND TEMPERATURE DATA AT SELECTED SITES
 09128000 - GUNNISON RIVER BELOW GUNNISON TUNNEL, CO.
 WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT 04...	170	11.0	APR 19...	320	4.5
NOV 16...	330	8.0	MAY 18...	350	6.0
DEC 13...	345	7.5	JUN 20...	190	10.5
JAN 24...	340	5.5	JUL 18...	180	11.0
MAR 07...	230	4.5	AUG 16...	220	11.0

09128500 - SMITH FORK NEAR CRAWFORD, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT 06...	165	6.0	APR 18...	140	5.0
NOV 17...	190	6.5	MAY 22...	80	9.5
NOV 20...	160	3.0	JUN 20...	110	11.5
OEC 14...	160	.0	JUL 25...	140	18.0
JAN 17...	180	.5			
MAR 14...	170	1.0			

09129600 - SMITH FORK NEAR LAZEAR, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT 06...	2000	11.0	APR 18...	840	8.5
NOV 17...	2600	14.0	MAY 16...	440	11.0
NOV 15...	2400	7.5	MAY 25...	320	10.5
NOV 28...	2500	3.0	JUN 20...	--	19.0
DEC 14...	1800	.0	JUL 11...	1600	23.0
JAN 17...	2600	1.0	JUL 25...	1700	24.5
MAR 14...	2700	8.0			
MAR 22...	2600	--			

SPECIFIC CONDUCTANCE AND TEMPERATURE DATA AT SELECTED SITES
09131100 - COW CREEK NEAR PAONIA, CO.

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WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT 05...	130	2.0	JUN 13...	60	7.0
NOV 21...	--	.0	29...	70	10.0
MAR 28...	210	.5	AUG 01...	65	12.0

09134200 - COTTONWOOD CREEK NEAR HOTCHKISS, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
NOV 29...	4000	2.0

09135900 - LEROUX CREEK AT HOTCHKISS, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
NOV 28...	1350	6.5

09143000 - SURFACE CREEK NEAR CEDAREDEGE, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT 04...	70	8.0	JUN 22...	70	6.0
MAR 19...	150	1.0	JUL 12...	70	14.0
APR 26...	120	4.0	26...	75	12.0
MAY 29...	--	5.5			

SPECIFIC CONDUCTANCE AND TEMPERATURE DATA AT SELECTED SITES
09143500 - SURFACE CREEK AT CEDAREDGE, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT 04...	85	11.0	MAY 17...	120	4.0
NOV 14...	160	3.5	MAY 23...	100	4.5
DEC 11...	160	.0	JUN 22...	80	9.0
JAN 15...	160	.0	JUL 26...	80	16.0
MAR 19...	180	5.0	AUG 02...	--	18.0
APR 20...	140	1.0			

09144200 - TONGUE CREEK AT COMY, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
NOV 28...	1550	3.5

09144250 - GUNNISON RIVER AT OELIA, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT 10...	1350	12.0	MAY 21...	320	8.0
NOV 20...	1500	5.0	MAY 29...	320	10.5
DEC 20...	500	3.0	JUN 27...	480	14.5
JAN 16...	460	4.0	JUL 26...	800	21.0
APR 17...	400	8.0			

09146200 - UNCOMPAGRE RIVER NEAR RIDGWAY, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT 04...	740	12.5	MAY 21...	340	9.5
NOV 15...	1400	8.0	MAY 29...	320	11.0
DEC 14...	400	1.0	JUN 21...	320	8.0
JAN 24...	1050	4.5	JUL 18...	470	17.0
MAR 08...	1100	5.5	AUG 16...	750	14.5
APR 20...	650	11.0			

SPECIFIC CONDUCTANCE AND TEMPERATURE DATA AT SELECTED SITES
09147500 - UNCOMPAGRE RIVER AT COLONA, CO.

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WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT 04...	1300	14.0	APR 23...	900	11.0
NOV 15...	1250	5.0	MAY 21...	350	13.5
27...	875	3.5	29...	340	10.0
DEC 14...	880	2.5	JUN 21...	390	10.5
JAN 25...	1150	.5	JUL 19...	480	12.0
MAR 08...	1100	9.5	AUG 16...	800	17.0

09150500 - ROUBIDEAU CREEK AT MOUTH, NEAR DELTA, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
NOV 28...	1700	3.0

09151500 - ESCALANTE CREEK NEAR DELTA, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
NOV 29...	640	2.5

09152000 - KANNAH CREEK NEAR WHITEWATER, CO.

WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT 03...	180	8.0	MAY 04...	210	4.0
NOV 08...	150	5.5	16...	120	9.5
DEC 20...	160	.5	JUN 11...	100	10.5
JAN 24...	160	.5	JUL 08...	110	12.0
MAR 13...	150	1.0	AUG 15...	110	13.5

SPECIFIC CONDUCTANCE AND TEMPERATURE DATA AT SELECTED SITES
 09152600 - ORCHARD MESA DRAIN AT GRAND JUNCTION, CO.
 WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT 13...	1750	15.0	MAY 10...	--	12.0
NOV 17...	3700	7.5	JUN 18...	1480	17.5
DEC 15...	3750	.5	JUL 10...	1850	18.5
JAN 29...	3600	1.0	AUG 24...	1600	22.0
MAR 29...	4000	8.5			

09152650 - LEACH CREEK AT DURHAM, CO.
 WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT 10...	1900	16.0	MAY 04...	680	10.5
NOV 17...	3700	5.0	10...	--	10.0
DEC 15...	3500	.5	JUN 22...	1200	15.5
JAN 29...	3200	2.0	JUL 10...	1350	19.0
MAR 29...	4500	8.5	AUG 21...	1400	20.0

09153290 - REED WASH NEAR MACK, CO.
 WATER QUALITY DATA, WATER YEAR OCTOBER 1978 TO SEPTEMBER 1979

DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)	DATE	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE (DEG C)
OCT 02...	1750	16.0	APR 27...	1080	12.0
NOV 17...	4600	7.0	MAY 16...	1220	18.0
DEC 12...	5000	.5	JUN 06...	1150	16.5
JAN 02...	5000	.0	JUL 11...	1320	18.0
FEB 26...	5100	4.0	AUG 03...	1550	--
APR 09...	5200	10.5			

DELTA COUNTY

384234N108085101

SC15-96-32BAD. State of Colorado. Drilled domestic water-table well in Dakota Group. Diameter, 6 in. (0.2 m). Depth, 230 ft (70.1 m). MP, 0.3 ft (0.091 m) above lsd. Altitude of land surface, 4,960 ft (1,512 m). Records available: 1976, 1978-79.

1979 Flowing

GRAND COUNTY

400248N105560301

SB 1-76-1808C. W. F. Linke. Drilled recreation water-table well in Middle Park Formation. Diameter, 6 in. (0.2 m). Depth, 603 ft (183.8 m). MP, 6.0 ft (1.83 m) above lsd. Altitude of land surface, 8,075 ft (2,461 m). Records available: 1973-79.

Highest water level, 3.4 ft (1.04 m) below lsd, Aug. 28, 1974; lowest water level, 77.25 ft (27.546 m) below lsd, Aug. 11, 1977.

Aug. 24, 1979 22.67 ft

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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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