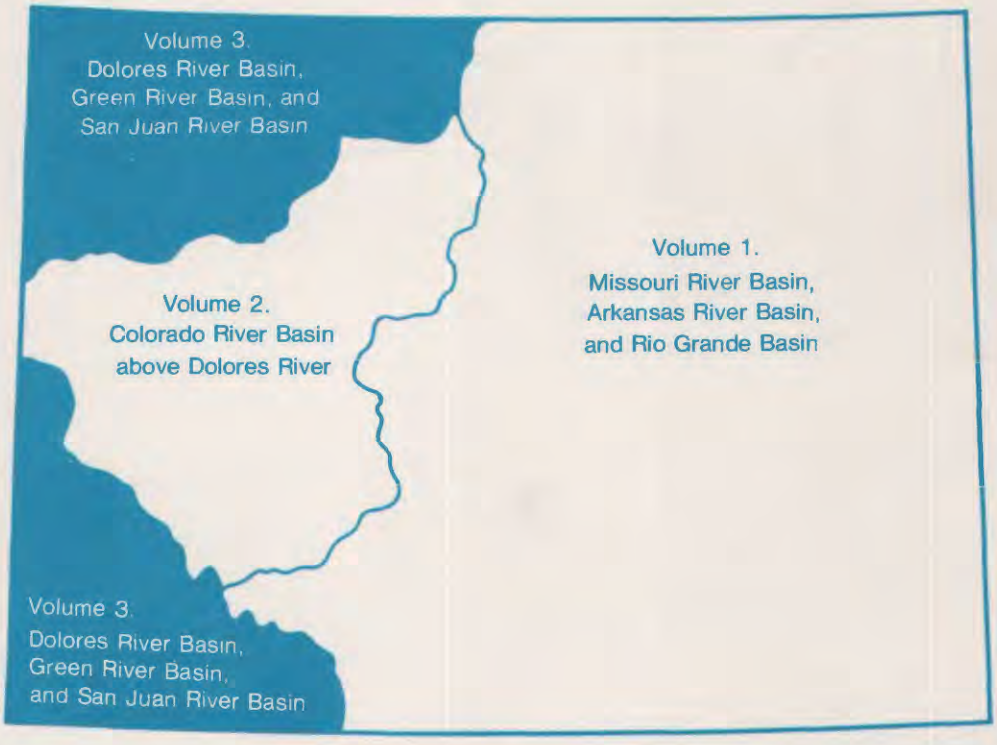
Water Resources Data Colorado Water Year 1983

Volume 3. Dolores River Basin, Green River Basin, and San Juan River Basin



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT CO-83-3
Prepared in cooperation with the State of Colorado
and with other agencies

CALENDAR FOR WATER YEAR 1983

1982

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1983

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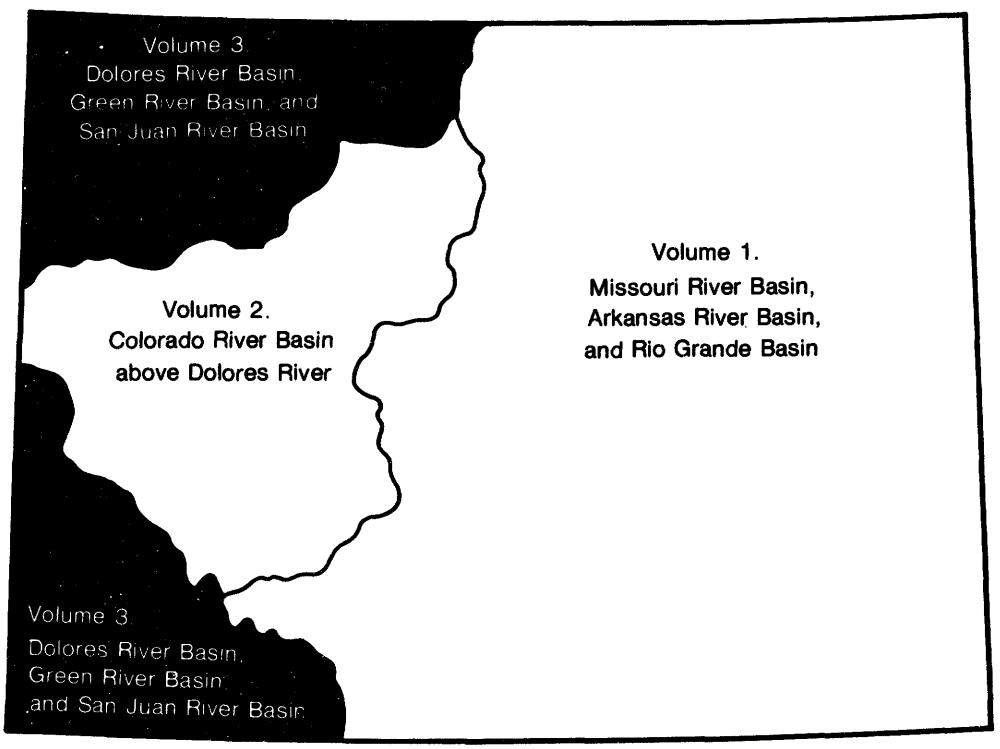
Water Resources Data Colorado Water Year 1983

Volume 3. Dolores River Basin, Green River Basin, and San Juan River Basin

by J.T. Steinheimer, R.C. Ugland, H.E. Burch, and E.A. Wilson



U.S. GEOLOGICAL SURVEY WATER-DATA REPORT CO-83-3
Prepared in cooperation with the State of Colorado
and with other agencies

UNITED STATES DEPARTMENT OF THE INTERIOR

WILLIAM P. CLARK, Secretary

GEOLOGICAL SURVEY

Dallas L. Peck, Director

For information on the water program in Colorado write to:

District Chief, Water Resources Division
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Denver Federal Center
Lakewood, CO 80225

1984

PREFACE

This volume of the annual hydrologic data report of Colorado is one of a series of annual reports that document hydrologic data gathered from the U.S. Geological Survey's surface- and ground-water data-collection networks in each State, Puerto Rico, and the Trust Territories. These records of streamflow, ground-water levels, and quality of water provide the hydrologic information needed by State, local, and Federal agencies, and the private sector for developing and managing our Nation's land and water resources. Hydrologic data for Colorado are contained in 3 volumes:

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

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

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

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16. Abstract (Limit: 200 words)

Water-resources data for Colorado for the 1983 water year consist of records of stage, discharge, and water quality of streams; stage, contents and water quality of lakes and reservoirs; and water levels and water quality of wells and springs. This report (Volumes 1, 2, and 3) contains discharge records for 400 gaging stations, stage and contents of 23 lakes and reservoirs, 6 partial-record low-flow stations, peak flow information for 19 crest-stage partial record stations, and 20 miscellaneous sites; water quality for 132 gaging stations and 291 miscellaneous sites; and water levels for 55 observation wells. Six pertinent stations in bordering States also are included in this report. The records were collected and computed by the Water Resources Division of the U.S. Geological Survey under the direction of J. F. Blakey, district chief. These data represent that part of the National Water Data System collected by the U.S. Geological Survey and cooperating State and Federal agencies.

17. Document Analysis a. Descriptors

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

b. Identifiers/Open-Ended Terms

c. COSATI Field/Group

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CONTENTS

ILLUSTRATIONS

TABLES

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

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

WATER RESOURCES DATA FOR COLORADO, 1983

VOLUME 3: DOLORES, GREEN, AND SAN JUAN BASINS

By J.T. Steinheimer, R.C. Ugland, H.E. Burch and E.A. Wilson

INTRODUCTION

Water-resources data for the 1983 water year for Colorado consist of records of stage, discharge, and water quality of streams; stage, contents, and water quality of lakes and reservoirs; and water levels and water quality of wells and springs. This report (volumes 1, 2, and 3) contains discharge records for 400 streamflow-gaging stations, stage and contents of 23 lakes and reservoirs, low-flow data for 6 partial-record stations, peak flow information for 19 crest-stage partial-record stations and 20 miscellaneous sites; water-quality data for 132 streamflow-gaging stations and 291 miscellaneous sites; and water levels for 55 observation wells. Locations of lake- and streamflow-gaging stations and water-quality stations are shown in figure 1, locations of crest-stage partial-record stations are shown in figure 2, and locations of observation wells are shown in figure 3. Six pertinent stations in bordering States also are included in this report. The records were collected and computed by the Colorado District. These data were collected by the U.S. Geological Survey and cooperating State and Federal agencies in Colorado and represent that part of the National Water Data System.

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

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

Beginning with the 1971 water year, water data on streamflow, water quality, and ground water are published in official Survey reports on a State-boundary basis. These official Survey reports carry an identification number consisting of the two-letter State abbreviation, the last two digits of the water year, and the volume number. For example, this volume is identified as "U.S. Geological Survey Water-Data Report CO-83-3." These water-data reports are for sale, in paper copy or in microfiche, by the National Technical Information Service, U.S. Department of Commerce, Springfield, VA 22161.

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

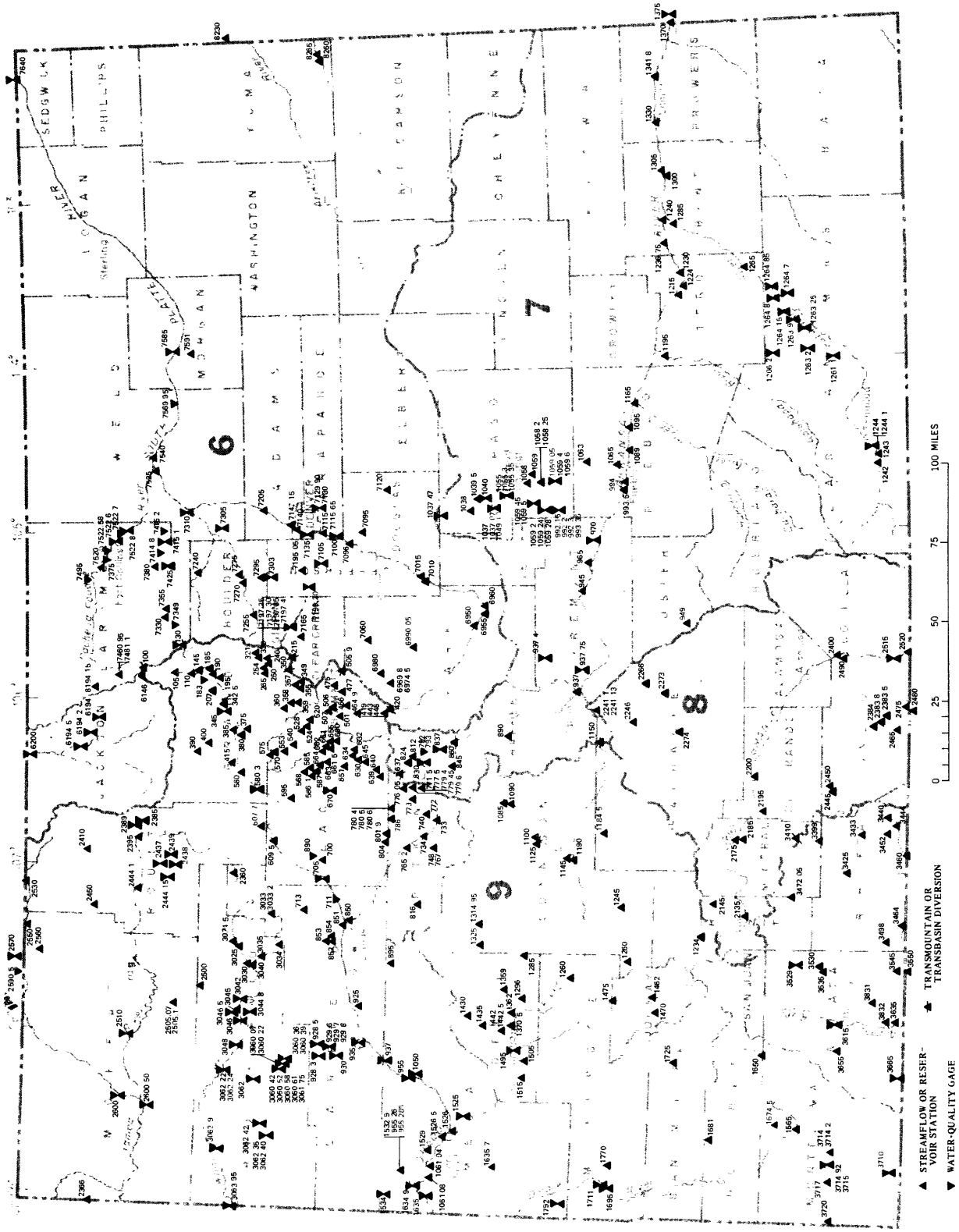


Figure 1.--Map showing locations of lake and stream-gaging stations and water-quality stations in Colorado.

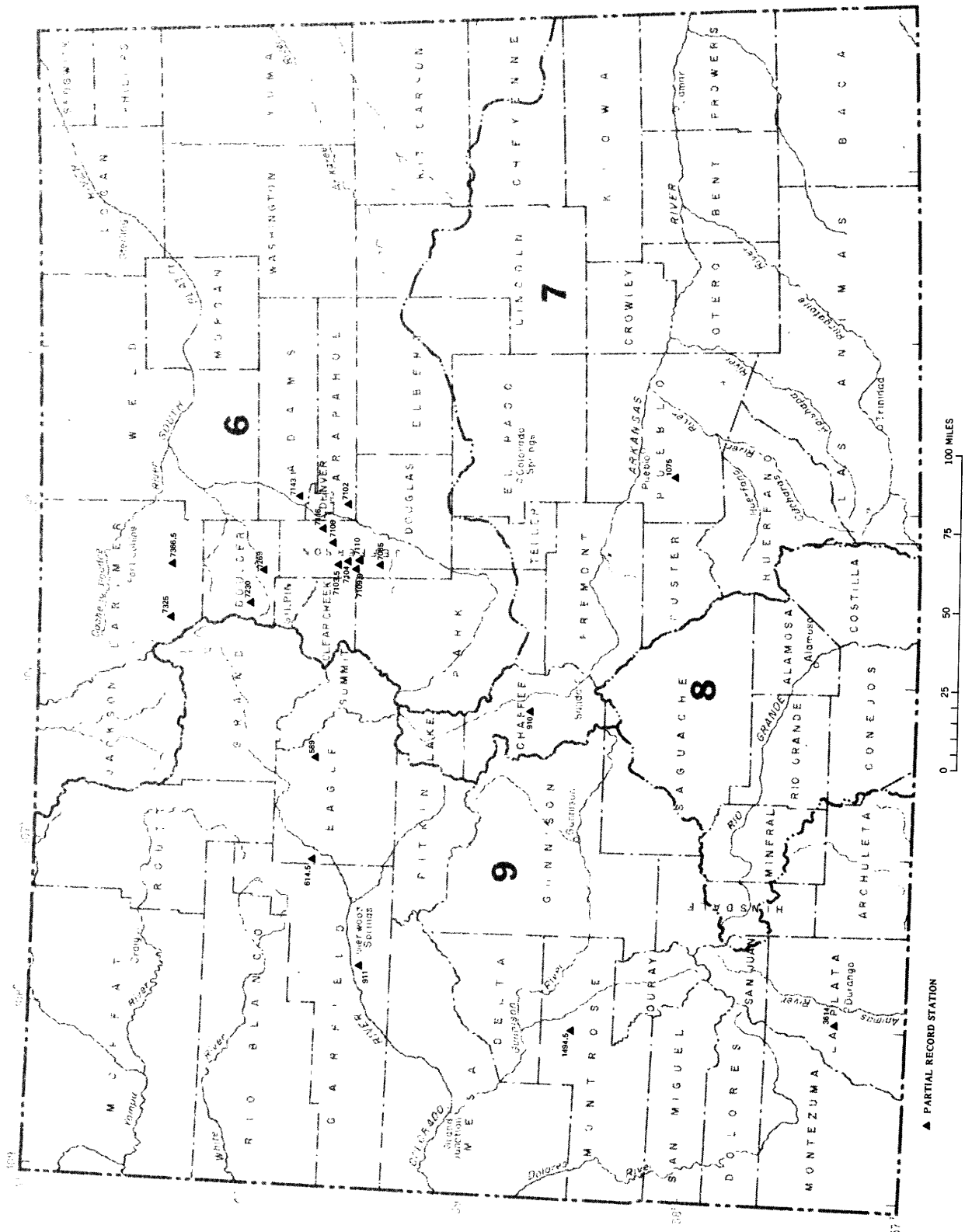


Figure 2.--Map showing locations of crest-stage partial-record stations in Colorado.

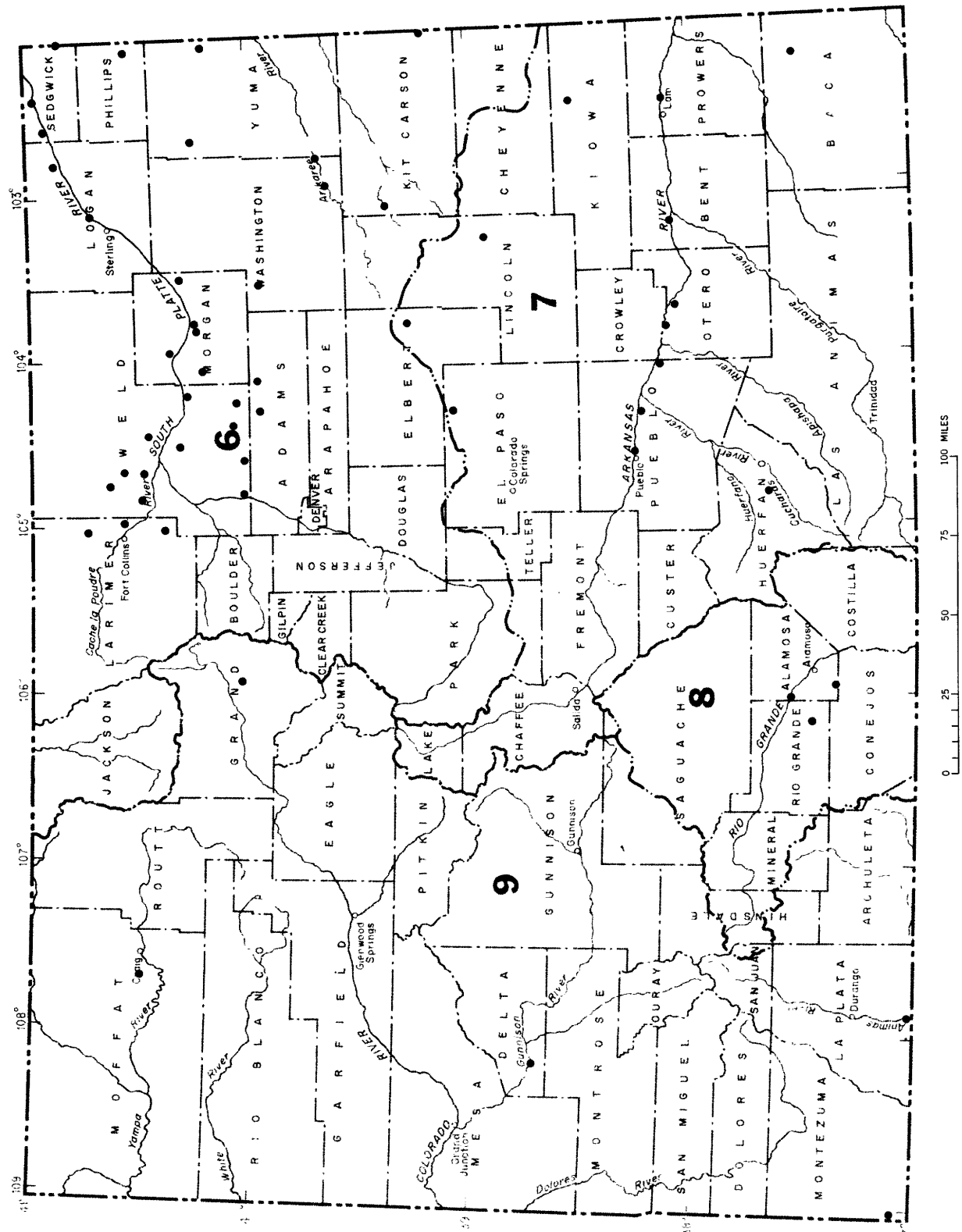


Figure 3.--Location of observation wells in Colorado.

COOPERATION

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

Arkansas River Compact Administration, Frank G. Cooley, Chairman and Federal Representative.
City and County of Denver, Board of Water Commissioners, M. A. Pugsley, President.
City of Aspen, Wayne Chapman, City Manager.
City of Aurora, Thomas Griswald, Manager of Planning and Resources.
City of Colorado Springs, Department of Public Utilities, James D. Phillips, Director.
City of Glenwood Springs, M. Flinn, Manager.
City of Longmont, James Cinea, Water Superintendent.
City of Northglenn, Thomas Ambalam, Director of Natural Resources.
Colorado Department of Highways, Jack Kinstlinger, Executive Director.
Colorado Division of Water Resources, J. A. Danielson, State Engineer.
Colorado River Water Conservation District, Roland C. Fischer, Secretary-Engineer.
Colorado Water Conservation Board, J. W. McDonald, Director.
Copper Mountain Water and Sanitation District, William Caffery, District Manager.
Denver Regional Council of Governments, Robert D. Farley, Executive Director.
Eagle County Board of Commissioners, Eric Edeem, Environmental Health Officer.
Grand County, R. Howard Moody, County Commissioner.
Larimer-Weld Regional Council of Governments, T. L. Trembly, Project Manager.
Metropolitan Denver Sewage Disposal District No. 1, Jack B. Enger, Manager.
Mineral County, Nellie M. Wyley, Chairperson, Board of County Commissioners.
Northern Colorado Water Conservation District, Larry Simpson, Manager.
Pitkin County Board of County Commissioners, C. Stewart, County Manager.
Pleasant View Water and Sanitation District, Jeff Isum, District Liaison Officer.
Pueblo Civil Defense, Betty Jo Hopper, Director.
Purgatoire River Water Conservancy District, C. Latuda, President.
Southeastern Colorado Water Conservancy District, C. L. Thomson, General Manager.
Southwestern Water Conservation District, Edward Searle, Manager.
Uncompahgre Valley Water Users Association, James Herbit, Manager.
Upper Yampa Water Conservancy District, J. Fetcher.
Urban Drainage and Flood Control District, L. Scott Tucker, Executive Director.
Yellow Jacket Water Conservancy District, F. G. Cooley, Secretary-Council.

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

HYDROLOGIC CONDITIONS

Weather Overview of the State for the 1983 Water Year

Weather information and data for the five major drainage basins in Colorado were obtained from published reports of the National Weather Service. Average precipitation and departures from normal for the reference period of 1951-80 water years are shown on a cumulative basis for each one-half of the water year and for the entire water year are shown in table 1. During the first one-half of the water year, all basins received more than normal precipitation. During the last one-half of the water year, the Colorado River, the South Platte River, and the Rio Grande basins received greater-than-normal precipitation, whereas the Arkansas River and the Kansas River basins received less-than-normal precipitation. For the entire water year, all river basins except the Arkansas received greater-than-normal precipitation.

The 1983 water year continued the greater-than-normal precipitation pattern from the preceding year, which was 125 percent greater than normal. During October and November, 1982, precipitation ranged from 63 percent of normal in the Arkansas River basin to 134 percent of normal in the Yampa and White River basins (subbasins in the Colorado River Basin). Above altitudes of 10,000 feet the snowpack was about 147 percent of normal. From December 1982 through February 1983, precipitation ranged from less than normal to near normal, causing a decrease in the snowpack. Forecasts for the spring runoff were for less-than-normal runoff.

March was the beginning of several months of unseasonably cold temperatures and greater-than-average precipitation. Precipitation for the State was about twice normal and totals in much of the South Platte River basin were more than four times normal.

April was wetter than normal, the wettest areas being along the Front Range and the Upper Colorado River Basin. Most areas received more than twice normal precipitation, and the mountain snowpack continued to increase throughout the State. Many low-altitude snow courses (near 8,000 feet) had near record maximums for April. Water content ranged from 200 to 900 percent of normal. Usually by April most of the snow below an altitude of 8,000 feet has melted, but air temperatures were 5°F to 7°F colder than normal, delaying the melting of the snowpack.

The first 3 weeks of May continued greater-than-average precipitation and less-than-normal air-temperature patterns. Many precipitation stations received two to three times the normal precipitation. Berthoud Pass (on the Continental Divide between the Colorado River and Platte River basins) had 6.88 inches of precipitation, including 70 inches of new snow. Many high-altitude snowpacks increased where significant melting normally would have occurred. During May 23-28, air temperatures throughout much of the State were in the 80° to 90°F range and temperatures in the mountains were in the 60° to 70°F range; this caused a rapid snowmelt and many rivers were near flood stage in the Colorado River and Cache la Poudre River basins. Air temperatures cooled during May 29 to May 31, easing the threat of flooding.

Table 1.--*Average precipitation during water year and departures from normal, in inches*

Drainage basin	October-March			April-September			1983 water year		
	Precipitation	Normal precipitation	Departure from normal	Precipitation	Normal precipitation	Departure from normal	Precipitation	Normal precipitation	Departure from normal
Arkansas River------	4.27	4.05	+0.22	9.27	10.27	-1.00	13.54	14.32	-0.78
Colorado River------	8.23	7.61	+.62	10.79	7.75	+3.04	19.02	15.36	+3.66
Kansas River--------	4.91	3.55	+1.36	12.67	12.79	-.12	17.58	16.34	+1.24
South Platte River--	5.77	4.26	+1.51	13.30	10.83	+2.47	19.07	15.09	+3.98
Rio Grande----------	4.77	4.53	+.24	8.18	7.00	+1.18	12.95	11.53	+1.42

The first 2 weeks of June continued to be cooler than normal, with greater-than-average precipitation lowering the snowline to 8,000 feet. From June 18 to June 23 a summer heat wave moved into the State and air temperatures in the mountains were in the 60° to 70°F range. Grand Junction, Fort Collins, and Greeley recorded 95°F temperatures. These high temperatures caused a rapid snowmelt, producing flooding in the Colorado River and Cache la Poudre River basins. Widespread thunderstorm activity from June 24 to June 28 added to flooding conditions. During July, with the majority of the snowpack melted and fairly normal air temperatures, floodwaters receded and conditions returned to normal.

Precipitation in August was limited to widespread thunderstorms. Precipitation in September was sparse.

Streamflow

The water year started with greater-than-normal streamflow in northwest and southwest parts of Colorado. Cold temperatures and the lack of precipitation caused a gradual decrease in streamflow until May. Warm air temperatures combined with thunderstorm activity during the last part of June caused rapid melting of the snowpack causing new peaks of record at many streamflow-gaging stations in the White River basin. The highest flows occurred at station 09304500 White River near Meeker (period of record 1901-06 and 1909-1983) where peak discharge was 6,700 ft^3/s as compared with 6,370 ft^3/s in 1921. The magnitude of discharge was about 5 five times greater than the 100-year flood. Many small tributaries in the White River basin also had magnitudes of discharge of about 5 times greater than the 100-year flood. For example, station 09306200 Piceance Creek below Ryan Gulch near Rio Blanco had an annual mean flow during water year 1983 of 282 ft^3/s, 14 times greater than the mean annual of 19.9 ft^3/s for 18 years of record.

The recurrence interval for peak flows along the Yampa River and its tributaries was only about 10 years. On May 31 a major mudflow destroyed the gaging station 09306235 Corral Gulch below Water Gulch near Rangely. See table 2 for a list of new peak flows at selected sites. The runoff in the southwestern part of the State, although remaining greater than normal, produced no notable peaks. The recurrence interval for peak flows at station 09364500 Animas River at Durango was only about 5 years, which was fairly typical of this part of the State.

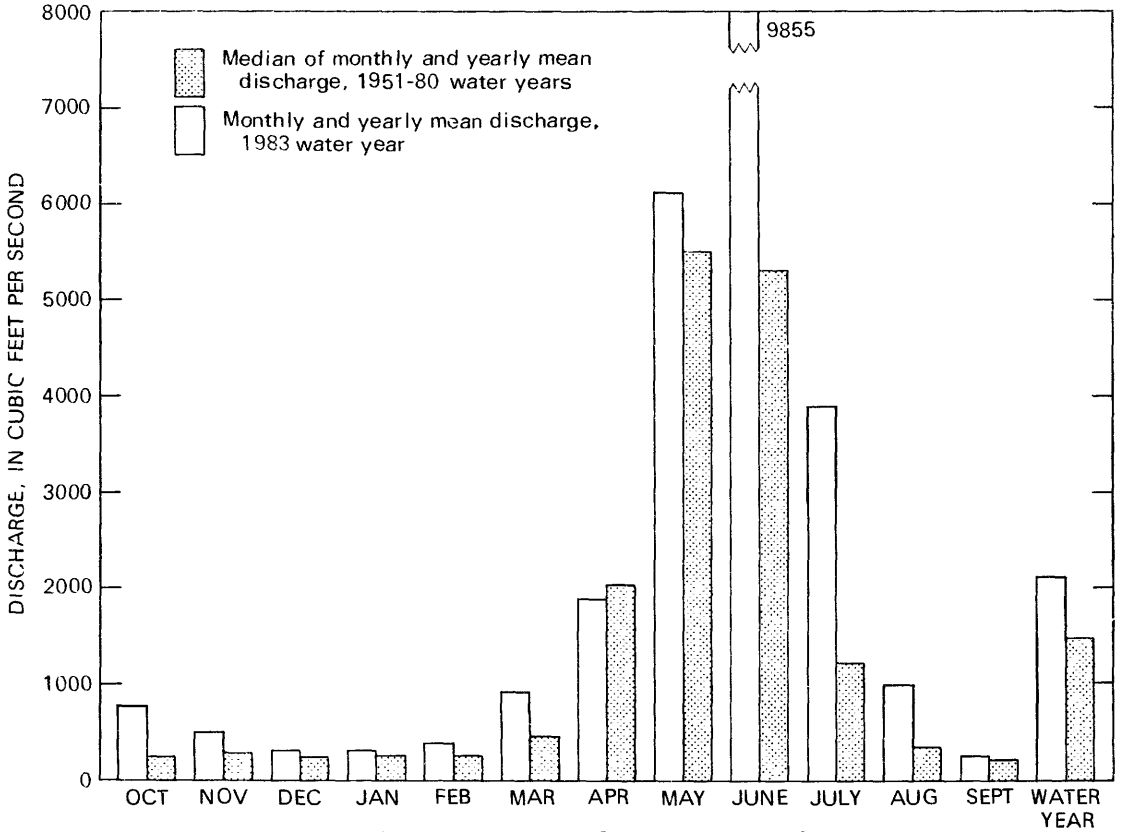
Monthly and annual mean water discharge for the 1983 water year are compared with the median discharge for the reference period of 1951-80 water years for two index stations in figure 4. Streamflow for gaging station 09251000 Yampa River near Maybell remained greater than normal throughout most of the water year. During October, streamflow was 270 percent of normal; by April this had decreased to 90 percent of normal. Streamflow increased during May and June, and by July it was 325 percent of normal. By September, streamflow decreased to 160 percent of normal. The water year mean was 148 percent of normal as compared with 125 percent of normal during the 1982 water year.

Table 2.--*Summary of flood stage and discharge at gaging stations where new peak discharges for the period of record occurred during the 1983 water year*

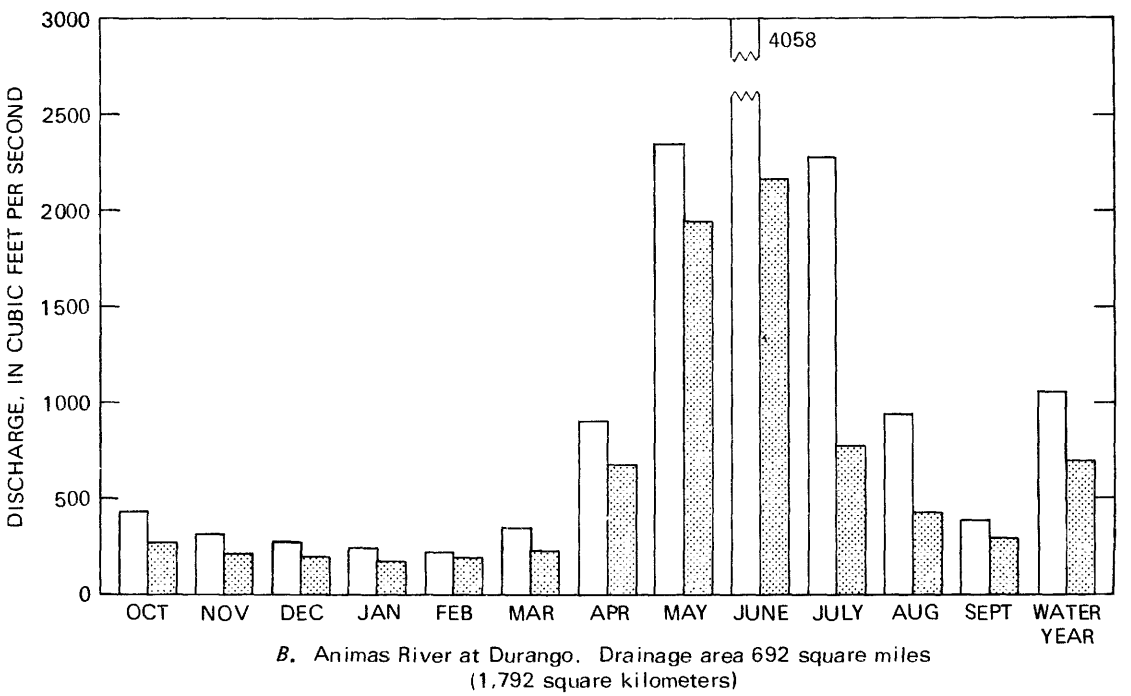
[mi², square mile; ft, feet; ft³/s, cubic foot per second]

Station number	Station name	Drainage area (mi²)	Period of record	Maximum previously known			Maximum during 1983 water year		
				Date	Gage height (feet)	Discharge (ft³/s)	Date	Gage height (ft)	Discharge (ft³/s)
09250507	Wilson Creek above Taylor Creek, near Axial	20.0	1980-83	5-13-82	1.16	19	5-12	4.43	82
09253000	Little Snake River near Slater	285	1942-47, 1950-83	4-25-74	8.95	4,180	5-28	8.09	4,200
09303300	South Fork White River at Budge's Resort	52.3	1975-83	6-08-81	5.95	1,580	6-25	6.57	2,750
09303320	Wagonwheel Creek at Budge's Resort	7.36	1975-83	6-12-80	4.27	223	6-05	----	*320
09303400	South Fork White River near Budge's Resort	128	1976-83	6-14-78	5.36	2,940	6-22	6.18	3,770
09303500	South Fork White River near Buford	152	1903-06, 1910-15, 1942-47, 1967-83	6-17-06	8.2	3,230	6-24	7.73	3,620
09304000	South Fork White River at Buford	177	1919-20, 1951-83	6-16-78	----	3,000	6-26	6.27	3,160
09304200	White River above Coal Creek, near Meeker	648	1961-83	5-29-79	5.97	4,900	6-26	7.07	5,740
09304500	White River near Meeker	755	1901-06, 1909-83	6-16-21	7.60	6,370	6-26	5.89	6,700
09304600	White River at Meeker	808	1978-83	5-29-79	7.13	5,290	6-26	----	*6,000
09304800	White River below Meeker	1,024	1961-83	6-17-78	4.46	4,750	6-26	4.97	6,590
09306052	Scandard Gulch at mouth, near Rio Blanco	7.97	1974-83	2-20-82	1.24	9.2	3-11	1.27	9.7
09306175	Black Sulphur Creek near Rio Blanco	103	1974-83	7-18-81	3.56	225	8-29	5.40	346
09306200	Piceance Creek below Ryan Gulch, near Rio Blanco	506	1964-83	3-09-66	6.23	400	5-28	7.81	480
09306242	Corral Gulch near Rangely	31.6	1974-83	9-07-81	4.08	349	6-01	4.45	620

*Maximum mean daily discharge.



A. Yampa River near Maybell. Drainage area 3,410 square miles (8,830 square kilometers) approximately



B. Animas River at Durango. Drainage area 692 square miles (1,792 square kilometers)

Figure 4.--Discharge for 1983 water year compared with median discharge for 1951-80 water years at two representative streamflow-gaging stations.

Streamflow for gaging station 09361500 Animas River at Durango remained greater than normal throughout most of the water year. During October, streamflow was 178 percent of normal; by April this had decreased to 94 percent of normal. Streamflow increased during May and June, and by July was 294 percent of normal. Streamflow decreased during August and by September was 114 percent of normal. The water year mean was 149 percent of normal as compared to 136 percent of normal during the 1982 water year.

During water year 1983, storage in Vallecito Reservoir decreased 41,410 acre-ft compared with a gain of 60,130 acre-ft during water year 1982.

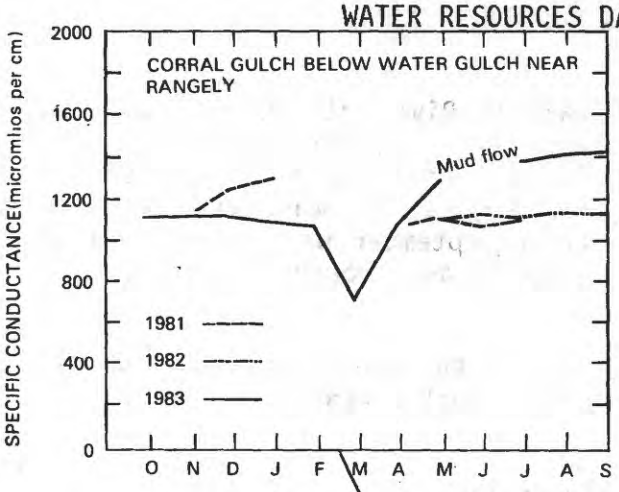
Chemical Quality of Streamflow

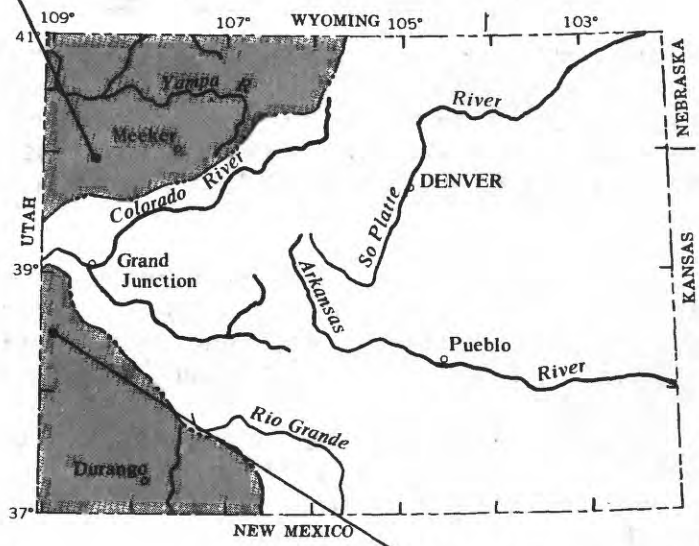
During the latter part of June peak streamflows occurred in the Green River basin. A major mudflow on May 31 destroyed gaging station 09306235 Corral Gulch below Water Gulch near Rangely. One peculiarity, in spite of the peak flows, was that specific-conductance values were much greater than the expected values for spring runoff as shown at gaging station 09306235 Corral Gulch below Water Gulch near Rangely (fig. 5A).

A typical discharge versus specific conductance relationship is shown for gaging station 09171100 Dolores River near Bedrock (fig. 5C) where under low-flow conditions, large specific-conductance values were measured; during spring runoff, high flows significantly decreased specific-conductance values.

The highest flow since 1921 occurred in northwest Colorado on the White River. Specific-conductance values measured were 10 times greater than normal for this type of flow condition and these values were sustained from the last week of April through May.

On May 5, at gaging station 09092830 Northwater Creek near Anvil Points, a concentration of 120 µg/L for dissolved lithium was measured; this concentration was about 10 times greater than the usual concentration of 13 µg/L.





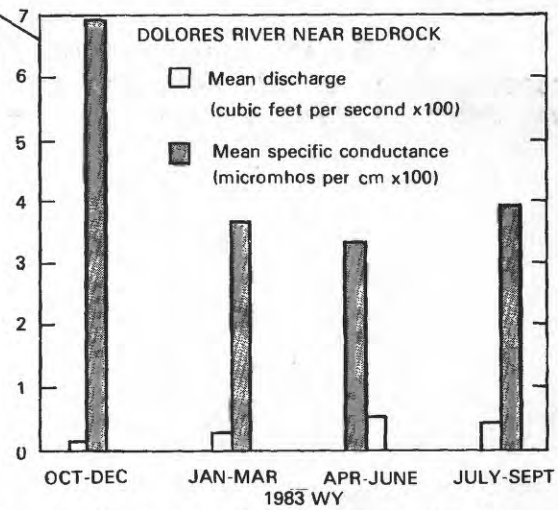


Figure 5A.--Histogram of mean monthly specific conductance for gaging station 09306235 Corral Gulch below Water Gulch near Rangely.

Figure 5B.--Location of gaging station 09171200 Dolores River near Bedrock and 09306235 Corral Gulch below Water Gulch near Rangely.

Figure 5C.--Comparison between mean discharge and specific conductance for gaging station 09171100 Dolores River near Bedrock.

Ground-Water

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

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

East of the Continental Divide, because of man's intensive use of ground water, the major fluctuations in water levels are declines caused by pumping wells. West of the Continental Divide, where withdrawals are small, water-level fluctuations reflect mostly changes in natural conditions.

Ground water is being mined from unconsolidated aquifers in the Northern High Plains and from consolidated aquifers in the Denver Basin. The aquifers in the alluvial valleys in eastern Colorado have been affected by both surface-water irrigation and ground-water pumpage. Most of the aquifers in western Colorado are still under natural conditions except where ground water is being pumped for the production and development of oil, gas, coal, and shale oil.

DEFINITION OF TERMS

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

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

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

Algal-growth potential (AGP) refers to the results of an algal assay test which determines the nutrients that are limiting to growth, as well as to quantify the biological response to changes in concentrations of algal growth-limiting nutrients. These measurements are made by inoculating a water samples with an algal test organism and evaluating its growth response to various additions of nutrients overtime. The water samples are spiked with .005 mg/L phosphorus and 0.075 mg/L nitrogen, and the algal growth potential results are reported in milligrams per liter.

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

Bacteria are microscopic unicellular organisms, typically spherical, rod like, 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°C ± 1.0°C on M-Endo medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

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

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

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

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

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

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

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

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

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

Bottom material: See Bed material.

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

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

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

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

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

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

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

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

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

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

Dissolved refers to that material in a representative water sample which passes through a 0.45 µm 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, µg/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 3.--*Factors for conversion of chemical constituents in milligrams or micrograms per liter to milliequivalents per liter*

Ion	Multiply by	Ion	Multiply by
Aluminum (Al^{+3})*.....	0.11119	Iodide (I^{-1}).....	0.00788
Ammonia as N.....	.07139	Iron (Fe^{+3})*.....	.05372
Barium (Ba^{+2}).....	.01456	Lead (Pb^{+2})*.....	.00965
Bicarbonate (HCO_3^{-1})...	.01639	Lithium (Li^{+1})*.....	.14411
Bromide (Br^{-1}).....	.01251	Magnesium (Mg^{+2}).....	.08226
Calcium (Ca^{+2}).....	.04990	Manganese (Mn^{+2})*.....	.03640
Carbonate (CO_3^{-2}).....	.03333	Nickel (Ni^{+2})*.....	.03406
Chloride (Cl^{-1}).....	.02821	Nitrate as N.....	.07139
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 4.--*Factors for conversion of sediment concentration in milligrams per liter to parts per million**

[All values calculated to three significant figures]

Range of concentration in 1000 mg/L	Divide by	Range of concentration in 1000 mg/L	Divide by	Range of concentration in 1000 mg/L	Divide by	Range of concentration in 1000 mg/L	Divide by
0 - 8	1.00	201-217	1.13	411-424	1.26	619-634	1.39
8.05- 24	1.01	218-232	1.14	427-440	1.27	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	749-762	1.47
137 -152	1.09	347-361	1.22	556-570	1.35	765-780	1.48
153 -169	1.10	363-378	1.23	572-585	1.36	782-796	1.49
170 -185	1.11	380-393	1.24	587-602	1.37	798-810	1.50
186 -200	1.12	395-409	1.25	604-617	1.38		

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Radioisotopes that are determined in this program are natural uranium in µg/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 (µg/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 µm 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 µm membrane filter. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to determine when the results should be reported as "suspended, total."

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

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

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

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

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

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

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

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

is, less than 95 percent) of the constituent present in the dissolved and suspended phases of the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

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

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

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

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

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

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

DOWNSTREAM ORDER AND STATION NUMBER

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

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

stations or partial-record stations have the same number as the gaging or partial-record station.

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

SPECIAL NETWORKS AND PROGRAMS

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

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

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

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

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

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

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

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

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

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

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

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

Information pertaining to the accuracy of the discharge records, to conditions which affect the natural flow of the gaging station, availability of water-quality records, and reservoir stations information on the dam forming the reservoir, the

capacity, outlet works and spillway, and purpose and use of the reservoir, is given under "REMARKS."

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

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

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

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

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

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

Accuracy of field data and computed results

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

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

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

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

Other Data Available

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

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

Records of Discharge Collected by Agencies other than the Geological Survey

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

EXPLANATION OF WATER-QUALITY RECORDS

Collection and Examination of Data

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

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

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

Water Analysis

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

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

Chemical-quality data are considered to be the most representative values available for the stations listed. The values reported represent water-quality conditions at the time of sampling, as much as possible, consistent wth available sampling techniques and methods of analysis. In the rare case where an apparent

inconsistency exists between a reported pH value and the relative abundance of carbon dioxide species (carbonate and bicarbonate), the inconsistency is the result of a slight uptake of carbon dioxide from the air by the sample between measurement of pH in the field determination of carbonate and bicarbonate in the laboratory.

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

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

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

Water Temperatures

Water temperatures are measured at most of the water-quality stations. In addition, water temperatures are taken at the time of discharge measurements for surface-water stations. For stations where water temperatures are taken manually the water temperatures are taken 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 5.--*Degrees Celsius (°C) to degrees Fahrenheit (°F)** *(Temperature reported to nearest 0.5°C)*

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

*°C=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 6.--*Water-Supply Paper numbers and parts, water years 1941-71*

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

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

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

EXPLANATION OF GROUND-WATER-LEVEL RECORDS

Collection of Data

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

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

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

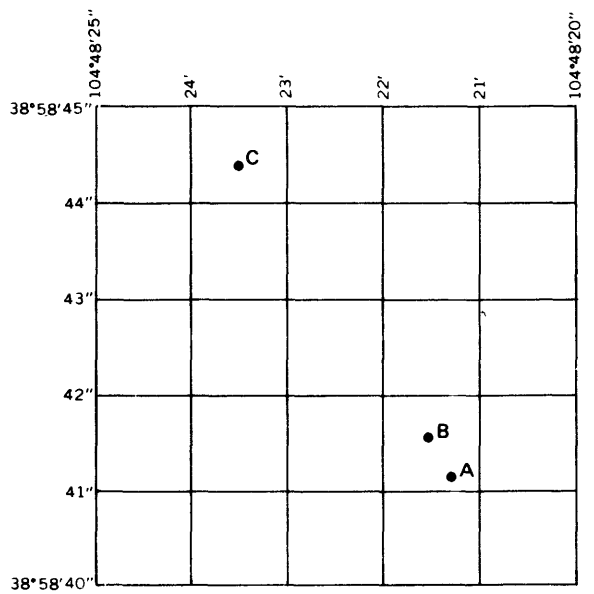


Figure 6.--System for numbering wells and miscellaneous sites (latitude and longitude).

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-mi^2 (93-km^2) area described by the township and range designation is subdivided into 1-mi^2 (2.59-km^2) areas called sections. The sections are numbered sequentially. The third number of the well location designates the section. The section, which contains 640 acres (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.

SELECTED REFERENCES

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

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

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

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

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

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

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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".

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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.

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

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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.

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

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

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DOLORES RIVER BASIN

09165000 DOLORES RIVER BELOW RICO, CO

LOCATION.--Lat 37°38'20", long 108°03'35", Dolores County, Hydrologic Unit 14030002, on left bank at upstream side of Montelores bridge northwest of State Highway 145 (relocated), at Dolores-Montezuma County line, 0.5 mi upstream from Ryman Creek, and 4.0 mi southwest of Rico.

DRAINAGE AREA.--105 mi^2.

PERIOD OF RECORD.--October 1951 to current year.

GAGE.--Water-stage recorder. Datum of gage is 8,422.23 ft, National Geodetic Vertical Datum of 1929.

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.--32 years, 135 ft^3/s; 97,810 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,120 ft^3/s June 10, 1952, gage height, 6.15 ft; minimum daily, 7.0 ft^3/s Nov. 16, 17, 1956, Feb. 6, 7, 1961.

EXTREMES OUTSIDE PERIOD OF RECORD.--Greatest flood since at least 1885 occurred Oct 5, 1911.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 800 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
May 30	2300	1,550	5.34	June 19	2230	* 1,590	5.40

Minimum daily discharge, 22 ft^3/s Feb. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	140	47	36	28	26	32	43	154	1220	878	202	106
2	119	38	36	28	26	32	39	134	1100	843	220	111
3	111	34	36	28	22	32	40	126	952	843	232	98
4	104	38	34	28	24	32	38	156	944	808	228	94
5	98	39	34	28	24	31	40	192	1000	773	324	87
6	90	39	34	28	24	30	35	198	944	717	348	80
7	90	39	34	28	24	32	37	185	952	696	352	77
8	87	39	34	28	24	33	34	240	992	661	288	94
9	80	40	34	28	26	36	35	352	952	616	304	80
10	75	39	34	28	26	38	33	445	850	598	264	75
11	76	39	34	28	26	44	33	450	906	500	258	71
12	68	38	32	28	26	43	35	352	1020	416	240	67
13	74	38	32	28	26	42	33	332	801	368	215	66
14	71	37	32	28	28	46	32	261	640	336	222	65
15	68	41	32	28	28	43	30	225	710	294	235	63
16	67	41	34	28	28	41	32	205	815	273	192	60
17	63	38	34	28	28	41	36	181	906	261	172	59
18	61	38	34	28	29	40	45	163	1160	249	174	57
19	56	38	32	26	30	40	61	161	1360	276	280	59
20	55	38	30	26	28	39	80	148	1330	258	181	76
21	53	38	32	26	28	36	75	165	1300	255	156	59
22	52	39	34	26	31	39	72	240	1220	304	142	54
23	51	35	34	26	32	36	87	372	1300	344	132	55
24	49	36	32	26	34	36	134	538	1410	267	130	60
25	49	36	30	26	35	39	178	661	1140	304	128	55
26	51	35	30	26	34	35	188	731	1050	460	130	53
27	57	36	30	26	33	36	188	864	1120	372	138	60
28	49	35	30	26	33	34	172	1100	1000	279	116	54
29	43	36	30	26	---	35	181	1040	984	261	118	55
30	52	36	28	26	---	37	181	1190	952	240	126	139
31	49	---	28	26	---	46	---	1280	---	222	109	---
TOTAL	2208	1140	1010	842	783	1156	2247	12841	31030	13972	6356	2189
MEAN	71.2	38.0	32.6	27.2	28.0	37.3	74.9	414	1034	451	205	73.0
MAX	140	47	36	28	35	46	188	1280	1410	878	352	139
MIN	43	34	28	26	22	30	30	126	640	222	109	53
AC-FT	4380	2260	2000	1670	1550	2290	4460	25470	61550	27710	12610	4340

CAL YR 1982 TOTAL 62983 MEAN 173 MAX 1130 MIN 20 AC-FT 124900
WTR YR 1983 TOTAL 75774 MEAN 208 MAX 1410 MIN 22 AC-FT 150300

09166500 DOLORES RIVER AT DOLORES, CO

LOCATION.--Lat 37°28'16", long 108°30'15", in NE¼NE¼ sec.16, T.37 N., R.15 W., Montezuma County, Hydrologic Unit 14030002, on left bank 70 ft downstream from bridge on State Highway 184 in Dolores and 0.4 mi upstream from Lost Canyon Creek.

DRAINAGE AREA.--504 mi^2.

PERIOD OF RECORD.--June 1895 to October 1903, August 1910 to November 1912, October 1921 to current year. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 859: 1937. WRD Colo. 1972: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 6,918.74 ft, National Geodetic Vertical Datum of 1929. See WSP 1713 or 1733 for history of changes prior to Oct. 7, 1952.

REMARKS.--Records good except those for winter period, which are poor. Diversions for irrigation of about 2,000 acres above station. Flow partly regulated by Ground Hog Reservoir, capacity, 21,710 acre-ft. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--72 years (water years 1896-1903, 1911-12, 1922-83), 430 ft^3/s; 311,500 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,000 ft^3/s Oct. 5, 1911, gage height, 10.2 ft, site and datum then in use, from rating curve extended above 2,800 ft^3/s; minimum daily, 8.0 ft^3/s Aug. 16, 1896.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1885, that of Oct. 5, 1911.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,800 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Apr. 25	2230	1,990	7.06	May 31	0500	* 6,070	9.49
May 10	2300	3,790	8.25				

Minimum daily discharge, 48 ft^3/s Feb. 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	365	128	80	65	65	120	266	1310	4750	1940	505	380
2	296	116	80	60	60	120	246	1150	4650	1800	435	410
3	266	91	80	60	55	130	263	1120	3780	1760	586	375
4	249	93	80	60	50	130	214	1400	3340	1720	515	360
5	233	101	80	60	50	140	204	1800	3370	1700	602	312
6	220	101	75	60	55	140	198	1810	3160	1660	734	204
7	211	107	80	65	48	140	179	1550	3000	1580	758	304
8	198	107	85	70	55	140	171	2000	3110	1470	592	280
9	188	141	95	70	55	140	192	2600	3000	1490	746	277
10	176	128	110	75	55	160	188	3020	2670	1410	652	256
11	182	128	100	60	50	192	198	3030	2720	1240	806	246
12	165	91	95	60	50	220	195	2280	3000	1050	746	233
13	171	90	90	60	50	236	195	2220	2480	916	592	224
14	168	90	90	55	50	277	179	1860	2050	830	597	220
15	162	89	75	55	55	263	174	1670	2110	729	702	182
16	160	95	70	55	55	217	195	1670	2290	668	592	133
17	154	95	75	55	55	208	233	1440	2360	652	515	112
18	146	95	75	55	55	204	345	1330	2750	597	485	126
19	138	100	70	55	55	185	542	1410	3290	646	764	133
20	131	100	70	55	60	171	707	1400	3270	641	575	171
21	128	100	75	55	60	141	729	1620	3170	553	485	160
22	121	90	75	55	55	182	746	2130	3060	862	445	105
23	121	85	80	55	60	168	892	2660	3000	892	420	97
24	119	87	85	50	75	149	1290	3260	3240	782	395	107
25	116	85	80	55	90	151	1670	3780	2900	630	455	105
26	119	87	75	60	100	149	1710	3980	2720	932	480	95
27	157	85	75	60	100	131	1600	4160	2770	932	490	101
28	131	89	80	65	110	154	1530	4700	2450	696	440	107
29	114	85	70	65	---	149	1690	4530	2240	580	415	110
30	128	85	65	70	---	165	1680	4800	2060	558	430	168
31	131	---	65	70	---	249	---	5290	---	548	410	---
TOTAL	5364	2964	2480	1870	1733	5321	18621	76980	88760	32464	17364	6093
MEAN	173	98.8	80.0	60.3	61.9	172	621	2483	2959	1047	560	203
MAX	365	141	110	75	110	277	1710	5290	4750	1940	806	410
MIN	114	85	65	50	48	120	171	1120	2050	548	395	95
AC-FT	10640	5880	4920	3710	3440	10550	36930	152700	176100	64390	34440	12090

CAL YR 1982 TOTAL 191951 MEAN 526 MAX 2600 MIN 46 AC-FT 380700
WTR YR 1983 TOTAL 260014 MEAN 712 MAX 5290 MIN 48 AC-FT 515700

09167450 PLATEAU CREEK NEAR MOUTH NEAR DOLORES, CO

LOCATION.--Lat 37°35'37", long 108°29'44", in SE¼NW¼, sec.34, T.39 N., R.15 W., Montezuma County, Hydrologic Unit 14030002, on left bank, 1.6 mi upstream from mouth and confluence of Beaver Creek, 6.6 mi upstream from confluence of Dolores River, and 9 mi north of Dolores.

DRAINAGE AREA.--83.0 mi^2.

PERIOD OF RECORD.--October 1982 to September 1983 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 6,919 ft, from topographic map.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,000 ft^3/s Apr. 25, 1983, gage height 6.62 ft, present site and datum, from rating curve extended above 103 ft^3/s, on basis of slope-area measurement of peak flow; minimum daily, 0.47 ft^3/s Oct. 20-25, 1983.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,000 ft^3/s at 1900 Apr. 25, gage height 6.62 ft, result of slope-area measurement of peak flow; minimum daily 0.47 ft^3/s Oct. 20 to 25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.0	.95	1.9	2.3	2.3	4.6	46	585	185	11	11	2.4
2	2.0	.90	1.4	2.3	2.2	5.4	54	540	141	10	8.0	2.3
3	1.3	.85	1.2	2.3	2.2	6.5	52	642	105	9.4	74	2.2
4	.90	.85	1.4	2.3	2.2	8.0	57	848	87	9.0	8.0	2.2
5	.75	.80	1.6	2.3	2.2	7.8	52	916	71	8.6	5.3	2.0
6	.65	.75	1.8	2.3	2.3	7.0	46	688	63	8.4	4.4	1.9
7	.60	.70	2.0	2.3	2.3	8.4	42	612	55	8.4	11	1.8
8	.55	.80	2.2	2.2	2.3	8.0	41	817	49	8.4	5.4	1.8
9	.55	5.2	2.3	2.2	2.3	10	38	852	49	9.8	16	1.9
10	.55	4.7	2.2	2.2	2.3	12	37	710	47	9.6	6.3	1.9
11	.55	4.6	2.2	2.2	2.3	14	39	517	38	8.8	5.2	1.8
12	.55	3.6	2.2	2.2	2.3	20	38	322	33	7.8	4.9	1.7
13	.55	3.1	2.2	2.2	2.3	41	39	310	32	7.4	4.0	1.6
14	.50	3.1	2.2	2.2	2.4	49	38	253	30	7.1	3.9	1.6
15	.50	2.9	2.2	2.2	2.3	70	38	220	26	6.8	3.9	1.7
16	.50	1.9	2.4	2.1	2.4	59	39	235	24	6.6	3.3	1.6
17	.50	1.2	2.6	2.1	2.4	50	48	217	22	6.5	3.0	1.6
18	.50	1.4	2.7	2.1	2.4	41	87	221	19	6.3	7.2	1.6
19	.50	5.6	2.6	2.1	2.4	36	220	248	17	6.0	17	1.5
20	.47	6.0	2.5	2.1	2.3	35	374	274	15	6.2	4.7	1.4
21	.47	3.8	2.5	2.1	2.3	32	414	190	14	6.3	3.6	1.8
22	.47	2.6	2.4	2.1	2.6	31	515	295	13	8.8	3.0	1.6
23	.47	2.1	2.6	2.1	2.9	27	668	350	12	12	2.8	1.6
24	.47	2.7	2.6	2.1	3.0	26	1110	362	13	13	2.9	1.7
25	.47	2.3	2.4	2.1	3.4	26	1310	358	21	8.2	3.0	1.8
26	.60	1.8	2.4	2.1	3.6	24	1100	318	22	8.8	2.9	1.8
27	1.0	1.6	2.3	2.1	3.6	22	983	318	20	8.6	2.8	2.2
28	1.3	1.9	2.3	2.3	4.5	21	1120	318	16	7.3	2.6	2.9
29	1.1	1.3	2.3	2.3	---	20	1270	280	13	6.8	2.4	5.7
30	.90	1.3	2.3	2.2	---	25	952	304	12	8.2	2.7	6.5
31	.90	---	2.3	2.2	---	36	---	244	---	11	2.8	---
TOTAL	26.12	71.30	68.2	67.9	72.0	782.7	10867	13364	1264	261.1	238.0	64.1
MEAN	.84	2.38	2.20	2.19	2.57	25.2	362	431	42.1	8.42	7.68	2.14
MAX	5.0	6.0	2.7	2.3	4.5	70	1310	916	185	13	74	6.5
MIN	.47	.70	1.2	2.1	2.2	4.6	37	190	12	6.0	2.4	1.4
AC-FT	52	141	135	135	143	1550	21550	26510	2510	518	472	127

WTR YR 1983 TOTAL 27146.42 MEAN 74.4 MAX 1310 MIN .47 AC-FT 53840

09168100 DISAPPOINTMENT CREEK NEAR DOVE CREEK, CO

LOCATION.--Lat 37°52'36", long 108°34'57", Dolores County, Hydrologic Unit 14030002, 0.2 mi downstream from ford, 6.5 mi southeast of Cedar, and 19 mi northeast of town of Dove Creek.

DRAINAGE AREA.--147 mi^2.

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

GAGE.--Water-stage recorder. Altitude of gage is 6,420 ft, from topographic map.

REMARKS.--Records good except those for winter period and those for period of no gage-height record, which are poor. Several small reservoirs and and ponds above station. 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.--26 years, 19.1 ft^3/s; 13,840 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,140 ft^3/s Aug. 8, 1983, gage height, 13.54 ft, from rating curve extended above 250 ft^3/s, on basis of slope-area measurements at gage heights 7.18, 10.26, and 13.38 ft; maximum gage height, 13.54 ft, July 13,1965 (slope-area measurement), Aug. 8, 1983; no flow at times most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 560 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
July 21	0930	1,100	7.65	Aug. 8	1700	* 8,140	13.54

Minimum daily discharge, 2.6 ft^3/s Jan. 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	4.6	8.5	5.0	3.8	37	59	204	322	88	20	9.2
2	11	4.1	6.5	4.6	3.8	41	42	186	292	74	57	8.2
3	8.5	3.8	7.0	4.8	3.8	37	43	156	249	68	30	8.2
4	7.9	4.1	5.5	5.5	3.8	32	28	198	223	65	84	7.5
5	6.6	3.6	4.6	6.0	3.6	35	28	247	220	60	26	6.9
6	6.0	3.3	4.0	4.4	3.8	28	23	236	209	57	22	6.6
7	5.8	3.1	4.6	3.6	4.0	22	20	210	198	54	24	6.0
8	5.8	3.1	8.0	3.0	5.0	28	19	281	194	52	663	6.3
9	5.8	21	11	2.8	6.5	28	19	353	193	65	82	6.6
10	5.5	17	10	3.0	7.0	34	23	376	166	54	39	5.1
11	5.5	14	10	2.8	7.0	52	26	336	169	47	32	4.2
12	5.5	8.5	6.0	2.6	7.0	68	25	238	180	40	39	4.0
13	5.2	8.2	4.4	2.8	10	63	26	234	152	36	32	3.8
14	5.2	7.9	3.8	3.0	15	99	23	202	118	32	54	3.6
15	4.9	6.9	3.2	3.2	20	78	23	271	114	28	24	3.8
16	4.6	7.5	3.0	3.4	16	45	26	271	128	25	19	3.6
17	4.3	7.2	3.2	3.8	15	34	37	185	125	22	17	3.2
18	4.6	6.9	3.2	4.0	13	34	79	167	139	21	41	3.2
19	4.3	12	3.0	3.0	17	34	143	174	159	20	63	3.4
20	4.1	14	3.2	3.0	15	34	164	174	153	20	28	3.6
21	4.1	10	3.8	3.0	20	24	183	190	146	112	12	4.0
22	4.1	8.2	5.0	3.0	26	26	186	257	142	30	11	3.8
23	4.1	7.2	12	3.0	32	23	220	294	139	75	10	4.0
24	3.8	6.0	8.5	3.0	42	20	303	331	155	32	13	4.2
25	3.8	6.9	5.5	2.8	27	18	351	339	167	22	20	4.4
26	3.8	6.6	5.0	2.8	16	18	294	329	167	32	14	4.6
27	13	6.0	4.8	3.0	12	15	244	322	194	51	11	4.8
28	6.3	5.8	4.8	3.4	18	18	241	342	139	30	10	16
29	4.6	6.0	4.8	3.6	---	22	260	339	118	32	10	35
30	4.9	6.6	4.8	3.6	---	33	295	378	103	23	9.5	35
31	5.2	---	5.0	3.6	---	63	---	361	---	26	9.5	---
TOTAL	187.8	230.1	176.7	109.1	373.1	1143	3453	8181	5173	1393	1526.0	222.8
MEAN	6.06	7.67	5.70	3.52	13.3	36.9	115	264	172	44.9	49.2	7.43
MAX	19	21	12	6.0	42	99	351	378	322	112	663	35
MIN	3.8	3.1	3.0	2.6	3.6	15	19	156	103	20	9.5	3.2
AC-FT	373	456	350	216	740	2270	6850	16230	10260	2760	3030	442

CAL YR 1982 TOTAL 8638.85 MEAN 23.7 MAX 225 MIN .45 AC-FT 17140
WTR YR 1983 TOTAL 22168.60 MEAN 60.7 MAX 663 MIN 2.6 AC-FT 43970

NOTE.--NO GAGE-HEIGHT RECORD DEC. 12 TO FEB. 21.

09169500 DOLORES RIVER AT BEDROCK, CO

LOCATION.--Lat 38°18'37", long 108°53'05", in NW¼SW¼ sec.20, T.47 N., R.18 W., Montrose County, Hydrologic Unit 14030002, on right bank at upstream side of bridge, 0.4 mi southeast of Bedrock, and 3.1 mi upstream from East Paradox Creek.

DRAINAGE AREA.--2,024 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1917 to September 1922 (monthly discharge only for some periods, published in WSP 1313), August 1971 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 4,940 ft, from topographic map. Prior to Aug. 1, 1971, nonrecording gage at different datum.

REMARKS.--Records good, except those for winter period, which are poor. Diversions above station for irrigation of about 5,000 acres above station and about 33,000 acres in the San Juan River basin.

AVERAGE DISCHARGE.--17 years (water years 1918-22, 1972-83), 497 ft³/s; 360,100 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,280 ft³/s Apr. 30, 1973, gage height, 12.09 ft, from floodmarks, from rating curve extended above 8,700 ft³/s; no flow Sept. 13, 1974, Aug. 15 to 18, 1978.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Sept. 6, 1970, reached a stage of 7.15 ft, present datum, from floodmarks (discharge not determined).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 8,360 ft³/s at 2000 Apr. 26, gage height, 11.43 ft; minimum daily, 10 ft³/s Sept. 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	288	38	170	98	110	230	833	5470	6670	2000	268	240
2	295	30	142	91	109	232	975	3850	5500	1820	290	152
3	290	31	124	100	114	250	885	3360	5050	1620	272	124
4	238	31	112	100	94	268	870	3560	3930	1550	250	106
5	187	29	86	100	94	300	698	5040	3510	1510	348	114
6	235	29	101	110	101	290	598	5810	3460	1470	272	98
7	202	30	112	110	86	272	554	4810	3300	1400	340	89
8	187	27	134	100	96	268	478	4410	3120	1310	392	80
9	172	30	140	100	109	272	452	5900	3190	1200	661	66
10	164	41	162	95	101	302	431	6850	3120	1200	456	50
11	162	69	182	90	96	332	474	7190	2830	1120	742	53
12	150	71	180	85	93	416	566	5950	2870	985	554	43
13	142	61	168	80	91	610	566	3960	3220	775	542	34
14	148	55	152	80	91	780	550	3610	2670	646	482	30
15	112	49	122	90	97	1020	514	3030	2050	518	446	28
16	110	45	109	100	100	995	494	2730	1990	431	428	23
17	104	42	119	110	98	775	538	2680	2200	350	455	19
18	104	41	114	130	98	682	746	2320	2260	300	353	18
19	100	44	136	110	98	630	1430	2160	2660	295	298	18
20	96	45	137	120	112	558	2270	2300	3220	295	401	13
21	91	41	134	130	115	498	2580	2240	3240	240	464	11
22	94	44	136	130	107	455	2760	2530	3050	282	338	11
23	94	46	136	120	109	446	3120	3300	2940	410	272	11
24	86	47	156	110	127	455	4110	4470	2940	522	230	12
25	59	47	148	110	158	416	6270	4460	3200	542	250	13
26	70	44	68	110	193	383	8000	4870	3000	377	174	11
27	195	40	75	100	196	374	7250	4950	2920	422	196	10
28	105	38	90	110	205	356	5620	5100	2870	610	218	13
29	46	37	85	110	---	362	5710	5740	2480	474	225	11
30	41	97	80	110	---	392	6470	5620	2200	389	208	102
31	39	---	90	110	---	431	---	5950	---	300	250	---
TOTAL	4406	1319	3900	3249	3198	14050	66812	134220	95660	25363	11075	1603
MEAN	142	44.0	126	105	114	453	2227	4330	3189	818	357	53.4
MAX	295	97	182	130	205	1020	8000	7190	6670	2000	742	240
MIN	39	27	68	80	86	230	431	2160	1990	240	174	10
AC-FT	8740	2620	7740	6440	6340	27870	132500	266200	189700	50310	21970	3180

CAL YR 1982 TOTAL 170724.8 MEAN 468 MAX 3250 MIN 3.8 AC-FT 338600
WTR YR 1983 TOTAL 364855.0 MEAN 1000 MAX 8000 MIN 10 AC-FT 723700

09169500 DOLORES RIVER AT BEDROCK, CO--Continued

WATER-QUALITY RECORDS

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

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: November 1979 to current year.
WATER TEMPERATURES: November 1979 to current year.

INSTRUMENTATION.--Water-quality monitor since November 1979.

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

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 4,790 micromhos July 12, 1981; minimum, 140 micromhos May 25, 1983.
WATER TEMPERATURES: Maximum, 33.5°C Aug. 7, 1981; minimum, -0.5°C Dec. 3-8, 1982.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 2,720 micromhos Nov. 30; minimum, 140 micromhos May 25.
WATER TEMPERATURES: Maximum, 27.0°C Aug. 7; minimum, -0.5°C Dec. 3-8.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1890	1810	756	945	977	918	885	244	231	215	1310	370
2	1740	1930	767	855	918	963	844	242	228	241	1000	404
3	1320	1970	839	836	898	964	879	240	224	261	913	444
4	1380	1970	833	862	940	873	992	246	218	293	943	488
5	746	1910	817	909	978	832	934	245	215	331	963	702
6	1810	1870	853	899	1030	800	800	259	212	360	1000	561
7	2190	1860	920	871	1110	779	486	273	204	418	1020	518
8	1910	1860	1030	1180	1100	822	452	284	206	460	950	522
9	2390	1980	1130	1170	961	921	377	298	216	597	1110	539
10	1430	2090	1190	1010	913	894	343	303	220	643	1120	433
11	1340	1800	1350	1030	830	911	350	275	225	709	1440	239
12	1390	1810	1470	986	815	878	362	262	226	789	1420	530
13	1480	1850	1530	915	804	804	321	270	230	883	1280	590
14	1420	1870	1560	874	813	854	320	289	233	1000	1130	425
15	1570	1830	1490	838	839	787	286	310	227	1050	1040	429
16	1190	1800	1560	807	764	740	275	323	229	1100	1030	463
17	1230	1740	1490	789	762	757	274	320	242	1160	1170	472
18	1510	1800	1630	797	834	771	282	324	244	1200	1780	498
19	1720	1370	1600	821	871	811	282	328	233	1250	1710	325
20	1870	680	1750	816	849	810	268	327	234	1280	1330	245
21	1840	625	1320	821	851	839	274	312	221	1320	2220	260
22	1840	571	1060	826	899	839	281	306	235	1420	1960	291
23	1810	590	1150	882	852	838	287	287	245	1470	2260	291
24	1810	659	947	885	930	864	297	279	245	1500	1620	339
25	1850	683	950	912	993	862	301	280	244	1540	977	331
26	1890	657	1040	959	901	908	298	288	243	1570	816	359
27	1860	661	976	931	885	932	292	274	228	1580	495	351
28	1980	678	882	898	925	970	278	249	211	1340	382	375
29	1890	715	970	910	---	884	261	244	196	744	376	408
30	1820	785	1050	962	---	836	252	237	192	1020	381	475
31	1820	---	1040	939	---	855	---	235	---	1250	381	---
MEAN	1680	1410	1160	908	902	855	428	279	225	935	1150	423

WTR YR 1982 MEAN 865 MAX 2390 MIN 192

09169500 DOLORES RIVER AT BEDROCK, CO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	557	1030	1520	1000	926	853	745	288	235	238	1000	702
2	605	984	1190	1030	938	803	617	303	242	237	835	655
3	1040	938	1000	1040	970	796	614	320	241	249	660	687
4	635	1060	926	1050	948	872	601	327	261	253	659	766
5	612	1110	949	984	1020	863	428	304	279	245	677	819
6	586	1110	912	952	988	853	500	294	280	249	895	881
7	567	1160	876	905	961	858	499	297	286	267	850	938
8	543	1390	866	844	1030	890	492	317	298	291	738	991
9	564	1410	853	806	1030	836	560	316	297	316	743	1030
10	579	1460	816	774	981	871	644	296	308	334	731	1110
11	592	1570	837	772	1020	835	738	261	331	367	782	1190
12	607	1600	763	776	986	759	747	253	340	383	763	1240
13	626	1700	706	802	1020	795	708	290	324	431	718	1270
14	640	1660	696	823	983	579	697	290	341	489	697	1330
15	659	1600	688	848	964	588	704	307	379	553	685	1360
16	677	1610	741	854	945	613	674	324	375	611	643	1400
17	693	1550	740	856	955	628	719	324	327	669	662	1450
18	735	1760	779	845	969	672	692	352	283	704	666	1480
19	746	1810	786	844	970	704	520	374	241	706	632	1490
20	753	1690	765	833	928	733	410	371	192	711	606	1540
21	776	1700	821	863	907	760	405	357	178	709	617	1630
22	789	1620	846	866	956	760	399	325	181	633	631	1630
23	786	1550	845	846	1060	754	390	231	183	599	623	1610
24	803	1540	821	849	946	744	368	192	181	676	611	1640
25	846	1570	871	865	968	735	310	173	256	788	606	1640
26	865	1580	910	888	978	724	298	185	289	752	596	1670
27	711	1660	993	914	933	745	313	198	242	649	614	1690
28	641	1690	947	890	920	799	307	215	245	535	621	1630
29	790	1710	1040	902	---	817	280	207	227	487	619	1590
30	954	1960	1020	891	---	797	280	223	234	479	608	1290
31	1010	---	1020	913	---	787	---	243	---	475	606	---
MEAN	709	1490	888	881	971	768	522	282	269	487	690	1280

WTR YR 1983 MEAN 767 MAX 1960 MIN 173

09169500 DOLORES RIVER AT BEDROCK, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	18.5	11.0	8.5	4.0	.0	---	.0	.0	1.0	.5	8.5	4.5
2	15.5	14.0	9.5	4.0	.0	---	.0	.0	1.0	.5	4.5	3.0
3	15.5	12.5	9.5	4.5	.5	---	.0	.0	.5	.5	4.0	3.0
4	14.0	10.5	9.5	4.5	.5	---	.0	.0	.5	.5	3.5	1.5
5	14.5	9.5	7.5	4.5	.5	-0.5	.0	.0	.5	.5	3.0	1.0
6	18.0	11.0	8.0	4.5	.5	---	.0	.0	1.0	.5	4.0	2.0
7	17.5	13.0	10.5	6.5	.5	---	.0	.0	1.0	.5	5.5	2.0
8	17.0	14.0	10.5	6.5	.5	---	.5	.0	1.0	.5	7.5	2.5
9	17.0	11.0	9.0	5.0	.0	---	.5	.0	1.0	1.0	11.0	3.5
10	16.0	11.0	8.0	4.0	.5	.0	.5	.0	1.5	1.0	9.5	5.0
11	13.5	11.5	8.5	4.5	2.0	.0	.0	.0	1.5	1.0	9.5	8.0
12	13.0	10.0	8.0	4.0	2.5	.0	.5	.0	1.5	1.0	12.0	7.5
13	13.0	10.0	8.0	4.0	1.5	.0	.5	.0	1.5	1.0	10.5	6.5
14	14.5	9.0	7.0	5.0	1.0	.0	.5	.0	1.5	1.0	9.5	8.0
15	11.5	6.5	8.5	4.0	2.0	.0	.5	.0	1.5	1.0	8.0	7.0
16	9.5	6.5	8.5	4.5	2.5	.0	.5	.0	1.5	1.0	8.0	6.5
17	11.5	7.0	6.5	4.0	.5	.0	.5	.0	2.0	1.0	7.5	5.0
18	13.0	7.5	6.0	3.5	.0	.0	.0	.0	3.0	1.0	9.0	5.0
19	13.0	7.0	5.0	2.0	.5	.0	.5	.0	5.0	1.0	6.5	4.5
20	12.5	7.5	4.0	1.0	1.5	.0	.0	.0	6.0	1.0	7.0	3.5
21	12.5	6.5	4.5	1.5	1.0	.0	.0	.0	6.5	1.0	6.5	2.5
22	12.5	6.0	4.5	2.0	.5	.0	.0	.0	6.5	1.0	8.5	2.0
23	12.0	6.0	5.0	2.0	.0	.0	.5	.0	5.5	1.5	9.5	4.0
24	7.5	6.0	5.0	1.5	.0	.0	.5	.0	7.5	4.0	10.5	4.5
25	10.0	4.5	4.0	3.0	.0	.0	.5	.0	8.5	7.0	11.5	5.0
26	10.0	4.5	3.5	1.0	.0	.0	.5	---	9.5	7.0	10.5	8.5
27	9.5	6.0	1.0	---	.0	.0	.5	.0	7.5	4.5	10.5	8.0
28	7.5	6.0	1.0	---	.0	.0	.5	.5	11.0	5.5	11.5	8.0
29	9.5	6.5	1.5	.5	.5	.0	.5	.5	---	---	9.0	7.0
30	8.0	5.5	2.5	.0	.0	.0	.5	.5	---	---	8.5	5.0
31	8.5	3.5	---	---	.0	.0	1.0	.5	---	---	11.0	5.0
MONTH	18.5	3.5	10.5	.0	2.5	-0.5	1.0	.0	11.0	.5	12.0	1.0

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	9.0	7.0	12.0	9.5	15.0	12.5	18.5	15.5	28.0	22.0	23.0	19.0
2	10.0	4.5	12.5	9.5	15.5	13.0	19.5	16.0	25.5	22.0	24.0	19.0
3	12.0	6.5	12.5	11.5	15.5	12.5	20.5	16.5	25.5	21.0	24.5	18.5
4	13.0	8.0	12.5	10.5	15.5	12.5	20.5	17.0	27.0	19.5	22.5	19.5
5	12.0	8.0	11.5	10.0	14.5	12.5	20.0	17.5	28.5	19.5	24.0	19.5
6	11.0	8.5	10.0	9.0	14.5	12.0	20.5	16.5	29.5	19.0	23.5	19.0
7	10.5	7.5	10.5	8.5	14.5	11.5	20.5	16.5	30.0	20.5	21.0	18.5
8	10.0	5.5	12.0	9.0	15.0	12.0	20.5	17.5	27.5	20.5	21.0	17.0
9	11.0	6.0	11.5	9.0	16.0	13.0	23.5	18.0	26.0	19.0	23.0	18.5
10	11.5	6.0	11.0	9.0	15.5	13.5	25.0	18.5	25.5	20.0	22.0	19.0
11	11.5	8.0	11.0	9.0	17.0	14.0	24.5	19.0	26.5	21.0	19.5	17.0
12	13.5	9.5	11.5	9.0	17.0	14.5	25.5	19.0	26.5	20.0	18.5	16.5
13	10.5	9.0	11.5	9.5	16.0	15.0	25.5	19.0	25.0	20.5	16.5	10.5
14	9.5	8.0	12.0	8.5	16.5	14.0	26.5	19.5	27.5	19.0	12.5	10.0
15	9.0	8.5	12.5	10.0	16.0	14.0	26.0	19.5	27.5	20.5	14.5	11.0
16	9.0	8.0	13.0	10.0	17.0	14.0	25.5	18.5	27.0	20.5	16.5	13.5
17	9.0	7.0	16.0	12.0	18.0	14.0	26.0	20.0	25.5	20.5	17.0	15.0
18	10.0	8.0	15.5	13.5	16.5	15.0	26.0	20.0	27.0	20.5	17.5	15.5
19	9.5	7.5	15.0	13.5	16.0	13.5	26.5	19.5	26.0	20.5	18.0	12.5
20	8.5	6.5	16.5	13.0	17.5	12.5	29.0	19.0	27.5	21.0	18.0	12.5
21	8.5	4.5	17.0	13.5	17.5	15.0	28.5	20.0	29.0	22.0	19.0	13.0
22	9.0	6.0	16.0	14.5	17.0	13.0	29.5	20.0	27.0	22.5	19.5	16.0
23	8.0	7.0	15.5	14.0	17.0	14.5	29.0	21.0	25.5	22.0	20.5	17.0
24	10.0	6.5	14.5	13.0	19.0	14.0	28.0	21.0	26.0	21.5	19.5	16.0
25	11.0	7.5	15.5	13.0	18.5	15.0	28.5	20.5	22.5	19.0	20.0	17.0
26	11.0	9.0	16.0	12.5	19.5	15.5	31.5	21.5	19.5	18.5	20.5	17.5
27	11.5	8.5	15.5	14.0	20.0	15.5	29.0	22.5	19.0	17.5	17.5	13.0
28	12.0	8.5	15.5	13.5	19.5	16.5	29.5	21.0	19.5	17.5	14.0	12.5
29	12.0	9.5	15.0	12.5	18.0	15.5	26.5	19.5	20.5	18.0	14.0	12.0
30	12.5	9.0	14.5	12.5	18.0	16.0	27.5	22.0	21.5	19.0	13.5	12.5
31	---	---	14.5	12.0	---	---	28.0	21.5	23.0	19.0	---	---
MONTH	13.5	4.5	17.0	8.5	20.0	11.5	31.5	15.5	30.0	17.5	24.5	10.0
YEAR	31.5	-0.5										

09169500 DOLORES RIVER AT BEDROCK, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	14.5	11.0	10.5	8.0	2.5	1.5	.0	.0	2.0	.0	6.0	4.5
2	14.5	11.0	9.0	6.0	2.0	.5	.0	.0	1.0	.0	6.5	5.0
3	14.0	10.0	7.5	4.0	1.5	-0.5	.0	.0	.0	.0	7.0	5.0
4	15.0	11.0	7.5	3.5	1.5	-0.5	.0	.0	.5	.0	8.0	6.0
5	15.0	12.0	7.0	3.0	1.0	-0.5	.0	.0	2.5	.0	7.5	6.5
6	14.0	10.0	7.0	3.0	1.0	-0.5	.0	.0	.5	.0	8.5	5.0
7	13.0	10.0	7.0	3.5	.0	-0.5	.0	.0	1.0	.0	8.5	5.5
8	12.0	9.5	6.0	5.0	1.5	-0.5	.0	.0	1.0	.0	9.0	6.0
9	9.5	7.0	8.0	6.0	2.5	1.0	.0	.0	1.5	.0	9.5	5.5
10	10.0	7.0	8.0	6.0	3.5	2.5	.0	.0	3.0	.0	9.5	6.5
11	10.5	7.0	7.5	5.5	5.5	3.0	.0	.0	4.0	.5	10.0	7.5
12	11.0	6.5	7.0	4.0	3.5	2.0	.0	.0	4.0	.5	10.5	7.5
13	11.5	7.5	6.5	3.0	2.5	2.0	.0	.0	3.0	1.0	10.0	7.5
14	11.5	8.0	5.5	2.0	2.5	1.0	.0	.0	4.5	2.5	9.0	7.5
15	12.5	8.5	4.0	1.0	2.0	1.0	.0	.0	4.5	1.5	7.5	5.5
16	13.0	9.0	4.5	.5	2.0	1.0	.0	.0	5.0	2.5	6.0	5.0
17	12.5	8.5	5.0	2.0	1.5	.5	.0	.0	5.0	2.0	5.5	4.5
18	13.0	8.5	5.5	4.5	2.0	.5	.0	.0	4.0	1.5	6.0	5.0
19	11.5	7.5	6.0	4.5	.5	.5	.0	.0	3.5	2.5	5.5	4.0
20	10.5	7.0	5.5	3.5	.5	.5	.0	.0	6.0	1.5	6.0	3.5
21	11.0	6.5	4.5	3.0	.5	.5	.0	.0	5.5	2.0	4.0	2.0
22	10.5	6.5	4.5	2.5	.5	.5	.0	.0	6.0	2.5	5.0	2.5
23	11.5	7.0	5.5	2.5	1.5	.5	.0	.0	7.5	3.5	5.0	3.5
24	11.5	7.5	3.5	2.0	1.0	.5	.0	.0	7.5	3.5	4.0	3.5
25	12.0	9.5	5.0	3.0	.5	.0	.0	.0	6.0	5.0	5.0	3.0
26	10.5	9.0	5.0	2.0	.0	.0	.5	.0	5.0	4.0	6.5	3.0
27	9.0	7.5	3.5	1.0	.0	.0	.5	.0	5.5	4.0	7.5	4.0
28	9.0	5.0	3.0	.0	.0	.0	1.5	.0	6.0	4.0	7.5	5.5
29	8.0	4.5	2.0	.0	.0	.0	.5	.0	---	---	9.0	6.0
30	9.0	6.5	3.0	1.5	.0	.0	1.0	.0	---	---	11.0	6.5
31	10.5	8.5	---	---	.0	.0	.5	.0	---	---	10.0	8.0
MONTH	15.0	4.5	10.5	.0	5.5	-0.5	1.5	.0	7.5	.0	11.0	2.0

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	10.5	7.5	6.5	5.5	12.0	10.0	18.5	16.0	25.0	22.0	23.0	20.5
2	9.5	7.0	7.5	6.0	12.0	10.5	18.5	16.0	25.0	21.5	23.5	20.5
3	8.5	6.5	8.5	7.5	11.0	9.5	19.5	17.0	24.5	22.0	23.5	20.5
4	7.0	5.5	9.5	7.5	11.5	10.5	20.5	17.5	25.5	23.0	23.5	20.0
5	7.0	4.5	9.5	8.5	11.5	11.0	20.5	18.0	26.5	23.0	23.5	19.0
6	7.0	4.0	9.0	8.0	12.0	11.0	21.0	18.5	26.5	23.0	23.5	18.0
7	7.0	3.5	8.0	6.5	12.5	11.0	21.5	19.0	27.0	24.0	21.0	18.5
8	8.0	4.0	9.5	7.0	12.5	11.0	21.5	19.5	26.0	24.0	21.5	18.0
9	10.0	5.5	10.0	8.5	12.5	11.0	20.0	19.0	25.5	23.5	21.5	17.5
10	10.0	7.0	10.5	8.0	11.0	10.5	22.0	18.5	24.0	21.5	21.0	18.0
11	8.5	7.0	10.5	8.5	12.0	11.0	21.5	18.5	23.0	20.0	21.5	16.5
12	9.0	6.0	9.5	6.5	11.5	10.5	22.0	19.0	24.5	21.0	22.0	17.0
13	7.0	5.0	8.5	8.0	11.0	10.0	22.5	19.5	25.5	22.0	21.0	17.0
14	8.0	3.5	9.0	8.5	11.5	9.5	23.5	19.5	26.0	23.0	21.0	17.5
15	9.0	4.5	9.5	8.0	13.5	10.0	22.5	20.0	26.0	22.5	22.0	16.5
16	10.0	5.5	9.0	8.5	15.0	12.0	22.0	19.0	25.5	22.5	21.5	16.5
17	11.5	6.5	9.0	7.5	16.0	13.5	22.5	18.5	25.0	22.5	21.5	16.5
18	9.5	7.5	8.0	7.0	17.5	14.5	24.0	20.5	25.0	22.0	21.5	16.5
19	10.5	8.0	9.5	7.5	18.0	16.0	23.0	21.0	25.0	21.5	21.0	17.0
20	9.0	7.5	12.0	9.0	17.0	16.0	23.5	21.0	24.0	21.0	19.0	14.0
21	8.0	7.0	12.5	10.5	17.0	16.0	24.0	21.0	23.0	20.0	18.5	12.5
22	8.0	7.0	14.5	11.5	17.5	16.0	23.0	21.0	23.0	19.5	18.0	12.0
23	8.5	7.0	14.5	13.0	18.0	16.0	22.0	20.0	23.0	19.0	16.5	14.5
24	9.0	8.0	13.5	12.5	17.5	15.5	23.5	20.0	22.0	19.0	18.0	14.5
25	9.0	7.5	13.5	12.0	16.0	14.0	23.0	21.5	22.5	19.0	20.5	14.5
26	7.5	6.5	13.0	11.5	14.0	13.5	23.5	21.5	23.5	19.5	18.5	15.0
27	7.0	6.5	13.0	11.5	15.5	14.0	22.5	21.0	23.5	20.5	19.0	15.0
28	7.5	6.5	13.0	11.5	17.0	14.5	24.0	19.5	23.5	20.5	18.5	14.0
29	8.0	7.0	13.0	10.5	17.0	15.0	25.0	21.5	22.5	21.0	16.5	14.0
30	8.0	7.0	12.0	11.0	18.5	16.0	25.0	21.5	23.0	19.5	14.5	12.0
31	---	---	12.0	10.5	---	---	25.5	22.5	24.0	20.0	---	---
MONTH	11.5	3.5	14.5	5.5	18.5	9.5	25.5	16.0	27.0	19.0	23.5	12.0
YEAR	27.0	-0.5										

09171100 DOLORES RIVER NEAR BEDROCK, CO

LOCATION.--Lat 38°21'29", long 108°49'54", in SW¼NW¼ sec.2, T.47 N., R.18 W., Montrose County, Hydrologic Unit 14030002, on right bank 2.5 mi downstream from West Paradox Creek and 4.3 mi northeast of Bedrock.

DRAINAGE AREA.--2,145 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1971 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 4,910 ft, from topographic map. Prior to Feb. 1, 1972, at site 400 ft upstream at datum 1.02 ft higher.

REMARKS.--Records good except those for winter period, which are poor. Diversions above station for irrigation of about 41,000 acres, of which about 33,000 acres is in the San Juan River basin.

AVERAGE DISCHARGE.--12 years, 502 ft^3/s; 363,700 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,500 ft^3/s Apr. 30, 1973, gage height, 12.88 ft, from floodmarks; minimum daily, 0.12 ft^3/s July 17, 18, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Sept. 6, 1970, reached a stage of 11.25 ft, site and datum in use prior to Feb. 1, 1972 (discharge, 5,710 ft^3/s), by slope-area measurement at site 1,400 ft upstream.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 7,710 ft^3/s at 0200 Apr. 27, gage height, 11.99 ft; minimum daily, 20 ft^3/s Sept. 21-28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	292	54	159	100	120	270	895	5900	6740	1980	258	252
2	315	49	159	100	110	272	1110	4020	5760	1820	324	153
3	300	42	135	110	114	288	910	3300	5460	1610	312	126
4	240	42	117	110	123	309	880	3630	4300	1540	265	106
5	200	40	104	110	122	351	730	5180	3820	1510	342	114
6	238	38	104	120	111	345	584	6100	3780	1500	324	102
7	215	38	112	120	117	280	544	5320	3580	1410	324	93
8	195	39	132	110	122	268	480	4760	3330	1320	417	86
9	175	41	141	110	132	275	440	5940	3410	1210	708	75
10	171	50	155	100	129	298	420	6860	3330	1210	580	58
11	169	73	171	100	123	336	476	7000	2950	1150	922	54
12	161	84	175	90	120	411	568	6210	2940	1010	735	50
13	155	73	173	90	120	604	616	4240	3300	780	584	43
14	159	64	161	117	120	865	556	3880	2700	632	552	35
15	135	61	130	111	124	1410	528	3060	2050	520	464	33
16	128	58	120	110	130	1180	496	2660	1960	428	476	29
17	123	54	130	120	128	845	520	2660	2170	360	508	26
18	120	53	120	140	129	700	700	2320	2230	298	384	24
19	111	54	140	120	126	636	1530	2450	2210	275	318	24
20	110	56	140	130	139	564	2540	2320	3420	298	369	22
21	105	54	140	140	143	504	3010	2050	3380	232	536	20
22	106	53	140	140	139	460	3190	2250	3220	275	369	20
23	108	58	140	130	139	448	3500	3240	3070	393	288	20
24	105	56	160	120	155	460	4510	3950	2980	504	245	20
25	80	58	160	120	182	405	6040	4560	3350	560	280	20
26	63	56	70	120	228	375	7310	5010	3190	411	182	20
27	215	53	80	110	230	369	7040	5090	3040	378	182	20
28	155	51	100	120	238	348	5860	5180	2940	588	212	20
29	69	51	90	120	---	354	5870	5880	2540	508	218	21
30	58	80	90	120	---	384	6530	5810	2210	375	210	80
31	55	---	100	120	---	411	---	6000	---	327	230	---
TOTAL	4831	1633	4048	3578	3913	15025	68383	136830	99360	25412	12118	1766
MEAN	156	54.4	131	115	140	485	2279	4414	3312	820	391	58.9
MAX	315	84	175	140	238	1410	7310	7000	6740	1980	922	252
MIN	55	38	70	90	110	268	420	2050	1960	232	182	20
AC-FT	9580	3240	8030	7100	7760	29800	135600	271400	197100	50400	24040	3500

CAL YR 1982 TOTAL 176194 MEAN 483 MAX 3410 MIN 11 AC-FT 349500
WTR YR 1983 TOTAL 376897 MEAN 1033 MAX 7310 MIN 20 AC-FT 747600

NOTE.--NO GAGE-HEIGHT RECORD DEC. 15 TO JAN. 13.

09171100 DOLORES RIVER NEAR BEDROCK, CO--Continued
(Water-Quality Monitor)

WATER-QUALITY RECORDS

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

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: December 1979 to current year.
WATER TEMPERATURES: December 1979 to current year.

INSTRUMENTATION.--Water-quality monitor since December 1979.

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

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 83,300 micromhos Aug. 9, 1981; minimum, 116 micromhos May 22, 1980.
WATER TEMPERATURES: Maximum, 33.5°C July 10, 1981; minimum, -1.5°C several days during November to January each year.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum recorded, 17,900 micromhos Sept. 26; minimum, 207 micromhos June 28.
WATER TEMPERATURES: Maximum, 29.0°C Aug. 6; minimum, -1.5°C Nov. 16.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1920	8830	4160	7400	5860	1970	1050	422	355	292	1420	1150
2	2050	11100	3390	7290	5430	1930	897	428	366	280	1780	1680
3	2160	12800	3520	7270	5340	1890	810	374	374	---	1630	2220
4	2240	14200	3960	6350	4440	1820	758	388	377	---	1620	2730
5	2210	15800	4460	5680	4390	1840	781	337	387	---	2610	2920
6	2120	15700	4370	5020	5580	1880	821	319	370	298	2770	3160
7	2430	14700	3970	4610	4530	1920	895	353	364	303	2190	3420
8	2740	15800	3190	4230	4630	2020	952	387	378	311	1150	3630
9	2990	15700	3040	3880	4140	1980	1030	386	368	328	798	4530
10	3230	12900	2860	3690	4210	1880	1110	377	372	338	547	6090
11	3180	8390	2570	3890	4430	1770	1180	358	348	363	960	5870
12	3500	7750	2500	4220	4590	1620	1170	359	372	384	1070	6410
13	3890	9470	2530	4450	5110	1490	1180	364	382	502	1160	6620
14	3840	10200	2760	4610	4970	1370	1190	366	394	650	1200	7240
15	4420	11500	3480	4850	4870	1250	1220	357	380	827	1180	7660
16	4780	12100	4020	5000	4620	1160	1300	358	503	1030	1090	9200
17	5010	12600	4330	4910	4530	1100	1340	369	409	1320	1000	10500
18	5140	13400	4130	4770	4830	1100	1380	359	409	1720	---	11800
19	5190	12200	4420	4760	4850	1060	1150	422	355	1890	---	12600
20	5420	11400	4150	4940	4440	1080	594	402	282	1730	---	13100
21	5860	12200	4360	4870	3630	1120	517	370	263	2250	---	14800
22	5960	12100	4440	4900	4350	1180	453	372	258	1660	---	15900
23	6080	10300	4560	4820	4430	1210	350	366	256	950	---	16600
24	6380	10600	4360	5160	3910	1190	352	319	269	970	---	17100
25	7580	10300	4630	5530	3000	1250	376	317	269	1110	---	17500
26	7030	10800	7360	5330	2480	1270	326	308	257	1160	---	17700
27	2060	11600	7560	6040	2310	1290	340	316	267	1240	---	17100
28	2860	12300	7100	5540	2300	1300	409	332	227	809	---	16200
29	6890	12400	8030	5410	---	1260	414	328	248	751	---	14900
30	8570	9460	7780	5630	---	1220	410	343	296	1160	---	13100
31	8860	---	7890	5850	---	1140	---	355	---	959	858	---
MEAN	4410	12000	4510	5190	4360	1470	825	362	339	914	1390	9450

WTR YR 1983 MEAN 3850 MAX 17700 MIN 227

09171100 DOLORES RIVER NEAR BEDROCK, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	15.5	10.5	14.5	9.5	3.0	1.0	.5	-0.5	4.5	.5	7.5	4.5
2	15.5	10.5	11.5	5.0	4.0	-0.5	.5	-0.5	3.5	-0.5	7.0	4.0
3	16.0	11.5	11.0	3.0	3.5	-0.5	.5	-0.5	3.0	-0.5	7.0	3.5
4	17.0	11.5	10.5	2.5	3.0	-0.5	1.0	.0	2.0	-0.5	8.0	5.0
5	16.0	11.5	9.5	2.5	3.0	-0.5	1.0	.0	4.0	.0	7.0	5.5
6	15.0	9.0	9.0	1.0	2.5	-0.5	1.0	.0	3.5	.0	9.0	4.0
7	14.5	8.5	9.5	1.5	1.5	-0.5	1.0	.0	3.5	.0	8.5	4.5
8	12.0	9.0	6.5	4.5	3.5	-0.5	.5	.0	3.0	.0	10.0	4.5
9	11.5	6.5	9.5	5.5	3.5	1.0	.5	.0	5.0	1.0	10.5	4.5
10	12.0	6.5	8.5	4.5	4.5	2.5	.5	.0	5.0	.0	10.0	5.0
11	12.0	6.5	7.0	4.0	7.0	3.5	1.0	.0	7.0	.0	10.0	6.0
12	13.0	5.5	7.5	1.5	5.5	2.0	1.5	.0	7.0	.5	10.5	6.5
13	13.5	7.0	7.0	1.5	3.5	2.0	2.0	.0	6.0	1.5	10.0	6.5
14	14.0	6.5	6.5	.0	4.0	1.0	1.0	.0	6.0	2.5	9.0	7.0
15	14.5	7.0	5.0	-1.0	3.5	1.0	2.0	.0	7.0	.5	6.5	5.0
16	16.0	7.5	5.5	-1.5	3.0	.5	1.5	.0	7.5	1.5	6.0	3.5
17	14.5	7.0	7.0	.5	3.5	.5	3.0	.0	7.5	1.0	4.5	3.0
18	15.0	7.0	5.5	3.5	3.0	.5	3.5	.0	6.0	.5	5.0	4.0
19	13.0	6.5	6.5	3.0	2.0	.5	2.5	.0	5.0	2.5	5.0	3.5
20	13.0	6.5	6.0	1.5	1.5	.5	3.5	.0	8.0	1.0	6.5	2.5
21	13.5	5.0	5.5	1.5	2.0	.0	3.0	.0	8.0	1.0	3.5	1.5
22	12.5	6.0	4.5	1.0	1.0	.0	4.0	.5	8.5	1.0	4.5	1.5
23	14.0	6.0	6.0	1.0	3.5	.5	2.5	.5	9.5	2.0	5.0	2.5
24	14.0	7.0	5.0	1.0	1.5	.0	1.5	.5	9.5	2.0	3.0	2.5
25	14.0	10.0	5.5	2.0	1.0	.0	4.0	.5	7.5	4.0	5.5	2.0
26	11.0	9.0	5.5	.0	1.5	-0.5	3.5	.5	5.0	3.0	7.5	2.0
27	10.5	7.5	5.5	-0.5	.0	-0.5	3.0	.5	5.5	3.5	8.0	3.0
28	12.0	6.5	5.5	-1.0	.5	-0.5	4.5	.5	6.5	1.0	8.0	5.0
29	10.0	4.5	3.0	.5	.0	-0.5	2.0	.5	---	---	10.0	5.5
30	12.5	8.0	4.0	1.5	.0	-0.5	3.5	.5	---	---	12.0	5.5
31	13.0	9.5	---	---	.0	-0.5	2.5	.5	---	---	10.5	7.5
MONTH	17.0	4.5	14.5	-1.5	7.0	-0.5	4.5	-0.5	9.5	-0.5	12.0	1.5
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	10.0	7.0	---	---	---	---	18.5	16.0	26.5	21.5	25.0	20.5
2	9.5	6.5	---	---	---	---	19.0	16.5	27.5	21.5	25.0	19.0
3	7.5	6.5	9.5	7.5	---	---	20.0	17.0	27.0	22.0	25.0	18.0
4	7.0	5.5	10.5	8.0	---	---	21.0	17.5	27.5	22.0	25.0	17.5
5	8.0	4.5	---	---	---	---	21.0	18.0	28.5	22.0	25.5	16.0
6	8.0	3.5	---	---	14.0	11.5	21.5	18.5	29.0	23.0	26.0	15.5
7	8.5	3.0	---	---	13.5	12.5	22.0	19.0	28.5	23.5	22.0	15.5
8	9.0	3.5	---	---	14.0	12.5	22.0	19.5	28.0	24.0	23.5	16.5
9	11.0	5.0	---	---	14.0	12.5	21.0	19.5	28.0	23.0	24.5	15.0
10	11.0	6.5	---	---	13.0	11.5	23.0	19.0	26.5	22.0	23.5	15.0
11	9.0	7.0	---	---	13.0	12.0	23.0	19.0	24.0	20.0	25.0	13.0
12	10.0	6.0	---	---	13.5	12.0	23.5	19.0	27.5	21.0	24.0	12.5
13	9.0	5.5	---	---	13.0	11.5	24.0	19.5	26.5	22.0	23.5	11.5
14	8.5	4.0	---	---	13.0	10.5	24.0	19.5	28.0	22.5	21.5	12.5
15	10.0	5.0	---	---	14.5	11.0	23.5	20.0	27.5	22.5	24.0	11.5
16	11.5	5.5	---	---	15.0	11.5	24.5	19.5	27.5	22.0	23.0	11.0
17	12.5	6.5	---	---	17.0	13.5	25.0	19.0	26.5	22.0	23.0	12.0
18	10.0	8.0	10.0	9.0	17.5	13.5	27.0	20.5	26.5	22.0	21.5	12.0
19	11.5	8.0	10.0	9.0	18.0	15.0	25.0	21.5	27.0	21.5	21.0	12.5
20	9.5	8.5	11.5	10.0	17.0	15.0	26.5	20.5	25.5	21.0	19.5	8.0
21	8.5	7.0	13.0	11.5	16.0	14.5	26.5	20.0	24.0	20.0	20.5	7.0
22	8.5	7.0	14.5	12.5	17.5	14.5	25.0	21.0	24.5	19.0	20.5	7.0
23	9.0	7.0	14.5	13.5	17.5	15.0	22.0	20.0	24.5	18.5	17.5	14.0
24	10.0	6.5	---	---	17.0	15.5	25.0	19.5	24.0	18.5	20.0	13.0
25	9.0	8.0	---	---	15.5	14.0	24.0	21.0	23.5	19.0	23.5	12.0
26	---	---	---	---	14.5	13.0	24.0	21.5	26.0	18.5	21.5	12.0
27	---	---	---	---	15.0	13.0	23.0	20.5	26.0	19.0	21.0	13.5
28	---	---	---	---	17.0	14.0	24.5	20.0	25.5	19.5	20.0	10.5
29	---	---	---	---	17.5	14.5	26.0	21.0	25.0	20.5	18.0	11.5
30	---	---	---	---	18.5	15.5	27.5	21.0	26.0	19.0	15.0	12.5
31	---	---	---	---	---	---	26.0	22.0	26.5	19.5	---	---
MONTH	12.5	3.0	14.5	7.5	18.5	10.5	27.5	16.0	29.0	18.5	26.0	7.0
YEAR	29.0	-1.5										

09172500 SAN MIGUEL RIVER NEAR PLACERVILLE, CO

LOCATION.--Lat 38°02'05", long 108°07'15", in NW¼SW¼ sec.30, T.44 N., R.11 W., San Miguel County, Hydrologic Unit 14030003, on right bank 0.7 mi downstream from Specie Creek and 4.0 mi northwest of Placerville.

DRAINAGE AREA.--308 mi^2.

PERIOD OF RECORD.--January to December 1909, September 1910 to December 1912, April 1930 to September 1934, April 1942 to current year. Monthly discharge only for some periods, published in WSP 1313. Published as "at Placerville," 1910-12.

GAGE.--Water-stage recorder. Datum of gage is 7,055.80 ft, (U.S. Bureau of Reclamation bench mark). See WSP 1713 or 1733 for history of changes prior to Oct. 21, 1958.

REMARKS.--Records good except those for winter period, which are fair. Diversions for irrigation of about 1,700 acres above station. One diversion from Fall Creek for irrigation of about 2,000 acres in Beaver and Saltado Creek basins. One small ditch diverts water from Leopard Creek to Uncompahgre River basin. Slight regulation by Lake Hope and Trout Lake of Western Colorado Co., combined capacity, 5,040 acre-ft. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--47 years (water years 1911-12, 1931-34, 1943-83), 229 ft^3/s; 165,900 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,000 ft^3/s Sept. 5, 1909 (result of failure of Trout and Middle Reservoir Dams); minimum daily, 26 ft^3/s Jan. 5, 1960.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 900 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
May 10	2100	2,750	5.56	June 24	0130	* 3,830	6.20
May 30	2300	1,930	5.09				

Minimum daily discharge, 50 ft^3/s Feb. 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	266	123	86	65	60	72	88	410	1460	1550	684	207
2	246	120	92	65	60	72	83	360	1510	1470	660	270
3	230	92	81	65	55	78	85	325	1220	1590	700	258
4	218	105	90	70	55	70	75	425	1130	1690	668	250
5	207	100	81	70	55	70	74	578	1130	1550	740	238
6	204	110	85	65	55	62	74	566	1090	1560	852	218
7	192	102	85	65	50	63	72	548	1090	1550	820	210
8	192	110	80	65	55	62	66	894	1160	1670	676	234
9	183	108	85	65	60	63	70	1250	1150	1670	628	214
10	177	112	78	65	60	112	70	1550	1020	1770	608	195
11	177	115	76	65	60	75	69	1150	1070	1440	602	156
12	162	88	76	65	60	75	70	900	1380	1270	560	138
13	165	100	80	65	60	72	70	836	1220	1060	506	120
14	159	90	76	65	60	76	70	716	930	1050	512	120
15	150	92	88	65	59	78	69	550	852	930	524	115
16	147	92	81	65	80	70	72	520	940	930	470	112
17	150	95	80	65	88	70	75	470	1090	920	425	105
18	147	93	75	65	90	72	86	584	1510	930	425	108
19	138	98	70	65	92	86	108	614	2280	1170	476	105
20	126	95	70	65	88	86	129	554	2560	1080	390	132
21	138	90	75	65	88	81	135	578	2740	980	355	112
22	132	86	80	65	90	92	144	796	2430	1060	335	108
23	123	93	80	65	81	90	162	870	2680	1270	315	112
24	132	80	76	60	72	88	238	1000	2500	930	310	112
25	132	92	72	60	76	88	355	1060	1470	970	320	102
26	126	83	74	60	72	108	440	1140	1470	1180	295	100
27	150	85	70	60	78	95	425	1270	1880	950	258	102
28	135	86	70	60	75	95	476	1340	1700	748	214	98
29	112	83	70	60	---	83	596	1410	1560	708	218	100
30	138	90	65	60	---	83	548	1700	1620	716	234	153
31	138	---	65	60	---	88	---	1580	---	732	210	---
TOTAL	5092	2908	2412	1985	1934	2475	5094	26544	45842	37094	14990	4604
MEAN	164	96.9	77.8	64.0	69.1	79.8	170	856	1528	1197	484	153
MAX	266	123	92	70	92	112	596	1700	2740	1770	852	270
MIN	112	80	65	60	50	62	66	325	852	708	210	98
AC-FT	10100	5770	4780	3940	3840	4910	10100	52650	90930	73580	29730	9130

CAL YR 1982 TOTAL 107965 MEAN 296 MAX 1220 MIN 48 AC-FT 214100
WTR YR 1983 TOTAL 150974 MEAN 414 MAX 2740 MIN 50 AC-FT 299500

09177000 SAN MIGUEL RIVER AT URAVAN, CO

LOCATION.--Lat 38°21'26", long 108°42'44", in SW¼NE¼ sec.2, T.47 N., R.17 W., Montrose County, Hydrologic Unit 14030003, on right bank 20 ft downstream from bridge on State Highway 141, 400 ft downstream from Tabeguache Creek, and 1.5 mi southeast of Uravan.

DRAINAGE AREA.--1,499 mi^2.

PERIOD OF RECORD.--August 1954 to September 1962, October 1973 to current year.

REVISED RECORDS.--WRD Colo. 1974: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 5,000 ft, from topographic map. Prior to Sept. 3, 1959, at site 0.5 mi downstream at different datum.

REMARKS.--Records good except those for winter period, which are poor. Natural flow of stream affected by storage reservoirs, diversions for irrigation of about 28,000 acres above station, and return flow from irrigated areas. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--18 years (water years 1955-62, 1974-83), 356 ft^3/s; 257,900 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,050 ft^3/s May 10, 1983, gage height, 10.14 ft, from rating curve extended above 14,100 ft^3/s; minimum daily, 9.4 ft^3/s Aug. 10, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Sept. 6, 1970, reached a stage of 12.6 ft, from floodmarks, discharge, 8,910 ft^3/s, by slope-area measurement at site 5.5 mi downstream.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Apr. 25	0200	6,020	9.06	May 31	0700	4,870	8.41
May 10	0500	* 8,050	10.14	Aug. 25	2230	2,780	6.68

Minimum daily discharge, 90 ft^3/s Jan. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	384	219	178	90	119	185	292	2100	3800	1840	800	234
2	320	198	162	110	119	143	273	1710	3660	1730	800	252
3	292	192	148	120	145	133	279	1450	2750	1770	794	270
4	285	160	137	130	143	133	255	1920	2480	1850	800	255
5	296	175	137	140	158	129	237	2590	2410	1820	734	243
6	270	170	131	140	107	129	213	2560	2220	1750	860	237
7	258	178	145	130	125	113	213	1890	2010	1670	830	231
8	258	172	145	130	152	141	192	2670	2070	1760	862	231
9	261	204	139	120	162	129	195	4410	2060	1710	830	237
10	249	207	160	110	162	133	192	4980	1910	1770	665	219
11	246	234	141	100	143	195	216	4450	1730	1590	1010	201
12	243	198	131	100	141	168	216	2200	2070	1350	860	165
13	234	162	121	100	165	178	246	2130	2010	1170	640	145
14	234	180	133	100	168	219	234	1670	1700	1120	560	139
15	228	152	121	110	152	273	225	1540	1400	1040	590	145
16	228	131	119	120	125	231	222	1490	1600	968	555	133
17	225	131	121	140	150	204	249	1350	1800	968	495	123
18	213	143	131	160	155	204	372	1260	2500	926	490	117
19	213	143	133	140	172	204	655	1750	3300	1070	575	125
20	198	155	127	160	152	207	1010	1760	2900	1090	510	129
21	198	155	148	170	148	188	1020	1480	2460	1010	440	150
22	192	148	158	160	160	204	1240	1830	2410	1080	420	143
23	190	185	152	137	188	216	1490	2190	2350	1260	348	145
24	180	158	139	137	188	210	2660	2600	2740	1210	449	168
25	188	152	111	139	185	201	4200	3010	2470	1000	748	172
26	261	165	92	139	165	201	3770	3100	2480	1340	641	162
27	428	145	101	131	139	201	2750	3150	2680	1280	372	158
28	249	145	119	139	158	204	2310	3350	2340	944	261	160
29	216	158	103	135	---	216	2860	3280	2020	764	249	152
30	195	158	97	129	---	201	3240	3600	1950	818	267	210
31	222	---	95	119	---	243	---	4240	---	824	252	---
TOTAL	7654	5073	4075	3985	4246	5736	31526	77710	70280	40492	18707	5451
MEAN	247	169	131	129	152	185	1051	2507	2343	1306	603	182
MAX	428	234	178	170	188	273	4200	4980	3800	1850	1010	270
MIN	180	131	92	90	107	113	192	1260	1400	764	249	117
AC-FT	15180	10060	8080	7900	8420	11380	62530	154100	139400	80320	37110	10810

CAL YR 1982 TOTAL 162148 MEAN 444 MAX 1960 MIN 60 AC-FT 321600
WTR YR 1983 TOTAL 274935 MEAN 753 MAX 4980 MIN 90 AC-FT 545300

09179200 SALT CREEK NEAR GATEWAY, CO

LOCATION.--Lat 38°31'59", long 108°58'13", in sec.3, T.49 N., R.19 W., Mesa County, Hydrologic Unit 14030004, on left bank 3.5 mi upstream from mouth and 10 mi south of Gate way.

DRAINAGE AREA.--31.2 mi^2.

WATER-DISCHARGE RECORDS

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

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

REMARKS.--Records fair except those for winter period and those when the stage-discharge relationship was indefinite, Apr. 23 to May 7, Aug. 1-3, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,670 ft^3/s July 12, 1981, gage height, 13.34 ft, result of slope-area measurement of peak flow; minium daily, 0.02 ft^3/s Oct. 7, 1979, July 30, 1982.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 250 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
June 25	1600	360	5.99	Aug. 2	2000	265	5.35
July 22	1700	* 1,680	11.04	Aug. 10	1700	353	5.94

Minimum daily discharge, 0.07 ft^3/s Oct. 4, July 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.10	.26	.46	.20	.21	.22	.36	5.0	.17	.07	2.8	.11
2	.09	.22	.46	.23	.17	.22	.24	2.8	.17	.08	18	.13
3	.10	.17	.46	.21	.16	.15	.31	3.7	.17	.09	1.4	.11
4	.07	.11	.41	.22	.17	.14	.24	6.2	.22	.09	.12	.11
5	.09	.10	.46	.24	.17	.14	.25	6.9	.12	.09	.10	.11
6	.08	.11	.46	.25	.17	.11	.24	7.1	.11	.09	.10	.11
7	.09	.11	.60	.26	.18	.13	.25	6.6	.12	.09	.10	.11
8	.09	.12	.47	.27	.28	.12	.20	5.0	.17	.09	.10	.14
9	.11	.38	.41	.28	.67	.13	.22	1.0	.38	.09	.10	.11
10	.11	.50	.36	.24	.17	.16	.19	1.2	.17	.09	19	.11
11	.11	.46	.30	.21	.16	.21	.29	1.0	.10	.09	.46	.11
12	.11	.41	.19	.26	.17	.20	.31	3.0	.78	.10	.11	.11
13	.11	.46	.20	.26	.17	.20	.31	6.2	.31	.10	4.1	.11
14	.11	.46	.27	.28	.17	.24	.22	5.0	.17	.10	2.5	.10
15	.11	.50	.27	.32	.17	.19	.22	4.0	.09	.10	.22	.11
16	.17	1.0	.26	.45	.11	.12	.22	3.0	.09	.10	.09	.12
17	.12	.41	.25	.26	.11	.18	.17	1.2	.08	.10	.09	.11
18	.12	.26	.25	.26	.14	.33	.17	1.0	.13	.13	.09	.11
19	.33	.22	.23	.26	.17	.34	.26	1.0	.12	.11	.09	.11
20	.35	.22	.26	.26	.13	.26	.22	1.1	.11	.09	.22	.12
21	.22	.26	.22	.22	.15	.22	.17	.89	.11	4.8	.09	.12
22	.17	.31	.22	.22	.12	.28	.17	1.2	.11	82	.09	.11
23	.17	.26	.36	.22	.12	.27	1.1	.82	.11	.22	.09	.13
24	.17	.31	.21	.22	.14	.29	5.9	.41	1.0	.10	.17	6.8
25	.11	.26	.22	.22	.13	.28	8.8	.46	15	.17	.17	.11
26	.22	.22	.27	.22	.17	.26	11	.36	7.2	.73	.08	.09
27	.22	.22	.22	.23	.17	.26	12	.43	.54	1.3	.08	.09
28	.17	.22	.21	.30	.22	.26	9.8	.31	.09	.10	.57	.09
29	.11	.22	.19	.21	---	.26	7.9	.22	.09	.09	1.2	.11
30	.12	.36	.19	.19	---	.23	8.4	.46	.08	.09	.17	3.8
31	.12	---	.20	.19	---	.29	---	.36	---	15	.11	---
TOTAL	4.37	9.12	9.54	7.66	5.07	6.69	70.13	77.92	28.11	106.49	52.61	13.71
MEAN	.14	.30	.31	.25	.18	.22	2.34	2.51	.94	3.44	1.70	.46
MAX	.35	1.0	.60	.45	.67	.34	12	7.1	15	82	19	6.8
MIN	.07	.10	.19	.19	.11	.11	.17	.22	.08	.07	.08	.09
AC-FT	8.7	18	19	15	10	13	139	155	56	211	104	27

CAL YR 1982 TOTAL 165.79 MEAN .45 MAX 29 MIN .02 AC-FT 329
WTR YR 1983 TOTAL 391.42 MEAN 1.07 MAX 82 MIN .07 AC-FT 776

09179200 SALT CREEK NEAR GATEWAY, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1978 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: February to September 1981, April 1982 to current year.
WATER TEMPERATURE: February to September 1981, April 1982 to current year.

INSTRUMENTATION.--Water-quality monitor from February 1981. Pumping sampler since February 1981.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 100,000 micromhos July 4, 1981; minimum, 1,000 micromhos July 8, 11, 1981.
WATER TEMPERATURE: Maximum, 35.0°C June 26, 1981; minimum, freezing point many days each winter.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum recorded, 99,300 micromhos Nov. 3, 8; minimum recorded, 1,060 micromhos Aug. 1.
WATER TEMPERATURE: Maximum, 33.0°C Aug. 26; minimum, freezing point on many days during the winter.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	SPE-CIFIC CON-DUCT-ANCE LAB (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)
OCT								
06...	1500	.08	--	63900	8.1	15.0	5.8	4100
NOV								
18...	1330	.18	--	59900	8.1	5.5	9.1	3600
DEC								
09...	1400	.18	56000	57100	8.2	4.0	9.6	3500
JAN								
12...	1300	.18	60000	59800	8.3	-2.0	8.6	3600
FEB								
15...	1400	.12	59000	54600	8.1	5.0	8.1	3300
MAR								
08...	1400	.13	57000	58800	9.0	11.0	--	3300
APR								
08...	1300	.17	54000	53900	9.2	13.0	6.4	2900
MAY								
19...	1000	.76	24300	19800	8.6	8.5	8.7	1300
JUN								
17...	1400	.17	57200	56900	9.0	21.5	6.0	3300
JUL								
26...	1430	1.4	52000	42000	8.2	23.0	5.4	3300
AUG								
10...	1800	350	--	3420	--	--	--	1700
12...	1400	.10	55000	49300	8.2	28.0	4.6	4100
SEP								
26...	1400	.11	59300	59800	8.2	22.0	5.2	3800
30...	0800	40	--	7620	--	14.0	--	1200

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
OCT									
06...	950	420	17000	120	650	179	2800	27000	.30
NOV									
18...	780	410	16000	120	550	199	2400	25000	.30
DEC									
09...	740	400	14000	110	570	171	2500	25000	.20
JAN									
12...	750	410	15000	110	570	210	2400	25000	.30
FEB									
15...	700	380	13000	100	500	201	2100	21000	.30
MAR									
08...	680	380	14000	110	560	173	2300	21000	.30
APR									
08...	570	350	13000	110	500	172	2400	20000	.40
MAY									
19...	280	140	4200	53	170	176	890	6800	.30
JUN									
17...	680	380	15000	120	550	184	2400	22000	.30
JUL									
26...	840	280	10000	79	360	144	2200	17000	.30
AUG									
10...	580	62	220	2	34	203	1400	350	.30
12...	1100	320	12000	85	470	177	1500	21000	.30
SEP									
26...	890	390	15000	110	450	193	330	25000	.20
30...	370	56	1300	17	54	68	980	2100	.20

09179200 SALT CREEK NEAR GATEWAY, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

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)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
OCT								
06...	7.2	49000	66.6	11	.200	.020	300	930
NOV								
18...	7.8	45000	61.6	22	.230	<.010	290	600
DEC								
09...	7.1	43000	58.9	21	.320	.020	230	440
JAN								
12...	8.6	44000	60.2	22	.160	<.010	190	390
FEB								
15...	8.1	38000	51.4	12	.220	.050	180	440
MAR								
08...	6.5	39000	53.1	14	.330	.040	190	30
APR								
08...	7.6	37000	50.2	17	.260	.100	190	230
MAY								
19...	8.5	13000	17.1	26	<.100	.010	30	190
JUN								
17...	9.1	41000	55.9	19	.180	.030	220	370
JUL								
26...	8.3	31000	41.9	116	.270	.040	120	1400
AUG								
10...	15	2800	3.8	2630	.460	.400	890	2900
12...	10	37000	49.6	9.9	.100	.070	190	2300
SEP								
26...	10	42000	57.4	13	<.100	.010	240	1300
30...	5.8	4900	6.7	530	.200	.010	70	1600

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
JUL				
26...	1315	.40	6800	7.3
26...	1415	1.4	9570	36
AUG				
10...	1800	350	321000	303000
10...	1810	204	164000	90300
10...	1830	63	206000	35000
SEP				
30...	0800	40	82500	8910
30...	0810	21	161000	9130
30...	0820	20	135000	7290

09179200 SALT CREEK NEAR GATEWAY, CO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	67900	---			---	47600	---	35500	60100	9360	58500
2	---	69300	---			---	48500	---	38800	64400	25500	59800
3	---	80000	33400			---	47600	---	40300	69400	33300	64400
4	---	84000	42400			---	48700	---	43900	71600	63800	66100
5	---	78000	44100			---	51000	---	47300	72300	71900	68900
6	---	69600	57300			---	54600	---	48800	73500	79200	71200
7	61000	71000	57900			---	54500	---	51300	75500	85000	73000
8	56500	89100	56300			---	54500	---	51100	76400	89700	74900
9	---	85100	51900			---	55200	---	41300	77500	---	76800
10	---	42600	33200			---	---	---	46400	78300	---	78000
11	49600	49600	---			48900	---	---	54600	82600	40000	80300
12	51200	51100	---			46900	---	---	35600	83800	48800	82200
13	---	52700	---			44800	---	---	33700	85000	35300	---
14	---	53400	---			45900	---	---	41600	85400	19600	---
15	---	53800	---			46700	---	---	48200	87700	---	---
16	52600	54300	---			45500	---	---	51800	90000	---	---
17	---	55700	---			42700	---	---	54500	92600	---	---
18	52400	58200	---			38900	---	---	57700	92900	---	---
19	---	53000	---			37600	---	9410	60000	90600	---	---
20	---	44400	---			42500	---	12100	60500	93500	---	---
21	59400	43700	---			42900	---	13500	61200	78500	---	---
22	55300	35700	---			39500	---	8980	61200	11000	---	---
23	---	---	---			41500	---	10900	59900	37200	---	---
24	83100	---	---			38800	---	12600	---	47000	---	---
25	86100	---	---			42400	---	14400	---	51800	---	---
26	---	---	---			45800	---	16600	---	381[illegible]	---	61200
27	---	---	---			46700	---	20100	---	20[illegible]	---	65900
28	---	---	---			46000	---	23800	---	22400	---	73000
29	55200	---	---			48300	---	28400	54000	29100	---	78600
30	59100	---	---			49300	---	28700	57000	31500	55100	42400
31	62100	---	---			46000	---	31700	---	20300	57900	---
MEAN	60300	61000	47100			44200	51400	17800	49400	64200	51000	69100

WTR YR 1983 MEAN 53400 MAX 93500 MIN 8980

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	12.0	5.0	3.5	1.5	.0	.0			---	---
2	---	---	8.0	3.0	4.0	.0	.0	.0			---	---
3	---	---	7.5	.0	2.5	.0	.0	.0			---	---
4	---	---	8.0	.0	3.0	.0	.0	.0			---	---
5	---	---	8.0	.0	3.0	.0	.0	.0			---	---
6	---	---	7.5	.0	4.0	.0	.0	.0			---	---
7	12.0	3.5	8.0	.5	3.0	.0	.0	.0			---	---
8	11.0	5.5	7.0	4.5	5.0	.0	.0	.0			---	---
9	11.0	3.5	10.5	6.0	4.0	.5	.0	.0			---	---
10	12.5	3.0	6.5	5.5	6.0	3.0	.0	.0			---	---
11	11.5	1.5	6.5	4.5	5.5	.0	.0	.0			14.0	3.0
12	12.5	2.5	5.5	2.0	4.0	.0	.0	.0			17.0	4.0
13	13.0	4.0	5.5	2.0	3.0	.0	.0	.0			15.0	2.5
14	14.0	2.5	4.0	.0	3.0	.0	.0	.0			13.0	5.0
15	14.5	3.5	3.5	.0	3.5	.0	.0	.0			10.0	3.5
16	13.5	4.5	3.5	.0	3.5	.0	.0	.0			11.5	1.0
17	13.5	3.0	5.0	1.0	3.0	.0	.0	.0			7.0	1.5
18	13.0	3.5	8.0	4.0	3.5	.0	.5	.0			7.0	.5
19	11.5	2.5	6.5	2.5	.5	.0	.5	.0			11.5	.5
20	11.0	2.5	5.5	1.0	2.0	.0	1.5	.0			11.5	.5
21	12.0	1.0	5.5	1.5	4.0	.0	1.5	.0			8.0	.0
22	10.5	2.0	5.0	1.0	3.0	.0	2.5	.0			8.0	1.0
23	12.0	2.5	4.5	.0	5.0	1.0	2.0	.0			13.5	2.0
24	12.0	4.5	4.0	.0	1.0	.0	1.0	.0			3.0	.0
25	13.5	8.0	5.5	1.5	.0	.0	3.5	.0			11.0	.0
26	11.0	7.0	5.0	.0	.0	.0	3.0	.0			12.0	.5
27	8.5	5.0	4.0	.0	.0	.0	3.0	.0			9.5	.5
28	9.5	2.0	4.5	.0	.0	.0	6.0	.0			10.5	3.5
29	8.5	1.0	4.5	.0	.0	.0	3.5	.0			17.0	2.0
30	10.5	5.0	4.5	2.0	.0	.0	4.0	.0			19.5	1.5
31	11.0	7.0	---	---	.0	.0	---	.0			12.0	3.5
MONTH	14.5	1.0	12.0	.0	6.0	.0	6.0	.0			19.5	.0

09179200 SALT CREEK NEAR GATEWAY, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	14.5	1.5	---	---	21.0	8.5	22.5	10.0	---	---	27.0	13.0
2	16.0	.5	---	---	16.0	8.0	24.0	11.0	---	---	27.5	15.5
3	10.5	1.5	---	---	18.5	5.5	25.0	12.5	---	---	26.5	13.5
4	9.5	.5	---	---	22.0	5.0	26.0	10.5	---	---	26.5	14.5
5	14.5	.5	---	---	21.5	6.5	28.0	10.5	---	---	27.5	11.0
6	9.0	.0	---	---	19.5	6.0	27.0	13.5	---	---	27.5	10.5
7	9.0	.0	---	---	22.0	6.5	28.0	16.0	---	---	23.5	11.0
8	12.5	.0	---	---	20.0	7.0	27.0	15.5	---	---	27.0	16.0
9	17.0	.0	---	---	17.0	9.5	23.5	15.5	---	---	26.5	13.0
10	---	---	---	---	23.0	6.5	27.5	14.0	---	---	25.5	13.5
11	---	---	---	---	21.0	9.0	27.0	11.5	---	---	27.5	10.5
12	---	---	---	---	13.0	8.0	27.5	13.0	---	---	27.0	10.5
13	---	---	---	---	17.5	6.0	28.5	12.5	27.0	16.5	26.5	10.5
14	---	---	---	---	23.5	4.0	24.5	12.5	26.5	18.5	24.0	14.5
15	---	---	---	---	24.5	5.5	24.5	14.0	29.5	18.0	27.0	11.5
16	---	---	---	---	23.0	6.0	25.5	12.0	31.0	16.5	26.5	10.0
17	---	---	---	---	22.5	8.0	26.5	13.5	31.5	17.5	24.0	11.0
18	---	---	---	---	22.0	6.5	28.0	16.0	30.0	19.0	26.0	12.5
19	---	---	14.0	7.5	23.0	7.0	29.0	18.5	30.5	18.5	24.0	13.0
20	---	---	19.0	5.5	23.5	7.0	29.0	17.5	28.5	17.5	22.5	8.5
21	---	---	22.0	4.5	24.0	7.5	26.5	17.0	29.0	16.0	23.0	4.5
22	---	---	22.5	6.5	26.0	8.0	---	---	29.5	15.0	24.0	5.5
23	---	---	24.5	6.0	24.0	13.0	---	---	28.5	14.0	20.5	15.0
24	---	---	24.0	6.5	20.5	14.5	---	---	27.5	15.0	22.0	15.5
25	---	---	22.5	7.0	29.0	12.5	---	---	28.0	17.5	24.0	13.0
26	---	---	23.0	7.5	21.5	15.0	---	---	33.0	17.5	22.5	13.0
27	---	---	23.5	7.5	29.0	14.5	---	---	30.0	17.5	21.5	12.5
28	---	---	23.0	8.0	24.5	15.0	---	---	29.5	17.5	22.5	9.5
29	---	---	24.5	11.0	24.5	11.5	---	---	28.0	20.5	20.0	12.0
30	---	---	23.0	12.0	23.5	11.0	---	---	25.0	16.0	16.5	13.5
31	---	---	20.0	9.0	---	---	---	---	29.5	12.5	---	---
MONTH	17.0	.0	24.5	4.5	29.0	4.0	29.0	10.0	33.0	12.5	27.5	4.5
YEAR	33.0	.0										

09236000 BEAR RIVER NEAR TOPONAS, CO

LOCATION.--Lat 40°03'00", long 107°04'00", in NW¼ sec.20, T.1 N., R.86 W., Garfield County, Hydrologic Unit 14050001, on right bank just downstream from Yampa Reservoir Dam at Stillwater campground, 0.8 mi downstream from Mandall Creek, 0.8 mi upstream from Dome Creek, and 14 mi west of Toponas.

DRAINAGE AREA.--23 mi^2, approximately.

PERIOD OF RECORD.--October 1952 to September 1965, October 1966 to current year. Published as Yampa River near Toponas prior to October 1973.

GAGE.--Water-stage recorder and Parshall flume. Altitude of gage is 9,700 ft, from river-profile map. Oct. 28, 1952, to Sept. 30, 1965, water-stage recorder at site 50 ft upstream at different datum.

REMARKS.--Records good. Flow regulated by Stillwater Reservoir, capacity, 6,200 acre-ft, 3.5 mi upstream and Yampa Reservoir, capacity, 620 acre-ft. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--13 years (water years 1953-65), 40.3 ft^3/s; 29,200 acre-ft/yr, prior to filling of Stillwater Reservoir; 17 years (water years 1968-83), 40.1 ft^3/s, 29,050 acre-ft/yr, subsequent to filling of Stillwater Reservoir.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 436 ft^3/s July 2, 1957, gage height, 6.39 ft, site and datum then in use; minimum daily, 1.6 ft^3/s Oct. 6-24, Nov. 18 to Dec. 8, 1966, during filling of Stillwater Reservoir.

EXTREMES FOR CURRENT YEAR.--Maximum discharge 321 ft^3/s at 2400 June 21, gage height, 3.34 ft; minimum daily, 16 ft^3/s Apr. 13.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31	28	26	20	18	18	17	21	77	162	76	36
2	30	28	26	20	18	17	17	21	82	153	74	35
3	29	27	26	20	18	17	17	21	76	164	76	34
4	28	27	25	20	18	17	18	22	86	155	75	40
5	28	26	24	19	18	17	17	21	89	125	73	36
6	29	25	24	20	18	18	17	22	81	134	71	34
7	29	25	25	20	18	18	18	22	79	171	71	34
8	29	25	24	20	18	18	17	23	87	200	68	35
9	30	26	23	20	17	17	17	26	91	197	66	33
10	30	26	24	20	18	17	17	28	91	202	64	32
11	29	28	23	19	18	17	17	30	102	203	63	32
12	29	27	23	19	18	17	17	26	110	167	64	31
13	28	27	23	19	18	17	16	25	102	129	65	31
14	28	26	23	19	17	18	18	25	109	135	61	31
15	29	26	23	19	17	18	18	24	115	166	60	31
16	29	26	23	19	17	18	18	24	125	182	57	30
17	28	26	22	19	17	18	18	25	182	178	55	30
18	28	26	22	18	17	17	19	24	280	175	56	29
19	28	27	22	18	17	17	19	23	292	173	63	30
20	27	27	22	18	18	17	19	23	296	171	68	31
21	27	27	22	18	18	17	19	24	293	163	55	29
22	26	27	21	18	17	17	19	27	305	128	52	28
23	26	27	21	18	17	17	19	30	303	127	51	29
24	27	26	20	19	17	17	21	35	300	118	50	31
25	27	27	21	19	17	17	21	41	285	117	50	30
26	27	26	21	18	17	18	21	44	275	108	49	28
27	29	26	21	18	17	18	21	53	254	90	48	28
28	28	26	21	18	18	17	21	64	219	83	48	27
29	27	26	22	18	---	17	21	69	220	79	46	27
30	28	26	21	17	---	18	21	73	195	75	38	28
31	29	---	19	18	---	17	---	70	---	78	36	---
TOTAL	877	793	703	585	491	538	555	1006	5201	4508	1849	940
MEAN	28.3	26.4	22.7	18.9	17.5	17.4	18.5	32.5	173	145	59.6	31.3
MAX	31	28	26	20	18	18	21	73	305	203	76	40
MIN	26	25	19	17	17	17	16	21	76	75	36	27
AC-FT	1740	1570	1390	1160	974	1070	1100	2000	10320	8940	3670	1860

CAL YR 1982 TOTAL 17725.0 MEAN 48.6 MAX 310 MIN 9.4 AC-FT 35160
WTR YR 1983 TOTAL 18046.0 MEAN 49.4 MAX 305 MIN 16 AC-FT 35790

09238500 WALTON CREEK NEAR STEAMBOAT SPRINGS, CO

LOCATION.--Lat 40°24'29", long 106°47'11", in SW¼NW¼ sec.11, T.5 N., R.84 W., Routt County, Hydrologic Unit 14050001, on left bank, 0.4 mi upstream from Beaver Creek, 0.6 mi downstream from Storm King Creek, 4.5 mi upstream from mouth, and 6.0 mi southeast of Steamboat Springs.

DRAINAGE AREA.--42.4 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1920 to September 1922, monthly discharge only, published in WSP 1313. October 1965 to September 1973, flow of Highline Canal included. Annual maximum discharge, water years 1978-81. May 1982 to current year.

REVISED RECORDS.--WDR-CO-82-3: 1978-81 (M).

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 7,050 ft, from topographic map. Prior to Oct. 1, 1965, water-stage recorder at site 0.2 mi downstream at different datum. Supplementary water-stage recorder on Highline Canal, May 18, 1966 to Sept. 30, 1973. Operated as a crest-stage partial-record site, June 1978 to May 1982, at present site and datum.

REMARKS.--Records good except those for winter period, which are poor. Diversion above station by Highline Canal from Beaver and Storm King Creeks for irrigation below station. No other diversion above station.

AVERAGE DISCHARGE.--11 years (water years 1921-22, 1966-73, 1983), 83.5 ft³/s; 60,500 acre-ft/yr, unadjusted for diversion.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge 2,800 ft³/s June 15, 1921; minimum daily, 4.5 ft³/s Oct. 29, Nov. 7, 8, 1921, Aug. 28, 29, 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 600 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
June 11	0100	1,030	2.48	June 21	0200	* 1,900	2.95
July 8	0100	1,310	2.66				

Minimum daily discharge, 5.0 ft³/s Feb. 17 to Mar. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	53	24	11	6.6	6.2	5.0	11	28	380	948	71	13
2	28	23	11	6.6	6.0	6.0	11	27	387	947	62	12
3	22	25	12	6.4	6.0	8.0	9.7	27	367	1070	55	12
4	15	23	12	6.4	6.0	8.0	11	27	447	627	55	24
5	14	25	10	6.4	6.0	8.0	11	37	432	540	59	17
6	18	25	12	6.6	5.8	8.0	10	38	425	505	49	13
7	24	21	12	6.8	5.8	8.0	11	36	472	521	39	12
8	28	20	9.6	6.8	5.6	8.0	9.7	44	539	674	36	18
9	17	19	9.2	6.8	5.6	8.0	8.0	60	585	494	33	15
10	19	18	9.0	6.2	5.6	8.0	8.3	89	663	391	29	12
11	19	17	9.0	6.2	5.4	8.0	9.7	104	874	324	31	11
12	17	18	9.2	6.2	5.4	9.0	9.7	101	961	278	42	11
13	17	24	9.2	6.2	5.4	10	10	81	591	256	35	10
14	17	21	8.6	6.0	5.4	11	11	71	508	230	29	10
15	24	17	8.6	6.0	5.4	12	10	62	627	220	32	11
16	35	16	8.4	6.0	5.2	11	10	58	763	197	32	9.7
17	33	15	8.0	6.0	5.0	10	10	53	855	169	24	9.3
18	33	15	8.0	6.4	5.0	10	12	48	1060	162	27	9.0
19	28	14	8.0	6.6	5.0	9.4	15	48	1200	192	80	9.3
20	20	14	7.8	6.4	5.0	9.7	14	49	1310	150	76	13
21	19	14	7.6	6.0	5.0	11	17	55	1320	278	40	10
22	17	13	7.6	6.2	5.0	11	16	77	1290	207	27	10
23	16	13	7.6	7.0	5.0	10	18	116	1430	255	22	10
24	20	13	7.8	7.2	5.0	9.8	29	166	1400	166	18	11
25	24	12	7.4	7.2	5.0	9.6	40	220	1450	128	17	11
26	26	12	7.4	7.2	5.0	11	44	282	1270	128	17	10
27	27	12	7.4	7.2	5.0	12	40	347	1300	158	15	9.7
28	18	11	7.0	7.2	5.0	12	33	387	1150	121	14	9.3
29	25	11	6.8	7.2	---	11	32	410	1130	90	14	9.3
30	27	11	6.8	7.2	---	11	31	425	1100	80	15	9.3
31	27	---	6.8	6.6	---	11	---	395	---	82	15	---
TOTAL	727	516	272.8	203.8	150.8	294.5	512.1	3968	26286	10588	1110	350.9
MEAN	23.5	17.2	8.80	6.57	5.39	9.50	17.1	128	876	342	35.8	11.7
MAX	53	25	12	7.2	6.2	12	44	425	1450	1070	80	24
MIN	14	11	6.8	6.0	5.0	5.0	8.0	27	367	80	14	9.0
AC-FT	1440	1020	541	404	299	584	1020	7870	52140	21000	2200	696

WTR YR 1983 TOTAL 44979.9 MEAN 123 MAX 1450 MIN 5.0 AC-FT 89220

09238500 WALTON CREEK NEAR STEAMBOAT SPRINGS, CO--Continued

WATER-QUALITY RECORDS

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	SPE-CIFIC CON-DUCT-ANCE LAB (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
NOV										
16...	1045	15	<50	41	6.8	.0	11.3	18	5.4	1.0
FEB										
22...	1200	E5.0	54	53	8.0	.5	--	19	5.7	1.1
MAY										
23...	1140	102	38	43	7.2	4.5	10.1	16	5.0	.92
JUN										
17...	1225	676	22	25	7.1	5.0	9.6	8	2.4	.57
JUL										
27...	0920	142	28	31	8.2	11.0	8.8	13	3.8	.75
SEP										
13...	0805	9.7	46	50	7.9	8.5	8.7	18	5.5	1.1

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)
NOV										
16...	1.9	.2	.70	20	8.0	.60	<.10	12	42	.06
FEB										
22...	2.1	.2	.70	24	5.0	.60	<.10	13	43	.06
MAY										
23...	1.5	.2	.80	18	7.0	.60	<.10	9.3	36	.05
JUN										
17...	1.0	.2	.40	12	4.3	.30	<.10	6.6	23	.03
JUL										
27...	1.1	.2	.40	15	7.5	1.1	<.10	7.0	31	.04
SEP										
13...	2.2	.2	.70	24	3.0	.30	<.10	10	37	.05

DATE	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	BORON, DIS-SOLVED (UG/L AS B)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)
NOV										
16...	1.7	<.020	<.100	.110	.29	.40	.010	<.010	<10	34
FEB										
22...	--	<.020	<.100	.100	.70	.80	.030	.010	<10	40
MAY										
23...	10	<.020	<.100	.190	.41	.60	.020	.020	<10	38
JUN										
17...	42	<.020	<.100	.120	.08	.20	.010	.040	<10	20
JUL										
27...	12	--	--	--	--	--	--	--	<10	32
SEP										
13...	.98	<.020	<.100	.130	.17	.30	.010	<.010	<10	43

E ESTIMATED

09238500 WALTON CREEK NEAR STEAMBOAT SPRINGS, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)
NOV 16...	<1	22	<1	<10	3	140	<1
JUN 17...	<1	15	<1	<10	3	73	3

DATE	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	ZINC, DIS-SOLVED (UG/L AS ZN)
NOV 16...	3	<.1	<1	1	<1	<1	9
JUN 17...	6	<.1	<1	<1	<1	<1	<3

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
NOV 16...	1045	15	10	.41
FEB 22...	1200	12	13	.42
MAY 23...	1140	102	15	4.1
JUN 17...	1225	676	676	1230
JUL 27...	0920	142	5	1.9
SEP 13...	0805	9.7	2	.05

09238900 FISH CREEK AT UPPER STATION, NEAR STEAMBOAT SPRINGS, CO

LOCATION.--Lat 40°28'30", long 106°47'11", in SE¼SE¼ sec.15, T.6 N., R.84 W., Routt County, Hydrologic Unit 14050001, on right bank 2.6 mi upstream from mouth and 2.5 mi east of Steamboat Springs.

DRAINAGE AREA.--25.8 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1966 to September 1972, May 1982 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 7,150 ft, from topographic map.

REMARKS.--Records good except those for winter period, which are poor. Diversions above station by Mount Werner Recreation area and City of Steamboat Springs for domestic use began in 1972 (see table below for figures of diversion). Natural flow of stream affected by storage in Fish Creek and Long Lake Reservoir.

AVERAGE DISCHARGE.--6 years (water years 1967-72), 69.6 ft^3/s; 50,430 acre-ft/yr, unadjusted for diversion.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge 1,110 ft^3/s June 20, 1968, gage height, 3.14 ft; minimum daily, 0.01 ft^3/s Aug. 7, 1972.

EXTREMES FOR CURRENT YEAR.--Maximum discharge 870 ft^3/s at 0200 June 25, gage height, 2.92 ft; minimum daily, 0.38 ft^3/s Sept. 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	43	33	11	6.8	6.4	6.6	3.8	20	224	566	49	2.6
2	30	33	11	6.8	6.4	6.6	3.8	18	228	581	46	1.7
3	25	33	12	6.8	6.4	6.6	4.4	18	212	666	34	1.4
4	24	30	12	6.6	6.4	6.6	4.4	21	250	485	26	6.9
5	22	31	11	6.6	6.4	6.6	4.2	27	240	430	46	5.8
6	27	27	12	6.8	6.4	6.8	4.0	25	236	443	43	3.4
7	26	27	12	7.0	6.4	6.8	3.6	23	302	475	25	2.6
8	29	26	9.6	6.8	6.4	6.8	3.4	28	446	623	20	6.0
9	23	26	9.4	6.8	6.4	6.8	3.4	39	458	526	20	5.2
10	25	23	9.2	6.6	6.4	6.8	3.3	57	491	417	16	4.0
11	25	22	9.2	6.4	6.4	7.0	3.1	64	568	310	10	3.0
12	22	21	9.4	6.2	6.4	7.2	3.1	52	561	247	19	3.0
13	22	20	9.0	6.2	6.4	7.2	2.9	44	374	223	14	3.6
14	23	18	8.6	6.2	6.4	7.2	2.6	38	275	196	9.4	3.2
15	26	17	8.6	6.2	6.4	7.8	2.3	34	296	189	11	2.0
16	32	16	8.4	6.2	6.4	8.6	1.9	32	404	159	11	1.6
17	30	15	8.2	6.2	6.4	10	1.9	31	491	133	6.6	2.2
18	31	15	8.0	6.4	6.4	12	2.4	29	554	119	13	2.0
19	30	15	8.0	6.6	6.4	11	3.2	29	617	127	48	1.9
20	27	14	7.8	6.6	6.4	9.9	3.8	32	638	107	49	1.1
21	24	14	7.8	6.0	6.6	9.4	3.8	30	652	189	23	1.9
22	23	13	7.6	6.4	6.6	6.9	3.7	56	632	169	15	1.8
23	23	13	7.8	7.0	6.6	5.6	5.3	110	668	198	11	1.9
24	23	13	8.2	7.4	6.6	5.3	11	127	669	124	8.4	2.2
25	25	13	7.4	7.4	6.6	5.3	27	165	763	84	6.9	2.0
26	28	12	7.2	7.4	6.6	5.2	33	200	644	76	5.0	1.8
27	33	12	7.2	7.4	6.6	5.6	29	245	645	83	2.8	1.7
28	32	11	7.2	7.4	6.6	5.6	25	275	597	67	3.6	1.1
29	38	11	7.0	7.4	---	3.9	22	290	591	52	4.4	.38
30	33	11	7.0	7.0	---	2.5	21	275	606	44	4.8	.65
31	34	---	7.0	6.4	---	2.5	---	216	---	39	4.4	---
TOTAL	858	585	275.8	208.0	180.8	212.7	246.3	2650	14332	8147	605.3	78.63
MEAN	27.7	19.5	8.90	6.71	6.46	6.86	8.21	85.5	478	263	19.5	2.62
MAX	43	33	12	7.4	6.6	12	33	290	763	666	49	6.9
MIN	22	11	7.0	6.0	6.4	2.5	1.9	18	212	39	2.8	.38
AC-FT	1700	1160	547	413	359	422	489	5260	28430	16160	1200	156
a	123	135	123	156	122	136	327	107	156	200	248	139

WTR YR 1983 TOTAL 28379.53 MEAN 77.8 MAX 763 MIN .38 AC-FT 56290

a - DIVERSIONS, IN ACRE-FEET, BY MOUNT WERNER PIPELINE AND CITY OF STEAMBOAT SPRINGS, FURNISHED BY COLORADO DIVISION OF WATER RESOURCES.

09238900 FISH CREEK AT UPPER STATION NEAR STEAMBOAT SPRINGS, CO--Continued

WATER-QUALITY RECORDS

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

WATER QUALITY DATA, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	SPE-CIFIC CON-DUCT-ANCE LAB (UMHOS)	PH (STAND-ARD 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											
16...	1340	13	<50	33	6.8	.0	11.3	12	0	3.7	.70
MAR											
16...	1340	8.4	43	42	7.6	.0	11.5	16	0	4.9	.90
MAY											
23...	1330	69	32	39	7.2	5.0	9.8	13	0	3.9	.75
JUN											
17...	1405	398	19	22	7.1	6.0	9.7	8	0	2.3	.46
JUL											
27...	1040	80	21	24	7.7	12.0	8.5	8	0	2.4	.44
SEP											
13...	0900	4.2	37	39	7.9	9.5	8.6	14	0	4.2	.73

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)
NOV										
16...	1.1	.2	.60	14	6.0	.50	<.10	7.0	28	.04
MAR										
16...	1.5	.2	.80	19	5.1	.40	<.10	8.8	34	.05
MAY										
23...	1.1	.1	.70	14	5.7	<.10	<.10	6.9	--	--
JUN										
17...	.80	.1	.40	10	3.8	.30	<.10	4.8	19	.03
JUL										
27...	.80	.1	.50	11	5.9	.30	.10	4.1	21	.03
SEP										
13...	1.5	.2	.70	15	2.8	1.3	.40	6.4	27	.04

DATE	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	BORON, DIS-SOLVED (UG/L AS B)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)
NOV										
16...	.99	<.020	<.100	.080	.22	.30	.010	<.010	<10	19
MAR										
16...	.77	<.020	<.100	.110	.29	.40	.010	.010	<10	24
MAY										
23...	--	<.020	<.100	.170	.23	.40	.010	.010	<10	20
JUN										
17...	21	<.020	<.100	.120	.18	.30	.010	.010	<10	13
JUL										
27...	4.6	--	--	--	--	--	--	--	<10	15
SEP										
13...	.31	<.020	<.100	.110	.19	.30	<.010	<.010	<10	24

DATE	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)
NOV							
16...	<1	17	<1	<10	1	93	1
JUN							
17...	<1	12	<1	<10	1	66	2

09238900 FISH CREEK AT UPPER STATION NEAR STEAMBOAT SPRINGS, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY DISSOLVED (UG/L AS HG)	MOLYBDENUM, DISSOLVED (UG/L AS MO)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, DISSOLVED (UG/L AS AG)	ZINC, DISSOLVED (UG/L AS ZN)
NOV 16...	2	<.1	<1	<1	<1	<1	9
JUN 17...	6	<.1	<1	<1	<1	<1	3

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)
NOV 16...	1045	15	10	.41
FEB 22...	1200	12	13	.42
MAY 23...	1140	102	15	4.1
JUN 17...	1225	676	676	1230
JUL 27...	0920	142	5	1.9
SEP 13...	0805	9.7	2	.05

09239500 YAMPA RIVER AT STEAMBOAT SPRINGS, CO

LOCATION.--Lat 40°29'01", long 106°49'54", in NW¼NE¼ sec.17, T.6 N., R.84W., Routt County, Hydrologic Unit 14050001, on right bank 30 ft downstream from Fifth Street Bridge in Steamboat Springs and 0.6 mi upstream from Soda Creek.

DRAINAGE AREA.--604 mi^2.

PERIOD OF RECORD.--May 1904 to October 1906, October 1909 to current year. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 764: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 6,695.47 ft, National Geodetic Vertical Datum of 1929. Prior to May 8, 1905, nonrecording gage at bridge 0.2 mi upstream at datum 4.16 ft, higher. May 8, 1905, to Oct. 31, 1906, nonrecording gage on bridge 30 ft upstream at datum 0.44 ft, higher. Mar. 8, 1910, to Sept. 11, 1934, water-stage recorder at present site at datum 0.44 ft, higher.

REMARKS.--Records good. Natural flow of stream affected by two diversions for irrigation to Egeria Creek in Colorado River basin, one diversion for irrigation from Trout Creek drainage to Oak Creek drainage, irrigation of about 19,700 acres above station, and by storage reservoirs. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--76 years, 467 ft^3/s; 338,300 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,820 ft^3/s June 14, 1921, gage height, 7.08 ft, present datum, from rating curve extended above 4,800 ft^3/s; minimum daily, 4.0 ft^3/s Sept. 8, 1934, Sept. 10-13, 1944.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
May 30	0500	3,200	5.10	June 25	0500	* 5,260	6.51
June 12	1600	4,140	5.76				

Minimum daily discharge, 105 ft^3/s Sept.18-19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	212	219	154	130	110	140	161	931	2660	3050	536	174
2	179	202	177	130	110	140	157	875	2730	2830	536	167
3	158	179	205	125	110	140	163	854	2580	3050	524	151
4	143	174	170	125	110	140	146	953	2670	2470	489	166
5	141	165	150	125	108	140	133	911	2670	2090	498	179
6	150	163	130	121	112	140	137	939	2650	1940	488	163
7	155	163	125	119	116	140	140	904	2790	1920	437	145
8	171	168	118	116	115	140	141	869	3180	2250	406	149
9	158	168	116	112	115	140	149	925	3230	1990	391	151
10	154	165	118	110	115	140	155	947	3350	1660	370	144
11	157	172	116	110	115	140	165	1440	3730	1380	336	136
12	155	163	112	110	120	155	171	1320	4000	1180	339	127
13	154	161	114	110	120	170	163	1090	3580	1050	358	123
14	150	161	114	110	120	190	158	955	2770	908	343	123
15	157	148	121	110	120	180	162	892	2650	838	324	123
16	180	148	119	110	115	175	172	843	2950	768	310	120
17	180	148	114	110	115	170	200	948	3200	674	293	112
18	178	150	121	110	115	168	252	972	3570	602	296	105
19	174	174	131	110	110	163	379	1080	4180	686	363	105
20	161	181	139	110	110	159	492	1050	4420	692	551	108
21	155	165	127	110	110	148	663	989	4470	1020	457	110
22	151	161	121	110	110	144	745	1110	4450	1220	351	111
23	148	152	131	110	110	152	841	1290	4390	1360	289	113
24	150	139	148	110	110	157	1210	1600	4500	1220	254	116
25	157	142	140	110	120	159	1640	1990	5040	866	226	120
26	164	137	140	110	130	152	1440	2280	4530	548	201	125
27	188	137	135	110	130	150	1090	2640	4290	740	191	121
28	179	135	133	110	140	154	1050	2980	4090	740	186	114
29	172	133	131	110	---	152	944	3020	3730	644	181	113
30	183	133	130	110	---	150	976	3170	3450	548	179	112
31	219	---	130	110	---	154	---	2780	---	542	179	---
TOTAL	5133	4806	4130	3523	3241	4742	14395	43547	106500	41476	10882	3926
MEAN	166	160	133	114	116	153	480	1405	3550	1338	351	131
MAX	219	219	205	130	140	190	1640	3170	5040	3050	551	179
MIN	141	133	112	110	108	140	133	843	2580	542	179	105
AC-FT	10180	9530	8190	6990	6430	9410	28550	86380	211200	82270	21580	7790

CAL YR 1982 TOTAL 223481 MEAN 612 MAX 3770 MIN 66 AC-FT 443300
WTR YR 1983 TOTAL 246301 MEAN 675 MAX 5040 MIN 105 AC-FT 488500

09241000 ELK RIVER AT CLARK, CO

LOCATION.--Lat 40°43'03", long 106°54'55", in NW¼NW¼ sec.27, T.9 N., R.85 W., Routt County, Hydrologic Unit 14050001, on left bank 30 ft downstream from bridge on State Highway 129, 0.8 mi north of Clark, and 2.0 mi upstream from Cottonwood Gulch.

DRAINAGE AREA.--206 mi².

PERIOD OF RECORD.--May 1910 to September 1922 (published as "near Clark"), April 1930 to current year. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 1733: 1956.

GAGE.--Water-stage recorder. Datum of gage is 7,267.75 ft, (State Highway Department bench mark). May 1910 to September 1922, nonrecording gage at site 30 ft upstream at datum 0.15 ft lower. Apr. 23, 1930, to Sept. 27, 1934, water-stage recorder at present site at datum 0.15 ft lower.

REMARKS.--Records good except those for winter period and those for period of no gage-height record, which are poor. Diversions above station for irrigation of about 230 acres above and about 460 acres below station. Natural flow of stream affected by storage in Lester Creek Reservoir (known also as Pearl Lake), capacity, 5,660 acre-ft since 1963 and Steamboat Lake, capacity, 23,060 acre-ft since 1968. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--65 years, 336 ft³/s; 243,400 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 4,470 ft³/s June 6, 9, 1912; minimum daily determined, 22 ft³/s Dec. 12, 1963, but a lesser discharge may have occurred during periods of no gage-height record prior to 1939.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,900 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
June 11	2300	3,530	5.19	June 25	0400	3,470	5.15
June 19	2200	* 3,710	5.34	July 3	0800	2,720	4.55

Minimum daily discharge, 62 ft³/s Jan. 31 to Feb. 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	304	153	90	70	62	78	110	276	1600	1790	251	124
2	290	139	90	70	62	75	100	276	1800	1770	261	122
3	270	104	82	70	62	80	96	276	1700	2260	318	121
4	280	137	80	70	62	78	110	280	2000	1660	386	166
5	309	113	86	70	62	78	110	322	1900	1530	408	154
6	288	118	80	70	62	78	100	365	1800	1540	338	126
7	235	117	80	70	62	77	110	313	1900	1640	287	122
8	309	132	80	70	62	77	90	313	2060	1900	259	133
9	292	132	80	70	62	77	80	474	2220	1800	250	131
10	276	128	78	68	62	77	90	716	2710	1760	243	121
11	139	128	78	68	78	82	96	780	3040	1500	217	116
12	141	117	78	68	70	91	99	644	2980	1280	270	111
13	162	108	78	68	72	94	94	510	1970	1250	245	108
14	268	108	76	68	74	99	93	486	1700	1190	212	108
15	276	99	76	68	74	96	98	444	1630	1010	197	110
16	284	90	76	68	76	90	104	498	1730	846	189	107
17	272	86	76	68	76	88	115	644	1940	780	184	102
18	260	86	76	68	78	91	117	652	2450	746	185	99
19	242	86	76	68	78	96	126	700	3020	721	271	99
20	232	86	74	72	80	100	122	836	2990	671	268	108
21	235	84	74	76	82	110	141	980	2810	677	216	101
22	235	84	74	76	82	110	153	1130	2590	659	187	102
23	232	84	74	74	82	100	172	1380	2430	713	174	100
24	232	84	74	66	82	98	197	1460	2350	591	161	101
25	203	84	74	70	82	100	249	1730	2880	475	157	120
26	143	82	72	72	82	110	304	1910	2320	427	150	110
27	200	82	72	70	80	120	318	2100	2270	426	143	110
28	153	82	72	68	78	120	288	2300	2230	362	139	109
29	132	80	72	66	---	110	272	2400	1950	319	140	107
30	148	90	72	64	---	110	276	2200	1900	284	136	111
31	157	---	70	62	---	110	---	1800	---	263	130	---
TOTAL	7199	3103	2390	2146	2026	2900	4430	29195	66870	32840	6972	3459
MEAN	232	103	77.1	69.2	72.4	93.5	148	942	2229	1059	225	115
MAX	309	153	90	76	82	120	318	2400	3040	2260	408	166
MIN	132	80	70	62	62	75	80	276	1600	263	130	99
AC-FT	14280	6150	4740	4260	4020	5750	8790	57910	132600	65140	13830	6860

CAL YR 1982 TOTAL 155294 MEAN 425 MAX 2040 MIN 48 AC-FT 308000
WTR YR 1983 TOTAL 163530 MEAN 448 MAX 3040 MIN 62 AC-FT 324400

NOTE.--NO GAGE-HEIGHT RECORD NOV. 18 TO JAN. 23.

09243700 MIDDLE CREEK NEAR OAK CREEK, CO

LOCATION.--Lat 40°23'08", long 106°59'33", in SW¼SW¼ sec.13, T.5 N., R.86 W., Routt County, Hydrologic Unit 1450001, on left bank 1.1 mi above mouth of Foidel Creek and 13.5 mi northwest of Oak Creek.

DRAINAGE AREA.--23.5 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1975 to September 1981, April 1982 to current year.

GAGE.--Water-stage recorder. Datum of gage is 6,720 ft, National Geodetic Vertical Datum of 1929.

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

AVERAGE DISCHARGE.--7 years (water years 1976-81, 83), 3.18 ft^3/s; 2,300 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 172 ft^3/s May 11, 1980, gage height, 3.21 ft, from rating curve extended above 45 ft^3/s; no flow many days each year.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 15 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
May 11	1415	* 36	2.17	May 25	0845	33	2.13

Minimum daily discharge, 0.02 ft^3/s, Sept. 21.-30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.78	.70	.55	.50	.50	.80	2.5	17	20	4.2	2.3	.53
2	.56	.70	.50	.50	.50	.85	2.3	20	18	3.8	2.4	.37
3	.45	.65	.50	.50	.45	.95	2.4	21	15	4.3	2.2	.45
4	.41	.70	.50	.50	.45	1.2	2.4	22	13	3.8	1.9	.56
5	.45	.70	.55	.55	.50	1.5	2.4	22	13	3.3	2.4	.53
6	.56	.70	.60	.55	.45	1.1	2.2	23	12	3.2	2.2	.33
7	.53	.70	.60	.55	.45	1.3	2.0	21	11	3.3	1.8	.33
8	.53	.84	.66	.55	.50	1.4	2.1	20	9.6	3.9	1.5	.45
9	.66	.84	.65	.55	.55	1.7	2.1	20	9.1	4.3	1.3	.45
10	.60	.84	.70	.50	.55	1.7	2.3	25	8.6	4.0	1.2	.33
11	.60	.97	.70	.50	.55	2.1	3.5	31	8.4	3.9	1.2	.29
12	.60	.84	.65	.50	.55	2.0	3.0	31	8.2	3.4	.96	.22
13	.60	.65	.65	.50	.60	2.5	3.0	27	8.2	3.1	1.0	.15
14	.56	.60	.70	.50	.60	3.0	2.8	24	7.3	2.9	.78	.19
15	.56	.55	.70	.50	.55	3.0	3.2	21	6.7	2.7	.84	.17
16	.53	.50	.66	.50	.55	2.0	3.5	21	6.3	2.5	1.7	.12
17	.56	.50	.66	.55	.55	2.5	4.1	24	5.8	2.2	3.6	.10
18	.56	.50	.66	.55	.60	2.5	5.6	22	5.5	2.0	5.5	.06
19	.53	.55	.66	.55	.60	2.0	8.0	20	5.2	2.1	1.3	.03
20	.56	.50	.66	.55	.60	2.0	8.7	18	4.5	2.0	.90	.03
21	.56	.50	.78	.50	.55	2.0	11	20	4.1	2.1	.78	.02
22	.60	.50	.75	.50	.60	2.1	13	22	4.1	2.3	.60	.02
23	.60	.50	.75	.50	.55	2.1	13	23	4.4	3.5	.53	.02
24	.66	.45	.70	.50	.60	2.1	14	27	5.0	4.0	.53	.02
25	.78	.50	.60	.55	.65	2.1	17	28	5.6	4.0	.49	.02
26	.72	.50	.50	.55	.65	2.0	16	28	8.7	3.8	.45	.02
27	.70	.45	.50	.55	.70	2.0	15	27	9.2	4.0	.41	.02
28	.65	.45	.50	.55	.70	2.0	15	24	8.2	5.1	.45	.02
29	.60	.50	.50	.55	---	2.0	15	22	6.0	3.8	.49	.02
30	.65	.50	.50	.55	---	2.0	17	21	4.9	3.1	.49	.02
31	.70	---	.50	.50	---	2.6	---	19	---	2.5	.53	---
TOTAL	18.41	18.38	19.09	16.25	15.65	59.10	214.1	711	255.6	103.1	42.73	5.89
MEAN	.59	.61	.62	.52	.56	1.91	7.14	22.9	8.52	3.33	1.38	.20
MAX	.78	.97	.78	.55	.70	3.0	17	31	20	5.1	5.5	.56
MIN	.41	.45	.50	.50	.45	.80	2.0	17	4.1	2.0	.41	.02
AC-FT	37	36	38	32	31	117	425	1410	507	204	85	12

WTR YR 1983 TOTAL 1479.30 MEAN 4.05 MAX 31 MIN .02 AC-FT 2930

09243700 MIDDLE CREEK NEAR OAK CREEK, CO--Continued

WATER-QUALITY RECORDS

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

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: April 1976 to September 1981 (discontinued).
WATER TEMPERATURES: April 1976 to September 1981 (discontinued).

INSTRUMENTATION.--Water-quality monitor April 1976 to September 1981.

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

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 1,880 micromhos May 29, 1981; minimum, 117 micromhos Aug. 10, 1978.
WATER TEMPERATURES: Maximum, 31.5°C July 31, 1976; minimum, freezing point on many days during winter months.

WATER QUALITY DATA, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	SPE-CIFIC CON-DUCT-ANCE LAB (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
NOV										
17...	0910	.51	825	860	8.2	.0	10.9	400	95	40
FEB										
11...	1450	.61	700	720	8.3	.0	--	310	74	31
MAR										
22...	1040	2.1	700	723	8.2	.5	11.0	320	74	32

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)
NOV										
17...	43	1	3.2	344	150	5.0	.20	10	550	.75
FEB										
11...	38	1	2.6	272	130	4.4	.20	9.8	450	.62
MAR										
22...	35	.9	2.7	254	140	5.1	.20	8.8	450	.61

DATE	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	BORON, DIS-SOLVED (UG/L AS B)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)
NOV										
17...	.76	<.020	.130	.110	.49	.60	.020	<.010	50	750
FEB										
11...	.75	<.020	.430	.110	.39	.50	.030	.020	30	600
MAR										
22...	2.6	<.020	.140	.110	.59	.70	.020	.020	40	590

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

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)
MAR					JUL				
22...	1040	2.1	188	1.1	26...	1050	4.0	399	4.3
APR					SEP				
27...	1050	17	592	27	12...	0830	.30	119	.10
MAY									
25...	0905	30	460	37					

09243800 FOIDEL CREEK NEAR OAK CREEK, CO

LOCATION.--Lat 40°20'45", long 107°05'04", in NW¼SW¼ sec.31, T.5 N., R.86 W., Routt County, Hydrologic Unit 14050001, on right bank 2.3 mi downstream from Reservoir No. 1, 6.9 mi upstream from mouth, and 8.7 mi northwest of Oak Creek.

DRAINAGE AREA.--8.61 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1975 to Oct. 1981, April 1982 to September 1983 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 6,880 ft, from topographic map.

REMARKS.--Records poor.

AVERAGE DISCHARGE.--7 years (water years 1976-81, 1983), 0.79 ft^3/s; 572 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 55 ft^3/s Apr. 21, 1980, gage height, 3.38 ft; no flow many days most years.

EXTREMES FOR CURRENT PERIOD.--Maximum discharge, 24 ft^3/s at 1900 April 24, gage height, 2.92 ft; no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.08	.03	.01	.30	.40	.80	.80	5.4	1.8	.29	.65	.29
2	.08	.02	.01	.30	.40	.80	.70	7.6	2.1	.21	.59	.23
3	.07	.02	.02	.30	.20	1.5	.60	5.8	1.6	.20	.51	.14
4	.07	.01	.02	.40	.20	1.4	.60	7.0	1.3	.20	.40	.13
5	.04	.01	.02	.50	.30	1.1	.60	5.2	1.3	.19	.31	.13
6	.03	.01	.02	.50	.20	.69	.70	5.2	1.4	.20	.21	.10
7	.04	.02	.02	.50	.20	.48	.70	5.1	1.2	.18	.13	.07
8	.02	.02	.02	.60	.30	.44	.80	4.5	.78	.18	.08	.05
9	.01	.02	.01	.60	.30	.41	1.0	4.1	.70	.17	.05	.05
10	.01	.02	.01	.60	.30	.67	1.5	4.0	.58	.17	.03	.04
11	.01	.02	.01	.60	.30	1.3	.92	4.2	.62	.13	.00	.03
12	.01	.02	.01	.50	.40	2.4	.75	4.3	.66	.09	.00	.00
13	.01	.02	.01	.40	.40	4.4	.71	4.2	.76	.06	.02	.00
14	.01	.02	.01	.40	.40	2.4	.65	4.0	.61	.04	.02	.00
15	.01	.01	.05	.40	.40	2.9	.65	3.7	.47	.01	.02	.00
16	.01	.01	.10	.40	.50	2.6	.80	3.7	.36	.00	.00	.00
17	.01	.01	.50	.50	.50	1.3	2.4	4.0	.29	.00	.00	.00
18	.01	.01	1.0	.50	.60	1.2	4.5	3.8	.22	.00	.31	.00
19	.01	.01	1.0	.60	.50	1.2	7.8	3.3	.19	.00	.31	.00
20	.01	.01	1.5	.60	.60	1.1	8.3	2.9	.17	.00	.64	.00
21	.01	.01	2.0	.40	.60	.90	11	2.4	.13	.00	.64	.00
22	.01	.02	2.0	.50	.70	.80	14	2.2	.08	.00	.52	.00
23	.01	.02	2.0	.40	.60	.80	15	2.2	.07	.20	.45	.00
24	.01	.02	1.5	.40	.70	.80	14	1.9	.14	.50	.90	.00
25	.01	.02	1.0	.50	.80	.60	13	1.9	.20	1.5	.83	.00
26	.01	.02	.50	.60	.80	.60	8.7	1.8	.75	1.2	.65	.00
27	.01	.02	.30	.60	.80	.60	6.5	1.5	2.8	1.5	.49	.00
28	.01	.01	.30	.60	.80	.60	6.3	1.2	1.9	1.9	.34	.00
29	.01	.01	.30	.50	---	.60	5.6	1.1	.77	1.3	.25	.00
30	.01	.01	.30	.60	---	.70	6.0	1.0	.45	1.0	.24	.00
31	.01	---	.30	.40	---	1.0	---	1.1	---	.76	.29	---
TOTAL	.66	.48	14.85	15.00	13.20	37.09	135.58	110.3	24.40	12.18	9.88	1.26
MEAN	.021	.016	.48	.48	.47	1.20	4.52	3.56	.81	.39	.32	.042
MAX	.08	.03	2.0	.60	.80	4.4	15	7.6	2.8	1.9	.90	.29
MIN	.01	.01	.01	.30	.20	.41	.60	1.0	.07	.00	.00	.00
AC-FT	1.3	1.0	29	30	26	74	269	219	48	24	20	2.5

WTR YR 1983 TOTAL 374.88 MEAN 1.03 MAX 15 MIN .00 AC-FT 744

NOTE.--NO GAGE-HEIGHT RECORD NOV. 15 TO MAR. 3.

09243800 FOIDEL CREEK NEAR OAK CREEK, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--September 1975 to September 1983 (discontinued).

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: May 1976 to September 1981, April 1982 to September 1983 (discontinued).
WATER TEMPERATURES: May 1976 to September 1981, April 1982 to September 1983 (discontinued).

INSTRUMENTATION.--Water-quality monitor since May 1976.

REMARKS.--Daily maximum and minimum specific-conductance data available in district office. Current year extremes based on 72 percent specific conductance data and 76 percent water temperature data.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 2,880 micromhos Jan. 23, 1983; minimum, 200 micromhos Apr. 21, 22, 1980.
WATER TEMPERATURES: Maximum, 31.5°C July 30, 1983; minimum, 0.0°C during winter period when flowing each year.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 2,880 micromhos Jan.23; minimum, 350 micromhos April 18.
WATER TEMPERATURES: Maximum, 31.5°C July 30; minimum, 0.0°C during December and January.

WATER QUALITY DATA, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	SPE-CIFIC CON-DUCT-ANCE LAB (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
NOV										
17...	1215	.01	1450	1500	7.7	1.5	9.1	750	170	80
DEC										
22...	1330	2.2	2350	2370	8.1	.0	9.9	1300	270	160
FEB										
11...	1340	.32	1830	1870	7.9	.5	--	870	190	95
MAR										
22...	1315	.80	1560	1590	7.9	5.0	10.4	750	160	86
MAY										
02...	1150	5.9	656	665	8.4	8.5	11.0	290	60	33
25...	1230	1.9	833	823	8.3	16.0	10.9	380	78	46
JUN										
08...	1130	1.0	915	893	8.2	16.0	9.4	420	85	50
16...	1600	.57	1110	910	8.0	20.0	--	450	91	54
JUL										
26...	1415	1.1	1050	987	--	21.0	8.5	460	77	66

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)
NOV										
17...	65	1	2.9	434	460	9.8	.20	11	1100	1.4
DEC										
22...	78	1	8.8	355	1100	12	.20	7.8	1900	2.5
FEB										
11...	100	2	5.3	374	630	8.0	.20	9.5	1300	1.7
MAR										
22...	83	1	4.5	290	600	9.5	.20	6.8	1100	1.5
MAY										
02...	32	.8	3.4	145	200	3.7	.20	6.8	430	.58
25...	35	.8	3.5	209	250	4.4	.20	2.5	550	.74
JUN										
08...	39	.9	3.6	241	270	5.1	.20	2.8	600	.82
16...	43	.9	3.8	259	290	4.9	.20	4.6	650	.88
JUL										
26...	44	.9	5.2	212	310	41	.30	4.1	680	.92

09243800 FOIDEL CREEK NEAR OAK CREEK, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	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)	BORON, DIS-SOLVED (UG/L AS B)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)
NOV										
17...	.03	<.100	<.010	60	1800	80	990	910	7.4	7.4
DEC										
22...	11	16.0	.010	100	460	40	490	500	--	--
FEB										
11...	1.1	29.0	.020	70	540	22	590	580	--	--
MAR										
22...	2.4	8.90	.020	70	1200	14	380	360	8.7	9.0
MAY										
02...	6.8	1.20	.020	40	1900	160	80	51	7.0	10
25...	2.8	.560	.010	50	760	33	130	100	--	--
JUN										
08...	1.6	.130	<.010	60	1700	42	310	250	--	--
16...	1.0	<.100	--	--	--	--	--	--	--	--
JUL										
26...	2.0	<.100	.020	130	1400	16	180	120	--	--

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)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)
NOV										
17...	1215	300	10	1	<1	<1	<1	2	1	1
MAR										
22...	1315	510	10	--	--	--	--	--	--	<1
MAY										
02...	1150	1500	220	1	1	<1	<1	7	8	1

DATE	LEAD, DIS-SOLVED (UG/L AS PB)	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)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
NOV										
17...	1	.1	<.1	<1	<1	2	<1	<1	20	27
MAR										
22...	<1	--	--	--	--	--	--	--	20	9
MAY										
02...	2	<.1	<.1	<1	<1	4	2	2	30	8

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

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
NOV						MAY					
17...	1215	.01	146	.00	--	25...	1230	1.9	192	.99	--
DEC						JUN					
22...	1330	2.2	65	.39	--	08...	1130	1.0	119	.32	--
MAR						JUL					
22...	1315	.80	138	.30	--	26...	1415	1.1	141	.42	--
MAY											
02...	1150	5.9	82	1.3	81						

09243800 FOIDEL CREEK NEAR OAK CREEK, CO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1330	1240	1450	2240		---	1380	654	895	934	1080	1070
2	1330	1250	1430	2280		---	1380	646	893	948	1070	---
3	1330	1300	1400	2290		---	1390	665	859	973	1080	---
4	1340	1320	1380	2040		---	1410	664	852	976	---	---
5	1340	1340	1370	1940		---	1420	664	860	992	---	---
6	1320	1350	1350	1990		---	1450	698	875	962	---	---
7	1330	1370	1350	1990		---	1460	715	884	975	---	---
8	1340	1370	1350	1980		---	1430	758	897	1020	---	---
9	1330	1350	1370	1930		---	1460	773	882	1040	---	---
10	1340	1340	1400	1880		---	1390	805	878	---	---	---
11	1360	1340	1390	1870		---	1130	824	877	---	---	---
12	1360	1320	1380	1990		1150	1130	829	886	---	---	---
13	1340	1310	1380	2040		1180	1190	826	904	---	---	---
14	1340	1320	1390	2100		1150	1210	817	913	---	---	---
15	1340	1340	1380	2030		1190	1200	808	---	---	---	---
16	1340	1410	1360	1090		1280	1090	801	---	---	---	---
17	1340	1460	1620	975		1350	698	806	---	---	---	---
18	1340	1470	2000	988		1400	532	791	---	---	---	---
19	1340	1480	2080	1030		1440	522	788	---	---	---	---
20	1360	1460	2150	977		1460	562	785	---	---	1040	---
21	1350	1440	2170	1260		1500	524	788	---	---	1090	---
22	1360	1420	2170	2270		1560	468	792	---	---	1100	---
23	1350	1400	---	2240		1670	491	794	---	---	1080	---
24	1330	1380	---	---		1670	521	801	---	---	1060	---
25	1330	1380	---	---		1640	552	804	905	---	1070	---
26	1320	1380	---	---		1580	598	819	909	1030	1080	---
27	1320	1390	---	---		1520	616	824	915	10	1080	---
28	1280	1440	---	---		1560	633	830	930	10 .0	1100	---
29	1320	1480	2300	---		1510	642	834	952	1070	---	---
30	1310	1470	2290	---		1480	652	849	959	1080	1070	---
31	1280	---	2290	---		1410	---	827	---	1080	1080	---
MEAN	1330	1380	1650	1800		1440	971	777	896	1010	1080	1070

WTR YR 1983 MEAN 1240 MAX 2300 MIN 468

09243800 FOIDEL CREEK NEAR OAK CREEK, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	11.0	8.5	6.0	3.5	.5	.5	1.0	.5	1.0	1.0	---	---
2	13.0	7.5	5.0	2.5	.5	.5	1.0	.5	1.0	1.0	---	---
3	12.5	6.0	5.0	2.0	1.0	.5	1.0	.0	1.0	1.0	1.0	1.0
4	13.0	6.5	6.5	3.0	1.0	.5	.5	.5	1.0	.5	1.0	1.0
5	10.0	7.0	6.0	3.0	1.0	.5	.5	.5	1.0	1.0	1.0	1.0
6	12.0	8.0	6.0	2.5	1.0	.5	.5	.5	1.0	1.0	1.0	1.0
7	11.5	5.0	5.5	2.5	1.0	.5	.5	.5	1.0	.5	1.5	1.0
8	8.5	5.0	5.0	3.5	.5	.5	.5	.5	1.0	1.0	1.5	1.5
9	6.5	4.0	7.0	4.0	.5	.5	.5	.5	1.0	1.0	1.5	1.5
10	8.5	2.5	7.5	4.0	.5	.5	.5	.5	1.0	1.0	1.5	1.0
11	8.5	2.5	5.5	3.0	.5	.5	.5	.5	1.0	.5	1.0	1.0
12	9.5	3.5	5.5	2.5	.5	.5	.5	.5	---	---	1.5	1.0
13	11.0	4.5	5.0	2.5	.5	.5	.5	.5	---	---	2.0	1.0
14	10.5	4.0	4.0	3.0	.5	.5	.5	.5	---	---	2.5	1.0
15	11.5	4.0	3.0	2.0	.5	.5	.5	.5	---	---	1.5	.5
16	11.5	4.5	2.0	1.5	.5	.5	1.0	.5	---	---	3.0	1.0
17	10.5	4.0	2.5	1.0	.5	.0	1.0	.5	---	---	3.5	1.0
18	11.5	6.0	2.0	1.0	.0	.0	1.0	1.0	---	---	4.5	1.0
19	9.5	3.5	2.0	1.0	.0	.0	1.0	.5	---	---	4.5	1.0
20	9.0	2.5	1.5	1.0	.0	.0	1.0	.5	---	---	3.5	1.0
21	9.0	3.0	1.0	1.0	.0	.0	1.0	.5	---	---	6.5	1.0
22	6.5	3.0	1.0	1.0	.0	.0	1.0	.5	---	---	6.5	1.0
23	8.5	3.0	1.0	1.0	.0	.0	1.0	.5	---	---	9.5	1.5
24	10.0	4.0	1.0	1.0	.0	.0	1.0	.5	---	---	6.5	1.0
25	9.0	6.5	1.0	1.0	.0	.0	1.0	1.0	---	---	5.0	1.5
26	7.5	4.5	1.0	1.0	.0	.0	1.0	1.0	---	---	8.0	1.0
27	6.0	3.5	1.0	.5	.0	.0	1.0	.5	---	---	9.5	1.5
28	7.5	2.5	1.0	.5	.5	.0	1.0	.5	---	---	8.0	3.0
29	4.5	2.0	.5	.5	.5	.0	1.0	.5	---	---	10.5	1.5
30	6.5	3.5	.5	.5	.5	.5	1.0	.5	---	---	10.5	2.5
31	6.0	4.5	---	---	.5	.5	1.0	.5	---	---	5.5	2.0
MONTH	13.0	2.0	7.5	.5	1.0	.0	1.0	.0	1.0	.5	10.5	.5

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	9.0	1.0	---	---	15.0	11.0	---	---	27.0	16.5	28.5	13.0
2	8.0	1.5	---	---	14.5	10.5	---	---	27.5	16.0	---	---
3	7.5	1.0	12.5	7.0	20.5	9.5	---	---	28.0	15.5	---	---
4	6.5	1.0	16.0	6.0	18.5	11.5	---	---	---	---	---	---
5	8.5	1.0	15.0	7.5	23.0	11.5	---	---	---	---	---	---
6	9.0	1.0	13.0	6.5	22.0	11.0	---	---	---	---	---	---
7	9.0	1.0	17.5	7.0	20.0	10.5	---	---	---	---	---	---
8	10.0	1.5	18.0	8.0	23.0	12.5	---	---	---	---	---	---
9	11.0	3.5	19.0	9.0	22.0	11.5	---	---	---	---	---	---
10	13.5	3.0	18.0	8.5	15.0	10.5	---	---	---	---	---	---
11	7.5	2.5	15.0	9.5	17.0	9.0	---	---	---	---	---	---
12	8.5	2.5	15.0	8.0	22.5	9.0	---	---	---	---	---	---
13	12.0	1.5	16.0	7.0	25.0	10.0	---	---	---	---	---	---
14	12.0	1.5	12.0	7.5	23.5	12.0	---	---	---	---	---	---
15	12.5	1.0	13.5	7.0	---	---	---	---	---	---	---	---
16	13.0	1.5	12.0	7.5	---	---	---	---	---	---	---	---
17	13.0	.5	9.5	6.0	---	---	---	---	---	---	---	---
18	9.5	.5	13.0	5.0	---	---	---	---	---	---	---	---
19	10.5	2.0	16.0	8.0	---	---	---	---	---	---	---	---
20	9.5	.5	18.0	6.5	---	---	---	---	24.0	16.0	---	---
21	10.0	2.0	16.0	8.5	---	---	---	---	27.5	14.5	---	---
22	7.5	3.0	17.0	9.5	---	---	---	---	29.5	15.5	---	---
23	11.0	3.0	20.5	9.0	---	---	---	---	26.0	14.5	---	---
24	11.0	4.5	21.5	9.5	---	---	---	---	27.0	14.5	---	---
25	---	---	19.5	10.5	19.0	15.0	---	---	26.5	15.5	---	---
26	---	---	20.5	11.0	23.0	14.5	---	---	28.5	15.0	---	---
27	---	---	23.0	12.0	26.0	10.5	22.0	17.5	29.5	14.0	---	---
28	---	---	21.0	13.5	28.5	7.0	28.5	16.5	25.0	13.5	---	---
29	---	---	20.0	11.5	27.0	4.0	29.5	16.0	21.5	13.5	---	---
30	---	---	15.0	12.5	---	---	31.5	17.0	26.0	12.5	---	---
31	---	---	18.0	10.5	---	---	26.0	16.5	28.0	13.5	---	---
MONTH	13.5	.5	23.0	5.0	28.5	4.0	31.5	16.0	29.5	12.5	28.5	13.0
YEAR	31.5	.0										

09243900 FOIDEL CREEK AT MOUTH, NEAR OAK CREEK, CO

LOCATION.--Lat 40°23'25", long 106°59'39", in SE¼SE¼ sec.14, T.5 N., R.86 W., Routt County, Hydrologic Unit 14050001, on left bank 0.9 mi upstream from mouth and 13.6 mi northwest of Oak Creek.

DRAINAGE AREA.--17.5 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1975 to September 1981, June 1982 to current year.

REVISED RECORDS.--WDR CO-78-3: 1976 (M), 1976.

GAGE.--Water-stage recorder. Altitude of gage is 6,730 ft, from topographic map.

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

AVERAGE DISCHARGE.--7 years (water years 1976-81, 83), 2.05 ft^3/s; 1,480 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 90 ft^3/s Apr. 22, 1980, gage height, 5.18 ft; no flow many days most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 44 ft^3/s at 2200 Aug. 18, gage height, 3.94 ft; minimum daily, 0.06 ft^3/s, Oct. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.06	1.5	1.9	1.0	1.5	3.9	3.0	11	11	3.7	3.4	.61
2	.10	1.7	1.8	1.0	1.5	4.0	3.0	12	11	3.7	3.3	.52
3	.13	1.9	1.8	1.0	1.2	4.2	3.2	13	5.4	3.7	3.0	.48
4	.16	2.1	1.5	1.1	1.2	4.2	3.0	15	4.5	3.4	9.0	.45
5	.20	2.0	1.5	1.5	1.3	2.0	2.8	12	5.3	2.9	5.6	.41
6	.23	2.0	.66	2.0	1.2	1.0	2.7	9.5	5.5	2.6	3.4	.34
7	.23	2.0	.71	2.0	1.3	1.6	2.5	9.4	5.3	2.3	3.3	.31
8	.23	1.9	.75	2.0	1.4	1.9	2.3	8.2	4.3	2.0	3.2	.31
9	.28	2.0	.75	2.0	1.6	2.9	2.1	7.0	4.2	1.8	3.1	.23
10	.25	2.1	1.0	1.5	1.5	2.5	3.4	6.4	4.2	1.7	2.8	.25
11	.25	2.1	1.0	1.5	1.5	3.0	4.3	6.2	4.0	1.8	2.4	.23
12	.25	2.1	1.0	1.5	1.5	4.5	3.4	6.7	3.8	1.7	2.2	.20
13	.25	2.1	1.5	1.5	1.5	14	3.1	6.5	3.9	2.1	2.2	.20
14	.23	2.1	1.5	1.5	1.5	11	3.1	6.1	3.7	1.9	2.1	.20
15	.19	2.1	2.1	1.5	1.5	7.0	3.0	5.9	3.4	1.9	1.9	.20
16	.19	2.1	2.2	1.5	1.7	4.5	3.2	7.2	3.1	2.1	1.7	.20
17	.19	2.1	2.4	1.5	1.8	3.5	6.0	9.6	2.9	2.0	1.5	.20
18	.19	2.1	2.6	1.7	2.0	3.5	11	8.7	2.6	1.9	5.4	.20
19	.17	2.1	2.5	2.0	2.2	3.4	21	7.4	2.4	1.8	8.3	.20
20	.19	2.0	2.5	2.0	2.3	3.2	18	6.2	2.1	2.1	3.5	.20
21	.19	2.0	3.0	1.5	2.5	2.8	21	5.5	1.9	2.1	2.2	.20
22	.19	2.0	3.2	1.7	2.7	2.2	24	5.1	1.6	2.7	2.2	.20
23	.19	2.0	3.2	1.5	2.9	2.1	23	4.6	1.5	2.8	2.1	.20
24	.21	2.0	2.5	1.5	3.0	2.3	26	4.3	1.5	3.0	2.0	.20
25	.21	2.0	2.0	1.6	3.2	2.1	23	4.1	2.4	3.1	1.7	.20
26	.21	1.9	1.5	1.7	3.4	1.9	16	4.0	8.2	3.3	1.5	.20
27	.20	1.9	1.0	1.7	3.5	1.7	11	4.0	12	3.4	1.3	.20
28	.40	1.9	1.0	1.7	3.7	1.7	11	4.0	11	3.4	1.1	.20
29	.80	1.9	1.0	1.5	---	1.7	10	3.9	4.7	3.4	.94	.20
30	1.1	1.9	1.0	1.7	---	1.7	12	3.9	3.9	3.4	.88	.20
31	1.3	---	1.0	1.5	---	2.9	---	3.9	---	3.4	.71	---
TOTAL	8.97	59.6	52.07	48.9	56.1	108.9	281.1	221.3	141.3	81.1	87.93	7.94
MEAN	.29	1.99	1.68	1.58	2.00	3.51	9.37	7.14	4.71	2.62	2.84	.26
MAX	1.3	2.1	3.2	2.0	3.7	14	26	15	12	3.7	9.0	.61
MIN	.06	1.5	.66	1.0	1.2	1.0	2.1	3.9	1.5	1.7	.71	.20
AC-FT	18	118	103	97	111	216	558	439	280	161	174	16

WTR YR 1983 TOTAL 1155.21 MEAN 3.16 MAX 26 MIN .06 AC-FT 2290

09243900 FOIDEL CREEK AT MOUTH, NEAR OAK CREEK, CO--CONTINUED

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1976 to September 1981, June 1982 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: April 1976 to September 1981.
WATER TEMPERATURE: April 1976 to September 1981.
SUSPENDED SEDIMENT DISCHARGE: April 1976 to September 1981.

INSTRUMENTATION.--Water-quality monitor since April 1976.

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

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 3,520 micromhos Aug. 10, 11, 1980; minimum, 255 micromhos July 1, 1980.
WATER TEMPERATURES: Maximum, 28.5°C July 22, 1980; minimum, 0.0°C several days during winter period each year.
SEDIMENT CONCENTRATIONS: Maximum daily, 3,650 mg/L Apr. 2, 1981; no flow many days most years.
SEDIMENT LOADS: Maximum daily, 702 tons Apr. 23, 1980; no flow many days most years.

WATER QUALITY DATA, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	SPE-CIFIC CON-DUCT-ANCE LAB (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	NITRO-GEN DIS-SOLVED (MG/L AS N)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
NOV											
17...	1040	4.5	3250	3330	8.0	.0	11.2	6.7	2300	480	260
FEB											
11...	1600	1.5	2820	2850	8.1	.5	--	5.3	1600	330	190

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)
NOV											
17...	110	1	8.4	291	2100	10	.20	4.2	3200	4.3	39
FEB											
11...	130	1	5.7	320	1500	7.4	.20	6.9	2400	3.2	9.7

DATE	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	BORON, DIS-SOLVED (UG/L AS B)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)
NOV										
17...	4.88	.020	4.90	.110	1.7	1.8	.010	<.010	180	5500
FEB										
11...	3.96	.040	4.00	.310	.99	1.3	.020	.010	140	4400

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

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)
MAR					JUL				
22...	1155	2.1	203	1.1	26...	1155	3.4	335	3.1
APR					SEP				
27...	1305	11	556	17	12...	0940	.21	184	.10
MAY									
25...	1040	4.4	210	2.5					

09244410 YAMPA RIVER BELOW DIVERSION, NEAR HAYDEN, CO

LOCATION.--Lat 40°29'18", long 107°09'33", in NW¼SW¼ sec.9, T.6 N., R.87W., Routt County, Hydrologic Unit 14050001, in bay of Colorado-Ute Electric Co. pumphouse on left bank 300 ft downstream from U.S. Highway 40, 0.1 mi upstream from Sage Creek, 0.5 mi downstream from diversion point of Gibraltar Canal, and 4.7 mi east of Hayden.

DRAINAGE AREA.--1,430 mi^2, approximately.

PERIOD OF RECORD.--Streamflow records, October 1965 to current year. Prior to October 1972, records included flow in Gibraltar Canal. Water-quality data available, June 1975 to September 1982.

GAGE.--Water-stage recorder. Altitude of gage is 6,380 ft, from topographic map.

REMARKS.--Records good except those for winter period and those for period of no gage-height record, which are fair. Records show flow of river below Gibraltar Canal diversion. Natural flow of stream affected by diversions for irrigation of about 30,000 acres above and 200 acres below station, transbasin diversions, storage reservoirs, and return flow from irrigated areas. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--19 years, 1,062 ft^3/s, 769,400 acre-ft/yr; does not include flow in Gibraltar Canal.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,500 ft^3/s Apr. 27, 1974, gage height, 11.90 ft, from rating curve extended above 12,000 ft^3/s; minimum daily, 5.1 ft^3/s July 19, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 10,200 ft^3/s at 1500 June 25, gage height, 10.17 ft; minimum daily, 172 ft^3/s Sept. 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	637	494	320	250	270	290	263	2150	5910	6200	1100	285
2	616	428	310	250	270	290	267	2040	6070	5800	1100	280
3	574	370	310	250	270	290	276	1980	5510	6200	1100	274
4	536	365	310	250	270	290	254	1840	5220	5200	1100	278
5	518	315	330	240	270	290	241	2210	5460	4200	1150	356
6	524	345	370	240	270	290	237	2230	5420	3900	1090	325
7	489	345	400	240	270	290	237	2030	5480	3800	871	281
8	512	355	340	240	270	290	245	2010	5220	4500	759	268
9	524	365	300	240	270	290	258	2350	5670	4000	695	286
10	489	360	300	240	270	290	267	3070	6400	3400	693	282
11	450	365	290	250	270	290	295	3470	7400	3000	601	264
12	375	350	290	250	270	320	310	3210	8800	2500	628	238
13	360	330	290	250	270	350	276	2600	6600	2200	675	226
14	412	330	290	250	270	370	263	2270	5580	1900	590	222
15	461	330	290	250	270	350	267	2070	5300	1700	531	222
16	500	330	280	250	280	330	290	2010	5620	1600	500	211
17	500	330	280	250	280	320	340	2230	5710	1400	482	200
18	489	340	280	250	280	300	456	2170	5750	1300	498	182
19	461	400	280	250	280	290	707	2200	5750	1200	633	172
20	423	460	280	250	280	270	966	2220	5750	1400	859	182
21	417	390	270	260	280	280	1500	2260	6560	2000	742	200
22	406	350	270	260	280	290	1700	2500	8850	2400	601	197
23	401	330	270	260	280	300	1760	2890	8740	2700	498	193
24	395	330	270	260	280	290	2320	3700	8450	2500	447	197
25	406	330	270	260	280	285	3110	4670	9630	1900	402	201
26	385	320	260	260	290	272	3080	5310	9140	1200	375	204
27	434	320	260	260	290	263	2360	6400	8190	1500	349	208
28	439	320	260	260	290	267	2160	7400	8480	1400	323	205
29	380	320	260	260	---	254	2160	7900	7500	1300	317	205
30	395	320	260	260	---	249	2290	6880	6790	1200	317	221
31	456	---	250	260	---	263	---	6210	---	1100	296	---
TOTAL	14364	10637	9040	7800	7720	9103	29155	102480	200950	84600	20322	7065
MEAN	463	355	292	252	276	294	972	3306	6698	2729	656	236
MAX	637	494	400	260	290	370	3110	7900	9630	6200	1150	356
MIN	360	315	250	240	270	249	237	1840	5220	1100	296	172
AC-FT	28490	21100	17930	15470	15310	18060	57830	203300	398600	167800	40310	14010

CAL YR 1982 TOTAL 432285 MEAN 1184 MAX 5600 MIN 130 AC-FT 857400
WTR YR 1983 TOTAL 503236 MEAN 1379 MAX 9630 MIN 172 AC-FT 998200

NOTE.--NO GAGE-HEIGHT RECORD JULY 1 TO AUG. 4.

09244415 SAGE CREEK ABOVE SAGE CREEK RESERVOIR, NEAR HAYDEN, CO

LOCATION.--Lat 40°23'01", long 107°11'34", in NE¼NW¼ sec.19, T.5N, R.87W., in Routt County, Hydrologic Unit 14050001, on right bank 0.8 mi upstream from Sage Creek Reservoir and 8.5 mi south of Hayden.

DRAINAGE AREA.--4.17 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1981 to September 1983 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 7,220 ft, from topographic map. Prior to June 4, 1982, at datum 1.00 ft, higher.

REMARKS.--Records fair.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 15 ft³/s Apr. 24, 1983; maximum recorded gage height, 2.38 ft, Nov. 27, 1983 (backwater from ice), datum then in use; no flow many days each year.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 15 ft³/s; minimum daily, 0.01 ft³/s, many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.04	.07	.03	.01	.02	.10	.10	8.0	5.1	.60	.30	.15
2	.03	.04	.02	.01	.02	.15	.10	7.8	4.6	.61	.30	.15
3	.01	.04	.02	.01	.02	.10	.09	7.5	3.8	.82	.26	.15
4	.03	.04	.02	.01	.01	.10	.09	8.0	3.5	.77	.26	.19
5	.03	.04	.02	.02	.02	.10	.08	8.5	3.3	.61	.22	.15
6	.03	.04	.02	.02	.02	.10	.08	8.0	3.4	.61	.18	.12
7	.03	.04	.02	.02	.02	.10	.06	8.0	3.2	.62	.18	.12
8	.04	.04	.02	.02	.02	.10	.07	8.0	2.9	.62	.18	.16
9	.04	.04	.02	.02	.02	.10	.10	8.5	2.6	.98	.19	.13
10	.04	.10	.02	.02	.02	.15	.15	8.5	2.4	.92	.19	.16
11	.04	.10	.02	.01	.03	.15	.15	8.0	2.4	.62	.19	.16
12	.04	.10	.01	.01	.03	.15	.10	7.5	2.6	.52	.19	.16
13	.03	.10	.01	.01	.03	.15	.10	7.0	2.5	.42	.19	.16
14	.03	.05	.01	.01	.04	.15	.15	7.0	2.4	.42	.19	.10
15	.03	.05	.01	.01	.03	.10	.15	7.0	1.8	.37	.20	.10
16	.03	.04	.01	.01	.03	.10	.25	7.0	1.7	.37	.20	.10
17	.03	.04	.01	.02	.03	.10	2.5	7.5	1.7	.32	.49	.10
18	.03	.04	.01	.02	.04	.10	4.0	7.4	1.4	.32	.49	.10
19	.03	.05	.01	.02	.04	.09	4.5	7.4	1.2	.43	.20	.10
20	.03	.04	.01	.02	.04	.08	5.0	7.0	1.2	.43	.34	.10
21	.03	.04	.01	.01	.05	.06	8.0	7.0	1.0	.38	.29	.10
22	.03	.03	.01	.02	.05	.05	9.0	7.0	1.0	.44	.25	.10
23	.03	.03	.01	.01	.05	.06	10	7.5	1.1	.60	.21	.10
24	.03	.02	.01	.01	.05	.05	15	7.4	1.2	.55	.17	.10
25	.03	.03	.01	.02	.06	.06	12	7.2	1.6	.44	.17	.10
26	.03	.02	.01	.02	.07	.06	9.5	7.2	1.2	.50	.17	.16
27	.03	.02	.01	.02	.07	.06	8.0	5.7	1.7	.55	.17	.13
28	.03	.01	.01	.02	.07	.06	7.0	4.8	1.6	.40	.14	.10
29	.03	.02	.01	.02	---	.05	8.5	4.4	1.0	.29	.14	.10
30	.04	.03	.01	.02	---	.04	9.0	4.2	.65	.25	.14	.13
31	.07	---	.01	.02	---	.10	---	3.8	---	.21	.15	---
TOTAL	1.02	1.35	.43	.49	1.00	2.92	113.82	219.8	65.75	15.99	6.94	3.78
MEAN	.033	.045	.014	.016	.036	.094	3.79	7.09	2.19	.52	.22	.13
MAX	.07	.10	.03	.02	.07	.15	15	8.5	5.1	.98	.49	.19
MIN	.01	.01	.01	.01	.01	.04	.06	3.8	.65	.21	.14	.10
AC-FT	2.0	2.7	.9	1.0	2.0	5.8	226	436	130	32	14	7.5

CAL YR 1982 TOTAL 247.30 MEAN .68 MAX 11 MIN .00 AC-FT 491
WTR YR 1983 TOTAL 433.29 MEAN 1.19 MAX 15 MIN .01 AC-FT 859

NOTE.--NO GAGE-HEIGHT RECORD APR. 6 TO MAY 25.

09244415 SAGE CREEK ABOVE SAGE CREEK RESERVOIR, NEAR HAYDEN, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--March 1981 to September 1983 (discontinued).

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: March 1981 to September 1983 (discontinued).
WATER TEMPERATURES: March 1981 to September 1983 (discontinued).

INSTRUMENTATION.--Water-quality monitor since March 1981.

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

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 1,100 micromhos Mar. 13, 1981; minimum, 230 micromhos Aug. 31, 1981, April 24, 1983.
WATER TEMPERATURES: Maximum, 23.0°C July 6, 1981; minimum, 0.0°C many days during October to May.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 1,010 micromhos October 1, 6; minimum, 230 micromhos April 24.
WATER TEMPERATURES: Maximum, 21.0°C July 7, 18; minimum, 0.0°C many days during October to May.

WATER QUALITY DATA, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	SPE-CIFIC CON-DUCT-ANCE LAB (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)
NOV								
17...	1440	.04	870	886	8.2	.0	10.6	460
DEC								
22...	1630	E.03	840	844	8.3	.5	10.2	450
FEB								
22...	1600	E.05	870	881	8.2	.5	10.4	430
MAR								
29...	1245	E.05	855	849	8.0	1.0	10.6	440
MAY								
02...	1525	7.8	356	376	8.1	10.0	8.3	190
25...	1515	7.4	400	410	8.2	17.5	7.6	170
JUN								
08...	1410	2.5	505	506	8.3	16.0	7.6	260
JUL								
27...	1240	.33	675	662	8.2	14.0	7.5	350
SEP								
13...	1100	.16	780	758	8.4	10.0	8.5	410

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
NOV									
17...	95	54	22	.5	4.4	304	200	5.6	.20
DEC									
22...	92	53	20	.4	4.0	288	200	5.6	.20
FEB									
22...	86	53	22	.5	3.9	258	210	5.9	.20
MAR									
29...	88	53	22	.5	3.7	277	200	6.8	.20
MAY									
02...	43	20	8.0	.3	2.7	132	63	2.7	.20
25...	40	17	5.2	.2	1.8	173	45	2.6	.20
JUN									
08...	57	28	9.3	.3	2.2	210	67	2.8	.20
JUL									
27...	75	40	14	.3	3.1	283	110	3.7	.20
SEP									
13...	85	48	17	.4	4.3	283	140	4.7	.20

E ESTIMATED.

09244415 SAGE CREEK ABOVE SAGE CREEK RESERVOIR, NEAR HAYDEN, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

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, ORTHO, DIS-SOLVED (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)
NOV								
17...	11	570	.78	.06	.190	<.010	5.8	5.7
DEC								
22...	10	560	.76	4.5	.180	<.010	--	--
FEB								
22...	9.8	550	.74	--	.200	.020	--	--
MAR								
29...	8.7	550	.75	--	.320	.040	7.1	6.7
MAY								
02...	8.3	230	.31	4.8	.440	.050	21	12
25...	5.8	220	.30	4.4	<.140	.030	--	--
JUN								
08...	9.4	300	.41	2.0	.110	.020	--	--
JUL								
27...	11	430	.58	.38	.220	.030	--	--
SEP								
13...	13	480	.66	.21	.230	.030	6.4	6.4

DATE	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)	BORON, DIS-SOLVED (UG/L AS B)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CADMIUM DIS-SOLVED (UG/L AS CD)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)
NOV								
17...	100	10	1	1	60	<1	<1	1
DEC								
22...	--	--	--	--	50	--	--	--
FEB								
22...	--	--	--	--	50	--	--	--
MAR								
29...	120	20	--	--	40	--	--	--
MAY								
02...	19000	60	2	1	40	2	1	19
25...	--	--	--	--	30	--	--	--
JUN								
08...	--	--	--	--	40	--	--	--
JUL								
27...	--	--	--	--	70	--	--	--
SEP								
13...	270	20	--	--	80	--	--	--

DATE	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)
NOV									
17...	<1	280	28	2	1	80	70	<.1	<.1
DEC									
22...	--	360	31	--	--	70	60	--	--
FEB									
22...	--	490	28	--	--	80	62	--	--
MAR									
29...	--	310	38	<1	3	70	59	--	--
MAY									
02...	6	13000	96	11	1	180	22	.1	<.1
25...	--	1000	20	--	--	50	15	--	--
JUN									
08...	--	1200	27	--	--	90	38	--	--
JUL									
27...	--	1500	34	--	--	140	45	--	--
SEP									
13...	--	610	22	<1	<1	90	37	--	--

09244415 SAGE CREEK ABOVE SAGE CREEK RESERVOIR, NEAR HAYDEN, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)
NOV								
17...	<1	<1	<1	1	<1	<1	10	10
DEC								
22...	--	--	--	--	--	--	--	--
FEB								
22...	--	--	--	--	--	--	--	--
MAR								
29...	--	--	--	--	--	--	10	5
MAY								
02...	<1	<1	13	9	1	1	90	32
25...	--	--	--	--	--	--	--	--
JUN								
08...	--	--	--	--	--	--	--	--
JUL								
27...	--	--	--	--	--	--	--	--
SEP								
13...	--	--	--	--	--	--	10	8

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

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
NOV						MAY					
17...	1440	.04	29	.00	--	02...	1525	7.8	611	13	90
DEC						25...	1515	7.4	96	1.9	--
22...	1630	.03	41	.00	--	JUN					
FEB						08...	1410	2.5	185	1.1	--
22...	1600	.05	79	.01	--	27...	1240	.33	160	.14	--
MAR						SEP					
29...	1245	.05	23	.00	--	13...	1100	.16	99	.04	--

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	965	903	862	840	817	848	851	444	464	650	677	723
2	927	926	850	832	817	842	857	418	465	640	690	728
3	905	932	848	831	818	864	857	440	480	621	688	728
4	896	902	848	808	825	871	875	422	482	629	690	774
5	886	917	851	793	812	865	867	422	492	633	692	757
6	952	914	858	786	810	859	862	424	493	640	694	755
7	922	907	855	790	812	869	857	428	502	642	687	746
8	881	911	848	796	808	860	845	416	510	644	680	774
9	932	935	839	802	809	870	838	405	512	615	679	761
10	940	932	833	797	808	836	792	405	521	617	680	755
11	950	902	862	799	814	835	795	408	522	643	688	754
12	942	890	875	802	821	783	844	413	515	655	699	754
13	943	901	845	803	826	775	850	417	518	658	700	767
14	927	913	828	804	818	812	844	422	527	665	694	765
15	912	914	829	800	825	871	821	428	546	667	694	752
16	907	910	814	793	825	896	785	425	540	670	700	750
17	900	881	830	804	823	894	697	418	565	662	702	746
18	893	856	829	820	830	886	601	432	566	665	714	735
19	884	849	853	820	818	882	580	424	576	665	706	759
20	894	861	832	811	822	880	567	436	572	672	747	784
21	886	862	812	800	827	878	426	438	588	681	735	797
22	888	868	834	794	842	870	475	427	583	685	729	790
23	884	880	832	796	877	860	454	420	590	684	725	799
24	885	903	824	795	878	860	405	415	583	683	725	806
25	893	848	845	796	875	860	408	412	566	681	720	805
26	897	858	865	802	875	859	451	415	591	689	709	801
27	929	879	842	824	871	850	463	431	565	684	682	800
28	915	870	828	814	865	841	459	442	572	696	691	803
29	918	848	849	814	---	853	439	453	607	688	702	804
30	895	857	856	815	---	837	423	463	651	681	729	824
31	827	---	847	815	---	820	---	471	---	687	716	---
MEAN	909	891	843	806	831	854	676	427	542	661	702	770

WTR YR 1983 MEAN 742 MAX 965 MIN 405

09244415 SAGE CREEK ABOVE SAGE CREEK RESERVOIR, NEAR HAYDEN, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

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

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	3.0	.0	8.0	.0	12.0	8.0	18.0	9.0	17.0	12.0	17.0	10.0
2	2.5	.0	10.0	.5	11.5	7.5	18.0	9.5	18.0	12.0	17.5	12.0
3	1.5	.0	8.5	2.0	15.5	6.0	17.0	11.0	18.5	12.0	17.0	11.0
4	.5	.0	12.0	1.0	15.5	7.0	18.5	8.0	19.0	12.5	15.0	11.0
5	1.0	.0	12.0	2.0	15.0	8.0	20.0	8.5	19.5	12.5	15.5	9.0
6	.5	.0	9.5	1.5	14.5	6.5	20.0	10.5	20.5	12.5	15.5	8.0
7	1.0	.0	14.5	2.5	17.5	7.5	21.0	12.0	20.5	12.5	16.0	8.5
8	1.5	.0	13.5	2.0	16.0	7.0	19.0	12.0	20.5	12.0	16.0	12.0
9	2.5	.5	15.5	3.0	16.0	7.5	18.0	12.5	20.5	13.0	16.0	10.0
10	3.5	.5	14.5	3.0	17.0	9.0	20.0	12.0	20.5	12.0	15.5	10.0
11	2.5	.5	11.5	3.5	16.5	8.5	19.0	9.5	17.0	12.5	14.5	7.5
12	2.5	.5	9.5	3.0	11.0	8.5	20.0	9.5	17.0	12.5	14.5	7.5
13	3.5	.0	13.5	2.5	14.5	7.0	20.0	10.0	18.0	12.5	15.0	7.5
14	2.5	.0	9.5	3.0	16.0	7.0	20.0	10.0	19.0	12.0	13.0	8.5
15	3.0	.0	9.0	2.5	18.0	7.5	19.0	11.5	19.0	12.5	14.0	8.0
16	3.5	.0	9.5	3.0	17.0	9.0	19.5	9.5	19.5	12.5	13.5	6.5
17	4.0	.0	6.5	1.5	18.5	8.5	20.0	10.5	18.5	13.0	14.0	7.5
18	4.0	.0	8.5	1.5	20.0	9.0	21.0	11.5	17.5	13.5	14.0	7.5
19	2.0	.0	11.5	3.5	20.0	9.5	18.5	13.0	17.0	12.0	12.5	6.5
20	4.5	.0	13.5	2.5	20.0	9.5	20.5	12.5	16.5	12.0	8.0	3.0
21	2.0	.0	11.5	4.5	20.0	9.0	17.5	12.5	17.5	11.5	9.0	1.5
22	3.0	.5	13.5	5.0	20.0	9.0	17.5	12.0	17.5	11.0	10.0	2.5
23	6.0	.5	16.5	4.5	20.0	10.5	15.0	12.5	17.5	10.0	11.0	5.0
24	7.5	.5	18.0	5.5	17.0	10.5	19.0	11.0	16.5	10.0	11.5	7.0
25	8.0	.5	17.5	6.5	17.5	11.5	18.0	11.5	16.5	10.5	12.0	6.0
26	9.5	.0	18.0	6.5	19.0	11.0	16.5	12.0	17.5	10.5	11.5	6.0
27	7.0	1.5	19.5	7.0	17.5	11.0	14.5	11.5	17.5	10.0	12.5	8.0
28	6.0	1.5	17.0	8.0	13.0	9.5	19.0	11.0	16.5	10.5	12.0	6.0
29	8.0	1.0	18.0	7.0	18.5	9.0	20.0	11.0	14.5	11.0	11.5	7.0
30	7.5	1.5	12.5	8.5	18.5	9.5	20.5	11.5	17.0	10.0	10.5	7.5
31	---	---	15.0	5.5	---	---	17.0	11.5	17.0	10.5	---	---
MONTH	9.5	.0	19.5	.0	20.0	6.0	21.0	8.0	20.5	10.0	17.5	1.5
YEAR	21.0	.0										

09245000 ELKHEAD CREEK NEAR ELKHEAD, CO

LOCATION.--Lat 40°40'11", long 107°17'04", in NW¼NE¼ sec.8, T.8 N., R.88 W., Routt County, Hydrologic Unit 14050001, on right bank 0.2 mi upstream from North Fork Elkhead Creek, 4.5 mi northwest of Elkhead, and 12 mi north of Hayden.

DRAINAGE AREA.--64.2 mi².

PERIOD OF RECORD.--January to November 1910 and May to November 1920 (monthly discharge only, published in WSP 1313; published as "at Hayes Ranch"), April 1953 to current year.

REVISED RECORDS.--WSP 1733: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 6,845 ft, from topographic map. Prior to Nov. 30, 1920, nonrecording gage or water-stage recorder 675 ft upstream at different 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.--30 years (water years 1954-83), 55.0 ft³/s; 39,850 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,950 ft³/s May 27, 1983, gage height, 7.17 ft; no flow Sept.1, 1954, Sept. 12-19, 24, 1955, Aug. 27-29, 1961, Aug. 14-19, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,950 ft³/s at 2300 May 27, gage height, 7.17 ft; only peak above base of 800 ft³/s; minimum daily, 3.5 ft³/s Sept. 27-29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.5	10	12	9.2	8.6	8.4	11	121	755	79	24	7.4
2	9.4	11	12	9.2	8.6	8.4	11	121	702	70	23	7.0
3	10	12	12	9.2	8.6	8.0	11	124	630	78	22	6.8
4	10	12	11	9.2	8.6	8.2	11	134	646	76	22	6.5
5	11	11	11	9.0	8.6	8.4	14	229	579	62	22	6.5
6	11	11	11	9.2	8.6	8.6	13	249	550	56	21	6.4
7	11	11	11	9.2	8.6	9.0	13	211	513	53	20	6.2
8	10	11	11	9.2	8.6	10	15	283	478	52	19	5.9
9	10	11	10	9.2	8.4	12	10	454	454	52	18	5.9
10	9.8	12	11	9.2	8.6	12	10	611	435	53	16	5.8
11	9.5	12	10	9.0	8.8	13	10	591	423	53	16	5.6
12	9.6	12	10	9.0	8.8	12	10	392	435	50	14	5.3
13	9.3	12	10	9.0	8.8	13	10	325	360	48	14	5.0
14	9.0	11	10	9.0	8.4	13	11	311	287	46	13	4.8
15	8.8	11	10	9.0	8.2	13	9.6	284	256	43	13	4.6
16	8.8	11	10	9.0	8.2	13	11	287	248	41	12	4.5
17	8.8	11	10	9.0	8.2	13	11	255	244	38	12	4.3
18	8.6	11	10	8.8	8.4	15	12	230	237	35	12	4.1
19	8.6	12	10	8.6	8.6	17	16	245	241	32	11	3.9
20	8.3	12	10	8.4	8.8	14	20	302	227	30	11	3.7
21	8.3	12	9.8	8.4	8.8	17	28	441	207	28	11	3.7
22	8.1	12	9.6	8.4	8.6	16	29	571	185	27	11	3.7
23	8.1	12	9.4	8.6	8.4	13	46	845	164	27	10	3.6
24	7.8	11	9.4	9.0	8.4	13	74	1100	151	27	9.7	3.6
25	7.9	12	9.6	8.8	8.4	12	133	1180	138	27	9.4	3.6
26	7.9	11	9.6	8.6	8.4	14	207	1490	149	26	9.1	3.6
27	8.5	11	9.6	8.6	8.4	12	209	1370	137	27	8.8	3.5
28	9.1	11	9.6	8.6	8.4	11	169	1350	147	28	8.5	3.5
29	9.1	12	10	8.4	---	10	116	1190	111	27	8.0	3.5
30	9.5	11	9.8	8.2	---	11	131	1040	92	26	7.7	3.8
31	9.8	---	9.0	8.4	---	11	---	774	---	25	7.4	---
TOTAL	284.1	342	317.4	274.6	238.8	369.0	1381.6	17110	10181	1342	435.6	146.3
MEAN	9.16	11.4	10.2	8.86	8.53	11.9	46.1	552	339	43.3	14.1	4.88
MAX	11	12	12	9.2	8.8	17	209	1490	755	79	24	7.4
MIN	7.8	10	9.0	8.2	8.2	8.0	9.6	121	92	25	7.4	3.5
AC-FT	564	678	630	545	474	732	2740	33940	20190	2660	864	290

CAL YR 1982 TOTAL 22711.2 MEAN 62.2 MAX 1290 MIN 2.9 AC-FT 45050
WTR YR 1983 TOTAL 32422.4 MEAN 88.8 MAX 1490 MIN 3.5 AC-FT 64310

09250000 MILK CREEK NEAR THORNBURGH, CO

LOCATION.--Lat 40°11'37", long 107°43'57", in NE¼ sec.32, T.3 N., R.92 W., Rio Blanco County, Hydrologic Unit 14050002, on right bank 2.2 mi southwest of Thornburgh and 3.0 mi upstream from Little Creek.

DRAINAGE AREA.--65 mi^2, approximately.

PERIOD OF RECORD.--Streamflow records, October 1952 to current year. Water-quality data available, May to September 1982. Published as "near Thornburg" October 1952 to September 1968.

GAGE.--Water-stage recorder. Datum of gage is 6,599.32 ft, National Geodetic Vertical Datum of 1929 (levels by U.S. Bureau of Reclamation).

REMARKS.--Records fair except those for winter period, which are poor. Diversion for irrigation of about 1,320 acres above station.

AVERAGE DISCHARGE.--31 years, 26.6 ft^3/s; 19,270 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,050 ft^3/s May 10, 1974, gage height, 5.03 ft, from rating curve extended above 540 ft^3/s; maximum gage height, 6.85 ft, May 29, 1983; minimum daily discharge, 0.20 ft^3/s for several days in 1956, 1963, and 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 250 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
May 11	0400	375	4.70	June 12	0400	562	5.46
May 29	0300	* 1,020	6.85				

Minimum daily discharge, 2.9 ft^3/s Sept. 18-20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	28	10	8.6	9.7	33	25	136	449	65	11	4.0
2	8.6	19	10	8.6	9.8	57	21	125	520	60	9.1	4.0
3	6.7	13	9.6	8.4	9.4	60	20	126	432	51	10	3.9
4	6.4	14	9.2	8.4	9.0	37	18	141	438	44	9.7	4.9
5	6.3	12	8.7	8.4	8.5	32	17	162	412	41	9.0	5.4
6	7.3	11	8.6	8.4	9.8	20	17	172	366	39	8.4	5.0
7	6.8	11	8.6	8.4	9.5	21	16	139	347	32	8.3	4.9
8	7.1	10	8.2	8.4	10	15	16	174	388	32	8.4	4.9
9	7.6	12	9.6	9.0	10	16	17	233	372	28	9.3	5.6
10	6.8	11	9.6	10	9.6	27	29	266	379	25	8.2	5.6
11	8.6	12	9.0	9.8	9.0	61	43	307	410	23	7.7	4.9
12	8.8	9.5	8.6	9.8	8.6	93	35	218	501	20	7.1	4.3
13	8.6	17	8.4	9.8	8.2	71	24	183	353	20	7.3	3.7
14	8.1	17	8.4	9.8	7.8	61	21	188	247	17	6.7	3.4
15	8.4	21	8.0	9.8	7.6	36	21	154	241	16	6.3	3.3
16	8.9	22	7.8	9.8	7.2	29	25	171	272	14	6.1	3.3
17	8.4	20	7.8	9.8	10	24	34	158	290	13	5.7	3.1
18	7.6	16	8.0	9.8	11	20	55	136	289	15	6.5	2.9
19	7.9	13	8.0	9.8	10	18	76	150	295	15	7.6	2.9
20	7.1	22	8.4	10	9.5	17	81	139	239	31	7.5	2.9
21	7.1	14	8.0	11	9.0	16	78	149	160	30	6.4	3.2
22	6.5	17	7.6	12	9.0	16	75	209	156	20	5.6	3.3
23	6.3	21	8.2	11	9.0	16	95	258	151	14	5.2	3.3
24	6.2	11	9.0	11	9.0	16	142	357	165	24	4.8	3.5
25	6.3	14	9.0	10	9.0	15	184	477	168	17	4.6	3.6
26	7.7	12	9.0	9.0	11	16	154	512	162	18	4.6	3.6
27	25	11	8.8	10	13	14	131	533	114	13	4.5	3.6
28	15	13	8.8	10	16	16	127	690	92	11	4.5	3.5
29	12	12	8.6	9.6	---	14	135	731	80	9.9	4.3	3.6
30	13	11	8.6	9.4	---	23	154	630	69	15	4.2	3.9
31	30	---	8.6	9.6	---	44	---	589	---	14	4.2	---
TOTAL	298.1	446.5	268.7	297.4	269.2	954	1886	8613	8557	786.9	212.8	118.0
MEAN	9.62	14.9	8.67	9.59	9.61	30.8	62.9	278	285	25.4	6.86	3.93
MAX	30	28	10	12	16	93	184	731	520	65	11	5.6
MIN	6.2	9.5	7.6	8.4	7.2	14	16	125	69	9.9	4.2	2.9
AC-FT	591	886	533	590	534	1890	3740	17080	16970	1560	422	234

CAL YR 1982 TOTAL 16099.5 MEAN 44.1 MAX 404 MIN 1.7 AC-FT 31930
WTR YR 1983 TOTAL 22707.6 MEAN 62.2 MAX 731 MIN 2.9 AC-FT 45040

09250507 WILSON CREEK ABOVE TAYLOR CREEK, NEAR AXIAL, CO

LOCATION.--Lat 40°18'53", long 107°47'58", in NW¼SW¼ sec.14, T.4 N., R.93 W., Moffatt County, Hydrologic Unit 14050002, on left bank about 200 ft upstream from Moffat County Road 17, about 50 ft upstream from confluence of Taylor Creek, and 2.4 mi north of Axial.

DRAINAGE AREA.--20.0 mi^2.

PERIOD OF RECORD.--October 1980 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,315 ft, from topographic map.

REMARKS.--Records fair except for flows above 10 ft^3/s, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 82 ft^3/s May 12, 1983, gage height, 4.43 ft; minimum daily, 0.15 ft^3/s Mar. 20, 21, 1982.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 82 ft^3/s at 2000 May 12, gage height, 4.43 ft; minimum daily, 0.72 ft^3/s Jan. 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.1	2.0	1.9	.74	1.3	2.1	2.2	21	43	8.1	3.3	1.5
2	1.0	1.6	1.7	.73	1.6	2.1	2.1	23	43	6.9	3.3	1.5
3	.86	1.1	1.6	.73	1.3	1.9	2.4	24	42	7.8	3.0	1.6
4	.76	1.2	1.6	.72	1.6	1.8	2.2	28	41	7.3	3.9	5.3
5	.76	1.2	1.8	.72	1.7	1.8	1.6	26	39	6.1	3.8	2.7
6	.78	1.1	1.7	1.1	1.7	1.9	1.7	31	38	6.1	3.3	2.2
7	.78	1.1	1.5	1.3	1.9	1.6	1.6	27	37	6.0	3.0	2.1
8	.98	1.1	1.2	1.2	1.9	1.9	2.0	32	36	5.3	3.0	2.8
9	1.2	1.1	1.3	1.2	2.0	1.6	2.4	25	35	5.6	2.8	2.2
10	1.3	1.1	1.6	1.1	1.9	1.9	1.9	56	34	5.4	2.9	1.7
11	1.2	1.1	1.6	.92	1.7	2.2	1.9	59	33	4.1	3.1	1.9
12	1.2	1.1	1.6	1.1	1.7	2.4	2.2	66	32	6.0	3.0	2.0
13	1.1	1.1	1.5	1.1	2.0	2.4	2.3	63	31	7.2	3.0	2.0
14	1.1	1.1	1.6	1.2	1.8	2.7	1.8	42	30	6.3	3.0	2.0
15	1.1	1.0	1.6	1.2	1.8	2.4	1.9	51	27	6.2	2.7	2.0
16	1.1	1.0	1.7	1.2	1.8	1.9	2.1	43	21	6.4	2.7	2.0
17	1.2	.93	1.5	1.2	1.8	2.3	2.5	39	28	6.2	3.0	2.0
18	1.1	.94	1.4	1.1	1.9	2.1	3.2	36	24	6.0	3.5	2.0
19	.98	1.4	.86	1.2	1.8	1.9	4.1	37	15	5.8	3.1	2.0
20	.98	1.4	1.3	1.2	1.8	1.9	4.2	38	15	5.6	3.6	2.0
21	1.1	1.7	1.5	1.2	1.7	1.6	5.1	44	8.6	5.4	3.0	2.1
22	1.1	1.1	1.5	1.2	2.8	1.8	5.6	47	6.6	5.2	3.1	2.2
23	1.1	1.2	1.5	1.2	2.5	2.2	4.6	48	9.8	5.0	2.2	2.3
24	1.1	1.2	1.5	1.2	2.3	1.9	5.6	48	10	4.8	1.9	2.4
25	1.1	1.2	1.4	1.4	3.1	1.9	11	46	8.9	4.6	1.9	2.5
26	1.2	1.3	1.3	1.4	2.3	1.9	15	46	9.3	4.4	1.7	2.6
27	1.6	1.4	.97	1.4	1.9	1.7	15	45	14	4.2	1.4	2.7
28	1.4	1.4	.95	1.4	2.3	2.1	13	45	10	4.4	1.1	2.8
29	1.2	1.4	.84	1.4	---	1.9	17	44	9.4	4.1	1.2	2.9
30	1.2	1.6	.85	1.3	---	2.1	18	44	9.6	3.6	1.6	3.0
31	1.7	---	.75	1.4	---	2.2	---	43	---	3.3	1.4	---
TOTAL	34.38	37.17	43.62	35.46	53.9	62.1	156.2	1267	740.2	173.4	83.5	69.0
MEAN	1.11	1.24	1.41	1.14	1.93	2.00	5.21	40.9	24.7	5.59	2.69	2.30
MAX	1.7	2.0	1.9	1.4	3.1	2.7	18	66	43	8.1	3.9	5.3
MIN	.76	.93	.75	.72	1.3	1.6	1.6	21	6.6	3.3	1.1	1.5
AC-FT	68	74	87	70	107	123	310	2510	1470	344	166	137

CAL YR 1982 TOTAL 841.31 MEAN 2.30 MAX 15 MIN .15 AC-FT 1670
WTR YR 1983 TOTAL 2755.93 MEAN 7.55 MAX 66 MIN .72 AC-FT 5470

09250510 TAYLOR CREEK AT MOUTH, NEAR AXIAL, CO

LOCATION.--Lat 40°18'48", long 107°47'57", in NW¼SW¼ sec.14, T.4 N., R.93 W., Moffatt County, Hydrologic Unit 14050002, on right bank 475 ft upstream from confluence with Wilson Creek, about 1,000 ft southwest of Gossard ranch house, and 2 mi north of Axial.

DRAINAGE AREA.--7.22 mi^2.

PERIOD OF RECORD.--Streamflow records, July 1975 to current year. Water-quality data available, July 1975 to September 1981.

GAGE.--Water-stage recorder. Altitude of gage is 6,300 ft, from topographic map. Prior to Mar. 28, 1980, gage 25 ft upstream at datum 0.08 ft higher.

REMARKS.--Records good. No diversions. Low dam to prevent erosion, 75 ft upstream.

AVERAGE DISCHARGE.--8 years, 0.17 ft^3/s; 123 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 18 ft^3/s Feb. 19, 1981, gage height, 2.69 ft, result of discharge measurement; no flow many days each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 9.4 ft^3/s at 1500 June 21, gage height, 2.02 ft; no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.28	.26	.00	.00	.00	.00	.00	.03	4.4	.95	.42	.05
2	.28	.26	.00	.00	.00	.00	.00	.03	4.2	.70	.42	.05
3	.30	.26	.00	.00	.00	.00	.00	.02	3.9	.75	.44	.07
4	.30	.28	.00	.00	.00	.00	.00	.02	3.7	.67	.42	.26
5	.30	.28	.00	.00	.00	.00	.00	.02	3.5	.58	.42	.12
6	.26	.26	.00	.00	.00	.00	.00	.05	3.3	.58	.33	.11
7	.26	.26	.00	.00	.00	.00	.00	.08	3.2	.58	.33	.07
8	.37	.24	.00	.00	.00	.00	.00	.16	3.1	.45	.33	.07
9	.52	.26	.00	.00	.00	.00	.00	.42	2.9	.46	.33	.06
10	.44	.24	.00	.00	.00	.00	.00	.85	2.8	.45	.33	.04
11	.37	.26	.00	.00	.00	.00	.00	1.7	2.6	.42	.30	.05
12	.26	.24	.00	.00	.00	.00	.00	2.7	3.0	.57	.30	.05
13	.26	.16	.00	.00	.00	.00	.00	3.3	2.5	.60	.30	.04
14	.26	.14	.00	.00	.00	.00	.00	3.6	2.1	.33	.30	.03
15	.26	.12	.00	.00	.00	.00	.00	3.8	1.9	.23	.28	.04
16	.35	.10	.00	.00	.00	.00	.01	4.1	1.8	.39	.30	.05
17	.26	.10	.00	.00	.00	.00	.01	4.1	1.6	.28	.30	.05
18	.26	.08	.00	.00	.00	.00	.02	4.0	1.6	.35	.35	.06
19	.28	.08	.00	.00	.00	.00	.05	4.1	1.6	.37	.44	.06
20	.26	.07	.00	.00	.00	.00	.04	4.0	1.4	.39	.49	.07
21	.26	.06	.00	.00	.00	.00	.04	4.0	1.7	.49	.39	.08
22	.26	.05	.00	.00	.00	.00	.03	4.1	1.6	.94	.39	.08
23	.33	.04	.00	.00	.00	.00	.03	4.1	1.4	.71	.36	.07
24	.33	.03	.00	.00	.00	.00	.02	4.2	1.4	.52	.32	.09
25	.28	.02	.00	.00	.00	.00	.01	4.3	1.4	.88	.28	.08
26	.26	.01	.00	.00	.00	.00	.02	4.4	1.5	.63	.26	.07
27	.30	.00	.00	.00	.00	.00	.01	4.4	1.7	.49	.16	.09
28	.28	.00	.00	.00	.00	.00	.01	4.4	1.3	.44	.10	.14
29	.26	.00	.00	.00	---	.00	.02	4.4	1.1	.42	.07	.12
30	.26	.00	.00	.00	---	.00	.03	4.5	1.1	.42	.08	.19
31	.26	---	.00	.00	---	.00	---	4.5	---	.39	.09	---
TOTAL	9.21	4.16	.00	.00	.00	.00	.35	84.38	69.3	16.43	9.63	2.41
MEAN	.30	.14	.000	.000	.000	.000	.012	2.72	2.31	.53	.31	.080
MAX	.52	.28	.00	.00	.00	.00	.05	4.5	4.4	.95	.49	.26
MIN	.26	.00	.00	.00	.00	.00	.00	.02	1.1	.23	.07	.03
AC-FT	18	8.3	.00	.00	.00	.00	.7	167	137	33	19	4.8

CAL YR 1982 TOTAL 27.69 MEAN .076 MAX .52 MIN .00 AC-FT 55
WTR YR 1983 TOTAL 195.87 MEAN .54 MAX 4.5 MIN .00 AC-FT 389

09251000 YAMPA RIVER NEAR MAYBELL, CO

LOCATION.--Lat 40°30'10", long 108°01'45", in NW¼ sec.2, T.6 N., R.95 W., Moffat County, Hydrologic Unit 14050002, on left bank 100 ft downstream from bridge on U.S. Highway 40, 2.0 mi downstream from Lay Creek, and 3.0 mi east of Maybell.

DRAINAGE AREA.--3,410 mi², approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1904 to October 1905, June 1910 to November 1912, April 1916 to current year. Monthly discharge only for some periods, published in WSP 1313. No winter records prior to 1917.

GAGE.--Water-stage recorder. Datum of gage is 5,900.23 ft, National Geodetic Vertical Datum of 1929. See WSP 1733 for history of changes prior to Mar. 9, 1937.

REMARKS.--Records good except those for winter period, which are poor. Natural flow of stream affected by transbasin diversions, numerous storage reservoirs, and diversions above station for irrigation of about 65,000 acres above and about 800 acres below station.

AVERAGE DISCHARGE.--67 years (water years 1917-83), 1,552 ft³/s; 1,124,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 17,900 ft³/s May 19, 1917, gage height, 10.4 ft, from floodmarks, site and datum then in use, from rating curve extended above 12,000 ft³/s; minimum daily, 2.0 ft³/s July 17-19, 1934.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 7,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
May 30	0700	* 13,400	9.59	June 26	2230	11,400	8.91
June 13	1700	11,500	8.97				

Minimum daily discharge, 180 ft³/s Sept. 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	694	750	500	200	350	500	806	4250	11000	8080	1410	412
2	822	862	500	200	300	550	830	4000	10200	7540	1400	360
3	862	798	500	200	300	600	782	3840	10300	7160	1360	365
4	814	670	450	200	300	700	790	3710	9400	7960	1370	376
5	726	560	450	200	300	750	742	3920	9720	7080	1400	355
6	718	588	450	250	300	1000	646	4130	9400	5860	1520	406
7	718	560	450	300	300	1000	602	4250	9000	5540	1410	448
8	718	553	450	300	300	900	588	3840	8700	5560	1200	500
9	670	553	450	300	300	800	623	4160	9250	6300	1080	450
10	726	588	450	300	350	798	646	5380	9600	5880	1000	500
11	710	595	450	350	350	806	678	6720	9950	5400	950	350
12	694	602	450	350	350	1180	862	7000	10800	4500	894	320
13	567	581	400	350	350	1630	894	5960	11400	3800	862	300
14	532	500	350	350	350	1790	854	4740	10600	3340	959	280
15	546	300	300	350	350	1660	734	4300	8040	3070	902	260
16	630	350	300	350	350	1360	678	4000	7540	2810	790	240
17	678	350	300	350	350	1120	710	4060	7980	2630	726	220
18	718	500	300	350	350	1020	846	4100	8540	2320	718	200
19	710	550	250	350	350	918	1280	3830	9220	2030	766	180
20	686	550	250	350	350	822	2150	3920	10300	2000	846	183
21	646	500	250	350	350	774	2510	3890	10800	1980	1110	186
22	609	450	250	350	350	718	3410	4200	10800	2240	1040	222
23	609	400	250	350	350	694	3400	5260	10800	2870	846	242
24	609	350	250	350	350	726	3290	6360	10700	3040	718	246
25	595	400	200	350	350	774	4500	8000	10600	2800	623	242
26	595	450	200	350	400	758	3950	9500	10900	2410	560	246
27	616	450	200	350	400	710	5140	10600	11200	2090	539	250
28	638	450	200	350	450	686	4160	11400	10200	2040	490	262
29	758	350	200	350	---	710	3860	12400	9900	2000	436	262
30	662	450	200	350	---	702	3960	13200	8800	1720	424	258
31	630	---	200	350	---	662	---	13200	---	1500	406	---
TOTAL	20906	15610	10400	9800	9600	27818	54921	188120	295640	123550	28755	9121
MEAN	674	520	335	316	343	897	1831	6068	9855	3985	928	304
MAX	862	862	500	350	450	1790	5140	13200	11400	8080	1520	500
MIN	532	300	200	200	300	500	588	3710	7540	1500	406	180
AC-FT	41470	30960	20630	19440	19040	55180	108900	373100	586400	245100	57040	18090

CAL YR 1982 TOTAL 712293 MEAN 1951 MAX 10200 MIN 191 AC-FT 1413000
WTR YR 1983 TOTAL 794241 MEAN 2176 MAX 13200 MIN 180 AC-FT 1575000

09251000 YAMPA RIVER NEAR MAYBELL, CO--Continued
(National Stream-Quality Accounting Network Station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1950 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: November 1950 to August 1973, July 1975 to current year.
WATER TEMPERATURES: November 1950 to August 1973, July 1975 to current year.
SUSPENDED-SEDIMENT DISCHARGE: December 1950 to May 1958, October 1975 to September 1976, October 1977 to September 1978, October 1981 to September 1982.

INSTRUMENTATION.--Water-quality monitor since July 1975.

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

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 1,060 micromhos Apr. 10, 1980; minimum daily, 89 micromhos June 27, 1983.
WATER TEMPERATURES: Maximum, 33.0°C Aug. 29, 1976; minimum, freezing point on many days during winter months.
SEDIMENT CONCENTRATIONS: Maximum daily, 6,180 mg/L Aug. 16, 1981; minimum daily, 1 mg/L several days during December 1975 to February 1976, Jan. 6, 1980.
SEDIMENT LOADS: Maximum daily, 47,100 tons May 9, 1958; minimum daily, 0.04 ton Oct. 2, 3, 1982.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 1,020 micromhos on a few days in April; minimum, 89 micromhos June 27.
WATER TEMPERATURES: Maximum, 26.5°C Aug. 9, 22; minimum 0.0°C many days during November to March.
SEDIMENT CONCENTRATIONS: Maximum daily, 1,790 mg/L April 2; minimum daily,3 mg/L Jan. 19.
SEDIMENT LOADS: Maximum daily, 28,500 tons April 26; minimum daily, 2.4 tons Sept.19.

WATER QUALITY DATA, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	SPE-CIFIC CON-DUCT-ANCE LAB (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)
DEC											
03...	1430	500	540	532	8.1	.0	1.5	11.8	<1	20	210
MAR											
16...	1550	1330	655	684	8.1	2.0	180	11.0	K47	2200	220
JUL											
20...	1025	2080	225	205	8.2	21.0	15	7.4	110	90	74
SEP											
06...	1145	412	500	489	8.6	18.5	5.9	9.8	26	680	190

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)
DEC										
03...	43	24	36	1	2.0	136	130	12	.20	6.8
MAR										
16...	47	26	54	2	3.2	129	200	14	.50	9.9
JUL										
20...	18	7.0	10	.5	1.1	64	32	4.7	.10	7.5
SEP										
06...	41	21	38	1	3.0	134	110	15	.20	3.1

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)
DEC										
03...	342	340	.47	462	<.100	<.060	1.1	.070	.030	.160
MAR										
16...	442	430	.60	1590	1.10	.260	1.7	.290	.070	.040
JUL										
20...	121	120	.16	680	<.100	.090	.90	.020	.020	<.010
SEP										
06...	303	310	.41	337	<.100	.020	.30	.020	.020	.010

K BASED ON NON-IDEAL COLONY COUNT.

09251000 YAMPA RIVER NEAR MAYBELL, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)
DEC							
03...	1	56	<1	<1	<3	2	51
MAR							
16...	1	56	<1	<1	<3	3	100
JUL							
20...	<1	36	<1	<1	<3	4	23
SEP							
06...	1	64	<1	<1	<3	3	29

DATE	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	ZINC, DIS-SOLVED (UG/L AS ZN)
DEC							
03...	<1	8	.1	1	1	1	7
MAR							
16...	<1	39	<.1	1	4	1	4
JUL							
20...	2	4	<.1	2	<1	<1	4
SEP							
06...	<1	4	<.1	1	1	1	5

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

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					
01...	0908	703	60	114	--
23...	1515	642	13	23	--
NOV					
21...	1630	500	25	34	--
DEC					
03...	1430	500	16	22	--
07...	1345	450	20	24	--
19...	1650	250	13	8.8	--
JAN					
16...	1445	350	12	11	--
30...	1155	350	25	24	--
FEB					
05...	1500	300	12	9.7	--
13...	1745	350	32	30	--
20...	1645	350	35	33	--
23...	1645	350	76	72	--
27...	1600	400	358	387	--
MAR					
06...	1535	1000	224	605	--
11...	1410	822	163	362	--
16...	1550	1330	327	1170	92
20...	1500	886	67	160	--
APR					
17...	1810	758	15	31	--
MAY					
21...	0845	389	792	832	--
JUN					
19...	1205	9480	707	18100	--
JUL					
20...	1025	2080	92	517	41
23...	1010	3020	421	3430	--
AUG					
22...	1740	977	62	164	--
SEP					
06...	1145	412	8	8.9	--
20...	1745	173	2	.93	--

09251000 YAMPA RIVER NEAR MAYBELL, CO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	372	433	563	653	538	669	923	---	214	129	297	
2	365	467	539	638	553	658	956	---	213	130	297	
3	359	469	538	627	559	685	981	---	217	138	300	
4	328	478	554	604	562	705	977	---	226	129	308	
5	320	495	528	574	563	719	1010	---	206	134	304	
6	328	500	498	546	564	763	968	---	202	144	336	
7	346	529	478	514	560	786	944	---	200	148	301	
8	342	523	493	495	556	788	941	---	194	158	299	
9	340	509	493	534	554	762	914	---	183	149	311	
10	357	496	499	529	552	769	880	---	173	125	326	
11	345	488	510	529	548	768	861	---	168	132	328	
12	333	489	507	560	555	728	868	---	165	137	329	
13	355	477	541	590	559	649	991	---	169	151	330	
14	397	487	557	564	575	641	1010	---	168	157	336	
15	405	497	594	549	588	622	949	---	181	174	335	
16	384	530	592	565	595	671	906	---	175	---	346	
17	381	560	615	567	653	700	911	---	162	---	369	
18	359	564	587	555	641	732	893	---	149	---	369	
19	348	552	582	553	622	792	944	---	140	---	371	
20	348	538	589	558	668	914	810	---	135	---	375	
21	347	535	596	550	654	895	645	382	129	---	353	
22	352	553	596	545	638	865	558	360	124	---	312	
23	361	564	598	543	637	865	532	324	120	222	308	
24	363	571	588	542	633	874	488	290	122	227	337	
25	372	553	605	542	626	875	388	267	128	211	368	
26	372	571	591	544	686	880	375	249	126	272	---	
27	370	589	588	547	682	874	361	237	102	297	---	
28	383	581	606	543	688	896	384	226	123	283	---	
29	435	559	654	541	---	901	407	223	126	271	---	
30	418	563	676	536	---	906	429	218	136	279	---	
31	412	---	677	533	---	899	---	210	---	293	---	
MEAN	364	524	569	557	600	782	773	271	163	187	330	

WTR YR 1983 MEAN 486 MAX 1010 MIN 102

09251000 YAMPA RIVER NEAR MAYBELL, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	11.5	9.5	5.5	4.0	.0	.0	.0	.0	.0	.0	.0	.0
2	11.5	8.5	4.5	3.0	.0	.0	.0	.0	.0	.0	.0	.0
3	11.5	9.0	3.5	1.5	.0	.0	.0	.0	.0	.0	.0	.0
4	12.5	9.5	4.0	2.0	.5	.0	.0	.0	.0	.0	.0	.0
5	11.5	9.0	3.5	1.5	.5	.0	.0	.0	.0	.0	.0	.0
6	10.5	8.0	4.0	1.5	.5	.0	.0	.0	.0	.0	.0	.0
7	10.5	8.0	4.5	2.0	.0	.0	.0	.0	.0	.0	.0	.0
8	9.0	7.0	4.0	3.0	.5	.0	.0	.0	.0	.0	1.0	.0
9	7.0	5.5	5.0	3.5	.0	.0	.0	.0	.0	.0	1.0	.0
10	6.5	4.5	5.0	3.5	.5	.0	.0	.0	.0	.0	2.5	.0
11	6.5	4.0	3.5	1.0	.5	.0	.0	.0	.0	.0	2.5	.0
12	7.5	7.0	1.5	.0	.0	.0	.0	.0	.0	.0	2.5	.0
13	9.0	6.5	1.0	.0	.0	.0	.0	.0	.0	.0	2.5	.0
14	9.0	6.5	1.0	.0	.5	.0	.0	.0	.0	.0	2.0	.5
15	10.0	7.5	.0	.0	.0	.0	.0	.0	.0	.0	1.5	.5
16	10.5	8.0	.5	.0	.5	.0	.0	.0	.0	.0	2.0	.0
17	10.0	7.5	1.0	.0	.5	.0	.0	.0	.0	.0	2.5	1.5
18	10.5	8.0	.5	.0	.5	.0	.0	.0	.0	.0	2.0	1.0
19	9.0	6.5	.5	.0	.0	.0	.0	.0	.0	.0	3.0	.0
20	8.0	6.0	.5	.0	.0	.0	.0	.0	.0	.0	4.0	1.0
21	8.0	5.5	.5	.0	.0	.0	.0	.0	.0	.0	5.0	2.0
22	7.0	5.5	.0	.0	.5	.0	.0	.0	.0	.0	5.5	3.0
23	7.0	5.0	.0	.0	.5	.0	.0	.0	.0	.0	6.5	3.5
24	8.5	6.0	.0	.0	.0	.0	.0	.0	.0	.0	5.0	3.0
25	9.0	8.0	.0	.0	.0	.0	.0	.0	.0	.0	3.5	2.0
26	8.5	7.5	.0	.0	.0	.0	.0	.0	.0	.0	3.5	.5
27	7.5	5.0	.0	.0	.0	.0	.0	.0	.0	.0	6.0	2.0
28	6.0	4.0	.0	.0	.0	.0	.0	.0	.0	.0	5.5	4.0
29	5.0	3.5	.5	.0	.0	.0	.0	.0	---	---	6.0	3.0
30	4.0	3.0	.0	.0	.0	.0	.0	.0	---	---	8.0	4.5
31	5.0	4.0	---	---	.0	.0	.0	.0	---	---	6.5	4.0
MONTH	12.5	3.0	5.5	.0	.5	.0	.0	.0	.0	.0	8.0	.0
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	6.0	3.0	---	---	10.0	9.0	14.5	13.0	23.5	20.5	22.5	19.0
2	5.5	3.5	---	---	10.0	9.0	14.0	13.0	23.0	20.5	23.0	19.5
3	5.5	3.0	---	---	10.5	8.5	15.0	13.5	23.5	20.0	24.0	19.5
4	5.0	3.0	---	---	11.0	10.0	14.5	13.0	23.5	21.5	21.5	19.0
5	4.0	1.5	---	---	11.0	9.5	15.0	12.5	25.0	21.0	21.0	17.0
6	5.0	1.5	---	---	10.5	9.0	16.0	14.5	25.0	21.5	21.5	17.0
7	6.5	2.5	---	---	12.0	9.5	18.0	15.5	25.5	22.5	21.5	17.5
8	6.5	3.5	---	---	12.0	10.5	18.0	16.5	25.5	22.5	22.0	18.5
9	9.0	5.0	---	---	11.5	10.0	17.5	17.0	26.5	23.0	22.0	17.5
10	9.5	7.0	11.5	9.5	12.5	10.5	18.0	16.5	26.0	23.0	21.5	17.0
11	8.5	7.5	10.0	8.5	12.5	11.5	17.5	16.0	25.5	23.0	20.5	16.5
12	8.0	6.0	8.5	7.5	12.0	10.0	18.0	16.0	24.0	22.5	21.0	16.5
13	7.5	4.5	8.0	7.0	10.0	9.0	19.0	16.0	24.5	21.5	22.0	16.5
14	7.5	3.0	8.5	7.5	11.0	8.5	20.0	17.0	24.5	21.5	20.0	14.5
15	9.0	4.5	9.0	7.0	13.0	10.5	19.0	17.5	25.0	21.5	20.5	14.5
16	10.0	5.5	9.0	6.5	13.5	11.5	19.0	16.0	24.5	21.5	20.5	14.5
17	12.0	6.5	7.0	5.5	13.5	12.0	19.0	17.0	25.0	21.5	20.5	14.5
18	11.0	7.5	7.5	5.5	14.0	12.0	20.0	17.5	25.5	22.0	20.0	14.0
19	11.0	9.0	9.5	7.5	14.0	12.5	21.0	19.0	24.0	21.5	18.5	12.5
20	10.0	8.5	9.5	7.5	14.0	12.5	21.5	19.5	22.5	21.0	16.0	10.0
21	9.5	8.0	11.5	8.5	14.0	13.0	21.5	19.0	22.5	19.0	15.0	8.5
22	8.0	7.0	12.5	10.0	14.0	13.0	21.0	19.5	23.0	19.5	16.0	9.5
23	9.0	6.5	13.0	10.5	14.0	13.5	21.0	19.5	22.5	19.0	16.0	11.5
24	10.5	7.0	13.0	11.5	14.0	13.0	21.0	18.0	22.0	18.5	17.5	13.5
25	10.5	9.0	12.5	11.5	14.0	12.5	21.0	18.5	21.5	18.0	19.0	14.5
26	8.5	7.5	12.0	11.0	14.5	13.5	21.0	19.5	22.5	18.5	18.0	13.5
27	8.5	7.5	12.0	11.0	13.5	12.0	19.5	18.5	23.0	19.0	18.0	14.5
28	8.0	6.5	12.5	11.5	12.5	11.0	21.0	17.5	23.5	19.5	18.0	13.5
29	7.5	6.0	11.5	11.0	14.0	12.0	21.5	18.5	22.0	18.5	17.5	13.5
30	8.0	6.5	11.5	10.5	14.0	13.0	24.0	20.0	22.5	18.5	15.5	12.5
31	---	---	10.5	9.0	---	---	23.5	21.0	22.5	18.5	---	---
MONTH	12.0	1.5	13.0	5.5	14.5	8.5	24.0	12.5	26.5	18.0	24.0	8.5
YEAR	26.5	.0										

09251000 YAMPA RIVER NEAR MAYBELL, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

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	694	56	105	750	---	60	500	---	40
2	822	60	133	862	---	65	500	---	40
3	862	70	163	798	---	50	500	30	40
4	814	46	101	670	21	38	450	18	22
5	726	33	65	560	23	35	450	14	17
6	718	35	68	588	36	57	450	14	17
7	718	27	52	560	15	23	450	24	29
8	718	27	52	553	26	39	450	14	17
9	670	23	42	553	26	39	450	10	12
10	726	22	43	588	14	22	450	10	12
11	710	26	50	595	13	21	450	14	17
12	694	24	45	602	15	24	450	14	17
13	567	15	23	581	14	22	400	15	16
14	532	23	33	500	14	19	350	10	9.5
15	546	26	38	300	21	17	300	10	8.1
16	630	30	51	350	18	17	300	7	5.7
17	678	19	35	350	16	15	300	18	15
18	718	30	58	500	16	22	300	14	11
19	710	22	42	550	21	31	250	18	12
20	686	29	54	550	21	31	250	---	11
21	646	29	51	500	23	31	250	---	11
22	609	18	30	450	---	26	250	---	11
23	609	16	26	400	---	20	250	---	10
24	609	19	31	350	---	20	250	---	10
25	595	---	30	400	---	25	200	---	9.0
26	595	---	30	450	---	25	200	---	9.0
27	616	---	32	450	---	30	200	---	8.5
28	638	---	42	450	---	30	200	---	8.5
29	758	---	65	350	---	25	200	---	8.5
30	662	---	45	450	---	30	200	---	8.5
31	630	---	32	---	---	---	200	---	8.0
TOTAL	20906	---	1667	15610	---	909	10400	---	470.3
		JANUARY			FEBRUARY			MARCH	
1	200	---	8.0	350	---	12	500	---	400
2	200	---	8.0	300	---	10	550	---	450
3	200	---	8.0	300	---	10	600	---	450
4	200	---	8.0	300	---	10	700	---	500
5	200	---	7.5	300	14	11	750	---	550
6	250	---	9.0	300	---	13	1000	230	621
7	300	---	11	300	---	15	1000	---	600
8	300	---	10	300	---	16	900	---	600
9	300	---	10	300	---	18	800	---	550
10	300	---	10	350	---	23	798	---	500
11	350	---	12	350	---	25	806	200	400
12	350	---	11	350	---	27	1180	---	2000
13	350	---	11	350	30	28	1630	1610	4440
14	350	---	11	350	---	25	1790	1780	3760
15	350	---	11	350	---	25	1660	500	2440
16	350	11	10	350	---	25	1360	340	1250
17	350	---	12	350	---	25	1120	220	665
18	350	---	12	350	---	25	1020	120	330
19	350	---	12	350	---	25	918	130	322
20	350	---	12	350	35	33	822	70	150
21	350	---	12	350	---	33	774	---	135
22	350	---	12	350	---	50	718	---	120
23	350	---	12	350	75	70	694	---	110
24	350	---	12	350	---	100	726	---	110
25	350	---	12	350	---	150	774	---	105
26	350	---	12	400	---	300	758	---	90
27	350	---	12	400	355	383	710	---	75
28	350	---	12	450	---	400	686	---	65
29	350	---	12	---	---	---	710	---	60
30	350	25	23	---	---	---	702	---	55
31	350	---	12	---	---	---	662	25	45
TOTAL	9800	---	346.5	9600	---	1887	27818	---	21948

09251000 YAMPA RIVER NEAR MAYBELL, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

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	806	70	152	4250	500	5740	11000	---	24000
2	830	90	202	4000	400	4320	10200	---	22000
3	782	75	158	3840	360	3730	10300	---	22500
4	790	47	100	3710	360	3600	9400	---	20100
5	742	40	80	3920	360	3320	9720	---	21500
6	646	35	61	4130	---	5700	9400	---	20100
7	602	22	36	4250	---	5740	9000	---	19500
8	588	24	38	3840	259	2690	8700	---	18600
9	623	30	50	4160	---	5700	9250	---	19600
10	646	35	61	5380	---	7000	9600	---	20600
11	678	31	57	6720	---	8000	9950	---	21200
12	862	37	86	7000	---	9450	10800	---	23000
13	894	53	128	5960	---	8050	11400	---	25000
14	854	48	110	4740	---	6000	10600	---	22500
15	734	---	80	4300	---	5800	8040	---	17500
16	678	---	65	4000	---	5700	7540	---	16500
17	710	33	63	4060	---	5700	7980	---	17000
18	846	35	80	4100	---	5700	8540	---	18500
19	1280	120	415	3830	---	5000	9220	780	19400
20	2150	665	3860	3920	---	6000	10300	---	22000
21	2510	865	5860	3890	792	8320	10800	---	23000
22	3410	965	8880	4200	---	9800	10800	---	23000
23	3400	895	8200	5260	---	12200	10800	---	23000
24	3290	920	8170	6360	---	14500	10700	---	22500
25	4500	1180	14300	8000	---	17900	10600	---	22500
26	3950	1280	13600	9500	---	20000	10900	---	23500
27	5140	1010	14000	10600	---	23000	11200	---	24000
28	4160	520	5840	11400	---	25000	10200	---	22000
29	3860	455	4740	12400	---	26500	9900	---	20100
30	3960	450	4200	13200	---	28500	8800	---	16600
31	---	---	---	13200	---	28500	---	---	---
TOTAL	54921	---	93672	188120	---	327160	295640	---	631300
		JULY			AUGUST			SEPTEMBER	
1	8080	---	14200	1410	---	600	412	---	15
2	7540	---	13200	1400	---	570	360	---	14
3	7160	---	11600	1360	---	550	365	---	13
4	7960	---	12900	1370	---	460	376	---	12
5	7080	---	10500	1400	---	470	355	---	11
6	5860	---	8700	1520	---	510	406	10	11
7	5540	---	7500	1410	---	475	448	10	12
8	5560	---	7500	1200	---	405	500	16	22
9	6300	---	8500	1080	---	290	450	15	18
10	5880	---	7900	1000	---	270	500	14	19
11	5400	---	6500	950	---	250	350	16	15
12	4500	---	5500	894	---	240	320	14	12
13	3800	---	4100	862	---	175	300	13	11
14	3340	---	3600	959	---	195	280	12	9.1
15	3070	---	2900	902	---	180	260	10	7.0
16	2810	---	2650	790	---	160	240	8	5.2
17	2630	---	2130	726	---	100	220	5	3.0
18	2320	---	1560	718	---	95	200	5	2.7
19	2030	---	960	766	---	105	180	5	2.4
20	2000	92	500	846	---	115	183	5	2.5
21	1980	---	800	1110	---	300	186	5	2.5
22	2240	---	1810	1040	50	197	222	12	7.2
23	2870	380	2940	846	60	137	242	5	3.3
24	3040	---	2870	718	65	126	246	15	10
25	2800	---	2250	623	20	34	242	10	6.5
26	2410	---	1650	560	15	23	246	10	6.6
27	2090	---	1200	539	15	22	250	5	3.4
28	2040	---	1000	490	10	13	262	5	3.5
29	2000	---	1000	436	15	18	262	5	3.5
30	1720	---	800	424	---	17	258	5	3.5
31	1500	---	700	406	---	16	---	---	---
TOTAL	123550	---	149920	28755	---	7118	9121	---	266.9
YEAR	794241		1236664.7						

09253000 LITTLE SNAKE RIVER NEAR SLATER, CO

LOCATION.--40°59'58", long 107°08'34", in SW¼NW¼ sec.15, T.12 N., R.87 W., Routt County, Hydrologic Unit 14050003, on left bank just downstream from highway bridge at Focus Ranch, 0.2 mi downstream from Spring Creek, and 12 mi east of Slater.

DRAINAGE AREA.--285 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1942 to September 1947, October 1950 to current year.

REVISED RECORDS.--WSP 1733: 1960.

GAGE.--Water-stage recorder. Datum of gage is 6,831.00 ft, National Geodetic Vertical Datum of 1929.

REMARKS.--Records good, except those for winter period, which are poor. Diversions for irrigation of about 2,000 acres above station.

AVERAGE DISCHARGE.--38 years, 232 ft³/s; 168,100 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,200 ft³/s May 28, 1983, gage height, 8.09 ft; maximum gage height, 8.95 ft, Apr. 25, 1974; minimum daily discharge, 8.6 ft³/s Sept. 10, 1944.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,600 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
May 10	2100	1,690	6.52	June 11	2200	3,320	7.65
May 28	2200	* 4,200	8.09	June 20	2300	2,790	7.34

Minimum daily discharge, 27 ft³/s Sept. 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	156	83	80	30	90	40	61	356	2560	1280	131	41
2	96	70	80	30	80	45	60	359	2300	1190	137	38
3	77	60	70	30	60	40	61	353	2180	1390	164	45
4	74	55	60	40	45	45	53	394	2410	1050	122	83
5	72	55	60	60	35	50	50	546	2350	907	121	76
6	68	56	60	100	35	60	50	562	2250	876	114	50
7	66	58	60	150	35	65	55	486	2180	844	98	42
8	64	65	50	150	40	70	58	698	2280	834	93	45
9	62	68	50	100	50	79	58	1010	2230	772	87	52
10	60	66	60	80	80	79	57	1260	2440	730	84	43
11	64	66	70	60	80	89	58	1320	2760	603	75	38
12	66	61	70	50	70	98	60	994	2980	524	103	35
13	70	55	70	50	60	105	57	788	2270	454	107	33
14	70	50	65	50	50	112	56	751	1870	428	82	33
15	74	50	55	50	45	97	60	700	1790	404	73	35
16	80	50	60	50	40	80	58	660	1880	346	68	33
17	69	60	70	60	40	72	60	615	2020	295	64	30
18	64	80	70	70	40	70	74	552	2270	267	103	28
19	62	97	60	70	40	66	100	633	2560	253	74	27
20	51	109	60	70	35	63	113	703	2570	239	72	30
21	55	100	60	70	35	61	129	801	2540	221	66	30
22	53	80	70	80	35	63	134	1030	2490	215	60	32
23	55	70	80	80	35	64	153	1370	2340	311	55	32
24	53	60	80	80	35	62	222	1910	2300	234	51	39
25	54	55	60	80	35	61	344	2280	2310	177	50	46
26	56	50	50	80	35	59	371	2450	2140	182	49	36
27	50	50	40	90	35	59	347	2760	1960	350	46	34
28	55	50	30	100	40	59	295	3240	1780	260	44	35
29	59	60	30	100	---	57	317	3310	1490	170	45	34
30	73	70	30	100	---	60	375	3050	1420	142	45	33
31	84	---	30	100	---	66	---	2520	---	138	44	---
TOTAL	2112	1959	1840	2310	1335	2096	3946	38461	66920	16086	2527	1188
MEAN	68.1	65.3	59.4	74.5	47.7	67.6	132	1241	2231	519	81.5	39.6
MAX	156	109	80	150	90	112	375	3310	2980	1390	164	83
MIN	50	50	30	30	35	40	50	353	1420	138	44	27
AC-FT	4190	3890	3650	4580	2650	4160	7830	76290	132700	31910	5010	2360

CAL YR 1982 TOTAL 118215 MEAN 324 MAX 2170 MIN 19 AC-FT 234500
WTR YR 1983 TOTAL 140780 MEAN 386 MAX 3310 MIN 27 AC-FT 279200

09253000 LITTLE SNAKE RIVER NEAR SLATER, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1977 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	SPE-CIFIC CON-DUCT-ANCE LAB (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO
OCT												
22...	1115	37	--	144	--	.5	--	54	15	4.1	7.4	.5
APR												
12...	1055	36	172	176	7.8	2.0	10.8	75	22	4.8	8.2	.4
MAY												
24...	0930	1420	85	87	7.4	3.0	10.4	39	12	2.2	3.0	.2
JUL												
21...	1025	221	77	85	7.8	14.5	8.2	34	10	2.2	1.7	.1
AUG												
31...	1215	44	152	149	9.1	17.0	11.0	66	20	4.0	6.4	.4

DATE	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)
OCT											
22...	.90	65	5.7	2.4	.00	17	91	.12	9.1	.000	.000
APR											
12...	.80	80	10	3.4	.60	20	120	.16	11	.600	.060
MAY											
24...	.80	38	4.3	2.2	.00	14	61	.08	235	.100	.050
JUL											
21...	.50	38	1.0	1.1	.00	12	51	.07	31	.000	.030
AUG											
31...	.90	70	8.0	2.2	.20	9.4	93	.13	11	.000	.030

09255000 SLATER FORK NEAR SLATER, CO

LOCATION.--Lat 40°58'57", long 107°22'56", in SW¼NE¼ sec.21, T.12 N., R.89 W., Moffat County, Hydrologic Unit 14050003, on right bank 15 ft downstream from highway bridge, 1.0 mi upstream from mouth, and 1.5 mi south of Slater.

DRAINAGE AREA.--161 mi².

PERIOD OF RECORD.--May to October, December 1910, March to October 1911, and April to May 1912 (published as Slater Creek), July 1931 to current year. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 618: 1910-11. WSP 764: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 6,600 ft, from river-profile map. May 28, 1910, to May 25, 1912, nonrecording gage at site 1.5 mi upstream at different datum. July 9, 1931, to May 6, 1932, nonrecording gage at site 0.2 mi downstream at different datum.

REMARKS.--Records good except those for winter period, which are fair and those for July 21 to Sept. 30, which are poor. Diversions for irrigation of about 500 acres above station.

AVERAGE DISCHARGE.--52 years (water years 1932-83), 75.4 ft³/s; 54,630 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,860 ft³/s May 8, 1974, gage height, 10.75 ft, from peak indicator; maximum gage height, 10.98 ft, May 28, 1979, from floodmark; no flow Aug. 2-10, 1934, Aug. 18, 25-27, 1936, Aug. 29 to Sept. 3, 1954, Aug. 3, 4, 15, 16, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 430 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
May 11	0100	677	7.29	July 27	unknown	901	8.18
May 27	2200	* 1,200	9.15				

Minimum daily discharge, 16 ft³/s, Sept. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	106	50	25	20	25	45	43	197	745	342	84	17
2	69	45	30	20	20	46	40	183	731	325	77	16
3	55	30	30	20	20	42	42	162	660	424	68	17
4	52	40	30	20	20	38	36	176	774	295	50	25
5	53	35	30	25	20	38	39	245	710	244	43	31
6	49	38	35	30	20	33	34	254	700	242	43	26
7	43	35	35	35	20	26	38	207	777	252	36	21
8	44	40	30	35	20	38	37	318	715	240	30	20
9	44	45	25	33	25	30	38	446	738	230	24	21
10	38	41	25	30	25	36	37	524	762	214	20	20
11	39	35	25	32	25	50	39	559	848	171	18	20
12	44	30	25	30	25	65	40	420	872	143	18	21
13	44	35	25	30	25	71	35	328	592	134	35	25
14	44	30	30	30	25	75	33	315	487	126	24	24
15	47	25	30	30	25	59	35	282	486	123	20	26
16	50	25	30	30	25	49	36	279	547	114	19	30
17	46	30	35	35	25	45	37	248	581	96	18	32
18	43	30	30	35	25	44	51	217	629	85	20	33
19	42	35	25	35	25	44	78	242	713	79	30	33
20	35	35	25	34	25	39	91	271	678	75	20	35
21	37	35	30	33	26	38	110	343	653	93	21	36
22	35	30	30	32	36	39	102	462	622	134	19	39
23	34	25	30	32	29	41	113	573	581	174	18	43
24	33	20	30	30	30	40	193	800	566	151	17	51
25	34	25	25	30	37	39	272	963	525	134	17	63
26	39	25	20	30	39	38	226	1010	497	160	17	62
27	108	25	20	35	34	37	194	1070	469	310	17	49
28	71	25	20	35	34	39	164	1100	470	330	17	42
29	54	25	20	30	---	36	188	1060	396	201	17	42
30	55	25	20	30	---	40	245	991	375	118	17	52
31	55	---	20	25	---	51	---	724	---	99	17	---
TOTAL	1542	969	840	931	730	1351	2666	14969	18899	5858	891	972
MEAN	49.7	32.3	27.1	30.0	26.1	43.6	88.9	483	630	189	28.7	32.4
MAX	108	50	35	35	39	75	272	1100	872	424	84	63
MIN	33	20	20	20	20	26	33	162	375	75	17	16
AC-FT	3060	1920	1670	1850	1450	2680	5290	29690	37490	11620	1770	1930

CAL YR 1982 TOTAL 38010.6 MEAN 104 MAX 1110 MIN 4.8 AC-FT 75390
WTR YR 1983 TOTAL 50618.0 MEAN 139 MAX 1100 MIN 16 AC-FT 100400

09257000 LITTLE SNAKE RIVER NEAR DIXON, WY

LOCATION.--Lat 41°01'42", long 107°32'55", in SE¼NW¼ sec.8, T.12 N., R.90 W., Carbon County, WY, Hydrologic Unit 14050003, on left bank 200 ft upstream from highway bridge, 1,000 ft upstream from Willow Creek, and 0.8 mi west of Dixon.

DRAINAGE AREA.--988 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1910 to September 1923, March 1938 to current year (no winter records since 1971). Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 1243: 1920(M).

GAGE.--Water-stage recorder. Datum of gage is 6,331.22 ft, National Geodetic Vertical Datum of 1929. May 27, 1910, to Sept. 30, 1923, nonrecording gage on highway bridge 200 ft downstream at datum 2.98 ft, higher. Mar. 15, 1938, to Sept. 30, 1957, water-stage recorder at site 225 ft downstream at datum 2.98 ft, higher; Oct. 1, 1957, to June 6, 1968, at site 850 ft downstream, at present datum; and June 7 to Sept. 30, 1968, at site 225 ft downstream, at present datum.

REMARKS.--Records poor. Diversions for irrigation of about 9,500 acres above station. One diversion above station for irrigation of about 3,000 acres below. Transbasin diversions above station.

AVERAGE DISCHARGE.--46 years (water years 1911-23, 1939-71), 514 ft^3/s; 372,400 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 9,600 ft^3/s May 26, 1920, gage height, 11.6 ft, present datum; maximum gage height, 11.74 ft, May 30, 1971; no flow Sept. 19, 20, 22, 1977, Aug. 7, 17, 18, 27-29, 1981.

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

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
May 28	1230	* 7,690	11.39	June 12	1400	6,050	10.48

Minimum daily discharge during period of operation, 15 ft^3/s Sept. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1							170	940	4850	2360	381	21
2							169	880	4690	2190	451	18
3							175	800	4160	2510	543	15
4							145	1000	4450	2130	365	57
5							135	1300	4460	1800	318	152
6							141	1300	4380	1670	324	90
7							132	1100	4120	1620	265	63
8							150	1600	4080	1610	220	65
9							173	2000	3890	1600	174	73
10							156	2700	4420	1560	137	63
11							196	3200	4840	1300	122	58
12							244	2400	5520	1070	103	56
13							184	1800	4540	981	175	58
14							144	1600	3290	868	141	57
15							198	1500	3060	795	103	61
16							209	1400	3170	801	82	63
17							217	1300	3320	662	73	62
18							227	1300	3640	587	86	61
19							383	1500	4450	530	124	60
20							463	1800	4490	504	90	65
21							539	2200	4330	460	93	66
22							538	2700	4250	421	74	71
23							596	3100	4010	764	60	75
24							1130	4700	3940	631	47	90
25							1000	5630	3860	502	27	109
26							900	6190	3730	699	25	98
27							820	6540	3290	989	20	83
28							760	6940	3440	1140	21	77
29							900	6920	2800	624	20	76
30							1000	6620	2560	479	22	85
31							---	5160	---	418	24	---
TOTAL							12194	88120	120030	34275	4710	2048
MEAN							406	2843	4001	1106	152	68.3
MAX							1130	6940	5520	2510	543	152
MIN							132	800	2560	418	20	15
AC-FT							24190	174800	238100	67980	9340	4060

09257000 LITTLE SNAKE RIVER NEAR DIXON, WY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1975 to current year.

REMARKS.--Pesticide and nutrient analyses were performed by the Denver Central Lab.

WATER QUALITY DATA, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE LAB (UMHOS)	TEMPER-ATURE (DEG C)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)
OCT										
21...	1300	139	261	4.5	110	33	7.5	9.0	.4	1.3
APR										
12...	1425	255	371	5.0	170	47	13	18	.6	1.5
MAY										
24...	1325	4550	158	8.0	68	20	4.4	4.6	.3	1.6
JUL										
21...	1430	479	213	21.0	75	22	4.9	4.2	.2	.60
AUG										
31...	1515	22	276	23.0	130	36	9.4	14	.6	1.8

DATE	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)
OCT										
21...	110	19	2.2	.00	16	150	.21	58	.000	.000
APR										
12...	160	45	3.8	.60	18	240	.33	167	.000	.500
MAY										
24...	70	11	1.6	.30	13	98	.13	1210	.100	.070
JUL										
21...	73	8.4	1.8	.30	13	99	.13	128	.000	.060
AUG										
31...	130	23	3.0	.40	6.1	170	.23	10	.100	.020

09258000 WILLOW CREEK NEAR DIXON, WY

LOCATION.--Lat 40°54'56", long 107°31'16", on line between secs. 8 and 17, T.11 N., R.90 W., Moffat County, Co., Hydrologic Unit 14050003, on right bank 6.2 mi south of Colorado-Wyoming State line, 8.0 mi upstream from mouth, and 8.3 mi south of Dixon.

DRAINAGE AREA.--24 mi^2, approximately.

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

GAGE.--Water-stage recorder. Altitude of gage is 6,700 ft, from topographic map.

REMARKS.--Records good except those for winter period, which are poor. One small ditch diverts water above station for irrigation. Regulation by Elk Lake, capacity, 400 acre-ft.

AVERAGE DISCHARGE.--30 years, 10.0 ft^3/s; 7,240 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 319 ft^3/s Apr. 25, 1974, gage height, 5.42 ft, from rating curve extended above 160 ft^3/s; no flow Sept. 17-19, 1955, many days July through September 1977, and Aug. 8-16, 1982.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 70 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Mar. 12	2000	116	4.11	May 24	2200	123	4.18
Apr. 24	1800	* 303	5.40	June 6	2100	120	4.15
Apr. 29	1900	166	4.50	June 11	2400	95	3.96
May 8	2100	216	4.84	July 27	0300	274	5.21

Minimum daily discharge, 2.0 ft^3/s Dec. 28 to Jan. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	10	5.5	2.0	7.8	8.1	8.7	60	59	58	11	3.1
2	7.4	6.0	5.9	2.0	7.1	8.0	6.9	48	55	59	10	2.9
3	6.1	4.8	5.0	2.0	6.7	7.0	7.7	43	47	65	8.5	4.3
4	6.0	4.5	5.0	4.0	6.4	7.0	6.9	68	53	53	7.7	9.8
5	6.5	5.4	5.0	6.0	6.0	8.0	6.5	94	56	45	8.9	6.7
6	5.6	5.0	5.0	9.0	5.0	8.0	6.5	76	61	49	6.8	4.0
7	5.0	4.6	4.0	11	4.0	8.0	7.0	77	57	54	7.2	3.4
8	5.4	4.8	4.0	11	4.0	8.5	7.1	117	52	58	8.8	4.7
9	5.1	5.4	4.0	10	5.0	9.3	7.0	112	55	58	8.5	4.1
10	5.4	5.6	5.0	8.7	5.0	11	7.3	89	63	55	7.8	3.4
11	5.5	3.6	5.0	8.2	5.0	28	7.8	73	74	45	7.4	3.0
12	5.4	3.0	5.0	7.9	5.5	64	7.5	45	78	35	8.1	2.9
13	5.6	3.0	5.0	7.0	6.2	45	6.7	35	51	36	8.6	2.9
14	5.2	3.0	5.0	7.0	6.9	26	6.2	39	39	36	7.1	2.9
15	5.3	3.0	5.0	7.0	6.3	14	6.2	33	42	36	6.6	3.1
16	5.5	4.0	6.0	7.0	6.0	11	6.4	33	50	32	6.4	2.7
17	5.3	6.0	6.8	8.0	5.0	11	10	29	57	27	6.0	2.6
18	5.0	9.3	6.4	9.0	5.5	7.6	29	26	71	27	8.5	2.4
19	4.8	17	6.3	9.0	5.5	7.0	51	35	93	26	6.2	2.5
20	3.9	16	6.8	9.6	5.6	8.8	57	34	89	24	6.1	2.8
21	4.4	9.9	7.6	9.7	5.0	9.5	69	40	98	22	5.4	3.1
22	4.2	7.5	7.5	10	5.0	7.3	57	53	93	23	5.0	3.2
23	4.1	6.2	7.7	10	5.0	6.7	78	64	87	36	4.6	3.2
24	4.1	5.0	6.2	10	5.0	6.7	149	78	82	19	4.4	3.4
25	4.6	4.0	5.0	9.0	5.0	6.0	120	84	75	30	4.5	4.0
26	5.2	3.0	4.0	9.0	5.0	5.5	61	85	72	52	4.2	3.3
27	4.0	3.0	3.0	9.6	5.0	6.0	44	89	66	65	3.9	3.4
28	5.0	3.0	2.0	9.7	6.0	6.3	43	92	65	20	3.6	3.6
29	6.0	4.0	2.0	9.0	---	5.7	92	84	58	14	3.5	3.2
30	6.5	5.0	2.0	9.0	---	8.3	97	80	57	12	3.4	3.7
31	17	---	2.0	8.3	---	13	---	57	---	11	3.3	---
TOTAL	186.1	174.6	154.7	248.7	155.5	386.3	1069.4	1972	1955	1182	202.0	108.3
MEAN	6.00	5.82	4.99	8.02	5.55	12.5	35.6	63.6	65.2	38.1	6.52	3.61
MAX	17	17	7.7	11	7.8	64	149	117	98	65	11	9.8
MIN	3.9	3.0	2.0	2.0	4.0	5.5	6.2	26	39	11	3.3	2.4
AC-FT	369	346	307	493	308	766	2120	3910	3880	2340	401	215

CAL YR 1982 TOTAL 4141.67 MEAN 11.3 MAX 75 MIN .00 AC-FT 8210
WTR YR 1983 TOTAL 7794.60 MEAN 21.4 MAX 149 MIN 2.0 AC-FT 15460

09259050 LITTLE SNAKE RIVER BELOW BAGGS, WY

LOCATION.--Lat 41°01'43", long 107°41'14", in SE¼NW¼NW¼ sec.7, T.12 N., R.92 W., Carbon County, Hydrologic Unit 14050003, 0.8 mi downstream from Ledford Slough, 1.5 mi southwest of Baggs, and 3.5 mi downstream from bridge on State Highway 789 in Baggs.

PERIOD OF RECORD.--October 1980 to current year.

REMARKS.--Pesticide and nutrient analyses were performed by the Denver Central Lab.

WATER QUALITY DATA, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	SPE-CIFIC CON-DUCT-ANCE LAB (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	HARD-NESS (MG/L AS CACO3)
OCT										
21...	1000	56	285	305	7.3	3.0	9.5	10.8	1000	130
DEC										
01...	1145	210	332	336	7.9	.0	13	11.3	22	140
MAR										
15...	1130	999	495	512	8.1	1.0	1800	11.0	K60	150
APR										
12...	1645	421	585	--	8.3	5.5	700	9.7	<8	--
MAY										
24...	1540	5010	175	--	8.0	10.0	200	8.4	K640	--
JUL										
21...	1620	445	235	217	8.1	22.0	14	7.3	K270	97
AUG										
31...	1745	39	415	407	8.5	23.0	13	9.0	200	170

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)
OCT										
21...	35	9.4	16	.6	1.3	130	27	3.2	.00	15
DEC										
01...	39	10	19	.7	1.6	140	36	4.0	.30	18
MAR										
15...	37	15	53	2	2.4	130	120	7.5	.10	9.6
APR										
12...	--	--	--	--	--	--	--	--	--	--
MAY										
24...	--	--	--	--	--	--	--	--	--	--
JUL										
21...	27	7.2	11	.5	1.3	97	19	2.4	.00	14
AUG										
31...	45	13	30	1	2.3	170	41	7.1	.40	5.5

DATE	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)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)
OCT										
21...	180	.25	28	<.100	.000	<.060	--	1.3	--	.000
DEC										
01...	210	.29	120	<.100	.000	<.060	--	.70	--	.000
MAR										
15...	320	.44	870	.100	.300	.140	8.6	8.7	8.8	.050
APR										
12...	--	--	--	.200	--	.080	1.8	1.9	2.1	1.50
MAY										
24...	--	--	--	.100	--	.130	1.5	1.6	1.7	.360
JUL										
21...	140	.19	168	<.100	.000	.100	1.1	1.3	--	.070
AUG										
31...	250	.33	26	<.100	.500	.040	.36	.40	--	.010

K BASED ON NON-IDEAL COLONY COUNT.

09260000 LITTLE SNAKE RIVER NEAR LILY, CO

LOCATION.--Lat 40°32'50", long 108°25'25", in NW¼NE¼ sec.20, T.7 N., R.98 W., Moffat County, Hydrologic Unit 14050003, on left bank 170 ft downstream from highway bridge, 6.0 mi north of Lily, and 10 mi upstream from mouth.

DRAINAGE AREA.--3,730 mi^2, approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June to August 1904 (published as "near Maybell"), October 1921 to current year. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 1713: 1959.

GAGE.--Water-stage recorder. Altitude of gage is 5,685 ft, from river-profile map. June 9 to Aug. 14, 1904, nonrecording gage, and May 5, 1922, to Nov. 30, 1935, water-stage recorder, at site 300 ft upstream at different datums.

REMARKS.--Records poor. Diversions for irrigation of about 21,000 acres above station.

AVERAGE DISCHARGE.--62 years, 579 ft^3/s; 419,500 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,200 ft^3/s May 27, 1926, gage height, 10.5 ft, site and datum then in use, from rating curve extended above 3,600 ft^3/s; maximum gage height, 11.1 ft, Feb. 13, 1962, from floodmark (backwater from ice); no flow at times in most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 3,500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
May 11	1200	4,680	5.76	May 30	0430	* 7,630	7.25

Minimum daily discharge, 47 ft^3/s Sept. 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	522	100	100	50	50	270	370	1830	6450	2880	543	70
2	686	120	120	50	50	300	380	2070	5560	2670	474	70
3	490	200	120	50	50	400	360	1790	5880	2490	410	84
4	430	180	100	50	50	500	350	1540	5260	2560	380	105
5	370	150	100	50	50	550	340	1460	5190	2540	462	101
6	310	100	100	50	50	600	339	1730	5480	2110	385	130
7	250	100	100	50	50	500	301	2270	5540	1880	334	123
8	300	80	100	50	50	500	275	2030	5130	1780	317	191
9	250	80	100	50	50	450	285	2120	4670	1710	301	161
10	230	100	100	50	80	400	293	3050	4850	1720	263	328
11	150	120	100	50	80	300	309	3820	4860	1660	236	188
12	160	120	100	50	80	340	343	4220	5030	1560	247	170
13	150	120	100	50	80	380	438	3500	5300	1390	222	145
14	140	100	100	50	80	470	415	2600	5280	1170	257	123
15	120	100	90	50	80	480	334	2250	3900	918	229	109
16	50	120	80	50	80	460	285	2120	3450	835	257	94
17	80	150	80	50	80	460	293	2010	3400	765	226	70
18	90	170	80	50	80	460	309	1880	3560	722	194	64
19	100	180	70	50	80	460	352	1740	3800	610	191	60
20	90	170	70	50	80	460	543	1680	4380	565	524	53
21	90	140	70	50	80	440	853	2050	4630	595	361	55
22	90	120	70	50	80	430	1070	2160	4520	536	226	53
23	80	100	70	50	80	420	1500	2670	4380	625	206	47
24	70	90	50	50	80	420	1260	3230	4300	673	179	58
25	60	100	50	50	80	400	1260	4180	4200	880	150	66
26	60	110	50	50	150	400	2250	4940	4150	681	130	68
27	60	120	50	50	200	380	2130	5520	4130	595	109	76
28	50	120	50	50	300	360	1820	6090	3680	1040	96	80
29	50	100	50	50	---	340	1560	6580	3840	1260	90	96
30	100	100	50	50	---	320	1460	7100	3230	1080	82	100
31	120	---	50	50	---	320	---	6660	---	739	76	---
TOTAL	5798	3660	2520	1550	2380	12970	22077	96890	138030	41239	8157	3138
MEAN	187	122	81.3	50.0	85.0	418	736	3125	4601	1330	263	105
MAX	686	200	120	50	300	600	2250	7100	6450	2880	543	328
MIN	50	80	50	50	50	270	275	1460	3230	536	76	47
AC-FT	11500	7260	5000	3070	4720	25730	43790	192200	273800	81800	16180	6220

CAL YR 1982 TOTAL 282038 MEAN 773 MAX 5440 MIN 11 AC-FT 559400
WTR YR 1983 TOTAL 338409 MEAN 927 MAX 7100 MIN 47 AC-FT 671200

NOTE.--NO GAGE-HEIGHT RECORD DEC. 19 TO APR. 5.

09260000 LITTLE SNAKE RIVER NEAR LILY, CO--Continued
(National Stream-Quality Accounting Network Station)

WATER-QUALITY RECORDS

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

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: July 1975 to current year.
WATER TEMPERATURES: July 1975 to current year.

INSTRUMENTATION:--Water-quality monitor since July 1975.

EXTREMES FOR PERIOD OF RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 2,020 micromhos Oct. 11, 1977; minimum, 122 micromhos June 20, 1978.
WATER TEMPERATURES: Maximum, 32.0°C Aug. ,1981; minimum, freezing point on many days during winter months each year.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, not determined; minimum, not determined.
WATER TEMPERATURES: Maximum, 31.5°C Aug. 9, 10; minimum, 0.0°C on many days during October to April.

WATER QUALITY DATA, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	SPE-CIFIC CON-DUCT-ANCE LAB (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)
DEC											
03...	1125	246	480	472	8.2	.0	9.3	11.3	K14	150	170
MAR											
16...	1130	E460	495	464	7.9	2.0	5100	11.1	K67	31000	99
MAY											
18...	0930	1850	256	288	7.9	6.0	320	10.0	K30	390	110
SEP											
06...	0845	133	745	742	8.2	12.0	650	8.6	700	4200	190

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)
DEC										
03...	48	12	40	1	1.3	163	76	10	.30	17
MAR										
16...	27	7.7	49	2	1.4	96	120	9.3	.40	7.6
MAY										
18...	31	8.4	13	.6	.80	99	38	3.3	.20	15
SEP										
06...	52	15	88	3	3.0	188	170	27	.30	8.9

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)
DEC										
03...	301	300	.41	200	<.100	<.060	1.3	.140	.020	<.010
MAR										
16...	277	280	.38	--	.270	.120	8.2	4.00	.030	.040
MAY										
18...	179	170	.24	894	.670	<.060	.70	.280	.040	.030
SEP										
06...	470	480	.64	169	<.100	.060	1.0	.150	.030	.020

E ESTIMATED.
K BASED ON NON-IDEAL COLONY COUNT.

09260000 LITTLE SNAKE RIVER NEAR LILY, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)
DEC							
03...	2	46	<1	<1	<3	3	30
MAR							
16...	1	38	<1	<1	<3	3	120
MAY							
18...	1	22	<1	<1	<3	7	57
SEP							
06...	2	61	<1	<1	<3	12	10

DATE	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	ZINC, DIS-SOLVED (UG/L AS ZN)
DEC							
03...	4	7	.1	3	<1	1	16
MAR							
16...	5	3	<.1	1	1	1	7
MAY							
18...	1	3	<.1	1	1	<1	4
SEP							
06...	2	3	<.1	2	1	<1	8

09260000 LITTLE SNAKE RIVER NEAR LILY, CO--Continued

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM	SED. SUSP. FALL DIAM. % FINER THAN .004 MM	SED. SUSP. FALL DIAM. % FINER THAN .016 MM	SED. SUSP. FALL DIAM. % FINER THAN .062 MM	SED. SUSP. FALL DIAM. % FINER THAN .125 MM	SED. SUSP. FALL DIAM. % FINER THAN .250 MM	SED. SUSP. FALL DIAM. % FINER THAN .500 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT												
03...	0920	487	17300	22700	--	--	--	--	--	--	--	--
10...	1130	240	1330	862	--	--	--	--	--	--	--	--
17...	1245	240	468	303	--	--	--	--	--	--	--	--
24...	1100	209	281	159	--	--	--	--	--	--	--	--
NOV												
03...	1750	380	866	889	--	--	--	--	--	--	--	--
07...	1507	264	673	480	--	--	--	--	--	--	--	--
14...	1050	100	539	146	--	--	--	--	--	--	--	--
21...	0830	200	305	165	--	--	--	--	--	--	--	--
27...	1030	175	170	80	--	--	--	--	--	--	--	--
DEC												
03...	1125	246	--	--	--	--	--	--	--	--	--	--
03...	1125	246	542	360	--	--	--	--	--	--	--	49
05...	1105	250	392	265	--	--	--	--	--	--	--	--
12...	1425	150	421	171	--	--	--	--	--	--	--	--
19...	1535	150	687	278	--	--	--	--	--	--	--	--
26...	1045	150	52	21	--	--	--	--	--	--	--	--
JAN												
02...	1600	100	170	46	--	--	--	--	--	--	--	--
09...	1605	100	957	258	--	--	--	--	--	--	--	--
15...	1435	150	295	119	--	--	--	--	--	--	--	--
23...	1015	200	83	45	--	--	--	--	--	--	--	--
30...	1110	200	47	25	--	--	--	--	--	--	--	--
FEB												
05...	1415	250	130	88	--	--	--	--	--	--	--	--
12...	0950	250	41	28	--	--	--	--	--	--	--	--
20...	1555	250	189	128	--	--	--	--	--	--	--	--
23...	1015	250	954	644	33	39	54	58	59	66	87	--
27...	1500	330	965	860	--	--	--	--	--	--	--	--
MAR												
06...	1415	E600	8240	--	--	--	--	--	--	--	--	--
13...	1500	E380	10800	--	--	--	--	--	--	--	--	--
16...	1130	E460	7630	--	55	63	82	91	95	99	100	--
20...	1405	456	3220	3960	--	--	--	--	--	--	--	--
26...	1420	410	1980	2190	--	--	--	--	--	--	--	--
APR												
03...	1230	430	2520	2930	--	--	--	--	--	--	--	--
11...	1845	229	2150	1330	--	--	--	--	--	--	--	--
17...	1635	313	1620	1370	--	--	--	--	--	--	--	--
24...	1055	1180	7720	24600	--	--	--	--	--	--	--	--
MAY												
01...	1215	1860	6280	31500	--	--	--	--	--	--	--	--
09...	1215	2460	3490	23200	--	--	--	--	--	--	--	--
15...	1155	2360	2430	15500	--	--	--	--	--	--	--	--
18...	0930	1850	1400	6990	--	--	--	--	--	--	--	3
23...	1920	2900	2530	19800	--	--	--	--	--	--	--	--
30...	1910	7050	2070	39400	--	--	--	--	--	--	--	--
JUN												
05...	1154	5170	2500	34900	--	--	--	--	--	--	--	--
13...	1930	5480	1660	24600	--	--	--	--	--	--	--	--
19...	1507	4160	1760	19800	--	--	--	--	--	--	--	--
26...	1130	4230	1280	14600	--	--	--	--	--	--	--	--
JUL												
04...	1145	2420	1540	10000	--	--	--	--	--	--	--	--
10...	0925	1620	2900	12700	--	--	--	--	--	--	--	--
17...	1145	765	1030	2130	--	--	--	--	--	--	--	--
24...	1135	950	17800	45500	--	--	--	--	--	--	--	--
31...	1525	690	3550	6610	--	--	--	--	--	--	--	--
AUG												
08...	1955	309	664	554	--	--	--	--	--	--	--	--
14...	1615	271	3500	2560	--	--	--	--	--	--	--	--
21...	1700	309	23900	19900	--	--	--	--	--	--	--	--
28...	1610	94	640	162	--	--	--	--	--	--	--	--
SEP												
05...	1455	94	770	195	--	--	--	--	--	--	--	--
06...	0845	133	4240	1520	--	--	--	--	--	--	--	30
11...	1550	176	17200	8180	--	--	--	--	--	--	--	--
18...	1550	E70	503	--	--	--	--	--	--	--	--	--
25...	1335	68	372	68	--	--	--	--	--	--	--	--

E ESTIMATED.

09260000 LITTLE SNAKE RIVER NEAR LILY, CO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	569	---	---	650	458	467	671	369	197	---	377	766
2	---	---	---	643	464	417	665	368	182	---	387	780
3	683	432	---	628	474	418	694	378	218	---	426	785
4	482	---	---	602	485	454	632	408	218	160	416	747
5	391	---	450	568	488	431	678	415	196	158	---	749
6	415	---	445	542	486	408	673	403	204	---	---	728
7	422	485	432	524	484	---	678	350	195	---	---	---
8	513	465	467	492	482	---	683	310	198	---	---	---
9	503	467	476	468	476	440	681	328	185	---	---	---
10	451	443	481	462	467	422	653	303	176	---	---	---
11	---	397	491	455	467	436	669	249	181	---	---	894
12	---	399	507	454	467	441	659	227	167	---	---	---
13	---	397	512	458	462	---	705	---	181	---	---	---
14	---	408	511	457	454	---	790	---	184	---	---	---
15	---	---	504	466	447	---	730	252	181	---	---	---
16	437	---	497	472	435	490	682	---	---	---	---	---
17	438	---	495	473	428	491	677	---	---	250	563	---
18	430	---	494	464	427	497	---	264	---	---	538	---
19	427	---	504	459	422	542	---	288	169	---	535	851
20	426	---	513	457	403	593	---	---	170	---	---	830
21	432	422	509	458	391	613	---	312	156	---	---	790
22	437	443	505	455	386	622	---	---	162	---	---	794
23	450	---	477	455	376	619	---	263	159	---	---	808
24	449	---	458	459	365	651	488	238	166	---	---	---
25	---	---	497	459	372	694	510	219	---	---	---	811
26	---	---	503	459	440	654	450	205	143	---	---	---
27	---	540	558	459	461	674	359	217	---	---	---	---
28	---	529	576	458	516	702	339	223	---	---	---	645
29	---	508	614	458	---	704	357	234	---	---	---	---
30	---	472	652	459	---	694	354	228	---	---	748	631
31	---	---	660	456	---	653	---	217	---	383	744	---
MEAN	464	454	511	491	446	547	603	291	181	238	526	774

WTR YR 1983 MEAN 467 MAX 894 MIN 143

09260000 LITTLE SNAKE RIVER NEAR LILY, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	11.0	7.5	8.0	3.5	.0	.0	.0	.0	.0	.0	.5	.0
2	11.5	5.0	5.5	1.0	.0	.0	.0	.0	.0	.0	3.0	.0
3	11.5	6.5	2.5	.0	.0	.0	.0	.0	.0	.0	2.5	.0
4	13.0	6.0	5.0	.0	.0	.0	.0	.0	.0	.0	3.0	.0
5	9.5	5.5	4.5	.0	.0	.0	.0	.0	.0	.0	2.0	.0
6	11.0	5.0	5.5	.0	.0	.0	.0	.0	.0	.0	3.0	.0
7	11.5	4.5	6.5	.0	.0	.0	.0	.0	.0	.0	.5	.0
8	7.5	3.5	5.0	1.5	.0	.0	.0	.0	.0	.0	2.0	.0
9	6.0	2.5	7.5	3.5	.0	.0	.0	.0	.0	.0	4.0	.5
10	9.0	1.0	6.0	2.0	.0	.0	.0	.0	.0	.0	7.0	.5
11	9.0	1.0	3.0	.0	.0	.0	.0	.0	.0	.0	7.0	2.5
12	12.0	5.0	1.5	.0	.0	.0	.0	.0	.0	.0	8.0	4.5
13	13.5	7.0	.0	.0	.0	.0	.0	.0	.0	.0	6.0	4.0
14	14.0	5.5	.0	.0	.0	.0	.0	.0	.0	.0	---	---
15	14.5	6.0	.5	.0	.0	.0	.0	.0	.0	.0	---	---
16	13.5	6.5	.5	.0	.0	.0	.0	.0	.0	.0	3.5	2.0
17	12.5	5.5	1.0	.0	.0	.0	.0	.0	.0	.0	3.5	1.0
18	12.0	5.5	.5	.0	.0	.0	.0	.0	.0	.0	3.5	.0
19	10.0	2.5	.5	.0	.0	.0	.0	.0	.0	.0	4.5	.0
20	9.5	2.0	.5	.0	.0	.0	.0	.0	.0	.0	3.0	.0
21	10.5	1.5	.0	.0	.0	.0	.0	.0	.0	.0	6.5	.0
22	8.5	2.5	.0	.0	.0	.0	.0	.0	.0	.0	7.0	1.0
23	9.5	2.0	.0	.0	.0	.0	.0	.0	.0	.0	8.0	2.0
24	11.5	4.5	.0	.0	.0	.0	.0	.0	.0	.0	5.5	2.0
25	11.0	7.5	.0	.0	.0	.0	.0	.0	.0	.0	3.5	.5
26	9.5	6.0	.0	.0	.0	.0	.0	.0	.0	.0	6.0	.0
27	6.5	1.5	.0	.0	.0	.0	.0	.0	.0	.0	7.5	1.0
28	6.5	.0	.0	.0	.0	.0	.0	.0	.5	.0	7.5	3.0
29	4.5	.5	.0	.0	.0	.0	.0	.0	---	---	9.0	2.0
30	4.5	2.0	.0	.0	.0	.0	.0	.0	---	---	11.0	2.5
31	6.0	4.0	---	---	.0	.0	.0	.0	---	---	5.5	3.0
MONTH	14.5	.0	8.0	.0	.0	.0	.0	.0	.5	.0	11.0	.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	6.5	2.0	10.0	7.0	11.5	9.5	17.5	14.5	25.0	18.5	25.5	14.0
2	6.0	2.5	10.0	7.5	12.0	10.0	17.5	15.0	26.0	19.0	25.0	15.5
3	5.5	1.5	10.0	6.5	13.0	9.5	19.0	15.0	27.0	18.0	28.5	16.0
4	2.0	.0	13.0	7.0	13.5	11.0	19.5	14.0	26.5	19.5	20.5	15.5
5	.5	.0	13.0	9.0	14.5	12.0	21.0	15.5	29.0	19.5	23.5	13.5
6	3.5	.0	10.5	8.0	13.0	11.5	21.0	17.0	30.0	20.5	23.5	11.5
7	7.5	.0	12.5	7.0	14.5	11.0	23.0	18.0	31.0	21.0	24.0	12.0
8	5.0	1.5	14.5	9.5	14.5	11.5	22.5	19.0	30.5	21.0	22.5	15.5
9	12.0	1.5	14.5	9.5	15.0	12.0	22.5	19.5	31.5	21.0	23.0	14.0
10	10.0	4.5	13.0	9.5	16.0	12.5	23.5	19.0	31.5	21.0	22.0	14.0
11	9.5	4.0	11.0	8.0	15.5	13.5	23.0	17.0	26.5	19.5	22.0	12.0
12	7.0	2.5	9.0	6.5	14.0	12.0	24.0	17.5	27.5	19.0	22.5	12.0
13	5.0	.0	9.5	6.5	13.0	10.5	25.5	18.5	28.0	18.5	24.0	12.0
14	7.0	.0	8.0	5.5	13.5	10.5	24.5	19.0	27.5	18.0	20.0	13.0
15	10.0	.0	9.0	6.0	15.0	11.0	21.0	18.0	27.5	21.5	23.5	10.5
16	12.5	1.5	8.0	6.5	16.5	12.5	23.0	17.0	26.0	19.0	22.0	10.0
17	13.5	2.5	7.0	5.5	17.5	13.0	22.5	16.5	26.0	18.0	21.0	10.0
18	12.5	4.0	8.5	5.0	18.0	14.5	24.5	16.5	26.5	19.0	21.0	10.0
19	12.5	6.0	8.5	7.5	18.5	14.5	24.5	18.5	25.5	18.0	18.5	7.0
20	12.5	5.0	11.5	6.0	18.0	14.5	24.0	19.0	---	---	17.0	2.5
21	11.0	7.5	13.0	8.5	17.5	14.0	25.0	17.0	---	---	17.0	3.5
22	11.5	8.0	13.5	9.5	18.0	14.0	25.0	19.0	24.5	16.0	19.0	4.5
23	12.5	7.0	15.0	10.0	18.0	15.0	23.0	19.0	23.5	15.0	17.0	8.5
24	13.5	8.5	16.0	11.5	18.0	15.0	25.0	17.5	24.0	13.5	19.5	11.5
25	11.5	8.5	16.0	12.5	18.0	15.0	24.0	18.5	24.0	14.0	23.0	8.5
26	11.0	7.5	16.0	12.0	16.5	14.5	24.5	18.5	26.5	15.0	19.5	9.0
27	10.0	7.5	16.0	12.0	15.5	14.0	21.0	18.5	26.5	13.5	21.5	12.0
28	10.0	7.5	16.0	13.0	16.5	13.5	23.0	17.0	25.5	15.0	19.5	8.5
29	11.0	7.0	15.5	13.0	16.5	13.0	24.5	18.0	23.5	13.5	19.0	10.0
30	9.5	7.5	15.0	12.5	18.0	14.0	26.0	19.0	27.5	13.5	15.0	10.5
31	---	---	12.5	10.5	---	---	24.0	20.0	27.0	14.5	---	---
MONTH	13.5	.0	16.0	5.0	18.5	9.5	26.0	14.0	31.5	13.5	28.5	2.5
YEAR	31.5	.0										

09260050 YAMPA RIVER AT DEERLODGE PARK, CO

LOCATION.--Lat 40°27'06", long 108°31'28", in SE¼SW¼ sec.21, T.6 N., R.99 W., Moffat County, Hydrologic Unit 14050002, in Dinosaur National Monument, on left bank at Deerlodge Park, 1,250 ft upstream from Disappointment Draw, and 5.5 mi downstream from Little Snake River.

DRAINAGE AREA.--7,660 mi², approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1975 and January 1978 (discharge measurements only), April 1982 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 5,600 ft, from topographic map.

REMARKS.--Records poor. Natural flow of stream affected by transbasin diversions, numerous storage reservoirs, and diversions for irrigation of about 86,800 acres above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 23,400 ft³/s May 31, 1983, gage height, 13.22 ft; minimum daily, 179 ft³/s Sept. 10, 1982.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 23,400 ft³/s at 1300 May 31, gage height, 13.22 ft; only peak above base of 10,000 ft³/s; minimum daily, 273 ft³/s Sept. 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1260	870	650	300	550	1600	1270	6030	22000	11600	2220	518
2	1310	1050	720	300	550	1550	1820	6460	17700	10800	2080	510
3	1660	1240	720	300	550	1800	1580	5960	18300	10200	2020	478
4	1370	1110	720	300	550	2000	1400	5620	16600	10100	1940	550
5	1170	870	720	350	550	2500	1290	5620	15600	11300	2140	534
6	1040	712	720	350	550	2300	1100	5870	16100	8650	2150	494
7	980	757	784	350	550	2140	900	6530	15600	7800	2060	559
8	1150	757	712	400	550	1550	840	6440	14600	7500	1900	703
9	1000	757	622	400	550	1440	802	6240	14700	7890	1640	649
10	900	775	658	400	600	1270	830	7520	15200	8100	1470	685
11	960	870	600	450	600	1350	860	9620	15600	7550	1320	685
12	940	850	600	450	600	1710	1050	11300	16200	6970	1310	613
13	880	802	600	450	600	2750	1370	10400	18300	6050	1230	518
14	721	750	550	500	600	3560	1380	8170	18600	5470	1300	446
15	667	700	550	500	600	3530	1130	8030	13500	4990	1400	390
16	685	700	550	500	600	3160	920	6400	10300	4510	1290	306
17	784	750	400	500	600	2790	850	6300	10200	4230	1140	332
18	811	800	400	500	600	2420	940	6240	11100	3890	1010	318
19	830	820	400	500	600	2050	1300	6140	12500	3500	1020	332
20	811	800	400	500	600	1680	2220	5910	13900	3260	1420	318
21	775	700	400	500	600	1310	3380	6440	15900	3220	1730	312
22	730	650	400	550	600	1290	3890	6720	16200	3160	1790	273
23	694	600	400	550	620	1250	5070	7940	15700	3720	1450	286
24	685	550	350	550	1000	1210	4530	9240	15700	3920	1170	332
25	703	580	350	550	1000	1320	4920	11800	15700	4300	980	338
26	685	600	350	550	1150	1440	7410	14500	15700	3630	820	338
27	721	650	350	550	1100	1330	8120	15300	16600	3260	748	351
28	721	650	350	550	1300	1230	6740	17600	15400	3320	739	364
29	757	650	350	550	---	1190	5810	19800	14700	3660	703	398
30	980	650	300	550	---	1330	5640	21800	13700	3360	577	390
31	920	---	300	550	---	1200	---	22900	---	2670	550	---
TOTAL	28300	23020	15976	14300	18920	57250	79362	294840	461900	182580	43317	13320
MEAN	913	767	515	461	676	1847	2645	9511	15400	5890	1397	444
MAX	1660	1240	784	550	1300	3560	8120	22900	22000	11600	2220	703
MIN	667	550	300	300	550	1190	802	5620	10200	2670	550	273
AC-FT	56130	45660	31690	28360	37530	113600	157400	584800	916200	362100	85920	26420

WTR YR 1983 TOTAL 1233085 MEAN 3378 MAX 22900 MIN 273 AC-FT 2446000

09260050 YAMPA RIVER AT DEERLODGE PARK, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--August 1975 to September 1983 (discontinued). August 1976 published in the 1977 report as "at Deerlodge Park," November 1977 to September 1981 published as "09260025, below Little Snake River."

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: November 1977 to September 1982.
WATER TEMPERATURES: November 1977 to September 1982.

INSTRUMENTATION.--Water-quality monitor November 1977 to September 1982.

REMARKS.--Daily maximum and minimum specific conductance available in district office. August 1975 to August 1976, water-quality data collected at present site. November 1977 to April 1980, all water-quality data collected approximately 3.5 mi upstream. May 1980 to April 21, 1981, all water-quality data collected approximately 1 mi upstream. April 22, 1981 to September 30, 1983, water-quality data collected at present site. All sites are considered equivalent.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 1,040 micromhos Oct. 4, 1979; minimum, 64 micromhos July 13, 1978.
WATER TEMPERATURES: Maximum, 29.5°C Aug. 2, 1980; minimum 0.0°C, many days during winter period most years.

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
FEB				
23...	1445	646	137	239
MAR				
10...	1235	1190	878	2820
10...	1240	1190	790	2540
15...	1600	3480	7020	66000
15...	1615	3480	4180	39300
29...	1150	1190	287	922
APR				
07...	1200	930	579	1450
08...	1135	859	322	747
19...	1255	1210	390	1270
19...	1320	1210	1320	4310
21...	1545	3620	2350	23000
21...	1615	3620	2600	25400
22...	1200	3860	2850	29700
22...	1240	3860	2380	24800
MAY				
07...	1635	6540	1250	22100
07...	1700	6540	1550	27400
09...	1400	6080	780	12800
09...	1430	6080	843	13800
12...	1320	12000	3040	98500
12...	1345	12000	2750	89100
MAY				
23...	1700	8540	1410	32500
23...	1730	8540	1560	36000
26...	1440	15200	2060	84500
26...	1500	15200	2570	105000
27...	1345	15800	1890	80600
27...	1415	15800	2220	94700
28...	1150	17600	2010	95500
28...	1230	17600	2040	96900
JUN				
08...	1110	14400	897	34900
08...	1140	14400	1160	45100
10...	0950	15000	763	30900
10...	1025	15000	875	35400
21...	1655	15800	641	27300
21...	1720	15800	627	26700
23...	1435	15700	541	22900
23...	1510	15700	564	23900
JUL				
12...	1605	7180	524	10200
12...	1635	7180	594	11500
14...	1310	5540	280	4190
14...	1330	5540	483	7220

PARTICLE-SIZE DISTRIBUTION OF SUSPENDED SEDIMENT, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	TIME	SED. SUSP. FALL DIAM. % FINER THAN .062 MM	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
FEB			
23...	1445	53	--
MAR			
10...	1235	--	91
10...	1240	94	--
15...	1600	81	--
15...	1615	--	89
29...	1150	89	--
APR			
07...	1200	65	--
08...	1135	92	--
19...	1255	88	--
19...	1320	--	95
21...	1545	--	81
21...	1615	64	--
22...	1200	--	86
22...	1240	80	--
MAY			
07...	1635	69	--
07...	1700	--	79
09...	1400	70	--
09...	1430	--	60
12...	1320	62	--
12...	1345	--	69
MAY			
23...	1700	78	--
23...	1730	--	31
26...	1440	80	--
26...	1500	--	83
27...	1345	77	--
27...	1415	--	78
28...	1150	72	--
28...	1230	--	74
JUN			
08...	1110	64	--
08...	1140	--	74
10...	0950	63	--
10...	1025	--	64
21...	1655	61	--
21...	1720	--	60
23...	1435	64	--
23...	1510	--	56
JUL			
12...	1605	25	--
12...	1635	--	19
14...	1310	47	--
14...	1330	--	38

09302450 LOST CREEK NEAR BUFORD, CO

LOCATION.--Lat 40°03'01", long 107°28'06", in SE¼SE¼ sec.15, T.1 N., R.90 W., Rio Blanco County, Hydrologic Unit 14050005, on left bank 15 ft downstream from highway bridge, 540 ft upstream from mouth, 0.5 mi downstream from Long Park Creek, and 9 mi northeast of Buford.

DRAINAGE AREA.--21.5 mi^2.

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

REVISED RECORDS.--WDR CO-79-3: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 7,560 ft, from topographic map. Oct. 1, 1973, to Sept. 30, 1975, at site 150 ft upstream at present datum.

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.--19 years, 22.1 ft^3/s; 16,010 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 944 ft^3/s May 9, 1974, gage height, 7.53 ft, from rating curve extended above 260 ft^3/s; minimum daily, 0.30 ft^3/s Jan. 9, 1977.

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

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
May 27	1800	* 760	4.75	June 18	2000	183	2.85
June 10	1900	255	3.27				

Minimum daily discharge, 2.1 ft^3/s Sept. 18.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.5	6.2	4.2	3.4	3.7	5.0	5.6	43	302	55	6.9	3.7
2	2.4	6.2	4.2	3.3	3.8	4.5	5.8	45	261	50	5.9	3.5
3	2.7	6.1	4.2	3.3	3.9	4.5	5.9	47	241	50	5.5	3.4
4	3.4	6.0	4.1	3.3	4.0	4.0	6.1	55	242	40	5.0	4.4
5	3.7	5.9	4.1	3.3	4.1	3.9	6.2	78	203	34	4.8	3.9
6	3.6	5.8	4.0	3.2	4.2	5.0	6.4	83	175	33	4.2	3.4
7	3.6	5.7	4.0	3.2	4.3	7.2	6.6	85	189	31	3.8	3.1
8	4.4	5.6	4.0	3.2	4.4	6.6	6.8	106	178	28	3.7	4.7
9	4.4	5.5	3.9	3.1	4.5	6.5	7.0	107	169	26	3.5	4.0
10	5.8	5.4	3.9	3.1	4.6	6.3	7.3	96	180	23	3.3	3.2
11	5.6	5.3	3.9	3.0	4.7	6.6	7.5	94	190	19	5.3	2.9
12	5.2	5.2	3.8	3.0	4.8	5.5	7.7	59	217	16	4.8	2.7
13	6.3	5.1	3.8	3.0	4.9	5.5	7.9	55	135	14	4.0	2.6
14	7.0	5.0	3.8	3.0	5.0	5.5	8.1	57	110	12	3.2	2.5
15	8.5	4.9	3.7	3.1	5.0	5.5	8.3	50	113	11	2.9	2.4
16	9.1	4.8	3.7	3.1	5.1	5.5	8.5	49	125	11	2.9	2.3
17	8.0	4.7	3.7	3.2	5.1	5.5	8.8	42	130	9.1	3.9	2.2
18	8.1	4.7	3.7	3.2	5.2	5.5	9.0	41	138	8.2	5.9	2.1
19	7.8	4.6	3.7	3.3	5.2	5.5	9.2	41	137	7.7	4.1	2.3
20	6.4	4.6	3.7	3.3	5.2	5.5	9.4	49	157	7.6	3.9	2.4
21	5.8	4.6	3.6	3.3	5.3	5.5	9.6	79	125	10	3.5	2.3
22	5.8	4.5	3.6	3.3	5.3	5.5	9.9	123	112	13	3.1	2.4
23	6.1	4.5	3.6	3.4	5.3	5.5	10	178	103	15	3.0	2.5
24	7.1	4.5	3.6	3.4	5.3	5.5	10	273	93	11	3.0	2.6
25	7.0	4.4	3.5	3.4	5.2	5.5	11	317	107	8.8	3.0	2.5
26	6.8	4.4	3.5	3.4	5.2	5.5	11	381	92	14	3.2	2.5
27	6.6	4.4	3.5	3.5	5.1	5.5	38	448	113	10	3.4	2.5
28	6.4	4.3	3.5	3.5	5.0	5.5	43	440	82	9.1	3.6	2.5
29	6.4	4.3	3.5	3.5	---	5.5	40	388	68	7.1	3.8	2.4
30	6.3	4.3	3.4	3.5	---	5.3	42	385	60	6.2	4.0	3.4
31	6.3	---	3.4	3.6	---	5.5	---	288	---	6.5	4.0	---
TOTAL	181.1	151.5	116.8	101.4	133.4	169.9	372.6	4582	4547	596.3	125.1	87.3
MEAN	5.84	5.05	3.77	3.27	4.76	5.48	12.4	148	152	19.2	4.04	2.91
MAX	9.1	6.2	4.2	3.6	5.3	7.2	43	448	302	55	6.9	4.7
MIN	2.4	4.3	3.4	3.0	3.7	3.9	5.6	41	60	6.2	2.9	2.1
AC-FT	359	301	232	201	265	337	739	9090	9020	1180	248	173

CAL YR 1982 TOTAL 11155.8 MEAN 30.6 MAX 343 MIN 2.0 AC-FT 22130
WTR YR 1983 TOTAL 11164.4 MEAN 30.6 MAX 448 MIN 2.1 AC-FT 22140

NOTE.--NO GAGE-HEIGHT RECORD OCT. 26 TO MAR. 3.

09302500 MARVINE CREEK NEAR BUFORD, CO

LOCATION.--Lat 40°02'18", long 107°29'15", in NE¼SE¼ sec.21, T.1 N., R.90 W., Rio Blanco County, Hydrologic Unit 14050005, on right bank 166 ft upstream from county road bridge, 1,800 ft upstream from mouth, and 8 mi northeast of Buford.

DRAINAGE AREA.--59.7 mi^2.

PERIOD OF RECORD.--July 1903 to September 1906, September 1972 to current year.

REVISED RECORDS.--WSP 1313: 1905-6. WDR CO-79-3: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 7,500 ft, from topographic map. July 28, 1903, to Sept. 30, 1906, nonrecording gage at approximately same site at different datum. Sept. 1, 1972, to Sept. 30, 1973, at site 40 ft downstream at datum 1.69 ft, higher. Oct. 1, 1973, to Sept. 30, 1975, at site 126 ft downstream at datum 5.0 ft, higher.

REMARKS.--Records good. Diversions above station for irrigation of 310 acres of hay meadows. One small transbasin diversion above station to Ute Creek basin. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--14 years, 90.9 ft^3/s; 65,860 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 723 ft^3/s June 17, 1905, gage height, 3.50 ft, datum then in use; maximum gage height recorded, 5.39 ft, Dec. 17, 1972, site then in use (backwater from ice); minimum discharge not determined.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 419 ft^3/s at 2200 July 6, gage height, 4.10 ft, only peak above base of 300 ft^3/s; minimum daily, 51 ft^3/s Feb. 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	99	83	71	68	66	62	57	63	181	313	160	114
2	91	80	70	68	81	62	56	61	181	319	159	113
3	89	76	69	68	97	61	57	62	170	347	154	111
4	88	79	72	68	51	61	57	63	175	351	153	118
5	88	77	68	68	70	63	58	66	177	341	154	113
6	89	77	68	68	62	63	60	66	173	364	144	110
7	94	75	67	68	63	62	60	65	173	364	139	109
8	89	75	67	68	65	61	58	71	177	365	144	110
9	90	76	68	68	63	60	55	77	183	359	143	108
10	88	76	68	68	64	61	56	84	191	331	135	107
11	86	79	67	68	69	62	56	85	208	315	146	107
12	86	75	76	68	63	62	55	80	240	276	146	106
13	85	76	70	68	63	61	54	79	208	251	146	105
14	84	72	71	70	62	61	54	77	189	231	138	105
15	85	85	72	71	62	61	55	75	189	217	135	106
16	85	86	67	64	63	60	54	78	201	204	132	104
17	84	74	66	63	63	60	54	77	220	192	133	103
18	82	73	83	63	65	60	55	74	248	185	139	103
19	82	74	80	62	65	59	57	74	272	182	133	103
20	81	73	65	62	65	59	56	74	278	184	134	103
21	81	72	65	62	63	58	57	78	272	191	128	103
22	81	72	66	62	63	58	56	85	269	194	124	102
23	79	80	66	63	62	58	57	94	278	193	122	103
24	79	86	66	62	62	58	62	107	297	180	121	104
25	79	67	66	62	62	59	65	122	342	178	120	102
26	81	75	66	61	62	58	64	140	345	183	118	101
27	86	80	66	61	61	57	63	161	341	174	117	101
28	82	72	66	62	62	58	63	181	318	169	117	100
29	79	70	66	62	---	57	62	188	313	165	117	99
30	82	70	66	67	---	57	63	189	312	162	116	104
31	84	---	66	62	---	57	---	184	---	160	115	---
TOTAL	2638	2285	2130	2025	1819	1856	1736	2980	7121	7640	4182	3177
MEAN	85.1	76.2	68.7	65.3	65.0	59.9	57.9	96.1	237	246	135	106
MAX	99	86	83	71	97	63	65	189	345	365	160	118
MIN	79	67	65	61	51	57	54	61	170	160	115	99
AC-FT	5230	4530	4220	4020	3610	3680	3440	5910	14120	15150	8290	6300

CAL YR 1982 TOTAL 32476 MEAN 89.0 MAX 247 MIN 38 AC-FT 64420
WTR YR 1983 TOTAL 39589 MEAN 108 MAX 365 MIN 51 AC-FT 78520

09303000 NORTH FORK WHITE RIVER AT BUFORD, CO

LOCATION.--Lat 39°59'15", long 107°36'50", in NW¼NW¼ sec.9, T.1 S., R.91 W., Rio Blanco County, Hydrologic Unit 14050005, on right bank 600 ft east of Buford and 1.2 mi upstream from South Fork White River.

DRAINAGE AREA.--260 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1910 to December 1915, July 1919 to December 1920, October 1951 to current year. Monthly discharge only for some periods, published in WSP 1313. Published as North Fork White River near Buford prior to 1951 and as White River at Buford 1951-67. Records for July 1903 to December 1906 at site 6.5 mi upstream not equivalent because of inflow between sites.

REVISED RECORDS.--WSP 1343: 1912. WDR CO-79-3: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 7,010 ft, from topographic map. May 24, 1910, to May 27, 1914, nonrecording gage at site 1.5 mi upstream at different datum. May 28, 1914, to Dec. 7, 1915, and July 1, 1919, to Oct. 9, 1920, nonrecording gage at present site at different datum. Several observations of specific-conductance and water temperature were obtained, and are published elsewhere in this report.

REMARKS.--Records good except those for period of no gage-height record, which are poor. Diversions above station for irrigation of about 900 acres above and 300 acres below station.

AVERAGE DISCHARGE.--38 years (water years 1911-15, 1920, 1952-83), 310 ft³/s; 224,600 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 3,150 ft³/s May 30, 1912; maximum gage height, 7.22 ft, Jan. 9, 1961 (backwater from ice); minimum daily discharge, 90 ft³/s, Feb. 21, 1955.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
May 28	2300	* 2,630	6.39	July 12	0100	1,900	6.07
June 25	2400	2,600	6.38				

Minimum daily discharge, 133 ft³/s Dec. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	309	237	196	167	160	160	161	270	1550	1480	502	293
2	252	219	195	170	160	161	159	270	1590	1420	488	289
3	237	222	194	170	160	160	163	280	1390	1490	474	284
4	246	222	193	170	160	161	156	300	1490	1440	468	318
5	228	219	192	170	162	166	153	350	1460	1300	468	295
6	231	195	191	170	162	166	153	360	1320	1350	457	281
7	231	190	190	170	162	163	154	365	1310	1340	432	277
8	237	190	189	170	162	161	157	425	1410	1320	428	285
9	234	190	188	170	164	158	156	560	1380	1300	417	275
10	234	190	187	170	164	163	158	627	1390	1200	397	270
11	225	195	186	170	164	175	161	708	1530	1150	417	266
12	228	195	185	170	164	182	160	555	1790	1100	432	265
13	228	200	184	170	162	180	156	491	1410	1050	434	258
14	228	200	183	170	162	181	153	497	1190	1000	398	253
15	243	200	182	170	164	176	154	444	1190	900	387	256
16	237	210	181	170	166	170	156	448	1300	850	376	250
17	234	210	180	170	166	168	159	412	1410	800	376	246
18	228	209	180	170	166	168	171	379	1610	775	432	244
19	222	208	172	170	166	165	184	386	1800	750	383	252
20	216	207	180	172	166	162	184	378	1850	750	420	253
21	175	206	182	175	166	161	195	444	1970	775	369	251
22	213	205	177	165	166	161	191	575	1910	800	352	248
23	202	204	177	165	166	162	191	715	1810	800	341	253
24	213	203	180	172	181	164	200	965	1800	750	333	253
25	219	202	162	177	162	168	210	1180	2190	720	330	258
26	237	201	158	167	161	164	210	1300	2130	708	325	258
27	243	200	167	172	160	159	260	1580	2100	601	311	260
28	210	199	162	162	162	163	270	1940	1840	556	304	260
29	228	198	142	162	---	159	260	1760	1680	518	306	263
30	237	197	133	158	---	159	270	1790	1540	514	312	260
31	246	---	154	160	---	163	---	1740	---	502	296	---
TOTAL	7151	6123	5522	5234	4586	5129	5465	22494	48340	30009	12165	7974
MEAN	231	204	178	169	164	165	182	726	1611	968	392	266
MAX	309	237	196	177	181	182	270	1940	2190	1490	502	318
MIN	175	190	133	158	160	158	153	270	1190	502	296	244
AC-FT	14180	12140	10950	10380	9100	10170	10840	44620	95880	59520	24130	15820

CAL YR 1982 TOTAL 128543 MEAN 352 MAX 1050 MIN 130 AC-FT 255000
WTR YR 1983 TOTAL 160192 MEAN 439 MAX 2190 MIN 133 AC-FT 317700

NOTE.--NO GAGE-HEIGHT RECORD NOV. 7 TO DEC. 17.

09303000 NORTH FORK WHITE RIVER AT BUFORD, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1982 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	SPE-CIFIC CON-DUCT-ANCE LAB (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	NITRO-GEN DIS-SOLVED (MG/L AS N)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
NOV											
08...	1300	190	295	303	8.0	3.5	10.3	--	150	45	8.3
MAR											
23...	0930	160	320	349	8.2	1.5	11.0	--	160	50	9.4
MAY											
19...	1040	368	284	306	8.2	4.0	10.4	--	150	46	8.3
JUN											
16...	1345	1140	185	191	8.0	9.0	8.9	.30	90	27	5.3

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)
NOV										
08...	2.9	.1	1.0	89	62	.60	.10	18	190	.26
MAR										
23...	3.2	.1	1.0	96	80	.50	.20	18	220	.30
MAY										
19...	3.2	.1	1.1	100	54	.70	<.10	15	190	.26
JUN										
16...	2.2	.1	.70	67	24	.60	<.10	15	120	.16

DATE	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	BORON, DIS-SOLVED (UG/L AS B)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)
NOV										
08...	98	.020	<.100	<.060	--	.40	.020	<.010	10	470
MAR										
23...	95	<.020	<.100	.100	.40	.50	.020	.020	<10	550
MAY										
19...	187	--	--	--	--	--	--	--	<10	420
JUN										
16...	356	<.020	.100	.150	.05	.20	.020	.030	<10	230

DATE	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)
NOV							
08...	1	20	<1	<10	1	12	3
JUN							
16...	<1	32	<1	<10	1	66	<1

DATE	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	ZINC, DIS-SOLVED (UG/L AS ZN)
NOV							
08...	2	<.1	<1	<1	<1	<1	<3
JUN							
16...	6	<.1	<1	3	<1	<1	14

09303300 SOUTH FORK WHITE RIVER AT BUDGE'S RESORT, CO

LOCATION.--Lat 39°50'36", long 107°20'03", in NW¼ sec.36, T.2 S., R.89 W., Garfield County, Hydrologic Unit 14050005, on right bank 20 ft upstream from Forest Service trail bridge, 0.2 mi upstream from Wagonwheel Creek, and 0.3 mi northeast of Budge's Resort.

DRAINAGE AREA.--52.3 mi^2.

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WDR CO-79-3: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 8,980 ft, from topographic map. June 1, 1975, to July 7, 1976, at site on left bank 50 ft upstream at datum 1.3 ft, lower.

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

AVERAGE DISCHARGE.--8 years, 103 ft^3/s; 74,620 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,750 ft^3/s June 25, 1983, gage height, 6.57 ft, from rating curve extended above 850 ft^3/s; minimum daily, 21 ft^3/s Sept. 29, 30, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,750 ft^3/s at 1900 June 25, gage height, 6.57 ft; minimum daily, 30 ft^3/s Jan. 28 to Feb. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	74	57	50	45	30	35	41	56	291	705	114	71
2	69	56	49	45	31	35	43	56	306	747	106	71
3	67	62	49	45	31	37	43	57	300	1090	108	69
4	65	62	49	44	31	38	42	61	334	857	127	91
5	64	58	47	44	31	38	49	65	344	658	174	78
6	64	58	45	46	32	38	58	65	338	611	137	69
7	64	54	43	50	32	38	55	64	344	756	115	67
8	64	51	43	48	32	39	50	75	367	849	106	68
9	60	52	43	42	34	39	45	89	394	691	102	66
10	64	52	43	42	36	41	43	99	423	482	96	64
11	67	54	43	42	36	41	42	99	490	316	93	63
12	63	54	48	42	44	40	42	92	505	257	101	61
13	62	52	52	42	37	40	44	86	391	225	107	61
14	62	57	51	44	33	40	53	83	333	198	93	60
15	63	68	51	44	35	40	48	79	326	181	88	66
16	63	70	50	49	32	42	48	82	356	167	86	60
17	61	72	49	43	36	41	47	78	426	149	88	60
18	59	62	44	40	34	41	47	77	644	140	95	58
19	58	53	44	40	35	40	46	77	995	136	93	60
20	54	39	46	36	35	42	46	80	1160	134	107	60
21	54	51	47	36	37	44	47	80	1250	151	90	60
22	54	50	49	34	37	42	47	80	1300	147	82	58
23	54	51	47	36	37	39	49	98	1350	172	79	59
24	55	53	45	36	37	41	55	133	1720	137	77	61
25	55	53	45	36	36	41	61	147	2020	128	77	61
26	57	53	45	34	36	41	59	170	804	138	76	59
27	61	53	45	32	35	40	58	205	775	128	74	57
28	55	53	45	30	35	40	58	243	900	119	74	57
29	60	53	45	30	---	37	55	263	735	109	71	55
30	57	51	45	30	---	40	59	280	699	105	73	59
31	57	---	45	30	---	41	---	281	---	105	73	---
TOTAL	1886	1664	1442	1237	967	1231	1480	3500	20620	10788	2982	1909
MEAN	60.8	55.5	46.5	39.9	34.5	39.7	49.3	113	687	348	96.2	63.6
MAX	74	72	52	50	44	44	61	281	2020	1090	174	91
MIN	54	39	43	30	30	35	41	56	291	105	71	55
AC-FT	3740	3300	2860	2450	1920	2440	2940	6940	40900	21400	5910	3790

CAL YR 1982 TOTAL 41071 MEAN 113 MAX 663 MIN 26 AC-FT 81460
WTR YR 1983 TOTAL 49706 MEAN 136 MAX 2020 MIN 30 AC-FT 98590

09303300 SOUTH FORK WHITE RIVER AT BUDGE'S RESORT,CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1982 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	SPE-CIFIC CON-DUCT-ANCE LAB (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	NITRO-GEN DIS-SOLVED (MG/L AS N)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
JAN											
31...	1300	67	140	152	8.1	.5	10.3	.64	67	18	5.3
APR											
14...	0900	46	147	161	8.1	.0	9.9	.65	76	21	5.8
JUN											
06...	1020	325	155	167	8.2	3.0	9.0	--	80	21	6.6
JUL											
12...	1020	253	110	122	8.0	8.0	8.5	--	56	15	4.5
AUG											
30...	1045	72	162	165	8.0	14.0	--	--	86	23	6.8

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)
JAN										
31...	2.0	.1	1.1	73	5.0	.50	.10	18	94	.13
APR										
14...	2.0	.1	1.1	77	5.0	.40	<.10	19	100	.14
JUN										
06...	1.3	.0	.70	81	3.8	.60	<.10	11	94	.13
JUL										
12...	1.1	.0	.70	62	3.3	.30	<.10	11	73	.10
AUG										
30...	1.8	.0	1.1	84	4.1	.50	<.10	16	100	.14

DATE	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	BORON, DIS-SOLVED (UG/L AS B)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)
JAN										
31...	17	<.020	.140	.110	.39	.50	.030	.030	<10	85
APR										
14...	13	<.020	.150	.100	.40	.50	.030	.010	<10	91
JUN										
06...	82	--	--	--	--	--	--	--	<10	64
JUL										
12...	50	<.020	<.100	.080	1.1	1.1	.040	.010	20	53
AUG										
30...	20	<.020	<.100	.050	.35	.40	.020	.020	<10	87

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
JUL				
12...	1020	253	17	12

09303320 WAGONWHEEL CREEK AT BUDGE'S RESORT, CO

LOCATION.--Lat 39°50'40", long 107°20'10", in SW¼SW¼ sec.25, T.2 S., R.89 W., Garfield County, Hydrologic Unit 14050005, on right bank 60 ft upstream from mouth and confluence of South Fork White River, about 800 ft downstream from private road bridge, and 0.2 mi north-northeast of Budge's Resort.

DRAINAGE AREA.--7.36 mi^2.

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

REVISED RECORDS.--WDR CO-79-3: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 8,980 ft, from topographic map.

REMARKS.--Records poor.

AVERAGE DISCHARGE.--8 years, 9.33 ft^3/s; 6,760 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 320 ft^3/s (estimated) June 25, 1983. Maximum determined gage height, 4.27 ft, June 12, 1980; no flow many days each year.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 320 ft^3/s (estimated) June 25, only peak above base of 55 ft^3/s; no flow most days during winter period.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.1	1.8	.00	.00	.00	.00	.00	2.1	75	195	2.7	.62
2	2.0	1.6	.00	.00	.00	.00	.00	2.3	80	200	2.5	.60
3	2.5	1.8	.00	.00	.00	.00	.00	2.3	65	230	2.5	.56
4	2.6	1.8	.00	.00	.00	.00	.00	2.3	80	210	2.7	.93
5	2.7	1.6	.00	.00	.00	.00	.00	2.3	75	180	3.0	1.0
6	2.7	1.4	.00	.00	.00	.00	.00	2.3	60	170	2.7	.61
7	2.5	1.2	.00	.00	.00	.00	.00	2.3	51	180	2.2	.54
8	2.4	1.2	.00	.00	.00	.00	.00	2.3	62	200	1.9	.54
9	2.4	1.2	.00	.00	.00	.00	.00	2.8	85	170	1.6	.54
10	2.5	1.4	.00	.00	.00	.00	.00	3.6	118	110	1.4	.49
11	2.6	1.4	.00	.00	.00	.00	.00	3.6	113	60	1.2	.40
12	3.0	1.2	.00	.00	.00	.00	.00	3.6	120	36	1.3	.35
13	2.8	1.4	.00	.00	.00	.00	.00	3.7	110	25	1.4	.31
14	2.5	1.6	.00	.00	.00	.00	.00	4.4	100	20	1.1	.29
15	2.4	1.8	.00	.00	.00	.00	.00	6.3	100	15	1.0	.30
16	2.4	1.8	.00	.00	.00	.00	.00	6.3	120	11	.95	.29
17	2.2	1.4	.00	.00	.00	.00	.00	6.5	140	7.0	1.0	.24
18	2.1	1.2	.00	.00	.00	.00	.20	7.4	160	6.0	1.1	.21
19	2.0	.80	.00	.00	.00	.00	.40	8.4	180	5.0	1.0	.20
20	1.6	.40	.00	.00	.00	.00	.80	8.6	200	5.5	1.1	.19
21	1.6	.00	.00	.00	.00	.00	1.2	8.6	220	5.0	.90	.19
22	1.6	.00	.00	.00	.00	.00	1.6	8.6	230	6.0	.80	.19
23	1.8	.00	.00	.00	.00	.00	2.0	10	240	4.5	.75	.18
24	1.8	.00	.00	.00	.00	.00	2.0	14	290	4.0	.70	.18
25	2.0	.00	.00	.00	.00	.00	2.0	17	320	4.0	.68	.18
26	2.1	.00	.00	.00	.00	.00	2.0	22	210	4.5	.66	.17
27	1.8	.00	.00	.00	.00	.00	2.0	30	220	4.0	.64	.17
28	2.0	.00	.00	.00	.00	.00	2.0	41	232	3.5	.64	.17
29	1.8	.00	.00	.00	---	.00	2.0	53	192	2.5	.62	.16
30	1.8	.00	.00	.00	---	.00	2.0	60	190	2.5	.62	.15
31	1.8	---	.00	.00	---	.00	---	70	---	2.5	.62	---
TOTAL	68.1	28.00	.00	.00	.00	.00	20.20	417.6	4438	2078.5	41.98	10.95
MEAN	2.20	.93	.000	.000	.000	.000	.67	13.5	148	67.0	1.35	.37
MAX	3.0	1.8	.00	.00	.00	.00	2.0	70	320	230	3.0	1.0
MIN	1.6	.00	.00	.00	.00	.00	.00	2.1	51	2.5	.62	.15
AC-FT	135	56	.00	.00	.00	.00	40	828	8800	4120	83	22

CAL YR 1982 TOTAL 5620.39 MEAN 15.4 MAX 159 MIN .00 AC-FT 11150
WTR YR 1983 TOTAL 7103.33 MEAN 19.5 MAX 320 MIN .00 AC-FT 14090

NOTE.--NO GAGE-HEIGHT RECORD OCT. 17 TO NOV. 12.

09303400 SOUTH FORK WHITE RIVER NEAR BUDGE'S RESORT, CO

LOCATION.--Lat 39°51'51", long 107°32'00", in NW¼SE¼ sec.19, T.2 S., R.90 W., Rio Blanco County, Hydrologic Unit 14050005, on right bank on downstream side of Forest Service bridge, 300 ft upstream from South Fork Campground, 10 mi above mouth, and about 10.5 mi southeast of Buford.

DRAINAGE AREA.--128 mi^2.

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

REVISED RECORDS.--WDR CO-79-3: 1976(M), 1977, 78(P), 1978.

GAGE.--Water-stage recorder. Altitude of gage is 7,600 ft, from topographic map.

REMARKS.--Records good except those above 500 ft^3/s, which are fair and those for periods Oct. 1-3, June 23 to July 12, which are poor. No regulation or diversions above station.

AVERAGE DISCHARGE.--7 years, 194 ft^3/s; 140,600 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,770 ft^3/s June 22, 1983, gage height, 6.18 ft; minimum daily, 40 ft^3/s Feb. 1 to Mar. 10, 1980, Dec. 30, 1980, Jan. 10, 15, 1981.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
June 12	0200	2,260	4.85	June 22	2400	* 3,770	6.18

Minimum daily discharge, 52 ft^3/s Feb. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	140	97	83	64	56	57	71	83	708	1150	245	116
2	130	90	81	66	54	57	73	78	741	1100	233	113
3	120	82	79	70	52	57	75	78	720	1150	232	114
4	123	87	75	74	54	59	73	79	784	1100	265	148
5	114	84	77	76	60	59	77	83	840	1000	323	126
6	111	84	71	78	56	59	93	85	827	950	281	118
7	108	83	69	78	55	61	101	84	844	900	237	115
8	105	81	71	76	55	61	98	91	928	1000	233	119
9	105	81	75	74	57	59	77	120	1060	900	216	113
10	102	80	73	70	57	61	71	144	1180	800	199	111
11	99	83	65	68	53	65	71	175	1430	700	191	109
12	102	82	63	66	57	63	69	152	1810	600	194	106
13	101	80	64	64	59	66	68	142	1130	535	201	104
14	99	78	66	62	57	66	70	148	812	475	181	107
15	99	75	68	60	57	68	73	140	699	438	172	110
16	101	89	70	58	57	70	71	142	684	412	168	105
17	98	112	72	58	57	68	66	137	722	377	167	103
18	98	106	74	58	59	68	68	130	1240	356	170	101
19	93	88	75	58	56	68	69	129	1720	340	173	104
20	90	83	79	55	56	68	67	137	2100	335	185	102
21	87	81	91	53	60	74	66	150	2300	343	158	102
22	87	79	84	59	63	74	68	177	2500	333	147	103
23	87	73	79	60	58	69	67	208	2260	367	139	108
24	87	74	79	61	58	69	75	269	2000	314	135	112
25	86	76	79	65	56	69	87	344	1800	290	133	109
26	89	78	73	61	56	71	89	485	1700	299	127	107
27	101	80	70	59	55	71	88	536	1500	284	125	105
28	96	82	66	61	57	77	88	616	1400	266	125	105
29	90	84	64	59	---	71	82	646	1300	247	123	103
30	95	84	60	57	---	71	84	678	1200	239	123	109
31	97	---	62	56	---	71	---	702	---	230	124	---
TOTAL	3140	2516	2257	1984	1587	2047	2295	7168	38939	17830	5725	3307
MEAN	101	83.9	72.8	64.0	56.7	66.0	76.5	231	1298	575	185	110
MAX	140	112	91	78	63	77	101	702	2500	1150	323	148
MIN	86	73	60	53	52	57	66	78	684	230	123	101
AC-FT	6230	4990	4480	3940	3150	4060	4550	14220	77240	35370	11360	6560

CAL YR 1982 TOTAL 75716 MEAN 207 MAX 1040 MIN 47 AC-FT 150200
WTR YR 1983 TOTAL 88795 MEAN 243 MAX 2500 MIN 52 AC-FT 176100

09303500 SOUTH FORK WHITE RIVER NEAR BUFORD, CO

LOCATION.--Lat 39°55'18", long 107°33'04", in NW¼SE¼ sec.36, T.1 S., R.91 W., Rio Blanco County, Hydrologic Unit 14050005, on left bank at upstream side of county bridge, 10 ft downstream from Peltier Creek, and 5.6 mi southeast of Buford.

DRAINAGE AREA.--152 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1903 to October 1906, June 1910 to December 1915, October 1942 to September 1947, April 1967 to current year. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 1057: 1944-45, WDR CO-79-3: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 7,480 ft, from topographic map. July 26, 1903, to Oct. 31, 1906, nonrecording gage, and Oct. 1, 1942, to Sept. 30, 1947, water-stage recorder, at site 60 ft upstream at different datums. Records for 1919-20 at site 6.0 mi downstream not equivalent.

REMARKS.--Records good. Diversions for irrigation of about 600 acres of hay meadows above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--29 years (water years 1904-06, 1911-15, 1943-47, 1968-83), 261 ft^3/s; 189,100 acre-ft.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,620 ft^3/s June 24, 1983, gage height, 7.73 ft; maximum gage height 8.2 ft, June 17, 1906, site and datum then in use; minimum discharge recorded, 56 ft^3/s Dec. 18, 1946, gage height, 1.01 ft, site and datum then in use, but may have been less during periods of no gage-height record.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,200 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
June 11	2200	1,950	6.07	June 24	2300	* 3,620	7.73

Minimum daily discharge, 83 ft^3/s Dec. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	201	133	153	90	128	100	101	157	1090	1970	300	171
2	180	126	152	97	115	100	98	150	1090	1840	291	171
3	170	128	153	101	110	100	104	151	1070	1970	282	171
4	181	150	160	105	103	101	103	155	1200	1870	298	191
5	163	153	153	110	96	103	101	162	1240	1530	350	181
6	162	149	149	115	94	102	98	166	1210	1450	371	170
7	156	147	149	117	92	100	111	163	1260	1450	295	167
8	155	146	149	116	93	101	112	177	1400	1520	277	167
9	155	148	153	113	98	100	102	211	1490	1390	265	166
10	145	147	152	105	98	100	100	251	1600	1250	250	161
11	142	147	142	105	107	106	100	273	1800	1000	240	157
12	147	146	151	104	113	107	100	242	1690	807	249	154
13	145	147	149	103	121	106	98	226	1250	696	260	152
14	140	150	148	103	96	108	96	216	1100	611	233	151
15	143	200	143	103	109	108	100	208	1200	561	223	156
16	143	224	140	102	100	102	100	214	1370	524	216	153
17	141	144	149	106	120	105	102	199	1670	476	218	152
18	140	143	160	106	112	104	106	191	2090	439	229	150
19	136	144	176	106	102	103	110	200	2420	418	216	148
20	134	144	145	107	106	100	111	208	2520	411	247	149
21	132	145	121	108	115	113	115	223	2570	409	215	147
22	129	146	151	106	119	104	115	253	2610	410	204	147
23	128	146	134	131	120	102	115	302	2750	443	195	149
24	126	149	119	160	111	102	129	376	3300	396	191	157
25	126	148	121	134	104	102	157	442	2950	352	190	158
26	128	149	127	128	100	104	157	543	2680	365	184	152
27	143	162	113	129	99	100	157	707	2790	347	179	151
28	133	158	104	118	100	101	155	829	2400	322	178	149
29	124	151	89	118	---	100	153	949	2150	299	175	146
30	132	152	83	114	---	100	162	1040	2030	287	174	152
31	137	---	84	115	---	101	---	1050	---	281	174	---
TOTAL	4517	4522	4272	3475	2981	3185	3468	10634	55990	26094	7369	4746
MEAN	146	151	138	112	106	103	116	343	1866	842	238	158
MAX	201	224	176	160	128	113	162	1050	3300	1970	371	191
MIN	124	126	83	90	92	100	96	150	1070	281	174	146
AC-FT	8960	8970	8470	6890	5910	6320	6880	21090	111100	51760	14620	9410

CAL YR 1982 TOTAL 103999 MEAN 285 MAX 1340 MIN 79 AC-FT 206300
WTR YR 1983 TOTAL 131253 MEAN 360 MAX 3300 MIN 83 AC-FT 260300

09303500 SOUTH FORK WHITE RIVER NEAR BUFORD, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1982 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	SPE-CIFIC CON-DUCT-ANCE LAB (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	NITRO-GEN DIS-SOLVED (MG/L AS N)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
JAN											
31...	1300	67	140	152	8.1	.5	10.3	.64	67	18	5.3
APR											
14...	0900	46	147	161	8.1	.0	9.9	.65	76	21	5.8
JUN											
06...	1020	325	155	167	8.2	3.0	9.0	--	80	21	6.6
JUL											
12...	1020	253	110	122	8.0	8.0	8.5	--	56	15	4.5
AUG											
30...	1045	72	162	165	8.0	14.0	--	--	86	23	6.8

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)
JAN										
31...	2.0	.1	1.1	73	5.0	.50	.10	18	94	.13
APR										
14...	2.0	.1	1.1	77	5.0	.40	<.10	19	100	.14
JUN										
06...	1.3	.0	.70	81	3.8	.60	<.10	11	94	.13
JUL										
12...	1.1	.0	.70	62	3.3	.30	<.10	11	73	.10
AUG										
30...	1.8	.0	1.1	84	4.1	.50	<.10	16	100	.14

DATE	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	BORON, DIS-SOLVED (UG/L AS B)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)
JAN										
31...	17	<.020	.140	.110	.39	.50	.030	.030	<10	85
APR										
14...	13	<.020	.150	.100	.40	.50	.030	.010	<10	91
JUN										
06...	82	--	--	--	--	--	--	--	<10	64
JUL										
12...	50	<.020	<.100	.080	1.1	1.1	.040	.010	20	53
AUG										
30...	20	<.020	<.100	.050	.35	.40	.020	.020	<10	87

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
JUL				
12...	1020	253	17	12

09304000 SOUTH FORK WHITE RIVER AT BUFORD, CO

LOCATION.--Lat 39°58'28", long 107°37'30", in NW¼NE¼ sec.17, T.1 S., R.91 W., Rio Blanco County, Hydrologic Unit 14050005, on left bank 30 ft downstream from highway bridge, 0.8 mi upstream from mouth, and 1.0 mi south of Buford.

DRAINAGE AREA.--177 mi^2.

PERIOD OF RECORD.--Streamflow records, July 1919 to December 1920 (monthly discharge only, published in WSP 1313), October 1951 to current year. Water-quality data available, October 1976 to February 1978. Sediment data available, October 1976 to February 1978.

REVISED RECORDS.--WDR CO-79-3: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 6,970 ft, from topographic map. Prior to Nov. 30, 1920, nonrecording gage at site 200 ft downstream, at different datum. Oct. 1951 to Apr. 1981, at site 500 ft downstream, at different datum.

REMARKS.--Records good except those for winter period, which are fair. Diversions above station for irrigation of about 1,100 acres above station and a small area below. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--33 years, 255 ft^3/s; 184,700 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,150 ft^3/s June 26, 1983; gage height, 6.27 ft; maximum gage height, 7.07 ft, June 30, 1957, site and datum then in use, minimum daily discharge, 47 ft^3/s Jan. 15, 1981.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,300 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
June 12	1600	1,950	5.16	June 26	0300	* 3,150	6.27

Minimum daily discharge, 90 ft^3/s Dec. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	174	165	156	100	140	112	106	174	924	1880	314	195
2	170	159	154	110	130	113	103	169	1010	1760	309	193
3	165	156	154	112	125	113	108	170	941	1850	299	190
4	171	162	157	115	120	113	101	177	1010	1780	308	212
5	163	156	157	120	115	116	107	189	1120	1440	349	204
6	161	158	151	122	110	116	140	194	1100	1350	360	192
7	162	159	153	122	110	114	152	185	1090	1320	299	187
8	160	157	155	120	110	112	141	194	1200	1400	285	190
9	160	161	163	120	116	110	129	213	1330	1280	277	187
10	157	160	159	115	116	110	125	236	1350	1130	264	185
11	155	162	147	115	116	120	126	263	1470	880	261	181
12	159	166	143	115	135	120	123	246	1770	689	266	180
13	157	154	131	114	130	120	122	236	1530	592	275	172
14	156	161	148	118	126	125	121	232	1160	526	255	165
15	158	144	150	120	122	130	129	227	1030	482	247	163
16	158	165	148	120	117	120	127	236	1120	454	243	155
17	157	170	152	125	131	125	129	235	1290	417	247	153
18	157	166	158	125	106	125	132	225	1570	390	257	152
19	155	164	153	128	110	125	140	235	1980	374	244	153
20	155	162	150	130	111	120	139	240	2630	366	268	153
21	154	161	130	130	115	130	143	256	2450	369	241	153
22	154	159	151	128	118	125	141	277	2480	374	230	151
23	154	163	142	150	117	120	143	302	2500	395	222	154
24	155	145	130	160	120	120	157	350	2610	374	219	160
25	155	163	130	140	114	120	174	412	2970	335	219	160
26	155	163	135	140	112	125	172	474	2860	347	213	151
27	170	155	122	140	111	120	173	565	2510	342	209	148
28	160	152	112	130	111	120	172	711	2310	319	206	147
29	158	156	102	130	---	119	171	780	2090	300	204	149
30	164	156	90	125	---	108	179	869	1950	300	202	157
31	167	---	94	130	---	109	---	921	---	298	202	---
TOTAL	4956	4780	4377	3869	3314	3675	4125	10193	51355	24113	7994	5092
MEAN	160	159	141	125	118	119	138	329	1712	778	258	170
MAX	174	170	163	160	140	130	179	921	2970	1880	360	212
MIN	154	144	90	100	106	108	101	169	924	298	202	147
AC-FT	9830	9480	8680	7670	6570	7290	8180	20220	101900	47830	15860	10100

CAL YR 1982 TOTAL 105657 MEAN 289 MAX 1240 MIN 79 AC-FT 209600
WTR YR 1983 TOTAL 127843 MEAN 350 MAX 2970 MIN 90 AC-FT 253600

09304200 WHITE RIVER ABOVE COAL CREEK, NEAR MEEKER, CO

LOCATION.--Lat 40°00'18", long 107°49'29", in NW¼NW¼ sec.3, T.1 S., R.93 W., Rio Blanco County, Hydrologic Unit 14050005, on left bank 40 ft downstream from county road bridge, 2.3 mi upstream from Coal Creek, and 5.0 mi southeast of Meeker.

DRAINAGE AREA.--648 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1961 to current year.

REVISED RECORDS.--WDR CO-79-3: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 6,400 ft, from topographic map. Oct. 1, 1961, to Sept. 30, 1976, at site 76 ft upstream at datum 2.00 ft, higher.

REMARKS.--Records good. Diversions above station for irrigation of about 8,000 acres above station and about 4,000 acres below.

AVERAGE DISCHARGE.--22 years, 552 ft³/s; 399,900 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,740 ft³/s June 26, 1983, gage height, 7.07 ft; minimum daily, 6.5 ft³/s July 19-21, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
June 12	2100	4,100	6.10	June 26	0600	* 5,740	7.07

Minimum daily discharge, 216 ft³/s Sept. 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	570	455	374	230	260	304	312	478	2750	3380	772	399
2	509	440	374	240	250	311	299	475	2900	2990	783	378
3	480	386	362	250	250	313	314	471	2700	3090	730	372
4	460	410	349	260	250	309	290	487	2700	3090	730	403
5	456	402	366	280	250	318	257	524	2800	2600	750	402
6	460	410	356	300	250	318	272	569	2700	2350	780	379
7	440	410	352	310	260	312	275	548	2600	2260	702	373
8	460	402	351	310	270	314	284	600	2700	2360	664	376
9	460	402	346	310	270	310	294	731	2800	2260	650	367
10	445	402	371	320	280	311	284	873	3000	2120	660	347
11	435	415	353	329	290	329	290	1010	3300	1840	644	331
12	445	406	312	320	295	347	290	869	4200	1490	636	314
13	445	386	343	300	280	354	287	791	3370	1240	640	317
14	445	374	368	300	280	357	275	794	2700	1120	593	280
15	450	366	328	300	290	356	269	728	2400	1020	573	269
16	455	374	362	310	290	331	275	724	2400	954	552	258
17	450	390	356	310	292	331	281	704	2600	902	527	246
18	430	398	346	320	295	329	294	644	3100	848	570	238
19	435	399	309	320	311	324	322	656	3800	806	532	231
20	425	394	335	310	308	314	318	640	4400	789	575	216
21	420	388	353	300	290	300	330	673	4360	801	531	222
22	415	383	344	300	301	310	338	781	4330	917	513	226
23	410	352	342	292	302	312	338	1020	4370	932	501	229
24	398	342	332	290	298	311	378	1380	4610	890	504	249
25	394	340	319	290	308	314	480	1720	5160	805	500	302
26	402	350	263	290	305	312	505	1880	5360	941	498	344
27	480	350	250	290	302	305	500	2200	5030	881	481	293
28	440	350	240	280	303	307	495	2320	4510	838	443	292
29	406	360	230	280	---	302	465	2460	3970	788	461	320
30	430	376	220	280	---	302	482	2690	3600	766	424	358
31	455	---	220	270	---	309	---	2780	---	768	414	---
TOTAL	13805	11612	10126	9091	7930	9876	10093	33220	105220	46836	18333	9331
MEAN	445	387	327	293	283	319	336	1072	3507	1511	591	311
MAX	570	455	374	329	311	357	505	2780	5360	3380	783	403
MIN	394	340	220	230	250	300	257	471	2400	766	414	216
AC-FT	27380	23030	20080	18030	15730	19590	20020	65890	208700	92900	36360	18510

CAL YR 1982 TOTAL 240639 MEAN 659 MAX 2740 MIN 202 AC-FT 477300
WTR YR 1983 TOTAL 285473 MEAN 782 MAX 5360 MIN 216 AC-FT 566200

09304200 WHITE RIVER ABOVE COAL CREEK, NEAR MEEKER, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--July 1978 to current year.

PERIOD OF DAILY RECORD.--
SUSPENDED-SEDIMENT DISCHARGE: October 1974 to September 30, 1982 (discontinued).
SPECIFIC CONDUCTANCE: July 1978 to current year.
WATER TEMPERATURES: July 1978 to current year.

INSTRUMENTATION.--Water-quality monitor since July 1978.

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

COOPERATION.--Chemical quality data are furnished by the U.S. Bureau of Reclamation.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 511 micromhos Dec. 24, 1981; minimum, 152 micromhos June 14, 1980.
WATER TEMPERATURES: Maximum, 22.0°C July 8, 1981; minimum, 0.0°C many days during winter months.
SEDIMENT CONCENTRATIONS: Maximum daily, 8,020 mg/L Sept. 3, 1977; no flow many days during each year.
SEDIMENT LOADS: Maximum daily, 424 tons Sept. 3, 1977; no flow many days during each year.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 452 micromhos Dec. 30; minimum, 157 micromhos June 29.
WATER TEMPERATURES: Maximum, 19.0°C Aug. 18; minimum, 0.0°C many days during period Nov. to Feb.

WATER QUALITY DATA, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	SPE-CIFIC CON-DUCT-ANCE LAB (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
OCT										
14...	0950	440	360	390	8.2	4.0	180	54	10	4.0
21...	1330	415	345	440	8.4	5.5	200	57	13	11
28...	1410	430	340	400	8.4	4.5	170	51	10	3.0
NOV										
05...	1320	350	350	380	8.5	3.5	170	51	10	3.0
10...	1225	402	345	410	8.5	5.5	170	51	10	3.0
19...	0915	399	350	380	8.2	3.0	170	53	10	4.0
DEC										
03...	1510	326	358	380	8.5	.5	180	54	10	6.0
09...	1330	298	379	430	8.6	.5	190	56	11	4.0
17...	1140	318	358	350	8.4	.5	150	44	10	3.2
22...	1045	350	358	440	8.1	1.0	180	56	10	3.2
30...	1535	194	433	530	8.6	.0	210	63	12	4.4
JAN										
05...	1340	280	360	380	8.5	.0	180	54	10	3.2
11...	1450	278	400	490	8.6	.0	190	56	11	3.2
19...	1355	320	368	400	8.6	1.0	190	58	11	3.4
FEB										
03...	1430	250	420	480	8.8	.0	210	64	12	4.6
09...	1450	270	360	400	8.7	3.0	180	56	10	3.7
24...	1345	257	395	440	8.8	4.5	190	57	11	3.7
MAR										
03...	1125	310	385	410	8.6	3.5	190	58	11	3.9
10...	1400	306	390	400	8.7	6.5	190	58	11	3.9
17...	1355	318	385	420	8.6	3.5	190	58	11	3.9
APR										
01...	1340	310	379	450	8.6	5.5	190	57	11	6.7
05...	1420	209	400	420	8.5	5.5	190	59	11	3.2
15...	1040	266	395	450	8.4	3.5	190	58	11	5.5
18...	1310	284	395	410	8.6	9.0	190	58	11	4.4
22...	1030	338	385	430	8.4	6.5	190	58	11	3.2
MAY										
04...	1250	500	350	390	8.8	8.5	170	53	10	3.2
13...	0955	782	315	350	8.3	4.0	160	47	9.4	2.7
19...	1300	638	340	390	8.5	7.5	170	51	9.8	3.0
JUN										
02...	1525	2950	222	260	8.2	7.5	110	35	6.4	2.1
09...	1320	2800	230	260	8.2	7.0	110	34	6.3	1.8
16...	1325	2400	225	250	8.1	9.0	110	35	6.6	1.8
27...	1100	5160	192	210	8.0	8.0	93	28	5.7	1.6
30...	1405	3580	200	210	8.2	10.0	98	29	6.1	1.6
JUL										
07...	1520	2230	205	190	8.1	13.5	96	29	5.8	2.1
13...	1600	1230	250	230	8.2	15.0	120	35	6.9	2.5
22...	1020	920	310	280	8.2	15.0	140	43	7.6	3.2
AUG										
05...	0955	770	320	310	8.3	12.5	150	47	8.8	3.2
15...	1040	580	330	330	8.2	14.0	170	51	9.5	4.1
19...	0925	528	330	330	8.3	14.0	170	51	9.4	3.2
26...	1325	499	350	340	8.6	15.0	170	51	9.4	3.2
SEP										
01...	1545	401	340	340	8.6	15.5	180	53	11	2.3
07...	1255	373	370	360	8.5	14.0	170	53	9.8	1.1
15...	1345	272	360	370	8.6	14.0	180	54	11	2.3
26...	1030	352	375	380	8.2	9.0	190	59	11	1.1
29...	1515	324	370	380	8.5	11.5	200	59	12	2.3

09304200 WHITE RIVER ABOVE COAL CREEK, NEAR MEEKER, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE FET-FLD (MG/L AS HCO3)	CAR-BONATE FET-FLD (MG/L AS CO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)
OCT									
14...	.1	1.3	120	7	72	1.0	210	.29	249
21...	.4	1.1	130	10	85	9.0	250	.34	280
28...	.1	1.1	120	5	68	1.0	200	.27	232
NOV									
05...	.1	.90	120	7	71	1.0	200	.27	189
10...	.1	1.1	95	18	71	1.0	200	.27	217
19...	.1	1.4	140	.00	71	1.1	220	.30	237
DEC									
03...	.2	1.7	110	12	75	1.0	220	.30	194
09...	.1	.80	120	10	82	1.0	220	.30	177
17...	.1	.80	89	5	83	1.1	190	.26	163
22...	.1	.80	120	5	82	1.1	220	.30	208
30...	.1	1.1	100	23	100	1.4	260	.35	136
JAN									
05...	.1	.80	100	10	83	1.1	220	.30	166
11...	.1	.80	110	10	94	1.1	230	.31	173
19...	.1	.80	110	13	89	1.1	230	.31	199
FEB									
03...	.1	.80	100	17	96	1.4	250	.34	169
09...	.1	.80	99	16	78	1.1	210	.29	153
24...	.1	.80	99	17	83	1.1	220	.30	153
MAR									
03...	.1	1.1	120	7	85	1.1	220	.30	184
10...	.1	1.1	110	13	83	1.4	220	.30	182
17...	.1	.80	110	14	84	1.1	230	.31	197
APR									
01...	.2	3.1	110	10	85	1.4	230	.31	193
05...	.1	.40	96	20	90	1.8	230	.31	130
15...	.2	2.7	120	14	87	1.4	240	.33	172
18...	.1	.80	120	12	88	1.4	230	.31	176
22...	.1	.80	130	5	81	1.4	220	.30	201
MAY									
04...	.1	.80	120	8	67	1.1	210	.29	283
13...	.0	1.1	120	8	50	.70	180	.24	380
19...	.1	.80	120	10	60	1.4	200	.27	345
JUN									
02...	.0	.80	120	.00	22	.70	120	.16	956
09...	.0	.80	110	2	20	.70	120	.16	907
16...	.0	.80	120	.00	32	2.1	130	.18	842
27...	.0	.80	100	.00	16	1.4	100	.14	1390
30...	.0	.80	100	.00	18	.70	110	.15	1060
JUL									
07...	.0	.40	96	.00	22	.40	110	.15	662
13...	.1	.80	110	.00	31	.70	130	.18	432
22...	.1	.40	120	2	43	1.1	160	.22	397
AUG									
05...	.1	.80	120	6	54	1.1	180	.24	374
15...	.1	.80	130	5	63	1.1	200	.27	313
19...	.1	.80	130	4	63	1.1	190	.26	271
26...	.1	.80	110	12	65	1.1	200	.27	269
SEP									
01...	.0	.80	130	6	68	1.4	210	.29	227
07...	.0	.80	130	6	69	1.4	210	.29	211
15...	.0	.80	120	8	73	1.4	210	.29	154
26...	.0	.80	130	10	78	1.8	220	.30	209
29...	.0	.80	130	6	80	1.4	230	.31	201

09304200 WHITE RIVER ABOVE COAL CREEK, NEAR MEEKER, CO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	326	336	350	402	374	375	381	365	---	180	---	353
2	329	338	350	394	378	377	383	368	215	185	---	356
3	336	353	355	390	419	380	371	372	218	185	---	366
4	339	347	362	379	401	382	382	370	220	186	---	359
5	340	344	352	353	371	375	393	359	217	186	---	354
6	336	345	356	352	381	373	392	348	223	192	---	368
7	337	343	355	353	378	377	390	352	231	200	---	362
8	334	345	357	359	369	378	384	339	230	187	---	355
9	334	343	361	367	361	384	375	315	220	190	---	356
10	336	343	346	390	364	385	382	298	215	161	---	362
11	342	338	356	383	365	376	382	276	215	204	---	363
12	339	339	368	383	371	372	382	295	200	217	---	367
13	339	346	373	382	362	376	384	305	196	241	---	368
14	346	349	357	384	365	379	390	296	206	242	---	367
15	340	358	373	380	372	376	393	310	223	250	334	364
16	335	353	356	382	370	384	390	312	212	254	320	367
17	335	351	356	367	373	383	388	318	200	259	324	363
18	338	346	361	364	371	379	386	335	200	240	311	374
19	339	345	383	370	360	377	384	340	190	268	320	376
20	342	346	376	373	362	380	392	333	192	277	313	365
21	344	349	359	372	371	386	397	313	202	280	322	369
22	347	350	359	367	370	379	404	285	204	282	333	370
23	347	361	359	376	371	377	397	260	196	291	339	372
24	347	---	361	368	373	379	386	233	183	---	344	369
25	346	---	383	362	372	376	360	---	177	---	345	372
26	345	---	412	371	373	376	351	---	189	---	340	378
27	331	364	406	357	375	382	353	---	195	---	339	376
28	335	361	393	363	374	382	356	---	180	---	345	378
29	350	347	421	367	---	384	365	---	171	---	348	377
30	342	348	435	368	---	389	362	---	190	---	349	380
31	336	---	421	384	---	389	---	---	---	---	352	---
MEAN	339	348	371	373	373	360	381	321	204	224	334	367

WTR YR 1983 MEAN 336 MAX 435 MIN 76

09304200 WHITE RIVER ABOVE COAL CREEK, NEAR MEEKER, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

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

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

09304480 COAL CREEK BELOW LITTLE BEAVER CREEK, NEAR MEEKER, CO

WATER-QUALITY RECORDS

LOCATION.--Lat°40 01'52", long 107°49'18", in NE¼NW¼ sec.28, T.1 N., R.93 W., Rio Blanco County, Hydrologic Unit 14050005, 1.7 mi upstream from mouth, 0.1 mi downstream from Little Beaver Creek, and 4.6 mi east of Meeker.

PERIOD OF RECORD.--July 1978 to current year.

COOPERATION.--Chemical quality data are furnished by U.S. Bureau of Reclamation.

WATER QUALITY DATA, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	SPE-CIFIC CON-DUCT-ANCE LAB (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
OCT									
14...	0925	5.2	1700	1660	8.1	5.0	800	160	98
21...	1340	4.5	1700	1650	8.1	6.5	810	160	100
28...	1355	11	1220	1200	8.2	7.0	540	110	64
NOV									
05...	1325	17	1000	1020	8.2	4.0	470	100	54
10...	1210	20	850	860	8.2	5.5	390	90	41
19...	0930	18	1000	990	8.1	3.0	460	99	51
DEC									
03...	1525	15	1090	1100	8.2	2.0	520	110	59
09...	1350	12	1080	1100	8.2	1.0	510	110	58
17...	1205	12	1150	1120	8.1	2.0	530	110	61
22...	1035	10	1090	1100	8.1	2.0	520	110	59
30...	1410	12	1260	1290	8.2	.5	600	120	74
JAN									
05...	1400	10	1160	1190	8.2	.0	580	120	68
11...	1500	10	1180	1150	8.2	.0	500	88	68
19...	1415	10	1250	1210	8.2	1.0	590	120	70
FEB									
03...	1500	9.2	1290	1310	8.2	.5	640	130	77
09...	1415	13	1220	1230	8.1	.0	590	120	71
24...	1330	10	1370	1410	8.2	4.0	660	130	81
MAR									
03...	1135	26	965	1000	8.0	1.5	400	76	52
10...	1420	24	1320	1340	8.0	5.5	600	120	74
17...	1340	22	1460	1520	8.1	3.5	700	140	86
APR									
01...	1325	24	1520	1530	8.1	6.0	670	130	84
05...	1015	14	1600	1620	8.1	3.0	760	150	93
15...	1050	18	1500	1620	8.3	5.0	720	140	90
18...	1325	24	1420	1530	8.2	9.5	690	140	82
22...	1040	32	1170	1190	8.1	6.5	530	110	63
MAY									
04...	1255	104	800	830	8.3	11.5	360	76	41
13...	1005	78	720	750	8.2	6.5	330	72	36
19...	1115	175	1060	1100	8.0	8.0	480	100	57
JUN									
02...	1545	145	635	650	8.1	12.5	280	61	30
09...	1305	115	645	680	8.1	10.5	300	66	32
16...	1445	102	645	680	8.0	15.0	290	66	31
27...	1115	125	965	1010	8.0	14.0	440	92	51
30...	1330	62	810	840	8.2	16.5	380	83	41
JUL									
07...	1405	66	690	660	8.1	16.0	330	76	34
13...	1550	32	855	480	8.2	21.0	270	62	27
22...	1000	74	700	760	7.9	17.0	370	89	37
AUG									
05...	0940	35	915	870	8.2	16.0	430	97	46
15...	1050	12	1080	1040	8.0	16.0	550	120	61
19...	0940	12	1160	1140	8.1	17.0	570	120	65
26...	1335	8.5	1050	1040	8.2	18.0	550	120	61
SEP									
01...	1600	7.2	1300	1280	8.2	22.0	640	130	76
07...	1310	12	1120	1100	8.1	17.0	550	120	62
15...	1405	13	945	940	8.2	16.5	490	110	53
26...	1045	35	725	720	8.1	12.0	350	84	34
29...	1530	25	850	840	8.1	13.0	410	96	42

09304480 COAL CREEK BELOW LITTLE BEAVER CREEK, NEAR MEEKER, CO

WATER QUALITY DATA, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)
OCT								
14...	67	1	3.0	590	24	1140	1.6	16
21...	68	1	2.7	590	25	1140	1.6	14
28...	46	.9	3.9	400	18	780	1.1	23
NOV								
05...	38	.8	3.5	300	12	650	.88	30
10...	28	.6	4.3	250	9.0	540	.73	29
19...	37	.8	11	300	11	630	.86	31
DEC								
03...	43	.8	2.3	340	14	710	.97	29
09...	45	.9	2.3	320	13	700	.95	23
17...	41	.8	3.5	350	16	730	.99	24
22...	39	.8	2.0	370	15	720	.98	19
30...	47	.9	2.0	410	19	860	1.1	28
JAN								
05...	43	.8	2.0	420	19	770	1.0	21
11...	45	.9	2.3	330	17	690	.94	19
19...	46	.8	2.3	380	18	810	1.1	22
FEB								
03...	53	.9	2.7	430	11	880	1.1	22
09...	49	.9	2.3	400	10	820	1.1	29
24...	65	1	4.3	500	14	970	1.3	26
MAR								
03...	47	1	12	320	12	620	.84	44
10...	66	1	8.6	480	15	900	1.1	58
17...	77	1	4.7	540	16	1050	1.4	62
APR								
01...	78	1	3.9	580	26	1060	1.4	69
05...	79	1	5.5	620	26	1150	1.6	43
15...	82	1	3.9	630	28	1150	1.6	56
18...	75	1	3.9	560	25	1030	1.4	67
22...	55	1	5.1	400	18	780	1.1	67
MAY								
04...	33	.8	3.9	230	9.9	500	.68	140
13...	28	.7	2.7	190	8.9	440	.60	93
19...	51	1	6.3	370	15	720	.98	340
JUN								
02...	20	.5	3.5	150	2.5	370	.50	145
09...	20	.5	2.3	160	8.5	380	.52	118
16...	21	.6	1.6	170	7.8	390	.53	107
27...	37	.8	3.5	310	13	640	.87	216
30...	29	.7	3.1	220	9.9	510	.69	85
JUL								
07...	20	.5	1.1	170	7.1	420	.57	75
13...	14	.4	.80	150	4.6	330	.45	29
22...	23	.5	2.3	200	8.9	490	.67	98
AUG								
05...	33	.7	2.0	260	13	580	.79	55
15...	38	.7	2.0	300	12	700	.95	23
19...	44	.8	2.3	370	16	790	1.1	26
26...	41	.8	1.6	330	13	710	.97	16
SEP								
01...	48	.8	3.9	460	19	900	1.1	17
07...	36	.7	2.3	380	15	750	1.0	24
15...	25	.5	1.6	280	9.6	620	.84	22
26...	17	.4	1.6	210	7.4	460	.63	43
29...	22	.5	2.3	240	8.9	540	.73	36

09304500 WHITE RIVER NEAR MEEKER, CO

LOCATION.--Lat 40°02'01", long 107°51'42", in NE¼ sec.30, T.1 N., R.93 W., Rio Blanco County, Hydrologic Unit 14050005, on left bank 1.0 mi upstream from Curtis Creek and 2.5 mi east of Meeker.

DRAINAGE AREA.--755 mi^2.

PERIOD OF RECORD.--June 1901 to December 1906, October 1909 to current year. Monthly discharge only for some periods, published in WSP 1313. Published as "at Meeker" 1901-13.

REVISED RECORDS.--WDR CO-79-3: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 6,300 ft, from topographic map. Prior to Oct. 31, 1906, and May 7 to Aug. 13, 1910, nonrecording gage, and Aug. 14, 1910, to Oct. 19, 1913, water-stage recorder, at site 2.5 mi downstream, at different datum. Oct. 20, 1913, to Sept. 30, 1971, water-stage recorder at present site, at datum 3.00 ft, higher, prior to Oct. 1, 1933, and at datum 2.00 ft, higher, thereafter.

REMARKS.--Records good except those for period of no gage-height record, which are poor. Diversions above station for irrigation of about 12,000 acres above station and about 3,000 acres below. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--79 years, 621 ft^3/s; 449,900 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,700 ft^3/s June 26, 1983, gage height, 5.89 ft, maximum gage height, 7.60 ft, June 16, 1921; minimum daily discharge, 78 ft^3/s July 16, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,100 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
June 12	1900	5,260	5.59	June 26	0900	* 6,700	5.89

Minimum daily, 250 ft^3/s Aug. 30 to Jan. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	602	509	415	250	280	352	348	590	3060	3340	915	451
2	548	480	415	270	270	380	328	590	3300	3050	913	431
3	515	435	400	270	270	386	348	584	2920	3140	857	428
4	495	460	380	300	270	372	324	602	3100	3130	854	464
5	495	455	405	330	270	394	308	650	3180	2660	879	464
6	500	450	390	330	280	380	308	692	2980	2450	909	440
7	489	455	385	340	280	367	304	656	2880	2400	724	431
8	496	450	385	340	290	369	328	717	3080	2520	784	438
9	497	460	395	350	290	366	332	864	3200	2410	761	437
10	483	460	410	350	300	385	332	1050	3250	2280	773	424
11	470	480	385	350	300	443	356	1210	3560	1930	750	417
12	482	455	344	340	290	520	340	1060	4620	1610	734	417
13	479	435	380	330	290	501	320	952	3860	1400	738	417
14	475	415	395	330	290	480	308	952	2880	1310	687	402
15	485	415	380	330	300	425	312	878	2540	1210	667	408
16	490	420	392	330	300	372	320	892	2640	1150	648	404
17	485	430	388	330	300	366	328	892	2900	1060	616	406
18	474	445	375	340	300	360	344	815	3320	1010	672	412
19	466	455	348	340	310	356	380	871	4080	963	621	392
20	459	440	380	330	320	344	380	843	4720	952	663	352
21	456	430	385	320	320	344	390	885	4240	988	607	393
22	452	425	372	320	330	340	405	1020	4280	1130	582	406
23	449	390	368	320	330	344	395	1170	4320	1150	566	410
24	430	395	360	310	330	344	450	1450	4440	1080	564	444
25	450	405	348	310	350	344	578	1750	5440	992	558	464
26	455	400	340	310	344	340	608	1990	6100	1120	555	473
27	536	395	310	310	341	332	590	2550	5620	1060	534	432
28	485	395	290	300	348	336	572	3100	4850	1020	520	434
29	450	395	260	290	---	328	542	3470	4080	937	505	442
30	479	400	250	290	---	332	590	3530	3590	918	482	462
31	510	---	250	280	---	364	---	3530	---	913	466	---
TOTAL	15037	13034	11280	9840	8493	11666	11768	40805	113030	51283	21104	12795
MEAN	485	434	364	317	303	376	392	1316	3768	1654	681	427
MAX	602	509	415	350	350	520	608	3530	6100	3340	915	473
MIN	430	390	250	250	270	328	304	584	2540	913	466	352
AC-FT	29830	25850	22370	19520	16850	23140	23340	80940	224200	101700	41860	25380

CAL YR 1982 TOTAL 247429 MEAN 678 MAX 2650 MIN 230 AC-FT 490800
WTR YR 1983 TOTAL 320135 MEAN 877 MAX 6100 MIN 250 AC-FT 635000

NOTE.--NO GAGE-HEIGHT RECORD JAN. 13 TO FEB. 25.

09304550 CURTIS CREEK NEAR MEEKER, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 40°02'22", long 107°52'53", in SE¼NW¼ sec.24, T.1 N., R.93 W., Rio Blanco County, Hydrologic Unit 14050005, 0.6 mi upstream from mouth, 1.6 mi east of Meeker.

PERIOD OF RECORD.--July 1978 to current year.

COOPERATION.--Chemical quality data are furnished by U.S. Bureau of Reclamation.

WATER QUALITY DATA, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	SPE-CIFIC CON-DUCT-ANCE LAB (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
OCT									
14...	0910	.52	3750	4050	8.3	4.0	1500	140	270
21...	1350	.52	4350	4640	8.3	8.5	1700	150	310
28...	1335	.78	3280	3340	8.4	7.0	1200	120	220
NOV									
05...	1255	.94	3300	3360	8.4	3.5	1200	120	220
10...	1200	.91	3530	3620	8.4	6.5	1300	120	240
19...	0945	.91	4000	3890	8.3	1.5	1400	140	250
DEC									
03...	1545	.71	4020	4000	8.2	1.0	1400	140	260
09...	1310	.44	4100	4100	8.2	.0	1500	150	270
17...	1215	.66	4050	4050	8.1	.0	1500	150	270
22...	1020	.73	3550	3650	8.2	.0	1300	130	240
30...	1335	.83	4000	3940	8.0	.0	1400	150	260
JAN									
05...	1425	.99	3950	4200	8.2	.0	1500	150	280
11...	1525	1.0	3800	3670	8.1	.0	1300	130	240
19...	1430	.83	3950	3330	8.1	.5	1100	120	200
FEB									
03...	1520	.44	4400	4410	8.0	.0	1600	160	280
09...	1400	.88	3190	3350	8.1	.0	1200	120	210
24...	1315	1.0	3150	3410	8.0	.5	1200	130	210
MAR									
03...	1150	E3.0	1760	1800	8.1	1.0	630	88	100
10...	1435	E2.5	2800	2740	8.1	5.5	980	130	160
17...	1350	E1.5	3250	3260	8.2	5.0	1100	140	190
APR									
01...	1300	E1.0	3200	3450	8.4	7.0	1200	120	210
05...	1400	1.4	3800	4020	8.4	6.0	1300	140	240
15...	1100	1.5	2780	2930	8.4	6.0	1100	110	190
18...	1200	2.3	3050	3280	8.4	13.5	1100	110	200
22...	1120	4.5	2070	2510	8.3	8.0	930	110	160
MAY									
04...	1315	8.5	1940	1960	8.5	14.0	700	81	120
13...	1015	9.0	1680	1750	8.4	5.0	640	74	110
19...	1130	9.0	1810	1860	8.3	10.0	700	97	110
JUN									
02...	1600	4.5	1810	1890	8.6	17.5	680	74	120
09...	1250	2.8	1780	1810	8.5	14.0	640	74	110
16...	1600	5.9	1950	1910	8.5	22.0	670	72	120
27...	1130	5.0	2180	2260	8.2	20.0	800	90	140
30...	1345	4.0	1790	2150	8.5	19.5	780	66	150
JUL									
07...	1355	2.0	1850	1950	8.5	24.0	760	72	140
13...	1545	1.8	1900	2020	8.6	26.0	740	65	140
22...	0950	2.2	2950	2950	8.2	18.0	1100	110	210
AUG									
05...	0920	1.7	2390	2390	8.3	15.5	940	97	170
15...	1105	1.6	1940	1990	8.4	19.0	760	74	140
19...	0955	1.6	2100	2090	8.4	18.0	790	86	140
26...	1405	.92	1950	1920	8.6	22.5	720	58	140
SEP									
01...	1625	.80	2040	1980	8.6	23.0	670	55	130
07...	1325	1.1	2090	1970	8.6	20.0	720	59	140
15...	1425	.81	2450	2270	8.6	20.0	770	63	150
26...	1055	.97	2340	2290	8.3	12.0	930	94	170
29...	1540	.87	2400	2290	8.5	16.0	890	77	170

E ESTIMATED.

09304550 CURTIS CREEK NEAR MEEKER, CO

WATER QUALITY DATA, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)
OCT								
14...	450	5	9.4	1600	120	3000	4.1	4.2
21...	540	6	9.7	2000	140	3500	4.8	4.9
28...	350	4	11	1300	110	2420	3.3	5.1
NOV								
05...	350	4	8.7	1300	110	2450	3.3	6.2
10...	390	5	8.6	1500	120	2690	3.7	6.6
19...	420	5	10	1500	160	2850	3.9	7.0
DEC								
03...	440	5	8.3	1600	140	2960	4.0	5.7
09...	450	5	15	1700	120	3120	4.2	3.7
17...	450	5	8.2	1700	150	3060	4.2	5.5
22...	400	5	7.8	1500	120	2730	3.7	5.4
30...	430	5	9.0	1700	180	3090	4.2	6.9
JAN								
05...	480	5	11	1800	120	3220	4.4	8.6
11...	400	5	8.6	1500	110	2700	3.7	7.3
19...	380	5	8.2	1300	120	2330	3.2	5.2
FEB								
03...	490	5	10	1600	96	3020	4.1	3.6
09...	370	5	10	1200	67	2270	3.1	5.4
24...	380	5	10	1500	89	2610	3.5	7.0
MAR								
03...	160	3	9.0	620	50	1190	1.6	--
10...	290	4	9.4	1300	120	2140	2.9	--
17...	340	4	9.4	1200	110	2300	3.1	--
APR								
01...	370	5	9.0	1300	170	2430	3.3	--
05...	440	5	9.0	1500	230	2850	3.9	11
15...	320	4	10	1200	110	2220	3.0	9.0
18...	340	5	8.2	1200	140	2300	3.1	14
22...	250	4	9.0	910	88	1870	2.5	23
MAY								
04...	180	3	8.2	600	64	1300	1.8	30
13...	160	3	7.8	500	33	1140	1.6	28
19...	170	3	9.8	540	73	1250	1.7	30
JUN								
02...	160	3	9.4	540	41	1210	1.6	15
09...	150	3	7.0	510	55	1170	1.6	8.8
16...	170	3	7.8	570	66	1260	1.7	20
27...	210	3	7.8	690	85	1510	2.1	20
30...	210	3	8.6	630	61	1390	1.9	15
JUL								
07...	210	3	5.9	640	58	1400	1.9	7.6
13...	230	4	5.9	680	51	1440	2.0	7.0
22...	350	5	8.2	1200	100	2270	3.1	13
AUG								
05...	270	4	11	880	61	1840	2.5	8.4
15...	220	4	7.8	650	53	1440	2.0	6.2
19...	230	4	8.2	670	57	1510	2.1	6.5
26...	220	4	7.4	620	59	1360	1.8	3.4
SEP								
01...	220	4	8.6	620	52	1380	1.9	3.0
07...	220	4	8.2	660	56	1410	1.9	4.6
15...	260	4	9.0	800	67	1640	2.2	3.6
26...	250	4	8.6	800	65	1700	2.3	4.5
29...	250	4	8.6	830	70	1680	2.3	3.9

09304600 WHITE RIVER AT MEEKER, CO

LOCATION.--Lat 40°02'00", long 107°55'05", in NE¼NE¼ sec.27, T.1 N., R.94 W., Rio Blanco County, Hydrologic Unit 14050005, on right bank, at 10th Street bridge, 0.4 mi upstream from Flag Creek, and 0.6 mi downstream from Sulphur Creek.

DRAINAGE AREA.--808 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1978 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,200 ft, from topographic map.

REMARKS.--Records good except those for period of no gage-height record, which are fair. Diversions above station for irrigation of about 3,000 acres above station and about 12,000 acres below.

AVERAGE DISCHARGE.--5 years, 667 ft³/s; 483,200 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 6,000 ft³/s June 26, 1983; maximum gage height, about 12.0 ft, Jan. 31, 1979, (ice jam); minimum daily discharge, 141 ft³/s, Aug. 29, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 6,000 ft³/s June 26, estimated, only peak above base of 2000 ft³/s; minimum daily, 252 ft³/s Dec. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	700	556	418	260	344	361	374	640	3150	3500	928	450
2	596	531	414	270	323	395	349	644	3250	3400	939	440
3	567	473	400	270	288	397	370	635	3000	3300	863	444
4	541	501	388	270	288	378	345	653	3100	3400	857	500
5	539	492	398	270	300	406	325	702	3150	3000	910	505
6	548	494	384	270	310	387	330	746	2950	2900	971	472
7	534	497	375	270	310	370	333	708	2900	2700	850	463
8	542	489	380	280	320	379	343	758	3000	2800	807	477
9	539	492	385	290	322	376	360	883	3100	2700	789	473
10	527	496	392	310	314	399	360	1060	3200	2500	812	452
11	515	522	368	320	320	479	387	1210	3500	2200	787	442
12	531	500	332	330	303	565	373	1040	4500	1900	766	438
13	525	475	381	330	313	539	351	937	3800	1750	769	434
14	519	458	401	330	317	518	336	934	3000	1600	700	405
15	529	471	366	330	307	458	339	861	2800	1400	672	412
16	538	478	371	330	311	390	349	877	2900	1300	630	410
17	527	478	354	330	308	386	358	877	3150	1200	596	402
18	514	484	342	330	313	380	378	809	3600	1150	679	415
19	506	493	324	330	324	373	425	851	4200	1100	625	388
20	493	482	396	330	324	357	424	827	4700	1050	685	332
21	494	470	397	335	309	345	442	868	4800	1100	610	392
22	486	457	375	329	319	354	447	1000	4700	1170	590	412
23	485	445	371	321	323	359	428	1160	4800	1270	570	425
24	468	453	365	342	324	357	494	1450	4900	1100	560	481
25	478	513	385	346	364	360	629	1740	5000	1030	560	505
26	497	438	316	337	332	358	653	1950	6000	1200	560	508
27	579	439	308	330	328	350	631	2450	5600	1140	540	449
28	532	439	359	327	337	353	609	3000	4800	1080	520	443
29	489	440	276	319	---	350	589	3400	4200	955	510	457
30	521	423	252	317	---	355	630	3450	3700	910	490	506
31	552	---	260	301	---	390	---	3400	---	916	470	---
TOTAL	16411	14379	11233	9654	8895	12224	12761	40520	115450	56721	21615	13332
MEAN	529	479	362	311	318	394	425	1307	3848	1830	697	444
MAX	700	556	418	346	364	565	653	3450	6000	3500	971	508
MIN	468	423	252	260	288	345	325	635	2800	910	470	332
AC-FT	32550	28520	22280	19150	17640	24250	25310	80370	229000	112500	42870	26440

CAL YR 1982 TOTAL 258544 MEAN 708 MAX 2540 MIN 240 AC-FT 512800
WTR YR 1983 TOTAL 333195 MEAN 913 MAX 6000 MIN 252 AC-FT 660900

NOTE.--NO GAGE-HEIGHT RECORD MAY 28 TO JULY 21.

09304600 WHITE RIVER AT MEEKER, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1978 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1978 to current year.
WATER TEMPERATURES: October 1978 to current year.

INSTRUMENTATION.--Water-quality monitor since October 1978.

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

COOPERATION.--Chemical quality data are furnished by the U.S. Bureau of Reclamation.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 810 micromhos Nov. 29, 1979; minimum, 134 micromhos May 29, 1983.
WATER TEMPERATURES: Maximum, 23.0°C July 21, 28, 30, 1980; minimum, 0.0°C on many days during winter months.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 643 micromhos Apr. 11; minimum, 134 micromhos May 29.
WATER TEMPERATURES: Maximum, 20.5°C on Aug. 9-10, 17, 18; minimum, 0.0°C on days during November to February.

WATER QUALITY DATA, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	SPE-CIFIC CON-DUCT-ANCE LAB (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
OCT										
14...	1020	522	440	440	8.4	4.0	200	57	13	11
21...	1305	498	415	440	8.7	5.0	200	57	13	11
28...	1440	522	438	420	8.7	5.5	180	52	13	22
NOV										
05...	1205	444	430	420	8.7	3.0	180	53	12	11
10...	1250	498	425	430	8.9	6.0	190	55	13	11
19...	0855	486	455	460	8.2	2.5	200	58	14	19
DEC										
03...	1410	375	455	460	8.6	1.0	200	57	14	13
09...	1250	350	475	490	8.2	.5	210	61	14	14
17...	1100	345	440	450	8.4	.5	200	59	13	12
22...	1305	365	453	470	8.4	2.0	210	60	14	12
31...	1030	260	565	570	8.3	.0	230	68	15	15
JAN										
05...	1320	270	445	440	8.4	.0	190	58	12	11
11...	1420	320	498	500	8.5	.5	210	62	14	13
19...	1335	330	485	470	8.4	1.0	210	62	13	13
FEB										
03...	1400	204	509	530	8.6	.5	220	65	15	19
09...	1510	320	440	450	8.6	3.0	200	58	13	13
24...	1400	304	490	500	8.8	5.0	210	61	15	15
MAR										
03...	1100	400	510	530	8.4	3.5	220	60	17	17
10...	1350	355	530	550	8.9	7.0	230	64	18	19
17...	1415	385	550	560	8.6	4.0	240	66	19	20
APR										
01...	1400	370	535	560	8.6	6.0	240	64	19	18
05...	1455	272	560	580	8.7	6.0	240	66	19	20
15...	1020	350	550	570	8.6	4.0	250	67	19	19
18...	1250	385	562	580	8.8	9.5	250	67	20	19
22...	1010	468	570	590	8.3	7.0	260	67	22	21
MAY										
04...	1225	649	480	500	8.6	10.0	220	58	18	18
13...	0940	940	385	400	8.3	5.0	180	50	13	8.3
19...	1240	852	520	540	8.4	8.0	230	59	21	18
JUN										
02...	1450	3250	275	280	8.2	8.0	130	37	8.6	4.1
09...	1335	3100	260	270	8.2	8.0	120	34	8.3	3.7
16...	1150	E2900	265	280	8.0	9.0	130	37	8.4	4.1
27...	1030	5600	230	240	8.0	9.0	110	31	7.4	3.4
30...	1430	3700	238	250	8.1	13.0	110	32	7.5	3.4
JUL										
07...	1540	2700	245	230	8.0	17.0	110	33	7.7	5.1
13...	1615	1750	300	280	8.2	16.5	140	40	9.5	6.0
22...	1045	1170	340	350	8.2	15.5	180	52	13	7.6
AUG										
05...	1020	960	361	360	8.4	14.0	180	52	12	8.0
15...	1010	677	400	400	8.3	16.0	200	57	13	11
15...	1015	677	--	--	--	--	--	--	--	--
19...	0905	607	415	400	8.3	15.0	200	57	13	12
31...	1305	470	415	410	8.5	16.0	210	61	13	12
SEP										
01...	1530	E450	440	460	8.6	17.5	200	59	14	8.7
07...	1240	456	455	450	8.5	14.5	220	63	15	8.7
15...	1325	415	465	470	8.7	14.5	220	64	15	8.7
26...	1010	516	480	490	8.3	9.5	220	65	15	7.6
29...	1505	456	470	450	8.7	13.0	230	66	15	9.9

E ESTIMATED.

09304600 WHITE RIVER AT MEEKER, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE FET-FLD (MG/L AS HCO3)	CAR-BONATE FET-FLD (MG/L AS CO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)
OCT									
14...	.4	1.0	130	11	85	9.0	250	.34	352
21...	.4	1.1	120	16	85	9.0	250	.34	336
28...	.7	1.1	100	16	86	9.0	250	.34	352
NOV									
05...	.4	1.1	110	17	81	9.0	240	.33	288
10...	.4	1.1	100	23	87	8.0	250	.34	336
19...	.6	1.0	150	.00	94	9.0	270	.37	354
DEC									
03...	.4	1.0	110	19	94	10	260	.35	263
09...	.4	1.5	130	11	100	12	280	.38	265
17...	.4	.80	130	7	95	10	260	.35	242
22...	.4	.80	120	13	96	10	260	.35	256
31...	.4	1.6	160	6	120	15	320	.44	225
JAN									
05...	.4	.80	120	7	94	9.2	250	.34	182
11...	.4	1.6	130	11	110	12	280	.38	242
19...	.4	.80	130	10	100	11	270	.37	241
FEB									
03...	.6	1.1	130	13	110	10	290	.39	160
09...	.4	1.1	110	13	93	6.0	250	.34	216
24...	.5	1.1	110	17	100	7.4	280	.38	230
MAR									
03...	.5	2.7	130	8	120	7.8	290	.39	313
10...	.6	2.0	110	18	120	8.2	310	.42	297
17...	.6	1.6	120	17	130	7.8	320	.44	333
APR									
01...	.5	.80	120	17	130	13	320	.44	320
05...	.6	.80	130	16	140	16	340	.46	250
15...	.5	3.5	120	17	140	12	330	.45	312
18...	.5	1.6	73	20	150	14	320	.44	333
22...	.6	1.6	160	5	140	11	340	.46	430
MAY									
04...	.5	4.3	150	6	100	7.1	290	.39	508
13...	.3	1.1	140	6	68	4.2	220	.30	558
19...	.5	2.0	140	11	120	7.1	310	.42	713
JUN									
02...	.2	1.1	120	.00	30	2.5	140	.19	1230
09...	.2	.80	120	.00	28	1.8	140	.19	1170
16...	.2	1.1	120	.00	32	2.1	150	.20	--
27...	.1	1.1	110	.00	25	1.8	130	.18	1970
30...	.1	.80	110	.00	25	1.8	130	.18	1300
JUL									
07...	.2	.80	110	2	31	1.8	130	.18	948
13...	.2	.80	130	.00	43	2.5	160	.22	756
22...	.3	.80	140	2	61	4.2	210	.29	663
AUG									
05...	.3	.80	140	4	67	3.9	220	.30	570
15...	.4	.80	140	6	77	6.0	240	.33	439
15...	--	--	--	--	--	--	--	--	--
19...	.4	.80	140	10	78	6.0	250	.34	410
31...	.4	.80	140	8	81	8.2	260	.35	330
SEP									
01...	.3	1.1	150	6	90	7.4	260	.35	--
07...	.3	1.1	160	6	92	7.4	270	.37	332
15...	.3	1.1	150	12	90	7.8	270	.37	303
26...	.2	1.1	150	13	98	7.4	280	.38	390
29...	.3	1.1	140	16	100	8.2	280	.38	345

09304600 WHITE RIVER AT MEEKER, CO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	466	465	459	525	472	491	565	455	269		---	438
2	452	453	458	502	460	510	577	470	259		---	430
3	466	456	457	487	532	495	550	475	207		---	452
4	468	456	446	459	510	528	562	470	202		---	456
5	469	449	443	416	453	507	576	438	202		356	450
6	470	440	464	425	471	504	561	389	191		362	462
7	469	437	460	445	466	518	559	396	209		356	463
8	459	436	448	454	456	526	561	430	258		370	464
9	459	436	450	462	444	534	578	457	264		374	465
10	465	430	437	485	446	555	610	468	269		379	475
11	469	437	452	478	452	562	625	359	258		380	476
12	471	439	486	478	467	517	616	366	246		378	470
13	455	455	500	469	472	519	593	370	---		378	467
14	426	457	490	475	483	540	566	331	---		383	466
15	421	472	516	468	488	541	553	361	---		390	464
16	411	466	474	480	498	545	539	390	---		393	449
17	408	463	461	464	502	550	539	425	---		396	455
18	407	460	456	453	503	565	553	473	---		393	455
19	405	457	485	445	493	556	575	485	---		402	469
20	407	446	476	453	484	566	567	405	---		393	486
21	410	448	452	467	494	587	570	372	---		400	487
22	415	444	456	470	494	553	550	351	---		405	486
23	415	455	465	480	493	567	515	325	---		410	489
24	419	474	464	473	494	579	500	293	---		409	484
25	439	434	491	455	477	557	490	269	---		408	481
26	422	447	528	471	478	551	461	240	---		406	476
27	433	459	540	452	477	558	432	222	---		409	476
28	445	449	530	463	483	556	417	242	---		413	462
29	459	441	538	470	---	546	427	165	---		418	459
30	446	445	551	468	---	557	438	247	---		430	470
31	444	---	577	487	---	585	---	257	---		431	---
MEAN	441	450	481	467	480	543	541	368	236		393	466

WTR YR 1983 MEAN 455 MAX 625 MIN 165

09304600 WHITE RIVER AT MEEKER, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

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

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	6.5	2.0	8.5	5.0	10.0	6.0			---	---	18.0	12.5
2	5.5	2.0	9.0	6.0	9.0	6.5			---	---	19.0	14.0
3	6.5	1.5	10.5	5.5	10.5	6.5			---	---	19.0	13.5
4	6.5	1.5	12.0	6.0	11.0	7.0			---	---	18.5	13.5
5	6.5	.5	11.0	8.0	10.0	7.0			17.0	14.0	17.5	11.5
6	6.5	.5	9.5	7.0	10.5	6.5			18.5	13.0	18.0	11.5
7	6.0	.5	12.0	5.0	11.5	6.5			18.5	13.5	17.5	11.5
8	7.0	1.5	11.5	7.5	10.0	6.5			18.5	15.0	19.0	14.0
9	10.0	4.0	12.0	7.0	9.5	7.0			20.5	14.5	18.0	13.0
10	10.5	5.0	12.0	6.0	11.5	7.5			20.5	15.0	18.0	12.5
11	9.0	5.5	10.5	6.5	11.5	7.0			20.0	16.0	17.0	11.0
12	8.0	5.0	8.0	4.5	11.0	7.0			18.5	14.5	17.0	10.5
13	8.5	3.5	9.5	4.5	9.0	6.0			19.0	14.0	17.0	11.0
14	8.0	2.5	8.5	5.5	11.5	6.0			18.5	14.5	15.5	11.5
15	9.5	2.5	9.5	5.0	12.0	7.0			20.0	16.0	17.0	11.0
16	10.0	3.0	8.5	5.5	12.0	7.0			19.5	14.5	16.0	10.0
17	11.0	4.0	6.5	3.0	13.0	8.0			20.5	15.5	16.0	11.0
18	10.5	5.0	8.5	3.0	13.0	8.0			20.5	15.5	16.0	10.5
19	10.5	7.0	9.5	6.0	13.0	8.5			18.0	15.0	15.0	10.5
20	10.5	6.0	12.0	6.0	13.0	8.0			17.5	14.5	12.5	7.5
21	9.5	7.0	12.5	7.5	13.0	8.0			18.5	12.5	12.0	5.0
22	9.5	6.0	13.5	8.0	13.0	8.0			18.5	13.0	13.0	6.5
23	12.5	6.5	13.5	7.5	12.5	9.0			18.5	13.0	11.0	8.0
24	12.5	7.5	13.5	7.0	12.5	9.5			16.5	12.5	13.0	9.5
25	11.5	8.0	13.0	6.5	13.5	10.0			17.0	12.5	15.0	9.0
26	10.0	6.0	12.5	7.0	---	---			18.5	12.5	14.0	9.0
27	9.5	7.0	13.0	6.5	---	---			19.0	13.0	15.0	11.0
28	8.5	6.0	12.0	6.5	---	---			16.0	13.0	14.0	9.5
29	9.5	5.5	11.5	6.5	---	---			15.5	13.5	13.5	10.0
30	9.0	6.5	10.5	7.5	---	---			18.5	12.5	12.0	10.0
31	---	---	10.0	6.0	---	---			18.0	12.5	---	---
MONTH	12.5	.5	13.5	3.0	13.5	6.0			20.5	12.5	19.0	5.0
YEAR	20.5	.0										

09304800 WHITE RIVER BELOW MEEKER, CO

LOCATION.-- Lat 40°00'48", long 108°05'33", in center of sec.31, T.1 N., R 95 W., Rio Blanco County, Hydrologic Unit 14050005, on left bank 30 ft downstream from county bridge, 4.5 mi downstream from Strawberry Creek, and 10 mi west of Meeker.

DRAINAGE AREA.--1,024 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1961 to current year.

REVISED RECORDS.--WDR CO-79-3: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 5,928 ft, from topographic map.

REMARKS.--Records good. Diversion above station for irrigation of about 22,000 acres above station, and a few small hay meadows below.

AVERAGE DISCHARGE.--22 years, 629 ft^3/s; 455,700 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,590 ft^3/s June 26, 1983, gage height, 4.97 ft; minimum daily, 85 ft^3/s June 28, 1977.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
June 13	0400	4,880	4.32	June 26	2000	* 6,590	4.97

Minimum daily discharge, 268 ft^3/s Dec. 31.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	700	567	431	270	330	549	386	676	3130	3740	1020	443
2	680	539	437	270	330	653	355	680	3250	3450	1060	433
3	621	487	428	270	330	576	378	666	2970	3470	979	421
4	581	496	414	270	332	462	352	683	3040	3530	952	474
5	553	494	445	270	340	534	334	713	3070	3170	979	502
6	553	493	415	270	340	456	340	767	2910	2890	1020	473
7	552	501	403	270	340	422	337	725	2780	2810	934	461
8	556	487	429	270	340	413	346	761	2940	2890	859	464
9	560	489	421	290	340	422	369	899	3010	2890	802	468
10	547	493	447	310	340	434	351	1080	3060	2770	800	444
11	530	514	411	320	340	538	387	1290	3510	2480	743	429
12	536	501	366	325	340	662	382	1160	4170	2050	742	430
13	535	465	411	330	340	611	354	1020	4400	1750	739	429
14	528	469	443	330	340	565	334	1010	3260	1610	686	406
15	496	448	421	330	340	506	331	943	2860	1480	651	423
16	538	487	420	330	340	405	344	964	2960	1380	610	428
17	531	505	407	330	340	399	351	994	3200	1270	579	427
18	516	486	398	330	340	390	366	912	3610	1200	612	439
19	506	488	374	330	339	377	422	973	4280	1130	624	424
20	502	480	370	330	346	360	431	951	4670	1080	649	388
21	498	463	380	330	319	340	444	954	5000	1110	635	427
22	491	462	392	330	336	357	468	1080	4930	1370	582	448
23	491	446	389	330	334	362	448	1220	4980	1440	544	469
24	478	418	389	330	344	363	496	1470	4880	1410	552	518
25	472	474	379	330	380	364	628	1860	5000	1220	554	544
26	496	468	317	330	393	360	657	2070	6060	1360	543	552
27	583	422	301	330	385	356	635	2570	5760	1340	529	509
28	550	389	328	330	425	357	613	3000	5060	1260	502	511
29	496	395	332	330	---	352	596	3340	4360	1120	511	522
30	521	400	281	330	---	349	641	3390	4020	1050	490	596
31	556	---	268	330	---	397	---	3460	---	1030	465	---
TOTAL	16753	14226	12047	9675	9683	13691	12876	42281	117130	60750	21947	13902
MEAN	540	474	389	312	346	442	429	1364	3904	1960	708	463
MAX	700	567	447	330	425	662	657	3460	6060	3740	1060	596
MIN	472	389	268	270	319	340	331	666	2780	1030	465	388
AC-FT	33230	28220	23900	19190	19210	27160	25540	83860	232300	120500	43530	27570

CAL YR 1982 TOTAL 258815 MEAN 709 MAX 2550 MIN 212 AC-FT 513400
WTR YR 1983 TOTAL 344961 MEAN 945 MAX 6060 MIN 268 AC-FT 684200

09304800 WHITE RIVER BELOW MEEKER, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1974 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: July 1978 to September 1983 (discontinued).
WATER TEMPERATURES: July 1978 to September 1983 (discontinued).

INSTRUMENTATION.--Water-quality monitor since July 1978.

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

COOPERATION.--Additional chemical quality data are furnished by the U.S. Bureau of Reclamation (noted by an asterisk in the water year heading).

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maxmum, 908 micromhos Aug. 30, 1981; minimum, 221 micromhos June 13, 1980.
WATER TEMPERATURES: Maximum, 25.0°C Aug. 7, 1978, Aug. 7, 1980; minimum, 0.0°C many days during winter months.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 695 micromhos Dec.31; minimum, 224 micromhos July 4.
WATER TEMPERATURES: Maximum, 22.0°C Aug.10; minimum, 0.0°C many days during November to February.

WATER QUALITY DATA, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	SPE-CIFIC CON-DUCT-ANCE LAB (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)
NOV							
09...	1410	496	485	492	8.4	6.0	11.4
JAN							
21...	1320	E330	475	497	8.3	.5	12.0
MAR							
28...	1435	340	615	611	8.5	5.5	13.6
MAY							
20...	1355	954	515	532	8.2	9.5	9.2
JUN							
16...	1100	3050	290	310	8.2	10.0	9.2
SEP							
14...	1015	410	560	549	8.1	13.0	8.8

DATE	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	BORON, DIS-SOLVED (UG/L AS B)	IRON, DIS-SOLVED (UG/L AS FE)
NOV							
09...	220	61	16	16	.5	20	14
JAN							
21...	210	61	15	16	.5	20	--
MAR							
28...	270	68	23	25	.7	20	--
MAY							
20...	240	61	21	19	.6	30	--
JUN							
16...	150	42	9.9	6.3	.2	10	42
SEP							
14...	270	73	20	19	.5	30	--

DATE	TIME	ARSENIC DIS-SOLVED (UG/L AS AS)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COPPER, DIS-SOLVED (UG/L AS CU)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	ZINC, DIS-SOLVED (UG/L AS ZN)
NOV												
09...	1410	<1	<1	<10	2	4	8	<.1	<1	2	2	6
JUN												
16...	1100	1	<1	<10	1	2	10	<.1	2	1	1	<3

E ESTIMATED.

09304800 WHITE RIVER BELOW MEEKER, CO--Continued

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

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					MAY				
09...	1410	496	12	16	20...	1355	954	277	713
JAN					JUN				
21...	1320	330	32	29	16...	1100	3050	271	2230
MAR					SEP				
28...	1435	355	13	12	14...	1015	410	41	45

WATER QUALITY DATA, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983 *

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	SPE-CIFIC CON-DUCT-ANCE LAB (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
OCT										
14...	1130	529	490	500	8.2	6.0	220	61	16	17
21...	1215	507	480	500	8.2	5.0	220	60	16	15
28...	1305	546	500	490	8.2	4.5	200	55	16	17
NOV										
05...	1235	507	480	460	8.3	3.0	200	54	15	14
10...	1125	491	480	500	8.3	5.0	220	60	16	16
19...	0810	491	500	520	8.0	3.0	220	60	17	17
DEC										
03...	1350	430	500	510	8.6	1.0	210	59	16	17
09...	1215	440	495	500	8.5	.0	210	60	15	16
17...	1135	400	495	500	8.3	.0	210	58	15	15
22...	0945	395	520	520	8.0	.5	210	59	16	15
31...	1120	249	695	670	8.3	.0	280	77	21	23
JAN										
05...	1130	E270	498	490	8.3	.0	220	62	15	14
11...	1350	E320	518	540	8.4	.0	220	62	15	17
19...	1310	E330	500	480	8.3	.0	200	59	14	15
21...	1320	330	--	--	--	5.0	--	--	--	--
FEB										
03...	1255	E330	510	530	8.4	.0	230	65	16	18
09...	1325	335	480	420	8.3	.0	210	61	15	17
24...	1230	340	540	540	8.5	3.5	220	62	17	21
MAR										
03...	1035	520	520	540	8.1	3.0	210	54	18	22
10...	1315	380	575	590	8.7	6.5	240	64	20	25
17...	1300	400	630	650	8.5	4.0	280	73	24	30
APR										
01...	1040	380	640	660	8.4	3.0	270	68	24	28
05...	1330	326	610	630	8.7	7.0	260	68	22	24
15...	1000	340	610	630	8.5	4.5	260	69	21	23
18...	1100	385	630	650	8.4	9.0	270	72	23	34
22...	0900	478	610	640	8.2	7.5	260	68	23	25
MAY										
04...	1100	698	550	570	8.4	10.0	240	62	21	21
13...	0910	1060	410	420	8.3	5.5	190	51	14	11
19...	1035	980	540	560	8.3	8.5	230	59	21	21
JUN										
02...	1420	3300	298	300	8.1	8.5	130	38	9.4	5.3
09...	1230	3100	280	290	8.2	9.5	130	37	9.0	5.5
16...	1045	3070	295	320	8.0	10.0	140	40	9.8	6.0
27...	0945	5730	260	280	8.0	9.5	120	34	8.8	5.7
30...	1300	4160	270	280	8.2	11.5	120	35	8.8	5.3
JUL										
07...	1440	2920	275	260	8.0	15.5	120	35	8.8	5.7
13...	1055	1770	338	330	8.1	13.5	150	43	11	7.6
22...	1115	1400	410	410	8.2	16.0	200	55	14	11
AUG										
05...	1040	1050	417	410	8.3	15.5	200	58	14	12
15...	0935	656	475	460	8.2	17.0	230	65	17	15
19...	0845	607	465	470	8.2	16.5	220	62	17	17
26...	1110	540	510	500	8.2	15.0	240	66	18	18
SEP										
01...	1450	447	525	530	8.4	18.0	240	66	19	15
07...	1210	470	545	540	8.3	15.0	250	69	20	15
15...	1245	425	560	560	8.4	15.0	270	74	21	17
26...	0945	558	560	570	8.2	10.5	260	70	20	15
29...	1415	535	535	550	8.5	13.5	250	68	20	15

E ESTIMATED.

GREEN RIVER BASIN

09304800 WHITE RIVER BELOW MEEKER, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE, FET-LAB (MG/L AS HCO3)	CAR-BONATE, FET-LAB (MG/L AS CO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)
OCT									
14...	.5	1.5	170	.000	100	9.0	290	.39	414
21...	.5	1.1	140	10	99	9.0	280	.38	383
28...	.5	1.4	130		100	9.0	280	.38	413
NOV									
05...	.5	1.0	120	11	95	8.0	260	.35	356
10...	.5	1.1	150		100	9.0	290	.39	384
19...	.5	1.1	170	.000	110	10	290	.39	384
DEC									
03...	.5	1.4	130	18	110	10	290	.39	337
09...	.5	1.0	140		100	10	280	.38	333
17...	.5	.80	140		110	10	280	.38	302
22...	.5	.80	160	.000	120	11	300	.41	320
31...	.6	1.6	180	10	150	18	390	.53	262
JAN									
05...	.4	1.1	150	.000	100	10	280	.38	--
11...	.5	1.1	140	14	120	11	300	.41	--
19...	.5	.80	130		100	11	280	.38	--
21...	--	--	--	--	--	--	--	--	--
FEB									
03...	.5	1.1	130	14	110	6.7	300	.41	--
09...	.5	1.1	140		110	6.4	280	.38	253
24...	.6	1.6	140	11	120	7.1	310	.42	285
MAR									
03...	.7	3.9	150	.000	110	7.8	290	.39	407
10...	.7	2.3	150	11	140	8.2	340	.46	349
17...	.8	2.0	140	19	160	9.0	390	.53	421
APR									
01...	.8	1.1	140	16	170	13	390	.53	400
05...	.7	1.1	140	17	150	13	370	.50	326
15...	.6	.80	140	17	160	13	370	.50	340
18...	.9	1.1	200	14	160	13	420	.57	437
22...	.7	2.0	170		160	11	370	.50	478
MAY									
04...	.6	2.0	170		130	8.2	330	.45	622
13...	.4	1.6	150	.000	75	5.0	230	.31	658
19...	.6	2.3	160		120	7.8	320	.44	847
JUN									
02...	.2	1.1	130	.000	36	2.5	150	.20	1340
09...	.2	1.1	130	.000	34	2.1	150	.20	1260
16...	.2	1.1	140	.000	40	2.8	170	.23	1410
27...	.2	1.1	120	.000	32	2.5	140	.19	2170
30...	.2	1.1	120	.000	33	2.1	140	.19	1570
JUL									
07...	.2	.80	120	.000	37	2.1	150	.20	1180
13...	.3	.80	140	.000	55	3.2	190	.26	908
22...	.4	1.1	160	.000	77	4.6	240	.33	907
AUG									
05...	.4	.80	150		81	4.6	250	.34	709
15...	.4	.80	160		95	6.0	290	.39	514
19...	.5	1.1	170		93	6.7	280	.38	459
26...	.5	.80	170		100	7.1	300	.41	437
SEP									
01...	.4	1.1	170	12	120	8.2	320	.44	386
07...	.4	1.1	170	12	120	8.2	330	.45	419
15...	.5	1.1	190		120	8.5	340	.46	390
26...	.4	1.6	160	24	120	8.2	340	.46	512
29...	.4	1.1	140	29	120	8.5	330	.45	477

09304800 WHITE RIVER BELOW MEEKER, CO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	504	505	613	520	496	607	562	300	262	332	526
2	---	503	499	540	512	518	619	588	297	264	348	536
3	---	487	500	483	522	529	596	585	307	259	366	537
4	---	488	493	429	522	561	607	575	298	239	400	543
5	---	476	499	436	518	579	612	534	290	253	415	528
6	---	472	498	429	520	603	613	465	295	263	403	529
7	---	468	499	475	518	601	609	417	295	265	403	533
8	---	473	497	510	509	598	593	406	285	263	420	532
9	---	475	500	529	485	615	582	376	283	260	424	528
10	---	463	483	563	492	595	598	411	285	266	426	534
11	---	458	498	505	511	564	627	388	281	---	436	538
12	---	449	505	500	519	539	622	376	277	---	441	541
13	---	464	---	---	528	538	596	416	299	335	446	533
14	468	466	---	---	562	526	585	378	310	346	455	537
15	469	---	---	---	530	509	591	420	312	364	464	545
16	457	---	---	---	546	572	588	439	310	372	463	540
17	454	---	484	---	493	619	593	446	291	378	469	543
18	454	---	488	---	518	612	612	469	280	387	470	539
19	451	507	485	470	497	594	618	548	265	395	473	541
20	468	502	520	475	475	579	589	538	256	404	474	562
21	467	498	524	485	464	569	584	421	251	408	476	561
22	463	502	505	501	485	585	598	362	247	415	485	564
23	462	458	522	519	489	586	587	348	252	430	490	566
24	463	489	533	488	510	595	579	340	253	403	492	565
25	482	470	522	473	518	576	534	288	252	387	492	561
26	466	458	583	441	525	566	493	281	253	391	493	548
27	484	458	606	457	502	584	480	294	267	378	492	546
28	491	444	606	502	493	591	487	303	272	364	495	545
29	497	461	627	528	---	593	509	303	264	337	502	542
30	495	492	652	524	---	586	538	296	266	333	524	547
31	484	---	639	503	---	619	---	291	---	324	521	---
MEAN	471	476	529	495	510	574	582	415	280	336	451	543

WTR YR 1983 MEAN 471 MAX 652 MIN 239

09304800 WHITE RIVER BELOW MEEKER, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

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

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	6.5	1.5	7.5	6.0	9.5	7.0	12.5	10.0	18.0	15.0	18.5	14.0
2	5.5	2.5	9.0	6.0	9.0	7.0	13.0	10.5	17.0	14.5	20.5	15.5
3	7.0	1.5	11.0	6.0	10.5	6.5	14.0	11.5	19.0	15.0	20.0	15.0
4	6.5	2.0	11.5	6.5	10.5	8.0	13.0	10.0	18.5	15.5	19.5	15.0
5	7.0	1.0	11.5	8.5	10.0	7.5	14.5	10.5	19.0	14.5	17.5	13.5
6	7.0	.5	9.5	7.5	10.0	7.0	15.5	12.0	20.0	16.0	17.0	12.5
7	6.5	1.0	12.0	5.5	12.0	7.5	16.5	13.0	21.0	16.5	17.5	12.5
8	7.0	2.0	12.0	8.5	10.5	8.0	15.5	13.0	20.5	15.0	19.0	14.5
9	10.5	4.0	13.0	8.5	9.5	8.0	16.5	14.0	21.5	16.0	18.0	14.5
10	10.5	5.0	11.5	7.5	12.0	8.0	16.5	13.5	22.0	16.0	18.0	14.0
11	9.0	6.5	10.0	6.5	11.5	8.5	---	---	20.5	15.0	18.5	12.5
12	9.0	5.0	8.0	4.5	11.0	7.0	---	---	19.0	17.0	17.5	12.0
13	8.5	3.5	10.0	5.5	9.5	6.0	17.5	13.5	20.0	15.5	17.5	12.0
14	9.0	2.0	8.5	6.5	11.0	6.5	16.0	13.0	19.5	15.0	16.5	12.5
15	9.5	4.5	9.0	5.5	11.5	8.5	17.0	13.5	21.5	16.0	17.0	12.0
16	10.5	3.5	8.0	5.5	12.5	9.5	17.0	12.5	20.0	16.5	16.0	11.5
17	11.5	4.0	6.0	3.5	12.5	9.5	17.5	13.0	21.5	16.5	16.5	12.0
18	10.5	5.0	7.5	3.5	13.5	10.0	19.0	13.5	21.5	17.0	16.0	11.5
19	10.5	7.5	9.5	6.5	13.5	10.0	19.0	15.0	20.5	16.5	15.0	12.5
20	10.5	6.5	11.0	6.5	13.5	9.5	19.0	15.0	18.5	16.0	12.5	8.5
21	9.0	7.5	13.0	8.5	13.5	9.5	18.5	15.0	19.0	14.0	11.5	6.5
22	10.0	6.0	13.5	9.0	13.5	9.5	17.5	14.5	19.5	14.5	12.5	7.0
23	11.0	6.5	13.5	9.0	13.0	10.5	16.5	15.0	19.0	14.0	11.0	9.0
24	13.5	7.5	13.0	9.5	12.5	10.5	17.0	13.0	17.0	14.0	13.5	10.0
25	12.0	8.5	12.5	8.0	13.0	10.5	18.5	14.5	18.0	13.5	15.0	9.5
26	10.5	6.5	12.5	8.0	11.5	10.0	16.5	14.5	19.5	13.5	13.5	10.5
27	9.5	7.5	12.0	8.0	10.5	9.5	15.0	13.5	19.5	14.0	15.0	11.5
28	8.0	7.0	11.5	8.0	14.0	8.5	18.0	12.5	17.0	14.5	14.5	10.5
29	8.5	6.0	11.5	7.0	11.5	9.5	19.0	15.0	16.5	14.0	13.5	11.0
30	9.5	7.0	11.0	8.5	13.0	9.5	19.5	15.0	19.0	13.0	12.5	11.0
31	---	---	9.5	7.0	---	---	18.0	15.5	19.0	14.0	---	---
MONTH	13.5	.5	13.5	3.5	14.0	6.0	19.5	10.0	22.0	13.0	20.5	6.5
YEAR	22.0	.0										

09306007 PICEANCE CREEK BELOW RIO BLANCO, CO

LOCATION.--Lat 39°49'34", long 108°10'57", in SE¼SE¼ sec.32, T.2 S., R.96 W., Rio Blanco County, Hydrologic Unit 14050006, on left bank 20 ft downstream from private bridge, 1,100 ft upstream from Stewart Gulch, and 14.3 mi west of Rio Blanco.

DRAINAGE AREA.--177 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1974 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 6,366 ft, from topographic map.

REMARKS.--Records good. Several diversions above station for irrigation of hay meadows.

AVERAGE DISCHARGE.--9 years, 15.6 ft^3/s; 11,300 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 520 ft^3/s July 19, 1977, gage height, 7.01 ft, from rating based on indirect measurement, maximum gage height, 7.21 ft, May 29, 1983; minimum daily discharge, 0.47 ft^3/s Apr. 25, 1981.

EXTREMES FOR CURRENT YEAR.-Peak discharges above base of 100 ft^3/s and maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Apr 25	0900	130	4.50	May 29	0700	* 369	7.21
May 11	1500	235	5.72				

Minimum daily discharge, 5.2 ft^3/s Jan. 19-23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	9.8	8.1	5.5	5.5	8.8	15	120	301	56	42	24
2	13	9.4	7.8	5.6	5.6	10	15	124	280	54	41	23
3	12	8.7	7.8	5.6	5.6	8.5	15	123	257	54	40	22
4	12	9.0	7.1	5.7	5.7	7.9	14	126	234	53	40	23
5	13	8.2	7.4	5.8	5.7	8.3	13	133	209	52	40	23
6	12	8.2	7.4	5.8	5.8	9.0	13	152	176	49	39	22
7	11	8.2	7.4	6.2	5.8	8.0	13	158	168	46	38	21
8	12	8.1	7.4	6.2	5.8	8.1	14	156	159	46	38	21
9	12	8.4	6.8	6.5	5.8	8.4	15	179	152	46	38	20
10	11	9.5	7.8	6.5	6.2	10	15	206	142	47	37	20
11	11	10	7.8	6.4	6.2	15	17	228	129	46	36	19
12	11	8.8	7.4	6.4	6.5	17	18	220	129	45	39	19
13	11	8.5	6.5	6.3	6.2	18	18	196	129	44	59	18
14	11	8.5	6.8	6.3	5.8	25	16	192	112	43	41	19
15	11	8.2	6.8	6.2	5.8	25	16	189	105	43	38	19
16	10	8.9	6.8	6.2	6.2	20	17	196	101	43	36	18
17	10	8.2	6.2	6.2	5.8	20	18	197	92	44	35	17
18	9.8	8.5	6.2	5.8	5.8	18	25	192	87	44	36	16
19	9.7	8.9	6.2	5.2	6.2	16	50	224	81	43	35	16
20	9.7	8.6	6.4	5.2	5.5	15	60	230	77	42	34	16
21	9.6	9.0	6.8	5.2	5.5	14	76	234	71	43	33	16
22	9.2	8.3	7.4	5.2	5.8	14	91	268	66	50	31	16
23	9.5	8.0	7.8	5.2	6.2	14	79	305	65	51	29	16
24	8.8	8.0	6.5	5.5	7.4	13	96	338	66	49	29	16
25	8.7	8.0	7.0	5.5	8.1	13	122	347	67	47	28	15
26	8.7	8.0	7.5	5.5	7.1	13	120	353	71	53	27	15
27	10	7.7	8.1	5.8	7.1	13	107	358	71	57	26	15
28	9.7	7.4	7.1	5.8	7.8	13	102	364	64	49	26	15
29	8.9	8.1	6.5	5.8	---	12	99	365	61	46	26	14
30	9.2	8.4	6.2	6.2	---	13	112	345	58	42	26	15
31	9.5	---	5.5	5.8	---	15	---	324	---	42	25	---
TOTAL	329.0	255.5	218.5	181.1	172.5	423.0	1401	7142	3780	1469	1088	549
MEAN	10.6	8.52	7.05	5.84	6.16	13.6	46.7	230	126	47.4	35.1	18.3
MAX	15	10	8.1	6.5	8.1	25	122	365	301	57	59	24
MIN	8.7	7.4	5.5	5.2	5.5	7.9	13	120	58	42	25	14
AC-FT	653	507	433	359	342	839	2780	14170	7500	2910	2160	1090

CAL YR 1982 TOTAL 3142.4 MEAN 8.61 MAX 29 MIN 1.3 AC-FT 6230
WTR YR 1983 TOTAL 17008.6 MEAN 46.6 MAX 365 MIN 5.2 AC-FT 33740

09306007 PICEANCE CREEK BELOW RIO BLANCO, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1974 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: December 1974 to current year.
pH: December 1974 to current year.
WATER TEMPERATURE: December 1974 to current year.
DISSOLVED OXYGEN: December 1974 to current year.
SUSPENDED SEDIMENT DISCHARGE: April 1974 to current year.

INSTRUMENTATION.--Automatic pumping sediment sampler since April 1974. Water-quality monitor since December 1974.

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

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 1,690 micromhos June 21, 1976; freezing, 344 micromhos Apr. 13, 1976.
pH: Maximum, 9.0 units June 21, 1976; minimum, 7.0 units May 24, 1976.
WATER TEMPERATURES: Maximum, 29.5°C July 25, 1977; minimum, freezing point on many days during winter months each year.
DISSOLVED OXYGEN: Maximum, 15.7 mg/L Oct. 8, 1975; minimum, 5.1 mg/L July 17, 1979.
SEDIMENT CONCENTRATIONS: Maximum daily, 20,300 mg/L July 20, 1974; minimum daily, 6 mg/L several days during September 1976.
SEDIMENT LOADS: Maximum daily, 8,500 tons May 29, 1983; minimum daily, 0.02 ton Apr. 20, 1981.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 1,400 micromhos July 28; minimum, 622 micromhos Feb. 22
pH: Maximum 8.8, March 30; minimum, 7.6 units November 5.
WATER TEMPERATURES: Maximum, 20.0°C Aug. 6, 7, 18; freezing point on many days November to April.
DISSOLVED OXYGEN: Maximum, not determined; minimum, not determined.
SEDIMENT CONCENTRATIONS: Maximum daily, 8,650 mg/L May 29; minimum daily, 32 mg/L Nov. 4 and Feb. 27.
SEDIMENT LOADS: Maximum daily, 8,500 tons May 29; minimum daily, 0.5 ton Feb. 18.

WATER QUALITY DATA, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	SPE-CIFIC CON-DUCT-ANCE LAB (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	NITRO-GEN DIS-SOLVED (MG/L AS N)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)
NOV											
02...	1000	10	1000	1040	8.5	4.5	11.6	1.4	20	K60	<4
MAR											
01...	1145	7.4	1030	991	8.4	6.0	9.4	2.0	--	--	--
31...	0905	14	1050	1060	--	4.5	--	1.1	--	--	--
APR											
06...	1315	9.5	1100	1090	8.4	8.5	9.7	1.1	--	--	--
MAY											
10...	0925	220	737	725	8.3	5.0	9.7	2.1	210	2200	2500
27...	0725	360	694	609	8.3	7.0	9.2	.91	--	--	--
AUG											
16...	0845	37	1040	987	8.3	11.5	9.9	2.6	--	--	--
SEP											
08...	0745	26	1050	997	8.3	11.5	8.0	2.2	--	--	--

DATE	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)
NOV											
02...	300	360	70	44	120	3	2.7	416	<.5	170	15
MAR											
01...	--	330	64	40	100	2	7.0	387	--	150	16
31...	--	360	73	44	120	3	2.7	397	--	190	17
APR											
06...	--	370	71	46	120	3	2.4	414	--	180	16
MAY											
10...	600	280	58	32	61	2	2.7	278	.5	120	8.5
27...	--	270	58	30	57	2	2.5	266	--	95	13
AUG											
16...	--	370	74	44	100	2	2.4	383	--	190	14
SEP											
08...	--	360	71	45	110	3	2.2	353	--	210	13

K BASED ON NON-IDEAL COLONY COUNT.

09306007 PICEANCE CREEK BELOW RIO BLANCO, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	FLUORIDE, DISSOLVED (MG/L AS F)	BROMIDE DISSOLVED (MG/L AS BR)	SILICA, DISSOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L)	SOLIDS, DISSOLVED (TONS PER AC-FT)	SOLIDS, DISSOLVED (TONS PER DAY)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)
NOV											
02...	.90	<.010	14	690	.93	19	.290	.120	.98	1.1	.040
MAR											
01...	.90	--	13	630	.85	12	.390	.440	1.1	1.6	.260
31...	.70	--	13	700	.95	26	.520	.080	.52	.60	--
APR											
06...	.90	--	14	700	.95	18	.360	.110	.69	.80	.120
MAY											
10...	.40	.010	15	470	.63	276	1.50	.090	.51	.60	1.70
27...	.40	--	10	430	.58	414	.310	.100	.50	.60	--
AUG											
16...	.70	--	16	670	.91	67	1.80	.090	.71	.80	.150
SEP											
08...	.20	--	15	680	.92	48	1.50	.050	.65	.70	.060

DATE	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, DISSOLVED (UG/L AS BA)	BORON, DISSOLVED (UG/L AS B)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	COPPER, DISSOLVED (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)	LEAD, DISSOLVED (UG/L AS PB)	LITHIUM DISSOLVED (UG/L AS LI)
NOV										
02...	20	2	110	190	<1	10	1	22	3	23
MAR										
01...	--	2	--	190	--	--	--	44	--	--
31...	--	--	--	160	--	--	--	--	--	--
APR										
06...	--	2	--	190	--	--	--	8	--	--
MAY										
10...	30	4	91	80	1	10	5	14	1	18
27...	--	--	--	80	--	--	--	--	--	--
AUG										
16...	--	3	--	170	--	--	--	8	--	--
SEP										
08...	--	2	--	190	--	--	--	15	--	--

DATE	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY DISSOLVED (UG/L AS HG)	MOLYBDENUM, DISSOLVED (UG/L AS MO)	SELENIUM, DISSOLVED (UG/L AS SE)	STRONTIUM, DISSOLVED (UG/L AS SR)	ZINC, DISSOLVED (UG/L AS ZN)	GROSS ALPHA, SUSP. TOTAL (PCI/L AS U-NAT)	GROSS ALPHA, DISSOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DISSOLVED (PCI/L AS CS-137)
NOV										
02...	61	<.1	6	1	1400	47	.7	<15	1.1	<8.8
MAR										
01...	87	--	--	--	1300	--	--	--	--	--
31...	--	--	--	--	1100	--	--	--	--	--
APR										
06...	55	--	--	--	1300	--	--	--	--	--
MAY										
10...	24	.1	7	3	780	4	120	12	170	5.7
27...	--	--	--	--	220	--	--	--	--	--
AUG										
16...	28	--	--	--	--	--	--	--	--	--
SEP										
08...	37	--	--	--	1400	--	--	--	--	--

DATE	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DISSOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)	RADIUM 226, DISSOLVED, RADON METHOD (PCI/L)	URANIUM NATURAL DISSOLVED (UG/L AS U)	CARBON, ORGANIC DISSOLVED (MG/L AS C)	CARBON, ORGANIC SUSPENDED TOTAL (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)	PHENOLS TOTAL (UG/L)	OIL AND GREASE, TOTAL RECOV. GRAVIMETRIC (MG/L)
NOV										
02...	1.1	<8.4	1.1	.12	4.3	6.9	.40	<.01	<1	7
MAR										
01...	--	--	--	--	--	12	1.0	--	9	--
31...	--	--	--	--	--	--	--	--	--	--
APR										
06...	--	--	--	--	--	4.6	.50	--	<1	--
MAY										
10...	140	5.5	120	.07	3.6	8.0	1.4	.01	6	1
27...	--	--	--	--	--	--	--	--	--	--
AUG										
16...	--	--	--	--	--	6.3	.50	--	1	--
SEP										
08...	--	--	--	--	--	4.6	.30	--	<1	--

09306007 PICEANCE CREEK BELOW RIO BLANCO, CO--Continued

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
OCT				
01...	1523	16	530	23
NOV				
02...	1000	9.5	60	1.5
04...	1240	7.8	32	.67
DEC				
01...	1230	9.1	78	1.9
16...	1430	7.8	35	.74
JAN				
06...	1048	6.4	53	.92
MAR				
01...	1405	8.4	158	3.6
APR				
25...	1232	126	6670	2270
MAY				
03...	1450	120	3400	1100
10...	0925	220	4440	2640
11...	1310	237	5620	3600
24...	1115	339	7050	6450
AUG				
02...	1510	41	198	22
16...	0845	37	313	31
SEP				
06...	1322	26	65	4.6
08...	0740	26	62	4.4

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	943	1050	1020	1140	1050	942	1120	776	---	1020	1100	1030
2	1020	1050	1040	1130	1080	850	1130	789	---	1020	1080	1030
3	1030	1060	1040	1120	1070	878	1090	796	---	1030	1070	1030
4	1030	1050	1050	1090	1030	947	1100	800	---	1020	1070	1020
5	1030	1050	1040	1060	1060	945	1100	800	---	1030	1060	1010
6	1030	1060	1040	1050	1040	964	1100	774	---	---	1060	1040
7	1030	1050	1040	1050	1040	1010	1090	814	---	---	1060	1050
8	1010	1050	1040	1050	1030	1000	1080	803	---	1050	1070	1050
9	1020	1040	1060	1070	1030	992	1050	768	---	1050	1060	1050
10	1030	1040	1020	1060	1040	908	1070	737	---	1060	1060	1050
11	1030	1010	1030	1060	1050	862	1090	714	---	1060	1050	1040
12	1030	1050	1070	1070	1050	767	1090	740	---	1070	1030	1030
13	1020	1060	1070	1060	1040	865	1090	768	---	---	869	987
14	1030	1060	1060	1060	1030	929	1080	772	---	---	1000	968
15	1030	1080	1080	1060	1050	907	1090	780	---	---	1030	960
16	1030	1080	1050	1050	1050	978	1080	776	---	---	1030	956
17	1020	1070	1050	1040	1060	1000	1090	791	902	---	1030	961
18	1030	1050	1050	1050	1040	1030	1020	837	902	---	1010	958
19	1030	1040	1090	1050	1010	1070	812	767	920	---	1020	956
20	1030	1050	1090	1050	1030	1080	789	784	932	---	1020	944
21	1040	1050	1060	1050	1060	1090	713	809	947	---	1030	955
22	1040	1060	1030	1050	1050	1090	---	794	961	---	1040	963
23	1040	1080	1010	1050	1030	1090	740	787	969	---	1030	970
24	1040	1090	1030	1040	992	1090	674	754	962	---	1030	982
25	1040	1050	1110	1040	958	1090	678	758	978	---	1030	990
26	1050	1040	1180	1040	1000	1090	716	---	963	1020	1030	991
27	1040	1070	1140	1040	1030	1100	761	---	990	1010	1030	1000
28	1040	1070	1120	1050	1000	1090	777	---	1010	1090	1030	1000
29	1060	1040	1160	1040	---	1090	792	---	1010	1100	1030	1020
30	1050	1030	1160	1050	---	1080	772	---	1020	1100	1030	1020
31	1050	---	1150	1050	---	1060	---	---	---	1100	1030	---
MEAN	1030	1050	1070	1060	1040	994	958	780	962	1050	1040	1000

WTR YR 1983 MEAN 1010 MAX 1180 MIN 674

09306007 PICEANCE CREEK BELOW RIO BLANCO, CO--Continued

PH (STANDARD UNITS), WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	8.4	7.9	8.4	8.1	8.5	8.1	8.3	8.2	8.4	8.3	8.4	8.2
2	8.5	8.0	8.5	8.1	8.6	8.5	8.3	8.2	8.4	8.3	8.5	8.2
3	8.5	8.0	8.3	8.0	8.6	8.5	8.4	8.3	8.4	8.3	8.4	8.2
4	8.5	8.0	8.4	7.9	8.6	8.5	8.4	8.3	8.4	8.4	8.4	8.3
5	8.2	8.0	8.2	7.6	8.6	8.4	8.4	8.3	8.4	8.3	8.4	8.3
6	8.4	7.9	8.3	7.8	8.7	8.4	8.3	8.0	8.5	8.3	8.5	8.3
7	8.5	7.9	8.3	7.9	8.6	8.5	8.3	8.0	8.4	8.3	8.5	8.3
8	8.2	7.9	8.3	7.9	8.6	8.4	8.0	8.0	8.4	8.4	8.6	8.4
9	8.3	7.8	8.3	8.0	8.5	8.4	8.0	7.9	8.4	8.1	8.6	8.3
10	8.3	7.8	8.2	7.9	8.6	8.5	8.0	8.0	8.4	8.3	8.6	8.2
11	8.3	7.8	8.1	7.9	8.6	8.5	8.0	7.9	8.4	8.3	8.5	8.1
12	8.4	7.8	8.2	7.8	8.5	8.4	8.0	7.9	8.4	8.3	8.5	8.1
13	8.4	7.9	8.2	7.8	8.5	8.4	8.2	8.0	8.4	8.3	8.6	8.2
14	8.4	7.9	8.2	7.8	8.5	8.4	8.4	8.3	8.4	8.4	8.4	8.2
15	8.5	7.9	8.2	7.8	8.5	8.4	8.3	8.3	8.5	8.4	8.4	8.2
16	8.5	7.9	8.2	7.9	8.6	8.5	8.3	8.3	8.4	8.3	8.5	8.3
17	8.5	7.9	8.3	7.9	8.6	8.5	8.4	8.3	8.4	8.3	8.5	8.3
18	8.5	7.9	8.2	7.9	8.6	8.5	8.4	8.3	8.3	8.0	8.5	8.4
19	8.4	7.8	8.4	8.0	8.6	8.5	8.4	8.3	8.1	7.9	8.6	8.3
20	8.4	7.8	8.4	8.1	8.5	8.4	8.4	8.3	8.3	8.0	8.6	8.3
21	8.4	7.9	8.3	8.1	8.6	8.5	8.4	8.3	8.2	7.9	8.6	8.3
22	8.4	7.9	8.3	8.1	8.6	8.5	8.4	8.3	8.2	8.0	8.6	8.4
23	8.4	7.9	8.3	8.0	8.6	8.5	8.4	8.3	8.3	8.0	8.6	8.4
24	8.5	7.9	8.2	8.0	8.6	8.5	8.4	8.3	8.4	7.9	8.5	8.4
25	8.4	8.0	8.3	8.1	8.5	8.4	8.4	8.3	8.4	8.1	8.5	8.4
26	8.2	8.0	8.3	8.1	8.4	8.2	8.4	8.3	8.3	8.1	8.6	8.4
27	8.1	7.9	8.2	8.0	8.5	8.2	8.4	8.3	8.4	8.2	8.6	8.4
28	8.3	7.8	8.2	8.0	8.4	8.3	8.4	8.3	8.5	8.3	8.6	8.5
29	8.3	7.8	8.2	8.1	8.4	8.2	8.4	8.4	---	---	8.5	8.3
30	8.3	8.1	8.3	8.1	8.3	8.2	8.4	8.3	---	---	8.8	8.4
31	8.4	8.1	---	---	8.3	8.2	8.4	8.3	---	---	8.6	8.4
MONTH	8.5	7.8	8.5	7.6	8.7	8.1	8.4	7.9	8.5	7.9	8.8	8.1

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	8.7	8.5	8.4	8.2	---	---	8.3	8.3	8.4	8.4	8.5	8.5
2	8.6	8.4	8.5	8.2	---	---	8.3	8.3	8.4	8.4	8.5	8.4
3	8.7	8.4	8.6	8.3	---	---	8.3	8.3	8.4	8.4	8.5	8.4
4	8.6	8.4	8.7	8.2	---	---	8.3	8.3	8.4	8.4	8.5	8.5
5	8.7	8.4	8.7	8.3	---	---	8.3	8.3	8.5	8.4	8.5	8.5
6	8.7	8.4	8.5	8.2	---	---	---	---	8.5	8.4	8.5	8.4
7	8.7	8.4	8.7	8.2	---	---	---	---	8.5	8.4	8.5	8.4
8	8.7	8.4	8.7	8.2	---	---	8.3	8.3	8.5	8.4	8.4	8.3
9	8.7	8.4	8.6	8.2	---	---	8.3	8.3	8.5	8.4	8.5	8.3
10	8.7	8.4	8.6	8.1	---	---	8.3	8.3	8.5	8.4	8.5	8.4
11	8.6	8.4	8.5	8.2	---	---	8.4	8.3	8.6	8.4	8.5	8.4
12	8.7	8.5	8.5	8.1	---	---	8.4	8.3	8.6	8.4	8.5	8.4
13	8.6	8.5	8.6	8.2	---	---	---	---	8.5	8.3	8.5	8.4
14	8.7	8.4	8.5	8.2	---	---	---	---	8.5	8.5	8.5	8.4
15	8.7	8.5	8.5	8.2	---	---	---	---	8.5	8.4	8.5	8.4
16	8.7	8.5	8.5	8.2	---	---	---	---	8.5	8.3	8.5	8.4
17	8.7	8.4	8.5	8.2	8.5	8.3	---	---	8.5	8.5	8.5	8.4
18	8.7	8.4	8.5	8.2	8.4	8.2	---	---	8.6	8.4	8.5	8.4
19	8.5	8.2	8.6	8.2	---	---	---	---	8.5	8.5	8.5	8.4
20	8.5	8.2	8.6	8.2	8.5	8.3	---	---	8.5	8.5	8.6	8.5
21	8.5	8.2	8.7	8.2	8.4	8.3	---	---	8.6	8.5	8.6	8.4
22	---	---	8.7	8.3	8.4	8.3	---	---	8.6	8.5	8.5	8.4
23	8.5	8.2	8.7	8.2	8.3	8.3	---	---	8.6	8.5	8.5	8.4
24	8.6	8.0	8.5	8.2	8.3	8.2	---	---	8.6	8.5	8.5	8.4
25	8.5	8.1	8.6	8.2	8.3	8.2	---	---	8.6	8.5	8.5	8.4
26	8.5	7.9	---	---	8.3	8.2	8.3	8.2	8.6	8.5	8.5	8.4
27	8.5	8.1	---	---	8.3	8.2	8.3	8.2	8.5	8.5	8.5	8.4
28	8.5	8.2	---	---	8.3	8.2	8.4	8.3	8.5	8.5	8.5	8.4
29	8.5	8.2	---	---	8.3	8.3	8.4	8.3	8.5	8.5	8.5	8.4
30	8.4	8.2	---	---	8.3	8.3	8.4	8.3	8.5	8.4	8.5	8.4
31	---	---	---	---	---	---	8.4	8.4	8.5	8.5	---	---
MONTH	8.7	7.9	8.7	8.1	8.5	8.2	8.4	8.2	8.6	8.3	8.6	8.3
YEAR	8.8	7.6										

09306007 PICEANCE CREEK BELOW RIO BLANCO, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	10.5	6.5	8.0	5.0	4.0	1.5	.0	.0	1.5	.0	7.0	3.5
2	12.5	5.0	5.5	2.5	3.5	1.0	.0	.0	.0	.0	7.5	3.0
3	13.0	5.0	5.5	.0	3.0	.0	.0	.0	1.0	.0	6.5	1.5
4	13.5	5.5	6.0	2.0	3.0	.0	.0	.0	3.0	.0	6.0	2.5
5	9.0	5.5	5.5	1.0	3.0	.0	.5	.0	.5	.0	4.5	2.0
6	11.5	4.0	6.0	.5	4.0	.0	.0	.0	3.0	.0	8.5	2.5
7	11.5	4.0	5.5	1.5	2.5	.0	2.0	.0	3.5	.5	5.5	1.0
8	8.0	4.5	6.0	3.5	1.5	.0	1.5	.0	3.0	1.0	9.0	2.5
9	8.0	3.5	8.0	4.5	2.0	.0	.5	.0	---	---	9.0	2.5
10	8.5	2.5	6.5	3.5	3.5	1.0	1.5	.0	3.5	.0	10.5	2.0
11	8.5	1.5	3.5	1.0	3.5	.0	1.0	.0	3.0	.0	10.5	2.5
12	9.0	3.0	3.5	.0	.0	.0	1.0	.0	3.5	.0	11.0	2.5
13	10.0	4.5	4.5	.0	2.0	.0	1.0	.0	4.0	.0	9.5	2.0
14	10.5	3.5	3.0	.0	1.0	.0	1.5	.0	4.0	2.5	4.5	1.5
15	11.5	4.5	1.5	.0	2.0	.0	2.0	.0	5.5	.5	4.0	1.0
16	11.0	5.0	2.5	.0	3.5	1.0	3.5	1.0	5.5	2.0	7.5	1.0
17	10.5	4.5	4.0	.0	2.5	.0	3.5	1.5	4.5	.0	6.0	2.0
18	11.0	5.5	5.0	2.0	.5	.0	3.5	1.0	4.5	.5	5.5	2.5
19	8.5	3.5	5.0	1.5	.0	.0	3.0	.0	3.0	1.0	8.0	1.0
20	8.5	2.5	3.5	.0	.5	.0	3.5	.5	6.5	1.0	7.5	.5
21	9.0	2.5	3.5	.0	3.5	.0	3.5	1.0	4.5	.0	9.0	.0
22	8.0	3.0	2.5	.0	3.5	1.0	3.0	.5	6.0	.0	8.0	1.0
23	9.5	3.5	.5	.0	4.0	1.0	2.5	.0	6.0	.0	9.5	3.0
24	11.0	4.5	1.5	.0	.5	.0	4.0	1.5	6.5	.0	6.0	2.0
25	10.0	7.5	4.0	1.5	.0	.0	3.0	.0	5.5	1.5	6.0	2.0
26	8.0	6.5	3.5	.0	.0	.0	4.0	1.0	4.5	1.5	8.5	1.5
27	7.0	4.0	1.5	.0	.0	.0	4.0	1.5	6.0	1.0	9.0	1.0
28	7.0	2.0	3.0	.0	.0	.0	3.5	.0	7.0	2.5	7.5	4.0
29	5.5	2.0	3.5	1.5	.0	.0	3.5	.5	---	---	---	---
30	7.0	4.5	4.0	2.5	.0	.0	2.0	.0	---	---	---	---
31	7.5	6.0	---	---	.0	.0	2.0	.0	---	---	7.5	3.5
MONTH	13.5	1.5	8.0	.0	4.0	.0	4.0	.0	7.0	.0	11.0	.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	9.0	2.5	7.0	3.5	---	---	16.5	9.0	18.5	11.5	---	---
2	7.0	1.0	9.5	2.5	---	---	17.0	9.0	16.5	11.5	---	---
3	8.5	.5	10.5	4.5	---	---	18.5	10.5	17.0	11.5	---	---
4	8.5	1.0	13.5	4.0	---	---	18.5	8.0	16.0	11.5	---	---
5	9.5	.0	13.0	5.5	---	---	19.5	8.5	19.0	11.5	---	---
6	11.5	.0	9.0	4.5	---	---	---	---	20.0	11.5	18.5	12.5
7	10.5	.0	14.5	3.0	---	---	---	---	20.0	12.0	17.5	8.5
8	10.0	.5	14.0	4.0	---	---	18.0	14.0	19.0	12.0	18.0	11.5
9	13.0	2.0	14.5	5.0	---	---	18.5	11.5	19.5	12.0	17.0	10.0
10	13.0	3.5	14.5	4.0	---	---	19.0	11.0	20.0	12.0	18.0	10.0
11	10.5	4.5	9.0	5.5	---	---	18.5	9.0	18.5	12.5	17.5	8.0
12	10.5	4.0	11.0	3.5	---	---	16.5	9.0	17.0	12.0	17.5	8.0
13	9.0	2.5	12.0	3.5	---	---	---	---	18.5	12.5	17.5	8.0
14	11.0	.5	8.5	4.0	---	---	---	---	15.0	11.5	14.5	9.5
15	12.0	.5	9.5	4.5	---	---	---	---	19.0	11.5	17.0	8.0
16	13.0	1.5	8.5	3.5	---	---	---	---	18.5	11.5	16.5	7.5
17	14.0	1.5	7.5	2.0	18.5	13.0	---	---	18.5	11.5	15.5	8.5
18	13.0	2.0	9.5	2.5	19.0	9.0	---	---	20.0	12.5	16.5	8.5
19	8.0	3.5	11.0	5.0	18.5	9.5	---	---	17.5	11.5	15.5	9.0
20	9.5	2.5	14.0	5.5	19.0	12.5	---	---	17.5	11.5	13.0	5.0
21	11.0	4.5	14.0	5.0	19.0	8.5	---	---	18.0	10.5	14.0	4.0
22	---	---	16.5	6.5	19.5	9.0	---	---	18.0	10.0	14.5	5.0
23	13.0	3.5	16.5	5.5	17.5	10.0	---	---	18.0	9.5	12.5	7.0
24	12.0	4.0	15.0	7.0	15.5	11.0	---	---	17.5	9.5	14.0	9.0
25	12.0	6.5	17.5	8.0	17.5	11.0	---	---	17.0	10.0	16.0	7.5
26	11.5	3.5	---	---	15.0	10.5	16.5	12.5	18.0	10.0	15.5	8.0
27	10.0	5.0	---	---	14.5	11.0	14.5	11.5	15.5	9.5	16.5	9.5
28	9.0	5.5	---	---	18.0	10.0	17.5	10.5	---	---	15.5	7.5
29	10.0	5.0	---	---	17.0	9.0	19.0	10.5	---	---	14.0	9.0
30	8.5	5.0	---	---	18.0	9.5	18.5	11.0	---	---	12.0	9.0
31	---	---	---	---	---	---	17.5	11.5	---	---	---	---
MONTH	14.0	.0	17.5	2.0	19.5	8.5	19.5	8.0	20.0	9.5	18.5	4.0
YEAR	20.0	.0										

09306007 PICEANCE CREEK BELOW RIO BLANCO, CO--Continued

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	8.8	7.9	11.5	8.0	11.0	9.2	---	---	10.6	10.1	9.4	8.2
2	9.4	7.6	11.4	8.7	11.1	9.9	---	---	10.6	10.4	9.7	8.7
3	9.4	7.2	11.5	8.8	11.3	8.3	---	---	10.5	10.1	9.9	8.8
4	9.2	6.9	11.6	8.4	11.3	8.2	---	---	10.5	9.7	9.7	8.9
5	9.1	7.4	10.8	8.4	11.2	8.2	---	---	10.5	10.3	9.8	9.3
6	9.4	7.2	10.7	8.1	11.0	8.0	10.3	9.9	10.6	9.8	9.8	8.2
7	9.2	6.9	10.5	8.2	11.0	9.8	11.0	10.1	10.4	9.7	10.1	9.0
8	9.2	7.4	10.0	8.0	11.2	10.1	10.9	10.4	10.2	9.8	9.9	8.5
9	9.4	7.5	10.2	8.1	10.9	8.2	10.8	10.5	10.2	9.2	9.9	8.4
10	9.5	7.4	10.4	7.8	10.3	8.2	11.0	10.4	10.5	9.3	10.1	8.1
11	9.5	7.1	10.1	8.5	10.3	8.3	11.0	10.4	10.4	8.4	10.1	8.4
12	9.4	7.0	10.6	8.8	10.6	8.3	10.9	10.4	10.2	8.4	9.9	8.1
13	9.1	6.8	10.5	8.5	10.1	8.2	11.3	10.5	10.2	8.2	10.0	8.4
14	9.1	6.0	10.5	9.0	10.2	8.1	11.4	10.7	9.6	9.1	10.1	9.5
15	9.0	6.4	10.2	9.0	10.0	8.0	11.4	10.6	10.0	8.4	10.3	9.7
16	---	---	10.2	8.9	---	---	11.0	10.1	9.6	8.3	10.4	10.3
17	---	---	10.3	8.8	---	---	11.0	10.2	10.1	8.4	---	---
18	---	---	10.0	8.6	---	---	11.0	10.4	9.8	8.5	---	---
19	---	---	10.6	8.8	---	---	11.3	10.3	9.9	8.1	---	---
20	---	---	10.7	8.2	---	---	11.1	10.3	10.0	8.2	---	---
21	11.4	8.4	10.8	9.0	---	---	11.0	10.3	10.5	8.4	---	---
22	11.2	8.2	10.4	8.7	---	---	11.0	10.4	10.6	8.5	---	---
23	11.1	7.9	10.6	9.1	---	---	11.4	10.5	10.6	8.5	---	---
24	10.8	7.5	10.7	9.2	---	---	10.9	10.2	10.5	8.3	---	---
25	10.3	7.6	10.4	9.3	---	---	11.3	10.4	9.7	8.6	---	---
26	10.0	8.0	10.9	9.6	---	---	11.0	10.1	9.4	8.3	---	---
27	10.2	8.2	11.0	10.0	---	---	10.6	10.0	9.5	7.9	---	---
28	10.8	7.4	11.1	9.8	---	---	11.0	9.9	9.1	7.6	---	---
29	12.2	9.1	10.8	10.0	---	---	10.9	10.0	---	---	---	---
30	12.0	7.9	10.9	10.1	---	---	10.9	10.2	---	---	---	---
31	11.3	8.0	---	---	---	---	10.6	10.1	---	---	10.7	9.0
MONTH	12.2	6.0	11.6	7.8	11.3	8.0	11.4	9.9	10.6	7.6	10.7	8.1

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	11.3	8.4	---	---	---	---	8.6	6.2	---	---	---	---
2	12.1	9.4	---	---	---	---	---	---	8.5	7.4	8.2	7.1
3	12.6	8.6	9.1	8.2	---	---	---	---	8.5	6.2	10.9	7.1
4	12.3	8.6	10.0	7.3	---	---	---	---	---	---	10.5	7.4
5	12.7	8.1	9.4	7.3	---	---	---	---	---	---	10.4	7.0
6	13.5	7.3	9.7	8.4	---	---	---	---	---	---	10.9	7.5
7	12.9	7.7	10.1	7.4	---	---	---	---	---	---	10.9	7.0
8	12.6	7.9	10.0	7.3	---	---	8.7	7.1	---	---	9.8	6.2
9	11.7	6.6	9.7	7.1	---	---	9.1	6.6	---	---	---	---
10	10.7	5.6	9.9	6.6	---	---	8.5	6.2	---	---	---	---
11	10.2	7.8	9.0	8.0	---	---	---	---	---	---	---	---
12	10.9	7.9	9.7	7.6	---	---	---	---	---	---	---	---
13	11.8	8.5	9.7	7.3	---	---	---	---	---	---	---	---
14	12.9	7.7	9.4	8.0	---	---	---	---	---	---	---	---
15	13.3	7.2	---	---	---	---	---	---	---	---	---	---
16	12.7	7.0	---	---	---	---	---	---	---	---	11.4	7.9
17	12.2	6.2	---	---	---	---	---	---	8.4	6.5	12.5	7.7
18	12.0	6.9	---	---	---	---	---	---	8.0	6.9	11.3	6.2
19	11.1	8.7	---	---	---	---	---	---	8.6	6.3	9.4	5.9
20	11.6	8.6	---	---	8.4	6.1	---	---	---	---	9.4	5.6
21	10.5	7.4	---	---	---	---	---	---	---	---	13.2	6.5
22	---	---	---	---	---	---	---	---	---	---	13.2	7.8
23	11.4	6.8	---	---	---	---	---	---	---	---	11.8	7.6
24	10.6	7.1	---	---	---	---	---	---	8.5	7.8	10.9	6.5
25	9.4	7.1	---	---	---	---	---	---	9.6	7.8	---	---
26	---	---	---	---	---	---	---	---	9.9	6.7	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---	---	---	---
29	---	---	---	---	7.9	6.9	---	---	---	---	---	---
30	---	---	---	---	8.8	6.4	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	13.5	5.6	10.1	6.6	8.8	6.1	9.1	6.2	9.9	6.2	13.2	5.6
YEAR	13.5	5.6										

09306007 PICEANCE CREEK BELOW RIO BLANCO, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

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	15	510	21	9.8	---	1.6	8.1	78	1.7
2	13	---	15	9.4	60	1.5	7.8	---	1.6
3	12	---	12	8.7	---	1.0	7.8	---	1.5
4	12	304	9.8	9.0	32	.78	7.1	---	1.3
5	13	144	5.1	8.2	---	.70	7.4	---	1.3
6	12	---	4.6	8.2	---	.70	7.4	---	1.2
7	11	---	4.1	8.2	---	.80	7.4	---	1.2
8	12	---	4.4	8.1	---	.80	7.4	---	1.0
9	12	---	4.3	8.4	---	.90	6.8	---	.90
10	11	---	3.8	9.5	---	1.0	7.8	---	1.0
11	11	---	3.7	10	---	1.0	7.8	---	1.0
12	11	---	3.5	8.8	---	1.0	7.4	---	1.0
13	11	---	3.5	8.5	---	1.0	6.5	---	.80
14	11	---	3.5	8.5	---	1.2	6.8	---	.80
15	11	---	3.4	8.2	---	1.2	6.8	---	.80
16	10	---	3.0	8.9	---	1.3	6.8	43	.79
17	10	---	2.9	8.2	---	1.3	6.2	---	.80
18	9.8	---	2.8	8.5	---	1.3	6.2	---	.80
19	9.7	---	2.7	8.9	---	1.4	6.2	52	.87
20	9.7	---	2.6	8.6	---	1.4	6.4	---	.90
21	9.6	---	2.5	9.0	---	1.4	6.8	---	.70
22	9.2	---	2.3	8.3	---	1.5	7.4	---	.80
23	9.5	---	2.3	8.0	---	1.5	7.8	---	.80
24	8.8	---	2.1	8.0	---	1.5	6.5	---	.70
25	8.7	---	2.0	8.0	---	1.5	7.0	---	.80
26	8.7	---	1.9	8.0	---	1.5	7.5	---	.80
27	10	---	2.1	7.7	---	1.6	8.1	---	.80
28	9.7	---	2.0	7.4	---	1.6	7.1	---	.80
29	8.9	---	1.7	8.1	---	1.6	6.5	---	.70
30	9.2	---	1.7	8.4	---	1.6	6.2	---	.70
31	9.5	---	1.7	---	---	---	5.5	---	.60
TOTAL	329.0	---	138.0	255.5	---	37.18	218.5	---	29.46
		JANUARY			FEBRUARY			MARCH	
1	5.5	---	.60	5.5	---	.80	8.8	116	3.0
2	5.6	---	.65	5.6	---	.80	10	313	12
3	5.6	---	.65	5.6	---	1.0	8.5	125	3.0
4	5.7	---	.65	5.7	86	1.3	7.9	---	2.5
5	5.8	---	.65	5.7	---	.80	8.3	115	2.6
6	5.8	43	.67	5.8	---	1.0	9.0	212	5.9
7	6.2	---	.75	5.8	---	.80	8.0	---	6.5
8	6.2	---	.75	5.8	---	.70	8.1	---	6.5
9	6.5	---	.85	5.8	46	.72	8.4	276	6.3
10	6.5	---	.85	6.2	---	.70	10	567	17
11	6.4	---	.95	6.2	---	.70	15	835	47
12	6.4	---	.95	6.5	---	.75	17	805	44
13	6.3	61	1.0	6.2	---	.70	18	911	51
14	6.3	---	1.0	5.8	---	.60	25	1430	100
15	6.2	---	1.0	5.8	---	.60	25	1120	82
16	6.2	---	1.0	6.2	---	.60	20	220	12
17	6.2	---	1.0	5.8	---	.55	20	---	14
18	5.8	---	1.0	5.8	34	.53	18	---	15
19	5.2	---	.95	6.2	---	.60	16	---	15
20	5.2	---	.95	5.5	---	.50	15	---	15
21	5.2	---	.95	5.5	---	.50	14	---	15
22	5.2	---	.95	5.8	---	.55	14	---	15
23	5.2	---	.95	6.2	35	.59	14	---	15
24	5.5	---	.90	7.4	133	3.4	13	---	15
25	5.5	---	.90	8.1	100	2.2	13	---	15
26	5.5	---	.90	7.1	42	.83	13	---	15
27	5.8	58	.91	7.1	32	.63	13	---	15
28	5.8	---	.90	7.8	64	1.5	13	---	15
29	5.8	---	.90	---	---	---	12	---	16
30	6.2	---	1.0	---	---	---	13	520	18
31	5.8	---	.90	---	---	---	15	360	15
TOTAL	181.1	---	27.03	172.5	---	24.95	423.0	---	629.3

09306007 PICEANCE CREEK BELOW RIO BLANCO, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

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	15	370	15	120	3800	1230	301	---	5000
2	15	280	11	124	4150	1390	280	---	4000
3	15	375	15	123	3600	1200	257	---	3000
4	14	320	12	126	3350	1140	234	4100	2590
5	13	360	13	133	3550	1270	209	4750	2680
6	13	426	16	152	4500	1850	176	---	2150
7	13	290	11	158	---	1900	168	---	1800
8	14	370	14	156	---	1900	159	---	1500
9	15	390	16	179	---	2200	152	---	1200
10	15	485	20	206	4500	2500	142	2650	1020
11	17	610	28	228	4570	2810	129	1700	592
12	18	590	29	220	3650	2170	129	2200	766
13	18	480	23	196	2900	1530	129	2500	871
14	16	440	19	192	---	1550	112	1900	575
15	16	400	18	189	---	1600	105	1650	468
16	17	400	18	196	3100	1640	101	1350	368
17	18	600	30	197	2650	1410	92	1450	360
18	25	2060	144	192	3550	1840	87	1100	258
19	50	5200	714	224	4950	2990	81	850	186
20	60	3950	650	230	4400	2730	77	775	161
21	76	4320	893	234	3650	2310	71	650	125
22	91	4580	1130	268	---	3600	66	625	111
23	79	4990	1080	305	---	5000	65	525	92
24	96	4780	1260	338	7000	6390	66	775	137
25	122	7460	2470	347	7950	7450	67	600	107
26	120	5800	1900	353	7800	7430	71	810	157
27	107	4700	1360	358	8550	8260	71	700	135
28	102	4800	1320	364	---	8400	64	540	93
29	99	3330	890	365	8650	8500	61	490	81
30	112	4200	1270	345	7400	6890	58	450	70
31	---	---	---	324	---	5300	---	---	---
TOTAL	1401	---	15389	7142	---	106380	3780	---	30653
		JULY			AUGUST			SEPTEMBER	
1	56	400	60	42	---	25	24	---	4.8
2	54	425	62	41	195	22	23	70	4.3
3	54	520	76	40	190	21	22	70	4.2
4	53	---	70	40	310	33	23	65	4.0
5	52	---	60	40	315	34	23	170	11
6	49	---	50	39	275	29	22	100	5.9
7	46	---	40	38	265	27	21	110	6.2
8	46	280	35	38	295	30	21	95	5.4
9	46	250	31	38	290	30	20	90	4.9
10	47	250	32	37	---	30	20	60	3.2
11	46	240	30	36	---	28	19	100	5.1
12	45	205	25	39	---	30	19	---	4.6
13	44	230	27	59	---	1460	18	---	3.9
14	43	230	27	41	---	50	19	---	3.6
15	43	250	29	38	---	30	19	---	3.0
16	43	250	29	36	---	28	18	50	2.4
17	44	220	26	35	290	27	17	80	3.7
18	44	255	30	36	365	35	16	105	4.5
19	43	225	26	35	325	31	16	100	4.3
20	42	220	25	34	240	22	16	75	3.2
21	43	270	31	33	---	20	16	90	3.9
22	50	280	38	31	---	18	16	75	3.2
23	51	375	52	29	---	14	16	80	3.5
24	49	335	44	29	---	14	16	---	3.0
25	47	255	32	28	160	12	15	70	2.8
26	53	3300	650	27	165	12	15	80	3.2
27	57	3510	720	26	145	10	15	90	3.6
28	49	---	50	26	135	9.5	15	70	2.8
29	46	---	30	26	160	11	14	---	3.0
30	42	---	25	26	145	10	15	80	3.2
31	42	---	25	25	80	5.4	---	---	---
TOTAL	1469	---	2487	1088	---	2157.9	549	---	124.4
YEAR	17008.6		158077.22						

09306022 STEWART GULCH ABOVE WEST FORK, NEAR RIO BLANCO, CO

LOCATION.--Lat 39°49'09", long 108°11'08", in SE¼NE¼ sec.5, T.3 S., R.96 W., Rio Blanco County, Hydrologic Unit 14050006, on left bank 0.6 mi upstream from mouth, about 300 ft above mouth of West Fork Stewart Gulch, and 14.2 mi west of Rio Blanco.

DRAINAGE AREA.--44.0 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1974 to current year.

REVISED RECORDS.--WDR CO-77-3: Drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 6,430 ft, from topographic map.

REMARKS.--Records good, except those for period of no gage-height record, which are poor. Diversion immediately upstream from gage for irrigation of about 20 acres of grassland.

AVERAGE DISCHARGE.--9 years, 1.66 ft^3/s; 1,200 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 38 ft^3/s July 19, 1977, gage height, 4.05 ft; no flow Aug. 7, 1975.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 18 ft^3/s at 1800 June 25, gage height, 3.56 ft; minimum daily, 0.10 ft^3/s Mar. 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.74	.94	1.2	1.2	1.4	1.9	1.5	1.9	1.6	1.9	5.3	8.3
2	.74	.94	1.2	1.2	1.4	2.7	1.7	1.9	1.6	2.0	5.5	8.4
3	.81	.94	1.2	1.2	1.4	1.7	1.7	1.9	1.6	2.0	5.4	8.6
4	.81	.94	1.2	1.2	1.4	1.6	1.6	1.9	1.6	2.0	5.6	9.0
5	.81	.95	1.2	1.2	1.4	1.5	1.6	1.9	1.6	2.1	5.4	9.0
6	.81	.96	1.2	1.2	1.4	1.6	1.7	2.0	1.7	2.1	5.5	8.9
7	.81	.96	1.2	1.2	1.4	1.5	1.6	1.8	1.6	2.2	5.5	8.9
8	.82	.97	1.2	1.2	1.4	1.6	1.6	1.8	1.5	2.2	5.6	8.9
9	.82	.98	1.2	1.2	1.5	1.8	1.7	1.7	1.5	2.2	5.6	9.1
10	.82	.98	1.3	1.3	1.5	1.4	1.6	1.7	1.4	2.3	5.8	9.0
11	.82	.99	1.3	1.3	1.5	1.1	1.6	1.7	1.2	2.3	5.9	9.2
12	.89	1.0	1.3	1.3	1.5	1.1	1.6	1.7	1.0	2.5	6.0	9.4
13	.89	1.0	1.3	1.3	1.5	.96	1.7	1.7	1.5	2.5	6.2	8.9
14	.96	1.0	1.3	1.3	1.5	.83	1.8	1.7	1.4	2.6	6.3	9.1
15	.90	1.0	1.2	1.3	1.5	.68	1.8	1.7	1.4	2.7	6.5	8.6
16	.97	1.0	1.2	1.3	1.5	.53	1.8	1.7	1.4	2.8	6.6	8.6
17	.90	1.1	1.3	1.3	1.5	.41	1.8	1.7	1.4	2.9	6.7	6.6
18	.91	1.1	1.3	1.3	1.6	.41	1.7	1.7	1.4	3.1	7.3	4.0
19	.91	1.1	1.3	1.3	1.6	.30	1.7	1.8	1.4	3.3	7.6	4.0
20	.91	1.1	1.3	1.3	1.6	.41	1.7	1.8	1.5	3.3	8.6	3.7
21	.91	1.1	1.3	1.3	1.6	.34	1.8	1.8	1.6	3.3	8.8	3.7
22	.91	1.1	1.3	1.4	1.7	.10	1.8	1.8	1.6	3.6	8.1	3.7
23	.92	1.2	1.3	1.4	1.9	1.2	1.8	1.7	1.6	4.0	6.3	3.6
24	.92	1.2	1.3	1.4	2.0	1.5	1.7	1.8	1.9	4.1	6.4	3.5
25	.92	1.2	1.3	1.4	1.9	1.3	1.7	1.8	2.5	4.4	6.5	3.5
26	.92	1.2	1.3	1.4	1.6	.92	1.7	1.7	1.9	4.7	6.8	3.4
27	.93	1.2	1.2	1.4	1.6	1.1	1.8	1.6	1.9	4.8	7.0	3.2
28	.93	1.2	1.2	1.4	1.8	1.3	1.8	1.7	1.8	4.8	7.6	3.1
29	.93	1.2	1.2	1.4	---	1.3	1.8	1.7	1.8	5.3	7.9	3.0
30	.93	1.2	1.2	1.4	---	1.4	1.9	1.7	1.9	5.5	8.1	3.0
31	.93	---	1.2	1.4	---	1.5	---	1.6	---	5.3	8.1	---
TOTAL	27.20	31.75	38.7	40.4	43.6	35.99	51.3	54.6	47.8	98.8	204.5	193.9
MEAN	.88	1.06	1.25	1.30	1.56	1.16	1.71	1.76	1.59	3.19	6.60	6.46
MAX	.97	1.2	1.3	1.4	2.0	2.7	1.9	2.0	2.5	5.5	8.8	9.4
MIN	.74	.94	1.2	1.2	1.4	.10	1.5	1.6	1.0	1.9	5.3	3.0
AC-FT	54	63	77	80	86	71	102	108	95	196	406	385

CAL YR 1982 TOTAL 487.95 MEAN 1.34 MAX 2.8 MIN .53 AC-FT 968
WTR YR 1983 TOTAL 868.54 MEAN 2.38 MAX 9.4 MIN .10 AC-FT 1720

NOTE.--NO GAGE HEIGHT RECORD JAN. 9 TO FEB. 17.

09306022 STEWART GULCH ABOVE WEST FORK, NEAR RIO BLANCO, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1974 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1974 to September 1982 (discontinued).
pH: October 1974 to March 1982 (discontinued).
WATER TEMPERATURE: October 1974 to September 1982 (discontinued).
DISSOLVED OXYGEN: October 1974 to March 1982 (discontinued).
SUSPENDED-SEDIMENT DISCHARGE: October 1974 to September 1982 (discontinued).

INSTRUMENTATION.--Water-quality monitor October 1974 to September 1982. Pumping sediment sampler October 1974 to September 1982.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 2,200 micromhos Nov. 10, 1975; minimum, 583 micromhos Feb. 22, 1982.
pH: Maximum, 8.9 units Dec. 9, 11, 1979; minimum, 7.6 units Oct. 7, 1975.
WATER TEMPERATURES: Maximum, 20.5°C July 3, 1976, June 3, 1977; minimum, 0.0°C Jan. 9, Dec. 17, 1977, Mar. 3, Dec. 2, 3, 1978, Jan. 29, 1979.
DISSOLVED OXYGEN: Maximum, 16.6 mg/L Jan. 13, 1976; minimum, 3.6 mg/L Aug. 19, 20, 1977.
SEDIMENT CONCENTRATIONS: Maximum daily, 1,350 mg/L June 8, 1975; minimum daily, no flow Aug. 7-9, 1975.
SEDIMENT LOADS: Maximum daily, 10 tons estimated June 8, 1975; minimum daily, no flow Aug. 7-9, 1975.

WATER QUALITY DATA, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	SPE-CIFIC CON-DUCT-ANCE LAB (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	NITRO-GEN DIS-SOLVED (MG/L AS N)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML)
NOV										
02...	1120	.94	1300	1340	8.6	6.0	13.9	1.7	14	210
MAR										
01...	0955	1.6	1330	1290	8.4	8.0	10.4	1.5	--	--
APR										
06...	1135	1.7	1330	1290	8.3	11.0	9.0	1.1	--	--
MAY										
10...	0755	1.7	1280	1270	8.3	6.0	9.6	3.8	<10	K10
AUG										
16...	0800	5.9	1350	1290	8.1	9.0	9.2	2.8	--	--
SEP										
08...	0700	8.7	1380	1370	8.0	9.0	7.5	3.2	--	--

DATE	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)
NOV										
02...	<3	600	520	87	72	130	3	1.5	428	<.5
MAR										
01...	--	--	500	83	70	120	2	2.0	421	--
APR										
06...	--	--	500	83	71	120	2	1.3	395	--
MAY										
10...	<2	K200	510	86	71	120	2	1.1	382	<.5
AUG										
16...	--	--	510	87	72	130	3	1.5	432	--
SEP										
08...	--	--	530	92	71	130	3	1.3	422	--

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	BROMIDE DIS-SOLVED (MG/L AS BR)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)
NOV									
02...	350	6.4	.30	<.010	13	920	1.1	2.3	.570
MAR									
01...	340	6.3	.50	--	15	890	1.1	3.9	.760
APR									
06...	360	6.4	.30	--	15	900	1.1	4.1	.730
MAY									
10...	330	6.3	.20	.020	16	860	1.1	4.0	3.40
AUG									
16...	360	7.2	.30	--	16	930	1.3	15	1.90
SEP									
08...	370	7.2	.20	--	15	940	1.3	22	2.20

K BASED ON NON-IDEAL COLONY COUNT.

09306022 STEWART GULCH ABOVE WEST FORK, NEAR RIO BLANCO, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	CARBON, ORGANIC DISSOLVED (MG/L AS C)	CARBON, ORGANIC SUSPENDED TOTAL (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)	PHENOLS TOTAL (UG/L)	OIL AND GREASE, TOTAL RECOV. GRAVIMETRIC (MG/L)
NOV									
02...	.090	1.0	1.1	.010	2.6	.20	<.01	1	4
MAR									
01...	.080	.62	.70	.060	2.8	.40	--	4	--
APR									
06...	.100	.30	.40	.090	2.6	1.6	--	<1	--
MAY									
10...	.140	.26	.40	.050	2.6	.40	<.01	2	<1
AUG									
16...	.060	.84	.90	.040	5.0	<.10	--	<1	--
SEP									
08...	.060	.94	1.0	.020	3.1	.10	--	2	--

DATE	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, DISSOLVED (UG/L AS BA)	BORON, DISSOLVED (UG/L AS B)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	COPPER, DISSOLVED (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)
NOV								
02...	10	1	50	80	<1	10	1	7
MAR								
01...	--	1	--	80	--	--	--	4
APR								
06...	--	1	--	80	--	--	--	18
MAY								
10...	20	1	47	80	<1	<10	1	9
AUG								
16...	--	<1	--	90	--	--	--	5
SEP								
08...	--	2	--	90	--	--	--	8

DATE	LEAD, DISSOLVED (UG/L AS PB)	LITHIUM DISSOLVED (UG/L AS LI)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY DISSOLVED (UG/L AS HG)	MOLYBDENUM, DISSOLVED (UG/L AS MO)	SELENIUM, DISSOLVED (UG/L AS SE)	STRONTIUM, DISSOLVED (UG/L AS SR)	ZINC, DISSOLVED (UG/L AS ZN)
NOV								
02...	3	20	2	<.1	2	1	2700	7
MAR								
01...	--	--	12	--	--	--	2600	--
APR								
06...	--	--	3	--	--	--	2800	--
MAY								
10...	<1	17	6	<.1	<1	1	2700	23
AUG								
16...	--	--	5	--	--	--	--	--
SEP								
08...	--	--	3	--	--	--	2600	--

RADIOCHEMICAL ANALYSES, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	GROSS ALPHA, SUSP. TOTAL (PCI/L AS U-NAT)	GROSS ALPHA, DISSOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DISSOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DISSOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)	RADIUM 226, DISSOLVED, RADON METHOD (PCI/L)	URANIUM NATURAL DISSOLVED (UG/L AS U)
NOV									
02...	--	<22	<.4	<13	<.4	<12	<.4	.08	2.9
MAY									
10...	1.1	<20	1.7	<10	1.6	<10	1.6	.08	3.1

09306022 STEWART GULCH ABOVE WEST FORK, NEAR RIO BLANCO, CO--Continued

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

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					MAY				
02...	1120	.94	32	.08	10...	0755	1.7	58	.27
MAR					AUG				
01...	0955	1.6	82	.35	16...	0800	5.9	35	.56
APR					SEP				
06...	1135	1.7	242	1.1	08...	0700	8.7	13	.31

09306036 SORGHUM GULCH AT MOUTH, NEAR RIO BLANCO, CO

LOCATION.--Lat 39°49'30", long 108°11'54", in NW¼NW¼ sec.5, T.3 S., R.96 W., Rio Blanco County, Hydrologic Unit 14050006, on left bank 1,400 ft upstream from mouth and 14.8 mi west of Rio Blanco.

DRAINAGE AREA.--3.62 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1974 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 6,372 ft, from topographic map. Prior to April 23, 1981, at site 300 ft downstream at datum 6.68 ft, lower.

REMARKS.--Records good except for periods of flow, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 59 ft^3/s Sept. 3, 1977, gage height, 2.92 ft, at former site, from rating curve extended above 40 ft^3/s, from slope-area measurement; maximum gage height at present site, 9.10 ft, Mar. 11, 1983; no flow most of each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 15 ft^3/s at 1630 Mar. 11, gage height, 9.10 ft; no flow most of year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.80	.00	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	.49	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	.56	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.37	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	1.6	.00	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	.49	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	.42	.00	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	.95	.00	.00	.00	.00	.00	.00
11	.00	.00	.00	.00	.00	5.2	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	2.8	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	.00	1.7	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.00	.00	.37	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	.76	.00	.00	.00	.00	.00	.00	.00
24	.00	.00	.00	.00	1.0	.00	.00	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	.64	.00	.00	.00	.00	.00	.00	.00
26	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	.00	.00	.65	.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	---
TOTAL	.00	.00	.00	.00	3.05	15.38	.00	.37	.00	.00	.00	.00
MEAN	.000	.000	.000	.000	.11	.50	.000	.012	.000	.000	.000	.000
MAX	.00	.00	.00	.00	1.0	5.2	.00	.37	.00	.00	.00	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	.00	.00	6.0	31	.00	.7	.00	.00	.00	.00

CAL YR 1982 TOTAL 0.29 MEAN .001 MAX .21 MIN .00 AC-FT .6
WTR YR 1983 TOTAL 18.80 MEAN .052 MAX 5.2 MIN .00 AC-FT 37

09306036 SORGHUM GULCH AT MOUTH, NEAR RIO BLANCO, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1974 to current year.

PERIOD OF DAILY RECORD.--
SUSPENDED-SEDIMENT DISCHARGE: October 1974 to September 30, 1982 (discontinued).

INSTRUMENTATION.--Water-quality monitor since October 1974 to September 1981. Pumping sediment sampler since October 1974.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SEDIMENT CONCENTRATIONS: Maximum daily, 8,020 mg/L Sept. 3, 1977; no flow many days during each year.
SEDIMENT LOADS: Maximum daily, 424 tons Sept. 3, 1977; no flow many days during each year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	SPE-CIFIC CON-DUCT-ANCE LAB (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	ALKA-LINITY LAB (MG/L AS CACO3)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)
MAR											
02...	1600	.30	100	118	8.3	.0	11.1	49	62	K24	K40

DATE	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)
MAR										
02...	K22000	44	15	1.6	1.7	.1	4.3	.6	6.3	1.3

DATE	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	BROMIDE DIS-SOLVED (MG/L AS BR)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)
MAR										
02...	<.10	<.010	3.1	63	.09	.05	.120	.270	1.1	.83

DATE	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	ARSENIC DIS-SOLVED (UG/L AS AS)	BORON, DIS-SOLVED (UG/L AS B)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)	PHENOLS TOTAL (UG/L)
MAR										
02...	1.1	.540	1	20	46	3	19	1.1	<.01	12

DATE	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	BARIUM, DIS-SOLVED (UG/L AS BA)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COPPER, DIS-SOLVED (UG/L AS CU)	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	ZINC, DIS-SOLVED (UG/L AS ZN)
MAR												
02...	70	55	<1	10	8	<1	<4	<.1	<1	<1	140	4

RADIOCHEMICAL ANALYSES, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	GROSS ALPHA, SUSP. TOTAL (PCI/L AS U-NAT)	GROSS ALPHA, DIS-SOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DIS-SOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DIS-SOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)	RADIUM 226, DIS-SOLVED, RADON METHOD (PCI/L)	URANIUM DIS-SOLVED, EXTRAC-TION (UG/L)
MAR									
02...	6.8	<2.0	10	6.6	6.7	6.3	6.4	.06	.09

K BASED ON NON-IDEAL COLONY COUNT.

09306036 SORGHUM GULCH AT MOUTH, NEAR RIO BLANCO, CO--Continued

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
MAR				
02...	1600	.30	88	.07

09306039 COTTONWOOD GULCH NEAR RIO BLANCO, CO

LOCATION.--Lat 39°49'36", long 108°12'25", in SW¼SE¼ sec.31, T.2 S., R.96 W., Rio Blanco County, Hydrologic Unit 14050006, on right bank 800 ft upstream from mouth and 15.4 mi west of Rio Blanco.

DRAINAGE AREA.--1.20 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1974 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 6,353 ft, from topographic map.

REMARKS.--Records excellent except for days of flow, which are poor. No diversion above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 53 ft³/s Sept. 3, 1977, gage height, 2.94 ft; no flow most of each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 8.0 ft³/s at 1500 Mar. 12, gage height, 2.00 ft; no flow most of the year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.40	.00	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	.50	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	.20	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.20	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	.50	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	.11	.00	.00	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	.82	.00	.00	.00	.00	.00	.00
11	.00	.00	.00	.00	.00	2.4	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	1.8	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	.00	.22	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	.10	.00	.00	.00	.00	.00	.00	.00
24	.00	.00	.00	.00	.42	.00	.00	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	.40	.00	.00	.00	.00	.00	.00	.00
26	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	.00	.00	.40	.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	---
TOTAL	.00	.00	.00	.00	1.32	7.15	.00	.00	.00	.00	.00	.00
MEAN	.000	.000	.000	.000	.047	.23	.000	.000	.000	.000	.000	.000
MAX	.00	.00	.00	.00	.42	2.4	.00	.00	.00	.00	.00	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	.00	.00	2.6	14	.00	.00	.00	.00	.00	.00

CAL YR 1982 TOTAL 0.10 MEAN .000 MAX .10 MIN .00 AC-FT .2
WTR YR 1983 TOTAL 8.47 MEAN .023 MAX 2.4 MIN .00 AC-FT 17

09306039 COTTONWOOD GULCH NEAR RIO BLANCO, CO--Continued

PERIOD OF RECORD:--April 1974 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: April 1974 to September 1981 (discontinued).
WATER TEMPERATURE: April 1974 to September 1981 (discontinued).
SUSPENDED-SEDIMENT DISCHARGE: April 1974 tp September 1981 (discontinued).

INSTRUMENTATION:--Water-quality monitor since April 1976. Automatic pumping sediment sampler since April 1974.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 225 micromhos Mar. 24, 1976; minimum, 124 micromhos Mar. 27, 1976.
WATER TEMPERATURES: Maximum, 25.0°C Mar. 24, 1976.
SEDIMENT CONCENTRATIONS: Maximum daily, 62,000 mg/L estimated Sept. 3, 1977; no flow many days each year.
SEDIMENT LOADS: Maximum daily, 200 tons estimated Sept. 3, 1977; no flow many days each year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	SPE-CIFIC CON-DUCT-ANCE LAB (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	ALKA-LINITY LAB (MG/L AS CACO3)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)
MAR											
02...	1645	.07	490	477	8.4	.0	11.2	156	54	K150	K57

DATE	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)
MAR										
02...	K30000	170	38	19	35	1	4.8	<.5	89	5.0

DATE	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	BROMIDE DIS-SOLVED (MG/L AS BR)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)
MAR										
02...	.20	<.010	6.8	290	.40	.06	.100	.280	1.3	.92

DATE	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)	PHENOLS TOTAL (UG/L)	ARSENIC DIS-SOLVED (UG/L AS AS)	BORON, DIS-SOLVED (UG/L AS B)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
MAR										
02...	1.1	.400	17	1.1	<.01	7	1	30	17	5

DATE	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	BARIUM, DIS-SOLVED (UG/L AS BA)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COPPER, DIS-SOLVED (UG/L AS CU)	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	ZINC, DIS-SOLVED (UG/L AS ZN)
MAR												
02...	30	120	<1	<10	4	<1	13	<.1	1	<1	1100	<3

RADIOCHEMICAL ANALYSES, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	GROSS ALPHA, SUSP. TOTAL (PCI/L AS U-NAT)	GROSS ALPHA, DIS-SOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DIS-SOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DIS-SOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)	RADIUM 226, DIS-SOLVED, RADON METHOD (PCI/L)	URANIUM NATURAL DIS-SOLVED (UG/L AS U)
MAR									
02...	1.8	<5.9	2.6	9.9	2.0	9.5	1.9	.09	1.6

K BASED ON NON-IDEAL COLONY COUNT.

09306039 COTTONWOOD GULCH NEAR RIO BLANCO, CO--Continued

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

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)
MAR 02...	1645	.07	--	--	MAR 02...	1645	.07	84	.02

09306042 PICEANCE CREEK TRIBUTARY NEAR RIO BLANCO, CO

LOCATION.--Lat 39°50'01", long 108°13'12", in SE¼NE¼ sec.36, T.2 S., R.97 W., Rio Blanco County, Hydrologic Unit 14050006, on left bank 600 ft upstream from mouth and 16.2 mi west of Rio Blanco.

DRAINAGE AREA.--1.06 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1974 to current year.

REVISED RECORDS.--WDR CO-79-3: 1977(M).

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 6,335 ft, from topographic map. Nov. 10, 1980 to June 10, 1981 at datum 0.21 ft, lower.

REMARKS.--Records poor. All flow due to discharge of settling ponds on tract Cb.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 384 ft³/s, Sept. 3, 1977, gage height, 2.57 ft, result of slope-area measurement of peak flow; no flow most of each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 7.4 ft³/s at 1000 Mar. 11, gage height, 2.13 ft; minimum daily, 0.01 ft³/s March 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.80	.49	.58	.70	.73	.88	.13	.53	.64	.78	.81	.62
2	.80	.58	.58	.70	.73	.85	.30	.47	.85	.79	.86	.62
3	.80	.62	.58	.70	.73	.62	.38	.44	.69	.79	.74	.67
4	.80	.67	.58	.71	.73	.77	.29	.49	.65	.80	.85	.93
5	.77	.66	.53	.71	.72	.92	.32	.53	.86	.86	.59	1.1
6	.71	.66	.49	.71	.70	.91	.31	.58	.70	.87	.68	.67
7	.71	.66	.62	.70	.70	.84	.35	.53	.70	.66	.67	.44
8	.62	.76	.67	.70	.75	.77	.07	.49	1.1	.62	.72	.53
9	.62	.70	.67	.70	.75	.76	.07	.44	1.6	.66	.62	.49
10	.58	.76	.67	.70	.77	1.0	.11	.49	.93	.66	.52	.51
11	.58	.81	.67	.70	.77	1.8	.20	.53	.82	.65	.54	.49
12	.58	.86	.75	.70	.77	.90	.44	.71	.99	.65	.57	.47
13	.53	.86	.82	.75	.77	.88	.56	.35	.62	.65	.64	.46
14	.58	.92	.82	.81	.77	.66	.78	.40	.57	.65	.58	.44
15	.57	.75	.82	.81	.77	.07	.66	.44	.69	.65	.52	.46
16	.52	.69	.77	.80	.77	.09	.69	.49	.62	.65	.46	.44
17	.52	.60	.77	.80	.77	.11	.67	.82	.60	.65	.40	.43
18	.51	.51	.77	.80	.77	.10	.57	1.0	.58	.65	.58	.47
19	.55	.47	.75	.69	.77	.35	.24	1.4	.63	.60	.53	.46
20	.55	.51	.77	.74	.75	.43	.22	1.1	.63	.60	.53	.41
21	.54	.79	.82	.74	.79	.28	.38	1.2	.68	.60	.58	.40
22	.49	.85	.82	.74	.77	.27	.41	1.1	.68	.60	.58	.40
23	.45	.84	.82	.74	.81	.10	.44	.63	.74	.60	.58	.43
24	.44	.64	.82	.74	.91	.30	.47	.63	.80	.60	.58	.51
25	.48	.68	.62	.74	.78	.38	.40	1.1	.92	.60	.53	.55
26	.39	.59	.65	.74	.71	.09	.55	1.3	.92	.63	.53	.59
27	.34	.63	.65	.74	.69	.20	.40	1.1	.87	.63	.58	.58
28	.42	.59	.65	.73	.84	.04	.40	.68	.77	.63	.58	.48
29	.46	.59	.65	.73	---	.01	.49	.68	.77	.62	.99	.52
30	.46	.58	.70	.73	---	.03	.53	.74	.78	.57	1.2	.51
31	.45	---	.70	.73	---	.20	---	.69	---	.66	.67	---
TOTAL	17.62	20.32	21.58	22.73	21.29	15.61	11.83	22.08	23.40	20.63	19.81	16.08
MEAN	.57	.68	.70	.73	.76	.50	.39	.71	.78	.67	.64	.54
MAX	.80	.92	.82	.81	.91	1.8	.78	1.4	1.6	.87	1.2	1.1
MIN	.34	.47	.49	.69	.69	.01	.07	.35	.57	.57	.40	.40
AC-FT	35	40	43	45	42	31	23	44	46	41	39	32

CAL YR 1982 TOTAL 129.14 MEAN .35 MAX 2.3 MIN .00 AC-FT 256
WTR YR 1983 TOTAL 232.98 MEAN .64 MAX 1.8 MIN .01 AC-FT 462

09306042 PICEANCE CREEK TRIBUTARY NEAR RIO BLANCO, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1974 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: April 1974 to current year.
pH: Feb. to Sept. 1981 (discontinued).
WATER TEMPERATURE: April 1974 to current year.
SUSPENDED-SEDIMENT DISCHARGE: April 1974 to September 1982.

INSTRUMENTATION.--Water-quality monitor since April 1974. Pumping sediment sampler April 1974 to September 1982.

REMARKS.--Daily maximum and minimum values of specific conductance are available in the district office. Water temperature extremes based on a representative 76 percent of record.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 2,570 micromhos Sept. 16, 1980; minimum observed, 220 micromhos Jan. 26, 1982.
WATER TEMPERATURES: Maximum, 33.5°C July 23, 1981; minimum, 0.0°C Sept. 6, 1980.
SEDIMENT CONCENTRATIONS: Maximum daily, 28,000 mg/L estimated Sept. 3, 1978; no flow many days each year.
SEDIMENT LOADS: Maximum daily, 900 tons, estimated, Sept. 3, 1978; no flow many days each year.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum not determined; minimum, not determined.
WATER TEMPERATURES: Maximum, 31.5°C July 7, 20, Aug. 8, 9; minimum, 0.0°C November to April.

WATER QUALITY DATA, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	SPE-CIFIC CON-DUCT-ANCE LAB (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	NITRO-GEN DIS-SOLVED (MG/L AS N)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)
NOV												
02...	1300	.62	2100	2170	8.9	8.5	9.0	2.0	15	1.5	<8	K43
MAR												
01...	1415	1.1	1800	1800	9.0	10.5	8.8	1.4	--	--	--	--
31...	0928	--	1400	2160	--	9.0	--	2.0	--	--	--	--
MAY												
10...	1315	.53	2090	2190	9.0	23.0	6.8	1.1	10	1.8	<10	K2
AUG												
16...	0945	.52	2100	2140	9.0	19.5	7.4	1.1	--	--	--	--
SEP												
08...	0830	.44	2100	2190	9.0	16.0	7.6	1.1	--	--	--	--

DATE	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)
NOV												
02...	880	62	12	7.5	570	33	1.6	1180	<.5	22	7.7	24
MAR												
01...	--	40	8.7	4.3	430	31	2.3	956	--	21	6.5	16
31...	--	47	8.3	6.1	510	34	1.8	1140	--	23	8.0	20
MAY												
10...	70	51	9.1	6.5	540	34	1.5	1160	<.5	26	8.4	21
AUG												
16...	--	49	8.4	6.9	530	34	1.6	1090	--	25	8.4	20
SEP												
08...	--	54	9.6	7.1	560	34	1.4	1200	--	23	8.1	18

DATE	BROMIDE DIS-SOLVED (MG/L AS BR)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)
NOV											
02...	<.010	15	1400	1.9	2.3	60	.800	--	.800	.170	1.0
MAR											
01...	--	11	1100	1.5	3.2	556	.680	--	.680	.140	.56
31...	--	13	1300	1.7	--	--	1.23	.070	1.30	<.060	--
MAY											
10...	.010	11	1300	1.8	1.9	1	.610	--	.610	.090	.51
AUG											
16...	--	12	1300	1.7	1.8	24	.530	--	.530	.080	.62
SEP											
08...	--	11	1400	1.8	1.6	47	.620	--	.620	.060	.54

K BASED ON NON-IDEAL COLONY COUNT.

09306042 PICEANCE CREEK TRIBUTARY NEAR RIO BLANCO, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	CARBON, ORGANIC DISSOLVED (MG/L AS C)	CARBON, ORGANIC SUSPENDED TOTAL (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)	PHENOLS TOTAL (UG/L)	OIL AND GREASE, TOTAL RECOV. GRAVIMETRIC (MG/L)	BORON, DISSOLVED (UG/L AS B)	STRONTIUM, DISSOLVED (UG/L AS SR)
NOV											
02...	1.1	.050	.030	--	6.9	.60	<.01	4	1	730	1100
MAR											
01...	.70	.900	.060	--	8.8	>8.0	--	4	--	630	720
31...	.70	--	.040	<.020	--	--	--	--	--	730	740
MAY											
10...	.60	.050	.030	--	4.3	.40	<.01	5	<1	750	1000
AUG											
16...	.70	.030	.030	--	5.5	.20	--	<1	--	760	--
SEP											
08...	.60	.020	.010	--	5.1	1.1	--	<1	--	760	1100

DATE	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, DISSOLVED (UG/L AS BA)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, DISSOLVED (UG/L AS CR)	COPPER, DISSOLVED (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)
NOV							
02...	40	1	400	<1	10	24	30
MAR							
01...	--	1	--	--	--	--	54
MAY							
10...	40	1	500	<1	<10	2	20
AUG							
16...	--	2	--	--	--	--	20
SEP							
08...	--	3	--	--	--	--	30

DATE	LEAD, DISSOLVED (UG/L AS PB)	LITHIUM DISSOLVED (UG/L AS LI)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY DISSOLVED (UG/L AS HG)	MOLYBDENUM, DISSOLVED (UG/L AS MO)	SELENIUM, DISSOLVED (UG/L AS SE)	ZINC, DISSOLVED (UG/L AS ZN)
NOV							
02...	5	40	<10	<.1	3	<1	10
MAR							
01...	--	--	4	--	--	--	--
MAY							
10...	<1	40	<10	<.1	<1	<1	<10
AUG							
16...	--	--	<10	--	--	--	--
SEP							
08...	--	--	<10	--	--	--	--

RADIOCHEMICAL ANALYSES, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	GROSS ALPHA, SUSP. TOTAL (PCI/L AS U-NAT)	GROSS ALPHA, DISSOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DISSOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DISSOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)	RADIUM 226, DISSOLVED, RADON METHOD (PCI/L)	URANIUM DISSOLVED, EXTRACTION (UG/L)
NOV									
02...	.6	<44	.9	<21	.8	<20	.7	.24	.72
MAY									
10...	.4	<34	.6	<18	.4	<17	.4	.21	--

09306042 PICEANCE CREEK TRIBUTARY NEAR RIO BLANCO, CO--Continued

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

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					AUG				
02...	1300	.62	42	.07	16...	0945	.52	115	.16
APR					SEP				
11...	1016	.07	465	.09	08...	0830	.44	98	.12
MAY									
10...	1315	.53	8	.01					

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1950	2050		---	---	1650			---	1940	---	---
2	1950	2040		---	---	1710			---	1950	---	---
3	1940	1980		---	---	1820			---	---	---	---
4	1960	1990		---	---	1890			---	1960	---	---
5	1930	1990		---	---	1830			---	1990	---	---
6	1970	2000		---	---	1920			---	1990	---	---
7	1980	1950		2040	---	1980			---	2030	---	---
8	1940	1950		2040	---	2000			---	1990	---	---
9	1960	1930		2050	---	1980			---	1970	2040	---
10	1970	---		2060	---	1510			---	2010	---	---
11	1960	---		2050	---	---			---	1980	---	2090
12	1960	---		---	---	---			---	---	---	2060
13	1960	---		---	---	---			---	---	---	2060
14	2000	---		---	---	---			---	2030	---	---
15	2020	---		---	---	---			---	1960	---	2060
16	2020	---		---	---	---			---	---	1970	2080
17	2020	---		---	---	---			---	---	2040	---
18	2020	---		---	2040	---			2010	---	2010	---
19	2020	---		---	1970	---			1970	---	1990	---
20	2020	---		---	2010	---			1990	---	2030	2100
21	2010	---		---	2030	---			1990	---	1990	2130
22	2000	---		---	2030	---			1980	---	2010	2120
23	2010	---		---	1990	---			1910	---	2010	---
24	2010	---		---	1980	---			1930	---	2040	---
25	2000	---		---	1990	---			1660	---	2030	---
26	1970	---		---	2020	---			---	---	2040	---
27	1910	---		---	2010	---			---	---	2010	---
28	1870	---		---	1940	---			---	---	---	---
29	1940	---		---	---	---			1970	---	---	---
30	2010	---		---	---	---			1970	---	---	---
31	2050	---		---	---	---			---	---	---	---

09306042 PICEANCE CREEK TRIBUTARY NEAR RIO BLANCO, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	15.5	7.0	12.5	6.0	7.5	2.5	2.0	.0	5.0	.0	13.0	6.0
2	19.0	4.0	10.0	4.0	7.0	2.5	4.0	.0	6.5	.0	14.5	4.0
3	18.5	7.0	11.5	2.0	8.0	.5	5.0	.0	5.5	.0	---	---
4	19.5	7.0	13.0	4.0	9.0	1.5	6.0	.0	6.5	.0	11.0	3.0
5	12.0	7.5	12.0	4.0	8.5	1.5	6.5	4.0	7.0	.0	8.0	1.5
6	18.0	5.5	12.5	4.0	9.0	3.5	7.5	4.5	6.5	.0	15.0	5.0
7	17.5	6.0	11.0	4.0	6.5	2.0	7.0	4.5	8.0	.0	11.0	2.5
8	13.0	5.0	9.5	6.0	5.5	1.0	7.5	3.0	7.5	1.5	14.5	4.5
9	11.0	5.5	13.0	5.5	6.0	1.0	4.0	.0	10.0	1.0	15.0	3.5
10	14.0	4.5	11.5	4.5	7.5	4.5	5.0	.0	8.0	1.5	17.0	3.5
11	14.5	2.0	7.0	2.0	7.5	.5	6.5	.5	9.0	.0	15.5	2.0
12	16.0	4.5	9.0	.0	6.0	.0	6.5	.0	9.5	.5	11.5	3.0
13	15.5	5.5	9.0	1.5	6.0	1.5	7.0	.5	8.5	2.0	8.0	1.0
14	17.5	5.0	7.5	.0	5.5	.0	7.0	.5	7.5	3.5	6.5	3.5
15	19.5	6.5	8.5	.0	7.0	.5	7.5	.5	11.5	1.0	3.5	.5
16	18.0	6.5	9.5	.0	8.5	3.5	7.0	.5	12.5	4.0	6.0	.0
17	16.5	6.0	10.0	1.5	7.5	2.0	8.5	3.5	10.0	1.0	5.5	1.5
18	16.5	5.5	10.0	5.0	6.0	.0	8.0	4.0	9.5	2.0	5.5	2.0
19	13.5	3.5	9.0	3.0	6.5	.0	7.0	3.0	5.5	1.5	5.0	1.0
20	15.0	3.5	8.5	1.5	7.5	.5	7.5	1.0	11.0	1.0	4.5	.5
21	15.5	4.0	8.5	.5	8.5	2.5	7.5	2.5	11.0	.0	10.5	.0
22	14.0	5.0	7.5	2.5	7.0	4.0	8.0	2.5	13.0	.0	7.5	.0
23	16.0	5.0	5.5	.5	7.5	1.0	7.0	2.5	14.0	1.5	7.5	3.0
24	18.5	6.5	5.5	.0	3.0	.0	6.0	1.0	14.5	2.0	5.5	1.5
25	14.5	9.5	9.0	3.0	.0	.0	8.0	2.0	11.5	4.5	5.5	2.0
26	12.0	8.5	8.0	1.0	.5	.0	8.5	1.5	8.5	3.0	5.5	1.0
27	9.0	4.5	7.5	.0	.5	.0	9.0	3.5	12.0	2.0	6.5	.5
28	12.5	3.5	8.5	1.0	.0	.0	8.5	3.0	13.0	3.0	5.5	1.5
29	10.0	4.5	7.5	5.0	.0	.0	9.0	1.5	---	---	---	---
30	11.0	7.0	7.0	5.0	.0	.0	7.5	1.5	---	---	---	---
31	11.5	9.0	---	---	.0	.0	6.0	.5	---	---	9.0	2.0
MONTH	19.5	2.0	13.0	.0	9.0	.0	9.0	.0	14.5	.0	17.0	.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	7.5	2.0			---	---	24.5	10.5	29.0	16.0	---	---
2	6.5	1.5			---	---	26.5	11.5	26.0	15.5	---	---
3	4.5	1.5			---	---	27.5	11.0	29.0	15.5	---	---
4	5.0	.5			---	---	28.5	9.0	27.0	15.5	---	---
5	8.0	.0			---	---	30.5	9.5	30.5	16.0	---	---
6	---	---			---	---	30.5	13.5	31.0	16.0	---	---
7	---	---			---	---	31.5	16.0	30.5	17.0	---	---
8	---	---			---	---	28.5	15.5	31.5	15.0	27.0	14.0
9	---	---			---	---	26.5	16.0	31.5	16.5	26.0	12.5
10	---	---			---	---	30.0	14.5	---	---	26.0	12.0
11	---	---			---	---	30.0	10.0	---	---	25.5	9.5
12	---	---			---	---	29.0	11.0	---	---	26.0	9.5
13	---	---			---	---	29.0	12.5	---	---	26.5	9.0
14	---	---			---	---	30.5	12.0	---	---	23.0	12.5
15	---	---			---	---	26.0	14.0	---	---	25.0	9.5
16	---	---			---	---	28.0	11.5	31.0	17.5	24.5	8.5
17	---	---			---	---	27.5	12.0	30.5	16.0	24.5	10.5
18	---	---			28.5	13.5	29.5	13.0	30.0	17.5	25.0	10.5
19	---	---			28.0	11.0	28.5	15.0	27.5	15.5	22.0	7.5
20	---	---			28.0	10.5	31.5	16.5	27.0	15.5	18.5	4.0
21	---	---			27.5	10.5	30.0	15.0	27.5	13.5	21.0	3.5
22	---	---			28.5	10.5	29.0	16.0	28.5	11.5	22.0	4.5
23	---	---			29.5	12.0	22.5	16.0	28.5	11.0	18.5	8.0
24	---	---			28.0	14.5	26.5	15.0	27.0	11.0	21.0	11.0
25	---	---			25.5	13.5	26.0	15.5	26.5	12.5	24.0	8.5
26	---	---			27.5	12.0	26.5	17.0	27.0	12.5	22.0	8.5
27	---	---			23.0	15.0	22.5	15.5	28.5	12.0	21.0	11.5
28	---	---			29.0	13.0	28.5	15.0	27.0	13.0	22.5	8.5
29	---	---			28.0	11.5	29.5	14.5	25.0	14.5	20.0	11.0
30	---	---			27.0	12.0	29.5	15.0	27.5	13.5	15.5	10.0
31	---	---			---	---	26.5	17.0	19.0	12.5	---	---
MONTH	8.0	.0			29.5	10.5	31.5	9.0	31.5	11.0	27.0	3.5
YEAR	31.5	.0										

09306052 SCANDARD GULCH AT MOUTH, NEAR RIO BLANCO, CO

LOCATION.--Lat 39°48'51", long 108°14'35", in SW¼SE¼ sec.2, T.3 S., R.97 W., Rio Blanco County, Hydrologic Unit 14050006, on right bank 2,100 ft upstream from mouth and 16.8 mi west of Rio Blanco.

DRAINAGE AREA.--7.97 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1974 to September 1976, November 1977 to current year.

REVISED RECORDS.--WDR CO-79-3: Drainage area.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 6,434 ft, from topographic map.

REMARKS.--Records excellent except for days of flow, which are fair.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9.7 ft^3/s, Mar. 11, 1983, gage height, 1.27 ft; maximum gage height, 1.65 ft, Mar. 4, 1975 (backwater from ice); no flow most of each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 9.7 ft^3/s at 1600 Mar. 11, gage height, 1.27 ft; no flow most of year.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	3.0	.00	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	3.5	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	.50	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	.50	.00	.00	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	.94	.00	.00	.00	.00	.00	.00
11	.00	.00	.00	.00	.00	1.6	.00	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	.58	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.19	.00	.00
23	.00	.00	.00	.00	.50	.00	.00	.00	.00	.00	.00	.00
24	.00	.00	.00	.00	.70	.00	.00	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	1.0	.00	.00	.00	.00	.00	.00	.00
26	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	.00	.00	.70	.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	---
TOTAL	.00	.00	.00	.00	2.90	10.62	.00	.00	.00	.19	.00	.00
MEAN	.000	.000	.000	.000	.10	.34	.000	.000	.000	.006	.000	.000
MAX	.00	.00	.00	.00	1.0	3.5	.00	.00	.00	.19	.00	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	.00	.00	5.8	21	.00	.00	.00	.4	.00	.00

CAL YR 1982 TOTAL 3.78 MEAN .010 MAX 1.6 MIN .00 AC-FT 7.5
WTR YR 1983 TOTAL 13.71 MEAN .038 MAX 3.5 MIN .00 AC-FT 27

09306052 SCANDARD GULCH AT MOUTH, NEAR RIO BLANCO, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1974 to September 1976, November 1977 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: April 1974 to September 1976, November 1977 to September 1981 (discontinued).
WATER TEMPERATURE: April 1974 to September 1976, November 1977 to September 1981 (discontinued).
SUSPENDED SEDIMENT DISCHARGE.--April 1974 to September 1976, November 1977 to September 1981 (discontinued).

INSTRUMENTATION.--Water-quality monitor since April 1974. Automatic pumping sediment sampler since April 1974.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 674 micromhos Nov. 1, 1980; minimum, 147 micromhos July 29, 1978.
WATER TEMPERATURES: Maximum, 22.0°C July 29, 1978; minimum, 0.0°C Nov. 3, 1980.
SEDIMENT CONCENTRATIONS: Maximum daily, 49,000 mg/L July 29, 1978; no flow many days each year.
SEDIMENT LOADS: Maximum daily, 120 tons estimated Sept. 30, 1981; no flow many days each year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	SPE-CIFIC CON-DUCT-ANCE LAB (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	ALKA-LINITY LAB (MG/L AS CACO3)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)
MAR											
02...	1715	4.5	130	161	8.2	.0	11.5	58	120	K38	K65

DATE	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	SULFIDE TOTAL (MG/L AS S)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)
MAR										
02...	K20000	53	18	1.8	3.7	.2	4.8	.8	8.1	2.3

DATE	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	BROMIDE DIS-SOLVED (MG/L AS BR)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)
MAR										
02...	.10	<.010	5.0	79	.11	.96	.180	.250	1.7	1.3

DATE	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)	PHENOLS TOTAL (UG/L)	ARSENIC DIS-SOLVED (UG/L AS AS)	BORON, DIS-SOLVED (UG/L AS B)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
MAR										
02...	1.5	1.00	21	>4.0	<.01	6	1	20	99	4

DATE	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	BARIUM, DIS-SOLVED (UG/L AS BA)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COPPER, DIS-SOLVED (UG/L AS CU)	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	ZINC, DIS-SOLVED (UG/L AS ZN)
MAR												
02...	110	64	<1	<10	4	<1	4	<.1	<1	<1	140	<3

RADIOCHEMICAL ANALYSES, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	GROSS ALPHA, DIS-SOLVED (PCI/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (PCI/L AS U-NAT)	GROSS ALPHA, DIS-SOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DIS-SOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DIS-SOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)	RADIUM 226, DIS-SOLVED, RADON METHOD (PCI/L)	URANIUM NATURAL DIS-SOLVED (UG/L AS U)
MAR										
02...	13	44	19	65	12	43	12	42	.10	24

K BASED ON NON-IDEAL COLONY COUNT.

09306052 SCANDARD GULCH AT MOUTH, NEAR RIO BLANCO, CO--Continue

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
MAR				
02...	1530	5.6	3890	59
02...	1715	4.5	1290	16
10...	1715	3.9	15000	158

09306058 WILLOW CREEK NEAR RIO BLANCO, CO

LOCATION.--Lat 39°50'14", long 108°14'37", in NW¼NE¼ sec.35, T.2 S., R.97 W., Rio Blanco County, Hydrologic Unit 14050006, on right bank 1,500 ft upstream from mouth and 17.4 mi west of Rio Blanco.

DRAINAGE AREA.--48.4 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1974 to current year.

REVISED RECORDS.--WDR CO-79-3: Drainage area.

GAGE.--Water-stage recorder. Concrete control since Aug. 9, 1974. Altitude of gage is 6,273 ft, from topographic map.

REMARKS.--Records good, except those for winter period, which are poor. Diversions above station for irrigation of about 315 acres.

AVERAGE DISCHARGE.--9 years, 2.19 ft³/s; 1,590 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 89 ft³/s, July 22, 1983, gage height, 5.16 ft, from rating curve extended above 18 ft³/s; no flow for many days in 1978, 1979.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 89 ft³/s at 1800 July 22, gage height, 5.16 ft; minimum daily, 1.0 ft³/s Dec. 4-20, Aug. 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.2	1.2	1.1	1.2	1.8	5.5	2.2	4.4	3.1	11	14	3.6
2	1.2	1.2	1.1	1.2	1.8	7.9	2.1	4.5	6.6	12	14	4.3
3	1.2	1.2	1.1	1.2	1.8	3.9	2.3	4.0	8.7	13	14	4.4
4	1.1	1.2	1.0	1.2	1.8	3.4	2.1	3.7	6.6	13	14	4.5
5	1.1	1.2	1.0	1.2	1.8	2.9	2.2	3.7	5.8	11	13	4.3
6	1.1	1.2	1.0	1.2	1.8	3.3	2.1	3.9	5.6	11	13	5.4
7	1.1	1.2	1.0	1.2	1.8	2.7	2.2	3.9	4.4	12	13	5.8
8	1.1	1.2	1.0	1.2	1.8	3.4	2.5	4.3	4.3	12	12	6.8
9	1.1	1.2	1.0	1.2	1.9	3.6	2.6	4.4	4.1	11	12	6.4
10	1.1	1.2	1.0	1.2	1.9	3.7	2.5	4.5	5.1	12	12	4.2
11	1.1	1.3	1.0	1.2	1.9	4.3	2.6	4.6	6.0	12	12	4.1
12	1.1	1.2	1.0	1.1	1.9	3.0	2.8	4.6	6.7	12	13	4.2
13	1.1	1.3	1.0	1.3	1.9	2.6	2.5	4.6	5.8	11	10	3.7
14	1.1	1.3	1.0	1.3	2.0	2.7	2.7	4.4	5.8	11	8.3	4.0
15	1.1	1.3	1.0	1.5	2.0	2.7	2.5	2.3	6.9	9.4	6.8	4.4
16	1.1	1.3	1.0	1.6	2.0	2.5	2.4	2.3	11	8.1	5.7	4.7
17	1.1	1.3	1.0	1.7	2.1	2.6	2.4	2.3	12	7.9	6.3	4.6
18	1.1	1.2	1.0	1.7	2.1	2.6	2.6	2.2	10	7.5	7.0	5.0
19	1.1	1.3	1.0	1.6	2.1	2.5	2.8	1.8	7.7	6.8	3.5	6.4
20	1.1	1.2	1.0	1.5	2.1	2.4	2.9	1.5	7.6	8.1	1.0	6.5
21	1.1	1.2	1.1	1.5	2.1	2.7	2.9	1.4	7.6	9.1	1.1	6.2
22	1.1	1.2	1.1	1.5	2.3	2.4	2.9	1.1	7.4	13	1.9	7.6
23	1.1	1.1	1.1	1.5	3.0	2.4	2.8	1.1	7.8	10	2.4	9.5
24	1.1	1.1	1.1	1.6	3.6	2.4	2.8	1.7	8.8	10	2.2	9.4
25	1.1	1.1	1.1	1.7	4.0	2.4	2.8	2.6	10	12	1.9	8.7
26	1.2	1.1	1.1	1.7	2.8	2.3	2.8	2.7	10	13	1.6	8.7
27	1.3	1.1	1.2	1.7	2.8	2.3	2.5	2.4	9.9	13	1.8	8.8
28	1.2	1.1	1.2	1.7	3.6	2.4	2.3	2.7	10	13	1.8	8.4
29	1.2	1.1	1.2	1.7	---	2.3	3.1	2.7	10	13	2.8	8.3
30	1.2	1.1	1.2	1.7	---	2.1	4.2	2.8	10	13	1.9	8.3
31	1.2	---	1.2	1.7	---	2.2	---	2.8	---	13	2.8	---
TOTAL	35.1	35.9	32.9	44.5	62.5	94.1	78.1	95.9	225.3	343.9	226.8	181.2
MEAN	1.13	1.20	1.06	1.44	2.23	3.04	2.60	3.09	7.51	11.1	7.32	6.04
MAX	1.3	1.3	1.2	1.7	4.0	7.9	4.2	4.6	12	13	14	9.5
MIN	1.1	1.1	1.0	1.1	1.8	2.1	2.1	1.1	3.1	6.8	1.0	3.6
AC-FT	70	71	65	88	124	187	155	190	447	682	450	359

CAL YR 1982 TOTAL 505.48 MEAN 1.38 MAX 4.5 MIN .03 AC-FT 1000
WTR YR 1983 TOTAL 1456.20 MEAN 3.99 MAX 14 MIN 1.0 AC-FT 2890

09306058 WILLOW CREEK NEAR RIO BLANCO, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1974 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: November 1974 to September 1982 (discontinued).
pH: March 1976 to February 1982 (discontinued).
WATER TEMPERATURE: November 1974 to September 1982 (discontinued).
DISSOLVED OXYGEN: March 1976 to February 1982 (discontinued).
SUSPENDED-SEDIMENT DISCHARGE: October 1974 to September 1982 (discontinued).

INSTRUMENTATION.--Water-quality monitor November 1974 to September 1982. Pumping sediment sampler October 1974 to September 1982.

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

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 1,920 micromhos July 14, 1976; minimum, 528 micromhos Mar. 18, 1976.
pH: Maximum, 8.8 units Mar. 11, 1980; minimum, 7.4 units June 4, 6, 1980.
WATER TEMPERATURES: Maximum, 30.5°C July 4, 1982; minimum, 0.0°C on many days during winter months each year.
DISSOLVED OXYGEN: Maximum, 12.9 mg/L Mar. 29, 1979; minimum, 3.6 mg/L Sept. 29, 1978.
SEDIMENT CONCENTRATIONS: Maximum daily, 7,030 mg/L July 29, 1979; no flow many days during 1978.
SEDIMENT LOADS: Maximum daily, 61 tons July 29, 30, 1979; no flow many days during 1978.

WATER QUALITY DATA, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	SPE-CIFIC CON-DUCT-ANCE LAB (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	NITRO-GEN DIS-SOLVED (MG/L AS N)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML)
NOV										
03...	0945	1.1	1370	1400	8.3	.0	12.2	--	14	96
MAR										
03...	1430	3.8	1120	1090	8.4	1.5	--	1.6	--	--
31...	0745	--	--	1240	--	--	--	.49	--	--
APR										
07...	1100	2.6	1260	1230	8.5	5.0	11.4	.64	--	--
MAY										
11...	0750	3.5	1250	1200	8.4	5.5	9.7	1.0	13	3400
AUG										
16...	1035	3.3	1460	1440	8.3	13.0	8.5	1.9	--	--
SEP										
08...	1015	6.8	1450	1450	8.2	12.5	8.0	1.1	--	--

DATE	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)
NOV										
03...	<4	1800	540	92	74	120	2	1.9	451	.6
MAR										
03...	--	--	440	80	58	93	2	4.0	385	--
31...	--	--	510	89	70	110	2	1.4	375	--
APR										
07...	--	--	500	87	69	110	2	1.4	344	--
MAY										
11...	K1400	1600	510	90	69	110	2	1.5	376	<.5
AUG										
16...	--	--	560	95	78	140	3	3.4	478	--
SEP										
08...	--	--	570	99	77	130	2	2.0	478	--

K BASED ON NON-IDEAL COLONY COUNT.

09306058 WILLOW CREEK NEAR RIO BLANCO, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	BROMIDE DIS-SOLVED (MG/L AS BR)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)
NOV									
03...	330	11	.40	<.010	15	920	1.1	3.0	<.100
MAR									
03...	250	10	.40	--	13	740	1.0	7.6	.220
31...	320	12	.40	--	13	840	1.1	--	.190
APR									
07...	310	12	.40	--	15	810	1.1	5.7	.240
MAY									
11...	310	11	.30	<.010	14	830	1.1	7.8	.340
AUG									
16...	370	14	.50	--	20	1000	1.4	9.0	.840
SEP									
08...	350	14	.40	--	18	980	1.3	18	.680

DATE	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)	PHENOLS TOTAL (UG/L)	OIL AND GREASE, TOTAL RECOV. GRAVI-METRIC (MG/L)
NOV									
03...	.090	.31	.40	.010	4.1	.40	<.01	<1	18
MAR									
03...	.180	1.1	1.4	.260	--	--	--	5	--
31...	<.060	--	.30	--	--	--	--	--	--
APR									
07...	.120	.28	.40	.170	4.9	2.1	--	3	--
MAY									
11...	.080	.62	.70	.070	3.5	.50	<.01	--	<1
AUG									
16...	.120	.98	1.1	.230	4.8	.30	--	<1	--
SEP									
08...	.040	.46	.50	.070	3.8	.60	--	<1	--

DATE	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)
NOV								
03...	10	1	67	<1	<10	1	7	1
MAR								
03...	--	1	--	--	--	--	37	--
31...	--	--	--	--	--	--	--	--
APR								
07...	--	1	--	--	--	--	11	--
MAY								
11...	10	--	69	<1	<10	<1	--	<1
AUG								
16...	--	2	--	--	--	--	9	--
SEP								
08...	--	1	--	--	--	--	24	--

09306058 WILLOW CREEK NEAR RIO BLANCO, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	ZINC, DIS-SOLVED (UG/L AS ZN)
NOV							
03...	25	3	<.1	4	1	3100	44
MAR							
03...	--	12	--	--	--	2400	--
31...	--	--	--	--	--	2800	--
APR							
07...	--	14	--	--	--	2900	--
MAY							
11...	16	--	<.1	3	2	2700	9
AUG							
16...	--	34	--	--	--	--	--
SEP							
08...	--	41	--	--	--	3100	--

RADIOCHEMICAL ANALYSES, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	GROSS ALPHA, SUSP. TOTAL (PCI/L AS U-NAT)	GROSS ALPHA, DIS-SOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DIS-SOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DIS-SOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)	RADIUM 226, DIS-SOLVED, RADON METHOD (PCI/L)	URANIUM NATURAL DIS-SOLVED (UG/L AS U)
NOV									
03...	--	<26	<.4	<12	<.4	<12	<.4	.06	2.7
MAY									
11...	3.6	<25	5.3	<9.7	3.1	<9.4	3.0	.06	2.9

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
NOV				
03...	0945	1.1	30	.10
03...	1446	1.3	22	.08
APR				
07...	1100	2.6	278	2.0
MAY				
11...	0750	3.5	136	1.3
AUG				
16...	1035	3.3	486	4.4
SEP				
08...	1015	6.8	184	3.4

09306061 PICEANCE CREEK ABOVE HUNTER CREEK, NEAR RIO BLANCO, CO

LOCATION.--Lat 39°51'02", long 108°15'31", in SE¼NE¼ sec.27, T.2 S., R.97 W., Rio Blanco County, Hydrologic Unit 14050006, on left bank 120 ft downstream from private bridge, 0.4 mi upstream from Hunter Creek, and 18.7 mi west of Rio Blanco.

DRAINAGE AREA.--309 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1974 to current year.

GAGE.--Water-stage recorder and concrete trapezoidal supercritical-flow flume. Altitude of gage is 6,214 ft, from topographic map. Prior to Mar. 26, 1982, at site 75 ft upstream at datum 0.98 ft, lower.

REMARKS.--Records good prior to May 7, and fair thereafter.

AVERAGE DISCHARGE.--9 years, 21.1 ft^3/s; 15,290 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 492 ft^3/s, Sept. 3, 1977, gage height, 5.17 ft, present datum; no flow Oct. 4, 5, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Sept. 3, 1977, exceeded all other floods at this location since at least 1939, from information by local resident.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, about 450 ft^3/s May 28, time and gage height unknown; minimum daily, 8.9 ft^3/s Dec. 25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	16	15	9.5	12	23	24	140	310	76	50	72
2	17	16	15	9.5	13	33	25	147	290	74	51	57
3	16	15	14	9.5	12	24	25	149	260	74	49	57
4	15	14	13	12	13	20	24	149	240	74	48	60
5	15	14	14	12	13	21	23	151	210	68	49	60
6	16	14	15	12	12	23	21	163	190	66	48	59
7	15	14	14	12	13	20	20	175	180	64	46	57
8	15	14	14	12	13	19	21	170	165	60	44	55
9	15	14	15	13	12	19	23	190	160	56	48	53
10	15	15	15	13	12	22	23	220	155	54	46	51
11	15	17	15	13	12	34	24	260	160	56	38	49
12	15	15	14	13	11	33	26	250	165	52	62	49
13	15	14	13	13	12	32	26	240	150	50	92	48
14	15	14	12	12	12	38	24	230	140	47	78	47
15	14	14	12	12	12	41	23	230	130	45	69	47
16	14	16	12	12	12	32	24	240	120	45	65	47
17	14	14	13	12	12	31	25	230	120	45	66	46
18	14	15	13	12	12	29	31	240	110	48	68	44
19	13	15	13	12	13	27	55	260	105	50	70	45
20	13	14	12	12	12	23	67	250	98	48	69	45
21	12	15	12	12	12	22	86	260	92	49	68	46
22	12	16	13	11	12	22	103	290	88	58	66	45
23	12	14	14	11	14	22	82	320	86	84	60	48
24	12	15	12	12	19	21	102	370	84	51	56	48
25	13	15	8.9	12	20	20	124	400	94	67	55	47
26	13	15	9.0	12	18	20	124	430	105	50	53	46
27	15	14	9.0	12	16	19	110	420	110	66	53	45
28	15	15	9.9	12	19	20	102	410	98	53	50	44
29	14	14	9.2	13	---	18	97	400	88	52	67	44
30	15	15	9.5	12	---	18	112	370	82	51	92	44
31	15	---	9.5	12	---	21	---	350	---	47	75	---
TOTAL	448	442	389.0	368.5	375	767	1596	8104	4385	1780	1851	1505
MEAN	14.5	14.7	12.5	11.9	13.4	24.7	53.2	261	146	57.4	59.7	50.2
MAX	19	17	15	13	20	41	124	430	310	84	92	72
MIN	12	14	8.9	9.5	11	18	20	140	82	45	38	44
AC-FT	889	877	772	731	744	1520	3170	16070	8700	3530	3670	2990

CAL YR 1982 TOTAL 4413.0 MEAN 12.1 MAX 42 MIN 2.9 AC-FT 8750
WTR YR 1983 TOTAL 22010.5 MEAN 60.3 MAX 430 MIN 8.9 AC-FT 43660

NOTE.--NO GAGE-HEIGHT RECORD MAY 7 TO AUG. 24.

09306061 PICEANCE CREEK ABOVE HUNTER CREEK, NEAR RIO BLANCO, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1974 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1974 to current year.
pH: October 1974 to current year.
WATER TEMPERATURE: October 1974 to current year.
DISSOLVED OXYGEN: October 1974 to current year
SUSPENDED-SEDIMENT DISCHARGE: April 1974 to current year.

INSTRUMENTATION.--Automatic pumping sediment sampler since April 1974. Water-quality monitor since October 1974.

REMARKS.--Daily maximum and minimum specific-conductance data available in district office. Station destroyed on May 7, 1983.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum 1,980 micromhos Jan. 15, 1976; minimum, 550 micromhos Apr. 5, 1978.
pH: Maximum, 8.9 units Dec. 7, 1977; minimum, 7.4 units Apr. 18, 1979.
WATER TEMPERATURES: Maximum, 26.5°C June 26, 1977; minimum, freezing point on many days during winter months.
DISSOLVED OXYGEN: Maximum, 16.5 mg/L Mar. 21, 22, 1976; minimum, 3.1 mg/L Sept. 10, 1978.
SEDIMENT CONCENTRATIONS: Maximum daily, 87,000 mg/L estimated Sept. 3, 1977; minimum daily, no flow Oct. 4, 5, 1977.
SEDIMENT LOADS: Maximum daily, 27,000 tons estimated Sept. 3, 1977; minimum daily, no flow Oct. 4, 5, 1977.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, not determined; minimum, not determined.
pH: Maximum, not determined; minimum, not determined.
WATER TEMPERATURES: Maximum, not determined; minimum, 0.0°C on many days during November to February.
DISSOLVED OXYGEN: Maximum, not determined; minimum, not determined.
SEDIMENT CONCENTRATIONS: Maximum daily, not determined; minimum daily, 15 mg/L Oct. 22.
SEDIMENT LOADS: Maximum daily, 1,000 tons estimated July 28; minimum daily, 0.28 tons Oct. 22.

WATER QUALITY DATA, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	SPE-CIFIC CON-DUCT-ANCE LAB (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	NITRO-GEN DIS-SOLVED (MG/L AS N)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L)	COLI-FORM, TOTAL, IMMED. (COLS. PER 100 ML)
NOV										
03...	1125	14	1290	1280	8.4	3.5	11.9	.96	13	K32
MAR										
02...	1825	23	750	771	8.2	5.0	8.6	2.2	--	--
31...	0810	21	--	1150	--	--	--	.76	--	--
APR										
07...	1235	19	1280	1260	8.5	8.5	9.4	1.3	--	--
MAY										
11...	0915	E250	744	746	8.5	6.5	9.6	2.3	220	8400
27...	0750	E365	749	753	8.3	7.5	9.4	2.8	--	--
AUG										
16...	1155	E80	1220	1150	8.3	15.0	8.2	2.4	--	--
SEP										
08...	1100	E60	1250	1200	8.3	13.0	8.5	2.0	--	--

DATE	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)
NOV										
03...	<3	240	410	69	56	150	3	2.3	477	<.5
MAR										
02...	--	--	220	40	29	75	2	7.1	280	--
31...	--	--	410	74	55	130	3	2.4	422	--
APR										
07...	--	--	430	77	57	130	3	2.5	430	--
MAY										
11...	4800	4900	280	57	33	67	2	2.8	287	<.5
27...	--	--	280	59	31	62	2	2.7	269	--
AUG										
16...	--	--	420	77	55	130	3	2.8	448	--
SEP										
08...	--	--	430	74	60	130	3	2.2	402	--

E ESTIMATED.
K BASED ON NON-IDEAL COLONY COUNT.

09306061 PICEANCE CREEK ABOVE HUNTER CREEK, NEAR RIO BLANCO, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	BROMIDE DIS-SOLVED (MG/L AS BR)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)
NOV									
03...	240	17	1.6	<.010	15	840	1.1	32	.360
MAR									
02...	120	11	.80	--	11	460	.63	29	.270
31...	220	14	.60	--	15	770	1.0	43	.460
APR									
07...	250	15	.80	--	15	810	1.1	41	.460
MAY									
11...	120	8.6	.40	.020	15	480	.65	--	1.50
27...	140	8.8	.40	--	14	490	.66	--	1.80
AUG									
16...	230	15	.90	--	17	800	1.1	--	1.40
SEP									
08...	290	13	.40	--	16	830	1.1	--	1.30

DATE	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)	PHENOLS TOTAL (UG/L)	OIL AND GREASE, TOTAL RECOV. GRAVI-METRIC (MG/L)
NOV									
03...	<.060	--	.60	.060	4.3	.60	<.01	<1	<1
MAR									
02...	.660	1.1	1.9	1.70	17	>8.0	--	10	--
31...	<.060	--	.30	--	--	--	--	--	--
APR									
07...	.140	.66	.80	.250	4.1	3.4	--	3	--
MAY									
11...	.090	.71	.80	1.60	7.6	>8.0	<.01	3	5
27...	.060	.94	1.0	--	--	--	--	--	--
AUG									
16...	.080	.92	1.0	.150	6.3	1.1	--	<1	--
SEP									
08...	.040	.66	.70	.090	5.6	.50	--	1	--

DATE	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	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)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)
NOV								
03...	10	2	110	200	<1	<10	2	12
MAR								
02...	--	2	--	110	--	--	--	120
31...	--	--	--	150	--	--	--	--
APR								
07...	--	2	--	160	--	--	--	9
MAY								
11...	20	3	97	90	<1	<10	3	15
27...	--	--	--	80	--	--	--	--
AUG								
16...	--	3	--	180	--	--	--	11
SEP								
08...	--	1	--	180	--	--	--	10

DATE	LEAD, DIS-SOLVED (UG/L AS PB)	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	ZINC, DIS-SOLVED (UG/L AS ZN)
NOV								
03...	1	26	53	<.1	7	1	1900	5
MAR								
02...	--	--	120	--	--	--	1100	--
31...	--	--	--	--	--	--	1800	--
APR								
07...	--	--	27	--	--	--	1900	--
MAY								
11...	<1	16	23	<.1	7	3	880	8
27...	--	--	--	--	--	--	840	--
AUG								
16...	--	--	16	--	--	--	--	--
SEP								
08...	--	--	11	--	--	--	2100	--

09306061 PICEANCE CREEK ABOVE HUNTER CREEK, NEAR RIO BLANCO, CO--Continued

RADIOCHEMICAL ANALYSES, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	GROSS ALPHA, SUSP. TOTAL (PCI/L AS U-NAT)	GROSS ALPHA, DIS-SOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DIS-SOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DIS-SOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)	RADIUM 226, DIS-SOLVED, RADON METHOD (PCI/L)	URANIUM NATURAL DIS-SOLVED (UG/L AS U)
NOV									
03...	--	<23	<1.8	<13	2.4	<12	2.3	.09	4.5
MAY									
11...	120	<13	170	<5.6	160	<5.4	130	.11	4.1

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
OCT				
01...	1141	22	290	17
NOV				
03...	1125	14	62	2.3
03...	1330	14	65	2.5
DEC				
14...	1320	12	188	6.1
16...	1350	13	93	3.3
JAN				
04...	1330	12	213	6.9
14...	1230	12	192	6.2
MAR				
02...	1300	20	378	20
02...	1825	23	4000	248
APR				
07...	1235	19	407	21
MAY				
11...	0915	E250	4740	--
AUG				
16...	1152	E80	562	--
SEP				
08...	1057	E60	131	--

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1190	1280	1220	1350	1260	---	1200					
2	1220	1290	1250	1350	1250	940	1220					
3	1250	1290	1260	1340	1270	1000	1180					
4	1260	1250	1270	1290	1280	---	1200					
5	1250	1260	1260	1250	1230	1120	1210					
6	1250	1260	1260	1250	1270	1140	1220					
7	1260	1250	1260	1270	1240	1180	1200					
8	1240	1240	1260	1260	1230	1200	1200					
9	1240	1230	1280	1260	1220	1160	---					
10	1250	1220	1240	1280	1240	1160	1160					
11	1250	1190	1250	1270	1250	---	1170					
12	1250	1230	1280	1270	1260	---	1180					
13	1240	1250	1290	1280	1250	---	---					
14	1230	1250	1280	1270	1240	1040	1180					
15	1240	1260	1290	1270	1240	---	---					
16	1240	1280	1270	1270	1240	1090	---					
17	1250	1270	1260	1250	1250	1100	---					
18	1250	1250	1270	1250	1240	1130	1130					
19	1250	1240	1300	1260	1200	1170	911					
20	1270	1260	1300	1260	1230	1120	847					
21	1290	1250	1260	1260	1260	---	782					
22	1300	1280	1250	1260	1250	1200	676					
23	1290	1290	1220	1260	1210	1200	---					
24	1290	1340	1220	1260	1120	1200	---					
25	1300	1380	1330	1250	1090	1200	694					
26	1300	1410	1370	1250	---	1180	739					
27	1260	1370	1340	1250	---	1210	790					
28	1290	1340	1320	1250	---	1200	---					
29	1310	1380	1360	1260	---	1210	---					
30	1310	1410	1380	1250	---	1210	---					
31	1300	---	1370	1250	---	1160	---					

E ESTIMATED.

09306061 PICEANCE CREEK ABOVE HUNTER CREEK, NEAR RIO BLANCO, CO--Continued

PH (STANDARD UNITS), WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	8.4	8.4	---	---	---	---	8.3	8.2	8.5	8.5	---	---
2	8.5	8.2	---	---	---	---	8.3	8.2	8.5	8.4	8.5	8.2
3	8.3	7.9	8.4	8.3	---	---	8.3	8.2	8.5	8.4	8.3	8.2
4	---	---	---	---	---	---	8.4	8.3	8.5	8.5	---	---
5	---	---	---	---	---	---	8.4	8.3	8.5	8.5	8.4	8.3
6	---	---	---	---	---	---	8.4	8.3	8.5	8.4	8.4	8.2
7	---	---	---	---	---	---	8.4	8.3	8.5	8.5	8.3	8.3
8	---	---	---	---	---	---	8.4	8.4	8.5	8.5	8.3	8.2
9	---	---	---	---	---	---	8.5	8.4	8.5	8.4	8.3	8.2
10	---	---	---	---	---	---	8.5	8.4	8.6	8.4	8.4	8.2
11	---	---	---	---	---	---	8.5	8.4	8.5	8.4	---	---
12	---	---	---	---	---	---	8.5	8.4	8.4	8.4	---	---
13	---	---	---	---	---	---	8.5	8.4	8.4	8.4	---	---
14	8.3	8.3	---	---	8.7	8.4	8.5	8.4	8.4	8.4	8.3	8.3
15	---	---	---	---	8.7	8.5	8.5	8.4	8.5	8.4	---	---
16	---	---	---	---	8.6	8.5	8.5	8.4	8.4	8.4	8.5	8.2
17	---	---	---	---	8.5	8.4	8.5	8.4	8.4	8.3	8.3	8.3
18	---	---	---	---	8.5	8.4	8.5	8.4	8.4	8.4	8.4	8.3
19	---	---	8.3	8.3	8.5	8.4	8.5	8.4	8.5	8.4	8.4	8.3
20	8.3	8.3	---	---	8.5	8.4	8.5	8.4	8.5	8.4	8.4	8.3
21	---	---	---	---	8.5	8.4	8.5	8.4	8.5	8.4	---	---
22	---	---	---	---	8.5	8.4	8.5	8.4	8.6	8.4	8.7	8.3
23	---	---	---	---	8.5	8.4	8.5	8.5	8.5	8.3	8.4	8.3
24	---	---	---	---	8.5	8.4	8.5	8.5	8.4	8.3	8.4	8.4
25	---	---	---	---	8.5	8.3	8.5	8.4	8.3	8.3	8.4	8.4
26	---	---	---	---	8.4	8.2	8.5	8.5	---	---	8.4	8.3
27	---	---	---	---	8.3	8.2	8.5	8.5	---	---	8.4	8.3
28	---	---	---	---	8.3	8.3	8.5	8.5	---	---	8.4	8.3
29	8.3	8.3	---	---	8.3	8.2	8.5	8.5	---	---	8.4	8.3
30	---	---	---	---	8.3	8.2	8.5	8.5	---	---	8.4	8.2
31	---	---	---	---	8.3	8.2	8.5	8.5	---	---	8.4	8.3

	APRIL		MAY	JUNE	JULY	AUGUST	SEPTEMBER
1	8.4	8.3					
2	8.4	8.3					
3	8.4	8.3					
4	8.4	8.3					
5	8.4	8.3					
6	8.4	8.2					
7	8.5	8.2					
8	8.4	8.3					
9	---	---					
10	8.4	8.3					
11	---	---					
12	---	---					
13	---	---					
14	---	---					
15	---	---					
16	---	---					
17	---	---					
18	---	---					
19	---	---					
20	---	---					
21	---	---					
22	---	---					
23	---	---					
24	---	---					
25	---	---					
26	---	---					
27	---	---					
28	---	---					
29	---	---					
30	---	---					
31	---	---					

09306061 PICEANCE CREEK ABOVE HUNTER CREEK, NEAR RIO BLANCO, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	11.0	6.5	8.5	5.5	4.5	2.5	.5	.0	3.0	.5	---	---
2	13.0	5.0	6.5	3.0	3.5	1.5	.5	.0	2.0	.0	8.5	2.5
3	13.0	5.5	6.5	1.0	3.5	.0	.5	.0	1.5	.0	7.0	2.0
4	13.5	6.0	7.0	2.0	4.0	.0	.5	.0	1.5	.5	---	---
5	9.5	6.0	6.5	1.5	4.0	.5	.5	.5	5.0	.0	5.5	1.5
6	12.0	4.0	7.0	1.5	4.5	1.0	2.5	.5	1.5	.0	10.0	3.0
7	11.5	4.5	7.0	2.5	2.5	.5	3.5	2.0	4.5	.5	6.5	1.5
8	8.5	5.0	6.0	4.0	2.0	.0	4.0	1.0	4.5	1.5	9.5	1.5
9	7.5	4.0	8.0	5.0	2.5	.0	2.5	.5	6.0	2.5	10.5	2.5
10	8.5	3.0	6.5	3.5	4.0	1.0	1.0	.0	4.0	.5	7.5	2.5
11	9.5	2.0	4.5	2.5	4.0	.5	3.0	.5	4.5	.0	---	---
12	9.5	3.0	4.5	.0	1.5	.0	3.0	.5	4.5	.0	---	---
13	10.5	4.5	4.5	.5	2.5	.0	2.0	.0	4.5	.0	---	---
14	10.5	3.5	3.5	.0	2.0	.0	3.0	.5	4.5	3.0	4.5	3.0
15	12.0	5.0	6.0	.0	2.5	.0	3.0	.5	6.5	.0	---	---
16	11.5	5.5	4.0	.0	4.5	2.0	3.5	.5	6.5	2.0	8.5	3.5
17	10.5	4.5	5.5	.0	3.5	.5	5.0	1.5	5.5	.0	7.0	3.0
18	11.5	5.5	6.0	2.5	2.5	.0	5.0	2.5	6.0	.5	6.0	3.5
19	8.5	4.0	5.5	2.5	1.5	.0	4.5	1.5	2.5	1.0	8.0	1.5
20	8.5	3.0	4.0	.0	2.0	.0	4.5	.5	7.5	1.0	3.5	1.5
21	9.5	3.0	4.0	.0	4.5	.5	4.5	1.5	6.0	.0	---	---
22	8.5	3.5	2.5	.5	4.0	2.0	5.0	2.0	7.5	.0	8.5	3.0
23	10.0	4.0	2.5	.0	5.0	1.5	4.0	1.5	8.0	.5	9.0	4.0
24	11.0	5.0	1.0	.0	1.0	.0	3.0	.0	7.5	.5	5.5	2.5
25	10.5	8.0	4.0	.5	.5	.0	5.5	2.0	5.5	1.5	6.0	3.0
26	8.5	6.5	4.0	.5	.5	.0	4.5	1.0	---	---	9.0	2.0
27	7.0	4.5	2.5	.0	.5	.0	5.0	2.0	---	---	8.5	2.0
28	8.0	3.0	3.5	.0	.5	.0	5.0	2.0	---	---	8.0	4.5
29	6.0	2.5	4.5	2.5	.5	.0	4.5	.5	---	---	12.0	3.5
30	7.0	5.0	4.5	2.5	.5	.0	4.5	1.0	---	---	13.0	4.0
31	8.0	6.5	---	---	.5	.0	3.0	.5	---	---	7.0	4.0

	APRIL		MAY	JUNE	JULY	AUGUST	SEPTEMBER
1	10.0	3.0					
2	7.5	2.5					
3	10.0	2.0					
4	8.5	2.0					
5	9.5	1.5					
6	11.0	.5					
7	10.5	1.5					
8	8.5	2.0					
9	---	---					
10	13.5	4.0					
11	---	---					
12	---	---					
13	---	---					
14	11.0	1.5					
15	---	---					
16	---	---					
17	---	---					
18	13.0	4.0					
19	9.5	5.5					
20	8.5	3.5					
21	10.0	5.0					
22	9.5	4.0					
23	---	---					
24	---	---					
25	---	---					
26	10.5	4.5					
27	9.5	6.0					
28	---	---					
29	---	---					
30	---	---					
31	---	---					

09306061 PICEANCE CREEK ABOVE HUNTER CREEK, NEAR RIO BLANCO, CO--Continued

OXYGEN, DISSOLVED (DO), MG/L, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	8.3	7.4	10.9	9.0	10.3	9.2	---	---			---	---
2	9.4	7.7	11.9	9.7	10.6	9.7	---	---			---	---
3	9.6	7.8	12.2	9.6	11.0	9.8	---	---			---	---
4	9.6	7.7	12.0	9.4	11.0	9.6	10.5	10.1			---	---
5	9.6	8.2	11.8	9.4	11.0	9.8	10.1	9.6			---	---
6	10.1	8.2	11.8	9.2	10.9	9.6	---	---			10.7	---
7	10.1	8.1	11.8	9.3	10.8	10.0	---	---			---	---
8	10.1	8.6	11.3	9.3	11.2	10.2	10.6	9.2			10.3	---
9	10.4	9.0	11.5	9.0	10.9	10.1	---	---			---	---
10	10.6	8.9	11.5	9.1	10.8	9.8	---	---			---	---
11	10.7	8.8	11.3	9.5	10.8	9.9	---	---			---	---
12	10.8	8.8	12.0	9.9	10.9	10.3	---	---			---	---
13	10.5	8.8	11.7	9.7	10.7	10.0	---	---			---	---
14	11.1	7.9	11.7	9.9	10.9	9.9	13.0	10.4			10.7	9.2
15	10.4	7.7	11.4	9.5	10.5	9.8	13.1	11.4			---	---
16	10.5	7.9	11.0	9.6	10.4	9.3	11.5	9.3			10.3	8.8
17	10.5	7.9	11.3	9.4	10.4	9.4	---	---			10.1	8.9
18	10.5	7.8	10.7	9.2	10.3	9.6	---	---			9.9	9.1
19	10.8	8.3	10.2	9.3	10.1	9.7	---	---			10.4	8.7
20	10.9	8.2	11.2	9.5	9.9	9.3	---	---			10.6	9.8
21	11.0	8.1	11.2	9.6	9.8	8.8	---	---			---	---
22	10.8	8.2	10.6	9.9	---	---	---	---			10.4	8.9
23	11.0	8.0	11.2	10.0	---	---	---	---			9.9	8.5
24	10.9	7.7	10.7	10.1	---	---	---	---			10.2	7.9
25	10.2	7.9	10.7	9.5	---	---	---	---			9.9	9.2
26	9.9	8.2	11.0	9.7	---	---	---	---			10.3	8.8
27	10.1	8.5	10.8	9.9	---	---	---	---			10.4	8.7
28	10.8	8.7	10.6	9.7	---	---	---	---			9.7	8.8
29	10.7	8.7	10.3	9.4	---	---	---	---			10.1	7.9
30	10.5	8.6	10.2	9.3	---	---	---	---			9.6	7.6
31	10.7	8.8	---	---	---	---	---	---			9.5	8.6

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	9.8	8.3										
2	9.9	8.5										
3	9.8	8.0										
4	9.9	8.4										
5	10.3	8.4										
6	10.4	8.1										
7	10.1	8.2										
8	9.9	8.6										
9	---	---										
10	9.6	7.6										
11	---	---										
12	---	---										
13	---	---										
14	9.8	6.9										
15	---	---										
16	---	---										
17	---	---										
18	---	---										
19	---	---										
20	---	---										
21	10.0	7.2										
22	---	---										
23	---	---										
24	---	---										
25	9.6	7.7										
26	---	---										
27	---	---										
28	---	---										
29	---	---										
30	---	---										
31	---	---										

09306061 PICEANCE CREEK ABOVE HUNTER CREEK, NEAR RIO BLANCO, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

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	19	264	14	16	---	2.7	15	---	4.0
2	17	---	12	16	---	2.7	15	---	4.0
3	16	---	12	15	63	2.6	14	---	3.8
4	15	---	12	14	---	2.5	13	---	4.0
5	15	---	12	14	---	2.5	14	---	4.5
6	16	---	14	14	---	2.5	15	---	5.0
7	15	---	13	14	---	2.5	14	---	5.0
8	15	329	13	14	---	2.5	14	---	5.0
9	15	---	11	14	---	2.5	15	---	6.0
10	15	233	9.0	15	---	2.6	15	---	5.0
11	15	---	9.0	17	---	2.7	15	---	5.0
12	15	---	9.0	15	---	2.6	14	---	5.5
13	15	---	8.5	14	---	2.5	13	---	6.0
14	15	---	8.0	14	---	2.5	12	188	6.1
15	14	---	7.0	14	---	2.8	12	---	6.5
16	14	---	7.0	16	---	3.4	12	136	4.4
17	14	---	7.0	14	---	2.8	13	---	5.5
18	14	---	6.0	15	---	2.6	13	157	5.5
19	13	---	6.0	15	---	2.6	13	---	5.5
20	13	---	5.0	14	---	2.5	12	---	5.0
21	12	---	5.0	15	---	2.6	12	---	4.0
22	12	---	4.0	16	---	2.8	13	---	3.5
23	12	---	4.0	14	---	3.0	14	---	4.0
24	12	---	4.0	15	---	4.0	12	---	3.5
25	13	---	4.0	15	---	3.4	8.9	133	3.2
26	13	---	4.0	15	---	3.2	9.0	168	4.0
27	15	---	4.0	14	---	3.8	9.0	140	3.4
28	15	---	4.0	15	---	4.0	9.9	---	3.5
29	14	---	3.0	14	---	2.8	9.2	---	3.2
30	15	---	3.0	15	---	2.8	9.5	---	3.5
31	15	---	3.0	---	---	---	9.5	154	4.0
TOTAL	448	---	236.5	442	---	85.0	389.0	---	141.1
		JANUARY			FEBRUARY			MARCH	
1	9.5	---	4.0	12	---	6.0	23	---	---
2	9.5	---	4.5	13	---	6.2	33	1640	202
3	9.5	---	5.0	12	---	6.0	24	900	58
4	12	213	6.9	13	---	5.9	20	500	27
5	12	---	6.9	13	---	5.9	21	360	20
6	12	---	6.9	12	---	5.5	23	660	41
7	12	---	6.9	13	---	5.7	20	360	19
8	12	---	6.9	13	---	5.7	19	300	15
9	13	---	6.5	12	168	5.4	19	280	14
10	13	---	6.5	12	---	5.5	22	655	49
11	13	---	6.5	12	---	5.5	34	1100	149
12	13	---	6.5	11	---	5.0	33	1470	150
13	13	---	6.5	12	---	5.5	32	1350	131
14	12	192	6.2	12	---	6.0	38	1820	209
15	12	---	6.0	12	---	6.0	41	2120	235
16	12	---	6.0	12	---	6.5	32	967	84
17	12	---	6.0	12	---	7.0	31	---	66
18	12	---	6.0	12	235	7.6	29	749	59
19	12	---	6.0	13	149	5.2	27	632	46
20	12	---	6.0	12	158	5.1	23	600	37
21	12	---	6.0	12	221	7.2	22	600	36
22	11	---	5.5	12	167	5.4	22	520	31
23	11	---	5.5	14	169	6.4	22	441	26
24	12	---	6.0	19	553	35	21	426	24
25	12	---	6.0	20	395	22	20	456	25
26	12	---	6.0	18	224	11	20	528	29
27	12	---	6.0	16	220	9.5	19	425	22
28	12	---	6.0	19	280	14	20	641	31
29	13	---	6.5	---	---	---	18	---	28
30	12	---	6.0	---	---	---	18	---	28
31	12	---	6.0	---	---	---	21	---	31
TOTAL	368.5	---	188.2	375	---	227.7	767	---	1922

09306061 PICEANCE CREEK ABOVE HUNTER CREEK, NEAR RIO BLANCO, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

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	24	---	33	140	3600	1360	310		
2	25	---	35	147	3500	1390	290		
3	25	---	35	149	3600	1450	260		
4	24	---	30	149	3300	1330	240		
5	23	---	25	151	3450	1410	210		
6	21	---	24	163	4000	1760	190		
7	20	407	22	175	4100	1940	180		
8	21	---	50	170	3200	1470	165		
9	23	---	75	190	3000	1540	160		
10	23	---	75	220	3700	2200	155		
11	24	---	100	260	6180	4340	160		
12	26	---	130	250	7650	4340	165		
13	26	---	130	240	3680	5160	150		
14	24	---	125	230	---	---	140		
15	23	---	120	230	---	---	130		
16	24	---	125	240	---	---	120		
17	25	---	130	230	---	---	120		
18	31	1700	142	240	---	---	110		
19	55	3400	505	260	---	---	105		
20	67	3100	561	250	---	---	98		
21	86	3300	775	260	---	---	92		
22	103	---	1150	290	---	---	88		
23	82	3450	763	320	---	---	86		
24	102	4500	1240	370	---	---	84		
25	124	5400	1810	400	---	---	94		
26	124	6200	2080	430	---	---	105		
27	110	5300	1570	420	---	---	110		
28	102	4700	1290	410	---	---	98		
29	97	4500	1180	400	---	---	88		
30	112	4450	1350	370	---	---	82		
31	---	---	---	350	---	---	---		
TOTAL	1596	---	15680	8104	---	29690	4385		

	JULY	AUGUST	SEPTEMBER
1	76	50	72
2	74	51	57
3	74	49	57
4	74	48	60
5	68	49	60
6	66	48	59
7	64	46	57
8	60	44	55
9	56	48	53
10	54	46	51
11	56	38	49
12	52	62	49
13	50	92	48
14	47	78	47
15	45	69	47
16	45	65	47
17	45	66	46
18	48	68	44
19	50	70	45
20	48	69	45
21	49	68	46
22	58	66	45
23	84	60	48
24	51	56	48
25	67	55	47
26	50	53	46
27	66	53	45
28	53	50	44
29	52	67	44
30	51	92	44
31	47	75	---
TOTAL	1780	1851	1505

YEAR	22010.5	48170.5

09306175 BLACK SULPHUR CREEK NEAR RIO BLANCO, CO

LOCATION.--Lat 39°52'16", long 108°17'18", in SE¼SW¼ sec.16, T.2 S., R.97 W., Rio Blanco County, Hydrologic Unit 14050006, on right bank 600 ft upstream from mouth, 0.2 mi west of Rock School, and 23.7 mi northwest of Rio Blanco.

DRAINAGE AREA.--103 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--December 1974 to September 1983 (discontinued).

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 6,130 ft, from topographic map.

REMARKS.--Records fair. Diversions for irrigation of about 160 acres above station.

AVERAGE DISCHARGE.--8 years, 8.07 ft³/s; 5,850 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 346 ft³/s, Aug. 29, 1983, gage height, 5.40, from rating curve extended above 171 ft³/s; minimum daily, 0.20 ft³/s May 12, 13, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 346 ft³/s at 1730 Aug. 29, gage height, 5.40 ft; minimum daily, 1.9 ft³/s Dec. 26.

REVISIONS.--The maximum discharge for the water year 1981 has been revised to 144 ft³/s July 18, 1981, gage height, 3.56 ft, this figure supersedes that published in the report for 1981.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.0	8.5	6.5	3.0	4.2	13	6.4	23	133	30	21	14
2	9.0	8.5	5.3	3.1	4.0	17	6.1	27	124	28	22	14
3	9.0	8.0	5.3	3.3	3.5	11	6.9	30	114	25	23	12
4	8.0	7.2	4.9	3.5	3.7	9.0	6.9	33	105	23	23	13
5	8.0	6.8	5.3	4.9	4.2	12	6.2	38	93	22	22	13
6	9.0	7.2	5.3	6.0	3.7	12	6.2	44	87	20	22	12
7	9.0	7.2	5.3	5.3	4.0	9.0	6.3	63	86	19	22	12
8	9.0	7.5	5.2	4.7	4.0	7.2	6.7	62	73	18	22	12
9	9.0	7.1	4.9	4.4	4.0	7.2	7.5	66	69	17	22	12
10	8.5	6.7	5.2	4.4	4.0	8.5	7.2	76	71	16	21	12
11	8.5	7.1	5.2	4.4	4.0	9.5	6.8	86	69	16	30	12
12	8.5	6.7	4.9	4.7	4.0	7.2	6.4	91	75	15	40	12
13	9.0	6.3	4.8	4.4	4.7	6.0	6.5	90	69	14	30	12
14	8.5	6.3	5.2	4.4	4.7	5.6	6.1	79	60	14	25	12
15	8.5	5.9	4.4	4.4	4.4	6.0	6.5	74	50	13	24	12
16	8.0	5.9	5.2	4.4	4.7	5.6	6.6	71	45	13	24	12
17	8.0	6.2	5.1	4.4	4.4	6.0	7.0	83	42	13	23	12
18	7.6	6.2	4.8	4.2	4.7	6.0	7.1	80	39	14	23	12
19	7.6	6.2	4.6	4.0	4.7	5.6	7.1	80	37	15	22	12
20	7.6	6.2	4.8	4.2	4.4	5.3	7.5	75	36	14	21	12
21	7.6	6.2	5.1	4.2	4.2	5.3	9.5	79	34	20	20	12
22	7.6	6.2	4.8	4.0	4.4	5.6	10	94	33	30	20	12
23	8.0	5.8	4.8	4.0	5.6	5.6	10	107	31	40	20	12
24	7.2	4.7	4.3	4.0	10	5.3	11	114	28	20	19	12
25	7.2	6.1	2.8	4.2	12	5.3	14	130	44	30	19	11
26	7.2	5.8	1.9	4.2	10	5.3	16	168	46	20	19	11
27	9.0	6.1	2.4	4.0	8.0	5.3	16	173	42	20	18	11
28	9.0	6.1	2.6	4.2	10	5.6	16	160	39	20	19	11
29	8.5	5.3	2.3	4.2	---	6.0	16	158	36	20	40	10
30	8.5	5.7	2.6	4.2	---	6.2	17	151	32	20	15	10
31	8.5	---	2.8	4.2	---	6.4	---	141	---	21	14	---
TOTAL	257.6	195.7	138.6	131.5	148.2	230.6	269.5	2746	1842	620	705	358
MEAN	8.31	6.52	4.47	4.24	5.29	7.44	8.98	88.6	61.4	20.0	22.7	11.9
MAX	9.0	8.5	6.5	6.0	12	17	17	173	133	40	40	14
MIN	7.2	4.7	1.9	3.0	3.5	5.3	6.1	23	28	13	14	10
AC-FT	511	388	275	261	294	457	535	5450	3650	1230	1400	710

CAL YR 1982 TOTAL 2023.22 MEAN 5.54 MAX 14 MIN .82 AC-FT 4010
WTR YR 1983 TOTAL 7642.70 MEAN 20.9 MAX 173 MIN 1.9 AC-FT 15160

09306175 BLACK SULPHUR CREEK NEAR RIO BLANCO, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--January 1975 to September 1981, November 1981 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: April 1975 to September 1981 (discontinued).
WATER TEMPERATURE: April 1975 to September 1981 (discontinued).
SUSPENDED-SEDIMENT DISCHARGE: October 1975 to September 1981 (discontinued).

INSTRUMENTATION.--Water-quality monitor since April 1975. Pumping sediment sampler since October 1975.

EXTREMES FOR PERIOD OF RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 2,920 micromhos Oct. 16, 1975; minimum, 200 micromhos July 17, 1981.
WATER TEMPERATURES: Maximum, 24.0°C July 30, 1976; minimum, 0.0°C many days during winter months some years.
SEDIMENT CONCENTRATIONS: Maximum daily, 19,800 mg/L Aug. 5, 1978; minimum daily, 7 mg/L estimated Oct. 1, 1979.
SEDIMENT LOADS: Maximum daily, 775 tons May 14, 1980; minimum daily, 0.01 ton May 12-14, 1978.

WATER QUALITY DATA, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	SPE-CIFIC CON-DUCT-ANCE LAB (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	NITRO-GEN DIS-SOLVED (MG/L AS N)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
NOV											
01...	1425	8.5	1400	1440	8.6	9.0	9.2	1.1	570	89	83
MAR											
02...	1915	34	490	508	8.1	3.0	10.3	1.4	180	42	17
31...	0901	6.6	1250	1240	--	5.0	--	.71	450	77	63

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)
NOV										
01...	130	2	1.9	450	380	22	.40	18	1000	1.4
MAR										
02...	33	1	3.6	160	87	7.8	.20	9.0	300	.40
31...	130	3	2.4	420	280	16	.60	15	840	1.1

DATE	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	BORON, DIS-SOLVED (UG/L AS B)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)
NOV										
01...	23	<.020	.150	.090	.91	1.0	<.010	.010	120	3900
MAR										
02...	27	<.020	.260	.240	.86	1.1	.170	.130	40	810
31...	15	<.020	.410	<.060	--	.30	.030	<.020	140	2300

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

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					MAY				
01...	1425	8.5	253	5.8	11...	1120	87	4130	970
MAR					AUG				
02...	1915	34	11400	1050	17...	0815	23	1140	71

09306200 PICEANCE CREEK BELOW RYAN GULCH, NEAR RIO BLANCO, CO

LOCATION.--Lat 39°55'16", long 108°17'49", in sec.32, T.1 S., R.97 W., Rio Blanco County, Hydrologic Unit 14050006, on left bank at downstream side of bridge, 40 ft downstream from Ryan Gulch, and 23 mi northwest of Rio Blanco.

DRAINAGE AREA.--506 mi^2.

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WDR CO-79-3: 1977(M).

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 6,070 ft, from topographic map.

REMARKS.--Records good. Diversions for irrigation above station.

AVERAGE DISCHARGE.--19 years, 22.6 ft^3/s; 16,370 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 480 ft^3/s, May 28, 1983, gage height, 7.81 ft; minimum daily, 0.15 ft^3/s June 7, 1981.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 100 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
May 28	1530	* 480	7.81	July 25	-	unknown	unknown
June 25	2330	173	5.03	July 27	0900	100	4.14
July 23	0130	174	5.04	Aug. 12	0400	122	4.41
July 23	1730	232	5.67	Aug. 29	2330	288	6.21

Minimum daily discharge, 14 ft^3/s Feb. 1, 3, 6, 10-14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30	25	23	22	14	42	34	144	361	91	71	72
2	30	25	21	22	15	47	34	147	320	82	73	71
3	27	24	20	22	14	38	35	149	304	81	72	69
4	25	24	20	22	15	29	34	150	265	82	71	73
5	25	23	21	21	17	31	32	152	239	81	71	73
6	28	24	21	21	14	31	30	160	218	77	70	71
7	26	24	21	22	16	30	31	179	203	69	68	69
8	26	24	21	22	15	26	32	183	182	68	66	67
9	26	24	20	21	15	27	34	183	174	65	70	65
10	26	24	21	21	14	28	34	215	171	59	67	63
11	25	26	21	21	14	35	34	265	163	60	68	61
12	25	25	20	20	14	40	36	298	176	59	86	61
13	26	24	20	20	14	38	35	277	186	56	105	60
14	25	24	20	20	14	42	34	255	160	55	88	59
15	24	22	20	19	15	47	33	249	149	50	79	59
16	23	22	20	19	16	42	34	250	144	48	75	59
17	23	23	20	19	16	38	35	274	141	48	74	58
18	22	23	20	18	16	37	38	246	131	53	76	56
19	23	24	21	18	17	34	54	270	116	55	77	57
20	23	23	20	17	17	32	65	287	112	53	75	57
21	22	23	20	16	16	30	75	277	106	52	73	58
22	23	23	20	16	17	30	91	311	98	67	71	57
23	23	24	20	17	19	30	84	345	95	124	66	60
24	22	25	20	16	30	29	89	382	94	71	62	60
25	22	26	19	17	32	28	103	431	104	97	61	58
26	22	22	20	16	28	28	118	461	127	70	59	57
27	25	21	20	16	22	27	118	464	129	86	58	56
28	24	21	20	16	25	27	111	462	110	73	69	55
29	23	22	21	15	---	28	108	447	101	72	102	54
30	23	22	21	15	---	28	116	425	98	71	95	54
31	24	---	22	15	---	33	---	396	---	68	74	---
TOTAL	761	706	634	582	491	1032	1741	8734	4977	2143	2292	1849
MEAN	24.5	23.5	20.5	18.8	17.5	33.3	58.0	282	166	69.1	73.9	61.6
MAX	30	26	23	22	32	47	118	464	361	124	105	73
MIN	22	21	19	15	14	26	30	144	94	48	58	54
AC-FT	1510	1400	1260	1150	974	2050	3450	17320	9870	4250	4550	3670

CAL YR 1982 TOTAL 6779.3 MEAN 18.6 MAX 39 MIN 4.6 AC-FT 13450
WTR YR 1983 TOTAL 25942.0 MEAN 71.1 MAX 464 MIN 14 AC-FT 51460

09306200 PICEANCE CREEK BELOW RYAN GULCH, NEAR RIO BLANCO, CO--Continued

WATER-QUALITY RECORDS

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

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: December 1979 to September 1982 (discontinued).
WATER TEMPERATURE: December 1979 to September 1982 (discontinued).
SUSPENDED-SEDIMENT DISCHARGE: October 1972 to current year.

INSTRUMENTATION.--Automatic pumping sediment sampler since October 1972. Water-quality monitor December 1979 to September 1982.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum 2,920 micromhos July 18, 1981; minimum, 520 micromhos July 18, 1981.
WATER TEMPERATURES: Maximum 26.5°C June 22, 1981; minimum, 0.0°C on many days during the winter period.
SEDIMENT CONCENTRATIONS: Maximum daily, 21,700 mg/L July 20, 1977; minimum daily, 8 mg/L Oct. 14, 1979, several days in Sept. 1981.
SEDIMENT LOADS: Maximum daily, 5,390 tons July 23, 1983; minimum daily, 0.05 ton Sept. 27, 30, 1981.

EXTREMES FOR CURRENT YEAR.--
SEDIMENT CONCENTRATIONS: Maximum daily, 4,975 mg/L July 22; minimum daily, 190 mg/L Jan. 30.
SEDIMENT LOADS: Maximum daily, 5,390 tons estimated July 23; minimum daily, 7.8 tons Feb. 3.

WATER QUALITY DATA, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	SPE-CIFIC CON-DUCT-ANCE LAB (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	NITRO-GEN DIS-SOLVED (MG/L AS N)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
DEC											
16...	1545	20	1490	1460	8.5	4.0	10.4	1.1	480	74	70
MAR											
02...	2000	69	800	787	8.3	5.5	9.5	2.0	260	47	34
APR											
07...	1410	28	1400	1400	8.2	6.5	9.7	.97	500	84	69

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)
DEC											
16...	160	3	2.1	506	310	14	1.1	16	950	1.3	51
MAR											
02...	78	2	5.8	275	140	11	.60	12	500	.67	93
APR											
07...	150	3	2.4	450	300	21	.70	16	920	1.1	69

DATE	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	BORON, DIS-SOLVED (UG/L AS B)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)
DEC										
16...	.440	<.020	.440	<.060	--	.80	.030	.020	190	2700
MAR										
02...	.230	.020	.250	.400	1.3	1.7	.120	.090	100	1400
APR										
07...	.470	<.020	.470	.100	.40	.50	.040	.020	160	2600

DATE	TIME	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	COBALT, DIS-SOLVED (UG/L AS CO)	IRON, DIS-SOLVED (UG/L AS FE)	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, DIS-SOLVED (UG/L AS NI)	ZINC, DIS-SOLVED (UG/L AS ZN)
MAY										
12...	0720	3	94	1	18	20	26	11	1	7

GREEN RIVER BASIN

09306200 PICEANCE CREEK BELOW RYAN GULCH, NEAR RIO BLANCO, CO--Continued

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)
OCT				
06...	1350	28	371	28
NOV				
03...	1645	23	281	17
DEC				
16...	1310	20	268	14
16...	1545	20	290	16
JAN				
07...	1345	22	231	14
20...	1530	18	458	22
MAR				
01...	1135	25	621	42
02...	2000	69	6970	1300
29...	1540	30	394	32
APR				
07...	1410	28	488	37
19...	1545	64	5190	897
APR				
22...	1500	103	3910	1090
MAY				
03...	1515	151	3830	1560
10...	1650	231	3090	1930
12...	0720	300	21300	17300
25...	1630	445	2280	2740
JUN				
16...	1415	145	5310	2080
JUL				
20...	1600	53	412	59
SEP				
02...	1552	71	663	127

09306200 PICEANCE CREEK BELOW RYAN GULCH, NEAR RIO BLANCO, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

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	30	---	35	25	---	20	23	---	18
2	30	---	35	25	---	20	21	---	17
3	27	---	30	24	290	19	20	---	16
4	25	---	30	24	---	18	20	---	16
5	25	---	30	23	---	18	21	---	15
6	28	375	28	24	---	19	21	---	15
7	26	---	26	24	---	20	21	---	15
8	26	---	26	24	---	20	21	---	15
9	26	---	26	24	---	20	20	---	18
10	26	---	26	24	---	20	21	---	16
11	25	---	24	26	---	21	21	---	16
12	25	---	24	25	---	20	20	---	20
13	26	---	24	24	---	19	20	---	21
14	25	---	24	24	---	22	20	---	20
15	24	---	22	22	---	24	20	---	21
16	23	---	22	22	---	22	20	280	15
17	23	---	22	23	---	20	20	---	15
18	22	---	20	23	---	18	20	---	15
19	23	---	20	24	---	19	21	---	18
20	23	---	20	23	---	18	20	---	18
21	22	---	20	23	---	18	20	---	15
22	23	---	20	23	---	18	20	---	13
23	23	---	20	24	---	19	20	---	13
24	22	---	20	25	---	20	20	---	13
25	22	---	20	26	---	22	19	---	13
26	22	---	20	22	---	20	20	---	13
27	25	---	20	21	---	22	20	---	13
28	24	---	20	21	---	25	20	---	13
29	23	---	18	22	---	20	21	---	13
30	23	---	18	22	---	20	21	---	13
31	24	---	18	---	---	---	22	---	13
TOTAL	761	---	728	706	---	601	634	---	485

		JANUARY			FEBRUARY			MARCH	
1	22	---	13	14	226	8.5	42	2850	476
2	22	---	13	15	192	7.8	47	3170	535
3	22	---	13	14	210	7.9	38	1920	240
4	22	---	13	15	220	8.9	29	1050	82
5	21	---	13	17	240	11	31	880	74
6	21	---	13	14	275	10	31	1100	92
7	22	225	13	16	330	14	30	990	80
8	22	---	13	15	350	14	26	605	42
9	21	---	13	15	300	12	27	---	42
10	21	---	13	14	265	10	28	1400	128
11	21	---	13	14	240	9.2	35	2820	317
12	20	---	15	14	265	10	40	2600	330
13	20	---	15	14	255	9.6	38	1650	170
14	20	---	15	14	255	9.6	42	1540	175
15	19	---	15	15	255	10	47	1540	195
16	19	---	15	16	375	16	42	1100	125
17	19	---	18	16	385	17	38	825	85
18	18	---	22	16	440	19	37	850	85
19	18	---	20	17	485	22	34	660	60
20	17	440	20	17	330	15	32	550	48
21	16	350	15	16	330	14	30	495	40
22	16	295	13	17	400	18	30	530	43
23	17	285	13	19	990	50	30	495	40
24	16	375	16	30	2840	316	29	485	38
25	17	340	15	32	2930	295	28	440	33
26	16	330	14	28	1300	112	28	440	33
27	16	310	13	22	790	49	27	440	32
28	16	275	12	25	1530	134	27	440	32
29	15	210	8.5	---	---	---	28	440	33
30	15	220	8.9	---	---	---	28	495	37
31	15	220	8.9	---	---	---	33	520	46
TOTAL	582	---	435.3	491	---	1229.5	1032	---	3788

09306200 PICEANCE CREEK BELOW RYAN GULCH, NEAR RIO BLANCO, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

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	34	522	48	144	---	1000	361	3240	3160
2	34	495	45	147	---	1200	320	---	2500
3	35	522	49	149	3360	1350	304	2640	2170
4	34	522	45	150	---	1400	265	2520	1800
5	32	550	48	152	4200	1720	239	2520	1630
6	30	550	43	160	---	1730	218	2400	1410
7	31	495	41	179	---	1800	203	2520	1380
8	32	440	38	183	---	1850	182	3180	1610
9	34	605	55	183	---	1800	174	2820	1320
10	34	550	50	215	3120	1810	171	3120	1440
11	34	594	55	265	2940	2100	163	3660	1610
12	36	792	77	298	2400	1930	176	3240	1540
13	35	704	66	277	2220	1660	186	3180	1330
14	34	605	56	255	2280	1570	160	3000	1300
15	33	605	54	249	---	1500	149	2820	1130
16	34	630	58	250	---	1500	144	2640	1120
17	35	630	60	274	1920	1420	141	---	1000
18	38	990	100	246	---	1200	131	---	900
19	54	3750	545	270	2100	1530	116	---	800
20	65	3960	632	287	1920	1490	112	---	800
21	75	4620	935	277	1860	1390	106	---	600
22	91	4840	1190	311	1680	1410	98	---	550
23	84	---	1100	345	1800	1680	95	---	500
24	89	---	1130	382	1980	2040	94	---	500
25	103	4560	1270	431	2160	2510	104	---	750
26	118	4080	1300	461	2880	3580	127	---	1000
27	118	3360	1070	464	2940	3680	129	---	600
28	111	3240	970	462	3180	4000	110	---	475
29	108	2640	770	447	3360	4060	101	---	400
30	116	2640	830	425	3600	4130	98	1360	360
31	---	---	---	396	3540	3780	---	---	---
TOTAL	1741	---	12730	8734	---	63820	4977	---	35685
		JULY			AUGUST			SEPTEMBER	
1	91	1000	246	71	500	96	72	600	117
2	82	750	166	73	450	89	71	750	144
3	81	---	160	72	450	87	69	500	93
4	82	---	160	71	500	96	73	450	89
5	81	---	150	71	450	86	73	300	59
6	77	---	140	70	500	94	71	---	55
7	69	---	120	68	500	92	69	---	45
8	68	---	120	66	450	80	67	---	45
9	65	100	18	70	480	91	65	45	7.9
10	59	100	16	67	550	99	63	45	7.7
11	60	100	16	68	450	83	61	40	6.6
12	59	100	16	86	1480	344	61	40	6.6
13	56	75	11	105	3150	893	60	40	6.5
14	55	75	11	88	1170	278	59	40	6.4
15	50	75	10	79	1100	235	59	40	6.4
16	48	60	7.8	75	1100	223	59	40	6.4
17	48	---	60	74	800	160	58	40	6.3
18	53	---	55	76	750	154	56	40	6.0
19	55	---	55	77	700	146	57	40	6.2
20	53	400	57	75	650	132	57	40	6.2
21	52	500	70	73	650	128	58	40	6.3
22	67	4980	901	71	600	115	57	40	6.2
23	124	---	5390	66	625	111	60	45	7.3
24	71	---	200	62	550	92	60	45	7.3
25	97	---	1500	61	---	95	58	45	7.0
26	70	790	149	59	450	72	57	40	6.2
27	86	2100	488	58	475	74	56	40	6.0
28	73	700	138	69	425	79	55	40	5.9
29	72	650	126	102	7740	2130	54	35	5.1
30	71	550	105	95	---	750	54	35	5.1
31	68	500	92	74	900	180	---	---	---
TOTAL	2143	---	10753.8	2292	---	7384	1849	---	788.6
YEAR	25942		138428.2						

09306222 PICEANCE CREEK AT WHITE RIVER, CO

LOCATION.--Lat 40°05'16", long 108°14'35", in SW¼NE¼ sec.2, T.1 N., R.97 W., Rio Blanco County, Hydrologic Unit 14050006, on left bank 900 ft upstream from mouth, 1.0 mi west of White River City, and 17 mi west of Meeker.

DRAINAGE AREA.--652 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1964 to September 1966, October 1970 to current year.

REVISED RECORDS.--WDR-CO-82-3: drainage area.

GAGE.--Water-stage recorder. Altitude of gage is 5,705 ft, from topographic map. Oct. 1, 1964, to Sept. 30, 1966, and Oct. 1, 1970, to July 12, 1974, at several sites 1.1 mi upstream at different datums.

REMARKS.--Records good except those for winter period and those for period of no gage-height, which are poor. Diversions for irrigation of about 5,500 acres above station.

AVERAGE DISCHARGE.--14 years, 29.2 ft³/s; 21,160 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 628 ft³/s, Sept. 7, 1978, gage height, 7.04 ft, on basis of slope-area measurement of peak flow; minimum daily, 0.50 ft³/s July 21, 22, 1966.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 100 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
May 28	----	* 560	unknown	July 24	0200	251	4.40
June 24	2100	232	4.65	July 26	0200	236	4.27
June 26	0900	255	4.76	Aug. 12	1030	163	3.35
July 23	1000	223	4.36	Aug. 30	0700	330	4.00

Minimum daily discharge, 13 ft³/s Dec. 25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36	32	29	26	17	60	37	206	440	142	82	80
2	36	32	27	26	18	70	37	251	420	126	83	79
3	32	30	25	25	17	62	39	214	390	120	85	72
4	31	29	25	25	18	40	38	197	360	115	86	76
5	31	28	25	24	21	49	37	208	340	117	81	73
6	34	28	25	25	18	42	34	209	320	116	80	71
7	31	28	25	26	20	42	34	249	300	114	78	71
8	31	28	22	26	18	35	34	260	290	103	76	68
9	32	28	23	25	17	34	37	250	278	104	80	68
10	31	29	25	25	16	33	38	278	265	93	77	67
11	30	34	24	24	17	39	37	374	265	89	78	66
12	30	31	20	24	17	49	40	380	253	92	120	65
13	31	29	21	24	17	43	39	324	270	86	147	64
14	30	27	20	23	17	46	38	282	280	82	134	64
15	29	24	18	23	18	54	36	258	250	74	110	62
16	28	24	20	23	19	47	37	246	225	69	102	61
17	27	26	21	23	19	43	37	280	205	65	100	61
18	27	27	19	22	20	42	41	270	195	64	100	60
19	28	29	15	22	21	39	52	257	185	60	103	60
20	27	29	17	20	22	38	70	298	180	60	100	60
21	26	28	23	19	24	36	85	332	165	60	98	61
22	26	27	25	20	26	36	105	355	145	76	95	63
23	26	26	26	19	30	36	114	409	135	152	89	67
24	26	17	22	20	40	36	114	446	130	137	82	70
25	26	29	13	19	54	35	141	495	157	84	84	66
26	26	27	17	19	47	35	159	510	212	105	82	64
27	29	24	23	19	36	34	158	520	224	95	78	64
28	31	25	24	19	57	34	164	525	194	87	80	62
29	29	28	25	18	---	34	162	505	173	82	83	60
30	28	27	25	18	---	33	173	490	160	82	161	61
31	31	---	26	18	---	34	---	470	---	78	86	---
TOTAL	916	830	695	689	681	1290	2167	10348	7406	2929	2920	1986
MEAN	29.5	27.7	22.4	22.2	24.3	41.6	72.2	334	247	94.5	94.2	66.2
MAX	36	34	29	26	57	70	173	525	440	152	161	80
MIN	26	17	13	18	16	33	34	197	130	60	76	60
AC-FT	1820	1650	1380	1370	1350	2560	4300	20530	14690	5810	5790	3940

CAL YR 1982 TOTAL 7950.3 MEAN 21.8 MAX 70 MIN 1.2 AC-FT 15770
WTR YR 1983 TOTAL 32857.0 MEAN 90.0 MAX 525 MIN 13 AC-FT 65170

NOTE.--NO GAGE-HEIGHT RECORD MAY 26 TO JUNE 24.

09306222 PICEANCE CREEK AT WHITE RIVER, CO--Continued

WATER-QUALITY RECORDS

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

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: January 1971 to June 1974, May 1975 to September 1983 (discontinued).
WATER TEMPERATURES: January 1971 to September 1974, May 1975 to September 1983 (discontinued).
SUSPENDED-SEDIMENT DISCHARGE: March 1974 to current year.

INSTRUMENTATION.--Water-quality monitor since May 1974. Pumping sediment sampler since March 1974.

REMARKS.--Maximum and minimum values of specific conductance available in district office. Specific conductance values of 10,000 micromhos represent values of 10,000 micromhos or higher due to instrument limitations.
EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum daily, 10,000 micromhos June 18, 1981; minimum daily, 460 micromhos Feb. 28 and Mar. 2, 1983.
WATER TEMPERATURES: Maximum, 32.0°C July 14, 1978; minimum, 0.0°C many days during winter months.
SEDIMENT CONCENTRATIONS: Maximum daily, 25,000 mg/L estimated Sept. 7, 1978; 4 mg/L Oct. 2, 1977.
SEDIMENT LOADS: Maximum daily, 6,095 tons estimated May 28, 1983; minimum daily, 0.10 ton June 22, 1978.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 3,100 micromhos Dec. 26; minimum, 460 micromhos Feb. 28 and Mar. 2.
WATER TEMPERATURE: Maximum, 23.5°C Aug. 7 and 10; minimum, 0.0°C many days during November to April.
SEDIMENT CONCENTRATIONS: Maximum daily, 7,100 mg/L July 23; minimum daily, 85 mg/L Jan. 4.
SEDIMENT LOADS: Maximum daily, 6,095 tons estimated May 28; minimum daily, 5.7 tons Jan. 4.

WATER QUALITY DATA, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	SPE-CIFIC CON-DUCT-ANCE LAB (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	NITRO-GEN DIS-SOLVED (MG/L AS N)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
DEC											
16...	1500	E20	1800	1730	8.7	.0	11.5	1.4	460	67	71
MAR											
01...	1715	72	1070	1070	8.4	6.0	9.7	2.3	250	45	34
31...	1305	34	--	1820	--	--	--	2.3	470	69	72
MAY											
04...	1415	210	1070	1080	8.2	11.5	8.8	1.7	340	60	46
12...	0925	351	950	970	8.5	5.5	9.4	3.0	320	56	43
27...	1335	E520	960	935	8.4	17.0	7.4	3.2	310	59	40
AUG											
01...	1310	84	1490	1400	8.3	18.5	7.9	2.2	430	67	63
17...	1035	101	1440	1410	8.3	16.5	7.7	2.0	440	69	64

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)
DEC											
16...	260	5	2.2	628	330	28	1.5	16	1200	1.6	--
MAR											
01...	170	5	5.1	410	160	26	.80	12	700	.95	137
31...	270	6	2.8	640	340	35	.90	15	1200	1.6	109
MAY											
04...	130	3	2.9	397	200	16	.60	16	710	.97	403
12...	110	3	2.9	348	190	14	.50	15	650	.88	616
27...	91	2	3.2	315	190	11	.50	15	610	.83	--
AUG											
01...	170	4	2.8	464	310	19	.70	16	930	1.3	211
17...	180	4	2.8	478	300	19	.70	17	940	1.3	257

E ESTIMATED.

09306222 PICEANCE CREEK AT WHITE RIVER, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	NITROGEN, NITRATE DISSOLVED (MG/L AS N)	NITROGEN, NITRITE DISSOLVED (MG/L AS N)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N)	NITROGEN,AMMONIA + ORGANIC DIS. (MG/L AS N)	PHOSPHORUS, DISSOLVED (MG/L AS P)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	BORON, DISSOLVED (UG/L AS B)	STRONTIUM, DISSOLVED (UG/L AS SR)
DEC										
16...	.480	<.020	.480	.150	.75	.90	.050	.030	240	2500
MAR										
01...	.370	.020	.390	.350	1.6	1.9	.150	.110	150	1200
31...	1.10	<.020	1.10	.120	1.1	1.1	.080	.030	250	2300
MAY										
04...	1.20	<.020	1.20	.100	.40	.50	.040	.030	140	1300
12...	1.87	.030	1.90	.180	.92	1.1	.040	.030	120	1100
27...	2.14	.060	2.20	.080	.92	1.0	.030	.030	110	1300
AUG										
01...	1.30	<.020	1.30	.060	.84	.90	.060	.040	210	2000
17...	1.30	<.020	1.30	.090	.61	.70	.070	.040	210	2100

DATE	TIME	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, DISSOLVED (UG/L AS BA)	COBALT, DISSOLVED (UG/L AS CO)	IRON, DISSOLVED (UG/L AS FE)	LITHIUM DISSOLVED (UG/L AS LI)	MANGANESE, DISSOLVED (UG/L AS MN)	MOLYBDENUM, DISSOLVED (UG/L AS MO)	NICKEL, DISSOLVED (UG/L AS NI)	ZINC, DISSOLVED (UG/L AS ZN)
MAY										
04...	1415	3	110	<1	6	23	14	10	11	4

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS)	SEDIMENT, SUSPENDED (MG/L)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT					
06...	1128	35	368	35	--
NOV					
02...	1103	32	461	40	--
DEC					
16...	1500	30	817	66	--
JAN					
04...	1355	E14	85	--	--
05...	1400	E25	161	--	--
FEB					
24...	1105	32	1840	158	--
25...	1420	44	4450	533	--
MAR					
02...	1815	68	558	103	--
29...	1125	35	5930	552	--
APR					
20...	1255	71	3670	699	--
APR					
27...	1330	166	5340	2390	75
MAY					
04...	1035	21	3840	213	75
04...	1415	210	3620	2050	75
10...	1250	277	4360	3260	--
12...	0925	351	4610	4370	--
25...	1100	491	4390	5820	--
JUN					
16...	1645	E200	1940	--	--
24...	1245	111	1180	354	--
JUL					
20...	1320	60	664	108	--
AUG					
01...	1305	84	1710	388	--
17...	1030	101	1470	401	--

E ESTIMATED.

09306222 PICEANCE CREEK AT WHITE RIVER, CO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1620	1800	---	2300	1890	1180	1680	1010	940	1480	1380	1430
2	1620	1830	---	2200	1980	885	1720	1050	973	1520	1400	1430
3	1680	1820	---	2120	2050	1060	1690	1040	993	1530	---	---
4	1730	1830	---	2070	2060	1570	1740	1040	1020	1490	---	---
5	1760	1770	---	1990	1820	1580	1770	1060	1050	1510	---	---
6	1730	1730	---	1900	1840	1690	1810	1060	1060	1510	---	---
7	1770	1800	---	1710	1880	---	1780	1070	1080	1500	---	---
8	1760	1730	1750	1690	1760	---	1730	1120	1100	1520	---	---
9	1740	1740	1830	1720	1710	1850	1730	1020	1120	1510	---	---
10	1720	1710	1740	1770	1740	1810	1730	977	1140	1540	---	---
11	1650	1520	1800	1910	1940	1620	1690	1020	1160	1540	---	---
12	1620	1460	1880	1850	1970	1370	1680	975	1180	1500	---	---
13	1630	1640	1800	1930	1910	1450	1680	970	1150	1520	---	---
14	1610	1680	1710	2000	1750	1530	1650	984	1190	1500	---	---
15	---	1750	1940	1900	1780	1530	1660	978	1210	1490	---	---
16	---	1820	1640	1880	1620	1580	1650	1000	1230	1490	---	---
17	---	1840	1490	1810	1310	1670	1620	974	1260	1490	---	---
18	---	1900	1880	1680	1890	1630	1560	---	1280	1470	---	---
19	---	1900	1970	1710	1840	1660	1430	1020	1300	---	---	---
20	1830	1830	2000	1790	1840	1750	1170	993	1290	1700	---	---
21	1800	1840	1820	1740	1860	1790	1110	1010	1300	1670	---	---
22	1820	1810	1780	1740	1850	1790	1030	1000	1320	1610	---	---
23	1810	1770	1830	1770	1760	1790	1010	993	1330	1290	---	1540
24	1770	2110	1810	1870	1460	1790	1050	918	1320	1280	---	1530
25	1760	1810	2250	1780	1150	1750	966	1000	1320	1410	---	1530
26	1750	1710	2600	1780	1310	1730	927	962	1210	1270	---	1540
27	1790	1810	2510	1810	1590	1730	957	941	1280	1300	---	1550
28	1780	1940	2250	1780	1300	---	987	---	1330	1380	---	1540
29	1810	1820	2160	1830	---	1760	998	863	1360	1440	---	1560
30	1800	1840	2280	1820	---	1770	1020	886	1420	1430	1240	1560
31	1790	---	2400	1870	---	1730	---	925	---	1430	1400	---
MEAN	1740	1790	1960	1860	1750	1610	1440	995	1200	1480	1360	1520

WTR YR 1983 MEAN 1570 MAX 2600 MIN 863

09306222 PICEANCE CREEK AT WHITE RIVER, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	12.0	7.0	8.5	5.0	3.5	1.5	.0	.0	.0	.0	6.5	3.0
2	13.5	6.0	7.0	2.5	2.0	.5	.0	.0	.0	.0	6.0	1.5
3	13.0	6.0	6.0	.0	2.5	.0	.0	.0	.0	.0	4.5	2.5
4	14.0	6.0	6.5	.5	1.5	.0	.0	.0	.0	.0	6.0	2.0
5	10.5	6.0	6.0	.0	2.0	.0	.0	.0	.0	.0	4.0	2.0
6	12.5	5.5	6.5	.0	3.0	.0	.0	.0	.0	.0	8.0	2.0
7	11.5	4.5	6.0	.5	1.0	.0	.0	.0	.0	.0	5.5	3.0
8	8.5	5.0	5.0	1.0	.0	.0	.0	.0	.0	.0	8.0	2.5
9	8.0	4.5	7.0	.0	.0	.0	.0	.0	.0	.0	8.5	2.5
10	9.5	3.0	6.5	.5	1.0	.0	.0	.0	.0	.0	11.0	2.5
11	9.5	1.5	4.0	1.5	3.0	.0	.0	.0	.0	.0	11.0	4.0
12	9.0	3.5	4.0	.0	.5	.0	.0	.0	.0	.0	11.0	5.5
13	11.5	5.5	3.5	.0	.0	.0	.0	.0	.0	.0	9.5	4.5
14	11.5	4.0	2.0	.0	.0	.0	.0	.0	.0	.0	7.5	4.5
15	12.5	4.5	.5	.0	.0	.0	.0	.0	.0	.0	4.5	2.5
16	12.5	5.5	1.0	.0	.0	.0	.0	.0	.0	.0	6.5	.5
17	11.5	4.5	2.0	.0	.0	.0	.0	.0	2.0	.0	5.5	3.5
18	12.0	5.0	5.0	.0	.0	.0	.0	.0	4.0	.5	4.0	1.5
19	9.5	3.0	5.0	2.0	.0	.0	.0	.0	2.5	1.5	7.0	.0
20	9.0	2.0	3.5	.0	.0	.0	.0	.0	5.0	.0	7.0	1.0
21	9.5	2.0	2.0	.0	.0	.0	.0	.0	4.5	.0	7.5	.5
22	7.5	2.0	.5	.0	.0	.0	.0	.0	5.0	.0	7.5	2.0
23	9.5	2.0	.5	.0	2.0	.0	.0	.0	6.0	.0	9.5	3.5
24	11.0	4.0	.0	.0	1.0	.0	.0	.0	6.0	.5	5.5	2.0
25	10.5	5.0	.0	.0	.0	.0	.0	.0	3.5	.0	4.5	1.5
26	8.5	6.0	.0	.0	.0	.0	.0	.0	3.5	1.0	7.5	.5
27	7.5	4.5	.0	.0	.0	.0	.0	.0	5.0	1.5	7.5	1.5
28	7.5	2.0	.0	.0	.0	.0	.0	.0	5.5	1.0	7.0	3.5
29	5.0	2.0	1.5	.0	.0	.0	.0	.0	---	---	10.0	2.5
30	7.0	4.0	3.5	1.0	.0	.0	.0	.0	---	---	12.0	4.0
31	7.0	6.0	---	---	.0	.0	.0	.0	---	---	6.5	3.0
MONTH	14.0	1.5	8.5	.0	3.5	.0	.0	.0	6.0	.0	12.0	.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	8.0	2.0	8.5	6.0	14.0	9.0	18.5	12.0	20.0	14.0	18.0	12.0
2	7.5	2.0	10.5	5.0	14.0	10.5	18.5	12.0	19.0	14.0	20.0	14.0
3	8.5	1.0	11.5	6.5	16.0	9.5	20.5	13.5	21.0	14.5	---	---
4	7.5	1.0	14.5	7.0	14.0	11.0	20.5	11.0	20.0	15.0	---	---
5	8.5	.5	13.5	8.5	15.0	10.0	22.0	11.0	22.5	15.0	---	---
6	9.0	.0	10.5	7.5	15.0	9.5	19.5	14.0	22.5	16.0	---	---
7	10.0	.5	14.5	5.5	18.0	11.0	21.0	14.0	23.5	16.5	---	---
8	9.0	2.0	14.5	8.0	15.5	11.5	20.0	14.0	22.0	16.5	---	---
9	12.5	2.5	15.5	8.0	15.5	10.0	19.0	14.0	23.0	15.5	---	---
10	12.0	1.0	15.0	9.0	17.5	10.5	20.5	13.5	23.5	17.0	---	---
11	10.5	6.0	12.0	8.0	17.0	12.0	20.0	11.0	21.0	17.0	---	---
12	10.5	1.0	11.0	5.5	14.5	10.0	20.0	10.0	19.0	15.5	---	---
13	9.5	2.5	12.5	6.0	13.5	8.5	21.0	11.0	21.5	15.5	---	---
14	9.5	1.0	9.5	6.5	16.5	9.0	18.0	11.0	20.5	16.0	---	---
15	11.5	2.0	12.0	6.0	17.0	11.0	18.0	11.5	21.0	16.0	---	---
16	13.0	2.5	10.5	6.5	19.0	12.0	20.0	10.5	20.5	16.0	16.5	9.0
17	14.5	3.5	---	---	19.5	12.0	20.0	11.0	21.0	15.0	16.5	10.0
18	12.5	4.5	---	---	20.0	13.0	21.0	10.0	20.5	16.0	16.0	10.0
19	12.0	7.5	---	---	20.0	13.0	---	---	19.5	15.5	15.0	10.5
20	11.0	6.0	14.0	7.0	19.5	12.5	---	---	17.5	14.0	12.5	7.0
21	9.5	7.0	15.5	8.0	19.5	12.0	22.5	14.0	19.0	13.0	12.5	4.5
22	10.5	5.5	17.0	9.5	20.0	12.0	20.5	15.0	18.0	13.0	13.0	5.5
23	11.5	6.5	18.5	10.0	18.5	12.5	17.5	14.0	18.5	12.0	11.5	7.5
24	14.0	7.0	19.5	11.0	18.5	14.0	19.0	13.0	17.0	12.0	14.0	9.5
25	12.5	8.0	19.5	11.5	19.5	14.0	20.0	14.0	17.5	12.0	15.5	8.5
26	11.0	6.5	19.5	12.0	17.0	12.5	19.5	14.5	19.0	12.0	14.5	9.0
27	10.5	7.0	20.0	12.5	17.0	13.0	17.5	14.0	18.5	12.0	15.0	11.0
28	9.5	7.5	20.0	13.0	20.5	13.0	20.0	12.0	17.0	13.0	14.5	9.0
29	9.5	6.5	18.0	11.5	18.5	13.0	21.0	13.5	15.0	12.5	14.0	10.0
30	9.5	7.0	18.0	13.0	19.0	12.0	20.5	14.0	18.0	10.0	11.5	9.5
31	---	---	14.5	10.0	---	---	19.0	14.5	19.0	12.0	---	---
MONTH	14.5	.0	20.0	5.0	20.5	8.5	22.5	10.0	23.5	10.0	20.0	4.5
YEAR	23.5	.0										

09306222 PICEANCE CREEK AT WHITE RIVER, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

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	36	---	49	32	470	41	29	---	45
2	36	506	49	32	305	26	27	623	45
3	32	---	45	30	369	30	25	---	45
4	31	---	40	29	---	31	25	---	45
5	31	---	40	28	---	30	25	---	45
6	34	438	40	28	---	30	25	---	45
7	31	272	23	28	---	35	25	---	50
8	31	---	23	28	---	35	22	---	50
9	32	---	25	28	---	35	23	---	50
10	31	339	28	29	---	45	25	---	50
11	30	---	28	34	---	55	24	---	50
12	30	---	28	31	---	50	20	---	50
13	31	331	28	29	---	55	21	---	55
14	30	292	24	27	---	50	20	---	55
15	29	---	22	24	---	45	18	---	55
16	28	---	20	24	706	46	20	817	55
17	27	232	18	26	875	61	21	---	50
18	27	---	18	27	1110	81	19	---	50
19	28	276	19	29	421	33	15	---	45
20	27	---	22	29	596	47	17	---	45
21	26	---	21	28	460	35	23	---	50
22	26	---	20	27	411	30	25	---	50
23	26	258	38	26	800	56	26	---	45
24	26	---	---	17	650	30	22	---	40
25	26	---	---	29	600	47	13	---	15
26	26	---	---	27	1250	91	17	---	18
27	29	---	---	24	---	50	23	---	20
28	31	---	---	25	800	54	24	---	5.5
29	29	264	21	28	650	49	25	---	5.5
30	28	271	20	27	---	45	25	---	5.5
31	31	450	38	---	---	---	26	---	5.5
TOTAL	916	---	747	830	---	1348	695	---	1240.0
		JANUARY			FEBRUARY			MARCH	
1	26	---	5.5	17	220	10	60	4800	833
2	26	---	5.5	18	500	24	70	5250	1040
3	25	---	5.5	17	550	25	62	4900	855
4	25	85	5.7	18	---	25	40	4980	538
5	24	100	6.5	21	---	20	49	2800	370
6	25	138	9.3	18	---	20	42	2790	316
7	26	125	8.8	20	---	15	42	2610	296
8	26	159	11	18	---	10	35	1360	129
9	25	140	9.5	17	209	9.6	34	942	86
10	25	120	8.1	16	190	8.2	33	1040	93
11	24	118	7.6	17	205	9.4	39	3200	337
12	24	110	7.1	17	230	11	49	4000	529
13	24	100	6.5	17	---	11	43	2440	283
14	23	140	8.7	17	---	14	46	2320	288
15	23	120	7.5	18	---	15	54	2140	312
16	23	114	7.1	19	---	20	47	1730	220
17	23	118	7.3	19	---	50	43	1360	158
18	22	120	7.1	20	---	55	42	1270	144
19	22	140	8.3	21	---	57	39	1140	120
20	20	140	7.6	22	---	60	38	957	98
21	19	170	9.6	24	---	65	36	1050	102
22	20	---	8.5	26	---	70	36	994	97
23	19	220	11	30	---	100	36	945	92
24	20	210	11	40	---	199	36	808	79
25	19	240	12	54	---	642	35	747	71
26	19	324	17	47	---	406	35	828	78
27	19	225	12	36	---	300	34	724	66
28	19	180	9.2	57	4910	1060	34	740	68
29	18	208	10	---	---	---	34	720	66
30	18	---	8.8	---	---	---	33	---	65
31	18	190	9.2	---	---	---	34	---	65
TOTAL	689	---	268.5	681	---	3311.2	1290	---	7894

09306222 PICEANCE CREEK AT WHITE RIVER, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

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	37	---	70	206	---	1650	440	---	4500
2	37	---	70	251	---	1800	420	---	4400
3	39	---	75	214	---	1900	390	---	4000
4	38	---	75	197	3960	2110	360	---	3600
5	37	---	75	208	3840	2160	340	---	3400
6	34	---	75	209	3900	2200	320	---	3200
7	34	---	75	249	4140	2780	300	---	3000
8	34	---	75	260	3600	2530	290	---	2700
9	37	---	75	250	4560	3080	278	---	2600
10	38	---	75	278	4980	3740	265	---	2400
11	37	---	75	374	5220	5270	265	---	2400
12	40	---	85	380	4200	4310	253	---	2200
13	39	900	95	324	3840	3360	270	---	2360
14	38	986	101	282	3420	2600	280	---	2400
15	36	973	95	258	2880	2010	250	---	1400
16	37	928	93	246	3120	2070	225	2110	1280
17	37	950	95	280	3120	2360	205	1640	908
18	41	1180	131	270	---	2400	195	1690	890
19	52	2400	337	257	3590	2490	185	1450	724
20	70	3300	624	298	3420	2750	180	1390	676
21	85	4840	1110	332	3620	3240	165	1380	615
22	105	4730	1340	355	3660	3510	145	1360	532
23	114	4510	1390	409	3930	4340	135	1180	430
24	114	3850	1160	446	4460	5370	130	2600	913
25	141	---	1400	495	4760	6360	157	2180	924
26	159	---	1600	510	4370	6020	212	5720	3270
27	158	3630	1550	520	4290	6020	224	3510	2120
28	164	---	1550	525	---	6100	194	2240	1170
29	162	---	1550	505	---	6000	173	1780	831
30	173	---	1550	490	---	5500	160	1560	674
31	---	---	---	470	---	5000	---	---	---
TOTAL	2167	---	16671	10348	---	111030	7406	---	60517
		JULY			AUGUST			SEPTEMBER	
1	142	1550	594	82	1160	257	80	800	173
2	126	1290	438	83	1080	242	79	650	139
3	120	1130	365	85	803	184	72	550	107
4	115	---	315	86	---	---	76	1580	324
5	117	1030	324	81	---	---	73	700	138
6	116	1210	378	80	---	---	71	645	124
7	114	---	350	78	---	---	71	525	101
8	103	---	300	76	686	141	68	525	96
9	104	---	325	80	725	157	68	---	85
10	93	---	285	77	728	151	67	450	81
11	89	820	197	78	---	160	66	390	69
12	92	---	200	120	2490	875	65	358	63
13	86	---	190	147	5030	2030	64	358	62
14	82	---	185	134	2780	1030	64	310	54
15	74	---	165	110	1230	365	62	292	49
16	69	---	145	102	1060	292	61	289	48
17	65	---	135	100	910	246	61	246	41
18	64	764	132	100	820	221	60	221	36
19	60	---	120	103	843	234	60	248	40
20	60	673	109	100	772	208	60	235	38
21	60	592	96	98	743	197	61	261	43
22	76	1200	246	95	659	169	63	270	46
23	152	7100	2910	89	625	150	67	274	50
24	137	4500	1660	82	563	125	70	320	60
25	84	1500	340	84	---	135	66	295	53
26	105	5630	1930	82	521	115	64	272	47
27	95	4730	1250	78	551	116	64	289	50
28	87	---	500	80	750	162	62	314	53
29	82	---	319	83	670	150	60	294	48
30	82	---	319	161	3830	2440	61	287	47
31	78	---	244	86	177	41	---	---	---
TOTAL	2929	---	15066	2920	---	10593	1986	---	2365
YEAR	32857		231050.7						

09306224 WHITE RIVER ABOVE CROOKED WASH, NEAR WHITE RIVER CITY, CO

LOCATION.--Lat 40°09'44", long 108°20'33", in NW¼NW¼ sec.12, T.2 N., R.98 W., Rio Blanco county, Hydrologic Unit 14050005, on right bank 15 ft upstream from County Road 77 bridge, 2.8 mi upstream from Crooked Wash, 9.8 mi downstream from Piceance Creek and 8.0 mi northwest of White River City.

DRAINAGE AREA.--1,821 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1982 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 5,590 ft, from topographic map. Oct. 1, 1982 to Aug. 15, 1983, at site 0.25 mi upstream, at datum 3.12 ft, higher.

REMARKS.--Records good except those for winter period and those for period of no gage-height record, which are fair. Diversions above station for irrigation of about 31,900 acres.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, about 6,000 ft³/s, June 27, time and gage height unknown; minimum daily, 300 ft³/s Jan. 1-7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	700	622	529	300	370	640	461	999	3750	3760	1100	579
2	700	577	519	300	370	740	447	994	3610	3500	1100	567
3	660	560	511	300	370	640	419	963	3410	3500	1050	548
4	620	504	485	300	370	560	471	961	3400	3600	1020	589
5	590	527	512	300	390	580	413	1000	3440	3200	1070	590
6	600	525	481	300	400	560	397	1100	3340	2950	1100	574
7	600	531	479	300	400	520	396	1020	3150	2900	1000	556
8	600	526	482	320	400	500	408	1120	3310	2900	960	554
9	620	537	465	340	400	540	427	1320	3340	2950	940	554
10	620	550	507	360	400	560	430	1600	3350	2800	920	534
11	600	572	512	370	400	600	459	1720	3590	2500	900	520
12	570	573	465	380	400	780	482	1580	4010	2150	940	506
13	580	537	442	380	400	730	449	1450	4620	1850	900	506
14	580	549	475	380	400	660	426	1420	3550	1650	860	488
15	580	488	467	380	400	580	421	1330	2920	1550	800	481
16	590	533	475	380	400	500	428	1440	2950	1400	787	486
17	580	558	506	380	400	480	440	1540	3120	1300	699	486
18	560	577	505	380	400	470	458	1390	3350	1250	720	478
19	550	561	478	370	400	460	524	1430	3800	1150	746	478
20	540	556	426	370	400	440	596	1490	4600	1120	736	438
21	540	532	488	370	370	430	584	1400	4800	1180	740	447
22	540	533	509	370	390	450	664	1570	4800	1400	701	476
23	540	536	471	370	380	470	631	1790	4900	1500	678	487
24	520	448	472	370	410	460	642	2110	5000	1500	664	521
25	505	489	426	370	430	460	790	2540	5000	1300	670	535
26	530	467	380	370	460	470	960	3040	5600	1400	656	548
27	580	450	350	370	440	460	934	3490	5400	1400	646	537
28	604	446	370	370	500	470	878	3690	5200	1300	621	518
29	539	489	380	370	---	460	873	3930	4600	1180	626	566
30	531	516	330	370	---	460	922	4140	3900	1100	666	554
31	582	---	310	370	---	470	---	4620	---	1100	604	---
TOTAL	18051	15869	14207	10960	11250	16600	16830	58187	119810	62280	25620	15701
MEAN	582	529	458	354	402	535	561	1877	3994	2009	826	523
MAX	700	622	529	380	500	780	960	4620	5600	3700	1100	590
MIN	505	446	310	300	370	430	396	961	2920	1100	604	438
AC-FT	35800	31480	28180	21740	22310	32930	33380	115400	237600	123500	50820	31140

WTR YR 1983 TOTAL 385365 MEAN 1056 MAX 5600 MIN 300 AC-FT 764400

NOTE.--NO GAGE-HEIGHT RECORD JUNE 19 TO AUG. 15.

09306224 WHITE RIVER ABOVE CROOKED WASH NEAR WHITE RIVER CITY,CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1982 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	SPE-CIFIC CON-DUCT-ANCE LAB (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
NOV 09...	0930	531	575	584	8.4	4.0	10.6	240	61	20
JAN 21...	1115	370	585	616	8.2	.0	10.5	240	63	20
MAR 28...	1210	470	765	768	8.5	5.0	11.2	280	66	27
MAY 20...	1130	1380	703	707	8.4	8.5	9.3	280	64	29
AUG 30...	1130	714	646	629	8.5	16.0	8.2	240	55	24
SEP 14...	0855	486	690	661	8.5	14.0	8.4	270	64	27

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)
NOV 09...	34	1	1.3	170	120	11	.20	13	360	.49
JAN 21...	35	1	1.5	172	130	13	.30	15	380	.52
MAR 28...	54	1	1.4	188	190	16	.30	12	480	.65
MAY 20...	49	1	2.3	195	170	12	.20	13	460	.62
AUG 30...	50	1	1.8	184	140	12	.40	14	410	.55
SEP 14...	44	1	1.5	175	160	11	.30	15	430	.58

DATE	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)
NOV 09...	1	36	<1	<10	2	16	<1

DATE	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	ZINC, DIS-SOLVED (UG/L AS ZN)
NOV 09...	7	<.1	<1	<1	1	<1	5

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

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 09...	0930	531	34	49	MAY 20...	1130	1380	1310	4880
JAN 21...	1115	370	52	52	AUG 30...	1130	714	2340	4510
MAR 28...	1210	470	218	277					

09306235 CORRAL GULCH BELOW WATER GULCH, NEAR RANGELY, CO

LOCATION.--Lat 39°54'22", long 108°31'56", in SE¼NW¼ sec.5, T.2 S., R.99 W., Rio Blanco County, Hydrologic Unit 14050006, on left bank 0.1 mi downstream from Water Gulch and 19 mi southeast of Rangely.

DRAINAGE AREA.--8.61 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 1974 to current year.

GAGE.--Water-stage recorder. Concrete control since Aug. 1, 1974. Prior to Aug. 1, 1974, water-stage recorder at different datum. Altitude of gage is 6,975 ft, from topographic map.

REMARKS.--Records good except those above 30 ft^3/s, which are fair.

AVERAGE DISCHARGE.--9 years, 0.56 ft^3/s; 406 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge determined, 272 ft^3/s, July 23, 1977, gage height, 3.20 ft, maximum gage height, 13.50 ft, May 31, 1983 (from mud flow); no flow many days most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge unknown; maximum gage height, 13.50 ft, May 31 (mud flow); no flow Jan. 31, Feb. 2-4, 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.23	.32	.12	.15	.03	.11	.16	3.7	45	4.2	2.2	1.3
2	.24	.25	.12	.14	.00	.09	.18	4.0	37	4.0	2.2	1.2
3	.26	.20	.11	.11	.00	.10	.22	4.4	35	3.9	2.1	1.3
4	.20	.18	.12	.09	.00	.07	.29	5.3	35	3.8	2.0	1.4
5	.42	.17	.11	.08	.04	.11	.19	5.6	37	3.4	1.8	1.3
6	.46	.16	.11	.08	.02	.08	.15	6.3	31	3.4	1.5	1.2
7	.45	.15	.12	.08	.03	.04	.18	6.6	27	3.4	1.4	1.3
8	.41	.14	.13	.09	.02	.06	.15	7.4	24	3.2	1.4	1.2
9	.37	.16	.16	.07	.02	.10	.10	9.1	21	3.2	1.4	1.2
10	.36	.15	.16	.07	.02	.10	.11	9.7	18	3.1	1.4	1.2
11	.35	.14	.14	.09	.02	.13	.60	11	16	3.1	1.4	1.2
12	.33	.13	.14	.09	.00	.13	.49	11	14	3.0	1.5	1.2
13	.32	.12	.16	.09	.02	.26	.53	11	13	2.9	1.5	1.3
14	.29	.12	.16	.09	.04	.15	.41	11	12	2.9	1.5	1.3
15	.26	.12	.16	.09	.03	.15	.49	11	11	2.9	1.4	1.3
16	.26	.12	.14	.09	.05	.06	.67	11	12	2.8	1.4	1.3
17	.23	.12	.13	.09	.04	.13	.75	11	9.9	2.8	1.4	1.3
18	.25	.12	.13	.08	.06	.02	1.2	11	9.1	2.6	1.4	1.3
19	.26	.12	.15	.07	.08	.15	.88	12	8.5	2.6	1.4	1.3
20	.28	.12	.14	.06	.08	.07	.92	12	8.2	2.6	1.4	1.3
21	.30	.12	.14	.05	.04	.09	1.1	14	7.5	2.6	1.4	1.4
22	.31	.13	.12	.04	.05	.12	1.3	16	7.3	2.6	1.4	1.3
23	.28	.13	.12	.03	.07	.13	1.7	16	6.6	2.5	1.3	1.3
24	.28	.13	.10	.02	.06	.19	2.0	17	6.2	2.4	1.3	1.3
25	.31	.13	.10	.02	.09	.23	2.2	18	5.8	2.3	1.3	1.3
26	.30	.12	.12	.02	.07	.13	2.3	26	5.6	2.3	1.4	1.3
27	.34	.12	.11	.02	.09	.10	2.5	30	5.2	2.3	1.4	1.3
28	.32	.12	.12	.03	.11	.13	2.8	32	5.0	2.1	1.3	1.3
29	.30	.12	.10	.02	---	.08	3.3	30	4.6	2.2	1.3	1.3
30	.28	.11	.10	.03	---	.15	3.5	35	4.3	2.2	1.4	1.3
31	.36	---	.15	.00	---	.14	---	78	---	2.2	1.3	---
TOTAL	9.61	4.34	3.99	2.08	1.18	3.60	31.37	486.1	481.8	89.5	46.5	38.5
MEAN	.31	.14	.13	.067	.042	.12	1.05	15.7	16.1	2.89	1.50	1.28
MAX	.46	.32	.16	.15	.11	.26	3.5	78	45	4.2	2.2	1.4
MIN	.20	.11	.10	.00	.00	.02	.10	3.7	4.3	2.1	1.3	1.2
AC-FT	19	8.6	7.9	4.1	2.3	7.1	62	964	956	178	92	76

CAL YR 1982 TOTAL 87.32 MEAN .24 MAX .66 MIN .00 AC-FT 173
WTR YR 1983 TOTAL 1198.57 MEAN 3.28 MAX 78 MIN .00 AC-FT 2380

NOTE.--NO GAGE-HEIGHT RECORD MAY 31 TO JUNE 16.

09306235 CORRAL GULCH BELOW WATER GULCH, NEAR RANGELY, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--March 1974 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: April 1974 to current year.
WATER TEMPERATURE: April 1974 to current year.
SUSPENDED-SEDIMENT DISCHARGE: October 1974 to September 1982 (discontinued).

INSTRUMENTATION.--Water-quality monitor since April 1974. Pumping sediment sampler since October 1974.

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

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 6,490 micromhos Dec. 19, 1981; minimum, 230 micromhos Mar. 20, 1978.
WATER TEMPERATURES: Maximum, 33.5°C June 11, 1981; minimum, freezing point many days during winter months each year.
SEDIMENT CONCENTRATIONS: Maximum daily, 17,800 mg/L July 26, 1981; no flow many days during 1974-78, 1981.
SEDIMENT LOADS: Maximum daily, 162 tons May 20, 1979; no flow many days during 1974-78, Dec. 15, 1979, 1981.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Not determined.
WATER TEMPERATURES: Maximum, 23°C August 15; minimum 0.0°C many days during October to April.

WATER QUALITY DATA, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	SPE-CIFIC CON-DUCT-ANCE LAB (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
NOV											
01...	1125	.52	1130	1120	8.4	7.5	9.3	460	86	59	85
MAY											
03...	1045	5.8	1250	1250	8.4	9.5	8.9	590	120	70	86
27...	1015	27	1440	1480	8.1	9.0	8.7	700	150	78	87
AUG											
10...	0900	1.5	1430	1400	8.4	11.5	8.9	610	120	75	100

DATE	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 105 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)
NOV											
01...	2	1.0	355	290	7.7	.30	22	785	770	1.0	1.1
MAY											
03...	2	1.7	327	360	11	.30	23	962	870	1.1	14
27...	1	3.6	343	470	16	.20	22	--	1000	1.4	75
AUG											
10...	2	1.1	314	450	18	.20	21	--	980	1.3	4.0

DATE	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	ARSENIC DIS-SOLVED (UG/L AS AS)	BORON, DIS-SOLVED (UG/L AS B)	MERCURY DIS-SOLVED (UG/L AS HG)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)
NOV											
01...	.900	.100	1.0	1.1	<.010	.010	6.3	4	90	<.1	3
MAY											
03...	3.70	.090	.61	.70	.030	.020	9.0	5	90	<.1	9
27...	6.20	.100	1.1	1.3	.020	.020	--	--	80	--	--
AUG											
10...	5.30	.050	.65	.70	.020	.020	--	4	90	--	--

09306235 CORRAL GULCH BELOW WATER GULCH, NEAR RANGELY, CO--Continued

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT					
04...	1146	.27	41	.03	--
NOV					
01...	1125	.52	26	.04	--
JAN					
06...	1145	.08	9	.00	--
FEB					
24...	1300	.13	3270	1.1	--
MAY					
03...	1045	5.8	13000	204	--
05...	1140	5.5	12600	187	--
11...	1415	11	4400	131	--
25...	1325	20	18700	1010	50
31...	1340	44	35200	4180	--

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	1100	---	---	1090	445	---	1210		1370	1390	1380
2	---	1160	---	---	---	546	---	1200		1370	1390	1400
3	---	1160	---	---	---	639	---	1230		1370	1390	1420
4	---	1160	---	---	---	671	---	1310		1370	1410	1400
5	---	---	---	---	1050	902	1120	1370		1370	1430	1410
6	---	1110	---	1040	1090	883	---	---		1380	1420	1400
7	---	1130	1090	1030	1080	860	---	---		1380	1420	1400
8	---	1110	1110	1040	1080	890	---	---		1380	1420	1410
9	---	1110	1110	1060	1050	493	---	---		1380	1410	1400
10	---	1110	---	1030	1030	512	---	---		1390	1410	1390
11	---	1110	---	---	1050	507	---	---		1390	1410	1400
12	---	1170	---	---	---	496	---	---		1400	1400	1390
13	---	1130	---	---	1020	543	1150	---		1400	1400	1390
14	1110	1150	---	---	1040	---	1160	---		1410	1400	1390
15	1120	1160	---	---	1050	---	1130	---		1400	1390	1380
16	1130	1120	---	---	1030	---	1100	---		1390	1400	1380
17	1140	---	---	---	1050	---	1060	---		1390	1390	1410
18	1130	---	---	---	1030	---	902	---		1390	1390	1410
19	1130	---	---	---	1050	---	720	---		1380	1390	1420
20	1130	---	---	1070	1040	---	908	---		1380	1390	1410
21	1140	---	---	1070	1030	---	914	---		1380	1390	1410
22	1140	---	---	1070	1020	---	1070	---		1370	1380	1410
23	1100	---	---	1070	1010	---	1010	---		1370	1380	1390
24	1090	---	---	1070	928	---	---	---		1370	1390	1390
25	1100	---	---	1050	---	---	---	---		1380	1390	1390
26	1100	---	---	1080	---	---	1200	---		1380	1390	1410
27	1100	---	---	1070	---	---	1180	---		1400	1390	1410
28	1140	---	---	1050	---	1100	1190	---		1410	1390	1420
29	1110	---	---	1070	---	1020	1170	---		1400	1380	1430
30	1110	---	---	1090	---	---	1210	---		1400	1380	1420
31	1030	---	---	---	---	---	---	---		1400	1380	---

09306235 CORRAL GULCH BELOW WATER GULCH, NEAR RANGELY, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	14.0	2.0	8.5	.0	3.0	.0	.0	.0	1.0	.0	4.0	.0
2	15.5	1.5	6.0	.0	2.5	.0	.0	.0	---	---	4.5	.5
3	15.0	2.0	3.0	.0	1.5	.0	.5	.0	---	---	4.0	.0
4	15.5	2.5	5.5	.0	2.0	.0	1.0	.0	---	---	4.0	.5
5	7.5	1.5	6.0	.0	2.0	.0	1.5	.5	.5	.0	3.5	.5
6	14.0	.5	6.0	.0	2.0	.0	2.0	1.0	.5	.0	6.5	.0
7	13.0	.5	6.0	.0	1.5	.0	2.0	1.0	1.0	.0	---	---
8	10.5	.0	6.0	.0	.0	.0	1.5	.0	1.5	.5	---	---
9	7.0	.0	7.0	.0	2.0	.0	.0	.0	1.5	.5	10.0	.0
10	10.0	.0	6.5	.0	3.0	1.0	.5	.0	1.5	.0	11.5	.0
11	10.5	.0	4.5	.0	2.5	.0	.5	.0	.5	.0	12.0	.0
12	11.0	.5	.5	.0	.0	.0	.0	.0	---	---	13.5	.5
13	12.0	1.0	2.5	.0	1.5	.0	.0	.0	1.5	.0	13.5	.0
14	13.0	1.0	.0	.0	.5	.0	1.0	.0	2.0	.0	---	---
15	14.5	.0	2.5	.0	2.0	.0	.5	.0	1.5	.0	---	---
16	13.0	.5	2.0	.0	2.0	.0	1.0	.0	2.0	.0	---	---
17	12.5	1.0	3.0	.0	1.5	.0	2.0	.5	1.5	.0	---	---
18	12.5	2.0	4.0	.5	.0	.0	1.5	.0	2.0	.0	---	---
19	8.5	.0	3.5	.0	.0	.0	2.0	.0	2.0	.0	---	---
20	10.0	.0	1.5	.0	.5	.0	1.0	.0	2.5	.0	---	---
21	10.5	.0	2.5	.0	2.0	.0	1.5	.0	2.0	.0	---	---
22	10.5	.5	2.0	.0	2.5	.0	1.0	.0	2.5	.0	---	---
23	12.0	.5	.0	.0	2.5	.5	1.5	.0	2.0	.0	---	---
24	14.0	2.0	1.5	.0	.5	.0	1.0	.0	2.5	.0	---	---
25	11.5	3.5	3.0	.5	.0	.0	2.0	.0	3.5	.0	---	---
26	9.0	2.5	1.0	.0	.0	.0	1.5	.0	3.5	.0	---	---
27	5.0	.0	.5	.0	.0	.0	2.0	.0	3.5	.0	---	---
28	6.5	.0	2.5	.0	.0	.0	2.0	.5	5.0	.0	10.0	.0
29	7.0	.0	3.0	.0	.0	.0	1.5	.0	---	---	15.0	.0
30	8.0	.5	3.0	.5	.0	.0	1.5	.0	---	---	---	---
31	8.0	.0	---	---	.0	.0	---	---	---	---	---	---
MONTH	15.5	.0	8.5	.0	3.0	.0	2.0	.0	5.0	.0	15.0	.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	15.0	2.0			17.0	8.5	19.5	9.5	17.0	8.5
2	---	---	13.0	2.5			19.0	7.5	17.5	9.5	22.0	9.5
3	---	---	13.5	4.5			19.0	8.0	19.0	9.5	21.5	9.0
4	---	---	14.5	4.5			19.5	6.0	17.0	9.5	20.5	9.5
5	9.5	.0	11.5	5.5			21.0	7.0	21.0	9.5	19.5	7.5
6	---	---	---	---			21.5	9.0	22.5	10.0	20.5	7.5
7	---	---	---	---			21.5	9.5	20.0	10.0	19.5	7.0
8	---	---	---	---			20.0	9.5	22.0	10.0	20.0	9.5
9	---	---	---	---			20.5	10.0	21.5	10.0	20.5	8.5
10	---	---	---	---			20.0	9.0	22.5	10.0	19.5	8.0
11	---	---	---	---			20.0	6.5	20.0	10.5	19.0	6.5
12	---	---	---	---			19.5	7.0	19.5	10.5	20.0	7.0
13	10.0	.0	---	---			21.0	8.0	21.0	10.0	19.5	7.0
14	14.5	.0	---	---			19.5	8.0	21.5	10.0	18.5	8.0
15	18.0	.0	---	---			19.5	8.5	23.0	11.0	19.0	7.0
16	19.0	.0	---	---			20.0	7.5	22.0	10.0	18.5	6.5
17	21.0	.0	---	---			20.5	8.0	21.5	10.0	18.5	7.5
18	18.5	.0	---	---			21.0	8.5	21.0	11.0	18.5	8.0
19	13.5	1.0	---	---			19.5	10.0	20.5	10.0	15.5	5.5
20	14.0	1.5	---	---			21.0	10.5	21.5	9.5	14.5	3.0
21	13.5	2.0	---	---			20.5	9.0	21.0	8.5	15.5	3.0
22	12.0	1.5	---	---			19.5	10.0	21.0	8.5	16.5	4.0
23	16.0	2.0	---	---			19.0	10.0	20.5	7.5	14.5	6.0
24	16.5	2.5	---	---			22.0	8.5	20.0	7.5	16.0	8.0
25	16.0	2.0	---	---			19.5	9.5	20.5	8.0	18.0	6.5
26	15.0	2.0	---	---			20.5	10.0	22.0	8.0	17.0	6.5
27	12.0	4.0	---	---			16.0	9.5	21.0	8.0	15.5	7.0
28	12.0	5.0	---	---			22.0	9.0	20.5	8.5	16.0	6.0
29	12.5	4.0	---	---			22.0	8.5	18.0	9.0	14.5	7.0
30	10.5	4.0	---	---			21.0	9.0	20.0	8.5	13.0	6.5
31	---	---	---	---			19.0	10.0	20.0	8.5	---	---
MONTH	21.0	.0	15.0	2.0			22.0	6.0	23.0	7.5	22.0	3.0
YEAR	23.0	.0										

09306240 BOX ELDER GULCH NEAR RANGELY, CO

LOCATION.--Lat 39°53'18", long 108°31'40", in NE¼SW¼ sec.8, T.2 S., R.99 W., Rio Blanco County, Hydrologic Unit 14050006, on left bank 30 ft upstream from unnamed tributary, 4.1 mi upstream from mouth, and 20 mi southeast of Rangely.

DRAINAGE AREA.--9.21 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1974 to current year.

GAGE.--Water-stage recorder and concrete control. Altitude of gage is 6,955 ft, from topographic map.

REMARKS.--Records excellent except for days of flow, which are poor. No diversion or regulation above station.

AVERAGE DISCHARGE.--9 years, 0.55 ft^3/s; 398 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 332 ft^3/s, Sept. 7, 1981, gage height, 4.37 ft, result of slope-area measurement of peak flow; no flow most of each year.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 55 ft^3/s at 1615 May 28, gage height, 2.75 ft; no flow many days.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.09	.20	8.2	34	2.1	.00	.00
2	.00	.00	.00	.00	.00	.13	.14	9.0	30	2.0	.00	.00
3	.00	.00	.00	.00	.00	.05	.23	10	28	1.7	.00	.00
4	.00	.00	.00	.00	.00	.03	.23	12	26	1.5	.00	.00
5	.00	.00	.00	.00	.00	.03	.24	13	24	1.4	.00	.00
6	.00	.00	.00	.00	.00	.02	.26	14	23	1.1	.00	.00
7	.00	.00	.00	.00	.00	.02	.31	13	22	1.1	.00	.00
8	.00	.00	.00	.00	.00	.02	.38	13	20	.00	.00	.00
9	.00	.00	.00	.00	.00	.02	.53	14	19	.	.00	.00
10	.00	.00	.00	.00	.00	.02	.73	13	17	.02	.00	.00
11	.00	.00	.00	.00	.00	.10	.89	16	15	.72	.00	.00
12	.00	.00	.00	.00	.00	.19	1.1	17	14	.64	.00	.00
13	.00	.00	.00	.00	.00	.17	1.7	17	13	.48	.00	.00
14	.00	.00	.00	.00	.00	.05	.62	17	12	.41	.00	.00
15	.00	.00	.00	.00	.00	.06	1.3	16	11	.35	.00	.00
16	.00	.00	.00	.00	.00	.03	1.4	16	10	.31	.00	.00
17	.00	.00	.00	.00	.00	.02	1.7	16	9.3	.26	.00	.00
18	.00	.00	.00	.00	.00	.00	1.9	17	8.4	.22	.00	.00
19	.00	.00	.00	.00	.00	.00	2.4	19	7.9	.18	.00	.00
20	.00	.00	.00	.00	.00	.03	2.9	20	7.0	.14	.00	.00
21	.00	.00	.00	.00	.00	.06	3.7	22	6.3	.15	.00	.00
22	.00	.00	.00	.00	.01	.03	3.7	25	6.1	.15	.00	.00
23	.00	.00	.00	.00	.05	.00	3.8	28	5.0	.23	.00	.00
24	.00	.00	.00	.00	.09	.00	5.3	28	4.4	.13	.00	.00
25	.00	.00	.00	.00	.09	.00	7.3	34	4.1	.09	.00	.00
26	.00	.00	.00	.00	.05	.00	8.2	37	3.9	.07	.00	.00
27	.00	.00	.00	.00	.04	.00	7.4	45	3.4	.10	.00	.00
28	.00	.00	.00	.00	.05	.00	7.6	48	3.0	.07	.00	.00
29	.00	.00	.00	.00	---	.00	7.6	44	2.6	.04	.00	.00
30	.00	.00	.00	.00	---	.06	7.9	38	2.3	.02	.00	.00
31	.00	---	.00	.00	---	.10	---	38	---	.01	.00	---
TOTAL	.00	.00	.00	.00	.38	1.33	81.66	677.2	391.7	18.38	.00	.00
MEAN	.000	.000	.000	.000	.014	.043	2.72	21.8	13.1	.59	.000	.000
MAX	.00	.00	.00	.00	.09	.19	8.2	48	34	2.1	.00	.00
MIN	.00	.00	.00	.00	.00	.00	.14	8.2	2.3	.01	.00	.00
AC-FT	.00	.00	.00	.00	.8	2.6	162	1340	777	36	.00	.00

CAL YR 1982 TOTAL 30.43 MEAN .083 MAX .94 MIN .00 AC-FT 60
WTR YR 1983 TOTAL 1170.65 MEAN 3.21 MAX 48 MIN .00 AC-FT 2320

09306240 BOX ELDER GULCH NEAR RANGELY, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1974 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: April 1974 to current year.
WATER TEMPERATURE: April 1974 to current year.
SUSPENDED-SEDIMENT DISCHARGE: March 1975 to September 1983 (discontinued).

INSTRUMENTATION.--Water-quality monitor since April 1974.

REMARKS.--Less than 80 percent daily record collected.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 1,320 micromhos May 20-21, 1983; minimum, 100 micromhos Mar. 7, 1983.
WATER TEMPERATURES: Maximum, 32.0°C June 20, 1978, June 29, 1979; minimum, 0.0°C Mar. 21-23, 1978, Apr. 20, May 7, 1979, Feb. 17, 18, Apr. 19, 1980.
SEDIMENT CONCENTRATIONS: Maximum daily, 33,100 mg/L Sept. 7, 1981; no flow many days each year.
SEDIMENT LOADS: Maximum daily, 6,750 tons Sept. 7, 1981; no flow many days each year.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 1,320 micromho, May 20, 21; minimum, 100 micromhos, Mar 7.
WATER TEMPERATURES: Maximum, 18.0°C Apr. 17; minimum, 0.5°C Feb, 27, 28, Apr. 1.

WATER QUALITY DATA, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	SPE-CIFIC CON-DUCT-ANCE LAB (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)
MAY											
03...	1235	9.5	1090	1110	8.2	7.5	9.2	500	98	61	67
27...	1050	48	1120	1180	8.3	8.5	8.8	570	120	66	75

DATE	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 105 DEG. C, DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)
MAY										
03...	1	.90	325	280	11	.30	21	819	740	1.0
27...	1	3.3	327	330	15	.30	21	--	830	1.1

DATE	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	BORON, DIS-SOLVED (UG/L AS B)	ARSENIC DIS-SOLVED (UG/L AS AS)	MERCURY DIS-SOLVED (UG/L AS HG)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)
MAY										
03...	19	.110	.49	.60	.020	13	70	6	<.1	9
27...	107	.100	1.0	1.1	.020	--	70	--	--	--

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

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)
FEB					MAY				
24...	1515	.09	27	.00	11...	1210	16	3710	160
APR					25...	1115	34	9750	895
26...	1540	7.4	3460	69	JUN				
MAY					14...	1250	12	324	10
03...	1235	9.5	3970	102					
04...	1520	12	3920	127					

09306240 BOX ELDER GULCH NEAR RANGELY, CO--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1					---	162	509	1040	---	---		
2					---	151	---	1060	---	---		
3					---	150	---	---	---	---		
4					---	163	---	1210	---	---		
5					---	170	982	1200	---	---		
6					---	187	---	1200	---	---		
7					---	174	---	1200	---	---		
8					---	171	---	1170	---	---		
9					---	174	---	1160	1110	---		
10					---	195	---	1140	1080	---		
11					---	225	---	1100	1120	---		
12					---	518	---	1100	---	---		
13					---	720	1050	1100	---	---		
14					---	771	---	1010	1120	---		
15					---	850	---	1020	1120	---		
16					---	788	---	---	1120	---		
17					---	866	---	---	1110	---		
18					---	---	---	---	1100	---		
19					---	---	972	1260	1090	---		
20					---	---	979	1310	1080	---		
21					---	---	955	1300	1080	---		
22					---	---	952	1280	1070	---		
23					---	---	---	1230	1070	---		
24					206	---	---	---	1070	---		
25					187	---	---	---	1070	---		
26					194	---	1030	---	1070	---		
27					201	---	1030	---	1060	1030		
28					186	---	1030	---	---	1090		
29					---	---	1030	---	---	1080		
30					---	530	1040	---	---	1090		
31					---	706	---	---	---	---		

09306240 BOX ELDER GULCH NEAR RANGELY, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1									---	---	.5	.5
2									---	---	.5	.5
3									---	---	.5	.5
4									---	---	.5	.5
5									---	---	.5	.5
6									---	---	1.0	.5
7									---	---	1.0	.5
8									---	---	1.5	.5
9									---	---	1.5	.5
10									---	---	2.5	.5
11									---	---	6.5	.5
12									---	---	5.5	.5
13									---	---	5.5	.5
14									---	---	1.0	.5
15									---	---	.5	.5
16									---	---	3.0	.5
17									---	---	3.0	.5
18									---	---	---	---
19									---	---	---	---
20									---	---	---	---
21									---	---	---	---
22									---	---	---	---
23									---	---	---	---
24									.5	.5	---	---
25									.5	.5	---	---
26									.5	.5	---	---
27									.5	.5	---	---
28									.5	.5	---	---
29									---	---	---	---
30									---	---	9.0	.5
31									---	---	10.0	.5

	APRIL		MAY		JUNE		JULY		AUGUST	SEPTEMBER
1	14.5	.5	11.5	3.0	11.0	6.0	---	---		
2	---	---	12.0	1.0	9.5	6.5	---	---		
3	---	---	11.5	4.0	11.0	5.5	---	---		
4	---	---	12.5	5.5	10.5	5.5	---	---		
5	7.0	.5	10.5	5.5	10.5	6.5	---	---		
6	8.5	.5	9.5	5.0	10.5	5.5	---	---		
7	7.5	.5	12.5	4.5	12.0	6.0	---	---		
8	9.0	.5	12.5	5.0	10.0	5.5	---	---		
9	17.0	.5	12.5	5.5	12.5	6.5	---	---		
10	15.5	.5	12.5	4.5	13.5	5.5	---	---		
11	13.0	.5	8.0	5.0	13.5	5.5	---	---		
12	14.0	.5	9.0	4.5	---	---	---	---		
13	8.0	.5	10.5	4.5	---	---	---	---		
14	11.5	.5	7.5	4.5	12.0	5.5	---	---		
15	15.0	.5	10.0	2.0	13.5	6.5	---	---		
16	16.5	.5	8.0	3.5	15.0	7.0	---	---		
17	18.0	.5	8.5	4.0	15.0	6.5	---	---		
18	13.0	.5	10.0	4.5	16.0	7.5	---	---		
19	13.0	2.5	9.0	5.0	16.0	7.0	---	---		
20	11.0	3.5	10.0	5.0	16.0	7.0	---	---		
21	13.0	4.0	12.0	5.5	16.0	7.0	---	---		
22	11.0	3.5	12.0	5.0	17.0	7.0	---	---		
23	13.5	4.0	12.0	5.0	16.0	7.5	---	---		
24	13.5	4.0	12.0	5.0	15.5	7.5	---	---		
25	12.5	4.0	11.5	5.5	13.0	7.5	---	---		
26	12.5	3.0	11.0	6.0	14.0	7.5	---	---		
27	10.0	4.5	10.5	5.5	13.0	8.5	---	---		
28	9.5	5.0	10.5	5.0	---	---	27.5	7.5		
29	11.0	4.0	11.0	5.5	---	---	27.5	6.5		
30	---	---	10.0	5.0	---	---	19.0	7.5		
31	---	---	10.0	5.5	---	---	---	---		

09306242 CORRAL GULCH NEAR RANGELY, CO

LOCATION.--Lat 39°55'13", long 108°28'20", in SE¼NW¼ sec.35, T.1 S., R.99 W., Rio Blanco County, Hydrologic Unit 14050006, on left bank 5 ft downstream from Boxelder Creek, and 3.5 mi upstream from confluence with Stake Springs Draw, and 21 mi southeast of Rangely.

DRAINAGE AREA.--31.6 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 1974 to current year.

GAGE.--Water-stage recorder. Concrete control since July 20, 1974. Altitude of gage is 6,570 ft, from topographic map.

REMARKS.--Records poor except those above 30 ft³/s, which are fair. No diversion above station.

AVERAGE DISCHARGE.--9 years, 1.97 ft³/s; 1,430 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 620 ft³/s, June 1, 1983, gage height, 4.45 ft, from rating curve extended above 15.5 ft³/s, on basis of slope-area measurements at gage heights 3.89 ft, and 4.08 ft; minimum daily, 0.06 ft³/s Apr. 10-14, 1974.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 620 ft³/s at 0430 June 1, gage height, 4.45 ft; minimum daily, 0.34 ft³/s Nov. 7, 9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.55	.36	.44	.56	.61	1.9	.70	9.5	207	6.4	2.8	2.9
2	.55	.39	.44	.55	.62	1.1	.70	9.3	83	5.9	2.7	3.0
3	.63	.36	.44	.55	.62	.96	.66	11	65	5.5	2.7	3.2
4	.63	.36	.44	.55	.62	.91	.66	14	56	5.3	2.8	3.6
5	.71	.35	.47	.55	.62	1.1	.70	16	56	5.3	2.6	3.3
6	.74	.35	.47	.59	.63	.98	.70	17	59	4.4	2.3	3.3
7	.79	.34	.47	.55	.63	.77	.75	16	53	4.1	2.2	3.3
8	.68	.37	.47	.55	.63	.99	.79	16	48	4.0	2.1	3.2
9	.67	.34	.47	.56	.67	1.1	.77	17	40	3.8	2.0	3.2
10	.66	.36	.51	.56	.68	1.1	.82	20	35	3.8	1.9	3.2
11	.65	.38	.51	.56	.68	3.4	.69	23	32	3.7	2.0	3.2
12	.68	.38	.51	.56	.68	2.0	.72	25	29	3.4	2.1	3.1
13	.67	.37	.50	.57	.68	1.5	.74	25	24	3.1	2.1	3.1
14	.63	.37	.50	.57	.69	1.0	.75	23	19	2.9	2.1	3.2
15	.59	.36	.50	.57	.73	1.0	.79	20	19	2.9	2.2	3.1
16	.62	.39	.50	.57	.73	1.2	.84	20	20	2.9	2.2	3.1
17	.61	.43	.50	.58	.69	1.0	1.0	19	18	2.7	2.4	3.0
18	.55	.43	.50	.58	.70	.90	1.7	19	14	2.7	2.4	3.0
19	.54	.47	.50	.58	.70	.90	2.6	22	14	2.6	2.5	3.0
20	.53	.42	.49	.58	.70	.90	3.0	26	15	2.6	2.4	2.9
21	.52	.46	.49	.59	.70	1.0	3.4	29	13	2.6	2.5	2.9
22	.47	.42	.49	.59	.75	1.0	3.9	32	12	3.0	2.5	2.9
23	.46	.42	.49	.59	1.0	1.0	4.7	34	11	2.8	2.5	3.0
24	.44	.46	.53	.59	1.3	.90	5.6	38	10	2.7	2.6	2.9
25	.43	.41	.53	.60	1.1	.80	6.9	48	9.8	2.7	2.6	2.9
26	.46	.45	.52	.56	.75	.80	7.8	88	9.5	2.6	2.6	2.9
27	.45	.45	.52	.56	.71	.75	7.6	87	8.7	2.7	2.7	2.9
28	.40	.45	.52	.60	1.0	.70	7.2	79	7.4	2.7	2.7	2.8
29	.39	.45	.52	.61	---	.69	7.3	83	6.9	2.6	2.8	2.7
30	.38	.44	.52	.61	---	.67	8.8	83	6.6	2.6	2.8	2.6
31	.52	---	.56	.61	---	.68	---	88	---	2.6	2.8	---
TOTAL	17.60	11.99	15.32	17.80	20.62	33.70	83.28	1056.8	1000.9	107.6	75.6	91.4
MEAN	.57	.40	.49	.57	.74	1.09	2.78	34.1	33.4	3.47	2.44	3.05
MAX	.79	.47	.56	.61	1.3	3.4	8.8	88	207	6.4	2.8	3.6
MIN	.38	.34	.44	.55	.61	.67	.66	9.3	6.6	2.6	1.9	2.6
AC-FT	35	24	30	35	41	67	165	2100	1990	213	150	181

CAL YR 1982 TOTAL 250.50 MEAN .69 MAX 2.3 MIN .34 AC-FT 497
WTR YR 1983 TOTAL 2532.61 MEAN 6.94 MAX 207 MIN .34 AC-FT 5020

09306242 CORRAL GULCH NEAR RANGELY, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--March 1974 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: April 1975 to current year.
WATER TEMPERATURE: January 1975 to current year.
SUSPENDED-SEDIMENT DISCHARGE: October 1974 to current year.

INSTRUMENTATION.--Water-quality monitor since October 1974. Pumping sediment sampler since October 1974.

REMARKS.--Daily maximum and minimum specific-conductance data available in district office. Maximum and minimum specific conductance extremes for current year based on 69 percent record that adequately represents extremes.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 3,000 micromhos July 17, 1976; minimum, 271 micromhos Feb. 18, 1980.
WATER TEMPERATURES: Maximum, 29.0°C Aug. 5, 1979; minimum, 0.0°C on several days during winter months some years.
SEDIMENT CONCENTRATIONS: Maximum daily, 35,800 mg/L Aug. 2, 1982; minimum daily, 2 mg/L May 24, 1981.
SEDIMENT LOADS: Maximum daily, 18,500 tons estimated June 1, 1983; minimum daily, 0.00 ton on many days during 1981.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 1,790 micromhos Sept 3; minimum, 300 micromhos Mar. 11.
WATER TEMPERATURES: Maximum, 21.0°C July 2, 5, 7; minimum, 0.5°C May 16.
SEDIMENT CONCENTRATIONS: Maximum daily, 29,200 mg/L May 31; minimum daily, 14 mg/L Oct. 4.
SEDIMENT LOADS: Maximum daily, 18,500 tons estimated June 1; minimum daily, 0.02 ton on many days.

WATER QUALITY DATA, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	SPE-CIFIC CON-DUCT-ANCE LAB (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
NOV										
01...	1250	.62	1450	1490	8.0	10.0	7.4	500	82	70
MAY										
03...	1430	10	1130	1130	8.4	14.0	7.8	500	95	64
27...	1130	56	1170	1080	8.4	13.0	8.1	520	110	60
AUG										
10...	0950	2.0	1560	1550	8.1	15.0	7.0	530	82	78
17...	0720	2.5	1600	1560	7.9	11.0	7.5	530	86	77

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	BROMIDE DIS-SOLVED (MG/L AS BR)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 105 DEG. C, DIS-SOLVED (MG/L)
NOV										
01...	170	3	1.4	472	370	10	.60	--	24	946
MAY										
03...	84	2	1.8	297	300	12	.30	<.010	23	732
27...	60	1	2.4	318	280	17	.30	--	22	--
AUG										
10...	170	3	1.9	458	430	13	.50	--	23	--
17...	170	3	1.8	463	440	13	.50	--	22	1130

DATE	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	ARSENIC DIS-SOLVED (UG/L AS AS)	BORON, DIS-SOLVED (UG/L AS B)	MERCURY DIS-SOLVED (UG/L AS HG)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)
NOV									
01...	1000	1.4	1.7	<.060	4.8	6	150	<.1	1
MAY									
03...	760	1.0	21	.090	11	6	90	<.1	8
27...	740	1.0	113	.060	--	--	70	--	--
AUG									
10...	1100	1.5	5.8	.040	--	6	160	--	--
17...	1100	1.5	7.4	.090	6.3	6	160	<.1	3

09306242 CORRAL GULCH NEAR RANGELY, CO--Continued

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SEDI-MENT, SUS-PENDED (MG/L)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM
OCT					
04...	1027	.65	13	.02	--
NOV					
01...	1250	.40	2280	2.5	--
02...	1638	.45	25	.03	--
DEC					
08...	1445	.43	15	.02	--
16...	1150	.55	22	.03	--
JAN					
06...	1703	.55	13	.02	--
FEB					
24...	1602	3.6	3630	35	--
MAR					
01...	1550	7.3	9870	195	--
01...	1645	5.8	9520	149	--
02...	1320	1.4	2420	9.1	--
MAR					
09...	1625	2.2	18400	109	--
28...	1815	.70	18	.03	--
MAY					
03...	1430	10	10200	278	--
05...	1625	15	12000	486	--
31...	1115	83	29200	6500	--
JUN					
14...	1645	18	6530	317	--
AUG					
04...	1645	2.7	152	1.1	39
17...	0720	2.5	167	1.1	--
SEP					
02...	1347	2.9	25	.20	--

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1390	1400	1410	---	1390	969	1410	1060	---		---	1560
2	1390	1420	1420	---	1400	826	1420	1090	---		---	1560
3	1400	1440	1430	---	1410	1190	1440	1100	---		---	1580
4	1400	1430	1430	---	1410	1170	1430	1170	---		1540	1490
5	1370	1430	1420	---	1410	1080	1420	1220	---		1530	1510
6	1400	1430	1420	1430	1400	1170	1430	---	---		1530	1550
7	1400	1450	1420	1400	1400	1280	1420	---	---		1530	1550
8	1390	1450	1440	1440	1390	1240	1380	---	---		1520	1550
9	1400	1450	1420	1500	1400	1200	1270	---	---		1530	1540
10	1400	1440	1430	1520	1400	1190	1070	---	---		1540	1510
11	1400	1430	1430	1520	1400	1040	1040	---	---		---	1520
12	1410	1430	1440	1420	1410	1020	1260	---	---		---	1540
13	1400	1450	1430	1430	1400	1200	1390	---	---		---	1540
14	1410	1450	1430	1440	1400	1220	1350	---	---		---	1540
15	1390	1450	1420	1440	1390	1250	1390	---	---		---	1540
16	1380	1440	1420	1450	1400	1230	1380	---	---		---	1570
17	1380	1410	1410	1470	1390	1230	1340	---	1310		1550	1570
18	1390	1410	---	1480	1390	1290	1140	---	1290		1540	1570
19	1400	1390	---	1490	1400	1300	1110	---	1280		1540	1570
20	1390	1400	---	1450	1400	1300	1100	---	1300		1550	1570
21	1380	1420	---	1400	1410	1330	1040	---	1300		1540	1570
22	1380	1420	---	1400	1350	1350	1050	---	1290		1540	1570
23	1360	1410	---	1410	1120	1360	1050	---	---		1550	1580
24	1370	1420	---	1400	1070	1390	1070	---	---		1550	1590
25	1360	1410	---	---	1100	1410	790	---	---		1550	1590
26	1350	1420	---	1400	1330	1410	1070	---	---		1540	1590
27	1330	1420	---	1410	1420	1410	1070	---	---		1540	1590
28	1350	1410	---	---	1250	1400	1070	---	---		1540	1580
29	1370	1420	---	---	---	1420	1080	---	---		1540	1590
30	1400	1410	---	1400	---	1380	1060	---	---		1540	1590
31	1270	---	---	1400	---	1390	---	---	---		1550	---
MEAN	1380	1430	1420	1440	1360	1250	1220	1130	1300		1540	1560

WTR YR 1983 MEAN 1380 MAX 1590 MIN 790

09306242 CORRAL GULCH NEAR RANGELY, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	12.5	8.0	10.5	7.5	9.5	6.5	---	---	8.5	6.0	10.5	1.0
2	14.0	8.0	10.5	7.0	9.0	6.5	---	---	9.5	6.0	8.0	3.5
3	13.5	8.0	11.0	7.0	9.5	6.5	---	---	9.0	6.0	9.5	3.0
4	13.5	8.0	11.5	7.0	10.0	6.5	---	---	9.5	6.0	9.0	4.0
5	10.0	7.5	11.0	7.0	10.0	6.5	---	---	9.5	6.0	8.5	2.5
6	13.5	8.0	11.0	7.0	10.5	7.0	8.0	7.5	9.0	6.0	11.0	3.5
7	13.0	8.0	11.5	7.0	8.5	6.5	9.5	7.0	9.5	6.5	10.5	5.5
8	12.0	7.0	9.5	8.0	9.0	6.5	10.0	5.5	10.0	7.0	12.0	5.0
9	10.5	8.0	11.0	7.5	9.0	6.5	8.5	5.5	10.5	6.5	12.5	5.0
10	11.5	7.5	11.0	6.0	9.5	8.0	9.0	6.0	10.0	6.5	12.0	4.0
11	12.5	7.5	9.0	6.5	9.5	6.5	9.5	6.5	10.5	6.5	12.5	1.5
12	12.5	8.0	10.5	6.5	9.0	6.5	9.5	6.5	10.0	6.5	12.5	3.5
13	13.0	7.0	9.5	6.5	9.0	7.0	9.5	6.0	11.0	6.5	12.5	5.5
14	13.0	8.0	10.0	6.0	8.5	6.5	9.5	6.5	9.5	6.5	9.0	6.5
15	13.5	8.0	10.5	6.5	9.5	6.5	9.5	6.5	10.5	6.5	9.0	7.0
16	13.0	8.0	10.5	6.5	9.5	7.0	9.5	6.5	10.5	6.5	12.5	6.5
17	12.5	8.0	10.5	7.0	8.5	6.5	10.0	7.0	10.0	6.5	10.5	7.5
18	12.5	8.0	11.0	7.5	---	---	9.5	5.5	10.0	6.5	9.0	6.0
19	12.0	7.0	9.0	7.0	---	---	9.0	6.5	9.5	6.0	12.0	6.5
20	12.0	7.5	10.0	6.5	---	---	9.5	6.5	11.5	6.5	12.0	6.5
21	12.0	7.5	10.0	6.5	---	---	9.5	6.5	11.5	6.5	12.0	6.5
22	11.0	7.5	8.5	7.0	---	---	9.5	6.5	12.0	6.5	11.5	7.0
23	12.5	8.0	9.5	6.0	---	---	9.0	6.5	11.5	3.0	13.0	6.5
24	13.0	8.0	9.0	6.0	---	---	8.5	6.0	11.0	2.0	9.5	6.5
25	11.5	9.0	10.0	6.5	---	---	9.5	6.5	9.5	2.5	11.0	7.0
26	10.5	8.5	9.5	6.5	---	---	10.0	7.0	9.5	6.0	10.5	7.0
27	9.5	6.0	9.5	6.5	---	---	10.5	6.5	10.5	6.5	12.5	7.0
28	11.0	7.0	9.5	6.5	---	---	10.0	7.0	11.5	3.0	10.5	7.0
29	11.0	7.0	9.5	7.5	---	---	9.5	6.5	---	---	13.0	6.5
30	10.5	8.0	9.5	7.5	---	---	9.5	6.5	---	---	13.5	7.0
31	10.5	7.0	---	---	---	---	8.5	6.5	---	---	11.0	6.0
MONTH	14.0	6.0	11.5	6.0	10.5	6.5	10.5	5.5	12.0	2.0	13.5	1.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	13.0	7.0	11.0	2.0	8.0	6.5	17.0	7.0	16.0	11.5	17.5	9.0
2	13.0	6.0	14.5	3.0	14.0	7.5	21.0	7.5	15.0	12.0	17.5	10.0
3	13.5	6.5	14.5	3.0	16.5	5.5	19.5	9.0	15.5	12.0	18.0	10.0
4	11.5	6.5	17.0	2.5	17.0	5.0	20.0	6.0	16.0	11.5	18.0	10.0
5	11.5	7.0	13.0	4.5	16.5	6.0	21.0	6.5	19.5	10.5	17.0	8.5
6	12.5	6.5	11.0	4.5	12.5	7.5	20.5	8.5	19.5	10.5	17.5	8.5
7	13.0	6.5	17.0	2.5	14.0	8.5	21.0	10.5	19.0	10.5	16.5	8.5
8	12.5	7.0	16.5	3.5	12.0	8.5	20.0	10.0	18.5	10.5	17.5	10.5
9	13.5	7.0	16.5	4.5	13.5	8.0	20.0	10.5	19.5	10.5	17.5	9.5
10	13.5	7.5	16.0	3.0	16.0	9.0	20.5	9.5	19.0	11.0	16.5	9.5
11	12.5	6.0	9.0	4.0	15.5	9.5	20.0	7.0	17.5	11.0	16.0	8.5
12	13.5	7.0	11.5	3.0	12.0	9.0	20.0	7.5	19.0	11.5	17.0	8.5
13	11.0	6.0	14.0	3.0	11.5	7.0	19.5	8.5	20.0	11.0	16.5	8.5
14	13.0	6.0	9.0	3.0	18.5	5.5	19.5	8.5	19.5	10.5	16.0	9.5
15	13.5	6.5	13.0	1.5	19.0	5.0	18.0	9.5	19.5	11.0	16.0	9.0
16	14.5	5.5	8.5	.5	18.0	6.0	18.0	8.5	18.0	10.5	16.0	8.0
17	16.0	5.0	10.5	1.5	20.5	6.5	17.5	8.5	18.5	10.5	16.0	9.0
18	14.0	4.0	13.0	3.5	20.0	6.0	17.5	9.5	18.0	11.0	16.0	9.0
19	13.5	3.5	11.0	4.0	18.5	6.0	16.5	10.5	18.0	10.5	15.5	8.0
20	13.0	3.5	13.0	4.0	18.5	5.0	17.0	10.5	18.5	10.0	14.0	6.5
21	14.5	4.0	---	---	18.5	4.0	17.5	10.0	17.5	9.5	14.5	7.0
22	11.5	3.0	---	---	20.0	4.0	17.0	10.0	17.5	9.0	15.0	7.0
23	16.0	3.5	---	---	18.5	5.0	18.0	10.5	17.0	8.5	14.0	8.5
24	17.0	3.0	---	---	16.5	6.0	19.5	9.5	16.5	8.5	15.0	9.5
25	15.5	2.5	---	---	15.0	5.5	17.5	10.0	17.5	9.0	16.0	8.0
26	14.5	1.5	15.5	7.5	15.0	4.5	18.0	10.5	18.0	9.0	15.0	8.5
27	13.0	3.5	17.5	6.5	14.0	6.0	16.5	10.5	17.0	9.0	15.0	9.5
28	12.5	4.5	16.5	6.5	---	---	16.5	10.5	17.0	9.5	14.5	8.5
29	12.5	3.0	17.5	6.5	---	---	16.0	11.0	16.5	10.0	13.5	8.5
30	11.5	3.5	14.5	7.0	19.5	7.5	16.0	11.0	19.0	9.5	13.0	9.0
31	---	---	12.0	5.5	---	---	15.0	11.5	17.5	9.0	---	---
MONTH	17.0	1.5	17.5	.5	20.5	4.0	21.0	6.0	20.0	8.5	18.0	6.5
YEAR	21.0	.5										

09306242 CORRAL GULCH NEAR RANGELY, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

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	.55	---	.02	.36	76	.07	.44	---	.02
2	.55	---	.02	.39	46	.05	.44	---	.02
3	.63	---	.03	.36	25	.02	.44	---	.02
4	.63	14	.02	.36	---	.03	.44	---	.02
5	.71	25	.05	.35	30	.03	.47	---	.02
6	.74	37	.07	.35	---	.04	.47	---	.02
7	.79	35	.07	.34	---	.04	.47	---	.02
8	.68	42	.08	.37	---	.03	.47	15	.02
9	.67	---	.07	.34	---	.03	.47	---	.02
10	.66	---	.07	.36	---	.03	.51	---	.03
11	.65	---	.07	.38	---	.03	.51	---	.03
12	.68	---	.07	.38	---	.03	.51	---	.03
13	.67	---	.07	.37	---	.03	.50	---	.03
14	.63	40	.07	.37	---	.03	.50	---	.03
15	.59	---	.05	.36	---	.03	.50	---	.03
16	.62	19	.03	.39	30	.03	.50	27	.04
17	.61	---	.03	.43	20	.02	.50	22	.03
18	.55	33	.05	.43	25	.03	.50	---	.03
19	.54	22	.03	.47	22	.03	.50	---	.03
20	.53	---	.05	.42	---	.03	.49	---	.03
21	.52	40	.06	.46	---	.03	.49	---	.03
22	.47	---	.05	.42	---	.03	.49	---	.03
23	.46	37	.05	.42	---	.03	.49	---	.03
24	.44	21	.02	.46	---	.03	.53	---	.03
25	.43	---	.02	.41	---	.03	.53	---	.03
26	.46	22	.03	.45	---	.02	.52	---	.03
27	.45	31	.04	.45	---	.02	.52	---	.03
28	.40	31	.03	.45	---	.02	.52	---	.03
29	.39	---	.04	.45	---	.02	.52	---	.03
30	.38	21	.02	.44	---	.02	.52	---	.03
31	.52	614	1.0	---	---	---	.56	---	.03
TOTAL	17.60	---	2.38	11.99	---	0.91	15.32	---	0.85
		JANUARY			FEBRUARY			MARCH	
1	.56	---	.03	.61	---	.07	1.9	2760	38
2	.55	---	.03	.62	---	.07	1.1	1040	3.9
3	.55	---	.03	.62	---	.07	.96	800	3.5
4	.55	---	.03	.62	---	.07	.91	500	1.8
5	.55	---	.03	.62	---	.07	1.1	2510	14
6	.59	18	.03	.63	---	.06	.98	3570	17
7	.55	44	.07	.63	---	.06	.77	830	2.4
8	.55	46	.07	.63	---	.06	.99	2380	10
9	.56	46	.07	.67	35	.06	1.1	4180	20
10	.56	---	.06	.68	23	.04	1.1	5720	30
11	.56	42	.06	.68	48	.09	3.4	11000	255
12	.56	60	.09	.68	40	.07	2.0	---	75
13	.57	64	.10	.68	33	.06	1.5	---	30
14	.57	---	.10	.69	58	.11	1.0	---	1.0
15	.57	---	.08	.73	36	.07	1.0	---	.80
16	.57	---	.08	.73	57	.11	1.2	---	.60
17	.58	---	.09	.69	40	.07	1.0	---	.40
18	.58	---	.09	.70	---	.07	.90	---	.10
19	.58	---	.09	.70	30	.06	.90	---	.10
20	.58	44	.07	.70	38	.07	.90	---	.10
21	.59	---	.08	.70	---	.05	1.0	---	.08
22	.59	52	.08	.75	35	.07	1.0	---	.08
23	.59	---	.08	1.0	996	5.4	1.0	---	.06
24	.59	---	.08	1.3	1250	10	.90	---	.06
25	.60	---	.08	1.1	346	1.5	.80	---	.05
26	.56	---	.07	.75	91	.20	.80	---	.05
27	.56	---	.07	.71	52	.10	.75	---	.05
28	.60	---	.07	1.0	467	2.3	.70	24	.05
29	.61	---	.07	---	---	---	.69	---	.05
30	.61	---	.07	---	---	---	.67	---	.05
31	.61	---	.07	---	---	---	.68	---	.06
TOTAL	17.80	---	2.12	20.62	---	21.03	33.70	---	504.34

09306242 CORRAL GULCH NEAR RANGELY, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

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	.70	47	.09	9.5	---	300	207	---	18500
2	.70	---	.06	9.3	---	275	83	---	5500
3	.66	21	.04	11	11000	327	65	---	3700
4	.66	---	.05	14	---	440	56	---	2400
5	.70	---	.05	16	12400	535	56	---	2400
6	.70	---	.05	17	11900	550	59	---	2600
7	.75	135	.30	16	10200	440	53	---	2100
8	.79	143	.35	16	9500	410	48	---	1900
9	.77	161	.40	17	10300	470	40	---	1700
10	.82	698	2.3	20	10100	545	35	---	1500
11	.69	127	.25	23	11800	733	32	---	1300
12	.72	154	.30	25	12300	830	29	---	650
13	.74	---	.50	25	12500	844	24	---	500
14	.75	183	.45	23	11500	714	19	6530	335
15	.79	274	.90	20	9600	518	19	---	300
16	.84	600	2.0	20	10400	562	20	---	300
17	1.0	1300	4.2	19	9000	462	18	---	270
18	1.7	8170	55	19	8800	450	14	---	200
19	2.6	7350	62	22	13100	780	14	---	200
20	3.0	7310	59	26	15000	1060	15	---	200
21	3.4	---	60	29	17200	1350	13	---	175
22	3.9	6200	65	32	17800	1540	12	---	150
23	4.7	---	100	34	17400	1600	11	---	120
24	5.6	---	140	38	---	1950	10	---	75
25	6.9	---	175	48	19600	2630	9.8	---	50
26	7.8	10000	210	88	21600	5130	9.5	---	40
27	7.6	---	200	87	---	5000	8.7	---	30
28	7.2	---	200	79	---	4700	7.4	---	25
29	7.3	---	200	83	---	5000	6.9	---	25
30	8.8	---	250	83	---	5500	6.6	---	20
31	---	---	---	88	29200	6940	---	---	---
TOTAL	83.28	---	1788.29	1056.8	---	52585	1000.9	---	47265
		JULY			AUGUST			SEPTEMBER	
1	6.4	1080	19	2.8	625	4.9	2.9	21	.16
2	5.9	---	17	2.7	70	.51	3.0	19	.15
3	5.5	---	16	2.7	---	.70	3.2	1810	21
4	5.3	---	14	2.8	122	.92	3.6	---	13
5	5.3	---	13	2.6	224	1.6	3.3	1140	11
6	4.4	1060	13	2.3	270	1.7	3.3	700	6.2
7	4.1	1220	14	2.2	136	.81	3.3	350	3.1
8	4.0	---	13	2.1	---	.80	3.2	161	1.4
9	3.8	1270	13	2.0	232	1.2	3.2	---	1.2
10	3.8	860	8.8	1.9	240	1.2	3.2	124	1.1
11	3.7	---	7.0	2.0	320	1.7	3.2	102	.88
12	3.4	651	6.0	2.1	---	1.0	3.1	98	.82
13	3.1	448	3.7	2.1	112	.64	3.1	---	.60
14	2.9	---	4.0	2.1	136	.77	3.2	44	.38
15	2.9	400	3.1	2.2	100	.59	3.1	49	.41
16	2.9	185	1.4	2.2	107	.64	3.1	66	.55
17	2.7	---	1.0	2.4	167	1.1	3.0	47	.38
18	2.7	75	.55	2.4	140	.90	3.0	46	.37
19	2.6	160	1.1	2.5	96	.65	3.0	---	.85
20	2.6	100	.70	2.4	---	.65	2.9	100	.78
21	2.6	110	.77	2.5	---	.65	2.9	77	.60
22	3.0	---	15	2.5	96	.65	2.9	77	.60
23	2.8	510	3.9	2.5	112	.75	3.0	80	.65
24	2.7	384	2.8	2.6	---	1.0	2.9	---	.50
25	2.7	200	1.5	2.6	220	1.5	2.9	21	.16
26	2.6	---	4.0	2.6	283	2.0	2.9	35	.27
27	2.7	140	1.0	2.7	---	1.0	2.9	---	.25
28	2.7	240	1.7	2.7	150	1.1	2.8	---	.25
29	2.6	140	1.0	2.8	122	.92	2.7	---	.20
30	2.6	---	.70	2.8	81	.61	2.6	---	.20
31	2.6	88	.60	2.8	---	.30	---	---	---
TOTAL	107.6	---	202.32	75.6	---	33.46	91.4	---	68.01
YEAR	2532.61		102473.71						

09306290 WHITE RIVER BELOW BOISE CREEK, NEAR RANGELY, CO

LOCATION.--Lat 40°10'47", long 108°33'53", in SW¼SE¼ sec.36, T.3 N., R.100 W., Rio Blanco County, Hydrologic Unit 14050007, on left bank 60 ft downstream from bridge on County Road 73, 0.5 mi below Boise Creek, and 16.4 mi east of rangely.

WATER-DISCHARGE RECORDS

DRAINAGE AREA.--2,530 mi^2.

PERIOD OF RECORD.--August 1982 to current year.

GAGE.--Water-stage recorder. Altitude of gage is 5,395 ft, from topographic map.

REMARKS.--Records fair. Diversions above station for irrigation of about 31,500 acres.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,060 ft^3/s June 27, 1983, gage height, 8.31 ft; minimum daily, 320 ft^3/s Jan. 1-7, 1983.

EXTREMES FOR PERIOD.--August to September 1982: Maximum discharge, 1,380 ft^3/s Sept. 29, gage height, 4.87 ft, minimum daily, 423 ft^3/s Sept. 4.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 6,060 ft^3/s at 0600 June 27, gage height, 8.31 ft; minimum daily, 320 ft^3/s Jan. 1-7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1981 TO SEPTEMBER 1982
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1											580	453
2											610	438
3											710	431
4											635	423
5											570	440
6											519	602
7											522	456
8											506	433
9											560	441
10											584	438
11											622	516
12											775	568
13											714	686
14											752	725
15											751	631
16											615	620
17											581	618
18											640	580
19											629	549
20											576	525
21											545	527
22											537	538
23											506	573
24											484	561
25											473	544
26											477	552
27											474	670
28											466	793
29											499	958
30											469	701
31											465	---
TOTAL											17846	16990
MEAN											576	566
MAX											775	958
MIN											465	423
AC-FT											35400	33700

09306290 WHITE RIVER BELOW BOISE CREEK, NEAR RANGELY, CO--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	693	666	526	320	390	700	510	1040	3500	3620	1120	618
2	698	625	517	320	390	820	495	1110	3600	3450	1130	610
3	639	572	508	320	390	700	513	1090	3500	3380	1080	600
4	612	534	493	320	390	600	556	1010	3000	3550	1050	673
5	597	518	497	320	400	660	476	1010	3400	3280	1090	668
6	609	540	508	320	410	600	451	1080	3200	2960	1130	648
7	604	541	482	320	410	560	445	1100	3100	2870	1060	627
8	627	543	469	330	410	546	457	1080	3100	2910	997	625
9	630	539	484	350	410	572	470	1220	3200	2980	961	636
10	632	544	508	370	410	583	450	1420	3400	2870	940	624
11	610	569	508	380	410	741	500	1580	3930	2620	915	608
12	577	572	479	400	410	887	480	1590	4270	2190	980	606
13	595	545	436	400	410	819	543	1590	5070	1890	933	603
14	592	537	485	400	410	755	472	1510	4300	1690	930	598
15	585	511	477	400	410	647	461	1450	3500	1560	853	600
16	602	527	491	400	410	529	459	1420	3210	1430	810	600
17	595	551	512	400	410	520	469	1460	3440	1320	787	600
18	574	562	490	400	410	511	485	1510	3490	1230	793	610
19	562	551	468	390	410	495	540	1470	3820	1180	856	610
20	553	552	450	390	410	477	596	1410	4380	1130	835	600
21	546	529	460	390	380	454	616	1400	4780	1130	846	550
22	553	523	470	390	410	474	674	1590	4840	1350	796	520
23	544	520	470	390	400	496	677	1700	4490	1500	764	540
24	546	480	470	390	430	487	694	1830	4560	1570	759	557
25	527	496	470	390	450	488	855	2190	4940	1300	757	587
26	548	537	420	390	500	498	948	2230	5150	1490	723	599
27	586	490	380	390	480	489	910	2600	5600	1430	707	591
28	695	475	390	390	600	495	897	3000	5160	1310	677	562
29	602	517	400	390	---	488	893	3500	4410	1170	683	664
30	564	536	360	390	---	483	945	3700	3950	1130	730	757
31	604	---	330	390	---	520	---	3900	---	1140	662	---
TOTAL	18501	16202	14408	11540	11760	18094	17937	53790	120290	62630	27354	18291
MEAN	597	540	465	372	420	584	598	1735	4010	2020	882	610
MAX	698	666	526	400	600	887	948	3900	5600	3620	1130	757
MIN	527	475	330	320	380	454	445	1010	3000	1130	662	520
AC-FT	36700	32140	28580	22890	23330	35890	35580	106700	238600	124200	54260	36280

WTR YR 1983 TOTAL 390797 MEAN 1071 MAX 5600 MIN 320 AC-FT 775100

09306290 WHITE RIVER BELOW BOISE CREEK NEAR RANGELY, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1982 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	SPE-CIFIC CON-DUCT-ANCE LAB (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	NITRO-GEN DIS-SOLVED (MG/L AS N)	HARD-NESS (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
NOV											
09...	1110	536	600	611	8.3	4.5	10.8	--	240	62	21
DEC											
16...	1130	485	650	637	8.3	.0	12.2	--	250	65	22
JAN											
20...	1130	E390	585	618	7.9	.0	10.5	--	230	62	19
MAR											
07...	1100	683	750	712	8.4	3.0	10.5	--	240	57	23
MAY											
04...	1100	980	847	818	8.5	9.0	9.5	--	290	65	32
20...	0900	1460	757	721	8.4	8.0	9.5	--	270	60	30
JUN											
16...	0905	2830	426	435	8.2	12.0	8.8	.63	180	47	15
AUG											
30...	0910	757	670	650	8.2	16.0	8.2	--	270	66	26
SEP											
14...	0740	603	720	698	8.3	15.0	7.8	--	280	65	29

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)
NOV											
09...	39	1	1.3	174	130	12	.20	13	380	.52	555
DEC											
16...	44	1	1.1	186	140	14	.30	14	410	.56	541
JAN											
20...	35	1	1.4	172	130	13	.30	14	380	.51	--
MAR											
07...	65	2	3.7	187	170	17	.30	13	460	.63	852
MAY											
04...	75	2	2.4	217	200	14	.30	12	530	.72	1410
20...	57	2	2.3	192	180	12	.30	12	470	.64	1850
JUN											
16...	21	.7	1.4	145	76	5.2	.20	13	270	.36	2040
AUG											
30...	42	1	1.4	200	150	14	.30	15	440	.59	890
SEP											
14...	51	1	1.6	210	170	13	.30	13	470	.64	765

DATE	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN,NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N)
NOV										
09...	<.020	<.100	<.100	<.060	.060	--	.54	.50	.00	.60
DEC										
16...	--	<.100	--	<.060	--	--	--	.50	--	--
JAN										
20...	--	.200	--	.110	--	.79	--	.90	--	--
MAR										
07...	--	.200	--	.130	--	2.7	--	2.8	--	--
MAY										
04...	--	.400	--	.140	--	2.2	--	2.3	--	--
20...	--	.500	--	.230	--	2.0	--	2.2	--	--
JUN										
16...	<.020	.300	.330	<.060	.110	--	.19	.30	.00	.30
AUG										
30...	--	.200	--	.070	--	.53	--	.60	--	--
SEP										
14...	--	.200	--	.090	--	.51	--	.60	--	--

E ESTIMATED.

09306290 WHITE RIVER BELOW BOISE CREEK NEAR RANGELY, CO--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	NITROGEN, TOTAL (MG/L AS N)	PHOSPHORUS, TOTAL (MG/L AS P)	PHOSPHORUS, DISSOLVED (MG/L AS P)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P)	CARBON, ORGANIC TOTAL (MG/L AS C)	CARBON, ORGANIC DISSOLVED (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)	BORON, DISSOLVED (UG/L AS B)	IRON, DISSOLVED (UG/L AS FE)	STRONTIUM, DISSOLVED (UG/L AS SR)
NOV										
09...	--	.010	.010	<.010	2.1	2.3	<.01	40	18	750
DEC										
16...	--	.040	--	--	--	--	--	40	--	770
JAN										
20...	1.1	.060	--	--	--	--	--	40	11	720
MAR										
07...	3.0	1.00	--	--	--	--	--	60	56	660
MAY										
04...	2.7	.680	--	--	23	5.2	--	80	6	790
20...	2.7	.710	--	--	--	--	--	60	13	740
JUN										
16...	.60	.210	.030	.020	9.9	4.3	--	30	27	420
AUG										
30...	.80	.110	--	--	3.9	--	--	50	16	810
SEP										
14...	.80	.070	--	--	--	--	--	60	21	890

DATE	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DISSOLVED (UG/L AS AS)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA)	BARIUM, DISSOLVED (UG/L AS BA)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CADMIUM DISSOLVED (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)
NOV										
09...	230	1	1	<100	40	<10	<1	<1	<10	<10
JUN										
16...	--	--	1	--	41	--	--	<1	--	<10

DATE	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	LITHIUM TOTAL RECOVERABLE (UG/L AS LI)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY DISSOLVED (UG/L AS HG)
NOV										
09...	<1	2	2	3	3	10	30	7	.1	<.1
JUN										
16...	--	--	10	--	1	--	--	9	--	<.1

DATE	MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO)	MOLYBDENUM, DISSOLVED (UG/L AS MO)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	NICKEL, DISSOLVED (UG/L AS NI)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, DISSOLVED (UG/L AS SE)	SILVER, DISSOLVED (UG/L AS AG)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN)	ZINC, DISSOLVED (UG/L AS ZN)
NOV									
09...	<1	<1	<1	<1	1	1	<1	20	19
JUN									
16...	--	3	--	1	--	1	<1	--	<3

09306395 WHITE RIVER NEAR COLORADO-UTAH STATE LINE, UT

LOCATION.--Lat 40°00'50", long 109°04'48", in NW¼NE¼NE¼ sec.27, T.9 S., R.25 E., Uintah County, Hydrologic Unit 14050007, on right bank 900 ft upstream from small right bank tributary, 2.7 mi downstream from Colorado-Utah State line, and 7.5 mi upstream from Evacuation Creek.

DRAINAGE AREA.--3,680 mi², approximately.

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Altitude of gage is 5,030 ft, from topographic map.

REMARKS.--Records good except those for winter months, which are fair. Diversions for irrigation of about 31,900 acres above station.

AVERAGE DISCHARGE.--7 years, 704 ft³/s; 510,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,850 ft³/s June 28, 1983, gage height, 8.68 ft; minimum, 10 ft³/s July 2, 3, 4, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,850 ft³/s June 28, gage height, 8.68 ft; minimum daily, 230 ft³/s Jan. 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	720	644	528	230	400	1100	533	1110	4730	3930	1160	650
2	600	663	520	240	390	1250	514	1220	4350	3710	1180	644
3	620	606	500	250	380	1350	511	1250	4310	3500	1160	631
4	620	570	480	280	380	1160	528	1200	3970	3510	1120	628
5	575	551	450	330	370	1150	486	1150	3960	3470	1160	687
6	654	534	430	390	370	1550	445	1170	4030	3050	1140	657
7	630	542	420	460	370	973	429	1250	3870	2820	1150	633
8	620	538	420	450	390	691	425	1240	3670	2750	1060	616
9	590	554	410	440	400	634	450	1290	3780	2840	1010	603
10	590	546	410	420	420	634	468	1450	3860	2800	977	595
11	580	580	440	410	430	642	479	1710	3880	2610	975	574
12	570	590	450	410	420	801	541	2000	4080	2310	1120	555
13	560	550	360	390	400	898	550	1880	4520	2000	1100	542
14	560	510	320	380	380	845	503	1740	4930	1780	1000	535
15	550	470	300	370	370	800	472	1700	3680	1670	906	516
16	550	460	300	370	390	693	465	1660	3160	1530	868	497
17	540	490	300	380	420	573	467	1770	3220	1430	841	507
18	540	530	300	410	430	553	489	2000	3380	1340	787	502
19	520	560	320	430	430	535	532	1880	3670	1280	833	491
20	510	560	340	420	420	516	619	1790	4080	1220	829	479
21	500	560	360	420	400	495	660	1610	4520	1220	829	462
22	500	540	380	440	400	467	692	1560	4730	1280	818	449
23	500	500	360	450	400	475	733	1660	4730	1550	767	487
24	500	490	310	440	450	489	725	1840	4720	1640	727	517
25	510	480	300	420	550	489	807	2190	4810	1460	718	572
26	550	470	290	410	660	482	967	2750	5020	1430	718	573
27	580	500	290	410	780	490	1000	3120	5550	1500	702	569
28	570	500	280	410	950	481	978	3670	5560	1440	685	530
29	615	500	265	410	---	477	964	4060	5110	1330	668	517
30	574	510	250	410	---	476	998	4410	4380	1220	668	531
31	595	---	240	410	---	470	---	4620	---	1160	715	---
TOTAL	17693	16098	11323	12090	12550	22639	18430	61950	128260	64780	28391	16749
MEAN	571	537	365	390	448	730	614	1998	4275	2090	916	558
MAX	720	663	528	460	950	1550	1000	4620	5560	3930	1180	687
MIN	500	460	240	230	370	467	425	1110	3160	1160	668	449
AC-FT	35090	31930	22460	23980	24890	44900	36560	122900	254400	128500	56310	33220

CAL YR 1982 TOTAL 293461 MEAN 804 MAX 2560 MIN 160 AC-FT 582100
WTR YR 1983 TOTAL 410953 MEAN 1126 MAX 5560 MIN 230 AC-FT 815100

NOTE.--NO GAGE-HEIGHT RECORD DEC. 16 TO JAN. 19.

09306395 WHITE RIVER NEAR COLORADO-UTAH STATE LINE, UT--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1976 to current year. Prior to 1979 water year, published in "Hydrologic and Climatologic Data" reports for Utah.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1976 to current year.
WATER TEMPERATURES: October 1976 to current year.
SUSPENDED-SEDIMENT DISCHARGE: October 1976 to current year.

INSTRUMENTATION.--Specific conductance and temperature recorder since October 1976.

REMARKS.--Sediment loads computed on U.S.P.S. 69 pumping sediment sampler concentrations for days where concentrations are given.

EXTREMES FOR PERIOD OF RECORD.--
SPECIFIC CONDUCTANCE: Maximum recorded (more than 20-percent missing record), 1,570 micromhos July 22, 1977; minimum recorded, 120 micromhos April 29, 1981.
WATER TEMPERATURES: Maximum recorded (more than 20-percent missing record), 31.0°C Aug. 9, 1978; minimum, 0.0°C on many days during winter period.
SEDIMENT CONCENTRATIONS: Maximum daily mean, 61,000 mg/L Sept. 8, 1978; minimum daily mean, 40 mg/L Sept. 21, 1983.
SEDIMENT LOADS: Maximum daily, 412,000 tons Sept. 8, 1978; minimum daily, 1.0 ton July 2, 3, 1977.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum observed, 950 micromhos Mar. 22; minimum recorded, 319 micromhos July 5.
WATER TEMPERATURES: Maximum recorded, 27.0°C Aug. 10; minimum, 0.0°C several days during winter period.
SEDIMENT CONCENTRATIONS: Maximum daily mean, 12,700 mg/L May 30; minimum daily mean, 40 mg/L Sept. 21.
SEDIMENT LOADS: Maximum daily, 152,000 tons May 31; minimum daily, 50 tons Sept. 21.

CORRECTION.--
The daily conductivity, temperature, and sediment data previously published in the 1981 water year report were inadvertently republished in the 1982 report. The daily conductivity, temperature, and sediment data for the 1982 water year are published herewith followed by the data for the 1983 water year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	SPE-CIFIC CON-DUCT-ANCE LAB (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	TUR-BID-ITY (NTU)	OXYGEN, DIS-SOLVED (MG/L)	OXYGEN DEMAND, CHEM-ICAL (HIGH LEVEL) (MG/L)	HARD-NESS (MG/L AS CACO3)
OCT											
12...	1100	610	625	682	7.9	8.0	10	39	11.0	21	250
29...	1000	625	700	663	8.1	4.0	--	--	10.2	--	250
NOV											
30...	1500	518	650	702	7.3	.5	--	--	--	--	260
JAN											
20...	1400	415	685	653	8.1	.0	--	--	11.0	--	240
MAR											
22...	1100	455	950	951	8.5	5.0	--	--	10.3	--	330
MAY											
03...	1530	1180	920	893	8.4	11.0	--	--	8.9	--	320
JUN											
07...	1100	3910	530	544	8.3	12.0	5	1700	8.5	170	200
AUG											
30...	1100	664	700	678	8.5	21.0	5	320	7.6	42	280
SEP											
06...	1330	620	770	752	8.4	20.0	--	--	7.5	--	300

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFIDE TOTAL (MG/L AS S)	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											
12...	62	24	47	1	1.5	181	<.5	160	21	.20	14
29...	62	23	45	1	1.4	175	--	150	21	.30	14
NOV											
30...	65	24	48	1	1.3	183	--	160	24	.30	14
JAN											
20...	62	21	40	1	1.4	175	--	150	15	.30	14
MAR											
22...	71	36	87	2	2.3	227	--	240	35	.30	13
MAY											
03...	64	38	87	2	2.5	213	--	260	20	.30	11
JUN											
07...	44	22	33	1	1.4	156	<2.5	120	7.3	.30	11
AUG											
30...	64	28	49	1	1.7	193	<.5	170	14	.20	14
SEP											
06...	69	31	58	2	2.2	214	--	190	14	.30	16

09306395 - WHITE RIVER NEAR COLORADO STATE LINE, UT

WATER QUALITY DATA, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N)
OCT										
12...	434	440	.59	715	157	--	<.020	<.100	.080	.82
29...	--	420	.57	712	--	--	--	<.100	--	--
NOV										
30...	--	450	.61	624	--	--	--	<.100	--	--
JAN										
20...	421	410	.57	472	45	.220	<.020	.220	.060	--
MAR										
22...	625	620	.85	768	218	.140	<.020	.140	.220	--
MAY										
03...	--	610	.83	1950	--	.810	--	.810	--	--
JUN										
07...	335	330	.46	3540	928	.750	<.020	.750	<.060	--
AUG										
30...	441	460	.60	791	573	.250	<.020	.250	.040	--
SEP										
06...	--	510	.69	852	--	.390	--	.390	--	--

DATE	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	NITRO-GEN, NH4 + ORG. SUSP. TOTAL (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P)	BORON, DIS-SOLVED (UG/L AS B)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CYANIDE TOTAL (MG/L AS CN)	PHENOLS TAL (UG/L)
OCT										
12...	45	44	.90	.080	<.010	<.010	50	3.4	<.01	<1
29...	--	--	--	--	--	<.010	40	--	--	--
NOV										
30...	--	--	--	--	--	<.010	40	--	--	--
JAN										
20...	--	--	--	--	--	.020	50	3.7	--	--
MAR										
22...	--	--	--	--	--	.060	60	5.4	--	--
MAY										
03...	--	--	--	--	--	.020	100	--	--	--
JUN										
07...	1.0	--	--	.430	--	.030	80	6.1	<.01	7
AUG										
30...	1.1	--	--	.020	--	.040	60	4.2	<.01	4
SEP										
06...	--	--	--	--	--	.030	70	--	--	--

DATE	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	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)
OCT										
12...	20	1	43	<0	<1	<10	10	34	2	24
JUN										
07...	60	1	240	<0	<1	<10	10	57	5	21
AUG										
30...	30	2	59	0	<1	<10	10	40	4	--

DATE	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, DIS-SOLVED (UG/L AS NI)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)
OCT									
12...	3	<.1	1	<1	2	1	740	<1	12
JUN									
07...	8	<.1	6	2	2	<1	440	3	190
AUG									
30...	1	<.1	3	3	2	<1	790	3	73

09306395 - WHITE RIVER NEAR COLORADO STATE LINE, UT

RADIOCHEMICAL ANALYSES, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	TIME	GROSS ALPHA, SUSP. TOTAL (PCI/L AS U-NAT)	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)
JUN								
07...	1100	130	<9.6	190	<4.1	130	<4.0	110
AUG								
30...	1100	--	<11	<18	6.5	12	6.2	11

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	588					---	8890	---	606	386	---	757
2	595					---	8890	---	616	366	---	784
3	600					---	8720	---	591	362	---	802
4	584					---	8620	---	606	354	---	800
5	596					---	8710	---	579	337	---	873
6	590					---	8720	---	541	365	---	840
7	580					---	8770	---	544	384	---	806
8	569					---	8730	---	554	393	590	793
9	559					---	8700	---	524	379	592	810
10	549					2170	8610	---	509	370	623	774
11	539					79	8550	---	491	379	615	754
12	529					7000	8520	---	468	392	675	755
13	519					9420	6930	---	453	447	729	773
14	508					9120	458	---	463	482	697	774
15	498					9020	546	---	503	502	649	770
16	488					9280	523	---	514	520	679	772
17	478					9410	614	---	523	546	681	766
18	468					9470	1910	853	482	567	668	756
19	457					9670	934	907	455	573	692	742
20	447					9610	1040	1010	419	562	657	720
21	437					9630	---	1020	408	720	648	708
22	---					9770	---	988	388	693	621	737
23	---					9860	---	944	378	647	622	744
24	---					9440	---	962	374	---	670	736
25	---					8940	---	893	380	---	686	795
26	---					8930	---	812	389	---	709	788
27	---					8810	---	757	399	---	701	776
28	---					8770	---	699	406	---	680	760
29	---					8790	---	656	401	---	723	749
30	---					8840	---	636	390	---	703	768
31	---					8820	---	614	---	---	738	---
MEAN	532					8400	5870	839	478	466	669	773

WTR YR 1983 MEAN 2120 MAX 9860 MIN 79

09306395 - WHITE RIVER NEAR COLORADO STATE LINE, UT

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	12.5	10.0									---	---
2	12.5	9.5									---	---
3	12.5	9.5									---	---
4	14.0	10.0									---	---
5	12.5	9.0									---	---
6	11.5	8.0									---	---
7	11.0	8.5									---	---
8	10.0	8.0									---	---
9	9.0	7.0									---	---
10	9.0	6.0									8.5	6.0
11	9.0	6.0									8.5	5.5
12	10.0	6.5									10.0	6.5
13	11.0	7.5									9.0	7.0
14	11.0	7.5									8.0	6.0
15	12.0	8.0									6.0	4.5
16	11.5	8.5									5.5	3.0
17	11.5	8.0									5.0	3.5
18	12.0	8.5									4.5	3.0
19	10.0	7.5									5.0	2.0
20	9.5	6.0									5.5	2.0
21	8.0	6.0									6.0	2.5
22	---	---									7.5	3.5
23	---	---									8.0	5.0
24	---	---									5.5	3.5
25	---	---									6.0	3.5
26	---	---									6.5	3.0
27	---	---									7.0	3.5
28	---	---									8.0	5.0
29	---	---									9.0	4.5
30	---	---									10.0	6.0
31	---	---									8.0	6.0
MONTH	14.0	6.0									10.0	2.0

	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	7.5	4.5	---	---	13.5	11.0	16.0	14.0	---	---	21.5	18.5
2	8.0	5.0	---	---	13.0	11.5	15.5	14.5	---	---	22.5	18.5
3	8.0	4.5	---	---	13.0	11.0	17.0	14.5	---	---	23.5	19.0
4	5.5	3.0	---	---	13.5	12.0	17.0	15.0	---	---	23.5	20.0
5	5.0	1.5	---	---	13.5	12.0	17.0	14.5	---	---	21.5	18.5
6	6.5	.5	---	---	13.0	12.0	18.0	15.5	---	---	21.5	17.0
7	8.5	2.5	---	---	14.0	11.5	19.0	16.5	---	---	21.0	17.5
8	8.5	4.0	---	---	14.5	13.0	19.5	18.0	26.5	.5	21.5	18.0
9	10.0	4.5	---	---	13.5	12.0	19.5	17.5	26.5	23.0	21.5	18.0
10	10.5	7.0	---	---	14.5	13.0	19.5	17.0	27.0	23.0	21.0	17.0
11	10.0	8.0	---	---	15.0	13.5	19.0	17.0	25.5	23.0	21.0	17.0
12	9.5	7.0	---	---	14.5	12.5	19.5	17.0	24.5	22.5	21.0	16.5
13	8.0	5.0	---	---	12.5	11.0	20.5	17.5	24.0	21.0	21.0	16.5
14	7.5	3.5	---	---	13.5	9.5	20.5	18.0	25.0	21.5	20.0	17.5
15	10.0	4.0	---	---	14.5	11.5	20.0	18.5	25.5	22.0	20.5	16.5
16	11.5	6.0	---	---	15.5	13.5	20.0	17.0	24.0	22.0	20.0	16.0
17	13.0	7.0	---	---	16.5	14.5	20.5	17.5	25.5	21.5	20.0	16.0
18	11.5	8.0	8.5	8.0	17.0	15.0	21.5	18.0	25.5	22.0	19.5	15.5
19	13.5	8.0	10.0	8.0	17.5	15.5	21.5	19.5	24.0	21.5	18.5	15.0
20	11.5	9.5	11.5	9.5	17.5	15.5	22.0	20.0	23.5	21.5	15.0	11.5
21	---	---	13.5	10.0	17.0	15.0	22.0	19.5	22.5	19.5	15.0	10.0
22	---	---	16.0	12.0	17.5	15.0	21.0	20.0	23.0	19.5	15.5	11.0
23	---	---	16.5	13.5	17.5	15.5	20.0	20.0	22.5	19.0	14.5	12.5
24	---	---	17.0	14.5	16.5	15.0	---	---	21.5	18.0	16.5	13.5
25	---	---	17.5	15.0	16.5	15.0	---	---	22.5	18.5	17.5	13.5
26	---	---	16.5	14.5	16.5	15.0	---	---	22.5	18.5	17.5	14.0
27	---	---	17.0	14.5	15.5	14.0	---	---	22.5	18.5	17.5	15.0
28	---	---	16.5	14.5	16.5	13.5	---	---	21.5	19.0	17.5	14.0
29	---	---	16.0	14.0	17.0	14.0	---	---	21.5	18.0	17.0	14.5
30	---	---	15.5	14.0	16.0	14.5	---	---	21.5	18.0	16.0	14.0
31	---	---	14.0	12.0	---	---	---	---	22.0	18.5	---	---
MONTH	13.5	.5	17.5	8.0	17.5	9.5	22.0	14.0	27.0	.5	23.5	10.0
YEAR	27.0	.5										

09306395 - WHITE RIVER NEAR COLORADO STATE LINE, UT

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

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	720	3570	6940	644	280	487	528	115	164
2	600	1580	2560	663	280	501	520	115	161
3	620	1020	1710	606	235	385	500	115	155
4	620	812	1360	570	230	354	480	115	149
5	575	581	902	551	200	298	450	115	140
6	654	735	1300	534	180	260	430	115	134
7	630	518	881	542	125	183	420	115	130
8	620	410	686	538	120	174	420	115	130
9	590	210	335	554	120	179	410	115	127
10	590	259	413	546	115	170	410	115	127
11	580	213	334	580	115	180	440	115	137
12	570	164	252	590	115	183	450	115	140
13	560	202	305	550	115	171	360	115	112
14	560	204	308	510	115	158	320	115	99
15	550	224	333	470	115	146	300	115	93
16	550	188	279	460	115	143	300	115	93
17	540	194	283	490	115	152	300	115	93
18	540	176	257	530	115	165	300	115	93
19	520	147	206	560	115	174	320	115	99
20	510	150	207	560	115	174	340	115	106
21	500	145	196	560	115	174	360	115	112
22	500	142	192	540	115	168	380	115	118
23	500	172	232	500	115	155	360	115	112
24	500	185	250	490	115	152	310	115	96
25	510	185	255	480	115	149	300	115	93
26	550	200	297	470	115	146	290	115	90
27	580	248	388	500	115	155	290	115	90
28	570	330	508	500	115	155	280	115	87
29	615	345	573	500	115	155	265	115	82
30	574	305	473	510	115	158	250	115	78
31	595	295	474	---	---	---	240	115	75
TOTAL	17693	---	23689	16098	---	6204	11323	---	3515

		JANUARY			FEBRUARY			MARCH	
1	230	115	71	400	60	65	1100	1140	3390
2	240	115	75	390	62	65	1250	1200	4050
3	250	115	78	380	58	60	1350	1030	3750
4	280	115	87	380	75	77	1160	970	3040
5	330	115	102	370	93	93	1150	1000	3110
6	390	115	121	370	95	95	1550	1120	4690
7	460	115	143	370	90	90	973	1160	3050
8	450	115	140	390	97	102	691	1090	2030
9	440	115	137	400	105	113	634	1050	1800
10	420	115	130	420	107	121	634	1000	1710
11	410	115	127	430	112	130	642	980	1700
12	410	115	127	420	107	121	801	1020	2210
13	390	115	121	400	125	135	898	1040	2520
14	380	115	118	380	145	149	845	1010	2300
15	370	115	115	370	148	148	800	950	2050
16	370	115	115	390	177	186	693	840	1570
17	380	115	118	420	205	232	573	740	1140
18	410	112	124	430	215	250	553	600	896
19	430	110	128	430	340	395	535	490	708
20	420	110	125	420	380	431	516	430	599
21	420	110	125	400	430	464	495	390	521
22	440	110	131	400	470	508	467	350	441
23	450	107	130	400	510	551	475	330	423
24	440	102	121	450	610	741	489	372	491
25	420	105	119	550	660	980	489	468	618
26	410	82	91	660	970	1730	482	444	578
27	410	80	89	780	770	1620	490	348	460
28	410	77	85	950	820	2100	481	684	888
29	410	83	92	---	---	---	477	600	773
30	410	83	92	---	---	---	476	564	725
31	410	70	77	---	---	---	470	420	533
TOTAL	12090	---	3454	12550	---	11752	22639	---	52764

09306395 - WHITE RIVER NEAR COLORADO STATE LINE, UT

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

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	533	1940	2790	1110	4050	12100	4730	11800	151000
2	514	1360	1890	1220	5400	17800	4350	10000	117000
3	511	744	1030	1250	5830	19700	4310	10300	120000
4	528	225	321	1200	5880	19100	3970	9400	101000
5	486	220	289	1150	4720	14700	3960	9700	104000
6	445	245	294	1170	4400	13900	4030	9500	103000
7	429	295	342	1250	4100	13800	3870	8000	83600
8	425	310	356	1240	3720	12500	3670	7500	74300
9	450	310	377	1290	4220	14700	3780	9100	92900
10	468	340	430	1450	6600	25800	3860	10100	105000
11	479	450	582	1710	9400	43400	3880	10500	110000
12	541	680	993	2000	11000	59400	4080	10200	112000
13	550	810	1200	1880	7900	40100	4520	10700	131000
14	503	1010	1370	1740	6400	30100	4930	8800	117000
15	472	1200	1530	1700	6100	28000	3680	6700	66600
16	465	1510	1900	1660	8200	36800	3160	4900	41800
17	467	1600	2020	1770	5300	25300	3220	3500	30400
18	489	1580	2090	2000	8400	45400	3380	2950	26900
19	532	1350	1940	1880	10300	52300	3670	2800	27700
20	619	1800	3010	1790	10400	50300	4080	3600	39700
21	660	1810	3230	1610	7700	33500	4520	3650	44500
22	692	2300	4300	1560	6600	27800	4730	3600	46000
23	733	2100	4160	1660	7300	32700	4730	3050	39000
24	725	2000	3920	1840	7900	39200	4720	2850	36300
25	807	4400	9590	2190	9800	57900	4810	2700	35100
26	967	5200	13600	2750	10900	80900	5020	3300	44700
27	1000	3850	10400	3120	12200	103000	5550	3650	54700
28	978	2700	7130	3670	12500	124000	5560	3400	51000
29	964	2390	6220	4060	11300	124000	5110	3050	42100
30	998	2550	6870	4410	12700	151000	4380	2900	34300
31	---	---	---	4620	12200	152000	---	---	---
TOTAL	18430	---	94174	61950	---	1501200	128260	---	2182600
		JULY			AUGUST			SEPTEMBER	
1	3930	2750	29200	1160	856	2680	650	650	1140
2	3710	2550	25500	1180	1580	5030	644	590	1030
3	3500	2500	23600	1160	656	2050	631	530	903
4	3510	2450	23200	1120	552	1670	628	530	899
5	3470	2400	22500	1160	1680	5260	687	470	872
6	3050	2250	18500	1140	2420	7450	657	410	727
7	2820	2200	16800	1150	784	2430	633	360	615
8	2750	2050	15200	1060	430	1230	616	300	499
9	2840	1950	15000	1010	340	927	603	235	383
10	2800	1950	14700	977	377	994	595	210	337
11	2610	1900	13400	975	348	916	574	185	287
12	2310	1600	9980	1120	5500	16600	555	165	247
13	2000	1300	7020	1100	9000	26700	542	150	220
14	1780	1200	5770	1000	6900	18600	535	145	209
15	1670	1100	4960	906	5200	12700	516	130	181
16	1530	900	3720	868	4600	10800	497	120	161
17	1430	760	2930	841	4200	9540	507	110	151
18	1340	720	2600	787	3100	6590	502	100	136
19	1280	660	2280	833	4000	9000	491	85	113
20	1220	710	2340	829	2900	6490	479	60	78
21	1220	1230	4050	829	1900	4250	462	40	50
22	1280	4900	16900	818	1200	2650	449	45	55
23	1550	5700	23900	767	960	1990	487	55	72
24	1640	6480	28700	727	930	1830	517	65	91
25	1460	4050	16000	718	880	1710	572	85	131
26	1430	6480	25000	718	840	1630	573	125	193
27	1500	5220	21100	702	790	1500	569	155	238
28	1440	3920	15200	685	740	1370	530	170	243
29	1330	1120	4020	668	730	1320	517	155	216
30	1220	680	2240	668	760	1370	531	160	229
31	1160	576	1800	715	740	1430	---	---	---
TOTAL	64780	---	418110	28391	---	168707	16749	---	10706
YEAR	410953		4476875						

09339900 EAST FORK SAN JUAN RIVER ABOVE SAND CREEK, NEAR PAGOSA SPRINGS, CO

LOCATION.--Lat 37°23'23", long 106°50'26", Archuleta County, Hydrologic Unit 14080101, on right bank 0.3 mi upstream from Sand Creek, 4.0 mi upstream from West Fork San Juan River, and 13 mi northeast of Pagosa Springs.

DRAINAGE AREA.--64.1 mi^2.

PERIOD OF RECORD.--October 1956 to current year. Prior to October 1959, published as San Juan River above Sand Creek, near Pagosa Springs.

REVISED RECORDS.--WSP 1713: 1957.

GAGE.--Water-stage recorder. Altitude of gage is 8,900 ft, from topographic map.

REMARKS.--Records good except those for period of no gage-height record, which are poor. Diversions above station for irrigation of about 500 acres of hay meadows above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--27 years, 85.6 ft^3/s; 62,020 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,260 ft^3/s, Sept. 14, 1970, gage height, 6.75 ft, from rating curve extended above 460 ft^3/s, on basis of slope-area measurement at gage height 6.13 ft; minimum daily determined, 3.4 ft^3/s Dec. 26, 1958.

EXTREMES OUTSIDE PERIOD OF RECORD.--Greatest flood since at least 1885 occurred Oct. 5, 1911.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
May 31	0030	* 856	5.20	June 20	2130	770	5.10

Minimum daily discharge, 9.0 ft^3/s Jan. 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	214	36	23	12	13	20	29	100	740	410	71	38
2	131	35	24	12	13	22	29	86	710	375	115	36
3	133	28	25	12	13	22	29	83	560	375	122	34
4	115	29	26	12	13	22	24	89	525	380	111	35
5	102	29	28	12	13	21	26	106	510	385	95	32
6	92	29	30	13	13	21	25	108	470	380	133	30
7	83	29	29	13	13	20	24	109	460	370	117	32
8	79	30	29	13	13	21	23	145	475	350	95	38
9	70	38	29	12	13	21	24	230	435	315	82	31
10	65	36	28	11	12	24	24	302	405	306	75	29
11	65	32	26	11	11	30	25	274	470	274	79	28
12	62	30	23	11	11	33	24	214	535	234	75	26
13	58	27	20	10	14	36	24	184	390	194	67	26
14	55	28	20	10	14	39	23	155	286	175	70	27
15	52	26	16	10	13	37	24	135	282	158	62	26
16	51	27	16	10	14	34	24	122	298	166	53	23
17	48	28	17	10	14	33	29	104	375	160	50	23
18	46	31	17	10	13	32	36	99	500	150	48	23
19	43	32	15	10	14	31	46	97	626	152	48	23
20	40	32	16	10	14	28	54	92	680	133	46	22
21	38	30	17	10	14	27	56	102	662	133	42	21
22	37	30	17	10	16	28	54	145	644	115	39	20
23	36	29	18	9.0	17	26	63	266	632	113	38	19
24	35	26	18	10	19	25	97	425	620	100	38	19
25	35	28	17	11	22	25	138	495	572	94	78	19
26	39	27	15	10	22	24	148	578	545	86	52	19
27	57	28	16	11	20	23	131	644	515	80	59	21
28	42	26	16	11	20	24	126	740	450	79	51	19
29	38	28	14	12	---	25	133	722	445	74	49	20
30	39	28	13	12	---	27	120	722	450	71	44	161
31	38	---	13	13	---	32	---	758	---	82	41	---
TOTAL	2038	892	631	343.0	411	833	1632	8431	15267	6469	2145	920
MEAN	65.7	29.7	20.4	11.1	14.7	26.9	54.4	272	509	209	69.2	30.7
MAX	214	38	30	13	22	39	148	758	740	410	133	161
MIN	35	26	13	9.0	11	20	23	83	282	71	38	19
AC-FT	4040	1770	1250	680	815	1650	3240	16720	30280	12830	4250	1820

CAL YR 1982 TOTAL 38778.0 MEAN 106 MAX 450 MIN 8.5 AC-FT 76920
WTR YR 1983 TOTAL 40012.0 MEAN 110 MAX 758 MIN 9.0 AC-FT 79360

NOTE.--NO GAGE-HEIGHT RECORD DEC. 16 TO MAR. 2

09342500 SAN JUAN RIVER AT PAGOSA SPRINGS, CO

LOCATION.--Lat 37°15'58", long 107°00'37", in NE¼SW¼ sec.13, T.35 N., R.2 W., Archuleta County, Hydrologic Unit 14080101, on right bank at former bridge site in Pagosa Springs, 0.2 mi upstream from McCabe Creek, 0.6 mi downstream from bridge on U.S. Highway 160, and 2.0 mi upstream from Mill Creek.

DRAINAGE AREA.--298 mi².

PERIOD OF RECORD.--October 1910 to December 1914, May 1935 to current year. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 1313: 1914(M).

GAGE.--Water-stage recorder. Datum of gage is 7,052.04 ft, National Geodetic Vertical Datum of 1929. Jan 29 to Mar. 6, 1911, nonrecording gage at site 0.5 mi upstream at different datum. Mar. 7 to Oct. 4, 1911, nonrecording gage at present site at different datum. Nov. 23, 1911, to Nov. 14, 1914, nonrecording gage at site 300 ft downstream at different datum.

REMARKS.--Records good. Diversions for irrigation of large areas above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--52 years, 370 ft³/s; 268,100 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 25,000 ft³/s Oct. 5, 1911, gage height, 17.8 ft, from floodmarks, from velocity-area study; minimum daily, 9.7 ft³/s Oct. 5, 6, 1956.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known since at least 1885, that of Oct. 5, 1911. Flood of June 29, 1927, reached a stage of 13.5 ft, discharge about 16,000 ft³/s, from information by local residents.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,500 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
May 10	2300	1,790	4.80	Aug. 5	2000	3,380	4.83
May 31	0100	* 3,380	6.27	Sept.30	1900	1,950	4.90
June 19	2330	3,310	6.22				

Minimum daily discharge, 48 ft³/s Jan. 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1230	154	92	62	70	116	203	666	3070	1780	286	175
2	768	145	99	62	70	126	190	590	2900	1640	480	163
3	635	126	94	61	66	122	192	515	2460	1630	490	158
4	545	132	94	62	76	124	165	565	2360	1640	500	151
5	470	130	95	61	72	116	149	672	2340	1610	668	128
6	416	128	90	68	70	112	147	744	2240	1530	776	122
7	384	126	97	68	71	116	147	666	2190	1470	792	120
8	352	128	103	68	71	126	140	847	2240	1350	580	160
9	304	163	112	65	74	132	136	1200	2080	1220	465	132
10	286	163	126	58	68	160	149	1580	2000	1110	404	118
11	279	158	122	57	66	203	158	1550	2200	952	388	114
12	259	140	108	57	60	230	154	1200	2410	828	336	114
13	247	134	97	52	71	238	160	1120	1920	720	282	108
14	227	122	103	51	77	247	149	952	1490	640	332	112
15	219	122	74	52	70	235	138	816	1490	570	320	110
16	211	122	80	52	77	198	149	732	1640	540	256	94
17	195	122	87	51	77	182	175	650	1940	525	230	90
18	177	126	83	53	74	177	256	580	2360	465	213	95
19	172	136	74	52	80	168	368	595	2950	470	205	99
20	158	138	82	52	76	158	448	560	2840	408	222	90
21	154	126	83	53	78	145	448	565	2710	400	187	85
22	147	120	82	53	90	145	440	792	2670	380	172	80
23	143	118	92	48	101	140	515	1180	2700	416	158	78
24	140	110	88	51	116	136	726	1710	2680	376	151	77
25	136	114	80	60	130	136	994	2120	2640	336	327	77
26	136	108	77	53	124	128	1020	2360	2270	316	235	78
27	255	112	78	55	116	118	910	2680	2350	293	265	80
28	175	106	82	62	114	130	810	2940	2020	336	238	90
29	154	106	68	61	---	128	875	3000	1880	265	232	80
30	156	108	68	66	---	145	798	3030	1910	262	232	893
31	156	---	66	68	---	205	---	3080	---	282	200	---
TOTAL	9286	3843	2776	1794	2305	4842	11309	40257	68950	24760	10622	4071
MEAN	300	128	89.5	57.9	82.3	156	377	1299	2298	799	343	136
MAX	1230	163	126	68	130	247	1020	3080	3070	1780	792	893
MIN	136	106	66	48	60	112	136	515	1490	262	151	77
AC-FT	18420	7620	5510	3560	4570	9600	22430	79850	136800	49110	21070	8070

CAL YR 1982 TOTAL 167971 MEAN 460 MAX 1990 MIN 48 AC-FT 333200
WTR YR 1983 TOTAL 184815 MEAN 506 MAX 3080 MIN 48 AC-FT 366600

09343300 RIO BLANCO BELOW BLANCO DIVERSION DAM, NEAR PAGOSA SPRINGS, CO

LOCATION.--Lat 37°12'11", long 106°48'45", in NW¼ sec.11, T.34 N., R.1 E., Archuleta County, Hydrologic Unit 14080101, on left bank 250 ft downstream from Blanco Diversion Dam, 1.1 mi downstream from Leche Creek, and 12 mi southeast of Pagosa Springs.

DRAINAGE AREA.--69.1 mi^2.

PERIOD OF RECORD.--March 1971 to current year.

GAGE.--Water-stage recorder. Datum of gage is 7,848.81 ft, National Geodetic Vertical Datum of 1929 (levels by U.S. Bureau of Reclamation).

REMARKS.--Flows controlled by diversion dam upstream.

AVERAGE DISCHARGE.--12 years, 37.5 ft^3/s; 27,170 acre-ft/yr.

COOPERATION.--Records collected and computed by U.S. Bureau of Reclamation.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,310 ft^3/s Sept. 30, 1982, gage height, 4.68 ft, maximum gage height, 4.69 ft, June 1, 1983; minimum daily discharge, 6.9 ft^3/s, Dec. 29, 1976.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 910 ft^3/s Sept. 30, gage height, 4.69 ft; minimum daily, 17 ft^3/s Feb. 11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	189	31	27	20	21	31	44	41	702	78	20	39
2	148	39	28	21	21	31	38	41	646	93	29	38
3	119	39	29	22	19	30	40	41	592	84	23	36
4	96	41	31	23	20	30	30	41	518	85	26	37
5	57	43	33	24	19	29	33	41	400	155	40	33
6	23	40	33	26	18	28	32	41	256	109	26	30
7	23	36	33	25	21	27	34	41	232	87	21	28
8	23	38	32	25	20	30	28	42	256	73	20	50
9	22	54	31	24	19	30	28	44	253	61	20	32
10	22	49	32	22	18	38	32	47	225	64	20	28
11	22	42	31	23	17	48	27	46	288	59	20	27
12	22	45	30	24	18	48	21	44	272	62	20	25
13	22	41	28	25	20	50	22	44	106	64	20	27
14	22	42	28	25	20	56	22	41	62	54	20	31
15	22	40	24	26	18	52	21	40	73	45	42	29
16	22	37	26	27	18	45	21	40	132	56	62	24
17	22	39	26	28	18	47	21	40	309	53	58	23
18	22	39	28	26	19	46	21	40	435	42	53	24
19	22	42	30	26	23	45	21	40	456	28	92	24
20	22	41	30	28	21	43	21	40	450	23	76	25
21	22	39	30	24	22	37	21	40	425	23	56	24
22	22	37	30	25	26	37	21	42	332	19	52	22
23	22	37	28	22	30	36	22	56	204	21	48	21
24	22	36	30	21	36	34	22	116	155	20	44	21
25	22	35	28	22	37	33	22	228	150	24	66	21
26	23	34	30	21	32	33	23	300	171	20	50	21
27	23	34	30	21	30	33	22	456	114	20	60	24
28	23	33	28	21	30	38	23	566	82	20	48	21
29	23	33	26	21	---	40	22	639	91	20	60	22
30	23	34	24	21	---	40	33	653	103	22	46	425
31	23	---	22	20	---	56	---	681	---	20	42	---
TOTAL	1190	1170	896	729	631	1201	788	4612	8490	1604	1280	1232
MEAN	38.4	39.0	28.9	23.5	22.5	38.7	26.3	149	283	51.7	41.3	41.1
MAX	189	54	33	28	37	56	44	681	702	155	92	425
MIN	22	31	22	20	17	27	21	40	62	19	20	21
AC-FT	2360	2320	1780	1450	1250	2380	1560	9150	16840	3180	2540	2440

CAL YR 1982 TOTAL 22819 MEAN 62.5 MAX 389 MIN 12 AC-FT 45260
WTR YR 1983 TOTAL 23823 MEAN 65.3 MAX 702 MIN 17 AC-FT 47250

09344000 NAVAJO RIVER AT BANDED PEAK RANCH, NEAR CHROMO, CO

LOCATION.--Lat 37°05'07", long 106°41'20", in NW¼ sec.24, T.33 N., R.2 E., Archuleta County, Hydrologic Unit 14080101, on left bank at downstream side of private bridge on Banded Peak Ranch, 0.5 mi downstream from Aspen Creek, 4.0 mi downstream from East Fork, and 9 mi northeast of Chromo.

DRAINAGE AREA.--69.8 mi^2.

PERIOD OF RECORD.--October 1936 to current year. Monthly discharge only for some periods, published in WSP 1313.

GAGE.--Water-stage recorder. Datum of gage is 7,940.6 ft, National Geodetic Vertical Datum of 1929 (river-profile survey). Prior to Oct. 1, 1949, at datum 3.00 ft, higher.

REMARKS.--Records good. Diversions for irrigation of about 430 acres above station.

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

AVERAGE DISCHARGE.--47 years, 106 ft^3/s; 76,800 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,480 ft^3/s June 9, 1980, gage height, 4.55 ft, from rating curve extended above 840 ft^3/s, on basis of float-area measurement at gage height 4.44 ft; maximum gage height, 7.02 ft, May 13, 1941, present datum; minimum daily discharge, 8.4 ft^3/s Sept. 29, 1960, result of temporary blockage by channel alteration upstream.

EXTREMES OUTSIDE PERIOD OF RECORD.--A major flood occurred Oct. 5, 1911.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 500 ft^3/s and maximum:

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
May 28	2000	1,080	3.55	June 18	2400	* 1,210	3.68
June 12	0030	848	3.20	Sept 30	1530	796	3.05

Minimum daily discharge, 34 ft^3/s Dec. 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	151	53	42	38	40	43	54	169	836	530	118	55
2	113	50	42	39	40	42	51	149	766	484	118	55
3	104	44	41	40	40	42	52	147	692	520	122	54
4	100	44	42	41	40	43	45	173	702	561	134	58
5	94	44	42	42	37	42	47	205	675	552	134	51
6	86	43	42	42	37	42	46	199	605	525	137	48
7	85	43	42	42	37	40	47	194	570	468	117	46
8	80	44	42	43	38	42	45	242	570	440	102	62
9	75	62	51	42	38	42	46	317	605	412	98	55
10	74	57	52	42	36	47	47	356	600	400	96	49
11	75	53	51	43	36	53	47	341	686	350	94	47
12	75	50	50	43	36	57	47	298	708	320	89	45
13	71	48	49	44	37	62	46	280	530	278	93	44
14	70	47	47	45	37	65	45	248	412	240	104	45
15	69	49	42	45	37	62	43	221	432	223	95	44
16	69	49	43	45	37	57	46	196	507	238	84	41
17	68	50	43	45	37	56	53	175	610	230	78	40
18	66	51	44	44	37	54	68	167	778	218	75	40
19	65	53	44	43	37	52	89	171	976	203	96	40
20	63	51	44	43	37	51	104	162	969	182	82	40
21	61	50	45	42	37	47	103	173	934	165	72	38
22	60	50	45	42	41	49	96	223	874	158	70	38
23	60	49	48	42	42	49	114	300	778	158	69	38
24	56	46	45	42	46	45	162	440	708	162	67	38
25	55	46	43	42	46	47	225	566	686	190	77	38
26	61	46	40	41	44	46	238	670	715	173	77	37
27	103	46	40	41	43	43	207	816	658	149	82	37
28	62	45	40	41	44	46	209	914	570	134	74	37
29	60	45	34	40	---	45	223	881	570	126	82	42
30	55	45	35	41	---	49	196	874	580	122	68	337
31	54	---	37	41	---	56	---	868	---	126	58	---
TOTAL	2340	1453	1347	1306	1094	1516	2841	11135	20302	9037	2862	1639
MEAN	75.5	48.4	43.5	42.1	39.1	48.9	94.7	359	677	292	92.3	54.6
MAX	151	62	52	45	46	65	238	914	976	561	137	337
MIN	54	43	34	38	36	40	43	147	412	122	58	37
AC-FT	4640	2880	2670	2590	2170	3010	5640	22090	40270	17920	5680	3250

CAL YR 1982 TOTAL 55684 MEAN 153 MAX 620 MIN 26 AC-FT 110400
WTR YR 1983 TOTAL 56872 MEAN 156 MAX 976 MIN 34 AC-FT 112800

09344400 NAVAJO RIVER BELOW OSO DIVERSION DAM, NEAR CHROMO, CO

LOCATION.--Lat 37°01'48", long 106°44'16", in NE¼ sec.9, T.32 N., R.2 E., Archuleta County, Hydrologic Unit 14080101, on left bank 600 ft downstream from Oso Diversion Dam, 5.5 mi east of Chromo, and 6 mi upstream from Little Navajo River.

DRAINAGE AREA.--100.5 mi^2.

PERIOD OF RECORD.--March 1971 to current year.

GAGE.--Water-stage recorder. Datum of gage is 7,647.71 ft, National Geodetic Vertical Datum of 1929 (levels by U.S. Bureau of Reclamation).

REMARKS.--Flows controlled by diversion dam upstream.

AVERAGE DISCHARGE.--12 years, 56.2 ft^3/s; 40,720 acre-ft/yr.

COOPERATION.--Records collected and computed by U.S. Bureau of Reclamation.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 870 ft^3/s May 11, 1973; minimum daily, 10 ft^3/s Oct. 10, 11, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 545 ft^3/s Sept. 30, gage height, 4.33 ft; minimum daily, 30 ft^3/s Sept. 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	53	52	49	38	46	52	81	94	234	98	58	56
2	42	62	54	40	45	56	74	94	215	79	58	58
3	42	56	54	41	44	54	76	94	173	82	58	56
4	43	56	54	42	46	55	66	94	138	82	58	61
5	43	57	51	44	42	53	46	94	154	86	59	56
6	43	56	51	46	42	52	42	94	105	79	58	54
7	43	56	49	48	44	52	42	94	93	79	59	52
8	43	55	49	48	44	56	42	94	89	79	59	70
9	43	76	56	49	45	58	42	94	84	86	59	58
10	42	72	59	48	42	66	42	94	77	79	59	50
11	42	67	59	46	43	79	43	94	96	79	59	48
12	42	62	58	48	42	88	42	94	136	79	59	44
13	42	59	55	49	44	99	42	94	58	79	59	44
14	42	58	55	48	44	103	42	94	63	80	59	45
15	43	58	49	49	42	94	41	94	83	80	59	46
16	42	61	52	49	44	82	42	95	136	80	59	40
17	42	62	52	49	45	79	42	93	193	80	59	34
18	42	65	55	49	44	74	41	94	276	67	59	32
19	42	70	57	47	46	71	42	94	353	58	58	30
20	42	68	58	48	45	67	42	94	353	58	56	33
21	42	65	57	48	45	63	42	94	342	58	58	36
22	43	65	57	48	49	65	42	94	318	58	59	41
23	43	65	56	48	51	63	43	94	118	58	59	40
24	42	62	59	48	56	61	43	124	143	58	59	38
25	44	62	56	48	59	59	35	171	189	58	57	38
26	44	60	58	46	56	60	43	245	214	58	58	38
27	44	61	58	47	55	56	42	245	229	58	57	36
28	44	60	54	48	56	59	42	285	150	58	57	34
29	44	61	50	47	---	59	43	315	118	58	58	41
30	44	63	45	48	---	65	65	266	119	58	57	299
31	44	---	40	46	---	84	---	254	---	58	59	---
TOTAL	1336	1852	1666	1448	1306	2084	1412	4067	5049	2207	1809	1608
MEAN	43.1	61.7	53.7	46.7	46.6	67.2	47.1	131	168	71.2	58.4	53.6
MAX	53	76	59	49	59	103	81	315	353	98	59	299
MIN	42	52	40	38	42	52	35	93	58	58	56	30
AC-FT	2650	3670	3300	2870	2590	4130	2800	8070	10010	4380	3590	3190

CAL YR 1982 TOTAL 28401 MEAN 77.8 MAX 350 MIN 20 AC-FT 56330
WTR YR 1983 TOTAL 25844 MEAN 70.8 MAX 353 MIN 30 AC-FT 51260

09345200 LITTLE NAVAJO RIVER BELOW LITTLE OSO DIVERSION DAM, NEAR CHROMO, CO

LOCATION.--Lat 37°04'32", long 106°48'38", in SW¼ sec.23, T.33 N., R.1 E., Archuleta County, Hydrologic Unit 14080101, on right bank at Little Oso Diversion Dam, 3.5 mi northeast of Chromo, and 4.0 mi upstream from confluence with Navajo River.

DRAINAGE AREA.--14.2 mi^2.

PERIOD OF RECORD.--June 1971 to current year.

GAGE.--Water-stage recorder. Datum of gage is 7,756.10 ft, National Geodetic Vertical Datum of 1929 (levels by U.S. Bureau of Reclamation).

REMARKS.--Flows controlled by diversion dam upstream.

AVERAGE DISCHARGE.--12 years, 6.74 ft^3/s; 4,880 acre-ft/yr.

COOPERATION.--Records collected and computed by U.S. Bureau of Reclamation.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 235 ft^3/s May 30, 1979; no flow Apr. 14, 1974.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, about 50 ft^3/s Sept. 30, minimum daily, 1.9 ft^3/s Feb. 10-12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	6.1	4.3	2.8	2.0	4.2	14	28	28	26	7.0	3.8
2	16	5.1	5.4	2.8	2.0	5.8	14	28	28	28	8.0	3.3
3	14	4.3	4.3	2.6	2.0	5.8	10	28	28	27	8.6	3.3
4	13	5.0	4.8	2.5	2.1	5.8	10	28	28	27	8.2	3.3
5	12	4.9	4.3	2.5	2.1	5.8	5.1	28	28	27	8.4	3.1
6	11	4.6	4.3	2.5	2.2	5.8	6.0	27	28	27	8.6	3.1
7	12	4.8	4.3	2.5	2.0	6.5	5.4	28	28	27	8.6	3.0
8	12	5.1	4.3	2.5	2.0	6.9	6.0	28	28	26	7.8	4.4
9	12	7.0	4.9	2.4	2.0	7.8	5.9	28	28	25	6.7	3.3
10	12	7.6	4.8	2.2	1.9	11	5.8	28	28	24	6.7	3.0
11	13	4.1	4.6	2.4	1.9	14	5.8	35	28	21	7.4	2.9
12	13	5.6	4.4	2.4	1.9	17	5.8	28	29	19	6.9	2.8
13	12	6.0	4.3	2.5	2.0	20	5.8	26	29	19	6.9	2.6
14	12	4.6	4.0	2.5	2.0	20	4.8	27	28	18	7.6	2.6
15	12	5.1	3.3	2.5	1.9	18	5.8	27	28	16	6.9	2.8
16	12	5.1	3.9	2.5	2.1	19	8.0	28	29	14	5.8	2.6
17	12	5.2	3.8	2.5	2.1	15	11	28	28	13	4.9	2.5
18	7.8	5.4	3.6	2.5	2.1	14	7.8	28	33	12	4.8	2.5
19	4.4	6.0	3.5	2.5	2.4	13	6.1	28	40	11	5.1	2.5
20	8.2	6.0	3.5	2.4	2.1	13	5.8	28	45	11	5.8	2.8
21	6.0	5.2	3.5	2.4	2.2	12	8.8	28	36	11	4.8	2.5
22	5.8	5.2	3.5	2.4	2.6	12	12	29	27	11	4.6	2.6
23	5.6	5.2	3.5	2.2	3.3	12	26	29	30	10	4.4	2.6
24	5.6	5.1	3.9	2.2	3.8	11	25	31	27	10	4.3	2.6
25	5.4	4.8	3.5	2.2	4.1	11	11	25	26	10	4.9	2.6
26	7.2	4.8	3.6	2.1	3.9	11	5.8	25	26	12	5.3	2.6
27	14	4.8	3.3	2.1	3.6	11	7.0	28	27	11	5.3	2.6
28	7.5	4.6	3.2	2.1	3.6	12	6.0	47	27	9.0	4.6	2.2
29	6.4	4.3	2.9	2.1	---	11	6.0	49	28	9.6	4.6	2.9
30	6.1	5.1	3.0	2.1	---	12	6.0	29	28	11	4.1	37
31	6.5	---	2.9	2.1	---	14	---	26	---	8.6	3.8	---
TOTAL	321.5	156.7	121.4	74.0	67.9	357.4	262.5	908	879	531.2	191.4	120.4
MEAN	10.4	5.22	3.92	2.39	2.43	11.5	8.75	29.3	29.3	17.1	6.17	4.01
MAX	25	7.6	5.4	2.8	4.1	20	26	49	45	28	8.6	37
MIN	4.4	4.1	2.9	2.1	1.9	4.2	4.8	25	26	8.6	3.8	2.2
AC-FT	638	311	241	147	135	709	521	1800	1740	1050	380	239

CAL YR 1982 TOTAL 4599.8 MEAN 12.6 MAX 37 MIN 2.0 AC-FT 9120
WTR YR 1983 TOTAL 3991.4 MEAN 10.9 MAX 49 MIN 1.9 AC-FT 7920

09346000 NAVAJO RIVER AT EDITH, CO

LOCATION.--Lat 37°00'10", long 106°54'25", in NW¼NW¼ sec.24, T.32 N., R.1 W., Archuleta County, Hydrologic Unit 14080101, on right bank 290 ft downstream from highway bridge, 0.2 mi southeast of Edith, 0.5 mi upstream from Colorado-New Mexico State line, and 1.3 mi upstream from Coyote Creek.

DRAINAGE AREA.--172 mi^2.

PERIOD OF RECORD.--Streamflow records, September 1912 to current year. Monthly or yearly discharge only for some periods, published in WSP 1313. Water-quality data available, November 1970 to September 1974. Sediment data available April 1973 to September 1974.

REVISED RECORDS.--WSP 1243: 1943, 1945. WSP 1633: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 7,033.00 ft, National Geodetic Vertical Datum of 1929 (levels by U.S. Bureau of Reclamation). Prior to Jan. 1, 1929, nonrecording gage at site 240 ft upstream, at different datum. June 2, 1935, to June 27, 1941, water-stage recorder at sites 200 and 240 ft upstream, at datum 2.0 ft, higher. June 28, 1941, to June 20, 1961, at site 50 ft downstream at present datum.

REMARKS.--Records good except those for winter period, which are poor. Diversions for irrigation of about 1,700 acres above station. High-water diversions above station into Heron Reservoir through Azotea tunnel began in March 1971. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--58 years (water years 1913-70), 155 ft^3/s; 112,300 acre-ft/yr, prior to diversions through Azotea tunnel: 13 years (water years 1971-83), 69.5 ft^3/s; 50,350 acre-ft/yr, subsequent to diversion through Azotea tunnel.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,840 ft^3/s Apr. 23, 1942, gage height, 6.55 ft, from rating curve extended above 1,100 ft^3/s; minimum daily, 8.0 ft^3/s Sept. 25, 1953, Aug. 7, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Oct. 5, 1911, exceeded all other observed floods at this location.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, ~~940 ft^3/s at 1930, Sept. 30, gage height, 4.84 ft~~; minimum daily, 28 ft^3/s Jan. 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	79	54	57	38	42	66	170	220	302	130	66	54
2	57	65	55	38	42	68	145	195	258	98	60	55
3	54	60	47	35	40	66	145	184	212	98	63	55
4	50	60	44	36	42	72	108	198	202	102	68	57
5	50	62	46	36	42	68	84	209	188	94	66	55
6	49	62	47	38	42	66	77	198	151	86	65	54
7	47	60	58	40	42	68	81	192	130	82	68	52
8	49	60	57	40	42	77	79	195	118	84	66	77
9	47	82	63	38	42	84	86	202	108	82	63	62
10	47	81	70	34	40	100	106	206	104	81	58	54
11	49	77	68	34	38	128	113	184	111	82	57	50
12	49	66	65	34	36	154	116	167	164	86	60	41
13	47	66	60	32	42	178	100	167	98	82	65	42
14	47	63	63	30	42	184	92	181	88	84	65	42
15	47	62	52	30	42	160	88	184	94	82	63	47
16	46	63	49	30	44	130	100	170	136	79	58	42
17	46	65	48	30	44	120	144	164	181	81	55	36
18	44	68	48	30	44	113	220	160	282	75	57	33
19	44	73	46	30	46	104	258	164	440	73	55	35
20	46	75	50	30	46	98	242	167	455	72	54	41
21	44	68	48	30	48	88	270	164	410	60	55	44
22	46	68	52	30	55	92	258	160	374	68	55	42
23	46	68	57	28	62	86	226	160	120	68	55	39
24	44	65	57	30	63	86	258	174	151	60	52	42
25	50	63	47	34	66	86	254	216	206	73	52	41
26	52	63	47	32	65	82	209	290	220	72	54	38
27	60	63	49	32	63	75	174	290	265	73	52	38
28	50	62	49	36	65	82	167	401	184	68	52	36
29	49	62	44	36	---	81	160	507	148	70	54	38
30	49	65	42	38	---	98	170	360	148	70	52	403
31	49	---	40	40	---	157	---	355	---	70	54	---
TOTAL	1533	1971	1625	1049	1327	3117	4700	6784	6048	2485	1819	1745
MEAN	49.5	65.7	52.4	33.8	47.4	101	157	219	202	80.2	58.7	58.2
MAX	79	82	70	40	66	184	270	507	455	130	68	403
MIN	44	54	40	28	36	66	77	160	88	60	52	33
AC-FT	3040	3910	3220	2080	2630	6180	9320	13460	12000	4930	3610	3460

CAL YR 1982 TOTAL 36509 MEAN 100 MAX 490 MIN 26 AC-FT 72420
WTR YR 1983 TOTAL 34203 MEAN 93.7 MAX 507 MIN 28 AC-FT 67840

09346400 SAN JUAN RIVER NEAR CARRACAS, CO

LOCATION.--Lat 37°00'49", long 107°18'42", in SE¼SW¼ sec.17, T.32 N., R.4 W., Archuleta County, Hydrologic Unit 14080101, on right bank just upstream from flow line of Navajo Reservoir, 3 mi northwest of Carracas, 7.2 mi upstream from Piedra River, and at mile 332.8.

DRAINAGE AREA.--1,230 mi^2, approximately.

PERIOD OF RECORD.--Streamflow records, October 1961 to current year. Water-quality data available, July 1969 to August 1973. Sediment data available, August 1973.

GAGE.--Water-stage recorder. Altitude of gage is 6,090 ft, from river-profile map.

REMARKS.--Records good except those for winter period, which are poor. Diversions for irrigation of about 11,000 acres above station. Highwater diversions above station into Rio Grande basin through Azotea tunnel (station 08284160) began in March 1971. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--9 years (water years 1962-70), 632 ft^3/s; 457,900 acre-ft/yr, prior to completion of Azotea tunnel: 13 years (water years 1971-83), 581 ft^3/s; 420,900 acre-ft/yr, since completion of Azotea tunnel.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,730 ft^3/s, Sept. 6, 1970, gage height, 8.34 ft, from rating curve extended above 6,000 ft^3/s, on basis of slope-area measurement of peak flow; minimum daily, about 5 ft^3/s Dec. 10, 1961, result of freezeup.

EXTREMES OUTSIDE PERIOD OF RECORD.--Major floods occurred Sept. 5 or 6, 1909; Oct. 5, 1911; June 29, 1927.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
May 29	0800	* 5,310	6.54	June 20	0830	4,490	6.16

Minimum daily discharge, 153 ft^3/s Sept. 28-30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1550	296	300	220	180	500	985	1300	3980	1960	427	300
2	1000	316	245	220	180	600	788	1140	3950	1840	480	279
3	838	304	253	210	170	496	809	913	3410	1780	657	271
4	747	283	238	210	180	570	650	913	3240	1780	644	260
5	669	287	240	220	190	496	496	1040	3190	1820	657	256
6	564	283	240	220	180	427	524	1180	2760	1700	760	235
7	512	283	240	230	180	469	496	1000	2400	1650	882	214
8	480	287	260	230	190	535	485	1130	2490	1500	747	245
9	438	351	280	220	190	524	463	1420	2310	1370	582	300
10	412	448	300	200	180	600	576	1960	2090	1240	518	245
11	402	485	320	190	180	740	676	2020	2220	1120	480	218
12	407	351	290	200	170	845	637	1580	2760	945	463	204
13	393	347	270	200	180	921	637	1460	2150	868	402	192
14	365	329	240	190	190	1040	625	1290	1510	781	402	182
15	351	300	230	190	200	1060	501	1190	1430	650	480	207
16	342	308	230	190	210	714	518	1030	1590	607	427	198
17	334	308	240	190	210	676	625	913	2060	594	384	185
18	316	320	250	190	220	689	945	795	2540	564	365	170
19	304	329	230	190	220	650	1420	795	3260	553	365	167
20	291	398	230	190	220	594	1650	802	3530	512	402	170
21	283	347	230	190	220	535	1870	823	3360	507	360	167
22	275	320	230	190	240	547	1690	905	3220	490	325	165
23	271	312	270	180	260	524	1410	1210	2820	490	304	165
24	268	304	250	160	300	507	1590	1760	2850	524	291	159
25	260	291	230	170	370	553	1930	2440	2880	453	402	156
26	264	283	220	170	420	558	1950	2980	2620	474	453	156
27	393	287	240	170	420	496	1630	3530	2660	427	432	156
28	393	283	250	180	440	529	1300	4060	2310	458	398	153
29	316	275	230	180	---	529	1520	4670	2080	417	351	153
30	300	287	230	180	---	644	1330	4020	2080	402	374	153
31	300	---	230	180	---	953	---	4210	---	402	329	---
TOTAL	14038	9602	7736	6050	6490	19521	30726	54479	79750	28878	14543	6081
MEAN	453	320	250	195	232	630	1024	1757	2658	932	469	203
MAX	1550	485	320	230	440	1060	1950	4670	3980	1960	882	300
MIN	260	275	220	160	170	427	463	795	1430	402	291	153
AC-FT	27840	19050	15340	12000	12870	38720	60950	108100	158200	57280	28850	12060

CAL YR 1982 TOTAL 270587 MEAN 741 MAX 3260 MIN 120 AC-FT 536700
WTR YR 1983 TOTAL 277894 MEAN 761 MAX 4670 MIN 153 AC-FT 551200

09347205 MIDDLE FORK PIEDRA RIVER NEAR DYKE, CO

LOCATION.--Lat 37°27'10", long 107°10'33", in NE¼SW¼ sec.10, T.37 N., R.3 W., Hinsdale County, Hydrologic Unit 14080102, on left bank 1.8 mi northeast of Piedra Guard Station, 2 mi downstream from headgate of Toner-Taylor ditch, and 15 mi northwest of Pagosa Springs.

DRAINAGE AREA.--34.1 mi².

PERIOD OF RECORD.--October 1977 to December 1983 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 7,860 ft. (Record is not equivalent to record for station 09347200.)

REMARKS.--Records good except those for winter period, which are poor. There is one small diversion above station for irrigation of a few acres of hay meadow below the station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--6 years, 54.3 ft³/s; 39,340 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 765 ft³/s Aug. 25, 1982, gage height, 3.65 ft; minimum daily, 2.0 ft³/s Oct. 17-20, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 512 ft³/s at 0300 May 31, gage height, 3.37 ft; maximum gage height, 3.44 ft, Jan. 13 (backwater from ice); minimum daily discharge, 6.5 ft³/s Jan. 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	206	22	12	8.5	10	9.7	14	70	335	200	32	24
2	138	21	12	8.0	9.7	9.2	13	63	375	190	90	25
3	110	16	12	8.0	10	9.7	14	67	298	190	50	24
4	90	15	12	8.0	11	10	12	81	270	190	50	24
5	81	15	12	8.0	10	10	12	95	250	188	63	21
6	69	15	12	9.0	9.7	9.7	12	92	224	182	58	19
7	63	15	12	9.0	9.2	9.2	12	98	215	170	60	17
8	56	16	13	9.0	9.2	9.7	12	140	206	152	51	21
9	46	19	14	8.5	9.2	9.7	12	143	191	135	42	16
10	41	19	16	8.0	8.4	12	12	140	188	118	38	19
11	42	17	15	7.5	8.4	14	12	132	234	102	37	21
12	39	16	14	7.5	7.9	14	12	120	221	88	34	16
13	34	15	13	7.5	7.9	15	12	120	191	77	28	15
14	31	15	12	7.0	7.9	16	12	110	161	70	60	15
15	31	15	10	7.0	7.9	16	12	100	185	61	51	14
16	30	15	10	7.0	8.4	16	11	95	227	55	41	13
17	28	15	11	7.0	7.9	14	13	86	266	53	34	12
18	26	16	10	7.0	7.9	14	17	79	325	45	32	13
19	24	16	9.5	7.0	8.8	14	24	77	375	42	27	13
20	22	16	10	7.0	7.9	13	32	77	385	36	41	13
21	22	15	11	7.0	7.9	12	32	76	335	34	35	12
22	21	14	11	7.0	8.8	12	31	95	298	32	29	12
23	21	14	12	6.5	9.7	12	38	122	290	36	25	11
24	20	14	11	7.0	12	12	76	155	290	30	24	11
25	19	14	11	8.0	12	11	92	182	280	29	40	13
26	19	13	10	7.5	12	9.2	102	212	270	29	29	12
27	21	13	10	8.0	11	8.8	88	286	250	38	25	22
28	20	13	10	8.5	11	11	85	274	230	29	23	18
29	19	13	9.0	8.5	---	12	90	330	220	23	26	16
30	20	13	8.5	9.0	---	12	85	360	210	23	25	197
31	21	---	8.5	9.5	---	14	---	395	---	29	23	---
TOTAL	1430	465	353.5	242.0	261.7	370.9	1001	4472	7795	2676	1223	679
MEAN	46.1	15.5	11.4	7.81	9.35	12.0	33.4	144	260	86.3	39.5	22.6
MAX	206	22	16	9.5	12	16	102	395	385	200	90	197
MIN	19	13	8.5	6.5	7.9	8.8	11	63	161	23	23	11
AC-FT	2840	922	701	480	519	736	1990	8870	15460	5310	2430	1350

CAL YR 1982 TOTAL 20175.6 MEAN 55.3 MAX 318 MIN 5.5 AC-FT 40020
WTR YR 1983 TOTAL 20969.1 MEAN 57.4 MAX 395 MIN 6.5 AC-FT 41590

NOTE.--NO GAGE-HEIGHT RECORD NOV. 7 TO DEC. 15.

09349800 PIEDRA RIVER NEAR ARBOLES, CO

LOCATION.--Lat 37°05'18", long 107°23'50", in NE¼SW¼ sec.21, T.33 N., R.5 W., Archuleta County, Hydrologic Unit 14080102, on left bank 3 mi downstream from Ignacio Creek, 5.2 mi northeast of Arboles Post Office, and 8 mi upstream from mouth.

DRAINAGE AREA.--629 mi^2.

PERIOD OF RECORD.--Streamflow records, August 1962 to current year. Gage operated 1895-99 and 1910-27 at site 7.5 mi downstream at altitude 6,000 ft. Low-flow records probably not equivalent. Water-quality data available, November to August 1973.

GAGE.--Water-stage recorder. Datum of gage is 6,147.52 ft, Colorado State Highway Department benchmark.

REMARKS.--Records good. Diversions for irrigation of about 2,800 acres above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--21 years, 380 ft^3/s; 275,300 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,370 ft^3/s Sept. 6, 1970, gage height, 6.38 ft, recorded, 7.55 ft, from floodmarks, from rating curve extended above 4,400 ft^3/s, on basis of slope-area measurement of peak flow; minimum discharge, 11 ft^3/s Dec. 9, 1963, Oct. 1, 1966.

EXTREMES OUTSIDE PERIOD OF RECORD.--Major floods occurred Sept. 5 or 6, 1909, and Oct. 5, 1911.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Apr 26	0130	2,740	4.15	May 28	0430	* 2,880	4.24
May 11	0330	2,400	3.93	June 20	0330	2,140	3.74

Minimum daily discharge, 92 ft^3/s Sept. 24-26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1000	158	146	135	110	312	656	1500	2530	1140	229	174
2	800	155	132	130	110	360	607	1280	2500	1050	326	164
3	650	135	138	128	104	335	670	1110	2140	1000	345	164
4	500	130	140	130	113	435	582	1190	1890	980	345	155
5	470	132	149	130	118	385	492	1390	1860	940	455	152
6	425	128	146	132	110	326	470	1520	1710	884	450	138
7	385	125	140	140	106	308	405	1310	1650	828	642	130
8	360	122	152	138	115	330	370	1460	1720	764	475	152
9	321	146	160	132	115	350	355	1820	1650	691	370	152
10	290	221	180	120	113	420	395	2190	1500	621	303	132
11	277	253	190	115	106	522	445	2210	1590	558	285	132
12	265	198	180	120	104	614	455	1790	1780	498	261	128
13	261	177	160	120	110	740	470	1650	1550	445	221	118
14	237	167	150	115	120	820	455	1470	1270	415	241	115
15	229	152	146	115	120	876	395	1310	1250	395	326	115
16	225	152	143	118	125	607	425	1190	1350	340	261	113
17	217	155	149	115	130	552	480	1080	1420	316	221	106
18	205	164	152	115	130	522	712	924	1660	308	202	104
19	194	164	140	115	138	440	1100	900	1970	281	191	110
20	180	237	140	113	135	380	1410	892	2010	253	205	108
21	170	194	143	113	135	380	1430	844	1940	229	188	99
22	161	184	140	113	149	395	1420	990	1880	253	170	97
23	158	170	161	106	174	395	1490	1310	1820	257	155	94
24	155	161	152	104	194	380	1800	1760	1960	269	149	92
25	152	152	135	104	245	385	2220	2080	1970	273	170	92
26	149	146	138	106	265	370	2230	2300	1660	355	198	92
27	217	155	146	104	253	360	2010	2530	1720	277	170	94
28	198	146	146	108	277	395	1840	2690	1440	261	213	110
29	161	140	140	108	---	370	1940	2690	1270	225	202	108
30	155	146	135	110	---	430	1770	2640	1210	209	205	466
31	158	---	138	110	---	621	---	2690	---	205	191	---
TOTAL	9325	4865	4607	3662	4024	14115	29499	50710	51870	15520	8365	4006
MEAN	301	162	149	118	144	455	983	1636	1729	501	270	134
MAX	1000	253	190	140	277	876	2230	2690	2530	1140	642	466
MIN	149	122	132	104	104	308	355	844	1210	205	149	92
AC-FT	18500	9650	9140	7260	7980	28000	58510	100600	102900	30780	16590	7950

CAL YR 1982 TOTAL 177587 MEAN 487 MAX 2710 MIN 60 AC-FT 352200
WTR YR 1983 TOTAL 200568 MEAN 550 MAX 2690 MIN 92 AC-FT 397800

09352900 VALLECITO CREEK NEAR BAYFIELD, CO
(Hydrologic bench-mark station)

LOCATION.--Lat 37°28'39", long 107°32'35", in NE¼NW¼ sec.16, T.37 N., R.6 W., La Plata County, Hydrologic Unit 14080101, on right bank 60 ft upstream from Fall Creek, 0.8 mi downstream from Bear Creek, 6.7 mi north of Vallecito Dam, and 18 mi north of Bayfield.

DRAINAGE AREA.--72.1 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1962 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 7,906.80 ft, National Geodetic Vertical Datum of 1929.

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

AVERAGE DISCHARGE.--21 years, 142 ft³/s; 102,900 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,050 ft³/s Sept. 6, 1970, gage height, 5.51 ft, from water-stage recorder, 6.76 ft, from floodmarks, from rating curve extended above 1,400 ft³/s, on basis of slope-area measurement of peak flow; minimum daily, 6.7 ft³/s Dec. 28, 1976.

EXTREMES OUTSIDE PERIOD OF RECORD.--Major floods occurred in October 1911 and June 1927.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 1,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
May 27	2200	1,100	2.93	June 18	2000	* 1,280	3.08

Minimum daily discharge, 20 ft³/s Feb. 2, 3, 5-21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	270	58	29	26	21	26	31	94	792	632	224	90
2	216	51	44	24	20	26	30	86	624	600	224	90
3	200	45	45	24	20	26	32	82	496	624	260	90
4	184	50	45	26	21	27	26	94	560	648	216	96
5	168	48	44	29	20	26	30	107	568	616	224	86
6	150	45	43	28	20	26	29	114	536	544	255	79
7	140	45	43	26	20	26	28	110	568	552	326	76
8	130	46	43	26	20	26	28	130	632	552	285	114
9	114	49	43	24	20	26	28	192	552	473	250	102
10	110	54	43	24	20	31	27	245	488	473	220	90
11	107	56	42	23	20	38	27	255	640	431	200	84
12	96	52	41	23	20	38	27	204	648	386	172	77
13	94	51	39	23	20	38	27	192	452	320	153	74
14	90	50	41	24	20	40	26	172	424	308	147	69
15	88	48	38	24	20	40	28	150	528	280	147	69
16	86	49	38	24	20	37	28	144	600	275	134	65
17	82	48	37	22	20	37	27	134	728	275	120	62
18	80	50	34	22	20	35	32	127	907	265	114	62
19	76	50	30	24	20	34	38	130	1050	265	137	58
20	72	49	32	24	20	35	46	124	1020	255	114	56
21	68	46	32	24	20	33	45	134	979	240	100	52
22	66	45	32	24	22	35	48	192	988	285	92	50
23	65	44	33	24	24	32	60	290	997	362	92	48
24	63	43	33	23	24	30	84	417	997	302	94	48
25	62	43	33	24	26	30	110	544	760	314	122	48
26	62	42	32	23	26	30	117	656	736	504	120	48
27	66	42	32	24	26	28	114	808	752	350	110	63
28	58	40	30	23	26	26	104	889	672	250	120	60
29	57	43	28	22	---	26	102	856	680	224	112	58
30	62	38	28	22	---	26	100	840	640	236	107	188
31	61	---	26	22	---	33	---	784	---	212	96	---
TOTAL	3243	1420	1133	745	596	967	1479	9296	21014	12053	5087	2252
MEAN	105	47.3	36.5	24.0	21.3	31.2	49.3	300	700	389	164	75.1
MAX	270	58	45	29	26	40	117	889	1050	648	326	188
MIN	57	38	26	22	20	26	26	82	424	212	92	48
AC-FT	6430	2820	2250	1480	1180	1920	2930	18440	41680	23910	10090	4470

CAL YR 1982 TOTAL 60939 MEAN 167 MAX 680 MIN 17 AC-FT 120900
WTR YR 1983 TOTAL 59285 MEAN 162 MAX 1050 MIN 20 AC-FT 117600

09352900 VALLECITO CREEK NEAR BAYFIELD, CO--Continued
(Hydrologic Bench-Mark Station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Chemical analyses: October 1963 to September 1968; October 1969 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: November 1962 to September 1982.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURES: Maximum, 20.0°C July 10, 1974; minimum, freezing point on many days during winter months each year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	SPE-CIFIC CON-DUCT-ANCE LAB (UMHOS)	PH (STAND-ARD UNITS)	TEMPER-ATURE (DEG C)	OXYGEN, DIS-SOLVED (MG/L)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML)	HARD-NESS (MG/L AS CACO3)
OCT										
12...	0900	79	61	73	6.5	1.0	10.8	<1	K1	45
JAN										
10...	0950	19	87	86	6.5	.0	10.9	<1	130	43
JUN										
09...	0840	562	51	60	6.5	4.0	--	K2	K2	27
AUG										
22...	1235	89	51	60	6.7	11.0	--	<1	K13	27

DATE	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY LAB (MG/L AS CACO3)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)
OCT										
12...	12	3.7	2.9	.2	.80	30	8.0	.50	.30	4.2
JAN										
10...	13	2.6	1.4	.0	.80	38	10	.40	.20	4.5
JUN										
09...	8.0	1.6	.70	.0	.50	25	7.2	<.10	.20	3.1
AUG										
22...	8.0	1.6	.80	.0	.70	26	3.5	.10	.30	3.1

DATE	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L)	SOLIDS, DIS-SOLVED (TONS PER AC-FT)	SOLIDS, DIS-SOLVED (TONS PER DAY)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P)
OCT									
12...	38	51	.05	8.1	<.100	.070	.60	.010	.030
JAN									
10...	55	56	.07	2.8	.140	<.060	.20	<.010	<.010
JUN									
09...	27	--	.04	41	.100	.130	.20	.010	.020
AUG									
22...	33	34	.04	7.9	<.100	.100	.40	.030	.010

DATE	ARSENIC DIS-SOLVED (UG/L AS AS)	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE)	CADMIUM DIS-SOLVED (UG/L AS CD)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)
OCT									
12...	1	17	0	1	<1	<3	6	18	2
JUN									
09...	<1	15	0	<1	<1	<3	3	36	4

K BASED ON NON-IDEAL COLONY COUNT.

09352900 VALLECITO CREEK NEAR BAYFIELD, CO--Continued

DATE	LITHIUM DIS-SOLVED (UG/L AS LI)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	MERCURY DIS-SOLVED (UG/L AS HG)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	SILVER, DIS-SOLVED (UG/L AS AG)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	VANA-DIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)
OCT 12...	16	6	<.1	<10	<1	<1	58	<6	19
JUN 09...	5	12	1.5	<10	<1	<1	220	<6	7

RADIOCHEMICAL ANALYSES, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

DATE	GROSS ALPHA, SUSP. TOTAL (PCI/L AS U-NAT)	GROSS ALPHA, DIS-SOLVED (UG/L AS U-NAT)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT)	GROSS BETA, DIS-SOLVED (PCI/L AS CS-137)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137)	GROSS BETA, DIS-SOLVED (PCI/L AS SR/YT-90)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90)	RADIUM 226, DIS-SOLVED, RADON METHOD (PCI/L)
JUN 09...	.3	<1.1	.5	1.0	<.5	.9	<.4	.07

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

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
JAN 10...	0950	19	7	.36	--
JUN 09...	0840	562	11	17	79
AUG 22...	1235	89	4	.96	--

09353000 VALLECITO RESERVOIR NEAR BAYFIELD, CO

LOCATION.--Lat 37°23'00", long 107°34'30", in SW¼SW¼ sec.18, T.36 N., R.6 W., La Plata County, Hydrologic Unit 14080101, in gatehouse above outlet gates at Vallecito Dam on Los Pinos (Pine) River, 300 ft left of spillway, 0.4 mi upstream from Jack Creek, and 11 mi northeast of Bayfield.

PERIOD OF RECORD.--April 1941 to current year.

REVISED RECORDS.--WSP 959: 1941. WSP 1513: 1956.

GAGE.--Water-stage recorder. Datum of gage is 7,580 ft, National Geodetic Vertical Datum of 1929 (levels by U.S. Bureau of Reclamation); gage readings have been reduced to elevations NGVD.

REMARKS.--Reservoir is formed by earth and rockfill dam; dam completed in March 1941. Capacity of reservoir, 126,300 acre-ft between elevations 7,580 ft, sill of outlet gate, and 7,665 ft, top of spillway gates. Dead storage, 3,395 acre-ft. Figures given are usable contents. Reservoir is used to store water for irrigation in Los Pinos (Pine) River basin.

COOPERATION.--Records furnished by Pine River Irrigation District.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 128,200 acre-ft, July 27, 1957, elevation, 7,665.72 ft; minimum, 1,520 acre-ft, Oct. 24, 25, 1944, elevation, 7,584.10 ft. No usable storage prior to April 1941.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 124,160 acre-ft, July 8, elevation, 7,664.22 ft; minimum, 58,670 acre-ft, Apr. 22, elevation, 7,636.90 ft.

MONTHEND ELEVATION IN FEET NGVD AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

Date	Elevation	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	7,656.54	103,980	-
Oct. 31	7,652.40	93,610	-10,370
Nov. 30	7,646.60	79,760	-13,850
Dec. 31	7,640.05	65,200	-14,560
CAL YR 1982			+8,070
Jan. 31	7,639.06	63,110	-2,090
Feb. 28	7,638.03	60,970	-2,140
Mar. 31	7,637.97	60,850	-120
Apr. 30	7,638.04	60,990	+140
May 31	7,647.86	82,690	+21,700
June 30	7,662.53	119,620	+36,930
July 31	7,660.63	114,580	-5,040
Aug. 31	7,651.02	90,240	-24,340
Sept. 30	7,638.80	62,570	-27,670
WTR YR 1983			-41,410

09353500 LOS PINOS RIVER NEAR BAYFIELD, CO
(LOCALLY KNOWN AS PINE RIVER)

LOCATION.--Lat 37°22'58", long 107°34'37", in SW¼ sec.18, T.36 N., R.6 W., La Plata County, Hydrologic Unit 14080101, on left side of outlet flume from Vallecito Reservoir, 0.4 mi upstream from Jack Creek, 2.0 mi upstream from Red Creek, and 11 mi north of Bayfield.

DRAINAGE AREA.--270 mi^2, approximately.

PERIOD OF RECORD.--October 1927 to September 1983 (discontinued). Monthly discharge only for some periods, published in WSP 1313.

GAGE.--Water-stage recorder and concrete weir. Datum of gage is 7,582.54 ft, National Geodetic Vertical Datum of 1929 (levels by U.S. Bureau of Reclamation). See WSP 1713 or 1733 for history of changes prior to Aug. 18, 1956.

REMARKS.--Records good. Flow regulated by Vallecito Reservoir (station 09353000) since April 1941. Transmountain diversions above station by Weminuche Pass and Pine River-Weminuche Pass ditches.

COOPERATION.--Gage-height record is furnished by Pine River Irrigation District.

AVERAGE DISCHARGE.--13 years (water years 1928-40), 345 ft^3/s; 250,000 acre-ft/yr, prior to completion of Vallecito Reservoir: 43 years (water years 1941-83), 356 ft^3/s; 257,900 acre-ft/yr, subsequent to completion of Vallecito Reservoir.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,800 ft^3/s July 27, 1957, gage height, 12.2 ft, from floodmarks at supplementary gage, from rating curve extended above 2,500 ft^3/s, on basis of slope-area measurement of peak flow (result of automatic spillway gates releasing from Vallecito Reservoir); no flow Apr. 15-25, 1982 (result of no release from Vallecito Reservoir when concrete spillway was being repaired); minimum daily prior to construction of Vallecito Reservoir, 38 ft^3/s Dec. 21, 22, 1937.

EXTREMES OUTSIDE PERIOD OF RECORD.--Greatest flood since at least 1885 occurred Oct. 5, 1911.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,780 ft^3/s at 0700 June 13, gage height, 3.79 ft; minimum daily, 128 ft^3/s Dec. 31 to Apr. 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	381	341	393	128	128	128	128	195	1250	946	775	748
2	381	409	393	128	128	128	128	199	1290	993	775	742
3	381	409	393	128	128	128	128	202	1410	993	775	736
4	442	409	389	128	128	128	128	202	1410	993	775	736
5	478	409	389	128	128	128	128	202	1410	838	775	731
6	478	409	389	128	128	128	169	202	1620	742	775	731
7	478	405	389	128	128	128	195	202	1750	742	775	726
8	536	405	389	128	128	128	195	202	1760	913	775	687
9	629	405	389	128	128	128	195	202	1760	1140	775	633
10	664	405	385	128	128	128	195	202	1770	982	775	633
11	726	405	385	128	128	128	195	205	1770	896	775	628
12	758	405	385	128	128	128	195	205	1770	896	775	628
13	758	405	385	128	128	128	195	205	1500	890	775	628
14	758	405	385	128	128	128	195	205	1400	824	775	628
15	659	405	385	128	128	128	195	205	1250	804	770	628
16	540	405	385	128	128	128	195	287	1110	804	770	623
17	504	401	385	128	128	128	195	365	944	804	770	623
18	445	401	385	128	128	128	195	365	950	804	764	618
19	409	401	385	128	128	128	195	420	950	798	764	618
20	409	401	385	128	128	128	195	633	950	798	758	618
21	409	401	385	128	128	128	195	922	956	798	758	613
22	409	397	381	128	128	128	195	1140	968	798	753	613
23	409	397	381	128	128	128	195	1200	968	792	753	613
24	409	393	381	128	128	128	195	1200	980	792	753	608
25	409	393	377	128	128	128	195	1200	980	786	748	604
26	409	393	373	128	128	128	195	1210	980	786	748	604
27	409	393	373	128	128	128	195	1230	980	786	748	599
28	409	393	373	128	128	128	195	1230	888	786	748	594
29	409	393	373	128	---	128	195	1240	873	781	748	594
30	310	393	244	128	---	128	195	1240	873	775	748	532
31	281	---	128	128	---	128	---	1250	---	775	748	---
TOTAL	15086	11986	11517	3968	3584	3968	5489	18167	37470	26255	23699	19317
MEAN	487	400	372	128	128	128	183	586	1249	847	764	644
MAX	758	409	393	128	128	128	195	1250	1770	1140	775	748
MIN	281	341	128	128	128	128	128	195	873	742	748	532
AC-FT	29920	23770	22840	7870	7110	7870	10890	36030	74320	52080	47010	38320

CAL YR 1982 TOTAL 154920.00 MEAN 424 MAX 1360 MIN .00 AC-FT 307300
WTR YR 1983 TOTAL 180506.00 MEAN 495 MAX 1770 MIN 128 AC-FT 358000

09354500 LOS PINOS RIVER AT LA BOCA, CO

LOCATION.--Lat 37°00'34", long 107°35'56", in NE¼NW¼ sec.22, T.32 N., R.7 W., La Plata County, Hydrologic Unit 14080101, on downstream end of right abutment of the Denver & Rio Grande Western Railroad Co. bridge, at southeast edge of La Boca, 0.1 mi upstream from Spring Creek, and 13 mi upstream from mouth.

DRAINAGE AREA.--510 mi^2, approximately.

PERIOD OF RECORD.--Streamflow records, October 1950 to current year. Monthly discharge only for some periods, published in WSP 1733. Water-quality data available, July 1969 to August 1973.

GAGE.--Water-stage recorder. Datum of gage is 6,143.58 ft, National Geodetic Vertical Datum of 1929.

REMARKS.--Records good. Flow regulated by Vallecito Reservoir (station 09353000) 24 mi upstream since April 1941. Diversions for irrigation of about 33,000 acres above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--33 years, 219 ft^3/s; 158,700 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,400 ft^3/s July 27, 1957, gage height, 8.95 ft, from rating curve extended above 5,100 ft^3/s; minimum daily, 6.1 ft^3/s May 1, 1977.

EXTREMES OUTSIDE PERIOD OF RECORD.--A major flood occurred Oct. 5, 1911, at this location.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,400 ft^3/s at 1700 June 25, gage height, 5.88 ft; minimum daily, 130 ft^3/s May 16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	234	380	454	170	160	375	355	544	1010	490	380	290
2	218	338	424	160	157	342	314	472	876	586	406	298
3	218	412	400	150	154	310	314	430	996	574	400	290
4	226	418	395	145	163	442	294	430	988	562	412	290
5	278	418	395	157	160	365	274	460	1000	478	406	286
6	286	424	390	157	157	278	294	466	1080	282	412	270
7	290	424	395	148	154	270	322	350	1310	266	412	282
8	298	400	406	145	157	270	314	350	1340	286	380	365
9	360	442	472	142	157	258	314	375	1280	598	350	234
10	430	442	550	140	154	270	322	418	1270	604	322	206
11	472	460	520	150	154	290	334	365	1280	395	326	206
12	550	436	508	157	151	302	338	298	1280	380	342	190
13	550	412	436	154	151	338	350	250	1200	390	326	178
14	562	406	418	154	157	355	350	202	980	360	330	190
15	538	400	390	154	157	390	342	154	892	298	326	202
16	400	395	390	151	166	310	342	130	640	286	290	187
17	350	395	390	154	175	286	342	154	448	278	266	181
18	365	406	385	163	181	298	385	136	430	282	270	172
19	262	424	380	163	187	302	472	139	424	274	330	172
20	246	442	375	160	190	282	550	287	430	286	290	190
21	238	430	375	160	206	266	532	580	418	274	294	178
22	246	424	370	157	234	270	508	788	424	290	290	190
23	294	418	385	157	274	290	502	924	442	338	278	206
24	360	406	375	157	290	278	592	916	592	322	274	234
25	370	406	365	157	318	290	676	900	1030	418	278	230
26	390	400	365	157	314	330	700	892	836	640	290	222
27	442	400	360	160	270	310	646	884	688	490	294	250
28	395	406	346	163	326	290	580	868	628	400	294	234
29	390	412	342	166	---	282	616	884	484	385	290	258
30	187	430	342	169	---	314	592	916	466	406	298	623
31	148	---	178	166	---	375	---	1060	---	385	286	---
TOTAL	10593	12406	12276	4843	5474	9628	12866	16022	25162	12303	10142	7304
MEAN	342	414	396	156	196	311	429	517	839	397	327	243
MAX	562	460	550	170	326	442	700	1060	1340	640	412	623
MIN	148	338	178	140	151	258	274	130	418	266	266	172
AC-FT	21010	24610	24350	9610	10860	19100	25520	31780	49910	24400	20120	14490

CAL YR 1982 TOTAL 106514 MEAN 292 MAX 1240 MIN 60 AC-FT 211300
WTR YR 1983 TOTAL 139019 MEAN 381 MAX 1340 MIN [illegible]

09355000 SPRING CREEK AT LA BOCA, CO

LOCATION.--Lat 37°00'40", long 107°35'47", in SE¼SW¼ sec.15, T.32 N., R.7 W., La Plata County, Hydrologic Unit 14080101, on right bank in an excavated channel, 0.2 mi upstream from mouth, and 0.2 mi east of La Boca.

DRAINAGE AREA.--58 mi², approximately.

PERIOD OF RECORD.--Streamflow records, October 1950 to current year. Monthly discharge only for some periods, published in WSP 1733. Water-quality data available, May 1974.

GAGE.--Water-stage recorder. Altitude of gage is 6,160 ft, from topographic map.

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

AVERAGE DISCHARGE.--33 years, 30.9 ft³/s; 22,390 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,980 ft³/s Sept. 6, 1970, gage height, 4.62 ft, from rating curve extended above 160 ft³/s, on basis of field estimate of peak flow; maximum gage height, 5.98 ft, Mar. 9, 1960 (backwater from ice); minimum daily discharge, 0.6 ft³/s Nov. 27, 1959.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 180 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Mar 25	2000	180	1.38	July 26	0100	454	2.18
June 25	1600	434	2.15	Sept 30	1800	* 590	2.50

Minimum daily discharge, 4.4 ft³/s Nov. 15, 25-28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	39	5.6	26	7.5	7.0	72	25	15	25	88	82	82
2	34	5.6	8.5	7.5	7.0	57	11	11	59	90	98	82
3	34	4.8	6.9	7.5	6.5	48	11	8.5	67	90	100	76
4	34	4.8	7.5	7.5	7.0	50	8.5	11	66	82	80	82
5	37	4.8	8.0	7.5	7.5	50	7.8	12	66	82	82	82
6	36	4.8	7.5	8.0	7.0	33	10	13	66	80	80	78
7	34	4.8	7.5	8.0	7.0	19	7.8	68	59	80	76	84
8	34	5.2	8.0	8.0	7.8	14	7.4	62	57	80	82	104
9	37	10	9.0	7.5	7.4	8.5	6.5	25	55	82	72	80
10	36	8.5	10	7.0	7.5	7.8	7.4	25	59	82	71	80
11	36	8.5	10	7.0	7.0	9.2	9.2	26	62	78	71	80
12	36	6.5	10	7.0	7.0	10	9.2	26	66	78	71	82
13	39	5.2	9.5	7.0	7.5	11	13	32	66	78	72	80
14	37	5.2	8.5	7.0	7.8	16	15	30	60	78	74	80
15	32	4.4	8.5	7.0	8.0	37	11	37	60	80	76	78
16	33	4.8	8.5	7.0	9.5	15	14	30	57	76	72	78
17	32	5.2	8.5	7.0	11	12	11	37	60	76	74	78
18	30	6.5	8.5	7.0	11	20	15	54	60	76	76	80
19	30	6.9	8.0	7.0	13	34	22	57	57	74	102	82
20	34	6.5	8.0	7.0	14	22	26	64	57	76	80	88
21	30	5.6	8.0	7.0	18	13	26	64	55	76	80	86
22	27	5.2	8.5	7.0	30	14	18	59	55	78	76	90
23	32	4.8	9.0	7.0	45	20	23	59	57	82	72	92
24	19	4.8	8.5	6.5	48	23	29	59	67	78	76	96
25	6.9	4.4	8.0	6.5	59	67	32	69	190	126	84	94
26	6.5	4.4	8.0	6.5	54	55	30	64	108	197	96	94
27	11	4.4	8.5	6.5	40	17	22	66	92	100	82	104
28	6.9	4.4	8.5	6.5	64	14	18	67	100	88	84	96
29	6.1	4.8	8.0	7.0	---	11	22	71	92	84	90	94
30	6.1	8.8	8.0	7.0	---	12	19	76	90	84	86	279
31	6.1	---	8.0	7.0	---	29	---	76	---	82	82	---
TOTAL	851.6	170.2	277.9	220.5	525.5	820.5	486.8	1373.5	2090	2681	2499	2761
MEAN	27.5	5.67	8.96	7.11	18.8	26.5	16.2	44.3	69.7	86.5	80.6	92.0
MAX	39	10	26	8.0	64	72	32	76	190	197	102	279
MIN	6.1	4.4	6.9	6.5	6.5	7.8	6.5	8.5	25	74	71	76
AC-FT	1690	338	551	437	1040	1630	966	2720	4150	5320	4960	5480

CAL YR 1982 TOTAL 12921.1 MEAN 35.4 MAX 181 MIN 3.0 AC-FT 25630
WTR YR 1983 TOTAL 14757.5 MEAN 40.4 MAX 279 MIN 4.4 AC-FT 29270

09361500 ANIMAS RIVER AT DURANGO, CO

LOCATION.--Lat 37°16'45", long 107°52'47", in SW¼SW¼ sec.20, T.35 N., R.9 W., La Plata County, Hydrologic Unit 14080104, on left bank at Western Colorado Power Co.'s plant at Durango, 0.8 mi upstream from Lightner Creek.

DRAINAGE AREA.--692 mi^2.

PERIOD OF RECORD.--June to December 1895, April 1896 to December 1898, April 1899 to December 1900, March to May 1901, April to November 1902, March to April 1903 (gage heights only, erroneously stated as discredited in WSP 1563), May to October 1903, July 1904 to December 1905, January to December 1910 (gage heights only), January to September 1911, January 1912 to current year. Monthly or yearly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 764: Drainage area. WSP 929: 1927(M). WSP 1243: 1911, 1918(M). WSP 1563: 1911-25 (monthly figures only).

GAGE.--Water-stage recorder. Datum of gage is 6,501.57 ft, National Geodetic Vertical Datum of 1929. See WSP 1713 or 1733 for history of changes prior to Mar. 2, 1921.

REMARKS.--Records good. Diversions for irrigation of about 4,000 acres above station. Natural regulation by many lakes and regulation for power above station. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--78 years (water years 1897-1900, 1905, 1911-83), 838 ft^3/s; 607,100 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 25,000 ft^3/s Oct. 5, 1911, gage height, 11 ft, present site and datum, from rating curve extended above 13,000 ft^3/s; minimum daily, 94 ft^3/s Mar. 2, 1913.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1885, that of Oct. 5, 1911.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 4,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
May 31	1230	* 6,050	6.43	June 20	1130	6,030	6.44
June 12	1000	4,540	5.72				

Minimum daily discharge, 209 ft^3/s Jan. 26, Feb. 7.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	950	326	275	230	212	305	401	1220	5240	3460	1310	538
2	870	326	266	220	238	285	415	1070	5140	3300	1270	554
3	800	295	262	230	254	275	415	980	3950	3340	1310	530
4	740	290	258	230	270	295	458	1060	3500	3590	1240	506
5	710	290	262	242	254	280	422	1300	3690	3370	1260	490
6	619	290	262	246	218	275	387	1550	3560	3210	1280	458
7	602	285	258	230	209	266	401	1360	3430	3160	1380	436
8	578	285	262	234	224	270	362	1440	3880	3270	1400	458
9	546	326	275	227	227	300	380	1940	3660	2860	1280	490
10	490	326	280	230	215	338	374	2540	3160	2970	1170	436
11	490	332	270	234	234	362	344	2810	3370	2570	1120	415
12	498	305	262	230	238	380	387	2190	4240	2350	1080	380
13	466	295	254	227	250	368	408	2040	3480	2080	990	368
14	450	310	258	224	234	394	415	1760	2610	1980	920	344
15	436	300	246	238	218	450	344	1550	2560	1860	950	350
16	429	295	250	227	234	415	350	1460	2950	1690	840	344
17	415	315	262	218	227	401	320	1360	3270	1690	740	310
18	394	295	266	224	230	387	387	1210	4240	1660	682	305
19	380	305	246	221	227	380	443	1270	5370	1760	750	315
20	374	295	238	218	224	350	570	1180	5640	1790	691	338
21	374	285	242	218	224	326	619	1140	5350	1680	637	338
22	350	280	254	215	238	387	646	1510	5160	1780	602	315
23	350	275	266	212	275	350	691	2150	4920	1810	586	326
24	356	270	254	212	270	368	940	2920	5440	1750	570	300
25	350	270	242	212	285	350	1370	3620	4780	1610	610	290
26	356	266	224	209	275	350	1550	3810	4280	2000	628	280
27	380	266	215	212	280	344	1480	4220	4150	1950	637	300
28	350	262	224	227	295	350	1330	5120	3610	1550	602	295
29	338	266	230	215	---	350	1330	5320	3580	1370	586	285
30	320	275	227	215	---	374	1380	5200	3530	1390	594	374
31	326	---	230	218	---	401	---	5720	---	1310	578	---
TOTAL	15087	8801	7820	6945	6779	10726	19319	72020	121740	70160	28293	11468
MEAN	487	293	252	224	242	346	644	2323	4058	2263	913	382
MAX	950	332	280	246	295	450	1550	5720	5640	3590	1400	554
MIN	320	262	215	209	209	266	320	980	2560	1310	570	280
AC-FT	29930	17460	15510	13780	13450	21280	38320	142900	241500	139200	56120	22750

CAL YR 1982 TOTAL 344198 MEAN 943 MAX 3640 MIN 180 AC-FT 682700
WTR YR 1983 TOTAL 379158 MEAN 1039 MAX 5720 MIN 209 AC-FT 752100

09363100 SALT CREEK NEAR OXFORD, CO

LOCATION.--Lat 37°08'23", long 107°45'10", in NE¼NE¼ sec.6, T.33 N., R.8 W., La Plata County, Hydrologic Unit 14080104, on right bank 2.9 mi upstream from mouth, 3.0 mi southwest of Oxford, and 11 mi southeast of Durango.

DRAINAGE AREA.--16.7 mi^2.

PERIOD OF RECORD.--October 1956 to September 1963, October 1967 to September 1983 (discontinued).

REVISED RECORDS.--WSP 1925: 1960.

GAGE.--Water-stage recorder. Altitude of gage is 6,470 ft, from topographic map. Prior to October 1967, at site 0.2 mi upstream at different datum.

REMARKS.--Records good except those for winter period, which are fair. Most of flow is return flow from areas irrigated by water imported from Los Pinos River. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--23 years, 12.2 ft^3/s; 8,840 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 811 ft^3/s Oct. 19, 1972, gage height, 5.24 ft, from rating curve extended above 200 ft^3/s, on basis of slope-area measurements at gage heights, 3.54 and 5.24 ft; no flow at times in 1959-60, 1962, 1977, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 131 ft^3/s at 1600 June 25, gage height, 3.31 ft; minimum daily, 0.40 ft^3/s May 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	2.0	3.5	1.3	1.2	42	1.7	1.2	22	32	39	34
2	20	4.0	3.7	1.4	1.2	29	1.3	.79	19	32	44	35
3	20	3.5	3.4	1.2	1.1	25	1.2	.60	22	27	46	33
4	19	3.0	3.0	1.2	1.1	58	1.2	.55	24	22	36	29
5	18	2.5	2.8	1.2	1.3	40	1.4	.50	24	23	30	25
6	19	2.8	2.8	1.2	1.1	16	1.7	.40	24	22	32	22
7	19	2.4	3.2	1.2	1.1	15	1.3	9.9	23	22	31	25
8	20	2.2	3.9	1.3	1.2	13	1.2	5.0	15	23	28	31
9	23	15	9.2	1.3	1.2	9.5	.97	10	18	26	25	28
10	26	14	16	1.3	1.2	6.7	.88	6.7	25	27	22	25
11	27	11	15	1.3	1.2	5.0	.88	11	27	26	29	23
12	24	9.8	7.6	1.3	1.2	3.5	1.1	13	25	20	32	22
13	19	9.5	3.0	1.3	.97	2.8	1.6	6.7	24	22	32	22
14	19	9.2	1.8	1.3	1.1	3.5	2.2	6.3	24	22	31	22
15	12	9.5	1.6	1.3	1.2	7.0	1.2	6.1	22	22	31	22
16	7.6	11	1.4	1.3	1.5	3.6	.97	7.0	21	21	31	21
17	6.7	11	1.3	1.3	3.0	2.7	.79	5.9	20	21	29	22
18	6.7	10	.97	1.2	3.2	3.6	.70	6.7	18	22	27	22
19	8.9	11	.79	1.2	3.4	6.3	.60	7.2	20	23	34	21
20	13	11	.97	1.2	3.6	7.4	.65	8.3	20	28	30	20
21	13	6.3	.65	1.3	5.0	5.3	.70	9.5	19	27	30	19
22	13	3.2	.60	1.3	6.5	5.1	.70	11	20	30	30	19
23	13	3.1	.60	1.3	10	11	.65	8.0	20	33	32	20
24	8.9	3.0	.88	1.3	13	12	.55	7.8	30	32	33	21
25	7.6	2.8	.60	1.3	13	13	.55	7.0	75	32	35	20
26	8.6	2.6	.65	1.4	13	15	.60	14	32	54	36	18
27	11	2.6	.97	1.3	8.3	9.5	.55	17	26	38	37	21
28	9.5	2.3	.97	1.4	32	7.6	.55	20	34	35	37	20
29	9.2	2.2	1.2	1.4	---	6.1	.55	22	34	36	35	21
30	8.6	2.4	1.2	1.4	---	5.3	.70	22	34	39	34	61
31	3.5	---	1.2	1.4	---	2.7	---	21	---	38	33	---
TOTAL	453.8	184.9	95.45	40.1	132.87	392.2	29.64	273.14	761	877	1011	744
MEAN	14.6	6.16	3.08	1.29	4.75	12.7	.99	8.81	25.4	28.3	32.6	24.8
MAX	27	15	16	1.4	32	58	2.2	22	75	54	46	61
MIN	3.5	2.0	.60	1.2	.97	2.7	.55	.40	15	20	22	18
AC-FT	900	367	189	80	264	778	59	542	1510	1740	2010	1480

CAL YR 1982 TOTAL 4810.16 MEAN 13.2 MAX 161 MIN .25 AC-FT 9540
WTR YR 1983 TOTAL 4995.10 MEAN 13.7 MAX 75 MIN .40 AC-FT 9910

09363200 FLORIDA RIVER AT BONDAD, CO

LOCATION.--Lat 37°03'24", long 107°52'09", in NE¼SW¼ sec.31, T.33 N., R.9 W., La Plata County, Hydrologic Unit 14080104, on left bank 40 ft downstream from BIA bridge, 0.6 mi upstream from mouth, 0.7 mi northeast of Bondad, and 15 mi south of Durango.

DRAINAGE AREA.--221 mi^2.

PERIOD OF RECORD.--October 1956 to September 1963, October 1967 to September 1983 (discontinued).

REVISED RECORDS.--WSP 1713: 1958.

GAGE.--Water -stage recorder. Altitude of gage is 6,000 ft, from topographic map. Prior to Sept. 11, 1958, at site 300 ft upstream at datum 2.39 ft, higher.

REMARKS.--Records good except those for winter period, which are fair. Diversion for irrigation of about 20,000 acres above station. Flow regulated by Lemon Reservoir, capacity, 40,100 acre-ft since November 1963. Most of flow is return flow from irrigated areas. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--7 years (water years 1957-63), 78.8 ft^3/s; 56,370 acre-ft/yr, prior to completion of Lemon Dam: 16 years (water years 1968-83), 75.4 ft^3/s; 54,630 acre-ft/yr, subsequent to completion of Lemon Dam.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,640 ft^3/s Oct. 19, 1972, gage height, 6.30 ft, from rating curve extended above 1,100 ft^3/s, on basis of slope-area measurement of peak flow; minimum daily, 4.6 ft^3/s July 24, 1959.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 876 ft^3/s at 2300 July 24, gage height, 5.65 ft; minimum daily, 26 ft^3/s Feb. 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	145	66	63	34	33	95	111	262	216	272	95	72
2	136	59	61	34	28	78	104	250	199	293	100	68
3	136	68	50	34	28	66	105	242	193	290	107	66
4	141	67	50	34	35	138	104	238	193	281	95	68
5	125	66	53	34	32	106	105	245	193	268	84	65
6	105	66	52	36	26	56	104	258	191	238	76	60
7	105	56	55	38	35	53	100	317	189	195	74	61
8	102	52	60	36	34	58	95	314	187	175	68	70
9	125	75	76	34	32	52	93	329	181	157	63	71
10	149	87	105	32	30	48	93	342	177	138	59	67
11	151	70	95	32	31	49	97	349	185	98	53	63
12	138	63	86	30	30	53	100	323	185	78	49	63
13	95	59	68	30	33	56	107	287	187	67	45	61
14	76	52	61	28	35	66	104	278	193	66	42	62
15	66	45	51	28	33	74	95	268	197	59	43	63
16	111	45	54	28	35	61	93	252	199	55	52	62
17	112	46	56	28	40	54	93	230	201	52	52	61
18	111	53	55	30	41	60	107	216	132	53	50	62
19	105	59	52	30	44	62	125	210	112	50	51	63
20	104	61	54	30	40	59	147	210	123	53	53	63
21	87	54	55	30	46	53	143	199	265	56	53	62
22	76	43	54	32	53	60	145	199	386	62	51	66
23	75	46	59	33	60	68	159	199	406	98	48	68
24	72	54	52	32	62	67	185	199	356	150	43	70
25	67	54	44	32	67	70	205	197	562	123	39	72
26	68	53	42	33	75	82	278	197	518	123	36	72
27	86	55	42	31	59	76	270	195	490	109	67	75
28	75	53	42	35	89	68	262	191	454	88	107	74
29	76	55	41	33	---	62	270	183	281	112	81	74
30	76	60	38	35	---	65	281	183	275	104	78	162
31	70	---	36	34	---	93	---	183	---	95	76	---
TOTAL	3166	1742	1762	1000	1186	2108	4280	7545	7626	4058	1990	2086
MEAN	102	58.1	56.8	32.3	42.4	68.0	143	243	254	131	64.2	69.5
MAX	151	87	105	38	89	138	281	349	562	293	107	162
MIN	66	43	36	28	26	48	93	183	112	50	36	60
AC-FT	6280	3460	3490	1980	2350	4180	8490	14970	15130	8050	3950	4140

CAL YR 1982 TOTAL 32743 MEAN 89.7 MAX 410 MIN 22 AC-FT 64950
WTR YR 1983 TOTAL 38549 MEAN 106 MAX 562 MIN 26 AC-FT 76460

09363500 ANIMAS RIVER NEAR CEDAR HILL, NM

LOCATION.--Lat 37°02'17", long 107°52'25", in sec.7, T.32 N., R.9 W., La Plata County, CO, Hydrologic Unit 14080104, on right bank 0.8 mi downstream from Florida River, 2.5 mi upstream from Colorado-New Mexico State line, 8.5 mi north of Cedar Hill, and at mile 32.9.

DRAINAGE AREA.--1,090 mi^2, approximately.

PERIOD OF RECORD.--October 1933 to current year. Monthly discharge only for October and November 1933, published in WSP 1313.

REVISED RECORDS.--WSP 1563: 1940 and 1946 (monthly figures only).

GAGE.--Water-stage recorder. Altitude of gage is 5,960 ft, from topographic map. Prior to Sept. 14, 1937, at datum between 1.52 and 1.36 ft, higher. Sept. 15, 1937, to Sept. 30, 1946, at datum 1.36 ft, higher.

REMARKS.--Records good except those for winter period, which are poor. Diversions for irrigation of about 20,000 acres above station. During water years 1944-49, Twin Rocks Canal diverted above station for irrigation below. Slight regulation by Lemon Dam, capacity, 40,100 acre-ft, about 30 mi upstream on Florida River since November 1963.

AVERAGE DISCHARGE.--50 years, 901 ft^3/s; 652,800 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,100 ft^3/s June 19, 1949, gage height, 11.45 ft; minimum, 63 ft^3/s Jan. 21, 1935.

EXTREMES OUTSIDE PERIOD OF RECORD.--A flood in October 1911 exceeded all other known floods at this location.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 4,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
May 31	1615	* 6,530	8.72	June 24	1830	6,430	8.65

Minimum daily discharge, 242 ft^3/s, Jan. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1150	393	333	295	245	524	626	1750	5860	3780	1370	598
2	1120	385	307	305	245	474	614	1480	5730	3630	1370	579
3	1020	372	288	325	265	436	583	1320	4480	3620	1370	598
4	963	354	302	330	295	578	611	1350	3920	3840	1320	552
5	918	356	281	330	280	515	558	1670	3900	3640	1330	543
6	830	353	287	330	270	423	541	2040	4000	3460	1380	504
7	788	342	286	325	250	417	544	2000	3870	3340	1440	501
8	753	333	293	310	262	420	512	2010	4310	3430	1470	492
9	739	392	350	304	273	449	499	2400	4070	3020	1370	574
10	690	413	393	295	258	472	526	3120	3600	3090	1270	507
11	690	405	376	280	270	528	506	3400	3680	2680	1240	468
12	684	377	348	270	286	571	539	2960	4550	2390	1210	438
13	648	343	300	265	298	591	566	2700	3910	2150	1090	430
14	582	341	290	265	307	648	568	2460	3800	2030	998	409
15	570	346	280	260	277	702	517	2240	3980	1910	1020	399
16	588	318	276	260	295	599	497	2080	3380	1730	918	414
17	582	344	285	260	298	546	510	1860	3660	1710	831	371
18	546	346	292	255	296	540	603	1840	4490	1680	757	362
19	540	345	280	255	299	531	714	1830	5600	1760	795	362
20	528	361	263	252	296	500	818	1830	5980	1770	764	396
21	486	339	266	252	294	446	868	1740	5820	1680	692	393
22	462	322	274	252	314	492	875	1920	5760	1750	656	382
23	445	308	291	250	374	516	939	2580	5490	1830	632	373
24	456	314	288	250	378	490	1250	3310	5940	1850	648	364
25	435	309	285	250	411	509	1680	4050	5730	1680	652	364
26	430	306	285	250	412	524	2010	4500	5060	1950	694	360
27	420	297	280	248	393	497	2020	4730	4820	1980	706	378
28	435	294	275	245	469	490	1920	5230	4250	1600	683	379
29	405	295	270	243	---	496	1900	5540	3930	1440	642	365
30	398	310	275	242	---	541	1970	5640	3870	1440	660	522
31	402	---	285	245	---	641	---	6470	---	1370	629	---
TOTAL	19723	10313	9184	8498	8610	16106	26884	88050	137440	73230	30607	13377
MEAN	636	344	296	274	308	520	896	2840	4581	2362	987	446
MAX	1150	413	393	330	469	702	2020	6470	5980	3840	1470	598
MIN	398	294	263	242	245	417	497	1320	3380	1370	629	360
AC-FT	39120	20460	18220	16860	17080	31950	53320	174600	272600	145300	60710	26530

CAL YR 1982 TOTAL 383260 MEAN 1050 MAX 3880 MIN 201 AC-FT 760200
WTR YR 1983 TOTAL 442022 MEAN 1211 MAX 6470 MIN 242 AC-FT 876800

09365500 LA PLATA RIVER AT HESPERUS, CO

LOCATION.--Lat 37°17'23", long 108°02'24", in NE¼SW¼ sec.14, T.35 N., R.11 W., La Plata County, Hydrologic Unit 14080105, on right bank at Hesperus 700 ft downstream from U.S. Highway 160.

DRAINAGE AREA.--37 mi^2, approximately.

PERIOD OF RECORD.--June to August 1904, May 1905 to September 1906, August to November 1910, June 1917 to current year. Monthly discharge only for some periods, published in WSP 1313. Records for Nov. 11 to Dec. 31, 1910, published in WSP 289, have been found to be unreliable and should not be used.

REVISED RECORDS.--WSP 1243: 1906(M). WSP 1563: 1923 (monthly figures only). See also PERIOD OF RECORD.

GAGE.--Water-stage recorder. Datum of gage is 8,104.71 ft, National Geodetic Vertical Datum of 1929. Prior to May 1, 1920, nonrecording gage, and May 1, 1920, to May 24, 1927, water-stage recorder, at several sites about 600 ft downstream at different datums. May 25, 1927, to Sept. 30, 1938, water-stage recorder at site 60 ft downstream and Oct. 1, 1938, to Sept. 30, 1941, at present site at datum 1.00 ft, higher.

REMARKS.--Records good. Cherry Creek ditch exports water above station for irrigation of about 2,000 acres in Cherry Creek drainage.

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

AVERAGE DISCHARGE.--67 years (water years 1906, 1918-83), 44.8 ft^3/s; 32,460 acre-ft/yr.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum flood observed occurred Oct. 5, 1911.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 230 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
May 10	1900	300	2.89	June 12	0500	400	3.29
May 28	0400	523	3.47	June 18	2330	490	3.52
May 31	0500	* 545	3.58				

Minimum daily discharge, 7.0 ft^3/s Dec. 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	10	16	8.0	8.2	12	20	109	485	175	40	18
2	25	10	12	8.5	8.0	12	20	99	405	166	38	18
3	23	10	11	8.0	8.2	13	20	99	318	169	38	17
4	21	9.5	11	8.5	8.5	14	20	113	332	175	38	16
5	20	9.0	11	8.5	8.6	14	19	136	332	158	41	14
6	20	9.0	10	8.5	8.5	14	19	136	309	155	38	14
7	18	9.0	9.5	8.6	8.6	14	19	131	314	166	35	13
8	18	9.0	9.5	8.2	8.6	14	18	147	345	139	31	13
9	16	11	10	8.0	8.2	16	18	203	300	152	30	13
10	15	10	10	8.0	8.2	16	18	264	252	144	28	12
11	15	10	10	8.2	8.2	16	19	250	300	111	45	12
12	14	9.5	9.5	8.2	8.2	16	19	175	340	86	34	12
13	14	10	9.5	7.7	8.2	18	19	155	225	73	31	12
14	14	9.0	10	7.7	8.2	20	18	139	187	62	28	12
15	13	8.6	9.5	7.7	8.2	21	18	122	225	59	30	11
16	13	8.6	11	7.7	8.2	21	18	113	256	56	28	11
17	13	9.0	11	7.7	8.2	21	18	101	253	56	27	11
18	13	9.5	11	8.2	8.6	21	22	90	368	57	27	10
19	13	10	11	8.2	8.6	21	26	90	405	60	30	10
20	13	9.5	11	8.2	8.6	21	31	84	376	59	26	9.5
21	13	9.5	11	8.6	9.5	20	36	86	345	54	23	9.5
22	13	9.5	11	8.6	9.0	20	41	122	327	70	23	9.5
23	12	9.5	11	9.0	9.5	20	50	196	350	74	22	9.5
24	12	10	10	9.0	9.5	20	67	280	345	62	24	9.5
25	12	10	10	9.5	10	20	113	314	318	60	28	9.0
26	13	10	10	9.0	10	19	127	358	268	54	24	9.0
27	14	10	9.5	8.6	10	19	124	400	242	46	23	9.0
28	12	10	7.0	8.6	11	18	124	470	215	40	21	9.0
29	11	10	7.5	8.2	---	18	144	410	209	38	21	10
30	10	13	7.5	8.2	---	19	129	430	199	40	20	32
31	10	---	8.0	8.2	---	20	---	480	---	41	18	---
TOTAL	469	291.7	316.0	257.8	245.3	548	1354	6302	9145	2857	910	374.5
MEAN	15.1	9.72	10.2	8.32	8.76	17.7	45.1	203	305	92.2	29.4	12.5
MAX	26	13	16	9.5	11	21	144	480	485	175	45	32
MIN	10	8.6	7.0	7.7	8.0	12	18	84	187	38	18	9.0
AC-FT	930	579	627	511	487	1090	2690	12500	18140	5670	1800	743

CAL YR 1982 TOTAL 17014.2 MEAN 46.6 MAX 284 MIN 4.0 AC-FT 33750
WTR YR 1983 TOTAL 23070.3 MEAN 63.2 MAX 485 MIN 7.0 AC-FT 45760

09366500 LA PLATA RIVER AT COLORADO-NEW MEXICO STATE LINE

LOCATION.--Lat 36°59'51", long 108°11'17", in NW¼SE¼ sec.10, T.32 N., R.13 W., La Plata County, CO, Hydrologic Unit 14080105, on right bank at Colorado-New Mexico State line, 0.2 mi downstream from Ponds Arroyo, and 4.8 mi north of La Plata, NM.

DRAINAGE AREA.--331 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1920 to current year. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 1313: 1934(M), 1936(M).

GAGE.--Water-stage recorder. Datum of gage is 5,975.15 ft, National Geodetic Vertical Datum of 1929. See WSP 1713 or 1733 for history of changes prior to Mar. 17, 1934.

REMARKS.--Records good except those for December and January, and April 21-26, which are fair. Diversions above station for irrigation of about 15,000 acres, mostly above station.

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

AVERAGE DISCHARGE.--63 years, 35.2 ft^3/s; 25,500 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,750 ft^3/s Aug. 24, 1927, gage height, 11.36 ft, present datum, from rating curve extended above 750 ft^3/s, on basis of slope-area measurement of peak flow; no flow at times in many years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 632 ft^3/s at 0900 Apr. 26, gage height, 3.40 ft; minimum daily, 2.9 ft^3/s Sept. 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	8.5	19	11	20	41	129	375	382	88	35	7.0
2	14	7.0	17	12	18	39	110	295	325	78	24	7.0
3	14	7.0	15	11	20	44	107	265	220	72	21	7.0
4	14	8.0	15	12	21	60	92	292	180	73	22	8.0
5	14	8.0	15	12	21	52	78	350	160	66	19	7.0
6	13	5.8	16	13	18	44	79	375	147	61	21	6.2
7	13	5.4	16	13	20	44	73	308	128	90	18	6.2
8	14	8.5	15	14	20	45	69	328	143	88	15	6.6
9	15	12	18	14	20	50	69	365	129	91	15	6.6
10	15	10	21	12	20	55	75	416	107	92	15	6.2
11	15	11	23	13	20	66	88	452	120	73	18	6.6
12	16	10	21	14	19	82	86	315	132	69	19	6.6
13	13	9.0	18	14	21	95	87	256	101	64	15	6.6
14	14	9.0	17	15	27	116	79	214	68	55	14	6.6
15	14	9.5	17	16	26	132	80	175	60	49	12	4.8
16	13	8.5	18	17	30	100	79	155	73	46	10	5.1
17	14	8.5	18	19	30	82	87	137	79	40	12	5.1
18	15	10	17	19	30	83	123	118	117	33	23	5.8
19	13	10	17	18	30	78	198	103	192	30	40	5.7
20	11	11	18	18	29	69	268	103	200	37	18	2.9
21	10	11	17	18	34	63	260	90	162	62	16	4.4
22	9.0	12	18	17	40	70	236	91	148	68	15	5.1
23	8.5	15	20	18	41	69	292	122	137	79	13	6.2
24	7.0	15	19	18	40	67	332	178	176	55	9.5	8.0
25	8.5	15	17	19	42	63	428	234	212	55	14	8.0
26	8.0	15	15	20	37	62	482	246	204	84	10	6.6
27	12	14	14	20	37	59	416	292	159	52	9.5	5.8
28	11	14	12	20	42	61	390	362	129	36	9.5	5.8
29	10	14	10	20	---	60	446	358	114	30	10	6.2
30	9.0	16	11	20	---	67	446	315	101	30	9.5	7.0
31	8.5	---	11	20	---	101	---	380	---	41	7.0	---
TOTAL	378.5	317.7	515	497	773	2119	5784	8065	4605	1887	509.0	186.7
MEAN	12.2	10.6	16.6	16.0	27.6	68.4	193	260	154	60.9	16.4	6.22
MAX	16	16	23	20	42	132	482	452	382	92	40	8.0
MIN	7.0	5.4	10	11	18	39	69	90	60	30	7.0	2.9
AC-FT	751	630	1020	986	1530	4200	11470	16000	9130	3740	1010	370

CAL YR 1982 TOTAL 12333.8 MEAN 33.8 MAX 232 MIN 5.4 AC-FT 24460
WTR YR 1983 TOTAL 25636.9 MEAN 70.2 MAX 482 MIN 2.9 AC-FT 50850

09371000 MANCOS RIVER NEAR TOWAOC, CO

LOCATION.--Lat 37°01'39", long 108°44'27", Ute Indian Reservation, Montezuma County, Hydrologic Unit 14080107, on left bank 700 ft upstream from bridge on U.S. Highway 666, 2.0 mi north of Colorado-New Mexico State line, 6.0 mi upstream from Aztec Creek, and 12 mi south of Towaoc.

DRAINAGE AREA.--526 mi^2, revised.

PERIOD OF RECORD.--Streamflow records, October 1920 to September 1943, February 1951 to current year. Monthly discharge only for some periods, published in WSP 1313. Water-quality data available, August 1969 to June 1972. Sediment data available, April to December 1961.

REVISED RECORDS.--WSP 1733: 1924 (monthly figures only).

GAGE.--Water-stage recorder. Datum of gage is 5,055.98 ft, National Geodetic Vertical Datum of 1929. See WSP 1713 or 1733 for history of changes prior to Mar. 11, 1954.

REMARKS.--Records good except those for winter period, which are fair. Diversions for irrigation of about 10,000 acres above station. One diversion above station for irrigation of about 100 acres below. Flow regulated by Jackson Gulch Reservoir, capacity, 10,000 acre-ft since March 1949. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--55 years, 59.4 ft^3/s; 37,960 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,300 ft^3/s Oct. 14 1941, gage height, 7.30 ft, present site and datum, from rating curve extended above 200 ft^3/s, on basis of slope-area measurement of peak flow; maximum gage height, 8.50 ft, Sept. 6, 1970; no flow at times in most years.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 700 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
May 11	1330	* 712	4.14	May 28	1730	708	4.22

Minimum daily discharge, 9.6 ft^3/s Sept. 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	43	23	35	14	21	95	366	366	525	232	98	24
2	43	24	37	17	15	126	290	295	522	207	81	22
3	36	22	27	19	15	118	327	265	411	185	72	22
4	34	20	14	20	24	157	109	270	324	179	90	22
5	33	19	26	22	21	157	92	336	300	167	100	20
6	30	20	26	22	16	118	83	384	275	147	120	14
7	30	20	24	20	20	108	76	315	248	133	112	11
8	30	20	32	19	25	112	63	324	252	136	96	10
9	28	25	34	19	24	114	58	405	268	142	77	10
10	27	41	70	16	21	110	61	486	272	151	53	9.6
11	28	34	58	16	21	121	76	584	209	128	99	13
12	28	34	45	16	20	136	87	405	225	102	116	14
13	30	26	38	15	23	159	88	354	232	83	108	15
14	29	27	33	16	28	169	95	312	189	75	81	16
15	28	25	27	16	27	221	110	278	159	61	63	16
16	27	24	20	17	28	151	110	250	149	57	53	15
17	28	25	28	20	28	108	109	235	136	50	42	15
18	26	28	28	24	31	98	147	203	132	48	34	15
19	25	28	22	20	32	94	240	189	185	40	158	15
20	24	33	20	22	34	87	321	181	280	38	72	15
21	24	34	24	22	32	78	312	185	272	43	45	17
22	24	29	27	22	39	76	336	232	248	104	34	17
23	23	26	31	22	58	87	381	336	238	110	30	19
24	22	25	28	23	86	84	411	452	278	110	26	23
25	22	24	16	19	134	69	504	514	393	87	53	23
26	22	22	20	17	114	69	490	542	472	82	37	21
27	26	20	20	18	73	64	411	553	405	131	33	21
28	31	22	18	23	68	70	381	600	351	70	31	27
29	28	22	15	18	---	90	399	542	300	57	30	24
30	24	26	15	22	---	126	405	476	258	48	31	37
31	23	---	15	20	---	271	---	539	---	64	27	---
TOTAL	876	768	873	596	1078	3643	6938	11408	8508	3267	2102	542.6
MEAN	28.3	25.6	28.2	19.2	38.5	118	231	368	284	105	67.8	18.1
MAX	43	41	70	24	134	271	504	600	525	232	158	37
MIN	22	19	14	14	15	64	58	181	132	38	26	9.6
AC-FT	1740	1520	1730	1180	2140	7230	13760	22630	16880	6480	4170	1080

CAL YR 1982 TOTAL 21582.7 MEAN 59.1 MAX 709 MIN 3.2 AC-FT 42810
WTR YR 1983 TOTAL 40599.6 MEAN 111 MAX 600 MIN 9.6 AC-FT 80530

09371400 HARTMAN DRAW AT CORTEZ, CO

LOCATION.--Lat 37°19'26", long 108°36'52", in NW¼NE¼ sec.4, T.36 N., R.16 W., Montezuma County, Hydrologic Unit 14080202, on left bank 600 ft upstream from mouth, 0.30 mi upstream from McElmo Fall, and 1.2 mi southwest of Cortez.

DRAINAGE AREA.--34.0 mi^2.

PERIOD OF RECORD.--April 1978 to current year. Water-quality data available, April 1978 to December 1981.

GAGE.--Water-stage recorder. Altitude of gage is 5,900 ft, from topographic map.

REMARKS.--Records good except those for winter period, which are poor. Diversions for irrigation above station.

AVERAGE DISCHARGE.--5 years, 14.1 ft^3/s; 10,220 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 172 ft^3/s July 12, 1981, gage height, 4.36 ft; minimum daily, 0.28 ft^3/s Apr. 30 to May 3, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 101 ft^3/s at 2030 Aug. 10, gage height, 3.56 ft; minimum daily, 6.6 ft^3/s May 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	14	19	7.5	12	31	21	15	17	25	39	37
2	18	14	16	10	11	24	18	15	16	24	33	35
3	18	13	16	11	11	22	18	12	17	24	31	35
4	16	13	19	12	12	38	18	11	17	24	32	35
5	26	13	17	13	12	33	18	10	18	23	32	35
6	28	13	13	12	12	21	17	9.9	17	22	30	36
7	38	12	12	11	12	18	20	9.7	18	22	32	35
8	37	14	13	11	13	17	20	9.0	20	23	29	37
9	37	28	17	10	14	16	21	9.0	19	32	30	37
10	36	14	18	9.0	15	15	21	8.5	17	33	44	38
11	35	15	16	9.0	14	15	21	8.4	15	29	46	38
12	37	12	14	9.0	13	16	22	8.9	16	27	41	36
13	45	12	16	9.0	15	15	23	7.8	17	25	40	31
14	44	11	14	9.0	18	15	27	6.6	17	25	37	30
15	45	11	11	9.5	19	19	25	7.5	18	24	38	29
16	44	11	11	9.5	20	15	22	7.2	17	23	38	23
17	44	11	12	11	19	15	20	9.2	17	22	39	20
18	43	11	14	14	18	18	19	9.2	17	21	37	19
19	41	13	10	12	22	21	18	9.2	17	21	38	16
20	48	14	11	12	22	21	18	11	17	22	38	15
21	49	13	11	12	26	20	17	11	15	22	38	15
22	47	13	14	11	32	23	18	9.2	16	23	36	15
23	28	13	22	10	33	26	19	8.5	16	34	33	15
24	18	12	22	9.5	30	25	19	8.2	17	32	32	20
25	17	12	12	12	25	22	18	9.6	36	34	35	22
26	16	11	12	11	21	22	13	11	42	39	40	20
27	19	11	11	12	21	24	13	12	36	38	39	23
28	16	10	10	12	36	27	13	11	30	38	38	24
29	15	11	8.0	13	---	33	13	13	27	34	38	39
30	14	15	8.5	13	---	28	14	15	25	32	41	30
31	14	---	8.5	12	---	24	---	19	---	42	37	---
TOTAL	954	390	428.0	338.0	528	679	564	321.6	604	859	1131	840
MEAN	30.8	13.0	13.8	10.9	18.9	21.9	18.8	10.4	20.1	27.7	36.5	28.0
MAX	49	28	22	14	36	38	27	19	42	42	46	39
MIN	14	10	8.0	7.5	11	15	13	6.6	15	21	29	15
AC-FT	1890	774	849	670	1050	1350	1120	638	1200	1700	2240	1670

CAL YR 1982 TOTAL 5096.9 MEAN 14.0 MAX 83 MIN 3.3 AC-FT 10110
WTR YR 1983 TOTAL 7636.6 MEAN 20.9 MAX 49 MIN 6.6 AC-FT 15150

NOTE.--NO GAGE-HEIGHT RECORD DEC. 14 TO JAN. 24.

09371420 McELMO CREEK ABOVE ALKALI CANYON, NEAR CORTEZ, CO

LOCATION.--Lat 37°19'38", long 108°38'55", in SE¼SE¼ sec.31, T.36 N., R.16 W., Montezuma County, Hydrologic Unit 14080202, on left bank 0.9 mi upstream from Alkali Canyon and 4.0 mi southwest of Cortez.

DRAINAGE AREA.--147 mi^2.

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

GAGE.--Water-stage recorder. Altitude of gage is 5,750 ft, from topographic map.

REMARKS.--Records good except those for winter period, which are poor. Diversions from tributaries above station for irrigation. Low flows are mainly return flow from irrigated areas. Water is imported above station from Dolores River basin for irrigation of about 33,000 acres above and below station in Montezuma Irrigation District and for municipal use by city of Cortez. A small amount of water is diverted at times to Mancos River basin. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--11 years, 26.2 ft^3/s; 18,980 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 864 ft^3/s July 15, 1981, gage height, 6.08 ft, from rating curve extended above 190 ft^3/s, on basis of step-backwater method; minimum daily, 1.5 ft^3/s Sept. 21, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 572 ft^3/s at 0800 Aug. 24, gage height, 5.00 ft; minimum daily, 10 ft^3/s Sept. 20, 21, 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	57	22	46	13	12	79	81	26	34	54	78	39
2	34	22	37	15	11	81	51	21	33	50	59	38
3	31	22	28	15	12	61	49	37	35	47	61	35
4	31	20	26	15	11	119	44	27	34	44	60	38
5	37	19	24	15	12	100	39	24	36	39	62	49
6	42	22	24	15	11	56	38	21	38	36	54	42
7	50	19	26	15	12	44	40	22	42	33	57	36
8	49	19	28	14	12	44	36	18	45	38	56	44
9	47	52	36	13	15	43	36	16	51	58	55	46
10	48	31	50	12	14	41	38	15	62	60	61	47
11	49	30	39	12	14	44	38	14	52	48	133	46
12	48	23	31	13	14	44	46	15	44	43	71	41
13	57	20	24	14	14	43	50	14	44	42	61	33
14	61	16	22	14	20	42	63	12	42	42	51	32
15	63	15	19	14	20	86	64	13	41	41	57	28
16	62	16	23	15	19	48	67	13	41	41	50	18
17	63	17	24	16	20	38	60	16	47	37	46	15
18	63	20	22	19	17	47	51	19	49	33	46	13
19	62	27	22	18	23	54	49	17	49	28	194	11
20	68	38	22	18	20	52	45	23	52	37	68	10
21	70	40	26	17	27	47	43	20	52	41	58	10
22	68	38	24	16	39	51	39	17	50	57	53	11
23	50	37	23	15	47	65	37	16	47	72	47	10
24	34	28	39	14	52	60	36	15	53	71	39	14
25	33	24	22	14	68	51	36	21	95	70	46	15
26	32	19	20	15	48	46	26	24	124	81	98	13
27	38	19	19	14	40	46	22	25	88	74	63	18
28	29	18	17	14	75	54	22	26	75	67	51	17
29	26	18	14	13	---	76	20	33	63	56	44	50
30	23	25	15	13	---	87	22	39	58	59	49	38
31	24	---	14	13	---	107	---	42	---	79	39	---
TOTAL	1449	736	806	453	699	1856	1238	661	1576	1578	1967	848
MEAN	46.7	24.5	26.0	14.6	25.0	59.9	42.9	21.3	52.5	50.9	63.5	28.3
MAX	70	52	50	19	75	119	81	42	124	81	194	50
MIN	23	15	14	12	11	38	20	12	33	28	39	10
AC-FT	2870	1460	1600	899	1390	3680	2550	1310	3130	3130	3900	1680

CAL YR 1982 TOTAL 10301.0 MEAN 28.2 MAX 254 MIN 9.5 AC-FT 20430
WTR YR 1983 TOTAL 13917.0 MEAN 38.1 MAX 194 MIN 10 AC-FT 27600

09371492 MUD CREEK AT HIGHWAY 32 NEAR CORTEZ, CO

LOCATION.--Lat 37°18'46", long 108°39'38", in SW¼ sec.6, T.35 N., R.16 W., Montezuma County, Hydrologic Unit 14080202, on left bank 1 mi upstream from mouth, and 4.5 mi southwest of Cortez.

DRAINAGE AREA.--33.6 mi^2.

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

GAGE.--Water-stage recorder. Altitude of gage is 5,765 ft, from topographic map.

REMARKS.--Records good. Several observations of specific conductance and water temperature were obtained, and are published elsewhere in this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 598 ft^3/s Aug. 24, 1982, gage height, 8.53 ft; minimum daily, from rating curve extended above 36 ft^3/s on basis of slope-area measurement, 1.2 ft^3/s Feb. 13, 14, 1982.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 66 ft^3/s at 0400 Mar. 4, gage height, 2.95 ft; minimum daily, 2.1 ft^3/s Nov. 14, 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	5.4	6.7	4.2	2.9	14	8.0	5.6	6.2	15	27	20
2	12	4.6	5.0	3.8	2.9	10	6.0	4.6	7.1	14	25	18
3	11	4.8	5.6	3.7	2.8	10	5.8	4.2	6.4	14	26	18
4	11	4.8	4.2	4.6	3.0	41	5.4	3.2	6.4	14	25	17
5	10	4.4	3.4	5.0	3.0	14	4.6	3.4	7.5	15	28	14
6	10	3.0	3.2	4.4	2.9	7.8	4.4	3.2	7.5	16	24	14
7	10	2.3	3.2	3.4	3.0	5.8	3.7	3.4	8.0	16	22	14
8	9.2	2.6	4.2	2.6	3.5	5.6	3.4	3.4	7.8	15	21	14
9	9.0	6.7	6.7	2.3	5.0	5.0	3.5	3.4	11	16	21	13
10	9.2	3.4	5.8	2.4	5.6	4.8	3.5	3.7	15	14	23	12
11	9.2	3.7	5.8	2.3	5.4	4.6	3.5	4.0	13	14	34	12
12	10	2.4	3.8	2.2	5.5	4.8	4.4	4.6	12	14	28	12
13	8.4	2.3	3.8	2.4	5.8	4.6	3.8	5.2	11	14	25	12
14	8.7	2.1	3.5	2.2	17	4.8	3.7	7.5	11	14	23	12
15	8.4	2.1	2.7	2.6	15	8.4	3.2	8.4	11	13	24	10
16	8.4	2.2	2.4	2.8	14	7.1	3.5	8.4	11	15	23	10
17	8.0	2.3	2.6	2.9	11	5.4	3.8	9.2	12	15	23	7.5
18	8.0	2.4	2.6	3.4	10	8.7	4.0	11	12	16	22	7.1
19	8.0	2.9	2.4	2.4	13	12	4.0	14	13	17	20	7.8
20	8.0	4.0	2.4	2.4	12	11	3.8	17	12	19	18	8.4
21	8.0	3.8	2.7	2.4	10	8.7	3.7	14	12	25	16	8.7
22	8.7	3.5	3.0	2.4	11	11	3.8	12	13	18	16	9.2
23	9.2	3.2	9.0	2.3	8.7	20	3.7	12	14	17	15	9.7
24	9.4	3.0	6.9	2.3	8.2	17	4.2	12	15	19	17	9.0
25	7.5	2.7	5.0	2.3	7.8	13	5.8	13	19	18	18	6.7
26	7.8	2.6	4.0	2.3	6.9	10	5.4	14	17	22	20	8.7
27	9.2	2.4	4.0	2.3	7.8	8.2	4.6	15	17	27	18	9.7
28	7.5	2.6	3.8	2.7	20	7.8	4.6	15	17	25	16	11
29	6.2	2.9	4.0	2.9	---	12	4.8	15	16	23	15	12
30	6.0	5.0	4.0	2.7	---	10	5.4	13	16	23	15	14
31	5.8	---	4.0	2.9	---	11	---	7.1	---	27	17	---
TOTAL	271.8	100.1	130.4	89.5	223.7	318.1	132.0	269.5	356.9	544	665	351.5
MEAN	8.77	3.34	4.21	2.89	7.99	10.3	4.40	8.69	11.9	17.5	21.5	11.7
MAX	12	6.7	9.0	5.0	20	41	8.0	17	19	27	34	20
MIN	5.8	2.1	2.4	2.2	2.8	4.6	3.2	3.2	6.2	13	15	6.7
AC-FT	539	199	259	178	444	631	262	535	708	1080	1320	697

CAL YR 1982 TOTAL 3257.2 MEAN 8.92 MAX 66 MIN 1.2 AC-FT 6460
WTR YR 1983 TOTAL 3452.5 MEAN 9.46 MAX 41 MIN 2.1 AC-FT 6850

09371500 McELMO CREEK NEAR CORTEZ, CO

LOCATION.--Lat 37°19'23", long 108°40'22", in NE¼ sec.1, T.35N., R.71 W., Montezuma County, Hydrologic Unit 14080202, on left bank 150 ft downstream from mouth of Mud Creek, and 4 mi southwest of Cortez.

DRAINAGE AREA.--230 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1926 to September 1929, April 1940 to September 1945, October 1950 to September 1954 (monthly discharge only for some periods, published in WSP 1313), January 1982 to current year.

REVISED RECORDS.--WSP 1313: 1927, 1927 (M).

GAGE.--Water-stage recorder. Altitude of gage is 5,700 ft, by barometer. Prior to Sept. 30, 1929, at site 3 mi downstream at different datum. Mar. 29, 1940 to Nov. 2, 1941, at site 150 ft upstream at datum 4.20 ft, higher. Nov. 3, 1941 to Sept. 30, 1945, at present site at datum 4.00 ft, higher. Oct. 1, 1950 to Sept. 30, 1954, at present site at datum 2.50 ft, higher, Jan. 1, 1982, to present, at former site at same datum.

REMARKS.--Records good except those for winter period, which are poor. Diversions for irrigation of about 200 acres above station. Flow is mainly return flows from irrigated lands for Montezuma Irrigation District (water imported from Dolores River basin).

AVERAGE DISCHARGE.--13 years (water years 1927-29, 1941-45, 1951-54, 1983), 54.4 ft³/s; 39,410 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,560 ft³/s, Sept. 9, 1927, gage height, 6.45 ft, from rating curve extended above 240 ft³/s, on basis of slope-area measurement at gage height, 5.72 ft; minimum not determined.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 540 ft³/s at 0830 Aug. 19, gage height, 5.76 ft; minimum daily, 26 ft³/s Dec. 31.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	107	64	86	30	32	146	144	51	65	125	152	86
2	79	62	66	32	29	131	98	44	62	114	133	88
3	76	60	54	36	30	122	93	59	68	108	138	94
4	77	60	58	40	30	213	83	47	66	106	146	98
5	99	47	50	40	31	167	76	44	75	99	137	97
6	103	47	47	40	30	106	73	41	79	93	118	97
7	109	43	47	38	31	89	70	41	80	93	118	90
8	107	44	50	36	33	89	66	37	90	96	111	102
9	104	109	69	32	37	83	66	34	111	131	115	93
10	105	62	85	30	39	80	62	52	126	124	124	92
11	105	64	66	30	41	82	65	50	104	110	207	88
12	103	52	58	30	39	82	75	47	87	105	138	82
13	113	47	50	30	43	78	84	44	95	109	118	73
14	110	41	44	30	59	78	98	43	91	106	110	72
15	112	39	39	30	59	124	92	42	94	105	117	68
16	113	38	39	34	59	78	90	39	93	99	105	55
17	110	40	43	40	58	66	78	45	100	92	103	51
18	107	51	44	44	57	83	68	49	105	89	103	51
19	106	78	39	36	68	99	66	62	101	85	237	44
20	111	92	41	36	63	94	66	62	101	94	119	44
21	112	87	42	36	78	83	62	55	101	100	106	47
22	110	80	41	34	99	105	62	51	98	115	100	44
23	88	59	50	34	124	125	55	45	99	156	95	34
24	70	47	54	28	126	114	55	50	113	138	91	38
25	70	44	38	32	124	101	55	55	174	138	99	37
26	68	39	42	31	90	96	47	57	195	152	151	34
27	87	40	36	32	85	96	44	64	172	154	108	40
28	70	39	30	35	149	114	44	65	158	134	95	41
29	66	41	28	34	---	160	44	77	140	114	95	72
30	65	58	28	33	---	167	47	79	123	178	91	73
31	66	---	26	32	---	183	---	80	---	169	82	---
TOTAL	2928	1674	1490	1055	1743	3434	2128	1611	3171	3631	3762	2025
MEAN	94.5	55.8	48.1	34.0	62.3	111	70.9	52.0	106	117	121	67.5
MAX	113	109	86	44	149	213	144	80	195	178	237	102
MIN	65	38	26	28	29	66	44	34	62	85	82	34
AC-FT	5810	3320	2960	2090	3460	6810	4220	3200	6290	7200	7460	4020

CAL YR 1982 TOTAL 20613 MEAN 56.5 MAX 310 MIN 16 AC-FT 40890
WTR YR 1983 TOTAL 28652 MEAN 78.5 MAX 237 MIN 26 AC-FT 56830

09371500 McELMO CREEK NEAR CORTEZ, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 37°19'23", long 108°40'22", (Mud Creek, CO, Quad., scale, 1:24,000), in NE¼ Sec. 1, T.35N., R.17W., Montezuma County, Hydrologic Unit 14080202, on left bank 150 ft downstream from mouth of Mud Creek and 4 mi southwest of Cortez.

PERIOD OF RECORD.--Jan. 1, 1982 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Feb. 6, 1982 to current year.
WATER TEMPERATURES: Feb. 6, 1982 to current year.

INSTRUMENTATION.--Water-quality monitor since January 1982.

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

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum 3,660 micromhos Feb. 7, 1982; minimum, 847 micromhos Aug. 24, 1982.
WATER TEMPERATURES: Maximum 25°C July 23, 25, 29, 1982, July 18, 19, 24, 1983; minimum, 0.0°C many days during winter months.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum 3,620 micromhos Feb. 2; minimum, 1350 micromhos Oct . 7.
WATER TEMPERATURES: Maximum 25°C July 18, 19, 24; minimum 0.0°C, many days during winter months.

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1690	2190	2830	2850	2960	2330	2120	2970	2170	1620	1600	1750
2	1730	2190	2760	2790	3150	2410	2310	3000	2090	1610	1560	1680
3	1770	2170	2720	2760	3060	2360	2500	2680	1970	1610	1590	1630
4	1780	2150	2880	2700	2950	2360	2580	2780	1950	1610	1520	1610
5	1580	2560	2860	2670	2920	2340	2640	2840	1880	1620	1580	1560
6	1460	2860	3000	2610	3040	2370	2710	3060	1840	1660	1590	1550
7	1390	2810	3010	2530	3060	2370	2680	2860	1830	1680	1580	1570
8	1420	2890	3130	2450	3070	2320	2670	2920	1780	1650	1580	1620
9	1410	3020	3190	2520	3040	2290	2690	3200	1780	1690	1590	1590
10	1400	2830	3050	2600	3110	2300	2560	2390	1800	1670	1610	1530
11	1450	2710	3100	2570	3120	2300	2570	2350	1750	1640	1880	1480
12	1460	2820	3100	2480	3170	2280	2680	2370	1720	1600	1650	1460
13	1400	2720	3120	2480	3120	2300	2780	2500	1730	1560	1610	1470
14	1410	2740	3120	2480	2950	2390	2930	2630	1810	1570	1630	1490
15	1420	2730	3030	2490	2680	2450	2820	2750	1770	1580	1670	1530
16	1420	2740	3010	2470	2760	2440	2660	2830	1800	1550	1670	1590
17	1430	2760	3020	2380	2720	2570	2620	2740	1750	1570	1700	1620
18	1460	2430	2920	2270	2820	2660	2680	2580	1700	1560	1730	1620
19	1500	1900	2900	2380	2710	2840	2740	2000	1710	1640	1880	1640
20	1480	1910	2740	2480	2680	2870	2820	2040	1660	1650	1690	1560
21	1480	1790	2920	2490	2540	2840	2870	1990	1610	1580	1700	1460
22	1490	1660	2880	2540	2270	2670	2910	2070	1610	1660	1680	1520
23	1630	2040	2790	2560	2020	2820	2900	2210	1620	1590	1670	1960
24	1920	2380	2960	2660	1920	2800	2880	2100	1650	1610	1680	2150
25	1990	2440	3020	2600	1990	2790	2740	2200	1820	1560	1740	2110
26	2030	2600	2630	2700	2340	2680	2780	2110	1910	1630	1730	2110
27	2190	2710	2850	2690	2670	2680	2900	2020	1680	1620	1720	2080
28	2240	2740	3050	2680	2620	2650	2840	1950	1670	1600	1750	2000
29	2150	2770	3110	2730	---	2440	2920	1930	1670	1620	1750	1980
30	2150	2790	2980	2860	---	2240	2920	1900	1620	1670	1930	2160
31	2160	---	2920	2930	---	2160	---	1900	---	1590	1860	---
MEAN	1660	2500	2950	2590	2770	2490	2710	2450	1780	1620	1680	1700

WTR YR 1983 MEAN 2240 MAX 3200 MIN 1390

09371700 McELMO CREEK BELOW CORTEZ, CO

LOCATION.--Lat 37°20'20", long 108°48'19", in NW¼NW¼ sec.35, T.36 N., R.18 W., Montezuma County, Hydrologic Unit 14080202, on left bank 100 ft downstream from bridge on State Highway 32, 150 ft downstream from Sand Canyon, and 11.7 mi west of Cortez.

DRAINAGE AREA.--283 mi^2.

PERIOD OF RECORD.--October 1972 to September 1983 (discontinued).

GAGE.--Water-stage recorder. Altitude of gage is 5,430 ft, from topographic map.

REMARKS.--Records good except those for winter period, which are fair. Diversions above station by Black Dike ditch for irrigation of 310 acres above station and Rock Creek ditch for irrigation of 650 acres below station. Low flows are mainly return flows from irrigated areas. Water is imported above station from Dolores River basin for irrigation of about 33,000 acres above and below station in Montezuma Irrigation District and for municipal use by city of Cortez. A small amount of water is diverted at times to Mancos River basin. Several observations of specific conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--11 years, 41.5 ft^3/s; 30,140 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,130 ft^3/s July 19, 1977, gage height, 8.96 ft, from floodmarks, from rating curve extended above 400 ft^3/s, on basis of step-backwater method; minimum daily, 0.04 ft^3/s Sept. 9, 1974.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 696 ft^3/s at 2230 July 22, gage height, 5.49 ft; minimum daily, 10 ft^3/s May 16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	116	56	92	28	41	180	158	34	40	111	130	56
2	80	54	74	34	35	156	112	29	35	102	105	58
3	81	55	55	38	37	140	102	38	38	92	127	61
4	77	60	53	40	42	218	97	31	38	91	124	64
5	93	52	52	44	41	204	88	27	46	85	110	61
6	101	45	48	44	38	116	81	22	50	79	92	61
7	106	43	49	42	41	100	77	23	50	74	88	56
8	104	41	54	38	39	99	74	21	57	81	88	61
9	101	89	64	38	48	94	71	13	69	108	90	59
10	102	73	89	34	48	88	72	19	96	118	87	56
11	102	63	73	32	48	90	73	22	71	89	190	56
12	102	60	64	32	46	89	84	17	54	78	128	51
13	107	54	56	32	50	87	88	16	57	83	110	46
14	104	50	52	30	60	84	105	13	55	81	96	39
15	105	44	45	32	72	120	101	12	56	79	100	38
16	106	45	45	34	70	91	99	10	54	72	90	31
17	101	44	49	38	70	74	93	12	56	65	85	21
18	99	52	50	40	61	80	83	21	61	62	86	19
19	97	77	44	44	75	103	78	34	63	58	186	19
20	101	95	44	44	69	99	77	40	73	66	100	16
21	109	92	46	42	81	95	75	31	61	75	83	19
22	104	88	49	41	95	99	76	24	60	113	79	20
23	87	73	59	41	107	128	78	22	60	132	74	20
24	69	55	65	37	117	128	62	22	70	121	71	20
25	71	50	45	42	136	113	59	24	124	122	76	20
26	68	44	38	38	107	104	54	31	246	121	110	20
27	82	42	42	43	92	101	50	36	214	123	89	20
28	71	42	40	43	135	108	48	39	178	108	76	110
29	62	42	31	44	---	143	50	48	136	91	69	90
30	59	58	30	42	---	173	40	54	116	88	71	110
31	55	---	30	42	---	193	---	56	---	139	54	---
TOTAL	2822	1738	1627	1193	1901	3697	2405	841	2384	2907	3064	1378
MEAN	91.0	57.9	52.5	38.5	67.9	119	80.2	27.1	79.5	93.8	98.8	45.9
MAX	116	95	92	44	136	218	158	56	246	139	190	110
MIN	55	41	30	28	35	74	40	10	35	58	54	16
AC-FT	5600	3450	3230	2370	3770	7330	4770	1670	4730	5770	6080	2730

CAL YR 1982 TOTAL 18077.8 MEAN 49.5 MAX 423 MIN 1.3 AC-FT 35860
WTR YR 1983 TOTAL 25957.0 MEAN 71.1 MAX 246 MIN 10 AC-FT 51490

09372000 McELMO CREEK NEAR COLORADO-UTAH STATE LINE

LOCATION.--Lat 37°19'27", long 109°00'54", in NE¼ sec.2, T.35 N., R.20 W., Montezuma County, Hydrologic Unit 14080202, on right bank 1.5 mi upstream from Colorado-Utah State line, 2.0 mi upstream from Yellowjacket Creek, and 2.0 mi west of former town of McElmo.

DRAINAGE AREA.--346 mi².

PERIOD OF RECORD.--Streamflow records, March 1951 to current year. Water-quality data available, November 1977 to September 1981.

REVISED RECORDS.--WSP 1925: 1951-52(M), 1957(M). WRD Colo. 1972: Drainage area.

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

REMARKS.--Records good. Diversions for irrigation of about 1,780 acres above station. One diversion above station for irrigation of about 60 acres below. Part of flow is return water from irrigated lands of Montezuma Irrigation District (water imported from Dolores River basin). Several observations of specific-conductance and water temperature were obtained and are published elsewhere in this report.

AVERAGE DISCHARGE.--32 years, 46.7 ft³/s; 33,830 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,040 ft³/s Aug. 7, 1967, gage height, 7.58 ft, from floodmark in gage well, from rating curve extended above 2,100 ft³/s; maximum gage height, 8.13 ft, Sept. 6, 1970; minimum daily discharge, 0.08 ft³/s Sept. 9, 10, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 674 ft³/s at about 1900 Sept. 28, gage height 5.46 ft, only peak above base of 620 ft³/s; minimum daily, 18 ft³/s Sept. 20, 26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	140	64	119	28	40	222	207	67	52	119	172	62
2	107	59	91	37	34	170	140	59	46	107	141	60
3	92	59	58	39	32	148	112	59	46	100	134	67
4	84	60	53	44	46	290	107	53	42	89	177	83
5	97	52	50	46	42	242	89	46	54	78	146	71
6	114	36	46	47	36	148	83	34	62	73	122	64
7	124	30	49	44	39	112	81	36	56	64	114	56
8	124	28	53	40	53	106	78	32	64	64	139	60
9	119	136	64	40	58	100	71	26	81	97	122	67
10	122	101	104	34	52	94	75	24	136	138	104	62
11	122	67	81	34	49	92	75	43	100	94	214	71
12	117	64	68	34	46	94	91	33	76	73	153	64
13	124	53	54	34	54	92	100	29	79	71	141	54
14	122	49	54	33	71	84	128	21	79	70	121	52
15	122	44	39	35	86	133	117	21	83	67	112	49
16	126	43	40	35	75	107	112	20	83	59	99	40
17	126	43	46	40	73	75	100	24	83	52	89	29
18	124	47	49	54	58	81	87	37	83	50	89	25
19	116	86	35	43	70	124	79	46	87	46	202	22
20	116	117	36	47	65	121	76	52	86	44	141	18
21	126	114	42	47	81	102	75	40	76	59	114	20
22	124	109	46	40	99	131	70	39	78	76	97	25
23	111	91	87	39	121	182	68	34	71	191	87	24
24	75	59	86	35	143	163	64	21	73	148	81	21
25	71	50	44	43	168	133	64	25	114	146	91	22
26	70	43	43	36	134	112	60	33	228	145	143	18
27	84	39	43	43	114	106	54	39	179	150	124	19
28	83	39	40	58	182	107	53	43	163	138	102	130
29	67	40	30	50	---	163	54	59	131	109	87	102
30	65	64	32	47	---	191	56	67	121	99	91	122
31	64	---	32	42	---	202	---	70	---	168	62	---
TOTAL	3278	1886	1714	1268	2121	4227	2626	1232	2712	2984	3811	1579
MEAN	106	62.9	55.3	40.9	75.8	136	87.5	39.7	90.4	96.3	123	52.6
MAX	140	136	119	58	182	290	207	70	228	191	214	130
MIN	64	28	30	28	32	75	53	20	42	44	62	18
AC-FT	6500	3740	3400	2520	4210	8380	5210	2440	5380	5920	7560	3130

CAL YR 1982 TOTAL 20484.0 MEAN 56.1 MAX 500 MIN 3.0 AC-FT 40630
WTR YR 1983 TOTAL 29438.0 MEAN 80.7 MAX 290 MIN 18 AC-FT 58390

TRANSMOUNTAIN DIVERSIONS FROM COLORADO RIVER BASIN IN COLORADO

There are 24 tunnels or ditches, all of which are equipped with water-stage recorders and Parshall flumes or sharp-crested weirs. Records furnished by Colorado Division of Water Resources. The locations and diversions of 6 selected diversions are given in the following list.

09010000 Grand River ditch diverts water from tributaries of Colorado River to La Poudre Pass Creek (tributary to Cache la Poudre River) in NW¼ sec.21, T.6 N., R.75 W., in Platte River basin. Two collection ditches beginning at headgates located in sec.28, T.5 N., R.76 W., and sec.29, T.6 N., R.75 W., intercept all tributaries upstream on each side of the Colorado River and converge at La Poudre Pass.
REVISIONS (WATER YEARS).--WSP 1313: 1912-27.

09013000 Alva B. Adams tunnel diverts water from Grand Lake and Shadow Mountain Lake in NW¼ sec.9, T.3 N., R.75 W., in Colorado River basin, to Lake Estes (Big Thompson River) in sec.30, T.5 N., R.72 W., in Platte River basin. For daily discharge, see elsewhere in this report.

09021500 Berthoud Pass ditch diverts water from tributaries of Fraser River between headgate in sec.33, T.2 S., R.75 W., and Berthoud Pass, in Colorado River basin, to Hoop Creek (tributary to West Fork Clear Creek) in sec.10, T.3 S., R.75 W., in Platte River basin.

09042000 Hoosier Pass tunnel diverts water from tributaries of Blue River in Colorado River basin to Montgomery Reservoir (Middle Fork South Platte River) in sec.14, T.8 S., R.78 W., in Platte River basin; this water is again diverted to South Catamount Creek (tributary to Catamount Creek) in SE¼ sec.14, T.13 S., R.69 W., in the Arkansas River basin. Collection conduits extending from the right bank of Crystal Creek (tributary to Spruce Creek) in sec.14, T.7 S., R.78 W., right bank of Spruce Creek in sec.23, T.7 S., R.78 W., right bank of McCullough Gulch in sec.26, T.7 S., R.78 W., right bank of Monte Cristo Creek in SW¼NE¼ sec.2, T.8 S., R.78 W., left bank of Bemrose Creek in SW¼SW¼ sec.6, T.8 S., R.77 W., and intercepting intermediate tributaries, transport
diversions to north portal of the tunnel.

09050590 Harold D. Roberts tunnel diverts water from Dillon Reservoir (Blue River) in sec.18, T.5 S., R.77 W., in Blue River basin, to North Fork South Platte River (tributary to South Platte, River) in SW¼SW¼ sec.4, T.7 S., R.74 W., in Platte River basin. Figures include a small amount of ground-water inflow between Dillon Reservoir and east portal of tunnel.

09063700 Homestake tunnel diverts water from Homestake Lake (Middle Fork Homestake Creek), in sec.17, T.8 S., R.81 W., in Eagle River basin, to Lake Fork in sec.9, T.9 S., R.81 W., in Arkansas River basin. Water is imported to Homestake Lake from tributaries of Homestake Creek by collection conduits that extend from right bank of French Creek in sec.28, T.7 S., R.81 W., and left bank of East Fork Homestake Creek in sec.9, T.8 S., R.81 W., and intercept intermediate tributaries.

DIVERSIONS, IN ACRE-FEET, WATER YEAR OCTOBER 1982 TO SEPTEMBER 1983

Diversion	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
TO PLATTE RIVER BASIN												
09010000	0	0	0	0	0	0	0	0	0	6,590	5,110	965
Water year 12,670												
09013000	15,520	11,550	15,150	19,450	20,920	18,610	5,050	1,190	140	17,710	26,450	14,030
Water year 165,800												
09021500	5.7	0	0	0	0	0	0	0	30	369	196	73
Water year 674												
09050590	0	7,330	0	0	0	0	0	0	0	0	0	673
Water year 8,000												
TO ARKANSAS RIVER BASIN												
09042000	900	0	0	0	0	0	0	278	3,150	423	900	509
Water year 6,160												
09063700	0	0	0	6,520	6,960	7,660	1,600	0	0	0	0	0
Water year 22,740												

TRANSMOUNTAIN DIVERSIONS FROM COLORADO RIVER BASIN IN COLORADO--Continued

TRANSMOUNTAIN DIVERSIONS NO LONGER PUBLISHED

Following is a list of Transmountain Diversions no longer being published in this report. Diversions, in acre-feet, for these sites are available from the State of Colorado, Division of Water Resources.

TO PLATTE RIVER BASIN		TO ARKANSAS RIVER BASIN		TO RIO GRANDE BASIN	
09012000	Eureka ditch	09061500	Columbine ditch	09118200	Tarbell ditch
09022500	Moffat Water tunnel	09062000	Ewing ditch	09121000	Tabor ditch
09046000	Boreas Pass ditch	09062500	Wurtz ditch	09347000	Don LaFont ditches 1&2
09047300	Vidler tunnel	09073000	Twin Lakes tunnel	09348000	Williams Cr-Squaw Pass ditch
		09077160	Chas. H. Boustead tunnel	09351000	Pine River-Weminuche Pass ditch
		09077500	Busk-Ivanhoe tunnel	09351500	Weminuche Pass ditch
		09115000	Larkspur ditch		

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 1983

Station number	Station name	Location	Total Drainage area (mi^2)	Non-contributing	Annual maximum: Period of record	Annual maximum: Date	Annual maximum: Gage height (feet)	Annual maximum: Discharge (ft^3/s)
		GREEN RIVER BASIN						
09361400	Junction Creek near Durango, CO	Lat 37°20'04", long 107°54'35", sec.36, T.36N., R.10 W., La Plata County, on left bank 4.5 mi upstream from mouth and 4.5 mi northwest of Durango.	26.3	-	1959-65, 1972, 1979-83	05-31-83	3.48	430

During October 1982, streamflow gain and loss measurements were made on several tributaries of the Gunnison and Dolores River basins, as part of a special study. In addition to discharge measurements, field observations of water temperature were obtained.

Stream	Tributary to	Location	Date	Discharge (ft^3/s)	Temp (°C)
West Fork Terror Creek	Terror Creek	Lat 38°56'54" Long 107°34'29"	10-05-82	1.61	7°
East Fork Terror Creek	Terror Creek	Lat 38°56'55" Long 107°34'27"	10-05-82	2.74	9°
Terror Creek	North Fork Gunnison River	Lat 38°55'36" Long 107°34'23"	10-05-82	3.71	8°
Oak Creek	Tongue Creek	Lat 38°55'37" Long 108°03'53"	10-06-82	.66	6.5°
Oak Creek	Tongue Creek	Lat 38°54'30" Long 108°02'29"	10-06-82	1.51	8°

During water year 1983, the following discharge measurements were made in the San Juan River basin as part of the San Juan Coal Hydrology project.

DISCHARGE MEASUREMENTS MADE AT MISCELLANEOUS SITES DURING THE 1983 WATER YEAR

Station no.	Stream	Tributary to	Location	Date	Discharge (ft^3/s)	Temperature (°C)	Specific conductance
--------	Cabezon Creek	Stollsteimer Creek	371013107174701	04-08-83	3.42	4.5	450
				04-14-83	4.36	6.0	400
				04-22-83	7.27	---	---
				05-05-83	4.69	9.0	400
				05-12-83	3.16	3.0	420
				05-18-83	2.08	12.0	480
				05-25-83	1.83	15.0	480
				06-02-83	1.64	14.0	500
				06-09-83	1.48	15.5	500
				06-16-83	1.26	----	---
				06-23-83	1.35	18.5	480
				06-30-83	1.26	18.5	480
				07-07-83	0.42	19.0	500
				07-14-83	0.41	----	---
				07-21-83	0.69	18.5	500
-	Stollsteimer Creek	Piedra River	370957107184601	03-23-83	17.4	3.5	460
				04-08-83	75.4	5.0	460
				04-14-83	133	4.5	410
				04-22-83	309	7.0	340
				05-05-83	88.5	9.0	460
				05-12-83	63.6	6.0	440
				05-18-83	39.0	14.0	600
				05-25-83	30.9	18.0	600
				06-02-83	22.7	17.5	650
				06-09-83	14.8	19.5	580
				06-16-83	11.9	----	---
				06-23-83	6.23	20.0	820
				06-29-83	6.94	20.5	820
				07-21-83	4.72	19.5	820
.	Stollsteimer Creek	Piedra River	370951107185501	09-20-83	1.79	15.0	890
.	Deep Canyon Creek	Stollsteimer Creek	370914107184801	08-05-83	0.03	17.0	440
.	Deep Canyon Creek	Stollsteimer Creek	370924107184901	08-05-83	0.04	17.5	450
.	Deep Canyon Creek	Stollsteimer Creek	370941107185501	03-23-83	2.65	2.0	380
				04-08-83	2.97	----	---
				04-14-83	3.52	6.0	340
				04-22-83	6.41	----	---
				04-28-83	5.25	8.0	210
				05-05-83	3.70	8.0	220
				05-12-83	2.08	1.0	260
				05-18-83	1.53	15.0	400
				05-25-83	0.58	18.5	440
				06-02-83	0.37	16.0	460
				06-09-83	0.38	19.0	420
				06-16-83	0.21	18.0	440
				06-23-83	0.13	20.0	450
				06-29-83	0.31	22.0	420
				07-07-83	0.11	19.5	420
				07-21-83	0.03	25.5	380
				08-10-83	0.00	----	---
--	Stollsteimer Creek	Piedra River	370947107085601	09-20-83	1.89	15.0	890
--	Stollsteimer Creek	Piedra River	370955107191601	09-20-83	2.47	15.0	900
--	Stollsteimer Creek	Piedra River	370947107192401	09-20-83	3.46	15.0	870
--	Stollsteimer Creek	Piedra River	370940107193701	04-28-83	170	8.0	366
--	Stollsteimer Creek	Piedra River	370923107202101	09-20-83	2.80	15.0	790
--	Stollsteimer Creek	Piedra River	370905107202901	09-20-83	2.42	17.0	800
--	Stollsteimer Creek	Piedra River	370856107203401	09-20-83	2.58	19.0	790
--	Stollsteimer Creek	Piedra River	370847107203401	09-20-83	1.95	19.0	800
--	Stollsteimer Creek	Piedra River	370828107210201	04-08-83	82.8	7.0	500
				04-14-83	143	4.5	420
				04-22-83	320	----	330
				04-28-83	170	8.0	370
				05-05-83	100	9.0	480
				05-12-83	68.0	7.0	460
				05-18-83	43.9	15.0	580
				05-25-83	36.3	18.0	620
				06-02-83	26.6	19.0	650
				06-09-83	24.1	16.5	750
				06-16-83	11.3	16.0	800
				06-23-83	5.93	19.5	800
				06-30-83	8.74	18.5	800
				07-07-83	3.62	19.0	800
				07-21-83	5.34	21.5	780
---	Southern Diversion Hay Gulch Irrigation Ditch	La Plata River	371458108052701	07-08-83	3.03	----	---
				09-15-83	2.12	17.0	150
---	Southern Diversion Hay Gulch Irrigation Ditch	La Plata River	371452108054901	07-08-83	2.94	----	---
				09-15-83	2.37	18.0	150
---	Southern Diversion Hay Gulch Irrigation Ditch	La Plata River	371452108061801	07-08-83	3.25	----	---
				09-15-83	2.64	18.0	155

DATE	TIME	SPECIFIC CONDUCTANCE (UMHOS)	TEMPERATURE (DEG C)	DATE	TIME	SPECIFIC CONDUCTANCE (UMHOS)	TEMPERATURE (DEG C)
09165000 - DOLORES RIVER BELOW RICO, CO. (LAT 37 38 20 LONG 108 03 35)							
OCT , 1982				MAY , 1983			
06...	1245	280	5.0	12...	1625	238	9.0
NOV				25...	1320	166	7.0
02...	1025	390	1.0	JUN			
DEC				01...	0810	110	3.0
14...	1425	440	.0	20...	0910	144	4.0
FEB , 1983				JUL			
03...	1110	480	.0	05...	0900	104	5.0
MAR				AUG			
09...	1210	475	3.0	01...	1400	250	15.0
APR				SEP			
05...	1140	436	2.0	02...	1235	314	12.5
27...	1050	271	5.0				
09166500 - DOLORES RIVER AT DOLORES, CO. (LAT 37 28 16 LONG 108 30 15)							
OCT , 1982				MAY , 1983			
06...	1430	290	8.5	11...	1000	188	4.0
NOV				26...	0630	188	4.5
02...	1225	360	3.0	26...	0635	144	4.5
DEC				JUN			
14...	1610	400	.0	03...	0645	177	5.0
FEB , 1983				14...	1345	167	7.0
03...	1325	430	.5	21...	1630	123	12.0
MAR				JUL			
09...	1425	402	5.0	06...	1555	175	14.0
16...	1230		6.0	26...	1540	188	15.0
APR				AUG			
05...	1330	363	3.0	31...	1100	259	15.0
27...	0850	206	3.0				
09167450 - PLATEAU CREEK NEAR MOUTH, NEAR DOLORES, CO. (LAT 37 35 57 LONG 108 29 44)							
NOV , 1982				JUN , 1983			
04...	1005	800	.0	03...	1015	360	8.0
MAR , 1983				14...	1005	678	9.0
07...	0925	785	1.0	AUG			
28...	0905	867	2.0	23...	0900	874	15.0
09168100 - DISAPPOINTMENT CREEK NEAR DOVE CREEK, CO. (LAT 37 52 36 LONG 108 34 57)							
OCT , 1982				APR , 1983			
05...	1005	1300	7.0	26...	1550	1330	9.0
NOV				JUN			
01...	1010	1600	8.0	02...	1040	910	9.0
DEC				21...	1325	672	18.0
13...	1015	1700	.0	JUL			
FEB , 1983				06...	1240	910	24.0
02...	1025	2100	.0	28...	0935	1310	19.5
MAR				SEP			
08...	1020	2330	4.0	01...	0930	1830	24.0
APR							
04...	0950	2760	1.0				
09172500 - SAN MIGUEL RIVER NEAR PLACERVILLE, CO. (LAT 38 02 05 LONG 108 07 15)							
OCT , 1982				MAY , 1983			
06...	1030	320	4.0	12...	0855	281	2.0
NOV				25...	1155	314	7.0
02...	0820	360	2.0	JUN			
DEC				01...	1030	252	7.0
14...	1135	390	.0	20...	1205	195	9.0
FEB , 1983				JUL			
03...	0910	410	.0	05...	1145	207	8.0
MAR				AUG			
09...	1000	455	4.0	01...	1135	228	10.0
APR				SEP			
05...	0930	446	1.0	02...	1015	291	12.0
26...	1025	259	2.5				

DATE	TIME	SPECIFIC CONDUCTANCE (UMHOS)	TEMPERATURE (DEG C)
09177000 - SAN MIGUEL RIVER AT URAVAN, CO. (LAT 38 21 26 LONG 108 42 44)			
OCT , 1982			
06...	0815	550	8.0
NOV			
01...	1625	780	10.0
DEC			
14...	0910	825	.0
FEB , 1983			
02...	1630	750	1.0
MAR			
09...	0810	937	5.0
APR			
05...	0730	687	3.0
26...	1230	304	7.0
MAY , 1983			
12...	1150	272	9.0
25...	0710	272	9.0
JUN			
02...	0715	281	10.5
21...	0850	96	12.0
JUL			
06...	0815	281	16.0
29...	1315	490	19.0
SEP			
01...	1630	1020	24.0
09236000 - BEAR RIVER NEAR TOPONAS, CO. (LAT 40 02 38 LONG 107 04 18)			
OCT , 1982			
05...	1150	100	6.0
APR , 1983			
14...	0915	100	1.5
SEP , 1983			
08...	1330	95	13.0
09239500 - YAMPA RIVER AT STEAMBOAT SPRINGS, CO. (LAT 40 29 01 LONG 106 49 54)			
OCT , 1982			
28...	1030	240	2.5
DEC			
23...	1030	235	.5
JAN , 1983			
24...	1300	220	1.0
FEB			
24...	1200	250	1.0
APR			
05...	1200	270	2.0
29...	1530	210	6.5
MAY			
24...	1400	160	11.0
MAY , 1983			
27...	0900	194	8.0
31...	1540	85	9.5
JUN			
10...	0900	57	7.0
JUL			
08...	1040	79	11.0
27...	1545	616	17.0
AUG			
25...	0930	260	17.0
SEP			
26...	1200	280	14.0
09244410 - YAMPA RIVER BELOW DIVERSION, NEAR HAYDEN, CO. (LAT 40 29 18 LONG 107 09 33)			
OCT , 1982			
07...	1145	190	7.0
NOV			
18...	1310	--	.0
JAN , 1983			
06...	1445	--	.0
MAR			
02...	1150	--	.5
MAY			
04...	1500	410	9.0
MAY , 1983			
29...	1220	105	8.0
JUN			
07...	1115	110	7.5
16...	1145	90	8.5
22...	1450	50	9.5
SEP			
06...	1235	260	17.0
09245000 - ELKHEAD CREEK NEAR ELKHEAD, CO. (LAT 40 40 11 LONG 107 17 05)			
OCT , 1982			
07...	1015	250	8.5
NOV			
19...	1030	310	.0
JAN , 1983			
11...	1145	280	.5
MAR , 1983			
02...	1000	--	.5
AUG			
31...	1315	--	19.5
09250000 - MILK CREEK NEAR THORNBURGH, CO. (LAT 40 11 37 LONG 107 43 54)			
OCT , 1982			
04...	1115	700	9.0
NOV			
19...	0850	740	1.0
DEC			
17...	1030	675	.0
JAN , 1983			
18...	1220	750	.0
MAR , 1983			
04...	1200	840	.5
MAY			
05...	1145	430	7.0
29...	1530	300	11.0
SEP			
06...	1600	800	21.0

DATE	TIME	SPECIFIC CONDUCTANCE (UMHOS)	TEMPERATURE (DEG C)	DATE	TIME	SPECIFIC CONDUCTANCE (UMHOS)	TEMPERATURE (DEG C)
09255000 - SLATER FORK NEAR SLATER, CO. (LAT 40 58 54 LONG 107 22 58)							
OCT , 1982				MAY , 1983			
22...	0940	--	2.0	27...	1400	120	9.5
DEC				JUN			
15...	1330	--	.0	14...	1445	100	9.0
MAR , 1983				JUL			
03...	1158	--	.5	21...	1220	145	17.5
APR				AUG			
12...	1235	270	3.5	31...	1355	235	18.5
09258000 - WILLOW CREEK NEAR DIXON, WY. (LAT 40 54 56 LONG 107 31 16)							
OCT , 1982				MAY , 1983			
21...	1525	--	6.5	27...	0915	125	6.0
DEC				JUN			
21...	1300	--	.0	14...	1015	120	5.5
MAR , 1983				AUG			
03...	1015	--	.5	31...	1015	170	14.5
09302450 - LOST CREEK NEAR BUFORD, CO. (LAT 40 03 01 LONG 107 28 06)							
OCT , 1982				MAY , 1983			
07...	1150	--	4.0	09...	1310	250	5.0
NOV				AUG			
17...	1105	310	.5	17...	1100	370	16.5
DEC				SEP			
17...	0900	320	.5	29...	1140	380	10.0
JAN , 1983							
14...	1030	325	.5				
09302500 - MARVINE CREEK NEAR BUFORD, CO. (LAT 40 02 18 LONG 107 29 15)							
NOV , 1982				MAY , 1983			
17...	1010	260	1.0	09...	1415	310	9.0
JAN , 1983				AUG			
14...	1205	270	.5	17...	1150	225	13.0
09303000 - NORTH FORK WHITE RIVER AT BUFORD, CO. (LAT 39 59 15 LONG 107 36 50)							
OCT , 1982				MAR , 1983			
04...	1530	270	11.0	23...	0930	320	1.5
NOV				23...	0930	--	1.5
08...	1300	295	3.5	MAY			
08...	1300	--	3.5	09...	1150	280	7.0
DEC				19...	1040	284	4.0
17...	1050	300	1.0	JUN			
JAN , 1983				16...	1345	185	9.0
14...	1330	320	.5				
09303400 - SOUTH FORK WHITE RIVER NEAR BUDGES RESORT, CO. (LAT 39 51 51 LONG 107 32 00)							
OCT , 1982				MAY , 1983			
04...	1200	190	6.0	13...	1030	220	3.5
NOV				AUG			
18...	1100	195	.5	24...	1200	200	12.0
DEC							
21...	1200	175	1.0				
09304000 - SOUTH FORK WHITE RIVER AT BUFORD, CO. (LAT 39 58 28 LONG 107 37 29)							
OCT , 1982				JAN , 1983			
04...	1430	200	12.0	14...	1430	270	.5
NOV				JUN			
18...	1430	215	3.0	07...	1055	230	7.0
DEC				SEP			
17...	1200	220	.5	29...	1415	265	13.0
09304500 - WHITE RIVER NEAR MEEKER, CO. (LAT 40 02 01 LONG 107 51 42)							
OCT , 1982				SEP , 1983			
01...	1030	420	14.0	27...	1140	495	13.0
28...	1415	430	5.0				
AUG , 1983							
29...	1610	450	15.5				

DATE	TIME	SPECIFIC CONDUCTANCE (UMHOS)	TEMPERATURE (DEG C)	DATE	TIME	SPECIFIC CONDUCTANCE (UMHOS)	TEMPERATURE (DEG C)
09306045 - PICEANCE C BL GARDENHIRE GULCH NR RIO BLANCO CO. (LAT 39 50 08 LONG 108 13 14)							
MAR , 1983							
31...	1014	1100	6.0				
09339900 - EF SAN JUAN R AB SAND CREEK, NR PAGOSA SPGS, CO. (LAT 37 23 23 LONG 106 50 26)							
OCT , 1982				JUN , 1983			
06...	0800	120	1.0	20...	1615	76	12.0
NOV				JUL			
01...	1125	120	.0	05...	1600	91	15.5
MAR , 1983				20...	1055	--	13.0
03...	0955	167	2.0	AUG			
MAY				01...	1050	116	16.0
24...	1305	91	11.0	SEP			
JUN				06...	1130	136	13.0
01...	1345	76	9.0				
09342500 - SAN JUAN RIVER AT PAGOSA SPRINGS, CO. (LAT 37 15 58 LONG 107 00 37)							
OCT , 1982				MAY , 1983			
06...	1140	115	5.0	25...	0735	66	4.0
NOV				JUN			
01...	1255	260	7.0	02...	0650	<50	4.0
DEC				21...	0700	47	6.0
15...	1205	290	.5	JUL			
FEB , 1983				06...	0755	47	8.0
02...	1555	390	4.0	AUG			
MAR				01...	0925	167	15.0
08...	1200	218	8.0	SEP			
APR				06...	1240	147	17.0
12...	1135	280	7.0				
25...	1320	135	8.0				
09346000 - NAVAJO RIVER AT EDITH, CO. (LAT 37 00 10 LONG 106 54 25)							
OCT , 1982				MAY , 1983			
06...	1005	240	3.0	24...	1515	207	15.0
NOV				JUN			
01...	0950	225	5.0	01...	1600	146	12.0
DEC				21...	0900	95	6.0
15...	1000	260	.0	JUL			
FEB , 1983				05...	1330	179	17.0
02...	1335	250	.0	AUG			
MAR				01...	1245	250	21.0
08...	1020	290	3.0	SEP			
APR				06...	0950	272	13.0
12...	1000	364	3.0				
25...	1945	318	13.0				
09346400 - SAN JUAN RIVER NEAR CARRACAS, CO. (LAT 37 00 49 LONG 107 18 42)							
OCT , 1982				MAY , 1983			
05...	1410	160	14.0	25...	1230	126	10.0
NOV				JUN			
02...	0955	240	5.5	02...	1200	96	8.0
DEC				21...	1220	71	10.0
16...	0945	380	.0	JUL			
FEB , 1983				06...	1225	86	16.0
03...	0935	330	.0	AUG			
MAR				01...	1510	218	23.0
08...	1425	520	8.0	SEP			
APR				07...	0930	291	17.0
12...	1200	475	7.5				
26...	1020	230	8.0				
09347205 - MIDDLE FORK PIEDRA RIVER NEAR DYKE, CO. (LAT 37 27 10 LONG 107 10 33)							
OCT , 1982				JUN , 1983			
06...	1315	75	6.5	01...	1030	42	6.0
NOV				20...	1300	<50	9.0
01...	1435	65	7.0	JUL			
DEC				05...	1020	39	7.0
15...	1430	100	.0	AUG			
MAR , 1983				03...	1230	51	15.0
03...	1255	91	2.0	SEP			
APR				06...	1400	62	16.5
25...	1020	126	2.0				
MAY							
24...	1005	56	5.0				

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)	DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (UMHOS)	TEMPER-ATURE (DEG C)
09349800 - PIEDRA RIVER NEAR ARBOLES, CO. (LAT 37 05 18 LONG 107 23 50)							
OCT , 1982				MAY , 1983			
05...	1235	185	12.0	25...	1030	144	7.0
NOV				JUN			
02...	1115	300	5.0	02...	0940	104	7.0
DEC				21...	1500	96	12.0
16...	1120	380	1.0	JUL			
FEB , 1983				06...	1025	106	16.0
03...	1105	360	.0	AUG			
MAR				03...	1425	240	22.0
03...	1515	340	5.5	SEP			
APR				07...	1130	356	18.0
08...	1340	333	8.0				
26...	0815	186	5.0				
09354500 - LOS PINOS RIVER AT LA BOCA, CO. (LAT 37 00 34 LONG 107 35 56)							
OCT , 1982				MAY , 1983			
05...	1005	160	10.5	27...	1035	135	12.0
NOV				JUN			
02...	1410	120	8.0	22...	1045	156	15.0
DEC				JUL			
16...	1320	120	2.0	11...	1200	156	17.0
FEB , 1983				AUG			
03...	1300	200	1.0	05...	1025	156	18.0
MAR				SEP			
09...	1215	198	7.0	07...	1405	177	18.0
APR							
12...	0905	204	7.0				
26...	1250	161	9.0				
09355000 - SPRING CREEK AT LA BOCA, CO. (LAT 37 00 40 LONG 107 35 47)							
OCT , 1982				MAY , 1983			
05...	0905	300	9.0	27...	0900	281	13.0
NOV				JUN			
02...	1315	850	9.0	22...	0940	333	17.0
DEC				JUL			
16...	1420	1000	.0	11...	1055	291	18.0
FEB , 1983				AUG			
03...	1355	1150	.0	05...	0930	272	19.0
MAR				SEP			
09...	0955	876	4.0	07...	1350	262	19.0
APR							
12...	1005	707	5.0				
26...	1400	240	14.0				
09361500 - ANIMAS RIVER AT DURANGO, CO. (LAT 37 16 45 LONG 107 52 47)							
OCT , 1982				MAY , 1983			
25...	1330	480	12.0	27...	0910	155	9.0
NOV				JUN			
24...	1055	450	4.5	20...	0920	106	7.0
DEC				JUL			
21...	1310	450	4.0	01...	1035	136	9.0
JAN , 1983				14...	1345	188	14.0
25...	1315	500	3.5	21...	1315	218	16.0
FEB				AUG			
23...	1415	505	8.0	29...	0745	370	17.0
MAR				SEP			
24...	1245	505	4.0	26...	1040	653	19.0
APR							
27...	1120	272	7.0				
09363100 - SALT CREEK NEAR OXFORD, CO. (LAT 37 08 23 LONG 107 45 10)							
OCT , 1982				APR , 1983			
04...	1125	165	10.0	08...	1140	918	9.0
NOV				MAY			
05...	0925	340	1.0	05...	1220	1320	16.0
DEC				27...	1200	272	17.0
17...	1105	780	.0	JUL			
FEB , 1983				11...	0925	177	17.0
01...	1500	900	.0	AUG			
14...	1105	1150	.0	05...	1130	156	20.0
MAR				SEP			
04...	1205	280	4.0	07...	1450	161	19.5

09363200 - FLORIDA RIVER AT BONDAD, CO. (LAT 37 03 24 LONG 107 52 09)

DATE	TIME	SPECIFIC CONDUCTANCE (UMHOS)	TEMPERATURE (DEG C)
OCT , 1982			
04...	0915	260	9.5
NOV			
05...	1050	320	3.0
DEC			
17...	1245	360	1.5
FEB , 1983			
01...	1345	400	2.0
MAR			
04...	1050	384	5.0
APR			
08...	1020	370	6.0
MAY , 1983			
05...	1340	259	12.0
11...	1620	230	12.0
JUN			
13...	1345	291	15.0
23...	0845	228	12.0
JUL			
21...	1005	333	20.5
AUG			
29...	1120	327	20.0

09371000 - MANCOS RIVER NEAR TOWAOC, CO. (LAT 37 01 39 LONG 108 44 27)

DATE	TIME	SPECIFIC CONDUCTANCE (UMHOS)	TEMPERATURE (DEG C)
OCT , 1982			
13...	1140	1350	8.5
NOV			
15...	1145	1420	3.0
15...	1420	1420	3.0
DEC			
13...	1415	1650	3.0
JAN , 1983			
20...	1420	1500	2.0
MAR			
01...	1135	1280	6.5
APR			
07...	1235	1440	7.0
22...	1215	714	8.0
MAY , 1983			
03...	1330	577	11.0
11...	1235	450	11.0
18...	1205	612	9.0
26...	1020	380	14.0
JUN			
07...	1150	470	15.0
30...	1410	530	19.0
JUL			
26...	1245	1050	23.0
AUG			
31...	0955	1120	20.0
SEP			
16...	1125	1080	18.0

09371400 - HARTMAN DRAW AT CORTEZ, CO. (LAT 37 19 26 LONG 108 36 52)

DATE	TIME	SPECIFIC CONDUCTANCE (UMHOS)	TEMPERATURE (DEG C)
OCT , 1982			
04...	1450	2180	18.0
NOV			
04...	1225	2200	4.0
DEC			
13...	0910	2200	1.0
JAN , 1983			
24...	0855	2100	.0
MAR			
02...	1305	2340	9.0
APR			
07...	1505	2440	5.0
MAY , 1983			
03...	1440	2800	15.0
31...	0840	1930	13.0
JUN			
30...	0910	1800	15.0
JUL			
26...	0905	1820	18.5
AUG			
30...	0845	1930	6.0

09371420 - MCELMO CREEK ABOVE ALKALI CANYON, NR CORTEZ, CO. (LAT 37 19 38 LONG 108 38 55)

DATE	TIME	SPECIFIC CONDUCTANCE (UMHOS)	TEMPERATURE (DEG C)
OCT , 1982			
04...	1320	2000	16.0
NOV			
04...	1345	2000	5.0
DEC			
13...	1035	2600	1.0
JAN , 1983			
13...	1025	2300	.0
APR			
07...	1410	3120	6.0
MAY , 1983			
03...	0940	2350	10.0
31...	1000	1930	15.0
JUN			
30...	1035	1440	16.0
JUL			
26...	1050	1700	19.5
AUG			
30...	0950	2030	17.0

09371492 - MUD CREEK AT STATE HIGHWAY 32, NEAR CORTEZ, CO. (LAT 37 18 46 LONG 108 39 38)

DATE	TIME	SPECIFIC CONDUCTANCE (UMHOS)	TEMPERATURE (DEG C)
OCT , 1982			
13...	1335	2180	7.5
NOV			
04...	1430	2800	4.0
DEC			
13...	1210	5200	2.0
JAN , 1983			
20...	1550	5000	2.0
MAR			
02...	1225	4160	6.0
APR			
07...	1330	4920	7.0
MAY , 1983			
03...	1210	5450	10.5
31...	1220	1700	15.0
JUN			
30...	1250	2050	17.0
JUL			
25...	1420	--	23.0
AUG			
30...	1455	2350	20.0

09371700 - MCELMO CREEK BELOW CORTEZ, CO. (LAT 37 20 26 LONG 108 48 19)

DATE	TIME	SPECIFIC CONDUCTANCE (UMHOS)	TEMPERATURE (DEG C)	DATE	TIME	SPECIFIC CONDUCTANCE (UMHOS)	TEMPERATURE (DEG C)
OCT , 1982				MAY , 1983			
04...	1140	1620	15.0	03...	1125	2690	13.0
NOV				31...	1110	1780	17.0
15...	1140	2400	2.0	JUN			
DEC				30...	1135	1540	18.0
14...	1150	2700	2.0	JUL			
JAN , 1983				25...	1145	1420	22.0
24...	1230	2250	1.0	AUG			
MAR				30...	1405	1930	21.0
02...	1120	2320	6.0				
APR							
07...	1110	2970	7.0				

09372000 - MCELMO CREEK NEAR COLORADO-UTAH STATE LINE (LAT 37 19 27 LONG 109 00 54)

DATE	TIME	SPECIFIC CONDUCTANCE (UMHOS)	TEMPERATURE (DEG C)	DATE	TIME	SPECIFIC CONDUCTANCE (UMHOS)	TEMPERATURE (DEG C)
OCT , 1982				MAY , 1983			
04...	0955	1750	13.0	03...	1000	2520	13.0
NOV				31...	0940	1660	16.0
15...	1005	2500	2.0	JUN			
DEC				30...	1000	1540	18.0
14...	1315	2880	3.0	JUL			
JAN , 1983				25...	1025	1480	21.0
24...	1115	2450	1.0	AUG			
MAR				30...	1255	1930	21.0
02...	1010	2340	10.0				
APR							
07...	0950	2970	7.0				

LA PLATA COUNTY

370122107522700 NB 32- 9-18BBB. B. Cogburn. Drilled stock water-table well in Naciemento Formation. Diameter, 6 in. Depth, 138 ft. MP, 0.3 ft above lsd. Altitude of land surface, 5,980 ft. Records available: 1973-83.

Highest water level, 19.18 ft below lsd, Aug. 26, 1976; lowest water level, 27.3 ft below lsd, Apr. 30, 1974.

Aug. 8, 1983 21.54 ft

370934107404100 NB34-08-26DAD2. U.S. Geological Survey Oxford Test Hole. Drilled observation water-table well in San Jose Formation. Diameter 6 in. Depth, 502 ft. MP, 1.0 ft above lsd. Altitude of land surface, 6,635 ft. Records available: 1975, 1980-83.

Highest water level, 17.0 ft below lsd, Oct. 2, 1975; lowest water level, 27.23 ft below lsd, Aug. 13, 1980.

Aug. 8, 1983 18.78 ft

MOFFAT COUNTY

403040107420801 SB 7-92-34 DBD. J. Herod. Drilled domestic water-table well in Browns Park Formation. Diameter, 5 in. Depth, 190 ft. MP, 4.0 ft below lsd. Altitude of land surface, 6,545 ft. Records available: 1974-80, 1983

Highest water level, 70.3 ft below lsd, Feb. 2, 1976; lowest water level, 72.9 ft below lsd, Nov. 7, 1974.

Aug. 11, 1983 70.95 ft, below lsd

MONTEZUMA COUNTY

370410108583701 NB33-20-25CDC. Ute Indian Tribe. Drilled stock water-table well in Dakota Sandstone. Diameter, 5 in. Depth, 250 ft. MP, 2.0 ft above lsd. Altitude of land surface, 4,900 ft. Records available: 1973-83.

Highest water level, -1.59 ft above lsd, Sept. 30, 1975; lowest water level, 59.43 ft below lsd, Aug. 18, 1980.

Aug. 8, 1983 54.12 ft

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October 1, 1978

FACTORS FOR CONVERTING INCH-POUND UNITS TO INTERNATIONAL SYSTEM UNITS (SI)

The following factors may be used to convert the inch-pound units published herein to the International System of Units (SI). This report contains both the inch-pound and SI unit equivalents in the station manuscript descriptions.

Multiply inch-pound units	By	To obtain SI units
	Length	
inches (in)	2.54×10^{1}	millimeters (mm)
	2.54×10^{-2}	meters (m)
feet (ft)	3.048×10^{-1}	meters (m)
miles (mi)	1.609×10^{0}	kilometers (km)
	Area	
acres	4.047×10^{3}	square meters (m^2)
	4.047×10^{-1}	square hectometers (hm^2)
	4.047×10^{-3}	square kilometers (km^2)
square miles (mi^2)	2.590×10^{0}	square kilometers (km^2)
	Volume	
gallons (gal)	3.785×10^{0}	liters (L)
	3.785×10^{0}	cubic decimeters (dm^3)
	3.785×10^{-3}	cubic meters (m^3)
million gallons	3.785×10^{3}	cubic meters (m^3)
	3.785×10^{-3}	cubic hectometers (hm^3)
cubic feet (ft^3)	2.832×10^{1}	cubic decimeters (dm^3)
	2.832×10^{-2}	cubic meters (m^3)
cfs-days	2.447×10^{3}	cubic meters (m^3)
	2.447×10^{-3}	cubic hectometers (hm^3)
acre-feet (acre-ft)	1.233×10^{3}	cubic meters (m^3)
	1.233×10^{-3}	cubic hectometers (hm^3)
	1.233×10^{-6}	cubic kilometers (km^3)
	Flow	
cubic feet per second (ft^3/s)	2.832×10^{1}	liters per second (L/s)
	2.832×10^{1}	cubic decimeters per second (dm^3/s)
	2.832×10^{-2}	cubic meters per second (m^3/s)
gallons per minute (gal/min)	6.309×10^{-2}	liters per second (L/s)
	6.309×10^{-2}	cubic decimeters per second (dm^3/s)
	6.309×10^{-5}	cubic meters per second (m^3/s)
million gallons per day	4.381×10^{1}	cubic decimeters per second (dm^3/s)
	4.381×10^{-2}	cubic meters per second (m^3/s)
	Mass	
tons (short)	9.072×10^{-1}	megagrams (Mg) or metric tons

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