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Water Resources Data Colorado Water Year 1999

Volume 2. Colorado River Basin

By R.M. Crowfoot, J.W. Unruh, G.F. Ritz, R.W. Boulger, and G.B. O'Neill

Water-Data Report CO–99–2

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

UNITED STATES DEPARTMENT OF THE INTERIOR

BRUCE BABBITT, Secretary

U. S. GEOLOGICAL SURVEY

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Denver Federal Center
Lakewood, CO 80225
(303) 236-4882

http://co.water.usgs.gov

2000

CALENDAR FOR WATER YEAR 1999

1998

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CALENDAR FOR WATER YEAR 1999

1998

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PREFACE

Volume 2 of the annual hydrologic data report of Colorado is one of a series of annual reports that document hydrologic data gathered from the U.S. Geological Survey's surface- and ground-water data-collection networks in each state, Puerto Rico, and the Trust Territories. These records of streamflow, ground-water levels, and quality of water provide the hydrologic information needed by State, local, and Federal agencies, and the private sector for developing and managing our Nation's land and water resources. Hydrologic data for Colorado are contained in two volumes:

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

Volume 2 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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13. ABSTRACT *(Maximum 200 words)*

Water-resources data for Colorado for the 1999 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 and 2) contains discharge records for 306 gaging stations, stage and contents of 15 lakes and reservoirs, discharge measurements for 1 partial-record low-flow station and 1 miscellaneous site, peak flow information for 28 crest-stage partial-record stations; water-quality for 109 gaging stations and for 8 lakes and reservoirs, supplemental water-quality for 186 gaged sites; water-quality for 53 miscellaneous sites and 14 observation wells; water levels for 2 observation wells, and meteorological data for 19 sites. Three pertinent stations operated by 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 W.F. Horak, 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.

14. SUBJECT TERMS
*Colorado, *Hydrologic data, *Surface water, *Ground water, *Water quality; Flow rate, Gaging stations, Lakes, Reservoirs, Chemical analyses, Sediment, Water temperatures, Sampling sites, Water analyses

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CONTENTS

ILLUSTRATIONS

NOTE.--Data for partial-record stations and miscellaneous sites for both surface-water discharge and quality are published in seperate sections of the data report.

(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, (R) precipitation.

Periodic tables: (c) chemical, (b) biological, (e) elevation or contents, (m) microbiological, (s) sediment, (t) temperature.)

VOLUME 2: COLORADO RIVER BASIN

By R.M. Crowfoot, J.W. Unruh, G.F. Ritz, R.W. Boulger, and G.B. O'Neill

INTRODUCTION

The Water-Resources Division of the U.S. Geological Survey, in cooperation with State agencies, obtains a large amount of data pertaining to the water resources of Colorado each water year. These data, accumulated during many water years, constitute a valuable data base for developing an improved understanding of the water resources of the State. To make these data readily available to interested parties outside the Geological Survey, the data are published annually in the report series entitled "Water Resources Data - Colorado".

This report (Volume 2 of two volumes) includes records on both surface and ground water in the State, west of the Continental Divide. Specifically, it contains: (1) discharge records for 164 surface-water stations, and peak discharge data for 1 partial-record surface-water station and discharge-measurement data for 1 low-flow partial-record site; (2) stage and contents for 9 lakes and reservoirs; (3) surface-water-quality data for 60 surface-water stations, 4 reservoirs, 22 miscellaneous sites, and miscellaneous surface-water-quality data for 109 gaged sites; and (4) ground-water level records for 2 sites, and meteorological data for 10 sites. Locations of lake and surface-water-gaging stations and surface-water-quality stations are shown in figure 1, locations of crest-stage partial-record stations are shown in figure 2. The data in this report represent that part of the National Water Data System collected by the U.S. Geological Survey and cooperating State and Federal agencies in Colorado.

Prior to introduction of this series and for several water years concurrent with it, water-resources data for Colorado were published in U.S. Geological Survey Water-Supply Papers. Data on stream discharge and stage and on lake or reservoir contents and stage, through September 1960, were published annually under the title "Surface-water Supply of the United States," Parts 6B, 7, 8, and 9. For the 1961 through 1970 water years, the data were published in two 5-year reports. Data on chemical quality, temperature, and suspended sediment for the 1941 through 1970 water years were published annually under the title "Quality of Surface Waters of the United States." Data on ground-water levels for the 1935 through 1955 water years were published annually under the title "Water Levels and Artesian Pressures in Observation Wells in the United States." For the 1956 through 1974 water years the data were published in four 5-year reports under the title "Ground-Water Levels in the United States." Water-supply papers may be purchased from the, U.S. Geological Survey, Books and Open-File Reports, Federal Center, Building 810, Box 25425, Denver, CO 80225.

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

Publications similar to this report are published annually by the Geological Survey for all States. 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-99-2**." For archiving and general distribution, the reports for 1971-74 water years also are identified as water-data reports. These water-data reports are for sale, in paper copy or in micro-fiche, 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 office at the address given on the back of the title page or by telephone (303) 236-4882.

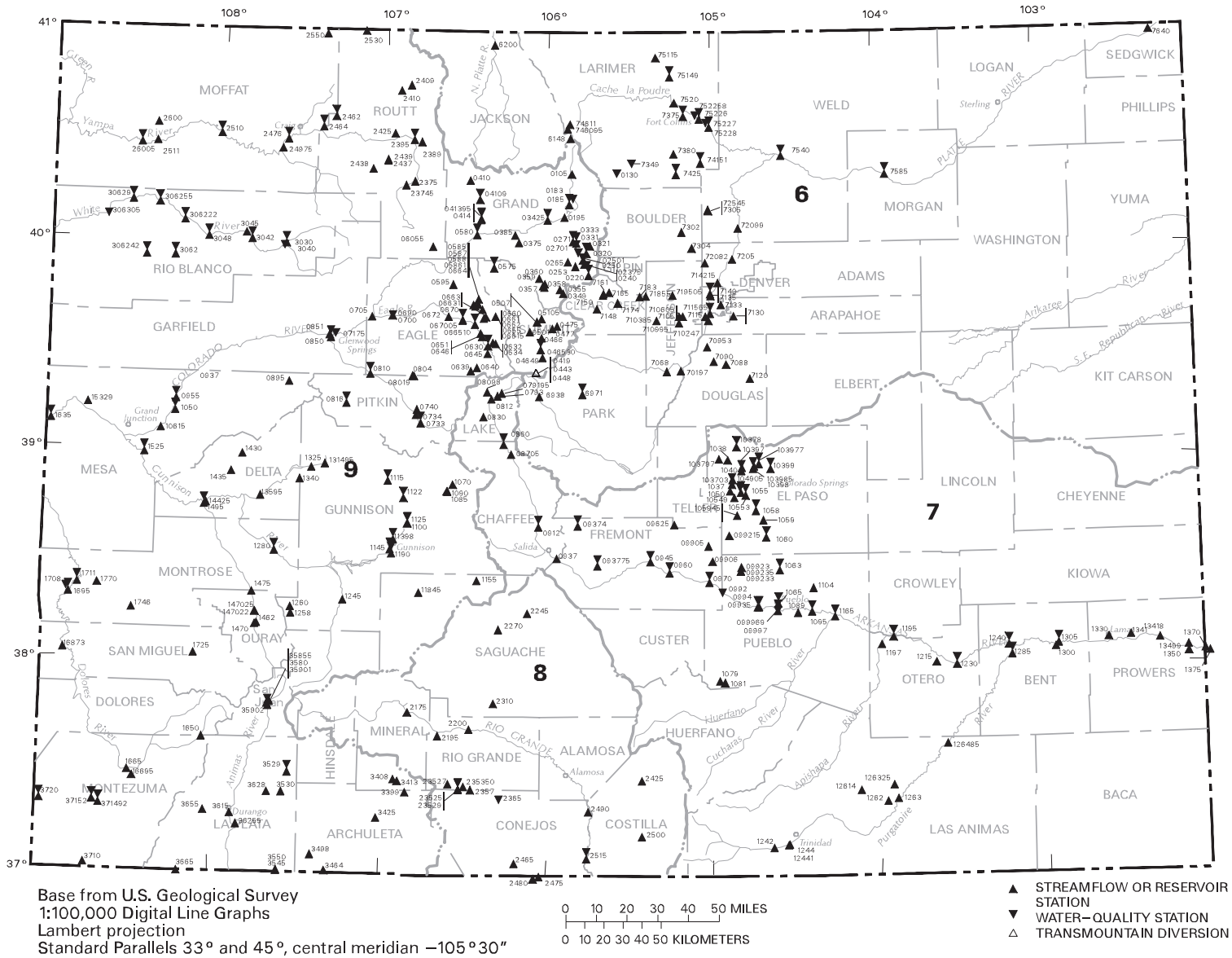


Figure 1.--Map showing locations of lake and surface-water stations and surface-water-quality stations in Colorado.

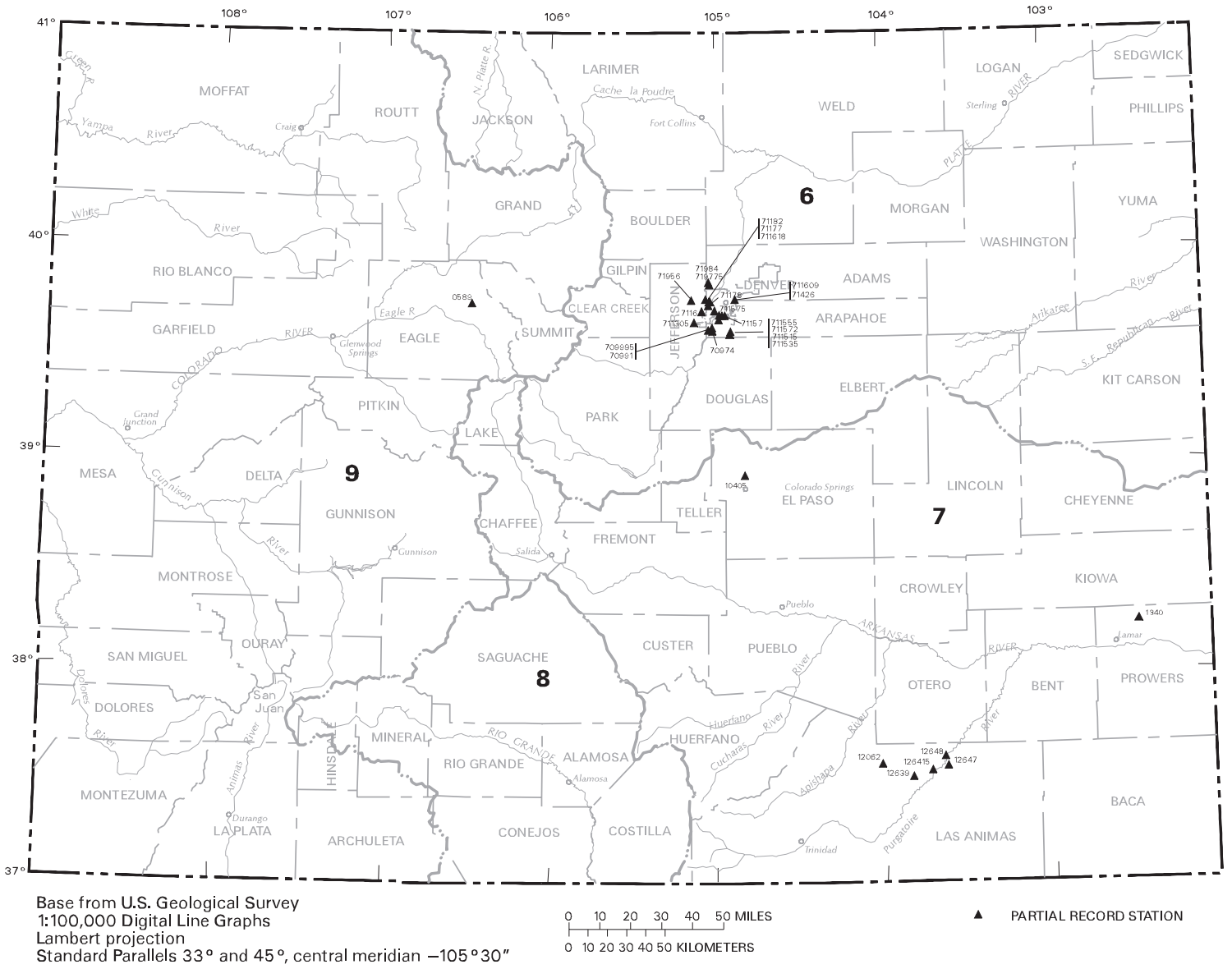


Figure 2.--Map showing locations of crest-stage partial-record stations in Colorado.

COOPERATION

The U.S. Geological Survey and organizations in 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 supported data-collection activities through cooperative agreements with the Survey during the **1999 water year** are:

Arapahoe County, Water and Wastewater Authority.
Arkansas River Compact Administration.
Centennial Water and Sanitation District.
Cherokee Metropolitan District.
City and County of Denver, Board of Water Commissioners.
City of Aurora.
City of Black Hawk.
City of Boulder.
City of Broomfield.
City of Colorado Springs.
City of Englewood.
City of Fort Collins.
City of Glendale.
City of Golden.
City of Gunnison.
City of Idaho Springs.
City of Lakewood.
City of Longmont.
City of Louisville.
City of Loveland.
City of Pueblo.
City of Westminster.
Clear Creek Board of County Commissioners.
Colorado City Metropolitan District.
Colorado Department of Public Health and Environment.
Colorado Department of Transportation.
Colorado Division of Parks and Outdoor Recreation.
Colorado Division of Water Resources.
Colorado Division of Wildlife.
Colorado River Water Conservation District.
Colorado Springs Utilities.
Colorado Water Conservation Board.
Crested Butte South Metropolitan District.
Delta County Board of County Commissioners.
Dolores Water Conservancy District.
Eagle County Board of Commissioners.
Eagle River Water and Sanitation District.
East Grand County Water-Quality Board.
Evergreen Metropolitan District.
Fountain Valley Authority.
Grand County.
La Plata County.
Lower Fountain Water-Quality Management Association.
Meeker Sanitation District.
Metro Wastewater Reclamation District.
Moffat County.
Mount Crested Butte Water and Sanitation District.
Northern Colorado Water Conservancy District.
Northwest Colorado Council of Governments.
Park County.
Plum Creek Wastewater Authority.
Pueblo Board of Water Works.
Pueblo West Metro Water District.
Rio Blanco County Board of County Commissioners.
Rio Grande Water Conservation District.
Roaring Fork Conservancy District.
Southeastern Colorado Water Conservancy District.
Southern Ute Indian Tribe.
Southwestern Colorado Water Conservation District.
St. Charles Mesa Water District.
Summit County.
Teller - Park Soil Conservation District.
Town of Basalt.
Town of Breckenridge.
Town of Crested Butte.
Town of Empire.
Town of Hotchkiss.
Town of Meeker.
Town of Rangely.
Trinchera Water Conservancy District.
Upper Arkansas River Water Conservancy District.
Upper Eagle Regional Water Authority.
Upper Gunnison River Water Conservancy District.
Upper South Platte Water Conservancy District.
Upper Yampa Water Conservancy District.
Urban Drainage and Flood Control District.
Yellowjacket Water Conservancy District.

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

SPECIAL NETWORKS AND PROGRAMS

Hydrologic Benchmark Network is a network of 50 sites in small drainage basins around the country whose purpose is to provide consistent data on the hydrology, including water quality, and related factors in representative undeveloped watersheds nationwide, and to provide analyses on a continuing basis to compare and contrast conditions observed in basins more obviously affected by human activities.

National Stream-Quality Accounting Network (NASQAN) monitors the water quality of large rivers within four of the Nation's largest river basins--the Mississippi, Columbia, Colorado, and Rio Grande. The network consists of 39 stations. Samples are collected with sufficient frequency that the flux of a wide range of constituents can be estimated. The objective of NASQAN is to characterize the water quality of these large rivers by measuring concentration and mass transport of a wide range of dissolved and suspended constituents, including nutrients, major ions, dissolved and sediment-bound heavy metals, common pesticides, and inorganic and organic forms of carbon. This information will be used (1) to describe the long-term trends and changes in concentration and transport of these constituents; (2) to test findings of the National Water-Quality Assessment Program (NAWQA); (3) to characterize processes unique to large-river systems such as storage and re-mobilization of sediments and associated contaminants; and (4) to refine existing estimates of off-continent transport of water, sediment, and chemicals for assessing human effects on the world's oceans and for determining global cycles of carbon, nutrients, and other chemicals.

The National Atmospheric Deposition Program/National Trends Network (NADP/NTN) provides continuous measurement and assessment of the chemical climate of precipitation throughout the United States. As the lead Federal agency, the USGS works together with over 100 organizations to accomplish the following objectives: (1) Provide a long-term, spatial and temporal record of atmospheric deposition generated from a network of 191 precipitation chemistry monitoring sites. (2) Provide the mechanism to evaluate the effectiveness of the significant reduction in SO_2 emissions that began in 1995 as implementation of the Clean Air Act Amendments (CAAA) occurred. (3) Provide the scientific basis and nationwide evaluation mechanism for implementation of the Phase II CAAA emission reductions for SO_2 and NO_x scheduled to begin in 2000.

Data from the network, as well as information about individual sites, are available through the World Wide Web at:

http://nadp.nrel.colostate.edu/NADP

The National Water-Quality Assessment (NAWQA) Program of the U.S. Geological Survey is a long-term program with goals to describe the status and trends of water-quality conditions for a large, representative part of the Nation's ground- and surface-water resources; provide an improved understanding of the primary natural and human factors affecting these observed conditions and trends; and provide information that supports development and evaluation of management, regulatory, and monitoring decisions by other agencies.

Assessment activities are being conducted in 53 study units (major watersheds and aquifer systems) that represent a wide range of environmental settings nationwide and that account for a large percentage of the Nation's water use. A wide array of chemical constituents will be measured in ground water, surface water, streambed sediments, and fish tissues. The coordinated application of comparative hydrologic studies at a wide range of spatial and temporal scales will provide information for decision making by water-resources managers and a foundation for aggregation and comparison of findings to address water-quality issues of regional and national interest.

Communication and coordination between USGS personnel and other local, State, and Federal interests are critical components of the NAWQA Program. Each study unit has a local liaison committee consisting of representatives from key Federal, State, and local water resources agencies, Indian nations, and universities in the study unit. Liaison committees typically meet semiannually to discuss their information needs, monitoring plans and progress, desired information products, and opportunities to collaborate efforts among the agencies.

Additional information about the NAWQA Program is available through the World Wide Web at:

http://wwwrvares.er.usgs.gov/nawqa/nawqa_home.html

EXPLANATION OF THE RECORDS

The surface-water and ground-water records published in this report are for the 1999 water year that began on October 1, 1998, and ended September 30, 1999. A calendar of the water year is provided on the inside of the front cover. The records contain streamflow data, stage and content data for lakes and reservoirs, ground-water level data, and water-quality data for surface and ground water. The locations of the stations where the surface-water data were collected are shown in figures 1 and 2. The following sections of the introductory text are presented to provide users with a more detailed explanation of how the hydrologic data published in this report were collected, analyzed, computed, and arranged for presentation.

Station Identification Numbers

Each data station, whether streamsite or well, in this report is assigned a unique identification number. This number is unique in that it applies specifically to a given station and to no other. The number usually is assigned when a station is first established and is retained for that station indefinitely. The systems used by the U.S. Geological Survey to assign identification numbers for surface-water stations and for ground-water well sites differ, but both are based on geographic location. The "downstream order" system is used for regular surface-water stations and the "latitude-longitude" system is used for wells and, in Colorado, for surface-water stations where only infrequent measurements are made.

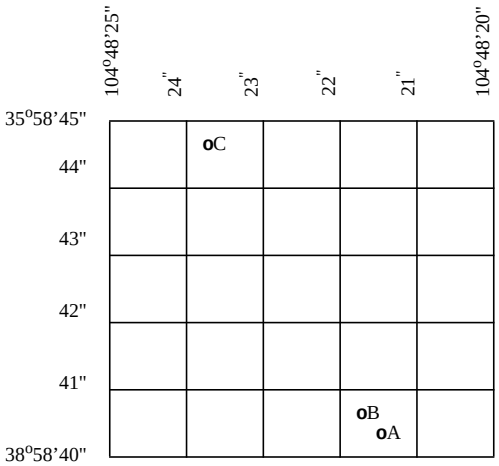
Downstream Order System

Since October 1, 1950, the order of listing hydrologic-station records in Survey reports is in a downstream direction along the main stream. All stations on a tributary entering upstream from a mainstream station are listed before that station. A station on a tributary that enters between two mainstream stations is listed between them. A similar order is followed in listing stations on first rank, second rank, and other ranks of tributaries. The rank of any tributary with respect to the stream to which it is immediately tributary is indicated by an indention in the "List of Stations" in the front of this report. Each indention represents one rank. This downstream order and system of indention show which stations are on tributaries between any two stations and the rank of the tributary on which each station is situated.

The station-identification number is assigned according to downstream order. In assigning station numbers, no distinction is made between partial-record stations and other stations; therefore, the station number for a partial-record station indicates downstream-order position in a list made up of both types of stations. Gaps are left in the series of numbers to allow for new stations that may be established; hence, the numbers are not consecutive. The complete eight-digit number for each station, such as 06614800, which appears just to the left of the station name, includes the two-digit Part number "06" plus the six-digit downstream-order number "614800." The Part number designates the major river basin; for example, Part "06" is the Missouri River basin.

Latitude-Longitude System

The identification numbers for wells, springs, and miscellaneous surface-water sites are assigned according to the grid system of latitude and longitude. The number consists of 15 digits. The first six digits denote the degrees, minutes, and seconds of latitude, the next seven digits denote the degrees, minutes, and seconds of longitude, and the last two digits (assigned sequentially) identify the wells or other sites within a 1-second grid. This site-identification number, once assigned, is a pure number, and may have no locational significance. In the rare instance where the initial determination of latitude and longitude are found to be in error, the station will retain its initial identification number; however, its true latitude and longitude will be listed in the LOCATION paragraph of the station description. (See figure below).



Coordinates for site A 385840N104482101
B 385840N104482102
C 385844N104482300

System for numbering wells, springs, and miscellaneous sites.

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

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

The 36-mi^2 area described by the township and range designation is subdivided into 1-mi^2 areas called sections. The sections are numbered sequentially. The third number of the well location designates the section. The section, which contains 640 acres, is subdivided into quarter sections. The 160-acre area is designated by the first letter following the section: A indicates the northeast quarter, B the northwest, C the southwest, and D the southeast. The quarter section is subdivided into quarter-quarter sections. The 40-

acre area is designated in the same manner by the second letter following the section. The 10-acre 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 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.

Records of Stage and Water Discharge

Records of stage and water discharge may be complete or partial. Complete records of discharge are those obtained using a continuous stage-recording device through which either instantaneous or mean daily discharges may be computed for any time, or any period of time, during the period of record. Complete records of lake or reservoir content, similarly, are those for which stage or content may be computed or estimated with reasonable accuracy for any time, or period of time. They may be obtained using a continuous stage-recording device, but need not be. Because daily mean discharges and end-of-day contents commonly are published for such stations, they are referred to as "daily stations."

By contrast, partial records are obtained through discrete measurements without using a continuous stage-recording device and pertain only to a few flow characteristics, or perhaps only one. The nature of the partial record is indicated by table titles. Records of miscellaneous discharge measurements or of measurements from special studies may be considered as partial records, but they are presented separately in this report. Location of all complete-record stations for which data are given in this report are shown in figure 1.

Data Collection and Computation

The data obtained at a complete-record gaging station on a stream or canal consist of a continuous record of stage, individual measurements of discharge throughout a range of stages, and notations regarding factors that may affect the relationships between stage and discharge. These data, together with supplemental information, such as weather records, are used to compute daily discharges. The data obtained at a complete-record gaging station on a lake or reservoir consist of a record of stage and of notations regarding factors that may affect the relationship between stage and lake content. These data are used with stage-area and stage-capacity curves or tables to compute water-surface areas and lake storage.

Continuous records of stage are obtained with analog recorders that trace continuous graphs of stage, with digital recorders that punch stage values on paper tapes at selected time intervals, with electronic recorders that store stage values on computer chips at selected time intervals, or with satellite data-collection platforms that transmit near real-time data at selected time intervals to office computers. Measurements of discharge are made with current meters using methods adapted by the Geological Survey as a result of experience accumulated since 1880. These methods are described in standard textbooks, in Water-Supply Paper 2175, and in U.S. Geological Survey Techniques of Water-Resources Investigations, Book 3, Chapter A6.

In computing discharge records, results of individual measurements are plotted against the corresponding stages, and stage-discharge relation curves are then constructed. From these curves, rating tables indicating the approximate discharge for any stage within the range of the measurements are prepared. If it is necessary to define extremes of discharge outside the range of the current-meter measurements, the curves are extended using: (1) logarithmic plotting; (2) velocity-area studies; (3) results of indirect measurements of peak discharge, such as slope-area or contracted-opening measurements, and computations of flow over dams or weirs; or (4) step-backwater techniques.

Daily mean discharges are computed by applying the daily mean stages (gage heights) to the stage-discharge curves or tables. If the stage-discharge relation is subject to change because of frequent or continual change in the physical features that form the control, the daily mean discharge is determined by the shifting-control method, in which correction factors based on the individual discharge measurements and notes of the personnel making the measurements are applied to the gage heights before the discharges are determined from the curves or tables. This shifting-control method also is used if the stage-discharge relation is changed temporarily because of aquatic growth or debris on the control. For some stations, formation of ice in the winter may obscure the stage-discharge relations that daily mean discharges must be estimated from other information such as temperature and precipitation records, notes of observations, and records for other stations in the same or nearby basins for comparable periods.

At some stream-gaging stations the stage-discharge relation is affected by the backwater from reservoirs, tributary streams, or other sources. This necessitates the use of the slope method in which the slope or fall in a reach of the stream is a factor in computing discharge. The slope or fall is obtained by means of an auxiliary gage set at some distance from the base gage. At some stations the stage-discharge relation is affected by changing stage; at these stations the rate of change in stage is used as a factor in computing discharge.

In computing records of lake or reservoir contents, it is necessary to have available from surveys, curves, or tables defining the relationship of stage and content. The application of stage to the stage-content curves or tables gives the contents from which daily, monthly, or yearly changes then are determined. If the stage-content relationship changes because of deposition of sediment in a lake or reservoir, periodic resurveys may be necessary to redefine the relationship. Even when this is done, the contents computed may become increasingly in error as time since the last survey increases. Discharges over lake or reservoir spillways are computed from stage-discharge relationships much as other stream discharges are computed.

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 from the recorded range in stage, previous or following record, discharge measurements, weather records, and comparison with other station records from the same or nearby basins. Likewise, daily contents may be estimated from operator's logs, previous or following record, inflow-outflow studies, and other information. Information explaining how estimated daily-discharge values are identified in station records is included in the next two sections. "Data Presentation" (REMARKS paragraph) and "Identifying Estimated Daily Discharge."

Data Presentation

Streamflow data in this report are presented in a new format that is considerably different from the format in data reports prior to the 1992 water year. The major changes are that statistical characteristics of discharge now appear in tabular summaries following the water-year data table and less information is provided in the text or station manuscript above the table. These changes represent the results of a pilot program to reformat the annual water-data report to meet current user needs and data preferences.

The records published for each continuous-record surface-water discharge station (gaging station) now consist of four parts, the manuscript or station description and the data table of daily mean values of discharge for the current water year with summary data; a tabular statistical summary of monthly mean flow data for a designated period, by water year; and a summary statistics table that includes statistical data of annual, daily, and instantaneous flow as well as data pertaining to annual runoff, 7-day low-flow minimums, and flow duration.

Station manuscript

The manuscript provides, under various headings, descriptive information, such as station location; period of record; historical extremes outside the period of record; record accuracy; and other remarks pertinent to station operation and regulation. The following information, as appropriate, is provided with each continuous record of discharge or lake content. Comments to follow clarify information presented under the various headings of the station description.

LOCATION.--Information on locations is obtained from the most accurate maps available. The location of the gaging station with respect to the cultural and physical features in the vicinity and with respect to the reference place mentioned in the station name is given. River mileages, given for only a few stations, were determined by methods given in "River Mileage Measurement," Bulletin 14, Revision of October 1968, prepared by the Water Resources Council or were provided by the U.S. Army Corps of Engineers.

DRAINAGE AREA.--Drainage areas are measured using the most accurate maps available. Because the type of maps available varies from one drainage basin to another, the accuracy of drainage areas likewise varies. Drainage areas are updated as better maps become available.

PERIOD OF RECORD.--This indicates the period for which there are published records for the station or for an equivalent station. An equivalent station is one that was in operation at a time that the present station was not, and whose location was such that flow at it can reasonably be considered equivalent with records from the present station.

REVISED RECORDS.--Because of new information, published records occasionally are found to be incorrect, and revisions are printed in later reports. Listed under this heading are all the reports in which revisions have been published for the station and the water years to which the revisions apply. If a revision did not include daily, monthly, or annual figures of discharge, that fact is noted 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 most recently revised figure was first published is given.

GAGE.--The type of gage in current use, the datum of the current gage referred to sea level (see glossary), and a condensed history of the types, locations, and datums of previous gages are given under this heading.

REMARKS.--All periods of estimated daily-discharge record will either be identified by date in this paragraph of the station description for water-discharge stations or flagged in the daily-discharge table. (See next section, "Identifying Estimated Daily Discharge.") If a REMARKS paragraph is used to identify estimated record, the paragraph will begin with this information presented as the first entry. The paragraph is also used to present information relative to the accuracy of the records, to special methods of computation, to conditions that affect natural flow at the station. In addition, information may be presented pertaining to average discharge data for the period of record; to extremes data for the period of record and the current year; and, possibly, to other pertinent items. For reservoir stations, information is given on the dam forming the reservoir, the capacity, outlet works and spillway, and purpose and use of the reservoir.

COOPERATION.--Records provided by a cooperating organization or obtained for the Geological Survey by a cooperating organization are identified here.

EXTREMES OUTSIDE PERIOD OF RECORD.--Included here is information concerning major floods or unusually low flows that occurred outside the stated period of record. The information may or may not have been obtained by the U.S. Geological Survey.

REVISIONS.--If a critical error in published records is discovered, a revision is included in the first report published following discovery of the error.

Although rare, occasionally the records of a discontinued gaging station may need revision. Because, for these stations, there would be no current or, possibly, future station manuscript published to document the revision in a "Revised Records" entry, users of data for these stations who obtained the record from previously published data reports may wish to contact the District office (address given on the back of the title page of this report) to determine if the published records were ever revised after the station was discontinued. Of course, if the data for a discontinued station were obtained by computer retrieval, the data would be current and there would be no need to check because any published revision of data is always accompanied by revision of the corresponding data in computer storage.

Manuscript information for lake or reservoir stations differs from that for stream stations in the nature of the "Remarks" and in the inclusion of a skeleton stage-capacity table when daily contents are given.

Headings for AVERAGE DISCHARGE, EXTREMES FOR PERIOD OF RECORD, AND EXTREMES FOR CURRENT YEAR have been deleted and the information contained in these paragraphs, except for the listing of secondary instantaneous peak discharges in the EXTREMES FOR CURRENT YEAR paragraph, is now presented in the tabular summaries following the discharge table or in the REMARKS paragraph, as appropriate. No changes have been made to the data presentations of lake contents.

Data table of daily mean values

The daily table of discharge records for stream-gaging stations gives mean discharge for each day of the water year. In the monthly summary below the daily table, the line headed "TOTAL" gives the sum of the daily figures for each month; the line headed "MEAN" gives the average flow in cubic feet per second during the month; and the lines headed "MAX" and "MIN" give the maximum and minimum daily mean discharges, respectively, for each month. Discharge for the month also is usually expressed in cubic feet per second per square mile (line headed "CFSM"), or in inches (line headed "IN"), or in acre-feet (line headed "AC-FT"). Figures for cubic feet per second per square mile and runoff in inches or in acre-feet may be omitted if there is extensive regulation or diversion or if the drainage area includes large noncontributing areas. In the yearly summary below the monthly summary, the figures shown are the appropriate discharges for the calendar and water years. At some stations monthly and (or) yearly observed discharges are adjusted for reservoir storage or diversion, or diversions or reservoir contents are given. These figures are identified by a symbol and corresponding footnote.

If applicable, data collected at partial-record stations follow the information for continuous-record sites. The tables of partial-record stations are followed by a listing of discharge measurements made at sites other than continuous-record or partial-record stations. These measurements are generally made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

Statistics of monthly mean data

A tabular summary of the mean (line headed "MEAN"), maximum (line headed "MAX"), and minimum (line headed "MIN") of monthly mean flows for each month for a designated period is provided below the mean values table. The water years of the first occurrence of the maximum and minimum monthly flows are provided immediately below those figures. The designated period will be expressed as "FOR WATER YEARS_____-_____, BY WATER YEAR (WY)," and will list the first and last water years of the range of years selected from the PERIOD OF RECORD paragraph in the station manuscript. It will consist of all of the station record within the specified water years, inclusive, including complete months of record for partial water years, if any, and may coincide with the period of record for the station. The water years for which the statistics are computed will be consecutive, unless a break in the station record is indicated in the manuscript.

Summary statistics

A table titled "SUMMARY STATISTICS" follows the statistics of monthly mean data tabulation. This table consists of four columns, with the first column containing the line headings of the statistics being reported. The table provides a statistical summary of yearly, daily, and instantaneous flows, not only for the current water year but also for the previous calendar year and for a designated period, as appropriate. The designated period selected, "WATER YEARS_____-_____," will consist of all of the station record within the specified water years, inclusive, including complete months of record for partial water years, if any, and may coincide with the period of record for the station. The water years for which the statistics are computed will be consecutive, unless a break in the station record is indicated in the manuscript. All of the calculations for the statistical characteristics designated ANNUAL (see line headings below), except for the "ANNUAL 7-DAY MINIMUM" statistic, are calculated for the designated period using complete water years. The other statistical characteristics may be calculated using partial water years.

The date or water year, as appropriate, of the first occurrence of each statistic reporting extreme values of discharge is provided adjacent to the statistic. Repeated occurrences may be noted in the REMARKS paragraph of the manuscript or in footnotes. Because the designated period may not be the same as the station period record published in the manuscript, occasionally the dates of occurrence listed for the daily and instantaneous extremes in the designated-period column may not be within the selected water years listed in the heading. When this occurs, it will be noted in the REMARKS paragraph or in footnotes. Selected streamflow duration curve statistics and runoff data are also given. Runoff data may be omitted if there is extensive regulation or diversion of flow in the drainage basin.

The following summary statistics data, as appropriate, are provided with each continuous record of discharge. Comments to follow clarify information presented under the various line headings of the summary statistics table.

ANNUAL TOTAL.--The sum of the daily mean values of discharge for the year. At some stations the annual total discharge is adjusted for reservoir storage or diversion. The adjusted figures are identified by a symbol and corresponding footnotes.

ANNUAL MEAN.--The arithmetic mean of the individual daily mean discharges for the year noted or for the designated period. At some stations the yearly mean discharge is adjusted for reservoir storage or diversion. The adjusted figures are identified by a symbol and corresponding footnotes.

HIGHEST ANNUAL MEAN.--The maximum annual mean discharge occurring for the designated period.

LOWEST ANNUAL MEAN.--The minimum annual mean discharge occurring for the designated period.

HIGHEST DAILY MEAN.--The maximum daily mean discharge for the year or for the designated period.

LOWEST DAILY MEAN.--The minimum daily mean discharge for the year or for the designated period.

ANNUAL 7-DAY MINIMUM.--The lowest mean discharge for 7 consecutive days for a calendar year or a water year. Note that most low-flow frequency analyses of annual 7-day minimum flows use a climatic year (April 1-March 31). The date shown in the summary statistics table is the initial date of the 7-day period. (This value should not be confused with the 7-day 10-year low-flow statistic.)

INSTANTANEOUS PEAK FLOW.--The maximum instantaneous discharge occurring for the water year or for the designated period. Note that secondary instantaneous peak discharges above a selected base discharge are stored in District computer files for stations meeting certain criteria. Those discharge values may be obtained by writing to the District Office. (See address on back of title page of this report.)

INSTANTANEOUS PEAK STAGE.--The maximum instantaneous stage occurring for the water year or for the designated period. If the dates of occurrence for the instantaneous peak flow and instantaneous peak stage differ. the REMARKS paragraph in the manuscript or a footnote may be used to provide further information.

INSTANTANEOUS LOW FLOW.--The minimum instantaneous discharge occurring for the water year or for the designated period.

ANNUAL RUNOFF.--Indicates the total quantity of water in runoff for a drainage area for the year. Data reports may use any of the following units of measurement in presenting annual runoff data:

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

Cubic feet per second per square mile (CFSM) is the average number of cubic feet of water flowing per second from each square mile area drained, assuming the runoff is distributed uniformly in time and area.

Inches (INCHES) indicates the depth to which the drainage area would be covered if all of the runoff for a given time period were uniformly distributed on it.

10 PERCENT EXCEEDS.--The discharge that has been exceeded 10 percent of the time for the designated period.

50 PERCENT EXCEEDS.--The discharge that has been exceeded 50 percent of the time for the designated period.

90 PERCENT EXCEEDS.--The discharge that has been exceeded 90 percent of the time for the designated period.

Data collected at partial-record stations follow the information for continuous-record sites. Data for partial-record discharge stations are presented in two tables. The first is a table of annual maximum stage and discharge at crest-stage stations, and the second is a table of discharge measurements at low-flow partial-record stations. The tables of partial-record stations are followed by a listing of discharge measurements made at sites other than continuous-record or partial-record stations. These measurements are generally made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

Identifying Estimated Daily Discharge

Estimated daily-discharge values published in the water-discharge tables of annual State data reports are identified either by flagging individual daily values with the letter symbol "e" and printing a table footnote, "e Estimated," or by listing the dates of estimated record in the REMARKS paragraph of the station description.

Accuracy of the Records

The accuracy of streamflow records 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 measurements of stage, measurements of discharge, and interpretation of records.

The accuracy attributed to the records is indicated under "REMARKS." "Excellent" means that about 95 percent of the daily discharges are within 5 percent of their true value; "good," within 10 percent; and "fair," within 15 percent. Records that do not meet the criteria mentioned, are rated "poor." Different accuracies may be attributed to different parts of a given record.

Daily mean discharges in this report are given to the nearest hundredth of a cubic foot per second for daily values less than 1 ft^3/s; to the nearest tenth between 1.0 and 10 ft^3/s; to whole numbers between 10 and 1,000 ft^3/s; and to 3 significant figures for more than 1,000 ft^3/s. The number of significant figures used is based solely on the magnitude of the discharge value. The same rounding rules apply to discharges 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. Evaporation from a reservoir is not included in the adjustments for changes in reservoir contents, unless it is so stated. Even at those stations where adjustments are made, large errors in computed runoff may occur if adjustments or losses are large in comparison with the observed discharge.

Other Records Available

The National Water Data Exchange (NAWDEX), U.S. Geological Survey, Reston, VA 22092, maintains an index of records of discharge collected by other agencies but not published by the Geological Survey. Information on records at specific sites can be obtained from that office upon request.

Information used in the preparation of the records in this publication, such as discharge-measurement notes, gage-height records, temperature measurements, and rating tables are on file in the Colorado District office. Information on the availability of the unpublished information or on the results of statistical analyses of the published records may be obtained from the District office.

Records of Surface-Water Quality

Records of surface-water quality ordinarily are obtained at or near stream-gaging stations because interpretation of records of surface-water quality nearly always requires corresponding discharge data. Records of surface-water quality in this report may involve a variety of types of data and measurement frequencies.

In March 1989 the National Water-Quality Laboratory discovered a bias in the turbidimetric method for sulfate analysis, indicating that values below 75 mg/L have a median positive bias of 2 mg/L above the true value for the period between 1982 and 1989.

On October 1, 1995, the Colorado District adopted a new sampling and quality-assurance protocol for sampling of surface waters (Horowitz and others, 1994). This protocol was adopted as standard operating procedure for the collection and processing of all trace-element, major-ion, nutrient, and radiochemical species in filtered, surface-water samples.

Accuracy of the Records

Accuracy of water-quality monitor records are based on: (1) The completeness of the record, (2) frequency of calibration checks, (3) the length of time and frequency that data exceed allowable error limits, (4) the magnitude of errors, and (5) confidence in the resultant shifts applied. Listed below are the limits of allowable error.

*	Temperature:	± 0.3 degree C.
*	Specific Conductance:	± 5 µS/cm or ± 5% whichever is greater
*	pH:	± 0.2 pH units
*	Dissolved Oxygen:	± 0.3 mg/L or ± 5% whichever is greater.

A record is rated excellent if the allowable error limits are never exceeded, good if limits are occasionally exceeded and shifts are no greater than two times the limit, fair if limits are regularly exceeded and shifts are no greater than three times the limit, and poor for all others.

Classification of Records

Water-quality data for surface-water sites are grouped into one of three classifications. A continuing-record station is a site where data are collected on a regularly scheduled basis. Frequency may be once or more times daily, weekly, monthly, or quarterly. A partial-record station is a site where limited water-quality data are collected systematically over a period of years. Frequency of sampling is usually less than quarterly. A miscellaneous sampling site is a location other than a continuing or partial-record station, where random samples are collected to give better areal coverage to define water-quality conditions in the river basin.

A careful distinction needs to be made between "continuing records" as used in this report and "continuous recordings," which refers to a continuous graph or a series of discrete values punched or recorded at short intervals on a paper tape, magnetic tape, computer chip, or some other medium. Some records of water quality, such as temperature and specific conductance, may be obtained through continuous recordings; however, because of costs, most data are obtained only monthly or less frequently. Locations of stations for which records on the quality of surface water appear in this report are shown in figure 1.

Arrangement of Records

Water-quality records collected at a surface-water daily record station are published immediately following that record, regardless of the frequency of sample collection. Station number and name are the same for both records. Where a surface-water daily record station is not available or where the water quality differs significantly from that at the nearby surface-water station, the continuing water-quality record is published with its own number and name in the regular downstream-order sequence. Water-quality data for partial-record stations and for miscellaneous sampling sites appear in separate tables following the table of discharge measurements at miscellaneous sites.

Onsite Measurements and Sample Collection

In obtaining water-quality data, a major concern needs to be assuring that the data obtained represent the in situ quality of the water. To assure this, certain measurements, such as water temperature, pH, and dissolved oxygen, need to be made onsite when the samples are taken. To assure that measurements made in the laboratory also represent the in situ water, carefully prescribed procedures need to be followed in collecting the samples, in treating the samples to prevent changes in quality pending analysis, and in shipping the samples to the laboratory. Procedures for onsite measurements and for collecting, treating, and shipping samples are given in publications on "Techniques of Water-Resources Investigations," Book 1, Chap. D2; Book 3, Chap. C2; Book 5, Chap. A1, A3, and A4. All of these references are listed on pages 30 and 31 of this report. Also, detailed information on collecting, treating, and shipping samples may be obtained from the Geological Survey District office.

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. All samples obtained for the National Stream Quality Accounting Network (see definitions) are obtained from at least several verticals. Whether samples are obtained from the centroid of flow or from several verticals, depends on flow conditions and other factors which must be evaluated by the collector.

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

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 U.S.G.S. District Office whose address is given on the back of the title page of this report.

Water Temperature

Water temperatures are measured at most of the water-quality stations. In addition, water temperatures are taken at time of discharge measurements for water-discharge stations. For stations where water temperatures are taken manually once or twice daily, the water temperatures are taken at about the same time each day. Large streams have a small diurnal 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 recorded to the nearest 0.1 degree Celsius. Water temperatures measured at the time of water-discharge measurements are published in this report as supplemental water-quality for gaging stations.

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 discharges 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.

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 and in predicting long-term sediment discharge characteristics of the stream.

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

Laboratory Measurements

Sediment samples, samples for biochemical-oxygen demand (BOD), samples for indicator bacteria, and daily samples for specific conductance are analyzed locally, most other samples are analyzed in the Geological Survey laboratories in Lakewood, CO. Methods used in analyzing sediment samples and computing sediment records are given in TWRI, Book 5, Chap. C1. Methods used by the Geological Survey laboratories are given in TWRI, Book 1, Chap. D2; Book 3, Chap. C2; Book 5, Chap. A1, A3, and A4.

Historical and current-year dissolved trace-element concentrations are reported herein for water that was collected, processed, and analyzed by using either ultraclean or other than ultraclean techniques. If ultraclean techniques were used, then those concentrations are reported in nanograms per liter. If other than ultraclean techniques were used, then those concentrations are reported in micrograms per liter and could reflect contamination introduced during some phase of the procedure.

Data Presentation

For continuing-record stations, information pertinent to the history of station operation is provided in descriptive headings preceding the tabular data. These descriptive headings give details regarding location, drainage area, period of record, type of data available, instrumentation, general remarks, cooperation, and extremes for parameters currently measured daily. Tables of chemical, physical, biological, radiochemical data, and so forth, obtained at a frequency less than daily are presented first. Tables of "daily values" of specific conductance, pH, water temperature, dissolved oxygen, and suspended sediment then follow in sequence.

In the descriptive headings, if the location is identical to that of the discharge gaging station, neither the LOCATION nor the DRAINAGE AREA statements are repeated. The following information, as appropriate, is provided with each continuous-record station. Comments that follow clarify information presented under the various headings of the station description.

LOCATION.--See Data Presentation under "Records of Stage and Water Discharge;" same comments apply.

DRAINAGE AREA.--See Data Presentation under "Records of Stage and Water Discharge;" same comments apply.

PERIOD OF RECORD.--This indicates the periods for which there are published water-quality records for the station. The periods are shown separately for records of parameters measured daily or continuously and those measured less than daily. For those measured daily or continuously, periods of record are given for the parameters individually.

INSTRUMENTATION.--Information on instrumentation is given only if a water-quality monitor temperature record, sediment pumping sampler, or other sampling device is in operation at a station.

REMARKS.--Remarks provide added information pertinent to the collection, analysis, or computation of the records.

COOPERATION.--Records provided by a cooperating organization or obtained for the Geological Survey by a cooperating organization are identified here.

EXTREMES.--Maximums and minimums are given only for parameters measured daily or more frequently. None are given for parameters measured weekly or less frequently, because the true maximums or minimums may not have been sampled. Extremes, when given, are provided for both the period of record and for the current water year.

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, 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 insure the most recent updates.

The surface-water-quality records for partial-record stations and miscellaneous sampling sites are published in separate tables following the table of discharge measurements at miscellaneous sites. No descriptive statements are given for these records. Each station is published with its own station number and name in the regular downstream-order sequence.

Remark Codes

The following remark codes may appear with the water-quality data in this report:

PRINTED OUTPUT REMARK

E	Estimated value
e	Estimated value
>	Actual value is known to be greater than the value shown
<	Actual value is known to be less than the value shown
K	Based on non-ideal colony count
M	Presence of material verified but not quantified

Records of Ground-Water Quality

Records of ground-water quality in this report differ from other types of records in that for most sampling sites they consist of only one set of measurements for the water year. The quality of ground water ordinarily changes only slowly; therefore, for most general purposes one annual sampling, or only a few samples taken at infrequent intervals during the year, is sufficient. Frequent measurement of the same constituents is not necessary unless one is concerned with a particular problem, such as monitoring for trends in nitrate concentration. In the special cases where the quality of ground water may change more rapidly, more frequent measurements are made to identify the nature of the changes.

Data Collection and Computation

The records of ground-water quality in this report were obtained mostly as a part of special studies in specific areas. Consequently, a number of chemical analyses are presented for some counties but none are presented for others. As a result, the records for this year, by themselves, do not provide a balanced view of ground-water quality statewide. Such a view can be attained only by considering records for this year in context with similar records obtained for these and other counties in earlier years.

Most methods for collecting and analyzing water samples are described in the "U.S. Geological Survey Techniques of Water-Resources Investigations" manuals listed at the end of the introductory text. The values reported in this report represent water-quality conditions at the time of sampling as much as possible, consistent with available sampling techniques and methods of analysis. All samples were obtained by trained personnel. The wells sampled were pumped long enough to assure that the water collected came directly from the aquifer and had not stood for a long time in the well casing where it would have been exposed to the atmosphere and to the material, possibly metal, comprising the casings.

Data Presentation

The records of ground-water quality are published in a section titled QUALITY OF GROUND WATER immediately following the ground-water-level records. Data for quality of ground water are listed alphabetically by County, and are identified by well number. The prime identification number for wells sampled is the 15-digit number derived from the latitude-longitude locations. No descriptive statements are given for ground-water-quality records; however, the well number, depth of well, date of sampling, and other pertinent data are given in the table containing the chemical analyses of the ground water. The REMARK codes listed for surface-water-quality records are also applicable to ground-water-quality records.

ACCESS TO USGS WATER DATA

The USGS provides near real-time stage and discharge data for many of the gaging stations equipped with the necessary telemetry and historic daily-mean and peak-flow discharge data for most current or discontinued gaging stations through the World Wide Web (WWW). These data may be accessed at :

http://water.usgs.gov	National home page
http://co.water.usgs.gov	Colorado home page

Some water-quality, ground-water, and meteorological data also are available through the WWW. In addition, data can be provided in various machine-readable formats on magnetic tape or 3.5 inch floppy diskette. Information about the availability of specific types of data or products, and user charges, can be obtained locally from each of the Water Resources Division District Offices (See address on the back of the title page).

DEFINITION OF TERMS

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

Acid neutralizing capacity (ANC) is the equivalent sum of all bases or base-producing materials, solutes plus particulates, in an aqueous system that can be titrated with acid to an equivalence point. This term designates titration of an "unfiltered" sample (formerly reported as alkalinity).

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, 325,851 gallons, or 1,233 cubic meters.

Adenosine triphosphate (ATP) is an organic, phosphate-rich, compound important in the transfer of energy in organisms. Its central role in living cells makes it an excellent indicator of the presence of living material in water. A measurement of ATP therefore provides a sensitive and rapid estimate of biomass. ATP is reported in micrograms per liter.

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

Algal growth potential (AGP) is the maximum algal dry weight biomass that can be produced in a natural water sample under standardized laboratory conditions. The growth potential is the algal biomass present at stationary phase and is expressed as milligrams dry weight of algae produced per liter of sample.

Alkalinity represents the capacity of solutes in an aqueous sample to neutralize acid. Total alkalinity titrations are performed in the field (FIELD) environment on an aqueous sample, filtered through a 0.45 micrometer filter (DIS), to an inflection point near pH = 4.5, using the iterative-titration (IT) method. Alkalinity titrations in the laboratory (LAB) are performed on unfiltered samples using the fixed-endpoint (FEP) method to pH = 4.5. On occasion, for chemical or hydrologic considerations, alkalinity titrations are performed in the field environment on unfiltered, whole-water (WWR) samples and noted. Column headings in this publication containing total alkalinity results will display the location: FIELD or LAB; titration method: IT or FEP; and type of aqueous sample: DIS or WWR.

Annual runoff is the total quantity of water in runoff for a drainage area for the year. Data reports may use any of the following units of measurement in presenting annual runoff data:

Acre-foot (AC-FT, acre-ft) is the quantity of water required to cover 1 acre to a depth of 1 foot and is equal to 43,560 cubic feet, 325,851 gallons, or 1,233 cubic meters.

Cubic foot per second per square mile [CFSM, (ft3/s)/mi2] is the average number of cubic feet of water flowing per second from each square mile of area drained, assuming the runoff is distributed uniformly in time and area.

Inch (IN., in.) as used in this report, refers to the depth to which the drainage area would be covered with water if all of the runoff for a given time period were uniformly distributed on it.

Aroclor is the registered trademark for a group of polychlorinated biphenyls that were manufactured by the Monsanto Company prior to 1976. Aroclors are assigned specific 4-digit reference numbers dependent upon molecular type and degree of substitution of the biphenyl ring hydrogen atoms by chlorine atoms. The first two digits of a numbered aroclor represent the molecular type and the last two digits represent the weight percent of the hydrogen substituted chlorine.

Bacteria are microscopic unicellular organisms, typically spherical, rodlike, or spiral and threadlike in shape, often clumped into colonies. Some bacteria cause disease, while 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. This group includes coliforms that inhabit the intestine of warm-blooded animals and those that inhabit soils. They are characterized as aerobic or facultative anaerobic, gram-negative, nonspore-forming, rod-shaped bacteria that ferment lactose with gas formation within 48 hours at 35 C In the laboratory, these bacteria are defined as all the organisms that produce colonies with a golden-green metallic sheen within 24 hours when incubated at 35 C plus or minus 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 intestine 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 that produce blue colonies within 24 hours when incubated at 44.5 C plus or minus 0.2 C on M-FC medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

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

Enterococcus bacteria are commonly found in the feces of humans and other warm-blooded animals. Although some strains are ubiquitous and not related to fecal pollution, the presence of enterococci in water is an indication of fecal pollution and the possible presence of enteric pathogens. Enterococcus bacteria are those bacteria that produce pink to red colonies with black or reddish-brown precipitate after incubation at 41 C on mE agar and subsequent transfer to EIA medium. Enterococci include Streptococcus feacalis, Streptococcus feacium, Streptococcus avium, and their variants.

Escherichia coli (E. coli) are bacteria present in the intestine and feces of warm-blooded animals. E. coli are a member species of the fecal coliform group of indicator bacteria. In the laboratory, they are defined as those bacteria that produce yellow or yellow-brown colonies on a filter pad saturated with urea substrate broth after primary culturing for 22 to 24 hours at 44.5 ˚C on mTEC medium. Their concentrations are expressed as number of colonies per 100 mL of sample.

Base flow is flow in a channel sustained by ground-water discharge in the absence of direct runoff.

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

Benthic organisms (invertebrates) are the group of animals inhabiting the bottom of an aquatic environment. They include a number of types of organisms, such as bacteria, fungi, insect larvae and nymphs, snails, clams, and crayfish. They are useful as indicators of water quality.

Biochemical oxygen demand (BOD) is a measure of the quantity of dissolved oxygen, in milligrams per liter, 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 mass per unit area or volume of habitat.

Ash mass is the mass or amount of residue present after the residue from the dry mass determination has been ashed in a muffle furnace at a temperature of 500 Cfor 1 hour. Ash mass of zooplankton and phytoplankton is expressed in grams per cubic meter (g/m3), and periphyton and benthic organisms in grams per square meter (g/m2).

Dry mass refers to the mass of residue present after drying in an oven at 105 C for zooplankton and periphyton, until the mass remains unchanged. This mass represents the total organic matter, ash, and sediment in the sample. Dry mass is 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 ash mass and represents the actual mass of the living matter. 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.

Biomass pigment ratio is an indicator of the total proportion of periphyton which are autotrophic (plants). This is also called the Autotrophic Index.

Bottom material: See “Bed material.”

Cells/volume refers to the number of plankton cells or natural units counted using a microscope and grid or counting cell. Results are generally reported as cells or units per milliliter.

Cells volume (biovolume) determination is one of several common methods used to estimate biomass of algae in aquatic systems. Cell members of algae are frequently used in aquatic surveys as an indicator of algal production. However, cell numbers alone cannot represent true biomass because of considerable cell-size variation among the algal species. Cell volume (mm3) is determined by obtaining critical cell measurements on cell dimensions (for example, length, width, height, or radius) for 20 to 50 cells of each important species to obtain an average biovolume per cell. Cells are categorized according to the correspondence of their cellular shape to the nearest geometric solid or combinations of simple solids (for example, spheres, cones, or cylinders). Representative formulae used to compute biovolume are as follows:

sphere 4/3 pr3 cone 1/3 pr3h cylinder pr3h.

From cell volume, total algal biomass expressed as biovolume (mm3/mL) is thus determined by multiplying the number of cells of a given species by its average cell volume and then summing these volumes over all species.

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 BOD 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 green pigments in plants.

Colloid is any substance with particles in such a fine state of subdivision dispersed in a medium (for example, water) that they do not settle out; but not in so fine a state of subdivision that they can be said to be truly dissolved.

Color unit is produced by 1 milligram per liter of platinum in the form of the chloroplatinate ion. Color is expressed in units of the platinum-cobalt scale.

Confined aquifer is a term used to describe an aquifer containing water between two relatively impermeable boundaries. The water level in a well tapping a confined aquifer stands above the top of the confined aquifer and can be higher or lower than the water table that may be present in the material above it. In some cases the water level can rise above the ground surface, yielding a flowing well.

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.

Continuous-record station is a site that meets either of the following conditions:

1. Stage or streamflow are recorded at some interval on a continuous basis. The recording interval is usually 15 minutes, but may be less or more frequent.
2. Water-quality, sediment, or other hydrologic measure-ments are recorded at least daily.

Control designates a feature in the channel downstream from a gaging station that physically influences the water-surface elevation and thereby determines the stage-discharge relation at the station. This feature may be a constriction of the channel, a bedrock outcrop, a gravel bar, an artificial structure, or a uniform cross section over a long reach of the channel.

Control structure as used in this report is a structure on a stream or canal that is used to regulate the flow or stage of the stream or to prevent the intrusion of saltwater.

Cubic foot per second (CFS, ft3/s) is the rate of discharge representing a volume of 1 cubic foot passing a given point in 1 second. It is equivalent to approximately 7.48 gallons per second, 448.8 gallons per minute, or 0.02832 cubic meters per second.

Cubic foot per second-day (CFS-DAY, Cfs-day, [(ft3/s)/d]) is the volume of water represented by a flow of 1 cubic foot per second for 24 hours. It is equivalent to 86,400 cubic feet, 1.9835 acre-feet, 646,317 gallons, or 2,447 cubic meters.

Daily record is a summary of streamflow, sediment, or water-quality values computed from data collected with sufficient frequency to obtain reliable estimates of daily mean values.

Daily record station is a site for which daily records of streamflow, sediment, or water-quality values are computed.

Datum, as used in this report, is an elevation above mean sea level to which all gage height readings are referenced.

Diel is of or pertaining to a 24-hour period of time; a regular daily cycle.

Discharge, or flow, is the volume of water (or more broadly, volume of fluid including solid- and dissolved-phase material), that passes a given point in a given period of time.

Annual 7-day minimum is the lowest mean discharge for 7 consecutive days in a year. Note that most low-flow frequency analyses of annual 7-day minimum flows use a climatic year (April 1-March 31). The date shown in the summary statistics table is the initial date of the 7-day period. (This value should not be confused with the 7-day 10-year low-flow statistic.)

I**nstantaneous discharge** is the discharge at a particular instant of time.

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

Dissolved refers to that material in a representative water sample that passes through a 0.45-micrometer membrane filter. This 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) content of water in equilibrium with air is a function of atmospheric pressure, temperature, and dissolved-solids concentration of the water. The ability of water to retain oxygen decreases with increasing temperature or dissolved solids, with small temperature changes having the more significant offset. Photosynthesis and respiration may cause diurnal variations in dissolved-oxygen concentration in water from some streams.

Dissolved-solids concentration of water is determined either analytically by the "residue-on-evaporation" method, or mathematically by totaling the concentrations of individual constituents reported in a comprehensive chemical analysis. During that analytical determination of dissolved solids, the bicarbonate (generally a major dissolved component of water) is converted to carbonate. Therefore, in the mathematical calculation of dissolved-solids concentration, the bicarbonate value, in milligrams per liter, is multiplied by 0.4926 to reflect the change. Alternatively, alkalinity concentration (as mg/L CaCO3) can be converted to carbonate concentration by multiplying by 0.60.

Diversity index is a numerical expression of evenness of distribution of aquatic organisms. The formula for diversity index is:

$$\bar{d} = -\sum_{i=1}^{s} \frac{n_i}{n} \log 2 \frac{n_i}{n}$$

where ni is the number of individuals per taxon, n is the total number of individuals, and s is the total number of taxa in the sample of the community. Diversity index values range from zero, when all the organisms in the sample are the same, to some positive number, when some or all of the organisms in the sample are different.

Drainage area of a site on a stream is that area, measured in a horizontal plane, that has a common outlet at the site for its surface runoff. Figures of drainage area given herein include all closed basins, or noncontributing areas, within the area unless otherwise specified.

Drainage basin is a part of the Earth's surface that is occupied by a drainage system with a common outlet for its surface runoff (see "Drainage area").

Dry weight refers to the weight of animal tissue after it has been dried in an oven at 65 °C until a constant weight is achieved. Dry weight represents total organic and inorganic matter in the tissue.

Flow-duration percentiles are values on a scale of 100 that indicate the percentage of time for which a flow is not exceeded. For example, the 90th percentile of river flow is greater than or equal to 90 percent of all recorded flow rates.

Gage datum is the elevation of the zero point of the reference gage from which gage height is determined as compared to sea level (see "Datum"). This elevation is established by a system of levels from known benchmarks, by approximation from topographic maps, or by geographical positioning system.

Gage height (G.H.) is the water-surface elevation referenced to the 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 site on a stream, canal, lake, or reservoir where systematic observations of stage, discharge, or other 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.

Gas chromatography/flame ionization detector (GC/FID) is a laboratory analytical method used as a screening technique for semivolatile organic compounds that are extractable from water in methylene chloride.

Ground-water level is the elevation of the water table or another potentiometric surface at a particular location.

Hardness of water is a 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 the equivalent concentration of calcium carbonate (CaCO3).

Hydrologic benchmark 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 benchmark station may be used to separate effects of natural from human-induced changes in other basins that have been developed and in which the physiography, climate, and geology are similar to those in the undeveloped benchmark basin.

Hydrologic unit is a geographic area representing part or all of a surface drainage basin or distinct hydrologic feature as defined by the former Office of Water Data Coordination and delineated on the State Hydrologic Unit Maps by the U.S. Geological Survey. Each hydrologic unit is identified by an 8-digit number.

Land-surface datum (lsd) is a datum plane that is approximately at land surface at each ground-water observation well.

Light-attenuation coefficient, also known as the extinction coefficient, is a measure of water clarity. Light is attenuated according to the Lambert-Beer equation

$$I = I_o e^{-\lambda L} \quad ,$$

where Io is the source light intensity, I is the light intensity at length L (in meters) from the source, l is the light-attenuation coefficient, and e is the base of the natural logarithm. The light attenuation coefficient is defined as

$$\lambda = -\frac{1}{L} \log_e \frac{I}{I_o} \quad .$$

Lipid is any one of a family of compounds that are insoluble in water and that make up one of the principal components of living cells. Lipids include fats, oils, waxes, and steroids. Many environmental contaminants such as organochlorine pesticides are lipophilic.

Macrophytes are the macroscopic plants in the aquatic environment. The most common macrophytes are the rooted vascular plants that are usually arranged in zones in aquatic ecosystems and restricted in the area by the extent of illumination through the water and sediment deposition along the shoreline.

Measuring point (MP) is an arbitrary permanent reference point from which the distance to water surface in a well is measured to obtain water level.

Membrane filter is a thin microporous material of specific pore size used to filter bacteria, algae, and other very small particles from water.

Metamorphic stage refers to the stage of development that an organism exhibits during its transformation from an immature form to an adult form. This developmental process exists for most insects, and the degree of difference from the immature stage to the adult form varies from relatively slight to pronounced, with many intermediates. Examples of metamorphic stages of insects are egg-larva-adult or egg-nymph-adult.

Methylene blue active substances (MBAS) are apparent detergents. The determination depends on the formation of a blue color when methylene blue dye reacts with synthetic anionic detergent compounds.

Micrograms per gram (UG/G, mg/g) is a unit expressing the concentration of a chemical constituent as the mass (micrograms) of the element per unit mass (gram) of material analyzed.

Micrograms per kilogram (UG/KG, mg/kg) is a unit expressing the concentration of a chemical constituent as the mass (micrograms) of the constituent per unit mass (kilogram) of the material analyzed. One microgram per kilogram is equivalent to 1 part per billion.

Micrograms per liter (UG/L, mg/L) is a unit expressing the concentration of chemical constituents in water as mass (micrograms) of constituent per unit volume (liter) of water. One thousand micrograms per liter is equivalent to 1 milligram per liter.

Microsiemens per centimeter (US/CM, mS/cm) is a unit expressing the amount of electrical conductivity of a solution as measured between opposite faces of a centimeter cube of solution at a specified temperature. Siemens is the International System of Units nomenclature. It is synonymous with mhos and is the reciprocal of resistance in ohms.

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

Miscellaneous site, or miscellaneous station, is a site where streamflow, sediment, and/or water-quality data are collected once, or more often on a random or discontinuous basis.

Most probable number (MPN) is an index of the number of coliform bacteria that, more probably than any other number, would give the results shown by the laboratory examination; it is not an actual enumeration. MPN is determined from the distribution of gas-positive cultures among multiple inoculated tubes.

Multiple-plate samplers are artificial substrates of known surface area used for obtaining benthic invertebrate samples. They consist of a series of spaced, hardboard plates on an eyebolt.

Nanograms per liter (NG/L, ng/L) is a unit expressing the concentration of chemical constituents in solution as mass (nanograms) of solute per unit volume (liter) of water. One million nanograms per liter is equivalent to 1 milligram per liter.

National Geodetic Vertical Datum of 1929 (NGVD of 1929) is a geodetic datum derived from a general adjustment of the first order level nets of 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. See NOAA web site: http://www.ngs.noaa.gov/faq.shtml#WhatVD29VD88

Nekton are the consumers in the aquatic environment and consist of large free-swimming organisms that are capable of sustained, directed mobility.

Nephelometric turbidity unit (NTU) is the measurement for reporting turbidity that is based on use of a standard suspension of Formazin. Turbidity measured in NTU uses nephelometric methods that depend on passing specific light of a specific wavelength through the sample.

Open or screened interval is the length of unscreened opening or of well screen through which water enters a well, in feet below land surface.

Organic carbon (OC) is a measure of organic matter present in aqueous solution, suspension, or bottom sediments. May be reported as dissolved organic carbon (DOC), suspended organic carbon (SOC), or total organic carbon (TOC).

Organism is any living entity.

Organism count/area refers to the number of organisms collected and enumerated in a sample and adjusted to the number per area habitat, usually square meter (m2), acre, or hectare. Periphyton, benthic organisms, and macrophytes are expressed in these terms.

Organism count/volume refers to the number of organisms collected and enumerated in a sample and adjusted to the number per sample volume, usually milliliter (mL) or liter (L). Numbers of planktonic organisms can be expressed in these terms.

Total organism count is the total number of organisms collected and enumerated in any particular sample.

Organochlorine compounds are any chemicals that contain carbon and chlorine. Organochlorine compounds that are important in investigations of water, sediment, and biological quality include certain pesticides and industrial compounds.

Parameter Code is a 5-digit number used in the U.S. Geological Survey computerized data system, National Water Information System (NWIS), to uniquely identify a specific constituent or property.

Partial-record station is a site where discrete measurements of one or more hydrologic parameters are obtained over a period of time without continuous data being recorded or computed. A common example is a crest-stage gage partial-record station at which only peak stages and flows are recorded.

Particle size is the diameter, in millimeters (mm), of a particle determined by sieve or sedimentation methods. The sedimentation method utilizes the principle of Stokes Law to calculate sediment particle sizes. Sedimentation methods (pipet, bottom-withdrawal tube, visual-accumulation tube, Sedigraph) 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).

Particle-size classification used in this report agrees with the recommendation 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	0.004	-	0.062	Sedimentation
Sand	0.062	-	2.0	Sedimentation/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 matter 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.

Percent composition or percent of total is a unit for expressing the ratio of a particular part of a sample or population to the total sample or population, in terms of types, numbers, weight, or volume.

Periodic station is a site where stage, discharge, sediment, chemical, or other hydrologic measurements are made one or more times during a year, but at a frequency insufficient to develop a daily record.

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

Pesticides are chemical compounds used to control undesirable organisms. Major categories of pesticides include insecticides, miticides, fungicides, herbicides, and rodenticides.

pH of water is the negative logarithm of the hydrogen-ion activity. Solutions with pH less than 7 are termed “acidic,” and solutions with a pH greater than 7 are termed “basic.” Solutions with a pH of 7 are neutral. The presence and concentration of many dissolved chemical constituents found in water are, in part, influenced by the hydrogen-ion activity of water. Biological processes including growth, distribution of organisms, and toxicity of the water to organisms are also influenced, in part, by the hydrogen-ion activity of water.

Picocurie (PC, pCi) is one trillionth (1 x 10-12) of the amount of radioactivity represented by a curie (Ci). A curie is the amount of radioactivity that yields 3.7 x 1010 radioactive disintegrations per second. A picocurie yields 2.22 dpm (disintegrations per minute).

Plankton is the community of suspended, floating, or weakly swimming organisms that live in the open water of lakes and rivers. Concentrations are expressed as a number of cells per milliliter (cells/mL of sample).

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 (Cyanophyta) 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 milliliter (cells/mL) of sample.

Euglenoids (Euglenophyta) are a group of algae that are usually free-swimming and rarely creeping. They have the ability to grow either photosynthetically in the light or heterotrophically in the dark.

Fire algae (Pyrrhophyta) are a group of algae that are free-swimming unicells characterized by a red pigment spot.

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

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.

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.

Polychlorinated naphthalenes (PCN’s) are industrial chemicals that are mixtures of chlorinated naphthalene compounds. They have properties and applications similar to polychlorinated biphenyls (PCB’s) and have been identified in commercial PCB preparations.

Primary productivity is a measure of the rate at which new organic matter is formed and accumulated through photosynthetic and chemosynthetic activity of producer organisms (chiefly, green plants). The rate of primary production is estimated by measuring the amount of oxygen released (oxygen method) or the amount of carbon assimilated (carbon method) by the plants.

Primary productivity (carbon method) is expressed as milligrams of carbon per area per unit time [mg C/(m2/time)] for periphyton and macrophytes or per volume [mg C/(m3/time)] for phytoplankton. Carbon method defines the amount of carbon dioxide consumed as measured by radioactive carbon (carbon-14). The carbon-14 method is of greater sensitivity than the oxygen light and dark bottle method and is preferred for use in unenriched waters. Unit time may be either the hour or day, depending on the incubation period.

Primary productivity (oxygen method) is expressed as milligrams of oxygen per area per unit time [mg O/(m2/time)] for periphyton and macrophytes or per volume [mg O/(m3/time)] for phytoplankton. Oxygen method defines production and respiration rates as estimated from changes in the measured dissolved-oxygen concentration. The oxygen light and dark bottle method is preferred if the rate of primary production is sufficient for accurate measurements to be made within 24 hours. Unit time may be either the hour or day, depending on the incubation period.

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 of 35 and 37, and the natural mixture has an atomic weight of 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. There are 275 isotopes of the 81 stable elements, in addition to more than 800 radioactive isotopes.

Recoverable from bottom material is 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 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.

Recurrence interval, also referred to as return period, is the average time, usually expressed in years, between occurrences of hydrologic events of a specified type (such as exceedances of a specified high flow or non-exceedance of a specified low flow). The terms “return period” and “recurrence interval” do not imply regular cyclic occurrence. The actual times between occurrences vary randomly, with most of the times being less than the average and a few being substantially greater than the average. For example, the 100-year flood is the flow rate that is exceeded by the annual maximum peak flow at intervals whose average length is 100 years (that is, once in 100 years, on average); almost two-thirds of all exceedances of the 100-year flood occur less than 100 years after the previous exceedance, half occur less than 70 years after the previous exceedance, and about one-eighth occur more than 200 years after the previous exceedance. Similarly, the 7-day 10-year low flow (7Q10) is the flow rate below which the annual minimum 7-day-mean flow dips at intervals whose average length is 10 years (that is, once in 10 years, on average); almost two-thirds of the non-exceedances of the 7Q10 occur less than 10 years after the previous non-exceedance, half occur less than 7 years after, and about one-eighth occur more than 20 years after the previous non-exceedance. The recurrence interval for annual events is the reciprocal of the annual probability of occurrence. Thus, the 100-year flood has a 1-percent chance of being exceeded by the maximum peak flow in any year, and there is a 10-percent chance in any year that the annual minimum 7-day-mean flow will be less than the 7Q10.

Replicate samples are a group of samples collected in a manner such that the samples are thought to be essentially identical in composition.

River mile is the distance of a point on a river measured in miles from the river’s mouth along the low-water channel.

River mileage is the linear distance along the meandering path of a stream channel determined in accordance with Bulletin No. 14 (October 1968) of the Water Resources Council.

Runoff in inches (IN., in.) is the depth, in inches, to which the drainage area would be covered if all the runoff for a given time period were uniformly distributed on it.

Sea level refers to the National Geodetic Vertical Datum of 1929 (NGVD of 1929)—a geodetic datum derived from a general adjustment of the first-order level nets of the United States and Canada, formerly called Sea Level Datum of 1929. See: http://www.co-ops.nos.noaa.gov/glossary/gloss_n.html#NGVD

Sediment is solid material that is transported by, suspended in, or deposited from water. It originates mostly from disintegrated rocks; it also 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.

Bed load is the sediment that is transported in a stream by rolling, sliding, or skipping along or very close to the bed. In this report, bed load is considered to consist of particles in transit from the bed to an elevation equal to the top of the bed-load sampler nozzle (usually within 0.25 ft of the streambed).

Bed-load discharge (tons per day) is the quantity of sediment moving as bed load, reported as dry weight, that passes a cross section in a given time.

Suspended sediment is the sediment that 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 above the bed) expressed as milligrams of dry sediment per liter of water-sediment mixture (mg/L). The entire sample is used for the analysis.

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

Suspended-sediment discharge (tons/day) is the quantity of sediment moving in suspension, reported as dry weight, that passes a cross section in a given time. It is calculated in units of tons per day as follows: concentration (mg/L) x discharge (ft3/s) x 0.0027.

Suspended-sediment load is a term that refers to material in suspension. The term needs to be qualified, such as “annual suspended-sediment load” or “sand-size suspended-sediment load,” and so on. It is not synonymous with either suspended-sediment discharge or concentration.

Total sediment discharge (tons/day) is the sum of the suspended-sediment discharge and the bed-load discharge. It is the total quantity of sediment, reported as dry weight, that passes a cross section in a given time.

Total sediment load or total load is a term that refers to the total sediment (bed load plus suspended-sediment load) that is in transport. The term needs to be qualified, such as “annual suspended-sediment load” or “sand-size suspended-sediment load,” and so on. It is not synonymous with total sediment discharge.

Seven-day 10-year low flow (7Q10, 7Q10) is the minimum flow averaged over 7 consecutive days that is expected to occur on average, once in any 10-year period. The 7Q10 has a 10-percent chance of occurring in any given year.

Sodium adsorption ratio (SAR) is the expression of relative activity of sodium ions in exchange reactions within soil and is an index of sodium or alkali hazard to the soil. Waters range in respect to sodium hazard from those which can be used for irrigation on almost all soils to those which are generally unsatisfactory for irrigation.

Solute is any substance that is dissolved in water.

Specific conductance is a measure of the ability of a water to conduct an electrical current. It is expressed in microsiemens per centimeter at 25 C Specific conductance is related to the type and concentration of ions in solution and can be used for approximating the dissolved-solids content of the water. Commonly, the concentration of dissolved solids (in milligrams per liter) is from 55 to 75 percent of the specific conductance (in microsiemens). This relation is not constant from stream to stream, and it may vary in the same source with changes in the composition of the water.

Stable isotope ratio (per MILL/MIL) is a unit expressing the ratio of the abundance of two radioactive isotopes. Isotope ratios are used in hydrologic studies to determine the age or source of specific waters, to evaluate mixing of different waters, as an aid in determining reaction rates, and other chemical or hydrologic processes.

Stage: See “Gage height.”

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

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.

Substrate is the physical surface upon which an organism lives.

Artificial substrate is a device which is purposely placed in a stream or lake for colonization of organisms. The artificial substrate simplifies the community structure by standardizing the substrate from which each sample is taken. Examples of artificial substrates are basket samplers (made of wire cages filled with clean streamside rocks) and multiplate samplers (made of hardboard) for benthic organism collection, and plexiglass strips for periphyton collection.

Natural substrate refers to any naturally occurring immersed or submersed solid surface, such as a rock or tree, upon which an organism lives.

Surface area of a lake or impoundment is that area encompassed by the boundary of the lake or impoundment as shown on USGS topographic maps, or on other available maps or photographs. The computed surface areas reflect the water levels of the lakes or impoundments at the times when the information for the maps or photographs was obtained.

Surficial bed material is the top 0.1 to 0.2 ft of the bed material that is sampled using U.S. Series Bed-Material Samplers.

Suspended (as used in tables of chemical analyses) refers to the amount (concentration) of undissolved material in a water-sediment mixture. It is associated with the material retained on a 0.45-micrometer filter.

Suspended, recoverable is the amount of a given constituent that is in solution after the part of a representative suspended-sediment sample that is retained on a 0.45-micrometer 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 are 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 is the total amount of a given constituent in the part of a representative suspended-sediment sample that is retained on a 0.45-micrometer membrane filter. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. 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.

Synoptic Studies are short-term investigations of specific water-quality conditions during selected seasonal or hydrologic periods to provide improved spatial resolution for critical water-quality conditions. For the period and conditions sampled, they assess the spatial distribution of selected water-quality conditions in relation to causative factors, such as land use and contaminant sources.

Taxonomy is the division of biology concerned with the classification and naming of organisms. The classification of organisms is based upon a hierarchial scheme beginning with Kingdom and ending with Species at the base. The higher the classification level, the fewer features the organisms have in common. For example, the taxonomy of a particular mayfly, Hexagenia limbata, is the following:

Kingdom	Animal
Phylum	Arthropoda
Class	Insecta
Order	Ephemeroptera
Family	Ephemeridae
Genus	Hexagenia
Species	Hexagenia limbata

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 year.

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

Tons per day (T/DAY, tons/d) is the rate representing a mass of 1 ton of a constituent in streamflow passing a cross section in 1 day. It is equivalent to 2,000 pounds per day, or 0.9072 metric tons per day.

Total is the total amount of a given constituent in a representative 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 suspended-sediment mixture and that the analytical method determined all of the constituent in the sample.)

Total discharge is the quantity of a given constituent, measured as dry mass or volume, that passes a stream cross section per unit of time. When referring to constituents other than water, this term needs to be qualified, such as "total sediment discharge," "total chloride discharge," and so on.

Total in bottom material is 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 length (fish) is the straight-line distance from the anterior point of a fish specimen's snout, with the mouth closed, to the posterior end of the caudal (tail) fin, with the lobes of the caudal fin squeezed together.

Total load refers to all of a constituent in transport. When referring to sediment, it includes suspended load plus bed load.

Total recoverable is the amount of a given constituent that is in solution after a representative 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 are required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Turbidity is a measurement of the collective optical properties of a water sample that cause light to be scattered and absorbed rather than transmitted in straight lines; the higher the intensity of scattered light, the higher the turbidity. Turbidity is expressed in nephelometric turbidity units (NTU) or Formazin turbidity units (FTU) depending on the method and equipment used.

Volatile organic compounds (VOC's) are organic compounds that can be isolated from the water phase of a sample by purging the water sample with inert gas, such as helium, and subsequently analyzed by gas chromatography. Many VOC's are manmade chemicals that are used and produced in the manufacture of paints, adhesives, petroleum products, pharmaceuticals, and refrigerants. They are often components of fuels, solvents, hydraulic fluids, paint thinners, and dry cleaning agents commonly used in urban settings. VOC contamination of drinking-water supplies is a human health concern because many are toxic and are known or suspected human carcinogens (U.S. Environmental Protection Agency, 1996).

Water level is the water-surface elevation or stage of the free surface of a body of water above or below any datum (see "Gage height"), or the surface of water standing in a well, usually indicative of the position of the water table or other potentiometric surface.

Water table is the surface of a ground-water body at which the water is at atmospheric pressure.

Water-table aquifer is an unconfined aquifer within which is found the water table.

Water year in U.S. Geological Survey reports dealing with surface-water supply 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, 1999, is called the "1999 water year."

WDR is used as an abbreviation for "Water-Data Report" in the REVISED RECORDS paragraph to refer to State annual hydrologic-data reports. (WRD was used as an abbreviation for "Water-Resources Data" in reports published prior to 1976.)

Weighted average is used in this report to indicate 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.

Well is an excavation (pit, hole, tunnel), generally cylindrical in form and often walled in, drilled, dug, driven, bored, or jetted into the ground to such a depth as to penetrate water-yielding geologic material and allow the water to flow or to be pumped to the surface.

Wet weight refers to the weight of animal tissue or other substance including its contained water.

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

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DISCONTINUED SURFACE-WATER DISCHARGE OR STAGE ONLY STATIONS

The following continuous-record surface-water discharge or stage-only stations (gaging stations) in Colorado have been discontinued or converted to partial-record stations. Daily streamflow or stage records were collected and published for the period of record, expressed in water years, shown for each station. [--, data unavailable]

Station name	Station number	Drainage area (sq mi)	Period of record (water years)
Lady Creek near Grand Lake, CO	09010100	0.08	1969-75
Jimmy Creek near Grand Lake, CO	09010400	0.08	1969-75
Onahu Creek near Grand Lake, CO	09010600	8.84	1969
Colorado River near Grand Lake, CO	09011000	102	1904-18, 1933-86
Little Columbine Creek above Shadow Mountain Lake at Grand Lake, CO	09011500	1.65	1950-55
Tonahutu Creek near Grand Lake, CO	09012400	16.0	1969
Harbison Ditch near Grand Lake, CO	09012410	--	1969
Tonahutu Creek below Harbison Ditch near Grand Lake, CO	09012420	--	1969
North Inlet at Grand Lake, CO	09012500	45.9	1905-09, 1910-12, 1947-55
East Inlet near Grand Lake, CO	09013500	27.2	1947-55
Grand Lake Outlet at Grand Lake, CO	09014000	76.3	1904-09, 1910-13
Shadow Mountain Lake near Grand Lake, CO	09014500	185	1947-98
Colorado River below Shadow Mountain Reservoir, CO	09015000	190	1947-59
Columbine Creek above Lake Granby near Grand Lake, CO	09015500	7.38	1950-55
Roaring Fork above Lake Granby, CO	09016000	5.95	1951-55
Arapahoe Creek at Monarch Lake Outlet, CO	09016500	46.9	1944-71
Arapahoe Creek below Monarch Lake, CO	09017000	56.9	1934-44
Stillwater Creek above Lake Granby, CO	09018000	17.5	1950-55
Colorado River below Lake Granby, CO	09019000	312	1950-82
Willow Creek near Granby, CO	09020000	109	1934-53
Willow Creek above Willow Creek Reservoir, CO	09020500	127	1953-60
Willow Creek Reservoir near Granby, CO	09020700	134	1953-98
Willow Creek below Willow Creek Reservoir, CO	09021000	134	1953-82
Moffat Water Tunnel at East Portal, CO	09022500	--	1935-82
Fraser River above Winter Park, CO	09023500	22.4	1907-09, 1934-37
Elk Creek near Fraser, CO	09025400	7.15	1970-96
Ranch Creek Ditch near Fraser, CO	09031900	--	1948-67
Ranch Creek near Tabernash, CO	09032500	51.3	1934-60
Meadow Creek near Tabernash, CO	09033000	8.03	1935-56
Strawberry Creek near Granby, CO	09033500	11.6	1935-45
Fraser River at Granby, CO	09034000	297	1904-09, 1937-55
Colorado River at Hot Sulphur Springs, CO	09034500	825	1904-94
Little Muddy Creek near Parshall, CO	09034800	6.52	1953-65
South Fork Williams Fork at Upper Station near Ptarmigan Pass, CO	09035820	2.78	1984-87
South Fork Williams Fork near Ptarmigan Pass, CO	09035830	4.01	1984-88
South Fork Williams Fork above Tributary near Ptarmigan Pass, CO	09035840	5.53	1984-87
South Fork Williams Fork Tributary near Ptarmigan Pass, CO	09035845	0.60	1984-88
South Fork Williams Fork above Short Creek near Ptarmigan Pass, CO	09035850	6.53	1984-87
South Fork Williams Fork below Short Creek near Ptarmigan Pass, CO	09035870	20.0	1984-87
South Fork Williams Fork below Old Baldy Mountain near Leal, CO	09035880	21.8	1985-88
Keyser Creek near Leal, CO	09036500	13.8	1942-52
Williams Fork near Scholl, CO	09037000	141	1910-17
Skylark Creek near Parshall, CO	09037200	2.42	1958-65
Williams Fork Reservoir near Parshall, CO	09038000	230	1939-98
Troublesome Creek near Pearmont, CO	09039000	44.6	1953-93
Troublesome Creek at Atmore Ranch near Troublesome, CO	09039500	48.8	1937-43
East Fork Troublesome Creek near Troublesome, CO	09040000	76.0	1937-43, 1953-83
Troublesome Creek near Troublesome, CO	09040500	168	1904-05, 1921-22, 1937-56
Muddy Creek near Kremmling, CO	09041000	87.4	1937-43, 1955-71, 1993-99
Antelope Creek near Kremmling, CO	09041100	11.5	1955-68
Red Dirt Creek near Kremmling, CO	09041200	19.0	1955-74
Pass Creek near Kremmling, CO	09041300	17.8	1957-70
Muddy Creek at Kremmling, CO	09041500	290	1904-05, 1982-95
Monte Cristo Creek near Hoosier Pass, CO	09043000	5.66	1953-58
Hoosier Creek near Hoosier Pass, CO	09044000	1.15	1953-58
Bemrose Creek near Hoosier Pass, CO	09044500	1.95	1953-58
McCullough Gulch near Breckenridge, CO	09045000	4.79	1953-58
Spruce Creek near Breckenridge, CO	09045500	5.23	1953-58

DISCONTINUED SURFACE-WATER DISCHARGE OR STAGE ONLY STATIONS (Continued)

The following continuous-record surface-water discharge or stage-only stations (gaging stations) in Colorado have been discontinued or converted to partial-record stations. Daily streamflow or stage records were collected and published for the period of record, expressed in water years, shown for each station. [--, data unavailable]

Station name	Station number	Drainage area (sq mi)	Period of record (water years)
Blue River at Dillon, CO	09047000	128	1910-61
Snake River at Dillon, CO	09048000	90.9	1910-19, 1929-64
West Tenmile Creek at Copper Mountain, CO	09049200	21.0	1973-79
Tenmile Creek at Frisco, CO	09050000	81.0	1942-50
Tenmile Creek at Dillon, CO	09050500	111	1910-19, 1929-61
Dillon Reservoir	09050600	335	1963-98
Straight Creek near Dillon, CO	09051000	12.9	1943-52
Willow Creek near Dillon, CO	09051500	13.4	1942-51
Rock Creek near Dillon, CO	09052000	15.8	1942-56, 1966-94
Boulder Creek at upper station, near Dillon, CO	09052400	8.56	1966-94
Boulder Creek near Dillon, CO	09052500	9.89	1942-51
Slate Creek at upper station, near Dillon, CO	09052800	14.2	1966-94
Slate Creek near Dillon, CO	09053000	16.6	1942-54
Blue River above Green Mountain Reservoir, CO	09053500	511	1943-71, 1985-88
Black Creek below Black Lake, near Dillon, CO	09054000	15.0	1942-49, 1966-94
Black Creek above Green Mountain Reservoir, CO	09054500	18.5	1944-53
Otter Creek above Green Mountain Reservoir, CO	09055000	8.40	1944-53
Cataract Creek near Kremmling, CO	09055300	12.0	1966-94
Cataract Creek above Green Mountain Reservoir, CO	09055500	13.6	1944-53
Blue River near Kremmling, CO	09056000	571	1904-08
Green Mountain Reservoir	09057000	598	1942-98
Blue River below Spruce Creek near Kremmling, CO	09057520	645	1989-94
Colorado River near Radium, CO	09058030	2,412	1981-90
Dickson Creek near Minturn, CO	09058600	3.41	1964-71
Rock Creek near Toponas, CO	09060500	47.6	1952-81
Rock Creek at Crater, CO	09060550	72.6	1984-99
Egeria Creek near Toponas, CO	09060700	28.2	1965-73
Rock Creek at McCoy, CO	09060770	198	1983-97
Big Alkali Creek near Burns, CO	09060800	14.2	1958-65
Catamount Creek near Burns, CO	09060900	5.31	1955-61
Big Alkali Creek below Castle Creek near Burns, CO	09060950	34.2	1981-86
Sunnyside Creek near Burns, CO	09061000	9.04	1952-58
Columbine Ditch near Fremont Pass, CO	09061500	--	1930-82
Ewing Ditch at Tennessee Pass, CO	09062000	--	1908-82
Wurtz Ditch near Tennessee Pass, CO	09062500	--	1931-82
Turkey Creek at Red Cliff, CO	09063500	29.4	1913-21, 1944-56
Black Gore Creek near Vail, CO	09066050	19.6	1974-79
Gore Creek at Vail, CO	09066250	57.3	1974-79
Gore Creek at Lower Station, at Vail, CO	09066310	77.1	1988-99
Gore Creek near Minturn, CO	09066500	101	1911-14, 1944-56
Beaver Creek at Avon, CO	09067000	14.8	1911, 1912-14, 1974-87, 1988
Alkali Creek near Wolcott, CO	09067300	27.3	1958-65
Eagle River at Eagle, CO	09067500	629	1910-24
East Brush Creek at Yeoman Park near Eagle, CO	09067700	9.74	1965-72
Brush Creek near Eagle, CO	09068000	71.4	1950-72
Gypsum Creek near Gypsum, CO	09069500	62.7	1950-55, 1965-72
Colorado River near Glenwood Springs, CO	09071100	--	1941-85
Grizzly Creek near Glenwood Springs, CO	09071300	5.73	1976-96
Colorado River at Glenwood Springs, CO	09072500	4,558	1899-1966
Roaring Fork above Lost Man Creek near Aspen, CO	09072550	9.10	1980-86
Lincoln Creek below Grizzly Reservoir near Aspen, CO	09073005	15.2	1980-86
Roaring Fork River at Aspen, CO	09073500	109	1910-21, 1931-64
Hunter Creek above Midway Creek near Aspen, CO	09073700	6.18	1964-80
Hunter Creek Feeder Conduit near Aspen, CO	09073720	--	1981-83
Midway Creek Feeder Conduit near Aspen, CO	09073790	--	1981-83
Midway Creek near Aspen, CO	09073800	8.62	1971-80
No Name Creek Feeder Conduit near Aspen, CO	09073890	--	1981-83
No Name Creek near Aspen, CO	09073900	6.54	1971-80

DISCONTINUED SURFACE-WATER DISCHARGE OR STAGE ONLY STATIONS (Continued)

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Station name	Station number	Drainage area (sq mi)	Period of record (water years)
Castle Creek above Aspen, CO	09074800	32.2	1969-94
Castle Creek near Aspen, CO	09075000	67.0	1911-20
Roaring Fork below Aspen, CO	09075500	228	1913-18
Maroon Creek above Aspen, CO	09075700	35.4	1969-94
Maroon Creek near Aspen, CO	09076000	41.7	1910-17
Owl Creek near Aspen, CO	09076520	6.60	1974-89
Fryingpan River Feeder Canal near Norrie, CO	09077150	--	1971-83
Fryingpan River near Ivanhoe Lake, CO	09077200	18.7	1963-82
Lily Pad Feeder Canal near Norrie, CO	09077250	--	1972-83
Granite Creek Feeder Conduit near Norrie, CO	09077300	--	1981-83
Fryingpan River near Norrie, CO	09077400	32.2	1963-67
Ivanhoe Creek near Norrie, CO	09077600	9.12	1963-76
Ivanhoe Creek Feeder Canal near Nast, CO	09077605	--	1976-83
Ivanhoe Creek near Nast, CO	09077610	9.43	1976-82
South Fork Fryingpan River Feeder Canal near Norrie, CO	09077750	--	1971-83
South Fork Fryingpan River at Upper Station near Norrie, CO	09077800	11.5	1963-82
South Fork Fryingpan River near Norrie, CO	09077900	17.3	1963-67
Chapman Gulch Feeder Canal near Norrie, CO	09077940	--	1971-83
Chapman Gulch near Nast, CO	09077945	6.00	1973-82
Chapman Gulch near Norrie, CO	09077950	6.38	1966-72
Sawyer Creek Feeder Canal near Norrie, CO	09077960	--	1972-83
Fryingpan River at Norrie, CO	09078000	90.6	1910-17, 1947-83
North Fork Fryingpan River Feeder Canal near Norrie, CO	09078040	--	1980-83
Morman Creek Feeder Canal near Norrie, CO	09078050	--	1979-83
Carter Creek Feeder Canal near Norrie, CO	09078060	--	1980-83
North Fork Fryingpan River above Cunningham Creek near Norrie, CO	09078100	12.0	1963-80
Cunningham Creek Feeder Canal near Norrie, CO	09078140	--	1979-83
Middle Cunningham Creek Feeder Canal near Norrie, CO	09078150	--	1980-83
Cunningham Creek near Norrie, CO	09078200	7.12	1963-80
North Fork Fryingpan River below Cunningham Creek near Norrie, CO	09078300	24.2	1963-68
North Fork Fryingpan River near Norrie, CO	09078500	42.0	1910-17, 1947-82
Lime Creek near Troutville, CO	09078900	4.56	1963-68
Lime Creek at Troutville, CO	09079000	7.76	1950-56
Lime Creek at Thomasville, CO	09079500	35.0	1950-56
Fryingpan River at Thomasville, CO	09080000	173	1915-20
Fryingpan River at Meredith, CO	09080100	191	1910-15, 1966-80
Fryingpan River at Ruedi, CO	09080200	226	1959-64
Rocky Fork Creek near Meredith, CO	09080300	12.3	1968-82
West Sopris Creek near Basalt, CO	09080800	14.4	1963-68
Crystal River at Marble, CO	09081500	74.3	1910-15, 1916-17
Crystal River at Placita, CO	09081550	107	1959-73, 1975-77
Crystal River near Redstone, CO	09082500	229	1935-63
North Thompson Creek near Carbondale, CO	09082800	26.8	1963-79
Thompson Creek near Carbondale, CO	09083000	75.7	1950-60, 1964-68
Prince Creek near Carbondale, CO	09083700	3.04	1963-68
Cattle Creek near Carbondale, CO	09084000	31.1	1950-55, 1962-72
Fourmile Creek near Carbondale, CO	09084500	8.10	1941-47
Fourmile Creek near Glenwood Springs, CO	09084600	16.7	1957-65
Canyon Creek above New Castle, CO	09085200	23.8	1969-86
East Canyon Creek near New Castle, CO	09085300	15.1	1969-83
Possum Creek near New Castle, CO	09085400	6.41	1969-82
Canyon Creek near New Castle, CO	09085500	55.0	1954-60
West Elk Creek near New Castle, CO	09086000	9.55	1991-97
Main Elk Creek near New Castle, CO	09086470	91.0	1991-97
East Elk Creek above Boiler Creek near New Castle, CO	09086970	23.4	1991-97
Elk Creek at New Castle, CO	09087500	180	1922-24, 1954-60
Colorado River at New Castle, CO	09087600	6,308	1966-72
Baldy Creek near New Castle, CO	09088000	15.3	1955-61
West Divide Creek below Willow Creek near Raven, CO	09089000	34.9	1938-47, 1963-70
East Divide Creek near Silt, CO	09090700	40.8	1959-65

DISCONTINUED SURFACE-WATER DISCHARGE OR STAGE ONLY STATIONS (Continued)

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Station name	Station number	Drainage area (sq mi)	Period of record (water years)
East Rifle Creek near Rifle, CO	09091500	34.3	1936-43, 1956-64
Rifle Creek near Rifle, CO	09092000	137	1939-46, 1952-64
Beaver Creek near Rifle, CO	09092500	7.90	1952-82
Battlement Creek near Parachute, CO	09092600	10.5	1956-65
West Parachute Creek near Parachute, CO	09092800	48.1	1957-62
Northwater Creek near Anvil Points, CO	09092830	12.6	1976-83
East Middle Fork Parachute Creek near Rio Blanco, CO	09092850	22.1	1976-83
East Fork Parachute Creek near Anvil Points, CO	09092960	14.5	1976-83
East Fork Parachute Creek near Rulison, CO	09092970	20.4	1976-83
Ben Good Creek near Rulison, CO	09092980	4.04	1976-83
Parachute Creek near Parachute, CO	09093000	141	1948-54, 1964-70, 1975-86
Parachute Creek at Parachute, CO	09093500	198	1921-27, 1948-54, 1975-82
Colorado River near DeBeque, CO	09093700	7,370	1967-97
Roan Creek above Clear Creek near De Beque, CO	09094200	151	1962-68
Clear Creek near De Beque, CO	09094400	110	1966-68
Roan Creek near De Beque, CO	09095000	321	1921-26, 1962-72, 1975-81
Dry Fork at Upper Station near DeBeque, CO	09095300	97.4	1996-98
Dry Fork near De Beque, CO	09095400	109	1974-82
Government Highline Canal at 16 Road near Loma, CO	09095526	--	1975-85
Lateral No 48 near Mack, CO	09095528	--	1973-81
Government Highline Canal above Camp 7 Spillway near Mack, CO	090955285	--	1983-85
Camp No 7 Spillway near Mack, CO	09095529	--	1975-82
Government Highline Canal near Mack, CO	09095530	--	1973-82
Plateau Creek near Heiberger, CO	09095800	18.6	1958-64
Plateau Creek at Upper Station near Collbran, CO	09096000	24.1	1937-43, 1951-58
Plateau Creek near Collbran, CO	09096500	80.4	1921-80
Buzzard Creek below Owens Creek near Heiberger, CO	09096800	49.7	1955-70
Buzzard Creek near Collbran, CO	09097500	143	1921-80
Brush Creek near Collbran, CO	09097600	9.57	1955-67
Atkinson Creek near Collbran, CO	09098500	0.85	1952-55
East Fork Big Creek near Collbran, CO	09099000	4.92	1940-41, 1950-55
Big Creek at Upper Station near Collbran, CO	09099500	20.2	1945-56
Big Creek near Collbran, CO	09100000	27.1	1937-44
Cottonwood Creek at Upper Station near Molina, CO	09100500	14.0	1945-57
Cottonwood Creek near Molina, CO	09101000	17.8	1937-43
Bull Creek at Upper Station near Molina, CO	09101500	9.85	1945-53
Coon Creek near Mesa, CO	09104000	9.35	1937-43
Mesa Creek near Mesa, CO	09104500	6.79	1937-60
Colorado River near Palisade, CO	09106000	8,738	1901-33
Kiefer Extension to Grand Valley Canal near Fruita, CO	09106104	--	1975-85
Kiefer Extension to Grand Valley Canal near Loma, CO	09106108	--	1975-85
Lewis Wash near Grand Junction, CO	09106200	4.72	1973-79
Texas Creek at Taylor Park, CO	09107500	40.4	1929-34, 1988-92
Willow Creek at Taylor Park, CO	09108000	--	1913-14, 1929-34
East River near Crested Butte, CO	09110500	90.3	1939-51
Coal Creek near Crested Butte, CO	09111000	8.65	1941-46
Slate River near Crested Butte, CO	09111500	70.1	1940-51
Cement Creek near Crested Butte, CO	09112000	26.1	1910-13, 1940-51
Castle Creek near Baldwin, CO	09113000	20.3	1944-50
Castle Creek above mouth near Baldwin, CO	09113100	22.4	1993-98
Ohio Creek at Baldwin, CO	09113300	47.2	1958-70
Ohio Creek near Baldwin, CO	09113500	121	1940-50, 1958-71, 1979-81
Ohio Creek near Gunnison, CO	09114000	167	1944-50
Tomichi Creek at Sargents, CO	09115500	149	1916-22, 1937-72

DISCONTINUED SURFACE-WATER DISCHARGE OR STAGE ONLY STATIONS (Continued)

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Station name	Station number	Drainage area (sq mi)	Period of record (water years)
Tomichi Creek near Doyleville, CO	09116000	209	1944-50
Tomichi Creek at Parlin, CO	09117000	427	1944-51, 1963-70
Quartz Creek near Ohio City, CO	09118000	106	1937-50, 1959-70
Cochetopa Creek near Parlin, CO	09118500	361	1940-48
Gunnison River at Iola, CO	09120500	2,352	1899, 1903, 1937-51
Cebolla Creek near Lake City, CO	09121500	25.2	1946-54
Cebolla Creek near Powderhorn, CO	09121800	248	1960-63
Cebolla Creek at Powderhorn, CO	09122000	340	1937-55
Soap Creek near Sapinero, CO	09122500	57.4	1955-66
Soap Creek at Sapinero, CO	09123000	86.0	1910-14, 1945-52
Lake Fork below Mill Gulch near Lake City, CO	09123400	57.5	1981-86
Lake Fork at Lake City, CO	09123500	115	1917-24, 1928-30, 1931-37
Henson Creek at Lake City, CO	09124000	83.1	1917-19, 1928-30, 1931-37
Gunnison River below Blue Mesa Dam, CO	09124700	3,453	1963-68
Curecanti Creek near Sapinero, CO	09125000	35.0	1945-72
Cimarron River at Cimarron, CO	09126500	209	1902-05, 1962-67
Cimarron River below Squaw Creek at Cimarron, CO	09127000	229	1942-52
Crystal Creek near Maher, CO	09127500	42.2	1916-19, 1945-54, 1960-69
Gunnison River above Gunnison Tunnel, CO	09127998	3,965	1905-65
Gunnison Tunnel near Montrose, CO	09127999	3,965	1910-65
Smith Fork near Crawford, CO	09128500	42.8	1935-94
Smith Fork at Crawford, CO	09129000	63.1	1954-60
Iron Creek near Crawford, CO	09129500	71.5	1947-52
Smith Fork near Lazear, CO	09129600	166	1976-87
Clear Fork near Ragged Mountain, CO	09129800	38.5	1965-73
East Muddy Creek near Bardine, CO	09130500	133	1934-53
West Muddy Creek near Ragged Mountain, CO	09130600	7.42	1955-65
West Muddy Creek near Bowie, CO	09130800	27.7	1968-74
Cow Creek near Paonia, CO	09131100	12.0	1968-82
West Muddy Creek near Somerset, CO	09131200	49.9	1961-73
Ruby Anthracite Creek near Floresta, CO	09132000	20.7	1938-43, 1954-58
Anthracite Creek near Somerset, CO	09132050	94.6	1977-81
Main Hubbard Creek near Paonia, CO	09132700	1.33	1960-68
Middle Hubbard Creek near Paonia, CO	09132800	1.36	1960-68
West Hubbard Creek near Paonia, CO	09132900	2.34	1960-73
Hubbard Creek near Bowie, CO	09132920	20.7	1968-74
North Fork Gunnison River near Paonia, CO	09133000	653	1921-32
Minnesota Creek at Paonia, CO	09134050	53.5	1976-79
Cottonwood Creek near Hotchkiss, CO	09134200	41.0	1976-79
Leroux Creek near Cedaredge, CO	09134500	34.5	1936-56, 1960-69
Cow Creek near Cedaredge, CO	09134700	7.24	1960-69
Leroux Creek near Lazear, CO	09135000	51.8	1917-26
Leroux Creek at Hotchkiss, CO	09135900	66.7	1976-96
Gunnison River near Lazear, CO	09136200	5,241	1962-85
Currant Creek near Cedaredge, CO	09136500	42.2	1948-54
Currant Creek near Read, CO	09137050	56.9	1976-87
Dirty George Creek near Grand Mesa, CO	09137800	10.6	1957-69
Ward Creek near Grand Mesa, CO	09139200	12.2	1957-69
Ward Creek near Cedaredge, CO	09139500	20.4	1939-46
Kiser Creek near Grand Mesa, CO	09140200	5.35	1957-69
Kiser Creek near Cedaredge, CO	09140500	10.8	1939-46
Cottonwood Creek near Grand Mesa, CO	09140700	2.15	1957-68
Cottonwood Creek near Cedaredge, CO	09141000	4.39	1939-46
Youngs Creek near Grand Mesa, CO	09141200	10.3	1957-69
Youngs Creek near Cedaredge, CO	09141500	11.3	1939-46

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Station name	Station number	Drainage area (sq mi)	Period of record (water years)
Ward Creek below Kiser Creek near Cedaredge, CO	09142000	52.2	1944-52
Surface Creek at Eckert, CO	09144000	43.6	1939-51
Tongue Creek at Cory, CO	09144200	197	1957-68, 1976-87
Red Mountain Creek near Ironton, CO	09144500	18.1	1947-55
Uncompahgre River At Ouray, CO	09145000	42.0	1908, 1910-24
Canyon Creek at Ouray, CO	09145500	25.8	1910-15
Uncompahgre River below Ouray, CO	09146000	75.2	1913-29
West Fork Dallas Creek near Ridgway, CO	09146400	14.1	1955-70
East Fork Dallas Creek near Ridgway, CO	09146500	16.8	1947-53, 1960-70
Beaver Creek near Ridgway, CO	09146550	12.2	1960-68
Pleasant Valley Creek near Noel, CO	09146600	8.17	1955-67
Cow Creek near Ridgway, CO	09147100	45.4	1955-73
Spring Creek near Beaver Hill, CO	09149400	41.6	1977-81
Spring Creek near Montrose, CO	09149420	76.6	1977-81
Dry Creek at Begonia Road near Delta, CO	09149480	175	1996-98
Potter Creek near Columbine Pass, CO	09149900	7.10	1980-81
Potter Creek near Olathe, CO	09149910	26.0	1980-81
Roubideau Creek at Mouth near Delta, CO	09150500	242	1938-54, 1976-83
Escalante Creek near Delta, CO	09151500	209	1922-23, 1970-89
Kannah Creek near Whitewater, CO	09152000	61.9	1917-82
Orchard Mesa Drain at Grand Junction, CO	09152600	3.70	1973-83
Leach Creek at Durham, CO	09152650	24.8	1973-83
Adobe Creek near Fruita, CO	09152900	15.4	1973-83
Colorado River near Fruita, CO	09153000	17,100	1907-23
Big Salt Wash at Fruita, CO	09153270	142	1973-77
Reed Wash near Loma, CO	09153300	29.3	1973-83
West Salt Creek near Carbonera, CO	09153330	95.6	1979-82
West Salt Creek near Mack, CO	09153400	168	1973-83
Badger Wash near Mack, CO	09163050	6.51	1973-82
East Salt Creek near Mack, CO	09163310	197	1973-82
Mack Wash near Mack, CO	09163340	15.9	1973-82
Salt Creek near Mack, CO	09163490	436	1973-83
Hay Press Creek above Fruita Reservoir 3 near Glade Park, CO	09163570	0.77	1983-88
West Fork Dolores River near Stoner, CO	09166000	162	1941-44
Lost Canyon Creek at Dolores, CO	09167000	73.5	1922-27, 1941-48
Plateau Creek near Mouth near Dolores, CO	09167450	83.0	1982-83
Dolores River near McPhee, CO	09167500	817	1938-52
Disappointment Creek near Dove Creek, CO	09168100	147	1957-86
Big Gypsum Creek near Slick Rock, CO	09168800	43.9	1979-81
West Paradox Creek near Paradox, CO	09170500	23.6	1944-52
West Paradox Creek above Bedrock, CO	09170800	53.3	1971-73
West Paradox Creek near Bedrock, CO	09171000	55.3	1944-52
San Miguel River near Telluride, CO	09171200	42.8	1959-65
San Miguel River at Fall Creek, CO	09171500	167	1895-99, 1910
Fall Creek near Fall Creek, CO	09172000	33.4	1941-59
Leopard Creek at Noel, CO	09172100	9.03	1955-63
Saltado Creek near Norwood, CO	09172600	--	1976-80
Gurley Ditch near Norwood, CO	09172700	--	1976-80
West Beaver Creek near Norwood, CO	09172800	--	1976-80
Beaver Creek near Norwood, CO	09173000	40.6	1941-61, 1962-67, 1975-81
Horsefly Creek near Sams, CO	09173500	28.8	1942-51
San Miguel River near Nucla, CO	09174000	649	1953-62
Cottonwood Creek near Nucla, CO	09174500	38.8	1942-51
West Naturita Creek at Upper Station near Norwood, CO	09174700	7.31	1976-80
West Naturita Creek near Norwood, CO	09175000	53.0	1940-52, 1975-80
Lilylands Canal near Norwood, CO	09175200	--	1976-80
Maverick Draw near Norwood, CO	09175400	41.3	1976-80
San Miguel River at Naturita, CO	09175500	1,069	1917-29, 1940-81
Tabeguache Creek near Nucla, CO	09176500	16.9	1946-53
Taylor Creek near Gateway, CO	09177500	15.4	1944-67

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Station name	Station number	Drainage area (sq mi)	Period of record (water years)
Deep Creek near Paradox, CO	09178000	4.31	1944-53
Geyser Creek near Paradox, CO	09178500	--	1944-51
Roc Creek near Uranium CO	09179000	75.8	1944-52
Salt Creek near Gateway, CO	09179200	31.2	1979-85
Dolores River at Gateway, CO	09179500	4,347	1936-54
Vermillion Creek at Ink Springs Ranch, CO	09235450	816	1977-81
Vermillion Creek below Douglas Draw, near Lodore, CO	09235490	918	1995
Bear River near Toponas, CO	09236000	23.0	1952-65, 1966-86
Bear River near Yampa, CO	09236500	41.6	1939-44
Service Creek near Oak Creek, CO	09237800	38.2	1965-73
Oak Creek near Oak Creek, CO	09238000	14.0	1952-57
North Fork Walton Creek near Rabbit Ears Pass, CO	09238300	0.71	1972-75
Fishhook Creek near Rabbit Ears Pass, CO	09238350	6.45	1972-75
Walton Creek near Steamboat Springs, CO	09238500	42.4	1920-22, 1965-73, 1978-87
Fish Creek Tributary above Long Lake near Buffalo Pass, CO	09238700	0.43	1984-86
Long Lake Inlet near Buffalo Pass, CO	09238705	0.71	1987-95
Fish Creek Tributary below Long Lake, near Buffalo Pass, CO	09238710	1.03	1985-95
Middle Fork Fish Creek near Buffalo Pass, CO	09238750	1.37	1985-95
Granite Creek near Buffalo Pass, CO	09238770	2.82	1985-95
Middle Fork Fish Creek tributary, below Fish Creek Reservoir, CO	09238800	4.78	1984-94
Spring Creek near Steamboat Springs, CO	09239400	6.96	1965-72
Elk River at Hinman Park, CO	09240500	61.0	1911-18
South Fork Elk River near Clark, CO	09240800	33.7	1966-73
Fish Creek near Milner, CO	09244100	34.5	1955-73
Grassy Creek near Mount Harris, CO	09244300	25.8	1958-66
Yampa River near Hayden, CO	09244400	1,430	1965-72
Gibralter Canal near Hayden, CO	09244405	--	1965-72
Yampa River below Diversion near Hayden, CO	09244410	1,430	1965-86
Sage Creek above Sage Creek Reservoir near Hayden, CO	09244415	4.17	1980-83
Watering Trough Gulch near Hayden, CO	09244460	2.65	1977-81
Hubberson Gulch near Hayden, CO	09244464	8.08	1977-81
Stokes Gulch near Hayden, CO	09244470	13.6	1976-81
Elkhead Creek near Clark, CO	09244500	45.4	1942-44, 1958-73
Elkhead Creek near Elkhead, CO	09245000	64.2	1953-96
North Fork Elkhead Creek near Elkhead, CO	09245500	21.0	1910, 1920, 1958-73
Elkhead Creek near Craig, CO	09246500	249	1906, 1909-18
Fortification Creek near Craig, CO	09246900	34.3	1955-60
Fortification Creek near Fortification, CO	09246920	40.0	1984-90
Fortification Creek at Craig, CO	09247000	258	1903-06, 1909-18, 1943-47
Yampa River at Craig, CO	09247500	1,730	1901-06,
East Fork of Williams Fork near Willow Creek, CO	09248500	96.0	1943-47
East Fork of Williams Fork above Willow Creek, CO	09248600	108	1956-72
East Fork of Williams Fork near Pagoda, CO	09249000	150	1953-71
South Fork of Williams Fork near Pagoda, CO	09249200	46.7	1965-79
Waddle Creek near Pagoda, CO	09249450	5.24	1985-86
Deep Rock Gulch near Hamilton, CO	09249455	3.53	1985-86
Williams Fork at Hamilton, CO	09249500	341	1904-06, 1909-27
Morapos Creek near Hamilton, CO	09249700	13.7	1965-67
Milk Creek near Thornburgh, CO	09250000	65.0	1952-86
Good Spring Creek at Axial, CO	09250400	40.0	1975-78
Wilson Creek above Taylor Creek near Axial, CO	09250507	20.0	1980-92
Taylor Creek at mouth near Axial, CO	09250510	7.22	1975-92
Jubb Creek near Axial, CO	09250610	7.53	1975-81
Morgan Gulch near Axial, CO	09250700	25.6	1980-81
Middle Fork Little Snake River near Battle Creek, CO	09251500	120	1912-22
South Fork Little Snake River near Battle Creek, CO	09252500	46.0	1912-20
Little Snake River near Slater, CO	09253000	285	1942-47, 1950-99
Battle Creek near Slater, CO	09253500	285	1942-51

DISCONTINUED SURFACE-WATER DISCHARGE OR STAGE ONLY STATIONS (Continued)

The following continuous-record surface-water discharge or stage-only stations (gaging stations) in Colorado have been discontinued or converted to partial-record stations. Daily streamflow or stage records were collected and published for the period of record, expressed in water years, shown for each station. [--, data unavailable]

Station name	Station number	Drainage area (sq mi)	Period of record (water years)
Slater Fork at Baxter Ranch near Slater, CO	09254500	80.0	1911-20, 1922
Little Snake River near Dixon, WY	09257000	988	1910-23, 1938-97
Willow Creek near Dixon, WY	09258000	24.0	1953-93
Little Snake River above Lily, CO	09259950	--	1950-69
Sand Wash near Sunbeam, CO	09259990	239	1987-91
North Fork White River below Trappers Lake, CO	09302400	19.5	1956-65
North Fork White River above Ripple Creek near Trappers Lake, CO	09302420	62.5	1965-73
Lost Creek near Buford, CO	09302450	21.5	1964-89
Marvine Creek near Buford, CO	09302500	59.7	1903-06, 1973-84
North Fork White River near Buford, CO	09302800	220	1903-06, 1956-72
South Fork White River at Budge's Resort, CO	09303300	52.3	1975-95
Wagonwheel Creek at Budge's Resort, CO	09303320	7.36	1975-89
Patterson Creek near Budge's Resort, CO	09303340	11.2	1976-77
South Fork White River near Budge's Resort, CO	09303400	128	1976-95
South Fork White River near Buford, CO	09303500	157	1903-06, 1910-15, 1942-47, 1967-92
South Fork White River at Buford, CO	09304000	177	1919-20, 1952-97
Big Beaver Creek near Buford, CO	09304100	34.1	1955-64
Miller Creek near Meeker, CO	09304150	57.6	1970-79
Coal Creek near Meeker, CO	09304300	25.1	1957-68
White River at Meeker, CO	09304600	808	1978-85
Piceance Creek at Rio Blanco, CO	09305500	8.97	1952-57
Piceance Creek below Rio Blanco, CO	09306007	177	1974-98
Middle Fork Stewart Gulch near Rio Blanco, CO	09306015	24.0	1974-76, 1977-82
Stewart Gulch above West Fork near Rio Blanco, CO	09306022	44.0	1976-85
West Fork Stewart Gulch near Rio Blanco, CO	09306025	14.2	1974-76, 1977-82
West Fork Stewart Gulch at Mouth near Rio Blanco, CO	09306028	15.7	1974-82
Sorghum Gulch near Rio Blanco, CO	09306033	1.22	1974-76, 1977-82
Sorghum Gulch at Mouth near Rio Blanco, CO	09306036	3.62	1974-86
Cottonwood Gulch near Rio Blanco, CO	09306039	1.20	1974-85
Piceance Creek Tributary near Rio Blanco, CO	09306042	1.06	1974-84, 1985-92
Piceance Creek below Gardenhire Gulch near Rio Blanco, CO	09306045	255	1980-82, 1985
Scandard Gulch near Rio Blanco, CO	09306050	6.61	1974-76, 1978-82
Scandard Gulch at Mouth near Rio Blanco, CO	09306052	7.97	1974-85
Willow Creek near Rio Blanco, CO	09306058	48.4	1974-85
Piceance Creek above Hunter Creek near Rio Blanco, CO	09306061	309	1974-87
Black Sulphur Creek near Rio Blanco, CO	09306175	103	1975-83
Horse Draw near Rangely, CO	09306202	1.47	1977-81
Horse Draw at Mouth near Rangely, CO	09306203	2.87	1977-81
White River above Crooked Wash near White River City, CO	09306224	1,821	1982-89
Stake Springs Draw near Rangely, CO	09306230	26.1	1974-77
Corral Gulch below Water Gulch near Rangely, CO	09306235	8.61	1974-89
Dry Fork near Rangely, CO	09306237	2.74	1974-82
Box Elder Gulch near Rangely, CO	09306240	9.21	1974-85
Box Elder Gulch Tributary near Rangely, CO	09306241	2.39	1975-82
Corral Gulch at 84 Ranch, CO	09306244	37.8	1975-77
Yellow Creek Tributary near 84 Ranch, CO	09306246	5.53	1975-77
Duck Creek at Upper Station near 84 Ranch, CO	09306248	39.1	1975-77
Duck Creek near 84 Ranch, CO	09306250	50.0	1975-77
White River above Rangely, CO	09306300	2,773	1972-82
Douglas Creek at Rangely, CO	09306380	425	1977-78, 1995
East Fork San Juan River near Pagosa Springs, CO	09340000	86.9	1935-80
West Fork San Juan River above Borns Lake near Pagosa Springs, CO	09340500	41.2	1937-53
West Fork San Juan River at West Fork Campground near Pagosa Springs, CO	09340800	50.5	1984-87, 1997-99
Wolf Creek near Pagosa Springs, CO	09341200	14.0	1968-75

DISCONTINUED SURFACE-WATER DISCHARGE OR STAGE ONLY STATIONS (Continued)

The following continuous-record surface-water discharge or stage-only stations (gaging stations) in Colorado have been discontinued or converted to partial-record stations. Daily streamflow or stage records were collected and published for the period of record, expressed in water years, shown for each station. [--, data unavailable]

Station name	Station number	Drainage area (sq mi)	Period of record (water years)
Wolf Creek at Wolf Creek Campground near Pagosa Springs, CO	09341300	18.0	1984-87, 1997-99
Windy Pass Creek near Pagosa Springs, CO	09341350	1.41	1984-87
West Fork San Juan River near Pagosa Springs, CO	09341500	85.4	1935-60, 1985-87, 1997-98
Turkey Creek near Pagosa Springs, CO	09342000	23.0	1937-49
Rio Blanco near Pagosa Springs, CO	09343000	58.0	1935-71
Rio Blanco below Blanco Diversion Dam near Pagosa Springs, CO	09343300	69.1	1971-98
Rio Blanco near Pagosa Springs, CO	09343500	23.3	1935-52
Navajo River above Chromo, CO	09344300	96.4	1956-70
Navajo River below OSO Diversion Dam near Chromo, CO	09344400	100.5	1971-98
Little Navajo River at Chromo, CO	09345500	21.9	1935-52
Navajo River at Edith, CO	09346000	172	1912-96
Middle Fork Piedra River near Pagosa Springs, CO	09347200	32.2	1969-75
Middle Fork Piedra River near Dyke, CO	09347205	34.1	1978-84
Piedra River at Bridge Ranger Station near Pagosa Springs, CO	09347500	82.3	1936-41, 1946-54
Williams Creek near Bridge Ranger Station near Pagosa Springs, CO	09348500	43.7	1936-41, 1946-49
Weminuche Creek near Bridge Ranger Station near Pagosa Springs, CO	09349000	53.4	1936-41, 1946-49
Piedra River near Piedra, CO	09349500	371	1911-12, 1938-73
Los Pinos River near Bayfield, CO	09353500	270	1927-86
Animas River at Howardsville, CO	09357500	55.9	1935-82
Cement Creek near Silverton, CO	09358500	13.5	1935-37, 1946-49
Mineral Creek above Silverton, CO	09358900	11.0	1968-75
Mineral Creek near Silverton, CO	09359000	43.9	1935-49
Lime Creek near Silverton, CO	09359100	33.9	1956-61
Animas River above Tacoma, CO	09359500	348	1945-56
Hermosa Creek near Hermosa, CO	09361000	172	1911, 1912-14, 1919-28, 1939-80
Falls Creek near Durango, CO	09361200	7.18	1959-65
Junction Creek near Durango, CO	09361400	26.3	1959-65
Lightner Creek near Durango, CO	09362000	66.0	1927-49
Rainbow Springs Trout Ranch near Bordad, CO	09362600	--	1995-97
Florida River near Hermosa, CO	09362900	68.8	1955-63
Florida River near Durango, CO	09363000	97.4	1899, 1901-03, 1910-12, 1917-24, 1926-60
Florida River below Florida Farmers Ditch near Durango, CO	09363050	107	1967-82
Highway Spring near Loma Linda, CO	09363070	--	1995-97
Salt Creek near Oxford, CO	09363100	17.7	1956-63, 1967-83
Florida River at Bondad, CO	09363200	221	1956-63, 1967-83
Cherry Creek near Red Mesa, CO	09366000	66.0	1928-50
West Mancos River near Mancos, CO	09368500	39.4	1910-11, 1938-53
East Mancos River near Mancos, CO	09369000	11.9	1937-51
Middle Mancos River near Mancos, CO	09369500	12.1	1937-51
Mancos River near Mancos, CO	09370000	71.5	1921, 1931-38
Mancos River near Cortez, CO	09370800	302	1976-79
Mancos River below Johnson Canyon near Cortez, CO	09370820	320	1979-82
Navajo Wash near Towaoc, CO	09371002	26.3	1986-94
Hartman Draw at Cortez, CO	09371400	34.0	1978-86
McElmo Creek above Alkali Canyon near Cortez, CO	09371420	147	1972-86

DISCONTINUED SURFACE-WATER DISCHARGE OR STAGE ONLY STATIONS (Continued)

The following continuous-record surface-water discharge or stage-only stations (gaging stations) in Colorado have been discontinued or converted to partial-record stations. Daily streamflow or stage records were collected and published for the period of record, expressed in water years, shown for each station. [--, data unavailable]

Station name	Station number	Drainage area (sq mi)	Period of record (water years)
Mud Creek near Cortez, CO	09371495	33.6	1978-81
McElmo Creek near Cortez, CO	09371500	230	1926-29, 1940-45, 1950-54, 1982-93
McElmo Creek below Cortez, CO	09371700	283	1972-83

DISCONTINUED SURFACE-WATER-QUALITY STATIONS

The following stations were discontinued as continuous-record surface-water-quality stations. Daily records of temperature, specific conductance, pH, dissolved oxygen or sediment were collected and published for the period of record shown for each station. [--, data unavailable]

Station name	Station number	Drainage area (sq mi)	Type of record	Period of record (water years)
Colorado River below Baker Gulch near Grand Lake, Co	09010500	53.4	Temp.	1997-98
Colorado River at Hot Sulphur Springs, CO	09034500	825	Temp., S.C.	1947-94
Williams Fork near Parshall, CO	09037500	184	Temp., S.C.	1986-87
Williams Fork below Williams Fork Reservoir, CO	09038500	230	Temp., S.C.	1985-87
Muddy Creek at Kremmling, CO	09041500	290	Temp., S.C.	1986-87, 1990-95
French Gulch at Breckenridge, CO	09046530	10.9	Temp.	1997-98
West Tenmile Creek at Copper Mountain, CO	09049200	21.0	Sed.	1973-79
Boulder Creek near Dillon, CO	09052500	9.89	Temp., S.C.	1982
Blue River above Green Mountain Reservoir, CO	09053500	511	Temp.	1986
			S.C.	1986-87
Blue River below Green Mountain Reservoir, CO	09057500	599	Temp., S.C.	1995-99
Rock Creek at Crater, CO	09060550	72.6	Temp., S.C.	1986-87
Black Gore Creek near Vail, CO	09066050	19.6	Sed.	1973-79
Gore Creek at Vail, CO	09066250	57.3	Sed.	1973-79
Gore Creek at mouth near Minturn, CO	09066510	102	Temp.	1997-98
			S.C.	1997
Colorado River near Dotsero, CO	09070500	4,394	Temp., S.C.	1980-84
			Temp.	1997-98
			Sed.	1959-61
Colorado River near Glenwood Springs, CO	09071100	4,560	Temp.	1969-70, 1980-85
			S.C.	1980-85
Colorado River at Glenwood Springs, CO	09072500	4,558	Temp.	1954-58
			Sed.	1959-61
Hunter Creek above Midway Creek near Aspen, CO	09073700	6.18	Temp., S.C.	1976-77
Roaring Fork River at Glenwood Springs, CO	09085000	1,451	Temp., S.C.	1980-84
			Sed.	1959-61
Colorado River below Glenwood Springs, CO	09085100	6,013	Temp., S.C.	1980-84
East Middle Fork Parachute Cr near Rio Blanco, CO	09092850	22.1	Temp., S.C.	1976-82
			Sed.	1977-82
East Fork Parachute Creek near Rulison, CO	09092970	20.4	Temp.	1977-78, 1980-83
			S.C.	1977-83
			Sed.	1978, 1980-83
Parachute Creek near Parachute, CO	09093000	141	Temp., S.C.	1975-80
			Sed.	1974-75
Parachute Creek at Parachute, CO	09093500	198	Temp., S.C.	1975-80
			Sed.	1974-82
Colorado River near De Beque, CO	09093700	7,370	Temp., S.C.	1973-82
			Sed.	1974-76
Roan Creek near De Beque, CO	09095000	321	Temp., S.C.	1975-80
			Sed.	1975-81
Dry Fork at Upper Station near DeBeque, CO	09095300	97.4	Temp.	1997-98
Government Highline Canal near Mack, CO	09095530	--	Temp.	1973-80
			S.C.	1974-80
Plateau Creek near Cameo, CO	09105000	592	Temp., S.C.	1971-75
Lewis Wash near Grand Junction, CO	09106200	4.72	Temp., S.C.	1973-77
East River below Cement Creek near Crested Butte, CO	09112200	238	S.C., D.O.,	1995-97
			Temp.	1995-98
Gunnison River below Gunnison Tunnel, CO	09128000	3,965	Temp.	1997-98
Uncompahgre River near Ridgway, CO	09146200	149	Temp.	1997-98
Dry Creek at Begonia Road near Delta, CO	09149480	175	Temp.	1997-98
			S.C.	1997
Uncompahgre River at Delta, CO	09149500	1,115	Sed.	1959
Potter Creek near Columbine Pass, CO	09149900	7.10	Temp., S.C.	1981
Potter Creek near Olathe, CO	09149910	26.0	Temp., S.C.	1981
Orchard Mesa Drain at Grand Junction, CO	09152600	3.70	Temp., S.C.	1973-77
Leach Creek at Durham, CO	09152650	24.8	Temp., S.C.	1973-77
Adobe Creek near Fruita, CO	09152900	15.4	Temp., S.C.	1973-80
Big Salt Wash at Fruita, CO	09153270	142	Temp., S.C.	1973-77

DISCONTINUED SURFACE-WATER-QUALITY STATIONS (Continued)

The following stations were discontinued as continuous-record surface-water-quality stations. Daily records of temperature, specific conductance, pH, dissolved oxygen or sediment were collected and published for the period of record shown for each station. [--, data unavailable]

Station name	Station number	Drainage area (sq mi)	Type of record	Period of record (water years)
Reed Wash near Mack, CO	09153290	15.7	Temp.	1997-98
			S.C.	1997
Reed Wash near Loma, CO	09153300	29.3	Temp., S.C.	1973-83
West Salt Creek near Carbonera, CO	09153330	95.6	Temp., S.C.	1981-82
West Salt Creek near Mack, CO	09153400	168	Temp., S.C.	1973-84
Badger Wash Observation Res 4-A near Mack, CO	09160000	.02	Temp., S.C.	1981
Badger Wash Observation Res 12 near Mack, CO	09160500	.09	Temp., S.C.	1981-82
Badger Wash Observation Res 2-A near Mack, CO	09161000	.15	Temp., S.C.	1981
Badger Wash near Mack, CO	09163050	6.51	Temp., S.C.	1973-80
East Salt Creek near Mack, CO	09163310	197	Temp., S.C.	1973-82
Mack Wash near Mack, CO	09163340	15.9	Temp.	1973-82
			S.C.	1974-82
Salt Creek near Mack, CO	09163490	436	Temp., S.C.	1973-83
Disappointment Creek near Dove Creek, CO	09168100	147	Temp., S.C.	1984
Big Gypsum Creek near Slick Rock, CO	09168800	43.9	Temp., S.C.	1981
Dolores River below W. Paradox Cr near Bedrock, CO	09171070	2,144	Temp., S.C.	1986-87
Salt Creek near Gateway, CO	09179200	31.2	Temp., S.C.	1981-85
Dolores River at Gateway, CO	09179500	4,347	Temp.	1949-52
Yampa River near Oak Creek, CO	09237500	227	Sed.	1985-88
Middle Creek near Oak Creek, CO	09243700	23.5	Temp., S.C.	1976-81
Foidel Creek near Oak Creek, CO	09243800	8.61	Temp., S.C.	1976-83, 1986-88
Foidel Creek at Mouth near Oak Creek, CO	09243900	17.5	Temp., S.C.	1976-81
			Sed.	1978-81
Sage Creek above Sage Creek Res. near Hayden, CO	09244415	4.17	Temp., S.C.	1981-83
Watering Trough Gulch near Hayden, CO	09244460	2.65	Temp., S.C.	1979-81
Hubberson Gulch near Hayden, CO	09244464	8.08	Temp., S.C.	1979-81
Stokes Gulch near Hayden, CO	09244464	13.6	Temp., S.C., Sed.	1978-81
Elkhead Creek above Long Gulch near Hayden, CO	09246200	171	Temp., S.C.	1995-99
Elkhead Creek below Maynard Gulch near Graig, CO	09246400	212	Temp., S.C.	1995-99
Good Spring Creek at Axial, CO	09250400	40.0	Temp.	1975-78
			S.C.	1974-78
Wilson Creek above Taylor Creek near Axial, CO	09250507	20.0	Temp., S.C., Sed.	1980-81
Taylor Creek at Mouth near Axial, CO	09250507	7.22	Temp., S.C.	1976-81
Wilson Creek near Axial, CO	09250600	27.4	Temp.	1975-80
			S.C.	1974-80
			Sed.	1976-80
Jubb Creek near Axial, CO	09250610	7.53	Temp., S.C.	1976-81
Morgan Gulch near Axial, CO	09250700	25.6	Temp., S.C.	1980-81
Little Snake River above Lily, CO	09259950	3,730	Temp., S.C.	1950-69
			Sed.	1958-64
Little Snake River near Lily, CO	09260000	3,730	Temp., S.C.	1975-85
			Sed.	1958-64
Yampa River at Deerlodge Park, CO	09260050	7,660	Temp., S.C.	1977-82
White River above Coal Creek, near Meeker, CO	09304200	648	Temp., S.C.	1978-84
White River near Meeker, CO	09304500	755	Temp., S.C.	1973-74
White River at Meeker, CO	09304600	808	Temp., S.C.	1978-85
White River below Meeker, CO	09304800	1,024	Temp., S.C.	1978-85
Piceance Creek below Rio Blanco, CO	09306007	177	Temp., S.C., Sed.	1974-85
Middle Fork Stewart Gulch near Rio Blanco, CO	09306015	24.0	Temp., S.C.	1976, 1981
			Sed.	1976
Stewart Gulch above West Fork near Rio Blanco, CO	09306022	44.0	Temp., S.C., Sed.	1974-82
West Fork Stewart Gulch near Rio Blanco, CO	09306025	14.2	Temp.	1974-76, 1980-81
			S.C.	1975-76, 1980-81
			Sed.	1974-76
West Fork Stewart Gulch at Mouth near Rio Blanco, CO	09306028	15.7	Temp.	1980-81
			S.C.	1977, 1980-81
			Sed.	1975-76, 1980-81

DISCONTINUED SURFACE-WATER-QUALITY STATIONS (Continued)

The following stations were discontinued as continuous-record surface-water-quality stations. Daily records of temperature, specific conductance, pH, dissolved oxygen or sediment were collected and published for the period of record shown for each station. [--, data unavailable]

Station name	Station number	Drainage area (sq mi)	Type of record	Period of record (water years)
Sorghum Gulch near Rio Blanco, CO	09306033	1.22	Temp., S.C.	1975-76, 1980
			Sed.	1975-76
Sorghum Gulch at Mouth near Rio Blanco, CO	09306036	3.62	Temp., S.C.	1976, 1978, 1980
			Sed.	1975-77, 1982
Cottonwood Gulch near Rio Blanco, CO	09306039	1.20	Temp., S.C.	1976-78, 1980
			Sed.	1974-77, 1980
Piceance Creek Tributary near Rio Blanco, CO	09306042	1.06	Temp., S.C.	1974-86
			Sed.	1974-82
Piceance Creek below Gardenhire Gulch near Rio Blanco, CO	09306045	255	Temp., S.C.	1980-81
Scandard Gulch near Rio Blanco, CO	09306050	6.61	Temp., S.C.	1980
			Sed.	1975-76
Scandard Gulch at Mouth near Rio Blanco, CO	09306052	7.97	Temp., S.C.	1976, 1978, 1980
			Sed.	1974-76, 1980
Willow Creek near Rio Blanco, CO	09306058	48.4	Temp., S.C.	1974-82
			pH, D.O.	1976-82
			Sed.	1974-82
Piceance Creek above Hunter Creek near Rio Blanco, CO	09306061	309	Temp., S.C., Sed.	1974-85
			pH, D.O.	1974-84
Black Sulphur Creek near Rio Blanco, CO	09306175	103	Temp., S.C., Sed.	1975-81
Piceance Creek below Ryan Gulch near Rio Blanco, CO	09306200	506	Sed.	1972-83
			Temp., S.C.	1980-82, 1986-98
Horse Draw near Rangely, CO	09306202	1.47	Sed.	1980
Horse Draw at Mouth near Rangely, CO	09306203	2.87	Temp., S.C.	1980
			Sed.	1980-81
Piceance Creek at White River, CO	09306222	652	Temp., S.C., Sed.	1974-83
Stake Springs Draw near Rangely, CO	09306230	26.1	Temp., S.C., Sed.	1977
Corral Gulch below Water Gulch near Rangely, CO	09306235	8.61	Temp., S.C.	1975-85
			Sed.	1974-82
Dry Fork near Rangely, CO	09306237	2.74	Temp., S.C.	1977, 1979, 1982
			Sed.	1975, 1977, 1979, 1981-82
Box Elder Gulch near Rangely, CO	09306240	9.21	Temp., S.C.	1975-85
			Sed.	1975-82
Box Elder Gulch Tributary near Rangely, CO	09306241	2.39	Temp.	1976, 1980-81
			S.C.	1976-77, 1981
			Sed.	1975, 1980, 1982
Corral Gulch near Rangely, CO	09306242	31.6	Temp., S.C.	1975-87
			Sed.	1974-85
Corral Gulch at 84 Ranch, CO	09306244	37.8	Temp., S.C. Sed.	1975-77
Yellow Creek Tributary near 84 Ranch, CO	09306246	5.53	Sed.	1976
Duck Creek at Upper Station near 84 Ranch, CO	09306248	39.1	Sed.	1976
Duck Creek near 84 Ranch, CO	09306250	50.0	Temp., S.C.	1977
Yellow Creek near White River, CO	09306255	262	Temp., S.C. Sed.	1974-82
Windy Pass Creek near Pagosa Springs, CO	09341350	1.41	Sed.	1986
West Fork San Juan River near Pagosa Springs, CO	09341500	87.9	Sed.	1985-87

DISCONTINUED SURFACE-WATER-QUALITY STATIONS (Continued)

The following stations were discontinued as continuous-record surface-water-quality stations. Daily records of temperature, specific conductance, pH, dissolved oxygen or sediment were collected and published for the period of record shown for each station. [--, data unavailable]

Station name	Station number	Drainage area (sq mi)	Type of record	Period of record (water years)
Rio Blanco near Pagosa Springs, CO	09343000	58.0	Sed.	1961-62
Navajo River above Chromo, CO	09344300	96.4	Sed.	1961-62
Vallecito Creek near Bayfield, CO	09352900	72.1	Temp.	1962-82
Mancos River near Cortez, CO	09370800	302	Temp., S.C.	1976-79
Mancos River below Johnson Canyon near Cortez, CO	09370820	320	Temp., S.C.	1979-82
Mancos River near Towaoc, CO	09371000	526	Sed.	1961
Hartman Draw at Cortez, CO	09371400	34.0	Temp., S.C.	1978-81
McElmo Creek near Cortez, CO	09371500	230	Temp., S.C.	1982-93

Type of record: Temp. (temperature), S.C. (specific conductance), pH (pH), D.O. (dissolved oxygen), Sed. (sediment).

PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS

The U.S.G.S. publishes a series of manuals describing procedures for planning and conducting specialized work in water-resources investigations. The material is grouped under major subject headings called books and is further divided into sections and chapters. For example, section A of book 3 (Applications of Hydraulics) pertains to surface water. The chapter, the unit of publication, is limited to a narrow field of subject matter. This format permits flexibility in revision and publication as the need arises.

The reports listed below are for sale by the U.S.G.S., Information Services, Box 25286, Federal Center, Denver, Colorado 80225 (authorized agent of the Superintendent of Documents, Government Printing Office). Prepayment is required. Remittance should be made in the form of a check or money order payable to the "U.S. Geological Survey." Prices are not included because they are subject to change. Current prices can be obtained by writing to the above address. When ordering or inquiring about prices for any of these publications, please give the title, book number, chapter number, and mention the "U.S. Geological Survey Techniques of Water-Resources Investigations."

Book 1. Collection of Water Data by Direct Measurement

Section D. Water Quality

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

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

Book 2. Collection of Environmental Data

Section D. Surface Geophysical Methods

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

2-D2. *Application of seismic-refraction techniques to hydrologic studies,* by F.P. Haeni: USGS–TWRI book 2, chap. D2. 1988. 86 pages.

Section E. Subsurface Geophysical Methods

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

2-E2. *Borehole geophysics applied to ground-water investigations,* by W.S. Keys: USGS–TWRI book 2, chap. E2. 1990. 150 pages.

Section F. Drilling and Sampling Methods

2-F1. *Application of drilling, coring, and sampling techniques to test holes and wells*, by Eugene Shuter and W.E. Teasdale: USGS–TWRI book 2, chap. F1. 1989. 97 pages.

Book 3. Applications of Hydraulics

Section A. Surface-Water Techniques

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

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

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

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

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

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

3-A7. *Stage measurement at gaging stations,* by T.J. Buchanan and W.P. Somers: USGS–TWRI book 3, chap. A7. 1968. 28 pages.

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

3-A9. *Measurement of time of travel in streams by dye tracing,* by F.A. Kilpatrick and J.F. Wilson, Jr.: USGS–TWRI book 3, chap. A9. 1989. 27 pages.

3-Al0. *Discharge ratings at gaging stations,* by E.J. Kennedy: USGS–TWRI book 3, chap. A10. 1984. 59 pages.

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

3-A12. *Fluorometric procedures for dye tracing*, Revised, by J.F. Wilson, Jr., E.D. Cobb, and F.A. Kilpatrick: USGS–TWRI book 3, chap. A12. 1986. 34 pages.

3-A13. *Computation of continuous records of streamflow*, by E.J. Kennedy: USGS–TWRI book 3, chap. A13. 1983. 53 pages.

3-A14. *Use of flumes in measuring discharge,* by F.A. Kilpatrick and V.R. Schneider: USGS–TWRI book 3, chap. A14. 1983. 46 pages.

3-A15. *Computation of water-surface profiles in open channels,* by Jacob Davidian: USGS–TWRI book 3, chap. A15. 1984. 48 pages.

3-A16. *Measurement of discharge using tracers*, by F.A. Kilpatrick and E.D. Cobb: USGS–TWRI book 3, chap. A16. 1985. 52 pages.

3-A17. *Acoustic velocity meter systems,* by Antonius Laenen: USGS–TWRI book 3, chap. A17. 1985. 38 pages.

3-A18. *Determination of stream reaeration coefficients by use of tracers,* by F.A. Kilpatrick, R.E. Rathbun, Nobuhiro Yotsukura, G.W. Parker, and L.L. DeLong: USGS–TWRI book 3, chap. A18. 1989. 52 pages.

3-A19. *Levels at streamflow gaging stations*, by E.J. Kennedy: USGS–TWRI book 3, chap. A19. 1990. 31 pages.

3-A20. *Simulation of soluable waste transport and buildup in surface waters using tracers*, by F.A. Kilpatrick: USGS–TWRI book 3, chap. A20. 1993. 38 pages.

3-A21 *Stream-gaging cableways,* by C. Russell Wagner: USGS–TWRI book 3, chap. A21. 1995. 56 pages.

Section B. Ground-Water Techniques

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

3-B2. *Introduction to ground-water hydraulics, a programed text for self-instruction*, by G.D. Bennett: USGS–TWRI book 3, chap. 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, chap. B3. 1980. 106 pages.

3-B4. *Regression modeling of ground-water flow,* by R.L. Cooley and R.L. Naff: USGS–TWRI book 3, chap. B4. 1990. 232 pages.

3-B4. *Supplement 1. Regression modeling of ground-water flow --Modifications to the computer code for nonlinear regression solution of steady-state ground-water flow problems,* by R.L. Cooley: USGS–TWRI book 3, chap. B4. 1993. 8 pages.

3-B5. *Definition of boundary and initial conditions in the analysis of saturated ground-water flow systems—An introduction*, by O.L. Franke, T.E. Reilly, and G.D. Bennett: USGS–TWRI book 3, chap. B5. 1987. 15 pages.

3-B6. *The principle of superposition and its application in ground-water hydraulics,* by T.E. Reilly, O.L. Franke, and G.D. Bennett: USGS–TWRI book 3, chap. B6. 1987. 28 pages.

3-B7. *Analytical solutions for one-, two-, and three-dimensional solute transport in ground-water systems with uniform flow,* by E.J. Wexler: USGS–TWRI book 3, chap. B7. 1992. 190 pages.

Section C. Sedimentation and Erosion Techniques

3-C1. *Fluvial sediment concepts,* by H.P. Guy: USGS–TWRI book 3, chap. C1. 1970. 55 pages.

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

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

Book 4. Hydrologic Analysis and Interpretation

Section A. Statistical Analysis

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

4-A2. *Frequency curves,* by H.C. Riggs: USGS–TWRI book 4, chap. A2. 1968. 15 pages.

Section B. Surface Water

4-B1. *Low-flow investigations,* by H.C. Riggs: USGS–TWRI book 4, chap. B1. 1972. 18 pages.

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

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

Section D. Interrelated Phases of the Hydrologic Cycle

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

Book 5. Laboratory Analysis

Section A. Water Analysis

5-A1. *Methods for determination of inorganic substances in water and fluvial sediments,* by M.J. Fishman and L.C. Friedman, editors: USGS–TWRI book 5, chap. A1. 1989. 545 pages.

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

5-A3. *Methods for the determination of organic substances in water and fluvial sediments*, edited by R.L. Wershaw, M.J. Fishman, R.R. Grabbe, and L.E. Lowe: USGS–TWRI book 5, chap. A3. 1987. 80 pages.

5-A4. *Methods for collection and analysis of aquatic biological and microbiological samples,* by L.J. Britton and P.E. Greeson, editors: USGS–TWRI book 5, chap. A4. 1989. 363 pages.

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

5-A6. *Quality assurance practices for the chemical and biological analyses of water and fluvial sediments,* by L.C. Friedman and D.E. Erdmann: USGS–TWRI book 5, chap. A6. 1982. 181 pages.

Section C. Sediment Analysis

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

Book 6. Modeling Techniques

Section A. Ground Water

6-A1. *A modular three-dimensional finite-difference ground-water flow model*, by M.G. McDonald and A.W. Harbaugh: USGS–TWRI book 6, chap. A1. 1988. 586 pages.

6-A2. *Documentation of a computer program to simulate aquifer-system compaction using the modular finite-difference ground-water flow model,* by S.A. Leake and D.E. Prudic: USGS–TWRI book 6, chap. A2. 1991. 68 pages.

6-A3. *A modular finite-element model (MODFE) for areal and axisymmetric ground-water-flow problems, Part 1: Model Description and User's Manual,* by L.J. Torak: USGS–TWRI book 6, chap. A3. 1993. 136 pages.

6-A4. *A modular finite-element model (MODFE) for areal and axisymmetric ground-water-flow problems, Part 2: Derivation of finite-element equations and comparisons with analytical solutions,* by R.L. Cooley: USGS–TWRI book 6, chap. A4. 1992. 108 pages.

6-A5. *A modular finite-element model (MODFE) for areal and axisymmetric ground-water-flow problems, Part 3: Design philosophy and programming details,* by L.J. Torak: USGS–TWRI book 6, chap. A5, 1993. 243 pages.

6-A6. A coupled surface-water and ground-water flow model (MODBRANCH) for simulation of stream-aquifer interaction, by Eric D. Swain and Eliezer J. Wexler. 1996. 125 pages.

Book 7. Automated Data Processing and Computations

Section C. Computer Programs

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

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

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

Book 8. Instrumentation

Section A. Instruments for Measurement of Water Level

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

8-A2. *Installation and service manual for U.S. Geological Survey manometers*, by J.D. Craig: USGS–TWRI book 8, chap. A2. 1983. 57 pages.

Section B. Instruments for Measurement of Discharge

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

Book 9. Handbooks for Water-Resources Investigations

Section A. National Field Manual for the Collection of Water-Quality Data

9-A1. *National Field Manual for the Collection of Water-Quality Data: Preparations for Water Sampling*, by F.D. Wilde, D.B. Radtke, Jacob Gibs, and R.T. Iwatsubo: USGS–TWRI book 9, chap. A1. 1998. 47 p.

9-A2. *National Field Manual for the Collection of Water-Quality Data: Selection of Equipment for Water Sampling*, edited by F.D. Wilde, D.B. Radtke, Jacob Gibs, and R.T. Iwatsubo: USGS–TWRI book 9, chap. A2. 1998. 94 p.

9-A3. *National Field Manual for the Collection of Water-Quality Data: Cleaning of Equipment for Water Sampling*, edited by F.D. Wilde, D.B. Radtke, Jacob Gibs, and R.T. Iwatsubo: USGS–TWRI book 9, chap. A3. 1998. 75 p.

9-A4. *National Field Manual for the Collection of Water-Quality Data: Collection of Water Samples*, edited by F.D. Wilde, D.B. Radtke, Jacob Gibs, and R.T. Iwatsubo: USGS–TWRI book 9, chap. A4. 1999. 156 p.

9-A5. *National Field Manual for the Collection of Water-Quality Data: Processing of Water Samples*, edited by F.D. Wilde, D.B. Radtke, Jacob Gibs, and R.T. Iwatsubo: USGS–TWRI book 9, chap. A5. 1999, 149 p.

9-A6. *National Field Manual for the Collection of Water-Quality Data: Field Measurements*, edited by F.D. Wilde and D.B. Radtke: USGS–TWRI book 9, chap. A6. 1998. Variously paginated.

9-A7. *National Field Manual for the Collection of Water-Quality Data: Biological Indicators*,edited by D.N. Myers and F.D. Wilde: USGS–TWRI book 9, chap. A7. 1997 and 1999. Variously paginated.

9-A8. *National Field Manual for the Collection of Water-Quality Data: Bottom-material samples*, by D.B. Radtke: USGS–TWRI book 9, chap. A8. 1998. 48 pages.

9-A9. *National Field Manual for the Collection of Water-Quality Data: Safety in Field Activities*, by S.L. Lane and R.G. Fay: USGS–TWRI book 9, chap. A9. 1998. 60 pages.

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

LOCATION.--Lat 40°19'33", long 105°51'22", in $NE^{1}/_{4}Nw^{1}/_{4}$ sec.12, T.4 N., R.76 W., Grand County, Hydrologic Unit 14010001, on left bank 500 ft downstream from Baker Gulch, 1.0 mi upstream from Bowen Gulch, and 5.5 mi northwest of town of Grand Lake.

DRAINAGE AREA.--53.4 mi^2.

PERIOD OF RECORD.--May 1953 to current year. Water-quality periodic record from December 1994 to September 1998. Daily water temperature record from October 1996 to September 1998.

REVISED RECORDS.--WSP 2124: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 8,750 ft above sea level, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. Transmountain diversion upstream from station by Grand River ditch (see elsewhere in this report).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27	31	e11	e9.3	e9.2	e10	e17	52	286	234	58	45
2	44	31	e11	e9.3	e9.3	e10	e18	51	280	236	48	46
3	45	e31	e11	e9.3	e9.3	e10	e18	48	309	225	43	43
4	54	e31	e11	e9.3	e9.3	e10	e19	47	326	211	50	48
5	40	e31	e11	e9.3	e9.3	e10	e19	39	293	193	70	42
6	38	e29	e11	e9.3	e9.3	e10	e20	36	253	181	55	39
7	38	e25	e11	e9.3	e9.3	e10	e21	40	233	168	50	36
8	45	e25	e11	e9.3	e9.3	e10	e21	58	260	168	45	34
9	44	e25	e11	e9.3	e9.3	e10	e22	e70	289	146	46	32
10	44	e25	e11	e9.3	e9.3	e10	e23	e74	290	107	47	32
11	41	e25	e11	e9.3	e9.3	e10	e24	e78	282	100	43	37
12	37	e20	e11	e9.3	e9.3	e10	e24	e80	265	102	41	37
13	37	e20	e11	e9.3	e9.3	e10	e24	e84	257	88	38	32
14	39	e20	e11	e9.3	e9.3	e10	24	e87	266	84	35	29
15	40	e20	e11	e9.3	e9.3	e12	24	79	314	91	34	28
16	37	e20	e11	e9.3	e9.3	e12	e24	78	313	89	33	27
17	35	e20	e11	e9.3	e9.3	e12	e24	76	323	87	38	26
18	34	e20	e11	e9.3	e9.3	e12	e23	84	326	81	36	26
19	33	e20	e10	e9.3	e9.3	e12	e23	110	326	95	35	28
20	33	e20	e10	e9.3	e9.3	e12	27	146	309	104	56	45
21	30	e15	e10	e9.3	e9.3	e12	35	170	322	79	46	39
22	32	e15	e10	e9.3	e9.3	e12	33	200	334	75	48	34
23	31	e15	e10	e9.3	e9.8	e12	33	242	367	69	37	30
24	29	e15	e10	e9.3	e10	e12	45	313	427	67	33	29
25	28	e15	e10	e9.3	e10	e15	54	307	412	71	44	28
26	28	e11	e9.3	e9.3	e10	e16	38	301	398	61	50	26
27	28	e11	e9.3	e9.3	e10	e16	38	292	369	57	62	24
28	32	e11	e9.3	e9.3	e10	e16	45	287	334	65	56	24
29	32	e11	e9.3	e9.3	---	e17	62	331	296	63	51	25
30	33	e11	e9.3	e9.3	---	e17	62	363	251	60	46	28
31	33	---	e9.3	e9.3	---	e17	---	335	---	58	44	---
TOTAL	1121	619	323.8	288.3	264.3	374	884	4558	9310	3515	1418	999
MEAN	36.2	20.6	10.4	9.30	9.44	12.1	29.5	147	310	113	45.7	33.3
MAX	54	31	11	9.3	10	17	62	363	427	236	70	48
MIN	27	11	9.3	9.3	9.2	10	17	36	233	57	33	24
AC-FT	2220	1230	642	572	524	742	1750	9040	18470	6970	2810	1980

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1953 - 1999, BY WATER YEAR (WY)

MEAN	24.4	15.6	10.0	7.96	7.15	7.70	27.3	168	320	115	34.7	27.3
MAX	83.7	37.2	20.2	12.8	10.6	12.1	74.5	329	596	425	104	78.1
(WY)	1962	1962	1998	1985	1984	1999	1962	1996	1997	1983	1983	1997
MIN	9.25	7.43	4.56	3.91	3.90	4.57	9.11	65.7	69.8	27.3	11.1	11.8
(WY)	1957	1957	1957	1957	1977	1977	1991	1995	1954	1954	1954	1956

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1953 - 1999	
ANNUAL TOTAL	20325.4		23674.4			
ANNUAL MEAN	55.7		64.9		64.2	
HIGHEST ANNUAL MEAN					109	1983
LOWEST ANNUAL MEAN					26.3	1954
HIGHEST DAILY MEAN	370	Jun 3	427	Jun 24	916	Jun 30 1957
LOWEST DAILY MEAN	e8.0	Feb 1	e9.2	Feb 1	3.0	Jan 13 1963
ANNUAL SEVEN-DAY MINIMUM	8.0	Feb 1	9.3	Jan 26	3.5	Feb 4 1977
INSTANTANEOUS PEAK FLOW			489	Jun 23	976	Jun 30 1957
INSTANTANEOUS PEAK STAGE			6.30	Jun 23	a7.19	Jun 30 1957
ANNUAL RUNOFF (AC-FT)	40320		46960		46480	
10 PERCENT EXCEEDS	168		252		193	
50 PERCENT EXCEEDS	25		29		18	
90 PERCENT EXCEEDS	8.6		9.3		6.5	

e Estimated
a Maximum gage height, 7.32 ft, Jun 10, 1995, but may have been higher during period of estimated record, Jun 13-20, 1995.

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

WATER-QUALITY RECORDS

LOCATION.--Lat 40°19'40", long 105°34'39", in $SW^1/_4NW^1/_4$ sec.9, T.4 N., R.73 W., Larimer County, Hydrologic Unit 10190006, on right bank at upstream end of Aspen Creek siphon, 700 ft downstream from east portal, and 4.5 mi southwest of Estes Park.

PERIOD OF RECORD.--September 1970 to current year. Water discharge records published from October 1946 to September 1998 (monthly discharge only for August and September 1947).

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)
DEC												
07...	0845	11	35	8.5	3.0	8.3	14	4.4	.81	1.7	.2	.5
JAN												
11...	0930	102	37	8.4	2.5	11.2	16	4.9	.95	1.5	.2	.5
MAR												
01...	0840	559	49	8.2	2.0	9.3	20	6.1	1.2	1.8	.2	.6
MAY												
03...	0900	355	45	8.1	4.0	8.8	19	5.8	1.1	1.7	.2	.6
AUG												
09...	0900	166	30	8.5	17.0	6.9	12	3.7	.71	1.2	.2	.4
SEP												
08...	0840	9.1	29	8.5	14.5	7.1	12	3.7	.68	1.6	.2	.4

DATE	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS-SOLVED (TONS PER DAY) (70302)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)
DEC												
07...	16	1.5	.4	.1	4.7	34	24	.05	.97	<.01	.09	.02
JAN												
11...	17	2.3	.3	.1	5.0	32	26	.04	8.81	.01	.08	.02
MAR												
01...	23	2.6	.5	.1	5.4	37	32	.05	55.8	<.01	.05	<.02
MAY												
03...	21	2.4	.7	.1	5.2	36	31	.05	34.5	<.01	.07	.04
AUG												
09...	14	1.7	.4	.1	3.9	21	21	.03	9.41	<.01	<.05	<.02
SEP												
08...	14	1.4	E.2	.1	4.1	24	--	--	--	<.01	<.05	<.02

DATE	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (01010)	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)
DEC											
07...	.2	.03	<.05	.01	5	<1.6	<16.0	<8	<14	<7	<10
JAN											
11...	.2	E.01	<.05	<.01	5	<1.6	<16.0	<8	<14	<7	<10
MAR											
01...	.2	<.05	<.05	.01	7	<1.6	<16.0	<8	<14	<7	<10
MAY											
03...	.2	<.05	<.05	<.01	6	<1.6	E8.1	<8	<14	<7	<10
AUG											
09...	.2	<.05	<.05	<.01	4	<1.6	<16.0	<8	<14	<7	<10
SEP											
08...	.1	<.05	<.05	<.01	5	<1.6	<16.0	<8	<14	<13	<10

E Estimated.

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	LITHIUM DIS-SOLVED (UG/L AS LI) (01130)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
DEC											
07...	E9	<100	<6	<10	<3	<50	<40	<4	25	<10	<20
JAN											
11...	23	<100	<6	<10	<3	<50	<40	<4	28	<10	<20
MAR											
01...	16	<100	<6	<10	<3	<50	<40	<4	35	<10	<20
MAY											
03...	23	<100	<6	18.1	<3	<50	<40	<4	32	<10	<20
AUG											
09...	15	<100	<6	10	<3	<50	<40	<4	21	<10	<20
SEP											
08...	13	<100	<4	8.5	E2	<30	<40	<7	21	<10	<20

E Estimated.

09014500 SHADOW MOUNTAIN LAKE NEAR GRAND LAKE, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 40°12'26", long 105°50'27", in $SW^1/_4NW^1/_4$ sec.19, T.3 N., R.75 W., Grand County, Hydrologic Unit 14010001, in gate house on left side of outlet gates near center of Shadow Mountain Dam on Colorado River, 1.0 mi upstream from Pole Creek and 3.2 mi south of town of Grand Lake.

DRAINAGE AREA.--185 mi^2.

PERIOD OF RECORD.--May 1989 to current year. Reservoir elevation and contents published April 1947 to September 1998. Prior to October 1960, elevations and contents were published as Shadow Mountain Reservoir near Grand Lake.

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

REMARKS.--Samples were collected near-surface and near-bottom, near dam.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	SAMPLING DEPTH (FEET) (00003)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	OXYGEN, DISSOLVED (MG/L) (00300)
OCT						
21...	0945	.100	50	7.6	7.5	7.0
21...	0946	5.00	50	7.5	7.5	7.0
21...	0947	10.0	50	7.5	7.4	7.0
21...	0948	15.0	50	7.5	7.4	7.0
21...	0949	20.0	50	7.5	7.4	6.9
21...	0950	25.0	49	7.4	7.3	6.2
AUG						
03...	1215	.1	46	7.8	18.1	6.6
03...	1216	5.0	46	7.8	17.4	6.6
03...	1217	10	46	7.8	16.6	6.6
03...	1218	15	48	7.8	12.1	5.8
03...	1219	20	48	7.7	11.5	5.7
03...	1220	25	48	7.7	10.9	5.1
03...	1221	29	48	7.6	10.6	4.3
SEP						
15...	1130	.1	52	8.5	14.5	7.8
15...	1131	5.0	52	8.6	14.1	7.8
15...	1132	10	52	8.6	13.9	8.0
15...	1133	15	52	8.6	13.7	7.9
15...	1134	17	52	8.6	13.7	7.7

DATE	TIME	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	TRANSPARENCY (SECCHI DISK) (IN) (00077)	OXYGEN, DISSOLVED (MG/L) (00300)	COLIFORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	HARDNESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	SODIUM ADSORPTION RATIO (00931)
OCT												
21...	1000	50	7.6	7.5	96.0	7.0	<1	23	6.9	1.3	1.8	.2
21...	1015	49	7.4	7.3	--	6.2	--	23	7.0	1.4	1.9	.2
MAY												
26...	1130	--	--	--	85	--	<1	22	6.4	1.3	1.9	.2
26...	1145	--	--	--	--	--	--	20	6.0	1.3	1.8	.2
AUG												
03...	1230	46	7.8	18.1	157	6.6	K1	20	5.9	1.2	1.7	.2
03...	1245	48	7.6	10.6	--	4.3	--	20	6.2	1.2	1.7	.2
SEP												
15...	1140	52	8.5	14.5	83	7.8	<1	22	6.5	1.4	1.7	.2
15...	1155	52	8.6	13.7	--	7.7	--	23	7.0	1.4	1.9	.2

DATE	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)	SOLIDS, DISSOLVED (TONS PER AC-FT) (70303)	NITROGEN, NITRITE DISSOLVED (MG/L AS N) (00613)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)
OCT												
21...	.7	24	2.9	.4	.2	4.9	41	34	.06	<.01	<.05	<.02
21...	.7	24	2.8	.4	.2	5.1	42	34	.06	<.01	<.05	<.02
MAY												
26...	.8	23	2.7	.3	.2	6.1	37	34	.05	<.01	<.05	<.02
26...	.8	22	2.7	.3	.2	6.1	36	33	.05	<.01	<.05	<.02
AUG												
03...	.6	21	2.6	.4	.1	5.3	32	30	.04	<.01	<.05	<.02
03...	.7	22	2.7	.3	.1	5.2	33	31	.04	<.01	<.05	<.02
SEP												
15...	.6	24	3.2	E.3	.1	6.5	43	--	--	<.01	<.05	<.02
15...	.6	25	2.9	E.3	.1	6.5	40	--	--	<.01	<.05	<.02

E Estimated.
K Based on non-ideal colony count.

09014500 SHADOW MOUNTAIN LAKE NEAR GRAND LAKE, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	CHLOR-A PHYTO-PLANK-TON CHROMO FLUOROM (UG/L) (70953)	CHLOR-B PHYTO-PLANK-TON CHROMO FLUOROM (UG/L) (70954)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (01010)	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)
OCT												
21...	.2	<.05	<.05	<.01	3.2	.1	3.5	7	<1.6	<16.0	<8	<14
21...	.3	<.05	<.05	<.01	--	--	4.1	7	<1.6	<16.0	<8	<14
MAY												
26...	.3	<.050	.016	.01	1.6	<.1	9.3	7	<1.6	<16.0	<1	<14
26...	.3	<.006	.02	.01	--	--	9.4	6	<1.6	<16.0	<1	<14
AUG												
03...	.1	<.05	<.05	<.01	.5	<.1	3.4	6	<1.6	<16.0	<1	<14
03...	.2	<.05	<.05	<.01	--	--	3.4	7	<1.6	<16.0	<1	<14
SEP												
15...	.3	<.05	<.05	<.01	5.6	<.1	3.9	6	<1.6	<16.0	<1	<14
15...	.4	E.04	<.05	<.01	--	--	4.7	6	<1.6	<16.0	<1	<14

DATE	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	LITHIUM DIS-SOLVED (UG/L AS LI) (01130)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
OCT												
21...	<7	<10	18	<100	<6	<3	<50	<40	<.20	39	<10	E10
21...	<7	<10	18	<100	<6	4	<50	<40	<.20	40	<10	<20
MAY												
26...	<7	<10	80	<100	E3	E3	<50	<40	<.20	36	<10	<20
26...	<7	<10	90	<100	<6	<3	<50	<40	<.20	33	<10	<20
AUG												
03...	<7	<10	60	<100	<6	E3	<50	<40	<.20	32	<10	<20
03...	<7	<10	17	<100	E5	E2	<50	<40	<.20	35	<10	<20
SEP												
15...	<13	<10	120	<100	<4	3	E20	<40	<.20	39	<10	<20
15...	<13	<10	120	<100	<4	2	<30	<40	<.20	39	<10	<20

E Estimated.

09018300 GRANBY PUMP CANAL NEAR GRAND LAKE, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 40°12'25", long 105°50'56", in $SW^1/_4NE^1/_4$ sec.24, T. 3 N., R.76 W., Grand County, Hydrologic Unit 14010001, at road crossing at south end of Shadow Mountain Lake, 4 mi southwest of Grand Lake, and 13.5 mi northeast of Granby.

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)
OCT											
21...	0855	358	47	7.3	7.4	2.2	22	6.6	1.2	1.8	.2
FEB											
23...	1015	393	50	8.0	2.3	10.4	21	6.5	1.2	1.8	.2

DATE	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS-SOLVED (TONS PER DAY) (70302)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)
OCT											
21...	.6	22	2.4	.4	.1	5.9	41	33	.06	39.5	<.01
FEB											
23...	.6	24	2.6	.4	<.1	5.1	41	33	.06	43.5	<.01

DATE	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (01010)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)
OCT											
21...	.08	<.02	.1	<.05	<.05	<.01	7	<1.6	<8	<14	<7
FEB											
23...	<.05	<.02	.2	<.05	<.05	<.01	7	<1.6	<8	<14	<7

DATE	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	LITHIUM DIS-SOLVED (UG/L AS LI) (01130)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
OCT											
21...	<10	17	<100	<6	27	<50	<40	<4	39	<10	E13
FEB											
23...	<10	<10	<100	<6	<3	<50	<40	<4	38	<10	<20

E Estimated.

09018500 LAKE GRANBY NEAR GRANBY, CO

LOCATION.--Lat 40°10'55", long 105°52'14", in NW$^{1}/_{4}$NE$^{1}/_{4}$ sec.35, T.3 N., R.76 W., Grand County, Hydrologic Unit 14010001, in Granby pumping plant at north shore of lake, 2.5 mi north of Granby Dam on Colorado River and 7.5 mi northeast of Granby.

DRAINAGE AREA.--312 mi^{2}.

RESERVOIR ELEVATIONS AND CONTENTS RECORDS

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

REVISED RECORDS.--WSP 2124: Drainage area.

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

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

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

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

EXTREMES FOR CURRENT YEAR.--Maximum contents, 463,000 acre-ft, June 29, July 2,3, elevation, 8,279.65 ft; minimum, 344,500 acre-ft, May 9, elevation, 8,262.36 ft.

MONTHEND ELEVATION AND CONTENTS AT 0800, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	8,273.79	421,300	-
Oct. 31	8,274.45	426,000	+4,700
Nov. 30	8,275.17	431,000	+5,000
Dec. 31	8,273.06	416,200	-14,800
CAL YR 1998	-	-	-800
Jan. 31	8,272.60	413,000	-3,200
Feb. 28	8,269.91	394,500	-18,500
Mar. 31	8,265.59	365,500	-29,000
Apr. 30	8,262.77	347,200	-18,300
May 31	8,268.15	382,600	+35,400
June 30	8,279.64	463,000	+80,400
July 31	8,278.88	457,500	-5,500
Aug. 31	8,279.29	460,400	+2,900
Sept. 30	8,277.53	447,800	-12,600
WTR YR 1999	-	-	+26,500

09018500 LAKE GRANBY NEAR GRANBY, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1973 to June 1975, June 1979 to current year.

REMARKS.--Samples were collected near-surface and near- bottom, near spillway.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	SAMPLING DEPTH (FEET) (00003)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	OXYGEN, DISSOLVED (MG/L) (00300)
OCT						
21...	1216	.1	47	7.7	11.1	6.6
21...	1217	5.0	47	7.6	10.8	6.5
21...	1218	10	47	7.6	10.7	6.6
21...	1219	15	47	7.6	10.6	6.5
21...	1220	20	47	7.6	10.6	6.5
21...	1221	25	47	7.5	10.6	6.5
21...	1222	30	47	7.5	10.5	6.4
21...	1223	40	47	7.5	10.4	6.3
21...	1224	50	47	7.5	10.4	6.3
21...	1225	60	47	7.4	10.0	4.8
21...	1226	70	46	7.1	8.2	1.8
21...	1227	80	47	7.1	7.3	1.6
21...	1228	90	46	7.0	7.1	1.6
21...	1229	100	46	7.0	7.1	1.7
21...	1230	110	46	7.0	7.0	1.6
21...	1231	120	46	6.9	7.0	1.6
21...	1232	130	46	7.0	7.0	1.5
MAY						
26...	0915	.1	53	7.9	9.8	9.0
26...	0916	5.0	53	7.9	9.6	9.0
26...	0917	10	53	7.9	9.4	9.0
26...	0918	15	52	7.9	9.2	9.0
26...	0919	20	52	7.9	9.1	9.1
26...	0920	25	52	7.9	8.3	9.1
26...	0921	30	51	7.9	6.7	9.1
26...	0922	40	52	7.9	5.9	9.1
26...	0923	50	52	7.9	5.5	8.9
26...	0924	60	51	7.8	5.1	8.8
26...	0925	70	50	7.8	5.0	8.7
26...	0926	80	50	7.8	4.8	8.6
26...	0927	90	50	7.8	4.8	8.6
26...	0928	100	50	7.7	4.8	8.5
26...	0929	110	50	7.7	4.7	8.5
26...	0930	120	50	7.7	4.7	8.4
26...	0931	130	50	7.7	4.7	8.4
AUG						
03...	0935	.1	50	8.4	18.9	6.5
03...	0936	5.0	50	8.4	18.8	6.5
03...	0937	10	50	8.4	18.7	6.5
03...	0938	15	50	8.4	18.6	6.5
03...	0939	20	49	8.4	18.6	6.4
03...	0940	25	49	8.4	18.5	6.3
03...	0941	30	51	8.2	16.1	5.3
03...	0942	40	47	8.1	12.1	4.7
03...	0943	50	48	8.0	9.3	5.0
03...	0944	60	50	8.0	7.3	4.7
03...	0945	70	50	7.9	6.9	4.9
03...	0946	80	50	7.9	6.5	5.0
03...	0947	90	50	7.8	6.4	5.0
03...	0948	100	50	7.8	6.2	5.0
03...	0949	108	50	7.8	6.1	5.0
SEP						
15...	0915	.1	47	7.4	15.1	6.7
15...	0916	5.0	47	7.4	15.1	6.7
15...	0917	10	47	7.4	15.1	6.7
15...	0918	15	47	7.4	15.1	6.7
15...	0919	20	47	7.4	15.1	6.7
15...	0920	25	47	7.4	15.1	6.7
15...	0921	30	47	7.4	15.1	6.7
15...	0922	40	47	7.4	14.9	6.5
15...	0923	50	47	7.2	11.7	3.6
15...	0924	60	48	7.2	8.4	3.9
15...	0925	70	48	7.2	7.6	3.9
15...	0926	80	48	7.1	7.4	4.0
15...	0927	90	48	7.1	6.9	4.0
15...	0928	100	48	7.1	6.8	4.2
15...	0929	110	48	7.0	6.7	4.2
15...	0930	120	48	7.0	6.7	4.2
15...	0931	130	48	7.0	6.6	4.2
15...	0932	140	48	7.0	6.6	4.2
15...	0933	150	48	7.0	6.6	4.1
15...	0934	158	48	6.9	6.5	4.1

09018500 LAKE GRANBY NEAR GRANBY, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	TRANS-PAR-ENCY (SECCHI DISK) (IN) (00077)	OXYGEN, DIS-SOLVED (MG/L) (00300)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)
OCT												
21...	1245	47	7.7	11.1	208	6.6	<1	21	6.5	1.2	1.8	.2
21...	1300	46	7.0	7.0	--	1.5	--	21	6.5	1.2	1.7	.2
MAY												
26...	0945	53	7.9	9.8	116	9.0	K1	22	6.8	1.3	2.1	.2
26...	1000	50	7.7	4.7	--	8.4	--	22	6.7	1.2	1.9	.2
AUG												
03...	1000	50	8.4	18.9	178	6.5	<1	21	6.4	1.1	1.9	.2
03...	1015	50	7.8	6.1	--	5.0	--	22	6.7	1.2	1.9	.2
SEP												
15...	0935	47	7.4	15.1	--	6.7	<1	20	6.3	1.1	1.8	.2
15...	0950	48	6.9	6.5	--	4.1	--	22	6.8	1.2	1.9	.2

DATE	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)
OCT												
21...	.6	23	2.4	.4	.1	4.8	39	31	.05	<.01	<.05	<.02
21...	.6	22	2.4	.4	.1	5.9	41	33	.06	<.01	.10	<.02
MAY												
26...	.6	25	2.6	.4	.1	5.4	34	35	.05	<.01	<.05	<.02
26...	.6	19	2.4	.3	.1	5.0	34	30	.05	<.01	<.05	<.02
AUG												
03...	.6	22	2.7	.4	.1	4.8	33	31	.04	<.01	<.05	<.02
03...	.6	23	2.8	.2	.1	5.3	34	33	.05	<.01	<.05	<.02
SEP												
15...	.6	23	2.5	.3	<.1	4.5	37	31	.05	<.01	<.05	<.02
15...	.6	24	2.6	.3	<.1	5.5	40	34	.05	<.01	.05	<.02

DATE	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	CHLOR-A PHYTO-PLANK-TON CHROMO FLUOROM (UG/L) (70953)	CHLOR-B PHYTO-PLANK-TON CHROMO FLUOROM (UG/L) (70954)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (01010)	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)
OCT												
21...	.2	<.05	<.05	<.01	1.7	.1	4.3	8	<1.6	<16.0	<8	<14
21...	.2	<.05	<.05	<.01	--	--	3.8	8	<1.6	<16.0	<8	<14
MAY												
26...	.3	<.05	.05	<.01	1.5	<.1	8.6	8	<1.6	<16.0	<1	<14
26...	.2	<.01	.028	.01	--	--	8.5	7	<1.6	<16.0	<1	<14
AUG												
03...	.2	<.05	<.05	<.01	1.1	<.1	3.7	8	<1.6	E7.0	<1	<14
03...	.2	<.05	<.05	<.01	--	--	3.1	8	<1.6	<16.0	<1	<14
SEP												
15...	.2	<.05	<.05	<.01	.7	<.1	5.0	8	<1.6	<16.0	<1	<14
15...	.2	<.05	<.05	<.01	--	--	3.0	8	<1.6	<16.0	<1	<14

DATE	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	LITHIUM DIS-SOLVED (UG/L AS LI) (01130)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
OCT												
21...	<7	<10	<10	<100	<6	<3	<50	<40	<.20	38	<10	<20
21...	<7	<10	15	<100	<6	15	<50	<40	<.20	39	<10	E8
MAY												
26...	<7	<10	E6	<100	E4	<3	<50	<40	<.20	43	<10	<20
26...	<7	<10	E5	<100	<6	<3	<50	<40	<.20	39	<10	<20
AUG												
03...	<7	<10	<10	<100	<6	<3	<50	<40	<.20	37	<10	<20
03...	<7	<10	<10	<100	E3	<3	<50	<40	<.20	40	<10	<20
SEP												
15...	<13	<10	<10	<100	<4	<2	<30	<40	<.20	38	<10	<20
15...	<13	<10	<10	<100	<4	<2	<30	<40	<.20	42	<10	<20

E Estimated.
K Based on non-ideal colony count.

400844105530800 LAKE GRANBY (WEST) NEAR GRANBY, CO

WATER-QUALITY RECORDS

PERIOD OF RECORD.--May 1989 to current year.

REMARKS.--Samples were collected near-surface and near-bottom, near dam in Rainbow Bay.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	SAMPLING DEPTH (FEET) (00003)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	OXYGEN, DISSOLVED (MG/L) (00300)
OCT						
21...	1316	.1	48	7.7	11.0	6.8
21...	1317	5.0	48	7.7	10.6	6.8
21...	1318	10	48	7.7	10.4	6.7
21...	1319	15	48	7.7	10.4	6.7
21...	1320	20	48	7.7	10.3	6.7
21...	1321	25	48	7.7	10.3	6.7
21...	1322	30	48	7.7	10.3	6.6
21...	1323	40	48	7.6	10.2	6.6
21...	1324	50	48	7.6	10.2	6.6
21...	1325	60	48	7.6	10.0	6.0
21...	1326	69	49	7.2	8.0	1.1
MAY						
26...	1015	.1	56	7.9	10.0	8.9
26...	1016	5.0	54	7.9	9.4	8.9
26...	1017	10	58	7.9	9.1	8.9
26...	1018	15	59	7.9	9.0	8.9
26...	1019	20	59	7.9	9.0	8.9
26...	1020	25	60	7.8	8.7	8.9
26...	1021	30	60	7.8	8.3	8.9
26...	1022	40	58	7.8	7.6	8.9
26...	1023	50	57	7.8	7.1	8.8
26...	1024	60	53	7.8	5.9	8.8
AUG						
03...	1030	.1	50	8.4	19.3	6.7
03...	1031	5.0	50	8.4	18.2	6.6
03...	1032	10	50	8.4	18.7	6.6
03...	1033	15	50	8.4	18.6	6.5
03...	1034	20	50	8.4	18.6	6.4
03...	1035	25	50	8.3	18.3	6.2
03...	1036	30	49	8.2	13.8	4.8
03...	1037	40	49	8.1	10.5	4.6
03...	1038	50	50	8.0	8.7	4.5
03...	1039	60	50	7.9	7.8	4.1
03...	1040	70	50	7.8	7.0	3.9
03...	1041	74	50	7.8	6.8	3.9
SEP						
15...	1001	.1	47	7.3	15.1	6.7
15...	1002	5.0	47	7.3	15.1	6.7
15...	1003	10	47	7.3	15.0	6.7
15...	1004	15	47	7.3	15.0	6.7
15...	1005	20	47	7.3	15.0	6.7
15...	1006	25	47	7.3	15.0	6.6
15...	1007	30	47	7.3	14.9	6.5
15...	1008	40	47	7.3	14.8	6.4
15...	1009	50	47	7.2	14.6	5.8
15...	1010	60	47	7.2	10.5	3.5
15...	1011	67	48	7.1	8.4	3.3

DATE	TIME	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	TRANSPARENCY (SECCHI DISK) (IN) (00077)	OXYGEN, DISSOLVED (MG/L) (00300)	COLIFORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	HARDNESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	SODIUM ADSORPTION RATIO (00931)
OCT												
21...	1330	48	7.7	11.0	197	6.8	<1	22	6.7	1.2	1.9	.2
21...	1345	49	7.2	8.0	--	1.1	--	22	6.8	1.2	1.9	.2
MAY												
26...	1010	56	7.9	10.0	82	8.9	<1	23	7.1	1.3	2.3	.2
26...	1045	53	7.8	5.9	--	8.8	--	24	7.4	1.4	2.5	.2
AUG												
03...	1045	50	8.4	19.3	174	6.7	K1	20	6.4	1.1	1.8	.2
03...	1100	50	7.8	6.8	--	3.9	--	22	6.6	1.2	1.9	.2
SEP												
15...	1020	47	7.3	15.1	--	6.7	<1	21	6.4	1.1	1.8	.2
15...	1035	48	7.1	8.4	--	3.3	--	21	6.4	1.1	1.8	.2

K Based on non-ideal colony count.

400844105530800 LAKE GRANBY (WEST) NEAR GRANBY, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	POTASSIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLORIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUORIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	NITROGEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITROGEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITROGEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)
OCT												
21...	.6	24	2.5	.4	.1	5.0	41	33	.06	<.01	<.05	<.02
21...	.6	24	2.5	.4	.1	5.1	40	33	.05	<.01	<.05	<.02
MAY												
26...	.6	26	2.7	.4	.1	5.9	38	36	.05	<.01	<.05	<.02
26...	.6	28	3.0	.4	.1	6.3	39	38	.05	<.01	<.05	<.02
AUG												
03...	.6	22	2.7	.2	.1	4.6	34	31	.05	<.01	<.05	<.02
03...	.6	23	2.8	.3	.1	5.4	35	33	.05	<.01	<.05	<.02
SEP												
15...	.6	23	2.5	.3	.1	4.6	38	31	.05	<.01	<.05	<.02
15...	.6	23	2.5	.3	<.1	4.8	29	31	.04	<.01	<.05	<.02

DATE	NITROGEN,AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOSPHORUS TOTAL (MG/L AS P) (00665)	PHOSPHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOSPHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	CHLOR-A PHYTOPLANKTON CHROMO FLUOROM (UG/L) (70953)	CHLOR-B PHYTOPLANKTON CHROMO FLUOROM (UG/L) (70954)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYLLIUM, DIS-SOLVED (UG/L AS BE) (01010)	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHROMIUM, DIS-SOLVED (UG/L AS CR) (01030)
OCT												
21...	.2	<.05	<.05	<.01	1.8	.1	4	8	<1.6	<16.0	<8	<14
21...	.2	<.05	<.05	<.01	--	--	4	8	<1.6	<16.0	<8	<14
MAY												
26...	.2	<.05	.12	.01	1.2	<.1	9.0	8	<1.6	<16.0	<1	<14
26...	.2	<.05	.50	.02	--	--	9.3	8	<1.6	<16.0	<1	<14
AUG												
03...	.2	<.05	<.05	<.01	1	<.1	5.5	7	<1.6	E9.0	<1	<14
03...	.1	<.05	<.05	.01	--	--	3.2	8	<1.6	<16.0	<1	<14
SEP												
15...	.2	<.05	<.05	<.01	.4	<.1	3.3	8	<1.6	<16.0	<1	<14
15...	.2	<.05	<.05	<.01	--	--	3.2	8	<1.6	<16.0	<1	<14

DATE	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	LITHIUM DIS-SOLVED (UG/L AS LI) (01130)	MANGANESE, DIS-SOLVED (UG/L AS MN) (01056)	MOLYBDENUM, DIS-SOLVED (UG/L AS MO) (01060)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRONTIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANADIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
OCT												
21...	<7	<10	<10	<100	<6	<3	<50	<40	<.20	40	<10	E7
21...	<7	<10	<10	<100	<6	6	<50	<40	<.20	41	<10	E7
MAY												
26...	<7	<10	E7	<100	<6	<3	<50	<40	<.20	46	<10	<20
26...	<7	<10	16	<100	<6	<3	<50	<40	<.20	51	<10	<20
AUG												
03...	<7	<10	<10	<100	<6	<3	<50	<40	<.20	36	<10	<20
03...	<7	<10	E8	<100	E3	<3	<50	<40	<.20	40	<10	<20
SEP												
15...	<13	<10	<10	<100	E2	E2	<30	<40	<.20	38	<10	<20
15...	<13	<10	E5	<100	<4	<2	<30	<40	<.20	38	<10	<20

E Estimated.

09019500 COLORADO RIVER NEAR GRANBY, CO

LOCATION.--Lat 40°07'15", long 105°54'00", in $SW^1/_4NW^1/_4$ sec.22, T.2 N., R.76 W., Grand County, Hydrologic Unit 14010001, on right bank 0.3 mi upstream from bridge on U.S. Highway 34, 1.3 mi upstream from Willow Creek, and 3.2 mi northeast of Granby.

DRAINAGE AREA.--323 mi^2.

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

REVISED RECORDS.--WSP 2124: Drainage area.

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

REMARKS.--No estimated daily discharges. Records good. Flow regulated by Lake Granby (station 09018500) since Sept. 13, 1949. Several diversions for irrigation of hay meadows upstream from station. Transmountain diversions upstream from station by Eureka and Grand River ditches and Alva B. Adams tunnel (see elsewhere in this report). Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

EXTREMES FOR PERIOD OF SEASONAL RECORD.--Maximum discharge, 2,520 ft^3/s, June 22, 1996, 5.76 ft; minimum daily, 9.6 ft^3/s, Sept. 21, 1981.

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

EXTREMES FOR CURRENT SEASON.--Maximum discharge, 1260 ft^3/s at 1045 July 1, gage height, 4.02 ft; minimum daily 10 ft^3/s, May 21.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	---	---	---	---	---	---	89	263	1220	66	34
2	26	---	---	---	---	---	---	90	452	1220	49	23
3	24	---	---	---	---	---	---	87	450	1220	30	21
4	24	---	---	---	---	---	---	86	448	1210	30	21
5	23	---	---	---	---	---	---	90	453	1040	35	21
6	24	---	---	---	---	---	---	89	458	624	42	21
7	22	---	---	---	---	---	---	89	471	367	41	21
8	22	---	---	---	---	---	---	89	468	297	41	21
9	21	---	---	---	---	---	---	89	356	149	41	78
10	20	---	---	---	---	---	---	94	181	99	40	67
11	22	---	---	---	---	---	---	89	106	65	40	21
12	21	---	---	---	---	---	---	86	115	65	38	20
13	---	---	---	---	---	---	---	88	121	66	39	202
14	---	---	---	---	---	---	---	80	92	72	40	403
15	---	---	---	---	---	---	---	72	81	70	39	428
16	---	---	---	---	---	---	---	71	78	64	40	458
17	---	---	---	---	---	---	---	72	72	69	41	459
18	---	---	---	---	---	---	---	69	70	70	40	458
19	---	---	---	---	---	---	---	35	67	66	41	458
20	---	---	---	---	---	---	---	11	68	66	40	362
21	---	---	---	---	---	---	---	10	73	67	40	455
22	---	---	---	---	---	---	---	12	72	69	39	458
23	---	---	---	---	---	---	---	14	72	69	39	459
24	---	---	---	---	---	---	---	49	245	68	40	459
25	---	---	---	---	---	---	---	76	745	68	41	458
26	---	---	---	---	---	---	---	75	1010	68	41	458
27	---	---	---	---	---	---	---	71	1010	67	41	458
28	---	---	---	---	---	---	---	69	1040	68	41	460
29	---	---	---	---	---	---	---	70	1160	70	40	461
30	---	---	---	---	---	---	---	70	1210	66	40	461
31	---	---	---	---	---	---	---	72	---	68	41	---
TOTAL	---	---	---	---	---	---	---	2153	11507	8867	1256	8184
MEAN	---	---	---	---	---	---	---	69.5	384	286	40.5	273
MAX	---	---	---	---	---	---	---	94	1210	1220	66	461
MIN	---	---	---	---	---	---	---	10	67	64	30	20
AC-FT	---	---	---	---	---	---	---	4270	22820	17590	2490	16230

09022000 FRASER RIVER AT UPPER STATION, NEAR WINTER PARK, CO

LOCATION.--Lat 39°50'45", long 105°45'05", in sec.26, T.2 S., R.75 W., Grand County, Hydrologic Unit 14010001, on left bank 0.8 mi upstream from Parsenn Creek, 2.5 mi south of Winter Park, and 7.8 mi southeast of Fraser.

DRAINAGE AREA.--10.5 mi^2.

WATER-DISCHARGE RECORDS

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

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

REMARKS.--Records good except for estimated daily discharges, which are poor. Transmountain diversions upstream from station through Berthoud Pass ditch to Moffat water tunnel, (see elsewhere in this report).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.0	4.0	e3.5	e1.7	e2.5	e1.9	e2.7	4.6	52	47	45	14
2	6.8	4.0	e3.5	e1.7	e2.5	e1.9	e2.7	4.9	58	46	40	15
3	6.2	e3.6	e3.5	e1.7	e2.5	e1.9	e2.7	4.8	73	43	32	14
4	6.5	e3.5	e3.5	e1.7	e2.5	e1.9	e2.7	4.8	77	40	34	13
5	5.8	e3.5	e3.5	e1.7	e2.5	e1.9	e2.7	4.5	67	38	34	12
6	6.0	e3.5	e2.5	e1.7	e2.5	e1.9	e2.8	4.5	55	37	32	12
7	e6.2	e3.5	e2.4	e1.7	e2.5	e1.9	e2.9	4.7	57	35	30	11
8	6.2	e3.5	e2.3	e1.7	e2.5	e1.9	e3.0	5.5	67	34	28	11
9	5.8	e3.5	e2.2	e1.7	e2.5	e1.9	e3.0	7.0	76	31	28	11
10	5.5	e3.5	e2.1	e1.7	e2.5	e1.9	e3.1	7.4	83	29	26	11
11	5.2	e3.5	e2.1	e1.7	e2.5	e1.9	e3.2	6.5	78	27	24	11
12	5.0	e3.5	e2.0	e1.7	e2.5	e1.9	e3.3	6.6	72	26	22	10
13	4.9	e3.5	e2.0	e1.7	e2.5	e1.9	3.2	7.4	68	25	20	9.8
14	e4.9	e3.5	e2.0	e1.7	e2.5	e1.9	3.2	8.9	71	26	19	9.3
15	4.7	e3.5	e2.0	e2.0	e2.5	e1.9	e3.0	10	77	25	18	9.0
16	4.7	e3.5	e2.0	e2.0	e2.5	e2.4	e3.2	11	72	26	17	8.8
17	5.3	e3.5	e2.0	e2.0	e2.2	e2.4	e3.2	10	80	26	17	8.5
18	5.2	e3.5	e2.0	e2.0	e2.2	e2.4	e3.2	12	92	26	15	8.2
19	6.3	e3.5	e2.0	e2.0	e2.2	e2.4	e3.4	15	93	26	16	9.3
20	4.6	e3.5	e2.0	e2.0	e2.2	e2.4	e3.5	17	94	24	16	10
21	4.5	e3.5	e2.0	e2.0	e2.2	e2.4	3.5	21	87	22	14	9.2
22	4.5	e3.5	e1.6	e2.0	e1.9	e2.4	3.4	25	92	23	14	8.5
23	4.4	e3.5	e1.7	e2.0	e1.9	e2.4	4.4	34	101	23	13	7.9
24	4.3	e3.5	e1.7	e2.0	e1.9	e2.4	4.0	40	100	22	12	7.6
25	4.2	e3.5	e1.7	e2.0	e1.9	e2.4	4.3	43	91	21	14	7.4
26	4.2	e3.5	e1.7	e2.0	e1.9	e2.4	3.9	36	81	20	13	7.1
27	4.4	e3.5	e1.7	e2.0	e1.9	e2.4	4.1	36	72	18	14	6.9
28	4.5	e3.5	e1.7	e2.5	e1.9	e2.4	4.5	37	64	24	14	6.8
29	4.3	e3.5	e1.7	e2.5	---	e2.4	5.1	42	56	25	13	7.3
30	4.2	e3.5	e1.7	e2.5	---	e2.4	4.9	50	50	28	12	6.7
31	4.0	---	e1.7	e2.5	---	e2.7	---	53	---	41	14	---
TOTAL	159.3	106.1	68.0	59.8	64.3	67.2	102.8	574.1	2256	904	660	293.3
MEAN	5.14	3.54	2.19	1.93	2.30	2.17	3.43	18.5	75.2	29.2	21.3	9.78
MAX	6.8	4.0	3.5	2.5	2.5	2.7	5.1	53	101	47	45	15
MIN	4.0	3.5	1.6	1.7	1.9	1.9	2.7	4.5	50	18	12	6.7
AC-FT	316	210	135	119	128	133	204	1140	4470	1790	1310	582

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1969 - 1999, BY WATER YEAR (WY)

MEAN	5.84	4.01	3.02	2.34	2.01	2.09	4.31	26.3	71.7	30.1	12.8	8.09
MAX	9.66	5.62	5.11	2.97	2.58	2.73	6.45	44.0	124	74.6	21.3	13.0
(WY)	1985	1985	1998	1998	1997	1997	1971	1996	1997	1995	1999	1984
MIN	4.15	2.61	1.62	1.63	1.45	1.41	2.12	8.10	38.2	12.2	6.39	4.62
(WY)	1995	1995	1995	1987	1987	1987	1973	1995	1989	1994	1994	1994

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1969 - 1999	
ANNUAL TOTAL	4670.0		5314.9			
ANNUAL MEAN	12.8		14.6		14.4	
HIGHEST ANNUAL MEAN					19.2	1997
LOWEST ANNUAL MEAN					10.4	1994
HIGHEST DAILY MEAN	93	Jun 3	101	Jun 23	220	Jun 7 1997
LOWEST DAILY MEAN	e1.6	Dec 22	e1.6	Dec 22	1.2	Feb 26 1989
ANNUAL SEVEN-DAY MINIMUM	1.7	Dec 22	1.7	Dec 22	1.4	Feb 20 1989
INSTANTANEOUS PEAK FLOW			135	Jun 18	a291	Jun 8 1997
INSTANTANEOUS PEAK STAGE			1.80	Jun 18	b2.08	Jun 8 1997
ANNUAL RUNOFF (AC-FT)	9260		10540		10410	
10 PERCENT EXCEEDS	38		43		43	
50 PERCENT EXCEEDS	4.3		4.3		5.0	
90 PERCENT EXCEEDS	2.1		1.9		2.0	

e Estimated
a From rating curve extended above 140 ft^3/s.
b Maximum gage height 2.26 ft, Jun 4, 1997, backwater from debris.

09022000 FRASER RIVER AT UPPER STATION NEAR WINTER PARK, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--March 1994 to current year.

REMARKS.--Nutrient analysis based on low-level methods.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)
OCT									
07...	0945	5.1	88	8.6	.4	10.3	--	--	--
NOV									
03...	1015	3.6	119	8.6	1.0	10.2	31	7.1	3.2
DEC									
01...	1045	3.5	102	8.6	.0	10.4	33	7.3	3.5
JAN									
05...	1120	1.7	98	8.1	.1	10.3	33	7.4	3.6
FEB									
16...	1020	2.6	109	8.7	.1	10.3	35	7.8	3.8
MAR									
08...	1045	1.9	133	8.1	.5	10.2	38	8.4	4.0
APR									
05...	1320	2.7	161	8.7	1.0	10.6	42	10	4.2
MAY									
03...	1050	4.1	210	8.2	3.0	10.2	49	12	4.7
JUN									
08...	1000	59	66	8.1	3.2	10.6	20	4.9	1.9
JUL									
19...	1040	27	85	8.5	7.0	9.4	22	5.1	2.3
AUG									
02...	1010	44	56	8.6	5.5	9.1	21	4.8	2.2
31...	0940	9.9	81	8.5	6.1	9.9	26	5.9	2.8

DATE	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)
OCT								
07...	7.4	<1	.001	.066	.002	--	<.0010	.002
NOV								
03...	16	1	<.0010	.049	<.002	<.05	.001	.001
DEC								
01...	10	<1	.001	.080	<.002	<.05	.001	.002
JAN								
05...	11	<1	<.001	.12	.004	<.05	<.004	.002
FEB								
16...	14	<1	.001	.12	.003	<.05	<.004	.003
MAR								
08...	21	<1	<.001	.12	.006	<.05	<.004	.002
APR								
05...	32	2	<.001	.089	.002	<.05	<.004	.002
MAY								
03...	46	<1	<.001	.068	.006	<.05	<.004	.001
JUN								
08...	9.8	<1	.001	.083	.003	<.05	<.004	.001
JUL								
19...	5.3	<1	<.001	.027	.003	<.05	<.004	<.001
AUG								
02...	4.5	5	.001	.078	.003	<.05	<.004	.002
31...	6.5	<1	.001	.067	.003	<.05	<.004	<.001

09023750 FRASER RIVER BELOW BUCK CREEK AT WINTER PARK, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 39°53'35", long 105°45'52", T.2 S., R.75 W., Grand County, Hydrologic Unit 14010001 on left bank approximately 400 ft upstream from the confluence of Cub Creek and the Fraser River.

DRAINAGE AREA.--25.6 mi^2.

PERIOD OF RECORD.--August 1990 to current year.

REMARKS.--Nutrient analysis based on low-level methods.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)
OCT									
07...	1100	15	109	7.9	3.0	9.8	--	--	--
NOV									
03...	1115	4.3	111	7.9	2.6	9.7	33	8.7	2.8
DEC									
01...	1145	3.6	115	8.0	2.3	10.4	35	9.1	3.1
JAN									
05...	1245	4.2	194	8.7	1.0	10.0	33	8.7	2.8
FEB									
16...	1130	4.2	113	8.1	1.5	10.1	38	9.6	3.3
MAR									
08...	1320	4.0	139	8.0	2.0	10.8	41	11	3.5
APR									
05...	1015	5.8	166	8.3	1.8	10.8	42	11	3.7
MAY									
03...	1145	8.1	163	7.8	5.0	9.4	44	11	3.7
JUN									
08...	1100	56	56	7.9	5.0	9.8	18	4.6	1.7
JUL									
19...	1130	42	61	8.2	8.1	9.0	22	5.1	2.2
AUG									
02...	1130	53	60	8.2	7.3	9.0	22	5.1	2.2
31...	1030	12	88	8.0	8.6	9.1	31	7.7	2.8

DATE	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)
OCT								
07...	9.4	5	.003	.083	.004	--	.002	.003
NOV								
03...	9.4	16	<.0010	.038	<.002	<.05	.004	.003
DEC								
01...	9.5	7	.001	.039	.006	<.05	.015	.014
JAN								
05...	36	3	<.001	.12	.014	<.05	.0044	.004
FEB								
16...	12	<1	.006	.087	.004	<.05	<.004	.003
MAR								
08...	18	4	.004	.082	.003	<.05	<.004	.002
APR								
05...	23	2	<.001	.072	.006	<.05	<.004	.003
MAY								
03...	28	13	.001	.058	.007	<.05	.004	.003
JUN								
08...	7.2	1	.001	.048	.003	<.05	<.004	.002
JUL								
19...	4.6	<1	.001	.024	.002	<.05	<.004	.001
AUG								
02...	4.7	4	.001	.066	.003	<.05	<.004	.002
31...	7.8	69	.002	.058	.004	.09	.017	.01

09024000 FRASER RIVER AT WINTER PARK, CO

LOCATION.--Lat 39°54'00", long 105°46'34", in SE$^{1}/_{4}$ sec.4, T.2 S., R.75 W., Grand County, Hydrologic Unit 14010001, on left bank 500 ft downstream from bridge on U.S. Highway 40, 1.4 mi south of Winter Park, 2.0 mi upstream from Vasquez Creek, 3.5 mi downstream from point of diversion for Moffat water tunnel, and 3.9 mi southeast of Fraser.

DRAINAGE AREA.--27.6 mi^{2}.

PERIOD OF RECORD.--September 1910 to current year. Monthly discharge only for some periods, published in WSP 1313. Published as "near Arrow" 1910-23 and as "near West Portal" 1924-39 and as "near Winter Park" 1990-1992. Records since June 9, 1936, equivalent to earlier records if transmountain diversions are added to flow past station.

REVISED RECORDS.--WSP 929: Drainage area. WDR CO-89-2: 1988 (M).

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

REMARKS.--Records good except for estimated daily discharges, which are poor. Transmountain diversions upstream from station through Berthoud Pass ditch (see elsewhere in this report) and to Moffat water tunnel (not known since 1968). Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.4	5.7	e4.8	5.1	e5.0	4.6	7.0	e8.8	36	116	56	13
2	9.8	5.9	e5.0	5.1	e5.0	4.6	6.6	e8.6	45	105	49	13
3	8.7	5.9	e5.0	5.1	e5.0	4.9	6.1	e8.4	71	75	46	13
4	9.9	5.4	5.1	5.2	e5.0	4.8	e6.1	e8.4	75	70	51	11
5	8.7	6.5	e5.0	5.4	e5.0	4.6	6.1	e8.0	67	65	50	9.8
6	8.4	6.1	e5.0	5.4	e5.0	4.7	e6.2	8.0	48	64	59	9.4
7	9.3	5.9	e5.0	5.2	e5.0	4.8	e6.2	10	47	62	58	8.9
8	11	e5.8	e5.0	5.1	e5.0	4.8	e6.4	11	58	59	55	8.6
9	8.1	e5.6	e5.0	5.1	e4.9	4.8	6.4	14	54	56	56	8.5
10	7.7	e5.6	e4.8	5.1	e4.8	4.8	6.6	12	84	53	56	9.6
11	7.5	e5.4	e4.8	5.1	e4.8	4.8	e6.6	9.9	125	51	49	9.8
12	7.4	e5.4	e4.8	5.1	e4.7	4.8	6.6	9.7	120	48	47	9.7
13	7.2	e5.4	e4.8	5.1	e4.7	4.9	7.4	12	112	45	46	9.4
14	7.3	5.4	4.8	e5.1	e4.7	5.1	7.3	14	116	45	45	9.4
15	7.2	5.5	4.8	e5.1	e4.6	5.2	6.7	14	120	45	44	8.1
16	7.3	5.6	5.0	e5.0	e4.5	5.3	e7.0	13	117	46	39	11
17	7.6	5.6	4.9	4.9	4.4	5.7	e7.4	12	154	54	40	20
18	7.7	5.3	4.8	4.9	4.4	5.9	e7.6	13	164	51	38	20
19	7.5	e5.2	4.7	5.0	4.3	5.9	e7.8	14	182	46	36	23
20	7.5	e5.2	4.8	5.1	4.3	6.1	e8.2	16	177	36	32	27
21	7.6	e5.2	4.8	5.1	4.6	6.5	e8.4	17	183	32	21	23
22	7.7	e5.2	4.6	5.0	4.6	6.0	e8.6	17	186	35	20	21
23	7.6	5.2	4.7	5.0	4.6	6.0	9.5	18	193	34	17	20
24	7.5	5.2	4.7	5.0	4.6	6.4	e9.5	18	189	32	12	20
25	7.5	5.1	4.8	5.0	4.6	7.0	e9.5	21	189	34	15	19
26	7.4	5.0	4.9	5.0	4.6	7.1	9.5	19	182	30	13	18
27	6.9	5.0	4.9	e5.0	4.6	6.7	e9.5	19	170	28	14	18
28	6.2	5.3	4.9	e5.0	4.6	e6.7	e9.2	27	152	34	15	18
29	5.8	5.1	4.9	e5.0	---	e6.7	e9.0	41	136	41	12	18
30	5.8	4.9	5.0	e5.0	---	6.7	e9.0	58	122	38	11	18
31	5.8	---	5.0	e5.0	---	7.1	---	46	---	54	12	---
TOTAL	240.0	163.6	151.1	157.3	131.9	174.0	228.0	525.8	3674	1584	1114	445.2
MEAN	7.74	5.45	4.87	5.07	4.71	5.61	7.60	17.0	122	51.1	35.9	14.8
MAX	11	6.5	5.1	5.4	5.0	7.1	9.5	58	193	116	59	27
MIN	5.8	4.9	4.6	4.9	4.3	4.6	6.1	8.0	36	28	11	8.1
AC-FT	476	325	300	312	262	345	452	1040	7290	3140	2210	883

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1911 - 1999, BY WATER YEAR (WY)

MEAN	10.8	9.58	7.63	6.66	6.22	6.65	12.7	49.3	116	48.9	19.7	13.1
MAX	31.0	20.4	21.1	12.1	9.88	13.6	31.5	163	354	209	72.2	46.0
(WY)	1914	1928	1928	1928	1938	1918	1925	1928	1918	1957	1929	1925
MIN	2.93	2.72	2.83	2.92	3.11	3.58	5.05	7.42	5.76	4.92	3.37	2.57
(WY)	1957	1965	1965	1967	1933	1990	1970	1954	1954	1954	1954	1966

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1911 - 1999	
ANNUAL TOTAL	9596.9		8588.9			
ANNUAL MEAN	26.3		23.5		25.6	
HIGHEST ANNUAL MEAN					60.9	1914
LOWEST ANNUAL MEAN					5.93	1954
HIGHEST DAILY MEAN	193	Jun 3	193	Jun 23	622	Jun 14 1918
LOWEST DAILY MEAN	e3.7	Mar 1	4.3	Feb 19	a2.0	Mar 29 1912
ANNUAL SEVEN-DAY MINIMUM	3.8	Feb 27	4.4	Feb 15	2.1	Oct 5 1956
INSTANTANEOUS PEAK FLOW			206	Jun 23	820	Jun 13 1918
INSTANTANEOUS PEAK STAGE			2.25	Jun 23	b2.90	Jun 13 1918
ANNUAL RUNOFF (AC-FT)	19040		17040		18540	
10 PERCENT EXCEEDS	86		57		59	
50 PERCENT EXCEEDS	7.4		7.5		8.9	
90 PERCENT EXCEEDS	4.5		4.8		4.2	

e Estimated
a Also occurred Mar 30, Apr 9, 1912, and Jan 23, 1915.
b Maximum gage height, 2.95 ft, Jun 9, 1997.

09025000 VASQUEZ CREEK AT WINTER PARK, CO

LOCATION.--Lat 39°55'13", long 105°47'05", in NE$^1/_4$NW$^1/_4$ sec.33. T.1 S., R.75 W., Grand County, Hydrologic Unit 14010001, on right bank 30 ft downstream from bridge on U.S. Highway 40, 0.2 mi upstream from mouth, 2.5 mi southeast of Fraser, and 4.5 mi downstream from Moffat water tunnel diversion.

DRAINAGE AREA.--27.8 mi^2.

PERIOD OF RECORD.--June to August 1907, July to November 1909, October 1933 to current year. Monthly discharge only for some periods, published in WSP 1313. Records for June to October 1908, published in WSP 269, are unreliable and should not be used. Published as Vasquez River at lower station, near Fraser 1907-09, as "near West Portal" 1934-39, and as "near Winter Park" 1940-87. Records for May 26, 1937 to September 1959, equivalent to earlier records if diversion to Moffat water tunnel is added to flow past station.

REVISED RECORDS.--See PERIOD OF RECORD.

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

REMARKS.--Records good except for estimated daily discharges, which are poor. Transmountain diversions upstream from station to Moffat water tunnel not known since 1959. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.6	5.8	e5.4	e8.2	7.6	8.0	9.3	7.4	29	124	10	8.5
2	4.8	5.8	e5.5	e8.4	7.6	8.0	9.3	7.2	43	75	9.1	8.6
3	4.6	5.8	e5.7	8.8	7.6	8.3	9.1	7.1	97	20	8.6	8.4
4	5.0	5.2	e5.8	8.8	8.0	8.8	e9.2	7.1	111	11	10	8.2
5	4.8	e3.8	e5.8	8.8	8.0	8.4	9.3	7.1	97	9.8	18	8.0
6	4.3	e3.8	e6.0	8.6	8.0	8.6	e9.3	7.1	75	9.7	52	7.8
7	4.4	e3.8	e6.0	8.4	8.0	8.5	9.4	6.9	58	9.7	49	7.9
8	4.7	e3.8	e6.0	8.4	8.0	8.4	9.4	7.8	37	10	47	7.9
9	4.8	e3.8	e6.2	8.5	8.0	8.4	9.6	9.1	20	11	48	7.8
10	5.0	e3.8	e6.2	8.6	8.0	8.4	9.9	8.9	54	11	53	8.0
11	5.1	e3.7	e6.4	8.6	8.0	8.5	16	7.8	76	11	48	8.0
12	5.1	e3.8	e6.4	8.4	8.0	8.4	9.1	8.1	62	11	44	7.9
13	5.0	e4.0	e6.6	8.2	8.0	8.3	8.8	8.9	59	10	40	7.8
14	5.0	e4.2	e6.6	8.1	8.0	8.2	8.7	9.4	72	9.5	40	7.8
15	5.0	e4.3	e6.8	8.1	8.0	8.5	8.8	11	122	9.9	42	7.6
16	4.8	e4.5	e6.8	8.1	8.1	8.6	e8.8	13	136	10	37	9.4
17	5.0	e4.5	e6.8	8.0	8.4	8.8	e8.8	13	143	9.8	40	19
18	5.1	e4.5	e7.0	8.0	8.4	8.7	e8.8	14	144	9.5	40	18
19	5.3	e4.5	e7.0	8.0	8.4	8.6	e8.6	14	146	9.7	35	21
20	5.4	e4.5	e7.2	8.1	8.4	8.9	e8.6	15	151	9.5	33	25
21	5.4	e4.5	e7.2	8.1	8.4	9.1	e8.6	16	162	9.1	18	23
22	5.4	e4.5	e7.2	8.1	8.4	9.2	e8.6	17	165	8.9	15	21
23	5.4	e4.5	e7.2	8.1	8.4	9.6	8.3	17	175	8.9	13	20
24	5.4	e4.6	e7.4	8.1	8.4	9.6	9.4	16	186	9.6	8.2	19
25	5.4	e4.7	e7.6	7.7	8.4	9.4	9.5	17	184	11	8.4	19
26	5.4	e4.9	e7.6	7.6	8.2	9.4	8.5	12	169	10	8.4	18
27	5.4	e5.0	e7.8	7.6	8.0	9.3	8.5	15	155	9.0	8.7	17
28	5.7	e5.2	e7.8	7.6	8.0	e9.3	9.2	16	141	10	8.9	17
29	5.8	e5.2	e8.0	7.6	---	e9.4	12	17	135	11	8.4	17
30	5.8	e5.4	e8.0	7.6	---	9.5	10	21	128	9.6	8.3	17
31	5.8	---	e8.2	7.6	---	9.3	---	33	---	11	8.4	---
TOTAL	158.7	136.4	210.2	252.8	226.7	272.4	281.4	386.9	3332	499.2	817.4	400.6
MEAN	5.12	4.55	6.78	8.15	8.10	8.79	9.38	12.5	111	16.1	26.4	13.4
MAX	5.8	5.8	8.2	8.8	8.4	9.6	16	33	186	124	53	25
MIN	4.3	3.7	5.4	7.6	7.6	8.0	8.3	6.9	20	8.9	8.2	7.6
AC-FT	315	271	417	501	450	540	558	767	6610	990	1620	795

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1934 - 1999, BY WATER YEAR (WY)

MEAN	6.10	6.72	5.57	4.88	4.52	4.68	7.60	27.2	68.6	23.2	8.21	6.90
MAX	35.1	21.9	13.4	10.0	9.99	9.14	19.8	119	234	177	41.2	27.0
(WY)	1962	1962	1962	1958	1958	1995	1943	1958	1942	1983	1936	1995
MIN	.66	1.84	1.30	1.28	.80	1.02	2.41	2.81	.14	.34	.39	.20
(WY)	1965	1963	1965	1965	1960	1965	1965	1954	1940	1956	1960	1944

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1934 - 1999	
ANNUAL TOTAL	6273.8		6974.7			
ANNUAL MEAN	17.2		19.1			
HIGHEST ANNUAL MEAN					39.6	1936
LOWEST ANNUAL MEAN					2.30	1963
HIGHEST DAILY MEAN	157	Jun 3	186	Jun 24	417	Jun 25 1983
LOWEST DAILY MEAN	e3.7	Nov 11	e3.7	Nov 11	a.00	Sep 9 1944
ANNUAL SEVEN-DAY MINIMUM	3.8	Nov 5	3.8	Nov 5	.00	Sep 9 1944
INSTANTANEOUS PEAK FLOW			253	Jun 23	b526	Jun 27 1983
INSTANTANEOUS PEAK STAGE			c2.99	Jun 23	4.14	Jun 27 1983
ANNUAL RUNOFF (AC-FT)	12440		13830			
10 PERCENT EXCEEDS	54		42		22	
50 PERCENT EXCEEDS	8.0		8.4		5.8	
90 PERCENT EXCEEDS	5.0		5.0		1.5	

e Estimated
a Also no flow at times in 1946, 1956, 1960, and 1966.
b From rating curve extended above 286 ft^3/s.
c Maximum gage height, 3.30 ft, Dec 13, backwater from ice.

09025010 FRASER RIVER BELOW VASQUEZ CREEK AT WINTER PARK, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 39°55'37", long 105°47'08", NE$^{1}/_{4}$SW$^{1}/_{4}$ sec.28, T.1 S., R.75 W., Grand County, Hydrologic Unit 14010001, on left bank approximately 1,500 ft downstream from the confluence of Vasquez Creek and the Fraser River.

DRAINAGE AREA.--59.1 mi^{2}.

PERIOD OF RECORD.--August 1990 to current year.

REMARKS.--Nutrient analysis based on low-level methods.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)
OCT									
07...	1305	12	86	8.7	5.0	9.4	--	--	--
NOV									
03...	1315	9.9	84	8.4	2.7	10.1	27	7.3	2.0
DEC									
01...	1250	9.8	88	8.6	.3	10.5	28	7.5	2.1
JAN									
05...	1450	14	84	8.0	.2	10.8	27	7.2	2.1
FEB									
16...	1440	14	95	8.3	.2	10.4	29	7.8	2.3
MAR									
08...	1435	9.8	103	8.4	.5	10.7	34	8.2	3.4
APR									
05...	1130	19	112	7.6	.8	10.4	36	8.8	3.5
MAY									
03...	1500	24	123	8.0	4.7	9.8	36	9.2	3.1
JUN									
08...	1200	118	49	8.1	6.5	9.5	16	4.2	1.3
JUL									
19...	1515	59	60	8.3	11.1	7.6	21	5.3	2.0
AUG									
02...	1230	80	62	9.0	10.0	8.6	22	5.4	2.1
31...	1320	25	73	8.5	11.9	8.9	25	6.7	2.0

DATE	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)
OCT								
07...	5.7	<1	.005	.11	.002	--	.007	.005
NOV								
03...	5.8	4	<.0010	.062	<.002	<.05	.006	.005
DEC								
01...	5.7	1	.004	.16	.035	.03	.010	.007
JAN								
05...	4.3	<1	.003	.37	.152	.03	.0325	.033
FEB								
16...	6.4	<1	.003	.49	.472	.08	.0631	.062
MAR								
08...	9.1	1	.005	.82	.018	.07	.053	.053
APR								
05...	12	3	.001	.73	.003	.07	.042	.042
MAY								
03...	16	1	.001	.22	.005	<.05	.024	.019
JUN								
08...	5.0	1	.001	.037	.003	<.05	.013	.004
JUL								
19...	4.0	1	.002	.051	.007	<.05	.009	.005
AUG								
02...	4.3	5	.004	.066	.004	<.05	.008	.003
31...	4.9	2	.001	.14	.003	E.04	.014	.011

E Estimated.

09025300 ELK CREEK AT UPPER STATION NEAR FRASER, CO

LOCATION.--Lat 39°53'22", long 105°49'55", (unsurveyed), T.2 S., R.76 W., Grand County, Hydrologic Unit 14010001, on right bank 150 ft downstream from Vasquez ditch, 1,100 ft upstream from aqueduct, and 4.0 mi south of Fraser.

DRAINAGE AREA.--1.67 mi^2.

PERIOD OF RECORD.--October 1996 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 9,400 ft above sea level, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. Transmountain diversions upstream from station to Moffat water tunnel. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.87	e.00	e.00	e.00	e.00	e.00	e.00	e.00	.86	6.0	2.5	1.5
2	.95	e.00	e.00	e.00	e.00	e.00	e.00	e.00	2.7	4.3	2.0	1.6
3	.95	e.00	e.00	e.00	e.00	e.00	e.00	e.00	7.9	3.2	1.9	1.5
4	.96	e.00	e.00	e.00	e.00	e.00	e.00	e.00	8.1	3.2	3.3	1.5
5	e.93	e.00	e.00	e.00	e.00	e.00	e.00	e.00	7.4	3.0	3.0	1.4
6	.94	e.00	e.00	e.00	e.00	e.00	e.00	e.00	6.3	2.9	2.5	1.3
7	.98	e.00	e.00	e.00	e.00	e.00	e.00	e.00	6.5	2.9	2.3	1.2
8	.98	e.00	e.00	e.00	e.00	e.00	e.00	e.00	7.2	2.8	2.1	1.2
9	.62	e.00	e.00	e.00	e.00	e.00	e.00	e.00	7.2	2.7	2.1	1.2
10	.04	e.00	e.00	e.00	e.00	e.00	e.00	e.00	7.3	2.7	2.4	1.2
11	.03	e.00	e.00	e.00	e.00	e.00	e.00	e.00	6.8	2.5	2.2	1.2
12	.02	e.00	e.00	e.00	e.00	e.00	e.00	e.00	6.6	2.5	2.1	1.2
13	.02	e.00	e.00	e.00	e.00	e.00	e.00	e.00	6.5	2.4	2.0	1.2
14	.02	e.00	e.00	e.00	e.00	e.00	e.00	e.00	7.1	2.5	2.0	1.2
15	.02	e.00	e.00	e.00	e.00	e.00	e.00	.03	7.9	2.4	2.0	1.2
16	.01	e.00	e.00	e.00	e.00	e.00	e.00	.03	7.7	1.2	1.9	1.1
17	.01	e.00	e.00	e.00	e.00	e.00	e.00	.03	8.0	.72	2.1	1.0
18	.01	e.00	e.00	e.00	e.00	e.00	e.00	.04	8.3	.51	2.0	1.0
19	e.00	e.00	e.00	e.00	e.00	e.00	e.00	.05	8.5	.54	1.9	1.1
20	e.00	e.00	e.00	e.00	e.00	e.00	e.00	.05	8.5	.55	2.0	1.3
21	e.00	e.00	e.00	e.00	e.00	e.00	e.00	.05	9.2	.87	1.9	1.2
22	e.00	e.00	e.00	e.00	e.00	e.00	e.00	.05	9.5	1.0	1.8	1.0
23	e.00	e.00	e.00	e.00	e.00	e.00	e.00	.06	10	1.2	1.7	.98
24	e.00	e.00	e.00	e.00	e.00	e.00	e.00	.07	10	2.6	1.6	.98
25	e.00	e.00	e.00	e.00	e.00	e.00	e.00	.08	9.9	2.7	1.6	.95
26	e.00	e.00	e.00	e.00	e.00	e.00	e.00	.08	9.1	2.4	1.7	.92
27	e.00	e.00	e.00	e.00	e.00	e.00	e.00	.08	8.5	2.1	1.7	.93
28	e.00	e.00	e.00	e.00	e.00	e.00	e.00	1.4	7.8	2.5	1.8	.92
29	e.00	e.00	e.00	e.00	---	e.00	e.00	1.7	7.4	2.4	1.7	.96
30	e.00	e.00	e.00	e.00	---	e.00	e.00	.78	6.6	2.1	1.6	.92
31	e.00	---	e.00	e.00	---	e.00	---	.80	---	2.8	1.5	---
TOTAL	8.36	0.00	0.00	0.00	0.00	0.00	0.00	5.38	225.36	72.19	62.9	34.86
MEAN	.27	.000	.000	.000	.000	.000	.000	.17	7.51	2.33	2.03	1.16
MAX	.98	.00	.00	.00	.00	.00	.00	1.7	10	6.0	3.3	1.6
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.86	.51	1.5	.92
AC-FT	17	.00	.00	.00	.00	.00	.00	11	447	143	125	69

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 1999, BY WATER YEAR (WY)

MEAN	.51	.23	.22	.21	.16	.14	.17	1.12	10.3	2.97	1.62	.99
MAX	.77	.68	.67	.64	.47	.41	.50	3.02	16.3	3.29	2.03	1.16
(WY)	1997	1997	1997	1997	1997	1997	1997	1998	1997	1998	1999	1999
MIN	.27	.000	.000	.000	.000	.000	.000	.17	7.12	2.33	1.33	.89
(WY)	1999	1998	1998	1998	1998	1999	1999	1997	1998	1999	1998	1998

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1997 - 1999	
ANNUAL TOTAL	486.14		409.05			
ANNUAL MEAN	1.33		1.12		1.55	
HIGHEST ANNUAL MEAN					2.18	1997
LOWEST ANNUAL MEAN					1.12	1999
HIGHEST DAILY MEAN	11	Jun 3	10	Jun 23	20	Jun 10 1997
LOWEST DAILY MEAN	e.00	Jan 1	a,e.00	Oct 19	b.00	May 7 1997
ANNUAL SEVEN-DAY MINIMUM	.00	Jan 1	.00	Oct 19	.00	May 7 1997
INSTANTANEOUS PEAK FLOW			13	Jun 23	22	Jun 10 1997
INSTANTANEOUS PEAK STAGE			5.54	Jun 23	5.69	Jun 10 1997
ANNUAL RUNOFF (AC-FT)	964		811		1120	
10 PERCENT EXCEEDS	5.4		2.9		4.4	
50 PERCENT EXCEEDS	.02		.00		.54	
90 PERCENT EXCEEDS	.00		.00		.00	

e Estimated
a No flow many days.
b No flow many days each year.

09026500 ST. LOUIS CREEK NEAR FRASER, CO

LOCATION.--Lat 39°54'36", long 105°52'40", in $SE^1/_4SW^1/_4$ sec.34, T.1 S., R.76 W., Grand County, Hydrologic Unit 14010001, on left bank 300 ft downstream from West St. Louis Creek, and 4.1 mi southwest of Fraser.

DRAINAGE AREA.--32.9 mi^2.

PERIOD OF RECORD.--October 1933 to current year. Prior to August 1934, monthly discharge only, published in WSP 1313. Records for May 1956 to September 1959, equivalent to earlier records if diversion to Moffat water tunnel is added to flow past station.

REVISED RECORDS.--WSP 2124: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 8,980.17 ft above sea level.

REMARKS.--Records good except for estimated daily discharges, which are poor. Transmountain diversions upstream from station to Moffat water tunnel not known since 1959. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	e7.4	e6.4	e6.4	e6.6	e6.2	e7.0	9.6	35	73	29	13
2	14	e7.5	e7.0	e6.4	e6.6	e6.2	e7.0	9.4	41	51	20	11
3	12	e7.4	6.5	e6.4	e6.6	e6.2	e7.0	9.6	62	20	14	9.7
4	9.0	e7.0	6.5	e6.4	e6.6	e6.2	e7.0	9.3	68	17	20	9.0
5	8.0	e6.8	e6.4	e6.4	e6.6	e6.2	e7.0	8.8	63	16	30	8.7
6	8.3	e7.2	e6.4	e6.4	e6.6	e6.2	e7.0	11	50	16	50	8.6
7	7.5	7.7	e6.4	e6.4	e6.4	e6.2	e7.0	9.5	47	16	50	8.5
8	7.7	e7.7	e6.4	e6.4	e6.4	e6.2	e7.0	10	36	16	47	11
9	7.5	e7.6	e6.4	e6.6	e6.4	e6.2	e7.0	12	32	15	45	11
10	7.1	e7.6	e6.4	e6.7	e6.4	e6.2	e7.0	13	53	15	47	11
11	7.7	e7.6	e6.4	6.8	e6.4	e6.2	e7.0	12	84	14	46	11
12	7.5	e7.6	e6.4	6.8	e6.4	e6.2	e6.9	12	85	14	43	11
13	7.3	e7.6	e6.4	6.7	e6.4	e6.2	e6.8	11	84	16	41	10
14	7.3	7.8	e6.4	6.7	e6.4	e6.2	e7.0	12	99	29	41	9.9
15	7.3	7.3	e6.4	6.7	e6.2	e6.2	e7.4	13	137	16	41	9.4
16	7.1	7.0	e6.4	6.7	e6.2	e6.2	e8.0	14	132	27	39	7.3
17	7.1	6.8	e6.4	e6.6	e6.2	e6.2	e8.0	13	132	66	41	18
18	7.3	6.8	e6.4	e6.6	e6.2	e6.2	e8.4	15	131	61	41	18
19	7.6	6.7	e6.4	e6.6	e6.2	e6.4	e9.0	18	141	40	37	22
20	7.3	e6.6	e6.4	e6.6	e6.2	e6.6	10	18	140	17	33	31
21	e7.2	e6.6	e6.4	e6.6	e6.2	e6.6	10	16	148	15	25	26
22	e7.4	6.7	e6.4	e6.6	e6.0	e6.6	9.3	17	166	14	23	23
23	e7.4	6.4	e6.4	e6.6	e6.2	e7.0	8.0	18	196	14	19	23
24	e7.2	6.4	e6.4	e6.6	e6.2	e7.0	9.2	19	109	15	13	22
25	e7.2	6.4	e6.4	e6.6	e6.2	e7.0	9.9	21	57	16	13	22
26	e7.1	6.5	e6.4	e6.6	e6.2	e7.0	8.5	19	86	14	14	20
27	e7.1	6.5	e6.4	e6.6	e6.2	e7.2	8.3	20	76	14	15	20
28	7.8	6.7	e6.4	e6.6	e6.2	e7.2	9.2	26	114	25	16	20
29	7.5	6.2	e6.4	e6.6	---	e7.2	11	41	113	28	13	20
30	e7.4	6.2	e6.4	e6.6	---	e7.2	11	35	76	20	11	21
31	e7.4	---	e6.4	e6.6	---	e7.0	---	37	---	30	11	---
TOTAL	246.3	210.3	199.2	203.9	177.4	201.6	242.9	509.2	2793	760	928	466.1
MEAN	7.95	7.01	6.43	6.58	6.34	6.50	8.10	16.4	93.1	24.5	29.9	15.5
MAX	14	7.8	7.0	6.8	6.6	7.2	11	41	196	73	50	31
MIN	7.1	6.2	6.4	6.4	6.0	6.2	6.8	8.8	32	14	11	7.3
AC-FT	489	417	395	404	352	400	482	1010	5540	1510	1840	925

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1934 - 1999, BY WATER YEAR (WY)

MEAN	11.9	9.34	7.59	6.80	6.27	6.37	9.40	37.5	117	66.1	24.2	14.6
MAX	31.4	19.7	14.3	12.0	11.0	12.0	26.2	102	263	250	70.1	34.1
(WY)	1962	1996	1946	1946	1946	1946	1960	1936	1997	1995	1945	1938
MIN	2.63	2.90	2.28	2.00	2.07	2.35	3.41	8.62	21.6	16.2	11.3	4.39
(WY)	1965	1967	1968	1961	1968	1968	1970	1968	1989	1994	1963	1963

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1934 - 1999	
ANNUAL TOTAL	6673.3		6937.9			
ANNUAL MEAN	18.3		19.0		26.5	
HIGHEST ANNUAL MEAN					48.9	1995
LOWEST ANNUAL MEAN					9.98	1963
HIGHEST DAILY MEAN	147	Jun 3	196	Jun 23	418	Jun 18 1995
LOWEST DAILY MEAN	e4.2	Jan 8	e6.0	Feb 22	a1.8	Jan 25 1968
ANNUAL SEVEN-DAY MINIMUM	4.4	Apr 9	6.2	Feb 16	1.8	Jan 24 1968
INSTANTANEOUS PEAK FLOW			241	Jun 23	558	Jun 17 1995
INSTANTANEOUS PEAK STAGE			2.25	Jun 23	b2.80	Jun 17 1995
ANNUAL RUNOFF (AC-FT)	13240		13760		19190	
10 PERCENT EXCEEDS	55		44		62	
50 PERCENT EXCEEDS	7.4		7.6		10	
90 PERCENT EXCEEDS	4.5		6.4		4.7	

e Estimated
a Also occurred Jan 26-30, Feb 1-2, and Feb 14, 1968.
b Maximum gage height, 3.21 ft, Jun 10, 1952, backwater from log on control.

09027100 FRASER RIVER AT TABERNASH, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 39°59'25", long 105°49'44", $SW^1/_4NW^1/_4$ sec.6, T.1 S., R.75 W., Grand County, Hydrologic Unit 14010001, on right bank approximately 100 ft upstream from the bridge over the Fraser River.

DRAINAGE AREA.--116 mi^2.

REVISED RECORDS.--WDR CO-93-2: Drainage area.

PERIOD OF RECORD.--August 1990 to current year.

REMARKS.--Nutrient analysis based on low-level methods.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)
OCT									
07...	1415	20	103	9.0	10.5	9.1	--	--	--
NOV									
03...	1430	18	97	9.4	4.6	10.8	34	9.8	2.2
DEC									
01...	1500	28	102	8.5	.4	11.4	34	10	2.2
JAN									
06...	1545	23	100	7.8	.3	10.0	34	10	2.3
FEB									
16...	1335	29	112	8.2	.2	10.4	37	11	2.5
MAR									
08...	1610	20	128	7.7	.0	10.9	41	11	3.3
APR									
05...	1445	41	117	7.9	5.8	9.0	39	11	2.9
MAY									
03...	1330	43	108	9.5	7.6	10.0	35	9.8	2.5
JUN									
08...	1300	133	51	7.9	10.7	8.5	20	5.8	1.4
JUL									
19...	1400	109	64	8.7	12.9	9.2	25	7.2	1.8
AUG									
02...	1600	112	72	8.5	18.2	7.7	27	7.5	2.0
31...	1430	47	85	10.0	16.7	9.6	30	8.6	2.0

DATE	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)
OCT								
07...	5.5	1	.009	.12	.032	--	.067	.057
NOV								
03...	5.0	3	.004	.082	.011	.07	.062	.057
DEC								
01...	5.0	13	.006	.25	.063	.10	.062	.060
JAN								
06...	4.6	<1	.007	.43	.334	.12	.0983	.098
FEB								
16...	5.8	<1	.008	.57	.866	.17	.14	.14
MAR								
08...	10	4	.008	.76	.673	.16	.14	.14
APR								
05...	9.2	9	.011	.59	.493	.17	.11	.11
MAY								
03...	11	6	.008	.12	.043	.10	.061	.036
JUN								
08...	3.8	3	.003	.028	.009	E.04	.02	.014
JUL								
19...	2.5	<1	.005	.033	.038	E.05	.031	.023
AUG								
02...	3.9	7	.01	.051	.072	.07	.054	.042
31...	4.4	2	.011	.047	.006	.09	.069	.061

E Estimated.

09032000 RANCH CREEK NEAR FRASER, CO

LOCATION.--Lat 39°57'00", long 105°45'54", in NW$^1/_4$NE$^1/_4$ sec.22, T.1 S., R.75 W., Grand County, Hydrologic Unit 14010001, on left bank 650 ft downstream from Middle Fork, and 2.7 mi east of Fraser.

DRAINAGE AREA.--19.9 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1934 to current year. Records for May 26, 1937, to September 1959, equivalent to earlier records if diversion to Moffat water tunnel is added to flow past station.

REVISED RECORDS.--WSP 1243: 1935.

GAGE.--Water-stage recorder. Elevation of gage is 8,660 ft above sea level, from topographic map. Prior to Oct. 5, 1995, at site 200 ft upstream, at different datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. Diversion upstream from station for irrigation of hay meadows along Fraser River. Transmountain diversion upstream from station to Moffat water tunnel not known since 1959. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.4	3.9	e3.1	e2.9	e2.8	e2.8	e3.0	7.1	37	3.7	4.5	5.1
2	4.7	3.9	e3.0	e2.9	e2.8	e2.8	e3.0	6.4	38	3.6	4.1	5.1
3	4.2	e3.9	e3.0	e2.9	e2.8	e2.8	e3.0	6.0	61	3.6	3.9	5.2
4	4.6	e4.1	e3.0	e2.9	e2.8	e2.8	e3.0	5.8	62	3.5	4.5	4.8
5	4.0	e3.9	e3.0	e2.9	e2.8	e2.8	e3.0	5.4	52	3.4	4.5	4.5
6	4.0	e3.9	e3.0	e2.9	e2.7	e2.7	e3.0	5.2	40	3.3	8.5	4.3
7	4.4	e3.8	e3.0	e2.9	e2.7	e2.7	e3.1	5.7	33	3.3	15	4.2
8	4.5	e3.7	e3.0	e2.9	e2.7	e2.7	e3.2	6.3	37	3.4	14	4.1
9	4.3	e3.7	e3.0	e2.9	e2.7	e2.7	e3.3	7.4	26	3.3	14	4.0
10	4.2	e3.6	e3.0	e2.9	e2.7	e2.7	e3.4	7.7	65	3.2	18	4.0
11	4.0	e3.5	e3.0	e2.8	e2.7	e2.7	e3.5	6.6	94	3.2	20	4.1
12	3.8	e3.5	e3.0	e2.8	e2.7	e2.7	e3.5	6.6	91	3.3	18	4.1
13	3.8	e3.5	e3.0	e2.8	e2.7	e2.8	e3.6	7.6	93	3.4	17	3.9
14	3.8	e3.4	e3.0	e2.8	e2.7	e2.9	e3.8	8.7	102	3.8	17	3.8
15	3.8	e3.4	e3.0	e2.8	e2.7	e3.0	e3.7	9.5	123	3.8	18	3.6
16	3.7	e3.4	e2.9	e2.8	e2.7	e3.0	e3.7	9.7	120	4.1	16	4.7
17	3.9	e3.4	e2.9	e2.8	e2.7	e3.0	e3.7	9.3	134	3.7	17	8.9
18	4.0	e3.3	e2.9	e2.8	e2.7	e3.0	e3.3	10	145	3.1	17	9.0
19	4.0	e3.3	e2.9	e2.8	e2.7	e3.0	e2.5	12	145	2.8	16	11
20	3.8	e3.3	e2.9	e2.8	e2.7	e3.0	e5.0	13	140	2.8	13	14
21	3.8	e3.3	e2.9	e2.8	e2.7	e3.0	7.0	15	133	2.9	3.3	12
22	3.9	e3.3	e2.9	e2.8	e2.7	e3.0	6.7	16	136	3.4	3.3	11
23	3.8	e3.3	e2.9	e2.8	e2.7	e3.0	6.0	19	139	3.4	4.2	10
24	3.8	e3.3	e2.9	e2.8	e2.7	e3.0	5.6	24	136	3.4	4.6	9.9
25	3.6	e3.2	e2.9	e2.8	e2.7	e3.0	5.3	28	103	3.5	4.7	9.8
26	3.7	e3.2	e2.9	e2.8	e2.7	e3.0	4.3	22	67	3.5	5.2	9.3
27	3.9	e3.1	e2.9	e2.8	e2.7	e3.0	4.6	20	58	3.5	5.2	9.1
28	4.6	e3.1	e2.9	e2.8	e2.7	e3.0	5.7	26	30	4.0	6.0	9.4
29	4.3	e3.1	e2.9	e2.8	---	e3.0	11	34	4.4	4.4	5.2	9.4
30	4.2	e3.1	e2.9	e2.8	---	e3.0	9.8	36	4.6	4.1	4.8	9.7
31	4.0	---	e2.9	e2.8	---	e3.0	---	42	---	4.4	4.7	---
TOTAL	124.5	104.4	91.5	87.8	76.1	89.6	133.3	438.0	2449.0	108.8	311.2	212.0
MEAN	4.02	3.48	2.95	2.83	2.72	2.89	4.44	14.1	81.6	3.51	10.0	7.07
MAX	4.7	4.1	3.1	2.9	2.8	3.0	11	42	145	4.4	20	14
MIN	3.4	3.1	2.9	2.8	2.7	2.7	2.5	5.2	4.4	2.8	3.3	3.6
AC-FT	247	207	181	174	151	178	264	869	4860	216	617	421

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1935 - 1999, BY WATER YEAR (WY)

MEAN	4.79	4.19	3.42	3.02	2.69	2.62	5.26	30.7	77.9	25.4	7.53	5.02
MAX	19.6	14.6	8.11	5.63	4.65	5.34	17.4	99.4	206	136	27.3	13.8
(WY)	1962	1962	1962	1962	1966	1950	1946	1936	1997	1995	1945	1945
MIN	.98	1.09	.87	.89	.74	.65	1.61	3.69	2.68	2.40	1.52	.98
(WY)	1969	1965	1965	1964	1964	1964	1961	1954	1966	1966	1960	1960

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1935 - 1999	
ANNUAL TOTAL	4192.6		4226.2			
ANNUAL MEAN	11.5		11.6			
HIGHEST ANNUAL MEAN					31.4	1983
LOWEST ANNUAL MEAN					2.55	1964
HIGHEST DAILY MEAN	173	Jun 3	145	Jun 18	402	Jun 7 1997
LOWEST DAILY MEAN	e2.4	Feb 16	e2.5	Apr 19	a.40	Sep 21 1960
ANNUAL SEVEN-DAY MINIMUM	2.4	Feb 16	2.7	Feb 6	.42	Sep 21 1988
INSTANTANEOUS PEAK FLOW			186	Jun 18	548	Jun 4 1997
INSTANTANEOUS PEAK STAGE			5.82	Jun 18	6.71	Jun 4 1997
ANNUAL RUNOFF (AC-FT)	8320		8380			
10 PERCENT EXCEEDS	27		20		31	
50 PERCENT EXCEEDS	3.5		3.6		4.1	
90 PERCENT EXCEEDS	2.4		2.8		1.8	

e Estimated
a Also occurred Oct 6, 1960, and Sep 24-26, 1988.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--February 1997 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)
OCT								
08...	1500	4.5	51	8.1	3.5	9.7	K1	.4
NOV								
05...	1245	4.7	49	8.3	.1	10.8	K3	.3
APR								
06...	1355	3.1	59	8.5	1.1	10.9	<1	.3
JUL								
09...	1515	25	35	8.0	8.3	8.7	K7	<.1
AUG								
04...	1200	4.2	42	8.0	10.3	8.3	15	.7

DATE	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)
OCT							
08...	<1	.002	.014	.002	--	.003	.002
NOV							
05...	1	.001	.033	<.002	<.05	.005	.002
APR							
06...	1	<.001	.045	<.002	<.05	.004	.005
JUN							
09...	<1	.001	<.005	.003	<.05	.004	.001
AUG							
04...	2	.001	<.005	<.002	<.05	.005	.003

K Based on non-ideal colony count.

MISCELLANEOUS FIELD MEASUREMENTS, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)
NOV				
04...	1455	4.1	49	.5
DEC				
03...	1420	3.0	52	.0
FEB				
18...	0935	2.7	57	.0
APR				
14...	1249	3.8	59	.5
MAY				
13...	1449	7.0	52	5.0
JUN				
02...	1536	26	37	7.5
JUL				
07...	1355	4.2	38	13.0
AUG				
04...	1234	4.2	42	11.0
SEP				
01...	1405	4.8	45	10.0

09032100 CABIN CREEK NEAR FRASER, CO

LOCATION.--Lat 39°59'09", long 105°44'40", in $NW^1/_4SE^1/_4$ sec.2, T.1 S., R.75 W., Grand County, Hydrologic Unit 14010001, on right bank 200 ft downstream from concrete diversion dam, 2.7 mi upstream from mouth, and 4.6 mi northeast of Fraser.

DRAINAGE AREA.--4.87 mi^2.

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

GAGE.--Water-stage recorder. Elevation of gage is 9,560 ft above sea level, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. Transmountain diversion upstream from station to Moffat water tunnel, amount unknown. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.4	3.1	e1.6	e1.3	e1.3	e1.3	e2.0	e1.9	6.9	31	10	5.7
2	3.3	3.1	e1.6	e1.3	e1.3	e1.3	e2.0	e1.3	9.5	29	7.9	6.5
3	3.1	3.0	e1.6	e1.3	e1.3	e1.3	e2.0	e1.1	32	22	7.2	6.5
4	3.2	e3.4	e1.6	e1.3	e1.3	e1.3	e2.1	e1.1	44	16	10	5.9
5	3.1	e3.2	e1.6	e1.3	e1.3	e1.3	e2.2	e1.2	41	16	11	5.5
6	2.9	e3.0	e1.6	e1.3	e1.3	e1.3	e2.2	e1.2	34	14	9.5	5.2
7	3.8	e3.0	e1.6	e1.3	e1.3	e1.3	e2.3	e1.2	35	13	8.7	5.0
8	3.8	e3.0	e1.6	e1.3	e1.3	e1.3	e2.3	e1.2	39	11	8.3	4.8
9	4.2	e2.9	e1.6	e1.3	e1.3	e1.3	e2.3	e1.1	28	9.6	8.0	4.7
10	4.2	e2.9	e1.6	e1.3	e1.3	e1.3	e2.4	e1.1	36	7.8	8.8	4.6
11	3.8	e2.9	e1.6	e1.3	e1.3	e1.3	e2.4	e1.1	43	6.6	8.3	4.5
12	3.5	e2.8	e1.6	e1.3	e1.3	e1.3	e2.4	e1.1	41	7.1	7.5	4.4
13	3.3	e2.8	e1.6	e1.3	e1.3	e1.3	e2.4	e1.1	39	8.6	7.0	4.0
14	3.5	e2.8	e1.6	e1.3	e1.3	e1.3	e2.4	.89	41	10	7.1	3.9
15	3.3	e2.8	e1.6	e1.3	e1.3	e1.3	e2.4	1.5	50	12	7.1	3.8
16	3.1	e2.9	e1.6	e1.3	e1.3	e1.4	e2.4	1.1	47	11	6.3	3.6
17	3.1	e2.8	e1.6	e1.3	e1.3	e1.5	e2.4	2.1	51	9.4	6.3	3.4
18	3.3	e2.7	e1.6	e1.3	e1.3	e1.6	e2.4	1.2	51	8.3	6.2	3.3
19	4.0	e2.6	e1.4	e1.3	e1.3	e1.7	e2.5	1.1	51	8.7	5.7	4.7
20	3.4	e2.4	e1.4	e1.3	e1.3	e1.8	2.5	2.1	51	7.7	6.4	6.1
21	3.3	e2.2	e1.4	e1.3	e1.3	e1.8	2.6	2.4	49	6.7	6.3	4.8
22	3.3	e2.2	e1.4	e1.3	e1.3	e1.9	e1.7	1.9	50	6.5	5.9	3.9
23	3.0	e2.1	e1.4	e1.3	e1.3	e1.9	e1.9	11	54	6.4	5.1	3.6
24	2.9	e2.1	e1.4	e1.3	e1.3	e1.9	e2.0	15	55	9.0	4.9	3.5
25	2.7	e2.1	e1.4	e1.3	e1.3	e2.0	e2.3	11	52	9.0	5.3	3.3
26	2.7	e2.1	e1.3	e1.3	e1.3	e2.0	e1.4	2.5	47	7.4	5.4	3.1
27	3.0	e2.2	e1.3	e1.3	e1.3	e2.0	e1.3	2.1	43	7.2	5.6	3.1
28	3.6	e2.1	e1.3	e1.3	e1.3	e2.0	e1.3	5.0	39	8.6	6.5	3.1
29	3.3	e1.9	e1.3	e1.3	---	e2.0	e1.5	7.5	35	9.0	5.4	4.1
30	3.3	e1.7	e1.3	e1.3	---	e2.0	e1.8	7.8	32	7.9	4.9	3.4
31	3.2	---	e1.3	e1.3	---	e2.0	---	7.5	---	9.8	4.9	---
TOTAL	102.6	78.8	46.4	40.3	36.4	49.0	63.8	99.39	1226.4	346.3	217.5	132.0
MEAN	3.31	2.63	1.50	1.30	1.30	1.58	2.13	3.21	40.9	11.2	7.02	4.40
MAX	4.2	3.4	1.6	1.3	1.3	2.0	2.6	15	55	31	11	6.5
MIN	2.4	1.7	1.3	1.3	1.3	1.3	1.3	.89	6.9	6.4	4.9	3.1
AC-FT	204	156	92	80	72	97	127	197	2430	687	431	262

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984 - 1999, BY WATER YEAR (WY)

MEAN	2.78	2.16	1.57	1.28	1.08	1.14	1.78	10.5	33.4	13.7	4.96	3.13
MAX	6.11	3.49	2.33	2.12	1.52	1.60	2.75	25.5	70.3	46.6	8.05	5.12
(WY)	1997	1997	1997	1997	1997	1997	1997	1996	1997	1995	1984	1984
MIN	1.67	.48	.47	.59	.30	.12	.079	1.60	9.99	4.91	1.91	1.48
(WY)	1990	1985	1985	1985	1985	1985	1985	1985	1989	1994	1994	1994

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1984 - 1999	
ANNUAL TOTAL	2107.3		2438.89			
ANNUAL MEAN	5.77		6.68		6.46	
HIGHEST ANNUAL MEAN					11.2	1997
LOWEST ANNUAL MEAN					3.77	1989
HIGHEST DAILY MEAN	49	Jun 3	55	Jun 24	112	Jun 7 1997
LOWEST DAILY MEAN	e1.1	Feb 16	.89	May 14	.04	May 7 1985
ANNUAL SEVEN-DAY MINIMUM	1.1	Feb 16	1.1	May 8	.07	Apr 12 1985
INSTANTANEOUS PEAK FLOW			66	Jun 23	162	Jun 8 1997
INSTANTANEOUS PEAK STAGE			1.91	Jun 23	a2.38	Jun 8 1997
ANNUAL RUNOFF (AC-FT)	4180		4840		4680	
10 PERCENT EXCEEDS	12		12		15	
50 PERCENT EXCEEDS	2.9		2.4		2.1	
90 PERCENT EXCEEDS	1.1		1.3		1.0	

e Estimated
a Maximum gage height, 2.39 ft, Jun 17, 1995.

395840105472700 RANCH CREEK BELOW CABIN CREEK NEAR TABERNASH, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 39°58'40", long 105°47'27", NW$^{1}/_{4}$NW$^{1}/_{4}$ sec.9, T.1 S., R.75 W., Grand County, Hydrologic Unit 14010001, 25 ft upstream from bridge to Devils Thumb Ranch over Ranch Creek.

PERIOD OF RECORD.--November 1998 to September 1999. (Discontinued)

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)
NOV								
05...	0900	8.2	79	8.1	.2	11.1	K4	.6
DEC								
02...	1300	8.9	68	8.5	.5	11.1	K1	.3
JAN								
06...	1125	6.0	66	7.5	.1	9.9	K5	.3
FEB								
17...	1320	8.9	73	7.9	.1	10.7	K1	1.0
MAR								
09...	1453	5.0	69	7.9	.000	10.3	K1	.2
APR								
07...	0900	10	78	8.2	.3	10.2	K1	.7
MAY								
04...	1330	17	60	8.2	7.3	9.3	K1	.5
JUN								
09...	1215	44	35	7.8	9.9	8.7	K5	<.1
JUL								
21...	0920	11	68	8.3	11.9	8.0	71	.8
AUG								
03...	1210	15	67	8.1	16.2	7.3	110	<.1
SEP								
01...	1500	12	67	8.4	16.7	7.6	34	1.2

DATE	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)
NOV							
05...	5	.001	.014	<.002	<.05	.008	.005
DEC							
02...	5	<.0010	.028	<.002	<.05	.007	.005
JAN							
06...	<1	<.001	.093	.017	<.05	.0064	.006
FEB							
17...	<1	.001	.077	.008	<.05	.0052	.006
MAR							
09...	<1	.001	.077	.011	<.05	.008	.007
APR							
07...	2	.001	.034	.009	E.03	.021	.015
MAY							
04...	3	<.001	.006	.006	<.05	.012	.005
JUN							
09...	1	.001	.018	.004	E.03	.005	.003
JUL							
21...	<1	.001	<.005	.002	<.05	.01	.006
AUG							
03...	4	.001	<.005	.002	<.05	.014	.008
SEP							
01...	1	.001	<.005	.004	E.03	.016	.007

E Estimated.
K Based on non-ideal colony count.

395947105481000 HURD CREEK BELOW TRAIL CREEK NEAR TABERNASH, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 39°59'47", long 105°48'10", in NE$^{1}/_{4}$NW$^{1}/_{4}$ sec.5, T.1 S., R.75 W., Grand County, Hydrologic Unit 14010001, just downstream from Trail Creek, and upstream from pond, 0.25 mi upstream from Hurd Creek Fishing Club, and 3 mi southeast of Tabernash.

DRAINAGE AREA.--Not determined.

PERIOD OF RECORD.--November 1998 to current year.

REMARKS.--Nutrient analysis based on low-level methods.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)
NOV								
05...	1010	1.3	47	7.7	.2	10.6	<1	.7
APR								
07...	1010	5.3	52	7.5	.3	11.4	K1	.5
JUN								
09...	1300	61	20	7.6	8.3	9.0	K1	<.1
AUG								
03...	1315	4.8	38	7.8	11.8	7.3	K8	<.1

DATE	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)
NOV							
05...	<1	.001	.007	<.002	<.05	.002	.002
APR							
07...	1	.001	.030	.003	.11	.004	.004
JUN							
09...	<1	.001	<.005	.009	<.05	<.004	.001
AUG							
03...	3	.001	<.005	.004	.11	<.004	.002

K Based on non-ideal colony count.

400016105490800 MEADOW CREEK AT MOUTH NEAR TABERNASH, CO

LOCATION.--Lat 40°00'16", long 105°49'08", in NW$^1/_4$SW$^1/_4$ sec.32, T.1 N., R.75 W., Grand County, Hydrologic Unit 14010001, on left bank 0.5 mi upstream from mouth, 0.8 mi downstream from Meadow Creek Campground, and 2 mi northeast of Tabernash.

DRAINAGE AREA.--13.9 mi^2.

PERIOD OF RECORD.--May 1997 to September 1999 (discontinued).

GAGE.--Water-stage recorder. Elevation of gage is 8,405 ft above sea level, from topographic map.

REMARKS.--Records fair, except for flows below 0.3 ft^3/s and estimated daily discharges, which are poor. Flow partially regulated by Meadow Creek Reservoir. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data for Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.08	1.0	e.60	e.60	e.60	e.60	e2.2	11	4.2	1.8	1.4	.15
2	.74	1.1	e.60	e.60	e.60	e.60	e2.3	10	3.8	1.7	.63	.23
3	.62	1.2	e.60	e.60	e.60	e.60	e2.4	9.6	3.7	1.7	.38	.28
4	1.0	e.86	e.60	e.60	e.60	e.60	e2.5	9.2	3.4	1.7	.48	.22
5	.77	e.82	e.60	e.60	e.60	e.60	e2.7	8.6	4.0	1.6	1.5	.17
6	.48	e.80	e.60	e.60	e.60	e.60	e2.8	8.0	3.3	1.5	.86	.13
7	.46	e.74	e.60	e.60	e.60	e.60	e2.9	8.8	3.0	1.6	.57	.10
8	.59	e.72	e.60	e.60	e.60	e.60	e3.2	9.5	2.8	1.6	.39	.08
9	.59	e.78	e.60	e.60	e.60	e.60	e3.3	11	2.7	1.5	.28	.08
10	1.4	e.64	e.60	e.60	e.60	e.60	e3.5	11	16	1.2	.34	.08
11	2.1	e.62	e.60	e.60	e.60	e.62	e3.7	10	31	1.1	.75	.07
12	2.2	e.60	e.60	e.60	e.60	e.64	e3.9	10	6.7	1.4	.43	.07
13	2.4	e.60	e.60	e.60	e.60	e.66	e4.2	12	5.3	1.1	.29	.08
14	2.8	e.60	e.60	e.60	e.60	e.68	e4.4	12	4.2	1.2	.21	.08
15	1.4	e.60	e.60	e.60	e.60	e.70	e4.0	13	6.6	2.0	.22	.56
16	.98	e.60	e.60	e.60	e.60	e.76	e4.0	13	9.6	1.6	.23	.95
17	1.1	e.60	e.60	e.60	e.60	e.78	e4.0	11	8.3	1.4	.20	.94
18	1.0	e.60	e.60	e.60	e.60	e.84	e4.1	11	8.8	1.1	.21	.96
19	1.1	e.60	e.60	e.60	e.60	e.88	4.8	12	7.2	1.1	.18	1.2
20	1.0	e.60	e.60	e.60	e.60	e.94	5.9	13	6.2	1.1	.29	1.9
21	.99	e.60	e.60	e.60	e.60	e1.0	6.4	12	5.4	.91	.35	2.6
22	.99	e.60	e.60	e.60	e.60	e1.1	6.1	9.2	5.6	.90	.26	3.8
23	.98	e.60	e.60	e.60	e.60	e1.1	6.0	8.5	4.1	.90	.17	3.6
24	1.5	e.60	e.60	e.60	e.60	e1.2	7.4	8.3	4.9	.93	.13	3.4
25	1.7	e.60	e.60	e.60	e.60	e1.3	8.8	7.8	4.1	1.5	.11	2.2
26	1.9	e.60	e.60	e.60	e.60	e1.4	7.1	7.1	3.3	.86	.12	1.5
27	1.8	e.60	e.60	e.60	e.60	e1.5	7.3	6.5	2.4	.61	.14	.80
28	2.4	e.60	e.60	e.60	e.60	e1.6	8.3	5.8	2.2	.53	.21	.61
29	2.1	e.60	e.60	e.60	---	e1.8	11	5.2	2.0	.89	.23	.40
30	2.0	e.60	e.60	e.60	---	e1.9	12	4.8	1.9	.56	.18	.45
31	1.6	---	e.60	e.60	---	e2.0	---	4.3	---	.87	.15	---
TOTAL	40.77	20.68	18.60	18.60	16.80	29.40	151.2	293.2	176.7	38.46	11.89	27.69
MEAN	1.32	.69	.60	.60	.60	.95	5.04	9.46	5.89	1.24	.38	.92
MAX	2.8	1.2	.60	.60	.60	2.0	12	13	31	2.0	1.5	3.8
MIN	.08	.60	.60	.60	.60	.60	2.2	4.3	1.9	.53	.11	.07
AC-FT	81	41	37	37	33	58	300	582	350	76	24	55

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 1999, BY WATER YEAR (WY)

MEAN	1.23	.60	.61	.65	.67	.96	3.81	9.50	24.6	1.13	.25	.41
MAX	1.32	.69	.63	.71	.74	.96	5.04	9.55	59.7	1.24	.38	.92
(WY)	1999	1999	1998	1998	1998	1998	1999	1998	1997	1999	1999	1999
MIN	1.15	.51	.60	.60	.60	.95	2.59	9.46	5.89	.96	.15	.028
(WY)	1998	1998	1999	1999	1999	1999	1998	1999	1999	1998	1998	1998

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1997 - 1999	
ANNUAL TOTAL	813.50		843.99			
ANNUAL MEAN	2.23		2.31		2.26	
HIGHEST ANNUAL MEAN					2.31	1999
LOWEST ANNUAL MEAN					2.20	1998
HIGHEST DAILY MEAN	43	Jun 2	31	Jun 11	162	Jun 7 1997
LOWEST DAILY MEAN	.00	Sep 4	.07	Sep 11	a.00	Sep 4 1998
ANNUAL SEVEN-DAY MINIMUM	.00	Sep 4	.08	Sep 8	.00	Sep 4 1998
INSTANTANEOUS PEAK FLOW			51	Jun 11	184	Jun 7 1997
INSTANTANEOUS PEAK STAGE			11.52	Jun 11	12.30	Jun 7 1997
ANNUAL RUNOFF (AC-FT)	1610		1670		1640	
10 PERCENT EXCEEDS	5.0		7.2		7.8	
50 PERCENT EXCEEDS	.78		.74		.71	
90 PERCENT EXCEEDS	.04		.37		.15	

e Estimated
a Also occurred Sep 5-11, and 15, 1998.

09033100 RANCH CREEK BELOW MEADOW CREEK NEAR TABERNASH, CO

LOCATION.--Lat 39°59'57", long 105°49'37", in $NW^1/_4NW^1/_4$ sec.6. T.1 S., R.75 W., Grand County, Hydrologic Unit 14010001, on right bank about 400 ft downstream from Meadow Creek, 0.75 mi northeast of Tabernash, and 4500 ft above mouth.

DRAINAGE AREA.--65.7 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1997 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 8,350 ft above sea level, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. Diversion upstream from station for irrigation of hay meadows in Fraser River Valley. Transmountain diversion upstream from station to Moffat Water Tunnel not known since 1959.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.0	14	e17	e15	e10	e6.7	e19	53	120	53	35	13
2	16	14	e19	e15	e10	e6.4	e20	48	106	52	21	14
3	13	14	e18	e15	e10	e6.4	e22	43	145	46	17	16
4	16	13	e18	e15	e10	e6.2	e24	38	158	36	19	14
5	14	e11	e17	e15	e10	e6.2	e26	34	151	29	37	12
6	13	e11	e16	e14	e10	e6.2	e27	31	121	28	26	11
7	13	e10	e16	e14	e10	e6.0	e32	30	112	27	32	11
8	15	e12	e16	e14	e9.8	e6.0	26	35	117	23	29	10
9	15	e12	e16	e14	e9.6	e6.0	22	42	104	22	27	9.9
10	16	e13	e16	e14	e9.4	e6.0	15	52	138	20	31	9.8
11	16	e14	e16	e14	e9.2	e5.8	19	42	198	18	42	10
12	15	e14	e16	e14	e9.0	e6.0	16	41	166	20	33	11
13	14	e14	e16	e14	e9.0	e6.0	22	46	160	20	30	10
14	15	e14	e16	e14	e9.0	e6.0	23	56	165	22	28	9.6
15	14	e14	e16	e13	e8.6	e6.0	16	57	216	28	33	9.6
16	13	e14	e16	e13	e8.6	e6.4	14	62	214	27	29	9.5
17	14	e14	e15	e13	e8.6	e6.8	15	57	220	27	28	14
18	14	e14	e15	e13	e8.4	e7.0	20	61	232	21	32	18
19	14	e14	e15	e13	e8.2	e7.4	23	69	223	20	27	33
20	15	e14	e15	e13	e8.0	e7.8	31	74	211	20	31	49
21	14	e14	e15	e13	e7.8	e8.0	34	79	204	15	15	45
22	14	e14	e15	e13	e7.6	e8.8	31	81	201	14	14	48
23	13	e14	e15	e13	e7.4	e9.0	27	88	201	15	12	48
24	13	e15	e15	e13	e7.4	e9.8	33	105	203	16	12	51
25	13	e15	e15	e12	e7.2	e10	46	115	180	27	12	51
26	13	e15	e15	e12	e7.0	e11	33	105	139	17	14	50
27	13	e15	e15	e12	e7.0	e12	31	100	126	16	13	e47
28	19	e16	e15	e13	e6.8	e13	36	99	104	18	19	e48
29	17	e16	e15	e11	---	e14	66	122	65	26	16	e48
30	16	e16	e15	e11	---	e15	71	118	57	19	13	e48
31	16	---	e15	e10	---	e16	---	127	---	23	13	---
TOTAL	445.0	414	490	412	243.6	253.9	840	2110	4757	765	740	778.4
MEAN	14.4	13.8	15.8	13.3	8.70	8.19	28.0	68.1	159	24.7	23.9	25.9
MAX	19	16	19	15	10	16	71	127	232	53	42	51
MIN	9.0	10	15	10	6.8	5.8	14	30	57	14	12	9.5
AC-FT	883	821	972	817	483	504	1670	4190	9440	1520	1470	1540

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 1999, BY WATER YEAR (WY)

MEAN	13.2	12.9	14.9	13.1	9.06	10.0	26.6	121	233	34.8	19.6	15.2
MAX	14.4	13.8	15.8	13.3	9.42	11.9	28.0	187	429	56.2	23.9	25.9
(WY)	1999	1999	1999	1999	1998	1998	1999	1997	1997	1997	1999	1999
MIN	12.0	12.0	14.0	13.0	8.70	8.19	25.2	68.1	110	23.6	14.8	8.43
(WY)	1998	1998	1998	1998	1999	1999	1998	1999	1998	1998	1998	1998

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1997 - 1999	
ANNUAL TOTAL	11195.8		12248.9			
ANNUAL MEAN	30.7		33.6		31.9	
HIGHEST ANNUAL MEAN					33.6	1999
LOWEST ANNUAL MEAN					30.2	1998
HIGHEST DAILY MEAN	268	Jun 3	232	Jun 18	718	Jun 7 1997
LOWEST DAILY MEAN	6.9	Sep 19	e5.8	Mar 11	5.3	Oct 4 1997
ANNUAL SEVEN-DAY MINIMUM	7.4	Sep 5	6.0	Mar 7	6.0	Mar 7 1999
INSTANTANEOUS PEAK FLOW			283	Jun 17	763	Jun 9 1997
INSTANTANEOUS PEAK STAGE			5.94	Jun 17	7.18	Jun 9 1997
ANNUAL RUNOFF (AC-FT)	22210		24300		23090	
10 PERCENT EXCEEDS	84		92		139	
50 PERCENT EXCEEDS	15		15		15	
90 PERCENT EXCEEDS	9.2		8.9		9.2	

e Estimated

09033100 RANCH CREEK BELOW MEADOW CREEK NEAR TABERNASH, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--February 1997 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)
OCT												
08...	1330	15	81	8.2	8.2	--	9.0	16	--	--	--	--
NOV												
05...	1100	7.3	85	7.7	1.0	1.3	10.7	K2	36	12	1.5	3.2
DEC												
02...	1400	24	82	8.5	.3	1.9	11.2	K2	31	10	1.4	2.7
JAN												
06...	1000	13	81	8.3	.1	1.2	9.3	K2	33	11	1.5	3.4
FEB												
17...	1430	6.8	83	8.0	.1	1.3	9.7	K1	34	11	1.5	3.4
MAR												
10...	0925	5.5	80	7.8	.0	1.3	10.4	K1	35	11	1.6	3.5
APR												
07...	1025	25	73	7.4	.7	3.1	10.6	<1	30	9.5	1.5	2.7
MAY												
04...	1500	36	56	8.2	6.8	4	9.1	<1	24	7.4	1.3	2.7
JUN												
09...	1340	93	34	7.6	11.3	9	8.6	K6	14	4.4	.80	1.7
JUL												
21...	1015	13	83	8.0	15.8	3.0	7.5	29	36	12	1.6	2.7
AUG												
03...	1445	18	76	8.5	18.7	1.6	7.1	18	34	11	1.5	2.8
SEP												
01...	1340	13	78	8.5	16.3	1.8	7.4	20	33	11	1.5	2.8

DATE	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS-SOLVED (TONS PER DAY) (70302)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)
OCT												
08...	--	--	--	--	.7	--	--	--	--	--	--	<1
NOV												
05...	.2	1.2	40	2.1	.9	.2	15	67	60	.09	1.32	--
DEC												
02...	.2	.9	39	1.9	.7	.2	15	64	57	.09	4.10	5
JAN												
06...	.3	1.1	40	2.4	.5	.3	16	66	61	.09	2.39	--
FEB												
17...	.3	1.2	41	2.0	.7	.1	17	68	62	.09	1.24	--
MAR												
10...	.3	1.1	41	2.0	.4	.3	16	63	61	.09	.94	--
APR												
07...	.2	1.8	35	1.4	.8	.2	12	62	51	.08	4.17	--
MAY												
04...	.2	1.0	28	2.1	1	.2	12	56	45	.08	5.49	<1
JUN												
09...	.2	.6	18	1.5	.2	.2	9.0	40	29	.05	10.1	--
JUL												
21...	.2	1.0	41	.9	.4	.3	15	68	59	.09	2.42	--
AUG												
03...	.2	1	37	.7	<.1	.3	13	67	--	--	--	6
SEP												
01...	.2	.9	40	1.3	.7	.3	14	61	57	.08	2.16	--

K Based on non-ideal colony count.

09033100 RANCH CREEK BELOW MEADOW CREEK NEAR TABERNASH, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	NITROGEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITROGEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITROGEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITROGEN, ORGANIC DIS-SOLVED (MG/L AS N) (00607)	NITROGEN,AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN,AMMONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOSPHORUS TOTAL (MG/L AS P) (00665)	PHOSPHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOSPHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	ALUMINUM, TOTAL RECOV-ERABLE (UG/L AS AL) (01105)
OCT											
08...	.001	.009	.003	--	--	--	--	.009	.007	--	--
NOV											
05...	<.01	<.05	<.02	--	.1	.2	<.05	.02	.01	--	--
DEC											
02...	<.01	<.05	<.02	--	.1	<.1	.01	<.05	.01	1.9	--
JAN											
06...	<.01	.07	<.02	--	<.1	<.1	<.05	<.05	<.01	--	--
FEB											
17...	<.01	.08	.02	--	E.09	E.06	<.05	<.05	<.01	--	--
MAR											
10...	<.01	.08	.03	--	<.1	E.07	<.05	<.05	.03	--	--
APR											
07...	<.01	.07	<.02	--	.3	.2	E.04	E.03	.02	--	--
MAY											
04...	<.01	<.05	.04	.14	.3	.2	<.05	<.05	.01	5.9	301
JUN											
09...	<.01	<.05	<.02	--	.3	.2	<.05	<.05	<.01	--	--
JUL											
21...	<.01	<.05	<.02	--	.2	.2	E.03	<.05	.02	--	--
AUG											
03...	<.01	<.05	<.02	--	.2	.2	<.05	<.05	<.01	3.5	105
SEP											
01...	<.01	<.05	<.02	--	.2	.1	E.05	<.05	<.01	--	--

DATE	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA) (01007)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYLLIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHROMIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	CHROMIUM, DIS-SOLVED (UG/L AS CR) (01030)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO) (01037)
OCT											
08...	--	--	--	--	--	--	--	--	--	--	--
NOV											
05...	--	--	--	--	--	--	--	--	--	--	--
DEC											
02...	--	--	--	--	--	--	--	--	--	--	--
JAN											
06...	--	--	--	--	--	--	--	--	--	--	--
FEB											
17...	--	--	--	--	--	--	--	--	--	--	--
MAR											
10...	--	--	--	--	--	--	--	--	--	--	--
APR											
07...	--	--	--	--	--	--	--	--	--	--	--
MAY											
04...	<1	<1	13.5	12	<4	<16.0	<1	<1	<1.0	<1.0	<1
JUN											
09...	--	--	--	--	--	--	--	--	--	--	--
JUL											
21...	--	--	--	--	--	--	--	--	--	--	--
AUG											
03...	1	<1	15.6	14	<4	E7.3	<1	<1	<1.0	<1.0	<1
SEP											
01...	--	--	--	--	--	--	--	--	--	--	--

E Estimated.

09033100 RANCH CREEK BELOW MEADOW CREEK NEAR TABERNASH, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	LITHIUM TOTAL RECOV-ERABLE (UG/L AS LI) (01132)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)
OCT											
08...	--	--	--	--	--	--	--	--	--	--	--
NOV											
05...	--	--	330	160	--	--	--	--	9	--	--
DEC											
02...	--	--	600	180	--	--	--	20	8	--	--
JAN											
06...	--	--	240	72	--	--	--	10	13	--	--
FEB											
17...	--	--	210	75	--	--	--	<10	10	--	--
MAR											
10...	--	--	210	73	--	--	--	10	11	--	--
APR											
07...	--	--	630	270	--	--	--	35.0	27	--	--
MAY											
04...	<1	<1	470	200	<1	<1	<16.0	15.8	12	<.1	<.1
JUN											
09...	--	--	389	110	--	--	--	17.9	8	--	--
JUL											
21...	--	--	501	260	--	--	--	20.6	16	--	--
AUG											
03...	<1	<1	656	350	<1	<1	<12	27.0	19	<.1	<.1
SEP											
01...	--	--	671	390	--	--	--	20.3	15	--	--

DATE	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO) (01062)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
OCT											
08...	--	--	--	--	--	--	--	--	--	--	--
NOV											
05...	--	--	--	--	--	--	--	--	--	--	--
DEC											
02...	--	--	--	--	--	--	--	--	--	--	--
JAN											
06...	--	--	--	--	--	--	--	--	--	--	--
FEB											
17...	--	--	--	--	--	--	--	--	--	--	--
MAR											
10...	--	--	--	--	--	--	--	--	--	--	--
APR											
07...	--	--	--	--	--	--	--	--	--	--	--
MAY											
04...	<1.0	<1.0	<1	<1	<1	<1	<1	<1	42	<40	<20
JUN											
09...	--	--	--	--	--	--	--	--	--	--	--
JUL											
21...	--	--	--	--	--	--	--	--	--	--	--
AUG											
03...	<1.0	<1.0	<1	<1	1	<1	<1	<1	53	<40	<20
SEP											
01...	--	--	--	--	--	--	--	--	--	--	--

395634105532401 CROOKED CREEK BELOW TIPPERARY CREEK NEAR TABERNASH, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 39°56'34", long 105°53'24", NE$^{1}/_{4}$SE$^{1}/_{4}$ sec.21, T.1 S., R.76 W., Grand County, Hydrologic Unit 14010001, approximately 0.5 mi below the confluence with Tipperary Creek, and 4 mi west of Fraser.

PERIOD OF RECORD.--June 1997 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)
OCT								
08...	1115	3.0	176	8.3	5.4	9.2	14	.4
NOV								
04...	1145	2.1	121	8.4	2.2	10.0	K1	.4
DEC								
02...	0900	1.7	190	8.0	.3	10.6	K1	.5
JAN								
06...	1430	1.5	173	8.1	.4	10.4	K1	1.2
FEB								
17...	1055	1.3	184	8.2	.1	10.6	<1	.2
MAR								
09...	1320	1.4	173	8.1	.0	10.4	K1	.3
APR								
06...	1215	3.0	181	8.1	.5	10.2	<1	.4
MAY								
04...	1040	8.7	140	7.6	2.0	9.9	K3	.9
JUN								
09...	1030	25	101	8.2	6.6	9.1	K1	<.1
JUL								
20...	1025	5.6	145	7.9	13.0	7.3	10	.2
AUG								
03...	1000	4.7	158	8.1	13.6	7.1	K8	<.1
SEP								
01...	1030	3.0	175	8.3	13.3	7.1	K7	.3

DATE	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)
OCT							
08...	<1	.001	.007	.002	--	.006	.006
NOV							
04...	2	.001	.006	<.002	<.05	.007	.005
DEC							
02...	<1	<.0010	<.00500	<.002	.02	.005	.002
JAN							
06...	<1	<.001	.015	.016	<.05	.0047	.004
FEB							
17...	<1	.001	.017	.012	<.05	.0057	.005
MAR							
09...	<1	.001	.019	.014	<.05	.004	.004
APR							
06...	3	.001	.030	.011	<.05	.004	.004
MAY							
04...	2	<.001	.018	.010	<.05	.008	.004
JUN							
09...	<1	.001	<.005	.005	<.05	.004	.004
JUL							
20...	<1	<.001	<.005	.002	E.03	.007	.005
AUG							
03...	12	.001	<.005	.005	<.05	.012	.008
SEP							
01...	3	.001	<.005	.004	E.05	.012	.007

E Estimated.
K Based on non-ideal colony count.

395901105550800 POLE CREEK AT UPPER STATION NEAR TABERNASH, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 39°59'01", long 105°55'08", SE$^{1}/_{4}$SW$^{1}/_{4}$ sec.6, T.1 S., R.76 W., Grand County, Hydrologic Unit 14010001, approximately 5 mi upstream from confluence with the Fraser River, and 4 mi west of Tabernash.

PERIOD OF RECORD.--February 1997 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)
OCT								
08...	0900	1.2	124	8.3	2.3	10.1	14	.7
NOV								
04...	0900	.44	121	8.1	.5	10.2	K5	.5
DEC								
02...	1115	.53	128	7.6	.4	10.6	K2	.3
JAN								
07...	0940	.63	126	7.6	.3	9.9	K1	.4
MAR								
09...	0935	--	134	7.7	.0	--	K1	.9
APR								
06...	0910	1.7	140	8.0	.2	10.6	K1	.4
MAY								
04...	0930	5.3	108	8.0	1.0	10.4	<1	1.0
JUN								
09...	0915	20	50	7.9	5.0	9.5	K1	<.1
JUL								
20...	0915	.88	138	8.0	12.6	6.2	85	.5
AUG								
03...	0900	.48	160	8.2	10.6	6.1	66	<.1
SEP								
01...	0915	1.1	106	8.5	11.1	7.5	14	.4

DATE	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)
OCT							
08...	1	.001	.008	<.002	--	.024	.016
NOV							
04...	8	.001	.006	<.002	.05	.015	.013
DEC							
02...	<1	<.0010	<.00500	<.002	.03	.014	.014
JAN							
07...	<1	<.001	.017	.025	.02	.0098	.009
MAR							
09...	<1	.001	.047	.027	E.03	.014	.012
APR							
06...	2	.001	.046	.033	E.05	.01	.009
MAY							
04...	3	.001	.030	.009	<.05	.014	.008
JUN							
09...	1	.001	<.005	.004	E.04	.015	.014
JUL							
20...	1	.001	<.005	.005	.05	.026	.016
AUG							
03...	5	.001	<.005	.007	E.05	.031	.021
SEP							
01...	<1	<.001	<.005	.002	.07	.037	.033

395930105510700 POLE CREEK AT MOUTH NEAR TABERNASH, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 39°59'30", long 105°51'07", SE$^{1}/_{4}$NE$^{1}/_{4}$ sec.2, T.1 S., R.76 W., Grand County, Hydrologic Unit 14010001, approximately 0.25 mi upstream from the confluence with Crooked Creek, and 0.5 mi west of Tabernash.

PERIOD OF RECORD.--February 1997 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)
OCT								
08...	1005	2.4	274	7.9	5.0	8.7	110	2.6
NOV								
04...	1000	2.1	255	7.9	1.6	10.4	K10	2.3
DEC								
02...	0945	1.4	287	8.3	.3	10.6	<1	2.5
JAN								
06...	1100	1.4	283	8.1	.2	9.8	<1	2.4
FEB								
17...	0950	1.31	282	8.3	.2	10.3	14	2.2
MAR								
09...	1100	1.4	270	7.8	.0	10.0	<1	2.7
APR								
06...	1320	5.4	251	8.3	2.0	10.3	<1	2.8
MAY								
04...	1120	11	173	8.0	3.3	10.0	<1	1.8
JUN								
09...	1100	21	111	8.1	9.0	9.1	K1	.6
AUG								
03...	1050	2.6	299	8.0	14.2	6.5	84	2.2
SEP								
01...	1200	1.0	282	8.1	14.1	6.4	69	2.6

DATE	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)
OCT							
08...	1	.001	.012	.002	--	.018	.014
NOV							
04...	4	.001	.009	<.002	.03	.017	.014
DEC							
02...	1	.002	.028	.009	.03	.012	.010
JAN							
06...	<1	.002	.23	.076	.03	.0162	.015
FEB							
17...	4	.005	.27	.055	E.04	.0147	.014
MAR							
09...	<1	.003	.27	.049	.05	.018	.016
APR							
06...	12	.002	.15	.021	.10	.057	.049
MAY							
04...	<1	.001	.025	<.002	E.04	.024	.016
JUN							
09...	3	.001	<.005	.005	.05	.024	.019
AUG							
03...	14	.003	.017	.033	.12	.043	.034
SEP							
01...	16	.002	<.005	.006	.12	.039	.032

E Estimated.
K Based on non-ideal colony count.

09033300 FRASER RIVER BELOW CROOKED CREEK AT TABERNASH, CO

LOCATION.--Lat 40°00'21", long 105°50'52", in $SE^1/_4NE^1/_4$ sec.36, T.1 N., R.76 W., Grand County, Hydrologic Unit 14010001, on left bank 600 ft downstream from Crooked Creek, and 1 mi north of Tabernash.

DRAINAGE AREA.--224 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1998 to September 1999.

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 8,270 ft above sea level, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. Transmountain diversions upstream from station to Moffat water tunnel, amount unknown.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36	40	e55	e40	e39	e38	114	135	328	388	182	70
2	57	42	e55	e40	e39	e36	86	128	306	331	129	71
3	49	e40	e56	e39	e39	e34	71	121	502	181	110	77
4	62	e37	e56	e38	e40	e34	66	114	558	155	117	68
5	49	e37	e56	e37	e41	e32	65	103	540	137	170	61
6	43	e38	e54	e38	e42	e30	78	94	392	131	202	60
7	42	e38	e52	e39	e42	e29	102	92	325	125	203	58
8	46	e38	e50	e39	e42	e29	100	105	305	117	191	57
9	46	e37	e49	e39	e42	e30	77	117	258	112	186	54
10	43	e37	e49	e39	e42	e32	69	139	340	103	204	53
11	41	e37	e48	e40	e41	e34	69	119	567	99	201	55
12	39	e38	e48	e40	e41	e36	80	115	509	101	180	59
13	38	e39	e48	e40	e41	e38	99	123	476	92	167	56
14	40	e40	e47	e40	e42	e40	94	140	507	107	160	55
15	38	e41	e47	e40	e42	e42	72	143	728	116	172	55
16	37	e42	e46	e40	e42	e42	64	153	778	117	155	49
17	42	e43	e46	e40	e42	e50	84	142	826	165	154	81
18	41	e44	e46	e40	e41	e60	90	147	826	156	168	86
19	44	e44	e45	e40	e41	e70	108	164	858	145	148	97
20	45	e44	e44	e40	e41	e80	131	173	836	110	153	136
21	42	e45	e43	e40	e41	e90	125	179	855	93	107	119
22	41	e46	e43	e39	e41	e90	114	192	876	89	97	110
23	39	e47	e42	e39	e41	e90	98	204	894	93	90	102
24	37	e48	e40	e39	e41	e100	108	235	841	94	68	97
25	34	e49	e40	e39	e42	e100	135	273	681	114	65	96
26	34	e50	e40	e39	e42	e100	110	246	665	99	76	89
27	35	e52	e40	e39	e40	e110	105	242	601	91	71	84
28	49	e52	e40	e39	e40	e100	115	254	560	97	88	84
29	48	e52	e40	e38	---	e100	174	330	508	146	76	82
30	45	e55	e40	e38	---	e107	171	331	420	115	69	89
31	42	---	e40	e38	---	131	---	358	---	151	66	---
TOTAL	1324	1292	1445	1215	1150	1934	2974	5411	17666	4170	4225	2310
MEAN	42.7	43.1	46.6	39.2	41.1	62.4	99.1	175	589	135	136	77.0
MAX	62	55	56	40	42	131	174	358	894	388	204	136
MIN	34	37	40	37	39	29	64	92	258	89	65	49
AC-FT	2630	2560	2870	2410	2280	3840	5900	10730	35040	8270	8380	4580

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 1999, BY WATER YEAR (WY)

MEAN	42.7	43.1	46.6	39.2	41.1	62.4	99.1	175	589	135	136	77.0
MAX	42.7	43.1	46.6	39.2	41.1	62.4	99.1	175	589	135	136	77.0
(WY)	1999	1999	1999	1999	1999	1999	1999	1999	1999	1999	1999	1999
MIN	42.7	43.1	46.6	39.2	41.1	62.4	99.1	175	589	135	136	77.0
(WY)	1999	1999	1999	1999	1999	1999	1999	1999	1999	1999	1999	1999

SUMMARY STATISTICS FOR 1999 WATER YEAR

ANNUAL TOTAL	45116	
ANNUAL MEAN	124	
HIGHEST DAILY MEAN	894	Jun 23
LOWEST DAILY MEAN	29	Mar 7
ANNUAL SEVEN-DAY MINIMUM	31	Mar 4
INSTANTANEOUS PEAK FLOW	1030	Jun 24
INSTANTANEOUS PEAK STAGE	5.32	Jun 24
ANNUAL RUNOFF (AC-FT)	89490	
10 PERCENT EXCEEDS	256	
50 PERCENT EXCEEDS	65	
90 PERCENT EXCEEDS	39	

e Estimated

09033300 FRASER RIVER BELOW CROOKED CREEK NEAR TABERNASH, CO

PERIOD OF RECORD.--October 1990 to September 1994, published as site number 400009105504600. August 1998 to current year.

REMARKS.--Nutrient samples based on low-level methods.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1997 TO SEPTEMBER 1998

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)
AUG												
20...	0930	79	100	8.3	12.6	8.0	62	38	12	2.1	3.7	.3
SEP												
03...	0940	56	101	7.9	9.9	8.7	25	39	12	2.2	3.6	.3

DATE	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS-SOLVED (TONS PER DAY) (70302)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)
AUG											
20...	1.1	41	2.0	2.9	.2	10	69	59	.09	14.7	.002
SEP											
03...	1.1	43	2.2	3.0	.3	10	68	61	.09	10.2	.002

DATE	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)
AUG											
20...	.026	<.002	.2	.2	.059	.031	.020	2.5	.4	270	21
SEP											
03...	.016	<.002	.2	.1	.045	.022	.015	2.3	<.2	270	26

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)
OCT												
08...	0945	44	124	8.2	4.0	10.1	K8	44	14	2.2	4.2	.3
DEC												
03...	1230	42	141	8.3	.2	11.5	<1	56	18	2.5	4.6	.3
FEB												
18...	1100	42	124	8.1	.1	10.0	K1	48	15	2.5	5.5	.3
APR												
14...	1330	84	109	8.4	4.0	10.3	<1	45	14	2.4	4.6	.3
JUN												
10...	1000	227	74	8.1	8.3	9.0	76	32	10	1.6	2.7	.2
AUG												
04...	0930	107	92	8.3	12.2	8.0	75	38	11	2.2	3.9	.3

K Based on non-ideal colony count.

09033300 FRASER RIVER BELOW CROOKED CREEK NEAR TABERNASH, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS-SOLVED (TONS PER DAY) (70302)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)
OCT												
08...	1.3	50	2.8	3.4	.2	12	81	70	.11	9.51	.005	.040
DEC												
03...	1.4	62	3.5	3.5	.2	15	96	87	.13	10.9	.005	.11
FEB												
18...	1.6	51	3.8	8.1	.3	15	91	85	.12	10.3	.005	.47
APR												
14...	1.9	--	2.6	4.5	.2	12	80	--	--	--	.003	.16
JUN												
10...	.8	--	2.2	2.2	.1	10	61	--	--	--	.002	.012
AUG												
04...	.9	--	1.1	3.3	.2	10	67	--	--	--	.009	.062

DATE	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00607)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)
OCT											
08...	.012	.12	.2	.1	.041	.022	.020	2.8	--	180	27
DEC											
03...	.017	.13	.1	.1	.049	.018	.016	2.0	.3	99	31
FEB											
18...	.412	.06	.5	.5	.10	.072	.069	1.6	.3	73	31
APR											
14...	.053	.22	.4	.3	.079	.048	.038	3.8	.5	270	33
JUN											
10...	.005	.21	.2	.2	.032	.015	.011	5.1	.3	110	17
AUG											
04...	.047	.12	.2	.2	.058	.03	.027	3.3	.3	200	25

MISCELLANEOUS FIELD MEASUREMENTS, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)
OCT					MAY				
09...	1030	44	124	4.00	05...	1100	110	130	3.00
NOV					JUN				
04...	1040	37	133	3.50	21...	1200	810	63.0	8.60
MAR									
30...	1045	110	147	1.00					

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER-ATURE WATER (DEG C) (00010)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
OCT					
08...	0945	44	4.0	5	.61
DEC					
03...	1230	42	.2	8	.92
FEB					
18...	1100	42	.1	6	.69
APR					
14...	1330	84	4.0	7	1.6
JUN					
10...	1000	227	8.3	10	6.0
AUG					
04...	0930	107	12.2	7	1.9

400352105550700 TENMILE CREEK NEAR GRANBY, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 40°03'52", Long 105°55'07", in $SE^{1}/_{4}NW^{1}/_{4}$ sec.8, T.1 N., R.76 W., Grand County, Hydrologic Unit 14010001, .25 mi downstream from Silver Creek Resort pond, and 2 mi south of Granby.

DRAINAGE AREA.--Not determined.

PERIOD OF RECORD.--November 1998 to September 1999.

REMARKS.--Nutrient analysis based on low-level methods.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)
NOV								
04...	1430	2.8	307	8.5	5.9	10.6	K5	3.6
APR								
06...	1000	4.6	294	7.8	3.0	9.2	K1	4.1
JUN								
08...	1500	25	188	8.1	15.4	7.8	K180	1.2
AUG								
02...	1420	5.3	365	8.6	21.7	8.1	65	3.9

DATE	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)
NOV							
04...	8	.001	.007	.002	.05	.027	.021
APR							
06...	10	.003	.085	.071	.09	.036	.027
JUN							
08...	20	.001	<.005	.01	.11	.055	.046
AUG							
02...	9	.003	<.005	.014	.12	.086	.062

K Based on non-ideal colony count.

09034250 COLORADO RIVER AT WINDY GAP NEAR GRANBY, CO

LOCATION.--Lat 40°06'30", long 106°00'13" in NW$^1/_4$ sec.27, T.2 N., R.77 W., Grand County, Hydrologic Unit 14010001, on right bank 300 ft downstream from county highway bridge, 1.1 mi downstream from Windy Gap diversion dam, 2.4 mi downstream from mouth of Fraser River, and 3.8 mi northwest of Granby.

DRAINAGE AREA.--789 mi^2.

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 7,790 ft above sea level, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Natural flow of stream affected by transmountain diversions, storage reservoirs, and diversions for irrigation. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	89	108	85	e78	e75	e80	222	288	1220	1780	382	125
2	119	112	84	e78	e83	e75	172	270	1330	1750	293	129
3	104	120	79	e78	e72	e82	138	265	1400	1610	237	117
4	113	109	66	e78	e71	e82	115	248	1470	1510	220	128
5	109	108	54	e80	e80	e86	120	235	1500	1340	253	88
6	101	100	55	e80	e79	e83	113	214	1370	1000	279	100
7	96	90	e54	e83	e84	e82	147	205	1240	707	308	91
8	89	90	e54	e76	e75	e83	206	233	1190	629	294	77
9	95	94	54	e82	e82	e87	138	246	959	439	289	159
10	95	83	e56	e78	e88	77	123	282	598	384	300	209
11	85	e82	e56	e78	e76	70	113	256	701	314	316	82
12	91	79	e56	e71	e70	78	125	241	696	272	302	90
13	71	e80	e56	e76	e80	70	147	234	689	288	285	174
14	96	e76	e58	e81	e75	70	176	247	686	270	268	493
15	92	e74	e58	e76	e84	71	125	247	891	334	275	511
16	89	e72	58	e84	e69	83	71	245	1030	305	266	547
17	103	e72	e62	e78	e74	86	84	247	1040	330	253	563
18	103	e70	66	e77	e69	93	122	254	1040	345	269	584
19	96	e68	e70	e83	e88	119	141	263	1050	340	251	595
20	109	e70	e70	e75	e67	155	188	270	1030	313	252	548
21	101	e72	e70	e83	e77	215	206	282	1060	286	233	642
22	101	e76	e66	e82	e78	237	201	319	1080	280	214	631
23	101	e78	e68	e72	e73	237	168	319	1160	290	161	621
24	99	e80	e69	e84	e80	213	161	371	1400	271	167	614
25	91	e78	e72	e76	e87	247	215	424	1670	292	129	612
26	102	85	e72	e72	e71	302	203	521	1920	273	130	604
27	94	85	e72	e68	e82	277	179	862	1830	237	125	599
28	125	83	e74	e78	e77	155	187	1000	1800	229	143	593
29	118	83	e75	e70	---	140	244	1020	1860	307	134	594
30	116	85	e76	e80	---	173	297	1080	1830	288	134	599
31	103	---	e78	e74	---	227	---	1110	---	279	136	---
TOTAL	3096	2562	2043	2409	2166	4135	4847	12298	36740	17292	7298	11519
MEAN	99.9	85.4	65.9	77.7	77.4	133	162	397	1225	558	235	384
MAX	125	120	85	84	88	302	297	1110	1920	1780	382	642
MIN	71	68	54	68	67	70	71	205	598	229	125	77
AC-FT	6140	5080	4050	4780	4300	8200	9610	24390	72870	34300	14480	22850

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1982 - 1999, BY WATER YEAR (WY)

MEAN	104	103	81.5	79.2	78.9	117	311	689	1015	564	191	121
MAX	152	188	120	110	110	260	881	2326	2997	2096	509	384
(WY)	1985	1986	1985	1985	1985	1984	1996	1984	1984	1983	1997	1999
MIN	59.9	76.5	64.3	59.0	63.5	75.8	132	138	186	172	106	65.4
(WY)	1982	1982	1982	1989	1982	1983	1983	1992	1990	1989	1989	1989

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1982 - 1999	
ANNUAL TOTAL	89227		106405			
ANNUAL MEAN	244		292		288	
HIGHEST ANNUAL MEAN					726	1984
LOWEST ANNUAL MEAN					122	1989
HIGHEST DAILY MEAN	1430	Jul 2	1920	Jun 26	4930	May 25 1984
LOWEST DAILY MEAN	54	Sep 20	54	Dec 5	38	Dec 20 1995
ANNUAL SEVEN-DAY MINIMUM	55	Dec 5	55	Dec 5	51	Oct 1 1981
INSTANTANEOUS PEAK FLOW			2000	Jun 26	5260	May 25 1984
INSTANTANEOUS PEAK STAGE			5.37	Jun 26	7.34	May 25 1984
ANNUAL RUNOFF (AC-FT)	177000		211100		208900	
10 PERCENT EXCEEDS	580		769		674	
50 PERCENT EXCEEDS	103		122		110	
90 PERCENT EXCEEDS	72		71		70	

e Estimated

09034250 COLORADO RIVER AT WINDY GAP NEAR GRANBY, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--December 1994 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)
OCT											
15...	0930	97	146	8.6	7.0	9.0	58	18	3.0	6.5	.4
APR											
14...	1000	182	129	8.4	5.0	10.2	56	18	3.0	6.1	.4
AUG											
12...	0920	315	108	8.5	14.4	8.3	45	14	2.5	4.4	.3

DATE	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS-SOLVED (TONS PER DAY) (70302)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)
OCT											
15...	1.5	65	4.5	2.6	.2	11	87	.12	22.8	5	<.01
APR											
14...	1.7	60	4.6	3.4	.2	10	84	.11	41.1	3	<.01
AUG											
12...	1.1	49	2.9	1.8	.2	9.4	66	.09	56.2	<1	<.01

DATE	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00607)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	ANTI-MONY, DIS-SOLVED (UG/L AS SB) (01095)	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)
OCT											
15...	.07	.02	.14	.2	.2	.02	.02	.02	<1	<1	<1
APR											
14...	.09	<.02	--	.4	.3	E.03	<.05	.02	<1	<1	<1
AUG											
12...	<.05	<.02	--	.3	.1	E.05	<.05	.02	<1	<1	<1

DATE	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (01010)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)
OCT											
15...	18	<1.6	<1	<1	<1.0	<1.0	<1	<1	170	<1	<1
APR											
14...	17	<1.6	<1	<1	<1.0	<1.0	<1	<1	200	<1	<1
AUG											
12...	15	<1.6	<1	<1	<1.0	<1.0	<1	<1	160	<1	<1

DATE	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
OCT											
15...	24	<.1	<.1	<1	<1	<1	<1	<1	<1	<10	<20
APR											
14...	52	<.1	<.1	<1	<1	<1	<1	<1	<1	<40	<20
AUG											
12...	24	<.1	<.1	<1	<1	<1	<1	<1	<1	<40	<20

E Estimated.

09034250 COLORADO RIVER AT WINDY GAP NEAR GRANBY, CO--Continued

MISCELLANEOUS FIELD MEASUREMENTS, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)
OCT				
06...	1703	114	143	7.5
FEB				
17...	1404	74	136	.0
APR				
13...	1617	163	144	8.0
MAY				
14...	1221	260	122	9.5
JUN				
03...	1322	1430	74	10.5
JUL				
08...	0738	642	97	11.5
AUG				
05...	1307	266	149	16.5
SEP				
02...	1212	145	125	16.5

09034900 BOBTAIL CREEK NEAR JONES PASS, CO

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

DRAINAGE AREA.--5.49 mi^2.

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

GAGE.--Water-stage recorder. Elevation of gage is 10,430 ft above sea level, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor. No diversion upstream from station. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.7	e2.9	e1.5	e.78	e.67	e.72	e.83	.80	31	60	26	10
2	3.9	e2.8	e1.5	e.76	e.64	e.72	e.81	.77	39	57	23	10
3	4.2	e2.7	e1.4	e.74	e.66	e.70	e.80	.75	45	52	21	8.8
4	4.4	e2.7	e1.4	e.76	e.67	e.68	e.76	.80	46	49	22	8.0
5	4.7	e2.6	e1.1	e.80	e.68	e.68	e.80	.80	36	46	22	7.1
6	4.3	e2.7	e1.2	e.82	e.70	e.68	e.82	.80	27	44	20	6.4
7	5.2	e2.7	e1.2	e.83	e.70	e.66	e.84	.81	38	38	18	5.8
8	4.5	e2.5	e1.1	e.82	e.71	e.68	e.88	.94	49	34	15	5.5
9	4.3	e2.1	e1.1	e.82	e.72	e.68	e.84	1.6	53	31	14	5.1
10	3.9	e1.9	e1.0	e.90	e.73	e.70	e.82	1.8	59	28	15	5.3
11	3.6	e1.7	e.96	e.88	e.68	e.68	e.85	1.9	58	26	13	5.4
12	3.5	e1.8	e.90	e.85	e.60	e.69	e.90	2.0	58	23	12	4.8
13	3.4	e1.9	e.94	e.84	e.63	e.72	e.96	2.0	57	22	11	4.3
14	3.6	e1.8	e.94	e.86	e.64	e.76	e.94	2.4	56	22	10	4.0
15	3.2	e1.7	e.94	e.83	e.66	e.76	e.92	3.3	58	21	10	4.0
16	3.1	e1.7	e.98	e.88	e.66	e.76	e.90	4.1	56	21	8.8	3.6
17	3.2	e1.7	e1.0	e.88	e.66	e.76	e.96	3.4	62	21	9.0	3.4
18	4.1	e1.7	e1.0	e.87	e.70	e.78	e.94	e4.2	66	20	8.2	3.2
19	4.7	e1.7	e1.1	e.86	e.70	e.79	e.94	e5.6	71	19	8.7	4.4
20	3.7	e1.6	e1.1	e.84	e.68	e.80	e.98	e7.1	76	16	9.3	4.8
21	3.9	e1.6	e.98	e.81	e.67	e.82	e.96	e8.8	76	15	8.0	4.9
22	3.1	e1.8	e.86	e.86	e.70	e.82	e.96	e10	85	15	7.2	4.4
23	3.0	e1.7	e.80	e.85	e.70	e.78	e.92	e14	87	14	6.7	3.9
24	3.1	e1.7	e.77	e.90	e.72	e.82	e.96	e18	84	13	6.6	3.8
25	3.2	e1.7	e.80	e.90	e.73	e.82	e.98	e23	86	13	8.3	3.6
26	2.9	e1.7	e.82	e.88	e.76	e.86	e.93	20	80	12	9.3	3.0
27	2.9	e1.6	e.83	e.80	e.75	e.84	.87	20	75	12	13	2.9
28	e3.5	e1.6	e.83	e.80	e.73	e.81	.87	25	68	19	14	2.9
29	e3.3	e1.5	e.86	e.70	---	e.80	.85	30	64	18	12	4.0
30	e3.1	e1.5	e.90	e.69	---	e.84	.81	32	59	15	11	3.0
31	e2.9	---	e.78	e.68	---	e.86	---	31	---	25	10	---
TOTAL	114.1	59.3	31.59	25.49	19.25	23.47	26.60	277.67	1805	821	402.1	150.3
MEAN	3.68	1.98	1.02	.82	.69	.76	.89	8.96	60.2	26.5	13.0	5.01
MAX	5.2	2.9	1.5	.90	.76	.86	.98	32	87	60	26	10
MIN	2.9	1.5	.77	.68	.60	.66	.76	.75	27	12	6.6	2.9
AC-FT	226	118	63	51	38	47	53	551	3580	1630	798	298

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 1999, BY WATER YEAR (WY)

MEAN	3.02	1.72	1.08	.87	.78	.77	1.42	14.4	57.6	30.8	9.80	4.63
MAX	5.49	3.33	1.79	1.24	1.15	1.21	4.30	31.0	85.8	75.5	25.5	9.74
(WY)	1985	1984	1983	1983	1995	1995	1969	1996	1997	1995	1983	1983
MIN	1.51	1.03	.78	.58	.48	.52	.68	1.57	27.3	7.08	4.90	2.35
(WY)	1981	1974	1977	1972	1972	1972	1973	1995	1966	1977	1977	1987

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1966 - 1999	
ANNUAL TOTAL	3705.12		3755.87			
ANNUAL MEAN	10.2		10.3		10.6	
HIGHEST ANNUAL MEAN					15.5	1984
LOWEST ANNUAL MEAN					6.28	1977
HIGHEST DAILY MEAN	74	Jun 30	87	Jun 23	146	Jun 25 1983
LOWEST DAILY MEAN	e.76	Mar 31	e.60	Feb 12	.44	Feb 11 1972
ANNUAL SEVEN-DAY MINIMUM	.79	Apr 13	.65	Feb 11	.46	Feb 11 1972
INSTANTANEOUS PEAK FLOW			123	Jun 23	290	Jun 28 1988
INSTANTANEOUS PEAK STAGE			4.52	Jun 23	a5.19	Jun 28 1988
ANNUAL RUNOFF (AC-FT)	7350		7450		7660	
10 PERCENT EXCEEDS	33		33		33	
50 PERCENT EXCEEDS	2.9		1.9		2.0	
90 PERCENT EXCEEDS	.84		.72		.70	

e Estimated
a Maximum gage height, 7.57 ft, May 15, 1984, backwater from ice.

09035500 WILLIAMS FORK BELOW STEELMAN CREEK, CO

LOCATION.--Lat 39°46'44", long 105°55'40", in sec.20, T.3 S., R.76 W., Grand County, Hydrologic Unit 14010001, on right bank 700 ft downstream from Steelman Creek and 6.5 mi southeast of Leal.

DRAINAGE AREA.--16.3 mi^2.

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

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

REMARKS.--Records good except for estimated daily discharges, which are poor. Transmountain diversions upstream from station through August P. Gumlick Tunnel (station 09035000) since May 10, 1940. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.0	6.5	e4.9	e4.2	e3.8	e4.7	e5.2	5.6	86	141	50	22
2	3.4	6.7	e4.9	e4.2	e3.4	e4.8	e5.0	5.3	100	134	40	21
3	.69	6.3	e4.9	e4.2	e3.5	e4.6	e4.9	5.2	114	121	36	19
4	.78	6.1	e4.9	e4.0	e3.6	e4.7	e4.8	5.4	116	113	45	18
5	5.8	e5.8	e4.6	e3.9	e3.8	e4.8	e4.9	5.3	97	106	45	16
6	9.5	e5.9	e4.8	e3.8	e3.8	e4.6	e4.9	5.3	81	103	40	15
7	11	e5.5	e4.8	e3.8	e3.8	e4.8	e5.0	5.4	97	93	35	14
8	13	e5.6	e4.7	e3.8	e4.0	e4.9	e4.9	6.3	119	86	32	13
9	13	e5.6	e4.7	e3.7	e4.1	e4.7	e4.7	8.2	131	79	31	13
10	12	e5.2	e4.6	e3.7	e4.2	e4.9	e4.7	9.6	142	73	33	13
11	10	e5.5	e4.6	e3.7	e4.2	e4.7	e4.7	8.6	138	67	30	14
12	9.0	e5.8	e4.7	e3.8	e3.9	e4.9	e5.1	8.0	135	61	28	13
13	8.5	e5.6	e4.7	e3.7	e3.8	e4.5	e5.4	8.2	131	57	25	11
14	9.5	e5.5	e4.7	e3.6	e4.0	e4.6	e5.2	14	134	56	25	11
15	8.4	e5.4	e4.5	e3.7	e4.2	e5.0	e5.0	5.6	141	55	24	11
16	7.6	e5.4	e4.6	e3.8	e4.1	e5.2	e4.9	5.8	130	55	22	10
17	7.6	e5.4	e4.7	e3.7	e4.1	e4.9	e4.5	11	138	53	24	9.8
18	8.8	e5.4	e4.7	e3.6	e4.1	e5.1	e4.6	19	142	47	23	9.6
19	10	e5.2	e4.8	e3.7	e4.2	e5.3	e4.8	31	153	46	22	12
20	7.9	e5.0	e5.0	e3.8	e3.9	e5.5	e5.0	37	167	43	23	15
21	7.6	e5.1	e4.7	e3.8	e3.9	e5.5	e5.2	37	174	39	20	15
22	7.4	e5.4	e4.5	e3.6	e4.1	e5.3	e5.3	17	190	38	19	13
23	7.2	e5.3	e4.3	e3.5	e4.0	e5.3	e5.0	17	205	36	17	11
24	6.8	e5.2	e4.3	e3.7	e4.2	e5.6	e5.0	45	206	36	16	11
25	6.5	e5.1	e4.2	e3.7	e4.2	e5.4	e5.2	57	214	34	21	10
26	6.8	e5.0	e4.3	e3.7	e4.4	e5.5	e5.4	71	201	32	21	9.2
27	7.1	e5.1	e4.4	e3.7	e4.7	e5.3	5.3	68	188	30	29	8.8
28	7.1	e5.1	e4.5	e3.6	e4.6	e4.8	5.4	74	173	43	30	8.8
29	7.9	e5.1	e4.6	e3.6	---	e4.8	5.7	82	158	40	25	8.9
30	7.3	e5.0	e4.6	e3.6	---	e5.0	5.9	85	142	34	23	8.7
31	6.7	---	e4.5	e3.8	---	e5.1	---	86	---	52	21	---
TOTAL	239.87	164.8	143.7	116.7	112.6	154.8	151.6	848.8	4343	2003	875	384.8
MEAN	7.74	5.49	4.64	3.76	4.02	4.99	5.05	27.4	145	64.6	28.2	12.8
MAX	13	6.7	5.0	4.2	4.7	5.6	5.9	86	214	141	50	22
MIN	.69	5.0	4.2	3.5	3.4	4.5	4.5	5.2	81	30	16	8.7
AC-FT	476	327	285	231	223	307	301	1680	8610	3970	1740	763

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1934 - 1999, BY WATER YEAR (WY)

MEAN	5.60	3.59	2.49	2.07	1.98	2.04	3.81	31.5	119	59.7	12.6	7.36
MAX	16.3	8.07	4.85	4.30	4.02	4.99	10.6	89.2	213	200	44.5	18.4
(WY)	1985	1938	1996	1939	1999	1985	1992	1936	1938	1995	1983	1984
MIN	.98	.58	.39	.31	.30	.35	.61	5.45	15.5	4.85	.70	.70
(WY)	1967	1987	1987	1978	1978	1987	1973	1991	1976	1968	1979	1979

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1934 - 1999	
ANNUAL TOTAL	7388.53		9538.67			
ANNUAL MEAN	20.2		26.1		a26.7	
HIGHEST ANNUAL MEAN					39.0	1995
LOWEST ANNUAL MEAN					4.11	1976
HIGHEST DAILY MEAN	154	Jun 30	214	Jun 25	395	Jul 12 1995
LOWEST DAILY MEAN	.43	Sep 16	.69	Oct 3	.20	Mar 6 1967
ANNUAL SEVEN-DAY MINIMUM	.55	Sep 5	3.6	Jan 28	.27	Feb 13 1971
INSTANTANEOUS PEAK FLOW			275	Jun 23	b516	Jul 11 1995
INSTANTANEOUS PEAK STAGE			4.84	Jun 23	c5.64	Jul 11 1995
ANNUAL RUNOFF (AC-FT)	14660		18920		a19340	
10 PERCENT EXCEEDS	77		86		70	
50 PERCENT EXCEEDS	4.7		5.6		3.7	
90 PERCENT EXCEEDS	2.5		3.8		.60	

e Estimated
a Includes diversions to August P. Gumlick Tunnel.
b From rating curve extended above 250 ft^3/s.
c Maximum gage height, 6.96 ft, May 15, 1984, backwater from ice.

09035700 WILLIAMS FORK ABOVE DARLING CREEK, NEAR LEAL, CO

LOCATION.--Lat 39°47'50", long 106°01'32", in $NW^1/_4NW^1/_4$ sec.16, T.3 S., R.77 W., Grand County, Hydrologic Unit 14010001, on left bank 0.3 mi upstream from Darling Creek, and 1.4 mi southeast of Leal.

DRAINAGE AREA.--35.0 mi^2.

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

REVISED RECORDS.--WDR CO-93-2: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 8,940 ft above sea level, from topographic map. Prior to Oct. 1, 1972, and May 6, 1981 to Jan. 31, 1983, at site 300 ft upstream at different datum. Prior to Oct. 20, 1992, and Oct. 1, 1972 to May 5, 1981, at site 0.6 mi upstream at different datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. Transmountain diversion upstream from station through August P. Gumlick Tunnel (station 09035000). Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	13	e15	e12	e11	e8.0	e13	15	141	211	82	37
2	11	14	e15	e12	e11	e8.0	e13	15	160	206	62	35
3	9.1	14	e14	e12	e11	e8.0	e13	14	190	189	55	33
4	9.8	13	e14	e12	e11	e8.0	e13	14	197	173	64	31
5	9.8	14	e14	e12	e11	e8.0	e13	12	173	160	75	29
6	16	e15	e14	e12	e11	e8.0	e13	12	132	154	67	27
7	18	e15	e13	e11	e11	e7.9	e13	14	148	141	56	25
8	20	e15	e13	e11	e10	e8.0	e13	15	192	131	50	23
9	19	e15	e13	e11	e10	e8.0	e13	19	213	121	48	22
10	19	e15	e13	e11	e9.5	e8.0	e13	22	228	111	52	22
11	17	e15	e13	e11	e9.0	e8.0	e13	18	223	102	51	25
12	16	e16	e13	e11	e9.0	e8.0	e14	17	221	94	49	24
13	15	e16	e13	e11	e9.0	e8.0	e15	20	215	88	44	21
14	17	e16	e12	e11	e9.0	e8.0	e14	25	221	89	42	19
15	16	e16	e12	e11	e9.0	e8.0	e14	22	238	87	43	19
16	14	e16	e12	e11	e9.0	e8.0	e13	22	231	84	38	18
17	14	e16	e12	e11	e8.8	e8.0	e13	23	234	85	42	17
18	14	e15	e12	e11	e8.6	e8.2	e13	34	235	75	44	17
19	14	e15	e12	e11	e8.4	e8.8	e13	47	250	74	37	20
20	14	e15	e12	e11	e8.4	e9.4	e13	58	260	68	42	30
21	13	e15	e13	e11	e8.3	e9.8	e13	68	272	65	37	27
22	14	e15	e13	e11	e8.2	e10	e13	52	286	62	35	24
23	14	e15	e12	e11	e8.2	e11	e13	56	294	60	31	21
24	13	e15	e12	e11	e8.0	e10	e13	86	294	58	30	20
25	13	e15	e11	e11	e8.0	e11	e13	107	297	57	35	20
26	13	e15	e11	e11	e8.0	e12	e14	115	288	53	38	17
27	14	e15	e11	e11	e8.0	e13	e15	108	272	52	50	15
28	15	e15	e12	e11	e8.0	e14	e16	115	252	62	53	15
29	15	e15	e12	e11	---	e13	18	133	239	67	44	16
30	14	e15	e12	e11	---	e13	17	139	222	54	38	16
31	14	---	e12	e11	---	e13	---	147	---	77	36	---
TOTAL	448.7	449	392	347	259.4	292.1	410	1564	6818	3110	1470	685
MEAN	14.5	15.0	12.6	11.2	9.26	9.42	13.7	50.5	227	100	47.4	22.8
MAX	20	16	15	12	11	14	18	147	297	211	82	37
MIN	9.1	13	11	11	8.0	7.9	13	12	132	52	30	15
AC-FT	890	891	778	688	515	579	813	3100	13520	6170	2920	1360

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 1999, BY WATER YEAR (WY)

MEAN	12.6	9.71	8.02	6.71	6.09	6.59	11.5	61.0	207	109	28.2	16.5
MAX	33.5	20.6	15.5	13.4	13.6	17.9	26.0	155	378	320	75.5	40.9
(WY)	1996	1998	1996	1996	1996	1996	1996	1996	1997	1995	1983	1984
MIN	6.20	4.90	3.87	3.43	3.47	3.21	5.29	21.3	63.6	21.9	10.4	7.09
(WY)	1980	1990	1975	1975	1975	1980	1973	1975	1966	1977	1981	1966

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1966 - 1999	
ANNUAL TOTAL	14814.4		16245.2			
ANNUAL MEAN	40.6		44.5		40.2	
HIGHEST ANNUAL MEAN					71.3	1984
LOWEST ANNUAL MEAN					17.6	1976
HIGHEST DAILY MEAN	231	Jun 2	297	Jun 25	555	Jul 12 1995
LOWEST DAILY MEAN	6.6	Sep 21	e7.9	Mar 7	2.7	Apr 5 1977
ANNUAL SEVEN-DAY MINIMUM	7.0	Sep 15	8.0	Mar 1	2.8	Mar 31 1977
INSTANTANEOUS PEAK FLOW			372	Jun 23	751	Jun 17 1995
INSTANTANEOUS PEAK STAGE			7.35	Jun 23	a6.94	Jun 17 1995
ANNUAL RUNOFF (AC-FT)	29380		32220		29130	
10 PERCENT EXCEEDS	132		141		120	
50 PERCENT EXCEEDS	14		15		11	
90 PERCENT EXCEEDS	9.0		9.0		5.0	

e Estimated
a Maximum gage height, 7.35 ft, Jun 23, 1999, present site and datum.

09035800 DARLING CREEK NEAR LEAL, CO

LOCATION.--Lat 39°48'02", long 106°01'33", in $SW^1/_4SW^1/_4$ sec.9, T.3 S., R.77 W., Grand County, Hydrologic Unit 14010001, on left bank 700 ft upstream from mouth, and 1.2 mi southeast of Leal.

DRAINAGE AREA.--8.76 mi^2.

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

GAGE.--Water-stage recorder. Elevation of gage is 8,940 ft above sea level, from topographic map. Prior to Aug. 23, 1996, at site 2,400 ft upstream at different datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. No diversion upstream from station. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.1	4.4	e3.0	e2.5	e2.5	e2.5	2.6	3.3	27	34	12	6.0
2	4.8	4.5	e3.0	e2.5	e2.5	e2.5	2.7	3.2	30	33	9.5	5.8
3	4.6	4.3	e3.0	e2.5	e2.5	e2.5	e3.0	3.2	36	29	8.7	5.7
4	4.8	e4.3	e2.9	e2.5	e2.5	e2.5	e3.0	3.1	39	26	11	5.5
5	4.7	e4.3	e2.8	e2.5	e2.5	e2.5	e3.0	3.8	33	24	11	5.3
6	4.9	e4.2	e2.8	e2.5	e2.5	e2.5	e3.0	e4.0	28	22	12	5.1
7	5.4	e4.1	e2.7	e2.5	e2.5	e2.5	e3.0	e3.8	34	21	9.7	4.9
8	5.6	e4.1	e2.7	e2.5	e2.5	e2.5	e2.9	3.5	41	20	8.8	4.8
9	5.5	e4.1	e2.6	e2.5	e2.5	e2.5	e2.8	4.1	43	18	8.6	4.7
10	5.3	e4.0	e2.6	e2.5	e2.5	e2.5	e2.7	4.3	42	17	8.7	4.7
11	5.0	e4.0	e2.6	e2.5	e2.5	e2.5	e2.9	4.1	41	15	8.2	5.1
12	4.7	e4.0	e2.5	e2.5	e2.5	e2.5	e3.0	3.8	40	14	7.8	4.9
13	4.7	e4.0	e2.5	e2.5	e2.5	e2.5	e3.1	4.1	39	14	7.3	4.7
14	5.0	e3.9	e2.5	e2.5	e2.5	e2.5	e3.0	4.5	40	17	7.2	4.6
15	4.7	e3.8	e2.5	e2.5	e2.5	e2.5	e2.8	4.9	45	14	7.1	4.6
16	4.4	e3.7	e2.5	e2.5	e2.5	e2.5	e2.9	5.3	43	13	6.7	4.5
17	4.3	e3.6	e2.5	e2.5	e2.5	e2.5	e3.0	5.4	44	13	7.8	4.4
18	4.7	e3.4	e2.5	e2.5	e2.5	e2.5	e3.1	6.4	47	12	7.2	4.4
19	4.7	e3.3	e2.5	e2.5	e2.5	e2.5	e3.1	8.2	50	12	6.5	5.0
20	4.5	e3.1	e2.5	e2.5	e2.5	e2.5	e3.1	10	51	11	6.5	6.0
21	4.7	e3.0	e2.5	e2.5	e2.5	e2.5	e3.0	13	55	11	6.4	5.7
22	4.6	e3.0	e2.5	e2.5	e2.5	e2.5	e2.9	15	60	10	6.1	5.2
23	4.6	e3.0	e2.5	e2.5	e2.5	e2.5	e3.2	18	61	10	5.8	4.8
24	4.4	e3.0	e2.5	e2.5	e2.5	e2.7	e3.5	21	61	10	6.9	4.8
25	4.4	e3.0	e2.4	e2.5	e2.5	e2.9	3.2	24	59	10	7.7	4.7
26	4.6	e3.0	e2.5	e2.5	e2.5	e2.8	2.9	21	53	9.4	6.6	4.4
27	4.5	e3.0	e2.5	e2.5	e2.5	e2.7	2.9	21	49	9.0	7.8	4.4
28	4.6	e3.0	e2.5	e2.5	e2.5	e2.6	3.0	23	44	11	6.9	4.5
29	4.8	e3.0	e2.5	e2.5	---	e2.6	3.6	26	40	10	6.5	4.6
30	4.6	e3.0	e2.5	e2.5	---	2.6	3.5	27	37	9.4	6.0	4.5
31	4.5	---	e2.5	e2.5	---	2.6	---	28	---	13	5.9	---
TOTAL	146.7	109.1	80.6	77.5	70.0	79.0	90.4	330.0	1312	491.8	244.9	148.3
MEAN	4.73	3.64	2.60	2.50	2.50	2.55	3.01	10.6	43.7	15.9	7.90	4.94
MAX	5.6	4.5	3.0	2.5	2.5	2.9	3.6	28	61	34	12	6.0
MIN	4.1	3.0	2.4	2.5	2.5	2.5	2.6	3.1	27	9.0	5.8	4.4
AC-FT	291	216	160	154	139	157	179	655	2600	975	486	294

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 1999, BY WATER YEAR (WY)

MEAN	4.10	3.16	2.58	2.19	2.01	2.02	2.82	14.7	48.2	22.5	7.45	4.72
MAX	7.86	5.52	4.33	3.00	3.08	2.90	6.03	28.6	85.1	91.6	20.2	9.64
(WY)	1985	1985	1985	1985	1998	1998	1985	1996	1984	1983	1983	1984
MIN	2.55	1.82	1.38	1.20	1.21	1.10	1.49	4.39	20.5	5.32	3.44	2.59
(WY)	1979	1976	1976	1976	1975	1975	1975	1983	1966	1977	1981	1979

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1966 - 1999	
ANNUAL TOTAL	3224.8		3180.3			
ANNUAL MEAN	8.84		8.71		9.70	
HIGHEST ANNUAL MEAN					18.1	1983
LOWEST ANNUAL MEAN					5.64	1977
HIGHEST DAILY MEAN	54	Jun 3	61	Jun 23	175	Jun 25 1983
LOWEST DAILY MEAN	e1.9	Apr 10	e2.4	Dec 25	1.0	Jan 12 1975
ANNUAL SEVEN-DAY MINIMUM	2.0	Apr 4	2.5	Dec 19	1.1	Feb 24 1975
INSTANTANEOUS PEAK FLOW			83	Jun 23	a241	Jun 30 1984
INSTANTANEOUS PEAK STAGE			5.03	Jun 23	b4.30	Jun 30 1984
ANNUAL RUNOFF (AC-FT)	6400		6310		7020	
10 PERCENT EXCEEDS	25		26		27	
50 PERCENT EXCEEDS	4.1		4.1		3.4	
90 PERCENT EXCEEDS	2.5		2.5		1.9	

e Estimated
a From rating curve extended above 100 ft^3/s.
b Maximum gage height, 5.44 ft, Jun 19, 1997, present site and datum.

09035900 SOUTH FORK WILLIAMS FORK NEAR LEAL, CO

LOCATION.--Lat 39°47'45", long 106°01'48", in NE$^{1}/_{4}$ sec.17, T.3 S., R.77 W., Grand County, Hydrologic Unit 14010001, on left bank 800 ft upstream from highway bridge, 0.6 mi upstream from mouth, and 1.2 mi southeast of Leal.

DRAINAGE AREA.--27.3 mi^{2}.

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

GAGE.--Water-stage recorder. Elevation of gage is 8,950 ft above sea level, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. No diversion upstream from station. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	13	e11	e9.0	e9.0	e9.3	11	14	103	135	59	24
2	16	13	e11	e9.0	e9.0	e9.3	10	14	108	129	41	23
3	15	13	e11	e9.0	e9.0	e9.2	9.3	13	119	119	38	22
4	17	13	e11	e9.0	e9.0	e9.2	9.8	13	122	112	41	20
5	15	e13	e10	e9.0	e9.0	e9.0	9.8	13	112	106	46	19
6	15	e13	e10	e9.0	e9.0	e9.0	9.5	14	99	104	43	19
7	16	e13	e10	e9.0	e9.0	e9.0	e10	12	105	98	38	18
8	17	e12	e10	e9.0	e9.0	e8.8	e10	15	121	93	36	17
9	17	e12	e10	e9.0	e9.0	e9.0	e11	19	131	88	35	17
10	16	e12	e10	e9.0	e9.0	e9.0	e11	21	139	81	37	16
11	15	e12	e10	e9.0	e9.0	e9.0	e11	18	138	74	35	19
12	14	e12	e10	e9.0	e9.0	e9.0	e12	17	137	68	32	18
13	14	e12	e10	e9.0	e9.0	e9.0	e13	19	134	62	29	16
14	15	e12	e10	e9.0	e9.0	e9.0	e12	25	139	63	28	16
15	14	e12	e10	e9.0	e9.0	e9.0	e12	29	146	60	29	16
16	13	e12	e10	e9.0	e9.0	e9.0	e12	33	146	57	26	15
17	14	e12	e10	e9.0	e9.1	e9.0	e13	31	148	59	28	15
18	14	e12	e10	e9.0	e9.3	e9.0	e13	35	150	51	28	15
19	14	e12	e10	e9.0	e9.4	e9.0	e13	42	161	51	25	17
20	14	e12	e10	e9.0	e9.5	e9.0	e14	49	169	46	29	20
21	13	e12	e10	e9.0	e9.6	e9.0	e14	62	170	44	25	18
22	14	e12	e9.8	e9.0	e9.8	e9.0	e14	78	173	42	24	15
23	13	e12	e9.6	e9.0	e10	e9.0	e14	87	178	41	22	14
24	13	e12	e9.5	e9.0	e9.8	e9.0	e14	96	180	39	21	14
25	13	e12	e9.4	e9.0	e9.6	e9.0	e14	106	183	38	21	14
26	13	e12	e9.3	e9.0	e9.4	e9.0	e15	90	179	37	22	13
27	13	e11	e9.2	e9.0	e9.3	e9.0	e15	86	171	38	30	13
28	14	e11	e9.1	e9.0	e9.3	e9.0	e15	90	162	44	32	13
29	14	e11	e9.0	e9.0	---	e9.0	e15	99	150	38	26	13
30	13	e11	e9.0	e9.0	---	e9.0	16	102	139	37	24	13
31	13	---	e9.0	e9.0	---	e9.0	---	104	---	53	23	---
TOTAL	445	363	306.9	279.0	258.1	279.8	372.4	1446	4312	2107	973	502
MEAN	14.4	12.1	9.90	9.00	9.22	9.03	12.4	46.6	144	68.0	31.4	16.7
MAX	17	13	11	9.0	10	9.3	16	106	183	135	59	24
MIN	13	11	9.0	9.0	9.0	8.8	9.3	12	99	37	21	13
AC-FT	883	720	609	553	512	555	739	2870	8550	4180	1930	996

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 1999, BY WATER YEAR (WY)

MEAN	13.6	11.0	9.35	7.76	7.34	7.38	11.4	56.6	159	74.5	26.7	16.8
MAX	24.0	16.7	21.1	12.8	11.4	11.5	25.0	118	243	215	63.3	32.3
(WY)	1985	1998	1986	1998	1996	1996	1971	1996	1984	1983	1983	1984
MIN	8.94	3.71	3.46	2.95	2.90	3.19	4.47	18.4	78.9	24.0	12.0	10.1
(WY)	1970	1967	1967	1967	1967	1967	1967	1995	1977	1966	1966	1966

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1966 - 1999	
ANNUAL TOTAL	10398.4		11644.2			
ANNUAL MEAN	28.5		31.9		33.5	
HIGHEST ANNUAL MEAN					54.8	1984
LOWEST ANNUAL MEAN					20.2	1977
HIGHEST DAILY MEAN	140	Jun 3	183	Jun 25	404	Jun 17 1995
LOWEST DAILY MEAN	7.4	Apr 13	e8.8	Mar 8	2.6	Mar 6 1967
ANNUAL SEVEN-DAY MINIMUM	7.6	Apr 13	9.0	Mar 5	2.8	Feb 28 1967
INSTANTANEOUS PEAK FLOW			221	Jun 25	a574	Jun 17 1995
INSTANTANEOUS PEAK STAGE			3.46	Jun 25	b4.17	Jun 17 1995
ANNUAL RUNOFF (AC-FT)	20630		23100		24270	
10 PERCENT EXCEEDS	83		103		97	
50 PERCENT EXCEEDS	13		13		13	
90 PERCENT EXCEEDS	9.0		9.0		6.6	

e Estimated
a From rating curve extended above 256 ft^{3}/s.
b Maximum gage height, 4.22 ft, Nov 22, 1979, backwater from ice.

09036000 WILLIAMS FORK NEAR LEAL, CO

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

DRAINAGE AREA.--89.5 mi^2.

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

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

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 8,790 ft above sea level, from topographic map. Prior to Aug. 16, 1953, at site 15 ft downstream at present datum.

REMARKS.--Records good except for estimated daily discharges, which are fair. Transmountain diversion upstream from station through August P. Gumlick Tunnel (see table below for figures of diversion). Diversions for irrigation of about 200 acres of hay meadows upstream from station and about 40 acres downstream from station. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	43	37	30	25	22	20	31	46	304	453	201	76
2	44	41	29	24	e21	20	29	46	331	445	141	73
3	42	41	29	24	22	20	27	44	397	412	122	70
4	45	37	29	24	22	20	26	44	423	385	131	65
5	41	31	25	24	22	20	27	40	395	360	170	62
6	47	34	e26	24	22	19	27	39	326	349	153	59
7	49	30	26	24	22	20	29	40	338	324	127	56
8	55	32	e26	24	22	20	31	45	413	304	113	54
9	50	31	25	24	21	19	28	54	453	280	108	53
10	49	28	e25	24	22	20	26	63	480	258	115	52
11	46	31	24	24	e20	20	27	53	477	239	110	55
12	44	37	23	22	e20	20	30	51	475	220	100	55
13	42	35	23	23	e20	20	32	56	459	205	92	52
14	44	35	23	e22	21	19	31	67	476	214	86	48
15	43	34	23	22	e19	20	27	69	516	209	90	49
16	40	33	23	23	e19	20	26	76	510	195	82	48
17	41	32	24	22	20	20	30	73	511	199	86	47
18	38	32	24	22	20	21	28	86	510	172	92	48
19	40	30	24	22	20	22	30	110	552	170	76	52
20	43	29	25	22	e19	23	34	132	569	157	86	64
21	40	32	e24	22	e19	24	35	162	601	147	78	60
22	41	33	e23	22	20	25	33	164	623	143	73	57
23	39	33	22	22	20	23	33	181	646	139	67	53
24	37	32	22	22	20	25	38	223	663	132	65	51
25	37	31	22	22	20	26	45	275	664	134	75	52
26	39	31	22	22	20	29	39	258	646	122	79	46
27	40	31	23	22	20	28	38	245	606	119	98	43
28	45	32	24	e21	20	25	42	254	562	140	97	44
29	45	31	24	e21	---	26	51	290	522	152	83	47
30	44	31	25	e21	---	29	52	299	479	126	75	52
31	38	---	25	22	---	30	---	316	---	171	72	---
TOTAL	1331	987	762	704	575	693	982	3901	14927	7075	3143	1643
MEAN	42.9	32.9	24.6	22.7	20.5	22.4	32.7	126	498	228	101	54.8
MAX	55	41	30	25	22	30	52	316	664	453	201	76
MIN	37	28	22	21	19	19	26	39	304	119	65	43
AC-FT	2640	1960	1510	1400	1140	1370	1950	7740	29610	14030	6230	3260
a	52	0	0	0	0	0	0	432	0	0	0	0

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1934 - 1999, BY WATER YEAR (WY)

MEAN	38.4	30.0	24.3	20.9	19.3	19.3	36.3	177	487	221	71.8	44.6
MAX	102	52.6	35.1	28.6	26.4	24.5	91.3	392	966	765	198	98.4
(WY)	1962	1962	1985	1985	1962	1946	1946	1996	1938	1983	1983	1961
MIN	18.5	18.7	14.4	14.1	14.0	14.1	19.8	76.1	119	59.6	29.0	24.2
(WY)	1964	1964	1964	1964	1964	1964	1944	1968	1954	1934	1954	1964

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1934 - 1999	
ANNUAL TOTAL	31736		36723			
ANNUAL MEAN	86.9		b102		b106	
HIGHEST ANNUAL MEAN					c176	1984
LOWEST ANNUAL MEAN					45.4	1954
HIGHEST DAILY MEAN	475	Jun 3	664	Jun 25	1430	Jun 21 1938
LOWEST DAILY MEAN	19	Mar 21	d,e19	Feb 15	f13	Dec 28 1939
ANNUAL SEVEN-DAY MINIMUM	21	Mar 15	19	Feb 15	14	Dec 23 1939
INSTANTANEOUS PEAK FLOW			749	Jun 23	1720	Jun 10 1952
INSTANTANEOUS PEAK STAGE			3.10	Jun 23	g4.23	Jun 10 1952
ANNUAL RUNOFF (AC-FT)	62950		b73900		b76800	
10 PERCENT EXCEEDS	266		319		277	
50 PERCENT EXCEEDS	39		40		34	
90 PERCENT EXCEEDS	23		21		18	

e Estimated
a Diversions in acre-feet, through August P. Gumlick Tunnel, provided by Denver Water Board.
b Includes diversions through August P. Gumlick Tunnel, since May 10, 1940.
c Does not include diversions through August P. Gumlick Tunnel.
d Also occurred Feb 16, 20, 21, Mar 6, 9, and 14.
f Also occurred at times in 1963, 1964, and 1967.
g Maximum gage height, 5.46 ft, Jun 29, 1971, backwater from log.

09037500 WILLIAMS FORK NEAR PARSHALL, CO

LOCATION.--Lat 40°00'01", long 106°10'45", in $SW^1/_4SW^1/_4$ sec.31, T.1 N., R.78 W., Grand County, Hydrologic Unit 14010001, on left bank 30 ft downstream from bridge on State Highway 286, 3.7 mi downstream from Skylark Creek, 3.9 mi south of Parshall, and 4.2 mi upstream from Williams Fork Reservoir Dam.

DRAINAGE AREA.--184 mi^2.

PERIOD OF RECORD.--July 1904 to September 1924, June 1933 to current year. Records since May 10, 1940, equivalent to earlier records if diversion to August P. Gumlick Tunnel is added to flow past station. Published as "near (Hot) Sulphur Springs" 1904-12 and as Williams River near Parshall June 1933 to September 1958. Water-quality data available, April 1986 to September 1987.

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

GAGE.--Water-stage recorder. Datum of gage is 7,808.95 ft above sea level, (Denver Board of Water Commissioners Datum). See WSP 1733 for history of changes prior to Aug. 9, 1938. Aug. 10, 1938 to Aug. 19, 1983, gage located on right bank at present datum. Aug. 19, 1983 to May 14, 1991, gage located 120 ft downstream of present site on left bank at present datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. Transmountain diversion upstream from station through August P. Gumlick Tunnel (station 09035000). Diversions for irrigation of about 1,300 acres upstream from station, and about 2,5000 acres downstream from station. About 150 acres upstream from station irrigated by diversions into the drainage area. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	53	e44	e40	e35	e35	66	99	336	286	219	62
2	43	59	e43	e40	e35	e35	63	92	309	282	147	57
3	55	61	e43	e40	e35	e35	54	90	346	249	91	55
4	60	55	e42	e40	e35	e35	57	89	367	221	87	50
5	56	49	e42	e40	e35	e33	55	78	349	195	138	45
6	55	54	e41	e40	e35	e35	50	72	237	182	119	42
7	58	54	e41	e40	e35	e35	59	72	211	180	101	39
8	66	51	e40	e40	e35	e35	66	85	292	171	89	36
9	66	e50	e40	e40	e35	e35	55	104	335	147	83	34
10	65	e50	e40	e40	e35	e35	53	131	365	121	90	34
11	63	e50	e40	e40	e35	e35	51	106	366	105	87	36
12	59	e50	e40	e40	e35	e35	60	97	363	91	78	39
13	60	e50	e40	e40	e35	e35	67	109	339	74	71	35
14	61	e50	e40	e40	e35	e35	65	130	358	76	65	32
15	61	e48	e40	e40	e35	e35	56	130	418	79	68	31
16	57	e47	e40	e40	e35	e35	50	143	447	60	71	31
17	59	e46	e40	e40	e35	e35	57	138	420	67	69	29
18	56	e46	e40	e40	e35	e36	58	149	408	50	82	28
19	57	e45	e40	e40	e35	e38	59	182	438	52	65	30
20	59	e45	e40	e40	e35	e39	68	205	440	52	70	52
21	57	e45	e40	e40	e35	e41	73	232	488	57	67	56
22	56	e45	e40	e40	e35	e38	70	249	497	62	62	67
23	55	e45	e40	e39	e35	e40	62	268	514	61	54	67
24	53	e45	e40	e38	e35	e43	71	303	523	66	51	65
25	52	e45	e40	e38	e35	e46	94	377	515	77	56	66
26	53	e45	e40	e38	e35	e44	79	353	507	73	62	61
27	54	e45	e40	e37	e35	e41	71	331	458	71	81	58
28	58	e45	e40	e37	e35	e45	79	327	417	76	75	57
29	56	e45	e40	e36	---	e50	103	358	366	107	68	54
30	56	e45	e40	e36	---	e56	115	358	322	123	62	61
31	55	---	e40	e35	---	e62	---	369	---	169	56	---
TOTAL	1737	1463	1256	1214	980	1212	1986	5826	11751	3682	2584	1409
MEAN	56.0	48.8	40.5	39.2	35.0	39.1	66.2	188	392	119	83.4	47.0
MAX	66	61	44	40	35	62	115	377	523	286	219	67
MIN	16	45	40	35	35	33	50	72	211	50	51	28
AC-FT	3450	2900	2490	2410	1940	2400	3940	11560	23310	7300	5130	2790
a	52	0	0	0	0	0	0	432	0	0	0	0

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1905 - 1999, BY WATER YEAR (WY)

MEAN	60.8	51.2	42.3	37.1	35.2	39.7	80.2	270	562	220	88.7	63.2
MAX	151	80.9	65.6	59.5	53.9	87.8	199	711	1243	855	245	153
(WY)	1962	1985	1985	1910	1912	1910	1962	1984	1918	1983	1984	1909
MIN	17.6	32.5	26.8	22.6	22.6	21.5	29.9	28.9	38.6	19.4	13.8	11.1
(WY)	1956	1982	1950	1964	1964	1971	1981	1963	1954	1963	1988	1966

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1905 - 1999	
ANNUAL TOTAL	29503		35100			
ANNUAL MEAN	80.8		b96.9		b134	
HIGHEST ANNUAL MEAN					c248	1984
LOWEST ANNUAL MEAN					38.8	1963
HIGHEST DAILY MEAN	425	Jun 4	523	Jun 24	f2520	Jun 14 1918
LOWEST DAILY MEAN	13	Sep 22	16	Oct 1	d4.8	May 6 1972
ANNUAL SEVEN-DAY MINIMUM	13	Sep 22	31	Sep 13	5.1	May 6 1972
INSTANTANEOUS PEAK FLOW			631	Jun 24	f2620	Jun 14 1918
INSTANTANEOUS PEAK STAGE			4.17	Jun 24	6.05	Jun 14 1918
ANNUAL RUNOFF (AC-FT)	58520		b70200		b97080	
10 PERCENT EXCEEDS	183		288		346	
50 PERCENT EXCEEDS	50		55		53	
90 PERCENT EXCEEDS	28		35		30	

e Estimated
a Diversions in acre-ft through August P. Gumlick Tunnel provided by Denver Water Board.
b Includes diversions through August P. Gumlick Tunnel.
c Does not include diversions through August P. Gumlick Tunnel.
d Also occurred May 8-10, 1972.
f Site and datum then in use, from rating curve extended above 1400 ft^3/s.

09038500 WILLIAMS FORK BELOW WILLIAMS FORK RESERVOIR, CO

LOCATION.--Lat 40°02'07", long 106°12'17", in NW$^1/_4$SE$^1/_4$ sec.23, T.1 N., R.79 W., Grand County, Hydrologic Unit 14010001, on left bank 400 ft downstream from Williams Fork Reservoir, 2.1 mi upstream from mouth, and 2.1 mi southwest of Parshall.

DRAINAGE AREA.--230 mi^2.

PERIOD OF RECORD.--October 1948 to September 1954, August 1958 to current year. Monthly discharge only for some periods, published in WSP 1313. Prior to October 1958, published as Williams River below Williams Fork Reservoir. Water-quality data available, April 1986 to September 1987.

REVISED RECORDS.--WSP 2124: Drainage area.

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

REMARKS.--No estimated daily discharges. Records good. Flow completely regulated by Williams Fork Reservoir (station 09038000). Transmountain diversion upstream from station through August P. Gumlick Tunnel (station 09036000). Diversions upstream from station for irrigation of about 3,200 acres and about 100 acres downstream from station. About 450 acres upstream from station irrigated by diversion into the drainage area. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	81	126	102	102	102	104	57	16	101	308	221	108
2	81	126	102	102	102	104	75	15	150	325	237	108
3	81	126	102	102	102	104	104	15	231	348	193	108
4	81	146	102	102	102	104	104	20	256	341	130	108
5	81	165	102	102	102	104	102	28	256	270	128	108
6	81	164	102	102	102	104	100	27	256	261	158	108
7	81	164	102	102	102	104	100	27	256	253	168	108
8	80	164	102	102	102	104	100	27	251	268	168	108
9	81	164	102	102	102	104	100	27	238	278	150	108
10	81	164	102	102	102	104	100	27	239	252	118	108
11	81	164	102	102	102	104	100	27	239	241	108	108
12	81	164	102	102	102	104	100	27	240	241	108	109
13	97	164	102	102	102	102	100	26	239	203	108	108
14	113	167	102	102	102	102	104	26	240	146	108	105
15	113	168	102	102	102	102	104	26	221	137	108	108
16	113	167	102	102	102	102	102	26	170	140	108	109
17	113	166	102	102	102	102	100	26	131	155	108	109
18	113	164	102	102	102	102	100	26	130	163	108	109
19	113	162	102	102	102	102	101	26	157	162	108	109
20	113	145	102	102	102	88	102	26	156	162	108	113
21	113	128	102	102	102	81	102	26	156	158	108	111
22	113	128	102	102	102	81	88	26	180	154	108	111
23	112	124	102	102	102	81	60	26	197	134	108	111
24	112	118	102	102	102	81	42	26	179	110	108	111
25	112	107	102	102	102	81	30	33	142	102	108	111
26	112	102	102	102	102	82	20	67	220	102	108	111
27	112	102	102	102	102	78	17	85	240	104	108	116
28	112	102	102	102	102	78	17	86	281	106	108	114
29	119	102	102	102	---	53	17	86	338	107	108	112
30	126	102	102	102	---	40	16	81	336	127	108	112
31	126	---	102	102	---	49	---	79	---	172	108	---
TOTAL	3128	4255	3162	3162	2856	2835	2364	1112	6426	6030	3939	3287
MEAN	101	142	102	102	102	91.5	78.8	35.9	214	195	127	110
MAX	126	168	102	102	102	104	104	86	338	348	237	116
MIN	80	102	102	102	102	40	16	15	101	102	108	105
AC-FT	6200	8440	6270	6270	5660	5620	4690	2210	12750	11960	7810	6520

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1949 - 1999, BY WATER YEAR (WY)

MEAN	128	134	105	104	91.3	93.6	77.0	118	207	171	152	152
MAX	264	276	251	264	279	265	273	401	1007	782	352	342
(WY)	1979	1979	1966	1984	1966	1966	1986	1952	1952	1983	1981	1981
MIN	23.5	36.7	13.5	14.7	7.88	14.1	6.04	6.29	10.8	7.97	19.2	17.1
(WY)	1988	1995	1983	1983	1995	1983	1960	1960	1961	1963	1986	1986

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1949 - 1999	
ANNUAL TOTAL	36320		42556			
ANNUAL MEAN	99.5		a118		a130	
HIGHEST ANNUAL MEAN					254	1984
LOWEST ANNUAL MEAN					39.1	1959
HIGHEST DAILY MEAN	282	May 31	348	Jul 3	1860	Jun 28 1983
LOWEST DAILY MEAN	14	Jun 25	15	May 2	b.30	May 14 1963
ANNUAL SEVEN-DAY MINIMUM	15	Jun 21	16	Apr 27	.54	Apr 27 1959
INSTANTANEOUS PEAK FLOW			383	Jul 3	c2640	Jun 20 1953
INSTANTANEOUS PEAK STAGE			2.77	Jul 3	8.50	Jun 20 1953
ANNUAL RUNOFF (AC-FT)	72040		a85490		a94185	
10 PERCENT EXCEEDS	160		179		251	
50 PERCENT EXCEEDS	105		102		110	
90 PERCENT EXCEEDS	20		59		16	

a Adjusted for storage at Williams Fork Reservoir.
b No flow for part of Apr 29, 1975.
c Site and datum then in use, from rating curve extended above 1500 ft^3/s.

09041000 MUDDY CREEK NEAR KREMMLING, CO

LOCATION.--Lat 40°17'37", long 106°28'59", in NE$^1/_4$SE$^1/_4$ sec. 20, T.4 N., R.81 W., Grand County, Hydrologic Unit 14010001, on right bank 0.2 mi upstream from Lindsey Creek, 0.5 mi upstream from bridge on U.S. Highway 40, 3 mi downstream from Albert Creek, and 17 mi northwest of Kremmling.

DRAINAGE AREA.--87.4 mi^2.

PERIOD OF RECORD.--September 1937 to September 1943, October 1955 to September 1971, October 1993 to September 1999 (discontinued). Monthly discharge only for some periods, published in WSP 1313.

GAGE.--Water-stage recorder. Elevation of gage is 7,856 ft above sea level, from topographic map. Prior to Oct. 1, 1955, non-recording gage at site 3 mi upstream at different datum. Prior to Oct. 1, 1993, at site 100 ft upstream at different datum.

REMARKS.--Records good except for estimated discharges, which are poor. Some regulations by Barber Reservoir (capacity, 4,290 acre-ft). Diversions for irrigation of about 900 acres above station. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.4	15	e10	e6.0	e10	e12	e30	189	372	31	21	11
2	12	16	e10	e6.5	e10	e13	e30	206	358	27	18	10
3	14	17	e10	e6.5	e10	e13	e30	197	406	26	16	10
4	13	15	e10	e6.5	e10	e13	e30	180	368	28	16	11
5	13	13	e10	e6.5	e10	e13	e30	161	330	26	18	11
6	13	13	e9.0	e7.0	e11	e13	e30	151	290	23	19	9.4
7	13	13	e8.0	e7.0	e11	e13	e30	140	267	22	19	8.7
8	13	12	e7.0	e7.0	e10	e15	e29	156	275	29	17	7.9
9	15	e12	e7.0	e7.5	e8.9	e15	e29	209	268	31	16	7.3
10	16	e13	e7.0	e8.0	e9.0	e15	e29	232	229	25	16	7.2
11	15	e13	e7.0	e8.5	e9.0	e15	e29	190	203	23	16	7.9
12	14	e13	e6.0	e8.5	e9.0	e15	e28	175	185	23	15	7.8
13	13	e13	e6.0	e8.5	e9.0	e15	e35	210	172	23	15	7.2
14	13	e13	e6.0	e8.5	e9.0	e15	e40	271	164	24	13	6.8
15	13	e13	e5.0	e8.5	e9.0	e15	53	240	185	26	13	6.5
16	13	e13	e5.0	e8.5	e9.0	e17	55	234	196	31	13	6.4
17	13	e13	e5.0	e8.5	e9.0	e18	53	232	152	26	13	6.1
18	12	e13	e5.0	e9.0	e10	e19	49	254	145	27	13	6.1
19	12	e14	e4.9	e9.5	e10	e20	53	297	127	31	13	6.5
20	12	e13	e4.9	e11	e10	e21	71	355	111	34	13	8.5
21	12	e12	e4.9	e11	e10	e21	79	386	99	31	14	9.6
22	11	e12	e4.9	e11	e11	e21	78	407	101	26	13	8.0
23	12	e12	e4.9	e11	e11	e21	69	430	82	26	12	7.3
24	12	e12	e4.8	e12	e11	e21	86	481	70	29	11	7.2
25	12	e12	e4.9	e12	e11	e25	105	482	62	30	10	7.7
26	12	e12	e4.9	e12	e12	e28	91	449	59	31	10	7.5
27	11	e12	e4.9	e12	e12	e28	100	441	53	27	13	6.4
28	16	e12	e4.9	e12	e12	e31	133	433	47	26	15	6.3
29	18	e13	e4.9	e12	---	e30	177	436	43	25	13	6.4
30	16	e11	e5.0	e12	---	e30	214	433	39	24	12	6.5
31	16	---	e5.5	e11	---	e30	---	438	---	20	11	---
TOTAL	408.4	390	197.3	285.5	282.9	591	1895	9095	5458	831	447	236.2
MEAN	13.2	13.0	6.36	9.21	10.1	19.1	63.2	293	182	26.8	14.4	7.87
MAX	18	17	10	12	12	31	214	482	406	34	21	11
MIN	8.4	11	4.8	6.0	8.9	12	28	140	39	20	10	6.1
AC-FT	810	774	391	566	561	1170	3760	18040	10830	1650	887	469

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 1999, BY WATER YEAR (WY)

MEAN	9.42	8.37	6.76	6.00	5.98	11.0	84.1	315	180	25.3	8.80	7.05
MAX	32.4	26.7	15.0	14.0	11.4	46.5	233	608	481	104	28.2	36.2
(WY)	1998	1960	1998	1998	1998	1960	1962	1996	1957	1957	1957	1997
MIN	3.00	4.00	3.00	3.00	3.00	3.50	17.0	175	31.5	3.25	.48	1.22
(WY)	1941	1941	1941	1938	1938	1941	1964	1966	1966	1939	1940	1942

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1938 - 1999	
ANNUAL TOTAL	22497.5		20117.3			
ANNUAL MEAN	61.6		55.1		55.9	
HIGHEST ANNUAL MEAN					95.3	1997
LOWEST ANNUAL MEAN					28.3	1966
HIGHEST DAILY MEAN	442	May 11	482	May 25	964	May 18 1996
LOWEST DAILY MEAN	e4.8	Dec 24	e4.8	Dec 24	.10	Aug 19 1940
ANNUAL SEVEN-DAY MINIMUM	4.9	Dec 19	4.9	Dec 19	.20	Aug 18 1940
INSTANTANEOUS PEAK FLOW			525	May 25	1120	May 18 1996
INSTANTANEOUS PEAK STAGE			7.36	May 25	8.54	May 18 1996
ANNUAL RUNOFF (AC-FT)	44620		39900		40500	
10 PERCENT EXCEEDS	263		192		203	
50 PERCENT EXCEEDS	14		13		8.7	
90 PERCENT EXCEEDS	7.6		7.0		3.4	

e Estimated

09041090 MUDDY CREEK ABOVE ANTELOPE CREEK NEAR KREMMLING, CO

LOCATION.--Lat 40°12'09", long 106°25'19", in $SE^1/_4SE^1/_4$ sec.23, T.3 N., R.81 W., Grand County, Hydrologic Unit 14010001, on left bank at upstream side of box culverts on U.S. Highway 40, 10.9 mi north of Kremmling, on U.S. Highway 40.

DRAINAGE AREA.--145 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1990 to current year.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 7,520 ft above sea level, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.4	14	e10	e9.0	e12	e18	43	206	384	21	14	e11
2	11	15	e10	e8.9	e12	e19	40	218	354	16	13	e12
3	12	16	e10	e8.9	e12	e19	31	211	411	14	15	e12
4	12	15	e10	e8.9	e12	e19	29	188	368	18	e16	e11
5	12	13	e10	e9.1	e13	e19	26	166	335	18	e17	e10
6	12	12	e10	e9.1	e14	e19	25	155	294	13	e18	e9.0
7	11	12	e9.0	e9.0	e13	e19	30	143	273	13	e17	e8.0
8	11	12	e9.0	e9.1	e12	e20	47	156	276	14	e17	e7.7
9	12	12	e9.0	e9.1	e11	e20	37	226	274	14	e16	e7.5
10	13	13	e9.0	e9.0	e11	e22	29	271	238	11	e17	e9.0
11	13	14	e9.0	e9.2	e12	e22	27	205	223	11	e18	e11
12	12	14	e8.9	e9.2	e12	e24	29	182	204	10	e17	e10
13	11	15	e8.8	e9.2	e12	e25	58	211	195	10	e15	e8.2
14	11	e15	e8.7	e9.2	e12	e26	81	301	170	11	e12	e8.2
15	11	e15	e8.7	e9.1	e12	e30	47	270	175	10	e13	e8.0
16	11	e15	e8.7	e10	e12	e32	38	260	174	15	e12	e7.0
17	11	e15	e8.8	e11	e12	e34	33	259	141	18	e13	e7.0
18	11	e15	e8.9	e12	e13	e36	34	274	121	23	e12	e7.4
19	11	e14	e9.0	e13	e13	e38	44	308	97	26	e13	e13
20	11	e13	e8.8	e13	e13	e39	79	395	85	22	e12	e11
21	11	e12	e8.6	e13	e13	e40	99	438	79	17	e15	e10
22	10	e13	e8.8	e14	e14	e42	98	470	76	14	e12	e7.0
23	10	e13	e8.8	e13	e14	e44	82	491	60	14	e9.0	e7.0
24	11	e13	e8.5	e13	e15	e45	89	567	51	17	e9.0	e8.0
25	11	e13	e8.7	e13	e16	e45	131	572	45	21	e11	e7.0
26	11	e13	e8.7	e13	e18	e45	110	511	43	22	e9.0	e10
27	10	e13	e8.7	e13	e18	e40	101	500	38	20	e11	e12
28	12	e13	e8.7	e13	e18	38	149	487	33	17	e12	e11
29	16	e14	e8.8	e12	---	36	180	486	31	23	e11	e10
30	15	e12	e8.9	e12	---	40	251	473	30	23	e10	e8.0
31	14	---	e9.0	e11	---	45	---	486	---	19	e13	---
TOTAL	358.4	408	280.5	335.0	371	960	2097	10086	5278	515	419.0	278.0
MEAN	11.6	13.6	9.05	10.8	13.2	31.0	69.9	325	176	16.6	13.5	9.27
MAX	16	16	10	14	18	45	251	572	411	26	18	13
MIN	8.4	12	8.5	8.9	11	18	25	143	30	10	9.0	7.0
AC-FT	711	809	556	664	736	1900	4160	20010	10470	1020	831	551

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 1999, BY WATER YEAR (WY)

MEAN	10.7	10.3	8.89	8.82	9.18	20.5	93.5	386	181	17.2	12.8	10.6
MAX	38.2	26.4	21.8	20.3	18.7	53.4	151	659	366	52.2	27.5	45.2
(WY)	1998	1998	1998	1998	1998	1998	1996	1997	1995	1995	1997	1997
MIN	4.32	4.36	2.82	2.68	3.00	9.92	40.8	190	32.2	2.69	5.14	3.51
(WY)	1993	1995	1991	1991	1991	1991	1995	1992	1992	1994	1994	1994

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1990 - 1999	
ANNUAL TOTAL	27994.1		21385.9			
ANNUAL MEAN	76.7		58.6		67.0	
HIGHEST ANNUAL MEAN					109	1997
LOWEST ANNUAL MEAN					29.0	1992
HIGHEST DAILY MEAN	634	May 7	572	May 25	908	May 18 1996
LOWEST DAILY MEAN	7.0	Sep 20	7.0	Sep 16	.96	Jul 25 1994
ANNUAL SEVEN-DAY MINIMUM	7.3	Sep 16	8.0	Sep 12	1.2	Jul 22 1994
INSTANTANEOUS PEAK FLOW			652	May 25	955	Jun 20 1994
INSTANTANEOUS PEAK STAGE			6.26	May 25	a7.36	Jun 20 1994
ANNUAL RUNOFF (AC-FT)	55530		42420		48520	
10 PERCENT EXCEEDS	300		205		222	
50 PERCENT EXCEEDS	18		14		12	
90 PERCENT EXCEEDS	8.8		9.0		4.1	

e Estimated
a Maximum gage height, 7.43 ft, May 18, 1996 and May 17, 1997.

09041090 MUDDY CREEK ABOVE ANTELOPE CREEK NEAR KREMMLING, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1990 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: April 1990 to current year.
WATER TEMPERATURE: April 1990 to current year.
SUSPENDED-SEDIMENT DISCHARGE: April 1990 to September 1993.

INSTRUMENTATION.--Water-quality monitor from April 1990 to current year.

REMARKS.--Records for specific conductance are good, except for June 2 - July 8, which are poor. Records for water temperature are good. Daily data that are not published are either missing or of unacceptable quality.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 1,010 microsiemens, Aug. 19, 1997; minimum, 88 microsiemens, May 20, 1994.
WATER TEMPERATURE: Maximum, 26.7°C, July 7, 1999; minimum, 0.0°C, on many days during winter.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 750 microsiemens, July 16; minimum, 92 microsiemens, May 29.
WATER TEMPERATURE: Maximum, 26.7°C, July 7; minimum, 0.0°C, on many days during winter.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)
OCT												
14...	1350	11	431	8.3	9.4	4.2	9.5	180	46	15	17	.6
NOV												
12...	1400	14	460	8.1	.8	4.4	10.6	200	54	16	18	.5
DEC												
14...	1400	8.7	548	8.5	.2	4.1	11.1	230	61	20	23	.6
JAN												
20...	1000	13	445	8.3	.1	5.8	10.0	190	49	16	19	.6
FEB												
09...	1000	10	458	8.2	.2	6.4	10.7	200	53	17	21	.6
MAR												
24...	1155	45	559	8.3	.0	50	11.4	240	62	20	26	.7
APR												
13...	1330	46	467	8.6	6.7	49	10.0	210	57	16	20	.6
MAY												
10...	1440	260	233	8.4	5.0	180	9.6	100	30	6.9	7.2	.3
JUN												
02...	1245	330	126	8.4	6.1	32	9.7	55	16	3.6	3.8	.2
JUL												
08...	1345	11	695	8.5	18.1	3	6.6	310	85	24	30	.7
AUG												
10...	1400	16	422	8.5	19.1	6.0	8.2	200	55	14	15	.5
SEP												
14...	1500	7.7	416	8.5	15.1	5.6	8.8	190	51	14	16	.5

DATE	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS-SOLVED (TONS PER DAY) (70302)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)
OCT											
14...	2.0	127	91	2.0	.2	7.9	260	258	.35	7.93	8
NOV											
12...	1.8	141	95	2.1	.1	9.5	304	281	.41	11.7	--
DEC											
14...	2.2	175	100	2.3	.2	11	349	329	.47	8.19	6
JAN											
20...	1.9	152	86	1.9	.1	2.0	292	268	.40	10.2	--
FEB											
09...	1.5	154	97	2.5	.2	11	313	295	.43	8.87	--
MAR											
24...	5.8	139	140	4.8	.1	9.8	376	353	.51	45.5	--
APR											
13...	2.7	136	110	2.9	.1	8.1	316	295	.43	39.1	--
MAY											
10...	1.5	93	33	.8	.1	8.1	157	144	.21	111	173
JUN											
02...	.8	50	14	.6	<.1	8.0	105	77	.14	94.7	--
JUL											
08...	2.2	252	130	2.4	.2	12	481	436	.65	13.8	--
AUG											
10...	1.7	141	78	1.9	.2	6.6	274	258	.37	12.1	9
SEP											
14...	1.8	139	83	1.5	.2	6.9	270	258	.37	5.61	--

09041090 MUDDY CREEK ABOVE ANTELOPE CREEK NEAR KREMMLING, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	NITROGEN, NITRITE DISSOLVED (MG/L AS N) (00613)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N) (00607)	NITROGEN,AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN,AMMONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOSPHORUS TOTAL (MG/L AS P) (00665)	PHOSPHORUS DISSOLVED (MG/L AS P) (00666)	PHOSPHORUS ORTHO, DISSOLVED (MG/L AS P) (00671)	CARBON, ORGANIC DISSOLVED (MG/L AS C) (00681)	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL) (01105)
OCT											
14...	<.01	.06	<.02	--	.2	.1	<.05	.01	.01	4.5	--
NOV											
12...	.01	.08	.03	.21	.2	.2	.01	<.05	.01	--	--
DEC											
14...	.01	<.05	.02	.18	.2	.2	<.05	.01	<.01	4.5	--
JAN											
20...	<.01	.06	.04	.16	.3	.2	<.05	<.05	<.01	--	--
FEB											
09...	<.01	.10	.04	.20	.3	.2	<.05	<.05	<.01	--	--
MAR											
24...	<.01	.15	.21	.72	1.3	.9	.22	.05	.02	--	--
APR											
13...	<.01	<.05	<.02	--	.5	.3	.08	<.05	<.01	--	--
MAY											
10...	<.01	.11	.05	.35	1.1	.4	.36	<.05	.02	7.1	2660
JUN											
02...	<.01	<.05	.03	.19	.5	.2	.14	<.05	.02	--	--
JUL											
08...	<.01	<.05	.03	.51	.6	.5	<.05	<.05	.02	--	--
AUG											
10...	<.01	<.05	<.02	--	.4	.3	<.05	<.05	<.01	4.8	210
SEP											
14...	<.01	<.05	<.02	--	.3	.2	<.05	<.05	<.01	--	--

DATE	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC DISSOLVED (UG/L AS AS) (01000)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA) (01007)	BARIUM, DISSOLVED (UG/L AS BA) (01005)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE) (01012)	BORON, DISSOLVED (UG/L AS B) (01020)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CADMIUM DISSOLVED (UG/L AS CD) (01025)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)	CHROMIUM, DISSOLVED (UG/L AS CR) (01030)	COBALT, TOTAL RECOVERABLE (UG/L AS CO) (01037)
OCT											
14...	--	--	--	--	--	--	--	--	--	--	--
NOV											
12...	--	--	--	--	--	--	--	--	--	--	--
DEC											
14...	--	--	--	--	--	--	--	--	--	--	--
JAN											
20...	--	--	--	--	--	--	--	--	--	--	--
FEB											
09...	--	--	--	--	--	--	--	--	--	--	--
MAR											
24...	--	--	--	--	--	--	--	--	--	--	--
APR											
13...	--	--	--	--	--	--	--	--	--	--	--
MAY											
10...	3	<1	114	42	<4.0	22.7	<1	<1	5.9	<1.0	3
JUN											
02...	--	--	--	--	--	--	--	--	--	--	--
JUL											
08...	--	--	--	--	--	--	--	--	--	--	--
AUG											
10...	1	<1	69.9	68	<4	50.8	<1	<1	<1.0	<1.0	<1
SEP											
14...	--	--	--	--	--	--	--	--	--	--	--

09041090 MUDDY CREEK ABOVE ANTELOPE CREEK NEAR KREMMLING, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	LITHIUM TOTAL RECOV-ERABLE (UG/L AS LI) (01132)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)
OCT											
14...	--	--	400	25	--	--	--	30	17	--	--
NOV											
12...	--	--	--	E8	--	--	--	--	20	--	--
DEC											
14...	--	--	340	E9	--	--	--	30	23	--	--
JAN											
20...	--	--	30	11	--	--	--	450	18	--	--
FEB											
09...	--	--	460	14	--	--	--	30	20	--	--
MAR											
24...	--	--	--	94	--	--	--	--	70	--	--
APR											
13...	--	--	1530	27	--	--	--	64.7	40	--	--
MAY											
10...	7	<1	5670	31	5	<1	E9.9	159	20	<.1	<.1
JUN											
02...	--	--	--	52	--	--	--	--	10	--	--
JUL											
08...	--	--	411	70	--	--	--	84.8	83	--	--
AUG											
10...	1	1	469	16	<1	<1	14.3	45.6	29	<.1	<.1
SEP											
14...	--	--	402	11	--	--	--	32.6	19	--	--

DATE	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO) (01062)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
OCT											
14...	--	--	--	--	--	--	--	--	--	--	--
NOV											
12...	--	--	--	--	--	--	--	--	--	--	--
DEC											
14...	--	--	--	--	--	--	--	--	--	--	--
JAN											
20...	--	--	--	--	--	--	--	--	--	--	--
FEB											
09...	--	--	--	--	--	--	--	--	--	--	--
MAR											
24...	--	--	--	--	--	--	--	--	--	--	--
APR											
13...	--	--	--	--	--	--	--	--	--	--	--
MAY											
10...	<1.0	1.4	10	2	1	<1	<1	<1	240	E23.5	<20
JUN											
02...	--	--	--	--	--	--	--	--	--	--	--
JUL											
08...	--	--	--	--	--	--	--	--	--	--	--
AUG											
10...	2.3	2.6	2	2	<1	<1	<1	<1	470	<40	<20
SEP											
14...	--	--	--	--	--	--	--	--	--	--	--

E Estimated.

09041090 MUDDY CREEK ABOVE ANTELOPE CREEK NEAR KREMMLING, CO--Continued

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
OCT				
14...	1315	11.3	7.2	.22
NOV				
12...	1330	14.3	10.9	.42
DEC				
14...	1345	8.69	15.8	.37
JAN				
20...	0945	12.9	14.8	.52
FEB				
09...	0950	10.5	14.6	.41
MAR				
24...	1303	44.8	112.5	14
31...	1115	29.0	82.6	6.5
APR				
13...	1320	45.8	88.4	11
26...	1155	108	232.5	68
MAY				
10...	1441	264	504.7	360
JUN				
02...	1246	334	1288.2	1160
JUL				
08...	1355	10.6	53.9	1.5
AUG				
10...	1200	16.4	15.7	.70
16...	1230	13.2	14.7	.52
SEP				
14...	1515	7.7	10.3	.21

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	512	488	504	404	394	400	---	---	---	---	---	---
2	623	467	532	410	391	397	---	---	---	---	---	---
3	620	521	580	420	410	417	---	---	---	---	---	---
4	529	484	504	588	407	456	---	---	---	---	---	---
5	508	482	496	421	414	417	---	---	---	---	---	---
6	488	462	476	426	410	419	---	---	---	---	---	---
7	462	449	458	440	414	429	---	---	---	---	---	---
8	455	448	451	443	417	429	---	---	---	---	---	---
9	461	430	445	454	418	436	---	---	---	---	---	---
10	430	393	406	510	442	465	---	---	---	---	---	---
11	399	383	389	525	458	510	---	---	---	---	---	---
12	389	369	375	---	---	---	---	---	---	---	---	---
13	384	374	380	---	---	---	---	---	---	---	---	---
14	416	384	401	---	---	---	---	---	---	---	---	---
15	430	410	421	---	---	---	---	---	---	---	---	---
16	430	416	423	---	---	---	---	---	---	---	---	---
17	425	416	421	---	---	---	---	---	---	---	---	---
18	443	421	433	---	---	---	---	---	---	---	---	---
19	448	435	443	---	---	---	---	---	---	---	---	---
20	466	443	456	---	---	---	---	---	---	---	---	---
21	448	435	439	---	---	---	---	---	---	---	---	---
22	441	426	435	---	---	---	---	---	---	---	---	---
23	440	428	435	---	---	---	---	---	---	---	---	---
24	445	434	441	---	---	---	---	---	---	---	---	---
25	450	431	442	---	---	---	---	---	---	---	---	---
26	434	428	432	---	---	---	---	---	---	---	---	---
27	438	428	434	---	---	---	---	---	---	---	---	---
28	442	433	437	---	---	---	---	---	---	---	---	---
29	439	395	411	---	---	---	---	---	---	---	---	---
30	401	389	395	---	---	---	---	---	---	---	---	---
31	408	400	404	---	---	---	---	---	---	---	---	---
MONTH	623	369	442	---	---	---	---	---	---	---	---	---

09041090 MUDDY CREEK ABOVE ANTELOPE CREEK NEAR KREMMLING, CO--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	---	---	---	493	429	460	291	271	278
2	---	---	---	---	---	---	474	404	443	345	280	299
3	---	---	---	---	---	---	581	411	462	357	312	335
4	---	---	---	---	---	---	527	416	468	313	302	306
5	---	---	---	---	---	---	509	417	471	325	304	311
6	---	---	---	---	---	---	498	417	468	340	313	329
7	---	---	---	---	---	---	511	435	461	343	314	330
8	---	---	---	---	---	---	481	414	447	319	289	306
9	---	---	---	---	---	---	477	413	442	292	230	264
10	---	---	---	---	---	---	479	409	442	257	225	240
11	---	---	---	---	---	---	467	409	442	265	255	260
12	---	---	---	---	---	---	469	402	426	272	243	258
13	---	---	---	---	---	---	470	420	443	256	233	244
14	---	---	---	---	---	---	430	380	391	244	221	234
15	---	---	---	---	---	---	420	380	402	243	149	164
16	---	---	---	---	---	---	441	381	412	154	146	149
17	---	---	---	---	---	---	445	390	416	156	147	151
18	---	---	---	---	---	---	453	389	413	151	138	143
19	---	---	---	---	---	---	451	386	416	144	132	138
20	---	---	---	---	---	---	406	349	380	137	118	130
21	---	---	---	---	---	---	375	340	352	172	120	164
22	---	---	---	---	---	---	355	324	336	158	146	154
23	---	---	---	---	---	---	405	342	375	149	139	145
24	---	---	---	---	---	---	488	402	446	143	133	138
25	---	---	---	---	---	---	495	359	402	133	127	130
26	---	---	---	---	---	---	373	342	360	134	125	129
27	---	---	---	---	---	---	396	344	368	134	109	126
28	---	---	---	---	---	---	392	322	343	109	100	104
29	---	---	---	---	---	---	346	316	336	122	92	105
30	---	---	---	---	---	---	330	268	280	117	109	113
31	---	---	---	---	---	---	---	---	---	119	104	110
MONTH	---	---	---	---	---	---	581	268	410	357	92	203

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	134	109	122	578	541	565	715	587	640	411	392	401
2	138	116	127	606	562	591	587	562	570	424	411	419
3	131	115	123	620	597	608	572	489	535	424	416	421
4	139	111	126	614	599	606	494	458	474	425	413	420
5	160	118	137	647	587	610	458	440	448	413	390	401
6	191	156	173	703	639	664	463	439	450	391	380	384
7	186	160	173	704	681	697	463	440	455	387	380	384
8	160	123	141	726	677	694	440	423	431	390	384	386
9	164	124	142	726	664	695	440	422	431	394	387	390
10	196	140	163	664	639	648	443	431	437	398	391	394
11	199	166	183	705	653	682	443	429	435	402	392	396
12	201	171	185	700	676	689	440	422	429	406	398	401
13	221	197	209	713	688	700	430	411	418	404	396	400
14	236	205	214	711	678	693	425	405	414	443	397	416
15	254	222	238	693	665	676	426	409	416	440	394	396
16	267	221	247	750	690	705	426	408	416	403	398	400
17	308	255	274	728	690	708	424	407	414	405	398	401
18	300	266	280	719	696	704	422	410	414	410	404	407
19	288	274	280	696	653	681	420	403	409	416	406	410
20	293	280	285	715	647	693	412	399	404	410	402	406
21	314	293	303	647	596	625	416	388	396	440	403	432
22	322	298	311	633	585	607	475	383	449	423	385	402
23	337	311	325	620	604	612	467	423	437	406	384	392
24	373	329	356	612	538	576	423	402	410	408	402	405
25	399	360	380	538	495	514	411	402	406	439	408	422
26	406	383	395	509	457	489	409	403	406	434	413	422
27	422	404	409	474	421	451	408	396	404	414	402	408
28	448	414	427	584	420	479	407	366	384	408	401	405
29	505	448	466	524	509	515	398	368	383	426	408	417
30	563	505	544	525	507	512	416	398	409	460	426	444
31	---	---	---	717	512	606	405	393	398	---	---	---
MONTH	563	109	258	750	420	622	715	366	436	460	380	406

09041090 MUDDY CREEK ABOVE ANTELOPE CREEK NEAR KREMMLING, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	14.0	10.4	12.3	7.6	4.1	5.8	---	---	---	---	---	---
2	12.3	9.4	10.5	7.3	5.1	6.0	---	---	---	---	---	---
3	11.7	8.4	10.0	6.4	4.0	5.2	---	---	---	---	---	---
4	9.9	6.5	8.2	5.5	2.2	3.8	---	---	---	---	---	---
5	6.5	4.2	5.5	4.3	1.0	2.6	---	---	---	---	---	---
6	7.3	2.2	4.4	3.7	.7	2.1	---	---	---	---	---	---
7	9.5	3.6	6.3	3.1	.5	1.7	---	---	---	---	---	---
8	10.1	5.4	7.6	2.8	.3	1.3	---	---	---	---	---	---
9	10.7	5.2	7.9	1.0	.0	.4	---	---	---	---	---	---
10	10.7	5.9	8.3	.4	.0	.1	---	---	---	---	---	---
11	10.1	4.7	7.6	.4	.0	.1	---	---	---	---	---	---
12	9.2	4.3	7.0	---	---	---	---	---	---	---	---	---
13	8.6	4.3	6.6	---	---	---	---	---	---	---	---	---
14	11.7	6.4	8.6	---	---	---	---	---	---	---	---	---
15	10.3	6.4	8.3	---	---	---	---	---	---	---	---	---
16	8.5	5.3	6.9	---	---	---	---	---	---	---	---	---
17	6.1	4.0	5.3	---	---	---	---	---	---	---	---	---
18	8.0	2.6	5.0	---	---	---	---	---	---	---	---	---
19	7.7	2.9	5.2	---	---	---	---	---	---	---	---	---
20	8.3	3.7	5.7	---	---	---	---	---	---	---	---	---
21	8.1	3.0	5.5	---	---	---	---	---	---	---	---	---
22	8.8	5.5	6.9	---	---	---	---	---	---	---	---	---
23	6.0	4.0	5.2	---	---	---	---	---	---	---	---	---
24	7.3	3.1	4.8	---	---	---	---	---	---	---	---	---
25	6.5	4.0	5.1	---	---	---	---	---	---	---	---	---
26	7.3	5.3	6.1	---	---	---	---	---	---	---	---	---
27	5.7	4.0	4.9	---	---	---	---	---	---	---	---	---
28	5.3	4.4	4.9	---	---	---	---	---	---	---	---	---
29	5.9	3.7	4.8	---	---	---	---	---	---	---	---	---
30	6.1	2.7	4.6	---	---	---	---	---	---	---	---	---
31	7.3	3.6	5.6	---	---	---	---	---	---	---	---	---
MONTH	14.0	2.2	6.6	---	---	---	---	---	---	---	---	---

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	---	---	---	4.8	.4	2.7	5.3	2.0	4.0
2	---	---	---	---	---	---	2.8	.0	1.1	5.8	1.8	3.9
3	---	---	---	---	---	---	3.8	.0	1.2	5.6	3.2	4.6
4	---	---	---	---	---	---	3.9	.0	1.5	7.1	2.3	4.3
5	---	---	---	---	---	---	4.9	.0	1.9	5.8	1.8	3.6
6	---	---	---	---	---	---	8.7	.0	3.9	7.0	.0	3.3
7	---	---	---	---	---	---	9.7	1.1	5.4	11.1	2.8	6.7
8	---	---	---	---	---	---	7.0	1.8	3.8	12.0	5.4	8.5
9	---	---	---	---	---	---	4.9	.0	2.5	9.7	5.0	8.0
10	---	---	---	---	---	---	6.4	.0	2.7	8.1	2.6	4.9
11	---	---	---	---	---	---	7.3	.0	3.4	7.5	.9	4.0
12	---	---	---	---	---	---	11.9	3.0	7.2	9.1	2.4	5.7
13	---	---	---	---	---	---	9.6	3.7	6.9	11.4	5.6	8.3
14	---	---	---	---	---	---	7.4	2.4	4.6	9.6	4.7	6.5
15	---	---	---	---	---	---	4.6	.0	1.9	7.9	3.6	6.0
16	---	---	---	---	---	---	4.7	.0	1.8	8.7	4.2	6.6
17	---	---	---	---	---	---	8.3	.0	3.2	10.1	3.1	6.7
18	---	---	---	---	---	---	9.7	1.1	5.1	10.0	3.9	7.4
19	---	---	---	---	---	---	9.9	2.7	6.3	10.7	4.1	8.0
20	---	---	---	---	---	---	9.3	3.9	6.8	10.7	4.8	8.1
21	---	---	---	---	---	---	6.9	3.6	5.6	10.8	3.9	7.6
22	---	---	---	---	---	---	6.1	1.9	4.4	10.6	3.7	7.3
23	---	---	---	---	---	---	8.5	2.3	5.0	11.9	4.5	8.3
24	---	---	---	---	---	---	10.6	3.4	6.9	10.2	5.1	8.0
25	---	---	---	---	---	---	8.3	4.3	5.7	8.6	4.5	6.7
26	---	---	---	---	---	---	5.3	3.7	4.4	10.1	4.2	7.2
27	---	---	---	---	---	---	9.1	3.1	5.8	9.8	4.7	7.2
28	---	---	---	---	---	---	7.8	3.4	5.6	10.7	4.5	7.7
29	---	---	---	---	---	---	10.6	4.3	7.2	9.8	4.7	7.2
30	---	---	---	---	---	---	8.4	2.8	4.5	10.7	5.4	8.2
31	---	---	---	---	---	---	---	---	---	9.7	5.2	7.1
MONTH	---	---	---	---	---	---	11.9	.0	4.3	12.0	.0	6.5

09041090 MUDDY CREEK ABOVE ANTELOPE CREEK NEAR KREMMLING, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	10.1	3.7	7.0	21.9	12.8	17.4	24.0	15.3	19.1	18.3	13.2	15.5
2	10.7	5.4	8.4	20.8	15.3	18.2	24.0	14.6	19.2	17.8	15.0	16.2
3	11.3	5.7	8.7	23.2	15.2	18.9	22.1	14.7	18.4	16.1	13.7	14.9
4	10.9	5.6	8.7	23.3	15.4	19.4	18.8	16.3	17.4	17.0	12.0	14.2
5	9.6	5.9	7.8	24.8	14.5	19.5	20.1	15.4	17.8	17.4	11.0	14.0
6	10.3	5.4	7.7	25.2	15.9	20.1	19.4	16.2	17.7	17.6	11.8	14.4
7	14.1	6.9	10.3	26.7	14.5	19.9	20.8	15.3	18.4	18.5	12.2	14.8
8	14.1	7.8	11.1	22.8	17.3	19.1	20.2	15.4	18.4	17.8	11.2	14.0
9	14.7	8.7	11.6	22.0	14.9	18.3	19.1	15.4	17.3	17.4	9.9	13.2
10	13.8	9.7	11.6	23.1	15.4	19.4	20.5	14.8	17.7	16.5	11.7	13.5
11	14.5	7.7	11.2	20.8	16.0	18.4	20.9	16.7	18.6	14.8	11.7	12.8
12	14.6	8.9	11.9	23.0	14.4	18.7	18.9	14.3	16.8	16.7	10.4	13.0
13	16.6	9.0	12.8	22.2	15.8	19.3	20.9	14.2	17.6	16.1	9.5	12.3
14	15.2	10.3	13.0	19.6	16.7	18.0	19.2	14.7	17.1	15.4	8.8	11.6
15	13.5	10.3	11.5	22.2	16.0	18.6	19.0	15.1	16.8	15.2	8.3	11.3
16	15.6	8.6	11.8	22.4	14.7	18.3	19.5	13.6	16.7	16.7	8.5	12.0
17	14.3	11.0	12.4	21.9	15.2	18.5	18.6	15.9	17.1	16.6	9.8	12.5
18	18.0	9.2	13.6	18.5	14.4	16.4	20.9	14.7	17.2	15.6	9.7	12.3
19	17.5	12.4	15.3	18.1	14.5	16.1	19.7	15.6	17.7	12.5	10.1	11.1
20	17.0	11.8	14.8	22.7	14.7	18.3	20.4	16.0	17.9	14.4	9.6	11.3
21	17.0	12.6	15.2	22.9	15.3	19.4	17.7	14.9	16.5	14.1	8.3	10.7
22	17.2	12.1	14.8	21.3	16.9	19.5	21.1	14.5	17.7	14.5	8.7	11.2
23	20.6	11.8	15.9	24.1	15.5	19.7	22.1	15.5	18.8	16.2	9.8	12.3
24	21.0	13.0	17.1	22.1	16.3	19.6	23.1	16.7	19.4	14.8	11.3	12.7
25	22.0	14.4	18.1	20.2	16.1	18.4	19.9	16.8	18.2	17.1	10.7	13.3
26	21.4	13.1	17.5	21.2	14.3	18.0	22.1	14.9	17.9	14.7	9.5	12.4
27	22.0	13.8	17.7	21.7	14.9	18.6	20.7	16.5	18.1	12.2	6.7	9.3
28	21.8	12.5	17.1	21.5	17.4	19.2	18.7	15.7	17.0	9.3	4.8	6.6
29	19.0	13.4	16.1	21.1	14.9	18.1	19.2	14.6	16.6	10.6	2.1	5.9
30	19.1	12.8	15.5	18.9	15.8	17.8	20.1	14.3	17.1	11.2	3.6	7.1
31	---	---	---	22.3	15.3	18.1	17.5	15.0	16.5	---	---	---
MONTH	22.0	3.7	12.9	26.7	12.8	18.6	24.0	13.6	17.7	18.5	2.1	12.2

401110106244800 WOLFORD MOUNTAIN RESERVOIR AT INFLOW NEAR KREMMLING, CO

WATER-QUALITY RECORDS

LOCATION (REVISED).--Lat. 40°11'10", long 106°24'48", in $NE^{1}/_{4}NW^{1}/_{4}$ sec.36, T.3 N, R.81 W., Grand County, Hydrologic Unit 14010001, 5 mi north of Kremmling.

DRAINAGE AREA.--270 mi^2.

PERIOD OF RECORD.--July 1995 to current year.

REMARKS.--Samples were collected at mid-depth at the upper inflow.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	SAMPLING DEPTH (FEET) (00003)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	OXYGEN, DISSOLVED (MG/L) (00300)
OCT						
05...	1116	.1	636	8.6	13.2	--
05...	1117	5.0	636	8.6	13.2	--
05...	1118	10	636	8.6	13.2	--
05...	1119	15	636	8.6	13.2	--
05...	1120	20	638	8.6	13.1	--
JUN						
01...	1115	.1	236	8.3	12.7	8.6
01...	1116	5.0	172	8.2	9.4	8.4
01...	1117	10	144	8.1	4.7	9.3
JUL						
22...	1100	.1	586	8.4	20.6	5.9
22...	1101	5.0	575	8.4	20.0	5.9
22...	1102	10	573	8.4	19.7	5.6
22...	1103	14	623	8.2	19.2	5.0
AUG						
18...	1125	.1	598	8.3	18.4	6.4
18...	1126	5.0	594	8.3	18.1	6.4
18...	1127	10	597	8.1	17.9	5.3

DATE	TIME	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	TURBIDITY (NTU) (00076)	TRANSPARENCY (SECCHI DISK) (IN) (00077)	OXYGEN, DISSOLVED (MG/L) (00300)	HARDNESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, DISSOLVED (MG/L AS NA) (00930)
OCT											
05...	1130	636	8.6	13.2	3.7	36	--	270	68	25	25
JUN											
01...	1120	172	8.2	9.4	26	--	8.4	74	21	5.3	5.6
JUL											
22...	1115	573	8.4	19.7	2.9	84	5.6	250	63	23	24
AUG											
18...	1135	594	8.3	18.1	2.6	48	6.4	250	62	24	26

DATE	SODIUM ADSORPTION RATIO (00931)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)	SOLIDS, DISSOLVED (TONS PER AC-FT) (70303)
OCT										
05...	.7	2.4	135	180	2.1	.2	7.8	430	397	.58
JUN										
01...	.3	1	55	30	.9	<.1	8.0	129	105	.18
JUL										
22...	.7	2.0	131	150	2.2	.1	8.4	386	354	.52
AUG										
18...	.7	2.0	128	180	2.0	.1	8.4	395	377	.54

401110106244800 WOLFORD MOUNTAIN RESERVOIR AT INFLOW NEAR KREMMLING, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	NITROGEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITROGEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITROGEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITROGEN, ORGANIC DIS-SOLVED (MG/L AS N) (00607)	NITROGEN,AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN,AMMONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOSPHORUS TOTAL (MG/L AS P) (00665)	PHOSPHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOSPHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)
OCT										
05...	<.01	<.05	.03	.31	.6	.3	.03	<.05	<.01	6.0
JUN										
01...	<.01	<.05	<.02	--	.4	.2	.06	<.05	.02	5.9
JUL										
22...	<.01	<.05	<.02	--	.5	.2	E.03	<.05	<.01	8.0
AUG										
18...	<.01	<.05	<.02	--	.5	.4	<.05	<.05	<.01	6.5

DATE	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL) (01105)	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA) (01007)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE) (01012)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)	CHROMIUM, DIS-SOLVED (UG/L AS CR) (01030)
OCT										
05...	80	<1	2	<100	66	<10	<1	<1	<1.0	<1.0
JUN										
01...	739	1	<1	39.3	30	<4	<1	<1	1.0	<1.0
JUL										
22...	82.5	1	2	57.4	58	<4	<1	<1	<1.0	<1.0
AUG										
18...	102	<1	<1	62.6	62	<4	<1	<1	<1.0	<1.0

DATE	COBALT, TOTAL RECOVERABLE (UG/L AS CO) (01037)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOVERABLE (UG/L AS FE) (01045)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	LITHIUM TOTAL RECOVERABLE (UG/L AS LI) (01132)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN) (01055)	MANGANESE, DIS-SOLVED (UG/L AS MN) (01056)
OCT										
05...	<1	2	<1	160	<10	<1	<1	20	30	<3
JUN										
01...	<1	2	1	1010	43	<1	<1	<12	28.1	9
JUL										
22...	<1	<1	1	143	16	<1	<1	21.2	25.0	21
AUG										
18...	<1	1	1	191	<10	<1	<1	24.1	30.6	12

DATE	MERCURY TOTAL RECOVERABLE (UG/L AS HG) (71900)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO) (01062)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI) (01067)	SELENIUM, TOTAL (UG/L AS SE) (01147)	SELENIUM, DIS-SOLVED (UG/L AS SE) (01145)	SILVER, TOTAL RECOVERABLE (UG/L AS AG) (01077)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
OCT										
05...	<.1	<.1	1.8	2	2	1	<1	<1	<10	E11
JUN										
01...	<.1	<.1	<1.0	2	<1	<1	<1	<1	<40	<20
JUL										
22...	<.1	<.1	2.0	2	1	1	<1	<1	<40	E9
AUG										
18...	<.1	<.1	1.9	1	2	2	<1	<1	<40	<20

E Estimated.

400841106240600 WOLFORD MOUNTAIN RESERVOIR AT MIDLAKE NEAR KREMMLING, CO

WATER-QUALITY RECORDS

LOCATION.--Lat. 40°08'41", long 106°24'06", in $NW^1/_4NW^1/_4$ sec.18, T.2 N, R.80 W., Grand County, Hydrologic Unit 14010001, 5 mi north of Kremmling.

DRAINAGE AREA.--270 mi^2.

PERIOD OF RECORD.--July 1995 to current year.

REMARKS.--Samples were collected at mid-depth at the upper inflow.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	SAMPLING DEPTH (FEET) (00003)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	OXYGEN, DISSOLVED (MG/L) (00300)
OCT						
05...	1030	.1	592	8.4	14.1	--
05...	1031	5.0	592	8.4	14.2	--
05...	1032	10	592	8.4	14.2	--
05...	1033	15	593	8.4	14.2	--
05...	1034	20	593	8.4	14.2	--
05...	1035	25	593	8.4	14.2	--
05...	1036	30	593	8.4	14.2	--
05...	1037	40	593	8.4	14.2	--
05...	1038	50	594	8.4	14.1	--
JUN						
01...	1020	.1	441	8.2	13.0	8.5
01...	1021	5.0	450	8.3	12.6	8.4
01...	1022	10	460	8.3	12.2	8.2
01...	1023	15	467	8.2	11.6	8.0
01...	1024	20	467	8.2	11.4	7.9
01...	1025	25	479	8.2	11.1	7.8
01...	1026	30	530	8.0	9.6	7.4
01...	1027	40	547	8.0	9.0	7.2
01...	1028	50	638	7.9	7.4	6.7
01...	1029	60	659	7.9	7.0	6.3
01...	1030	70	669	7.5	6.7	--
JUL						
22...	1015	.1	491	8.5	20.1	6.2
22...	1016	5.0	487	8.5	19.4	6.2
22...	1017	10	489	8.5	19.3	6.2
22...	1018	15	488	8.5	19.3	6.1
22...	1019	20	494	8.4	18.8	5.6
22...	1020	25	549	8.1	16.1	3.1
22...	1021	30	548	7.9	15.2	2.8
22...	1022	40	552	7.9	11.9	2.8
22...	1023	50	586	7.8	9.7	3.0
22...	1024	60	614	7.7	8.8	2.7
AUG						
18...	1040	.1	555	8.3	18.0	6.7
18...	1041	5.0	551	8.3	18.0	6.7
18...	1042	10	552	8.3	18.0	6.7
18...	1043	15	556	8.3	18.0	6.6
18...	1044	20	556	8.3	18.0	6.6
18...	1045	25	555	8.2	17.8	5.9
18...	1046	30	556	8.1	17.2	5.1
18...	1047	40	575	7.8	12.6	1.4
18...	1048	50	595	7.8	10.0	1.9
18...	1049	60	631	7.7	8.6	1.4
18...	1050	65	639	7.7	8.4	1.2

DATE	TIME	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	TURBIDITY (NTU) (00076)	TRANSPARENCY (SECCHI DISK) (IN) (00077)	OXYGEN, DISSOLVED (MG/L) (00300)	COLIFORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	HARDNESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)
OCT											
05...	1045	592	8.4	14.1	3.7	48	--	<1	250	63	23
05...	1100	594	8.4	14.1	3.7	--	--	--	260	66	23
JUN											
01...	1040	441	8.2	13.0	12	38	8.5	K3	180	46	16
01...	1055	1200	7.5	6.7	11	--	.7	--	280	70	27
JUL											
22...	1030	491	8.5	20.1	1.6	143	6.2	1	210	53	18
22...	1045	614	7.7	8.8	2.0	--	2.7	--	210	54	18
AUG											
18...	1055	555	8.3	18.0	.7	110	6.7	<1	240	60	22
18...	1100	639	7.7	8.4	3.7	--	1.2	--	260	65	25

K Based on non-ideal colony count.

400841106240600 WOLFORD MOUNTAIN RESERVOIR AT MIDLAKE NEAR KREMMLING, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)
OCT											
05...	23	.6	2.0	130	170	2.0	<.1	7.9	396	365	.54
05...	22	.6	2.1	130	160	2.0	.2	8.0	395	366	.54
JUN											
01...	17	.6	1.9	102	120	2.1	.1	8.1	303	268	.41
01...	29	.8	2.5	140	210	3.3	.1	8.0	467	432	.64
JUL											
22...	19	.6	1.9	106	130	2.2	.2	8.1	328	298	.45
22...	19	.6	1.9	106	130	2.2	.1	8.1	327	300	.44
AUG											
18...	23	.7	1.9	125	160	2.0	.1	8.5	365	355	.50
18...	27	.7	2.2	127	190	2.8	.1	9.1	413	400	.56

DATE	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00607)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	CHLOR-A PHYTO-PLANK-TON CHROMO FLUOROM (UG/L) (70953)	CHLOR-B PHYTO-PLANK-TON CHROMO FLUOROM (UG/L) (70954)
OCT											
05...	<.01	.05	.04	.31	.4	.3	.02	<.05	<.01	3.7	<.1
05...	<.01	.05	.04	.29	.4	.3	.01	<.05	<.01	--	--
JUN											
01...	<.01	<.05	.09	.26	.4	.4	<.05	<.05	.01	1.5	<.1
01...	<.01	.11	.06	.34	.4	.4	<.05	<.05	.01	--	--
JUL											
22...	<.01	<.05	<.02	--	.4	.3	<.05	<.05	<.01	.4	<.1
22...	<.01	<.05	<.02	--	.4	.4	<.05	<.05	<.01	--	--
AUG											
18...	<.01	<.05	<.02	--	.5	.3	<.05	<.05	<.01	2.4	<.1
18...	<.01	.26	<.02	--	.4	.3	<.05	<.05	<.01	--	--

DATE	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL) (01105)	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA) (01007)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)
OCT										
05...	60	<1	1	<100	63	<10	<1	<1	<1.0	<1.0
05...	70	<1	1	<100	63	<10	<1	<1	<1.0	<1.0
JUN										
01...	157	<1	<1	50.6	48	<4	<1	<1	<1.0	<1.0
01...	82.3	<1	<1	65.1	63	<4	<1	<1	<1.0	<1.0
JUL										
22...	<28	<1	<1	51.8	52	<4	<1	<1	<1.0	<1.0
22...	37.4	1	<1	51.0	52	<4	<1	<1	<1.0	<1.0
AUG										
18...	29.5	1	<1	56.3	57	<4	<1	<1	<1.0	<1.0
18...	153	1	<1	60.1	58	<4	<1	<1	<1.0	<1.0

DATE	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO) (01037)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	LITHIUM TOTAL RECOV-ERABLE (UG/L AS LI) (01132)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)
OCT										
05...	<1	1	<1	110	<10	<1	<1	20	30	7
05...	<1	1	<1	130	<10	<1	<1	20	30	7
JUN										
01...	<1	2	1	210	14	<1	<1	16.4	8.0	3
01...	<1	2	1	157	<10	<1	<1	26.2	30.2	5
JUL										
22...	<1	<1	3	61.8	<10	<1	<1	18.5	4.1	<3
22...	<1	1	<1	59.9	E8	<1	<1	17.3	3.7	E2
AUG										
18...	<1	<1	2	43.9	<10	<1	<1	21.4	4.6	<2
18...	<1	<1	<1	177	<10	<1	<1	25.9	62.5	E2

E Estimated.

400841106240600 WOLFORD MOUNTAIN RESERVOIR AT MIDLAKE NEAR KREMMLING, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO) (01062)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
OCT										
05...	<.1	<.1	1.7	2	2	2	<1	<1	<10	<20
05...	<.1	<.1	2.0	2	2	2	<1	<1	<10	<20
JUN										
01...	<.1	<.1	1.8	2	1	2	<1	<1	<40	<20
01...	<.1	<.1	1.9	3	2	2	<1	<1	<40	<20
JUL										
22...	<.1	<.1	1.7	1	1	1	<1	<1	<40	E10
22...	<.1	<.1	1.8	1	1	1	<1	<1	<40	<20
AUG										
18...	<.1	<.1	1.7	1	2	1	<1	<1	<40	<20
18...	<.1	<.1	1.9	1	2	2	<1	<1	<40	<20

E Estimated.

400812106254800 ALKALI SLOUGH #2 AT WOLFORD MOUNTAIN RESERVOIR NEAR KREMMLING, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 40°08'12", long 106°25'48", NW$^{1}/_{4}$NW$^{1}/_{4}$ sec.18, T.2 N., R.81 W., Grand County, Hydrologic Unit 14010001, 5 mi north of Kremmling.

PERIOD OF RECORD.--July 1996 to current year.

REMARKS.--Samples were collected approximately 100 yards from mouth.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)
OCT 14...	1220	.25	2770	8.0	10	2.6	8.5	1900	560	110	27	.3
JUL 08...	1000	1.0	2600	7.9	11	2.9	7.5	1700	550	67	25	.3

DATE	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS-SOLVED (TONS PER DAY) (70302)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)
OCT 14...	6.4	210	1600	5.8	.8	10	2670	2430	3.63	1.80	8
JUL 08...	4.4	233	1400	6.2	.9	9.3	2480	2260	3.37	6.69	4

DATE	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00607)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL) (01105)
OCT 14...	<.01	.10	.06	.17	.2	.2	<.05	<.05	<.01	5.6	40
JUL 08...	<.01	.27	.18	.15	.4	.3	<.05	<.05	.01	7.5	32.6

DATE	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA) (01007)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO) (01037)
OCT 14...	2	2	<100	19	<10	233	<1	<1	2.0	1.6	<1
JUL 08...	<1	2	18.4	18	<4	174	<1	<1	<1.0	<1.0	<1

DATE	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	LITHIUM TOTAL RECOV-ERABLE (UG/L AS LI) (01132)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)
OCT 14...	2	1	220	<30	<1	<1	100	40	36	<.1	<.1
JUL 08...	1	1	264	<30	<1	<1	57.8	35.9	39	<.2	<.1

400812106254800 ALKALI SLOUGH #2 AT WOLFORD MOUNTAIN RESERVOIR NEAR KREMMLING, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	MOLYBDENUM, TOTAL RECOVERABLE (UG/L AS MO) (01062)	MOLYBDENUM, DISSOLVED (UG/L AS MO) (01060)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI) (01067)	NICKEL, DISSOLVED (UG/L AS NI) (01065)	SELENIUM, TOTAL (UG/L AS SE) (01147)	SELENIUM, DISSOLVED (UG/L AS SE) (01145)	SILVER, TOTAL RECOVERABLE (UG/L AS AG) (01077)	SILVER, DISSOLVED (UG/L AS AG) (01075)	STRONTIUM, DISSOLVED (UG/L AS SR) (01080)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)	ZINC, DISSOLVED (UG/L AS ZN) (01090)
OCT											
14...	11	9.0	13	12	16	15	<1	<1	5900	<10	<60
JUL											
08...	9.3	9.8	15	17	24	29	<1	<1	5100	<40	<60

09041395 WOLFORD MOUNTAIN RESERVOIR NEAR KREMMLING, CO

LOCATION.--Lat. 40°06'46", long 106°24'52", in $SW^1/_4NE^1/_4$ sec.25, T.2 N, R.81 W., Grand County, Hydrologic Unit 14010001, in outlet tower at dam, 5 mi north of Kremmling.

RESERVOIR ELEVATIONS AND CONTENTS RECORDS

DRAINAGE AREA.--270 mi^2.

PERIOD OF RECORD.--May 1995 to current year.

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 7,500.00 ft above sea level; gage readings have been reduced to elevations above sea level.

REMARKS.--Reservoir is formed by an earth-filled dam. Storage began May 1995; dam completed May 1995. Usable capacity, 65,870 acre-ft, at elevation 7,489 ft, crest of spillway. No dead storage. Figures given represent total contents. Water-quality sampling at three sites in reservoir.

COOPERATION.--Colorado River Water Conservation District.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents 68,160 acre-ft, June 3, 1997, elevation, 7,490.62 ft; minimum observed since appreciable storage was first obtained, 27,750 acre-ft, Nov. 10, 17, 1995, elevation 7,455.90 ft.

EXTREMES (AT 2400) FOR CURRENT YEAR.--Maximum contents, 67,200 acre-ft, June 3, elevation, 7,489.88 ft; minimum, 48,000 acre ft, Mar. 4, elevation 7,475.98 ft.

MONTHEND ELEVATION AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	7,478.69	51,450	-
Oct. 31	7,477.38	49,800	-1,650
Nov. 30	7,476.90	49,170	-630
Dec. 31	7,476.27	48,400	-770
CAL YR 1998	-	-	-2,800
Jan. 31	7,476.18	48,300	-100
Feb. 28	7,476.07	48,100	-200
Mar. 31	7,476.71	48,900	+800
Apr. 30	7,478.19	50,800	+1,900
May 31	7,489.77	67,000	+16,200
June 30	7,489.08	66,000	-1,000
July 31	7,489.13	66,100	+100
Aug. 31	7,488.06	64,500	-1,600
Sept. 30	7,483.89	58,400	-6,100
WTR YR 1999	-	-	+6,950

09041395 WOLFORD MOUNTAIN RESERVOIR NEAR KREMMLING, CO

WATER-QUALITY RECORDS

LOCATION.--Lat. 40°06'46", long 106°24'52", in $SW^1/_4NE^1/_4$ sec.25, T.2 N, R.81 W., Grand County, Hydrologic Unit 14010001, 5 mi north of Kremmling.

DRAINAGE AREA.--270 mi^2.

PERIOD OF RECORD.--July 1995 to current year.

REMARKS.--Samples were collected near-surface and near-bottom, near dam.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	SAMPLING DEPTH (FEET) (00003)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	OXYGEN, DISSOLVED (MG/L) (00300)
OCT						
05...	0945	.1	584	8.3	14.0	--
05...	0946	5.0	584	8.3	14.0	--
05...	0947	10	584	8.3	14.0	--
05...	0948	15	584	8.3	14.0	--
05...	0949	20	584	8.3	14.0	--
05...	0950	25	584	8.3	14.0	--
05...	0951	30	584	8.3	14.0	--
05...	0952	40	584	8.3	14.0	--
05...	0953	50	584	8.3	14.0	--
05...	0954	60	584	8.3	14.0	--
05...	0955	70	559	8.0	12.6	--
05...	0956	80	560	7.8	12.0	--
05...	0957	90	571	7.8	11.8	--
JUN						
01...	0930	.1	465	8.3	12.0	8.0
01...	0931	5.0	470	8.3	11.5	8.0
01...	0932	10	475	8.3	11.3	7.9
01...	0933	15	472	8.3	11.3	7.9
01...	0934	20	485	8.2	11.2	7.8
01...	0935	25	492	8.2	11.2	7.8
01...	0936	30	543	8.1	10.4	7.6
01...	0937	40	621	8.0	8.3	7.2
01...	0938	50	646	8.0	7.5	7.1
01...	0939	60	655	7.9	7.2	6.9
01...	0940	70	664	7.9	7.0	6.7
01...	0941	80	696	7.8	6.7	6.2
01...	0942	90	700	7.8	6.6	6.0
01...	0943	100	728	7.8	6.5	5.7
JUL						
22...	0930	.1	485	8.5	19.4	6.0
22...	0931	5.0	485	8.5	19.1	6.0
22...	0932	10	485	8.5	19.0	5.9
22...	0933	15	489	8.3	18.2	5.0
22...	0934	20	495	8.1	17.0	3.8
22...	0935	25	499	8.0	15.7	3.3
22...	0936	30	501	7.9	14.5	3.1
22...	0937	40	560	7.8	10.4	3.1
22...	0938	50	615	7.8	8.8	3.4
22...	0939	60	641	7.8	8.0	3.5
22...	0940	70	648	7.7	7.7	3.5
22...	0941	80	661	7.7	7.6	3.3
22...	0942	90	665	7.7	7.5	3.2
22...	0943	100	679	7.7	7.5	3.1
22...	0944	110	768	7.6	7.4	2.5
AUG						
18...	0945	.1	548	8.2	18.0	6.7
18...	0946	5.0	548	8.2	18.0	6.7
18...	0947	10	548	8.2	18.1	6.7
18...	0948	15	548	8.2	18.1	6.6
18...	0949	20	548	8.2	18.0	6.5
18...	0950	25	546	8.2	17.4	5.9
18...	0951	30	555	7.8	15.7	2.3
18...	0952	40	543	7.8	13.0	1.8
18...	0953	50	598	7.8	9.6	2.5
18...	0954	60	629	7.8	8.5	2.8
18...	0955	70	639	7.8	8.1	2.6
18...	0956	80	652	7.7	7.9	2.4
18...	0957	90	671	7.7	7.8	2.2
18...	0958	100	714	7.7	7.8	2.1

09041395 WOLFORD MOUNTAIN RESERVOIR NEAR KREMMLING, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	TRANS-PAR-ENCY (SECCHI DISK) (IN) (00077)	OXYGEN, DIS-SOLVED (MG/L) (00300)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)
OCT											
05...	1000	584	8.3	14.0	2.3	60.0	--	<1	250	62	22
05...	1015	571	7.8	11.8	5.4	--	--	--	230	60	21
JUN											
01...	0950	465	8.3	12.0	12	49	8.0	K5	200	50	17
01...	1005	728	7.8	6.5	10	--	5.7	--	300	75	28
JUL											
22...	0950	485	8.5	19.4	2.2	139	6.0	<1	210	53	18
22...	1010	768	7.6	7.4	3.0	--	2.5	--	280	69	26
AUG											
18...	1000	548	8.2	18.0	.3	129	6.7	<1	230	59	21
18...	1015	714	7.7	7.8	1.0	--	2.1	--	290	71	27

DATE	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)
OCT											
05...	23	.6	2.1	128	160	2.0	<.1	8.2	388	358	.53
05...	21	.6	2.0	124	150	2.0	.2	9.3	369	342	.50
JUN											
01...	19	.6	1.9	108	130	2.3	.1	8.0	332	295	.45
01...	31	.8	2.7	141	230	3.4	.1	8.0	504	463	.69
JUL											
22...	19	.6	1.8	105	130	2.2	.1	8.1	327	295	.44
22...	28	.7	2.4	64	210	2.8	.2	8.3	453	384	.62
AUG											
18...	23	.7	1.8	116	160	2.0	.1	8.8	363	346	.49
18...	29	.8	2.7	132	210	3.0	.1	9.2	455	433	.62

DATE	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00607)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	CHLOR-A PHYTO-PLANK-TON CHROMO FLUOROM (UG/L) (70953)	CHLOR-B PHYTO-PLANK-TON CHROMO FLUOROM (UG/L) (70954)
OCT											
05...	<.01	.07	.03	.28	.4	.3	.01	<.05	<.01	2.6	<.1
05...	<.01	.10	.07	.28	.5	.4	.03	.01	<.01	--	--
JUN											
01...	<.01	.05	.02	.33	.4	.4	<.05	<.05	.01	.6	<.1
01...	<.01	.14	.06	.29	.4	.3	<.05	<.05	.02	--	--
JUL											
22...	<.01	<.05	<.02	--	.4	.4	<.05	<.05	<.01	1.1	<.1
22...	<.01	.25	<.02	--	.4	.4	<.05	<.05	<.01	--	--
AUG											
18...	<.01	<.05	<.02	--	.4	.3	<.05	<.05	<.01	3	.1
18...	<.01	.28	<.02	--	.4	.3	<.05	<.05	<.01	--	--

DATE	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL) (01105)	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA) (01007)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)
OCT										
05...	40	<1	1	<100	62	<10	<1	<1	<1.0	<1.0
05...	80	1	2	<100	56	<10	<1	<1	<1.0	<1.0
JUN										
01...	126	<1	<1	53.9	51	<4	<1	<1	<1.0	<1.0
01...	102	<1	<1	65.4	63	<4	<1	<1	<1.0	<1.0
JUL										
22...	50.2	<1	<1	51.1	52	<4	<1	<1	<1.0	<1.0
22...	48.1	<1	<1	61.9	61	<4	<1	<1	<1.0	<1.0
AUG										
18...	E24.4	<1	<1	55.8	57	<4	<1	<1	<1.0	<1.0
18...	77.5	1	<1	60.9	61	<4	<1	<1	<1.0	<1.0

E Estimated.
K Based on non-ideal colony count.

09041395 WOLFORD MOUNTAIN RESERVOIR NEAR KREMMLING, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO) (01037)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	LITHIUM TOTAL RECOV-ERABLE (UG/L AS LI) (01132)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)
OCT										
05...	<1	1	1	60	<10	<1	<1	20	20	E2
05...	<1	1	<1	210	15	<1	<1	20	150	150
JUN										
01...	<1	2	2	197	10	<1	<1	16.7	7.5	E2
01...	<1	2	<1	141	E5	<1	<1	27.7	36.4	12
JUL										
22...	<1	<1	1	61.6	11	<1	<1	17.3	E2.9	<3
22...	<1	<1	2	84.7	<10	<1	<1	24.9	32.4	<3
AUG										
18...	<1	<1	1	25.6	<10	<1	<1	20.9	3.1	<2
18...	<1	<1	<1	79.7	<10	<1	<1	24.5	48.1	E1

DATE	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO) (01062)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
OCT										
05...	<.1	<.1	1.9	2	2	2	<1	<1	<10	<20
05...	<.1	<.1	1.8	2	2	2	<1	<1	<10	<20
JUN										
01...	<.1	<.1	1.5	2	2	2	<1	<1	<40	<20
01...	<.1	<.1	2.1	3	3	3	<1	<1	<40	<20
JUL										
22...	<.1	<.1	1.6	2	<1	1	<1	<1	<40	<20
22...	<.1	<.1	2.5	2	2	2	<1	<1	<40	<20
AUG										
18...	<.1	<.1	1.7	<1	2	2	<1	<1	<40	<20
18...	<.1	<.1	2.5	2	3	2	<1	<1	<40	<20

E Estimated.

09041400 MUDDY CREEK BELOW WOLFORD MOUNTAIN RESERVOIR NEAR KREMMLING, CO

LOCATION.--Lat 40°06'31", long 106°24'48", in $NW^1/_4SE^1/_4$ sec. 25, T.2 N., R.81 W., Grand County, Hydrologic Unit 14010001, on left bank 1,500 ft downstream from Wolford Mountain Reservoir, and 4 mi northwest of Kremmling.

DRAINAGE AREA.--270 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1995 to current year.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 7,380 ft above sea level, from topographic map.

REMARKS.--No estimated daily discharges. Records good. Flow is entirely regulated by Wolford Mountain Reservoir.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	126	35	29	26	22	23	49	70	496	102	63	83
2	96	34	27	26	22	23	67	71	468	93	55	112
3	83	32	21	26	22	23	67	71	477	87	46	112
4	84	31	18	24	22	24	67	76	494	85	41	112
5	70	31	18	23	22	24	66	76	461	85	41	112
6	49	31	18	23	22	23	60	77	419	83	43	112
7	53	31	21	23	22	24	56	76	395	80	43	111
8	52	31	24	23	22	24	56	75	368	80	42	112
9	52	31	26	23	22	24	56	75	355	83	40	112
10	51	31	27	23	22	24	56	76	334	85	39	111
11	51	30	27	23	22	24	56	77	318	81	38	111
12	51	31	27	22	22	24	56	77	276	80	38	112
13	52	31	27	22	22	24	56	76	213	79	45	112
14	52	31	28	22	23	24	56	90	212	78	56	111
15	51	31	28	22	23	24	56	112	259	79	56	111
16	51	31	28	22	23	24	56	113	307	67	58	111
17	51	31	28	22	23	24	56	114	333	47	60	110
18	50	31	27	22	23	24	56	114	302	53	60	110
19	42	31	26	22	23	24	56	113	263	70	60	111
20	38	31	26	22	23	24	56	113	238	99	60	111
21	37	31	26	22	23	24	61	114	220	101	59	111
22	36	31	26	22	23	47	50	116	210	97	59	111
23	37	31	26	22	23	77	27	116	197	92	59	110
24	37	31	26	22	23	64	27	117	177	89	59	109
25	36	31	26	23	23	57	48	118	158	86	59	109
26	36	31	26	22	23	57	67	118	145	84	59	108
27	36	31	26	23	23	37	43	118	133	83	59	111
28	36	31	26	23	23	20	26	119	126	86	59	112
29	36	30	26	23	---	21	26	129	116	76	59	112
30	36	30	26	22	---	20	40	260	109	71	58	111
31	36	---	26	22	---	23	---	436	---	75	59	---
TOTAL	1604	935	787	707	631	923	1575	3503	8579	2536	1632	3303
MEAN	51.7	31.2	25.4	22.8	22.5	29.8	52.5	113	286	81.8	52.6	110
MAX	126	35	29	26	23	77	67	436	496	102	63	112
MIN	36	30	18	22	22	20	26	70	109	47	38	83
AC-FT	3180	1850	1560	1400	1250	1830	3120	6950	17020	5030	3240	6550

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 1999, BY WATER YEAR (WY)

MEAN	77.4	32.2	21.8	23.9	27.2	50.1	118	326	286	76.5	82.4	119
MAX	172	46.5	32.7	32.3	34.4	75.8	249	454	492	96.7	153	189
(WY)	1998	1998	1998	1998	1998	1997	1996	1998	1997	1997	1996	1998
MIN	35.3	23.7	7.07	15.8	21.0	29.8	45.4	113	164	60.4	39.3	51.2
(WY)	1997	1997	1996	1996	1996	1999	1998	1999	1996	1996	1995	1995

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1995 - 1999	
ANNUAL TOTAL	38523		26715			
ANNUAL MEAN	106		73.2		106	
HIGHEST ANNUAL MEAN					129	1997
LOWEST ANNUAL MEAN					73.2	1999
HIGHEST DAILY MEAN	756	May 13	496	Jun 1	992	Jun 3 1997
LOWEST DAILY MEAN	18	Dec 4	18	Dec 4	2.8	Dec 3 1995
ANNUAL SEVEN-DAY MINIMUM	21	Dec 3	21	Dec 3	3.4	Dec 2 1995
INSTANTANEOUS PEAK FLOW			518	Jun 3	1030	Jun 2 1997
INSTANTANEOUS PEAK STAGE			6.66	Jun 3	8.39	Jun 2 1997
ANNUAL RUNOFF (AC-FT)	76410		52990		76730	
10 PERCENT EXCEEDS	226		117		237	
50 PERCENT EXCEEDS	51		50		53	
90 PERCENT EXCEEDS	28		22		22	

09041400 MUDDY CREEK BELOW WOLFORD MOUNTAIN RESERVOIR NEAR KREMMLING, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--July 1995 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1995 to current year.
WATER TEMPERATURE: October 1995 to current year.
DISSOLVED OXYGEN: October 1995 to current year.

INSTRUMENTATION.--Water-quality monitor from Oct. 1995 to current year.

REMARKS.--Water temperature and specific conductance records are rated good. Dissolved oxygen records are good, except for the periods: Feb. 19 to Mar. 12, July 23 to Sept. 8, which are rated fair, and Nov. 27 to Jan. 21, June 12 to July 22 which are rated poor.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum 1,910 microsiemens, Oct. 20, 1996; minimum, 281 microsiemens, June 10, 1997.
WATER TEMPERATURE: Maximum 19.2°C, June 24, 1997; minimum 1.1°C, Feb. 2, 1996.
DISSOLVED OXYGEN: Maximum, 11.9 mg/L, July 3, 1998; minimum, 4.9 mg/L, July 31, 1996.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum 1,320 microsiemens, May 29; minimum, 459 microsiemens, June 14-16.
WATER TEMPERATURE: Maximum 18°C, July 21; minimum 1.6°C, Jan. 29.
DISSOLVED OXYGEN: Maximum, 10.6 mg/L, July 3, 4; minimum, 6.2 mg/L, Aug. 27.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)
OCT												
13...	1240	54	639	8.3	12.1	9.7	9.1	270	67	24	25	.7
NOV												
12...	1230	32	629	8.4	8.3	1.5	7.9	270	67	24	24	.6
DEC												
14...	1145	26	650	8.7	2.3	.7	10.0	280	70	25	25	.6
JAN												
19...	1320	23	627	8.6	3.6	1.0	9.8	280	70	25	27	.7
FEB												
08...	1300	20	665	8.5	3.7	1.5	9.3	280	72	25	26	.7
MAR												
24...	1443	58	664	7.9	5.5	1.1	9.7	310	78	27	27	.7
APR												
13...	1035	54	637	7.9	4.9	2.1	9.7	290	73	26	26	.7
MAY												
10...	1215	78	657	8.4	6.8	10	9.4	290	71	28	30	.8
JUN												
01...	1345	511	525	8.4	10.8	15	8.7	88	26	5.6	7.8	.4
JUL												
08...	1130	81	661	8.7	9.2	3	8.8	280	70	25	28	.7
AUG												
10...	1200	39	694	8.3	10.1	1.1	9.3	320	82	28	29	.7
SEP												
14...	1220	111	593	8.3	12.8	2.4	8.3	260	64	23	25	.7

09041400 MUDDY CREEK BELOW WOLFORD MOUNTAIN RESERVOIR NEAR KREMMLING, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)	SOLIDS, DISSOLVED (TONS PER AC-FT) (70303)	SOLIDS, DISSOLVED (TONS PER DAY) (70302)	RESIDUE TOTAL AT 105 DEG. C, SUSPENDED (MG/L) (00530)
OCT											
13...	2.4	133	190	2.4	.2	8.9	421	402	.57	60.9	19
NOV											
12...	2.3	132	180	2.5	.2	7.7	430	393	.58	36.7	--
DEC											
14...	2.3	134	190	2.7	.2	7.8	436	406	.59	30.8	3
JAN											
19...	2.5	137	200	2.6	.2	<.1	452	411	.61	28.4	--
FEB											
08...	1.9	139	210	3.0	.2	7.5	458	427	.62	25.4	--
MAR											
24...	2.3	137	200	3.2	.2	8.5	457	432	.62	71.6	--
APR											
13...	2.3	139	200	3.0	.2	7.7	460	423	.63	67.3	--
MAY											
10...	2.5	141	210	3.6	.2	7.5	467	436	.64	98.4	--
JUN											
01...	1.5	63	36	2.4	.2	9.1	153	127	.21	211	--
JUL											
08...	2.2	130	210	3.2	.2	7.9	461	424	.63	--	2
AUG											
10...	2.4	132	230	3.0	.2	7.9	266	464	.36	27.9	<1
SEP											
14...	1.9	125	180	2.3	.2	8.6	412	384	.56	123	--

DATE	NITROGEN, NITRITE DISSOLVED (MG/L AS N) (00613)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N) (00607)	NITROGEN,AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN,AMMONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOSPHORUS TOTAL (MG/L AS P) (00665)	PHOSPHORUS DISSOLVED (MG/L AS P) (00666)	PHOSPHORUS ORTHO, DISSOLVED (MG/L AS P) (00671)	CARBON, ORGANIC DISSOLVED (MG/L AS C) (00681)	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL) (01105)
OCT											
13...	.01	.09	.14	.34	.5	.5	.02	.02	.02	6.4	--
NOV											
12...	.01	.08	.05	.34	.3	.4	<.05	<.05	.01	--	--
DEC											
14...	.01	.10	.03	.29	.5	.3	.02	.02	.01	6.0	--
JAN											
19...	<.01	.08	.03	.31	.4	.3	<.05	<.05	<.01	--	--
FEB											
08...	<.01	.09	.02	.28	.4	.3	<.05	<.05	<.01	--	--
MAR											
24...	<.01	.17	.03	.29	.4	.3	<.05	<.05	<.01	--	--
APR											
13...	<.01	.11	<.02	--	.4	.3	<.05	<.05	<.01	--	--
MAY											
10...	<.01	.11	.08	.30	.4	.4	E.03	<.05	.02	--	--
JUN											
01...	<.01	.08	.03	.16	.4	.2	.09	<.05	.04	--	--
JUL											
08...	<.01	.19	.03	.27	.4	.3	<.05	<.05	.01	6.5	80.8
AUG											
10...	<.01	.27	<.02	--	.4	.2	<.05	<.05	<.01	6.1	56.6
SEP											
14...	<.01	.12	<.02	--	.3	.3	<.05	<.05	<.01	--	--

09041400 MUDDY CREEK BELOW WOLFORD MOUNTAIN RESERVOIR NEAR KREMMLING, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA) (01007)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO) (01037)
OCT											
13...	--	--	--	--	--	--	--	--	--	--	--
NOV											
12...	--	--	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--	--	--
DEC											
14...	--	--	--	--	--	--	--	--	--	--	--
JAN											
19...	--	--	--	--	--	--	--	--	--	--	--
FEB											
08...	--	--	--	--	--	--	--	--	--	--	--
MAR											
24...	--	--	--	--	--	--	--	--	--	--	--
APR											
13...	--	--	--	--	--	--	--	--	--	--	--
MAY											
10...	--	--	--	--	--	--	--	--	--	--	--
JUN											
01...	--	--	--	--	--	--	--	--	--	--	--
JUL											
08...	<1	<1	60.4	59	<4	58.9	<1	<1	<1.0	<1.0	<1
AUG											
10...	<1	<1	58.5	60	<4	58.4	<1	<1	<1.0	<1.0	<1
SEP											
14...	--	--	--	--	--	--	--	--	--	--	--

DATE	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	LITHIUM TOTAL RECOV-ERABLE (UG/L AS LI) (01132)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)
OCT											
13...	--	--	340	E10	--	--	--	390	370	--	--
NOV											
12...	--	--	--	E7	--	--	--	--	32	--	--
DEC											
14...	--	--	20	<10	--	--	--	30	23	--	--
JAN											
19...	--	--	30	E9	--	--	--	<10	19	--	--
FEB											
08...	--	--	60	E7	--	--	--	20	17	--	--
MAR											
24...	--	--	--	<10	--	--	--	--	E2	--	--
APR											
13...	--	--	50.8	<10	--	--	--	12.6	5	--	--
MAY											
10...	--	--	102	<10	--	--	--	14.6	4	--	--
JUN											
01...	--	--	224	24	--	--	--	25.3	26	--	--
JUL											
08...	1	<1	89.9	E5	<1	<1	24.6	34.4	8	<.2	<.1
AUG											
10...	<1	<1	76.4	<10	<1	<1	24.2	91.6	26	<.1	<.1
SEP											
14...	--	--	91.6	E5	--	--	--	13.5	4	--	--

E Estimated.

09041400 MUDDY CREEK BELOW WOLFORD MOUNTAIN RESERVOIR NEAR KREMMLING, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO) (01062)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
OCT											
13...	--	--	--	--	--	--	--	--	--	--	--
NOV											
12...	--	--	--	--	--	--	--	--	--	--	--
DEC											
14...	--	--	--	--	--	--	--	--	--	--	--
JAN											
19...	--	--	--	--	--	--	--	--	--	--	--
FEB											
08...	--	--	--	--	--	--	--	--	--	--	--
MAR											
24...	--	--	--	--	--	--	--	--	--	--	--
APR											
13...	--	--	--	--	--	--	--	--	--	--	--
MAY											
10...	--	--	--	--	--	--	--	--	--	--	--
JUN											
01...	--	--	--	--	--	--	--	--	--	--	--
JUL											
08...	2.3	2.8	3	2	3	3	<1	<1	640	<40	<20
AUG											
10...	2.3	2.5	2	3	3	2	<1	<1	710	<40	<20
SEP											
14...	--	--	--	--	--	--	--	--	--	--	--

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	9.1	8.1	8.4	10.2	8.3	9.0	9.6	7.6	8.2	8.3	6.9	7.3
2	9.1	7.8	8.3	9.3	5.9	7.9	9.8	7.6	8.3	9.1	7.7	8.3
3	9.1	7.7	8.1	7.9	5.7	6.5	9.7	7.5	8.3	8.6	7.3	7.9
4	9.2	7.8	8.2	8.3	6.0	6.7	10.0	7.4	8.3	8.0	7.1	7.5
5	9.6	7.9	8.5	8.9	6.2	7.1	10.1	7.5	8.5	8.2	7.0	7.4
6	10.3	7.7	8.5	9.2	6.4	7.3	10.1	7.9	8.7	8.2	7.0	7.4
7	9.8	7.6	8.4	8.9	6.3	7.1	10.5	7.6	8.6	8.3	7.1	7.5
8	10.2	7.6	8.5	8.1	6.2	6.8	---	---	---	8.5	7.2	7.6
9	9.5	7.3	8.2	8.1	6.0	6.8	---	---	---	8.5	7.3	7.7
10	9.4	7.3	8.0	9.1	6.1	7.2	9.6	7.7	8.4	8.6	7.3	7.8
11	9.4	7.4	8.1	8.9	6.3	7.3	9.5	7.9	8.5	8.6	7.4	7.8
12	9.3	7.4	8.1	---	---	---	9.9	8.3	8.8	8.7	7.4	7.8
13	---	---	---	---	---	---	9.8	8.1	8.7	8.8	7.4	7.9
14	---	---	---	8.5	6.4	7.0	10.0	8.5	9.0	8.8	7.3	7.8
15	---	---	---	8.8	6.4	7.1	9.8	8.5	8.9	8.7	7.3	7.8
16	8.7	7.5	7.9	8.7	6.4	7.1	9.6	8.2	8.7	8.7	7.3	7.8
17	8.8	7.6	8.0	8.6	6.5	7.1	9.3	8.0	8.4	9.0	7.4	7.9
18	8.9	7.5	8.1	8.7	6.6	7.3	9.2	7.8	8.3	8.9	7.3	7.8
19	9.0	7.3	8.0	9.1	6.6	7.4	8.8	7.6	8.0	10.0	7.3	8.2
20	9.1	7.3	8.0	9.2	6.7	7.5	8.9	7.6	8.0	9.8	8.0	8.6
21	8.9	7.4	8.0	9.2	6.8	7.6	9.0	7.6	8.1	9.9	8.0	8.6
22	9.0	7.5	8.0	9.1	6.9	7.7	8.6	7.5	7.8	9.8	8.0	8.6
23	8.7	7.4	7.8	9.4	7.1	7.8	8.5	7.4	7.8	9.7	7.7	8.4
24	9.0	7.4	7.9	9.2	7.1	7.8	8.6	7.4	7.8	9.2	7.6	8.2
25	9.1	7.4	8.0	9.5	7.3	8.0	8.1	7.0	7.5	9.6	7.7	8.4
26	9.2	7.5	8.1	9.2	7.1	7.8	7.9	6.9	7.3	9.5	7.5	8.2
27	9.3	7.6	8.2	9.7	7.3	8.1	8.0	7.0	7.4	9.3	7.5	8.1
28	8.8	7.6	8.0	9.7	7.6	8.2	7.9	7.0	7.3	9.4	7.5	8.2
29	9.3	7.5	8.2	9.4	7.5	8.0	8.0	6.8	7.3	9.1	7.6	8.2
30	9.1	7.4	8.1	9.5	7.5	8.2	7.8	6.9	7.2	9.0	7.5	8.0
31	9.7	7.6	8.5	---	---	---	8.0	6.9	7.3	8.7	7.4	7.9
MONTH	---	---	---	---	---	---	---	---	---	10.0	6.9	8.0

09041400 MUDDY CREEK BELOW WOLFORD MOUNTAIN RESERVOIR NEAR KREMMLING, CO--Continued

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	8.4	7.5	7.8	9.7	7.3	8.3	10.1	9.2	9.6	9.0	8.3	8.7
2	8.6	7.3	7.9	9.6	7.6	8.3	9.9	9.4	9.6	8.9	8.5	8.7
3	9.2	7.6	8.1	9.3	7.4	8.1	9.8	9.1	9.5	8.8	8.4	8.6
4	8.7	7.2	7.9	8.7	7.0	7.7	9.8	9.4	9.6	8.7	8.3	8.5
5	8.7	7.1	7.8	9.4	7.0	8.0	10.0	9.5	9.8	8.9	8.4	8.7
6	9.1	7.4	8.0	9.1	6.9	7.8	10.0	9.4	9.8	9.5	8.7	8.8
7	8.9	7.4	8.0	9.0	7.0	7.7	10.0	9.3	9.7	8.9	8.3	8.7
8	9.1	7.4	8.0	8.8	6.8	7.6	9.8	9.3	9.5	9.1	8.4	8.7
9	9.5	7.5	8.2	9.0	6.7	7.5	10.2	9.6	9.8	9.7	9.1	9.3
10	9.2	7.7	8.3	8.7	6.7	7.5	10.4	9.6	10.0	9.9	9.3	9.5
11	9.4	7.7	8.3	8.9	6.8	7.6	10.5	9.8	10.1	9.7	9.2	9.5
12	9.5	7.8	8.4	8.5	6.9	7.5	10.1	9.0	9.6	9.5	9.1	9.3
13	9.4	7.8	8.3	8.5	6.9	7.6	9.6	8.9	9.3	9.3	9.0	9.1
14	9.5	7.6	8.3	8.9	6.9	7.6	9.4	9.0	9.2	9.2	8.9	9.0
15	9.5	7.5	8.3	8.6	6.9	7.6	9.4	9.0	9.2	9.0	8.8	8.9
16	9.5	7.6	8.3	8.7	6.8	7.6	9.4	8.9	9.1	9.0	8.7	8.8
17	9.4	7.7	8.4	8.7	6.7	7.6	9.4	8.8	9.1	9.0	8.5	8.8
18	9.6	7.7	8.4	8.6	7.0	7.7	9.4	8.8	9.1	8.7	8.2	8.5
19	9.6	7.6	8.3	8.6	7.1	7.7	9.1	8.3	8.8	8.6	8.3	8.4
20	9.7	7.8	8.5	8.4	7.0	7.7	8.9	8.3	8.5	8.3	7.8	8.1
21	9.6	7.7	8.5	8.8	6.9	7.7	9.0	8.4	8.7	8.4	7.9	8.1
22	9.7	7.8	8.6	9.4	6.9	8.0	9.1	8.3	8.7	8.2	7.8	8.0
23	9.5	7.6	8.4	10.1	9.0	9.6	9.1	8.2	8.7	8.3	7.7	8.0
24	9.8	7.7	8.5	10.2	9.1	9.7	9.3	8.2	8.6	8.3	7.1	7.7
25	9.4	7.7	8.3	10.1	9.5	9.7	9.2	8.2	8.7	7.9	7.6	7.7
26	9.9	7.6	8.5	10.1	9.4	9.7	9.3	8.4	8.9	7.8	7.4	7.6
27	9.2	7.3	8.1	9.9	8.3	9.2	9.0	7.9	8.5	8.1	7.5	7.8
28	9.4	7.5	8.2	9.6	8.3	9.0	8.9	7.9	8.3	7.8	7.5	7.7
29	---	---	---	9.6	8.6	9.1	8.8	8.0	8.3	7.7	7.3	7.5
30	---	---	---	9.5	8.6	9.0	9.2	8.1	8.5	8.3	7.0	7.5
31	---	---	---	10.3	8.7	9.4	---	---	---	8.5	7.5	8.0
MONTH	9.9	7.1	8.2	10.3	6.7	8.2	10.5	7.9	9.2	9.9	7.0	8.5

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	8.8	8.2	8.6	10.3	8.5	9.3	8.5	6.9	7.6	7.9	6.7	7.3
2	9.3	8.6	8.9	10.3	8.7	9.4	8.6	7.1	7.8	8.0	7.2	7.6
3	9.2	8.8	8.9	10.6	8.8	9.5	9.1	7.2	8.2	7.7	6.7	7.3
4	9.2	8.7	9.0	10.6	8.8	9.5	9.4	7.7	8.3	7.6	6.9	7.3
5	9.2	8.7	9.0	10.4	8.3	9.3	9.5	7.8	8.5	7.6	7.2	7.4
6	8.9	8.7	8.8	10.4	8.5	9.3	9.4	8.0	8.5	7.6	7.2	7.4
7	9.1	8.9	9.0	10.4	8.4	9.3	9.7	7.6	8.6	8.6	7.1	8.1
8	9.1	8.7	8.9	10.5	8.4	9.2	9.0	7.4	8.2	8.7	8.3	8.5
9	9.0	8.7	8.9	10.5	8.6	9.4	9.1	7.4	8.1	8.6	8.0	8.4
10	8.9	8.7	8.8	10.5	8.7	9.5	9.1	7.5	8.2	8.7	7.3	8.2
11	9.1	8.9	9.0	10.5	8.8	9.5	9.0	7.6	8.2	8.1	7.3	7.8
12	9.1	8.4	8.8	10.5	8.8	9.6	8.7	7.5	8.0	8.5	7.5	8.0
13	8.8	7.8	8.4	10.4	8.9	9.5	---	7.5	---	8.5	8.0	8.3
14	8.5	7.9	8.2	10.2	8.7	9.3	---	6.7	---	8.3	7.6	8.0
15	9.0	8.3	8.5	10.1	8.7	9.2	7.3	6.3	6.8	8.0	7.6	7.8
16	9.0	8.5	8.8	10.1	7.9	9.1	8.4	---	---	8.1	7.6	7.8
17	8.8	8.6	8.7	9.9	7.5	8.6	---	---	---	7.9	7.5	7.7
18	8.7	8.0	8.4	9.4	7.4	8.1	8.0	6.9	7.4	7.8	7.4	7.6
19	8.5	8.1	8.2	8.5	6.8	7.6	8.1	6.8	7.6	7.7	7.4	7.5
20	8.6	7.9	8.3	7.8	6.7	7.1	8.1	6.5	7.4	7.8	7.3	7.5
21	8.6	7.9	8.2	8.2	7.0	7.6	7.3	6.3	6.8	7.9	7.4	7.7
22	8.6	7.9	8.3	8.0	6.7	7.4	7.5	6.4	6.8	7.7	7.3	7.5
23	8.8	7.9	8.3	8.6	6.9	7.6	7.4	6.3	6.8	7.7	7.2	7.5
24	9.2	7.8	8.3	8.0	6.4	7.3	7.1	6.3	6.6	7.6	7.2	7.4
25	9.4	8.1	8.8	8.5	6.5	7.6	7.1	6.3	6.6	7.7	7.2	7.4
26	9.4	8.5	8.9	8.8	7.9	8.3	7.4	6.3	6.7	7.4	6.7	7.1
27	9.7	8.5	9.0	9.2	7.8	8.4	7.4	6.2	6.8	7.4	6.9	7.1
28	9.9	8.2	9.0	8.5	7.1	7.9	7.4	6.4	6.7	7.7	7.0	7.4
29	9.8	8.3	8.9	8.4	7.1	7.6	7.7	6.4	7.1	8.0	7.5	7.7
30	10.1	8.5	9.1	8.8	7.1	7.7	8.0	6.9	7.4	7.9	7.3	7.6
31	---	---	---	8.1	7.0	7.4	7.8	6.5	7.2	---	---	---
MONTH	10.1	7.8	8.7	10.6	6.4	8.6	---	---	---	8.7	6.7	7.7

09041400 MUDDY CREEK BELOW WOLFORD MOUNTAIN RESERVOIR NEAR KREMMLING, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	11.9	11.5	11.6	10.8	9.8	10.2	6.2	5.1	5.5	3.6	2.7	2.9
2	12.0	11.4	11.6	10.5	9.6	10.1	6.1	5.0	5.3	3.3	2.5	2.8
3	11.9	11.3	11.5	10.6	9.7	10.0	6.0	4.8	5.2	3.2	2.2	2.6
4	11.5	11.3	11.4	10.4	9.5	9.8	5.9	4.6	5.0	3.2	2.5	2.8
5	11.5	10.8	11.2	10.4	9.4	9.6	4.7	4.0	4.4	3.9	2.6	3.0
6	11.9	10.6	11.1	10.0	9.0	9.4	4.9	3.7	4.1	4.2	2.9	3.2
7	12.2	10.9	11.4	9.7	8.9	9.2	4.5	3.5	3.8	4.0	2.7	3.1
8	12.5	11.0	11.5	9.1	8.5	8.8	4.4	3.4	3.8	3.4	2.5	2.8
9	12.3	11.0	11.5	8.7	8.1	8.4	4.1	3.2	3.7	3.3	2.5	2.9
10	12.0	11.1	11.5	8.9	7.8	8.2	3.8	2.8	3.2	3.4	2.6	3.0
11	12.2	11.0	11.5	8.7	7.7	8.1	3.5	2.5	2.8	3.9	2.7	3.0
12	12.3	11.1	11.6	8.7	7.7	8.1	3.1	2.3	2.5	3.5	2.3	2.7
13	12.4	11.1	11.7	8.6	7.5	7.8	2.8	1.9	2.2	3.3	2.2	2.7
14	12.8	11.7	12.0	8.4	7.3	7.7	2.8	1.8	2.1	3.3	2.4	2.7
15	12.4	11.4	11.9	8.3	7.2	7.6	3.1	1.9	2.4	3.4	2.3	2.8
16	12.4	11.4	11.8	8.1	7.0	7.3	3.3	2.2	2.6	3.3	2.5	2.8
17	11.9	11.4	11.6	7.8	6.8	7.1	3.5	2.4	2.8	3.4	2.4	2.7
18	12.2	11.2	11.6	7.3	6.5	6.8	3.6	2.4	2.8	3.6	2.6	3.1
19	12.5	11.0	11.5	7.4	6.3	6.7	3.3	2.5	2.9	3.9	2.8	3.1
20	12.1	10.8	11.3	7.0	6.1	6.4	2.7	2.2	2.5	3.6	2.6	3.0
21	12.1	10.7	11.3	7.0	6.1	6.4	2.9	1.9	2.4	3.6	2.3	2.8
22	11.8	10.8	11.2	7.1	6.0	6.3	2.7	1.8	2.2	3.4	2.2	2.7
23	11.4	10.6	10.8	7.0	5.9	6.3	2.8	1.9	2.1	3.6	2.4	2.8
24	11.6	10.4	10.8	6.9	5.7	6.1	2.8	1.8	2.2	3.2	2.6	2.9
25	11.2	10.2	10.6	6.6	5.6	6.0	3.2	2.2	2.6	3.5	2.5	2.9
26	11.1	10.3	10.7	6.6	5.6	6.0	3.7	2.5	2.9	3.8	2.0	2.6
27	10.7	10.1	10.5	6.6	5.5	5.9	3.4	2.6	2.9	3.5	2.2	2.6
28	10.6	10.2	10.4	6.2	5.5	5.8	3.1	2.6	2.9	3.4	1.8	2.5
29	10.7	9.9	10.3	6.3	5.5	5.7	3.5	2.8	3.1	3.1	1.6	2.1
30	10.7	9.7	10.1	6.3	5.3	5.6	3.3	2.7	3.0	3.2	1.7	2.2
31	10.8	9.8	10.1	---	---	---	3.2	2.5	2.8	3.2	1.7	2.3
MONTH	12.8	9.7	11.2	10.8	5.3	7.6	6.2	1.8	3.2	4.2	1.6	2.8

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	3.2	1.8	2.3	3.7	2.2	2.8	5.0	4.1	4.5	6.5	5.6	6.1
2	3.4	1.9	2.5	3.9	2.3	2.9	4.8	4.2	4.5	7.0	5.9	6.3
3	3.6	2.1	2.6	3.9	2.1	2.9	4.9	4.1	4.4	6.5	5.7	6.0
4	3.5	1.9	2.6	4.4	2.6	3.2	5.1	3.9	4.3	6.5	5.6	5.9
5	4.4	2.6	3.0	3.9	2.0	2.8	4.6	3.8	4.2	6.6	5.9	6.1
6	3.2	2.6	2.8	4.3	2.4	3.0	4.9	3.5	4.1	6.9	5.7	6.3
7	4.0	2.4	3.0	4.5	2.5	3.3	5.1	3.7	4.2	7.8	6.2	7.0
8	4.1	2.6	3.0	4.2	2.7	3.2	4.5	3.7	4.0	7.7	6.4	7.1
9	4.1	2.7	3.2	4.6	2.6	3.3	4.7	3.7	4.0	7.4	6.3	6.7
10	3.3	2.0	2.7	3.9	2.7	3.1	4.6	3.7	4.0	7.1	5.8	6.5
11	3.4	2.0	2.5	4.4	2.6	3.2	4.9	3.6	4.2	7.3	6.3	6.8
12	3.6	1.9	2.5	3.6	2.7	3.1	5.7	4.4	4.9	7.8	6.7	7.2
13	3.8	2.0	2.7	4.5	2.4	3.2	5.5	4.4	4.8	7.7	6.8	7.2
14	3.9	2.2	2.9	4.7	2.6	3.5	5.4	4.7	4.9	7.7	7.0	7.3
15	4.0	2.5	3.0	4.7	2.8	3.5	5.3	4.2	4.6	8.0	7.4	7.6
16	3.9	2.2	2.9	4.8	2.9	3.5	5.2	4.3	4.6	8.6	7.4	8.0
17	3.2	2.1	2.7	5.1	2.8	3.7	5.5	4.1	4.8	8.8	8.0	8.4
18	3.9	2.5	3.0	5.2	3.0	3.9	6.2	4.6	5.3	9.3	8.2	8.6
19	3.6	2.4	2.8	5.3	3.1	4.0	6.1	5.1	5.5	9.3	8.1	8.5
20	3.7	1.9	2.6	5.6	3.3	4.2	6.1	5.2	5.6	10.6	8.3	9.5
21	3.2	1.8	2.4	5.8	3.6	4.4	6.2	5.3	5.6	9.8	8.7	9.4
22	3.5	1.8	2.5	5.6	3.6	4.3	6.4	4.9	5.4	10.8	8.9	9.8
23	3.9	2.1	2.7	4.9	3.8	4.3	6.4	4.9	5.3	10.4	9.0	9.7
24	4.0	2.1	2.8	5.2	4.1	4.5	7.3	4.8	5.8	10.5	8.4	9.4
25	3.9	2.0	2.7	5.4	4.1	4.6	5.8	5.2	5.4	9.4	8.9	9.1
26	3.7	2.0	2.5	5.3	4.2	4.6	5.9	5.6	5.7	10.9	9.3	10.0
27	3.9	2.1	2.7	6.0	4.2	4.7	7.2	5.6	6.2	10.6	8.9	9.6
28	3.8	2.1	2.7	6.1	4.1	4.8	6.9	5.6	6.0	10.5	8.8	9.6
29	---	---	---	6.5	4.0	4.9	7.2	5.3	6.0	10.4	8.2	9.4
30	---	---	---	6.7	4.3	5.1	6.2	5.4	5.7	11.0	8.0	9.5
31	---	---	---	5.9	3.9	4.7	---	---	---	10.5	8.0	9.3
MONTH	4.4	1.8	2.7	6.7	2.0	3.8	7.3	3.5	4.9	11.0	5.6	8.0

09041400 MUDDY CREEK BELOW WOLFORD MOUNTAIN RESERVOIR NEAR KREMMLING, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	11.4	9.9	10.6	11.6	9.9	10.6	15.8	13.9	14.6	12.2	10.8	11.5
2	11.5	8.1	10.2	10.8	8.8	9.9	14.9	12.9	13.9	12.3	11.0	11.6
3	11.6	8.2	9.9	10.5	8.8	9.5	13.2	10.8	12.1	13.1	11.1	11.8
4	12.2	9.5	10.4	10.2	8.7	9.2	10.8	9.9	10.4	12.9	11.1	11.9
5	11.1	9.6	10.5	10.9	8.6	9.7	11.6	9.4	10.2	12.3	10.7	11.5
6	11.0	10.3	10.6	10.9	8.8	9.8	11.2	9.8	10.3	12.2	11.3	11.7
7	10.9	9.9	10.4	10.2	8.4	9.3	11.7	9.6	10.6	12.6	11.7	12.2
8	11.1	9.0	10.1	10.1	8.9	9.3	11.5	9.5	10.3	12.4	11.0	11.9
9	11.3	9.6	10.5	10.5	8.9	9.6	10.9	9.0	9.8	12.6	11.2	11.9
10	11.7	10.7	11.1	10.3	8.9	9.5	10.9	8.7	9.5	13.2	11.6	12.1
11	12.8	10.4	11.4	9.5	8.2	8.7	10.3	8.3	9.2	13.1	11.4	12.0
12	13.4	11.1	12.2	9.4	7.9	8.5	9.6	7.9	8.5	14.9	11.9	13.1
13	16.7	12.2	14.3	9.0	7.8	8.3	10.7	---	---	13.0	11.4	12.4
14	16.1	13.0	14.7	8.8	7.9	8.2	11.7	10.5	11.0	13.0	11.7	12.5
15	13.5	12.9	13.3	8.8	8.0	8.3	12.1	10.4	11.4	13.1	11.7	12.4
16	13.3	11.8	12.7	9.1	7.7	8.4	11.8	---	---	13.2	12.2	12.6
17	12.2	11.6	11.9	12.6	9.1	10.9	11.9	10.7	11.2	13.0	12.1	12.6
18	14.3	11.7	12.7	13.2	11.4	12.2	12.1	10.9	11.4	13.2	12.1	12.8
19	13.2	11.6	12.6	15.5	12.3	13.6	11.8	10.6	11.1	13.2	12.1	12.7
20	13.3	11.6	12.3	17.6	15.1	16.2	12.1	11.0	11.5	14.3	12.0	13.3
21	12.6	11.5	12.1	18.0	15.9	16.8	11.9	10.7	11.3	13.2	12.2	12.6
22	12.7	11.4	12.1	17.2	15.3	16.1	12.4	10.9	11.6	13.4	12.5	12.9
23	13.5	11.7	12.5	17.6	14.4	15.9	12.2	10.6	11.4	13.2	12.4	12.8
24	14.3	12.8	13.4	17.1	15.0	16.0	12.1	10.8	11.4	13.0	12.4	12.7
25	13.6	10.3	12.3	16.3	15.2	15.6	12.1	10.9	11.4	13.4	10.9	12.5
26	12.9	10.4	11.6	17.3	14.6	15.6	12.5	10.9	11.6	14.3	11.9	13.6
27	12.0	9.7	10.9	16.8	14.3	15.4	12.4	11.0	11.6	14.0	12.8	13.4
28	12.9	10.3	11.5	16.6	15.3	15.8	12.2	11.1	11.5	13.5	12.5	13.0
29	11.9	10.9	11.3	15.9	14.6	15.2	12.3	11.2	11.5	12.9	12.1	12.5
30	11.4	10.6	10.9	15.1	14.0	14.6	12.3	10.9	11.4	12.8	12.1	12.4
31	---	---	---	16.3	14.4	15.1	12.5	11.0	11.7	---	---	---
MONTH	16.7	8.1	11.7	18.0	7.7	12.0	15.8	---	---	14.9	10.7	12.4

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	565	556	561	606	599	604	625	623	624	630	628	629
2	576	559	570	615	601	608	627	623	625	631	629	630
3	577	573	575	614	612	613	632	625	628	633	629	631
4	577	572	575	613	611	612	633	629	631	635	631	633
5	592	572	578	614	611	612	633	627	631	634	632	633
6	596	592	594	614	612	613	633	630	632	633	631	633
7	598	593	595	616	613	614	633	628	630	635	631	633
8	598	593	596	616	614	615	628	626	627	635	632	634
9	597	592	594	618	615	616	627	623	625	637	634	635
10	596	591	594	618	616	617	625	623	624	636	634	635
11	606	592	598	618	616	617	625	623	624	638	635	636
12	618	606	612	618	613	616	624	622	623	638	635	637
13	636	618	628	617	614	615	624	622	623	639	636	637
14	638	632	636	617	614	616	625	623	624	638	634	636
15	637	591	621	617	614	616	627	625	626	639	636	638
16	591	587	589	617	614	616	628	627	627	639	636	638
17	591	590	591	617	614	616	630	627	628	640	637	638
18	592	590	591	619	617	618	631	628	629	641	639	640
19	599	590	593	620	617	619	633	630	631	644	638	641
20	596	594	595	620	617	619	632	628	630	644	642	643
21	600	596	596	621	618	619	634	630	632	643	637	641
22	600	598	599	621	619	620	654	633	638	643	640	642
23	600	598	599	621	619	621	638	634	636	643	641	642
24	600	598	599	622	619	620	638	635	636	642	639	641
25	601	598	600	622	620	621	637	634	636	642	640	641
26	601	599	600	622	620	621	634	630	631	643	637	642
27	602	599	600	622	620	621	631	628	629	643	640	642
28	602	600	601	622	620	621	630	628	629	643	640	642
29	603	601	602	624	622	623	631	628	630	646	641	643
30	604	602	603	624	622	624	630	628	629	646	644	645
31	605	602	603	---	---	---	630	628	629	646	643	645
MONTH	638	556	596	624	599	617	654	622	629	646	628	638

09041400 MUDDY CREEK BELOW WOLFORD MOUNTAIN RESERVOIR NEAR KREMMLING, CO--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	648	645	647	655	651	653	654	625	643	674	668	670
2	649	645	647	654	652	653	625	613	619	671	665	668
3	647	644	646	654	652	653	617	605	611	672	667	670
4	649	646	647	655	641	651	631	608	614	671	659	664
5	648	646	647	655	652	653	641	606	618	660	657	658
6	648	646	647	655	652	654	677	640	657	658	656	657
7	647	644	646	655	650	654	674	648	658	662	656	659
8	651	645	648	655	652	653	699	664	685	666	659	662
9	652	645	650	654	648	652	679	649	660	671	661	665
10	652	643	648	654	651	652	671	661	666	697	661	681
11	648	647	648	656	653	655	661	646	653	694	691	693
12	652	648	650	659	654	656	648	643	646	692	691	691
13	652	650	651	655	652	654	656	647	651	700	692	695
14	651	649	650	656	652	655	653	651	652	696	684	692
15	650	648	649	655	653	654	654	652	653	687	678	681
16	652	649	650	655	652	654	657	654	655	684	672	677
17	652	645	649	654	651	653	660	657	659	673	669	671
18	651	649	650	654	651	653	662	659	661	674	667	670
19	650	648	649	652	648	650	663	661	662	674	663	669
20	651	647	649	649	646	647	665	662	664	670	645	658
21	653	648	651	651	645	647	665	662	664	668	647	658
22	652	650	651	646	640	644	677	660	668	662	643	653
23	653	651	652	649	642	647	676	673	674	663	650	657
24	653	651	652	649	644	646	675	672	674	667	643	657
25	652	651	652	647	641	644	674	665	670	663	644	658
26	653	651	652	642	636	640	668	665	666	650	621	635
27	654	652	653	643	637	640	674	664	669	653	623	639
28	655	653	654	649	642	646	676	673	674	649	621	632
29	---	---	---	648	641	644	684	675	679	1320	620	781
30	---	---	---	652	643	648	685	674	682	964	649	713
31	---	---	---	655	648	651	---	---	---	696	581	627
MONTH	655	643	649	659	636	650	699	605	657	1320	581	670

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	587	549	558	619	593	607	601	584	591	576	547	558
2	674	543	581	636	613	623	620	600	609	590	569	584
3	664	523	587	641	630	634	647	620	635	587	571	579
4	598	549	574	645	633	638	671	647	662	584	571	579
5	594	557	566	641	630	636	677	660	672	584	570	576
6	564	554	560	643	633	637	669	656	661	580	571	577
7	584	561	567	649	640	645	667	657	663	579	569	574
8	624	559	580	655	642	649	681	665	673	582	571	576
9	594	565	570	654	643	648	691	680	685	582	574	577
10	569	561	565	658	648	654	704	687	695	583	574	578
11	570	565	568	665	657	661	707	698	703	587	577	584
12	570	529	554	668	659	665	704	700	702	589	575	581
13	534	460	493	675	666	670	---	---	---	597	579	586
14	477	459	463	677	669	673	---	---	---	595	581	588
15	487	459	466	677	660	671	583	561	573	600	592	595
16	524	459	479	677	664	670	---	---	---	597	592	594
17	522	512	518	674	622	644	584	567	575	598	593	595
18	521	508	514	624	608	617	581	573	577	598	590	594
19	535	512	521	610	548	584	586	578	582	600	592	595
20	535	524	529	550	543	546	580	567	574	598	587	591
21	537	529	535	550	540	546	587	570	581	599	592	596
22	550	529	536	558	542	549	582	572	577	594	591	592
23	549	540	543	560	554	557	584	571	576	596	593	595
24	557	531	543	558	552	555	573	566	570	598	594	596
25	567	533	547	558	552	556	571	561	564	614	595	602
26	572	549	558	564	555	559	567	557	561	608	593	596
27	591	564	574	565	560	563	566	557	560	599	593	595
28	583	569	574	564	548	557	559	548	554	599	593	595
29	594	577	586	577	563	570	558	551	554	600	598	599
30	603	593	598	584	575	578	557	549	553	601	598	600
31	---	---	---	584	572	577	556	543	549	---	---	---
MONTH	674	459	547	677	540	611	---	---	---	614	547	588

09041900 MONTE CRISTO DIVERSION NEAR HOOSIER PASS, CO

LOCATION.--Lat 39°22'51", long 106°04'15", in NE$^1/_4$SE$^1/_4$ sec.2, T.8 S., R.78W., Summit County, Hydrologic Unit 14010002, on left bank at entrance to Hoosier Pass tunnel, 2,200 ft downstream from diversion point, 1.4 mi northwest of Hoosier Pass, and 7 mi southwest of Breckenridge.

PERIOD OF RECORD.--October 1957 to current year (seasonal records only).

GAGE.--Water-stage recorder with satellite telemetry, and Parshall flume. Elevation of gage is 10,986 ft above sea level, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. This is a transmountain diversion from Monte Cristo Creek in Blue River basin through Hoosier Pass tunnel to South Platte River basin from which it is again diverted to South Catamount Creek in the Arkansas River basin. Water is for municipal use by city of Colorado Springs. Diversion point is in SW$^1/_4$NE$^1/_4$ sec.2, T.8 S., R.78 W. The entire flow is regulated by diversion gates.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 73 ft^3/s, Sept. 29, 1994; no flow for most of each year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32	---	---	---	---	---	---	e.00	7.8	.65	22	7.7
2	28	---	---	---	---	---	---	e.00	9.7	.65	21	6.2
3	26	---	---	---	---	---	---	e.00	10	.58	18	4.7
4	24	---	---	---	---	---	---	e.00	9.0	.50	15	5.0
5	28	---	---	---	---	---	---	e.00	6.7	e.22	15	5.1
6	e15	---	---	---	---	---	---	e.00	5.3	e.47	21	5.9
7	e.00	---	---	---	---	---	---	e.00	7.9	e.17	15	3.4
8	e.00	---	---	---	---	---	---	e.24	11	e.00	14	2.6
9	e.00	---	---	---	---	---	---	.72	12	e8.2	13	2.5
10	e.00	---	---	---	---	---	---	.86	11	14	16	2.4
11	e.00	---	---	---	---	---	---	.59	8.6	14	13	3.8
12	e.00	---	---	---	---	---	---	.58	8.8	18	11	4.3
13	e.00	---	---	---	---	---	---	.86	8.9	29	6.5	3.5
14	e.00	---	---	---	---	---	---	1.5	11	31	7.2	11
15	e.00	---	---	---	---	---	---	1.9	13	31	6.4	28
16	e.00	---	---	---	---	---	---	1.9	15	22	5.4	29
17	e.00	---	---	---	---	---	---	1.6	16	26	5.8	34
18	e.00	---	---	---	---	---	---	2.4	14	14	e3.2	36
19	e.00	---	---	---	---	---	---	3.8	13	9.6	e.00	36
20	e.00	---	---	---	---	---	---	5.1	10	17	e3.7	36
21	e.00	---	---	---	---	---	---	7.7	5.1	22	9.2	35
22	e.00	---	---	---	---	---	---	8.6	1.7	26	8.8	35
23	e.00	---	---	---	---	---	---	10	1.5	28	7.0	35
24	e.00	---	---	---	---	---	---	13	1.6	22	6.5	35
25	e.00	---	---	---	---	---	---	11	1.7	19	7.9	34
26	e.00	---	---	---	---	---	---	6.3	1.3	17	13	34
27	e.00	---	---	---	---	---	---	5.9	.97	17	7.0	33
28	e.00	---	---	---	---	---	---	7.5	e.50	19	2.6	35
29	e.00	---	---	---	---	---	---	10	e.40	18	8.0	36
30	e.00	---	---	---	---	---	---	12	.62	20	9.1	36
31	e.00	---	---	---	---	---	---	10	---	22	8.5	---
TOTAL	153.00	---	---	---	---	---	---	124.05	224.09	467.04	319.80	615.1
MEAN	4.94	---	---	---	---	---	---	4.00	7.47	15.1	10.3	20.5
MAX	32	---	---	---	---	---	---	13	16	31	22	36
MIN	.00	---	---	---	---	---	---	.00	.40	.00	.00	2.4
AC-FT	303	---	---	---	---	---	---	246	444	926	634	1220

e Estimated

09044300 BEMROSE-HOOSIER DIVERSION NEAR HOOSIER PASS, CO

LOCATION.--Lat 39°22'50", long 106°04'13", in NE$^1/_4$SE$^1/_4$ sec.2, T.8 S., R.78 W., Summit County, Hydrologic Unit 14010002, on right bank at entrance to Hoosier Pass tunnel, 1.4 mi northwest of Hoosier Pass, 1.6 mi downstream from diversion point on Bemrose Creek, and 7 mi southwest of Breckenridge.

PERIOD OF RECORD.--October 1957 to current year (seasonal records only).

GAGE.--Water-stage recorder with satellite telemetry, and Parshall flume. Elevation of gage is 10,986 ft above sea level, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. This is a transmountain diversion from Bemrose and Hoosier Creeks in Blue River basin through Hoosier Pass tunnel to South Platte River basin from which it is again diverted to South Catamount Creek in the Arkansas River basin. Water is for municipal use by city of Colorado Springs. Diversion points are in SW$^1/_4$SW$^1/_4$ sec.6, T.8 S., R.77 W., and in sec.12, T.8 S., R.78 W. The entire flow is regulated by diversion gates.

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

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e.00	---	---	---	---	---	e.00	e.00	9.8	23	e5.0	2.2
2	e.00	---	---	---	---	---	e.00	e.00	12	21	e5.0	2.2
3	e.00	---	---	---	---	---	e.00	e.00	14	19	e5.0	2.2
4	e.00	---	---	---	---	---	e.00	e.00	15	18	4.6	2.1
5	e.00	---	---	---	---	---	e.00	e.00	13	17	5.0	2.0
6	e.00	---	---	---	---	---	e.00	e.00	12	17	5.2	2.0
7	e.00	---	---	---	---	---	e.00	e.00	17	15	5.0	1.9
8	e.00	---	---	---	---	---	e.00	e.16	23	14	4.8	1.9
9	e.00	---	---	---	---	---	e.00	e1.0	26	13	4.7	1.8
10	e.00	---	---	---	---	---	e.00	1.3	26	13	4.6	1.8
11	e.00	---	---	---	---	---	e.00	1.2	25	12	4.2	1.9
12	e.00	---	---	---	---	---	e.00	1.2	24	10	3.9	1.8
13	e.00	---	---	---	---	---	e.00	1.6	23	9.7	3.7	1.6
14	e.00	---	---	---	---	---	e.00	1.6	27	9.1	3.6	1.6
15	e.00	---	---	---	---	---	e.00	1.9	27	8.5	3.5	1.9
16	e.00	---	---	---	---	---	e.00	1.6	26	9.4	3.2	1.9
17	e.00	---	---	---	---	---	e.00	2.0	29	9.6	3.0	1.8
18	e.00	---	---	---	---	---	e.00	2.7	30	7.8	2.9	1.7
19	e.00	---	---	---	---	---	e.00	3.4	34	8.5	2.8	1.7
20	e.00	---	---	---	---	---	e.00	3.9	32	8.0	2.8	1.8
21	e.00	---	---	---	---	---	e.00	4.9	32	7.6	2.8	1.6
22	e.00	---	---	---	---	---	e.00	5.6	33	7.6	2.6	e.63
23	e.00	---	---	---	---	---	e.00	6.9	37	7.4	2.4	e.00
24	e.00	---	---	---	---	---	e.00	7.9	37	6.9	2.3	e.00
25	e.00	---	---	---	---	---	e.00	6.3	38	6.5	2.2	e.00
26	e.00	---	---	---	---	---	e.00	5.1	30	6.1	2.3	e.00
27	e.00	---	---	---	---	---	e.00	5.0	25	5.8	2.7	e.00
28	e.00	---	---	---	---	---	e.00	5.9	24	5.5	2.6	e.00
29	e.00	---	---	---	---	---	e.00	7.8	24	5.1	2.3	e.00
30	e.00	---	---	---	---	---	e.00	9.6	24	e5.0	2.2	e.00
31	e.00	---	---	---	---	---	---	9.4	---	e5.0	2.1	---
TOTAL	0.00	---	---	---	---	---	0.00	97.96	748.8	331.1	109.0	40.03
MEAN	.000	---	---	---	---	---	.000	3.16	25.0	10.7	3.52	1.33
MAX	.00	---	---	---	---	---	.00	9.6	38	23	5.2	2.2
MIN	.00	---	---	---	---	---	.00	.00	9.8	5.0	2.1	.00
AC-FT	.00	---	---	---	---	---	.00	194	1490	657	216	79

e Estimated

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

LOCATION.--Lat 39°22'51", long 106°04'14", in NE$^1/_4$SE$^1/_4$ sec.2, T.8 S., R.78 W., Summit County, Hydrologic Unit 14010002, on left bank at entrance to Hoosier Pass tunnel, 1.4 mi northwest of Hoosier Pass, 1.6 mi downstream from diversion point on McCullough Gulch, and 7 mi southwest of Breckenridge.

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

GAGE.--Water-stage recorder with satellite telemetry, and Parshall flume. Elevation of gage is 10,986 ft, above sea level, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. This is a transmountain diversion from McCullough Gulch and Spruce and Crystal Creeks in Blue River basin through Hoosier Pass tunnel to South Platte River basin from which it is again diverted to South Catamount Creek in the Arkansas River basin. Water is for municipal use by city of Colorado Springs. Diversion points are in secs.14, 23, and 26, T.7 S., R.78 W. The entire flow is regulated by diversion gates.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 132 ft^3/s, June 22, 1996; no flow for most of each year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e.00	---	---	---	---	---	e.00	e.00	26	e.00	5.3	24
2	e.00	---	---	---	---	---	e.00	e.00	30	e.00	e1.9	20
3	e.00	---	---	---	---	---	e.00	e.00	35	e.00	e.00	17
4	e.00	---	---	---	---	---	e.00	e.00	34	e.00	e4.2	14
5	e.00	---	---	---	---	---	e.00	e.00	29	e.00	11	12
6	e.00	---	---	---	---	---	e.00	e.00	26	e.00	14	10
7	e.00	---	---	---	---	---	e.00	e.00	36	e.00	3.6	9.1
8	e.00	---	---	---	---	---	e.00	e.00	51	e.00	6.4	8.3
9	e.00	---	---	---	---	---	e.00	e.00	62	e.00	11	7.5
10	e.00	---	---	---	---	---	e.00	e.00	62	e.00	16	7.0
11	e.00	---	---	---	---	---	e.00	e.00	66	e.00	13	8.6
12	e.00	---	---	---	---	---	e.00	e.00	66	e.00	10	8.7
13	e.00	---	---	---	---	---	e.00	e.40	59	e5.1	12	7.1
14	e.00	---	---	---	---	---	e.00	1.4	62	e3.9	14	6.1
15	e.00	---	---	---	---	---	e.00	1.8	52	e.92	14	6.2
16	e.00	---	---	---	---	---	e.00	2.4	34	e.00	13	7.2
17	e.00	---	---	---	---	---	e.00	1.7	42	e.00	14	5.9
18	e.00	---	---	---	---	---	e.00	2.4	32	e.00	20	4.6
19	e.00	---	---	---	---	---	e.00	4.9	27	e.00	15	4.6
20	e.00	---	---	---	---	---	e.00	7.2	e13	e.00	14	e2.2
21	e.00	---	---	---	---	---	e.00	11	e.00	e.00	21	e.00
22	e.00	---	---	---	---	---	e.00	13	e.00	e.00	18	e.00
23	e.00	---	---	---	---	---	e.00	17	e.00	e.00	16	e.00
24	e.00	---	---	---	---	---	e.00	25	e.00	e.00	14	e.00
25	e.00	---	---	---	---	---	e.00	25	e.00	e.00	14	e.00
26	e.00	---	---	---	---	---	e.00	17	e.00	e.56	16	e.00
27	e.00	---	---	---	---	---	e.00	15	e.00	6.4	21	e.00
28	e.00	---	---	---	---	---	e.00	17	e.00	10	31	e.00
29	e.00	---	---	---	---	---	e.00	24	e.00	9.3	22	e.00
30	e.00	---	---	---	---	---	e.00	29	e.00	9.3	20	e.00
31	e.00	---	---	---	---	---	---	32	---	7.4	21	---
TOTAL	0.00	---	---	---	---	---	0.00	247.20	844.00	52.88	426.40	190.10
MEAN	.000	---	---	---	---	---	.000	7.97	28.1	1.71	13.8	6.34
MAX	.00	---	---	---	---	---	.00	32	66	10	31	24
MIN	.00	---	---	---	---	---	.00	.00	.00	.00	.00	.00
AC-FT	.00	---	---	---	---	---	.00	490	1670	105	846	377

e Estimated

09046490 BLUE RIVER AT BLUE RIVER, CO

LOCATION.--Lat 39°27'21", long 106°01'52", in $NE^1/_4SE^1/_4$ sec.7, T.7 S, R.77 W., Summit County, Hydrologic Unit 14010002 on left bank, 350 ft downstream from spillway of Goose Pasture Tarn Dam and 2.0 mi southeast of Breckenridge.

DRAINAGE AREA.--42.4 mi^2 .

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

REVISED RECORDS.--WDR CO-95-2: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry and concrete control. Elevation of gage is 9,835 ft above sea level, from topographic map.

REMARKS.--No estimated daily discharges. Records good. Transmountain diversions upstream from station by Boreas Pass ditch and Hoosier Pass tunnel. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32	17	10	6.3	4.6	5.0	3.7	12	103	249	71	23
2	31	18	9.9	6.7	4.7	4.8	3.6	12	111	258	65	23
3	27	17	9.5	6.8	4.5	4.6	3.7	10	120	238	58	21
4	28	16	9.2	7.1	4.5	4.5	3.8	11	124	224	52	21
5	25	14	8.5	7.0	4.5	4.3	3.8	10	117	215	49	18
6	26	14	11	6.1	4.3	3.8	3.7	9.5	104	220	56	16
7	43	14	12	5.2	4.5	3.5	3.8	9.1	111	191	54	15
8	39	13	11	4.6	4.6	3.5	3.8	12	132	181	49	15
9	30	15	13	4.7	4.7	3.4	3.7	17	143	183	44	14
10	24	13	15	4.8	4.7	3.6	3.9	20	150	161	44	15
11	21	12	13	5.0	4.7	3.3	4.0	15	147	144	39	16
12	20	13	13	5.1	4.4	3.6	4.1	13	148	123	36	16
13	20	13	12	5.1	4.2	3.5	7.7	16	145	122	32	15
14	20	14	12	5.1	4.0	3.3	8.1	26	147	77	25	14
15	19	13	12	5.0	4.2	3.3	7.9	30	169	101	24	14
16	18	13	10	4.7	4.5	3.0	6.7	33	184	99	23	16
17	19	12	9.7	4.7	5.1	3.0	6.3	28	196	125	24	15
18	17	12	9.8	4.8	5.0	3.0	6.9	31	199	106	26	15
19	18	11	11	5.1	4.9	3.2	8.8	40	224	102	29	16
20	19	11	11	5.2	4.8	3.3	11	47	238	98	28	20
21	18	11	11	5.1	4.9	3.4	13	55	260	91	24	23
22	17	11	10	5.1	5.1	3.6	11	63	273	89	21	21
23	17	11	13	4.9	5.2	3.6	11	76	288	96	19	21
24	17	11	15	5.0	5.2	3.6	9.4	90	301	86	18	22
25	16	10	14	6.5	5.0	3.7	11	106	306	76	18	24
26	17	10	9.3	6.2	4.8	3.8	16	80	300	69	19	21
27	20	9.8	3.7	5.3	4.7	3.7	6.8	75	276	62	24	21
28	22	9.8	4.9	4.6	4.8	3.6	7.5	76	255	57	45	20
29	18	10	6.0	4.5	---	3.6	15	86	234	55	38	19
30	18	10	5.3	4.2	---	3.7	18	98	232	56	25	19
31	18	---	6.0	4.4	---	3.7	---	105	---	65	24	---
TOTAL	694	378.6	320.8	164.9	131.1	113.5	227.7	1311.6	5737	4019	1103	549
MEAN	22.4	12.6	10.3	5.32	4.68	3.66	7.59	42.3	191	130	35.6	18.3
MAX	43	18	15	7.1	5.2	5.0	18	106	306	258	71	24
MIN	16	9.8	3.7	4.2	4.0	3.0	3.6	9.1	103	55	18	14
AC-FT	1380	751	636	327	260	225	452	2600	11380	7970	2190	1090

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984 - 1999, BY WATER YEAR (WY)

MEAN	19.5	13.4	9.93	7.16	5.68	5.22	11.4	61.1	129	90.9	46.7	26.5
MAX	32.2	26.5	18.9	14.3	8.11	7.96	21.9	128	276	327	120	44.3
(WY)	1985	1985	1985	1985	1985	1985	1989	1996	1995	1995	1995	1984
MIN	13.5	8.62	6.96	4.67	4.12	3.66	5.53	26.0	63.1	23.0	18.0	14.2
(WY)	1992	1992	1995	1995	1991	1999	1993	1995	1992	1991	1986	1986

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1984 - 1999	
ANNUAL TOTAL	10089.3		14750.2			
ANNUAL MEAN	27.6		40.4		35.7	
HIGHEST ANNUAL MEAN					70.4	1995
LOWEST ANNUAL MEAN					20.5	1990
HIGHEST DAILY MEAN	201	Jul 25	306	Jun 25	578	Jul 12 1995
LOWEST DAILY MEAN	3.7	Dec 27	3.0	Mar 16	a3.0	Mar 16 1999
ANNUAL SEVEN-DAY MINIMUM	4.3	Mar 11	3.2	Mar 14	3.2	Mar 14 1999
INSTANTANEOUS PEAK FLOW			360	Jun 26	681	Jun 18 1995
INSTANTANEOUS PEAK STAGE			2.64	Jun 26	3.23	Jun 18 1995
ANNUAL RUNOFF (AC-FT)	20010		29260		25840	
10 PERCENT EXCEEDS	69		123		90	
50 PERCENT EXCEEDS	17		14		15	
90 PERCENT EXCEEDS	5.4		3.9		5.2	

a Also occurred many times many years.

09046530 FRENCH GULCH AT BRECKENRIDGE, CO

LOCATION (REVISED).--Lat. 39°29'35", long. 106°02'39", in $SE^1/_4SW^1/_4$, sec.30, T.6 S, R.77 W, Summit County, Hydrologic Unit 14010002, on left bank, 300 ft south of Summit Co. Rd. 450, 200 ft upstream from bridge on Hwy. 9, in Breckenridge.

DRAINAGE AREA.--10.9 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1995 to current year.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 9,510 ft above sea level, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor. No diversion or regulation upstream from gage.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.9	4.5	3.8	1.8	2.0	1.6	2.5	3.8	e40	56	17	10
2	5.8	4.1	3.8	1.8	2.0	1.6	2.4	3.8	e43	55	14	10
3	5.4	3.8	3.7	1.8	2.1	e1.5	2.4	3.7	e46	49	13	10
4	5.9	4.1	3.8	1.8	2.0	1.6	2.8	3.6	e49	45	12	9.6
5	5.7	3.7	3.7	1.7	2.1	1.5	2.3	3.5	e48	43	14	9.1
6	5.4	3.9	3.5	1.7	2.0	1.5	2.5	3.3	e46	45	24	8.7
7	5.6	3.8	3.3	1.8	2.1	2.0	2.2	3.2	e44	42	18	8.4
8	5.7	3.8	2.9	1.8	2.0	1.6	2.4	5.1	e53	40	16	8.1
9	5.6	3.9	3.0	2.0	2.0	e1.7	2.2	6.0	e60	36	15	7.8
10	5.3	3.4	2.7	1.8	2.0	1.7	2.1	6.7	62	33	14	7.4
11	5.1	3.2	2.5	1.8	2.4	1.7	2.4	5.7	58	29	13	7.6
12	5.0	3.3	2.5	1.8	2.1	1.6	2.1	4.9	59	26	13	7.3
13	4.9	3.6	2.4	1.9	2.1	1.6	2.3	5.4	54	24	13	6.9
14	5.0	3.9	2.4	e1.8	2.2	e1.6	2.3	7.3	57	23	12	6.7
15	4.9	4.0	2.3	1.9	2.0	e1.9	2.3	8.2	64	22	12	6.6
16	4.8	4.0	2.2	e1.8	2.1	2.0	2.5	11	61	21	11	6.5
17	4.9	3.9	2.2	e1.9	e2.0	2.2	3.0	9.7	67	20	11	6.3
18	4.8	3.9	2.2	2.0	e2.2	2.0	2.1	9.8	69	19	11	6.1
19	4.8	3.7	2.1	2.0	1.8	2.0	2.3	e12	83	18	9.9	6.1
20	4.8	3.5	2.0	2.0	1.7	1.9	2.5	e14	77	19	9.6	6.6
21	4.6	3.5	e1.9	2.0	1.7	2.0	2.5	e15	84	19	9.8	6.3
22	4.6	3.6	e1.8	2.0	e1.9	2.0	2.4	e17	83	19	9.4	5.8
23	4.5	3.7	e1.9	2.0	1.9	1.9	2.2	e22	86	19	9.0	5.6
24	4.4	3.7	e1.8	2.1	1.7	2.0	2.3	e27	87	17	8.6	5.8
25	4.4	3.7	1.9	2.1	1.7	2.1	2.6	e33	91	18	8.4	5.8
26	4.4	3.7	1.7	2.0	1.7	2.1	2.7	e31	88	16	8.3	5.5
27	4.7	3.7	1.7	e1.9	1.6	2.3	2.8	e39	79	15	10	5.3
28	5.1	3.9	1.8	e1.9	1.6	2.2	3.1	e28	72	15	13	5.3
29	4.8	4.0	2.0	e1.9	---	2.4	4.0	e32	63	14	11	5.3
30	4.7	3.8	2.0	e2.0	---	2.3	4.4	e33	57	14	10	5.1
31	4.6	---	1.8	e2.0	---	2.4	---	e40	---	16	10	---
TOTAL	156.1	113.3	77.3	58.8	54.7	58.5	76.6	447.7	1930	847	380.0	211.6
MEAN	5.04	3.78	2.49	1.90	1.95	1.89	2.55	14.4	64.3	27.3	12.3	7.05
MAX	5.9	4.5	3.8	2.1	2.4	2.4	4.4	40	91	56	24	10
MIN	4.4	3.2	1.7	1.7	1.6	1.5	2.1	3.2	40	14	8.3	5.1
AC-FT	310	225	153	117	108	116	152	888	3830	1680	754	420

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 1999, BY WATER YEAR (WY)

MEAN	4.97	3.39	2.55	1.95	1.91	1.98	3.23	21.1	54.9	21.6	10.8	6.52
MAX	5.15	3.78	2.74	2.10	2.04	2.09	4.07	38.8	75.0	27.3	12.4	7.05
(WY)	1996	1999	1996	1998	1996	1997	1997	1996	1997	1999	1997	1999
MIN	4.68	3.14	2.47	1.87	1.76	1.89	2.48	10.8	22.0	18.6	8.17	5.88
(WY)	1998	1996	1997	1997	1997	1999	1998	1998	1998	1998	1996	1998

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1996 - 1999	
ANNUAL TOTAL	2661.9		4411.6			
ANNUAL MEAN	7.29		12.1		11.2	
HIGHEST ANNUAL MEAN					13.0	1997
LOWEST ANNUAL MEAN					7.23	1998
HIGHEST DAILY MEAN	30	Jun 4	91	Jun 25	115	Jun 5 1997
LOWEST DAILY MEAN	e1.7	Mar 6	e1.5	Mar 3	e1.3	Mar 7 1997
ANNUAL SEVEN-DAY MINIMUM	1.7	Mar 6	1.6	Feb 28	1.4	Mar 2 1997
INSTANTANEOUS PEAK FLOW			106	Jun 26	124	Jun 5 1997
INSTANTANEOUS PEAK STAGE			6.93	Jun 26	7.09	Jun 5 1997
ANNUAL RUNOFF (AC-FT)	5280		8750		8140	
10 PERCENT EXCEEDS	20		41		29	
50 PERCENT EXCEEDS	4.4		4.0		4.2	
90 PERCENT EXCEEDS	1.9		1.8		1.9	

e Estimated

09046530 FRENCH GULCH AT BRECKENRIDGE, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1995 to September 1999 (discontinued).

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: October 1996 to September 1998 (discontinued).

INSTRUMENTATION.--Water temperature sensor and logger October 1996 to September 1998 (discontinued).

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: Maximum, 10.9°C, Aug. 30, 1998; minimum, 0.0°C on many days each winter.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)
JAN										
20...	1425	2.0	350	7.6	1.7	9.7	150	45	8.1	2.4
MAR										
11...	1015	1.6	340	7.2	1.5	9.4	160	49	8.4	2.4
APR										
06...	1250	2.1	366	7.5	4.1	9.2	160	49	8.6	2.4
15...	1145	2.2	339	7.6	1.0	--	150	48	8.3	2.5
26...	1415	2.8	347	7.4	2.1	9.8	150	48	8.1	2.6
30...	1000	4.4	320	7.7	1.0	9.8	150	47	8.0	2.3
MAY										
06...	1020	3.4	352	7.6	2.3	9.8	150	46	8.0	2.4
18...	1005	9.8	289	7.8	3.1	9.6	120	38	6.3	2.3
JUN										
10...	1440	56	148	7.7	5.0	9.4	65	21	3.0	1.4
JUL										
08...	1110	39	136	7.6	6.0	9.3	57	19	2.5	1.3
AUG										
18...	1305	11	196	7.8	9.3	8.2	83	26	4.0	1.8
SEP										
17...	1510	6.2	206	7.6	7.4	8.6	88	28	4.4	1.8

DATE	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)
JAN										
20...	0.1	1.0	32	26	130	1.4	<0.1	9.1	236	214
MAR										
11...	.1	.9	31	25	130	1.7	<.1	9.0	243	216
APR										
06...	.1	.9	37	30	130	2.0	<.1	9.1	243	222
15...	.1	.9	37	30	130	2.1	<.1	9.1	242	221
26...	.1	1.0	41	34	120	2.5	<.1	9.1	232	217
30...	.1	1.0	35	29	120	2.5	<.1	9.0	224	209
MAY										
06...	.1	1.0	39	32	130	2.5	<.1	9.0	234	218
18...	.1	.8	46	38	90	2.6	<.1	8.5	186	174
JUN										
10...	.1	.6	35	29	34	1.0	<.1	7.3	106	88
JUL										
08...	.1	.6	35	29	28	.6	<.1	7.0	96	77
AUG										
18...	.1	.7	41	34	50	1.1	<.1	9.0	118	115
SEP										
17...	.1	.8	42	34	58	1.1	<.1	8.9	136	125

09046530 FRENCH GULCH AT BRECKENRIDGE, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS-SOLVED (TONS PER DAY) (70302)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)
JAN										
20...	0.32	1.29	<0.01	0.05	0.02	<0.1	<0.1	<0.004	<0.004	<0.01
MAR										
11...	.33	1.05	<.01	.10	<.02	<.1	<.1	<.004	<.004	.01
APR										
06...	.33	1.38	<.01	.10	<.02	<.1	<.1	<.004	<.004	<.01
15...	.33	1.44	<.01	.11	<.02	E.07	<.1	<.004	<.004	<.01
26...	.32	1.74	<.01	.14	.03	E.08	<.1	<.004	<.004	.01
30...	.30	2.66	<.01	.29	.04	<.1	<.1	.009	<.004	.01
MAY										
06...	.32	2.15	<.01	.19	.04	E.06	<.1	<.004	<.004	<.01
18...	.25	4.92	<.01	.17	<.02	E.09	E.07	.004	<.004	.01
JUN										
10...	.14	16.1	<.01	.10	<.02	E.07	E.09	.006	<.004	<.01
JUL										
08...	.13	10.1	<.01	.07	.03	.1	<.1	<.004	<.004	<.01
AUG										
18...	.16	3.50	<.01	.06	<.02	<.1	E.08	<.004	<.004	<.01
SEP										
17...	.18	2.26	<.01	<.05	<.02	E.09	<.1	.004	.006	<.01

DATE	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	ANTI-MONY, DIS-SOLVED (UG/L AS SB) (01095)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (01010)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)
JAN										
20...	0.4	<0.2	6	<1	<1	31	<1	8	<1	<1
MAR										
11...	.3	<.2	6	<1	<1	31	<1	8	<1	<1
APR										
06...	.4	<.2	17	<1	1	29	<1	8	<1	<1
15...	.3	<.2	19	<1	<1	30	<1	8	<1	<1
26...	.3	<.2	17	<1	<1	28	<1	7	<1	<1
30...	.5	<.2	22	<1	<1	26	<1	8	<1	<1
MAY										
06...	.6	<.2	23	<1	<1	28	<1	8	<1	<1
18...	.4	.2	20	<1	<1	20	<1	6	<1	<1
JUN										
10...	1.5	.2	7	<1	1	10	<1	4	<1	<1
JUL										
08...	.9	<.2	4	<1	<1	10	<1	3	<1	<1
AUG										
18...	.5	<.2	4	<1	<1	14	<1	4	<1	<1
SEP										
17...	.5	<.2	4	<1	<1	18	<1	4	<1	<1

DATE	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	URANIUM NATURAL DIS-SOLVED (UG/L AS U) (22703)
JAN										
20...	<1	12	7	18	<1	4	<1	<1	3500	<1
MAR										
11...	1	17	5	17	<1	4	<1	<1	3400	<1
APR										
06...	2	31	3	23	<1	4	<1	<1	3500	<1
15...	2	45	3	22	<1	3	<1	<1	3200	<1
26...	2	32	2	21	<1	4	<1	<1	3200	<1
30...	3	57	<1	30	<1	4	<1	<1	3300	<1
MAY										
06...	3	76	1	29	<1	3	<1	<1	3200	<1
18...	2	28	1	57	<1	3	<1	<1	2700	<1
JUN										
10...	2	23	1	196	<1	2	<1	<1	1400	<1
JUL										
08...	1	E9	<1	164	<1	1	<1	<1	1100	<1
AUG										
18...	<1	11	2	86	<1	2	<1	<1	1500	<1
SEP										
17...	<1	11	4	56	<1	1	<1	<1	1600	<1

E Estimated.

09046600 BLUE RIVER NEAR DILLON, CO

LOCATION.--Lat 39°34'00", long 106°02'56", in SW$^{1}/_{4}$SE$^{1}/_{4}$ sec.31, T.5 S., R.77 W., Summit County, Hydrologic Unit 14010002, on left bank 0.3 mi upstream from Dillon Reservoir, and 5.0 mi south of Dillon.

DRAINAGE AREA.--121 mi^{2}.

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

REVISED RECORDS.--WSP 2124: Drainage area. WDR CO-95-2: 1994.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 9,020 ft above sea level, from topographic map. Prior to Aug. 6, 1992, at site 1.4 mi upstream at different datum. Aug. 6, 1992 to Oct. 20, 1994, at site 200 ft upstream at different datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. Transmountain diversions upstream from station by Boreas Pass ditch and Hoosier Pass tunnel (see elsewhere in this report). Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	55	48	e38	e34	e27	e28	e28	68	372	446	178	77
2	63	47	e37	e34	e27	e27	e28	67	375	453	159	75
3	68	e47	e37	e34	e27	e26	e28	67	399	427	145	74
4	68	e46	e36	e34	e27	e26	e28	64	415	398	137	73
5	68	e45	e35	e32	e27	e25	e28	60	408	380	137	70
6	67	e45	e36	e30	e26	e23	e28	58	362	381	154	66
7	62	e45	e38	e27	e27	e21	e28	56	354	367	145	63
8	68	e45	e39	e26	e27	e21	29	60	389	341	135	61
9	76	e45	e41	e27	e27	e21	29	68	437	328	127	59
10	73	e45	e42	e27	e27	e21	29	78	453	306	125	58
11	67	e43	e41	e27	e27	e20	28	82	402	286	119	57
12	62	e42	e40	e27	e26	e20	28	79	398	260	113	58
13	58	e42	e39	e27	e24	e20	29	76	392	244	106	58
14	55	e42	e38	e27	e25	e19	30	83	395	227	101	56
15	55	e42	e37	e27	e26	e19	31	100	434	218	94	54
16	55	e42	e37	e26	e27	e18	30	122	474	217	90	53
17	53	e42	e37	e25	e28	e17	29	132	492	231	87	53
18	52	e42	e37	e26	e28	e18	29	128	497	217	90	53
19	50	e42	e37	e27	e28	e19	32	138	539	208	88	53
20	48	e40	e37	e27	e28	e20	34	175	543	204	86	56
21	47	e39	e37	e27	e28	e21	36	201	569	192	85	59
22	47	e38	e37	e27	e28	e22	37	233	573	189	83	61
23	47	e38	e39	e28	e28	e22	39	269	578	195	78	60
24	47	e38	e42	e28	e28	e23	38	333	593	186	74	58
25	46	e38	e40	e32	e28	e23	40	418	591	177	72	59
26	45	e38	e36	e31	e28	e23	41	371	589	164	71	60
27	45	e38	e29	e29	e28	e24	42	326	543	153	74	59
28	49	e38	e31	e27	e28	e26	45	314	515	146	87	56
29	54	e38	e32	e26	---	e27	50	324	469	144	100	55
30	52	e38	e33	e25	---	e28	63	347	451	145	95	55
31	49	---	e34	e26	---	e28	---	375	---	160	83	---
TOTAL	1751	1258	1149	877	760	696	1014	5272	14001	7990	3318	1809
MEAN	56.5	41.9	37.1	28.3	27.1	22.5	33.8	170	467	258	107	60.3
MAX	76	48	42	34	28	28	63	418	593	453	178	77
MIN	45	38	29	25	24	17	28	56	354	144	71	53
AC-FT	3470	2500	2280	1740	1510	1380	2010	10460	27770	15850	6580	3590

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 1999, BY WATER YEAR (WY)

MEAN	52.3	39.1	31.4	26.4	24.4	23.6	39.9	177	346	207	107	68.1
MAX	101	74.4	54.0	40.3	36.0	32.5	77.7	461	661	644	241	143
(WY)	1985	1985	1984	1984	1983	1983	1985	1996	1995	1995	1984	1983
MIN	30.6	23.8	21.7	17.0	17.2	17.0	23.0	65.1	72.0	73.7	55.1	40.5
(WY)	1978	1978	1978	1995	1992	1995	1964	1981	1963	1966	1977	1962

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1958 - 1999	
ANNUAL TOTAL	26595		39895			
ANNUAL MEAN	72.9		109		a108	
HIGHEST ANNUAL MEAN					168	1984
LOWEST ANNUAL MEAN					45.8	1963
HIGHEST DAILY MEAN	297	Jul 25	593	Jun 24	b1160	Jun 26 1983
LOWEST DAILY MEAN	e22	Mar 1	e17	Mar 17	c16	Feb 12 1993
ANNUAL SEVEN-DAY MINIMUM	23	Feb 23	19	Mar 13	16	Mar 3 1995
INSTANTANEOUS PEAK FLOW			631	Jun 26	1390	Jun 18 1995
INSTANTANEOUS PEAK STAGE			6.57	Jun 26	6.91	Jun 18 1995
ANNUAL RUNOFF (AC-FT)	52750		79130		a78250	
10 PERCENT EXCEEDS	169		371		248	
50 PERCENT EXCEEDS	47		47		45	
90 PERCENT EXCEEDS	24		26		23	

e Estimated
a Adjusted for diversions to Hoosier Pass tunnel.
b Also occurred Jun 18, 1995.
c Also occurred Feb 13-14, 1993, Jan 9, and Mar 3-21, 1995.

09047500 SNAKE RIVER NEAR MONTEZUMA, CO

LOCATION.--Lat 39°36'20", long 105°56'33", in NW$^1/_4$ sec.19, T.5 S., R.76 W. (projected), Summit County, Hydrologic Unit 14010002, on right bank 200 ft downstream from North Fork and 4.5 mi northwest of Montezuma.

DRAINAGE AREA.--57.7 mi^2.

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

REVISED RECORDS.--WSP 2124: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 9,320 ft above sea level, from topographic map. Prior to Oct. 14, 1943, nonrecording gage at present site and datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. Small diversions upstream from station for irrigation and domestic use. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36	26	e16	e12	e9.6	e9.1	e15	e14	230	348	247	68
2	37	e26	e16	e12	e9.4	e9.1	e15	e14	247	333	203	70
3	34	e26	e16	e12	e9.4	e9.1	e15	e14	270	302	170	68
4	36	e25	e16	e12	e9.4	e9.1	e15	e14	285	284	165	63
5	33	e24	e16	e12	e9.4	e9.1	e15	15	256	268	169	59
6	33	e23	e15	e12	e9.4	e9.1	e15	16	218	274	193	56
7	36	e23	e15	e12	e9.4	e9.1	e15	17	255	257	158	52
8	38	e23	e15	e12	e9.4	e9.1	e15	20	314	264	146	50
9	36	e23	e15	e12	e9.4	e9.1	e15	27	345	230	151	48
10	34	e22	e15	e12	e9.4	e9.1	e15	29	368	213	157	46
11	32	e21	e15	e12	e9.4	e9.1	e15	24	342	197	142	50
12	30	e20	e15	e12	e9.0	e9.1	e15	22	331	177	131	49
13	29	e20	e15	e12	e9.1	e9.1	e15	25	318	165	120	45
14	30	e20	e15	e12	e9.1	e9.1	e15	35	362	169	113	42
15	29	e20	e15	e12	e9.1	e9.1	e15	41	387	170	110	42
16	28	e20	e15	e12	e9.1	e9.4	e15	43	360	170	102	40
17	28	e20	e15	e12	e9.1	e9.8	e15	39	396	160	102	38
18	27	e20	e15	e12	e9.1	e9.8	e15	47	416	145	100	37
19	27	e20	e15	e12	e9.1	e9.8	e15	63	434	141	91	42
20	28	e19	e15	e12	e9.1	e10	e15	75	431	140	88	58
21	26	e18	e14	e12	e9.1	e10	e15	90	451	138	85	51
22	27	e17	e13	e12	e9.1	e10	e15	109	448	134	81	48
23	26	e17	e12	e12	e9.1	e10	e15	132	484	134	75	45
24	25	e17	e12	e12	e9.1	e11	e15	165	499	127	72	46
25	25	e17	e12	e12	e9.1	e11	e15	195	493	123	73	47
26	26	e17	e12	e12	e9.1	e12	e14	155	455	114	75	43
27	27	e17	e12	e12	e9.1	e13	e14	152	425	121	89	42
28	28	e17	e12	e11	e9.1	e13	e14	168	388	223	88	41
29	28	e17	e12	e11	---	e13	e14	200	372	271	77	40
30	27	e17	e12	e11	---	e14	e14	222	357	201	72	40
31	26	---	e12	e10	---	e15	---	237	---	231	69	---
TOTAL	932	612	440	367	258.2	317.3	445	2419	10937	6224	3714	1466
MEAN	30.1	20.4	14.2	11.8	9.22	10.2	14.8	78.0	365	201	120	48.9
MAX	38	26	16	12	9.6	15	15	237	499	348	247	70
MIN	25	17	12	10	9.0	9.1	14	14	218	114	69	37
AC-FT	1850	1210	873	728	512	629	883	4800	21690	12350	7370	2910

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1943 - 1999, BY WATER YEAR (WY)

MEAN	27.5	19.8	15.5	12.1	10.7	10.7	18.0	98.2	288	149	67.2	38.3
MAX	66.9	39.5	25.9	18.0	16.4	17.0	35.4	216	520	385	177	90.7
(WY)	1985	1985	1985	1985	1997	1997	1946	1958	1997	1995	1984	1984
MIN	16.1	11.8	9.90	7.03	7.00	7.40	8.34	28.7	101	50.9	24.4	18.0
(WY)	1945	1965	1978	1963	1946	1973	1973	1995	1966	1977	1977	1977

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1943 - 1999	
ANNUAL TOTAL	18806		28131.5			
ANNUAL MEAN	51.5		77.1		63.0	
HIGHEST ANNUAL MEAN					95.8	1997
LOWEST ANNUAL MEAN					35.1	1954
HIGHEST DAILY MEAN	296	Jun 3	499	Jun 24	870	Jun 22 1995
LOWEST DAILY MEAN	e10	Mar 5	e9.0	Feb 12	5.0	Feb 26 1964
ANNUAL SEVEN-DAY MINIMUM	11	Mar 4	9.1	Feb 12	6.0	Jan 9 1963
INSTANTANEOUS PEAK FLOW			620	Jun 23	1250	Jun 10 1952
INSTANTANEOUS PEAK STAGE			3.02	Jun 23	a3.51	Jun 10 1952
ANNUAL RUNOFF (AC-FT)	37300		55800		45660	
10 PERCENT EXCEEDS	147		250		177	
50 PERCENT EXCEEDS	26		23		23	
90 PERCENT EXCEEDS	13		9.4		10	

e Estimated
a Maximum gage height, 3.88 ft, Jun 6, 1972.

09047700 KEYSTONE GULCH NEAR DILLON, CO

LOCATION.--Lat 39°35'40", long 105°58'19", in NE$^1/_4$NE$^1/_4$ sec.26, T.5 S., R.77 W., Summit County, Hydrologic Unit 14010002, on right bank 0.7 mi upstream from mouth, and 4.7 mi southeast of Dillon.

DRAINAGE AREA.--9.10 mi^2.

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

REVISED RECORDS.--WSP 2124: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 9,350 ft above sea level, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. No known diversion upstream from station. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.4	3.3	e3.0	e2.8	e2.5	e2.3	e2.5	3.1	21	18	9.5	5.3
2	3.5	3.5	e3.0	e2.8	e2.5	e2.3	e2.5	2.9	23	17	7.8	5.4
3	3.3	e3.2	e3.0	e2.8	e2.5	e2.3	e2.5	2.8	24	16	7.2	5.3
4	3.6	e3.1	e3.0	e2.8	e2.5	e2.3	e2.5	2.8	24	15	8.0	5.0
5	3.4	e3.1	e3.0	e2.8	e2.5	e2.3	e2.5	2.4	22	15	8.6	4.8
6	3.2	e3.1	e2.9	e2.8	e2.5	e2.3	e2.5	2.6	21	15	9.5	4.7
7	3.8	e3.1	e2.9	e2.8	e2.5	e2.3	2.1	2.9	24	15	7.8	4.5
8	4.0	e3.1	e2.9	e2.8	e2.5	e2.3	2.3	3.7	25	16	7.2	4.5
9	3.7	e3.1	e2.9	e2.8	e2.5	e2.3	1.8	4.9	25	13	7.2	4.4
10	3.7	e3.1	e2.9	e2.8	e2.4	e2.3	1.9	4.9	25	12	7.9	4.4
11	3.6	e3.0	e2.9	e2.8	e2.3	e2.3	2.0	3.7	24	11	7.2	4.6
12	3.4	e3.0	e2.9	e2.8	e2.2	e2.3	2.1	3.8	23	11	6.9	4.5
13	3.4	e3.0	e2.9	e2.8	e2.3	e2.3	2.3	4.5	23	10	6.5	4.4
14	3.5	e3.0	e2.9	e2.8	e2.3	e2.3	2.3	5.9	24	11	6.4	4.3
15	3.4	e3.0	e2.9	e2.8	e2.3	e2.3	e2.1	7.2	26	11	6.3	4.3
16	3.2	e3.0	e2.9	e2.8	e2.3	e2.3	e2.1	7.2	26	11	6.2	4.3
17	3.4	e3.0	e2.9	e2.8	e2.3	e2.3	e2.2	6.8	29	10	6.3	4.3
18	3.5	e3.0	e2.9	e2.8	e2.3	e2.4	e2.2	8.2	28	9.5	6.5	4.3
19	3.4	e3.0	e2.9	e2.8	e2.3	e2.4	2.4	11	27	9.7	6.0	4.7
20	3.3	e3.0	e2.9	e2.8	e2.3	e2.4	2.5	11	26	8.9	5.9	5.3
21	3.5	e3.0	e2.9	e2.8	e2.3	e2.4	2.5	12	26	8.3	5.9	4.9
22	3.4	e3.0	e2.7	e2.8	e2.3	e2.4	2.3	13	26	8.7	5.7	4.4
23	3.2	e3.0	e2.8	e2.8	e2.3	e2.4	2.4	15	26	9.1	5.5	4.1
24	3.4	e3.0	e2.8	e2.8	e2.3	e2.4	2.8	16	25	9.0	5.3	4.3
25	3.3	e3.0	e2.8	e2.7	e2.3	e2.4	3.1	18	24	8.5	5.3	4.4
26	3.1	e3.0	e2.8	e2.7	e2.3	e2.4	2.5	16	23	8.0	5.4	4.0
27	3.4	e3.0	e2.8	e2.7	e2.3	e2.5	2.6	16	21	8.5	6.2	4.0
28	3.9	e3.0	e2.8	e2.6	e2.3	e2.5	3.0	18	20	8.7	6.7	3.9
29	3.7	e3.0	e2.8	e2.5	---	e2.5	3.6	20	19	7.9	5.8	3.9
30	3.4	e3.0	e2.8	e2.5	---	e2.5	3.4	21	18	7.8	5.4	4.0
31	3.3	---	e2.8	e2.5	---	e2.5	---	21	---	9.7	5.3	---
TOTAL	107.3	91.7	89.3	85.4	66.2	73.2	73.5	288.3	718	349.3	207.4	135.2
MEAN	3.46	3.06	2.88	2.75	2.36	2.36	2.45	9.30	23.9	11.3	6.69	4.51
MAX	4.0	3.5	3.0	2.8	2.5	2.5	3.6	21	29	18	9.5	5.4
MIN	3.1	3.0	2.7	2.5	2.2	2.3	1.8	2.4	18	7.8	5.3	3.9
AC-FT	213	182	177	169	131	145	146	572	1420	693	411	268

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 1999, BY WATER YEAR (WY)

MEAN	3.38	2.98	2.55	2.22	2.07	2.09	3.09	12.7	25.1	10.4	5.37	3.80
MAX	6.12	4.33	3.68	2.89	2.90	3.00	6.19	40.8	58.8	31.2	15.5	7.97
(WY)	1985	1985	1966	1997	1997	1986	1986	1996	1995	1995	1984	1984
MIN	2.02	1.77	1.37	1.39	1.40	1.40	1.44	5.49	4.49	2.55	2.19	1.83
(WY)	1982	1964	1964	1964	1961	1973	1973	1981	1963	1963	1977	1977

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1958 - 1999	
ANNUAL TOTAL	1651.5		2284.8			
ANNUAL MEAN	4.52		6.26		6.31	
HIGHEST ANNUAL MEAN					13.1	1984
LOWEST ANNUAL MEAN					3.10	1963
HIGHEST DAILY MEAN	18	Jun 2	29	Jun 17	153	Jun 18 1995
LOWEST DAILY MEAN	e2.2	Mar 5	1.8	Apr 9	1.1	Feb 26 1964
ANNUAL SEVEN-DAY MINIMUM	2.4	Mar 4	2.1	Apr 7	1.3	Nov 28 1963
INSTANTANEOUS PEAK FLOW			37	Jun 17	a311	Jun 17 1995
INSTANTANEOUS PEAK STAGE			2.66	Jun 17	3.47	Jun 17 1995
ANNUAL RUNOFF (AC-FT)	3280		4530		4570	
10 PERCENT EXCEEDS	9.0		17		15	
50 PERCENT EXCEEDS	3.1		3.1		3.1	
90 PERCENT EXCEEDS	2.6		2.3		1.9	

e Estimated
a From rating curve extended above 65 ft^3/s.

09050100 TENMILE CREEK BELOW NORTH TENMILE CREEK AT FRISCO, CO

LOCATION.--Lat 39°34'31", long 106°06'36", in $SE^1/_4NW^1/_4$ sec.34, T.5 S., R.78 W., Summit County, Hydrologic Unit 14010002, on right bank 220 ft upstream from bridge on U.S. Highway 6, 160 ft downstream from North Tenmile Creek, and 0.6 mi west of Frisco.

DRAINAGE AREA.--93.3 mi^2.

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

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 9,100 ft above sea level, from topographic map. Prior to Apr. 21, 1981 at site 720 ft downstream at different datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. Natural flow of stream affected by a few small diversions upstream from station for irrigation and municipal use, and transbasin diversion from Robinson Reservoir, capacity, 2,520 acre-ft, in Eagle River basin. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40	30	e24	e19	e18	e20	e28	55	446	470	157	96
2	47	32	e24	e19	e18	e20	e28	54	500	439	144	89
3	43	31	e24	e19	e18	e20	e28	51	562	393	126	86
4	48	28	e24	e19	e18	e20	e28	50	558	364	128	81
5	45	28	e24	e19	e18	e20	e28	48	467	335	137	76
6	42	26	e23	e19	e18	e20	e28	49	382	340	149	72
7	45	24	e22	e19	e18	e20	e28	48	462	327	129	68
8	48	26	e22	e19	e18	e20	28	58	593	304	119	60
9	46	e28	e22	e19	e18	e20	28	76	636	279	114	62
10	45	e30	e22	e19	e18	e20	26	84	622	247	116	61
11	43	e27	e22	e19	e18	e21	26	74	586	224	108	69
12	41	e26	e22	e19	e17	e21	26	70	582	204	102	67
13	40	e26	e22	e19	e18	e21	27	83	559	196	92	61
14	42	e26	e22	e19	e18	e21	28	117	575	199	88	58
15	39	e26	e22	e19	e18	e21	26	127	616	202	89	57
16	36	e26	e22	e19	e18	e22	27	140	644	204	86	58
17	35	e26	e22	e19	e18	e23	28	139	728	211	90	56
18	34	e26	e22	e19	e18	e23	24	164	669	183	99	57
19	34	e25	e22	e19	e18	e23	29	210	681	184	86	59
20	33	e24	e22	e19	e18	e25	32	252	679	170	85	71
21	32	e24	e21	e19	e18	e25	34	286	659	151	89	68
22	33	e24	e20	e19	e19	e25	33	329	668	173	85	64
23	32	e24	e19	e19	e19	e25	31	400	707	185	78	60
24	30	e24	e19	e19	e19	e27	34	483	709	160	75	66
25	29	e24	e19	e19	e19	e27	44	483	698	152	78	70
26	30	e24	e19	e19	e19	e27	41	367	661	143	92	63
27	32	e24	e19	e19	e19	e28	38	340	612	139	140	59
28	35	e24	e19	e18	e19	e28	45	350	566	143	133	57
29	34	e24	e19	e18	---	e28	52	416	519	139	112	55
30	32	e24	e19	e18	---	e28	60	459	477	126	100	54
31	31	---	e19	e18	---	e28	---	479	---	145	94	---
TOTAL	1176	781	663	585	510	717	963	6341	17823	7131	3320	1980
MEAN	37.9	26.0	21.4	18.9	18.2	23.1	32.1	205	594	230	107	66.0
MAX	48	32	24	19	19	28	60	483	728	470	157	96
MIN	29	24	19	18	17	20	24	48	382	126	75	54
AC-FT	2330	1550	1320	1160	1010	1420	1910	12580	35350	14140	6590	3930

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 1999, BY WATER YEAR (WY)

MEAN	32.3	25.0	19.6	16.9	17.2	19.2	38.0	251	485	198	75.2	44.7
MAX	77.7	76.2	34.5	34.0	33.8	46.0	95.0	493	818	607	251	127
(WY)	1985	1985	1994	1994	1983	1983	1962	1996	1997	1995	1984	1984
MIN	13.0	9.83	11.7	11.0	9.55	9.20	13.7	96.5	156	44.9	25.3	21.8
(WY)	1978	1978	1978	1963	1978	1976	1973	1995	1963	1977	1977	1977

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1958 - 1999	
ANNUAL TOTAL	30068		41990			
ANNUAL MEAN	82.4		115		102	
HIGHEST ANNUAL MEAN					183	1984
LOWEST ANNUAL MEAN					47.0	1977
HIGHEST DAILY MEAN	525	Jun 3	728	Jun 17	1480	Jun 17 1965
LOWEST DAILY MEAN	e19	Dec 23	e17	Feb 12	5.3	Oct 14 1994
ANNUAL SEVEN-DAY MINIMUM	19	Dec 23	18	Feb 6	7.9	Mar 8 1960
INSTANTANEOUS PEAK FLOW			866	Jun 23	a1910	Jun 16 1965
INSTANTANEOUS PEAK STAGE			4.22	Jun 23	6.15	Jun 16 1965
ANNUAL RUNOFF (AC-FT)	59640		83290		73890	
10 PERCENT EXCEEDS	246		406		322	
50 PERCENT EXCEEDS	34		33		31	
90 PERCENT EXCEEDS	22		19		14	

e Estimated
a From rating curve extended above 750 ft^3/s.

09050700 BLUE RIVER BELOW DILLON, CO

LOCATION.--Lat 39°37'32", long 106°03'57", in $SE^1/_4SE^1/_4$ sec.12, T.5 S., R.78 W., Summit County, Hydrologic Unit 14010002, on right bank 0.3 mi downstream from Dillon Dam, 0.1 mi upstream from Straight Creek, and 1.1 mi west of Dillon.

DRAINAGE AREA.--335 mi^2.

PERIOD OF RECORD.--January 1960 to current year. Statistical summary computed for 1963 to current year.

GAGE.--Water-stage recorder with satellite telemetry, and concrete control. Elevation of gage is 8,760 ft above sea level, from topographic map.

REMARKS.--No estimated daily discharges. Records good. Flow regulated since Sept. 3, 1963, by Dillon Reservoir, 0.3 mi upstream (station 09050600). Natural flow of stream affected by transmountain diversions, transbasin diversions, and diversions upstream from station for irrigation of about 400 acres of hay meadows. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	241	236	107	104	102	101	97	52	263	1290	472	323
2	241	237	107	104	102	101	98	52	482	1210	457	305
3	241	237	107	104	102	101	98	52	777	1150	387	273
4	241	236	107	104	101	101	97	58	994	1110	418	262
5	241	218	107	104	101	101	85	86	1280	1060	465	252
6	241	171	107	104	101	101	66	96	1410	974	507	241
7	241	151	106	104	101	101	66	96	1450	889	519	156
8	237	151	104	104	101	101	67	96	1450	899	503	102
9	233	133	104	104	101	101	67	96	1450	943	484	119
10	233	120	104	104	101	101	67	96	1450	951	485	131
11	234	120	104	104	101	101	67	96	1450	937	476	148
12	235	116	104	104	101	101	67	96	1450	800	456	162
13	236	107	104	104	101	101	67	96	1450	635	427	165
14	237	107	104	104	101	101	67	96	1450	527	402	165
15	237	107	104	104	101	101	65	96	1330	473	384	218
16	237	107	104	104	101	101	65	96	1190	500	363	245
17	237	107	104	104	100	101	65	96	1200	578	350	224
18	237	107	104	101	101	100	65	96	1280	609	356	209
19	237	107	105	104	101	87	65	96	1410	627	340	202
20	237	107	104	104	101	69	65	96	1550	592	328	213
21	237	107	104	104	101	69	61	96	1640	536	320	215
22	237	107	104	104	101	70	50	96	1640	481	312	208
23	237	107	104	104	101	70	51	96	1720	509	299	202
24	237	107	104	104	101	69	52	97	1810	495	282	199
25	237	107	104	103	101	68	52	73	1790	462	272	203
26	237	107	104	103	101	63	52	78	1790	419	273	196
27	237	107	104	103	101	51	52	96	1800	367	300	183
28	237	107	104	103	101	50	52	132	1720	373	352	174
29	237	107	104	103	---	50	52	159	1540	406	363	168
30	237	107	104	102	---	50	52	161	1420	393	349	163
31	237	---	104	102	---	77	---	185	---	406	334	---
TOTAL	7361	4052	3245	3212	2830	2660	1992	3009	41636	21601	12035	6026
MEAN	237	135	105	104	101	85.8	66.4	97.1	1388	697	388	201
MAX	241	237	107	104	102	101	98	185	1810	1290	519	323
MIN	233	107	104	101	100	50	50	52	263	367	272	102
AC-FT	14600	8040	6440	6370	5610	5280	3950	5970	82590	42850	23870	11950

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1963 - 1999, BY WATER YEAR (WY)

MEAN	117	101	85.7	76.2	78.9	84.0	129	322	740	452	259	163
MAX	243	268	193	158	155	269	742	1101	1813	1476	999	348
(WY)	1987	1985	1985	1966	1997	1996	1996	1984	1984	1984	1984	1983
MIN	.000	23.2	44.6	31.0	47.6	48.6	39.3	24.0	32.3	51.5	51.7	18.6
(WY)	1964	1964	1989	1984	1986	1986	1965	1965	1965	1981	1981	1963

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1963 - 1999	
ANNUAL TOTAL	75827		109659			
ANNUAL MEAN	208		300		218	
HIGHEST ANNUAL MEAN					538	1984
LOWEST ANNUAL MEAN					65.5	1981
HIGHEST DAILY MEAN	1090	May 30	1810	Jun 24	1940	May 24 1984
LOWEST DAILY MEAN	104	Dec 8	50	Mar 28	a.00	Sep 4 1963
ANNUAL SEVEN-DAY MINIMUM	104	Dec 8	52	Apr 22	.00	Sep 4 1963
INSTANTANEOUS PEAK FLOW			1820	Jun 23	2010	May 25 1984
INSTANTANEOUS PEAK STAGE			3.63	Jun 23	b3.88	May 25 1984
ANNUAL RUNOFF (AC-FT)	150400		217500		157800	
10 PERCENT EXCEEDS	387		914		490	
50 PERCENT EXCEEDS	114		107		103	
90 PERCENT EXCEEDS	107		69		51	

a Also occurred Sept 5 to Nov 19, 1963.
b Maximum gage height for period of record, 3.95 ft, Jun 22, 1983.

09051050 STRAIGHT CREEK BELOW LASKEY GULCH, NEAR DILLON, CO

LOCATION.--Lat 39°38'23", long 106°02'23", in $SW^1/_4SW^1/_4$ sec.5, T.5 S., R.77 W., Summit County, Hydrologic Unit 14010002, on right bank, 120 ft upstream from culverts on Deer Trail Drive, in the community of Dillon Valley, 0.9 mi north of Dillon, 1.1 mi downstream of Laskey Gulch, and 1.8 mi upstream from mouth.

DRAINAGE AREA.--18.3 mi^2.

PERIOD OF RECORD.--October 1986 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 9,070 ft above sea level, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Diversion upstream from station for municipal purposes downstream from station. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.2	6.2	e5.2	e3.9	e3.6	e3.4	e3.4	5.9	37	74	27	12
2	7.6	6.5	e5.2	e3.9	e3.6	e3.4	e3.4	5.9	42	69	21	12
3	6.9	e6.3	e5.0	e3.9	e3.6	e3.4	e3.4	5.8	52	62	20	12
4	7.8	e6.2	e5.0	e3.9	e3.6	e3.4	e3.4	5.6	55	58	22	11
5	7.2	e6.0	e4.9	e3.9	e3.6	e3.4	e3.4	5.5	45	54	23	10
6	e7.2	e6.0	e4.7	e3.9	e3.6	e3.4	e3.4	5.9	38	52	22	9.9
7	8.1	e6.0	e4.5	e3.9	e3.6	e3.4	e3.4	6.5	49	50	19	9.8
8	8.1	e5.8	e4.4	e3.9	e3.6	e3.4	e3.4	7.4	61	45	17	9.4
9	7.9	e5.8	e4.4	e3.9	e3.6	e3.4	e3.4	8.7	65	41	18	9.1
10	7.6	e5.6	e4.3	e3.9	e3.6	e3.4	4.9	8.8	72	39	21	9.1
11	7.2	e5.2	e4.2	e3.9	e3.6	e3.4	5.3	7.0	70	37	19	10
12	7.1	e5.2	e4.2	e3.9	e3.3	e3.4	5.4	6.8	64	34	17	9.7
13	7.1	e5.2	e4.2	e3.9	e3.4	e3.4	5.0	9.1	69	33	15	9.2
14	7.4	e5.2	e4.2	e3.9	e3.4	e3.4	4.8	11	74	32	15	8.9
15	7.3	e5.2	e4.2	e3.9	e3.4	e3.4	5.1	12	82	32	15	8.6
16	7.3	e5.4	e4.2	e3.9	e3.4	e3.4	5.2	12	74	31	14	8.6
17	7.2	e5.6	e4.2	e3.9	e3.4	e3.4	5.3	11	72	30	14	8.1
18	e7.0	e5.6	e4.2	e3.9	e3.4	e3.4	5.1	13	74	28	14	8.1
19	e7.2	e5.4	e4.2	e3.9	e3.4	e3.4	5.3	15	84	28	13	9.8
20	7.3	e5.2	e4.2	e3.9	e3.4	e3.4	5.4	17	91	25	13	11
21	6.5	e5.0	e4.0	e3.9	e3.4	e3.4	5.3	20	97	24	13	9.8
22	6.7	e5.0	e3.7	e3.9	e3.4	e3.4	5.1	23	101	25	12	8.9
23	6.6	e5.0	e3.8	e3.9	e3.4	e3.4	4.8	26	110	24	12	8.4
24	6.2	e5.0	e3.8	e3.9	e3.4	e3.4	5.8	35	107	22	13	9.1
25	6.3	e5.0	e3.8	e3.9	e3.4	e3.4	6.0	42	110	21	12	8.9
26	6.6	e5.0	e3.8	e3.9	e3.4	e3.4	5.4	31	108	20	12	7.9
27	6.6	e5.2	e3.8	e3.9	e3.4	e3.4	5.8	29	104	23	18	7.5
28	7.0	e5.4	e3.8	e3.8	e3.4	e3.4	5.9	31	94	26	17	7.8
29	6.8	e5.6	e3.8	e3.6	---	e3.4	7.1	34	86	21	13	7.8
30	6.4	e5.4	e3.8	e3.6	---	e3.4	7.1	35	78	20	12	7.7
31	6.1	---	e3.8	e3.6	---	e3.4	---	37	---	29	12	---
TOTAL	219.5	165.2	131.5	119.9	97.3	105.4	145.7	522.9	2265	1109	505	280.1
MEAN	7.08	5.51	4.24	3.87	3.48	3.40	4.86	16.9	75.5	35.8	16.3	9.34
MAX	8.1	6.5	5.2	3.9	3.6	3.4	7.1	42	110	74	27	12
MIN	6.1	5.0	3.7	3.6	3.3	3.4	3.4	5.5	37	20	12	7.5
AC-FT	435	328	261	238	193	209	289	1040	4490	2200	1000	556

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 1999, BY WATER YEAR (WY)

MEAN	7.47	5.99	4.67	3.96	3.84	4.09	6.21	25.8	68.2	33.1	13.3	8.45
MAX	12.2	8.77	6.99	5.54	6.40	7.32	9.99	63.1	119	89.0	23.6	13.3
(WY)	1996	1996	1996	1996	1996	1996	1989	1996	1996	1995	1995	1995
MIN	4.08	3.86	3.71	2.43	2.39	3.14	3.55	9.45	36.2	11.7	8.68	4.31
(WY)	1990	1990	1995	1992	1992	1992	1995	1995	1987	1994	1994	1989

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1987 - 1999	
ANNUAL TOTAL	4142.8		5666.5			
ANNUAL MEAN	11.4		15.5		15.4	
HIGHEST ANNUAL MEAN					25.5	1996
LOWEST ANNUAL MEAN					10.9	1987
HIGHEST DAILY MEAN	61	Jun 3	110	Jun 23	226	Jun 17 1995
LOWEST DAILY MEAN	e3.2	Feb 28	e3.3	Feb 12	1.8	Jan 31 1992
ANNUAL SEVEN-DAY MINIMUM	3.3	Feb 22	3.4	Feb 12	1.9	Jan 26 1992
INSTANTANEOUS PEAK FLOW			138	Jun 23	a416	Jun 17 1995
INSTANTANEOUS PEAK STAGE			5.11	Jun 23	5.78	Jun 17 1995
ANNUAL RUNOFF (AC-FT)	8220		11240		11190	
10 PERCENT EXCEEDS	27		42		40	
50 PERCENT EXCEEDS	6.3		6.2		6.7	
90 PERCENT EXCEEDS	3.4		3.4		3.5	

e Estimated
a From rating curve extended above 150 ft^3/s.

09057500 BLUE RIVER BELOW GREEN MOUNTAIN RESERVOIR, CO

LOCATION.--Lat 39°52'49", long 106°20'00", in SW$^{1}/_{4}$NE$^{1}/_{4}$ sec.15, T.2 S., R.80 W., Summit County, Hydrologic Unit 14010002, on left bank 0.3 mi upstream from Elliott Creek, 0.3 mi downstream from Green Mountain Dam, and 13 mi southeast of Kremmling.

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

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WSP 2124: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 7,682.66 ft above sea level, (levels by U.S. Bureau of Reclamation). Prior to Oct. 1, 1951, water-stage recorder at site 3.7 mi downstream at different datum.

REMARKS.--Records good except for estimated daily discharges, which are fair. Flow regulated by Green Mountain Reservoir since November 1942 (station 09057000). Diversions for irrigation of about 5,000 acres upstream from station. Transmountain diversions upstream from station (see elsewhere in this report).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e629	e472	436	417	235	226	138	105	512	1450	670	606
2	e641	e470	425	416	232	172	143	104	719	1510	669	606
3	e637	e470	422	415	231	115	144	104	789	1740	669	606
4	e639	e458	428	419	229	103	146	102	1080	1680	670	605
5	e601	e470	429	426	235	101	146	104	1350	1570	669	605
6	e443	e470	424	423	233	100	144	105	1420	1460	742	605
7	e453	e470	422	421	232	100	190	104	1420	1430	965	605
8	e514	e470	422	415	228	100	234	102	1420	1450	959	605
9	e560	e470	420	414	236	99	208	100	1280	1450	956	472
10	e561	e470	426	413	229	100	144	99	1040	1450	955	552
11	e564	430	424	413	242	99	146	99	810	1450	890	558
12	e565	431	423	222	243	99	145	97	601	1450	802	563
13	e567	429	422	240	238	100	192	99	484	1440	805	563
14	e567	429	430	242	239	99	237	99	482	1440	805	564
15	e567	429	431	243	239	98	239	99	471	1190	807	563
16	e565	446	440	242	237	98	241	99	590	859	807	564
17	e564	459	427	243	238	97	242	99	712	865	710	562
18	e561	431	420	244	244	98	241	99	710	868	614	563
19	e560	424	414	243	237	99	242	99	712	873	605	565
20	e576	426	413	237	234	99	240	99	710	870	616	566
21	e570	426	424	235	247	99	238	100	790	870	616	557
22	e450	423	427	231	232	98	212	100	961	869	617	556
23	e552	423	423	232	227	99	102	100	967	868	616	563
24	e554	430	422	231	236	99	103	100	1220	867	617	561
25	e562	427	422	232	253	99	104	101	1390	869	612	561
26	e559	422	420	233	247	99	102	102	1470	781	605	558
27	e546	421	418	232	245	100	100	102	1460	667	604	558
28	e464	421	417	235	244	99	102	102	1450	666	606	562
29	e460	422	421	238	---	100	108	102	1450	667	605	562
30	e456	441	418	238	---	115	107	102	1450	669	606	567
31	e460	---	417	239	---	143	---	102	---	670	606	---
TOTAL	16967	13280	13127	9324	6642	3352	5080	3130	29920	34958	22095	17103
MEAN	547	443	423	301	237	108	169	101	997	1128	713	570
MAX	641	472	440	426	253	226	242	105	1470	1740	965	606
MIN	443	421	413	222	227	97	100	97	471	666	604	472
AC-FT	33650	26340	26040	18490	13170	6650	10080	6210	59350	69340	43830	33920

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1943 - 1999, BY WATER YEAR (WY)

MEAN	378	295	316	309	296	320	397	534	756	812	624	498
MAX	1258	800	580	566	559	864	1286	1557	2134	2536	1547	846
(WY)	1963	1963	1947	1948	1962	1962	1996	1952	1984	1984	1984	1990
MIN	144	82.5	.72	.46	.19	.61	47.2	55.7	54.4	131	270	192
(WY)	1950	1943	1943	1943	1943	1943	1943	1969	1981	1981	1964	1946

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1943 - 1999	
ANNUAL TOTAL	165571		174978			
ANNUAL MEAN	454		479			
HIGHEST ANNUAL MEAN					946	1984
LOWEST ANNUAL MEAN					200	1964
HIGHEST DAILY MEAN	1430	May 31	1740	Jul 3	4010	Jul 12 1995
LOWEST DAILY MEAN	55	Jul 1	97	Mar 17	a,b.00	Dec 6 1942
ANNUAL SEVEN-DAY MINIMUM	55	Jun 30	98	Mar 14	.00	Jan 5 1943
INSTANTANEOUS PEAK FLOW			1810	Jul 3	4040	Jul 12 1995
INSTANTANEOUS PEAK STAGE			7.82	Jul 3	10.85	Jul 12 1995
ANNUAL RUNOFF (AC-FT)	328400		347100			
10 PERCENT EXCEEDS	637		880		857	
50 PERCENT EXCEEDS	500		426		373	
90 PERCENT EXCEEDS	172		100		124	

e Estimated
a No flow at times in 1943.
b Minimum daily discharge (prior to Green Mountain Reservoir), 80 ft^3/s, Feb 18-24, 1938, Feb 18-19, 1940.

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

WATER-QUALITY RECORDS

PERIOD OF RECORD.--January 1986 to September 1987, October 1995 to September 1999 (discontinued).

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1986 to September 1987, October 1995 to September 1999 (discontinued).
WATER TEMPERATURE: October 1986 to September 1987, October 1995 to September 1999 (discontinued).

INSTRUMENTATION.--Water-quality monitor from January 1986 to September 1987, and water-quality monitor with satellite telemetry since October 1995.

REMARKS.--Records for specific condutance are good. Records for water temperature are fair.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum 247 microsiemens, Apr. 8, 9, 1999; minimum, 147 microsiemens, Sept. 13-14, 16, 1997.
WATER TEMPERATURE: Maximum 16.5°C, Sept. 9, 1998; minimum 1.8°C, Mar. 19, and Mar. 27 to Apr. 1, 1997.

EXTREMES FOR CURRENT PERIOD.--
SPECIFIC CONDUCTANCE: Maximum, 247 microsiemens, Apr. 8, 9; minimum, 175 microsiemens, Oct. 6.
WATER TEMPERATURE: Maximum 16.5°C, Sept. 9; minimum, 2.5°C, Apr. 1 and 2.

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	183	177	181	188	183	185	184	183	184	183	182	183
2	183	182	182	187	185	186	184	183	183	183	182	183
3	184	182	183	188	184	186	184	182	183	183	182	183
4	185	183	184	188	183	186	183	182	182	184	183	183
5	187	176	184	189	182	186	183	182	182	184	183	183
6	186	175	184	189	183	187	183	182	182	184	183	184
7	186	180	182	190	185	187	183	182	182	185	184	184
8	182	180	181	190	184	186	183	182	182	185	183	184
9	181	179	180	186	183	184	183	182	182	185	184	184
10	180	178	179	184	181	183	183	182	182	185	184	185
11	180	178	179	184	181	183	183	182	182	187	185	185
12	180	178	179	182	180	181	183	182	182	187	185	186
13	181	179	180	181	180	181	---	---	---	189	186	187
14	182	179	180	181	180	181	---	---	---	190	187	188
15	183	180	182	182	181	181	---	---	---	189	187	188
16	184	180	182	183	181	181	---	---	---	189	188	188
17	184	182	183	183	181	182	181	180	180	188	187	188
18	184	180	182	183	181	182	182	180	181	189	187	188
19	184	180	182	182	181	182	182	181	182	189	187	188
20	185	181	184	182	181	182	182	181	181	191	188	189
21	185	181	184	182	182	182	182	181	182	190	189	189
22	185	181	183	182	178	182	182	181	181	190	189	189
23	184	180	182	182	182	182	182	181	181	190	189	190
24	184	180	182	183	182	182	182	181	182	191	189	190
25	184	180	182	183	182	182	185	181	182	192	190	191
26	185	182	184	183	182	182	183	181	182	192	190	191
27	185	183	184	183	182	183	183	182	182	192	191	192
28	188	183	185	183	182	183	183	182	182	193	191	192
29	185	183	184	184	183	183	183	182	182	193	192	192
30	185	183	184	184	183	184	183	182	182	193	192	193
31	186	183	184	---	---	---	183	182	182	194	193	193
MONTH	188	175	182	190	178	183	---	---	---	194	182	188

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

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	194	193	194	207	204	205	244	241	243	220	220	220
2	197	194	194	209	206	207	245	242	244	220	219	220
3	196	194	195	209	208	208	246	240	242	221	220	220
4	196	195	195	209	207	208	242	239	240	221	219	220
5	195	194	195	210	208	209	244	239	241	221	220	220
6	197	195	195	210	208	209	243	240	242	---	---	---
7	198	196	197	210	209	210	243	235	239	221	220	220
8	198	197	197	210	209	209	247	231	238	221	220	220
9	202	197	197	210	209	209	247	229	237	221	220	220
10	202	197	198	211	209	210	245	233	238	222	219	220
11	200	197	198	211	210	211	235	229	233	222	220	220
12	199	198	199	212	210	211	239	231	234	221	220	221
13	199	196	198	213	211	212	235	223	230	221	220	221
14	200	197	199	214	212	213	246	227	236	221	220	221
15	200	199	200	215	213	213	243	233	237	221	220	221
16	200	199	200	214	213	214	240	230	235	222	221	221
17	201	200	200	217	214	215	233	219	224	222	221	221
18	201	200	201	218	217	218	233	217	224	222	221	221
19	202	200	201	219	217	218	231	220	224	222	221	221
20	202	201	201	222	219	220	228	218	223	222	221	221
21	202	201	201	223	221	222	229	220	224	222	221	222
22	202	201	202	225	222	223	221	217	219	223	221	222
23	204	202	203	228	224	226	218	216	217	222	221	222
24	204	203	203	229	226	227	219	217	218	222	221	222
25	205	203	204	232	229	230	220	218	219	222	220	222
26	205	204	204	234	232	233	220	219	219	223	219	222
27	205	204	205	238	233	235	220	219	219	222	220	222
28	206	204	205	241	237	239	220	219	219	223	222	222
29	---	---	---	244	241	242	220	219	219	223	220	221
30	---	---	---	245	243	244	220	219	220	223	221	222
31	---	---	---	244	243	244	---	---	---	223	220	222
MONTH	206	193	199	245	204	219	247	216	230	---	---	---

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	224	219	221	207	203	205	199	197	198	191	187	190
2	221	219	220	207	202	204	199	196	198	191	188	189
3	221	217	219	204	200	202	199	196	198	189	187	188
4	219	217	218	204	201	202	200	196	198	190	186	188
5	219	212	215	205	200	203	198	196	197	188	185	187
6	218	203	212	204	201	203	198	196	197	188	185	186
7	215	205	210	205	198	203	198	195	197	187	184	186
8	210	203	207	204	201	203	199	195	197	186	183	185
9	213	202	207	204	202	203	198	195	196	186	178	183
10	211	202	207	204	201	202	197	195	196	186	183	184
11	213	203	208	203	201	202	197	195	196	185	183	184
12	213	202	209	203	201	202	197	194	196	184	182	184
13	214	204	210	203	201	202	197	194	195	185	182	184
14	212	207	209	203	200	202	197	193	195	185	182	183
15	213	208	211	203	200	201	197	193	195	184	182	183
16	213	211	212	202	200	201	196	193	194	185	182	183
17	214	212	212	202	198	200	197	193	194	184	182	183
18	215	212	213	202	200	201	196	193	194	184	182	183
19	215	209	213	201	199	200	195	191	193	184	182	184
20	214	212	213	201	199	200	195	192	194	184	180	183
21	215	211	213	201	198	200	194	192	193	185	183	184
22	215	212	214	200	198	200	194	192	193	186	184	185
23	216	212	214	201	197	199	193	191	193	187	185	186
24	215	212	213	201	198	199	193	191	192	188	185	187
25	215	210	212	201	198	199	193	191	192	187	185	186
26	212	209	210	200	197	199	193	191	192	188	185	186
27	210	208	209	200	197	199	193	190	192	186	182	184
28	210	205	207	200	197	198	193	190	191	186	183	184
29	208	205	206	200	197	199	192	190	191	186	182	184
30	208	204	206	199	197	198	193	189	191	187	183	185
31	---	---	---	199	196	198	193	188	190	---	---	---
MONTH	224	202	212	207	196	201	200	188	194	191	178	185

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

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	13.7	13.1	13.3	9.7	9.4	9.5	5.7	5.6	5.6	3.1	3.1	3.1
2	13.5	13.4	13.4	9.4	9.3	9.4	5.6	5.5	5.5	3.1	3.0	3.1
3	13.4	13.2	13.3	9.4	9.1	9.3	5.5	5.5	5.5	3.1	3.0	3.0
4	13.3	13.1	13.2	9.4	9.0	9.2	5.5	5.3	5.4	3.1	3.0	3.1
5	13.2	13.0	13.1	9.3	8.9	9.1	5.3	5.2	5.3	3.1	3.0	3.0
6	13.2	12.7	13.0	9.0	8.8	8.9	5.2	5.1	5.1	3.1	3.0	3.0
7	13.0	12.3	12.6	8.9	8.6	8.8	5.1	4.8	4.9	3.0	3.0	3.0
8	12.5	11.9	12.1	8.7	8.4	8.6	4.8	4.7	4.8	3.1	3.0	3.0
9	12.3	11.6	12.0	8.5	8.2	8.4	4.8	4.5	4.6	3.1	3.0	3.0
10	12.1	11.7	11.9	8.2	8.1	8.2	4.5	4.3	4.5	3.1	3.0	3.0
11	12.0	11.7	11.8	8.1	7.9	8.0	4.3	4.2	4.3	3.1	3.0	3.0
12	12.1	11.5	11.8	7.9	7.4	7.7	4.2	4.0	4.1	3.4	3.0	3.1
13	11.7	11.4	11.6	7.5	7.2	7.4	---	---	---	3.1	3.0	3.0
14	11.7	11.3	11.5	7.3	7.0	7.2	---	---	---	3.1	3.0	3.0
15	11.6	11.2	11.4	7.1	6.6	6.9	---	---	---	3.1	2.9	3.0
16	11.6	11.2	11.4	7.2	6.8	7.0	---	---	---	3.1	2.9	3.0
17	11.4	11.2	11.3	7.1	6.5	6.9	4.0	3.9	4.0	3.1	3.0	3.1
18	11.5	11.1	11.3	6.8	6.6	6.7	4.0	3.7	3.8	3.2	3.1	3.1
19	11.3	10.8	11.0	6.8	6.7	6.8	3.7	3.7	3.7	3.2	3.1	3.1
20	11.2	10.7	10.9	6.7	6.6	6.6	3.7	3.4	3.6	3.2	3.0	3.1
21	11.0	10.6	10.8	6.6	6.4	6.5	3.4	3.2	3.3	3.1	3.0	3.1
22	11.0	6.5	10.4	6.5	6.4	6.4	3.3	2.6	3.0	3.2	3.0	3.1
23	10.8	10.3	10.5	6.4	6.3	6.3	3.1	3.0	3.0	3.2	3.1	3.1
24	10.6	10.1	10.4	6.3	6.2	6.3	3.2	3.0	3.1	3.2	3.1	3.1
25	10.5	10.1	10.3	6.2	6.1	6.2	3.2	3.1	3.1	3.2	3.1	3.1
26	10.3	9.9	10.1	6.1	6.0	6.0	3.2	3.1	3.1	3.2	3.0	3.1
27	10.1	9.9	10.0	6.0	5.9	6.0	3.1	3.1	3.1	3.2	3.0	3.1
28	10.0	9.6	9.9	5.9	5.8	5.9	3.2	3.1	3.1	3.2	3.0	3.0
29	10.0	9.8	9.9	5.8	5.7	5.8	3.1	3.1	3.1	3.1	3.0	3.0
30	9.9	9.7	9.8	5.7	5.6	5.7	3.1	3.1	3.1	3.1	3.0	3.0
31	9.8	9.5	9.7	---	---	---	3.2	3.1	3.1	3.1	3.0	3.0
MONTH	13.7	6.5	11.4	9.7	5.6	7.4	---	---	---	3.4	2.9	3.0

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	3.1	3.0	3.0	3.1	2.8	2.9	3.2	2.5	2.8	5.4	5.0	5.2
2	3.1	2.9	3.0	3.1	2.8	2.9	3.0	2.5	2.7	5.5	4.5	5.0
3	3.1	2.9	3.0	3.4	2.8	3.0	3.0	2.6	2.8	5.2	4.8	4.9
4	3.1	2.9	3.0	3.5	2.6	3.0	3.1	2.7	2.8	5.4	4.9	5.1
5	3.2	3.0	3.0	3.3	2.8	3.0	3.3	2.8	2.9	5.6	4.9	5.1
6	3.1	3.0	3.0	3.3	2.8	2.9	3.3	2.8	2.9	5.5	4.7	4.9
7	3.2	3.0	3.0	3.6	2.8	3.1	3.4	2.8	2.9	5.8	4.9	5.2
8	3.1	3.0	3.0	3.5	3.0	3.1	3.3	2.8	3.0	5.9	5.0	5.3
9	3.2	2.9	3.0	3.7	3.0	3.1	3.4	2.9	3.1	6.2	5.2	5.4
10	3.1	2.9	3.0	3.6	2.8	3.1	3.4	3.0	3.2	5.7	4.6	5.1
11	3.1	2.9	2.9	3.6	3.0	3.2	3.8	3.2	3.4	6.0	5.0	5.4
12	3.1	2.9	2.9	3.2	2.9	3.1	3.8	3.2	3.4	6.4	5.2	5.6
13	3.1	2.9	2.9	3.7	2.9	3.1	3.8	3.2	3.4	6.5	5.2	5.6
14	3.1	2.9	2.9	3.7	3.0	3.2	3.5	3.1	3.3	6.2	5.2	5.5
15	3.1	2.9	2.9	3.8	3.0	3.2	3.6	3.2	3.4	6.6	5.3	5.7
16	3.1	2.9	2.9	3.6	3.0	3.2	3.7	3.3	3.5	6.6	5.3	5.7
17	3.0	2.8	2.9	3.8	3.0	3.2	3.6	3.2	3.4	6.9	5.6	6.1
18	3.1	2.9	2.9	3.8	3.0	3.2	3.9	3.4	3.6	6.5	5.6	6.0
19	3.0	2.8	2.9	3.8	3.1	3.2	3.9	3.5	3.6	6.7	5.5	5.9
20	3.1	2.9	2.9	3.8	3.0	3.2	4.1	3.6	3.7	6.4	5.7	6.0
21	3.1	2.8	2.9	3.6	2.8	3.0	4.0	3.5	3.8	6.6	5.6	6.0
22	3.0	2.8	2.9	3.6	3.0	3.1	4.2	3.8	4.0	6.8	5.7	6.1
23	3.1	2.9	2.9	3.3	2.7	2.9	4.8	4.1	4.3	7.2	5.8	6.2
24	3.1	2.9	2.9	3.5	2.7	2.9	5.1	4.2	4.5	6.8	5.9	6.3
25	3.1	2.8	2.9	3.7	2.9	3.1	5.1	4.4	4.6	7.0	5.9	6.4
26	3.1	2.8	2.9	3.6	2.9	3.0	4.6	4.4	4.5	7.3	6.0	6.5
27	3.1	2.8	2.9	3.6	2.7	2.9	4.7	4.2	4.3	6.7	5.9	6.2
28	3.1	2.8	2.9	3.4	2.6	2.8	4.8	4.4	4.6	7.2	6.0	6.5
29	---	---	---	3.4	2.6	2.8	5.5	4.6	5.0	7.5	6.1	6.6
30	---	---	---	3.4	2.6	2.8	5.5	5.0	5.1	7.3	6.0	6.5
31	---	---	---	3.2	2.6	2.8	---	---	---	7.6	6.2	6.7
MONTH	3.2	2.8	2.9	3.8	2.6	3.0	5.5	2.5	3.6	7.6	4.5	5.8

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

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	7.4	6.2	6.7	8.9	8.2	8.4	10.4	9.9	10.1	13.0	12.2	12.5
2	7.2	6.6	6.9	9.6	8.3	8.6	10.5	9.8	10.2	13.0	12.3	12.6
3	7.4	6.5	7.0	10.2	9.1	9.6	10.9	9.9	10.2	13.0	12.5	12.7
4	7.3	6.7	7.0	9.8	9.1	9.5	11.0	9.7	10.3	13.0	12.3	12.7
5	7.5	6.7	7.2	10.0	8.5	9.1	10.6	10.1	10.4	13.1	12.5	12.8
6	8.3	6.7	7.3	9.0	8.6	8.8	10.8	10.3	10.5	13.2	12.6	12.9
7	7.9	6.9	7.4	12.6	8.5	9.2	11.1	10.3	10.6	13.3	12.5	13.0
8	7.7	7.2	7.5	9.0	8.6	8.8	11.1	10.1	10.7	13.4	12.8	13.1
9	7.6	6.7	7.2	8.9	8.7	8.8	11.1	10.4	10.8	16.5	13.0	14.0
10	8.0	7.1	7.5	9.1	8.7	8.9	11.1	10.5	10.8	13.3	12.9	13.2
11	8.1	7.1	7.5	9.1	8.8	9.0	11.1	10.6	10.9	13.4	13.0	13.2
12	8.3	7.2	7.6	9.4	8.8	9.0	11.4	10.7	11.0	13.4	13.1	13.3
13	8.2	7.2	7.6	9.2	8.9	9.0	11.6	10.6	11.1	13.7	13.0	13.3
14	7.7	7.2	7.4	9.5	9.0	9.2	11.6	10.7	11.2	13.6	13.0	13.4
15	7.9	7.3	7.6	9.5	9.0	9.2	11.7	10.8	11.2	13.6	13.3	13.5
16	7.8	7.5	7.7	9.5	9.1	9.2	11.8	11.0	11.3	13.6	13.1	13.4
17	7.9	7.6	7.7	10.0	9.1	9.4	11.9	10.8	11.4	13.6	13.4	13.5
18	8.0	7.4	7.7	9.4	9.2	9.3	11.7	11.1	11.4	13.6	13.2	13.4
19	8.1	7.6	7.8	9.7	9.3	9.5	12.2	11.0	11.6	13.5	13.3	13.4
20	7.9	7.7	7.8	9.6	9.3	9.5	11.9	11.2	11.5	14.7	13.3	13.5
21	8.0	7.5	7.8	9.8	9.4	9.6	11.9	11.4	11.7	13.5	13.3	13.4
22	8.1	7.8	7.9	9.8	9.4	9.6	11.9	11.5	11.7	13.4	13.2	13.3
23	8.3	7.7	7.9	10.0	9.3	9.7	12.2	11.6	11.8	13.4	13.1	13.2
24	8.2	7.8	8.0	10.1	9.4	9.7	12.3	11.6	11.9	13.3	13.1	13.2
25	8.2	7.8	8.0	10.0	9.5	9.7	12.3	11.6	12.0	13.3	13.1	13.2
26	8.3	8.0	8.1	10.1	9.6	9.8	12.4	11.7	12.1	13.4	12.8	13.2
27	8.3	7.9	8.1	10.2	9.6	9.9	12.4	11.8	12.1	13.7	13.0	13.3
28	8.6	8.0	8.2	10.2	9.5	9.9	12.4	12.0	12.2	13.4	13.1	13.2
29	8.4	8.1	8.2	10.2	9.7	9.9	12.5	12.1	12.3	13.4	12.9	13.2
30	8.5	8.1	8.3	10.2	9.9	10.0	12.8	11.6	12.3	13.3	12.7	13.0
31	---	---	---	10.4	9.9	10.1	12.9	11.8	12.5	---	---	---
MONTH	8.6	6.2	7.6	12.6	8.2	9.4	12.9	9.7	11.3	16.5	12.2	13.2

09058000 COLORADO RIVER NEAR KREMMLING, CO

LOCATION.--Lat 40°02'12", long 106°26'22", in NE$^1/_4$SW$^1/_4$ sec.23, T.1 N., R.81 W., Grand County, Hydrologic Unit 14010001, on right bank at upstream end of Gore Canyon, 3.0 mi southwest of Kremmling and 3.8 mi downstream from Blue River.

DRAINAGE AREA.--2,382 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1904 to September 1918 (published as Grand River near Kremmling), October 1961 to September 1970, October 1971 to current year. Statistical summary computed for 1962 to current year.

REVISED RECORDS.--WSP 2124: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 7,320 ft above sea level, from topographic map. See WSP 1313 for history of changes prior to Oct. 1, 1961.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	992	784	709	e585	e490	516	579	654	2280	3730	1410	990
2	1020	821	699	e585	e500	480	606	649	2880	3650	1440	1070
3	1010	822	690	e583	e505	427	583	633	3020	3850	1330	1070
4	1010	808	677	e579	e507	412	560	616	3440	3670	1230	1060
5	1010	813	678	e575	e510	424	549	604	3950	3460	1190	1060
6	828	809	626	e560	515	403	531	590	3940	2960	1250	1020
7	771	814	614	e550	508	396	534	575	3690	2530	1550	1010
8	814	801	623	e545	522	399	653	566	3550	2450	1570	979
9	883	797	646	e540	e522	391	665	596	3380	2440	1540	891
10	889	744	646	e540	e522	417	568	645	2720	2340	1510	1000
11	900	718	635	e537	522	412	525	692	2310	2240	1490	1010
12	876	758	654	e530	e520	416	524	625	2120	2170	1350	950
13	886	743	653	523	e520	406	552	646	1860	2140	1320	947
14	893	757	659	e525	e518	402	664	680	1800	2060	1320	1120
15	911	760	663	e522	e518	414	664	742	1960	1990	1310	1300
16	906	777	673	520	e515	418	618	740	2380	1610	1310	1340
17	902	782	648	508	513	440	569	757	2580	1550	1260	1360
18	910	760	649	520	e517	471	602	762	2510	1590	1120	1380
19	899	755	651	509	519	513	629	766	2420	1620	1110	1400
20	891	729	632	517	512	555	667	833	2360	1650	1110	1460
21	905	710	647	503	509	583	730	862	2260	1580	1100	1410
22	830	731	608	497	517	631	767	963	2490	1550	1070	1460
23	848	729	e605	498	e510	656	598	1030	2530	1520	1040	1430
24	871	727	e600	501	502	638	489	1080	2760	1480	992	1430
25	861	714	e600	501	e509	624	505	1160	3210	1470	989	1420
26	854	701	e595	511	e508	663	570	1250	3660	1440	975	1410
27	834	688	e593	e507	507	701	542	1440	3670	1250	989	1400
28	786	687	e590	505	513	604	490	1740	3560	1220	979	1410
29	814	698	e592	477	---	507	501	1660	3660	1270	1000	1400
30	804	706	e590	e480	---	466	597	1830	3790	1300	992	1410
31	798	---	e587	e485	---	528	---	2010	---	1310	992	---
TOTAL	27406	22643	19732	16318	14350	15313	17631	28396	86740	65090	37838	36597
MEAN	884	755	637	526	512	494	588	916	2891	2100	1221	1220
MAX	1020	822	709	585	522	701	767	2010	3950	3850	1570	1460
MIN	771	687	587	477	490	391	489	566	1800	1220	975	891
AC-FT	54360	44910	39140	32370	28460	30370	34970	56320	172000	129100	75050	72590

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 1999, BY WATER YEAR (WY)

MEAN	744	650	583	561	552	657	1038	1922	2222	1605	1091	867
MAX	1413	1030	1067	1000	1025	1394	3297	6200	7160	5840	2321	1366
(WY)	1963	1985	1985	1985	1962	1962	1962	1984	1984	1983	1984	1984
MIN	547	352	277	278	294	331	536	477	379	539	630	733
(WY)	1989	1978	1964	1964	1964	1977	1964	1977	1966	1963	1963	1969

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1962 - 1999	
ANNUAL TOTAL	367444		388054			
ANNUAL MEAN	1007		1063		1043	
HIGHEST ANNUAL MEAN					2378	1984
LOWEST ANNUAL MEAN					568	1964
HIGHEST DAILY MEAN	3160	May 31	3950	Jun 5	a12700	May 26 1984
LOWEST DAILY MEAN	e587	Dec 31	391	Mar 9	b250	Dec 13 1963
ANNUAL SEVEN-DAY MINIMUM	592	Dec 25	405	Mar 6	264	Dec 20 1963
INSTANTANEOUS PEAK FLOW			4170	Jun 5	c13600	May 26 1984
INSTANTANEOUS PEAK STAGE			10.64	Jun 5	16.60	May 26 1984
ANNUAL RUNOFF (AC-FT)	728800		769700		755600	
10 PERCENT EXCEEDS	1420		2250		1930	
50 PERCENT EXCEEDS	910		757		767	
90 PERCENT EXCEEDS	710		507		430	

e Estimated
a Maximum daily discharge for period of record, 20000 ft^3/s, Jun 7, 1912.
b Minimum discharge observed for period of record, 166 ft^3/s, Dec 19, 1907.
c Maximum discharge observed for period of record, 21500 ft^3/s, Jun 7, 1912, gage height, 21.8 ft, datum then in use, from rating curve extended above 14000 ft^3/s.

09058000 COLORADO RIVER NEAR KREMMLING, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1989 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)
OCT												
14...	1000	905	217	8.2	10.0	7.8	K4	K2	88	28	4.6	6.4
MAR												
25...	1309	630	255	8.2	6.5	9.6	K1	13	96	29	6.0	11
APR												
12...	1150	480	271	--	7.4	9.5	<1	<1	110	34	7.1	11
MAY												
11...	1000	730	245	8.3	6.0	9.0	K8	22	91	26	6.0	11
JUN												
03...	1100	3000	215	8.3	13.0	8.0	57	41	220	55	20	23
AU												
11...	1230	1500	209	8.3	14.6	7.7	20	17	86	28	4.0	6.4

DATE	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS-SOLVED (TONS PER DAY) (70302)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)
OCT												
14...	.3	1.8	65	34	3.0	.3	7.7	118	125	.16	288	<.01
MAR												
25...	.5	3.5	83	34	3.8	.2	10	162	148	.22	276	<.01
APR												
12...	.4	2.0	83	47	4.2	.3	8.8	175	164	.24	222	<.01
MAY												
11...	.5	1.5	73	39	3.0	.2	10	153	142	.21	301	<.01
JUN												
03...	.7	2.2	115	150	2.6	.1	8.3	365	330	.50	2980	<.01
AUG												
11...	.3	1.8	55	35	3.8	.3	7.9	128	121	.17	534	<.01

DATE	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (01010)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)
OCT											
14...	.11	.02	<.1	<.05	<.05	.01	39	<1.6	<8	<14	<7
MAR											
25...	.12	.03	.5	.07	<.05	.02	39	<1.6	<8	<14	<7
APR											
12...	.06	<.02	.3	<.05	<.05	.02	40	<1.6	<8	<14	<7
MAY											
11...	.06	.04	.5	.06	.09	.03	30	<1.6	<8	<14	<7
JUN											
03...	.07	.05	.4	E.04	<.05	.01	54	<1.6	<8	<14	<7
AUG											
11...	.13	<.02	.2	E.03	<.05	<.01	36	<1.6	<8	<14	<7

DATE	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	LITHIUM DIS-SOLVED (UG/L AS LI) (01130)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
OCT											
14...	<10	15	<100	7	23	<50	<40	<4	160	<10	<20
MAR											
25...	<10	66	<100	10	36	<50	<40	<4	200	<10	<20
APR											
12...	<10	70	<100	11	40	<50	<40	<4	220	E6	<20
MAY											
11...	<10	52	<100	8	29	<50	<40	<4	190	<10	<20
JUN											
03...	<10	E10	<100	18	14	<50	<40	<4	490	<10	<20
AUG											
11...	<10	27	<100	7	13	<50	<40	<4	140	<10	E9

E Estimated.
K Based on non-ideal colony count.

09058500 PINEY RIVER BELOW PINEY LAKE NEAR MINTURN, CO

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

DRAINAGE AREA.--13.0 mi^2.

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

GAGE.--Water-stage recorder. Datum of gage is 9,145.25 ft above sea level, levels by U.S. Bureau of Reclamation. Prior to October 1963, water-stage recorder at site 15 ft upstream at present datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. No diversions upstream from station. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.1	e9.6	e8.2	e4.7	e3.7	e3.2	e6.8	21	72	80	41	9.4
2	7.6	e10	e8.2	e4.4	e3.9	e3.1	e7.0	19	78	102	29	8.8
3	8.3	e9.8	e8.2	e4.4	e3.6	e3.1	e7.4	17	96	91	22	10
4	11	e9.2	e7.7	e4.6	e3.5	e3.2	e7.8	16	115	84	19	9.2
5	e12	e8.9	e8.2	e4.6	e3.5	e3.1	e8.1	15	106	70	21	7.9
6	e11	e8.9	e7.6	e4.7	e3.5	e3.1	e8.4	15	67	68	40	7.0
7	e10	e9.0	e7.4	e4.5	e3.5	e3.0	e8.4	14	63	69	37	6.5
8	e9.7	e8.9	e7.0	e4.4	e3.5	e3.0	e8.6	19	115	75	27	6.0
9	e9.6	e8.8	e6.8	e4.2	e3.5	e2.9	e10	24	149	55	23	5.9
10	e10	e8.6	e8.4	e3.9	e3.7	e3.0	e11	27	141	47	33	5.6
11	e11	e8.4	e7.6	e3.7	e3.6	e3.1	e11	22	104	40	38	5.9
12	e12	e8.6	e7.0	e3.7	e3.3	e3.1	e12	20	113	36	31	7.8
13	e12	e8.5	e6.7	e3.8	e3.4	e3.2	e14	22	129	36	24	7.3
14	e11	e8.4	e7.0	e3.9	e3.5	e3.2	15	28	124	34	20	6.6
15	e11	e8.3	e7.2	e3.9	e3.6	e3.2	e14	26	130	37	17	6.0
16	e12	e8.1	e6.8	e3.8	e3.6	e3.2	e14	29	149	33	16	5.9
17	e12	e8.2	e6.7	e3.7	e3.5	e3.2	e13	27	148	30	14	5.7
18	e11	e8.2	e6.6	e3.7	e3.6	e3.2	e13	31	132	28	14	5.8
19	e10	e8.0	e6.8	e3.7	e3.5	e3.3	e12	40	138	26	12	6.1
20	e10	e7.9	e6.4	e3.6	e3.5	e3.5	e14	48	142	29	12	9.4
21	e9.8	e7.6	e5.9	e3.6	e3.4	e3.7	17	57	152	26	12	12
22	e9.5	e8.0	e5.1	e3.7	e3.3	e3.6	16	69	167	23	11	13
23	e9.2	e8.6	e4.3	e3.7	e3.4	e3.4	15	76	160	21	9.7	12
24	e9.0	e8.7	e4.2	e3.7	e3.4	e4.4	17	100	155	21	8.5	11
25	e9.0	e8.6	e4.1	e3.7	e3.2	e5.4	21	144	154	19	7.9	15
26	e8.8	e8.3	e4.3	e3.7	e3.2	e6.0	18	88	171	18	7.9	13
27	e8.8	e8.1	e4.6	e3.6	e3.2	e7.0	16	85	139	19	11	10
28	e9.0	e7.8	e4.8	e3.5	e3.2	e6.8	16	89	121	44	11	8.6
29	e9.6	e7.6	e4.9	e3.2	---	e6.8	19	94	106	42	9.4	7.6
30	e10	e7.7	e5.0	e3.4	---	e6.6	24	89	75	34	8.7	7.3
31	e9.6	---	e4.9	e3.5	---	e6.8	---	99	---	42	10	---
TOTAL	307.6	255.3	198.6	121.2	97.3	123.4	394.5	1470	3711	1379	597.1	252.3
MEAN	9.92	8.51	6.41	3.91	3.48	3.98	13.1	47.4	124	44.5	19.3	8.41
MAX	12	10	8.4	4.7	3.9	7.0	24	144	171	102	41	15
MIN	4.1	7.6	4.1	3.2	3.2	2.9	6.8	14	63	18	7.9	5.6
AC-FT	610	506	394	240	193	245	782	2920	7360	2740	1180	500

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1948 - 1999, BY WATER YEAR (WY)

MEAN	6.34	4.08	2.84	2.25	2.03	2.59	11.1	65.6	126	58.5	15.0	7.33
MAX	15.1	8.82	6.41	4.00	4.01	5.52	23.0	107	202	146	45.3	14.8
(WY)	1985	1985	1999	1952	1996	1995	1952	1984	1952	1995	1984	1984
MIN	1.71	1.23	1.04	.79	.83	.84	2.12	26.6	52.1	8.70	3.69	2.16
(WY)	1980	1980	1980	1975	1975	1975	1973	1968	1954	1977	1954	1974

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1948 - 1999	
ANNUAL TOTAL	7644.2		8907.3			
ANNUAL MEAN	20.9		24.4		25.3	
HIGHEST ANNUAL MEAN					41.2	1984
LOWEST ANNUAL MEAN					12.9	1977
HIGHEST DAILY MEAN	154	Jun 3	171	Jun 26	362	Jun 9 1985
LOWEST DAILY MEAN	e1.8	Feb 28	e2.9	Mar 9	.40	Oct 6 1975
ANNUAL SEVEN-DAY MINIMUM	2.1	Feb 28	3.0	Mar 5	.62	Mar 28 1975
INSTANTANEOUS PEAK FLOW			232	Jun 26	560	Jun 8 1985
INSTANTANEOUS PEAK STAGE			4.46	Jun 26	a5.12	Jun 8 1985
ANNUAL RUNOFF (AC-FT)	15160		17670		18350	
10 PERCENT EXCEEDS	61		82		86	
50 PERCENT EXCEEDS	7.6		9.0		5.0	
90 PERCENT EXCEEDS	2.9		3.5		1.6	

e Estimated
a Maximum gage height for period of record, 6.44 ft, Apr 13, 1977.

09058610 DICKSON CREEK NEAR VAIL, CO

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

DRAINAGE AREA.--3.41 mi^2.

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

GAGE.--Water-stage recorder. Elevation of gage is 9,245 ft above sea level, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. Diversion by Willy N. ditch 75 ft upstream for irrigation of hay meadows downstream from station. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.8	e1.4	e1.1	e.92	e1.0	e.90	e1.1	3.2	15	5.0	3.2	1.9
2	1.8	e1.4	e1.1	e.92	e1.0	e.96	e1.1	3.1	15	4.8	4.0	1.9
3	1.8	e1.4	e1.1	e.92	e1.0	e.96	e1.1	2.9	16	4.7	4.6	1.8
4	1.8	e1.4	e1.1	e.92	e.95	e.96	e1.1	2.9	16	4.5	4.8	1.8
5	1.7	e1.4	e1.1	e.92	e.90	e.96	e1.1	2.9	15	4.3	5.1	2.9
6	1.7	e1.4	e1.0	e1.0	e.90	e.96	e1.2	2.9	14	4.5	3.1	1.4
7	1.7	e1.4	e.94	e1.0	e.90	e.96	e1.3	3.1	12	4.5	3.3	1.5
8	1.7	e1.4	e.87	e1.0	e.90	e.90	e1.3	3.9	12	4.2	2.5	1.6
9	1.8	e1.4	e.97	e.92	e.90	e.90	e1.3	4.5	13	4.3	2.6	1.5
10	1.8	e1.4	e1.1	e.92	e.90	e.90	e1.4	4.4	12	4.2	3.0	1.5
11	1.7	e1.3	e1.1	e.92	e.90	e.90	e1.6	4.2	12	3.6	3.2	1.8
12	1.7	e1.3	e1.1	e.92	e.90	e.90	e1.8	4.2	11	3.5	2.8	1.6
13	1.7	e1.3	e1.1	e1.0	e.90	e.90	e2.0	4.8	11	3.3	2.6	1.5
14	e1.7	e1.3	e1.1	e1.0	e.90	e.90	e2.2	5.1	10	3.6	2.3	1.5
15	e1.7	e1.3	e1.1	e1.0	e.90	e.90	2.1	5.1	11	4.1	2.4	1.5
16	e1.7	e1.3	e1.1	e1.0	e.90	e.90	2.1	5.9	12	3.8	2.4	1.5
17	e1.7	e1.3	e1.1	e1.0	e.90	e.93	2.1	6.1	11	3.4	2.3	1.5
18	e1.7	e1.3	e1.1	e1.0	e.90	e.96	2.1	6.9	10	3.3	2.3	1.5
19	e1.5	e1.2	e1.1	e1.0	e.90	e.96	2.1	8.4	9.7	3.6	2.2	1.7
20	e1.5	e1.2	e1.1	e1.0	e.90	e.96	2.1	9.8	8.9	3.7	2.2	2.2
21	e1.5	e1.2	e1.0	e1.0	e.90	e.96	2.1	11	8.5	3.3	2.2	1.7
22	e1.5	e1.2	e.94	e1.0	e.90	e.96	2.2	12	8.6	3.2	2.2	1.6
23	e1.5	e1.2	e.86	e1.0	e.90	e.96	2.2	13	7.8	3.1	2.0	1.5
24	e1.5	e1.2	e.86	e1.0	e.90	e.96	2.5	13	7.3	3.1	1.9	1.6
25	e1.5	e1.2	e.92	e1.0	e.90	e1.1	3.0	16	6.9	3.1	2.0	1.8
26	e1.4	e1.1	e1.0	e1.0	e.90	e1.2	2.6	15	6.6	3.1	1.9	1.4
27	e1.4	e1.1	e1.0	e1.0	e.90	e1.3	2.5	15	6.2	3.3	2.0	1.3
28	e1.4	e1.1	e1.0	e.90	e.90	e1.2	2.6	14	5.7	3.3	1.9	1.4
29	e1.6	e1.1	e1.0	e.82	---	e1.1	3.2	14	5.3	3.4	1.9	1.4
30	e1.6	e1.1	e1.0	e.90	---	e1.1	3.6	15	5.2	3.2	1.9	1.4
31	e1.6	---	e.92	e1.0	---	e1.1	---	16	---	3.5	2.2	---
TOTAL	50.7	38.3	31.88	29.90	25.55	30.51	58.7	248.3	314.7	116.5	83.0	49.2
MEAN	1.64	1.28	1.03	.96	.91	.98	1.96	8.01	10.5	3.76	2.68	1.64
MAX	1.8	1.4	1.1	1.0	1.0	1.3	3.6	16	16	5.0	5.1	2.9
MIN	1.4	1.1	.86	.82	.90	.90	1.1	2.9	5.2	3.1	1.9	1.3
AC-FT	101	76	63	59	51	61	116	493	624	231	165	98

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1972 - 1999, BY WATER YEAR (WY)

MEAN	1.20	.99	.80	.72	.68	.77	1.50	7.53	11.0	3.49	1.71	1.40
MAX	2.22	1.96	1.60	1.65	1.45	1.23	6.10	20.1	29.1	12.0	3.83	2.81
(WY)	1996	1996	1996	1996	1996	1985	1979	1996	1997	1995	1995	1995
MIN	.007	.002	.000	.000	.000	.000	.000	1.22	.91	.73	.17	.042
(WY)	1984	1984	1984	1984	1984	1984	1984	1977	1977	1977	1982	1972

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1972 - 1999	
ANNUAL TOTAL	899.17		1077.24			
ANNUAL MEAN	2.46		2.95		2.65	
HIGHEST ANNUAL MEAN					5.73	1997
LOWEST ANNUAL MEAN					.58	1977
HIGHEST DAILY MEAN	15	Jun 2	16	May 25	48	Jun 2 1997
LOWEST DAILY MEAN	e.24	Mar 1	e.82	Jan 29	a.00	Aug 12 1972
ANNUAL SEVEN-DAY MINIMUM	.29	Mar 1	.90	Feb 5	.00	Sep 12 1972
INSTANTANEOUS PEAK FLOW			21	Sep 5	52	Jun 1 1997
INSTANTANEOUS PEAK STAGE			3.06	Sep 5	b3.29	Jun 1 1997
ANNUAL RUNOFF (AC-FT)	1780		2140		1920	
10 PERCENT EXCEEDS	6.8		7.5		6.4	
50 PERCENT EXCEEDS	1.5		1.5		1.1	
90 PERCENT EXCEEDS	.40		.90		.50	

e Estimated
a No flow at times some years.
b Maximum gage height, 4.89 ft, May 9, 1984, backwater from ice.

09058700 FREEMAN CREEK NEAR MINTURN, CO

LOCATION.--Lat 39°41'54", long 106°26'42", Eagle County, Hydrologic Unit 14010001, on right bank 0.8 mi upstream from mouth and 7.5 mi north of Minturn.

DRAINAGE AREA.--2.94 mi^2.

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

GAGE.--Water-stage recorder. Elevation of gage is 9,335 ft above sea level, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. No regulation or diversion upstream from station. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.21	.23	e.08	e.10	e.12	e.13	e.12	e.92	11	1.2	.74	.40
2	.30	.31	e.08	e.10	e.12	e.14	e.12	e.92	10	1.2	.61	.43
3	.25	.28	e.08	e.11	e.12	e.14	e.12	e.92	10	1.1	.53	.39
4	.36	.23	e.08	e.12	e.12	e.14	e.12	e1.0	9.0	1.0	.61	.35
5	.31	.20	e.08	e.12	e.12	e.14	e.13	e1.2	8.0	.89	.68	.32
6	.27	.17	e.08	e.12	e.12	e.14	e.13	e1.4	7.1	1.0	.74	.31
7	.33	.17	e.08	e.12	e.12	e.14	e.13	e1.7	6.1	1.1	.69	.30
8	.44	.17	e.07	e.12	e.12	e.13	e.13	e2.3	5.8	1.0	.53	.26
9	.39	e.17	e.08	e.12	e.12	e.12	e.13	e2.1	5.4	1.0	.54	.27
10	.32	e.17	e.08	e.12	e.13	e.12	e.13	e2.0	5.2	.83	.71	.26
11	.25	e.15	e.08	e.13	e.13	e.12	e.13	e1.9	4.8	.75	.72	.35
12	.22	e.14	e.08	e.14	e.13	e.12	e.13	e1.9	4.2	.78	.57	.36
13	.20	e.13	e.08	e.15	e.13	e.12	e.13	e2.1	3.7	.70	.48	.30
14	.21	e.13	e.08	e.16	e.13	e.12	e.15	e2.4	3.7	.82	.44	.29
15	.20	e.13	e.08	e.16	e.13	e.12	e.18	e2.7	5.0	.83	.46	.28
16	.19	e.13	e.08	e.16	e.13	e.12	e.21	e3.1	5.1	.73	.44	.28
17	.18	e.13	e.08	e.15	e.13	e.13	e.24	e3.6	4.2	.71	.44	.32
18	.19	e.13	e.08	e.14	e.13	e.13	e.27	e4.2	3.9	.65	.46	.36
19	.20	e.12	e.08	e.13	e.13	e.13	e.30	e5.1	3.5	.79	.39	.38
20	.20	e.11	e.08	e.13	e.13	e.13	e.35	e6.0	3.1	.75	.42	.62
21	.19	e.11	e.08	e.13	e.13	e.13	e.40	e7.0	2.8	.67	.43	.46
22	.18	e.11	e.08	e.13	e.13	e.13	e.45	e8.5	2.8	.68	.42	.36
23	.18	e.11	e.08	e.13	e.13	e.13	e.50	e10	2.3	.64	.38	.32
24	.17	e.10	e.08	e.13	e.13	e.13	e.54	e13	2.1	.63	.35	.34
25	.16	e.10	e.08	e.13	e.13	e.13	e.61	e16	1.9	.61	.35	.42
26	.16	e.09	e.09	e.13	e.13	e.13	e.55	e15	1.7	.60	.37	.35
27	.17	e.09	e.10	e.13	e.13	e.14	e.52	e14	1.5	.68	.41	.32
28	.23	e.09	e.10	e.13	e.13	e.13	e.65	15	1.4	.64	.37	.31
29	.23	e.09	e.10	e.13	---	e.12	e.80	13	1.4	.95	.34	.30
30	.22	e.09	e.10	e.13	---	e.12	e1.0	13	1.3	.78	.36	.31
31	.21	---	e.10	e.13	---	e.12	---	13	---	.85	.42	---
TOTAL	7.32	4.38	2.58	4.03	3.55	3.99	9.37	184.96	138.0	25.56	15.40	10.32
MEAN	.24	.15	.083	.13	.13	.13	.31	5.97	4.60	.82	.50	.34
MAX	.44	.31	.10	.16	.13	.14	1.0	16	11	1.2	.74	.62
MIN	.16	.09	.07	.10	.12	.12	.12	.92	1.3	.60	.34	.26
AC-FT	15	8.7	5.1	8.0	7.0	7.9	19	367	274	51	31	20

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 1999, BY WATER YEAR (WY)

MEAN	.27	.18	.12	.098	.089	.13	.62	6.79	6.70	.99	.35	.27
MAX	.78	.45	.26	.24	.21	.29	1.73	18.0	23.2	3.50	1.25	.70
(WY)	1985	1985	1983	1983	1983	1986	1971	1984	1983	1995	1983	1984
MIN	.083	.030	.000	.000	.000	.000	.000	1.26	.30	.15	.065	.079
(WY)	1993	1965	1965	1965	1965	1991	1991	1977	1977	1977	1981	1977

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1965 - 1999	
ANNUAL TOTAL	326.05		409.46			
ANNUAL MEAN	.89		1.12		1.39	
HIGHEST ANNUAL MEAN					3.54	1984
LOWEST ANNUAL MEAN					.31	1977
HIGHEST DAILY MEAN	9.1	May 21	e16	May 25	63	May 25 1984
LOWEST DAILY MEAN	e.03	Mar 1	e.07	Dec 8	a.00	Nov 10 1964
ANNUAL SEVEN-DAY MINIMUM	.04	Mar 4	.08	Dec 2	.00	Nov 10 1964
INSTANTANEOUS PEAK FLOW			b19	May 27	82	May 25 1984
INSTANTANEOUS PEAK STAGE			b2.18	May 27	c2.21	May 25 1984
ANNUAL RUNOFF (AC-FT)	647		812		1010	
10 PERCENT EXCEEDS	2.8		2.9		3.4	
50 PERCENT EXCEEDS	.19		.23		.20	
90 PERCENT EXCEEDS	.05		.10		.05	

e Estimated
a No flow some days some years.
b Maximum recorded, may have been higher during period of no gage-height record, Apr 13 to May 27.
c Maximum gage height, 3.51 ft, May 18, 1973, backwater from ice.

09058800 EAST MEADOW CREEK NEAR MINTURN, CO

LOCATION (REVISED).--Lat 39°43'54", long 106°25'34", in T.4 S., R.81 W., Eagle County, Hydrologic Unit 14010001, on left bank 1.4 mi upstream from mouth, and 10 mi north of Minturn.

DRAINAGE AREA.--3.61 mi^2.

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

GAGE.--Water-stage recorder. Elevation of gage is 9,455 ft above sea level, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. No regulation or diversion upstream from station. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.0	1.3	e1.4	e1.3	e1.4	e1.3	e1.5	2.6	22	16	3.6	1.8
2	1.5	1.4	e1.5	e1.3	e1.3	e1.3	e1.5	2.2	23	15	2.7	2.0
3	1.5	1.4	e1.6	e1.2	e1.3	e1.3	e1.4	1.8	26	14	2.4	1.9
4	1.7	e1.4	e1.5	e1.2	e1.3	e1.3	e1.3	1.8	26	13	2.5	1.5
5	1.4	e1.3	e1.4	e1.2	e1.3	e1.3	e1.2	2.1	24	11	3.0	1.3
6	1.0	e1.2	e1.3	e1.2	e1.3	e1.3	e1.2	2.2	22	11	4.4	1.2
7	1.4	e1.2	e1.2	e1.2	e1.3	e1.3	e1.2	1.7	23	10	3.8	1.1
8	2.1	e1.2	e1.1	e1.2	e1.3	e1.3	e1.2	2.3	27	10	2.5	1.1
9	2.3	e1.2	e1.1	e1.2	e1.3	e1.3	e1.2	4.0	28	8.9	4.5	1.0
10	2.2	e1.1	e1.3	e1.2	e1.3	e1.3	e1.2	4.7	26	7.4	5.6	.99
11	1.8	e1.1	e1.3	e1.2	e1.3	e1.4	e1.3	3.5	25	6.7	4.7	1.3
12	1.6	e1.1	e1.3	e1.2	e1.2	e1.4	e1.3	2.2	25	6.5	3.6	1.4
13	1.5	e1.2	e1.3	e1.2	e1.2	e1.4	e1.3	3.4	25	5.7	2.9	1.2
14	1.9	e1.2	e1.3	e1.1	e1.3	e1.4	1.4	5.0	25	5.9	2.6	1.1
15	1.6	e1.2	e1.3	e1.1	e1.3	e1.4	1.4	4.6	30	5.7	2.6	1.1
16	1.4	e1.2	e1.3	e1.1	e1.3	e1.4	1.4	5.8	32	5.1	2.4	1.0
17	1.3	e1.2	e1.3	e1.1	e1.3	e1.4	1.4	5.6	29	4.7	2.4	1.0
18	1.4	e1.2	e1.3	e1.2	e1.3	e1.4	1.3	7.6	27	4.4	2.4	1.0
19	1.4	e1.2	e1.3	e1.3	e1.3	e1.4	1.4	11	27	6.1	2.1	1.2
20	1.3	e1.2	e1.3	e1.3	e1.3	e1.4	1.5	13	26	5.2	2.2	2.4
21	1.3	e1.2	e1.3	e1.3	e1.3	e1.5	1.5	16	27	4.1	2.0	2.0
22	1.4	e1.2	e1.3	e1.3	e1.3	e1.6	1.3	18	26	3.8	1.7	1.5
23	1.3	e1.3	e1.1	e1.2	e1.3	e1.6	1.3	19	25	3.6	1.6	1.2
24	1.2	e1.3	e1.3	e1.2	e1.3	e1.5	1.5	21	25	3.5	1.5	1.5
25	1.1	e1.3	e1.3	e1.2	e1.3	e1.5	2.2	24	24	3.3	1.4	1.6
26	1.3	e1.3	e1.3	e1.2	e1.3	e1.6	1.6	23	23	3.2	2.1	1.2
27	1.2	e1.3	e1.3	e1.2	e1.3	e1.8	1.5	22	22	3.5	3.3	1.1
28	1.3	e1.2	e1.3	e1.2	e1.3	e1.7	1.7	23	21	3.4	2.2	1.1
29	1.4	e1.2	e1.3	e1.1	---	e1.6	2.1	22	20	3.6	1.9	1.2
30	1.3	e1.3	e1.3	e1.2	---	e1.5	3.3	23	17	3.9	2.0	1.1
31	1.3	---	e1.3	e1.2	---	e1.5	---	23	---	4.8	2.2	---
TOTAL	45.4	37.1	40.5	37.3	36.3	44.4	44.6	321.1	748	213.0	84.8	40.09
MEAN	1.46	1.24	1.31	1.20	1.30	1.43	1.49	10.4	24.9	6.87	2.74	1.34
MAX	2.3	1.4	1.6	1.3	1.4	1.8	3.3	24	32	16	5.6	2.4
MIN	1.0	1.1	1.1	1.1	1.2	1.3	1.2	1.7	17	3.2	1.4	.99
AC-FT	90	74	80	74	72	88	88	637	1480	422	168	80

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 1999, BY WATER YEAR (WY)

MEAN	1.32	.98	.80	.70	.68	.76	1.58	11.1	23.2	8.47	2.26	1.40
MAX	2.78	2.00	1.50	1.20	1.30	1.43	3.75	26.3	45.7	28.8	5.85	3.09
(WY)	1966	1966	1966	1999	1999	1999	1987	1986	1983	1983	1965	1984
MIN	.73	.55	.44	.35	.40	.40	.66	2.97	7.55	1.28	.68	.75
(WY)	1978	1979	1979	1979	1965	1965	1975	1975	1977	1977	1977	1977

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1965 - 1999	
ANNUAL TOTAL	1379.67		1692.59			
ANNUAL MEAN	3.78		4.64		4.44	
HIGHEST ANNUAL MEAN					8.05	1983
LOWEST ANNUAL MEAN					1.83	1977
HIGHEST DAILY MEAN	26	Jun 2	32	Jun 16	81	Jun 20 1983
LOWEST DAILY MEAN	e.58	Apr 10	.99	Sep 10	.32	Jan 7 1979
ANNUAL SEVEN-DAY MINIMUM	.63	Apr 9	1.1	Sep 13	.33	Jan 6 1979
INSTANTANEOUS PEAK FLOW			49	Jun 15	107	Jun 17 1995
INSTANTANEOUS PEAK STAGE			1.56	Jun 15	a1.86	Jun 17 1995
ANNUAL RUNOFF (AC-FT)	2740		3360		3210	
10 PERCENT EXCEEDS	14		20		15	
50 PERCENT EXCEEDS	1.3		1.4		1.1	
90 PERCENT EXCEEDS	.87		1.2		.60	

e Estimated
a Maximum gage height, 2.22 ft, May 12, 1970, backwater from ice.

09059500 PINEY RIVER NEAR STATE BRIDGE, CO

LOCATION.--Lat 39°48'00", long 106°35'00", in SW$^{1}/_{4}$NE$^{1}/_{4}$ sec.16, T.3 S., R.82 W., Eagle County, Hydrologic Unit 14010001, on left bank at old bridge crossing, 1.2 mi downstream from Rock Creek, and 6.0 mi southeast of State Bridge.

DRAINAGE AREA.--86.2 mi^{2}.

PERIOD OF RECORD.--May 1944 to current year. Water-quality data available, October 1993 to September 1996.

REVISED RECORDS.--WSP 2124: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry and crest-stage gage. Datum of gage is 7,272.35 ft above sea level. Prior to July 29, 1944, nonrecording gage, and July 29, 1944 to Oct. 24, 1947, water-stage recorder, at datum 2.38 ft higher.

REMARKS.--Records good except for estimated daily discharges, which are poor. Diversions upstream from station for irrigation of about 400 acres of hay meadows upstream and downstream from station. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	e31	e20	e14	e18	e16	e31	162	373	151	77	27
2	24	e36	e20	e14	e17	e16	e31	150	377	169	57	27
3	26	e33	e19	e14	e15	e16	e29	132	412	155	45	27
4	37	e31	e20	e14	e15	e16	e27	122	415	146	42	25
5	32	e31	e18	e15	e15	e16	e27	105	369	128	48	23
6	29	e31	e17	e15	e15	e16	e25	96	292	126	72	20
7	31	e31	e15	e15	e15	e17	e27	100	281	124	71	18
8	37	e31	e14	e14	e14	e17	e27	131	345	131	54	17
9	38	e30	e19	e14	e14	e17	e35	168	381	109	49	17
10	37	e29	e15	e14	e15	e17	e38	193	363	94	66	17
11	33	e29	e15	e14	e14	e17	e38	151	312	85	75	19
12	29	e31	e17	e14	e12	e17	e45	137	308	77	62	22
13	27	e29	e17	e14	e14	e17	e56	156	307	73	50	20
14	27	e30	e17	e13	e16	e17	e72	213	300	72	42	18
15	28	e30	e17	e14	e16	e18	e68	200	330	75	40	18
16	27	e30	e17	e13	e15	e19	e67	229	376	71	36	17
17	27	e28	e16	e15	e17	e19	e63	221	353	64	34	16
18	26	e27	e17	e15	e17	e20	e62	243	317	59	34	17
19	26	e27	e16	e15	e17	e22	e57	285	307	62	30	18
20	26	e24	e16	e15	e16	e25	e90	300	296	64	31	29
21	25	e25	e15	e15	e16	e25	123	351	289	56	30	32
22	e25	e26	e11	e15	e16	e25	114	389	292	51	29	28
23	e25	e25	e9.6	e14	e17	e23	102	400	282	46	26	26
24	e26	e25	e9.8	e15	e17	e25	113	432	263	44	23	26
25	e25	e23	e10	e15	e17	e26	147	532	255	42	22	31
26	e24	e22	e12	e15	e16	e33	123	442	264	43	24	29
27	e25	e21	e14	e15	e16	e37	110	416	234	45	32	24
28	e33	e21	e15	e14	e16	e33	115	410	209	67	30	22
29	e33	e22	e15	e12	---	e33	136	412	190	75	27	21
30	e34	e21	e15	e13	---	e33	181	409	157	67	25	21
31	e31	---	e15	e14	---	e33	---	413	---	80	31	---
TOTAL	890	830	483.4	442	438	681	2179	8100	9249	2651	1314	672
MEAN	28.7	27.7	15.6	14.3	15.6	22.0	72.6	261	308	85.5	42.4	22.4
MAX	38	36	20	15	18	37	181	532	415	169	77	32
MIN	17	21	9.6	12	12	16	25	96	157	42	22	16
AC-FT	1770	1650	959	877	869	1350	4320	16070	18350	5260	2610	1330

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1944 - 1999, BY WATER YEAR (WY)

MEAN	20.1	17.8	15.1	13.5	13.1	15.7	53.8	261	347	113	32.4	18.2
MAX	62.9	34.1	24.6	20.0	24.5	35.3	167	495	656	379	94.9	46.1
(WY)	1962	1985	1985	1966	1986	1986	1962	1958	1957	1983	1983	1984
MIN	6.72	8.68	7.19	7.44	7.86	9.18	16.8	99.0	74.1	14.8	6.22	4.00
(WY)	1978	1980	1980	1980	1980	1980	1961	1977	1954	1977	1954	1944

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1944 - 1999	
ANNUAL TOTAL	26814.4		27929.4			
ANNUAL MEAN	73.5		76.5		76.9	
HIGHEST ANNUAL MEAN					127	1984
LOWEST ANNUAL MEAN					27.2	1977
HIGHEST DAILY MEAN	493	May 30	532	May 25	e1300	May 25 1984
LOWEST DAILY MEAN	e9.6	Dec 23	e9.6	Dec 23	1.9	Sep 1 1954
ANNUAL SEVEN-DAY MINIMUM	12	Mar 4	12	Dec 21	2.3	Sep 17 1954
INSTANTANEOUS PEAK FLOW			596	May 25	e,a,b1300	May 25 1984
INSTANTANEOUS PEAK STAGE			c4.91	May 25		
ANNUAL RUNOFF (AC-FT)	53190		55400		55680	
10 PERCENT EXCEEDS	216		271		259	
50 PERCENT EXCEEDS	28		28		20	
90 PERCENT EXCEEDS	15		15		11	

e Estimated
a Maximum daily discharge for period of record.
b Maximum discharge and stage, (recorded), 1220 ft^{3}/s, Jun 27, 1983, gage height 5.82 ft, from peak stage indicator, but may have been higher May 25, 1984.
c Maximum gage height, 5.10 ft, Nov 8, backwater from beaver dam.

09060550 ROCK CREEK AT CRATER, CO

LOCATION.--Lat 39°58'42", long 106°42'34", in NW$^1/_4$NE$^1/_4$ sec. 17, T.1 S., R.83 W., Routt County, Hydrologic Unit 14010001, on right bank 250 ft downstream from county bridge crossing, 2 mi downstream from Kayser Mutual Ditch diversion, and 0.8 mi northwest of Crater.

DRAINAGE AREA.--72.6 mi^2.

PERIOD OF RECORD.--October 1984 to September 1999 (discontinued). Water-quality data available, December 1984 to September 1996.

GAGE.--Water-stage recorder with satellite telemetry and crest-stage gage. Elevation of gage is 7,185 ft above sea level, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Diversions for irrigation of approximately 1,025 acres upstream from station. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	20	12	11	11	11	37	79	204	21	6.3	2.7
2	22	23	12	11	11	11	38	70	191	19	2.2	2.6
3	23	21	11	11	11	11	30	64	219	15	1.8	2.5
4	23	17	11	11	11	11	25	57	186	11	1.8	2.8
5	19	14	8.1	11	11	11	22	43	160	9.2	7.2	2.5
6	15	15	4.0	11	11	11	21	36	143	7.4	14	2.3
7	16	14	7.0	11	11	11	28	46	133	6.9	6.0	2.2
8	21	13	7.1	11	11	11	37	81	128	14	2.2	2.3
9	19	13	9.9	11	11	11	27	122	119	15	1.9	2.5
10	17	12	9.5	11	11	11	23	108	107	7.1	1.9	2.5
11	15	12	e8.5	11	10	11	20	78	96	5.0	1.8	2.8
12	13	16	e8.6	12	11	11	25	73	90	7.3	1.7	2.8
13	13	15	9.4	11	11	11	53	82	83	4.2	1.7	2.6
14	12	14	9.2	11	11	11	67	103	81	3.5	1.7	2.2
15	12	15	8.8	11	11	12	43	90	118	7.8	1.7	2.0
16	12	15	8.6	11	11	12	31	91	137	5.6	1.7	2.0
17	13	14	8.9	11	11	12	27	92	91	4.4	1.7	2.1
18	13	14	9.0	11	11	13	26	110	83	3.1	1.8	2.1
19	15	12	8.6	11	11	15	40	134	68	10	1.9	2.2
20	16	8.0	8.5	11	11	16	62	164	63	10	1.9	3.8
21	14	11	e7.5	11	11	18	55	199	58	4.1	1.9	3.4
22	14	14	e6.5	11	11	20	41	202	59	2.4	3.4	2.2
23	14	13	e5.4	11	11	22	28	245	48	2.2	1.9	2.2
24	14	12	e5.5	11	11	27	34	265	42	1.9	1.8	2.1
25	13	12	e5.6	12	11	30	59	352	39	1.8	1.7	2.1
26	13	11	8.8	12	11	34	38	262	33	5.8	2.0	1.9
27	13	11	9.5	12	11	34	39	259	28	2.2	2.7	1.8
28	21	12	10	12	11	29	56	243	25	2.2	2.5	1.8
29	19	13	11	11	---	27	77	238	23	6.1	2.6	1.8
30	19	12	11	11	---	28	92	238	22	13	2.7	1.8
31	21	---	11	11	---	34	---	232	---	15	2.7	---
TOTAL	496	418.0	271.5	346	307	537	1201	4458	2877	243.2	88.8	70.6
MEAN	16.0	13.9	8.76	11.2	11.0	17.3	40.0	144	95.9	7.85	2.86	2.35
MAX	23	23	12	12	11	34	92	352	219	21	14	3.8
MIN	12	8.0	4.0	11	10	11	20	36	22	1.8	1.7	1.8
AC-FT	984	829	539	686	609	1070	2380	8840	5710	482	176	140

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1985 - 1999, BY WATER YEAR (WY)

MEAN	10.1	11.8	10.2	9.83	9.78	12.9	51.9	176	79.7	10.3	4.90	5.34
MAX	24.7	19.1	14.9	13.9	12.8	20.0	95.1	305	190	26.6	11.7	19.3
(WY)	1998	1998	1998	1985	1985	1986	1986	1997	1995	1995	1986	1997
MIN	1.60	7.12	6.36	5.67	6.81	8.77	16.4	73.2	12.3	2.18	1.55	1.81
(WY)	1993	1995	1995	1995	1995	1991	1993	1990	1994	1992	1990	1992

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1985 - 1999	
ANNUAL TOTAL	13340.1		11314.1			
ANNUAL MEAN	36.5		31.0		32.9	
HIGHEST ANNUAL MEAN					52.4	1997
LOWEST ANNUAL MEAN					17.8	1990
HIGHEST DAILY MEAN	279	May 22	352	May 25	499	May 17 1996
LOWEST DAILY MEAN	1.6	Aug 14	1.7	Aug 12	1.2	Aug 15 1990
ANNUAL SEVEN-DAY MINIMUM	1.7	Aug 12	1.7	Aug 11	1.3	Aug 25 1990
INSTANTANEOUS PEAK FLOW			399	May 25	746	May 18 1996
INSTANTANEOUS PEAK STAGE			4.21	May 25	4.67	May 18 1996
ANNUAL RUNOFF (AC-FT)	26460		22440		23820	
10 PERCENT EXCEEDS	150		86		95	
50 PERCENT EXCEEDS	13		11		11	
90 PERCENT EXCEEDS	1.8		2.2		2.6	

e Estimated

392511106164000 EAST FORK EAGLE RIVER NEAR RED CLIFF, CO.

WATER-QUALITY RECORDS

LOCATION.--Lat 39°25'11", long 106°16'40", in $SE^1/_4SE^1/_4$ sec. 24, T 7 S. R. 80 W., Eagle County, Hydrologic Unit 14010003, at Resolution Road No. 702, 0.25 mi east of East Fork Eagle ford on East Fork Eagle Road, 1.0 mi west of Camp Hale Campground, and 10.2 mi south-southwest of Red Cliff

DRAINAGE AREA.--Not determined.

PERIOD OF RECORD.--November 1996 to current year.

REMARKS.--No water-quality data at this site before November 1996.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML) (31633)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)
OCT											
20...	0845	3.0	177	7.9	1.2	9.5	K1	<1	89	21	9.0
JAN											
20...	1328	.94	183	7.5	.0	10.6	<1	K1	--	--	--
APR											
21...	1320	2.0	241	8.4	4.2	8.9	<1	<1	120	29	12
MAY											
26...	0907	14	148	8.2	3.1	9.5	K3	K2	73	17	7.6
JUL											
20...	1025	5.3	153	8.2	8.8	--	K2	K1	--	--	--
AUG											
17...	0845	1.0	179	8.0	7.7	8.0	14	7	87	20	8.7

DATE	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	ALKA-LINITY WAT.DIS FET LAB CACO3 (MG/L) (29801)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)
OCT										
20...	1.6	.1	.83	85	--	8.4	.32	<.10	5.1	98
JAN										
20...	--	--	--	--	--	--	--	--	--	--
APR										
21...	1.9	.1	.94	106	--	18	.32	.20	4.7	131
MAY										
26...	1.1	.1	.73	--	67	9.1	.27	<.10	4.5	80
JUL										
20...	--	--	--	--	--	--	--	--	--	--
AUG										
17...	1.4	.1	.83	--	76	12	.14	.16	5.1	94

DATE	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS-SOLVED (TONS PER DAY) (70302)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)
OCT										
20...	.13	.79	<.010	.089	<.020	<.10	<.10	.010	.014	<.010
JAN										
20...	--	--	<.010	.084	.051	E.05	E.10	<.004	<.004	<.010
APR										
21...	.18	.70	<.010	.089	<.020	E.05	E.10	.005	<.004	.012
MAY										
26...	.11	3.01	<.010	<.050	.038	.24	.17	.011	<.004	<.010
JUL										
20...	--	--	<.010	<.050	<.020	E.06	E.10	<.004	<.004	<.010
AUG										
17...	.13	.26	<.010	<.050	<.020	.14	<.10	<.004	<.004	<.010

E Estimated.
K Based on non-ideal colony count.

392511106164000 EAST FORK EAGLE RIVER NEAR RED CLIFF, CO.--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
OCT										
20...	<1.0	<1.0	270	<1.0	29	32	<.1	<1	<.20	<20
APR										
21...	<1.0	<1.0	330	<1.0	27	30	<.1	<1	<.20	<20
MAY										
26...	<1.0	<1.0	180	<1.0	8.4	11	<.1	<1	<.20	<20
AUG										
17...	<1.0	<1.0	220	<1.0	24	26	<.1	<1	<.20	<20

09063000 EAGLE RIVER AT RED CLIFF, CO

LOCATION.--Lat 39°30'30", long 106°21'58", in NW$^1/_4$SW$^1/_4$ sec.20, T.6 S., R.80 W., Eagle County, Hydrologic Unit 14010003, on left bank at Red Cliff, and 0.3 mi upstream from Turkey Creek.

DRAINAGE AREA.--70.0 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1910 to September 1925, May 1944 to current year. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 2124: Drainage area. WRD Colo. 1972: 1971.

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 8,653.80 ft above sea level, (levels by U.S. Bureau of Reclamation). Jan. 8, 1911 to Sept. 30, 1925, nonrecording gage at bridge 0.2 mi downstream at different datum. May 24, 1944 to Oct. 12, 1952, water-stage recorder at site 200 ft upstream at datum 1.46 ft lower. Prior to May 6, 1982, at site 250 ft downstream at datum 5.00 ft lower.

REMARKS.--Records good except for estimated daily discharges, which are poor. Transmountain diversions upstream from station by Columbine, Ewing, and Wurtz ditches. Transbasin diversion upstream from station from Robinson Reservoir, capacity, 2,520 acre-ft to Tenmile Creek for mining development. Small diversions for irrigation of 400 acres upstream from station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	14	e10	e9.0	e10	e8.6	18	46	259	109	43	23
2	22	16	e10	e9.0	e9.6	e8.8	17	42	276	100	35	22
3	20	15	e10	e9.0	e9.2	e8.8	e16	42	298	87	31	21
4	23	14	e10	e8.8	e9.2	e9.0	e15	40	301	81	31	20
5	23	13	e11	e9.4	e9.2	e9.2	e15	37	282	75	33	19
6	20	13	e10	e9.4	e9.0	e9.6	16	35	251	104	39	18
7	23	13	e9.6	e9.6	e8.8	e9.6	15	36	252	82	34	17
8	23	13	e9.2	e9.6	e8.6	e9.4	17	45	283	75	32	16
9	20	13	e11	e9.4	e8.0	e9.2	16	59	298	68	28	15
10	19	e12	e10	e8.8	e8.6	e9.6	16	65	301	62	30	15
11	17	e11	e9.6	e8.8	e8.2	e10	19	54	291	58	29	17
12	15	e11	e9.6	e8.8	e7.8	e10	15	49	284	55	28	19
13	15	e12	e9.6	e8.4	e7.8	e10	18	57	273	49	26	17
14	14	e11	e9.8	e8.4	e8.0	e11	19	74	268	47	24	16
15	14	e11	e10	e9.0	e8.6	e11	18	86	272	49	24	15
16	13	e11	e10	e8.6	e8.8	e12	21	95	283	49	24	15
17	12	e11	e10	e8.4	e9.0	e12	20	90	294	53	24	15
18	12	e11	e10	e8.8	e8.8	e13	15	96	289	44	27	15
19	12	e11	e10	e8.8	e8.8	e13	20	118	286	44	24	15
20	12	e10	e10	e9.0	e8.6	e13	27	141	281	41	24	19
21	12	e10	e9.6	e8.8	e8.6	e14	31	154	280	38	26	18
22	12	e10	e8.6	e8.6	e8.6	e13	29	168	267	42	24	16
23	12	e11	e7.6	e8.6	e9.0	e13	26	181	253	48	22	15
24	12	e11	e7.8	e8.8	e9.0	e14	27	201	235	41	21	17
25	12	e11	e8.2	e9.0	e9.0	e16	34	228	180	39	23	18
26	12	e11	e9.2	e8.6	e8.8	e18	31	222	161	38	22	15
27	12	e11	e9.6	e8.6	e8.6	e20	29	222	146	38	32	14
28	22	e10	e9.8	e8.4	e8.6	e17	34	216	133	36	26	13
29	18	e10	e9.6	e8.0	---	15	47	234	128	39	25	13
30	16	e10	e9.4	e8.6	---	16	54	243	117	34	23	14
31	15	---	e9.2	e9.2	---	18	---	259	---	39	22	---
TOTAL	504	351	298.0	274.2	244.8	380.8	695	3635	7522	1764	856	502
MEAN	16.3	11.7	9.61	8.85	8.74	12.3	23.2	117	251	56.9	27.6	16.7
MAX	23	16	11	9.6	10	20	54	259	301	109	43	23
MIN	12	10	7.6	8.0	7.8	8.6	15	35	117	34	21	13
AC-FT	1000	696	591	544	486	755	1380	7210	14920	3500	1700	996

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1911 - 1999, BY WATER YEAR (WY)

MEAN	16.2	13.5	11.2	10.4	10.2	11.8	32.4	156	200	57.0	25.9	18.3
MAX	31.8	25.2	18.8	16.3	19.7	25.6	81.3	387	422	161	54.5	39.0
(WY)	1962	1985	1985	1918	1916	1916	1916	1911	1912	1995	1945	1921
MIN	10.4	8.47	7.06	5.07	4.74	5.68	9.48	36.5	38.4	18.8	10.7	8.89
(WY)	1989	1965	1989	1989	1989	1981	1975	1981	1954	1981	1977	1977

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1911 - 1999	
ANNUAL TOTAL	10580.7		17026.8			
ANNUAL MEAN	29.0		46.6		47.0	
HIGHEST ANNUAL MEAN					90.2	1912
LOWEST ANNUAL MEAN					16.5	1981
HIGHEST DAILY MEAN	161	Jun 3	301	Jun 4	900	Jun 5 1912
LOWEST DAILY MEAN	e7.6	Dec 23	e7.6	Dec 23	a1.0	Oct 15 1917
ANNUAL SEVEN-DAY MINIMUM	8.7	Dec 21	8.1	Feb 8	3.8	Jan 31 1989
INSTANTANEOUS PEAK FLOW			335	Jun 9	b1010	Jun 5 1912
INSTANTANEOUS PEAK STAGE			4.77	Jun 9	c4.00	Jun 5 1912
ANNUAL RUNOFF (AC-FT)	20990		33770		34010	
10 PERCENT EXCEEDS	83		157		130	
50 PERCENT EXCEEDS	13		16		16	
90 PERCENT EXCEEDS	9.6		8.8		9.0	

e Estimated
a Also occurred Oct 16, 1917.
b Maximum discharge observed, site and datum then in use, from rating curve extended above 500 ft^3/s.
c Maximum gage height recorded, 6.43 ft, May 24, 1984.

09063000 EAGLE RIVER AT RED CLIFF, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1996 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML) (31633)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)
OCT											
20...	1107	12	226	8.3	3.0	9.4	<1	<1	110	26	12
JAN											
20...	1031	9.4	230	7.9	.0	11.4	<1	<1	--	--	--
APR											
21...	1622	31	204	8.4	5.6	9.7	<1	K1	100	23	10
MAY											
26...	1140	214	132	8.2	6.7	8.8	K2	K1	63	14	6.6
JUL											
20...	1330	42	197	8.3	15.2	7.6	K1	<1	--	--	--
AUG											
17...	1130	24	227	8.4	12.0	7.6	K3	K2	110	26	12

DATE	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	ALKA-LINITY WAT.DIS FET LAB CACO3 (MG/L) (29801)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)
OCT										
20...	2.6	.1	.93	110	--	9.1	1.1	<.10	7.3	125
JAN										
20...	--	--	--	--	--	--	--	--	--	--
APR										
21...	2.7	.1	1.1	95	--	7.4	2.3	.11	7.4	112
MAY										
26...	1.6	.1	.33	--	60	5.9	1.5	<.10	6.0	72
JUL										
20...	--	--	--	--	--	--	--	--	--	--
AUG										
17...	2.2	.1	.87	--	110	8.0	.71	.11	7.4	121

DATE	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS-SOLVED (TONS PER DAY) (70302)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)
OCT										
20...	.17	4.05	<.010	.072	<.020	<.10	<.10	.014	<.050	<.010
JAN										
20...	--	--	<.010	.059	.047	<.10	<.10	<.004	<.004	<.010
APR										
21...	.15	9.39	<.010	.074	<.020	.12	E.10	.012	.005	.012
MAY										
26...	.10	41.6	<.010	<.050	.029	.32	.21	.032	.006	.010
JUL										
20...	--	--	<.010	<.050	<.020	E.09	E.10	.004	<.004	<.010
AUG										
17...	.16	7.86	<.010	<.050	<.020	.12	<.10	<.004	<.004	<.010

DATE	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
OCT										
20...	<1.0	<1.0	100	<1.0	E1.7	<10	<.1	<1	<.20	36
APR										
21...	<1.0	<1.0	310	<1.0	5.1	12	<.1	<1	<.20	<20
MAY										
26...	<1.0	<1.0	600	<1.0	8.4	34	<.1	<1	<.20	<20
AUG										
17...	<1.0	<1.0	140	<1.0	3.0	9	<.1	<1	<.20	<20

E Estimated.
K Based on non-ideal colony count.

09063000 EAGLE RIVER AT RED CLIFF, CO--Continued

MISCELLANEOUS FIELD MEASUREMENTS, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)
OCT				
15...	1010	13	222	4.5
DEC				
02...	1500	11	217	2.4
JAN				
14...	0950	8.3	224	.1
MAR				
17...	1330	13	216	3.1
APR				
12...	1535	14	230	8.8
MAY				
25...	1455	225	134	5.9
JUN				
09...	1515	258	115	10.1

09063200 WEARYMAN CREEK NEAR RED CLIFF, CO

LOCATION.--Lat 39°31'20", long 106°19'23", in $SE^1/_4SW^1/_4$ sec.15, T.6 S., R.80 W., Eagle County, Hydrologic Unit 14010003, on right bank 0.15 mi upstream from mouth, and 2.25 mi east of Red Cliff.

DRAINAGE AREA.--9.53 mi^2.

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

GAGE.--Water-stage recorder. Elevation of gage is 9,280 ft above sea level, from topographic map. Prior to Aug. 7, 1992, at site 0.25 mi upstream, at different datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. No regulation or diversion upstream from station. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.3	2.6	e1.6	e1.3	e1.2	e1.2	e1.7	2.5	22	49	11	6.4
2	3.3	2.6	e1.6	e1.3	e1.2	e1.2	e1.6	2.6	25	47	10	6.1
3	3.3	2.6	e1.6	e1.2	e1.2	e1.2	e1.6	2.6	28	44	9.9	5.8
4	3.4	2.5	e1.6	e1.2	e1.2	e1.2	e1.5	2.8	31	41	10	5.6
5	3.3	2.5	e1.6	e1.2	e1.2	e1.3	e1.4	2.8	33	38	10	5.5
6	e3.2	2.6	e1.5	e1.2	e1.2	e1.3	e1.4	2.7	34	37	10	5.4
7	e3.2	2.6	e1.4	e1.2	e1.1	e1.3	e1.3	2.9	35	38	9.6	5.3
8	e3.5	2.6	e1.5	e1.3	e1.1	e1.3	e1.3	3.1	38	35	9.4	5.2
9	e3.2	2.6	e1.6	e1.3	e1.1	e1.3	e1.3	3.5	e37	32	9.3	5.1
10	e3.0	2.6	e1.5	e1.3	e1.1	e1.3	e1.3	3.7	e37	30	9.5	5.1
11	e2.9	2.6	e1.4	e1.3	e1.1	e1.3	e1.3	3.5	e37	28	9.1	5.5
12	e2.8	2.6	e1.4	e1.2	e1.1	e1.3	e1.3	3.6	e35	26	8.9	5.2
13	e2.8	2.5	e1.4	e1.2	e1.1	e1.3	e1.3	4.0	e35	24	8.5	5.0
14	e2.8	2.4	e1.4	e1.1	e1.2	e1.3	1.3	4.5	e43	23	8.3	4.9
15	2.8	e2.3	e1.4	e1.1	e1.2	e1.3	1.2	5.1	e46	22	8.2	4.9
16	2.8	e2.2	e1.4	e1.1	e1.2	e1.3	1.2	5.8	51	21	8.0	4.8
17	2.8	e2.2	e1.4	e1.1	e1.2	e1.3	1.2	6.4	51	20	8.5	4.7
18	2.6	e2.1	e1.4	e1.1	e1.2	e1.3	1.3	7.1	49	18	8.3	4.7
19	2.6	e2.0	e1.4	e1.1	e1.2	e1.4	1.4	8.0	54	18	7.9	5.0
20	2.6	e1.9	e1.3	e1.1	e1.2	e1.4	1.4	9.2	61	15	7.8	5.3
21	2.6	e2.0	e1.2	e1.1	e1.3	e1.4	1.5	10	71	14	7.8	5.0
22	2.6	e2.0	e1.2	e1.1	e1.3	e1.4	1.5	12	68	14	7.5	4.7
23	2.6	e2.1	e1.1	e1.1	e1.3	e1.5	1.5	14	67	13	7.2	4.4
24	2.6	e2.1	e1.0	e1.1	e1.3	e1.6	1.7	15	65	13	7.0	4.7
25	2.6	e2.0	e1.1	e1.2	e1.3	e1.7	1.8	16	64	13	6.9	4.5
26	2.6	e1.9	e1.2	e1.2	e1.3	e1.8	1.7	16	66	12	7.1	4.3
27	2.6	e1.8	e1.2	e1.2	e1.3	e1.8	1.8	16	63	12	7.7	4.2
28	2.6	e1.7	e1.2	e1.2	e1.2	e1.7	2.0	16	61	13	6.9	4.1
29	2.6	e1.6	e1.2	e1.1	---	e1.5	2.4	18	58	12	6.7	4.0
30	2.6	e1.6	e1.3	e1.1	---	e1.6	2.6	19	54	11	6.5	4.0
31	2.6	---	e1.3	e1.1	---	e1.7	---	21	---	12	6.5	---
TOTAL	88.8	67.4	42.4	36.4	33.6	43.5	45.8	259.4	1419	745	260.0	149.4
MEAN	2.86	2.25	1.37	1.17	1.20	1.40	1.53	8.37	47.3	24.0	8.39	4.98
MAX	3.5	2.6	1.6	1.3	1.3	1.8	2.6	21	71	49	11	6.4
MIN	2.6	1.6	1.0	1.1	1.1	1.2	1.2	2.5	22	11	6.5	4.0
AC-FT	176	134	84	72	67	86	91	515	2810	1480	516	296

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 1999, BY WATER YEAR (WY)

MEAN	2.80	1.98	1.58	1.35	1.26	1.38	2.16	12.6	46.0	21.8	6.93	3.91
MAX	5.02	2.86	2.48	1.95	1.80	2.28	4.66	34.4	90.2	55.5	17.4	9.57
(WY)	1985	1985	1985	1985	1985	1985	1985	1984	1984	1995	1984	1984
MIN	1.65	1.27	1.06	.87	.45	.80	1.13	4.96	16.7	5.13	2.71	2.16
(WY)	1989	1970	1989	1992	1967	1965	1968	1995	1977	1977	1977	1977

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1965 - 1999	
ANNUAL TOTAL	2395.1		3190.7			
ANNUAL MEAN	6.56		8.74		8.65	
HIGHEST ANNUAL MEAN					17.4	1984
LOWEST ANNUAL MEAN					3.61	1977
HIGHEST DAILY MEAN	34	Jun 4	71	Jun 21	140	Jun 20 1983
LOWEST DAILY MEAN	e1.0	Dec 24	e1.0	Dec 24	.30	Feb 21 1967
ANNUAL SEVEN-DAY MINIMUM	1.1	Dec 21	1.1	Jan 14	.40	Feb 8 1967
INSTANTANEOUS PEAK FLOW			74	Jun 20	a155	Jun 20 1983
INSTANTANEOUS PEAK STAGE			2.24	Jun 20	a3.61	Jun 20 1983
ANNUAL RUNOFF (AC-FT)	4750		6330		6270	
10 PERCENT EXCEEDS	24		30		25	
50 PERCENT EXCEEDS	2.6		2.6		2.4	
90 PERCENT EXCEEDS	1.6		1.2		1.2	

e Estimated
a Site and datum then in use.

09063400 TURKEY CREEK NEAR RED CLIFF, CO

LOCATION.--Lat 39°31'22", long 106°20'08", in NW$^1/_4$SW$^1/_4$ sec.16, T.6 S., R.80 W., Eagle County, Hydrologic Unit 14010003, on right bank 400 ft downstream from Lime Creek, 1.9 mi northeast of Red Cliff, and 2.0 mi upstream from mouth.

DRAINAGE AREA.--23.8 mi^2.

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

REVISED RECORDS.--WDR CO-88-2: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 8,918 ft above sea level, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. No diversion upstream from station. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.4	4.9	e4.0	e3.8	e3.8	e3.0	e3.9	16	69	69	28	14
2	6.4	5.1	e4.2	e3.6	e3.5	e3.0	e3.9	16	71	66	25	13
3	6.1	4.9	e3.8	e3.5	e3.3	e3.0	e3.7	17	77	65	24	13
4	6.7	4.4	e3.6	e3.5	e3.3	e3.0	e3.6	17	80	63	25	13
5	6.1	4.7	e3.4	e3.5	e3.2	e3.0	e3.6	17	87	57	25	12
6	6.1	4.7	e3.3	e3.6	e3.2	e3.0	e3.7	17	81	53	25	12
7	6.3	4.6	e4.4	e3.7	e3.2	e3.0	e3.8	17	80	53	24	11
8	6.4	e4.4	e4.1	e3.7	e3.2	e3.0	e4.0	18	86	48	23	11
9	6.2	e4.4	e3.8	e3.6	e3.3	e3.0	e4.1	19	100	51	22	11
10	6.0	e4.6	e3.8	e3.5	e3.3	e3.0	e3.9	23	98	51	23	11
11	5.9	e4.7	e3.8	e3.4	e3.2	e3.0	e4.2	22	102	44	22	12
12	5.7	e4.7	e3.7	e3.4	e3.1	e3.0	e5.0	23	99	39	21	11
13	5.7	e4.4	e3.7	e3.2	e3.0	e3.0	e5.8	24	94	38	21	10
14	5.8	e4.3	e3.6	e3.2	e3.1	e3.0	5.5	27	93	40	20	10
15	5.7	e4.3	e3.8	e3.2	e3.3	e3.1	4.6	30	105	41	20	10
16	5.5	e4.3	e3.7	e3.4	e3.3	e3.3	6.0	33	104	39	19	9.9
17	5.9	e4.2	e3.7	e3.3	e3.4	e3.3	6.9	35	134	38	21	9.6
18	5.9	e4.0	e3.8	e3.3	e3.4	e3.3	7.5	38	155	35	20	9.2
19	5.4	e3.9	e3.5	e3.4	e3.4	e3.4	7.4	44	155	34	19	9.8
20	5.4	e4.1	e3.3	e3.5	e3.3	e3.6	9.6	55	145	34	18	11
21	5.2	e4.1	e3.3	e3.4	e3.3	e3.8	10	60	157	33	18	10
22	5.2	e4.1	e3.0	e3.4	e3.2	e3.6	10	62	171	33	17	9.4
23	5.1	e4.0	e2.8	e3.4	e3.2	e3.6	11	65	173	31	17	9.0
24	5.0	e4.0	e2.8	e3.4	e3.2	e3.6	11	67	163	30	16	9.5
25	5.0	e3.8	e3.1	e3.4	e3.1	e4.0	12	66	161	29	16	9.2
26	5.0	e3.8	e3.3	e3.3	e3.1	e4.5	12	62	155	29	16	8.6
27	5.1	e3.9	e3.5	e3.2	e3.0	e4.9	13	61	152	28	17	8.4
28	5.5	e4.2	e3.8	e3.1	e3.0	e4.7	13	59	136	33	16	7.9
29	5.2	e4.0	e3.8	e3.0	---	e4.5	15	61	107	30	15	7.9
30	5.0	e4.0	e3.8	e3.2	---	e4.3	17	65	84	27	14	7.9
31	5.0	---	e3.8	e3.5	---	e3.9	---	68	---	29	14	---
TOTAL	175.9	129.5	112.0	105.6	90.9	107.4	224.7	1204	3474	1290	621	311.3
MEAN	5.67	4.32	3.61	3.41	3.25	3.46	7.49	38.8	116	41.6	20.0	10.4
MAX	6.7	5.1	4.4	3.8	3.8	4.9	17	68	173	69	28	14
MIN	5.0	3.8	2.8	3.0	3.0	3.0	3.6	16	69	27	14	7.9
AC-FT	349	257	222	209	180	213	446	2390	6890	2560	1230	617

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 1999, BY WATER YEAR (WY)

MEAN	6.18	4.57	3.64	3.18	2.98	3.54	7.59	47.0	122	48.4	14.3	8.10
MAX	12.2	9.19	5.76	4.96	4.44	6.36	23.1	103	274	139	39.1	19.8
(WY)	1985	1985	1985	1985	1997	1985	1985	1984	1984	1995	1984	1984
MIN	3.77	2.84	2.68	1.92	1.00	2.10	2.66	17.8	40.9	11.0	6.34	4.23
(WY)	1978	1978	1982	1987	1964	1981	1973	1995	1977	1977	1977	1977

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1964 - 1999	
ANNUAL TOTAL	5055.3		7846.3			
ANNUAL MEAN	13.9		21.5		22.6	
HIGHEST ANNUAL MEAN					49.4	1984
LOWEST ANNUAL MEAN					9.46	1977
HIGHEST DAILY MEAN	89	Jun 3	173	Jun 23	415	Jun 17 1965
LOWEST DAILY MEAN	e2.3	Feb 27	e2.8	Dec 23	a1.0	Jan 21 1964
ANNUAL SEVEN-DAY MINIMUM	2.6	Feb 26	3.0	Feb 27	1.0	Jan 21 1964
INSTANTANEOUS PEAK FLOW			207	Jun 19	b556	Jun 8 1985
INSTANTANEOUS PEAK STAGE			2.60	Jun 19	c2.87	Jun 8 1985
ANNUAL RUNOFF (AC-FT)	10030		15560		16380	
10 PERCENT EXCEEDS	54		65		71	
50 PERCENT EXCEEDS	5.1		5.8		5.8	
90 PERCENT EXCEEDS	2.8		3.2		2.8	

e Estimated
a Also occurred Jan 22 to Feb 29, 1964.
b From rating curve extended above 325 ft^3/s.
c Maximum gage height for period of record, 3.24 ft, Jun 6, 1997.

09063900 MISSOURI CREEK NEAR GOLD PARK, CO

LOCATION.--Lat 39°23'25", long 106°28'10", Eagle County, Hydrologic Unit 14010003, on left bank 50 ft downstream from road culvert, 0.6 mi upstream from Fancy Creek, 2.2 mi southwest of Gold Park, and 10 mi southwest of Red Cliff.

DRAINAGE AREA.--6.39 mi^2.

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

REVISED RECORDS.--WDR CO-88-2: Drainage area.

GAGE.--Water-stage recorder, crest-stage gage, and concrete control. Elevation of gage is 9,980 ft above sea level, from topographic map.

REMARKS.-- Records good except for estimated daily discharges, which are poor. Transmountain diversion upstream from station to Arkansas River basin through Homestake Tunnel. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e4.0	e2.4	e1.3	e1.2	e1.2	e.84	e1.4	4.1	15	29	8.1	6.8
2	e3.8	e2.3	e1.3	e1.2	e1.2	e.84	e1.4	3.9	16	24	7.7	6.6
3	e3.5	e2.2	e1.2	e1.2	e1.1	e.84	e1.4	3.6	18	18	7.6	6.6
4	e4.0	e2.2	e1.2	e1.3	e1.1	e.84	e1.4	3.4	16	15	7.6	5.7
5	e4.1	e2.2	e1.2	e1.3	e1.1	e.84	e1.6	3.3	15	10	7.8	5.1
6	e4.5	e2.3	e1.2	e1.3	e1.1	e.90	e1.7	3.2	12	9.7	8.1	4.6
7	e4.3	e2.2	e1.1	e1.3	e1.1	e.90	e1.9	2.8	20	9.4	7.6	4.2
8	e4.8	e2.1	e1.1	e1.3	e1.1	e.90	e1.9	2.9	32	9.3	7.3	3.8
9	e5.4	e2.3	e1.1	e1.3	e1.0	e.90	e1.9	4.7	32	9.1	7.3	3.5
10	e4.9	e2.1	e1.1	e1.3	e1.0	e.90	e1.8	6.3	30	9.0	7.5	3.3
11	e4.5	e2.0	e1.2	e1.2	e1.0	e.94	e1.7	5.7	24	8.9	7.4	6.3
12	e4.0	e1.9	e1.2	e1.2	e1.0	e.88	e1.7	4.7	20	8.6	7.2	6.2
13	e4.5	e1.8	e1.2	e1.3	e1.1	e.84	e1.8	4.7	24	8.4	7.1	4.8
14	e4.2	e1.7	e1.2	e1.3	e1.1	e.84	e1.9	5.9	30	8.4	7.1	4.7
15	e4.0	e1.7	e1.2	e1.3	e1.1	e.84	e2.0	6.7	29	8.6	7.1	4.3
16	e3.7	e1.7	e1.2	e1.3	e1.1	e.84	e1.9	7.3	35	9.0	6.9	4.2
17	e3.5	e1.8	e1.2	e1.3	e1.1	e.79	e1.8	7.6	36	9.1	6.9	4.9
18	e3.5	e1.7	e1.2	e1.3	e1.0	e.80	e1.7	8.2	27	8.8	7.0	5.9
19	e3.8	e1.6	e1.2	e1.2	e1.0	e.88	e1.7	9.6	35	8.8	6.7	7.8
20	e3.3	e1.5	e1.2	e1.1	e.90	e1.0	e1.7	11	43	8.8	7.3	14
21	e3.0	e1.6	e1.1	e1.1	e.90	e1.2	e2.1	12	41	8.7	7.1	12
22	e2.9	e1.7	e1.0	e1.1	e.90	e1.1	e2.4	13	47	8.8	7.1	12
23	e2.7	e1.8	e.92	e1.1	e.90	e1.1	e2.6	14	60	8.8	6.1	11
24	e2.6	e1.7	e.92	e1.1	e.90	e1.3	e2.9	18	55	8.5	7.8	15
25	e2.4	e1.5	e1.0	e1.1	e.90	e1.7	2.7	21	53	8.5	8.4	17
26	e2.5	e1.4	e1.1	e1.1	e.90	e1.6	2.6	14	42	8.8	7.9	14
27	e2.8	e1.4	e1.2	e1.1	e.84	e2.0	2.6	14	38	11	9.0	11
28	e3.0	e1.4	e1.2	e1.0	e.84	e1.8	2.9	17	29	8.6	8.3	8.5
29	e3.4	e1.3	e1.2	e1.0	---	e1.8	3.8	18	22	7.9	7.7	8.1
30	e3.0	e1.2	e1.2	e1.1	---	e1.7	4.4	20	23	7.9	7.1	7.1
31	e2.5	---	e1.2	e1.2	---	e1.5	---	17	---	8.4	6.8	---
TOTAL	113.1	54.7	35.84	37.2	28.48	34.15	63.3	287.6	919	325.8	230.6	229.0
MEAN	3.65	1.82	1.16	1.20	1.02	1.10	2.11	9.28	30.6	10.5	7.44	7.63
MAX	5.4	2.4	1.3	1.3	1.2	2.0	4.4	21	60	29	9.0	17
MIN	2.4	1.2	.92	1.0	.84	.79	1.4	2.8	12	7.9	6.1	3.3
AC-FT	224	108	71	74	56	68	126	570	1820	646	457	454

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1972 - 1999, BY WATER YEAR (WY)

MEAN	3.24	1.88	1.14	.82	.70	.83	2.61	14.7	32.5	21.1	9.41	4.91
MAX	7.29	3.59	2.73	1.66	1.48	1.75	7.02	41.7	79.0	78.6	29.1	9.46
(WY)	1985	1997	1996	1996	1998	1998	1974	1984	1984	1984	1983	1984
MIN	.84	.61	.35	.31	.28	.37	.71	4.00	12.7	7.96	3.55	1.65
(WY)	1980	1977	1977	1976	1977	1979	1983	1983	1977	1997	1977	1974

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1972 - 1999	
ANNUAL TOTAL	2176.64		2358.77			
ANNUAL MEAN	5.96		6.46		7.85	
HIGHEST ANNUAL MEAN					20.6	1984
LOWEST ANNUAL MEAN					4.35	1977
HIGHEST DAILY MEAN	38	Jun 30	60	Jun 23	172	Jul 10 1984
LOWEST DAILY MEAN	e.92	Dec 23	e.79	Mar 17	a.24	Feb 12 1977
ANNUAL SEVEN-DAY MINIMUM	1.0	Dec 20	.83	Mar 12	.25	Feb 7 1977
INSTANTANEOUS PEAK FLOW			118	Jun 23	b300	Jul 4 1975
INSTANTANEOUS PEAK STAGE			2.98	Jun 23	c3.19	Jul 4 1975
ANNUAL RUNOFF (AC-FT)	4320		4680		5690	
10 PERCENT EXCEEDS	14		16		19	
50 PERCENT EXCEEDS	2.8		2.8		2.3	
90 PERCENT EXCEEDS	1.3		1.0		.54	

e Estimated
a Also occurred Feb 13, 1977.
b From rating curve extended above 35 ft^3/s.
c Maximum gage height, 3.83 ft, Jul 30, 1983.

09064000 HOMESTAKE CREEK AT GOLD PARK, CO

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

DRAINAGE AREA.--36.0 mi^2.

PERIOD OF RECORD.--October 1947 to September 1954, August 1972 to current year. Statistical summary computed for 1973 to current year.

REVISED RECORDS.--WDR CO-88-2: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry, and crest-stage gage. Elevation of gage is 9,200 ft above sea level, from topographic map. Prior to Aug. 1, 1972, water-stage recorder at site 1,500 ft upstream at datum 9,245 ft above sea level (river-profile survey).

REMARKS.--Records good except for estimated daily discharges, which are poor. Flow regulated by Homestake Lake, capacity, 44,360 acre-ft, since June 7, 1966. Transmountain diversion upstream from station to Arkansas River basin through Homestake Tunnel since June 6, 1967. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	9.5	e6.8	e7.5	7.0	e5.0	e10	21	60	57	46	25
2	11	e9.5	e7.0	e7.6	e6.8	e5.0	e10	19	67	52	42	23
3	9.1	e10	e7.0	e7.6	e6.3	e4.9	e9.8	17	76	44	37	22
4	12	e9.2	e6.9	e7.6	e5.9	e4.9	e9.8	15	67	42	37	18
5	12	e8.8	e6.7	e7.6	e5.8	e4.8	9.8	17	57	35	38	15
6	13	e8.8	e6.5	e7.6	e5.8	e5.1	e10	20	48	33	44	14
7	12	e8.8	e6.3	e7.6	e5.7	e5.2	11	16	62	31	39	13
8	14	e9.0	e6.5	e7.8	e5.7	e5.2	11	21	92	33	36	12
9	15	e9.5	e6.8	e8.2	e5.8	e5.3	e11	33	96	34	36	11
10	14	e8.9	e6.6	e8.2	e5.7	e5.2	e10	37	89	32	37	11
11	12	e8.2	e6.4	e8.0	e5.3	e5.5	e10	30	71	33	35	20
12	11	e8.6	e6.4	e8.0	e5.1	e5.4	11	31	66	34	33	19
13	11	e8.4	e6.4	e8.2	e5.4	e5.4	12	36	69	38	31	14
14	12	e8.0	e6.7	e8.0	e5.6	e5.3	12	44	87	38	30	16
15	11	e8.2	e6.9	e7.6	e5.5	e5.2	12	48	84	38	29	14
16	10	e8.2	e7.0	e7.7	e5.4	e5.0	e11	50	83	38	28	14
17	9.9	e8.2	e6.9	e7.6	e5.3	e5.0	e11	50	85	38	28	17
18	11	8.6	e6.8	e7.6	e5.2	e5.3	e11	53	68	36	28	22
19	11	e8.2	e7.0	e7.4	e5.1	e5.6	12	55	83	38	28	27
20	9.0	e7.8	e6.9	e7.6	e5.1	e6.4	16	57	95	38	30	51
21	8.6	e7.6	e6.8	e7.8	e4.9	e8.0	18	61	87	37	21	44
22	8.4	e7.8	e6.3	e7.8	e5.0	e9.4	17	62	100	40	21	40
23	8.0	8.2	e5.8	e7.6	e5.2	e8.6	22	69	139	43	19	35
24	7.7	8.4	e6.0	e7.6	e5.1	e8.6	18	98	130	41	26	45
25	7.8	7.1	e6.4	e7.7	e5.1	e11	23	102	119	39	30	49
26	8.5	8.0	e7.0	e7.6	e5.2	e13	19	65	94	40	27	39
27	9.1	7.7	e7.6	e7.2	e5.2	e12	18	64	80	53	35	33
28	11	7.8	e7.4	e6.9	e5.0	e13	20	70	64	51	35	29
29	12	6.8	e7.6	e6.4	---	e12	25	77	55	42	31	26
30	10	6.8	e7.6	e6.6	---	e11	28	83	53	40	26	23
31	9.8	---	e7.5	e6.8	---	e11	---	74	---	46	25	---
TOTAL	331.9	250.6	210.5	235.0	154.2	222.3	428.4	1495	2426	1234	988	741
MEAN	10.7	8.35	6.79	7.58	5.51	7.17	14.3	48.2	80.9	39.8	31.9	24.7
MAX	15	10	7.6	8.2	7.0	13	28	102	139	57	46	51
MIN	7.7	6.8	5.8	6.4	4.9	4.8	9.8	15	48	31	19	11
AC-FT	658	497	418	466	306	441	850	2970	4810	2450	1960	1470

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1973 - 1999, BY WATER YEAR (WY)

MEAN	14.0	9.89	7.43	6.11	5.71	6.67	14.6	65.2	99.6	63.2	33.0	17.1
MAX	31.4	15.2	13.8	10.9	10.3	12.4	33.8	211	310	243	121	34.8
(WY)	1985	1991	1986	1986	1986	1989	1989	1984	1984	1995	1983	1984
MIN	6.15	4.37	2.78	2.16	1.98	2.56	5.50	29.7	38.0	24.4	12.9	8.36
(WY)	1990	1990	1976	1976	1976	1976	1983	1977	1992	1988	1977	1977

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1973 - 1999	
ANNUAL TOTAL	8952.3		8716.9			
ANNUAL MEAN	24.5		23.9		a28.7	
HIGHEST ANNUAL MEAN					79.2	1984
LOWEST ANNUAL MEAN					15.3	1977
HIGHEST DAILY MEAN	328	Jun 30	139	Jun 23	b602	Jun 30 1984
LOWEST DAILY MEAN	e2.6	Feb 28	e4.8	Mar 5	1.8	Feb 5 1976
ANNUAL SEVEN-DAY MINIMUM	2.9	Feb 27	5.0	Feb 28	1.9	Jan 31 1976
INSTANTANEOUS PEAK FLOW			337	Jun 23	c930	Jun 30 1984
INSTANTANEOUS PEAK STAGE			d5.24	Jun 23	f6.21	Jun 30 1984
ANNUAL RUNOFF (AC-FT)	17760		17290		20760	
10 PERCENT EXCEEDS	50		60		64	
50 PERCENT EXCEEDS	9.0		11		12	
90 PERCENT EXCEEDS	3.8		5.6		4.6	

e Estimated
a Average discharge for 7 years (water years 1948-54), 63.4 ft^3/s, 45,930 acre-ft/yr, prior to diversion through Homestake Tunnel.
b Maximum daily discharge for period of record, 755 ft^3/s, Jun 21, 1951.
c Maximum discharge and stage for period of record, 1080 ft^3/s, Jun 13, 1953, gage height, 6.84 ft, site and datum then in use, from rating curve extended above 700 ft^3/s.
d Maximum gage height, 5.89 ft, Dec 24, backwater from ice.
f Maximum gage height for statistical period, 6.31 ft, Apr 5, 1978, backwater from ice.

09064500 HOMESTAKE CREEK NEAR RED CLIFF, CO

LOCATION.--Lat 39°28'24", long 106°22'02", in NE$^1/_4$NE$^1/_4$ sec.6, T.7 S., R.80 W., Eagle County, Hydrologic Unit 14010003, on right bank at downstream side of Forest Service road bridge, 2.4 mi south of Red Cliff, and 3.0 mi upstream from mouth.

DRAINAGE AREA.--58.2 mi^2.

PERIOD OF RECORD.--October 1910 to September 1918, May 1944 to current year. Published as "at Redcliff" October 1910 to September 1916. Statistical summary computed for 1967 to current year.

REVISED RECORDS.--WDR CO-88-2: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 8,783 ft above sea level (river-profile survey). See WSP 1713 or 1733 for history of changes prior to May 8, 1961.

REMARKS.--Records good except for estimated daily discharges, which are poor. Flow regulated by Homestake Lake (capacity, 44,360 acre-ft) since June 7, 1966. Transmountain diversions upstream from station through Homestake Tunnel (see elsewhere in this report) since June 6, 1967. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	16	e14	e11	e9.2	e7.7	e14	72	139	108	77	28
2	25	21	e14	e11	e9.2	e7.7	e14	69	144	103	72	25
3	17	21	e13	e11	e9.0	e7.7	e14	65	157	87	58	25
4	25	15	e13	e11	e8.8	e8.0	e14	58	149	83	55	22
5	24	16	e13	e12	e8.6	e7.8	e14	52	133	70	58	19
6	20	17	e12	e12	e8.6	e7.6	e14	49	109	71	79	17
7	24	16	e11	e12	e8.6	e7.4	e15	50	108	73	65	15
8	30	e16	e11	e11	e8.6	e7.3	e17	60	153	68	55	14
9	30	e15	e11	e11	e8.6	e7.2	e16	83	160	66	51	13
10	28	e15	e11	e11	e8.0	e7.2	e17	93	161	56	61	13
11	24	e14	e12	e11	e7.4	e7.2	e20	72	136	52	57	19
12	20	e14	e12	e11	e7.2	e7.2	e24	67	129	51	51	24
13	18	e14	e12	e11	e7.3	e7.2	e29	82	125	53	44	17
14	22	e15	e12	e11	e7.5	e7.2	35	99	149	54	42	15
15	20	e15	e12	e11	e7.6	e7.2	28	104	172	55	41	16
16	15	e15	e12	e11	e7.6	e7.2	26	117	162	56	39	16
17	15	e15	e12	e11	e7.4	e7.0	26	110	174	61	40	14
18	13	13	e12	e11	e7.3	e7.2	32	115	152	49	43	21
19	14	13	e11	e11	e7.3	e8.0	34	124	160	58	38	23
20	15	13	e10	e11	e7.2	e8.8	43	136	181	62	43	57
21	13	14	e9.5	e11	e7.2	e9.7	53	141	183	50	36	51
22	13	14	e9.0	e11	e7.4	e10	48	148	181	53	29	45
23	12	e14	e8.2	e10	e7.8	e10	45	156	207	64	23	40
24	12	e13	e7.8	e10	e7.8	e11	49	181	224	54	27	49
25	9.5	e13	e8.0	e10	e7.6	e13	64	227	207	51	35	60
26	12	e13	e8.8	e10	e7.4	e14	54	159	187	58	31	46
27	13	e13	e10	e10	e7.4	e16	52	159	159	70	46	37
28	21	e13	e12	e10	e7.5	e15	59	144	140	82	46	31
29	21	e13	e12	e8.4	---	e15	75	173	117	68	38	27
30	20	e14	e12	e9.0	---	e15	90	171	105	62	34	25
31	18	---	e12	e9.6	---	e15	---	175	---	78	29	---
TOTAL	581.5	443	349.3	332.0	221.1	293.5	1035	3511	4663	2026	1443	824
MEAN	18.8	14.8	11.3	10.7	7.90	9.47	34.5	113	155	65.4	46.5	27.5
MAX	30	21	14	12	9.2	16	90	227	224	108	79	60
MIN	9.5	13	7.8	8.4	7.2	7.0	14	49	105	49	23	13
AC-FT	1150	879	693	659	439	582	2050	6960	9250	4020	2860	1630

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1967 - 1999, BY WATER YEAR (WY)

MEAN	19.2	13.7	10.5	8.74	8.52	11.0	35.8	126	149	76.2	38.4	22.7
MAX	45.1	31.0	19.7	16.7	16.7	22.5	73.1	358	439	313	136	42.3
(WY)	1985	1985	1985	1996	1996	1989	1986	1984	1984	1984	1983	1984
MIN	8.59	5.30	4.66	3.19	2.93	3.60	10.8	53.6	55.2	27.8	8.54	8.29
(WY)	1976	1967	1989	1987	1987	1981	1983	1990	1992	1967	1990	1977

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1967 - 1999	
ANNUAL TOTAL	14542.6		15722.4			
ANNUAL MEAN	39.8		43.1		a43.5	
HIGHEST ANNUAL MEAN					116	1984
LOWEST ANNUAL MEAN					20.3	1977
HIGHEST DAILY MEAN	291	Jul 1	227	May 25	831	May 25 1984
LOWEST DAILY MEAN	6.3	Sep 29	e7.0	Mar 17	b1.8	Sep 2 1990
ANNUAL SEVEN-DAY MINIMUM	8.5	Sep 24	7.2	Mar 11	2.1	Aug 29 1990
INSTANTANEOUS PEAK FLOW			351	Jun 23	c943	May 24 1984
INSTANTANEOUS PEAK STAGE			2.99	Jun 23	3.96	May 24 1984
ANNUAL RUNOFF (AC-FT)	28850		31190		31490	
10 PERCENT EXCEEDS	105		131		117	
50 PERCENT EXCEEDS	23		18		17	
90 PERCENT EXCEEDS	9.4		7.9		6.5	

e Estimated
a Average discharge for 30 years (water years 1911-18, 1945-66), 86.6 ft^3/s; 62,740 acre-ft/yr, prior to diversion through Homestake tunnel.
b Minimum observed for period of record, 0.60 ft^3/s, Jan 25, 1915 (discharge measurement).
c Maximum discharge and stage for period of record, 1300 ft^3/s, Jun 24, 1918, gage height, 6.20 ft, site and datum then in use.

09064600 EAGLE RIVER NEAR MINTURN, CO

LOCATION.--Lat 39°33'14", long 106°24'07", in $SW^1/_4SE^1/_4$ of unsurveyed sec. T.6 S., R.81 W., Eagle County, Hydrologic Unit 14010003, on left bank 500 ft upstream from U.S. Highway 24 bridge and 2.5 miles southeast of Minturn.

DRAINAGE AREA.--186 mi^2.

PERIOD OF RECORD.--October 1989 to current year.

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 8,078.37 ft above sea level, from levels by private engineering firm.

REMARKS.--Records good except for estimated daily discharges, which are poor. Transmountain diversions upstream from station by Columbine, Ewing, and Wurtz Ditches. Transmountain diversion from Robinson Reservoir, capacity 2,520 acre-ft, for use in Tenmile Creek basin. Several small diversions for irrigation upstream from station. No regulation. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	43	49	e34	e33	e36	e31	67	150	601	371	180	83
2	51	56	e33	e33	e33	e32	64	144	635	358	162	82
3	45	56	e32	e33	e33	e30	56	142	693	322	138	80
4	56	49	e32	e33	e30	e32	54	131	701	307	133	74
5	55	43	e31	e32	e32	e35	50	118	647	276	145	67
6	48	48	e29	e32	e30	e30	49	110	560	292	193	64
7	53	47	e28	e32	e30	e28	55	110	547	278	161	60
8	57	44	e26	e33	e33	e26	63	129	648	264	141	57
9	56	47	e33	e34	e34	e25	56	174	701	250	127	56
10	55	e43	e32	e31	e35	e24	52	209	713	218	142	54
11	52	e39	e27	e32	e29	e22	49	168	669	199	138	63
12	48	e43	e28	e32	e25	e21	56	150	643	188	125	75
13	46	e42	e33	e33	e31	e20	66	175	613	176	115	63
14	51	e44	e34	e31	e33	e21	68	226	630	173	108	58
15	50	46	e35	e31	e34	e23	62	252	678	176	109	58
16	45	44	e34	e31	e32	e27	56	285	681	179	104	57
17	45	41	e33	e33	e31	e25	57	274	729	210	107	56
18	43	40	e33	e32	e30	e29	59	288	700	168	122	60
19	43	38	e34	e33	e30	e32	67	330	701	165	104	62
20	43	41	e35	e33	e29	e34	83	384	724	169	104	94
21	42	38	e31	e32	e28	e37	99	420	721	146	106	94
22	42	43	e26	e32	e29	e41	94	459	686	148	97	83
23	42	41	e19	e31	e28	e47	88	492	683	166	87	76
24	41	40	e21	e33	e30	53	91	566	697	146	85	83
25	40	39	e22	e33	e29	59	118	686	614	141	92	95
26	41	38	e24	e34	e31	74	105	575	572	147	90	82
27	44	37	e36	e33	e29	77	99	577	507	164	117	72
28	59	35	e35	e30	e30	63	115	544	467	181	108	68
29	56	35	e35	e26	---	61	148	611	422	167	98	64
30	52	34	e34	e28	---	64	182	624	383	146	92	64
31	51	---	e34	e31	---	66	---	659	---	180	85	---
TOTAL	1495	1280	953	990	864	1189	2328	10162	18966	6471	3715	2104
MEAN	48.2	42.7	30.7	31.9	30.9	38.4	77.6	328	632	209	120	70.1
MAX	59	56	36	34	36	77	182	686	729	371	193	95
MIN	40	34	19	26	25	20	49	110	383	141	85	54
AC-FT	2970	2540	1890	1960	1710	2360	4620	20160	37620	12840	7370	4170

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 1999, BY WATER YEAR (WY)

MEAN	46.2	39.3	31.0	28.1	27.3	34.2	87.0	401	568	220	92.9	57.0
MAX	68.8	47.8	44.6	41.8	42.3	54.4	175	726	962	661	186	73.8
(WY)	1998	1996	1996	1996	1996	1997	1996	1996	1995	1995	1995	1995
MIN	27.6	25.3	21.2	17.9	18.4	23.5	50.4	219	263	94.8	49.8	40.6
(WY)	1990	1990	1990	1990	1990	1991	1991	1990	1992	1994	1990	1994

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1990 - 1999	
ANNUAL TOTAL	38158		50517			
ANNUAL MEAN	105		138		136	
HIGHEST ANNUAL MEAN					197	1995
LOWEST ANNUAL MEAN					87.9	1990
HIGHEST DAILY MEAN	501	Jun 3	729	Jun 17	1540	Jun 18 1995
LOWEST DAILY MEAN	e18	Mar 9	e19	Dec 23	11	Dec 9 1994
ANNUAL SEVEN-DAY MINIMUM	20	Mar 4	22	Mar 9	16	Jan 4 1990
INSTANTANEOUS PEAK FLOW			832	Jun 24	1810	Jun 18 1995
INSTANTANEOUS PEAK STAGE			5.29	Jun 24	6.75	Jun 18 1995
ANNUAL RUNOFF (AC-FT)	75690		100200		98720	
10 PERCENT EXCEEDS	278		477		384	
50 PERCENT EXCEEDS	47		56		49	
90 PERCENT EXCEEDS	30		30		24	

e Estimated

09065100 CROSS CREEK NEAR MINTURN, CO

LOCATION.--Lat 39°34'05", long 106°24'43", in $SW^1/_4SW^1/_4$ sec.36, T.5 S., R.81 W., Eagle County, Hydrologic Unit 14010003, on right bank 0.4 mi upstream from mouth, and 1.5 mi southeast of Minturn.

DRAINAGE AREA.--34.2 mi^2.

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

REVISED RECORDS.--WDR CO-81-2: 1980 (M). WDR CO-88-2: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 7,992 ft above sea level, from topographic map. Prior to July 18, 1956, nonrecording gage at site 0.3 mi downstream at different datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. Bolts ditch exports water upstream from station to tailings ponds and recreation lake along Eagle River. Diversion 0.5 mi upstream from station for water supply of school and for municipal supply of Minturn. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	14	e7.6	e4.2	e4.5	e3.8	14	28	163	258	118	33
2	17	18	e6.8	e4.2	e4.1	e4.0	13	26	193	295	97	31
3	16	17	e6.7	e4.1	e4.0	e3.6	15	26	219	254	80	31
4	20	13	e7.0	e4.0	e3.8	e4.3	13	23	199	243	76	28
5	19	17	e6.8	e4.0	e4.0	e4.7	9.8	20	186	212	96	24
6	16	15	e5.6	e4.0	e3.8	e4.4	13	20	136	205	152	22
7	19	14	e4.5	e4.1	e3.7	e4.4	11	19	144	172	128	20
8	22	16	e3.6	e4.1	e4.0	e4.5	11	28	247	180	97	18
9	22	e14	e4.2	e4.3	e4.0	e4.4	12	46	288	204	82	17
10	24	e13	e4.0	e3.9	e4.2	e4.5	11	54	261	155	106	16
11	23	e12	e3.6	e4.0	e3.6	e4.5	15	40	213	134	120	21
12	21	e11	e3.7	e3.9	e3.1	e4.4	9.7	32	235	107	96	30
13	20	e13	e4.3	e4.1	e3.6	e4.2	12	40	238	106	74	22
14	21	e12	e4.3	e3.8	e4.1	e4.2	13	66	273	113	63	19
15	23	e12	e4.4	e3.8	e4.2	e4.5	11	63	288	107	59	17
16	20	e13	e4.3	e3.8	e3.9	e4.9	12	73	253	108	56	18
17	19	e12	e4.2	e4.1	e3.8	e5.2	10	71	281	161	53	17
18	16	e12	e4.2	e4.0	e3.7	e5.8	9.5	78	292	111	64	22
19	17	e11	e4.3	e4.1	e3.6	7.2	12	107	303	94	54	22
20	17	e9.6	e4.4	e4.2	e3.5	8.9	15	134	325	106	50	41
21	15	e8.8	e4.0	e4.0	e3.4	10	20	151	331	93	45	41
22	16	e8.2	e3.1	e4.0	e3.6	15	20	171	319	88	44	36
23	15	e8.0	e2.5	e3.9	e3.4	18	20	207	349	82	40	35
24	14	e8.6	e2.6	e4.1	e3.7	15	21	267	393	77	36	42
25	13	e6.4	e2.7	e4.1	e3.6	16	30	350	397	73	35	58
26	13	e6.2	e3.1	e4.2	e3.7	19	26	198	399	78	38	47
27	15	e7.0	e4.5	e4.0	e3.5	20	23	205	338	124	48	37
28	17	e7.2	e4.4	e3.6	e3.6	23	27	191	317	121	43	32
29	16	e7.6	e4.4	e3.2	---	20	32	242	273	112	38	28
30	16	e8.0	e4.3	e3.5	---	17	36	210	221	88	37	27
31	15	---	e4.2	e3.9	---	16	---	232	---	130	34	---
TOTAL	548	344.6	138.3	123.2	105.7	285.4	497.0	3418	8074	4391	2159	852
MEAN	17.7	11.5	4.46	3.97	3.77	9.21	16.6	110	269	142	69.6	28.4
MAX	24	18	7.6	4.3	4.5	23	36	350	399	295	152	58
MIN	11	6.2	2.5	3.2	3.1	3.6	9.5	19	136	73	34	16
AC-FT	1090	684	274	244	210	566	986	6780	16010	8710	4280	1690

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1957 - 1999, BY WATER YEAR (WY)

MEAN	13.6	7.20	4.29	3.12	2.97	4.13	21.0	121	254	136	45.1	22.4
MAX	49.5	15.6	9.81	8.85	8.84	11.4	57.6	221	360	355	122	65.0
(WY)	1962	1962	1997	1997	1997	1997	1962	1970	1980	1957	1983	1961
MIN	3.39	1.99	.99	.17	.48	1.09	6.35	57.8	134	38.5	14.4	6.68
(WY)	1957	1957	1963	1963	1977	1977	1973	1995	1977	1977	1977	1974

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1957 - 1999	
ANNUAL TOTAL	16143.4		20936.2			
ANNUAL MEAN	44.2		57.4		52.9	
HIGHEST ANNUAL MEAN					83.2	1984
LOWEST ANNUAL MEAN					25.4	1977
HIGHEST DAILY MEAN	247	Jul 1	399	Jun 26	618	Jun 30 1957
LOWEST DAILY MEAN	e2.5	Dec 23	e2.5	Dec 23	a.10	Dec 27 1962
ANNUAL SEVEN-DAY MINIMUM	3.0	Mar 4	3.2	Dec 20	.13	Dec 26 1962
INSTANTANEOUS PEAK FLOW			573	Jun 26	754	Jun 30 1957
INSTANTANEOUS PEAK STAGE			4.75	Jun 26	b5.45	Jun 30 1957
ANNUAL RUNOFF (AC-FT)	32020		41530		38360	
10 PERCENT EXCEEDS	147		205		178	
50 PERCENT EXCEEDS	15		17		11	
90 PERCENT EXCEEDS	3.9		3.9		2.2	

e Estimated
a Also occurred Dec 28-31, 1962, Jan 6-8, 11-15, 1963.
b Maximum gage height, 6.14 ft, Aug 6, 1983.

09065500 GORE CREEK AT UPPER STATION, NEAR MINTURN, CO

LOCATION.--Lat 39°37'33", long 106°16'39", in NE$^1/_4$NW$^1/_4$ sec.18, T.5 S., R.79 W., Eagle County, Hydrologic Unit 14010003, on right bank 20 ft downstream from bridge pier on Interstate 70, 0.2 mi upstream from Black Gore Creek, 4.4 mi east of Vail, and 8.4 mi northeast of Minturn.

DRAINAGE AREA.--14.4 mi^2.

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

REVISED RECORDS.--WDR CO-89-2: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 8,600 ft above sea level, from topographic map. Oct. 1, 1947 to Sept. 30,1956, Oct. 1, 1963 to Sept. 30, 1980, at various sites about 1200 ft upstream at different datums. See WDR CO-80-2, for history of changes prior to Oct. 1, 1980. Oct. 1, 1980 to Apr. 21, 1992, gage at site 10 ft upstream and at datum 2.0 ft higher.

REMARKS.--Records good except for estimated daily discharges, which are poor. No diversion upstream from station. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.3	6.5	e3.9	e2.1	e2.2	e2.2	e8.8	15	e110	e120	51	15
2	6.9	7.3	e3.8	e2.0	e2.3	e2.2	e8.6	14	e130	e120	39	14
3	6.3	7.0	e3.7	e2.0	e2.3	e2.2	e8.6	12	e140	e110	33	13
4	7.4	6.8	e3.6	e2.0	e2.2	e2.2	e8.6	11	e150	e94	36	12
5	7.4	8.4	e3.3	e2.1	e2.1	e2.3	e8.6	9.9	e120	e86	38	11
6	7.4	7.9	e3.1	e2.1	e2.3	e2.3	e8.4	9.2	e100	e84	35	9.6
7	7.9	e6.8	e3.1	e2.1	e2.3	e2.3	6.8	9.6	e110	82	32	8.8
8	9.1	e6.4	e2.9	e2.2	e2.3	e2.4	7.6	13	e150	e80	29	8.2
9	9.5	e6.9	e2.9	e2.0	e2.2	e2.4	7.1	18	e160	88	27	7.7
10	10	e6.0	e2.8	e1.9	e2.2	e2.4	6.8	19	e150	76	e30	7.4
11	9.6	e6.3	e2.7	e2.0	e2.2	e2.5	7.0	16	e140	65	e32	10
12	8.9	e5.8	e2.7	e2.1	e2.2	e2.6	7.0	e18	e140	57	27	9.8
13	8.6	e5.6	e2.4	e2.0	e2.0	e2.7	7.4	e19	e150	55	22	e8.6
14	10	e5.6	e2.4	e1.9	e1.9	e3.1	8.1	e20	e150	57	20	e7.6
15	10	e5.8	e2.3	e1.9	e2.2	e3.2	7.4	e23	e140	56	20	e7.2
16	8.8	e5.8	e2.3	e2.0	e2.0	e3.2	7.2	e25	e150	54	17	e7.2
17	8.3	e5.8	e2.3	e2.0	e1.9	e3.3	7.2	e30	e160	60	19	e7.2
18	8.1	e5.6	e2.3	e1.9	e1.9	e3.4	7.1	e32	e160	48	21	e7.6
19	7.8	e5.3	e2.4	e1.9	e1.9	e3.8	6.9	e37	e160	46	18	e9.0
20	7.5	e5.2	e2.3	e1.9	e1.8	e4.1	8.3	e52	e160	43	20	e12
21	7.1	e5.5	e2.2	e1.9	e1.8	e5.0	10	e62	e160	40	18	e15
22	7.1	e5.0	e2.2	e1.9	e1.8	e5.4	9.4	e72	e160	40	18	e15
23	6.8	e4.6	e2.2	e1.9	e1.8	e5.9	8.7	e88	e170	37	16	e14
24	6.5	e4.5	e2.2	e2.0	e2.1	e5.6	10	e100	e170	34	15	e15
25	6.2	e4.0	e2.2	e2.1	e2.1	e5.4	15	e120	e180	33	15	e17
26	6.4	e3.9	e2.2	e2.2	e2.1	e6.8	12	e130	e170	34	15	e15
27	6.9	e4.1	e2.1	e2.2	e2.1	e7.8	12	e100	e160	39	24	e13
28	6.5	e4.2	e2.1	e2.1	e2.1	e9.0	15	e100	e150	63	19	e12
29	8.4	e4.3	e2.1	e2.1	---	e7.8	16	e110	e140	69	17	e12
30	7.6	e4.1	e2.1	e2.1	---	e8.0	19	e130	e100	47	15	e11
31	6.9	---	e2.1	e2.2	---	e8.4	---	e130	---	54	14	---
TOTAL	241.2	171.0	80.9	62.8	58.3	129.9	280.6	1544.7	4390	1971	752	331.9
MEAN	7.78	5.70	2.61	2.03	2.08	4.19	9.35	49.8	146	63.6	24.3	11.1
MAX	10	8.4	3.9	2.2	2.3	9.0	19	130	180	120	51	17
MIN	5.3	3.9	2.1	1.9	1.8	2.2	6.8	9.2	100	33	14	7.2
AC-FT	478	339	160	125	116	258	557	3060	8710	3910	1490	658

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1948 - 1999, BY WATER YEAR (WY)

MEAN	7.52	5.00	3.68	3.16	3.03	3.69	11.5	68.1	155	71.1	20.8	9.64
MAX	19.8	15.3	9.23	9.75	10.6	12.6	22.5	121	245	198	83.7	22.9
(WY)	1985	1985	1986	1986	1986	1985	1969	1974	1978	1983	1983	1984
MIN	3.12	2.50	1.94	1.86	1.55	1.57	3.81	23.4	59.2	17.2	7.37	3.52
(WY)	1976	1976	1964	1964	1977	1977	1973	1968	1954	1977	1954	1956

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1948 - 1999	
ANNUAL TOTAL	9083.2		10014.3			
ANNUAL MEAN	24.9		27.4		30.2	
HIGHEST ANNUAL MEAN					48.3	1983
LOWEST ANNUAL MEAN					17.4	1954
HIGHEST DAILY MEAN	178	Jun 2	e180	Jun 25	455	Jun 25 1983
LOWEST DAILY MEAN	e1.5	Mar 1	e1.8	Feb 20	1.2	Mar 5 1977
ANNUAL SEVEN-DAY MINIMUM	1.6	Feb 27	1.8	Feb 17	1.3	Feb 27 1977
INSTANTANEOUS PEAK FLOW			a		b662	Jun 24 1983
INSTANTANEOUS PEAK STAGE			a		c2.60	Jun 24 1983
ANNUAL RUNOFF (AC-FT)	18020		19860		21880	
10 PERCENT EXCEEDS	85		104		101	
50 PERCENT EXCEEDS	6.6		7.8		7.0	
90 PERCENT EXCEEDS	2.1		2.1		2.4	

e Estimated
a Not determined.
b From rating curve extended above 140 ft^3/s.
c Maximum gage height, 6.65 ft, Jun 18, 1951, datum then in use.

09066000 BLACK GORE CREEK NEAR MINTURN, CO

LOCATION.--Lat 39°35'47", long 106°15'52", T.5 S., R.79 W., Eagle County, Hydrologic Unit 14010003, on right bank 200 ft from U.S. Highway 6, 0.3 mi upstream from Timber Creek, 2.5 mi upstream from mouth, and 9 mi east of Minturn.

DRAINAGE AREA.--12.6 mi^2.

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

REVISED RECORDS.--WDR CO-89-2: Drainage area.

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

REMARKS.--Records good except for estimated daily discharges, which are poor. No diversions upstream from station. Natural regulation by two small recreation lakes upstream from station. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.7	3.9	e3.2	e2.9	e3.3	e2.9	e5.2	9.5	94	48	16	7.1
2	4.5	4.3	e3.2	e2.9	e3.3	e2.9	e4.9	9.0	110	44	14	6.9
3	4.0	4.3	e3.2	e2.9	e3.4	e2.9	e5.0	8.5	125	40	12	6.6
4	5.2	3.9	e3.2	e2.9	e3.3	e2.9	e5.0	8.0	123	37	14	6.3
5	4.7	e4.8	e3.2	e2.9	e3.2	e3.0	e5.0	7.2	105	34	14	5.9
6	4.7	e4.6	e3.2	e3.1	e3.3	e3.0	e5.1	6.5	87	32	14	5.7
7	5.3	e4.2	e3.0	e3.3	e3.3	e3.0	e5.2	6.8	102	31	12	5.5
8	5.2	e3.8	e2.8	e3.4	e3.3	e2.9	5.3	9.6	120	30	11	5.3
9	4.9	e3.5	e2.8	e3.4	e3.3	e2.9	e5.0	12	130	28	10	5.2
10	4.7	e3.6	e2.8	e3.3	e3.3	e3.1	e5.1	12	131	25	11	5.2
11	4.2	e4.0	e2.8	e3.4	e3.3	e3.1	e5.1	9.9	126	23	10	6.5
12	3.9	e3.8	e2.9	e3.5	e3.3	e3.1	e5.0	9.6	117	21	10	5.7
13	3.7	e3.7	e2.9	e3.6	e3.2	e3.2	e4.4	12	111	20	9.1	5.4
14	4.1	e3.7	e2.9	e3.5	e3.0	e3.2	3.0	14	114	19	8.9	5.1
15	3.7	e3.8	e3.0	e3.6	e3.0	e3.2	e2.9	17	127	19	9.3	5.1
16	3.6	e3.8	e3.0	e3.7	e3.3	e3.2	e2.9	18	135	20	8.7	5.0
17	3.7	e3.8	e3.0	e3.7	e3.2	e3.3	e2.9	19	134	19	10	5.2
18	3.8	e3.6	e3.0	e3.8	e3.0	e3.4	e2.8	24	125	17	10	5.0
19	3.6	e3.5	e3.1	e3.8	e3.0	e3.6	e2.5	30	122	17	8.7	6.8
20	3.5	e3.5	e3.0	e3.9	e3.0	e3.6	2.2	36	118	16	9.3	8.1
21	3.4	e3.7	e2.9	e4.0	e3.0	e4.0	2.7	44	111	15	8.4	6.9
22	3.4	e3.5	e2.7	e4.0	e3.0	e4.2	4.7	48	110	15	8.0	6.2
23	3.3	e3.5	e2.7	e4.1	e2.9	e4.6	5.8	57	108	15	7.5	5.7
24	3.3	e3.5	e2.8	e4.2	e2.8	e4.4	7.9	67	100	14	7.3	7.0
25	3.2	e3.5	e2.8	e4.3	e2.8	e4.4	8.7	68	92	13	7.1	6.6
26	3.4	e3.4	e2.9	e4.5	e2.8	e4.9	7.4	57	83	13	8.1	5.9
27	3.6	e3.4	e3.0	e4.7	e2.8	e5.1	8.1	54	72	13	9.8	5.5
28	4.1	e3.4	e3.1	e4.6	e2.8	e5.4	9.0	81	64	16	8.0	5.5
29	4.6	e3.5	e3.0	e4.3	---	e5.1	11	83	58	14	7.5	5.0
30	4.1	e3.3	e3.0	e4.0	---	e5.0	11	98	53	13	7.1	4.8
31	3.9	---	e3.1	e3.3	---	e5.1	---	102	---	17	7.2	---
TOTAL	125.0	112.8	92.2	113.5	87.2	114.6	160.8	1037.6	3207	698	308.0	176.7
MEAN	4.03	3.76	2.97	3.66	3.11	3.70	5.36	33.5	107	22.5	9.94	5.89
MAX	5.3	4.8	3.2	4.7	3.4	5.4	11	102	135	48	16	8.1
MIN	3.2	3.3	2.7	2.9	2.8	2.9	2.2	6.5	53	13	7.1	4.8
AC-FT	248	224	183	225	173	227	319	2060	6360	1380	611	350

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1948 - 1999, BY WATER YEAR (WY)

MEAN	3.89	3.43	2.85	2.52	2.40	2.98	7.46	54.9	92.2	22.5	7.33	4.37
MAX	10.7	10.7	9.57	8.08	9.09	14.5	22.8	130	160	69.2	21.4	12.0
(WY)	1985	1985	1985	1986	1986	1986	1985	1948	1978	1995	1984	1984
MIN	1.90	1.84	1.35	1.01	.91	1.40	2.86	15.0	21.8	6.09	2.56	2.43
(WY)	1951	1964	1970	1979	1979	1971	1973	1995	1954	1954	1954	1956

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1948 - 1999	
ANNUAL TOTAL	4437.6		6233.4			
ANNUAL MEAN	12.2		17.1		17.2	
HIGHEST ANNUAL MEAN					30.3	1984
LOWEST ANNUAL MEAN					8.16	1954
HIGHEST DAILY MEAN	104	Jun 3	135	Jun 16	274	Jun 17 1995
LOWEST DAILY MEAN	2.4	Mar 1	2.2	Apr 20	.90	Feb 22 1968
ANNUAL SEVEN-DAY MINIMUM	2.6	Feb 25	2.7	Apr 15	.90	Feb 4 1979
INSTANTANEOUS PEAK FLOW			163	Jun 15	370	Jun 17 1995
INSTANTANEOUS PEAK STAGE			4.43	Jun 15	a5.06	Jun 17 1995
ANNUAL RUNOFF (AC-FT)	8800		12360		12490	
10 PERCENT EXCEEDS	41		57		54	
50 PERCENT EXCEEDS	4.2		4.8		3.9	
90 PERCENT EXCEEDS	2.8		2.9		2.0	

e Estimated
a Maximum gage height, 6.00 ft, Mar 30, 1968, backwater from ice.

09066100 BIGHORN CREEK NEAR MINTURN, CO

LOCATION.--Lat 39°38'24", long 106°17'34", in N$^1/_2$ sec.12, T.5 S., R.80 W., Eagle County, Hydrologic Unit 14010003, on left bank 0.3 mi upstream from U.S. Highway 6, 0.4 mi upstream from mouth, 4.5 mi east of Vail, and 8.5 mi northeast of Minturn.

DRAINAGE AREA.--4.54 mi^2.

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

REVISED RECORDS.--WDR CO-88-2: Drainage area.

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 8,625 ft above sea level, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. No regulation or diversion upstream from station. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.9	2.3	e1.2	e.86	e.90	e1.0	e2.4	5.4	30	37	17	4.6
2	2.0	2.4	e1.2	e.84	e.90	e1.1	e2.3	4.9	34	37	13	4.3
3	1.9	2.3	e1.1	e.84	e.92	e1.1	e2.3	4.4	41	34	11	3.9
4	2.0	2.2	e1.1	e.84	e.88	e1.2	e2.3	4.1	42	31	12	3.5
5	1.9	2.5	e1.0	e.86	e.86	e1.2	e2.2	3.7	35	28	13	3.2
6	1.9	2.3	e.98	e.90	e.90	e1.3	e2.2	3.4	25	29	14	3.0
7	2.3	2.3	e.98	e.90	e.90	e1.4	2.1	3.4	31	30	12	2.9
8	2.9	2.4	e.96	e.92	e.90	e1.4	2.3	4.8	46	26	11	2.8
9	3.6	e1.9	e.96	e.90	e.90	e1.5	2.2	8.3	54	24	9.7	2.6
10	4.6	e2.0	e.96	e.90	e.90	e1.5	2.0	9.0	48	21	12	2.5
11	4.7	e2.2	e.94	e.90	e.90	e1.5	1.7	7.3	43	17	14	3.2
12	4.3	e2.0	e.94	e.96	e.90	e1.6	1.4	6.5	50	16	12	3.0
13	4.1	e1.9	e.94	e.92	e1.0	e1.6	2.2	7.0	47	15	9.8	2.6
14	4.7	e1.9	e.94	e.90	e.96	e1.6	2.8	8.5	46	15	8.8	2.4
15	4.3	e2.0	e.92	e.90	e.96	e1.6	2.7	9.3	47	15	8.2	2.4
16	3.9	e2.0	e.92	e.92	e1.3	e1.7	2.7	10	49	15	7.1	2.3
17	3.5	e2.0	e.92	e.92	e.94	e1.8	3.0	10	56	17	7.5	2.3
18	3.2	e1.9	e.92	e.90	e.94	e1.9	2.4	12	53	14	7.6	2.3
19	3.1	e1.8	e.92	e.90	e.94	e2.0	2.4	17	53	12	6.5	2.9
20	3.0	e1.7	e.92	e.90	e.94	e2.1	2.6	23	53	12	6.8	3.8
21	2.8	e1.9	e.90	e.90	e.92	e2.2	3.3	30	53	12	6.1	3.9
22	2.9	e1.7	e.90	e.90	e.92	e2.3	3.2	32	68	12	5.7	4.5
23	2.7	e1.5	e.90	e.90	e.90	e2.4	2.9	34	74	12	5.2	4.5
24	2.4	e1.5	e.90	e.92	e.90	e2.3	3.5	41	63	12	4.8	5.0
25	2.3	e1.3	e.90	e.96	e.98	e2.2	4.6	42	60	11	4.6	5.9
26	2.3	e1.2	e.90	e1.0	e1.0	e2.4	4.1	32	57	11	4.6	5.8
27	2.4	e1.3	e.90	e1.0	e1.0	e2.6	4.0	27	51	12	7.0	5.2
28	2.2	e1.3	e.86	e.96	e1.0	e3.0	4.3	27	44	13	5.8	4.5
29	2.8	e1.4	e.86	e.94	---	e2.7	4.8	34	38	14	5.1	4.0
30	2.4	e1.3	e.86	e.90	---	e2.2	6.1	38	35	12	4.7	3.8
31	2.3	---	e.86	e.90	---	e2.3	---	37	---	16	4.7	---
TOTAL	91.3	56.4	29.46	28.16	26.36	56.7	87.0	536.0	1426	582	271.3	107.6
MEAN	2.95	1.88	.95	.91	.94	1.83	2.90	17.3	47.5	18.8	8.75	3.59
MAX	4.7	2.5	1.2	1.0	1.3	3.0	6.1	42	74	37	17	5.9
MIN	1.9	1.2	.86	.84	.86	1.0	1.4	3.4	25	11	4.6	2.3
AC-FT	181	112	58	56	52	112	173	1060	2830	1150	538	213

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 1999, BY WATER YEAR (WY)

MEAN	2.80	1.72	1.05	.85	.83	1.02	3.83	23.9	49.6	22.9	7.56	3.65
MAX	8.03	4.65	2.53	2.04	2.54	2.97	10.0	52.5	85.2	61.2	22.6	9.94
(WY)	1986	1985	1985	1986	1986	1986	1985	1984	1978	1983	1984	1984
MIN	1.01	.84	.63	.45	.30	.32	.86	8.09	17.7	5.61	3.27	1.12
(WY)	1964	1980	1977	1967	1964	1981	1964	1995	1966	1977	1994	1975

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1964 - 1999	
ANNUAL TOTAL	3085.36		3298.28			
ANNUAL MEAN	8.45		9.04		10.0	
HIGHEST ANNUAL MEAN					18.6	1984
LOWEST ANNUAL MEAN					5.15	1966
HIGHEST DAILY MEAN	66	Jun 2	74	Jun 23	170	Jun 26 1983
LOWEST DAILY MEAN	e.50	Mar 1	e.84	Jan 2	a.10	Feb 8 1967
ANNUAL SEVEN-DAY MINIMUM	.56	Feb 25	.85	Dec 29	.20	Mar 4 1981
INSTANTANEOUS PEAK FLOW			109	Jun 22	b338	Jun 8 1985
INSTANTANEOUS PEAK STAGE			3.61	Jun 22	c4.10	Jun 8 1985
10 PERCENT EXCEEDS	24		33		33	
50 PERCENT EXCEEDS	2.2		2.5		2.4	
90 PERCENT EXCEEDS	.82		.90		.70	

e Estimated
a Also occurred Jan 30, 1970.
b From rating curve extended above 82 ft^3/s.
c Maximum gage height, 4.26 ft, Jun 8, 1985, backwater from debris.

09066150 PITKIN CREEK NEAR MINTURN, CO

LOCATION.--Lat 39°38'37", long 106°18'07", in $SW^1/_4SW^1/_4$ sec.1, T.5 S., R.80 W., Eagle County, Hydrologic Unit 14010003, on left bank, 1,000 ft upstream from U.S. Highway 6, 1,200 ft upstream from mouth, 4.0 mi east of Vail, and 8 mi northeast of Minturn.

DRAINAGE AREA.--5.32 mi^2.

PERIOD OF RECORD.--Annual maximum and occasional low-flow measurements water years 1965-66. October 1966 to current year.

REVISED RECORDS.--WRD Colo. 1971: 1967-70. WDR CO-88-2: Drainage area.

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 8,525 ft above sea level, from topographic map. Oct. 1, 1964, to Sept. 30, 1966, crest-stage gage at datum 0.98 ft lower, at site 300 ft downstream.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.9	5.0	e2.5	e1.7	e1.6	e1.6	e3.1	6.3	e42	49	25	5.8
2	3.8	5.3	e2.5	e1.6	e1.6	e1.6	e2.9	6.1	e45	53	18	5.6
3	3.8	5.4	e2.3	e1.6	e1.7	e1.6	e2.9	5.3	e46	47	15	5.3
4	4.1	4.9	e2.3	e1.6	e1.6	e1.6	e2.9	4.8	e44	42	15	4.9
5	4.1	4.9	e2.1	e1.6	e1.5	e1.6	e2.8	4.4	e46	39	15	4.6
6	4.1	5.4	e2.1	e1.7	e1.6	e1.6	2.6	e4.3	e40	38	18	4.3
7	4.6	4.9	e2.1	e1.7	e1.6	e1.6	2.8	4.2	e41	38	15	4.0
8	5.7	4.8	e2.1	e1.8	e1.6	e1.6	3.0	6.1	e48	36	13	3.9
9	6.2	e3.9	e2.0	e1.7	e1.6	e1.6	2.9	8.2	e45	32	13	3.8
10	6.5	e3.7	e2.0	e1.6	e1.6	e1.6	2.7	8.0	e42	26	19	3.7
11	6.0	e4.2	e2.0	e1.6	e1.6	e1.6	2.9	e8.2	e40	21	20	4.6
12	5.7	e3.6	e2.0	e1.7	e1.6	e1.6	3.0	7.2	e43	20	16	4.5
13	5.6	e3.6	e2.0	e1.6	e1.5	e1.6	3.2	7.8	e48	20	14	4.0
14	6.2	e3.6	e2.0	e1.6	e1.4	e1.7	3.5	8.9	e47	19	12	3.8
15	6.2	e3.8	e2.0	e1.6	e1.4	e1.7	3.0	9.3	e48	20	11	3.7
16	5.6	e3.8	e1.9	e1.7	e1.7	e1.8	4.4	10	e50	19	10	3.5
17	5.4	e3.8	e1.9	e1.7	e1.4	e1.9	4.1	10	e54	19	10	3.5
18	5.3	e3.6	e1.9	e1.6	e1.4	e2.0	2.6	12	52	16	9.9	3.5
19	5.1	e3.5	e1.9	e1.6	e1.4	e2.1	2.8	15	55	16	8.9	4.0
20	5.1	e3.3	e1.9	e1.6	e1.3	e2.3	3.2	e17	55	16	8.8	5.7
21	4.9	e3.6	e1.8	e1.6	e1.3	e2.4	3.8	e18	54	15	8.3	5.3
22	5.0	e3.3	e1.8	e1.6	e1.3	e2.6	3.8	e19	56	17	7.8	5.9
23	4.9	e3.0	e1.8	e1.6	e1.3	e2.9	3.8	e30	59	16	7.2	5.7
24	4.7	e3.0	e1.8	e1.6	e1.4	e2.8	4.0	e44	65	15	6.5	6.1
25	4.6	e2.8	e1.8	e1.7	e1.5	e2.6	5.2	e45	62	14	6.2	6.5
26	4.4	e2.6	e1.8	e1.8	e1.5	e2.8	4.7	e43	59	13	6.3	5.8
27	4.6	e2.7	e1.8	e1.8	e1.5	e3.1	4.5	e44	59	19	8.2	5.3
28	4.9	e2.7	e1.7	e1.6	e1.5	e3.5	4.5	e41	59	26	6.7	5.0
29	5.7	e2.8	e1.7	e1.6	---	e3.2	5.3	e43	52	21	6.3	4.8
30	5.1	e2.7	e1.7	e1.6	---	e3.0	7.1	e46	44	17	6.2	4.6
31	5.0	---	e1.7	e1.6	---	e3.0	---	e47	---	29	6.0	---
TOTAL	155.8	114.2	60.9	51.0	42.0	66.2	108.0	583.1	1500	788	362.3	141.7
MEAN	5.03	3.81	1.96	1.65	1.50	2.14	3.60	18.8	50.0	25.4	11.7	4.72
MAX	6.5	5.4	2.5	1.8	1.7	3.5	7.1	47	65	53	25	6.5
MIN	2.9	2.6	1.7	1.6	1.3	1.6	2.6	4.2	40	13	6.0	3.5
AC-FT	309	227	121	101	83	131	214	1160	2980	1560	719	281

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1967 - 1999, BY WATER YEAR (WY)

MEAN	4.12	2.56	1.77	1.44	1.35	1.49	4.02	23.8	54.3	30.6	9.83	5.13
MAX	9.43	3.84	3.28	3.84	3.94	3.85	6.98	44.8	101	94.5	31.1	11.2
(WY)	1985	1982	1986	1986	1986	1985	1992	1974	1978	1984	1983	1984
MIN	1.49	1.26	.94	.58	.70	.87	1.44	8.48	23.2	7.73	4.15	2.78
(WY)	1967	1980	1967	1967	1981	1981	1973	1995	1989	1994	1969	1988

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1967 - 1999	
ANNUAL TOTAL	3454.28		3973.2			
ANNUAL MEAN	9.46		10.9		11.7	
HIGHEST ANNUAL MEAN					22.7	1984
LOWEST ANNUAL MEAN					6.77	1989
HIGHEST DAILY MEAN	66	Jun 3	65	Jun 24	186	Jun 14 1978
LOWEST DAILY MEAN	e.88	Mar 1	e1.3	Feb 20	.24	Oct 29 1972
ANNUAL SEVEN-DAY MINIMUM	.95	Feb 24	1.3	Feb 17	.26	Oct 26 1972
INSTANTANEOUS PEAK FLOW			78	Jun 25	265	Jun 8 1985
INSTANTANEOUS PEAK STAGE			2.54	Jun 25	a2.85	Jun 8 1985
ANNUAL RUNOFF (AC-FT)	6850		7880		8500	
10 PERCENT EXCEEDS	27		42		38	
50 PERCENT EXCEEDS	4.1		4.2		3.3	
90 PERCENT EXCEEDS	1.2		1.6		1.1	

e Estimated
a Maximum gage height, 3.75 ft, Jul 13, 1995, backwater from debris.

09066200 BOOTH CREEK NEAR MINTURN, CO

LOCATION.--Lat 39°38'54", long 106°19'21", in NE$^1/_4$SE$^1/_4$ of sec.3, T.5 S., R.80 W., Eagle County, Hydrologic Unit 14010003, near center of span on downstream side of old Highway 6 bridge pier, 100 ft upstream from frontage road to I-70, 0.2 mi upstream from mouth, 3.0 mi northeast of Vail, and 7.0 mi northeast of Minturn.

DRAINAGE AREA.--6.02 mi^2.

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

REVISED RECORDS.--WDR CO-89-2: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 8,325 ft above sea level, from topographic map. Prior to June 4, 1984, gage at site 1,000 ft upstream at different datum (gage destroyed by rock slide).

REMARKS.--Records fair except for estimated daily discharges, which are poor. No diversion or regulation upstream from station. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.1	2.5	e1.6	e.86	e.80	e.74	e3.2	7.7	53	55	21	3.2
2	1.8	2.9	e1.6	e.82	e.80	e.76	e3.1	7.3	59	55	15	3.1
3	1.6	2.8	e1.5	e.82	e.82	e.76	e3.1	6.4	69	46	12	2.9
4	2.4	2.5	e1.5	e.82	e.80	e.78	e3.1	5.8	72	38	11	2.6
5	2.3	2.5	e1.4	e.84	e.76	e.78	e3.0	5.2	61	34	12	2.4
6	2.2	2.6	e1.3	e.88	e.80	e.80	2.8	5.0	45	33	19	2.2
7	2.9	2.5	e1.3	e.88	e.80	e.82	3.0	5.1	51	33	14	2.1
8	3.7	2.3	e1.2	e.90	e.80	e.80	3.5	8.2	71	30	11	1.9
9	3.8	e2.5	e1.2	e.84	e.80	e.84	3.2	13	76	24	11	1.8
10	3.9	e2.3	e1.2	e.80	e.80	e.84	2.7	14	68	21	12	1.8
11	3.5	e2.6	e1.1	e.80	e.80	e.86	2.4	10	65	17	12	2.6
12	3.2	e2.4	e1.1	e.86	e.80	e.88	2.9	9.0	68	16	11	2.4
13	3.1	e2.3	e1.0	e.82	e.76	e.90	3.7	9.9	71	15	9.0	2.0
14	3.5	e2.3	e1.0	e.80	e.70	e.92	4.4	13	68	15	8.0	1.9
15	3.0	e2.4	e.96	e.80	e.70	e1.1	e3.8	13	70	14	7.5	1.8
16	2.6	e2.4	e.96	e.82	e.80	e1.2	e3.7	16	71	14	6.6	1.8
17	2.6	e2.4	e.96	e.82	e.68	e1.3	e3.7	17	78	13	6.6	1.8
18	2.7	e2.3	e.96	e.80	e.68	e1.4	3.3	20	76	11	6.0	1.9
19	2.5	e2.2	e.96	e.80	e.68	e1.5	3.7	27	78	11	5.2	2.4
20	2.4	e2.1	e.96	e.80	e.68	e1.7	4.5	34	77	11	5.5	3.6
21	2.2	e2.3	e.92	e.80	e.66	e2.0	5.2	42	73	9.9	5.0	3.9
22	2.1	e2.1	e.92	e.80	e.66	e2.2	5.0	51	78	9.3	4.5	3.9
23	2.1	e1.9	e.92	e.80	e.64	e2.5	4.7	60	80	8.9	4.1	3.5
24	2.0	e1.9	e.92	e.82	e.64	e2.4	5.2	69	78	8.6	3.8	4.0
25	1.9	e1.7	e.92	e.84	e.72	e2.2	6.7	71	82	8.0	3.6	4.4
26	2.0	e1.6	e.92	e.90	e.74	e2.8	5.8	53	81	7.8	3.6	3.7
27	2.0	e1.7	e.92	e.90	e.74	e3.2	5.6	50	76	16	4.4	3.3
28	2.0	e1.7	e.86	e.86	e.74	e3.8	5.7	50	70	25	3.7	3.1
29	2.8	e1.8	e.86	e.84	---	e3.5	6.7	55	56	20	3.5	3.0
30	2.6	e1.7	e.86	e.80	---	e3.0	8.7	61	46	15	3.4	2.8
31	2.5	---	e.86	e.80	---	e3.1	---	61	---	23	3.4	---
TOTAL	79.0	67.2	33.64	25.74	20.80	50.38	126.1	869.6	2067	657.5	258.4	81.8
MEAN	2.55	2.24	1.09	.83	.74	1.63	4.20	28.1	68.9	21.2	8.34	2.73
MAX	3.9	2.9	1.6	.90	.82	3.8	8.7	71	82	55	21	4.4
MIN	1.1	1.6	.86	.80	.64	.74	2.4	5.0	45	7.8	3.4	1.8
AC-FT	157	133	67	51	41	100	250	1720	4100	1300	513	162

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 1999, BY WATER YEAR (WY)

MEAN	2.92	2.02	1.25	1.00	.95	1.37	5.43	31.3	64.8	25.7	5.92	3.01
MAX	8.30	7.17	3.54	2.48	2.97	5.72	14.2	57.8	123	70.4	14.4	7.29
(WY)	1985	1985	1985	1985	1985	1986	1986	1974	1982	1983	1984	1984
MIN	.88	.66	.67	.37	.39	.41	1.39	10.0	23.5	3.65	1.45	.97
(WY)	1975	1965	1975	1977	1981	1981	1973	1995	1966	1994	1994	1974

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1965 - 1999	
ANNUAL TOTAL	3565.52		4337.16			
ANNUAL MEAN	9.77		11.9		12.1	
HIGHEST ANNUAL MEAN					19.0	1982
LOWEST ANNUAL MEAN					6.66	1977
HIGHEST DAILY MEAN	88	Jun 2	82	Jun 25	218	Jun 15 1978
LOWEST DAILY MEAN	e.66	Jan 12	e.64	Feb 23	a.20	Feb 8 1967
ANNUAL SEVEN-DAY MINIMUM	.70	Feb 24	.66	Feb 18	.33	Feb 7 1967
INSTANTANEOUS PEAK FLOW			113	Jun 25	355	Jun 15 1978
INSTANTANEOUS PEAK STAGE			3.20	Jun 25	b4.07	Jun 15 1978
ANNUAL RUNOFF (AC-FT)	7070		8600		8800	
10 PERCENT EXCEEDS	30		52		41	
50 PERCENT EXCEEDS	2.1		2.8		2.4	
90 PERCENT EXCEEDS	.75		.80		.75	

e Estimated
a Also occurred Jan 29, 1970, and Feb 10-11, 1981.
b Maximum gage height, 4.62 ft, Jun 18, 1963, backwater from debris.

09066300 MIDDLE CREEK NEAR MINTURN, CO

LOCATION.--Lat 39°38'45", long 106°22'54", in sec.6, T.5 S., R.80 W., Eagle County, Hydrologic Unit 14010003, on right bank 200 ft upstream from Interstate Highway 70, 0.2 mi upstream from mouth, and 5.0 mi northeast of Minturn.

DRAINAGE AREA.--5.94 mi^2.

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

REVISED RECORDS.--WDR CO-88-2: Drainage area.

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

REMARKS.--Records good except for estimated daily discharges, which are poor. No diversion or regulation upstream from station. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.89	1.0	e.37	e.20	e.17	e.14	e.58	1.1	17	27	5.6	e2.2
2	1.2	1.2	e.37	e.18	e.17	e.15	e.57	1.1	18	25	4.4	e2.1
3	.99	1.1	e.35	e.18	e.18	e.15	e.56	1.1	23	23	4.0	e2.0
4	1.2	e.98	e.34	e.18	e.16	e.15	e.56	1.0	26	19	4.1	1.9
5	1.0	.90	e.33	e.18	e.15	e.16	e.56	.94	26	16	4.8	1.7
6	.97	.81	e.30	e.19	e.16	e.16	.53	.93	22	15	7.9	1.6
7	1.1	.79	e.30	e.19	e.16	e.17	.57	.94	23	14	5.4	1.4
8	1.5	.78	e.30	e.20	e.16	e.16	.59	1.3	28	13	4.7	1.3
9	1.5	e.68	e.28	e.18	e.16	e.17	.51	2.6	32	11	5.1	1.3
10	1.4	e.66	e.28	e.18	e.16	e.17	.50	2.9	33	9.2	5.9	1.3
11	1.3	e.70	e.27	e.18	e.16	e.17	.48	2.3	31	8.1	5.7	1.7
12	1.0	e.64	e.26	e.19	e.16	e.18	.52	2.2	32	7.5	4.9	1.6
13	1.0	e.58	e.26	e.18	e.15	e.19	.57	2.7	34	6.9	4.5	1.3
14	1.1	e.58	e.25	e.17	e.13	e.19	.61	3.2	33	6.9	4.1	1.2
15	1.1	e.60	e.24	e.17	e.13	e.22	.58	3.1	37	6.6	3.9	1.1
16	.93	e.60	e.24	e.18	e.15	e.23	.53	3.6	41	6.1	3.5	1.1
17	.91	e.60	e.24	e.18	e.14	e.24	.59	3.7	43	5.8	3.4	1.1
18	1.1	e.58	e.24	e.17	e.14	e.25	.55	4.3	42	5.2	3.4	1.2
19	1.0	e.54	e.24	e.17	e.14	e.26	.59	5.0	43	5.4	3.1	1.4
20	1.0	e.50	e.24	e.17	e.14	e.28	.64	5.5	45	5.1	3.4	2.2
21	.93	e.56	e.22	e.17	e.13	e.30	.85	6.8	50	4.4	3.1	1.9
22	1.1	e.51	e.22	e.17	e.13	e.34	.93	8.5	57	4.1	2.9	1.7
23	1.0	e.45	e.21	e.17	e.12	e.38	.87	10	53	3.9	2.4	1.4
24	.95	e.45	e.20	e.19	e.12	e.37	.85	13	51	3.8	1.9	1.5
25	.91	e.40	e.20	e.19	e.13	e.36	.95	16	52	3.7	1.8	1.8
26	.98	e.37	e.20	e.20	e.14	e.37	.86	14	47	3.7	1.9	1.4
27	1.1	e.40	e.20	e.20	e.14	e.39	.87	14	43	4.1	3.1	1.2
28	1.1	e.40	e.20	e.19	e.14	e.44	.93	14	38	4.5	e2.6	1.2
29	1.3	e.43	e.20	e.18	---	e.42	1.0	15	33	4.4	e2.4	1.2
30	1.2	e.39	e.20	e.17	---	e.45	1.3	16	29	4.5	e2.3	1.3
31	1.1	---	e.20	e.17	---	e.50	---	17	---	5.8	e2.3	---
TOTAL	33.86	19.18	7.95	5.62	4.12	8.11	20.60	193.81	1082	282.7	118.5	45.3
MEAN	1.09	.64	.26	.18	.15	.26	.69	6.25	36.1	9.12	3.82	1.51
MAX	1.5	1.2	.37	.20	.18	.50	1.3	17	57	27	7.9	2.2
MIN	.89	.37	.20	.17	.12	.14	.48	.93	17	3.7	1.8	1.1
AC-FT	67	38	16	11	8.2	16	41	384	2150	561	235	90

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 1999, BY WATER YEAR (WY)

MEAN	1.22	.82	.49	.40	.37	.41	1.30	11.8	35.3	13.4	3.27	1.68
MAX	3.90	3.10	1.75	2.45	2.34	2.16	6.53	25.5	53.1	39.5	14.0	7.18
(WY)	1985	1983	1986	1986	1986	1985	1985	1984	1984	1995	1983	1979
MIN	.36	.030	.000	.000	.000	.000	.26	3.41	14.3	2.30	.86	.36
(WY)	1965	1965	1965	1965	1965	1965	1976	1995	1966	1977	1977	1977

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1965 - 1999	
ANNUAL TOTAL	1541.87		1821.75			
ANNUAL MEAN	4.22		4.99		5.87	
HIGHEST ANNUAL MEAN					11.3	1984
LOWEST ANNUAL MEAN					2.52	1977
HIGHEST DAILY MEAN	41	Jun 3	57	Jun 22	93	Jun 22 1983
LOWEST DAILY MEAN	e.20	Dec 24	e.12	Feb 23	a.00	Nov 10 1964
ANNUAL SEVEN-DAY MINIMUM	.20	Dec 24	.13	Feb 19	.00	Nov 10 1964
INSTANTANEOUS PEAK FLOW			72	Jun 22	116	Jun 20 1974
INSTANTANEOUS PEAK STAGE			2.50	Jun 22	b,c2.65	Jun 20 1974
ANNUAL RUNOFF (AC-FT)	3060		3610		4250	
10 PERCENT EXCEEDS	16		16		20	
50 PERCENT EXCEEDS	.79		.95		.94	
90 PERCENT EXCEEDS	.30		.17		.20	

e Estimated
a No flow at times most years.
b Maximum gage height, 3.28 ft, Jun 25, 1983, backwater from debris.
c Site and datum then in use.

09066310 GORE CREEK AT LOWER STATION, AT VAIL, CO

LOCATION.--Lat 39°38'28", long 106°23'37", in NW$^1/_4$NW$^1/_4$ sec.7, T.5 S., R.80 W., Eagle County, Hydrologic Unit 14010003, on right bank 40 ft south of the water treatment plant at Vail, 0.1 mi upstream from Red Sandstone Creek, and 0.6 mi downstream from Middle Creek.

DRAINAGE AREA.--77.1 mi^2.

PERIOD OF RECORD.--August 1988 to September 1999 (discontinued).

GAGE.--Water-stage recorder. Elevation of gage is 8,060 ft above sea level, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. No regulation or diversion upstream from station. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	28	19	15	e14	12	31	70	452	464	174	50
2	31	33	19	15	14	12	32	68	499	451	137	47
3	30	31	19	15	14	12	28	61	577	405	116	46
4	39	27	19	15	17	12	27	57	606	367	119	42
5	33	26	e17	16	14	12	26	53	526	332	130	38
6	30	27	e17	16	13	11	25	50	416	337	146	36
7	31	26	e17	16	14	12	27	50	461	334	122	33
8	38	27	e16	16	14	12	31	62	616	299	105	31
9	39	26	e17	17	14	12	28	81	682	277	98	29
10	41	e22	e17	15	14	12	27	96	666	242	116	29
11	39	e26	e17	15	e14	12	27	78	638	212	117	38
12	36	e23	e17	15	e13	13	27	71	655	190	103	36
13	35	e24	e18	15	e13	12	30	78	651	179	87	31
14	37	24	e18	e14	e13	13	35	102	664	181	78	29
15	36	25	e18	e14	12	15	31	107	722	183	77	28
16	33	24	e18	e14	e11	16	28	124	752	172	69	27
17	32	23	e17	16	e11	17	31	122	816	183	69	27
18	31	24	17	16	e11	20	29	137	777	156	76	28
19	30	23	17	16	12	23	33	183	784	148	63	34
20	30	e26	13	16	e12	29	39	227	802	145	70	52
21	28	e27	e11	16	e12	35	45	276	776	132	62	44
22	29	22	e10	15	12	34	45	326	849	132	60	45
23	27	22	e11	15	e12	29	41	376	851	125	55	43
24	27	22	e11	15	12	30	44	454	822	115	51	47
25	26	21	e11	15	11	36	59	508	762	112	50	56
26	27	20	e12	15	11	43	54	384	713	110	50	49
27	26	20	13	15	11	41	52	358	654	130	70	44
28	31	20	13	e17	12	34	59	375	585	177	59	40
29	33	21	13	e15	---	30	67	431	521	186	55	36
30	31	20	14	e14	---	32	79	475	465	143	50	35
31	29	---	14	e14	---	32	---	500	---	179	49	---
TOTAL	991	730	480	473	357	665	1137	6340	19760	6798	2683	1150
MEAN	32.0	24.3	15.5	15.3	12.8	21.5	37.9	205	659	219	86.5	38.3
MAX	41	33	19	17	17	43	79	508	851	464	174	56
MIN	26	20	10	14	11	11	25	50	416	110	49	27
AC-FT	1970	1450	952	938	708	1320	2260	12580	39190	13480	5320	2280

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 1999, BY WATER YEAR (WY)

MEAN	26.2	19.7	14.6	12.6	11.4	16.4	47.7	307	635	232	62.7	31.9
MAX	38.9	25.7	21.7	19.5	16.4	28.9	87.0	510	1008	658	124	44.7
(WY)	1998	1996	1996	1997	1996	1997	1989	1996	1997	1995	1995	1997
MIN	16.8	12.9	8.46	6.61	7.73	9.74	25.5	99.9	337	55.8	25.4	19.3
(WY)	1990	1989	1995	1995	1990	1991	1991	1995	1994	1994	1994	1988

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1988 - 1999	
ANNUAL TOTAL	32197		41564			
ANNUAL MEAN	88.2		114		118	
HIGHEST ANNUAL MEAN					166	1993
LOWEST ANNUAL MEAN					77.6	1994
HIGHEST DAILY MEAN	648	Jun 3	851	Jun 23	1450	Jun 5 1997
LOWEST DAILY MEAN	e10	Mar 1	e10	Dec 22	5.9	Jan 25 1995
ANNUAL SEVEN-DAY MINIMUM	11	Feb 27	11	Dec 20	6.0	Jan 23 1995
INSTANTANEOUS PEAK FLOW			1110	Jun 23	1840	Jun 4 1997
INSTANTANEOUS PEAK STAGE			10.28	Jun 23	11.50	Jun 4 1997
ANNUAL RUNOFF (AC-FT)	63860		82440		85730	
10 PERCENT EXCEEDS	281		422		402	
50 PERCENT EXCEEDS	27		31		26	
90 PERCENT EXCEEDS	13		13		11	

e Estimated

09066400 RED SANDSTONE CREEK NEAR MINTURN, CO

LOCATION.--Lat 39°40'58", long 106°24'03", in sec.25, T.4 S., R.81 W., (projected), Eagle County, Hydrologic Unit 14010003, on left bank 150 ft upstream from road culvert, 1,400 ft upstream from Indian Creek, and 6.8 mi north of Minturn.

DRAINAGE AREA.--7.32 mi^2.

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

REVISED RECORDS.--WDR CO-88-2: Drainage area.

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 9,212 ft above sea level, from topographic map.

REMARKS.-- Records good except for estimated daily discharges, which are poor. No regulation or diversion upstream from station. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e1.4	1.9	e1.6	e1.4	e1.2	e1.3	e2.1	7.3	48	22	7.4	3.3
2	e1.5	2.1	e1.7	e1.4	e1.4	e1.3	e2.1	6.3	48	21	5.7	3.2
3	e1.7	1.9	e1.7	e1.3	e1.3	e1.3	e2.1	5.9	52	19	5.0	3.3
4	e1.9	2.2	e1.7	e1.2	e1.3	e1.3	e2.1	5.4	53	18	5.5	2.9
5	e1.8	1.9	e1.7	e1.2	e1.3	e1.3	e2.0	5.0	47	16	6.7	2.6
6	e1.7	e1.8	e1.7	e1.2	e1.3	e1.3	e1.9	4.7	39	16	10	2.2
7	e1.7	e1.7	e1.6	e1.3	e1.3	e1.3	e2.1	5.2	43	15	7.8	1.9
8	e1.7	e1.7	e1.5	e1.4	e1.3	e1.3	e2.3	7.2	49	14	5.9	1.9
9	e1.8	e1.7	e1.5	e1.4	e1.3	e1.4	e2.5	9.4	52	13	7.9	1.8
10	e1.9	e1.7	e1.5	e1.4	e1.3	e1.4	e2.8	9.7	51	12	11	1.7
11	e2.2	e1.7	e1.5	e1.4	e1.3	e1.4	e3.0	8.3	45	11	9.8	2.7
12	e2.3	e1.7	e1.7	e1.4	e1.3	e1.4	e3.3	7.5	45	10	7.6	2.7
13	e2.2	e1.7	e1.5	e1.3	e1.2	e1.4	e3.5	8.3	43	9.7	6.6	2.0
14	e2.1	e1.9	e1.4	e1.3	e1.2	e1.4	4.0	11	41	9.6	5.9	1.7
15	2.0	e1.8	e1.4	e1.3	e1.2	e1.4	e3.5	11	47	9.5	5.7	1.7
16	1.8	e1.8	e1.4	e1.3	e1.3	e1.4	e3.3	13	50	8.7	5.4	1.7
17	1.8	e1.8	e1.4	e1.3	e1.3	e1.5	e3.1	14	46	8.0	5.2	1.7
18	2.0	e1.8	e1.4	e1.4	e1.3	e1.5	e3.1	17	43	7.6	5.2	2.0
19	2.4	e1.8	e1.4	e1.4	e1.3	e1.5	e3.5	21	42	8.1	4.5	2.8
20	1.8	e1.7	e1.5	e1.4	e1.3	e1.5	3.7	27	40	8.0	5.1	5.4
21	1.8	e1.7	e1.4	e1.4	e1.3	e1.6	4.9	34	40	6.9	4.7	4.3
22	1.8	e1.7	e1.4	e1.4	e1.3	e1.8	4.5	38	41	6.4	4.5	3.5
23	1.8	e1.7	e1.4	e1.4	e1.3	e1.9	4.3	42	38	5.9	3.8	2.9
24	1.7	e1.7	e1.3	e1.3	e1.3	e1.9	4.3	48	36	6.2	3.4	3.1
25	1.6	e1.7	e1.1	e1.3	e1.3	e1.7	5.6	55	36	5.6	3.1	3.7
26	1.7	e1.7	e1.2	e1.3	e1.3	e1.9	5.6	51	33	5.5	4.4	2.8
27	1.7	e1.7	e1.4	e1.3	e1.3	e2.1	5.6	47	30	5.9	6.4	2.5
28	1.9	e1.7	e1.4	e1.3	e1.3	e2.3	6.0	49	28	6.1	4.5	2.4
29	1.9	e1.6	e1.4	e1.3	---	e2.4	6.9	49	25	6.3	3.9	2.5
30	1.9	e1.6	e1.4	e1.3	---	e2.2	9.1	51	22	6.6	3.6	2.4
31	1.9	---	e1.4	e1.2	---	e2.1	---	52	---	7.9	3.9	---
TOTAL	57.4	53.1	45.6	41.2	36.1	49.5	112.8	720.2	1253	325.5	180.1	79.3
MEAN	1.85	1.77	1.47	1.33	1.29	1.60	3.76	23.2	41.8	10.5	5.81	2.64
MAX	2.4	2.2	1.7	1.4	1.4	2.4	9.1	55	53	22	11	5.4
MIN	1.4	1.6	1.1	1.2	1.2	1.3	1.9	4.7	22	5.5	3.1	1.7
AC-FT	114	105	90	82	72	98	224	1430	2490	646	357	157

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 1999, BY WATER YEAR (WY)

MEAN	2.03	1.55	1.24	1.05	.99	1.12	3.43	29.1	50.4	12.4	3.67	2.22
MAX	5.14	3.80	2.60	2.14	2.14	1.90	6.60	69.9	92.0	44.0	15.0	5.57
(WY)	1985	1985	1985	1985	1985	1985	1971	1996	1983	1983	1983	1984
MIN	.92	.57	.51	.52	.48	.46	1.47	6.85	16.3	3.22	1.59	.98
(WY)	1989	1977	1977	1987	1987	1987	1973	1995	1966	1977	1987	1987

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1964 - 1999	
ANNUAL TOTAL	2299.74		2953.8			
ANNUAL MEAN	6.30		8.09		9.11	
HIGHEST ANNUAL MEAN					14.9	1983
LOWEST ANNUAL MEAN					4.31	1977
HIGHEST DAILY MEAN	56	Jun 2	55	May 25	164	Jun 20 1983
LOWEST DAILY MEAN	.80	Mar 9	1.1	Dec 25	.20	Jan 30 1970
ANNUAL SEVEN-DAY MINIMUM	.82	Mar 5	1.3	Feb 9	.34	Jan 28 1970
INSTANTANEOUS PEAK FLOW			70	Jun 15	223	Jun 17 1995
INSTANTANEOUS PEAK STAGE			3.94	Jun 15	a4.58	Jun 17 1995
ANNUAL RUNOFF (AC-FT)	4560		5860		6600	
10 PERCENT EXCEEDS	23		33		29	
50 PERCENT EXCEEDS	1.7		2.1		1.8	
90 PERCENT EXCEEDS	.98		1.3		.82	

e Estimated
a Maximum gage height, 5.18 ft, Apr 17, 1987, backwater from ice.

09066510 GORE CREEK AT MOUTH NEAR MINTURN, CO

LOCATION.--Lat 39°36'34", long 106°26'50", in $NE^1/_4NW^1/_4$ sec.22, T.5 S., R.81W., Eagle County, Hydrologic Unit 14010003, on left bank 0.1 mi upstream from the confluence with Eagle River and 2 mi northwest of Minturn.

DRAINAGE AREA.-- 102 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1995 to current year.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 7,730 ft above sea level, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Diversion upstream from station for Vail water treatment plant.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30	34	24	21	e18	16	47	97	489	437	189	55
2	35	42	24	18	18	16	47	96	532	432	151	54
3	33	39	23	18	17	15	42	86	627	391	127	52
4	46	32	23	18	e18	16	39	80	653	359	127	48
5	38	31	21	19	20	15	38	73	578	328	143	44
6	34	33	e21	20	19	16	36	68	467	329	162	41
7	34	32	e21	21	19	16	39	70	492	337	136	39
8	43	32	e21	20	20	16	44	87	632	304	116	36
9	44	32	e20	18	20	16	40	117	706	286	106	35
10	47	27	e21	18	20	16	37	137	693	251	130	34
11	43	34	e21	18	e20	16	35	113	640	222	133	43
12	40	30	e21	20	e20	16	38	105	657	201	118	43
13	40	30	e22	19	e19	16	43	116	636	192	100	38
14	43	31	e22	17	e19	17	47	145	636	191	89	35
15	43	32	e22	e18	18	20	41	151	698	194	87	34
16	38	32	e22	e19	19	21	37	173	738	184	79	33
17	36	31	e21	20	16	23	39	170	771	197	77	33
18	34	30	e21	20	e16	27	40	191	730	169	87	34
19	34	29	e20	21	15	32	44	240	733	162	73	39
20	35	26	e19	21	16	39	53	287	738	162	78	59
21	33	32	e19	21	e15	47	62	339	720	146	72	51
22	33	28	e19	20	15	46	61	381	795	144	70	51
23	32	27	e19	21	e15	39	55	421	800	141	62	50
24	31	27	e20	21	15	41	59	490	766	129	59	52
25	31	26	e19	21	16	48	79	569	718	123	57	62
26	32	25	e18	21	15	59	74	456	673	121	57	54
27	31	26	e18	19	15	58	72	431	604	140	78	48
28	39	26	18	e19	15	46	79	443	544	180	66	44
29	39	27	20	e19	---	42	89	487	488	202	61	42
30	37	26	e20	e18	---	45	110	515	441	158	57	42
31	35	---	20	e18	---	48	---	540	---	192	55	---
TOTAL	1143	909	640	602	488	904	1566	7674	19395	7004	3002	1325
MEAN	36.9	30.3	20.6	19.4	17.4	29.2	52.2	248	646	226	96.8	44.2
MAX	47	42	24	21	20	59	110	569	800	437	189	62
MIN	30	25	18	17	15	15	35	68	441	121	55	33
AC-FT	2270	1800	1270	1190	968	1790	3110	15220	38470	13890	5950	2630

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 1999, BY WATER YEAR (WY)

MEAN	44.1	31.5	24.3	21.5	19.8	31.7	70.5	433	791	247	82.5	43.9
MAX	48.5	33.3	27.0	26.6	22.3	42.4	102	678	1103	291	108	52.4
(WY)	1998	1997	1997	1997	1997	1997	1996	1996	1997	1997	1997	1997
MIN	36.9	29.8	20.6	19.0	17.4	25.4	48.1	248	419	195	57.7	32.0
(WY)	1999	1998	1999	1996	1999	1998	1998	1999	1998	1998	1996	1998

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1996 - 1999	
ANNUAL TOTAL	37476		44652			
ANNUAL MEAN	103		122		154	
HIGHEST ANNUAL MEAN					194	1996
LOWEST ANNUAL MEAN					104	1998
HIGHEST DAILY MEAN	741	Jun 3	800	Jun 23	1540	Jun 4 1997
LOWEST DAILY MEAN	16	Mar 2	15	Feb 19	15	Feb 19 1999
ANNUAL SEVEN-DAY MINIMUM	17	Feb 28	15	Feb 21	15	Feb 21 1999
INSTANTANEOUS PEAK FLOW			1050	Jun 23	1850	Jun 4 1997
INSTANTANEOUS PEAK STAGE			8.77	Jun 23	9.97	Jun 4 1997
ANNUAL RUNOFF (AC-FT)	74330		88570		111300	
10 PERCENT EXCEEDS	319		442		483	
50 PERCENT EXCEEDS	34		40		42	
90 PERCENT EXCEEDS	20		18		19	

e Estimated

09066510 GORE CREEK AT MOUTH NEAR MINTURN, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1995 to current year..

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1996 to September 1997.
WATER TEMPERATURE: October 1996 to September 1998.

REMARKS.--Data not published are either missing or of unacceptable quality.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 464 microsiemens Jan. 29, 1997; minimum, 83 microsiemens June 19-20, 1997.
WATER TEMPERATURE: Maximum, 18.8°C, Aug. 23, 1998; minimum, 0.0°C on many days during winters.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)
NOV												
20...	1240	22	359	9.0	.0	12.8	170	52	9.3	7.3	.2	1.2
DEC												
17...	1320	21	383	8.4	.1	11.0	180	56	9.7	7.5	.2	1.4
JAN												
20...	1120	22	378	8.5	.8	10.9	160	50	9.1	11	.4	1.6
FEB												
17...	1140	16	435	8.8	1.4	10.6	190	59	11	12	.4	2.0
MAR												
11...	1320	16	418	9.5	4.9	11.5	190	59	10	11	.4	1.5
APR												
06...	0915	25	335	8.2	.9	11.2	150	45	7.8	10	.4	1.1
26...	1125	76	257	8.7	2.4	10.9	110	35	5.9	7.9	.3	.8
MAY												
06...	1240	68	284	9.2	3.3	11.4	130	40	6.8	7.7	.3	.9
18...	1325	193	191	9.1	7.0	9.8	86	27	4.3	4.3	.2	.5
JUN												
10...	1020	663	99	8.0	4.4	11.1	47	15	2.4	1.7	.1	.4
AUG												
18...	1015	86	202	8.1	9.6	8.8	90	28	5.2	3.9	.2	.8
SEP												
17...	1135	37	307	8.7	10.3	9.3	140	44	7.8	6.0	.2	1.3

DATE	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS-SOLVED (TONS PER DAY) (70302)
NOV												
20...	--	--	--	117	56	12	.1	4.2	203	215	.28	12.2
DEC												
17...	--	--	--	125	56	11	.1	5.8	234	226	.32	13.5
JAN												
20...	111	--	91	113	49	20	.1	4.2	229	205	.31	13.9
FEB												
17...	118	--	97	127	63	20	.2	3.4	278	239	.38	12.0
MAR												
11...	74	17	89	--	60	22	.2	1.9	270	223	.37	11.9
APR												
06...	87	--	71	103	35	19	.1	1.9	198	168	.27	13.3
26...	87	2	75	--	19	16	<.1	4.1	156	134	.21	32.1
MAY												
06...	89	10	89	--	24	17	<.1	4.1	176	155	.24	32.4
18...	78	6	74	--	11	7.9	<.1	4.5	131	104	.18	68.3
JUN												
10...	51	--	42	--	3.2	3.2	<.1	4.1	77	55	.10	138
AUG												
18...	85	--	70	--	18	5.2	<.1	4.8	112	108	.15	26.0
SEP												
17...	106	7	99	--	39	9.8	.1	3.9	184	172	.25	18.5

09066510 GORE CREEK AT MOUTH NEAR MINTURN, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00607)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)
NOV												
20...	.004	.47	.006	.11	.2	.1	.10	.10	.098	1.1	E9	<3
DEC												
17...	.004	.88	.012	--	.1	<.1	.15	.14	.14	.9	<10	<3
JAN												
20...	.005	1.2	.009	.10	.2	.1	.19	.18	.17	1.4	E7	<3
FEB												
17...	.006	1.9	.006	.15	.2	.2	.29	.29	.34	1.7	E5	E2
MAR												
11...	.006	.75	.012	.15	.2	.2	.21	.20	.17	1.5	<10	E2
APR												
06...	.003	.72	.008	.14	.2	.1	.088	.076	.071	1.9	<10	4
26...	<.001	.15	.011	.12	.3	.1	.046	.016	.012	2.3	<10	E3
MAY												
06...	.002	.097	.010	.11	.2	.1	.033	.016	.013	2.3	E6	E2
18...	.001	.065	.008	.20	.3	.2	.051	.008	.007	3.0	11	E2
JUN												
10...	.001	.062	.003	.13	.2	.1	.021	.006	.004	3.3	12	E2
AUG												
18...	.004	.13	.003	.13	.2	.1	.058	.043	.035	1.6	E6	E2
SEP												
17...	.004	.29	.017	.25	.1	.3	.076	.069	.065	1.4	13	<2

E Estimated.

MISCELLANEOUS FIELD MEASUREMENTS, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)
APR				
27...	0915	68	245	3.0
JUL				
26...	1515	121	176	14.0
AUG				
09...	1530	101	183	13.2

09067000 BEAVER CREEK AT AVON, CO

LOCATION.--Lat 39°37'47", long 106°31'20", in NE$^1/_4$SW$^1/_4$ sec.12, T.5 S., R.82 W., Eagle County, Hydrologic Unit 14010003, on left bank at Avon, 550 ft upstream from U.S. Highway 6 and 24, and 700 ft upstream from mouth.

DRAINAGE AREA.--14.8 mi^2.

PERIOD OF RECORD.--January to December 1911, January 1912 to September 1914 (gage heights and discharge measurements only), May 1974 to February 1988. October 1988 to current year.

REVISED RECORDS.--WDR CO-88-2: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 7,453 ft above sea level, from topographic map. Prior to May 1, 1974, nonrecording gage near present site, at different datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. Diversions upstream from station for irrigation upstream and downstream from station. Slight natural regulation by several small lakes in headwaters. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.3	5.3	3.6	e2.6	e3.0	2.2	5.4	10	49	46	21	9.8
2	3.7	7.0	3.9	e2.6	e2.9	2.2	5.2	10	48	44	18	9.9
3	4.6	6.8	3.3	e2.6	e2.6	2.2	4.3	9.4	51	39	16	9.5
4	7.0	6.6	3.4	e2.6	e2.6	2.2	4.0	8.7	51	36	16	8.5
5	5.7	6.3	2.8	e2.8	e2.6	2.2	3.9	7.6	48	33	18	7.9
6	5.2	5.2	e2.6	e2.8	e2.6	2.2	4.0	7.2	42	32	20	7.3
7	5.5	4.9	e2.4	e2.8	e2.6	2.2	4.4	7.4	42	32	20	6.5
8	5.9	4.3	e2.2	e2.6	e2.4	2.3	4.7	9.4	48	34	17	5.9
9	5.9	e4.2	e3.0	e2.8	e2.4	2.2	4.0	13	e62	35	16	5.7
10	6.0	e3.7	e2.5	e2.8	e2.6	2.2	3.7	14	e59	29	18	5.4
11	5.3	e3.7	e2.5	e2.8	e2.3	2.3	3.8	11	e48	26	18	8.1
12	4.9	e4.0	e2.8	e2.7	e2.0	2.4	4.5	10	e50	22	18	9.1
13	5.0	3.8	e2.8	e2.7	e2.1	2.5	5.3	13	e52	20	15	7.2
14	5.4	4.4	e2.7	e2.4	e2.3	2.6	5.5	17	e52	23	14	6.2
15	5.6	4.5	e2.8	e2.7	e2.5	2.7	4.4	16	e52	23	14	5.8
16	5.2	4.3	e2.8	e2.4	e2.3	2.8	3.8	18	e50	23	13	6.1
17	e5.0	4.2	e2.6	e2.5	e2.5	3.0	4.4	18	e52	24	13	5.2
18	e4.9	3.8	e2.8	e2.5	e2.5	3.2	4.5	20	e56	20	14	5.5
19	e4.8	e3.7	e2.6	e2.6	e2.5	3.6	6.0	25	e55	21	12	6.0
20	e4.7	e3.5	e2.6	e2.6	e2.3	3.9	6.4	29	e55	22	15	9.2
21	e4.7	e3.6	e2.5	e2.6	e2.3	4.4	6.8	28	e60	18	14	8.3
22	e4.6	e3.9	e2.3	e2.6	e2.3	4.4	7.0	29	e62	17	13	6.8
23	e4.5	3.8	e1.8	e2.4	e2.4	4.3	6.5	31	e66	17	11	6.1
24	e4.5	3.8	e1.9	e2.6	e2.3	4.8	8.5	36	68	15	10	8.1
25	e4.4	3.8	e1.9	e2.6	2.2	5.3	8.8	55	69	15	9.6	8.8
26	e4.3	3.9	e2.1	e2.6	2.1	5.6	7.5	45	64	18	11	7.3
27	e5.0	3.8	e2.5	e2.6	2.0	6.6	7.7	43	60	21	14	6.5
28	e5.8	3.7	e2.8	e2.6	2.1	4.8	8.5	44	55	18	12	6.3
29	e6.0	4.7	e2.8	e2.3	---	4.4	12	49	52	19	10	6.1
30	e5.8	3.9	e2.8	e2.3	---	4.8	13	52	49	19	10	6.1
31	5.6	---	e2.8	e2.5	---	5.0	---	53	---	25	11	---
TOTAL	158.8	133.1	82.9	80.6	67.3	105.5	178.5	738.7	1627	786	451.6	215.2
MEAN	5.12	4.44	2.67	2.60	2.40	3.40	5.95	23.8	54.2	25.4	14.6	7.17
MAX	7.0	7.0	3.9	2.8	3.0	6.6	13	55	69	46	21	9.9
MIN	3.3	3.5	1.8	2.3	2.0	2.2	3.7	7.2	42	15	9.6	5.2
AC-FT	315	264	164	160	133	209	354	1470	3230	1560	896	427

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1974 - 1999, BY WATER YEAR (WY)

MEAN	4.48	3.64	2.97	2.52	2.38	2.98	6.14	28.2	63.6	30.5	10.3	5.83
MAX	8.42	5.78	5.01	4.17	3.99	4.71	11.2	51.7	114	79.5	25.6	10.6
(WY)	1998	1997	1984	1986	1986	1997	1996	1974	1983	1983	1984	1984
MIN	2.28	2.07	1.65	1.44	1.51	1.49	2.48	11.5	22.6	4.81	2.34	1.41
(WY)	1981	1980	1995	1981	1977	1977	1975	1977	1977	1977	1977	1977

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1974 - 1999	
ANNUAL TOTAL	5138.8		4625.2			
ANNUAL MEAN	14.1		12.7		13.6	
HIGHEST ANNUAL MEAN					22.7	1984
LOWEST ANNUAL MEAN					4.94	1977
HIGHEST DAILY MEAN	78	Jun 2	69	Jun 25	242	Jun 27 1983
LOWEST DAILY MEAN	1.7	Mar 10	e1.8	Dec 23	.55	Sep 10 1977
ANNUAL SEVEN-DAY MINIMUM	1.9	Mar 7	2.1	Dec 21	.75	Sep 5 1977
INSTANTANEOUS PEAK FLOW			a74	Jun 24	249	Jun 27 1983
INSTANTANEOUS PEAK STAGE			a2.72	Jun 24	3.46	Jun 27 1983
ANNUAL RUNOFF (AC-FT)	10190		9170		9870	
10 PERCENT EXCEEDS	46		43		41	
50 PERCENT EXCEEDS	4.6		5.4		4.4	
90 PERCENT EXCEEDS	2.3		2.4		2.0	

e Estimated
a Maximum recorded, may have been higher during period of no gage-height record, Jun 09-23.

09067005 EAGLE RIVER AT AVON, CO

LOCATION.--Lat 39°37'54", long 106°31'19", in $SE^1/_4NW^1/_4$ sec.12, T.5 S., R.82 W., Eagle County, Hydrologic Unit 14010003, on left bank 100 ft downstream from bridge, 300 ft north of Highway 6 and 24, and 350 ft downstream from Beaver Creek, in the city of Avon.

DRAINAGE AREA.--395 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1988 to current year.

GAGE.--Water-stage recorder with satellite telemetry and crest-stage gage. Elevation of gage is 7,410 ft above sea level, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. Natural flow of stream affected by transmountain diversions, storage reservoirs, diversions for irrigation and municipal use.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	95	110	75	e61	66	51	150	329	1580	1290	582	225
2	119	131	75	e60	63	51	150	318	1680	1310	483	221
3	110	128	73	e59	62	50	128	305	1860	1200	404	215
4	142	108	75	e58	62	53	119	280	1870	1120	381	199
5	129	96	60	e58	61	48	115	254	1730	1010	442	182
6	113	103	63	e56	54	49	108	239	1430	989	585	170
7	119	99	58	e56	53	49	124	245	1430	958	507	156
8	145	95	40	e57	55	49	141	294	1800	909	433	143
9	146	102	69	e60	57	48	125	398	1980	917	379	137
10	150	82	60	e52	55	50	116	487	1950	769	453	131
11	138	88	52	e53	46	50	108	395	1780	683	463	158
12	128	96	71	49	53	50	123	351	1770	651	407	188
13	124	90	70	48	76	48	146	395	1710	610	356	151
14	134	94	67	49	55	50	154	518	1730	584	320	133
15	138	96	65	53	49	55	139	553	1870	591	312	127
16	121	96	72	52	44	63	125	640	1900	572	298	128
17	117	93	77	58	51	66	121	628	2000	687	286	122
18	109	88	84	59	53	76	130	678	1960	550	339	131
19	109	83	78	61	54	86	147	855	1980	513	285	140
20	110	67	67	61	48	95	181	1020	2010	546	292	224
21	105	82	57	60	49	120	220	1160	1970	472	275	221
22	105	88	e44	59	48	123	220	1330	1980	455	259	200
23	102	84	e36	61	55	115	203	1470	1980	465	235	190
24	100	83	e37	61	51	123	203	1700	2050	421	218	202
25	96	81	e38	61	57	137	277	2020	1970	399	222	251
26	99	77	e47	61	51	168	249	1560	1890	411	224	214
27	102	78	e64	56	50	180	229	1540	1700	507	300	187
28	130	79	e63	57	49	138	261	1500	1590	548	274	170
29	132	85	e62	54	---	128	307	1670	1410	573	244	163
30	120	81	e62	72	---	141	387	1680	1300	456	239	162
31	114	---	e62	77	---	148	---	1790	---	584	229	---
TOTAL	3701	2763	1923	1799	1527	2658	5206	26602	53860	21750	10726	5241
MEAN	119	92.1	62.0	58.0	54.5	85.7	174	858	1795	702	346	175
MAX	150	131	84	77	76	180	387	2020	2050	1310	585	251
MIN	95	67	36	48	44	48	108	239	1300	399	218	122
AC-FT	7340	5480	3810	3570	3030	5270	10330	52770	106800	43140	21280	10400

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 1999, BY WATER YEAR (WY)

MEAN	110	82.0	63.1	58.4	55.4	73.0	217	1156	1684	721	253	144
MAX	169	115	88.5	85.5	79.8	117	365	1856	2725	1938	541	200
(WY)	1996	1996	1996	1996	1996	1996	1996	1996	1997	1995	1995	1997
MIN	67.5	47.6	43.6	38.3	39.2	47.6	124	577	936	230	106	94.0
(WY)	1989	1990	1990	1992	1992	1991	1991	1995	1992	1994	1994	1990

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1989 - 1999	
ANNUAL TOTAL	112951		137756			
ANNUAL MEAN	309		377		386	
HIGHEST ANNUAL MEAN					542	1993
LOWEST ANNUAL MEAN					276	1994
HIGHEST DAILY MEAN	2040	Jun 3	2050	Jun 24	e3800	Jun 5 1997
LOWEST DAILY MEAN	e36	Dec 23	e36	Dec 23	a32	Nov 29 1989
ANNUAL SEVEN-DAY MINIMUM	46	Dec 21	46	Dec 21	35	Jan 4 1992
INSTANTANEOUS PEAK FLOW			2290	May 25	b3930	Jun 6 1997
INSTANTANEOUS PEAK STAGE			4.13	May 25	b,c4.03	Jun 6 1997
ANNUAL RUNOFF (AC-FT)	224000		273200		279400	
10 PERCENT EXCEEDS	938		1430		1270	
50 PERCENT EXCEEDS	109		131		111	
90 PERCENT EXCEEDS	56		53		50	

e Estimated
a Also occurred Jan 5-6, 1990.
b May have been higher during period of indefinite stage-discharge relationship, Jun 4-5, 1997.
c Maximum gage height, 5.14 ft, May 31, 1993.

09067005 EAGLE RIVER AT AVON, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1993 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML) (31633)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)
OCT											
19...	1515	109	256	8.2	5.3	9.7	K8	K1	120	32	9.0
JAN											
19...	1615	65	386	8.0	1.7	10.5	K4	K1	--	--	--
APR											
21...	1030	220	241	8.4	4.5	10.0	10	13	100	28	8.0
MAY											
25...	1428	1950	109	8.1	6.0	9.5	39	18	47	13	3.5
JUL											
19...	1410	519	156	8.3	12.1	8.2	21	17	--	--	--
AUG											
16...	1600	310	190	8.1	15.1	7.4	K5	K5	85	24	6.2

DATE	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	ALKA-LINITY WAT.DIS FET LAB CACO3 (MG/L) (29801)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)
OCT										
19...	3.5	.1	.85	81	--	39	3.7	<.10	5.4	143
JAN										
19...	--	--	--	--	--	--	--	--	--	--
APR										
21...	5.8	.2	.93	70	--	31	9.7	<.10	6.0	132
MAY										
25...	1.9	.1	.68	--	42	8.2	2.3	<.10	5.1	61
JUL										
19...	--	--	--	--	--	--	--	--	--	--
AUG										
16...	3.2	.2	.69	--	61	24	3.1	<.10	5.8	104

DATE	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS-SOLVED (TONS PER DAY) (70302)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)
OCT										
19...	.19	42.1	<.010	.140	<.020	<.10	<.10	.016	<.050	<.010
JAN										
19...	--	--	<.010	.727	.026	.14	E.10	.078	.065	.053
APR										
21...	.18	78.7	<.010	.140	<.020	.28	.13	.038	.007	.014
MAY										
25...	.08	320	<.010	.143	.036	.42	.20	.065	.013	.012
JUL										
19...	--	--	<.010	.062	<.020	E.09	E.10	.009	.004	.011
AUG										
16...	.14	86.8	<.010	.109	.020	.18	E.10	.022	.010	<.010

DATE	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
OCT										
19...	<1.0	1.1	280	<1.0	110	108	<.1	<1	<.20	46
APR										
21...	<1.0	2.7	620	<1.0	160	103	<.1	<1	<.20	84
MAY										
25...	<1.0	1.9	1000	<1.0	150	23	<.1	<1	<.20	E17
AUG										
16...	<1.0	1.5	230	<1.0	52	42	<.1	<1	<.20	25

E Estimated.
K Based on non-ideal colony count.

09067005 EAGLE RIVER AT AVON, CO--Continued

MISCELLANEOUS FIELD MEASUREMENTS, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)
OCT				
06...	1140	112	256	2.5
NOV				
16...	1505	102	299	2.5
DEC				
30...	1045	80	380	.0
JAN				
12...	1440	62	372	.6
FEB				
24...	1350	64	399	2.6
APR				
06...	1025	86	320	1.4
MAY				
21...	0820	1110	130	4.3
JUN				
24...	0830	2090	100	6.3
AUG				
11...	0850	472	139	11.6

09067200 LAKE CREEK NEAR EDWARDS, CO

LOCATION.--Lat 39°38'51", long 106°36'31", in $SE^1/_4NE^1/_4$ sec.6, T.5 S., R.82 W., Eagle County, Hydrologic Unit 14010003, on right bank 30 ft upstream from U.S. Highway 6, and 1.0 mi west of Edwards.

DRAINAGE AREA.--49.0 mi^2.

PERIOD OF RECORD.--October 1993 to current year. Published as 09066980 during the 1994-96 water years.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 7,160 ft above sea level, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Natural flow of stream affected by diversions for irrigation, and return flow from irrigated areas. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e20	28	18	12	e13	9.5	16	24	188	187	137	60
2	e22	32	18	12	e12	9.5	16	24	202	207	110	61
3	e23	30	17	12	11	9.3	15	22	224	190	94	60
4	e27	28	18	12	11	9.6	14	23	216	177	87	54
5	e26	28	16	13	11	9.4	14	21	199	163	96	50
6	24	28	15	13	11	9.4	13	19	152	153	133	47
7	24	28	13	13	11	10	14	18	148	131	122	44
8	25	28	12	12	10	10	15	21	227	149	103	41
9	26	27	17	12	10	10	14	30	254	177	92	37
10	27	26	13	12	11	10	14	39	227	138	104	35
11	27	26	13	12	9.7	10	13	35	191	117	107	41
12	26	28	15	12	e8.2	10	14	32	202	96	102	46
13	24	26	15	12	e9.0	10	15	32	214	93	87	39
14	25	27	15	11	10	10	15	46	214	97	76	35
15	25	27	15	12	10	11	14	47	219	99	76	33
16	24	27	15	11	9.5	11	14	57	206	97	73	32
17	24	25	14	12	10	11	14	60	220	105	68	31
18	23	24	15	12	9.9	12	13	66	240	94	72	32
19	23	24	14	e12	9.8	13	14	88	234	94	66	32
20	22	21	14	e12	9.4	14	16	115	237	111	69	45
21	21	22	13	e12	9.3	15	18	132	242	94	63	45
22	21	23	e9.8	e12	9.5	15	20	170	260	91	60	44
23	21	22	e8.4	e11	9.8	14	18	187	270	84	56	41
24	22	22	e8.6	e12	9.7	15	18	222	285	81	52	47
25	21	21	e8.8	e12	9.5	16	23	308	272	79	47	58
26	20	20	e10	e12	9.4	18	22	196	271	90	46	52
27	21	19	e12	e12	9.2	21	18	197	259	145	69	46
28	29	19	13	e11	9.3	18	17	197	239	135	92	42
29	30	20	13	e9.4	---	17	19	227	207	151	72	38
30	30	19	13	e9.8	---	17	26	219	179	114	66	35
31	28	---	13	e11	---	17	---	234	---	154	64	---
TOTAL	751	745	424.6	365.2	282.2	391.7	486	3108	6698	3893	2561	1303
MEAN	24.2	24.8	13.7	11.8	10.1	12.6	16.2	100	223	126	82.6	43.4
MAX	30	32	18	13	13	21	26	308	285	207	137	61
MIN	20	19	8.4	9.4	8.2	9.3	13	18	148	79	46	31
AC-FT	1490	1480	842	724	560	777	964	6160	13290	7720	5080	2580

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 1999, BY WATER YEAR (WY)

MEAN	31.8	23.7	14.9	12.7	11.3	12.9	21.7	117	274	151	70.6	37.2
MAX	44.8	28.4	19.0	16.0	13.3	14.9	29.6	165	418	293	125	56.0
(WY)	1998	1996	1996	1997	1998	1997	1996	1996	1997	1995	1995	1997
MIN	24.2	16.8	10.8	9.43	9.26	10.6	15.4	43.8	171	44.3	24.5	23.5
(WY)	1999	1995	1994	1995	1994	1994	1995	1995	1998	1994	1994	1994

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1994 - 1999	
ANNUAL TOTAL	19272.6		21008.7			
ANNUAL MEAN	52.8		57.6		65.0	
HIGHEST ANNUAL MEAN					87.3	1997
LOWEST ANNUAL MEAN					45.5	1994
HIGHEST DAILY MEAN	296	Jun 28	308	May 25	845	Jun 16 1995
LOWEST DAILY MEAN	e8.4	Dec 23	e8.2	Feb 12	7.0	Feb 1 1994
ANNUAL SEVEN-DAY MINIMUM	10	Dec 21	9.4	Feb 25	8.0	Jan 29 1994
INSTANTANEOUS PEAK FLOW			379	May 25	1290	Jun 16 1995
INSTANTANEOUS PEAK STAGE			2.53	May 25	3.63	Jun 16 1995
ANNUAL RUNOFF (AC-FT)	38230		41670		47100	
10 PERCENT EXCEEDS	146		189		198	
50 PERCENT EXCEEDS	24		24		26	
90 PERCENT EXCEEDS	13		10		11	

e Estimated

09069000 EAGLE RIVER AT GYPSUM, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 39°39'00", long 106°57'06", Eagle County, Hydrologic Unit 14010003, at bridge at Gypsum, about 400 ft upstream from Gypsum Creek, about 520 ft upstream from bridge on U.S. Highways 6 and 24, and about 550 ft upstream from gaging station.

DRAINAGE AREA.--944 mi^2, at gaging station.

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

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: April 1947 to March 1995.
WATER TEMPERATURE: April 1949 to March 1995.

REMARKS.--Records of discharge are given for Eagle River below Gypsum (station 09070000), located 550 ft downstream from Eagle River at Gypsum (station 09069000).

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum daily, 2,200 microsiemens Mar. 9, 1990; minimum daily, 130 microsiemens June 9-10, 1976.
WATER TEMPERATURE: Maximum daily, 24°C Aug. 24, 1949, several days in Aug. 1988, and July 27, 1990; minimum daily, 0.0°C on many days during winter months.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML) (31633)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)
OCT											
19...	1210	272	976	8.4	6.0	10.4	K10	K1	340	100	19
JAN											
19...	1330	201	1130	8.1	.8	12.0	K4	K2	--	--	--
APR											
22...	0907	363	665	8.3	6.9	--	34	43	220	64	14
MAY											
25...	1132	2800	207	8.2	7.0	9.9	260	190	78	23	4.7
JUL											
19...	1135	651	415	8.3	14.4	8.6	K14	K2	--	--	--
AUG											
16...	1230	457	536	8.1	15.8	7.8	19	17	190	58	11

DATE	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	ALKA-LINITY WAT.DIS FET LAB CACO3 (MG/L) (29801)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)
OCT											
19...	68	2	2.9	136	--	200	95	.12	7.6	576	.78
JAN											
19...	--	--	--	--	--	--	--	--	--	--	--
APR											
22...	39	1	1.1	107	--	120	65	.10	6.9	372	.51
MAY											
25...	7.4	.4	.53	--	53	28	9.4	<.10	5.3	111	.15
JUL											
19...	--	--	--	--	--	--	--	--	--	--	--
AUG											
16...	29	.9	1.7	--	93	99	41	.10	7.1	304	.41

DATE	SOLIDS, DIS-SOLVED (TONS PER DAY) (70302)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)
OCT										
19...	423	7	<.010	.354	<.020	.12	.12	.036	.023	.019
JAN										
19...	--	--	.022	1.01	.305	.49	.44	.145	.125	.104
APR										
22...	365	104	<.010	.336	.041	.73	.21	.233	.038	.032
MAY										
25...	842	299	<.010	.149	.048	1.4	.21	.376	.014	.014
JUL										
19...	--	--	<.010	.248	<.020	.18	E.10	.030	.018	.017
AUG										
16...	376	6	<.010	.402	<.020	.18	<.10	.044	.029	.024

E Estimated.
K Based on non-ideal colony count.

09069000 EAGLE RIVER AT GYPSUM, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	ANTI-MONY, DIS-SOLVED (UG/L AS SB) (01095)	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (01010)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)
OCT									
19...	<1.0	<1	<1	52	<1.6	<1	<1.0	<1	<1.0
APR									
22...	<1.0	2	<1	42	<1.6	<1	<1.0	2	<1.0
MAY									
25...	<1.0	3	<1	30	<1.6	1	<1.0	7	<1.0
AUG									
16...	<1.0	<1	<1	45	<1.6	<1	<1.0	<1	<1.0

DATE	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)
OCT								
19...	1	<1.0	27	<1	<1.0	24	<.10	<.1
APR								
22...	5	1.4	19	4	<1.0	36	<.10	<.1
MAY								
25...	15	1.1	56	25	<1.0	33	<.10	<.1
AUG								
16...	3	1.3	38	<1	<1.0	16	<.10	<.1

DATE	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
OCT								
19...	<1	<1.0	<1	1	<1	<1.0	20	24
APR								
22...	5	<1.0	<1	<1	<1	<1.0	70	E13
MAY								
25...	10	<1.0	<1	<1	<1	<1.0	250	<20
AUG								
16...	3	<1.0	1	<1	<1	<.20	<40	<20

E Estimated.

09070000 EAGLE RIVER BELOW GYPSUM, CO

LOCATION (REVISED).--Lat 39°38'58", long 106°57'11", in $SW^1/_4NW^1/_4$ sec.5, T.5 S., R.85 W., Eagle County, Hydrologic Unit 14010003, on right bank 20 ft downstream from bridge on U.S. Highways 6 and 24 at Gypsum and 150 ft downstream from Gypsum Creek.

DRAINAGE AREA.--944 mi^2.

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

REVISED RECORDS.--WDR CO-88-2: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 6,275.11 ft, above sea level.

REMARKS.--Records good except for estimated daily discharges, which are fair. Transmountain diversions upstream from station, see elsewhere in this report. Transbasin diversions upstream from station from Robinson Reservoir, capacity, 2,520 acre-ft, to Tenmile Creek for mining development. Many small diversions for irrigation of hay meadows upstream from station. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data for Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	203	284	244	204	217	184	302	649	2010	1550	852	353
2	265	304	242	202	200	192	300	638	2050	1610	722	355
3	269	318	238	199	194	177	284	618	2290	1500	609	349
4	328	295	233	195	182	202	269	593	2360	1410	542	329
5	319	273	224	192	193	231	266	557	2260	1300	619	306
6	305	271	208	193	181	213	242	518	1850	1190	767	285
7	297	275	196	193	179	214	241	486	1670	1180	759	266
8	299	276	167	197	194	225	266	478	2150	1120	663	248
9	302	293	197	206	196	216	271	533	2470	1240	586	233
10	304	262	188	187	205	221	256	662	2490	1040	623	222
11	300	238	166	193	175	218	240	707	2240	909	673	239
12	286	271	170	189	147	215	247	637	2230	811	640	301
13	276	264	202	197	178	207	265	592	2190	751	550	280
14	276	270	204	183	198	206	303	656	2220	735	487	246
15	282	277	207	185	201	221	279	760	2330	e760	470	234
16	280	284	202	185	186	221	262	807	2390	e740	458	235
17	287	278	199	198	184	216	253	859	2480	e920	422	228
18	288	271	199	192	178	226	254	859	2550	e750	479	232
19	274	259	205	199	177	241	263	944	2510	e680	438	246
20	271	242	209	201	171	249	289	1230	2530	743	434	316
21	274	231	188	194	166	265	333	1380	2550	648	428	378
22	269	256	146	193	173	290	360	1580	2550	625	409	336
23	267	255	122	188	164	278	405	1680	2570	617	378	316
24	264	246	123	198	179	282	480	1970	2640	572	341	313
25	266	246	e131	197	176	288	529	2540	2440	553	326	397
26	272	241	e154	201	182	312	565	2040	2390	567	325	381
27	284	241	e223	195	172	348	538	1970	2150	707	396	343
28	297	239	216	174	175	317	519	1870	2020	762	457	306
29	299	250	213	154	---	289	538	2130	1800	885	417	296
30	300	248	208	165	---	291	609	2090	1600	719	378	278
31	295	---	202	187	---	295	---	2300	---	814	372	---
TOTAL	8798	7958	6026	5936	5123	7550	10228	35333	67980	28408	16020	8847
MEAN	284	265	194	191	183	244	341	1140	2266	916	517	295
MAX	328	318	244	206	217	348	609	2540	2640	1610	852	397
MIN	203	231	122	154	147	177	240	478	1600	553	325	222
AC-FT	17450	15780	11950	11770	10160	14980	20290	70080	134800	56350	31780	17550

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1947 - 1999, BY WATER YEAR (WY)

MEAN	262	243	199	182	175	191	351	1336	2318	1029	391	271
MAX	526	382	277	243	252	297	862	2722	4134	2989	1096	625
(WY)	1962	1985	1985	1984	1986	1986	1962	1984	1984	1957	1984	1984
MIN	129	169	150	139	125	138	183	528	742	251	150	141
(WY)	1957	1990	1992	1990	1992	1965	1983	1977	1954	1977	1977	1956

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1947 - 1999	
ANNUAL TOTAL	185413		208207			
ANNUAL MEAN	508		570		580	
HIGHEST ANNUAL MEAN					1082	1984
LOWEST ANNUAL MEAN					264	1977
HIGHEST DAILY MEAN	2390	Jun 3	2640	Jun 24	6580	May 25 1984
LOWEST DAILY MEAN	122	Dec 23	122	Dec 23	78	Dec 10 1994
ANNUAL SEVEN-DAY MINIMUM	153	Dec 20	153	Dec 20	99	Aug 29 1990
INSTANTANEOUS PEAK FLOW			2950	Jun 24	7020	May 25 1984
INSTANTANEOUS PEAK STAGE			6.90	Jun 24	9.46	May 25 1984
ANNUAL RUNOFF (AC-FT)	367800		413000		419900	
10 PERCENT EXCEEDS	1260		1730		1590	
50 PERCENT EXCEEDS	276		284		245	
90 PERCENT EXCEEDS	199		187		159	

e Estimated

09070500 COLORADO RIVER NEAR DOTSERO, CO

LOCATION.--Lat 39°38'38", long 107°04'38", in NW$^1/_4$SE$^1/_4$ sec.6, T.5 S., R.86 W., Eagle County, Hydrologic Unit 14010001, on left bank about 500 ft south of Interstate Highway 70, 1.5 mi west of Dotsero, and 1.5 mi downstream from Eagle River.

DRAINAGE AREA.--4,394 mi^2.

PERIOD OF RECORD.--October 1940 to current year. Water quality data available May 1962 to September 1984, October 1995 to September 1998.

GAGE.--Water-stage recorder with satellite telemetry and crest-stage gages. Elevation of gage is 6,130 ft above sea level, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. Natural flow of stream affected by transmountain diversions, storage reservoirs, power development, diversions for irrigation of 68,000 acres upstream from station, and return flow from irrigated areas. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Wuality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1370	1380	1190	e1200	1020	905	1150	1840	6020	6270	2640	1640
2	1510	1410	1180	e1150	1060	909	1230	1850	6480	6190	2600	1670
3	1540	1530	1170	e1120	1040	847	1200	1820	7140	6100	2400	1730
4	1610	1440	1140	e1090	1040	805	1120	1730	7430	6030	2210	1710
5	1600	1380	1120	e1150	1050	799	1080	1610	7730	5700	2180	1660
6	1530	1390	990	e1170	1020	790	1050	1490	7590	5220	2310	1620
7	1280	1380	e880	e1180	1010	766	1040	1460	7120	4790	2480	1540
8	1280	1390	e800	e1180	1040	779	1120	1490	7500	4330	2620	1500
9	1320	1430	e1000	e1130	1030	770	1270	1700	7920	4490	2490	1460
10	e1330	1320	e980	e1150	1050	758	1190	2040	7610	4170	2510	1340
11	e1340	1240	e900	e1130	975	783	1060	2000	6640	3880	2560	1530
12	e1350	1280	e940	e1140	860	764	1040	1910	6280	3710	2490	1560
13	e1350	1320	e1000	e1180	922	749	1090	1820	5940	3530	2270	1500
14	1350	1320	e990	e900	1020	725	1280	2080	5720	3460	2160	1440
15	1360	1330	e1010	e920	1030	726	1360	2290	5810	3440	2120	1650
16	1400	1350	e1040	e940	956	736	1240	2360	6470	3210	2090	1810
17	1400	1350	e1100	e1000	976	739	1160	2410	6820	2940	2060	1850
18	1410	1360	e1100	e1030	935	769	1120	2450	6890	2800	2010	1860
19	1410	1300	e1140	e1060	995	819	1190	2710	6660	2770	1870	1900
20	1410	1230	e1180	1090	912	867	1310	3150	6550	2930	1840	2010
21	1420	1190	e960	1040	905	954	1520	3510	6390	2790	1850	2140
22	1430	1240	e780	1020	923	1040	1650	3860	6450	2660	1820	2090
23	1290	1270	e720	977	861	1130	1640	4200	6610	2590	1740	2080
24	1390	1240	e720	1020	940	1280	1350	4650	6630	2510	1650	2040
25	1400	1220	e730	1040	905	1260	1470	5640	6850	2430	1580	2110
26	1400	1200	e1000	1030	924	1390	1510	5410	7060	2450	1570	2110
27	1400	1180	e1300	1030	906	1510	1470	5160	7090	2470	1630	2040
28	1430	1170	e1260	1030	891	1410	1480	5310	6780	2420	1750	2000
29	1410	1190	e1260	956	---	1170	1470	5800	6450	2550	1710	1990
30	1420	1190	e1230	920	---	1090	1720	5790	6320	2470	1680	1980
31	1410	---	e1190	e980	---	1070	---	6330	---	2570	1650	---
TOTAL	43550	39220	32000	32953	27196	29109	38580	95870	202950	113870	64540	53560
MEAN	1405	1307	1032	1063	971	939	1286	3093	6765	3673	2082	1785
MAX	1610	1530	1300	1200	1060	1510	1720	6330	7920	6270	2640	2140
MIN	1280	1170	720	900	860	725	1040	1460	5720	2420	1570	1340
AC-FT	86380	77790	63470	65360	53940	57740	76520	190200	402600	225900	128000	106200

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1941 - 1999, BY WATER YEAR (WY)

MEAN	1203	1090	957	913	924	1051	1880	4861	6466	3194	1730	1302
MAX	2038	1664	1503	1473	1603	1961	5601	10770	13440	9354	4055	2616
(WY)	1963	1963	1985	1985	1962	1962	1962	1984	1984	1983	1984	1984
MIN	759	677	521	504	529	610	1039	1436	1373	1021	1050	737
(WY)	1943	1978	1943	1941	1943	1964	1964	1977	1954	1963	1958	1942

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1941 - 1999	
ANNUAL TOTAL	725640		773398			
ANNUAL MEAN	1988		2119		2134	
HIGHEST ANNUAL MEAN					4173	1984
LOWEST ANNUAL MEAN					1117	1977
HIGHEST DAILY MEAN	7170	Jun 1	7920	Jun 9	20800	May 25 1984
LOWEST DAILY MEAN	e720	Dec 23	e720	Dec 23	a350	Jan 5 1944
ANNUAL SEVEN-DAY MINIMUM	870	Dec 20	744	Mar 12	417	Jan 13 1944
INSTANTANEOUS PEAK FLOW			8310	Jun 9	22200	May 25 1984
INSTANTANEOUS PEAK STAGE			7.75	Jun 9	14.20	May 25 1984
ANNUAL RUNOFF (AC-FT)	1439000		1534000		1546000	
10 PERCENT EXCEEDS	3730		5750		5010	
50 PERCENT EXCEEDS	1440		1400		1260	
90 PERCENT EXCEEDS	1170		920		760	

e Estimated
a Also occurred Jan 1, 1995.

09071750 COLORADO RIVER ABOVE GLENWOOD SPRINGS, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 39°33'32", long 107°17'25", in NW$^1/_4$SE$^1/_4$ sec.2, T.6 S., R.89 W., Garfield County, Hydrologic Unit 14010001, 0.25 mi upstream from No Name Creek and 2.0 mi above Glenwood Springs.

DRAINAGE AREA.--4,556 mi^2.

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

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: December 1985 to current year.
WATER TEMPERATURE: December 1985 to current year.

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

REMARKS.--Discharge obtained by subtracting the flow in Roaring Fork River at Glenwood Springs (station 09085000) from the flow in the Colorado River below Glenwood Springs (station 09085100). Water-quality data collection was moved downstream to the site downstream from No Name Creek previous site 09071100 on Dec. 12, 1985. Water-quality data collection was relocated upstream 0.25 mi above No Name Creek on Oct. 19, 1995. Water-quality data collected at this site are considered equivalent to data collected at old site. Previous to Oct. 1995, daily maximum and minimum specific-conductance data available in district office. Daily specific-conductance records are good except Dec. 26-Jan. 23, Jan. 28-31, Feb. 11-13, July 11-12,18-19,and 22 which are fair, and Dec. 9-19 which are poor. Daily water temperature records are good. Interruptions in record are due to equipment malfunctions or sensors affected by slush ice.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 1,740 microsiemens, Aug. 21, 1990; minimum, 181 microsiemens, June 21, 1996.
WATER TEMPERATURE: Maximum, 22.5°C, July 26, 1987; minimum, 0.0°C, on many days during the winter months.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 1,200 microsiemens, July 29; minimum, 228 microsiemens, June 27.
WATER TEMPERATURE: Maximum, 19.8° C, Aug. 25; minimum, 0.0° C, on many days during the winter months.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)
OCT											
02...	1145	1640	606	8.5	13.6	8.9	170	52	11	48	2
JAN											
19...	1059	1110	753	7.9	.4	11.8	180	54	11	73	2
MAR											
17...	1045	874	841	8.3	6.8	11.2	200	60	13	81	2
APR											
20...	1607	1370	652	8.5	9.5	9.8	180	53	11	57	2
MAY											
18...	0940	2520	444	8.2	11.0	9.9	140	40	9.3	33	1
26...	1555	5680	272	8.1	11.1	8.9	94	27	6.2	15	.7
JUL											
22...	1130	2830	455	8.2	18.2	7.9	140	41	8.0	32	1
AUG											
17...	1545	2320	490	8.2	17.3	7.8	140	42	8.0	38	1

DATE	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	ALKA-LINITY WAT.DIS FET LAB CACO3 (MG/L) (29801)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS-SOLVED (TONS PER DAY) (70302)
OCT										
02...	2.2	105	--	90	72	.31	7.6	345	.47	1530
JAN										
19...	2.4	106	--	85	110	.22	10	406	.55	1220
MAR										
17...	2.8	120	--	97	130	.21	9.1	460	.63	1090
APR										
20...	2.5	108	--	75	83	.22	7.5	355	.48	1310
MAY										
18...	1.6	--	97	55	43	.15	9.7	249	.34	1690
26...	1.2	--	75	28	18	<.10	8.6	149	.20	2280
JUL										
22...	1.9	--	90	56	45	.23	8.5	247	.34	1890
AUG										
17...	1.9	--	85	64	54	.24	8.1	268	.36	1680

09071750 COLORADO RIVER ABOVE GLENWOOD SPRINGS, CO--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	650	625	636	614	605	610	655	648	650	635	593	612
2	648	622	633	618	610	615	651	639	644	645	605	625
3	640	607	621	613	590	602	660	640	651	641	617	634
4	612	602	607	594	583	587	662	645	655	655	627	641
5	610	595	605	607	594	602	665	650	661	649	627	638
6	600	594	596	609	599	606	702	654	669	634	622	628
7	672	597	637	613	599	607	---	---	---	629	612	619
8	690	669	680	604	593	601	---	---	---	627	609	618
9	671	654	663	600	527	587	786	704	744	652	625	633
10	654	625	634	602	595	599	---	---	---	639	604	624
11	625	620	623	619	602	614	---	---	---	664	622	644
12	625	614	620	632	619	627	---	---	---	640	617	629
13	629	615	624	645	604	626	745	699	731	670	620	640
14	633	627	630	617	606	612	716	678	706	843	593	719
15	635	627	630	617	608	612	704	652	676	797	608	691
16	635	618	626	616	605	612	677	639	661	806	719	768
17	619	612	615	614	603	607	699	639	668	811	699	754
18	624	612	618	613	596	605	677	637	653	729	696	715
19	622	611	617	612	569	598	681	642	663	731	668	704
20	617	605	612	632	610	622	---	---	---	702	684	695
21	610	605	607	649	631	640	---	---	---	706	691	698
22	607	599	603	651	633	647	---	---	---	724	697	706
23	621	602	605	660	631	644	---	---	---	754	709	724
24	712	613	646	642	632	637	---	---	---	757	676	711
25	615	607	611	645	633	639	---	---	---	696	682	691
26	612	607	610	646	635	639	---	---	---	696	688	691
27	617	610	613	649	632	642	651	612	631	728	684	707
28	611	607	609	658	640	651	627	610	620	810	699	743
29	633	611	624	659	644	652	631	623	627	810	720	752
30	619	603	612	656	648	651	679	610	632	845	806	833
31	613	603	609	---	---	---	627	606	618	893	780	862
MONTH	712	594	622	660	527	620	---	---	---	893	593	689

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	810	737	782	759	738	746	679	650	670	528	485	500
2	748	702	729	761	735	746	650	624	639	494	486	490
3	730	693	710	772	730	746	624	607	614	508	491	503
4	736	704	718	799	765	776	638	615	625	543	508	527
5	737	682	706	809	787	797	687	619	665	553	533	542
6	708	702	706	821	785	800	697	656	683	578	553	565
7	711	689	701	885	821	842	711	681	692	594	578	588
8	721	687	706	885	832	855	711	683	699	604	584	596
9	708	686	696	866	841	852	683	623	647	587	532	574
10	733	695	707	871	834	852	627	607	614	542	478	515
11	729	689	705	870	834	848	668	617	647	478	464	468
12	839	748	775	843	818	830	710	663	684	491	472	484
13	834	799	815	839	808	827	701	677	691	522	491	515
14	865	716	780	821	808	814	691	632	662	518	479	506
15	800	700	747	830	813	822	632	576	597	479	446	457
16	743	681	711	828	802	815	596	577	584	452	440	448
17	750	684	722	811	801	806	623	596	614	440	415	433
18	770	699	736	807	782	797	664	612	643	441	415	429
19	773	690	733	786	759	774	662	624	649	433	400	422
20	747	689	705	759	713	737	626	606	621	400	358	382
21	765	674	724	723	665	706	606	554	583	358	333	345
22	788	680	737	682	623	659	554	523	537	333	304	321
23	812	704	738	644	580	618	524	514	519	310	290	300
24	834	683	748	639	577	609	599	523	562	293	269	281
25	761	711	736	613	588	602	624	583	607	273	249	262
26	754	733	739	636	577	609	583	563	570	271	252	260
27	738	732	734	605	549	583	573	562	566	274	257	268
28	757	733	740	567	550	561	591	566	579	268	260	265
29	---	---	---	613	557	584	592	581	586	260	240	250
30	---	---	---	689	613	662	586	528	568	257	245	251
31	---	---	---	707	651	681	---	---	---	258	237	245
MONTH	865	674	732	885	549	741	711	514	621	604	237	419

09071750 COLORADO RIVER ABOVE GLENWOOD SPRINGS, CO--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	266	254	259	264	249	255	461	437	442	568	529	536
2	267	256	262	267	257	263	439	433	437	546	539	543
3	258	243	250	263	257	261	451	435	441	539	526	531
4	247	241	244	267	257	262	475	451	461	542	527	535
5	244	238	241	275	267	272	486	475	482	544	539	542
6	265	243	253	---	---	---	481	466	477	546	540	544
7	268	262	265	---	---	---	466	439	446	563	544	557
8	270	247	258	342	323	334	444	416	423	565	556	562
9	252	232	241	338	328	333	435	422	428	573	562	568
10	244	234	239	---	---	---	444	435	439	590	567	576
11	267	244	254	381	362	367	442	430	435	657	543	593
12	270	258	263	382	371	376	440	426	432	569	543	560
13	271	258	264	---	---	---	467	440	451	561	550	555
14	277	259	267	---	---	---	474	462	467	567	554	562
15	275	253	263	---	---	---	480	474	478	573	517	555
16	263	248	254	---	---	---	487	479	484	517	482	504
17	260	245	252	---	---	---	487	479	483	483	471	477
18	262	246	252	305	294	301	503	483	489	505	469	479
19	266	251	258	309	296	303	514	503	509	474	464	470
20	273	251	260	---	---	---	524	507	518	467	460	462
21	265	250	258	---	---	---	526	513	520	461	434	449
22	272	246	258	449	446	447	523	515	520	453	430	440
23	257	241	250	---	---	---	534	523	530	446	435	440
24	262	232	245	---	---	---	549	531	541	456	439	452
25	254	236	244	470	462	465	652	549	580	457	451	455
26	248	232	239	470	466	468	574	563	568	455	439	446
27	237	228	232	470	463	466	573	561	567	447	439	445
28	240	232	236	470	452	465	566	532	550	453	444	450
29	248	240	245	1200	452	652	536	531	533	449	435	439
30	249	244	248	495	453	471	548	536	541	447	437	443
31	---	---	---	479	461	468	553	539	550	---	---	---
MONTH	277	228	252	---	---	---	652	416	491	657	430	506

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	15.2	13.8	14.6	8.7	7.4	8.0	4.9	3.0	4.0	.2	.0	.0
2	13.9	12.7	13.3	8.9	8.3	8.6	3.7	2.6	3.3	.1	.0	.0
3	13.7	11.5	12.3	8.6	7.3	7.9	3.4	2.2	2.9	.0	.0	.0
4	11.7	10.1	10.7	7.6	5.5	6.5	2.9	1.7	2.4	.2	.0	.0
5	10.5	8.7	9.4	6.1	5.0	5.6	2.6	1.3	2.1	.1	.0	.0
6	9.1	7.8	8.4	6.1	4.8	5.4	1.3	.0	.6	.1	.0	.0
7	9.4	8.0	8.6	5.4	4.5	5.0	.0	.0	.0	.2	.0	.0
8	10.1	9.1	9.7	5.4	4.1	4.6	.0	.0	.0	.2	.0	.0
9	10.8	9.5	10.2	4.3	3.2	3.7	.0	.0	.0	.2	.0	.0
10	11.0	9.9	10.6	3.2	1.9	2.4	.0	.0	.0	.3	.0	.1
11	10.9	9.4	10.3	2.3	1.4	1.9	.0	.0	.0	.1	.0	.0
12	10.5	9.1	9.9	2.9	1.8	2.1	.0	.0	.0	.4	.0	.1
13	10.4	9.0	9.7	3.1	2.5	2.9	.0	.0	.0	.3	.0	.0
14	11.1	9.9	10.4	3.8	2.7	3.2	.0	.0	.0	.0	.0	.0
15	11.4	10.1	11.0	4.2	3.4	3.8	.0	.0	.0	.0	.0	.0
16	11.0	9.3	10.2	4.6	3.7	4.2	.0	.0	.0	.0	.0	.0
17	9.8	8.5	9.3	4.7	3.8	4.3	.0	.0	.0	.3	.0	.1
18	9.0	7.6	8.4	4.5	3.8	4.2	.0	.0	.0	.4	.0	.1
19	8.5	7.2	7.9	4.0	2.7	3.4	.1	.0	.0	.7	.2	.4
20	8.5	7.8	8.2	3.3	1.4	2.3	.0	.0	.0	.7	.3	.5
21	8.8	7.7	8.3	1.9	.7	1.3	.0	.0	.0	.7	.3	.5
22	9.6	8.8	9.1	2.4	1.4	1.8	.0	.0	.0	.7	.1	.4
23	9.6	8.1	8.9	3.2	2.4	2.8	.0	.0	.0	.8	.1	.4
24	8.4	7.4	8.0	3.6	2.9	3.3	.0	.0	.0	1.3	.8	1.0
25	8.5	7.8	8.1	3.4	2.5	3.1	.0	.0	.0	1.3	.9	1.1
26	8.9	8.4	8.6	3.4	2.3	3.0	.0	.0	.0	1.4	.8	1.1
27	9.1	8.2	8.7	3.2	2.0	2.7	.0	.0	.0	1.1	.4	.7
28	8.2	7.4	7.8	2.9	2.3	2.6	.0	.0	.0	1.3	.0	.5
29	8.1	7.4	7.7	4.1	2.6	3.4	.1	.0	.0	.9	.0	.2
30	7.9	7.4	7.7	4.8	4.0	4.3	.2	.0	.0	.1	.0	.0
31	8.3	7.6	7.9	---	---	---	.0	.0	.0	.4	.0	.1
MONTH	15.2	7.2	9.5	8.9	.7	3.9	4.9	.0	.5	1.4	.0	.2

09071750 COLORADO RIVER ABOVE GLENWOOD SPRINGS, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	.5	.0	.2	4.8	3.0	3.9	7.1	6.4	6.7	9.9	8.1	8.9
2	.9	.1	.4	5.4	4.1	4.6	7.5	5.9	6.7	9.6	8.1	8.5
3	.7	.2	.4	5.1	3.9	4.6	6.3	4.9	5.6	9.6	8.2	8.8
4	1.2	.2	.6	5.2	4.2	4.8	6.4	5.1	5.8	9.1	8.2	8.6
5	1.7	.9	1.3	4.9	3.9	4.4	6.3	5.4	5.7	8.9	7.0	8.1
6	2.1	1.7	1.9	4.3	3.4	3.8	7.5	5.9	6.5	8.0	7.1	7.4
7	2.6	1.8	2.2	4.4	3.7	4.0	9.2	6.7	7.9	9.9	8.0	9.0
8	3.2	2.2	2.7	4.7	3.7	4.2	8.6	7.3	8.2	11.9	9.9	11.0
9	3.5	2.4	3.1	5.5	4.5	4.9	8.2	5.5	7.3	12.5	11.6	12.1
10	3.7	1.7	3.0	6.2	4.7	5.2	5.7	4.6	5.2	12.4	10.1	11.1
11	1.7	.0	.5	6.2	5.3	5.6	6.3	5.2	5.6	10.4	8.4	9.2
12	.1	.0	.0	5.8	5.1	5.3	8.7	5.8	7.4	9.7	8.5	8.9
13	.3	.0	.0	5.7	4.4	4.9	10.4	8.6	9.4	11.1	9.7	10.2
14	.6	.0	.1	6.5	4.9	5.5	10.6	8.5	9.7	11.8	11.0	11.4
15	1.2	.1	.5	7.3	5.8	6.3	9.2	7.0	8.2	11.9	10.0	10.7
16	1.0	.2	.6	7.3	5.9	6.4	7.9	5.8	6.7	11.8	10.2	10.6
17	.9	.1	.5	7.8	6.1	6.7	7.0	5.9	6.4	11.9	9.9	10.8
18	1.0	.1	.5	8.6	6.9	7.5	8.7	6.6	7.7	12.4	10.8	11.4
19	2.4	1.0	1.7	9.2	7.5	8.1	10.4	7.9	9.2	13.1	11.5	12.2
20	2.3	1.2	1.7	9.4	7.9	8.3	10.3	9.2	9.9	13.6	12.1	12.8
21	1.8	.9	1.4	9.5	7.8	8.5	10.6	9.9	10.3	13.6	11.8	12.6
22	1.5	.6	.9	8.9	7.1	8.1	10.7	9.0	9.6	13.0	11.4	12.2
23	1.7	.7	1.1	7.3	6.1	6.8	9.7	7.6	8.5	12.9	11.5	12.1
24	2.6	1.3	2.0	8.3	6.9	7.3	9.6	8.0	8.6	12.9	11.4	12.3
25	3.3	2.1	2.6	8.6	7.3	8.0	10.5	9.6	9.9	12.4	10.5	11.2
26	3.7	2.3	2.8	8.9	7.5	8.3	10.5	8.4	9.0	11.6	9.5	10.5
27	3.4	2.0	2.7	8.6	7.8	8.2	9.1	8.5	8.7	11.8	10.0	10.8
28	3.7	2.3	2.9	8.1	6.3	7.2	9.8	8.9	9.3	12.3	9.9	11.1
29	---	---	---	7.0	5.8	6.5	10.8	9.2	9.8	12.3	10.7	11.2
30	---	---	---	8.1	6.9	7.4	10.9	9.9	10.5	12.0	9.8	10.8
31	---	---	---	7.9	6.6	7.3	---	---	---	11.6	10.1	10.7
MONTH	3.7	.0	1.4	9.5	3.0	6.2	10.9	4.6	8.0	13.6	7.0	10.6

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	11.4	9.1	10.1	16.0	13.4	14.5	19.4	17.5	18.3	17.8	16.7	17.3
2	11.3	10.2	10.6	16.4	14.6	15.5	19.5	18.2	18.8	17.3	16.3	16.8
3	11.6	10.1	10.7	16.8	14.9	15.8	19.4	18.0	18.6	16.9	15.8	16.4
4	11.5	10.4	10.9	17.0	15.2	16.0	18.8	17.6	18.1	16.5	15.1	15.7
5	10.7	9.6	10.1	17.7	15.3	16.3	18.0	17.1	17.4	15.8	14.6	15.2
6	11.0	8.5	9.7	---	---	---	18.6	17.5	17.9	15.9	14.8	15.3
7	12.3	9.4	10.6	---	---	---	18.7	17.2	17.9	16.1	15.1	15.6
8	12.7	10.7	11.7	18.1	16.8	17.3	18.8	17.5	18.1	16.2	14.9	15.5
9	12.7	10.8	11.7	17.0	16.0	16.4	18.5	17.3	17.7	15.8	14.6	15.3
10	12.5	11.0	11.7	---	---	---	17.8	16.8	17.4	15.6	14.7	15.3
11	12.3	10.3	11.3	17.5	16.0	16.5	17.8	16.9	17.3	16.1	14.8	15.5
12	12.9	10.8	11.7	16.9	15.3	15.9	17.4	16.3	16.9	15.0	13.9	14.4
13	12.9	11.4	12.1	---	---	---	17.3	15.0	16.0	15.1	13.8	14.5
14	12.9	11.8	12.3	---	---	---	17.3	16.3	16.7	14.7	13.4	14.1
15	12.6	11.2	11.5	---	---	---	17.2	16.2	16.7	14.3	13.1	13.6
16	11.3	10.3	10.7	---	---	---	17.2	16.1	16.6	14.9	13.5	13.9
17	11.4	10.4	11.0	---	---	---	17.5	16.8	17.2	15.1	13.7	14.3
18	13.1	10.8	11.5	17.5	16.5	16.9	18.1	16.2	17.1	15.1	13.8	14.4
19	13.4	11.4	12.5	16.9	16.2	16.5	18.3	17.4	17.8	15.0	13.1	13.7
20	13.4	12.6	13.0	---	---	---	18.8	17.6	17.9	13.7	12.5	13.0
21	13.3	12.5	12.9	---	---	---	18.9	16.9	17.7	13.3	12.1	12.5
22	14.3	12.5	13.3	---	---	---	18.6	17.1	17.6	13.2	11.8	12.4
23	14.3	12.8	13.5	---	---	---	19.2	17.5	18.2	14.0	12.4	13.0
24	14.9	13.0	13.8	---	---	---	19.5	18.6	19.0	14.3	13.5	13.9
25	15.4	13.7	14.4	19.6	18.3	18.9	19.8	18.5	19.1	14.3	13.3	13.7
26	15.4	13.5	14.4	19.6	17.7	18.4	19.2	18.0	18.6	14.4	13.4	13.8
27	15.3	13.6	14.5	19.0	17.7	18.3	19.2	18.4	18.9	13.9	11.5	12.4
28	15.3	13.5	14.4	19.4	18.2	18.7	18.7	18.1	18.4	12.0	9.9	10.6
29	15.3	13.3	14.3	19.0	17.7	18.2	18.5	17.0	17.6	10.3	8.9	9.4
30	15.1	13.3	14.2	18.5	17.4	18.0	17.9	17.0	17.4	10.2	8.8	9.3
31	---	---	---	18.5	17.5	18.1	18.3	17.2	17.8	---	---	---
MONTH	15.4	8.5	12.2	---	---	---	19.8	15.0	17.8	17.8	8.8	14.0

09073300 ROARING FORK RIVER ABOVE DIFFICULT CREEK NEAR ASPEN, CO

LOCATION.--Lat 39°08'28", long 106°46'25", Pitkin County, Hydrologic Unit 14010004, on left bank in the White River National Forest at Difficult Creek Campground, 0.45 mi upstream from Difficult Creek, and 4.25 mi southeast of Aspen.

DRAINAGE AREA.--75.8 mi^2.

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 8,120 ft above sea level, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. Transmountain diversion 11 mi upstream through Twin Lakes Tunnel to Arkansas River basin since May 24, 1935 (16,520 acre-ft diverted during current year, provided by Colorado Division of Water Resources).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	35	16	14	e13	e13	e16	29	44	193	632	120	61
2	32	19	14	e13	e15	e16	27	43	196	593	142	60
3	29	17	13	e13	e15	e15	26	42	198	539	161	64
4	33	15	14	e14	e14	e15	27	40	237	230	110	59
5	30	18	13	e14	e15	e15	26	37	306	352	114	52
6	25	18	e14	e14	e14	e14	24	36	268	342	147	48
7	26	16	e11	e14	e15	e14	26	36	428	325	116	45
8	28	16	e12	e13	e15	e13	29	42	743	317	103	42
9	28	16	e14	e13	e14	e13	28	56	855	309	94	40
10	27	15	e15	e15	e13	e14	27	62	881	291	115	38
11	28	16	e12	e14	e11	e14	28	50	824	274	122	43
12	25	17	e15	e13	e14	e14	28	46	818	213	103	46
13	27	16	e14	e12	e13	e14	31	54	818	143	86	50
14	26	16	e13	e14	e12	e15	33	78	838	142	74	48
15	25	17	e15	e13	e14	e15	31	86	797	135	80	56
16	20	16	e16	e14	e17	e15	31	98	680	128	70	63
17	19	16	e15	e13	e14	e16	33	90	649	129	94	58
18	16	16	e14	e14	e14	e17	32	93	723	121	68	54
19	19	15	e14	e14	e15	e19	36	123	860	131	66	58
20	19	14	e13	e15	e14	e22	40	150	1000	125	68	71
21	16	15	e10	e14	e15	27	42	164	1090	e133	68	69
22	17	15	e12	e15	e15	28	41	178	1030	e142	76	65
23	16	15	e14	e15	e16	27	39	206	1160	e141	65	61
24	15	15	e12	e15	e15	27	40	231	1340	e136	62	77
25	16	14	e10	e15	e16	30	44	230	1070	e140	62	122
26	18	14	e11	e12	e15	32	41	202	950	e138	61	99
27	16	14	e13	e11	e16	31	39	200	876	e123	66	82
28	18	14	e13	e12	e16	28	42	197	758	124	69	75
29	17	15	e13	e14	---	28	43	209	682	118	63	75
30	17	14	e13	e13	---	30	49	199	629	115	59	74
31	17	---	e13	e12	---	30	---	200	---	116	59	---
TOTAL	700	470	409	420	405	624	1012	3522	21897	6897	2763	1855
MEAN	22.6	15.7	13.2	13.5	14.5	20.1	33.7	114	730	222	89.1	61.8
MAX	35	19	16	15	17	32	49	231	1340	632	161	122
MIN	15	14	10	11	11	13	24	36	193	115	59	38
AC-FT	1390	932	811	833	803	1240	2010	6990	43430	13680	5480	3680

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 - 1999, BY WATER YEAR (WY)

MEAN	29.6	22.1	17.7	15.7	14.9	16.4	30.7	143	413	190	63.6	40.0
MAX	53.3	43.3	31.0	24.4	21.1	24.4	53.8	512	939	872	145	83.7
(WY)	1987	1985	1985	1985	1998	1997	1985	1984	1984	1995	1995	1986
MIN	15.8	12.5	10.9	10.6	10.8	9.60	14.9	57.4	103	41.8	21.2	17.7
(WY)	1995	1995	1995	1995	1981	1981	1983	1995	1989	1981	1981	1981

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1980 - 1999	
ANNUAL TOTAL	17291		40974			
ANNUAL MEAN	47.4		112		a133	
HIGHEST ANNUAL MEAN					194	1984
LOWEST ANNUAL MEAN					35.7	1981
HIGHEST DAILY MEAN	235	Jun 3	1340	Jun 24	1930	Jun 8 1985
LOWEST DAILY MEAN	e10	Dec 21	e10	Dec 21	b8.0	Jan 11 1980
ANNUAL SEVEN-DAY MINIMUM	12	Dec 20	12	Dec 20	9.2	Mar 22 1981
INSTANTANEOUS PEAK FLOW			1550	Jun 24	c2350	Jun 8 1985
INSTANTANEOUS PEAK STAGE			4.30	Jun 24	5.10	Jun 8 1985
ANNUAL RUNOFF (AC-FT)	34300		81270		a96360	
10 PERCENT EXCEEDS	132		249		182	
50 PERCENT EXCEEDS	25		29		28	
90 PERCENT EXCEEDS	15		13		13	

e Estimated
a Includes Twin Lakes Tunnel.
b Also occurred Dec 31, 1994.
c From rating curve extended above 910 ft^3/s.

09073300 ROARING FORK RIVER ABOVE DIFFICULT CREEK NEAR ASPEN, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1996 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML) (31633)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)
OCT											
21...	0930	17	72	7.7	3.4	9.4	<1	<1	30	9.5	1.5
JAN											
22...	1140	14	79	7.4	.7	10.2	<1	<1	--	--	--
APR											
20...	0850	37	67	7.9	2.1	10.3	K1	K1	29	9.2	1.5
JUN											
01...	1550	161	38	7.8	8.0	8.8	<1	<1	17	5.2	.93
JUL											
21...	1330	80	89	7.7	12.8	8.1	<1	K1	--	--	--
AUG											
18...	1200	69	60	7.5	11.2	8.3	K15	K4	27	8.4	1.3

DATE	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	ALKA-LINITY WAT.DIS FET LAB CACO3 (MG/L) (29801)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)
OCT										
21...	2.1	.2	.49	30	--	5.0	.29	.63	7.6	45
JAN										
22...	--	--	--	--	--	--	--	--	--	--
APR										
20...	2.0	.2	.40	25	--	5.8	.38	.41	7.3	42
JUN										
01...	1.2	.1	.34	--	18	2.0	.16	.24	5.8	27
JUL										
21...	--	--	--	--	--	--	--	--	--	--
AUG										
18...	1.4	.1	.31	--	21	8.9	.10	.21	6.2	39

DATE	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS-SOLVED (TONS PER DAY) (70302)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)
OCT										
21...	.06	2.08	<.010	.073	<.020	<.10	<.10	<.050	.013	<.010
JAN										
22...	--	--	.020	.156	<.020	<.10	<.10	<.004	<.004	<.010
APR										
20...	.06	4.22	<.010	.087	.025	E.05	E.10	<.004	<.004	<.010
JUN										
01...	.04	11.8	<.010	<.050	.024	.15	.15	.004	<.004	<.010
JUL										
21...	--	--	<.010	<.050	<.020	.13	E.10	.006	<.004	<.010
AUG										
18...	.05	7.13	<.010	<.050	<.020	.69	<.10	.004	<.004	<.010

DATE	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
OCT										
21...	<1.0	<1.0	40	<1.0	<10	E2.5	<.1	<1	<.20	<20
APR										
20...	<1.0	1.3	60	<1.0	4	E2.0	<.1	<1	<.20	<20
JUN										
01...	<1.0	1.1	60	<1.0	E3	E2.2	<.1	<1	<.20	<20
AUG										
18...	<1.0	2.9	270	<1.0	9	6.4	<.1	<1	<.20	<20

E Estimated.
K Based on non-ideal colony count.

09073300 ROARING FORK RIVER ABOVE DIFFICULT CREEK NEAR ASPEN, CO--Continued

MISCELLANEOUS FIELD MEASUREMENTS, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)
OCT				
01...	1410	38	78	8.6
NOV				
17...	0900	15	75	2.0
JAN				
12...	1205	15	83	.5
FEB				
22...	1335	18	78	1.2
APR				
06...	1145	26	79	2.2
MAY				
17...	1220	82	56	4.8
JUN				
16...	1225	646	48	11.6
28...	1330	620	48	11.5
JUL				
27...	1205	123	50	11.9
SEP				
13...	1215	52	74	7.6

09073400 ROARING FORK RIVER NEAR ASPEN, CO

LOCATION.--Lat 39°10'48", long 106°48'05", T. 10 S., R. 84 W., Pitkin County, Hydrologic Unit 14010004, on right bank 25 ft upstream from private bridge, 115 ft upstream from Salvation ditch headgate, 1.0 mi southeast of Aspen, and 2.0 mi upstream from Hunter Creek.

DRAINAGE AREA.--108 mi^2.

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

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 8,014.01 ft above sea level. Prior to Apr. 25, 1968, at site 85 ft upstream, at datum 1.16 ft higher.

REMARKS.--Records good except for estimated daily discharges, which are poor. Transmountain diversion 14 mi upstream through Twin Lakes tunnel to Arkansas River basin since May 24, 1935, (16,520 acre-ft diverted during current year, provided by Colorado Division of Water Resources). Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	49	35	29	25	26	e28	46	65	361	718	166	102
2	51	41	29	25	26	e27	45	66	380	686	174	102
3	44	38	28	e22	25	e26	42	64	381	622	180	101
4	51	35	28	24	26	e26	40	62	405	357	144	94
5	48	34	27	24	26	e25	42	57	493	447	151	83
6	41	40	25	24	26	e25	39	56	428	453	182	77
7	45	36	23	24	26	e24	42	55	521	412	153	72
8	47	36	e19	24	26	e24	45	63	822	407	136	67
9	46	37	e23	23	26	e23	42	83	1010	395	121	64
10	45	33	24	23	25	e23	40	103	997	358	145	62
11	43	32	23	24	e20	e24	38	84	878	326	157	69
12	41	35	26	23	e18	e24	40	76	870	268	134	80
13	43	35	e25	e22	e26	e23	43	83	866	180	115	69
14	43	35	e24	e21	28	e26	46	128	865	190	103	63
15	42	36	e24	e22	27	e28	42	141	869	177	108	74
16	38	37	e25	e23	e25	e31	37	164	770	168	93	93
17	36	36	e26	24	27	e32	41	161	733	173	113	85
18	32	35	e26	24	e25	35	41	162	767	156	92	82
19	34	33	27	24	e27	37	44	206	898	171	87	86
20	39	30	24	25	28	40	49	246	956	175	93	116
21	36	31	e19	24	e26	44	58	267	1150	171	88	116
22	36	32	e17	25	e25	44	58	292	1080	186	101	108
23	35	32	e20	26	e26	43	53	346	1090	187	87	105
24	35	31	e23	25	e26	43	54	395	1130	176	81	121
25	34	30	e24	25	e27	46	61	398	1090	186	83	159
26	37	30	26	25	e26	51	57	343	1060	188	81	136
27	36	30	26	25	e26	52	54	365	948	167	83	116
28	40	30	25	e18	e27	46	58	353	850	164	91	108
29	37	31	25	e17	---	44	60	391	777	160	82	105
30	37	31	25	e23	---	47	71	367	715	158	77	106
31	36	---	25	e25	---	46	---	378	---	164	88	---
TOTAL	1257	1017	760	728	718	1057	1428	6020	24160	8746	3589	2821
MEAN	40.5	33.9	24.5	23.5	25.6	34.1	47.6	194	805	282	116	94.0
MAX	51	41	29	26	28	52	71	398	1150	718	182	159
MIN	32	30	17	17	18	23	37	55	361	156	77	62
AC-FT	2490	2020	1510	1440	1420	2100	2830	11940	47920	17350	7120	5600

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 1999, BY WATER YEAR (WY)

MEAN	43.8	35.2	30.2	27.2	25.9	27.8	48.7	197	441	210	71.7	51.7
MAX	80.0	61.6	47.5	44.6	41.1	44.3	79.7	554	1017	1057	186	94.0
(WY)	1966	1985	1987	1997	1997	1997	1985	1984	1984	1995	1995	1999
MIN	23.5	20.7	18.6	17.0	15.4	16.6	26.2	97.0	119	48.4	29.3	23.8
(WY)	1978	1978	1977	1977	1977	1977	1973	1983	1977	1977	1977	1977

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1965 - 1999	
ANNUAL TOTAL	27838		52301			
ANNUAL MEAN	76.3		143		a154	
HIGHEST ANNUAL MEAN					229	1984
LOWEST ANNUAL MEAN					42.1	1977
HIGHEST DAILY MEAN	367	Jun 3	1150	Jun 21	1900	Jul 10 1995
LOWEST DAILY MEAN	e17	Dec 22	e17	Dec 22	12	Nov 28 1976
ANNUAL SEVEN-DAY MINIMUM	22	Dec 20	22	Dec 20	15	Feb 1 1977
INSTANTANEOUS PEAK FLOW			1340	Jun 24	b2230	Jul 11 1995
INSTANTANEOUS PEAK STAGE			4.72	Jun 24	5.97	Jul 11 1995
ANNUAL RUNOFF (AC-FT)	55220		103700		a111600	
10 PERCENT EXCEEDS	220		395		255	
50 PERCENT EXCEEDS	40		44		41	
90 PERCENT EXCEEDS	29		24		23	

e Estimated
a Includes diversions through Twin Lakes Tunnel.
b Also occurred Jun 9, 1985.

09074000 HUNTER CREEK NEAR ASPEN, CO

LOCATION.--Lat 39°12'21", long 106°47'49", Pitkin County, Hydrologic Unit 14010004, on right bank 280 ft upstream from headgate of Red Mountain ditch, 1.5 mi upstream from mouth, and 1.5 mi northeast of Aspen.

DRAINAGE AREA.--41.1 mi^2.

PERIOD OF RECORD.--June 1950 to September 1956, September 1969 to current year. Statistical summary computed for 1980 to current year.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 8,610 ft above sea level, from topographic map. Prior to Sept. 1, 1969, at site 220 ft downstream, at different datum, Sept. 1, 1969 to July 10, 1991 at datum 1.0 ft lower.

REMARKS.--Records good except for estimated daily discharges, which are poor. Transmountain diversion upstream from station to Charles H. Boustead tunnel by feeder conduit. Several small diversions upstream from station for irrigation of hay meadows upstream and downstream from station. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.9	13	9.4	e5.9	5.2	5.1	19	35	185	292	104	51
2	14	18	9.1	e5.8	4.9	5.1	16	33	192	259	102	46
3	12	15	e8.8	e5.6	4.8	4.9	17	31	207	237	68	46
4	17	13	e8.6	e6.0	4.9	5.0	18	30	205	230	66	40
5	14	11	e7.8	e6.0	5.0	5.2	13	27	182	189	73	35
6	13	13	e6.8	e5.8	4.8	5.3	13	26	159	184	138	33
7	18	12	e5.6	e5.6	4.9	5.3	15	27	195	168	88	30
8	23	12	e5.0	e5.4	5.0	5.3	18	37	275	159	71	28
9	21	e11	e5.8	e5.2	4.9	5.2	15	52	274	144	62	26
10	21	e11	e6.2	5.1	4.8	5.3	14	62	202	e132	67	24
11	18	e12	e5.6	4.8	4.8	5.3	15	54	167	108	71	31
12	15	12	5.1	5.5	5.2	5.3	15	49	171	e98	61	38
13	15	12	5.5	e5.2	5.0	5.3	18	54	178	85	52	30
14	17	11	5.6	e5.1	5.1	5.7	19	76	150	e102	49	25
15	16	11	5.7	e5.3	5.1	6.6	16	88	156	103	58	31
16	13	11	6.1	e4.8	5.0	6.8	14	103	155	96	52	45
17	12	11	6.3	e5.2	5.0	7.0	16	100	176	111	51	37
18	10	10	8.0	e5.0	5.0	8.2	15	119	205	82	49	35
19	14	10	7.4	4.8	5.1	10	19	183	220	100	45	39
20	14	e8.8	e7.0	5.1	5.0	13	26	245	222	112	46	65
21	12	e9.4	e6.8	5.1	5.0	15	29	298	233	83	42	56
22	13	9.1	e4.3	5.4	5.0	16	27	339	275	90	52	48
23	12	9.0	e4.8	5.5	5.2	14	24	451	448	105	58	40
24	11	9.0	e5.4	5.4	5.0	14	27	495	514	79	48	68
25	11	8.8	e5.8	5.2	4.9	19	34	242	492	88	51	85
26	13	9.1	e6.2	5.1	4.9	23	28	190	444	80	46	61
27	13	9.0	e6.2	5.2	4.8	22	26	189	408	80	52	47
28	17	9.0	e6.2	5.2	4.8	18	33	187	362	74	61	42
29	15	8.7	e6.0	5.1	---	16	34	201	322	72	49	41
30	14	8.8	e6.0	5.1	---	19	45	199	294	69	44	39
31	14	---	e6.2	5.3	---	20	---	195	---	85	49	---
TOTAL	451.9	327.7	199.3	164.8	139.1	320.9	638	4417	7668	3896	1925	1262
MEAN	14.6	10.9	6.43	5.32	4.97	10.4	21.3	142	256	126	62.1	42.1
MAX	23	18	9.4	6.0	5.2	23	45	495	514	292	138	85
MIN	9.9	8.7	4.3	4.8	4.8	4.9	13	26	150	69	42	24
AC-FT	896	650	395	327	276	637	1270	8760	15210	7730	3820	2500

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 - 1999, BY WATER YEAR (WY)

MEAN	16.3	10.9	7.26	6.17	5.69	6.85	19.5	123	214	82.3	33.6	20.2
MAX	32.7	25.1	14.4	11.3	9.21	11.3	40.8	287	462	271	74.4	42.1
(WY)	1985	1985	1985	1987	1985	1997	1989	1996	1996	1995	1995	1999
MIN	5.35	3.32	2.33	2.74	2.89	3.66	7.68	44.8	72.6	30.4	10.6	7.03
(WY)	1990	1990	1981	1981	1990	1990	1983	1995	1989	1994	1980	1980

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1980 - 1999	
ANNUAL TOTAL	12908.4		21409.7			
ANNUAL MEAN	35.4		58.7		a45.6	
HIGHEST ANNUAL MEAN					81.2	1996
LOWEST ANNUAL MEAN					27.2	1994
HIGHEST DAILY MEAN	412	Jun 2	514	Jun 24	786	Jun 6 1988
LOWEST DAILY MEAN	e4.3	Dec 22	e4.3	Dec 22	1.8	Dec 20 1980
ANNUAL SEVEN-DAY MINIMUM	5.5	Dec 7	4.9	Feb 5	1.9	Dec 20 1980
INSTANTANEOUS PEAK FLOW			759	Jun 23	b1170	Jun 8 1985
INSTANTANEOUS PEAK STAGE			2.85	Jun 23	c2.33	Jun 8 1985
ANNUAL RUNOFF (AC-FT)	25600		42470		33000	
10 PERCENT EXCEEDS	89		188		120	
50 PERCENT EXCEEDS	12		17		13	
90 PERCENT EXCEEDS	6.2		5.1		5.0	

e Estimated
a Average discharge for 16 years (water years 1951-1956, 1970-1979), 50.7 ft^3/s; 36730 acre-ft/yr, prior to diversion through Charles H. Boustead tunnel.
b From rating curve extended above 300 ft^3/s.
c Maximum gage height for period of record, 4.30 ft, Nov 30, 1984, backwater from ice.

09080190 RUEDI RESERVOIR NEAR BASALT, CO

LOCATION.--Lat 39°21'50", long 106°49'05", in NW$^{1}/_{4}$ sec.18, T.8 S., R.84 W., Pitkin County, Hydrologic Unit 14010004, in gatehouse of Ruedi Dam just upstream from Rocky Fork Creek, and 13 mi east of Basalt.

DRAINAGE AREA.--223 mi^{2}.

PERIOD OF RECORD.--May 1968 to current year.

GAGE.--Water-stage recorder. Datum of gage is 7766.00 ft above sea level, (levels by U.S. Bureau of Reclamation); gage readings have been reduced to elevations above sea level.

REMARKS.--Reservoir is formed by an earthfill dam. Storage began in May 1968; dam completed July 16, 1968. Capacity, 102,300 acre-ft, 1969 survey, between elevations 7,540.00 ft, sill of auxiliary outlet and 7,766.00 ft, crest of spillway. Dead storage below elevation 7,540.00 ft, 61 acre-ft. Figures given are total contents.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 103,930 acre-ft, July 14, 1995, elevation, 7,767.55 ft; minimum after first filling, 32,430 acre-ft, Apr. 24, 1996, elevation, 7,670.17 ft.

EXTREMES (at 2400) FOR CURRENT YEAR.--Maximum contents, 102,550 acre-ft, July 28, elevation, 7,766.18 ft; minimum contents, 65,490 acre-ft, Mar. 20, elevation, 7,723.58 ft.

MONTHEND ELEVATION IN FEET ABOVE SEA LEVEL AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Elevation (feet)	Contents (acre-feet)	Change in Contents (acre feet)
Sept. 30	7745.99	83,660	
Oct. 31	7734.58	74,040	-9,620
Nov. 30	7733.27	72,980	-1,060
Dec. 31	7730.56	70,830	-2,150
CAL YR 1998	-	-	-8,850
Jan. 31	7727.83	68,700	-2,130
Feb. 28	7725.22	66,720	-1,980
Mar. 31	7724.07	65,850	-870
Apr. 30	7726.04	67,340	+1,490
May 31	7743.90	81,840	+14,500
June 30	7762.50	98,920	+17,080
July 31	7766.07	102,440	+3,520
Aug. 31	7763.65	100,050	-2,390
Sept. 30	7758.30	94,880	-5,170
WATER YEAR 1999	-	-	+11,220

09080400 FRYINGPAN RIVER NEAR RUEDI, CO

LOCATION.--Lat 39°21'56", long 106°49'30", in $SE^1/_4SE^1/_4$ sec.12, T.8 S., R.85 W., Pitkin County, Hydrologic Unit 14010004, on right bank 0.4 mi downstream from Rocky Fork Creek and Ruedi Dam, 1.5 mi west of former site of Ruedi, and 12.5 mi east of Basalt.

DRAINAGE AREA.--238 mi^2.

PERIOD OF RECORD.--October 1964 to current year. Statistical summary computed for 1969 to current year.

GAGE.--Water-stage recorder with satellite telemetry and concrete control. Datum of gage is 7,473.25 ft above sea level, (levels by U.S. Bureau of Reclamation). Prior to Nov. 7, 1970, at site 2.0 mi downstream at different datum.

REMARKS.--No estimated daily discharges. Records good. Diversions for irrigation of hay meadows upstream from station. Transmountain diversions upstream from station to Arkansas River basin through Busk-Ivanhoe Tunnel since June 1925 and Charles H. Boustead Tunnel since May 16, 1972 (see elsewhere in this report). Flow regulated by Ruedi Reservoir (station 0908190) since May 18, 1968. Several observations of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	312	122	82	79	81	84	91	130	370	763	267	214
2	362	123	82	79	80	84	91	131	514	653	267	224
3	360	122	82	79	81	86	92	132	536	615	266	224
4	359	122	82	79	80	86	93	132	564	615	264	224
5	347	123	82	79	81	86	93	132	549	614	263	221
6	340	123	82	79	81	86	93	132	492	614	263	221
7	349	123	82	79	81	86	92	131	452	485	264	221
8	358	112	81	79	81	86	92	130	430	320	264	219
9	311	81	82	79	81	86	92	130	377	275	263	218
10	296	82	81	79	81	86	92	131	303	254	261	218
11	298	81	81	79	81	86	91	131	275	257	261	218
12	299	80	80	79	81	85	92	132	275	261	262	217
13	301	80	80	79	81	86	92	133	274	264	262	219
14	299	82	80	79	81	86	92	134	274	268	260	220
15	256	83	80	81	81	87	91	134	274	272	259	225
16	232	84	79	81	81	87	91	134	276	260	259	227
17	203	84	79	81	82	88	91	135	276	224	258	224
18	203	86	79	81	82	89	91	136	276	224	243	222
19	199	89	79	81	82	89	91	137	276	222	207	220
20	198	87	80	81	82	89	91	142	274	223	204	219
21	198	86	80	81	82	89	92	149	274	224	204	219
22	196	88	81	81	82	89	93	152	274	222	204	220
23	138	88	79	84	82	90	92	155	311	222	204	220
24	115	88	79	88	82	91	93	157	547	222	204	221
25	116	85	79	87	83	91	94	160	677	220	201	221
26	118	81	79	87	84	91	94	160	667	221	200	221
27	120	81	79	86	84	92	94	162	671	221	200	221
28	120	83	79	84	84	91	94	194	669	221	201	220
29	119	85	79	82	---	91	95	280	703	237	201	220
30	119	83	79	80	---	91	103	280	766	270	201	218
31	121	---	79	81	---	91	---	280	---	267	202	---
TOTAL	7362	2817	2487	2513	2285	2725	2778	4788	12896	10230	7339	6616
MEAN	237	93.9	80.2	81.1	81.6	87.9	92.6	154	430	330	237	221
MAX	362	123	82	88	84	92	103	280	766	763	267	227
MIN	115	80	79	79	80	84	91	130	274	220	200	214
AC-FT	14600	5590	4930	4980	4530	5410	5510	9500	25580	20290	14560	13120

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1969 - 1999, BY WATER YEAR (WY)

MEAN	151	126	137	133	137	146	164	278	374	273	164	147
MAX	366	185	224	228	250	280	370	669	950	812	242	255
(WY)	1970	1985	1996	1996	1996	1996	1971	1970	1984	1995	1995	1998
MIN	54.8	44.0	38.2	36.8	36.3	33.6	39.1	116	115	95.9	57.1	49.1
(WY)	1978	1969	1969	1969	1969	1977	1969	1990	1992	1977	1977	1977

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1969 - 1999	
ANNUAL TOTAL	66019		64836			
ANNUAL MEAN	181		178		a186	
HIGHEST ANNUAL MEAN					288	1984
LOWEST ANNUAL MEAN					83.9	1977
HIGHEST DAILY MEAN	794	May 31	766	Jun 30	1390	Jun 25 1983
LOWEST DAILY MEAN	79	Dec 16	79	Dec 16	b28	Nov 14 1995
ANNUAL SEVEN-DAY MINIMUM	79	Dec 23	79	Dec 23	29	Mar 5 1981
INSTANTANEOUS PEAK FLOW			784	Jun 29	c1400	Sep 16 1976
INSTANTANEOUS PEAK STAGE			3.13	Jun 29	d3.50	Sep 16 1976
ANNUAL RUNOFF (AC-FT)	130900		128600		134800	
10 PERCENT EXCEEDS	248		300		306	
50 PERCENT EXCEEDS	155		122		154	
90 PERCENT EXCEEDS	82		80		81	

a Subsequent to completion of Ruedi Reservoir.
b Minimum daily discharge for period of record, 16 ft^3/s, Feb 2, 1968 (result of storage in Ruedi Reservoir); minimum daily discharge prior to construction of Ruedi Reservoir, 28 ft^3/s, Mar 4, 1966.
c Maximum discharge and stage for period of record, 2690 ft^3/s, Jun 18, 1965, gage height 5.16 ft, site and datum then in use.
d Maximum gage height for statistical period, 3.89 ft, Jun 24, 1983.

09081000 ROARING FORK RIVER NEAR EMMA, CO

LOCATION.--Lat 39°22'24", long 107°05'00", in $SW^1/_4NW^1/_4$ sec.11, T.8 S., R.87 W., Eagle County, Hydrologic Unit 14010004, on left bank 10 ft upstream from bridge on Hooks Lane, 1.2 mi downstream from Sopris Creek, and 1.2 mi northwest of Emma.

DRAINAGE AREA.--853 mi^2, approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1908 to September 1909 (monthly discharge only, published in WSP 1313), March 1998 to current year.

GAGE.--Water-stage recorder with satellite telemetry and crest-stage gage. Elevation of gage is 6,470 ft above sea level, from topographic map. Prior to Mar. 1998, nonrecording gage at different datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. Diversions for irrigation of about 16,000 acres above station. Transmountain diversions to Arkansas River basin through Busk-Ivanhoe tunnel since 1925 and through Twin Lakes tunnel since 1935. Transmountain diversion from headwaters of Fryingpan River through Chares H. Boustead Tunnel to Arkansas River basin began May 16, 1972. Natural flow of stream affected by storage in Ruedi Reservoir on Fryingpan River (station 09080190) since May 1968.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	482	320	262	e244	284	228	288	427	1720	2800	1010	548
2	578	345	259	e256	260	229	291	510	1920	2730	984	589
3	567	340	257	e238	261	222	266	502	1930	2540	941	608
4	631	319	258	e236	256	226	248	519	1970	2370	900	597
5	601	306	256	e242	262	228	253	479	2050	2300	894	558
6	e648	319	227	e239	258	224	235	442	1870	2250	1010	533
7	e502	312	208	249	254	222	233	432	1890	2070	921	510
8	e470	312	e171	247	251	232	246	441	2310	1910	847	489
9	e480	299	238	242	231	224	236	498	2540	1870	814	477
10	e485	262	e191	254	242	228	231	637	2470	1700	847	468
11	e470	252	e171	249	211	227	215	575	2290	1570	897	495
12	e468	272	254	252	189	228	224	524	2350	1420	873	519
13	e440	265	249	251	249	221	238	532	2420	1280	799	489
14	e435	270	240	236	259	226	254	647	2420	1300	764	469
15	e450	274	251	250	241	242	237	694	2440	1240	785	479
16	e440	278	272	242	216	250	219	750	2270	1210	758	523
17	e435	272	275	268	235	251	225	762	2280	1180	735	507
18	e440	267	272	259	225	261	219	e842	2340	1110	708	515
19	e420	257	289	260	225	272	212	e882	2480	1100	640	528
20	e425	237	295	264	219	287	223	1020	2550	1130	637	611
21	e420	247	e245	269	214	297	260	1100	2700	1050	620	602
22	405	264	e240	255	224	306	274	1160	2740	1060	627	571
23	364	262	e170	257	216	293	274	1400	2840	1050	597	543
24	322	258	e208	260	226	289	268	1620	3130	1020	565	585
25	326	252	e225	260	223	300	323	1620	3320	1040	551	668
26	343	251	e246	267	225	321	292	1410	3290	1110	559	630
27	344	252	e252	256	220	346	276	1470	3120	1020	558	592
28	359	250	e260	236	220	307	283	1440	3000	964	550	580
29	335	261	e258	220	---	290	299	1750	2850	952	540	570
30	329	265	e258	248	---	295	402	1700	2790	993	525	569
31	325	---	e252	295	---	291	---	1740	---	1020	524	---
TOTAL	13739	8340	7509	7801	6596	8063	7744	28525	74290	46359	22980	16422
MEAN	443	278	242	252	236	260	258	920	2476	1495	741	547
MAX	648	345	295	295	284	346	402	1750	3320	2800	1010	668
MIN	322	237	170	220	189	221	212	427	1720	952	524	468
AC-FT	27250	16540	14890	15470	13080	15990	15360	56580	147400	91950	45580	32570

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 - 1999, BY WATER YEAR (WY)

MEAN	443	278	242	252	236	260	404	1049	1984	1360	693	520
MAX	443	278	242	252	236	260	551	1177	2476	1495	741	547
(WY)	1999	1999	1999	1999	1999	1999	1998	1998	1999	1999	1999	1999
MIN	443	278	242	252	236	260	258	920	1491	1225	644	493
(WY)	1999	1999	1999	1999	1999	1999	1999	1999	1998	1998	1998	1998

SUMMARY STATISTICS	FOR 1999 WATER YEAR		WATER YEARS 1998 - 1999	
ANNUAL TOTAL	248368			
ANNUAL MEAN	680		680	
HIGHEST ANNUAL MEAN			680	1999
LOWEST ANNUAL MEAN			680	1999
HIGHEST DAILY MEAN	3320	Jun 25	3320	Jun 25 1999
LOWEST DAILY MEAN	e170	Dec 23	e170	Dec 23 1998
ANNUAL SEVEN-DAY MINIMUM	209	Dec 6	209	Dec 6 1998
INSTANTANEOUS PEAK FLOW	3800	Jun 25	8070	Jun 19 1909
INSTANTANEOUS PEAK STAGE	9.57	Jun 25	a10.40	Jun 19 1909
ANNUAL RUNOFF (AC-FT)	492600		493000	
10 PERCENT EXCEEDS	1880		1710	
50 PERCENT EXCEEDS	340		524	
90 PERCENT EXCEEDS	227		238	

e Estimated
a Datum then in use

09081000 ROARING FORK RIVER NEAR EMMA, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--January 1998 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML) (31633)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)
OCT											
21...	1203	414	356	8.4	7.3	10.1	<1	<1	170	54	9.1
JAN											
21...	1046	270	416	8.0	1.1	11.4	K2	K5	--	--	--
APR											
20...	1226	231	389	8.8	8.6	8.7	K4	K3	180	56	9.7
JUN											
02...	0940	1920	227	8.2	6.5	9.6	25	21	100	33	5.0
JUL											
21...	1025	1070	284	8.2	11.9	8.9	9	K7	--	--	--
AUG											
18...	1530	719	309	8.2	15.8	7.9	K4	K6	140	44	7.5

DATE	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	ALKA-LINITY WAT.DIS FET LAB CACO3 (MG/L) (29801)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)
OCT										
21...	3.4	.1	1.1	98	--	76	1.8	.17	7.8	212
JAN										
21...	--	--	--	--	--	--	--	--	--	--
APR										
20...	4.0	.1	1.1	100	--	87	3.1	<.10	6.8	228
JUN										
02...	2.0	.1	.90	--	65	42	1.2	.15	6.4	131
JUL										
21...	--	--	--	--	--	--	--	--	--	--
AUG										
18...	2.8	.1	1.3	--	87	62	1.5	.14	7.9	180

DATE	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS-SOLVED (TONS PER DAY) (70302)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)
OCT										
21...	.29	237	<.010	.088	.020	.10	<.10	.012	.019	<.010
JAN										
21...	--	--	<.010	.264	.023	.12	E.10	.034	.029	.025
APR										
20...	.31	142	<.010	.064	.026	.26	E.10	.034	.015	.013
JUN										
02...	.18	679	<.010	.096	.036	.23	E.10	.031	.006	.014
JUL										
21...	--	--	<.010	.063	<.020	.16	E.10	.017	.006	.019
AUG										
18...	.24	350	<.010	.109	<.020	E.06	.11	.015	.009	<.010

DATE	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
OCT										
21...	<1.0	1.2	60	<1.0	4.8	<10	<.1	<1	<.20	E9.3
APR										
20...	<1.0	<1.0	140	<1.0	4.7	12	<.1	<1	<.20	<20
JUN										
02...	<1.0	<1.0	350	<1.0	4.9	28	<.1	<1	<.20	<20
AUG										
18...	<1.0	<1.0	70	<1.0	5.3	8	<.1	<1	<.20	E9.0

E Estimated.
K Based on non-ideal colony count.

09081000 ROARING FORK RIVER NEAR EMMA, CO--Continued

MISCELLANEOUS FIELD MEASUREMENTS, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)
OCT				
02...	1030	587	318	9.1
NOV				
14...	1705	279	402	5.2
JAN				
06...	1400	254	403	2.8
FEB				
25...	1505	224	404	5.3
APR				
08...	1435	244	394	7.5
MAY				
18...	1235	779	297	9.7
19...	1415	923	390	8.2
JUN				
08...	1225	2380	296	8.4
JUL				
28...	1145	1040	297	14.5
SEP				
09...	1230	478	343	11.4

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
OCT				
21...	1203	414	46	51
APR				
20...	1226	231	8	4.9
MAY				
18...	1235	779	30	63
JUN				
02...	0940	1920	42	218
JUL				
21...	1025	1070	3	9.8
AUG				
18...	1530	719	6	11

09081600 CRYSTAL RIVER ABOVE AVALANCHE CREEK, NEAR REDSTONE, CO

LOCATION.--Lat 39°13'56", long 107°13'36", in $SE^1/_4SW^1/_4$ sec.33, T.9 S., R.88 W., Pitkin County, Hydrologic Unit 14010004, on right bank 1.2 mi upstream from Avalanche Creek, and 3.6 mi north of Redstone.

DRAINAGE AREA.--167 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1955 to current year.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 6,905 ft above sea level, from river-profile map.

REMARKS.--Records good except for estimated daily discharges, which are fair. A few small diversions for irrigation upstream from station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	94	84	66	52	52	53	100	221	995	1050	305	179
2	96	85	65	50	48	54	97	221	1090	1050	262	257
3	89	88	62	45	52	e52	95	214	1090	942	237	302
4	122	81	63	48	50	e50	93	210	1070	887	226	247
5	99	79	62	50	56	e48	93	188	974	823	219	199
6	92	81	55	50	e55	47	93	174	797	793	249	173
7	96	81	45	49	e54	47	93	175	853	710	219	158
8	99	81	36	47	55	47	98	210	1170	713	200	146
9	96	79	56	45	53	44	99	280	1320	674	201	137
10	99	77	53	49	55	45	96	338	1370	599	245	133
11	96	77	45	49	44	45	96	278	1250	532	334	143
12	92	82	53	49	35	45	98	247	1350	458	289	143
13	90	76	52	47	53	44	102	260	1370	444	229	127
14	93	75	50	41	55	46	127	337	1390	419	203	120
15	91	79	49	45	56	50	127	358	1370	436	221	126
16	91	81	50	44	49	56	122	397	1270	418	231	126
17	91	78	51	52	53	60	122	418	1450	400	212	123
18	88	75	53	49	50	71	128	492	1490	364	194	116
19	87	71	54	51	52	80	150	618	1460	337	190	132
20	89	62	54	51	57	92	190	802	1500	335	191	192
21	85	67	48	52	49	107	216	887	1480	313	191	159
22	84	69	32	47	51	114	197	956	1570	296	182	141
23	85	67	38	50	48	109	185	1080	1330	293	170	135
24	82	65	43	51	51	109	175	1200	1290	319	191	180
25	82	64	46	50	50	124	184	1180	e1220	298	179	183
26	93	64	50	51	53	141	172	1060	e1200	300	170	171
27	91	64	53	51	49	143	163	1030	e1150	340	160	157
28	102	64	53	40	52	117	169	1090	e1120	294	155	143
29	94	71	53	33	---	107	175	1180	1120	292	149	133
30	89	67	53	44	---	108	234	1160	1030	337	e150	128
31	87	---	50	51	---	101	---	1140	---	381	164	---
TOTAL	2864	2234	1593	1483	1437	2356	4089	18401	37139	15847	6518	4809
MEAN	92.4	74.5	51.4	47.8	51.3	76.0	136	594	1238	511	210	160
MAX	122	88	66	52	57	143	234	1200	1570	1050	334	302
MIN	82	62	32	33	35	44	93	174	797	292	149	116
AC-FT	5680	4430	3160	2940	2850	4670	8110	36500	73670	31430	12930	9540

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1956 - 1999, BY WATER YEAR (WY)

MEAN	100	73.2	56.7	50.0	49.5	67.3	193	764	1299	646	204	127
MAX	223	152	95.9	85.3	89.9	184	464	1223	2019	1872	640	253
(WY)	1998	1987	1986	1985	1986	1986	1962	1984	1957	1957	1995	1986
MIN	49.7	39.5	36.3	34.1	28.3	32.4	83.4	288	375	96.9	74.6	59.8
(WY)	1978	1978	1978	1978	1964	1964	1964	1977	1977	1977	1977	1956

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1956 - 1999	
ANNUAL TOTAL	119213		98770			
ANNUAL MEAN	327		271		303	
HIGHEST ANNUAL MEAN					468	1957
LOWEST ANNUAL MEAN					107	1977
HIGHEST DAILY MEAN	1670	Jun 30	1570	Jun 22	3500	Jun 25 1983
LOWEST DAILY MEAN	32	Dec 22	32	Dec 22	a22	Dec 5 1955
ANNUAL SEVEN-DAY MINIMUM	44	Dec 21	44	Dec 21	27	Feb 11 1964
INSTANTANEOUS PEAK FLOW			1750	Jun 22	4180	Jun 25 1983
INSTANTANEOUS PEAK STAGE			3.97	Jun 22	6.12	Jun 25 1983
ANNUAL RUNOFF (AC-FT)	236500		195900		219600	
10 PERCENT EXCEEDS	1040		1030		964	
50 PERCENT EXCEEDS	99		102		96	
90 PERCENT EXCEEDS	56		49		44	

e Estimated
a Also occurred Feb 15, 1964, Jan 2 and Feb 17-18, 1978.

09081600 CRYSTAL RIVER ABOVE AVALANCHE CREEK, NEAR REDSTONE, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1996 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML) (31633)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)
OCT											
21...	1456	84	595	7.6	8.7	9.0	<1	<1	240	79	9.7
JAN											
21...	1427	51	673	7.5	2.7	10.1	K8	<1	--	--	--
APR											
19...	1415	140	483	8.0	9.1	9.3	K1	K1	190	63	8.9
JUN											
01...	1242	855	202	7.9	6.8	9.4	K3	<1	87	28	4.1
JUL											
21...	0800	317	279	7.9	10.1	9.2	16	13	--	--	--
AUG											
18...	0845	198	352	7.6	11.5	8.2	K16	10	140	47	6.2

DATE	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	ALKA-LINITY WAT.DIS FET LAB CACO3 (MG/L) (29801)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)
OCT										
21...	22	.6	1.9	128	--	160	8.7	.25	9.3	364
JAN										
21...	--	--	--	--	--	--	--	--	--	--
APR										
19...	18	.6	1.4	119	--	110	5.9	.19	7.8	288
JUN										
01...	4.5	.2	.54	--	71	27	1.1	.12	5.1	114
JUL										
21...	--	--	--	--	--	--	--	--	--	--
AUG										
18...	10	.4	.98	--	88	76	3.4	.19	7.0	205

DATE	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS-SOLVED (TONS PER DAY) (70302)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)
OCT										
21...	.50	82.6	<.010	.066	.024	.12	<.10	.016	.024	<.010
JAN										
21...	--	--	<.010	.103	.024	<.10	<.10	<.004	<.004	<.010
APR										
19...	.39	109	<.010	.066	.027	E.08	<.10	.014	<.004	<.010
JUN										
01...	.15	263	<.010	.089	.024	.13	E.10	.016	<.004	<.010
JUL										
21...	--	--	<.010	<.050	<.020	.10	E.10	.008	<.004	.011
AUG										
18...	.28	109	<.010	.059	<.020	.10	<.10	.007	<.004	<.010

DATE	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
OCT										
21...	<1.0	<1.0	190	<1.0	8.9	12	<.1	<1	<.20	<20
APR										
19...	<1.0	<1.0	370	<1.0	6.3	14	<.1	<1	<.20	<20
JUN										
01...	<1.0	<1.0	350	<1.0	3.0	12	<.1	<1	<.20	<20
AUG										
18...	<1.0	<1.0	250	<1.0	5.7	12	<.1	<1	<.20	<20

E Estimated.
K Based on non-ideal colony count.

09081600 CRYSTAL RIVER ABOVE AVALANCHE CREEK, NEAR REDSTONE, CO--Continued

MISCELLANEOUS FIELD MEASUREMENTS, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)
OCT				
06...	0930	92	552	3.8
NOV				
16...	1320	80	596	4.9
JAN				
06...	1100	49	711	2.6
FEB				
25...	1115	47	778	4.7
MAR				
11...	1100	48	754	5.2
APR				
08...	1045	98	552	3.6
MAY				
20...	1140	701	229	6.9
JUN				
17...	1140	1320	359	10.2
JUL				
28...	1345	264	297	15.9
SEP				
09...	1100	142	413	10.4

09085000 ROARING FORK RIVER AT GLENWOOD SPRINGS, CO

LOCATION.--Lat 39°32'37", long 107°19'44", in SW$^1/_4$SE$^1/_4$ sec.9, T.6 S., R.89 W., Garfield County, Hydrologic Unit 14010004, on left bank at Glenwood Springs, 2,100 ft upstream from mouth.

DRAINAGE AREA.--1,451 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1905 to September 1909, September 1910 to current year. Monthly discharge only for some periods, published in WSP 1313. Prior to October 1960, published as Roaring Fork at Glenwood Springs. Statistical summary computed for 1972 to current year.

REVISED RECORDS.--WSP 2124: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 5,720.73 ft above sea level. Prior to Nov. 20, 1915, nonrecording gage on highway bridge 800 ft downstream, at different datum. Nov. 20, 1915 to Oct. 26, 1917, nonrecording gage at present site and datum.

REMARKS.--Records good except for estimated daily discharges, which are fair. Diversions upstream from station for irrigation of about 35,000 acres. Transmountain diversions to Arkansas River basin through Busk-Ivanhoe tunnel since 1925, Twin Lakes tunnel since 1935, and Charles H. Boustead tunnel since 1972. Natural flow of stream affected by storage in Ruedi Reservoir on Fryingpan River (station 09080190) since May 1968.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	773	739	588	493	497	463	506	935	3020	4450	1590	988
2	904	763	582	470	453	467	505	910	3380	4400	1480	1080
3	901	783	571	461	458	454	500	909	3540	4020	1380	1190
4	1030	745	567	467	442	457	476	902	3510	3730	1370	1150
5	989	717	569	465	460	459	477	843	3520	3470	1370	1050
6	935	721	534	458	455	445	467	788	3010	3340	1490	1000
7	935	716	497	454	444	442	472	773	2870	3060	1430	958
8	948	712	463	454	456	445	502	813	3850	2830	1340	923
9	924	736	507	438	463	431	497	967	4450	2780	1250	897
10	876	677	504	463	490	433	489	1190	4520	2510	1330	882
11	864	647	471	446	451	438	470	1080	4100	2290	1480	905
12	865	668	507	454	397	439	467	981	4230	2040	1500	947
13	875	657	548	450	438	428	472	967	4350	1830	1330	879
14	876	669	521	434	469	430	513	1100	4320	1790	1230	842
15	855	671	524	442	482	445	521	1170	4490	1760	1240	846
16	807	679	518	470	430	442	498	1210	4100	1740	1260	893
17	781	670	517	472	457	446	499	1260	4300	1690	1200	881
18	767	656	515	468	442	461	498	1340	4530	1610	1200	875
19	757	639	e500	472	446	487	519	1640	4570	1580	1110	880
20	750	596	e495	493	433	515	581	2080	4690	1620	1110	1070
21	740	586	e440	487	419	538	667	2300	4920	1500	1080	1060
22	738	637	e300	474	443	561	689	2450	5180	1490	1110	999
23	729	619	e370	463	420	551	663	2870	5040	1480	1040	952
24	673	614	e400	474	458	530	636	3300	5440	1460	1020	1000
25	678	604	e440	465	453	538	711	3450	5650	1470	995	1120
26	720	596	e460	476	458	584	698	2870	5630	1520	991	1070
27	733	594	e480	475	443	621	664	2860	5320	1540	977	1020
28	787	589	e490	438	440	571	683	2840	5110	1460	975	990
29	754	605	e490	399	---	525	709	3430	4710	1470	949	958
30	762	606	500	422	---	514	896	3370	4480	1550	930	945
31	756	---	491	451	---	512	---	3380	---	1660	948	---
TOTAL	25482	19911	15359	14248	12597	15072	16945	54978	130830	69140	37705	29250
MEAN	822	664	495	460	450	486	565	1773	4361	2230	1216	975
MAX	1030	783	588	493	497	621	896	3450	5650	4450	1590	1190
MIN	673	586	300	399	397	428	467	773	2870	1460	930	842
AC-FT	50540	39490	30460	28260	24990	29900	33610	109000	259500	137100	74790	58020

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1972 - 1999, BY WATER YEAR (WY)

MEAN	746	677	577	511	485	546	829	2257	4192	2498	1018	754
MAX	1159	969	790	677	689	861	1602	4663	7383	7483	2676	1160
(WY)	1985	1985	1985	1996	1986	1986	1985	1984	1984	1995	1995	1995
MIN	384	411	382	371	315	298	352	593	1139	422	316	363
(WY)	1978	1978	1978	1978	1977	1977	1977	1977	1977	1977	1977	1977

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1972 - 1999	
ANNUAL TOTAL	481405		441517			
ANNUAL MEAN	1319		1210		a1260	
HIGHEST ANNUAL MEAN					2092	1984
LOWEST ANNUAL MEAN					485	1977
HIGHEST DAILY MEAN	5090	May 30	5650	Jun 25	b11800	Jul 12 1995
LOWEST DAILY MEAN	e300	Dec 22	e300	Dec 22	c,d248	Aug 11 1977
ANNUAL SEVEN-DAY MINIMUM	413	Dec 21	413	Dec 21	258	Aug 9 1977
INSTANTANEOUS PEAK FLOW			6240	Jun 26	f13000	Jul 13 1995
INSTANTANEOUS PEAK STAGE			6.10	Jun 26	g8.31	Jul 13 1995
ANNUAL RUNOFF (AC-FT)	954900		875700		912500	
10 PERCENT EXCEEDS	3020		3350		3050	
50 PERCENT EXCEEDS	828		739		684	
90 PERCENT EXCEEDS	565		446		441	

e Estimated
a Average discharge for 65 years (water years 1906-09, 1911-71), 1368 ft^3/s; 991100 acre-ft/yr, prior to diversion through Charles H. Boustead tunnel.
b Maximum daily discharge for period of record, 16600 ft^3/s, Jun 30, 1957.
c Minimum daily discharge for period of record, 179 ft^3/s, Jan 21, 1935; minimum discharge during the day of Jan 21, 1935, 145 ft^3/s, gage height, 0.65 ft.
d Also occurred Aug 12, 1977.
f Maximum discharge for period of record, 19000 ft^3/s, Jul 1, 1957, gage height, 8.65 ft.
g Maximum gage height for period of record, 8.7 ft, Jun 14, 1921, from floodmarks.

09085000 ROARING FORK RIVER AT GLENWOOD SPRINGS, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1993 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML) (31633)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)
OCT											
20...	1505	761	567	8.6	9.8	11.3	70	K9	230	72	13
JAN											
21...	0810	482	594	7.7	2.3	10.4	180	76	--	--	--
APR											
19...	1102	530	524	8.5	8.5	11.6	K2	K9	220	69	12
MAY											
27...	0837	3020	252	8.1	7.4	9.5	K62	69	110	34	5.5
JUL											
22...	0800	1550	413	8.2	13.6	8.7	36	41	--	--	--
AUG											
19...	0900	1110	492	8.0	14.0	8.4	44	22	190	60	10

DATE	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	ALKA-LINITY WAT.DIS FET LAB CACO3 (MG/L) (29801)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)
OCT										
20...	27	.8	1.6	134	--	110	35	.21	9.6	347
JAN										
21...	--	--	--	--	--	--	--	--	--	--
APR										
19...	22	.6	1.4	137	--	110	22	.21	7.7	331
MAY										
27...	5.8	.2	.77	--	71	39	11	.12	6.9	145
JUL										
22...	--	--	--	--	--	--	--	--	--	--
AUG										
19...	19	.6	1.2	--	120	88	22	.17	9.8	282

DATE	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS-SOLVED (TONS PER DAY) (70302)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)
OCT										
20...	.47	714	<.010	.118	<.020	.11	.11	.016	<.050	<.010
JAN										
21...	--	--	<.010	.210	<.020	.28	E.10	.025	.009	<.010
APR										
19...	.45	473	<.010	<.050	.027	.27	.10	.028	.009	<.010
MAY										
27...	.20	1180	--	--	--	--	--	--	--	--
JUL										
22...	--	--	<.010	.083	<.020	.22	E.10	.020	<.004	<.010
AUG										
19...	.38	845	<.010	.145	<.020	.10	E.10	.023	.007	<.010

DATE	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
OCT										
20...	<1.0	<1.0	40	<1.0	E3.9	<10	<.1	<1	<.20	<20
APR										
19...	<1.0	<1.0	210	<1.0	5.1	18	<.1	<1	<.20	<20
MAY										
27...	<1.0	<1.0	1000	<1.0	4.2	43	<.1	<1	<.20	<20
AUG										
19...	<1.0	<1.0	220	<1.0	5.0	17	<.1	<1	<.20	<20

E Estimated.
K Based on non-ideal colony count.

09085000 ROARING FORK RIVER AT GLENWOOD SPRINGS, CO--Continued

MISCELLANEOUS FIELD MEASUREMENTS, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)
OCT				
05...	1500	942	512	9.5
NOV				
18...	1600	625	595	4.5
FEB				
23...	1200	406	600	2.2
APR				
05...	1245	479	573	5.2
MAY				
19...	1235	1720	322	10.4
JUN				
28...	1250	4980	212	12.3
AUG				
10...	1300	1360	455	15.1

09085100 COLORADO RIVER BELOW GLENWOOD SPRINGS, CO

LOCATION.--Lat 39°33'18", long 107°20'13", in $NW^1/_4NW^1/_4$ sec.9, T.6 S., R.89 W., Garfield County, Hydrologic Unit 14010005, on left bank 0.6 mi downstream from Roaring Fork River and 1.0 mi northwest of Post Office in Glenwood Springs.

DRAINAGE AREA.--6,013 mi^2.

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

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 5,700.75 ft above sea level, Colorado State Highway Department benchmark.

REMARKS.--No estimated daily discharges. Records good. Natural flow of stream affected by transmountain diversions, storage reservoirs, power development, and diversions for irrigation of 110,000 acres. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2300	2300	1950	1810	1500	1420	1710	2870	9330	10300	4490	2950
2	2540	2310	1940	1720	1460	1460	1790	2850	9940	10100	4330	3010
3	2620	2450	1920	1680	1460	1420	1810	2820	10800	9670	4130	3190
4	2790	2380	1890	1640	1440	1360	1680	2730	11100	9400	3890	3240
5	2810	2280	1870	1740	1520	1330	1640	2580	11300	8890	3770	3040
6	2720	2260	1770	1760	1510	1330	1610	2410	10700	8370	3890	2950
7	2530	2270	1610	1780	1490	1270	1600	2340	10100	7750	4140	2810
8	2440	2260	1420	1770	1500	1300	1680	2390	11300	7010	4200	2720
9	2470	2440	1660	1670	1540	1280	1840	2710	12300	7120	4050	2620
10	2490	2090	1610	1750	1560	1280	1780	3230	12200	6590	4010	2570
11	2480	2080	1450	1680	1450	1290	1650	3190	10800	6140	4170	2490
12	2480	2090	1490	1720	1200	1310	1600	3000	10500	5720	4350	2760
13	2440	2160	1650	1650	1220	1280	1580	2840	10300	5380	3940	2660
14	2430	2120	1670	1360	1440	1260	1790	3180	10000	5270	3680	2550
15	2420	2150	1610	1390	1520	1280	1960	3530	10200	5260	3580	2560
16	2400	2200	1670	1410	1430	1300	1880	3620	10300	5080	3600	2870
17	2380	2170	1790	1510	1450	1320	1750	3740	10900	4680	3520	2920
18	2370	2160	1750	1550	1410	1350	1690	3860	11200	4500	3520	2950
19	2360	2160	1790	1580	1460	1420	1760	4390	11000	4440	3310	2950
20	2360	2030	1910	1590	1410	1530	1950	5250	11000	4600	3240	3190
21	2360	1930	1600	1570	1360	1640	2210	5850	11000	4550	3210	3410
22	2360	2050	1260	1520	1450	1780	2420	6320	11200	4320	3240	3300
23	2320	2060	1170	1460	1290	1860	2400	7110	11300	4240	3140	3270
24	2160	2030	1160	1540	1410	1860	2180	8010	11600	4180	3010	3210
25	2240	2000	1160	1530	1420	1870	2220	9030	11900	4110	2920	3400
26	2290	1990	1480	1520	1420	1920	2340	8550	12100	4130	2900	3410
27	2300	1960	1960	1510	1410	2130	2260	8160	11900	4230	2860	3290
28	2380	1930	1900	1400	1400	2090	2250	8330	11400	4080	3000	3180
29	2320	1970	1880	1290	---	1860	2310	9430	10700	4270	3020	3150
30	2350	1980	1840	1210	---	1660	2660	9390	10300	4300	2960	3110
31	2330	---	1790	1280	---	1640	---	9910	---	4370	2900	---
TOTAL	75240	64260	51620	48590	40130	47100	58000	153620	328670	183050	110970	89730
MEAN	2427	2142	1665	1567	1433	1519	1933	4955	10960	5905	3580	2991
MAX	2810	2450	1960	1810	1560	2130	2660	9910	12300	10300	4490	3410
MIN	2160	1930	1160	1210	1200	1260	1580	2340	9330	4080	2860	2490
AC-FT	149200	127500	102400	96380	79600	93420	115000	304700	651900	363100	220100	178000

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1967 - 1999, BY WATER YEAR (WY)

MEAN	2129	1919	1619	1523	1503	1737	2747	7071	10620	5820	2937	2306
MAX	3082	2703	2487	2192	2209	2814	5113	15570	20710	15180	5975	3716
(WY)	1985	1985	1985	1985	1986	1986	1996	1984	1984	1995	1984	1984
MIN	1394	1186	1162	1142	1023	1018	1571	2146	2781	1755	1674	1647
(WY)	1978	1978	1967	1995	1981	1977	1977	1977	1977	1977	1977	1977

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1967 - 1999	
ANNUAL TOTAL	1255910		1250980			
ANNUAL MEAN	3441		3427		3499	
HIGHEST ANNUAL MEAN					6276	1984
LOWEST ANNUAL MEAN					1638	1977
HIGHEST DAILY MEAN	12000	May 31	12300	Jun 9	30200	May 25 1984
LOWEST DAILY MEAN	1160	Dec 24	1160	Dec 24	870	Feb 11 1981
ANNUAL SEVEN-DAY MINIMUM	1390	Dec 20	1280	Mar 9	978	Mar 10 1977
INSTANTANEOUS PEAK FLOW			13000	Jun 9	31500	May 25 1984
INSTANTANEOUS PEAK STAGE			8.11	Jun 9	12.49	May 25 1984
ANNUAL RUNOFF (AC-FT)	2491000		2481000		2535000	
10 PERCENT EXCEEDS	6910		9350		8110	
50 PERCENT EXCEEDS	2460		2340		2120	
90 PERCENT EXCEEDS	1870		1420		1340	

09089500 WEST DIVIDE CREEK NEAR RAVEN, CO

LOCATION.--Lat 39°19'52", long 107°34'46", in NE$^1/_4$SW$^1/_4$ sec.29, T.8 S., R.91 W., Mesa County, Hydrologic Unit 14010005, on left bank 10 ft downstream from private road bridge, 0.8 mi upstream from Brook Creek, 8 mi south of Raven, and 16 mi south of Silt.

DRAINAGE AREA.--64.6 mi^2.

PERIOD OF RECORD.--October 1955 to current year. Water-quality data available, May 1986 to September 1990. Sediment data available, October 1989 to September 1990.

REVISED RECORDS.--WSP 2124: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 7,050 ft above sea level, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Natural flow of stream affected by water imported from Thompson Creek (Roaring Fork basin), Muddy Creek (Muddy Creek basin), and Buzzard Creek (Plateau Creek basin). Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.3	5.9	e3.7	e4.1	e4.1	e4.3	18	130	244	53	15	6.9
2	2.8	5.6	e3.6	e4.1	e4.2	e4.4	17	124	224	47	11	7.7
3	2.6	7.1	e3.6	e4.1	e4.2	e4.4	15	117	221	41	9.2	8.8
4	4.3	5.6	e3.5	e4.2	e4.3	e4.4	14	110	198	38	13	7.6
5	5.2	5.3	e3.5	e4.3	e4.3	e4.3	14	93	177	31	14	5.8
6	4.2	5.4	e3.4	e4.4	e4.3	e4.3	13	92	154	29	14	5.0
7	4.0	5.0	e3.1	e4.5	e4.3	e4.3	18	125	141	28	12	4.3
8	3.9	5.0	e2.8	e4.5	e4.2	e4.3	26	170	148	32	9.4	3.8
9	3.6	e4.5	e3.4	e4.5	e4.2	e4.3	20	198	151	30	9.3	3.4
10	3.3	e3.9	e3.3	e4.6	e4.1	e4.3	18	205	154	22	21	3.3
11	3.1	e3.9	e3.1	e4.5	e3.7	e4.3	16	160	162	21	20	4.4
12	2.9	e4.0	e3.3	e4.5	e3.2	e4.2	17	141	148	23	19	5.2
13	2.9	e4.1	e3.4	e4.4	e4.0	e4.0	24	166	141	18	13	3.9
14	2.8	e4.1	e3.4	e4.3	e4.0	e4.8	34	208	137	18	10	3.3
15	2.7	e4.0	e3.5	e4.3	e4.1	e6.0	27	213	143	26	9.6	3.7
16	2.8	e3.9	e3.4	e4.2	e4.1	e7.6	25	222	143	19	9.8	4.6
17	3.5	e3.8	e3.4	e4.2	e4.1	e8.4	26	211	165	16	13	4.1
18	3.5	e3.5	e3.3	e4.3	e4.0	e9.6	33	235	173	16	19	4.1
19	3.1	e3.3	e3.3	e4.3	e4.0	e11	49	282	144	21	12	4.5
20	3.1	e3.1	e3.2	e4.3	e4.0	19	79	315	133	18	16	12
21	3.1	e3.3	e3.2	e4.3	e4.1	23	80	310	133	14	37	8.2
22	3.1	e3.6	e2.5	e4.3	e4.1	24	68	338	131	14	39	5.7
23	3.4	e3.6	e2.8	e4.2	e4.2	24	58	366	116	16	18	4.7
24	4.1	e3.6	e3.1	e4.2	e4.1	22	68	410	110	14	13	5.3
25	4.1	e3.6	e3.3	e4.1	e4.1	27	79	404	96	14	10	6.0
26	5.4	e3.6	e3.5	e4.1	e4.1	31	68	337	84	12	9.3	4.6
27	5.1	e3.7	e3.7	e4.1	e4.2	32	67	302	76	12	8.7	3.9
28	7.0	e3.8	e3.9	e3.8	e4.3	27	90	295	66	10	8.3	3.6
29	6.6	e4.0	e4.0	e3.5	---	22	94	302	59	11	7.5	3.5
30	6.2	e3.8	e4.0	e4.0	---	23	148	286	55	10	7.0	3.6
31	6.2	---	e4.1	e4.1	---	19	---	269	---	19	6.1	---
TOTAL	120.9	127.6	105.3	131.3	114.6	396.2	1323	7136	4227	693	433.2	155.5
MEAN	3.90	4.25	3.40	4.24	4.09	12.8	44.1	230	141	22.4	14.0	5.18
MAX	7.0	7.1	4.1	4.6	4.3	32	148	410	244	53	39	12
MIN	2.3	3.1	2.5	3.5	3.2	4.0	13	92	55	10	6.1	3.3
AC-FT	240	253	209	260	227	786	2620	14150	8380	1370	859	308

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1956 - 1999, BY WATER YEAR (WY)

MEAN	3.51	3.45	2.86	2.63	2.67	6.96	49.5	210	130	27.5	4.82	2.62
MAX	17.5	13.1	9.05	8.07	7.76	29.3	146	491	389	84.9	24.8	10.4
(WY)	1998	1987	1985	1985	1986	1986	1985	1984	1995	1995	1983	1970
MIN	.097	.28	.002	.000	.000	.81	9.32	18.4	5.37	.075	.000	.000
(WY)	1957	1957	1977	1977	1977	1977	1968	1977	1977	1977	1977	1956

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1956 - 1999	
ANNUAL TOTAL	23961.3		14963.6			
ANNUAL MEAN	65.6		41.0		37.4	
HIGHEST ANNUAL MEAN					76.2	1984
LOWEST ANNUAL MEAN					3.38	1977
HIGHEST DAILY MEAN	632	May 6	410	May 24	932	May 14 1984
LOWEST DAILY MEAN	1.8	Sep 27	2.3	Oct 1	a.00	Oct 1 1955
ANNUAL SEVEN-DAY MINIMUM	2.0	Sep 24	2.9	Oct 10	.00	Jul 21 1956
INSTANTANEOUS PEAK FLOW			533	May 24	b1410	May 14 1984
INSTANTANEOUS PEAK STAGE			4.30	May 24	5.83	May 14 1984
ANNUAL RUNOFF (AC-FT)	47530		29680		27060	
10 PERCENT EXCEEDS	241		148		123	
50 PERCENT EXCEEDS	6.1		5.9		4.1	
90 PERCENT EXCEEDS	3.1		3.4		.70	

e Estimated
a No flow at times in most years.
b From rating curve extended above 670 ft^3/s.

09095500 COLORADO RIVER NEAR CAMEO, CO

LOCATION.--Lat 39°14'20", long 108°16'00", in $SW^1/_4SW^1/_4$ sec.30, T.9 S., R.97 W., Mesa County, Hydrologic Unit 14010006, on left bank 100 ft north of Interstate 70, 0.5 mi upstream from Jackson Canyon, 5.9 mi upstream from Grand Valley project diversion dam, and 7 mi northeast of Cameo.

DRAINAGE AREA.--8,050 mi^2, approximately.

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WRD Colo. 1973: 1970.

GAGE.--Water-stage recorder with satellite telemetry and crest-stage gage. Datum of gage is 4,813.73 ft above sea level, (Levels by Colorado Department of Highways). Prior to Oct. 10, 1934, nonrecording gage on river and water-stage recorder on Highline Canal, about 10 mi downstream at different datum. Oct. 10, 1934 to Feb. 27, 1958, water-stage recorder at site 3.0 mi downstream at datum 22.55 ft lower.

REMARKS.--Records good except for estimated daily discharges, which are poor. Natural flow of stream affected by transmountain diversions, storage reservoirs, power development, and diversion for irrigation of about 160,000 acres.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2280	2650	2330	e2150	1680	1760	1930	3140	11800	11100	4250	3050
2	2440	2620	2300	e2050	1850	1800	2040	3060	11700	11100	4070	3100
3	2610	2720	2300	e2000	1780	1830	2130	3100	12900	10600	3920	3240
4	2810	2760	2260	e2000	1800	1740	2070	3240	13300	10300	3750	3310
5	2970	2650	2220	e2000	1880	1700	1980	3040	13600	9600	3680	3130
6	2920	2590	2180	e2100	1980	1670	1970	2860	13100	8980	3770	3040
7	2860	2590	2010	e2100	1940	1630	1900	2750	12000	8220	3980	2980
8	2710	2580	1790	e2100	1910	1610	1900	2750	12700	7340	3920	2880
9	2690	2730	1760	e2000	1890	1560	2020	2910	14400	7110	3850	2820
10	2700	2610	2000	e2000	2030	1490	2120	3310	15100	6820	3750	2770
11	2700	2440	1840	e2100	1970	1470	2050	3650	13500	6190	4100	2750
12	2690	2430	1730	e2000	1710	1520	1900	3360	12500	5760	4170	2920
13	2680	2460	1940	e1900	1520	1520	1890	3210	12300	5320	3870	2910
14	2660	2500	1990	e1700	1650	1520	1860	3210	11700	5060	3610	2780
15	2650	2480	1990	e1600	1790	1530	2030	3610	11700	5140	3500	2730
16	2650	2510	1830	e1700	1850	1580	2090	3680	12000	5040	3490	2950
17	2650	2500	1910	e1800	1750	1600	2010	3770	12500	4610	3440	3070
18	2620	2480	1980	e1800	1760	1630	1920	3800	13200	4480	3430	3080
19	2600	2470	1930	1770	1720	1690	1890	4290	12900	4300	3330	3090
20	2580	2420	2080	1840	1810	1790	1980	5280	12600	4340	3280	3230
21	2580	2300	2020	1860	1750	1880	2170	6280	12600	4380	3300	3420
22	2600	2290	e1700	1830	1730	2010	2450	7000	12900	4160	3310	3380
23	2630	2380	e1400	1790	1800	2110	2570	7960	13000	4080	3260	3300
24	2520	2390	e1500	1770	1590	2140	2650	9240	13000	4040	3100	3240
25	2500	2340	e1500	1870	1730	2120	2540	10600	13300	3980	3020	3310
26	2580	2330	e1800	1890	1710	2150	2640	11200	13600	3930	2960	3360
27	2610	2300	e2100	1910	1720	2230	2570	10000	13400	4050	2960	3270
28	2790	2290	e2200	1850	1710	2360	2480	10000	13000	4070	3050	3170
29	2700	2310	e2200	1690	---	2240	2530	11100	12100	4070	3090	3130
30	2680	2340	e2100	1550	---	2040	2790	11800	11500	4250	2990	3110
31	2680	---	e2100	1530	---	1920	---	12400	---	4220	3000	---
TOTAL	82340	74460	60990	58250	50010	55840	65070	175600	383900	186640	109200	92520
MEAN	2656	2482	1967	1879	1786	1801	2169	5665	12800	6021	3523	3084
MAX	2970	2760	2330	2150	2030	2360	2790	12400	15100	11100	4250	3420
MIN	2280	2290	1400	1530	1520	1470	1860	2750	11500	3930	2960	2730
AC-FT	163300	147700	121000	115500	99190	110800	129100	348300	761500	370200	216600	183500

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1934 - 1999, BY WATER YEAR (WY)

MEAN	2144	1955	1712	1596	1608	1821	3207	9231	12710	5947	2875	2215
MAX	3732	3253	3002	2621	2775	3365	8615	20290	25830	17430	6571	4271
(WY)	1985	1985	1985	1985	1986	1986	1962	1984	1984	1957	1984	1984
MIN	1084	1038	1004	940	941	1020	1730	2536	2959	1515	1332	1243
(WY)	1935	1935	1935	1964	1935	1935	1961	1977	1977	1934	1940	1934

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1934 - 1999	
ANNUAL TOTAL	1503770		1394820			
ANNUAL MEAN	4120		3821		3924	
HIGHEST ANNUAL MEAN					7605	1984
LOWEST ANNUAL MEAN					1937	1977
HIGHEST DAILY MEAN	15100	May 31	15100	Jun 10	38000	May 26 1984
LOWEST DAILY MEAN	e1400	Dec 23	e1400	Dec 23	700	Dec 29 1939
ANNUAL SEVEN-DAY MINIMUM	1710	Dec 20	1520	Mar 9	852	Dec 24 1939
INSTANTANEOUS PEAK FLOW			15600	Jun 10	39300	May 26 1984
INSTANTANEOUS PEAK STAGE			8.91	Jun 10	14.36	May 26 1984
ANNUAL RUNOFF (AC-FT)	2983000		2767000		2843000	
10 PERCENT EXCEEDS	8940		10800		9730	
50 PERCENT EXCEEDS	2700		2610		2150	
90 PERCENT EXCEEDS	2260		1730		1370	

e Estimated

09095500 COLORADO RIVER NEAR CAMEO, CO--Continued

WATER-QUALITY RECORDS

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

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: December 1935 to current year.
WATER TEMPERATURE: April 1949 to current year.

INSTRUMENTATION.--Water-quality monitor since October 1982.

REMARKS.--Daily water temperature record is good. Daily specific conductance record is good, except for the periods Oct. 15 to Nov. 17, and Jan. 3-25, which are fair, and Dec. 17-27, which is poor. Missing daily data were due to sensor fouling or instrument malfunctions. Previous to water year 1995, daily maximum and minimum specific conductance data are available in district office.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 1,970 microsiemens Jan. 19, 1940; minimum, 190 microsiemens June 17-18, 1993.
WATER TEMPERATURE: Maximum, 28.5°C July 22, 1989; minimum, 0.0°C on many days during winter months.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 1,480 microsiemens, Dec. 24-25; minimum, 303 microsiemens, June 10.
WATER TEMPERATURE: Maximum, 22.8° C, July 28; minimum, 0.0° C, on many days during winter months.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)
OCT												
15...	1340	2660	917	8.6	12.1	9.8	220	61	16	103	3	3.2
NOV												
17...	1300	2580	980	8.2	6.3	10.7	240	68	17	111	3	3.4
MAR												
11...	1045	1460	1280	8.2	6.0	11.8	270	77	20	149	4	4.4
APR												
14...	1330	1780	1070	8.6	11.5	9.7	240	69	17	126	4	3.7
JUN												
08...	1110	12600	355	8.1	12.4	8.9	120	36	8.0	24	.9	1.4
28...	0940	12700	317	8.0	14.7	7.1	100	30	6.0	22	1	1.2
JUL												
28...	1115	4230	664	8.3	20.7	8.4	170	51	11	59	2	2.3
SEP												
08...	1300	2840	839	8.7	17.9	8.5	200	59	14	85	3	3.0
13...	1315	2910	877	8.3	17.0	8.4	220	63	15	87	3	3.2

DATE	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	ALKA-LINITY WAT.DIS FET LAB CACO3 (MG/L) (29801)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS-SOLVED (TONS PER DAY) (70302)
OCT											
15...	--	--	139	--	120	140	.32	7.6	531	.72	3810
NOV											
17...	--	--	148	--	130	150	.28	7.8	571	.78	3970
MAR											
11...	--	--	161	--	150	210	.29	5.8	718	.98	2830
APR											
14...	--	--	139	--	130	180	.26	4.5	618	.84	2970
JUN											
08...	--	--	--	88	44	28	.14	7.8	202	.28	6880
28...	78	64	--	--	36	27	.19	6.4	167	.23	5740
JUL											
28...	--	--	--	110	84	83	.23	7.4	366	.50	4180
SEP											
08...	--	--	--	120	110	120	.29	7.1	472	.64	3620
13...	--	--	--	--	--	--	--	--	--	--	--

09095500 COLORADO RIVER NEAR CAMEO, CO--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	1000	975	985	940	930	935	1040	1020	1030	---	---	---
2	1000	985	993	947	931	936	1030	1030	1030	---	---	---
3	987	929	946	951	935	946	1040	1020	1030	1070	1040	1050
4	930	904	913	935	912	919	1040	1030	1030	1120	1070	1090
5	904	872	889	931	912	919	---	---	---	1130	1100	1110
6	887	871	878	967	929	940	---	---	---	1150	1080	1110
7	896	878	885	969	965	967	---	---	---	1090	1070	1080
8	942	887	903	968	954	960	---	---	---	1080	1050	1070
9	966	942	952	967	959	963	---	---	---	1080	1060	1070
10	965	946	952	961	887	936	---	---	---	1090	1060	1070
11	958	942	948	1060	926	1010	---	---	---	1110	1050	1090
12	949	927	933	1030	1010	1010	---	---	---	1100	1040	1070
13	930	919	922	1030	1020	1020	---	---	---	1130	1080	1100
14	924	910	916	1030	981	992	---	---	---	1200	1020	1130
15	920	899	911	1010	989	1000	---	---	---	1180	1110	1140
16	908	893	899	1010	1000	1010	---	---	---	1300	1180	1260
17	913	895	906	1010	984	996	1190	1130	1170	1270	1200	1240
18	914	898	905	992	978	983	1140	1080	1120	1250	1210	1230
19	911	898	903	989	977	981	1150	1000	1110	1220	1160	1190
20	911	904	907	987	964	976	1120	1000	1080	1190	1170	1180
21	910	896	903	1020	973	988	1080	1010	1030	1170	1130	1150
22	908	893	899	1050	1020	1030	1230	1080	1150	1170	1150	1160
23	900	889	893	1060	1010	1030	1330	1230	1300	1180	1170	1170
24	898	885	892	1030	1010	1020	1480	1350	1420	1200	1180	1190
25	965	897	928	1020	1010	1010	1480	1470	1470	1230	1190	1190
26	951	922	929	1020	1010	1020	1470	1300	1420	1200	1160	1170
27	927	907	916	1030	1010	1020	1300	1170	1230	1170	1160	1160
28	925	904	920	1040	1020	1030	---	---	---	1170	1160	1170
29	926	911	918	1040	1020	1030	---	---	---	1200	1170	1190
30	951	914	928	1050	1040	1040	---	---	---	1260	1200	1240
31	949	935	941	---	---	---	---	---	---	1310	1240	1280
MONTH	1000	871	920	1060	887	987	---	---	---	---	---	---

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	1340	1300	1320	1140	1110	1130	1030	986	1010	847	735	790
2	1330	1190	1270	1140	1120	1130	1020	977	998	745	718	731
3	1210	1160	1180	1130	1100	1120	981	948	963	751	720	735
4	1200	1150	1180	1140	1100	1120	974	949	962	771	747	757
5	1170	1140	1160	1160	1130	1150	988	962	977	785	764	774
6	1190	1160	1170	1170	1150	1160	1000	786	935	794	770	781
7	1180	1150	1160	1190	1170	1180	1020	852	941	829	781	805
8	1180	1170	1170	1200	1170	1190	1060	979	1030	834	810	819
9	1180	1170	1170	1240	1200	1220	1080	998	1060	814	788	799
10	---	---	---	1240	1230	1240	1080	941	1030	788	707	748
11	---	---	---	1360	1240	1270	983	891	953	709	655	674
12	1120	1110	1110	1350	1180	1230	961	866	921	665	650	656
13	1200	1120	1170	1230	1190	1220	1080	874	1000	703	650	684
14	1310	1200	1270	1230	1170	1210	1120	1050	1100	714	651	698
15	1280	1180	1250	1230	1180	1200	1130	1040	1100	713	639	689
16	1190	1150	1180	1230	1180	1220	1040	968	1010	660	623	639
17	1150	1130	1140	1220	1160	1200	981	968	975	629	604	619
18	1180	1130	1160	1220	1200	1210	1020	976	996	623	595	614
19	1160	1140	1160	1220	1190	1210	1040	1020	1030	610	574	596
20	1170	1150	1160	1200	1150	1190	1070	1030	1050	576	494	539
21	1160	1120	1130	1150	1040	1080	1060	975	1010	495	446	477
22	1170	1120	1150	1050	968	1010	976	889	932	448	423	438
23	1170	1150	1160	996	913	947	889	816	848	426	388	411
24	1160	1110	1140	944	895	913	838	811	821	395	358	381
25	1220	1150	1180	933	878	898	907	817	867	366	341	354
26	1160	1130	1140	939	907	925	915	880	898	352	336	343
27	1150	1130	1140	966	924	944	901	851	868	372	351	364
28	1140	1120	1130	950	882	904	882	865	871	371	361	366
29	---	---	---	897	840	869	884	851	868	372	340	360
30	---	---	---	943	873	901	887	833	860	348	336	344
31	---	---	---	1020	943	981	---	---	---	348	330	341
MONTH	---	---	---	1360	840	1100	1130	786	963	847	330	591

09095500 COLORADO RIVER NEAR CAMEO, CO--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	353	330	340	348	330	340	670	651	657	812	804	808
2	362	341	351	354	331	342	657	646	650	835	790	807
3	348	329	338	353	331	346	659	649	655	812	776	796
4	334	320	329	360	346	355	683	656	672	779	754	765
5	325	314	323	375	349	365	731	683	698	770	747	756
6	331	314	323	386	368	379	752	714	723	798	770	782
7	358	331	348	889	381	439	719	682	699	826	792	801
8	359	337	352	849	435	470	682	664	673	874	821	840
9	337	310	324	462	442	452	670	655	658	934	874	902
10	310	303	307	457	442	450	679	656	668	921	863	881
11	326	304	315	495	457	473	911	663	704	931	911	919
12	341	326	335	516	490	502	700	599	653	969	928	948
13	340	332	336	539	514	526	650	626	635	934	878	896
14	347	333	341	564	538	549	695	650	669	920	892	901
15	345	338	342	561	546	554	710	686	697	939	912	922
16	345	336	340	568	559	564	712	698	706	939	909	933
17	358	336	340	602	556	573	720	697	709	909	846	864
18	343	331	336	610	599	605	723	711	717	846	826	832
19	344	332	338	621	604	615	728	698	718	836	813	823
20	341	331	336	628	615	622	759	719	745	835	799	820
21	339	330	334	703	602	615	770	743	758	799	754	775
22	337	328	332	641	605	624	773	755	764	754	739	744
23	333	321	328	659	638	648	766	747	754	754	736	743
24	332	319	324	702	640	657	780	757	765	747	728	738
25	323	315	318	690	649	664	796	778	783	755	735	744
26	318	307	314	679	658	668	838	793	808	739	709	720
27	317	306	311	688	657	668	852	808	830	715	705	710
28	318	306	312	678	662	671	823	804	814	723	701	712
29	331	311	323	685	645	671	822	798	812	737	715	723
30	341	324	334	971	660	767	801	788	793	732	723	727
31	---	---	---	758	665	679	808	788	795	---	---	---
MONTH	362	303	331	971	330	544	911	599	722	969	701	811

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	16.7	14.7	15.6	11.1	8.9	9.9	6.0	4.1	5.1	---	---	---
2	15.5	12.5	14.1	10.5	9.5	9.9	5.8	3.9	4.8	---	---	---
3	14.9	12.9	13.7	10.0	8.9	9.4	5.2	3.3	4.3	---	---	---
4	12.9	10.7	12.1	9.3	7.4	8.2	4.7	2.9	3.8	.0	.0	.0
5	11.6	9.7	10.5	8.4	6.8	7.5	4.0	2.3	3.3	.0	.0	.0
6	11.4	9.1	10.3	7.4	6.0	6.8	2.3	.0	.9	.0	.0	.0
7	11.9	9.1	10.5	7.2	5.7	6.5	---	---	---	.0	.0	.0
8	12.6	9.7	11.1	6.5	5.2	6.0	---	---	---	.0	.0	.0
9	13.4	10.3	11.8	5.2	4.3	4.9	---	---	---	.0	.0	.0
10	13.4	10.6	12.0	4.3	2.9	3.6	---	---	---	.0	.0	.0
11	13.1	10.2	11.7	4.0	2.7	3.3	---	---	---	.0	.0	.0
12	13.0	10.2	11.6	5.2	3.1	4.0	---	---	---	.4	.0	.1
13	12.3	10.0	11.2	5.3	3.3	4.3	---	---	---	1.2	.0	.5
14	13.5	10.6	12.0	5.5	3.3	4.4	---	---	---	.6	.0	.2
15	12.8	10.8	11.9	6.0	3.6	4.8	---	---	---	.3	.0	.0
16	11.9	10.9	11.3	6.6	4.5	5.5	---	---	---	.0	.0	.0
17	11.7	9.7	10.6	6.5	4.8	5.6	1.3	---	---	.3	.0	.1
18	11.0	8.6	9.9	5.9	4.6	5.2	1.4	.0	.6	1.7	.0	.6
19	11.0	8.4	9.7	5.7	3.8	4.7	1.2	.0	.4	2.9	.0	2.0
20	11.0	8.6	9.8	4.7	3.2	3.8	.5	.0	.0	3.1	2.1	2.7
21	10.5	8.6	9.7	3.8	1.9	2.9	.0	.0	.0	2.9	2.4	2.7
22	11.4	9.6	10.4	4.0	1.9	3.0	.0	.0	.0	3.3	1.7	2.4
23	11.9	10.1	11.0	4.7	2.4	3.4	.0	.0	.0	3.1	1.3	2.3
24	11.4	9.2	10.3	5.1	3.2	4.1	.0	.0	.0	3.1	2.2	2.6
25	10.7	9.3	9.8	4.8	3.0	3.9	.0	.0	.0	3.1	2.1	2.6
26	11.0	9.4	10.1	5.1	3.1	4.1	.0	.0	.0	3.8	2.7	3.1
27	10.4	9.4	9.9	5.2	3.1	4.2	.0	.0	.0	3.7	2.4	2.9
28	9.7	8.9	9.4	4.5	3.6	4.1	---	---	---	3.8	1.8	2.8
29	9.3	8.0	8.7	5.5	4.0	4.6	---	---	---	2.9	.0	1.4
30	9.2	8.5	8.9	6.0	4.3	5.1	---	---	---	1.7	.0	.8
31	10.1	8.3	9.1	---	---	---	---	---	---	1.8	.0	.8
MONTH	16.7	8.0	10.9	11.1	1.9	5.3	---	---	---	---	---	---

09095500 COLORADO RIVER NEAR CAMEO, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	2.5	.8	1.5	7.3	4.0	5.8	7.8	6.5	7.0	10.8	9.2	10.1
2	2.8	.6	1.8	7.8	4.8	6.5	7.0	5.7	6.4	11.5	9.5	10.4
3	3.5	1.0	2.3	7.2	4.9	6.3	7.7	5.1	6.2	10.6	9.1	10.0
4	3.4	1.5	2.7	7.7	5.3	6.5	8.1	5.7	6.7	9.7	8.7	9.1
5	3.6	2.7	3.1	6.6	5.1	5.9	8.8	5.9	7.3	10.1	7.9	8.9
6	4.6	3.1	3.7	7.5	4.5	5.9	10.4	6.4	8.4	11.5	7.9	9.6
7	5.6	3.7	4.7	7.0	5.1	5.8	10.8	7.3	9.2	13.5	9.0	11.2
8	6.1	4.1	5.1	6.9	4.7	5.8	10.7	8.0	9.4	15.2	10.9	13.0
9	6.7	4.6	5.7	8.1	5.1	6.5	9.9	7.3	8.4	14.3	12.5	13.4
10	6.3	3.5	5.3	8.7	5.2	7.0	9.7	5.3	7.3	12.7	10.5	11.7
11	3.5	1.3	2.3	7.9	6.0	6.9	9.6	6.2	8.0	12.1	9.2	10.6
12	1.8	.0	.9	7.1	6.2	6.7	11.7	7.7	9.4	12.6	10.0	11.3
13	2.0	.0	.9	8.4	4.7	6.6	12.6	9.4	10.9	12.3	11.1	11.6
14	2.1	.1	1.3	9.2	5.4	7.4	12.3	9.9	11.3	14.0	11.2	12.4
15	4.2	1.4	2.7	9.2	6.5	8.0	11.3	8.1	9.9	13.0	11.8	12.4
16	3.5	1.9	2.8	9.7	6.3	8.2	10.8	7.4	9.1	12.8	10.9	11.7
17	3.3	1.7	2.4	10.4	6.7	8.7	11.6	7.0	9.2	13.1	9.9	11.5
18	3.6	1.5	2.7	11.3	7.5	9.5	12.7	8.3	10.5	14.2	11.6	12.9
19	4.2	2.3	3.3	12.0	8.2	10.2	13.6	9.1	11.4	15.1	12.6	13.9
20	5.0	2.2	3.6	12.1	8.7	10.6	14.1	11.1	12.6	15.7	13.0	14.4
21	4.2	2.7	3.6	12.0	8.8	10.5	13.6	11.2	12.4	15.0	12.9	14.0
22	4.6	2.3	3.4	11.8	8.3	10.1	12.6	11.1	11.8	14.9	12.1	13.7
23	4.7	2.2	3.5	11.0	8.2	9.7	11.1	9.1	10.2	14.7	12.4	13.7
24	5.5	2.2	3.9	11.8	8.0	9.9	9.9	8.4	9.2	14.1	12.1	13.2
25	6.2	3.2	4.8	12.3	8.4	10.4	10.6	8.3	9.3	13.1	11.8	12.3
26	6.4	3.9	5.2	11.0	8.8	10.1	11.6	9.7	10.6	12.8	10.7	11.6
27	5.9	3.1	4.6	12.0	9.1	10.4	12.3	9.5	10.9	13.6	10.9	12.3
28	6.5	3.1	4.9	10.4	7.7	9.2	12.3	10.2	11.3	14.3	11.3	12.8
29	---	---	---	10.9	6.7	8.7	13.4	10.5	12.0	13.7	12.2	12.9
30	---	---	---	10.2	7.4	8.9	12.7	10.4	11.5	12.9	11.0	12.1
31	---	---	---	9.1	7.5	8.1	---	---	---	12.7	11.4	12.1
MONTH	6.7	.0	3.3	12.3	4.0	8.1	14.1	5.1	9.6	15.7	7.9	12.0

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	12.7	9.9	11.4	17.6	14.1	15.9	20.7	18.4	19.7	19.2	18.1	18.5
2	12.3	11.2	11.7	17.8	15.0	16.4	21.7	19.2	20.4	19.6	17.6	18.4
3	12.8	10.5	11.6	18.5	15.2	16.9	21.2	19.2	20.1	18.9	16.6	17.6
4	13.2	10.9	12.0	18.7	15.6	17.2	21.2	18.9	19.8	18.2	15.1	16.5
5	11.9	10.1	10.7	19.3	15.3	17.4	20.8	18.9	19.5	18.2	15.4	16.7
6	12.4	9.4	10.8	19.8	16.2	18.1	21.0	18.2	19.3	18.5	15.2	16.8
7	13.7	10.3	12.0	19.8	17.0	18.5	21.0	19.1	20.1	18.9	15.7	17.3
8	14.4	11.3	12.8	19.2	17.5	18.5	20.7	18.8	19.9	19.2	15.7	17.5
9	14.3	11.8	13.0	20.0	17.1	18.6	20.6	19.0	19.8	18.3	15.6	17.1
10	13.7	11.3	12.5	19.9	16.5	18.3	19.8	18.2	19.0	19.0	15.9	17.3
11	14.2	11.2	12.5	19.5	16.9	18.1	19.5	17.9	18.8	19.2	15.9	17.4
12	14.5	11.3	12.9	19.4	16.5	18.1	19.9	17.7	18.7	18.5	15.8	17.2
13	14.9	11.7	13.3	19.5	17.4	18.6	20.2	17.7	18.9	17.9	15.0	16.6
14	14.7	12.2	13.5	19.1	17.8	18.4	19.4	17.8	18.6	16.9	14.7	16.0
15	13.8	12.5	12.8	19.7	17.2	18.3	19.1	17.7	18.3	16.7	14.8	15.7
16	14.1	11.5	12.8	19.0	17.5	18.4	20.2	17.5	18.7	16.6	13.6	15.2
17	13.7	11.8	12.5	20.0	17.5	18.7	20.1	19.0	19.5	18.3	15.4	16.6
18	14.3	11.3	12.8	19.6	18.4	19.1	20.9	17.7	19.3	17.7	15.1	16.4
19	15.4	12.3	13.7	18.7	17.5	18.1	20.6	19.2	19.9	16.7	15.2	15.8
20	15.4	13.1	14.3	20.3	17.2	18.7	21.8	19.0	20.2	16.4	14.5	15.3
21	15.4	13.0	14.3	20.7	18.5	19.6	21.2	19.6	20.5	15.4	13.3	14.4
22	15.8	12.6	14.2	21.1	19.4	20.2	21.4	19.0	20.2	15.3	13.2	14.2
23	15.9	13.3	14.7	22.2	19.2	20.6	22.0	19.0	20.4	16.0	13.7	14.7
24	16.5	13.4	15.0	21.7	20.0	20.9	22.4	19.7	21.0	16.6	14.6	15.4
25	16.5	13.8	15.2	22.2	19.4	20.8	21.5	19.5	20.6	16.9	14.5	15.6
26	16.6	13.7	15.2	21.4	20.1	20.7	22.2	19.1	20.5	16.4	14.5	15.5
27	16.9	13.9	15.3	21.6	19.4	20.7	21.1	19.0	20.0	14.9	13.0	13.9
28	16.8	14.0	15.4	22.8	20.6	21.5	22.3	19.1	20.5	13.3	11.4	12.4
29	16.8	13.9	15.4	21.8	20.1	20.9	22.0	19.4	20.7	12.3	10.1	11.2
30	16.9	14.0	15.4	21.0	19.4	20.2	21.6	19.1	20.4	12.3	9.6	10.9
31	---	---	---	20.4	18.5	19.3	20.6	18.8	19.4	---	---	---
MONTH	16.9	9.4	13.3	22.8	14.1	18.9	22.4	17.5	19.8	19.6	9.6	15.8

09105000 PLATEAU CREEK NEAR CAMEO, CO

LOCATION.--Lat 39°11'00", long 108°16'02", in $SW^1/_4SW^1/_4$ sec.18, T.10 S., R.97 W., Mesa County, Hydrologic Unit 14010005, on left bank 300 ft from State Highway 65, 1.15 mi upstream from mouth, and 4.0 mi northeast of Cameo.

DRAINAGE AREA.--592 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1935 to September 1983. October 1985 to current year. Prior to May 1936, monthly discharges only, published in WSP 1313.

REVISED RECORDS.--WSP 979: 1942. WSP 2124: Drainage area. WDR CO-83-2: 1973 (M), 1975 (M).

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 4,840 ft above sea level, from topographic map. Prior to Aug. 27, 1936, nonrecording gage.

REMARKS.--Records good except for estimated daily discharges and discharges above 1,000 ft^3/s, which are poor. Natural flow of stream affected by storage reservoirs, diversions for irrigation of about 25,000 acres, return flow from irrigated areas, and for power development.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	140	157	126	89	105	126	147	392	781	125	163	187
2	151	165	124	83	99	130	147	328	769	108	147	205
3	149	186	123	75	102	121	149	292	859	100	137	252
4	173	170	122	75	100	128	136	327	921	102	148	233
5	171	156	127	e70	113	123	139	296	619	93	168	204
6	180	151	99	e72	114	115	131	255	446	90	172	194
7	175	148	e96	e76	111	119	137	286	354	86	152	188
8	165	147	e92	e74	114	129	148	397	507	87	137	183
9	159	168	e90	e72	e110	127	138	440	489	112	127	176
10	154	153	e98	e70	e112	128	120	480	442	102	145	175
11	150	147	e90	e76	e110	124	116	395	384	96	402	188
12	148	158	e92	e72	101	127	114	322	326	126	222	187
13	145	147	e98	e76	115	112	118	306	285	105	177	175
14	143	149	e100	e72	119	117	152	352	265	96	165	171
15	139	151	e98	e76	121	120	146	397	257	168	157	177
16	147	152	e98	e78	113	124	129	401	276	136	157	191
17	156	147	e105	e86	119	129	130	355	277	118	164	181
18	155	142	109	99	114	138	134	370	578	110	165	180
19	152	132	109	100	118	145	157	448	382	112	162	202
20	150	121	e98	106	113	153	211	519	324	123	258	276
21	149	123	e86	109	111	162	225	512	297	112	250	263
22	149	136	e68	104	116	166	220	526	353	111	240	222
23	155	135	e72	101	108	158	201	556	274	116	202	208
24	155	136	e76	e98	114	156	251	637	236	100	180	212
25	156	127	87	e100	119	154	348	572	214	108	171	245
26	176	127	94	e100	122	174	300	508	197	103	177	208
27	169	130	96	e98	113	184	260	532	179	113	188	194
28	229	131	e92	95	119	166	271	561	165	138	181	191
29	171	133	e92	91	---	148	301	751	152	152	167	193
30	162	132	90	97	---	147	441	906	135	158	164	180
31	160	---	87	101	---	140	---	1030	---	161	177	---
TOTAL	4933	4357	3034	2691	3145	4290	5617	14449	11743	3567	5622	6041
MEAN	159	145	97.9	86.8	112	138	187	466	391	115	181	201
MAX	229	186	127	109	122	184	441	1030	921	168	402	276
MIN	139	121	68	70	99	112	114	255	135	86	127	171
AC-FT	9780	8640	6020	5340	6240	8510	11140	28660	23290	7080	11150	11980

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1936 - 1999, BY WATER YEAR (WY)

MEAN	116	104	87.4	78.1	83.3	108	245	689	530	125	82.1	96.3
MAX	333	207	148	117	148	220	759	1825	2975	796	328	255
(WY)	1942	1987	1942	1998	1958	1998	1942	1942	1983	1995	1983	1997
MIN	25.2	37.3	42.1	41.4	42.8	58.3	71.9	33.8	19.8	16.6	13.4	17.4
(WY)	1978	1978	1991	1961	1978	1964	1990	1977	1977	1977	1977	1977

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1936 - 1999	
ANNUAL TOTAL	124540		69489			
ANNUAL MEAN	341		190		197	
HIGHEST ANNUAL MEAN					542	1983
LOWEST ANNUAL MEAN					48.8	1977
HIGHEST DAILY MEAN	2650	May 22	1030	May 31	4100	Jun 25 1983
LOWEST DAILY MEAN	e68	Dec 22	e68	Dec 22	8.2	Aug 15 1977
ANNUAL SEVEN-DAY MINIMUM	83	Dec 21	73	Jan 4	9.1	Aug 10 1977
INSTANTANEOUS PEAK FLOW			1730	Aug 11	5580	Jun 15 1973
INSTANTANEOUS PEAK STAGE			5.05	Aug 11	a7.99	Jun 15 1973
ANNUAL RUNOFF (AC-FT)	247000		137800		142400	
10 PERCENT EXCEEDS	971		354		431	
50 PERCENT EXCEEDS	152		148		99	
90 PERCENT EXCEEDS	104		95		46	

e Estimated
a Maximum gage height, 8.73 ft, Jun 16, 1995.

09105000 PLATEAU CREEK NEAR CAMEO, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1968 to August 1979, November 1993 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: June 1994 to current year.
WATER TEMPERATURE: June 1994 to current year.

INSTRUMENTATION.--Water-quality monitor since June 1994.

REMARKS.-- Daily record of specific conductance are good, except for the period Oct. 1-9, Nov. 28 through Dec. 6, Dec. 31 through Feb. 12, Feb. 13-23, May 21 through June 23, July 23 through Sept. 1, which are considered fair. The periods Oct. 9 through Nov. 16, and Dec 7-31, are considered poor. Interruptions in daily record are due to sensor fouling or missing transmissions. Daily maximum and minimum specific conductance data from June 1994 to September 1995 available in district office.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum recorded, 2020 microsiemens, Aug. 11, 1999, maximum observed, 1470 microsiemens, Aug. 6, 1997; minimum, 160 microsiemens several days in June 1995.
WATER TEMPERATURE: Maximum, 27.0°C, July 6, 1999; minimum, 0.0°C, on many days during winter months.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 2,020 microsiemens, Aug. 11; minimum, 238 microsiemens, May 29.
WATER TEMPERATURE: Maximum, 27.0°C, JulY 6; minimum, 0.0°C, on many days during winter months.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)
OCT												
15...	1010	141	694	8.6	8.9	10.0	280	52	37	51	1	4.8
NOV												
16...	1035	147	682	8.5	4.8	11.6	280	57	33	50	1	4.0
JAN												
14...	1220	73	716	8.5	.0	13.9	290	58	35	58	1	4.2
MAR												
08...	1120	128	614	8.4	5.5	11.8	230	49	26	45	1	3.5
APR												
13...	1230	113	622	8.8	10.4	--	260	57	28	48	1	3.3
MAY												
21...	1020	598	299	8.3	10.9	8.8	120	30	9.7	14	.6	1.7
JUN												
29...	1410	160	501	8.6	22.4	7.4	210	46	22	31	1	3.5
JUL												
23...	1115	121	608	8.4	21.2	9.0	250	52	30	44	1	4.6
SEP												
07...	1400	196	590	8.5	17.2	--	240	50	29	36	1	4.2

DATE	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	ALKA-LINITY WAT.DIS FET LAB CACO3 (MG/L) (29801)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS-SOLVED (TONS PER DAY) (70302)
OCT												
15...	--	--	--	314	--	64	5.6	.61	31	435	.59	166
NOV												
16...	--	--	--	295	--	71	6.6	.48	26	425	.58	169
JAN												
14...	--	--	--	316	--	84	7.1	.52	28	464	.63	91.0
MAR												
08...	--	--	--	268	--	72	7.0	.42	22	387	.53	134
APR												
13...	--	--	--	257	--	72	6.3	.38	21	389	.53	119
MAY												
21...	--	--	--	139	--	17	2.4	.15	14	173	.23	279
JUN												
29...	234	7	204	--	230	38	3.8	.40	21	289	.39	125
JUL												
23...	--	--	--	--	280	54	4.0	.44	28	382	.52	125
SEP												
07...	261	14	238	--	280	45	4.9	.52	29	342	.46	181

09105000 PLATEAU CREEK NEAR CAMEO, CO--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	676	649	664	716	686	701	695	673	687	686	655	675
2	691	672	682	711	689	702	704	678	693	703	671	690
3	678	667	672	721	700	709	708	674	695	716	686	701
4	669	661	665	713	701	708	710	681	696	710	686	700
5	673	658	666	715	705	709	717	673	696	698	671	687
6	660	645	653	722	704	713	729	686	710	704	682	693
7	660	636	649	727	705	716	800	721	762	702	694	698
8	665	651	657	719	679	705	802	702	776	705	696	701
9	662	605	646	691	669	681	705	608	656	741	686	710
10	621	593	607	689	666	676	---	---	---	708	698	702
11	625	592	606	713	679	688	---	---	---	716	693	706
12	607	567	593	713	674	685	---	---	---	717	705	711
13	581	558	570	691	678	686	---	---	---	713	702	708
14	583	548	566	707	679	688	---	---	---	727	701	713
15	576	544	560	696	677	684	---	---	---	756	701	722
16	575	552	563	696	668	683	---	---	---	750	712	728
17	602	546	570	696	682	689	---	---	---	732	689	712
18	576	543	556	698	679	690	713	691	705	715	695	708
19	581	544	560	702	684	694	712	684	704	718	701	710
20	590	553	570	726	696	705	711	682	693	720	707	713
21	594	565	578	743	715	726	714	682	696	721	696	712
22	618	576	599	744	697	712	803	714	770	708	695	700
23	627	592	608	709	682	692	789	634	734	722	706	713
24	629	599	611	705	672	688	583	535	561	722	683	710
25	654	605	625	699	677	690	567	541	548	731	685	713
26	667	635	652	714	676	696	584	512	548	767	727	733
27	660	634	647	715	673	696	591	511	564	785	740	754
28	716	644	689	712	679	698	602	577	592	855	764	808
29	702	689	694	709	667	693	590	581	585	875	746	813
30	720	695	710	698	665	686	594	583	589	805	737	781
31	721	694	711	---	---	---	690	586	631	847	741	798
MONTH	721	543	626	744	665	696	---	---	---	875	655	720

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	985	773	881	673	618	636	505	485	494	435	402	416
2	992	920	976	662	620	634	523	501	510	447	416	432
3	948	898	921	651	620	634	555	516	530	466	428	443
4	948	825	887	669	617	637	568	555	561	495	443	465
5	951	821	892	648	632	642	575	551	564	496	442	479
6	926	734	862	645	633	640	609	571	590	504	423	475
7	742	720	734	653	641	647	620	603	612	495	435	462
8	740	720	729	659	633	646	604	571	594	470	375	410
9	730	688	720	667	644	653	571	547	557	402	342	364
10	698	646	674	664	644	657	575	549	560	394	361	374
11	774	676	737	660	638	650	604	574	584	418	381	395
12	782	628	724	663	633	649	632	604	618	437	408	420
13	722	579	663	666	638	652	634	605	623	439	408	424
14	703	628	659	687	651	663	605	527	574	413	369	393
15	650	603	617	672	641	655	532	523	529	376	350	362
16	650	588	618	664	635	647	584	531	554	369	339	353
17	645	625	636	662	629	642	589	557	571	366	348	355
18	698	640	676	654	619	637	587	553	573	374	339	354
19	712	694	705	637	610	623	563	495	536	350	303	322
20	710	700	705	624	590	606	507	393	456	322	273	294
21	705	697	701	600	559	582	393	303	359	297	273	288
22	700	689	695	565	533	551	427	345	407	296	272	286
23	689	615	643	542	518	527	457	417	437	295	258	275
24	667	615	636	524	509	516	479	423	457	278	241	259
25	665	614	634	520	505	514	510	429	458	298	259	273
26	663	613	629	510	462	486	550	455	497	299	273	286
27	654	610	631	476	456	469	545	503	527	314	275	290
28	676	603	632	471	449	460	534	403	455	308	267	288
29	---	---	---	492	468	478	446	416	428	295	238	266
30	---	---	---	493	480	487	592	417	461	298	248	272
31	---	---	---	495	483	490	---	---	---	353	253	297
MONTH	992	579	722	687	449	594	634	303	523	504	238	357

09105000 PLATEAU CREEK NEAR CAMEO, CO--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	486	350	413	549	510	527	581	552	562	472	464	468
2	561	486	520	569	526	544	575	557	566	---	---	---
3	614	561	579	580	547	560	601	575	589	---	---	---
4	647	614	626	594	564	576	627	598	613	---	---	---
5	663	644	651	602	566	582	626	595	614	---	---	---
6	688	661	671	604	570	586	622	594	613	---	---	---
7	705	683	693	603	569	584	603	579	594	---	---	---
8	718	698	707	623	577	596	598	577	588	579	552	564
9	728	710	718	648	567	615	603	576	592	580	551	568
10	727	690	708	589	569	580	613	593	604	586	558	573
11	690	676	683	892	589	626	2020	543	704	582	555	568
12	680	667	673	1080	596	665	791	674	724	560	548	555
13	684	664	670	632	599	608	729	651	683	572	550	562
14	665	507	642	626	605	612	742	688	712	575	550	564
15	582	475	509	667	600	624	689	558	636	582	555	572
16	646	488	614	604	589	594	558	520	532	574	552	564
17	605	465	529	613	590	601	557	532	544	581	548	565
18	649	605	630	616	601	607	574	538	555	576	536	568
19	649	610	635	626	609	617	574	504	543	580	527	560
20	622	597	609	612	577	597	504	446	468	573	479	524
21	630	618	623	597	573	588	623	471	532	489	472	481
22	622	578	602	612	575	593	561	524	547	508	489	500
23	585	563	574	601	584	592	542	519	531	520	506	515
24	---	---	---	620	584	608	534	507	522	520	499	510
25	---	---	---	652	618	639	530	449	507	503	482	494
26	---	---	---	639	618	628	506	330	409	521	499	513
27	---	---	---	638	601	624	398	326	354	521	509	515
28	---	---	---	619	580	602	516	367	434	530	509	524
29	500	494	499	618	572	598	511	491	502	541	528	534
30	519	493	506	685	581	640	499	474	489	563	537	552
31	---	---	---	630	581	604	475	463	470	---	---	---
MONTH	---	---	---	1080	510	601	2020	326	559	---	---	---

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	15.8	12.3	13.7	11.1	8.0	9.5	5.0	2.1	3.8	.0	.0	.0
2	14.7	9.4	12.2	9.7	7.8	8.6	4.6	1.9	3.5	.0	.0	.0
3	13.5	10.4	11.9	9.0	7.3	8.1	4.2	1.4	3.0	.0	.0	.0
4	11.8	9.7	10.6	7.8	4.4	6.3	3.7	1.2	2.7	.0	.0	.0
5	11.8	7.4	9.6	7.1	3.8	5.5	3.7	1.3	2.9	.0	.0	.0
6	11.4	5.9	9.0	7.1	4.2	5.7	1.3	.0	.2	.3	.0	.0
7	12.6	6.6	9.8	6.7	4.1	5.5	.0	.0	.0	1.9	.0	.8
8	12.6	7.5	10.4	6.6	4.8	5.6	.0	.0	.0	2.0	.0	1.1
9	13.3	7.6	10.8	4.9	3.4	4.1	.0	.0	.0	1.2	.0	.1
10	12.9	7.8	10.7	4.0	.8	2.7	.0	.0	.0	2.3	.0	.9
11	12.4	7.0	10.1	3.9	1.3	2.7	.0	.0	.0	1.6	.0	.5
12	12.4	7.1	10.0	6.1	3.0	4.4	.0	.0	.0	2.6	.3	1.3
13	11.9	7.1	9.8	5.4	1.9	3.9	.0	.0	.0	1.9	.0	.9
14	13.9	8.9	11.5	5.7	2.1	4.0	.0	.0	.0	1.1	.0	.2
15	12.2	8.2	10.6	6.3	2.5	4.5	.0	.0	.0	.0	.0	.0
16	11.2	8.6	9.8	6.7	3.4	5.3	.0	.0	.0	.0	.0	.0
17	11.2	7.7	9.4	6.0	3.7	4.9	.8	.0	.1	.0	.0	.0
18	10.4	5.4	8.3	5.7	3.7	4.5	1.4	.0	.5	3.2	.0	1.5
19	10.4	5.2	8.1	4.9	2.0	3.4	2.4	.0	.8	4.3	2.2	3.2
20	11.0	6.5	8.9	3.7	.7	2.2	2.2	.0	.6	4.1	2.3	3.1
21	10.3	6.4	8.7	3.5	.1	1.9	.0	.0	.0	3.1	1.6	2.5
22	11.9	9.0	10.2	4.5	.6	2.7	.0	.0	.0	2.9	.5	1.7
23	12.2	9.3	10.6	4.7	1.9	3.4	.0	.0	.0	2.8	.0	1.4
24	10.9	6.5	9.1	5.8	2.3	4.0	.0	.0	.0	3.4	2.5	3.0
25	10.2	7.9	9.0	5.0	1.9	3.6	.0	.0	.0	3.4	1.7	2.6
26	11.6	9.0	10.1	4.6	1.6	3.3	.0	.0	.0	3.8	2.8	3.3
27	10.6	7.9	9.1	4.9	1.8	3.5	.0	.0	.0	4.5	1.6	3.0
28	9.8	7.5	8.7	6.1	3.0	4.2	.0	.0	.0	3.0	.0	1.3
29	9.1	6.1	7.8	7.5	5.2	6.3	.0	.0	.0	1.6	.0	.5
30	8.6	7.3	8.0	6.5	3.1	4.8	.0	.0	.0	1.6	.0	.4
31	9.9	7.1	8.4	---	---	---	.0	.0	.0	1.4	.0	.4
MONTH	15.8	5.2	9.8	11.1	.1	4.6	5.0	.0	.6	4.5	.0	1.1

09105000 PLATEAU CREEK NEAR CAMEO, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	2.9	.4	1.5	8.2	2.1	5.4	6.3	3.9	4.8	8.7	4.9	7.0
2	2.9	.0	1.4	7.7	3.1	5.8	6.0	2.9	4.5	11.7	6.6	9.1
3	3.7	.2	2.1	6.9	1.8	4.8	7.5	2.1	5.0	10.5	7.9	9.0
4	3.2	.0	1.8	7.4	3.3	5.5	7.5	3.7	5.7	8.6	5.8	7.1
5	5.1	2.9	3.8	6.4	3.3	5.1	9.6	4.7	6.9	10.0	4.6	7.2
6	5.9	2.8	4.2	8.4	2.9	5.6	11.9	4.3	8.2	11.9	4.2	8.2
7	6.2	2.8	4.5	7.1	3.5	5.2	11.7	5.2	8.9	13.9	6.1	10.3
8	5.9	2.9	4.5	8.2	4.1	6.1	12.3	6.5	9.1	15.2	8.9	12.2
9	7.7	3.0	5.5	7.8	3.5	5.9	9.5	5.2	6.6	13.7	10.4	12.1
10	7.2	.4	3.7	9.0	3.5	6.4	10.8	2.8	6.6	11.2	7.9	9.1
11	2.3	.0	.5	6.7	3.6	5.1	9.4	3.4	6.9	12.0	5.1	8.5
12	.6	.0	.1	7.9	4.7	5.8	13.5	7.1	9.8	12.7	5.9	9.6
13	2.0	.0	.6	8.7	1.8	5.4	15.0	7.8	11.3	13.3	9.8	11.4
14	2.5	.0	.7	9.3	2.8	6.4	12.3	8.2	10.1	14.8	9.3	11.9
15	5.5	1.2	2.9	9.1	4.0	6.8	11.1	4.6	8.0	12.8	8.0	10.4
16	4.1	.0	1.9	10.0	3.8	7.3	10.1	3.0	7.0	11.8	7.8	10.0
17	4.1	.9	2.4	10.5	3.9	7.6	12.7	4.1	8.4	13.5	6.1	9.9
18	4.8	.3	2.8	11.5	5.0	8.5	13.9	6.3	10.2	14.9	7.6	11.4
19	4.8	2.3	3.6	11.8	5.3	8.9	14.4	7.6	11.3	15.3	9.3	12.6
20	5.2	.2	2.9	11.0	5.2	8.6	12.9	9.3	11.3	15.5	10.1	13.0
21	4.1	.9	2.7	12.0	5.9	9.1	11.8	8.7	10.4	14.7	9.6	12.5
22	4.6	.8	3.0	11.1	4.7	8.3	10.8	8.3	9.2	14.9	9.5	12.6
23	6.0	.6	3.4	9.7	4.7	7.7	9.1	6.9	8.1	15.0	10.6	13.2
24	6.6	.9	4.0	12.0	5.5	8.9	9.0	7.3	8.4	14.2	10.7	12.7
25	6.6	1.8	4.5	12.1	5.7	9.2	9.3	5.4	7.8	12.8	10.4	11.7
26	6.7	2.0	4.4	10.2	6.3	8.4	9.7	6.9	8.6	14.4	9.4	11.9
27	6.3	.6	3.8	11.6	7.3	9.1	12.0	6.7	9.5	15.8	9.8	12.7
28	7.2	1.0	4.3	9.8	3.9	7.1	12.4	7.8	10.2	16.3	9.4	13.1
29	---	---	---	10.8	3.3	7.3	13.6	8.6	11.1	15.3	10.3	12.1
30	---	---	---	9.8	5.5	7.9	12.1	7.6	9.4	13.7	8.1	11.0
31	---	---	---	8.2	5.6	6.5	---	---	---	11.5	8.8	10.1
MONTH	7.7	.0	2.9	12.1	1.8	7.0	15.0	2.1	8.4	16.3	4.2	10.8

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	14.3	6.6	10.3	24.9	16.9	21.0	23.9	16.8	20.4	18.1	16.1	16.9
2	13.1	8.7	11.2	23.8	18.6	21.3	23.4	17.2	20.7	19.0	15.2	16.9
3	13.3	7.9	10.6	25.5	17.8	21.4	21.9	17.7	19.1	17.3	14.1	15.6
4	13.2	7.7	10.6	25.1	18.5	21.6	22.8	17.6	19.9	18.5	12.1	15.4
5	11.2	7.2	8.8	26.2	17.4	21.9	21.1	17.2	18.5	18.4	11.2	15.1
6	14.1	7.3	10.7	27.0	18.6	22.6	23.1	16.4	19.3	18.9	11.8	15.7
7	17.1	10.0	13.6	26.5	18.7	22.6	23.0	16.5	19.9	19.2	12.3	16.1
8	17.0	9.6	13.8	23.6	20.4	22.2	21.5	16.4	19.4	19.0	12.0	15.9
9	17.3	10.2	14.0	25.7	19.0	22.2	22.3	16.8	19.6	17.4	11.5	15.1
10	16.1	10.4	13.7	25.4	17.3	21.4	19.7	16.7	18.3	19.8	13.5	16.7
11	17.9	10.4	14.2	23.2	18.5	21.0	18.3	12.2	16.2	19.5	14.9	17.2
12	18.8	12.3	15.8	24.5	15.9	20.1	20.3	14.2	17.3	18.9	12.6	16.0
13	19.8	13.0	16.7	23.3	17.9	20.8	20.0	15.0	17.7	18.2	11.6	15.3
14	20.2	14.1	17.3	21.7	18.8	20.2	19.7	15.8	17.7	16.3	11.4	14.4
15	18.2	15.0	16.3	23.4	17.3	20.0	19.2	15.9	17.6	16.4	13.5	14.8
16	20.6	13.7	16.9	21.5	16.6	19.5	20.3	15.4	18.1	18.0	11.1	14.5
17	19.1	15.4	17.2	23.9	16.6	20.2	20.2	16.9	18.6	19.1	13.7	16.3
18	19.3	11.8	15.7	22.1	18.0	20.3	21.1	16.4	19.0	17.9	11.8	15.2
19	21.4	14.6	18.1	20.7	16.8	18.6	20.5	17.0	19.0	16.2	12.5	14.4
20	20.3	15.3	18.2	24.1	16.8	20.4	21.6	16.4	19.1	16.1	12.1	14.1
21	21.1	15.8	18.5	24.5	17.6	20.8	21.0	17.2	19.2	15.3	9.6	12.8
22	20.9	14.2	17.8	24.2	18.6	21.2	22.9	15.8	19.3	15.5	9.3	12.7
23	---	---	---	25.5	16.8	21.2	22.5	15.8	19.6	16.3	11.1	13.9
24	---	---	---	24.1	19.1	21.6	23.2	16.2	20.0	17.3	12.9	15.1
25	---	---	---	23.8	17.9	21.0	21.4	16.9	19.5	17.1	11.7	14.8
26	---	---	---	24.2	18.6	21.5	22.5	16.0	19.3	16.7	11.5	14.3
27	---	---	---	24.8	17.9	21.5	20.3	16.8	18.7	14.3	9.4	12.0
28	---	---	---	25.1	19.0	22.2	23.0	16.8	19.6	12.0	6.9	9.9
29	---	---	---	23.4	19.4	21.5	23.0	16.3	19.8	11.7	5.7	9.1
30	23.6	16.1	19.9	21.9	17.9	19.8	22.4	16.3	19.4	12.6	6.3	9.7
31	---	---	---	21.2	17.7	19.6	19.9	16.2	17.9	---	---	---
MONTH	---	---	---	27.0	15.9	21.0	23.9	12.2	19.0	19.8	5.7	14.5

09106150 COLORADO RIVER BELOW GRAND VALLEY DIVERSION NEAR PALISADE, CO

LOCATION.--Lat 39°05'55", long 108°21'16", in NW$^1/_4$SE$^1/_4$ sec.18, T.1 S., R.2 E., Mesa County, Hydrologic Unit 14010005, on right bank 0.25 mi downstream of intake structure for Grand Valley Diversion Canal, and 0.25 mi south of Palisade.

DRAINAGE AREA.--8,753 mi^2.

PERIOD OF RECORD.--October 1990 to current year. Water-quality data available, October 1993 to September 1996.

GAGE.--Water-stage recorder with satellite telemetry and crest-stage gage. Elevation of gage is 4,670 ft above sea level, from topographic map.

REMARKS.-- No estimated daily discharges. Records good. Natural flow of stream affected by transmountain diversions, storage reservoirs, power development, and diversion for irrigation of about 230,000 acres. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1220	1770	2240	2140	1730	1800	1240	2410	10600	9080	2950	1580
2	1360	1900	2200	2100	1870	1820	1240	2260	10300	8980	2830	1700
3	1530	2080	2200	2000	1840	1850	1320	2250	11400	8570	2640	1970
4	1670	2240	2170	1970	1850	1810	1250	2510	12000	8250	2430	2140
5	1860	2360	2160	1960	1890	1910	1020	2320	12100	7730	2290	1940
6	1810	2690	2100	2030	1990	1720	805	2030	11500	7240	2350	1730
7	1740	2540	1960	2060	1950	1720	710	1900	10400	6720	2550	1610
8	1550	2540	1750	2100	1910	1720	702	1930	10900	6010	2560	1470
9	1500	2630	1770	2060	1930	1690	740	2110	12500	5660	2550	1370
10	1520	2670	1900	2000	2100	1660	850	2820	13000	5510	2390	1290
11	1510	2380	1770	2060	2030	1650	753	3540	11900	4930	3210	1250
12	1510	2380	1700	2010	1810	1560	654	2830	10700	4570	3120	1390
13	1490	2400	1790	2040	1670	1720	558	2570	10500	4110	2760	1450
14	1450	2440	1890	1940	1720	1690	435	2480	9970	3830	2410	1300
15	1440	2420	1910	1730	1870	1640	557	3060	9820	4030	2240	1240
16	1450	2450	1900	1700	1920	1690	710	3290	10100	3890	2220	1440
17	1470	2460	1970	1820	1860	1740	654	3350	10600	3410	2160	1620
18	1430	2440	2040	1910	1860	1780	515	3370	11500	3210	2090	1670
19	1420	2420	2000	1970	1840	1820	461	3730	11100	2980	1980	1700
20	1400	2190	2030	2030	1870	1850	551	5020	10800	3010	1980	1960
21	1390	2250	1860	2010	1810	1940	803	5970	10800	3100	1940	2220
22	1400	2220	1460	1960	1790	1980	1120	6140	11100	2810	1950	2220
23	1530	2320	1250	1900	1840	2010	1320	6870	11100	2690	1840	2120
24	1530	2330	1220	1870	1720	2000	1510	7980	11000	2590	1650	2080
25	1440	2260	1350	1920	1800	1970	1550	8940	11300	2520	1530	2170
26	1590	2250	1670	1930	1820	1920	1590	9370	11500	2420	1450	2260
27	1630	2230	2060	1940	1810	1950	1540	8460	11300	2560	1450	2170
28	1920	2220	2270	1880	1800	2070	1390	8460	10900	2600	1520	2070
29	1800	2220	2270	1770	---	1910	1450	9440	10000	2540	1590	2010
30	1740	2250	2220	1670	---	1570	1890	10200	9380	2830	1530	2000
31	1750	---	2130	1630	---	1310	---	11000	---	2860	1520	---
TOTAL	48050	69950	59210	60110	51900	55470	29888	148610	330070	141240	67680	53140
MEAN	1550	2332	1910	1939	1854	1789	996	4794	11000	4556	2183	1771
MAX	1920	2690	2270	2140	2100	2070	1890	11000	13000	9080	3210	2260
MIN	1220	1770	1220	1630	1670	1310	435	1900	9380	2420	1450	1240
AC-FT	95310	138700	117400	119200	102900	110000	59280	294800	654700	280100	134200	105400

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1991 - 1999, BY WATER YEAR (WY)

MEAN	1239	1952	1794	1769	1818	2127	2314	8222	11580	4986	1816	1295
MAX	2560	2484	2370	2375	2416	2913	4837	14160	20860	16010	3897	2461
(WY)	1998	1998	1998	1998	1996	1998	1996	1993	1997	1995	1995	1997
MIN	538	1220	1209	1280	1297	1302	962	4603	3164	745	557	650
(WY)	1991	1995	1991	1991	1991	1991	1995	1992	1992	1994	1994	1994

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1991 - 1999	
ANNUAL TOTAL	1292167		1115318			
ANNUAL MEAN	3540		3056		3412	
HIGHEST ANNUAL MEAN					5114	1997
LOWEST ANNUAL MEAN					1764	1992
HIGHEST DAILY MEAN	14400	May 31	13000	Jun 10	29600	Jun 17 1995
LOWEST DAILY MEAN	980	Sep 10	435	Apr 14	342	Aug 6 1994
ANNUAL SEVEN-DAY MINIMUM	1060	Sep 5	555	Apr 14	443	Aug 2 1994
INSTANTANEOUS PEAK FLOW			13300	Jun 9	30600	Jun 17 1995
INSTANTANEOUS PEAK STAGE			8.25	Jun 9	12.41	Jun 17 1995
ANNUAL RUNOFF (AC-FT)	2563000		2212000		2472000	
10 PERCENT EXCEEDS	8040		8960		8410	
50 PERCENT EXCEEDS	2360		1980		1950	
90 PERCENT EXCEEDS	1350		1390		837	

09107000 TAYLOR RIVER AT TAYLOR PARK, CO

LOCATION (REVISED).--Lat 38°51'37", long 106°33'58", in $NW^1/_4NE^1/_4$ sec.5, T.14 S., R.82 W., Gunnison County, Hydrologic Unit 14020001, on left bank 0.2 mi upstream from Taylor Park Reservoir waterline, 2.7 mi north of Taylor Park, and 21 mi northeast of Almont.

DRAINAGE AREA.--128 mi^2.

PERIOD OF RECORD.--June 1929 to September 1934, October 1987 to current year. Records for 1929-1934 provided by Colorado Division of Water Resources, published in WSP 1313. Statistical summary computed for 1988 to current year.

REVISED RECORDS.--WSP 1313: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 9,340 ft above sea level, from topographic map. June 1929 to Sept. 1934 water-stage recorder at different datum at site flooded by waters of Taylor Park Reservoir since 1937.

REMARKS.--Records good except for estimated daily discharges, which are poor. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	82	59	50	32	e35	e34	51	79	472	358	157	96
2	79	66	50	e33	e35	36	49	81	518	348	154	103
3	67	62	49	e33	e35	e37	48	88	496	327	167	107
4	79	54	48	e30	e34	37	47	80	540	316	149	96
5	67	51	48	31	e35	36	48	72	486	275	164	86
6	64	56	e45	31	37	e35	48	73	412	260	182	82
7	71	55	e40	33	36	e34	60	89	465	252	145	79
8	76	54	e47	31	36	e33	68	110	563	282	131	76
9	73	54	e41	e31	37	e32	55	143	595	273	127	75
10	72	52	e40	32	36	e32	50	145	597	227	152	76
11	66	63	e38	34	35	e33	53	108	533	212	159	82
12	62	66	e36	33	e38	e31	86	105	557	205	133	84
13	61	61	e38	e34	e32	e31	85	138	567	193	118	76
14	62	64	e38	e34	e35	e32	83	178	564	273	112	74
15	60	62	e36	e32	e36	e33	70	188	620	219	130	94
16	57	58	e35	e30	e37	e35	55	204	515	199	122	105
17	56	56	e36	31	36	e38	59	202	511	200	112	89
18	53	52	e37	31	35	41	83	217	498	191	109	85
19	56	50	e38	32	e35	43	111	258	522	221	109	92
20	58	49	e39	33	e35	47	126	299	503	209	112	125
21	53	58	e38	32	e36	53	122	340	527	179	111	106
22	59	53	e36	e34	34	57	105	362	534	198	111	90
23	59	51	e34	e35	e33	56	79	407	530	199	105	86
24	55	49	e31	35	e34	59	85	449	523	193	105	96
25	59	48	e31	36	e33	72	90	464	512	180	100	100
26	70	47	e33	36	e35	87	86	463	491	178	105	87
27	69	48	e34	e37	e34	76	87	508	458	160	108	80
28	69	50	e32	e37	e35	65	89	495	427	164	106	77
29	61	51	32	e37	---	69	93	550	397	157	103	76
30	63	50	31	e33	---	67	98	495	369	160	93	77
31	61	---	32	e30	---	54	---	496	---	153	90	---
TOTAL	1999	1649	1193	1023	984	1425	2269	7886	15302	6961	3881	2657
MEAN	64.5	55.0	38.5	33.0	35.1	46.0	75.6	254	510	225	125	88.6
MAX	82	66	50	37	38	87	126	550	620	358	182	125
MIN	53	47	31	30	32	31	47	72	369	153	90	74
AC-FT	3970	3270	2370	2030	1950	2830	4500	15640	30350	13810	7700	5270

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 1999, BY WATER YEAR (WY)

MEAN	59.4	48.8	40.7	35.2	33.6	39.3	75.8	263	432	205	95.1	69.1
MAX	91.3	71.6	53.8	41.9	38.2	50.5	119	447	767	719	236	122
(WY)	1996	1996	1996	1997	1995	1997	1996	1996	1995	1995	1995	1995
MIN	39.6	34.5	30.0	28.6	27.9	32.6	39.4	162	195	88.4	53.4	46.5
(WY)	1989	1989	1989	1990	1994	1996	1995	1990	1992	1994	1994	1990

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1988 - 1999	
ANNUAL TOTAL	34266		47229			
ANNUAL MEAN	93.9		129		117	
HIGHEST ANNUAL MEAN					197	1995
LOWEST ANNUAL MEAN					79.4	1992
HIGHEST DAILY MEAN	416	Jun 3	620	Jun 15	1120	Jun 17 1995
LOWEST DAILY MEAN	e27	Apr 5	e30	Jan 4	a24	Feb 7 1989
ANNUAL SEVEN-DAY MINIMUM	28	Mar 31	31	Jan 4	25	Feb 23 1996
INSTANTANEOUS PEAK FLOW			724	Jun 10	1400	Jun 18 1995
INSTANTANEOUS PEAK STAGE			3.31	Jun 10	4.08	Jun 18 1995
ANNUAL RUNOFF (AC-FT)	67970		93680		84520	
10 PERCENT EXCEEDS	232		409		290	
50 PERCENT EXCEEDS	58		69		55	
90 PERCENT EXCEEDS	35		33		34	

e Estimated
a Minimum daily discharge for period of record, 23 ft^3/s, Jan 1-19, 1931.

09108500 TAYLOR PARK RESERVOIR AT TAYLOR PARK, CO

LOCATION.--Lat 38°49'07", long 106°36'24", Gunnison County, Hydrologic Unit 14020001, at dam on Taylor River just downstream from Taylor Park, and 16 mi northeast of Almont.

DRAINAGE AREA.--254 mi^2.

PERIOD OF RECORD.--October 1937 to current year. Prior to October 1938, published in WSP 1313.

REVISED RECORDS.--WSP 1089: 1940(M), 1942(M), 1945-46. WSP 1924: Drainage area.

GAGE.--Water-stage recorder with satelite telemetry, and nonrecording gage (read once daily). Datum of gage is 9,187 ft above sea level, (levels by U.S. Bureau of Reclamation); gage readings have been reduced to elevations above sea level.

REMARKS.--Reservoir is formed by an earth and rockfill dam. Dam completed by U. S. Bureau of Reclamation in September 1937. Capacity of reservoir, 106,200 acre-ft between elevations 9,187 ft, bottom of outlet gates, and 9,330 ft, crest of spillway. No dead storage. Water used for irrigation in Uncompahgre Valley. Figures given are usable contents.

COOPERATION.--Records provided by Uncompahgre Valley Water Users Association.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 111,000 acre-ft, July 1, 1957, elevation, 9,332.35 ft; minimum after first filling, 8,780 acre-ft, Oct. 19-20, 1956, elevation, 9,240.70 ft.

EXTREMES (at 1800) FOR CURRENT YEAR.--Maximum contents, 101,630 acre-ft, July 3, elevation, 9,327.54 ft; minimum contents, 59,400 acre-ft, Mar. 18, elevation, 9,303.02 ft.

MONTHEND ELEVATION AND CONTENTS, AT 1800, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Elevation (feet)	Contents (acre-feet)	Change in Contents (acre feet)
Sept. 30	9309.89	69,700	
Oct. 31	9308.07	66,900	-2,800
Nov. 30	9307.65	66,200	-700
Dec. 31	9306.04	63,800	-2,400
CAL YR 1998	-	-	-12,200
Jan. 31	9304.90	62,100	-1,700
Feb. 28	9303.62	60,200	-1,900
Mar. 31	9303.58	60,200	0
Apr. 30	9303.64	60,300	+100
May 31	9311.08	71,600	+11,300
June 30	9327.33	100,900	+29,300
July 31	9326.21	98,600	-2,300
Aug. 31	9324.46	95,300	-3,300
Sept. 30	9319.13	85,400	-9,900
WATER YEAR 1999	-	-	+15,700

09109000 TAYLOR RIVER BELOW TAYLOR PARK RESERVOIR, CO

LOCATION.--Lat 38°49'06", long 106°36'31", Gunnison County, Hydrologic Unit 14020001, on bridge 1,000 ft downstream from Taylor Park Reservoir Dam, 3.4 mi upstream from Lottis Creek, and 17 mi northeast of Almont.

DRAINAGE AREA.--254 mi^2.

PERIOD OF RECORD.--June 1929 to September 1934 (monthly discharges only, published in WSP 1313), October 1938 to current year. Statistical summary computed for 1939 to current year.

REVISED RECORDS.--WSP 1924: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 9,169.67 ft above sea level, (levels by U.S. Bureau of Reclamation). Prior to Nov. 11, 1952, at site 1,600 ft downstream, at datum 1.00 ft lower. Oct. 15, 1946 to May 4, 1952, supplementary nonrecording gage just downstream from reservoir outlet at different sites and datums used during winter months.

REMARKS.--Records good. Flow regulated by Taylor Park Reservoir (station 09108500) since 1937. One small diversion for irrigation from Willow Creek upstream from reservoir. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	204	98	98	e98	98	99	84	149	262	473	350	288
2	185	98	98	e98	97	100	84	159	296	477	350	310
3	185	98	98	e98	98	101	84	161	316	483	350	310
4	185	98	98	e98	98	101	84	160	317	483	351	310
5	185	98	98	e98	98	101	84	160	317	479	350	310
6	184	98	98	e98	98	101	84	163	317	481	351	310
7	183	98	98	e98	98	103	84	163	318	479	350	310
8	183	98	98	96	98	101	84	163	319	480	350	331
9	184	98	98	96	98	101	84	164	304	481	351	354
10	184	98	98	96	99	101	84	164	296	480	350	355
11	183	98	98	96	98	101	83	163	296	480	351	354
12	183	98	98	98	98	90	83	163	298	449	351	354
13	183	98	98	101	98	79	81	163	298	407	352	354
14	183	98	98	98	98	78	116	164	297	381	350	353
15	183	98	98	94	99	77	180	164	299	380	321	353
16	189	98	98	94	99	77	253	193	300	378	268	353
17	195	98	98	94	99	76	294	241	297	378	248	352
18	195	98	98	95	99	76	293	262	294	381	247	353
19	195	98	e98	95	99	75	260	263	295	380	248	354
20	194	98	e98	94	99	76	205	266	296	381	248	353
21	195	98	e98	95	99	84	151	269	296	379	247	352
22	195	98	e98	98	99	84	135	269	297	378	250	353
23	142	98	e98	97	99	84	140	270	297	377	252	352
24	98	98	e98	98	99	84	140	270	298	378	251	353
25	98	98	e98	98	99	84	140	268	298	379	251	354
26	98	98	e98	98	99	84	140	265	298	360	252	354
27	98	98	e98	97	99	84	139	266	299	351	252	353
28	98	98	e98	97	99	84	138	266	345	351	251	353
29	98	98	e98	96	---	84	138	264	439	351	251	326
30	98	98	e98	96	---	84	138	262	471	352	252	284
31	98	---	e98	97	---	84	---	262	---	351	252	---
TOTAL	5061	2940	3038	3000	2758	2738	4087	6579	9370	12798	9248	10155
MEAN	163	98.0	98.0	96.8	98.5	88.3	136	212	312	413	298	338
MAX	204	98	98	101	99	103	294	270	471	483	352	355
MIN	98	98	98	94	97	75	81	149	262	351	247	284
AC-FT	10040	5830	6030	5950	5470	5430	8110	13050	18590	25380	18340	20140

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 1999, BY WATER YEAR (WY)

MEAN	192	95.9	74.8	63.7	62.0	86.7	151	184	331	400	363	401
MAX	586	438	353	195	196	320	655	550	931	1249	646	809
(WY)	1969	1968	1966	1966	1971	1986	1970	1962	1948	1957	1950	1956
MIN	11.4	10.0	6.00	4.02	4.00	4.19	9.44	.000	.000	147	183	99.5
(WY)	1962	1941	1964	1964	1964	1964	1964	1940	1940	1964	1977	1961

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1939 - 1999	
ANNUAL TOTAL	65882		71772			
ANNUAL MEAN	180		197		201	
HIGHEST ANNUAL MEAN					341	1995
LOWEST ANNUAL MEAN					94.8	1941
HIGHEST DAILY MEAN	324	Jul 11	483	Jul 3	2180	Jul 1 1957
LOWEST DAILY MEAN	98	Oct 24	75	Mar 19	a.00	May 1 1940
ANNUAL SEVEN-DAY MINIMUM	98	Oct 24	76	Mar 14	.00	May 1 1940
INSTANTANEOUS PEAK FLOW			508	Jul 7	2270	Jul 1 1957
INSTANTANEOUS PEAK STAGE			4.84	Jul 7	7.56	Jul 1 1957
ANNUAL RUNOFF (AC-FT)	130700		142400		145500	
10 PERCENT EXCEEDS	293		353		480	
50 PERCENT EXCEEDS	183		142		107	
90 PERCENT EXCEEDS	98		94		17	

e Estimated
a Also occurred May 2 to Jul 3, 1940, May 7-22, 1942, May 5-21, 1943.

09110000 TAYLOR RIVER AT ALMONT, CO

LOCATION.--Lat 38°39'52", long 106°50'41", in NW$^1/_4$SE$^1/_4$ sec.22, T.51 N., R.1 E., Gunnison County, Hydrologic Unit 14020001, on left bank at Almont, 15 ft downstream from bridge on State Highway 306, and 800 ft upstream from confluence with East River.

DRAINAGE AREA.--477 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1910 to current year. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 1213: 1911. WSP 1924: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 8,010.76 ft above sea level. Prior to Apr. 16, 1922, nonrecording gage at same site and datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. Flow partly regulated since September 1937 by Taylor Park Reservoir (station 09108500), 24 mi upstream from station. Diversions for irrigation of about 360 acres upstream from station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	281	166	159	162	e172	145	138	249	e760	714	511	388
2	254	170	159	e155	e165	146	137	260	e800	708	513	442
3	242	169	160	e145	e175	145	132	264	e810	697	543	431
4	267	162	168	e155	188	147	131	259	e815	687	620	423
5	265	160	175	162	182	147	134	253	797	668	e540	416
6	258	164	162	157	169	147	129	253	729	681	e520	414
7	261	164	155	156	163	145	135	255	707	694	e530	409
8	260	164	154	156	164	148	148	273	761	678	e540	416
9	256	167	159	e150	160	146	144	316	776	680	e540	454
10	253	166	161	156	158	148	139	324	759	673	e530	454
11	250	170	145	167	155	149	134	287	713	652	e520	453
12	249	175	151	164	152	145	143	284	712	623	e540	446
13	247	164	e155	e155	157	124	161	304	710	563	e530	444
14	248	189	e160	e152	174	119	170	306	710	536	e520	436
15	246	162	e155	e155	167	121	227	315	747	528	e480	e445
16	249	164	157	e160	e162	120	289	326	707	518	417	451
17	256	166	147	166	e160	122	339	362	721	513	362	445
18	255	165	148	160	159	121	349	413	701	519	358	443
19	255	165	155	160	152	124	350	454	674	556	364	454
20	255	163	153	153	149	127	317	486	647	556	367	489
21	254	172	150	153	153	140	268	526	670	522	375	466
22	255	187	e145	e148	153	143	227	567	676	544	373	454
23	235	163	e140	e153	157	142	216	618	646	561	370	451
24	166	161	e145	162	168	144	215	646	e645	558	379	460
25	167	160	e145	157	168	145	236	667	e655	538	379	453
26	178	160	e147	160	149	151	226	686	e650	534	389	446
27	177	160	e153	e155	151	154	221	730	e660	527	369	443
28	182	160	e155	e153	157	145	245	e730	e670	532	368	437
29	172	163	e163	e147	---	144	255	e730	e690	537	368	417
30	170	161	e163	e155	---	145	286	e735	721	532	359	367
31	168	---	164	e167	---	143	---	e740	---	518	359	---
TOTAL	7231	4982	4808	4856	4539	4332	6241	13618	21439	18347	13933	13147
MEAN	233	166	155	157	162	140	208	439	715	592	449	438
MAX	281	189	175	167	188	154	350	740	815	714	620	489
MIN	166	160	140	145	149	119	129	249	645	513	358	367
AC-FT	14340	9880	9540	9630	9000	8590	12380	27010	42520	36390	27640	26080

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1910 - 1999, BY WATER YEAR (WY)

MEAN	246	156	121	110	109	134	249	606	929	576	417	395
MAX	699	518	424	240	288	456	784	1485	2419	1975	707	855
(WY)	1969	1968	1966	1966	1971	1985	1970	1936	1914	1957	1960	1956
MIN	60.3	53.3	39.8	40.8	35.2	34.6	55.8	129	109	168	83.2	91.6
(WY)	1938	1938	1963	1941	1941	1938	1941	1940	1940	1931	1913	1937

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1910 - 1999	
ANNUAL TOTAL	102322		117473			
ANNUAL MEAN	280		322		338	
HIGHEST ANNUAL MEAN					550	1995
LOWEST ANNUAL MEAN					155	1977
HIGHEST DAILY MEAN	732	Jun 3	e815	Jun 4	3600	Jun 9 1920
LOWEST DAILY MEAN	e104	Feb 6	119	Mar 14	a24	Mar 12 1938
ANNUAL SEVEN-DAY MINIMUM	105	Jan 17	122	Mar 13	27	Feb 19 1941
INSTANTANEOUS PEAK FLOW			b851	Jun 4	c3760	Jun 9 1920
INSTANTANEOUS PEAK STAGE			b3.05	Jun 4	d5.00	Jun 9 1920
ANNUAL RUNOFF (AC-FT)	203000		233000		245200	
10 PERCENT EXCEEDS	525		673		740	
50 PERCENT EXCEEDS	246		245		198	
90 PERCENT EXCEEDS	111		145		83	

e Estimated
a Minimum discharge observed for period of record, before storage began in Taylor Park Reservoir, 50 ft^3/s for several days in Aug 1913, gage height, 1.2 ft.
b May have been higher during period of no gage-height record, May 23 to Jun 4.
c From rating curve extended above 2300 ft^3/s.
d Maximum gage height, 5.32 ft, Jul 1, 1957.

09110000 TAYLOR RIVER AT ALMONT, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD--October 1993 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)
NOV								
17...	1430	166	142	8.0	2.9	9.9	<1	<.010
JAN								
06...	1130	145	148	7.9	.3	10.8	<1	<.010
APR								
20...	1630	286	122	7.2	6.3	9.2	K1	<.010
JUN								
02...	1150	730	134	8.3	5.8	9.0	--	<.010
JUL								
13...	1415	597	117	8.6	12.8	8.3	K2	<.010
AUG								
24...	1930	375	121	7.9	13.9	7.5	K1	<.010

DATE	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)
NOV							
17...	<.050	.026	<.10	<.10	<.050	.010	<.010
JAN							
06...	<.050	<.020	<.10	<.10	<.004	<.004	<.010
APR							
20...	.067	<.020	.18	.10	.020	.005	.013
JUN							
02...	.115	.029	.15	.14	.020	<.004	.022
JUL							
13...	<.050	<.020	.18	.21	.008	.004	<.010
AUG							
24...	<.050	<.020	.16	E.10	.012	.005	<.010

E Estimated.
K Based on non-ideal colony count.

MISCELLANEOUS FIELD MEASUREMENTS, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)
OCT				
21...	1250	254	141	6.6
DEC				
02...	1008	156	148	.2
MAR				
02...	0953	144	160	1.9
APR				
20...	1447	330	--	6.2
MAY				
26...	1545	671	132	8.6
JUN				
30...	1313	722	118	10.8
SEP				
02...	1400	455	119	13.0

385609106575800 EAST RIVER BELOW GOTHIC, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 38°56'09", long 106°57'58", in $SE^1/_4SE^1/_4$ sec.11,T.13 S., R.86 W., Gunnison County, Hydrologic Unit 14020001, at county road bridge, 0.1 mi east of Gothic, and 2.0 mi west of Mt. Crested Butte.

DRAINAGE AREA.--Not determined.

PERIOD OF RECORD--April 1995 to current year.

REMARKS.--No previous water-quality data prior to April 1995.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)
NOV								
17...	0915	17	278	8.2	.2	9.6	<1	<.010
JAN								
08...	0945	e3.0	276	7.9	.0	9.0	K1	<.010
APR								
13...	1515	22	300	7.6	5.3	8.8	<1	<.010
JUN								
01...	1230	229	185	7.8	7.7	9.1	K1	<.010
JUL								
20...	1630	78	184	8.1	11.3	7.8	K3	<.010
AUG								
26...	0900	50	211	8.2	7.2	9.1	36	<.010

DATE	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)
NOV							
17...	.096	<.020	<.10	<.10	<.050	<.050	<.010
JAN							
08...	<.050	<.020	<.10	<.10	<.004	<.004	.012
APR							
13...	.091	<.020	E.06	<.10	.009	<.004	<.010
JUN							
01...	.134	.023	E.09	E.10	.009	<.004	.018
JUL							
20...	<.050	<.020	.19	E.10	<.004	<.004	<.010
AUG							
26...	.099	<.020	.11	E.10	<.004	<.004	<.010

e Estimated.
E Estimated.
K Based on non-ideal colony count.

385408106543600 EAST RIVER ABOVE CRESTED BUTTE, CO.

WATER-QUALITY RECORDS

LOCATION.--Lat 38°54'08", long 106°54'36", Gunnison County, Hydrologic Unit 14020001, 0.25 mi upstream from confluence with Brush Creek, and 4.2 mi northeast of Crested Butte.

DRAINAGE AREA.--Not determined.

PERIOD OF RECORD--August 1995 to current year.

REMARKS.--No previous water-quality data prior to August 1995.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)
NOV								
16...	1330	11	297	8.1	2.6	8.8	K1	.017
JAN								
07...	0915	3.0	309	7.9	.4	8.9	K1	<.010
APR								
13...	1715	40	308	7.7	4.3	8.9	K1	.021
JUN								
01...	1520	279	207	8.1	10.6	7.4	<1	<.010
JUL								
20...	1415	74	216	7.9	15.8	7.1	15	<.010
AUG								
26...	1130	43	228	8.2	12.7	7.4	52	<.010

DATE	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)
NOV							
16...	.080	<.020	<.10	<.10	<.050	<.050	<.010
JAN							
07...	.071	.022	<.10	<.10	<.004	<.004	<.010
APR							
13...	.077	<.020	.17	E.10	.026	<.004	.011
JUN							
01...	.127	.022	.19	.11	.043	<.004	.013
JUL							
20...	<.050	<.020	.12	.12	.005	<.004	<.010
AUG							
26...	.084	<.020	.11	E.10	.011	<.004	<.010

E Estimated.
K Based on non-ideal colony count.

384950106544200 EAST RIVER ABOVE SLATE RIVER, NEAR CRESTED BUTTE, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 38°49'50", long 106°54'42", in $SE^1/_4SW^1/_4$ sec. 17, T.14 S., R.85 W., Gunnison County, Hydrologic Unit 14020001, 100 ft upstream from confluence with Slate River, and 4.7 mi southeast of Crested Butte.

DRAINAGE AREA.--Not determined.

PERIOD OF RECORD.--April 1995 to current year

REMARKS.--No previous water-quality data prior to April 1995.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
NOV										
20...	1020	16	320	8.2	1.7	--	10.0	--	K1	--
JAN										
05...	1330	19	343	8.2	1.7	--	9.5	--	K1	--
APR										
21...	0915	122	280	7.9	2.0	--	9.7	.4	K4	--
JUN										
03...	0915	568	194	7.9	4.6	4.0	9.8	.2	14	93
JUL										
21...	0845	165	270	8.0	9.8	--	8.3	--	40	--
AUG										
25...	1410	78	295	8.4	13.0	.32	7.3	.2	K4	140

DATE	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)
NOV										
20...	--	--	.011	.095	<.020	<.10	<.10	.013	<.050	<.010
JAN										
05...	--	--	<.010	.093	.040	<.10	<.10	.013	.006	.011
APR										
21...	--	--	<.010	.102	.031	.24	.11	.046	.004	.010
JUN										
03...	30	4.6	<.010	.140	.023	.23	.10	.039	<.004	.016
JUL										
21...	--	--	<.010	<.050	<.020	.13	E.10	.006	<.004	<.010
AUG										
25...	45	6.7	<.010	<.050	<.020	.11	.10	.005	<.004	<.010

DATE	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
JUN								
03...	<10	<1.0	<1.0	E9.5	<1.0	3.7	<.20	<20
AUG								
25...	<10	<1.0	<1.0	10	<1.0	<3.0	<.20	<20

E Estimated.
K Based on non-ideal colony count.

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
JUN				
03...	0915	568	18	27
AUG				
25...	1410	78	3	.59

385429107013000 SLATE RIVER ABOVE OH-BE-JOYFUL CREEK NEAR CRESTED BUTTE, CO.

WATER-QUALITY RECORDS

LOCATION.--Lat 38°54'29", long 107°01'30", in SE$^{1}/_{4}$NE$^{1}/_{4}$ sec.20,T.13 S., R.86 W., Gunnison County, Hydrologic Unit 14020001, 0.2 mi upstream from confluence with Oh-Be-Joyful Creek, and 3.4 mi northwest of Crested Butte.

DRAINAGE AREA.--Not determined.

PERIOD OF RECORD--June 1995 to current year.

REMARKS.--No previous water-quality data prior to June 1995.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	CALCIUM BOT MAT <63U WS FIELD PERCENT (34830)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)
NOV												
18...	1030	7.5	133	8.0	2.0	.20	9.9	K1	60	21	--	2.0
JAN												
06...	1145	3.4	133	7.6	.5	.22	9.8	<1	63	22	--	2.1
APR												
15...	0900	27	140	7.7	.0	--	10.3	<1	64	22	1.2	2.4
JUN												
02...	0715	205	84	7.6	2.3	3.5	10.0	K1	36	12	--	1.3
JUL												
22...	0800	37	97	7.6	8.1	1.4	8.3	12	42	15	--	1.3
AUG												
24...	0750	29	129	7.9	9.5	.31	8.4	24	54	19	1.5	1.7

DATE	MAGNE-SIUM BOT MAT <63U WS FIELD PERCENT (34900)	SODIUM BOT MAT <63U WS FIELD PERCENT (34960)	POTAS-SIUM BOT MAT <63U WS FIELD PERCENT (34940)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS BOT MAT <63U WS FIELD PERCENT (34935)
NOV												
18...	--	--	--	.001	.055	.002	<.10	<.10	.001	.001	.001	--
JAN												
06...	--	--	--	<.010	.090	<.020	<.10	<.10	<.004	<.004	<.010	--
APR												
15...	1.5	.68	2.0	.001	.094	.003	E.07	<.10	<.004	<.004	.001	.11
JUN												
02...	--	--	--	<.001	.067	<.002	E.10	E.10	.015	<.004	.001	--
JUL												
22...	--	--	--	<.010	.086	<.020	.11	<.10	<.004	<.004	<.010	--
AUG												
24...	1.4	.71	2.0	<.001	.069	<.002	E.09	<.10	<.004	<.004	.001	.095

DATE	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL) (01105)	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	ALUM-INUM BOT MAT <63U WS FIELD PERCENT (34790)	ANTI-MONY BOT MAT <63U WS FIELD (UG/G) (34795)	ARSENIC BOT MAT <63U WS FIELD (UG/G) (34800)	BARIUM BOT MAT <63U WS FIELD (UG/G) (34805)	BERYL-LIUM BOT MAT <63U WS FIELD (UG/G) (34810)	BISMUTH BOT MAT <180UWS FIELD (UG/G) (34816)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CADMIUM BOT MAT <63U WS FIELD (UG/G) (34825)
NOV											
18...	--	<10	--	--	--	--	--	--	--	<1.0	--
JAN											
06...	--	<10	--	--	--	--	--	--	--	<1.0	--
APR											
15...	--	<10	8.0	2.0	36	610	3	<1	--	<1.0	2.9
JUN											
02...	380	11	--	--	--	--	--	--	<1	<1.0	--
JUL											
22...	--	26	--	--	--	--	--	--	--	<1.0	--
AUG											
24...	40	E9.4	7.3	2.3	42	600	2	<1	<1	<1.0	4.1

E Estimated.
K Based on non-ideal colony count.

385429107013000 SLATE RIVER ABOVE OH-BE-JOYFUL CREEK, NEAR CRESTED BUTTE, CO.--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	CERIUM BOT MAT <63U WS FIELD (UG/G) (34835)	CHRO-MIUM BOT MAT <63U WS FIELD (UG/G) (34845)	COBALT BOT MAT <63U WS FIELD (UG/G) (34840)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	COPPER BOT MAT <63U WS FIELD (UG/G) (34850)	EURO-PIUM BOT MAT <63U WS FIELD (UG/G) (34855)	GALLIUM BOT MAT <63U WS FIELD (UG/G) (34860)	GOLD BOT MAT <63U WS FIELD (UG/G) (34870)	HOLMIUM BOT MAT <63U WS FIELD (UG/G) (34875)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)
NOV											
18...	--	--	--	--	<1.0	--	--	--	--	--	--
JAN											
06...	--	--	--	--	1.0	--	--	--	--	--	--
APR											
15...	76	13	85	--	<1.0	67	1	17	<1	<1	--
JUN											
02...	--	--	--	1	<1.0	--	--	--	--	--	390
JUL											
22...	--	--	--	--	<1.0	--	--	--	--	--	--
AUG											
24...	82	14	75	<1	<1.0	71	1	17	<1	1	30

DATE	IRON, DIS-SOLVED (UG/L AS FE) (01046)	IRON BOT MAT <63U WS FIELD PERCENT (34880)	LANTHA-NUM BOT MAT <63U WS FIELD (UG/G) (34885)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	LEAD BOT MAT <63U WS FIELD (UG/G) (34890)	LITHIUM BOT MAT <63U WS FIELD (UG/G) (34895)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MANGA-NESE BOT MAT <63U WS FIELD (UG/G) (34905)	MOLYB-DENUM BOT MAT <63U WS FIELD (UG/G) (34915)
NOV											
18...	E5.0	--	--	--	<1.0	--	--	--	<3.0	--	--
JAN											
06...	<10	--	--	--	<1.0	--	--	--	<3.0	--	--
APR											
15...	<10	3.3	43	--	<1.0	150	53	--	E1.6	410	4
JUN											
02...	E5.7	--	--	2	<1.0	--	--	9	<3.0	--	--
JUL											
22...	18	--	--	--	<1.0	--	--	--	E1.9	--	--
AUG											
24...	<10	3.8	50	<1	<1.0	140	52	<3	<3.0	640	6

DATE	NEODYM-IUM BOT MAT <63U WS FIELD (UG/G) (34920)	NICKEL BOT MAT <63U WS FIELD (UG/G) (34925)	NIOBIUM BOT MAT <63U WS FIELD (UG/G) (34930)	SCAN-DIUM BOT MAT <63U WS FIELD (UG/G) (34945)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	SILVER BOT MAT <63U WS FIELD (UG/G) (34955)	STRON-TIUM BOT MAT <63U WS FIELD (UG/G) (34965)	TANTA-LUM BOT MAT <63U WS FIELD (UG/G) (34975)	THAL-LIUM BED MAT D SIEVE <63 U TOTAL (UG/G) (04064)	THORIUM BOT MAT <63U WS FIELD (UG/G) (34980)
NOV										
18...	--	--	--	--	<.20	--	--	--	--	--
JAN										
06...	--	--	--	--	<.20	--	--	--	--	--
APR										
15...	39	39	14	11	<.20	<.1	170	1	1.2	10
JUN										
02...	--	--	--	--	<.20	--	--	--	--	--
JUL										
22...	--	--	--	--	<.20	--	--	--	--	--
AUG										
24...	38	38	12	11	<.20	.8	200	1	1.2	12

DATE	TIN BOT MAT <63U WS FIELD (UG/G) (34985)	TITA-NIUM, SED, BM WS,<63U DRY WGT REC PERCENT (49274)	VANA-DIUM BOT MAT <63U WS FIELD (UG/G) (35005)	YTTER-BIUM BOT MAT <63U WS FIELD (UG/G) (35015)	YTTRIUM BOT MAT <63U WS FIELD (UG/G) (35010)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	ZINC BOT MAT <63U WS FIELD (UG/G) (35020)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L) (38260)	URANIUM BOT MAT <63U WS FIELD (UG/G) (35000)
NOV										
18...	--	--	--	--	--	--	E8.8	--	<.02	--
JAN										
06...	--	--	--	--	--	--	<20	--	<.02	--
APR										
15...	3	.340	160	2	24	--	20	520	<.02	3.8
JUN										
02...	--	--	--	--	--	<40	E9.0	--	<.02	--
JUL										
22...	--	--	--	--	--	--	61	--	<.02	--
AUG										
24...	3	.320	150	2	26	<40	<20	580	--	4.0

E Estimated.

385429107013000 SLATE RIVER ABOVE OH-BE-JOYFUL CREEK, NEAR CRESTED BUTTE, CO.--Continued

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
NOV				
18...	1030	7.5	1	.03
JAN				
06...	1145	3.4	1	.01
APR				
15...	0900	27	2	.12
JUN				
02...	0715	205	12	6.9
JUL				
22...	0800	37	1	.10
AUG				
24...	0750	29	1	.04

385426107013400 OH-BE-JOYFUL CREEK ABOVE SLATE RIVER, NEAR CRESTED BUTTE, CO.

WATER-QUALITY RECORDS

LOCATION.--Lat 38°54'26", long 107°01'34", in $SE^1/_4NE^1/_4$ sec.20,T.13 S., R.86 W., Gunnison County, Hydrologic Unit 14020001, 0.1 mi upstream from mouth, and 3.4 mi northwest of Crested Butte.

DRAINAGE AREA.--Not determined.

PERIOD OF RECORD--August 1995 to current year.

REMARKS.--No previous water-quality data prior to August 1995.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)
JUN										
02...	0945	108	44	7.5	3.5	1.5	10.3	K1	20	6.8
AUG										
24...	1045	22	73	7.5	10.8	.36	7.3	6	31	11

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)
JUN									
02...	.63	<.010	.130	.022	.11	.11	<.004	<.004	.016
AUG									
24...	.95	<.010	<.050	<.020	E.10	E.10	<.004	<.004	<.010

DATE	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
JUN								
02...	41	<1.0	3.5	11	6.5	17	<.20	98
AUG								
24...	58	1.6	3.5	16	9.1	36	<.20	182

E Estimated.
K Based on non-ideal colony count.

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
JUN				
02...	0945	108	1	.32
AUG				
24...	1045	22	3	.17

385240106583600 SLATE RIVER ABOVE COAL CREEK, NEAR CRESTED BUTTE, CO.

WATER-QUALITY RECORDS

LOCATION.--Lat 38°52'40", long 106°58'36", in $SE^1/_4NE^1/_4$ sec.35,T.13 S., R.86 W., Gunnison County, Hydrologic Unit 14020001, 0.5 mi upstream from confluence with Coal Creek, and 0.6 mi northwest of Crested Butte.

DRAINAGE AREA.--Not determined.

PERIOD OF RECORD--April 1995 to current year.

REMARKS.--No previous water-quality data prior to April 1995.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	CALCIUM BOT MAT <63U WS FIELD PERCENT (34830)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)
NOV												
18...	1345	11	130	7.6	3.9	.25	9.0	K1	60	20	--	2.5
JAN												
06...	0910	7.9	141	7.4	.7	.19	9.0	K1	62	20	--	2.6
APR												
14...	1215	44	136	7.4	5.0	--	8.9	<1	60	20	1.2	2.5
JUN												
02...	1250	347	79	7.5	7.0	2.0	8.4	K1	33	11	--	1.2
JUL												
22...	0945	68	95	7.6	10.1	1.5	7.9	8	41	14	--	1.5
AUG												
24...	1330	46	115	7.8	16.7	.33	6.6	8	49	16	1.2	1.9

DATE	MAGNE-SIUM BOT MAT <63U WS FIELD PERCENT (34900)	SODIUM BOT MAT <63U WS FIELD PERCENT (34960)	POTAS-SIUM BOT MAT <63U WS FIELD PERCENT (34940)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS BOT MAT <63U WS FIELD PERCENT (34935)
NOV												
18...	--	--	--	<.010	.076	<.020	<.10	<.10	<.050	<.050	<.010	--
JAN												
06...	--	--	--	<.010	.098	<.020	<.10	<.10	<.004	<.004	<.010	--
APR												
14...	1.3	.72	1.9	<.010	.084	<.020	E.07	E.10	<.004	<.004	.010	.11
JUN												
02...	--	--	--	<.010	.140	.027	.10	.11	.012	<.004	.014	--
JUL												
22...	--	--	--	<.010	.066	<.020	E.09	<.10	<.004	<.004	<.010	--
AUG												
24...	1.2	.72	1.9	<.010	<.050	<.020	E.07	<.10	<.004	<.004	<.010	.095

DATE	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL) (01105)	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	ALUM-INUM BOT MAT <63U WS FIELD PERCENT (34790)	ANTI-MONY BOT MAT <63U WS FIELD (UG/G) (34795)	ARSENIC BOT MAT <63U WS FIELD (UG/G) (34800)	BARIUM BOT MAT <63U WS FIELD (UG/G) (34805)	BERYL-LIUM BOT MAT <63U WS FIELD (UG/G) (34810)	BISMUTH BOT MAT <180UWS FIELD (UG/G) (34816)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CADMIUM BOT MAT <63U WS FIELD (UG/G) (34825)
NOV											
18...	--	<10	--	--	--	--	--	--	--	<1.0	--
JAN											
06...	--	<10	--	--	--	--	--	--	--	<1.0	--
APR											
14...	--	<10	7.6	1.7	33	580	2	<1	--	<1.0	5.6
JUN											
02...	240	20	--	--	--	--	--	--	<1	<1.0	--
JUL											
22...	--	19	--	--	--	--	--	--	--	<1.0	--
AUG											
24...	40	22	6.8	1.7	32	570	2	<1	<1	<1.0	6.3

E Estimated.
K Based on non-ideal colony count.

385240106583600 SLATE RIVER ABOVE COAL CREEK, NEAR CRESTED BUTTE, CO.--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	CERIUM BOT MAT <63U WS FIELD (UG/G) (34835)	CHRO-MIUM BOT MAT <63U WS FIELD (UG/G) (34845)	COBALT BOT MAT <63U WS FIELD (UG/G) (34840)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	COPPER BOT MAT <63U WS FIELD (UG/G) (34850)	EURO-PIUM BOT MAT <63U WS FIELD (UG/G) (34855)	GALLIUM BOT MAT <63U WS FIELD (UG/G) (34860)	GOLD BOT MAT <63U WS FIELD (UG/G) (34870)	HOLMIUM BOT MAT <63U WS FIELD (UG/G) (34875)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)
NOV											
18...	--	--	--	--	<1.0	--	--	--	--	--	--
JAN											
06...	--	--	--	--	<1.0	--	--	--	--	--	--
APR											
14...	78	13	73	--	1.0	70	1	17	<1	1	--
JUN											
02...	--	--	--	2	1.2	--	--	--	--	--	250
JUL											
22...	--	--	--	--	<1.0	--	--	--	--	--	--
AUG											
24...	79	13	64	1	<1.0	72	1	16	<1	1	70

DATE	IRON, DIS-SOLVED (UG/L AS FE) (01046)	IRON BOT MAT <63U WS FIELD PERCENT (34880)	LANTHA-NUM BOT MAT <63U WS FIELD (UG/G) (34885)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	LEAD BOT MAT <63U WS FIELD (UG/G) (34890)	LITHIUM BOT MAT <63U WS FIELD (UG/G) (34895)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MANGA-NESE BOT MAT <63U WS FIELD (UG/G) (34905)
NOV										
18...	11	--	--	--	<1.0	--	--	--	9.2	--
JAN										
06...	<10	--	--	--	<1.0	--	--	--	8.1	--
APR										
14...	15	3.6	45	--	<1.0	230	54	--	10	850
JUN										
02...	18	--	--	4	<1.0	--	--	11	4.7	--
JUL										
22...	12	--	--	--	<1.0	--	--	--	12	--
AUG										
24...	14	3.4	49	1	<1.0	190	52	9	9.4	750

DATE	MOLYB-DENUM BOT MAT <63U WS FIELD (UG/G) (34915)	NEODYM-IUM BOT MAT <63U WS FIELD (UG/G) (34920)	NICKEL BOT MAT <63U WS FIELD (UG/G) (34925)	NIOBIUM BOT MAT <63U WS FIELD (UG/G) (34930)	SCAN-DIUM BOT MAT <63U WS FIELD (UG/G) (34945)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	SILVER BOT MAT <63U WS FIELD (UG/G) (34955)	STRON-TIUM BOT MAT <63U WS FIELD (UG/G) (34965)	TANTA-LUM BOT MAT <63U WS FIELD (UG/G) (34975)	THAL-LIUM BED MAT D SIEVE <63 U TOTAL (UG/G) (04064)
NOV										
18...	--	--	--	--	--	<.20	--	--	--	--
JAN										
06...	--	--	--	--	--	<.20	--	--	--	--
APR										
14...	4	40	32	14	10	<.20	<.1	170	1	1.1
JUN										
02...	--	--	--	--	--	<.20	--	--	--	--
JUL										
22...	--	--	--	--	--	<.20	--	--	--	--
AUG										
24...	4	36	31	12	10	<.20	.6	170	1	1.0

DATE	THORIUM BOT MAT <63U WS FIELD (UG/G) (34980)	TIN BOT MAT <63U WS FIELD (UG/G) (34985)	TITA-NIUM, SED, BM WS,<63U DRY WGT REC PERCENT (49274)	VANA-DIUM BOT MAT <63U WS FIELD (UG/G) (35005)	YTTER-BIUM BOT MAT <63U WS FIELD (UG/G) (35015)	YTTRIUM BOT MAT <63U WS FIELD (UG/G) (35010)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	ZINC BOT MAT <63U WS FIELD (UG/G) (35020)	URANIUM BOT MAT <63U WS FIELD (UG/G) (35000)
NOV										
18...	--	--	--	--	--	--	--	21	--	--
JAN										
06...	--	--	--	--	--	--	--	E11	--	--
APR										
14...	10	3	.330	130	2	24	--	37	910	3.7
JUN										
02...	--	--	--	--	--	--	E30	28	--	--
JUL										
22...	--	--	--	--	--	--	--	41	--	--
AUG										
24...	11	3	.300	130	2	27	E30	32	820	3.8

E Estimated.

385240106583600 SLATE RIVER ABOVE COAL CREEK, NEAR CRESTED BUTTE, CO.--Continued

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
NOV				
18...	1345	11	1	.03
JAN				
06...	0910	7.9	0	.01
APR				
14...	1215	44	1	.11
JUN				
02...	1250	347	7	6.8
JUL				
22...	0945	68	1	.13
AUG				
24...	1330	46	1	.18

09111500 SLATE RIVER NEAR CRESTED BUTTE, CO

LOCATION.--Lat 38°52'11", long 106°58'08", in NW$^1/_4$NE$^1/_4$ sec.2, T.14 S., R.86 W., Gunnison County, Hydrologic Unit 14020001, on right bank 400 ft downstream from Washington Gulch, 1 mi east of Crested Butte, and 6.3 mi upstream from mouth.

DRAINAGE AREA.--68.9 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1940 to September 1951, October 1993 to current year. Monthly discharges only for some periods, published in WSP 1313.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 8,820 ft above sea level, from topographic map. Prior to Oct. 1, 1993, gage at site 0.3 mi downstream at different datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. Diversions for irrigation of about 1,300 acres upstream and downstream from station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	28	e19	15	e15	12	77	126	645	377	71	42
2	19	31	e19	14	e15	11	69	119	668	360	66	55
3	16	29	e19	e14	e16	11	65	108	685	328	58	72
4	29	22	e19	15	e16	11	61	101	688	313	55	64
5	25	20	e16	14	e17	11	60	95	607	282	56	54
6	21	21	e15	12	e18	11	54	88	490	265	64	47
7	24	21	e16	12	14	11	60	92	469	244	54	43
8	26	20	e17	e14	10	11	69	127	583	237	49	39
9	25	21	e16	e15	9.5	11	66	175	667	210	45	38
10	26	21	e15	e15	10	12	63	188	671	193	45	35
11	24	e22	e16	14	e16	12	56	150	599	175	55	36
12	22	21	e16	e15	e16	11	69	144	620	157	52	38
13	21	e21	e15	e14	e16	11	95	181	635	144	44	34
14	21	e22	e15	e14	e15	14	114	239	639	133	42	31
15	21	e23	e15	e15	e14	16	109	262	665	125	57	42
16	19	23	e16	e16	e15	20	100	291	635	123	67	38
17	17	22	e16	e16	e15	24	97	295	714	117	56	35
18	16	19	e16	e16	e16	29	111	337	694	112	52	33
19	16	20	e17	e16	16	37	134	426	649	108	48	43
20	17	e21	e16	16	16	47	167	529	597	102	56	76
21	17	e23	e12	e15	16	65	182	592	577	95	70	62
22	17	e21	e13	e16	e15	81	160	624	640	93	69	55
23	18	e20	e14	e16	e15	84	137	706	589	98	58	52
24	17	e20	e15	e16	e16	91	134	774	568	98	55	70
25	18	e20	e16	e16	18	111	133	776	541	99	50	74
26	29	21	e17	e16	14	127	120	705	507	85	47	72
27	28	22	e17	e18	12	113	117	691	473	84	43	64
28	31	21	e17	e14	12	98	123	713	447	83	42	52
29	26	20	e18	e13	---	93	124	767	411	80	40	47
30	30	19	e18	e15	---	93	150	728	388	74	37	44
31	30	---	e18	e16	---	83	---	715	---	75	42	---
TOTAL	682	655	504	463	413.5	1372	3076	11864	17761	5069	1645	1487
MEAN	22.0	21.8	16.3	14.9	14.8	44.3	103	383	592	164	53.1	49.6
MAX	31	31	19	18	18	127	182	776	714	377	71	76
MIN	16	19	12	12	9.5	11	54	88	388	74	37	31
AC-FT	1350	1300	1000	918	820	2720	6100	23530	35230	10050	3260	2950

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 1999, BY WATER YEAR (WY)

MEAN	31.9	24.1	16.5	13.2	11.8	19.7	122	532	621	223	56.5	28.0
MAX	68.4	38.4	25.1	23.5	20.0	44.3	303	778	971	804	237	62.7
(WY)	1998	1998	1994	1996	1996	1999	1943	1941	1995	1995	1995	1995
MIN	10.2	8.63	8.03	8.35	6.20	8.52	36.4	281	280	50.7	15.2	13.8
(WY)	1943	1943	1943	1947	1945	1950	1944	1995	1940	1940	1940	1942

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1940 - 1999	
ANNUAL TOTAL	47843		44991.5			
ANNUAL MEAN	131		123		145	
HIGHEST ANNUAL MEAN					214	1995
LOWEST ANNUAL MEAN					120	1994
HIGHEST DAILY MEAN	839	Jun 3	776	May 25	1390	Jun 17 1995
LOWEST DAILY MEAN	11	Sep 29	9.5	Feb 9	3.9	Nov 26 1942
ANNUAL SEVEN-DAY MINIMUM	12	Sep 23	11	Mar 2	5.8	Nov 21 1942
INSTANTANEOUS PEAK FLOW			878	May 24	1550	Jun 17 1995
INSTANTANEOUS PEAK STAGE			4.97	May 24	5.84	Jun 17 1995
ANNUAL RUNOFF (AC-FT)	94900		89240		105000	
10 PERCENT EXCEEDS	471		497		532	
50 PERCENT EXCEEDS	23		42		28	
90 PERCENT EXCEEDS	15		15		10	

e Estimated

09111500 SLATE RIVER NEAR CRESTED BUTTE, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD--March 1995 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	CALCIUM BOT MAT <63U WS FIELD PERCENT (34830)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)
NOV												
19...	0900	18	171	7.5	.9	.70	9.6	K4	72	23	--	3.5
JAN												
06...	1515	15	180	7.3	.6	.81	9.5	13	70	23	--	3.2
APR												
14...	0830	106	156	7.3	1.0	--	8.9	27	67	21	.91	3.6
JUN												
02...	1515	662	79	7.6	8.1	3.5	8.3	K1	32	10	--	1.4
JUL												
21...	1430	89	125	7.5	15.5	1.6	7.1	--	52	17	--	2.2
AUG												
25...	0850	52	144	7.9	11.2	.95	7.6	83	58	19	1.1	2.7

DATE	MAGNE-SIUM BOT MAT <63U WS FIELD PERCENT (34900)	SODIUM BOT MAT <63U WS FIELD PERCENT (34960)	POTAS-SIUM BOT MAT <63U WS FIELD PERCENT (34940)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS BOT MAT <63U WS FIELD PERCENT (34935)
NOV												
19...	--	--	--	<.010	.137	.162	<.10	<.10	<.050	<.050	.032	--
JAN												
06...	--	--	--	.012	.486	.444	.56	.50	.108	.089	.072	--
APR												
14...	.96	.92	1.9	<.010	.174	.121	.32	.23	.040	.016	.015	.12
JUN												
02...	--	--	--	<.010	.116	.045	.19	.15	.017	.004	.017	--
JUL												
21...	--	--	--	<.010	.118	.048	.19	.14	.010	<.004	<.010	--
AUG												
25...	1.2	.71	2.0	<.010	.110	.228	.37	.30	.038	.031	.019	.11

DATE	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL) (01105)	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	ALUM-INUM BOT MAT <63U WS FIELD PERCENT (34790)	ANTI-MONY BOT MAT <63U WS FIELD (UG/G) (34795)	ARSENIC BOT MAT <63U WS FIELD (UG/G) (34800)	BARIUM BOT MAT <63U WS FIELD (UG/G) (34805)	BERYL-LIUM BOT MAT <63U WS FIELD (UG/G) (34810)	BISMUTH BOT MAT <180UWS FIELD (UG/G) (34816)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CADMIUM BOT MAT <63U WS FIELD (UG/G) (34825)
NOV											
19...	--	E6.8	--	--	--	--	--	--	--	<1.0	--
JAN											
06...	--	E7.8	--	--	--	--	--	--	--	<1.0	--
APR											
14...	--	18	7.4	1.4	25	600	3	<1	--	1.2	5.8
JUN											
02...	280	25	--	--	--	--	--	--	<1	<1.0	--
JUL											
21...	--	21	--	--	--	--	--	--	--	<1.0	--
AUG											
25...	70	11	7.2	1.7	37	630	3	<1	<1	<1.0	10

DATE	CERIUM BOT MAT <63U WS FIELD (UG/G) (34835)	CHRO-MIUM BOT MAT <63U WS FIELD (UG/G) (34845)	COBALT BOT MAT <63U WS FIELD (UG/G) (34840)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	COPPER BOT MAT <63U WS FIELD (UG/G) (34850)	EURO-PIUM BOT MAT <63U WS FIELD (UG/G) (34855)	GALLIUM BOT MAT <63U WS FIELD (UG/G) (34860)	GOLD BOT MAT <63U WS FIELD (UG/G) (34870)	HOLMIUM BOT MAT <63U WS FIELD (UG/G) (34875)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)
NOV											
19...	--	--	--	--	<1.0	--	--	--	--	--	--
JAN											
06...	--	--	--	--	<1.0	--	--	--	--	--	--
APR											
14...	95	11	69	--	3.3	56	2	16	<1	1	--
JUN											
02...	--	--	--	3	1.7	--	--	--	--	--	320
JUL											
21...	--	--	--	--	1.1	--	--	--	--	--	--
AUG											
25...	78	16	65	1	<1.0	79	2	17	<1	1	180

E Estimated.
K Based on non-ideal colony count.

09111500 SLATE RIVER NEAR CRESTED BUTTE, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	IRON, DIS-SOLVED (UG/L AS FE) (01046)	IRON BOT MAT <63U WS FIELD PERCENT (34880)	LANTHA-NUM BOT MAT <63U WS FIELD (UG/G) (34885)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	LEAD BOT MAT <63U WS FIELD (UG/G) (34890)	LITHIUM BOT MAT <63U WS FIELD (UG/G) (34895)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MANGA-NESE BOT MAT <63U WS FIELD (UG/G) (34905)
NOV 19...	85	--	--	--	<1.0	--	--	--	70	--
JAN 06...	66	--	--	--	<1.0	--	--	--	48	--
APR 14...	65	3.1	53	--	<1.0	130	47	--	158	1000
JUN 02...	26	--	--	3	<1.0	--	--	25	15	--
JUL 21...	24	--	--	--	<1.0	--	--	--	32	--
AUG 25...	58	3.7	47	<1	<1.0	190	56	72	70	1400

DATE	MOLYB-DENUM BOT MAT <63U WS FIELD (UG/G) (34915)	NEODYM-IUM BOT MAT <63U WS FIELD (UG/G) (34920)	NICKEL BOT MAT <63U WS FIELD (UG/G) (34925)	NIOBIUM BOT MAT <63U WS FIELD (UG/G) (34930)	SCAN-DIUM BOT MAT <63U WS FIELD (UG/G) (34945)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	SILVER BOT MAT <63U WS FIELD (UG/G) (34955)	STRON-TIUM BOT MAT <63U WS FIELD (UG/G) (34965)	TANTA-LUM BOT MAT <63U WS FIELD (UG/G) (34975)	THAL-LIUM BED MAT D SIEVE <63 U TOTAL (UG/G) (04064)
NOV 19...	--	--	--	--	--	<.20	--	--	--	--
JAN 06...	--	--	--	--	--	<.20	--	--	--	--
APR 14...	2	48	25	13	10	<.20	<.1	150	1	1.0
JUN 02...	--	--	--	--	--	<.20	--	--	--	--
JUL 21...	--	--	--	--	--	<.20	--	--	--	--
AUG 25...	4	38	30	12	10	<.20	.9	170	1	1.2

DATE	THORIUM BOT MAT <63U WS FIELD (UG/G) (34980)	TIN BOT MAT <63U WS FIELD (UG/G) (34985)	TITA-NIUM, SED, BM WS,<63U DRY WGT REC PERCENT (49274)	VANA-DIUM BOT MAT <63U WS FIELD (UG/G) (35005)	YTTER-BIUM BOT MAT <63U WS FIELD (UG/G) (35015)	YTTRIUM BOT MAT <63U WS FIELD (UG/G) (35010)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	ZINC BOT MAT <63U WS FIELD (UG/G) (35020)	URANIUM BOT MAT <63U WS FIELD (UG/G) (35000)
NOV 19...	--	--	--	--	--	--	--	49	--	--
JAN 06...	--	--	--	--	--	--	--	37	--	--
APR 14...	11	3	.330	110	2	23	--	455	880	3.4
JUN 02...	--	--	--	--	--	--	60	47	--	--
JUL 21...	--	--	--	--	--	--	--	31	--	--
AUG 25...	12	3	.300	130	2	31	40	42	1200	4.0

MISCELLANEOUS FIELD MEASUREMENTS, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)
MAR 01...	1526	15	236	.3
JUN 30...	1754	344	79	15.1

09111500 SLATE RIVER NEAR CRESTED BUTTE, CO--Continued

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
NOV				
19...	0900	18	2	.10
JAN				
06...	1515	15	1	.06
APR				
14...	0830	106	6	1.9
JUN				
02...	1515	662	8	15
JUL				
21...	1430	89	1	.12
AUG				
25...	0850	52	3	.46

384852106541500 SLATE RIVER ABOVE EAST RIVER NEAR CRESTED BUTTE, CO.

WATER-QUALITY RECORDS

LOCATION.--Lat 38°48'52", long 106°54'15", in $NW^1/_4NW^1/_4$ sec.28,T.14 S., R.85 W., Gunnison County, Hydrologic Unit 14020001, 100 ft upstream from confluence with East River, and 4.7 mi southeast of Crested Butte.

DRAINAGE AREA.--Not determined.

PERIOD OF RECORD--April 1995 to current year.

REMARKS.--No previous water-quality data prior to April 1995.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)
NOV								
20...	0900	20	196	7.7	.4	10.0	--	K1
APR								
21...	1125	202	132	7.8	4.0	9.2	.6	K6
JUN								
03...	1115	855	79	7.6	6.5	10.1	.1	K8
JUL								
21...	1100	130	148	7.9	14.5	7.6	--	27
AUG								
25...	1210	72	184	8.1	14.7	--	.2	17

DATE	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)
NOV								
20...	<.010	.186	.042	.14	<.10	.020	.010	.014
APR								
21...	<.010	.132	.053	.33	.18	.060	.013	.017
JUN								
03...	<.010	.110	.022	.17	.12	.035	<.004	.017
JUL								
21...	<.010	.082	<.020	.17	E.10	.009	.004	<.010
AUG								
25...	<.010	.132	<.020	.18	.12	.020	.013	<.010

E Estimated.
K Based on non-ideal colony count.

09112200 EAST RIVER BELOW CEMENT CREEK NEAR CRESTED BUTTE, CO

LOCATION.--Lat 38°47'03", long 106°52'13", in $NE^1/_4NE^1/_4$ sec.3, T.15 S., R.85 W., Gunnison County, Hydrologic Unit 14020001, on left bank 11 ft downstream from bridge on State Highway 135, 1.6 mi downstream from Cement Creek, and 8.5 mi southeast of Crested Butte.

DRAINAGE AREA.--238 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1963 to September 1972, October 1979 to September 1981, October 1993 to current year.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 8,440 ft above sea level, from topographic map. Prior to Oct. 1993, water-stage recorder 0.5 mi upstream, at different datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. Diversions for irrigation of about 4,500 acres upstream and downstream from station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	92	100	79	69	63	60	158	381	1550	1040	369	202
2	96	113	81	68	65	62	140	354	1580	1020	350	230
3	83	104	77	e64	62	60	124	329	1570	935	313	263
4	104	90	77	69	e60	62	119	308	1630	907	297	247
5	98	86	68	66	62	61	117	271	1490	827	300	209
6	91	92	65	66	62	61	114	253	1230	788	320	191
7	95	90	e60	66	62	59	135	266	1160	718	281	177
8	97	88	e63	65	63	62	163	388	1430	714	256	168
9	98	87	71	e62	64	58	152	553	1630	672	245	163
10	100	84	e66	65	63	61	132	633	1700	634	248	158
11	94	82	e55	63	63	59	131	484	1530	581	277	152
12	90	91	e60	63	e56	61	173	438	1590	557	260	153
13	89	87	e64	62	e58	56	247	518	1670	511	227	144
14	87	92	e62	e55	e64	58	303	682	1730	494	216	137
15	86	93	e60	e57	60	63	271	721	1760	475	269	161
16	85	94	e62	e56	e60	65	226	809	1570	469	289	164
17	84	93	e64	60	60	68	215	813	1710	475	252	158
18	80	91	e66	63	58	75	275	878	1690	463	236	154
19	80	88	67	64	60	85	343	1090	1660	492	240	179
20	82	79	68	65	68	99	439	1300	1540	490	252	269
21	86	91	67	65	66	126	495	1460	1520	448	295	227
22	86	89	e58	65	59	157	444	1510	1660	466	282	191
23	91	85	e50	66	e58	162	375	1640	1600	492	242	183
24	93	81	e52	66	62	188	372	1770	1570	451	239	214
25	94	80	e56	65	61	239	395	1750	1540	460	225	228
26	121	81	60	67	59	280	351	1610	1480	430	232	217
27	118	82	63	66	60	265	325	1600	1380	390	205	198
28	127	84	65	e56	63	214	354	1620	1290	377	202	176
29	107	89	67	e54	---	201	340	1810	1160	377	194	163
30	106	85	67	e57	---	208	450	1680	1060	359	184	160
31	105	---	68	e64	---	176	---	1670	---	356	199	---
TOTAL	2945	2671	2008	1959	1721	3511	7878	29589	45680	17868	7996	5636
MEAN	95.0	89.0	64.8	63.2	61.5	113	263	954	1523	576	258	188
MAX	127	113	81	69	68	280	495	1810	1760	1040	369	269
MIN	80	79	50	54	56	56	114	253	1060	356	184	137
AC-FT	5840	5300	3980	3890	3410	6960	15630	58690	90610	35440	15860	11180

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 1999, BY WATER YEAR (WY)

MEAN	117	90.4	70.8	62.6	58.9	71.3	233	1024	1389	603	221	142
MAX	188	125	96.2	83.2	76.0	113	404	1606	2450	1796	609	271
(WY)	1966	1998	1966	1971	1971	1999	1971	1996	1995	1995	1995	1965
MIN	58.5	62.4	51.7	43.8	42.7	43.5	77.0	406	633	181	91.7	64.3
(WY)	1964	1964	1964	1995	1964	1964	1964	1981	1981	1981	1981	1994

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1964 - 1999	
ANNUAL TOTAL	99760		129462			
ANNUAL MEAN	273		355		341	
HIGHEST ANNUAL MEAN					531	1995
LOWEST ANNUAL MEAN					162	1981
HIGHEST DAILY MEAN	1400	Jun 3	1810	May 29	3610	Jun 17 1995
LOWEST DAILY MEAN	e50	Dec 23	e50	Dec 23	36	Jan 24 1995
ANNUAL SEVEN-DAY MINIMUM	58	Dec 22	58	Dec 22	40	Feb 21 1964
INSTANTANEOUS PEAK FLOW			2010	May 29	4350	Jun 18 1995
INSTANTANEOUS PEAK STAGE			3.84	May 29	a5.06	Jun 18 1995
ANNUAL RUNOFF (AC-FT)	197900		256800		247100	
10 PERCENT EXCEEDS	851		1330		1070	
50 PERCENT EXCEEDS	101		152		110	
90 PERCENT EXCEEDS	66		61		56	

e Estimated
a Maximum gage height for period of record, 8.30 ft, Jun 12, 1980, from floodmarks, site and datum then in use.

09112200 EAST RIVER BELOW CEMENT CREEK NEAR CRESTED BUTTE, CO--Continued
(National Water-Quality Assessment Program station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1993 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: May 1995 to May 1997.
WATER TEMPERATURE: May 1995 to September 1998.
DISSOLVED OXYGEN: May 1995 to May 1997.

INSTRUMENTATION.--Water-quality monitor with satellite telemetry May 1995 to May 1997. Water temperature sensor and logger May 1997 to September 1998.

REMARKS.--Upper Colorado River Basin National Water Quality Assessment station (NAWQA).

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 366 microsiemens Dec. 15, 1995; minimum, 125 microsiemens June 22, 1995.
WATER TEMPERATURE: Maximum, 18.5°C Aug. 7, 1998; minimum, 0.0°C on many days during winter months.
DISSOLVED OXYGEN: Maximum, 13.5 mg/L Feb. 17, 1997 (may have been higher during periods of missing record); minimum 6.7 mg/L July 24, 1996 (may have been lower during periods of missing record).

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
NOV										
18...	0820	78	286	8.1	1.1	.44	9.9	.6	K5	140
JAN										
06...	0950	70	287	8.2	.4	--	10.8	--	<1	--
FEB										
24...	1300	68	278	8.8	3.8	--	11.6	--	--	130
MAR										
11...	1215	54	282	8.6	4.2	--	11.8	--	<1	140
APR										
05...	1620	152	255	8.0	5.4	--	9.7	--	<1	130
21...	0830	461	198	8.0	2.5	16	9.8	.3	<4	92
MAY										
12...	0920	346	231	8.4	2.7	--	9.9	--	<1	110
25...	1800	1510	162	8.1	9.6	--	8.3	--	K9	73
JUN										
02...	1040	1550	159	8.0	5.3	10	9.0	.1	--	74
15...	1715	1660	160	8.0	8.6	--	8.2	--	92	77
JUL										
13...	1245	497	231	8.3	14.0	--	7.7	--	9	110
AUG										
26...	0900	231	271	8.1	10.1	3.1	8.3	.2	140	130
SEP										
14...	1410	135	290	8.2	11.4	--	8.4	--	E1	140

DATE	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	ALKA-LINITY WAT.DIS FET LAB CACO3 (MG/L) (29801)
NOV									
18...	43	7.5	--	--	--	--	--	--	--
JAN									
06...	--	--	--	--	--	--	--	--	--
FEB									
24...	39	7.0	5.4	.2	1.0	113	7	105	--
MAR									
11...	42	7.8	5.3	.2	1.1	115	8	108	120
APR									
05...	40	6.9	4.0	.2	.93	111	--	91	110
21...	29	5.0	2.8	.1	.75	84	--	69	79
MAY									
12...	33	5.9	3.2	.1	.69	100	--	82	94
25...	23	3.7	1.6	.1	1.9	71	--	58	68
JUN									
02...	23	3.8	1.6	.1	.45	78	--	64	68
15...	24	3.9	1.5	.1	.30	71	--	58	68
JUL									
13...	35	5.5	2.2	.1	.64	--	--	--	99
AUG									
26...	40	6.5	3.0	.1	.81	131	--	107	110
SEP									
14...	45	7.6	3.5	.1	.89	124	2	106	120

E Estimated.
K Based on non-ideal colony count.

09112200 EAST RIVER BELOW CEMENT CREEK NEAR CRESTED BUTTE, CO--Continued
(National Water-Quality Assessment Program station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS-SOLVED (TONS PER DAY) (70302)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)
NOV									
18...	--	--	--	--	--	--	--	--	<.001
JAN									
06...	--	--	--	--	--	--	--	--	.002
FEB									
24...	35	1.9	.26	6.7	174	160	.24	31.9	.002
MAR									
11...	32	2.4	.21	6.5	182	163	.25	26.5	.003
APR									
05...	32	2.0	.18	6.4	160	148	.22	65.7	.002
21...	22	1.3	.11	5.7	123	109	.17	153	.001
MAY									
12...	21	1.9	.12	6.3	143	122	.19	134	.001
25...	12	.59	.11	5.1	94	83	.13	383	.001
JUN									
02...	12	.76	<.10	5.0	--	85	.12	357	.001
15...	12	.87	<.10	4.9	102	83	.14	457	.001
JUL									
13...	18	.85	<.10	5.7	132	--	--	--	.001
AUG									
26...	24	.93	<.10	6.5	154	147	.21	96.0	.002
SEP									
14...	33	1.1	.14	7.0	169	162	.23	61.6	.001

DATE	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)
NOV									
18...	.094	.003	<.10	<.10	.007	.003	.002	--	--
JAN									
06...	.207	.006	<.10	E.10	.013	.008	.010	--	--
FEB									
24...	.062	.007	.13	E.10	.030	.012	.014	.8	.3
MAR									
11...	.088	.010	.22	E.10	.048	.025	.025	1.0	.3
APR									
05...	.104	.022	.14	E.10	.027	.016	.014	1.4	.2
21...	.120	.037	.37	.20	.069	.009	.007	2.1	.5
MAY									
12...	.120	.042	.19	.14	.023	.008	.007	2.1	.3
25...	.074	.007	.27	.14	.046	<.004	.003	2.6	.5
JUN									
02...	.065	.002	.15	.13	.024	.004	.002	2.2	.3
15...	.041	.004	.17	E.10	.021	<.004	.001	2.1	.2
JUL									
13...	.037	.003	.15	.10	.008	<.004	.001	1.3	.2
AUG									
26...	.085	.003	.13	<.10	.017	.004	.002	1.0	.2
SEP									
14...	.054	.074	E.10	E.10	.005	.004	.003	1.0	.3

DATE	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L) (38260)
NOV									
18...	<10	<1.0	<1.0	E9.7	<1.0	<3.0	<.20	E8.2	.02
APR									
21...	22	<1.0	1.7	25	<1.0	42	<.20	55	<.02
JUN									
02...	15	<1.0	1.0	12	<1.0	6.8	<.20	E18	.13
AUG									
26...	<10	<1.0	<1.0	<10	<1.0	4.4	<.20	E8.9	<.02

E Estimated.

09112200 EAST RIVER BELOW CEMENT CREEK NEAR CRESTED BUTTE, CO--Continued
(National Water-Quality Assessment Program station)

MISCELLANEOUS FIELD MEASUREMENTS, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DISCHARGE, INST. CUBIC FEET PER SECOND (00061)	SPECIFIC CONDUCTANCE (US/CM) (00095)	TEMPERATURE WATER (DEG C) (00010)
OCT				
20...	1430	82	308	8.2
NOV				
19...	1210	81	295	3.9
MAR				
01...	1430	59	287	6.9
APR				
07...	1601	129	274	10.2
SEP				
03...	0903	239	268	9.4

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DISCHARGE, INST. CUBIC FEET PER SECOND (00061)	SEDIMENT,[a] SUSPENDED (MG/L) (80154)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY) (80155)
NOV				
18...	0820	78	<.5	e.06
FEB				
24...	1300	68	3	.50
APR				
21...	0830	461	40	50
JUN				
02...	1040	1550	19	79
AUG				
26...	0900	231	10	6.0

a Suspended sediment concentration determined from a subsample split except for equal width-increment sediment sample collected Apr. 21.
e Estimated.

09112500 EAST RIVER AT ALMONT, CO

LOCATION.--Lat 38°39'52", long. 106°50'51", in NW$^{1}/_{4}$SE$^{1}/_{4}$ sec.22, T.51 N., R.1 E., Gunnison County, Hydrologic Unit 14020001, on left bank at Almont, 200 ft upstream from bridge on State Highway 135, and 400 ft upstream from confluence with Taylor River.

DRAINAGE AREA.--289 mi^{2}.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April to October 1905, July 1910 to September 1922, October 1934 to current year. Monthly discharges only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 1313: 1911. WSP 1733: 1952. WSP 1924: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 8,006.29 ft above sea level. Apr. 16 to Sept. 30, 1905, and July 27, 1910 to Apr. 30, 1922, nonrecording gages at bridge 200 ft downstream, at different datums. Oct. 1, 1934 to Sept. 22, 1954, water-stage recorder at present site at datum 2.00 ft higher.

REMARKS.--Records good except for estimated daily discharges, which are poor. Diversions for irrigation of about 7,400 acres upstream from station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	78	107	80	63	e57	64	136	318	1300	939	366	231
2	83	122	82	64	e59	60	128	288	1380	933	361	242
3	75	120	80	66	e57	56	113	271	1380	884	351	260
4	85	106	79	76	e62	56	107	254	1440	855	343	253
5	88	98	73	77	e60	55	e96	230	1340	770	339	223
6	82	104	68	62	e57	53	e93	214	1100	736	335	210
7	83	102	71	62	e57	51	e100	215	994	691	327	202
8	86	100	63	61	e57	55	e125	295	1220	686	309	195
9	87	99	e75	61	e58	51	e140	423	1400	635	284	190
10	88	96	e73	61	e58	54	e122	504	1490	596	275	186
11	89	88	e65	60	e57	52	e118	397	1340	552	286	180
12	85	100	e72	59	e55	56	e130	343	1390	510	281	180
13	85	93	78	59	e56	49	e180	381	1450	477	260	180
14	85	99	76	57	e57	51	243	508	1520	465	247	172
15	83	99	74	59	e59	56	230	542	1560	446	268	187
16	85	98	78	59	e57	60	196	630	1400	435	298	192
17	94	95	77	59	e57	63	182	645	1520	440	301	186
18	94	96	77	59	e58	72	218	688	1510	425	293	180
19	98	92	77	59	e60	82	266	864	1490	446	287	193
20	103	81	71	59	e59	99	345	1070	1400	456	286	267
21	105	84	68	61	e56	117	395	1240	1380	418	299	243
22	109	91	73	61	e54	134	367	1280	1480	444	290	211
23	110	88	e58	62	e55	139	312	1430	1430	462	262	205
24	113	84	e58	62	e57	153	294	1560	1410	431	252	217
25	110	83	e63	62	e56	182	329	1570	1370	430	243	240
26	128	83	e65	62	e57	214	290	1450	1320	407	247	226
27	130	84	e67	62	e58	209	261	1420	1230	385	232	215
28	131	85	e68	e59	e57	173	289	1370	1160	378	230	198
29	114	91	e70	e51	---	161	273	1580	1060	375	227	187
30	107	86	69	e51	---	169	362	1450	969	374	219	182
31	107	---	65	e57	---	150	---	1440	---	367	220	---
TOTAL	3000	2854	2213	1892	1607	2996	6440	24870	40433	16848	8818	6233
MEAN	96.8	95.1	71.4	61.0	57.4	96.6	215	802	1348	543	284	208
MAX	131	122	82	77	62	214	395	1580	1560	939	366	267
MIN	75	81	58	51	54	49	93	214	969	367	219	172
AC-FT	5950	5660	4390	3750	3190	5940	12770	49330	80200	33420	17490	12360

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1911 - 1999, BY WATER YEAR (WY)

MEAN	117	95.6	73.3	62.3	59.5	68.3	247	1028	1389	573	237	131
MAX	279	172	128	102	90.4	137	670	1978	2670	2037	659	271
(WY)	1912	1987	1985	1985	1962	1986	1936	1936	1920	1957	1995	1965
MIN	56.3	47.8	42.0	25.5	28.7	43.1	77.2	222	289	93.5	25.0	52.4
(WY)	1978	1978	1977	1940	1940	1976	1964	1977	1977	1977	1913	1977

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1911 - 1999	
ANNUAL TOTAL	99009		118204			
ANNUAL MEAN	271		324		341	
HIGHEST ANNUAL MEAN					574	1995
LOWEST ANNUAL MEAN					104	1977
HIGHEST DAILY MEAN	1480	Jun 3	1580	May 29	5000	Jun 12 1918
LOWEST DAILY MEAN	54	Mar 8	49	Mar 13	19	Aug 13 1913
ANNUAL SEVEN-DAY MINIMUM	59	Mar 8	53	Mar 7	21	Jan 15 1940
INSTANTANEOUS PEAK FLOW			1730	May 24	a6500	Jun 15 1921
INSTANTANEOUS PEAK STAGE			5.76	May 24	b6.60	Jun 15 1921
ANNUAL RUNOFF (AC-FT)	196400		234500		247000	
10 PERCENT EXCEEDS	806		1180		1060	
50 PERCENT EXCEEDS	110		134		109	
90 PERCENT EXCEEDS	64		58		55	

e Estimated
a Site and datum then in use, from rating curve extended above 3000 ft^{3}/s.
b Maximum gage height 8.41 ft, Jun 18, 1995, present datum.

PERIOD OF RECORD--October 1990 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
NOV 18...	1010	92	288	8.3	1.9	.43	10.3	.6	<1	150
JAN 06...	1230	61	306	8.5	1.4	--	11.2	--	<1	--
APR 21...	1200	386	211	8.2	5.3	15	9.9	.4	K1	95
JUN 02...	1345	1350	179	8.0	8.7	4.0	8.1	.1	--	85
JUL 13...	1700	453	263	8.9	17.0	--	7.2	--	12	--
AUG 26...	1120	255	291	8.3	13.4	.46	7.9	.1	14	140

DATE	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)
NOV 18...	46	8.1	<.010	.100	.024	<.10	<.10	<.050	<.050	<.010
JAN 06...	--	--	<.010	.099	<.020	<.10	<.10	.007	<.004	<.010
APR 21...	30	5.1	<.010	.119	.031	.36	.13	.064	.007	.015
JUN 02...	27	4.4	<.010	--	.030	.13	.13	.018	<.004	--
JUL 13...	--	--	<.010	<.050	<.020	.12	.15	.009	<.004	<.010
AUG 26...	43	7.0	<.010	.069	<.020	.16	E.10	.007	<.004	<.010

DATE	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
NOV 18...	<10	<1.0	<1.0	<10	<1.0	3.1	<.20	<20
APR 21...	24	<1.0	1.4	14	<1.0	23	<.20	25
JUN 02...	11	<1.0	<1.0	11	<1.0	5.1	<.20	E18
AUG 26...	<10	<1.0	<1.0	10	<1.0	4.0	<.20	<20

E Estimated.
K Based on non-ideal colony count.

MISCELLANEOUS FIELD MEASUREMENTS, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)
OCT 20...	1500	107	327	8.4
NOV 19...	1415	83	310	3.9
MAR 02...	0921	56	325	1.6
MAY 26...	1728	1360	186	10.3
JUN 29...	1456	992	210	13.5
SEP 03...	0937	267	292	10.4

09112500 EAST RIVER AT ALMONT, CO--Continued

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
NOV				
18...	1010	92	1	.12
APR				
21...	1200	386	32	33
JUN				
02...	1345	1350	16	60
AUG				
26...	1120	255	3	2.0

09113980 OHIO CREEK ABOVE MOUTH, NEAR GUNNISON, CO

LOCATION.--Lat 38°35'16", long 106°55'51", in $SW^1/_4SW^1/_4$ sec.13, T.50 N., R.1 W., Gunnison County, Hydrologic Unit 14020002, on left bank at County Road 48 bridge, 1.1 mi upstream from confluence with the Gunnison River, and 3.1 mi north of Gunnison.

DRAINAGE AREA.--161 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--December 1998 to September 1999.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 7,770 ft above sea level, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. Diversions for irrigation of about 10,000 acres upstream from station.

EXTREMES FOR CURRENT YEAR.--Maximum discharge for period December to September, 497 ft^3/s, June 18, gage height, 4.45 ft; minimum daily, 13 ft^3/s, Feb. 19.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	e19	e17	22	41	49	248	141	150	61
2	---	---	---	e19	e17	24	37	60	249	144	153	69
3	---	---	---	e19	e17	29	33	72	260	157	128	77
4	---	---	31	e20	e17	23	30	66	244	148	123	e74
5	---	---	31	e20	e18	20	29	49	225	117	129	e68
6	---	---	24	e20	e18	18	29	44	216	91	149	e62
7	---	---	e23	e19	e19	23	47	42	189	96	118	e58
8	---	---	e22	e19	e19	19	51	72	185	131	110	e54
9	---	---	e23	e20	21	22	39	101	195	142	110	e52
10	---	---	e24	e19	e19	20	32	110	210	154	111	e49
11	---	---	e22	e19	e16	23	29	71	200	156	119	e45
12	---	---	e23	e18	e15	20	34	45	201	145	111	e41
13	---	---	e23	e16	e16	20	46	47	205	134	100	e39
14	---	---	e22	e18	e15	24	50	77	208	123	100	e38
15	---	---	e23	e20	e14	25	46	105	248	124	141	e38
16	---	---	e24	e17	e14	29	36	137	249	128	167	e39
17	---	---	e22	e18	e15	37	31	138	347	148	106	38
18	---	---	e21	18	e14	44	28	150	385	143	77	35
19	---	---	e20	18	13	55	37	204	309	187	81	40
20	---	---	e18	18	e14	73	44	258	276	179	84	76
21	---	---	e17	19	e15	86	50	265	280	151	82	56
22	---	---	e17	e19	15	95	46	280	298	147	87	39
23	---	---	e18	e19	e16	85	40	323	267	176	70	40
24	---	---	e20	e19	e18	84	45	344	249	240	78	45
25	---	---	e20	e19	e20	92	47	296	225	251	69	49
26	---	---	e20	e19	22	88	41	273	213	194	70	43
27	---	---	e20	e19	25	80	41	287	191	153	74	41
28	---	---	e20	e18	23	62	34	283	183	146	84	38
29	---	---	e20	e16	---	57	29	328	159	157	75	37
30	---	---	e20	e16	---	59	43	316	153	156	67	35
31	---	---	e20	e16	---	46	---	290	---	148	64	---
TOTAL	---	---	---	573	482	1404	1165	5182	7067	4707	3187	1476
MEAN	---	---	---	18.5	17.2	45.3	38.8	167	236	152	103	49.2
MAX	---	---	---	20	25	95	51	344	385	251	167	77
MIN	---	---	---	16	13	18	28	42	153	91	64	35
AC-FT	---	---	---	1140	956	2780	2310	10280	14020	9340	6320	2930

e Estimated

09113980 OHIO CREEK ABOVE MOUTH NEAR GUNNISON, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD--October 1996 to current year.

REMARKS--Prior to September 1998, published as site number 383516106555000.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
NOV										
18...	1130	42	227	8.2	3.8	8.3	10.1	.7	K4	110
JAN										
06...	1345	20	191	7.9	3.0	--	10.2	--	K1	--
APR										
21...	1330	62	120	7.9	8.9	--	8.5	.2	110	--
JUN										
03...	0815	277	201	8.0	6.3	10	8.8	.2	--	88
JUL										
14...	0850	131	280	8.0	13.3	--	7.5	--	K270	--
AUG										
25...	1330	71	181	8.2	18.2	--	7.8	--	60	--

DATE	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)
NOV										
18...	29	7.8	<.001	.012	.003	.14	.15	.067	.020	.017
JAN										
06...	--	--	<.001	.048	.010	<.10	E.10	.033	.020	.021
APR										
21...	--	--	<.001	.008	.002	.35	.18	.083	.018	.013
JUN										
03...	25	6.5	.001	.016	<.002	.41	.29	.080	.034	.024
JUL										
14...	--	--	.001	.009	.003	.40	.30	.073	.027	.019
AUG										
25...	--	--	.001	.005	.025	.24	.18	.056	.035	.030

DATE	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L) (38260)
NOV									
18...	<10	<1.0	<1.0	38	<1.0	38	<.20	<20	.02
JUN									
03...	<10	<1.0	1.0	60	<1.0	26	<.20	<20	.09

E Estimated.
K Based on non-ideal colony count.

MISCELLANEOUS FIELD MEASUREMENTS, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)
NOV				
20...	1215	24	293	2.4
DEC				
02...	1122	21	280	3.1
MAR				
02...	1705	37	237	.8
APR				
07...	0823	40	179	.8
MAY				
19...	1555	174	158	15.1
25...	1840	274	156	12.1
JUN				
29...	1412	162	245	18.1
SEP				
01...	1340	59	176	15.6

09113980 OHIO CREEK ABOVE MOUTH, NEAR GUNNISON, CO--Continued

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
NOV				
18...	1130	42	14	1.6
JUN				
03...	0815	277	35	26

09114500 GUNNISON RIVER NEAR GUNNISON, CO

LOCATION.--Lat 38°32'31", long. 106°56'57", in $NW^1/_4NW^1/_4$ sec.2, T.49 N., R.1 W., Gunnison County, Hydrologic Unit 14020002, on right bank 0.7 mi downstream from Antelope Creek and 1.2 mi west of Gunnison.

DRAINAGE AREA.--1,012 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1910 to December 1928, October 1944 to current year. Monthly discharges only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 1313: 1911, 1916.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 7,655 ft above sea level, from topographic map. Nov. 25, 1910 to Dec. 31, 1928, nonrecording gages (supplementary water-stage recorder Apr. 28, 1916 to June 17, 1918) at bridge about 0.6 mi downstream at various datums. April 11, 1945 to July 28, 1970, water-stage recorder at sites 0.4 mi upstream at different datum.

REMARKS.--Records good except for the period Dec. 6 to Feb. 6, which is poor. Flow regulated by Taylor Park Reservoir (station 09108500), 37 mi upstream from station. Diversions for irrigation of about 22,000 acres upstream from station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	324	352	273	272	e230	232	335	592	2090	1630	968	675
2	327	375	275	248	e235	238	324	592	2200	1630	958	740
3	324	371	272	238	e230	230	301	590	2270	1600	933	750
4	366	345	270	e250	e240	229	290	580	2320	1560	904	734
5	371	328	264	e252	e255	227	288	535	2190	1420	906	692
6	351	338	252	e250	254	226	284	515	1840	1350	932	669
7	356	336	e230	252	252	224	300	512	1650	1340	868	646
8	358	335	244	245	253	229	330	597	1870	1390	827	636
9	356	335	268	237	253	220	312	758	2150	1340	812	662
10	360	328	257	250	246	227	302	877	2310	1280	848	658
11	361	320	255	240	237	228	294	729	2120	1220	887	654
12	360	343	262	241	241	231	319	641	2170	1150	844	647
13	359	334	266	242	254	206	381	670	2240	1050	792	641
14	356	333	276	230	243	208	430	800	2320	992	773	631
15	352	331	275	232	243	221	471	877	2490	969	821	662
16	352	330	273	e230	229	227	487	989	2340	960	803	669
17	365	327	280	e255	240	235	523	1030	2560	985	762	650
18	371	326	262	e270	238	250	554	1090	2580	971	747	638
19	373	315	262	254	243	272	621	1330	2420	1100	750	663
20	384	297	272	254	233	314	660	1590	2240	1120	736	796
21	384	294	233	254	231	349	664	1840	2240	1020	747	743
22	397	311	e190	244	237	371	604	1930	2440	1050	748	690
23	393	295	e210	254	229	362	560	2260	2400	1090	707	683
24	331	287	e225	266	235	386	537	2460	2300	1120	705	698
25	329	285	e250	253	229	419	578	2380	2210	1120	692	723
26	382	279	e265	259	226	459	542	2160	2100	1050	711	703
27	385	281	e265	250	224	453	515	2140	1910	984	683	674
28	416	282	e265	231	225	396	553	2090	1810	968	687	657
29	374	293	e265	e200	---	378	537	2570	1730	977	673	639
30	357	286	e255	e210	---	399	649	2430	1670	964	650	599
31	359	---	e260	e235	---	361	---	2360	---	956	651	---
TOTAL	11233	9592	7971	7598	6685	9007	13545	40514	65180	36356	24525	20322
MEAN	362	320	257	245	239	291	452	1307	2173	1173	791	677
MAX	416	375	280	272	255	459	664	2570	2580	1630	968	796
MIN	324	279	190	200	224	206	284	512	1650	956	650	599
AC-FT	22280	19030	15810	15070	13260	17870	26870	80360	129300	72110	48650	40310

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1911 - 1999, BY WATER YEAR (WY)

MEAN	405	301	238	212	204	252	613	1847	2528	1296	746	551
MAX	805	614	616	395	365	582	1381	3605	6074	4621	1510	908
(WY)	1969	1968	1966	1966	1971	1986	1962	1914	1918	1957	1957	1985
MIN	186	162	128	119	111	117	214	283	425	288	317	221
(WY)	1978	1964	1963	1945	1955	1964	1964	1977	1977	1977	1977	1924

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1911 - 1999	
ANNUAL TOTAL	220140		252528			
ANNUAL MEAN	603		692		768	
HIGHEST ANNUAL MEAN					1278	1995
LOWEST ANNUAL MEAN					256	1977
HIGHEST DAILY MEAN	2310	Jun 3	2580	Jun 18	11400	Jun 11 1918
LOWEST DAILY MEAN	e185	Jan 21	e190	Dec 22	80	Dec 27 1962
ANNUAL SEVEN-DAY MINIMUM	194	Jan 26	220	Mar 9	95	Dec 25 1962
INSTANTANEOUS PEAK FLOW			2800	May 24	a11400	Jun 13 1918
INSTANTANEOUS PEAK STAGE			3.23	May 24	b6.74	Jul 1 1957
ANNUAL RUNOFF (AC-FT)	436600		500900		556200	
10 PERCENT EXCEEDS	1400		1840		1920	
50 PERCENT EXCEEDS	367		382		395	
90 PERCENT EXCEEDS	210		234		180	

e Estimated
a Site and datum then in use, from rating curve extended above 5000 ft^3/s, gage height, 4.05 ft.
b Site and datum then in use.

WATER-QUALITY RECORDS

PERIOD OF RECORD--April 1995 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
NOV 19...	0850	307	221	8.2	.5	.48	10.8	.6	K6	110
JAN 07...	1230	245	206	8.5	.1	--	12.2	--	<1	--
APR 22...	0920	610	208	7.8	4.8	--	9.7	.6	K9	--
JUN 03...	1030	2350	184	8.2	6.5	10	8.8	.2	--	84
JUL 14...	1130	1010	226	8.2	12.9	--	8.2	--	25	--
AUG 25...	1200	689	198	8.1	14.3	--	8.1	--	12	--

DATE	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)
NOV 19...	32	6.9	<.010	.071	.025	<.10	<.10	<.050	<.050	.010
JAN 07...	--	--	<.010	<.050	<.020	<.10	<.10	<.004	<.004	<.010
APR 22...	--	--	<.010	.101	<.020	.29	.13	.035	.006	.013
JUN 03...	25	5.1	<.010	.146	<.020	.23	.15	.041	.007	.020
JUL 14...	--	--	<.010	<.050	<.020	.17	.14	.017	.007	.010
AUG 25...	--	--	<.010	<.050	<.020	.22	.17	.015	.006	<.010

DATE	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
NOV 19...	<10	<1.0	<1.0	14	<1.0	9.6	<.20	<20
JUN 03...	E6.6	<1.0	<1.0	23	<1.0	12	<.20	E11

E Estimated.
K Based on non-ideal colony count.

MISCELLANEOUS FIELD MEASUREMENTS, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)
NOV 19...	0850	307	221	.5	JUN 03...	1030	2350	184	6.5

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
NOV 19...	0850	307	1	1.1
JUN 03...	1030	2350	28	175

09115500 TOMICHI CREEK AT SARGENTS, CO

LOCATION.--Lat 38°24'42", long 106°25'20", in $SW^1/_4SW^1/_4$ sec.21, T.48 N., R.5 E., Saguache County, Hydrologic Unit 14020003, on right bank 300 ft from U.S. Highway 50, 0.5 mi downstream from Marshall Creek, and 0.8 mi south of Sargents.

DRAINAGE AREA.-- 149 mi^2.

PERIOD OF RECORD.--October 1916 to September 1922, October 1937 to September 1972, October 1992 to current year. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WSP 1313: 1922(M). WRD Colo. 1967: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 8,416 ft above sea level, from topographic map. May 12 to Oct. 5, 1917, nonrecording gage. Oct. 6, 1917 to Sept. 30, 1922, water-stage recorder, at railroad bridge 1,000 ft upstream at different datum. Apr. 18, 1938 to Sept. 9, 1953, water-stage recorder at present site at datum 1.0 ft higher.

REMARKS.--Records good except for estimated daily discharges, which are poor. Diversions for irrigation of about 1,900 acres upstream from station. Larkspur ditch diverts water upstream from station to Arkansas River basin. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	56	35	37	e23	e22	e22	e33	69	238	65	52	43
2	56	36	38	e21	e21	e23	e31	65	242	63	52	45
3	45	35	39	e20	e22	e25	e30	65	236	70	78	44
4	57	32	42	e21	e23	e29	e30	70	231	71	59	39
5	45	34	40	e22	e24	e24	e32	61	220	60	59	36
6	39	35	38	e21	e26	e25	e35	59	198	54	60	34
7	42	33	e31	e21	e28	e24	38	61	187	54	52	32
8	44	35	e27	e20	e24	e24	43	69	193	53	46	31
9	42	34	e25	e20	e23	e25	37	81	190	54	45	30
10	42	e33	e32	e20	e22	e25	37	92	171	50	54	30
11	40	e33	e28	e21	e20	e24	35	81	159	46	56	30
12	37	e35	e26	e20	e21	e23	38	77	155	50	48	30
13	37	e33	e29	e18	e22	e23	45	85	147	55	43	29
14	36	e33	e27	e18	e23	e23	39	102	140	51	40	29
15	35	e34	e26	e20	e22	e24	37	115	173	57	45	30
16	34	e36	e26	e20	e21	e25	34	130	162	57	44	31
17	36	e35	e27	e22	e22	e27	37	122	163	61	43	30
18	35	e33	e27	e22	e21	e27	39	120	156	57	44	29
19	35	e30	e28	e22	e22	e31	41	142	142	80	40	31
20	34	e28	e27	e23	e22	e34	45	176	134	76	42	50
21	33	e29	e23	e23	e21	e37	50	200	142	64	45	41
22	33	e30	e17	e21	e20	e38	50	221	133	60	43	34
23	33	e29	e16	e22	e19	e37	44	239	116	70	44	32
24	32	e28	e19	e22	e21	e37	42	247	106	53	38	33
25	32	e28	e20	e22	e21	e39	52	243	99	53	42	35
26	37	e28	e22	e22	e22	e43	47	248	94	57	43	32
27	38	e28	e24	e19	e21	e41	45	244	86	57	41	30
28	45	e29	e24	e17	e21	e39	51	227	78	52	40	29
29	38	33	e24	e18	---	e38	53	246	73	50	41	29
30	37	34	e23	e20	---	e39	91	237	69	54	39	30
31	36	---	e22	e23	---	e36	---	248	---	50	40	---
TOTAL	1221	968	854	644	617	931	1261	4442	4633	1804	1458	1008
MEAN	39.4	32.3	27.5	20.8	22.0	30.0	42.0	143	154	58.2	47.0	33.6
MAX	57	36	42	23	28	43	91	248	242	80	78	50
MIN	32	28	16	17	19	22	30	59	69	46	38	29
AC-FT	2420	1920	1690	1280	1220	1850	2500	8810	9190	3580	2890	2000

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1917 - 1999, BY WATER YEAR (WY)

MEAN	31.8	28.1	23.6	21.8	22.3	28.1	67.8	202	204	66.3	40.0	29.6
MAX	48.9	38.1	39.0	43.2	49.6	50.3	139	382	588	255	128	59.5
(WY)	1971	1997	1996	1996	1996	1972	1962	1958	1957	1957	1957	1957
MIN	18.8	17.6	13.3	10.7	10.9	15.0	34.4	50.4	19.8	19.5	13.7	13.5
(WY)	1956	1967	1967	1967	1967	1970	1967	1954	1954	1940	1950	1950

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1917 - 1999	
ANNUAL TOTAL	23232		19841			
ANNUAL MEAN	63.6		54.4		63.9	
HIGHEST ANNUAL MEAN					122	1921
LOWEST ANNUAL MEAN					26.8	1967
HIGHEST DAILY MEAN	362	May 30	248	May 26	838	Jun 18 1995
LOWEST DAILY MEAN	e16	Dec 23	e16	Dec 23	6.0	Nov 16 1920
ANNUAL SEVEN-DAY MINIMUM	20	Dec 21	20	Jan 8	8.5	Sep 5 1959
INSTANTANEOUS PEAK FLOW			284	May 25	964	Jun 18 1995
INSTANTANEOUS PEAK STAGE			2.11	May 25	a4.03	Jun 18 1995
ANNUAL RUNOFF (AC-FT)	46080		39350		46270	
10 PERCENT EXCEEDS	156		125		157	
50 PERCENT EXCEEDS	35		37		30	
90 PERCENT EXCEEDS	24		22		18	

e Estimated
a Maximum gage height for period of record, 4.05 ft, Jun 16, 1917, and Jun 9, 1921, site and datum then in use.

09118450 COCHETOPA CREEK BELOW ROCK CREEK, NEAR PARLIN, CO

LOCATION.--Lat 38°20'08", long 106°46'18", in $SW^1/_4NE^1/_4$ sec.17, T.47 N., R.2 E. Saguache County, Hydrologic Unit 14020003, on left bank 0.75 mi downstream from Rock Creek and 12 mi southeast of Parlin.

DRAINAGE AREA.--334 mi^2.

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

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 8,470 ft above sea level, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. Diversions for irrigation of hay meadows upstream from station. Transmountain diversion by Tarbell ditch exports water upstream from station to Saguache Creek, since 1913. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	55	42	32	e22	19	e21	48	58	84	80	167	122
2	57	42	33	e21	19	e22	42	47	91	77	161	124
3	44	41	e31	e20	19	e22	31	68	90	70	148	125
4	58	38	e30	e21	18	e21	30	62	77	75	154	119
5	48	36	e28	e21	21	e19	30	49	69	75	166	111
6	44	35	e26	e21	20	e19	29	43	77	59	169	107
7	42	37	e25	e21	20	e20	31	40	66	55	181	104
8	43	36	e23	e20	23	e20	31	46	72	66	169	97
9	41	e37	e21	21	23	e20	29	51	91	102	156	92
10	40	e35	e22	e21	24	e21	25	46	109	70	181	87
11	39	e38	e23	e20	22	e21	26	46	110	52	204	84
12	38	e37	e22	e18	e21	e22	29	43	108	47	186	86
13	38	e37	e22	e18	21	e24	33	50	107	44	163	82
14	38	e37	e21	19	20	e26	33	84	108	43	151	78
15	37	e37	e21	21	21	e27	28	107	118	45	146	83
16	36	e37	e22	20	18	e30	26	116	128	49	145	96
17	40	37	e22	20	19	e33	27	114	140	58	136	86
18	40	37	e23	e22	19	e37	28	114	147	52	140	80
19	39	38	e23	e21	21	44	30	115	137	74	152	83
20	40	e34	e21	e21	20	51	36	107	140	81	149	90
21	42	e36	e19	21	20	56	44	99	153	78	155	80
22	41	e35	e17	19	20	57	39	95	143	85	148	72
23	42	e34	e19	e21	22	55	35	86	123	134	130	69
24	41	e33	e21	e21	22	54	34	94	118	112	122	71
25	40	e32	e22	e21	e22	53	35	90	118	108	138	70
26	48	e32	e23	e21	e22	60	32	84	117	111	141	64
27	48	e33	e23	19	e21	61	30	93	109	118	138	60
28	47	34	e23	e16	e20	52	34	84	106	114	137	59
29	43	36	e22	e18	---	47	38	81	96	109	134	58
30	42	34	e22	20	---	50	65	86	88	128	136	59
31	43	---	e23	19	---	49	---	84	---	155	128	---
TOTAL	1334	1087	725	625	577	1114	1008	2382	3240	2526	4731	2598
MEAN	43.0	36.2	23.4	20.2	20.6	35.9	33.6	76.8	108	81.5	153	86.6
MAX	58	42	33	22	24	61	65	116	153	155	204	125
MIN	36	32	17	16	18	19	25	40	66	43	122	58
AC-FT	2650	2160	1440	1240	1140	2210	2000	4720	6430	5010	9380	5150

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1981 - 1999, BY WATER YEAR (WY)

MEAN	37.3	31.3	23.4	20.3	20.9	32.4	53.9	86.9	93.9	56.3	68.3	47.4
MAX	72.6	49.9	39.5	36.6	33.4	52.3	135	413	240	130	153	90.8
(WY)	1983	1983	1985	1984	1986	1985	1987	1984	1984	1995	1999	1982
MIN	17.7	15.0	10.3	11.1	10.5	12.5	27.9	18.4	21.5	20.4	16.0	14.7
(WY)	1990	1993	1982	1982	1982	1982	1990	1989	1989	1996	1996	1996

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1981 - 1999	
ANNUAL TOTAL	16194		21947			
ANNUAL MEAN	44.4		60.1		47.9	
HIGHEST ANNUAL MEAN					106	1984
LOWEST ANNUAL MEAN					24.8	1994
HIGHEST DAILY MEAN	127	May 14	204	Aug 11	954	May 23 1984
LOWEST DAILY MEAN	e17	Dec 22	e16	Jan 28	8.4	Feb 7 1982
ANNUAL SEVEN-DAY MINIMUM	20	Dec 19	19	Jan 27	8.9	Feb 7 1982
INSTANTANEOUS PEAK FLOW			217	Aug 11	1120	May 23 1984
INSTANTANEOUS PEAK STAGE			a3.10	Aug 11	b4.49	May 23 1984
ANNUAL RUNOFF (AC-FT)	32120		43530		34720	
10 PERCENT EXCEEDS	77		132		94	
50 PERCENT EXCEEDS	38		42		34	
90 PERCENT EXCEEDS	22		21		16	

e Estimated
a Maximum gage, 3.97ft, Dec 11, backwater from ice.
b Maximum gage height, 5.64 ft, Mar 25, 1998, backwater from ice.

09119000 TOMICHI CREEK AT GUNNISON, CO

LOCATION.--Lat 38°31'18", long 106°56'25", in NE$^1/_4$SW$^1/_4$ sec.11, T.49 N., R.1 W., Gunnison County, Hydrologic Unit 14020003, on right bank 300 ft downstream from highway bridge, 1.8 mi southwest of Post Office in Gunnison, and 2.0 mi upstream from mouth.

DRAINAGE AREA.--1,061 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--November and December 1910 (gage heights and discharge measurements only), October 1937 to current year. Monthly discharges only for some periods, published in WSP 1313. Published as "near Gunnison" 1910.

REVISED RECORDS.--WSP 2124: Drainage area. WDR CO-86-2: 1985.

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 7,628.58 ft above sea level. Nov. 25 to Dec. 24, 1910, nonrecording gage 300 ft upstream at different datum. Apr. 20, 1938 to Oct. 2, 1940, water-stage recorder at present site at datum 1.00 ft higher.

REMARKS.--Records good except for estimated daily discharges, which are poor. Diversions for irrigation of about 24,000 acres upstream from station. Water diverted upstream from station by Larkspur ditch to Arkansas River basin since 1935 and by Tarbell ditch to Rio Grande basin since 1914.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	42	129	e92	e68	e60	e82	154	226	406	168	368	273
2	74	131	e85	e65	e60	e90	148	218	406	170	407	282
3	113	132	e80	e67	e62	e98	134	198	421	205	448	281
4	135	125	e74	e70	e65	110	116	188	408	185	433	271
5	170	114	e68	e69	e64	106	116	165	390	172	444	252
6	158	109	e69	e68	e66	100	118	144	387	159	433	239
7	151	114	e68	e67	e71	122	117	124	364	153	419	230
8	144	111	e67	e64	e73	112	114	120	330	209	394	223
9	143	122	e70	e68	e75	107	103	128	335	210	361	209
10	133	98	e68	e68	e67	109	92	126	357	202	388	188
11	129	76	e69	e67	e59	117	92	128	364	175	459	186
12	126	e80	e71	e64	e67	108	93	127	350	161	437	185
13	122	e84	e68	e59	e67	121	91	116	339	155	383	182
14	121	e86	e69	e63	e65	111	93	114	338	151	339	177
15	120	e88	e70	e66	e62	124	91	145	359	152	339	173
16	114	e92	e71	e72	e61	137	82	192	422	159	335	189
17	121	e97	e73	e70	e63	143	78	208	450	153	311	189
18	130	e98	e75	e73	e64	147	85	218	522	164	308	176
19	123	e94	e71	e73	e63	153	86	218	463	254	314	183
20	120	e92	e65	e73	e65	166	85	207	402	351	315	233
21	121	e90	e55	e69	e68	203	91	238	397	319	309	232
22	121	e95	e56	e71	e69	226	103	270	458	292	316	208
23	122	e93	e58	e73	e70	203	112	278	418	319	361	184
24	121	e90	e65	e72	e76	187	104	350	343	335	417	178
25	118	e88	e69	e72	e83	178	105	420	308	292	293	182
26	128	e87	e72	e73	e89	186	108	429	275	286	293	176
27	141	e89	e71	e64	e89	190	106	453	258	302	293	164
28	151	e93	e71	e58	e83	168	99	444	230	346	288	156
29	144	e97	e70	e61	---	157	86	421	210	363	294	153
30	133	e96	e69	e60	---	159	115	434	191	332	274	154
31	129	---	e71	e60	---	162	---	427	---	347	273	---
TOTAL	3918	2990	2170	2087	1926	4382	3117	7474	10901	7241	11046	6108
MEAN	126	99.7	70.0	67.3	68.8	141	104	241	363	234	356	204
MAX	170	132	92	73	89	226	154	453	522	363	459	282
MIN	42	76	55	58	59	82	78	114	191	151	273	153
AC-FT	7770	5930	4300	4140	3820	8690	6180	14820	21620	14360	21910	12120

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 1999, BY WATER YEAR (WY)

MEAN	95.1	102	77.3	67.2	69.8	113	243	404	483	198	163	94.2
MAX	209	158	117	116	98.0	279	564	2073	1481	859	440	318
(WY)	1970	1971	1987	1971	1986	1939	1942	1984	1984	1957	1957	1970
MIN	33.5	62.4	45.8	37.1	36.2	59.8	56.5	22.4	51.8	42.5	51.5	19.2
(WY)	1964	1951	1964	1979	1979	1981	1967	1977	1977	1955	1977	1956

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1938 - 1999	
ANNUAL TOTAL	57218		63360			
ANNUAL MEAN	157		174		176	
HIGHEST ANNUAL MEAN					478	1984
LOWEST ANNUAL MEAN					60.4	1977
HIGHEST DAILY MEAN	522	Jun 1	522	Jun 18	4040	May 26 1984
LOWEST DAILY MEAN	30	Sep 29	42	Oct 1	2.6	Sep 30 1977
ANNUAL SEVEN-DAY MINIMUM	41	Sep 25	60	Jan 28	7.6	May 4 1967
INSTANTANEOUS PEAK FLOW			755	Aug 23	4620	May 23 1984
INSTANTANEOUS PEAK STAGE			3.27	Aug 23	5.49	May 23 1984
ANNUAL RUNOFF (AC-FT)	113500		125700		127500	
10 PERCENT EXCEEDS	298		363		390	
50 PERCENT EXCEEDS	120		128		100	
90 PERCENT EXCEEDS	70		67		54	

e Estimated

09119000 TOMICHI CREEK AT GUNNISON, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD--October 1990 to September 1993, April 1995 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
NOV 19...	0800	97	270	8.2	.1	2.0	10.9	.6	K9	120
JAN 07...	1100	80	245	8.0	.1	--	10.4	--	K2	--
APR 21...	1500	97	274	7.8	11.4	--	9.4	.6	77	--
JUN 03...	0915	438	268	8.0	10.6	2.8	7.8	.4	--	120
JUL 14...	0935	149	343	8.1	17.0	--	8.7	--	47	--
AUG 25...	1040	290	225	8.2	16.2	--	8.1	--	89	--

DATE	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)
NOV 19...	34	9.4	<.010	.059	.026	.10	<.10	.016	.026	.021
JAN 07...	--	--	<.010	<.050	<.020	<.10	<.10	.034	.016	.015
APR 21...	--	--	<.010	.063	<.020	.28	.18	.064	.032	.027
JUN 03...	32	9.0	<.010	.103	<.020	.53	.39	.060	.025	.029
JUL 14...	--	--	<.010	<.050	<.020	.35	.37	.046	.023	.021
AUG 25...	--	--	<.010	<.050	<.020	.36	.25	.089	.046	.036

DATE	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
NOV 19...	<10	<1.0	<1.0	24	<1.0	35	<.20	<20
JUN 03...	<10	<1.0	1.1	68	<1.0	29	<.20	<20

K Based on non-ideal colony count.

MISCELLANEOUS FIELD MEASUREMENTS, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)
NOV 19...	0800	97	270	.1
JUN 03...	0915	438	268	10.6
AUG 25...	1040	290	225	16.2

09119000 TOMICHI CREEK AT GUNNISON, CO--Continued

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
NOV				
19...	0800	97	5	1.3
JUN				
03...	0915	438	22	27
AUG				
25...	1040	290	19	15

383103106594200 GUNNISON RIVER AT COUNTY ROAD 32 BELOW GUNNISON, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 38°31'03", long 106°59'42", in $SW^1/_4SE^1/_4$ sec. 8, T.49 N., R.1 W., Gunnison County, Hydrologic Unit 14020002, at County Road 32 bridge, 0.25 mi south of US HWY 50, and 3.3 mi west of Gunnison.

DRAINAGE AREA.--2,128 mi^2.

PERIOD OF RECORD.--December 1994 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: October 1996 to September 1998.

INSTRUMENTATION.--Water temperature sensor and logger October 1996 to September 1998.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: Maximum, 19.5°C, July 18, 1998; minimum, 0.0°C on many days during winters.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)
NOV										
18...	1300	524	236	8.4	2.8	1.5	11.0	.8	K1	110
JAN										
05...	1640	354	217	8.4	.4	--	11.0	--	K6	--
APR										
06...	1000	405	224	8.0	2.3	--	10.7	--	K4	--
22...	1030	714	202	8.0	6.1	10	9.8	.4	15	91
MAY										
12...	1310	732	236	8.5	8.3	--	9.8	--	K4	--
26...	0845	2920	191	8.0	7.6	--	8.8	--	97	--
JUN										
03...	1130	2800	202	8.1	8.6	10	8.3	.6	--	93
16...	1240	2780	212	8.1	10.8	--	8.6	--	75	--
JUL										
14...	1310	1180	248	8.4	14.6	--	8.6	--	40	--
AUG										
25...	0810	974	212	7.9	13.3	3.1	7.7	--	62	95

DATE	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)
NOV										
18...	33	7.6	.001	.098	.002	<.10	<.10	.031	.024	.020
JAN										
05...	--	--	<.001	.092	.005	<.10	E.10	.032	.020	.019
APR										
06...	--	--	.001	.071	.006	.19	.10	.033	.018	.017
22...	27	5.7	.001	.131	.004	.29	.13	.111	.022	.019
MAY										
12...	--	--	.001	.033	.006	.26	.19	.032	.017	.011
26...	--	--	.001	.047	.006	.46	.22	.091	.014	.010
JUN										
03...	27	5.9	.001	.036	<.002	.26	.18	.040	.011	.008
16...	--	--	.001	.024	.003	.37	.15	.067	.011	.008
JUL										
14...	--	--	.002	.020	.004	.20	.17	.028	.013	.009
AUG										
25...	28	6.1	.001	.035	.006	.20	.16	.044	.021	.018

DATE	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	METHY-LENE BLUE ACTIVE SUB-STANCE (MG/L) (38260)
NOV									
18...	<10	<1.0	<1.0	18	<1.0	14	<.20	<20	<.02
APR									
22...	E8.4	<1.0	1.1	43	<1.0	21	<.20	E7.2	.02
JUN									
03...	E8.3	<1.0	<1.0	33	<1.0	16	<.20	<20	<.02
AUG									
25...	<10	<1.0	<1.0	27	<1.0	10	<.20	<20	<.02

E Estimated.
K Based on non-ideal colony count.

383103106594200 GUNNISON RIVER AT COUNTY ROAD 32 BELOW GUNNISON, CO--Continued

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
NOV				
18...	1300	524	5	6.5
APR				
22...	1030	714	17	33
MAY				
26...	0845	2920	80	630
JUN				
03...	1130	2800	28	214
AUG				
25...	0810	974	10	26

09124500 LAKE FORK AT GATEVIEW, CO

LOCATION.--Lat 38°17'56", long 107°13'46", in $SE^1/_4NE^1/_4$ sec.29, T.47 N., R.3 W., Gunnison County, Hydrologic Unit 14020002, on left bank at old village of Gateview, 25 ft downstream from private bridge, 0.2 mi upstream from Indian Creek, and 6.3 mi upstream from waterline of Blue Mesa Reservoir, at elevation 7,519 ft.

DRAINAGE AREA.--334 mi^2.

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WSP 2124: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 7,827.66 ft above sea level. Prior to Oct. 1, 1938, at datum 2.00 ft higher, Oct. 1, 1938 to Sept. 30, 1945, at datum 1.00 ft, higher, and Oct. 1, 1945 to Sept. 3, 1991, at datum 1.00 ft higher.

REMARKS.--Records good except for estimated daily discharges, which are poor. Diversions for irrigation of about 1,600 acres upstream from station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	100	114	74	e66	e58	e60	68	141	1040	1240	620	411
2	113	113	76	e62	e58	e58	68	147	1150	1210	590	396
3	108	112	74	e60	e60	e56	66	146	931	1100	585	416
4	125	101	73	e62	e63	e57	64	148	914	1030	560	424
5	123	91	76	e63	e64	e57	65	144	827	985	566	399
6	119	97	68	e63	e64	e57	65	135	691	896	551	373
7	125	94	62	e61	e64	e57	67	130	706	849	528	347
8	124	92	45	e60	e64	e56	68	142	923	850	496	324
9	128	94	61	e60	e63	e56	67	201	1100	798	477	303
10	129	91	67	e63	e60	e58	64	234	1250	711	538	287
11	124	88	48	e62	e61	e58	61	219	1250	674	664	274
12	121	93	55	e61	e63	e54	65	221	1250	642	623	261
13	117	101	65	e60	e61	e53	64	251	1230	601	563	240
14	116	88	e68	e58	e60	e54	66	379	1400	569	508	228
15	116	84	e68	e58	e58	e57	65	467	1230	537	483	234
16	113	84	e68	e60	e60	e59	59	485	1260	523	463	230
17	112	84	e69	e64	e60	e62	65	466	1410	496	443	238
18	107	82	e65	e67	e60	e64	65	476	1330	470	419	230
19	108	78	e66	e64	e59	e65	68	565	1370	478	416	236
20	108	69	e62	e64	e58	66	75	686	1480	378	416	239
21	107	84	e56	e61	e58	69	89	803	1350	427	416	228
22	107	98	e49	e62	e59	68	93	893	1380	456	399	220
23	106	93	e53	e66	e58	66	102	983	1460	467	380	216
24	104	80	e59	e63	e59	67	119	1080	1500	481	379	216
25	107	78	e63	e64	e57	68	132	840	1520	538	375	207
26	126	77	e66	e64	e57	76	183	762	1550	517	362	197
27	129	76	e66	e60	e57	75	258	709	1460	508	374	191
28	127	77	e66	e54	e58	69	159	725	1470	531	409	179
29	119	81	e65	e50	---	67	135	975	1310	581	408	175
30	117	77	e64	e54	---	70	141	962	1250	630	445	177
31	116	---	e65	e58	---	70	---	1050	---	661	432	---
TOTAL	3601	2671	1982	1894	1681	1929	2726	15565	36992	20834	14888	8096
MEAN	116	89.0	63.9	61.1	60.0	62.2	90.9	502	1233	672	480	270
MAX	129	114	76	67	64	76	258	1080	1550	1240	664	424
MIN	100	69	45	50	57	53	59	130	691	378	362	175
AC-FT	7140	5300	3930	3760	3330	3830	5410	30870	73370	41320	29530	16060

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1938 - 1999, BY WATER YEAR (WY)

MEAN	95.6	68.9	52.4	46.4	44.0	56.3	131	535	993	491	210	132
MAX	242	143	75.7	66.5	71.0	102	340	1153	1586	1266	480	430
(WY)	1942	1942	1984	1984	1986	1939	1952	1984	1944	1957	1999	1970
MIN	40.3	42.7	34.6	32.5	30.4	30.5	53.3	205	263	107	82.5	45.5
(WY)	1957	1940	1940	1977	1990	1977	1990	1977	1977	1977	1956	1956

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1938 - 1999	
ANNUAL TOTAL	75924		112859			
ANNUAL MEAN	208		309		238	
HIGHEST ANNUAL MEAN					413	1984
LOWEST ANNUAL MEAN					88.7	1977
HIGHEST DAILY MEAN	1140	Jun 3	1550	Jun 26	2410	Jun 29 1957
LOWEST DAILY MEAN	e36	Mar 23	45	Dec 8	22	Jan 21 1976
ANNUAL SEVEN-DAY MINIMUM	38	Mar 23	56	Mar 8	23	Jan 19 1976
INSTANTANEOUS PEAK FLOW			1720	Jun 26	2720	Jul 10 1983
INSTANTANEOUS PEAK STAGE			4.26	Jun 26	a4.18	Jul 10 1983
ANNUAL RUNOFF (AC-FT)	150600		223900		172700	
10 PERCENT EXCEEDS	595		918		691	
50 PERCENT EXCEEDS	107		112		86	
90 PERCENT EXCEEDS	46		59		41	

e Estimated
a At datum then in use. Maximum gage height, 4.77 ft, Jun 16, 1995, at present datum.

09124500 LAKE FORK AT GATEVIEW, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1990 to September 1993, November 1998 to September 1999 (discontinued).

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	TEMPERATURE WATER (DEG C) (00010)	DISCHARGE, INST. CUBIC FEET PER SECOND (00061)	SPECIFIC CONDUCTANCE (US/CM) (00095)	SEDIMENT, SUSPENDED (MG/L) (80154)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY) (80155)	SED. SUSP. FALL DIAM. % FINER THAN .062 MM (70342)	SED. SUSP. FALL DIAM. % FINER THAN .125 MM (70343)	SED. SUSP. FALL DIAM. % FINER THAN .250 MM (70344)	SED. SUSP. FALL DIAM. % FINER THAN .500 MM (70345)	SED. SUSP. FALL DIAM. % FINER THAN 1.00 MM (70346)
OCT											
22...	1010	4.5	108	163	.800	.23	--	--	--	--	--
APR											
21...	1545	10.0	95	178	5	1.3	--	--	--	--	--
MAY											
20...	0920	6.6	707	140	65	124	--	--	--	--	--
27...	1209	8.4	706	135	8	14	--	--	--	--	--
31...	1230	9.0	1050	115	90	255	88	92	96	99	100
AUG											
18...	1330	13.5	414	134	7	7.8	--	--	--	--	--
31...	1615	14.7	435	141	11	13	--	--	--	--	--

09125800 SILVER JACK RESERVOIR NEAR CIMARRON, CO

LOCATION.--Lat 38°13'58", long 107°32'28", in T.46 N., R. 6 W., Gunnison County, Hydrologic Unit 14020002, in gate house of Silver Jack Dam on Cimarron River, 14.5 mi south of Cimarron.

DRAINAGE AREA.--59 mi^2.

PERIOD OF RECORD.--October 1987 to current year.

REVISED RECORDS.--WDR CO-92-2: 1991 minimum contents.

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 8925.60 ft. above sea level, (levels by U.S. Bureau of Reclamation); gage readings have been reduced to elevations above sea level.

REMARKS.--Reservoir is formed by an earthfill dam. Storage began in December 1970; dam completed December 1971. Capacity, 13,520 acre-ft, 1971 survey, between elevation 8,800.0 ft, streambed at dam, and 8,925.6 ft, crest of spillway. Dead storage below elevation 8,836.0 ft, 520 acre-ft. Figures given are live contents.

COOPERATION.--Capacity tables provided by U.S. Bureau of Reclamation.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 13,550 acre-ft, June 15-16, 1995, elevation, 8,927.45 ft; minimum contents, 1,840 acre-ft, Sept. 30, 1994, elevation, 8,864.91 ft.

EXTREMES FOR CURRENT YEAR.--Maximum daily mean contents, 13,330 acre-ft, June 18, mean elevation, 8,926.72 ft; minimum daily mean contents, 2,400 acre-ft, Oct. 22, mean elevation, 8,870.45 ft.

MONTHEND ELEVATION AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Elevation (feet)	Contents (acre-feet)	Change in Contents (acre feet)
Sept. 30	8871.10	2,470	
Oct. 31	8873.14	2,700	+230
Nov. 30	8876.95	3,150	+450
Dec. 31	8877.16	3,180	+30
CAL YR 1998	-	-	-5,510
Jan. 31	8876.18	3,060	-120
Feb. 28	8874.79	2,900	-160
Mar. 31	8878.12	3,300	+400
Apr. 30	8886.41	4,470	+1,170
May 31	8920.09	11,450	+6,980
June 30	8926.64	13,310	+1,860
July 31	8924.01	12,540	-770
Aug. 31	8920.45	11.550	-990
Sept. 30	8905.37	8,050	-3,500
WATER YEAR 1999	-	-	+5,580

09126000 CIMARRON RIVER NEAR CIMARRON, CO

LOCATION.--Lat 38°15'26", long 107°32'46", in NW$^1/_4$NE$^1/_4$ Sec.8, T.46 N., R.6 W., Gunnison County, Hydrologic Unit 14020002, on right bank 0.2 mi upstream from Forest Service bridge, 0.8 mi upstream from headgate on Cimarron ditch, 1.9 mi downstream from Silver Jack Dam, and 13 mi south of Cimarron.

DRAINAGE AREA.--66.6 mi^2.

PERIOD OF RECORD.--October 1954 to current year. Prior to October 1965, published as Cimarron Creek near Cimarron. Statistical summary computed for 1971 to current year.

REVISED RECORDS.--WSP 2124: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 8,641.48 ft above sea level. Oct. 14, 1954 to Oct. 11, 1972 at site 0.4 mi downstream at different datum. Oct. 12, 1972 to Sept. 30, 1996 at site 0.2 mi downstream at datum 10.00 ft lower.

REMARKS.--Records good except for estimated daily discharges, which are poor. Diversion upstream from station through Owl Creek ditch into Uncompahgre River basin. Flow regulated by Silver Jack Dam, 1.9 mi upstream since Dec. 23, 1970, total capacity, 13,520 acre-ft. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	39	23	20	e20	e20	e23	25	31	151	433	153	110
2	39	23	20	e18	e20	e17	23	32	153	394	156	109
3	39	23	21	e18	e20	e18	23	31	174	362	164	110
4	42	23	21	e19	e20	e18	25	29	197	336	166	108
5	39	23	20	e18	e20	e20	23	29	233	314	162	106
6	39	23	21	e20	e20	e20	26	30	251	291	154	105
7	40	23	e20	19	e20	e21	23	34	264	242	148	105
8	40	24	e20	e18	e20	e23	25	39	352	227	146	105
9	39	24	20	e18	e20	e20	25	39	390	215	148	104
10	38	22	e20	e18	e22	e20	25	36	426	202	149	105
11	38	22	e20	e18	e21	e20	e25	34	427	205	142	105
12	37	22	20	18	e21	e20	25	35	424	206	134	105
13	37	22	e20	e17	e20	e21	26	38	463	205	132	107
14	39	22	e20	e17	e20	e20	26	39	478	207	132	110
15	38	22	e20	e17	e20	e20	26	36	399	209	133	110
16	37	22	20	e19	e20	e20	e26	39	441	205	128	111
17	38	22	20	18	e21	e20	26	53	549	204	124	112
18	38	21	20	19	e21	e20	28	75	616	206	125	113
19	38	21	20	19	e22	e21	30	116	600	191	126	114
20	39	24	20	19	e22	e20	30	119	564	166	124	108
21	39	25	e20	20	e22	e23	29	126	517	166	122	94
22	32	21	e20	e18	e21	e23	29	137	591	164	121	93
23	22	21	e20	e20	e22	e23	30	134	565	160	120	94
24	23	21	e20	18	e22	e23	32	136	579	160	119	95
25	23	20	e20	18	e22	e24	31	139	570	160	119	95
26	24	20	e20	e15	e20	e24	29	140	558	158	116	94
27	23	20	19	e19	e20	e24	30	141	508	159	118	93
28	23	20	e20	e20	e19	e24	30	147	510	157	118	92
29	23	20	19	e20	---	e27	31	148	454	158	117	92
30	23	20	19	e20	---	26	35	151	436	155	114	92
31	22	---	e20	e20	---	26	---	151	---	153	111	---
TOTAL	1050	659	620	575	578	669	817	2464	12840	6770	4141	3096
MEAN	33.9	22.0	20.0	18.5	20.6	21.6	27.2	79.5	428	218	134	103
MAX	42	25	21	20	22	27	35	151	616	433	166	114
MIN	22	20	19	15	19	17	23	29	151	153	111	92
AC-FT	2080	1310	1230	1140	1150	1330	1620	4890	25470	13430	8210	6140

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1971 - 1999, BY WATER YEAR (WY)

MEAN	48.0	23.1	16.5	14.9	15.1	16.5	23.7	170	443	225	119	76.1
MAX	135	46.9	31.7	30.0	29.4	35.3	46.5	440	799	640	239	126
(WY)	1983	1986	1974	1974	1986	1986	1987	1996	1984	1995	1983	1995
MIN	20.2	8.18	6.79	2.36	3.03	4.45	8.46	46.5	114	89.0	73.9	32.2
(WY)	1991	1990	1978	1971	1971	1971	1977	1995	1977	1977	1981	1977

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1971 - 1999	
ANNUAL TOTAL	38123		34279			
ANNUAL MEAN	104		93.9		a99.4	
HIGHEST ANNUAL MEAN					180	1984
LOWEST ANNUAL MEAN					40.2	1977
HIGHEST DAILY MEAN	661	Jun 3	616	Jun 18	1330	Jun 16 1995
LOWEST DAILY MEAN	e11	Jan 2	e15	Jan 26	b,c.00	Dec 24 1970
ANNUAL SEVEN-DAY MINIMUM	12	Jan 9	18	Jan 9	.00	Dec 24 1970
INSTANTANEOUS PEAK FLOW			709	Jun 17	d1620	Jun 5 1997
INSTANTANEOUS PEAK STAGE			3.05	Jun 17	f3.91	Jun 5 1997
ANNUAL RUNOFF (AC-FT)	75620		67990		72020	
10 PERCENT EXCEEDS	338		208		275	
50 PERCENT EXCEEDS	24		29		30	
90 PERCENT EXCEEDS	14		20		11	

e Estimated
a Average discharge for 16 years (water years 1955-70), 88.6 ft^3/s; 64190 acre-ft/yr, prior to completion of Silver Jack Dam.
b Also occurred Dec 25-31, 1970, and Jan 1-9, 1971. Result of storage in Silver Jack Dam.
c Minimum daily discharge prior to construction of Silver Jack Dam, 8.0 ft^3/s, Dec 27-28, 1962, and Jan 13, 1963.
d Maximum discharge and stage for period of record, 1790 ft^3/s, Jun 28, 1957, gage height, 8.32 ft, site and datum then in use.
f Maximum gage height for statistical period, 6.16 ft, Jun 25, 1971.

09128000 GUNNISON RIVER BELOW GUNNISON TUNNEL, CO

LOCATION.--Lat 38°31'45", long. 107°38'54", in NE$^1/_4$NW$^1/_4$ sec.10, T.49 N., R.7 W., Montrose County, Hydrologic Unit 14020002, on left bank 0.4 mi downstream from east portal of Gunnison tunnel, 4.7 mi downstream from Crystal Creek, and 12 mi northeast of Montrose.

DRAINAGE AREA.--3,965 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1903 to current year. Monthly discharge only for some periods, published in WSP 1313. Published as "at east portal of Gunnison tunnel" 1905-6 and as "at River portal" 1907-11. Statistical summary computed for 1911 to current year.

REVISED RECORDS.--WSP 1313: 1906(M). WSP 1733: 1918-19, 1948. WSP 2124: Drainage area. WDR CO-77-2: 1926, 1941.

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 6,526.06 ft above sea level. Apr. 9, 1905 to Aug. 20, 1915, nonrecording gage at site 300 ft upstream from diversion dam at east portal of Gunnison Tunnel, at different datum. Aug. 21, 1915 to Jan. 19, 1943, nonrecording gage at site 500 ft downstream from diversion dam at east portal of Gunnison Tunnel, at different datum. Jan. 20, 1943 to Sept. 30, 1956, water-stage recorder at present site at datum 1.0 ft, higher.

REMARKS.--No estimated daily discharges. Records good. Natural flow of stream affected by transmountain diversions, transbasin diversion through Gunnison Tunnel for irrigation of about 75,000 acres in Uncompahgre Valley (see table below for figures of diversion). Taylor Park Reservoir (station 09108500). Blue Mesa Reservoir (station 09124600), Morrow Point Reservoir (station 09125400), Crystal Reservoir (station 09127600), diversions for irrigation of about 63,000 acres, and return flow from irrigated areas.

COOPERATION.--Diversions, in acre-feet, through Gunnison Tunnel; provided by Colorado Division of Water Resources.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	619	760	795	791	712	657	642	650	2270	1680	2140	1190
2	629	758	837	791	714	668	611	663	1660	1680	2140	1340
3	628	756	837	796	715	714	611	668	1230	1680	2250	1690
4	612	756	836	797	714	719	617	670	965	1680	2660	1870
5	661	762	836	749	713	706	622	770	955	1680	2660	2000
6	687	760	831	740	712	623	624	847	916	1680	2660	1740
7	689	761	828	790	712	622	623	902	893	1570	2660	1750
8	688	760	823	788	716	620	623	963	946	1270	2660	1750
9	745	758	821	785	709	617	580	976	951	1200	2660	1720
10	753	753	822	786	708	616	507	984	953	1220	2560	1700
11	794	751	827	789	705	621	510	983	951	1220	2220	1700
12	794	758	824	789	691	622	530	1130	953	1230	1940	1700
13	793	766	823	759	695	621	662	1280	921	1230	1870	1700
14	747	766	817	701	701	623	614	1320	686	1230	1870	1690
15	700	762	819	677	658	644	494	1300	651	1130	1890	1750
16	698	744	818	675	638	643	461	1260	640	865	1880	1750
17	697	754	822	678	689	645	433	1300	631	778	1860	1860
18	697	808	818	679	693	645	435	1390	612	792	1860	1950
19	697	815	812	678	694	654	474	1590	618	777	1720	1970
20	699	819	810	682	694	652	540	1710	679	785	1310	1980
21	702	822	779	679	696	658	546	1750	830	783	1120	1900
22	703	824	759	674	696	617	546	1830	766	785	1130	1830
23	703	828	805	674	700	602	555	2070	745	785	1160	1820
24	700	829	808	673	702	636	562	2310	877	775	1160	1900
25	699	834	808	634	704	630	557	2640	1120	770	1100	1900
26	696	837	808	622	704	636	554	2890	1220	825	1070	1890
27	698	836	808	676	704	640	557	2840	1230	911	1010	1880
28	700	841	808	676	706	631	562	2830	1400	1090	971	1890
29	701	843	805	674	---	628	567	2750	1690	1200	986	1880
30	739	798	800	671	---	644	601	2680	1670	1460	1050	1990
31	765	---	791	692	---	666	---	2660	---	1870	1140	---
TOTAL	21833	23619	25235	22265	19595	19920	16820	48606	30629	36631	55367	53680
MEAN	704	787	814	718	700	643	561	1568	1021	1182	1786	1789
MAX	794	843	837	797	716	719	662	2890	2270	1870	2660	2000
MIN	612	744	759	622	638	602	433	650	612	770	971	1190
AC-FT	43310	46850	50050	44160	38870	39510	33360	96410	60750	72660	109800	106500
a	36230	236	274	401	214	14720	53600	53280	58050	60120	60210	38320

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1911 - 1999, BY WATER YEAR (WY)

MEAN	555	762	804	789	780	877	1304	3187	4042	1548	686	505
MAX	2114	1888	2165	2732	3153	3278	3282	8617	11670	8468	2237	2447
(WY)	1912	1971	1987	1974	1971	1971	1930	1928	1957	1957	1957	1929
MIN	17.0	116	141	143	155	248	177	216	123	61.1	34.4	8.37
(WY)	1935	1935	1966	1966	1966	1966	1954	1967	1954	1940	1924	1937

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1911 - 1999	
ANNUAL TOTAL	363197		374200			
ANNUAL MEAN	995		1025		1320	
HIGHEST ANNUAL MEAN					2936	1984
LOWEST ANNUAL MEAN					261	1967
HIGHEST DAILY MEAN	3290	May 23	2890	May 26	18600	Jun 15 1921
LOWEST DAILY MEAN	610	Sep 23	433	Apr 17	b.00	Sep 11 1915
ANNUAL SEVEN-DAY MINIMUM	623	Sep 28	483	Apr 15	.30	Oct 26 1950
INSTANTANEOUS PEAK FLOW			2980	May 26	c19000	Jun 15 1921
INSTANTANEOUS PEAK STAGE			5.66	May 26	15.80	Jun 15 1921
ANNUAL RUNOFF (AC-FT)	720400		742200		956400	
10 PERCENT EXCEEDS	1510		1870		3150	
50 PERCENT EXCEEDS	798		789		610	
90 PERCENT EXCEEDS	689		622		190	

a Diversions, in acre-feet, through Gunnison tunnel, provided by Colorado Division of Water Resources.
b Also occurred Sep 26, 1936, Oct 8, 1949, Sep 5-6, and 15-16, 1950.
c Present datum, from rating curve extended above 14000 ft^3/s.

09128000 GUNNISON RIVER BELOW GUNNISON TUNNEL, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--December 1994 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: October 1996 to September 1998.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: Maximum, 12.8°C, Oct. 1, 4, 1997; minimum, 1.2°C, several days, Feb. 1997.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)
NOV								
17...	1120	736	196	8.1	7.3	9.6	<1	.010
JAN								
05...	1315	716	194	8.0	3.8	10.3	<1	<.010
APR								
05...	1320	620	200	7.8	4.0	10.6	<1	.001
20...	1330	548	202	7.8	5.2	10.8	<1	<.001
MAY								
11...	1340	984	228	8.4	6.4	9.8	<1	.002
26...	1315	2920	188	8.4	8.6	9.6	19	.001
JUN								
01...	1445	2130	189	8.2	8.5	9.1	--	<.001
17...	1115	653	183	8.2	10.0	9.3	11	.001
JUL								
15...	0950	1150	195	8.1	10.5	8.9	<5	.001
AUG								
24...	1340	1210	195	8.0	11.5	8.6	16	<.001

DATE	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)
NOV							
17...	.073	.026	<.10	.10	.016	.020	.017
JAN							
05...	.064	<.020	<.10	.12	.020	.015	.013
APR							
05...	.038	.004	.18	.11	.019	.012	.011
20...	.020	.002	.12	.12	.017	.008	.007
MAY							
11...	.021	.006	.18	.14	.024	.008	.006
26...	.013	.005	.38	.13	.045	.009	.007
JUN							
01...	.009	<.002	.17	.20	.021	.011	.008
17...	.012	.003	.15	.10	.024	.011	.010
JUL							
15...	.012	.003	.13	.19	.017	.011	.008
AUG							
24...	.037	.004	.14	.16	.070	.013	.012

MISCELLANEOUS FIELD MEASUREMENTS, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)
OCT					MAY				
16...	1105	699	193	10.5	14...	1345	1320	226	6.8
DEC					JUN				
02...	0905	834	207	6.0	15...	1225	641	187	10.0
JAN					JUL				
25...	1200	600	199	3.3	06...	1245	1710	189	10.9
MAR					AUG				
29...	1450	659	229	5.2	18...	1130	1850	199	11.1

09131495 PAONIA RESERVOIR NEAR BARDINE, CO

LOCATION.--Lat 38°56'39", long 107°21'06", in NE$^{1}/_{4}$ sec.8, T.13 S., R.89 W., Gunnison County, Hydrologic Unit 14020004, in gate house of Paonia Dam on Muddy Creek, 16 mi east of Paonia.

DRAINAGE AREA.--246 mi^{2}.

PERIOD OF RECORD.--December 1961 to current year. Monthend active contents provided by U.S. Bureau of Reclamation from December 1961 to September 1987. Extremes for period of record are subsequent to 1987.

REVISED RECORD.--WDR CO-92-2; 1988-91.

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 6,447.50 ft above sea level (levels by U.S. Bureau of Reclamation); gage readings have been reduced to elevations above sea level.

REMARKS.--Reservoir is formed by an earthfill dam. Storage began in December 1961; dam completed January 1962. Capacity 20,950 acre-ft, 1966 survey, between elevation 6,290.0 ft streambed at dam, and 6,447.5 ft, crest of spillway. Dead storage below elevation 6,358.0 ft, 2,440 acre-ft. Inactive storage below elevation 6360.0 ft, 2,620 acre-ft. Figures published prior to 1988 water year are active contents; figures given beginning 1988 water year are live contents.

COOPERATION.--Capacity tables provided by U.S. Bureau of Reclamation.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 17,460 acre-ft, June 6, 1995, elevation 6,449.76 ft; minimum contents, 117 acre-ft, Apr. 14, 1996, elevation 6,360.72 ft.

EXTREMES FOR CURRENT YEAR.--Maximum daily mean contents, 17,100 acre-ft, May 26, 27, elevation, 6,448.63 ft; minimum daily mean contents, 1,040 acre-ft, Oct. 9, mean elevation, 6,376.74 ft.

MONTHEND ELEVATION AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Elevation (feet)	Contents (acre-feet)	Change in Contents (acre feet)
Sept. 30	6393.09	2,970	
Oct. 31	6386.68	2,040	-930
Nov. 30	6389.81	2,470	430
Dec. 31	6389.05	2,360	-110
CAL YR 1998	-	-	-500
Jan. 31	6393.73	3,070	+710
Feb. 28	6398.86	3,920	+850
Mar. 31	6418.24	8,110	+4,190
Apr. 30	6448.41	17,010	+8,900
May 31	6448.51	17,040	+30
June 30	6447.96	16,860	-180
July 31	6446.82	16,480	-380
Aug. 31	6436.65	13,270	-3,210
Sept. 30	6416.57	7,700	-5,570
WATER YEAR 1999	-	-	4,730

09132500 NORTH FORK GUNNISON RIVER NEAR SOMERSET, CO

LOCATION.--Lat 38°55'33", long. 107°26'01", in $SE^1/_4SW^1/_4$ sec.10, T.13 S., R.90 W., Gunnison County, Hydrologic Unit 14020004, on left bank 2.3 mi east of Somerset and 4.8 mi upstream from Hubbard Creek.

DRAINAGE AREA.--526 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1933 to current year. Monthly discharge only for some periods, published in WSP 1313. Sediment data available, November 1978 to September 1982.

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

GAGE.--Water-stage recorder with satellite telemetry and crest-stage gage. Elevation of gage is 6,280 ft above sea level, from topographic map. Prior to Oct. 1, 1982, at various sites 0.8 mi downstream, at different datums. See WDR CO-81-2, for history of changes.

REMARKS.--Records good except for estimated daily discharges, which are poor. Natural flow of stream affected by small diversions for irrigation in nearby drainage areas, irrigation of about 3,000 acres upstream from station, storage in Overland Reservoir, capacity, 6,280 acre-ft, and storage in Paonia Reservoir, capacity, 18,300 acre-ft, since February 1962.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	200	122	101	e71	e80	110	181	1010	1570	550	e210	226
2	200	126	99	e72	e76	117	166	923	1560	515	e200	255
3	197	133	97	e58	e76	113	154	927	1630	448	e210	279
4	217	125	98	e52	e78	113	140	891	1560	418	e220	256
5	209	120	93	e56	e82	109	134	742	1390	375	e230	236
6	200	114	93	e62	e88	103	129	658	1120	343	e230	226
7	199	108	74	e58	e88	105	150	675	976	314	e220	218
8	176	113	e68	e56	e82	106	183	823	1210	308	e200	209
9	112	111	e82	e55	e80	102	165	1050	1380	313	e220	202
10	86	108	e76	e58	e78	103	154	1280	1360	273	e240	212
11	87	109	e66	e65	e60	107	145	1010	1240	244	e260	220
12	86	116	e78	e65	e54	106	149	854	1260	230	e250	218
13	84	108	e78	e63	e70	101	199	925	1260	206	e230	208
14	84	109	e76	e62	e84	105	251	1240	1220	198	e230	207
15	82	112	e73	e64	e86	118	230	1360	1230	237	e240	216
16	82	115	e73	e67	e78	131	204	1470	1190	217	e230	221
17	87	114	e77	e74	e78	135	191	1390	1400	199	e250	210
18	82	112	e78	e78	e80	143	214	1500	1530	195	237	209
19	82	106	e80	e75	e78	160	267	1790	1350	191	234	221
20	82	95	e79	e76	e80	191	369	2140	1210	195	236	296
21	82	96	e62	e78	e78	220	421	2130	1130	206	243	262
22	82	107	e50	e71	e78	237	396	2150	1270	203	248	246
23	82	103	e52	e73	e76	225	350	2330	1130	201	238	237
24	82	99	e62	e76	e86	224	371	2420	1030	203	257	287
25	85	96	e68	e75	e90	260	490	2220	976	210	234	297
26	105	96	e74	e77	98	300	647	2090	891	203	226	272
27	99	97	e76	e78	100	312	611	2000	799	200	221	255
28	122	98	e76	e77	100	270	672	1930	724	e200	226	243
29	129	110	e80	e56	---	244	675	2040	637	e210	214	235
30	125	105	e74	e62	---	246	1090	1940	576	e200	216	229
31	125	---	e72	e78	---	204	---	1830	---	e195	218	---
TOTAL	3752	3283	2385	2088	2262	5120	9498	45738	35809	8200	7118	7108
MEAN	121	109	76.9	67.4	80.8	165	317	1475	1194	265	230	237
MAX	217	133	101	78	100	312	1090	2420	1630	550	260	297
MIN	82	95	50	52	54	101	129	658	576	191	200	202
AC-FT	7440	6510	4730	4140	4490	10160	18840	90720	71030	16260	14120	14100

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1934 - 1999, BY WATER YEAR (WY)

MEAN	121	94.6	77.3	65.6	71.1	155	727	1944	1503	459	200	154
MAX	466	318	271	166	180	721	1736	3993	4095	1834	438	319
(WY)	1987	1987	1966	1966	1986	1986	1986	1984	1957	1995	1957	1986
MIN	47.9	35.2	33.1	29.6	30.4	40.2	166	314	179	64.6	48.1	47.6
(WY)	1957	1990	1978	1990	1978	1964	1977	1977	1934	1934	1977	1934

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1934 - 1999	
ANNUAL TOTAL	199374		132361			
ANNUAL MEAN	546		363		465	
HIGHEST ANNUAL MEAN					829	1984
LOWEST ANNUAL MEAN					114	1977
HIGHEST DAILY MEAN	3160	May 21	2420	May 24	7080	May 24 1984
LOWEST DAILY MEAN	e50	Dec 22	e50	Dec 22	17	Nov 10 1950
ANNUAL SEVEN-DAY MINIMUM	63	Dec 21	57	Jan 3	25	Feb 17 1978
INSTANTANEOUS PEAK FLOW			2650	May 23	9220	May 24 1984
INSTANTANEOUS PEAK STAGE			4.46	May 23	a8.20	May 24 1984
ANNUAL RUNOFF (AC-FT)	395500		262500		337200	
10 PERCENT EXCEEDS	1760		1210		1520	
50 PERCENT EXCEEDS	211		198		136	
90 PERCENT EXCEEDS	74		74		54	

e Estimated
a From outside high-water mark.

09134000 MINNESOTA CREEK NEAR PAONIA, CO

LOCATION.--Lat 38°52'12", long. 107°30'13", in $SE^1/_4NE^1/_4$ of sec.1, T.14 S., R.91 W., Delta County, Hydrologic Unit 14020004, on right bank 0.25 mi downstream from South Fork, 6 mi upstream from mouth, and 4.5 mi east of Paonia.

DRAINAGE AREA.--41.3 mi^2.

PERIOD OF RECORD.--April 1936 to September 1947, October 1985 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 6,200 ft above sea level, from topographic map. Apr. 1936 to Oct. 1941, staff gages at different datums. Oct. 1941 to Sept. 1947, water-stage recorder at different datum. Dec. 1985 to present, water-stage recorder, at datum 2.0 ft lower.

REMARKS.--Records fair except for estimated daily discharages, which are poor. Natural flow of stream affected by two small storage reservoirs, one of which obtains water from the East Muddy Creek Basin. Small trans-basin diversions from Coal Creek into Minnestota Creek. Diversions upstream from station for irrigation of about 100 acres. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.3	2.4	2.5	2.4	1.6	2.7	5.6	16	44	30	25	16
2	3.1	2.8	e2.8	2.1	e2.2	2.5	5.6	15	46	29	25	16
3	2.6	3.1	e2.7	2.0	2.0	2.4	5.4	15	46	27	24	17
4	5.3	2.5	2.6	2.0	e2.3	2.4	4.8	14	47	27	23	20
5	3.4	2.3	1.9	2.1	1.9	2.1	4.8	12	45	26	22	19
6	2.9	2.3	2.5	2.1	1.6	1.9	4.9	11	47	27	18	21
7	2.8	2.4	e2.3	2.1	1.5	2.1	5.9	10	66	25	14	18
8	2.7	2.8	e2.0	2.1	1.9	2.2	6.9	10	83	24	13	17
9	2.6	2.7	e2.3	2.1	2.3	2.1	5.7	11	76	24	17	17
10	2.5	e3.4	e2.4	2.1	e2.3	2.1	5.4	14	62	24	24	17
11	2.3	e3.3	2.0	2.1	e2.0	2.3	4.9	13	51	24	27	17
12	2.2	e3.5	e2.1	2.0	e2.3	2.6	5.2	12	33	25	24	16
13	2.2	e3.4	2.0	1.9	e2.3	2.3	6.9	12	37	24	23	16
14	2.2	e3.3	1.6	1.9	e2.4	2.7	7.2	13	35	25	22	15
15	2.2	e3.2	1.8	1.8	e2.4	3.6	6.5	15	34	26	22	16
16	2.3	e3.4	2.2	1.9	e2.3	4.0	5.9	16	33	24	22	16
17	2.8	e3.4	2.1	1.8	1.2	4.0	5.6	17	36	23	21	14
18	2.5	e3.2	2.1	1.9	1.8	4.6	6.4	17	39	25	21	13
19	2.4	e3.0	e2.3	e2.2	1.2	4.8	8.2	20	41	30	20	7.7
20	2.4	e2.7	2.3	e2.3	1.4	5.2	10	26	40	30	21	7.6
21	2.3	e2.7	e2.3	e2.2	1.2	5.6	10	31	39	30	21	5.7
22	2.4	e2.9	e1.8	e2.1	1.2	5.8	11	34	40	26	21	4.3
23	2.5	e2.9	e1.5	e2.1	1.8	5.4	11	36	39	25	19	2.9
24	2.5	2.3	e1.7	1.9	2.1	5.3	12	41	38	26	19	3.6
25	3.3	2.5	e1.8	1.8	2.0	6.2	15	42	36	25	19	3.3
26	4.5	2.1	e2.0	2.0	1.9	6.9	13	39	33	26	19	3.3
27	3.4	2.0	2.0	1.8	2.0	8.0	11	41	32	26	19	3.1
28	4.9	2.1	2.0	e2.1	2.4	7.1	11	43	29	26	19	3.2
29	3.2	e2.8	2.2	e1.8	---	6.2	11	45	29	26	19	3.5
30	2.9	e2.8	2.2	e1.9	---	6.5	19	50	30	25	17	3.6
31	2.6	---	2.2	e2.2	---	5.8	---	50	---	25	16	---
TOTAL	89.2	84.2	66.2	62.8	53.5	127.4	245.8	741	1286	805	636	352.8
MEAN	2.88	2.81	2.14	2.03	1.91	4.11	8.19	23.9	42.9	26.0	20.5	11.8
MAX	5.3	3.5	2.8	2.4	2.4	8.0	19	50	83	30	27	21
MIN	2.2	2.0	1.5	1.8	1.2	1.9	4.8	10	29	23	13	2.9
AC-FT	177	167	131	125	106	253	488	1470	2550	1600	1260	700

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1937 - 1999, BY WATER YEAR (WY)

MEAN	6.14	5.40	4.44	3.62	4.06	7.61	28.7	96.5	75.8	29.2	15.8	8.36
MAX	16.6	12.9	9.08	5.80	8.62	19.2	89.6	199	194	88.2	29.7	19.8
(WY)	1942	1987	1987	1942	1986	1986	1942	1993	1993	1995	1993	1993
MIN	2.88	2.50	1.78	1.71	1.91	3.32	7.18	23.6	25.2	11.6	4.49	3.57
(WY)	1999	1941	1990	1990	1999	1991	1990	1990	1990	1939	1990	1946

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1937 - 1999	
ANNUAL TOTAL	8214.6		4549.9			
ANNUAL MEAN	22.5		12.5		23.9	
HIGHEST ANNUAL MEAN					46.9	1993
LOWEST ANNUAL MEAN					7.97	1990
HIGHEST DAILY MEAN	123	May 14	83	Jun 8	340	May 28 1993
LOWEST DAILY MEAN	1.5	Dec 23	1.2	Feb 17	1.0	Nov 14 1936
ANNUAL SEVEN-DAY MINIMUM	1.8	Dec 22	1.4	Feb 17	a1.4	Feb 17 1999
INSTANTANEOUS PEAK FLOW			89	Jun 8	359	May 28 1993
INSTANTANEOUS PEAK STAGE			1.69	Jun 8	b3.24	May 28 1993
ANNUAL RUNOFF (AC-FT)	16290		9020		17310	
10 PERCENT EXCEEDS	66		32		70	
50 PERCENT EXCEEDS	6.0		5.2		7.3	
90 PERCENT EXCEEDS	2.3		2.0		3.0	

e Estimated
a Also occurred Jan 16, 1990.
b Maximum gage height, 3.70 ft, May 22, 1942, site and datum then in use.

09135950 NORTH FORK GUNNISON RIVER BELOW LEROUX CREEK, NEAR HOTCHKISS, CO

LOCATION.--Lat 38°47'18", long 107°44'21", in $SW^1/_4SW^1/_4$ sec.36, T.14 S., R.93 W., Delta County, Hydrologic Unit 14020004, on left bank 0.7 mi downstream from Leroux Creek, and 1 mi southwest of Hotchkiss.

DRAINAGE AREA.--922 mi^2.

PERIOD OF RECORD.--July 1997 to current year (seasonal records only).

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 5,240 ft above sea level, from topographic map.

REMARKS.--No estimated daily discharges. Records good. Natural flow of stream affected by irrigation of about 44,000 acres upstream from station, storage in Overland Reservoir, capacity, 6,280 acre-ft, and storage in Paonia Reservoir, capacity, 18,300 acre-ft. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

EXTREMES FOR PERIOD OF SEASONAL RECORD.--Maximum discharge, 3,220 ft^3/s, May 24, 1999, gage height, 11.34; minimum daily, 61 ft^3/s, Apr. 12, 1999.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge 3,230 ft^3/s (discharge measurment), June 11, 1997, gage height, 11.82 ft.

EXTREMES FOR CURRENT SEASON.--Maximum discharge, 3,220 ft^3/s at 0300, May 24, gage height, 11.34 ft; minimum daily, 61 ft^3/s, Apr. 12.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	102	---	---	---	---	124	317	1400	1910	520	157	141
2	114	---	---	---	---	138	306	1220	1860	475	137	187
3	116	---	---	---	---	141	288	1200	1960	401	117	238
4	117	---	---	---	---	144	267	1250	1840	358	117	253
5	136	---	---	---	---	145	238	1060	1660	312	122	220
6	136	---	---	---	---	141	208	883	1370	254	146	185
7	143	---	---	---	---	136	176	870	1170	224	160	151
8	138	---	---	---	---	140	235	1020	1370	198	116	133
9	119	---	---	---	---	139	179	1260	1560	207	97	123
10	154	---	---	---	---	135	149	1540	1590	178	130	121
11	155	---	---	---	---	136	84	1260	1420	138	211	131
12	150	---	---	---	---	144	61	1030	1370	127	227	142
13	149	---	---	---	---	142	88	1040	1360	100	169	136
14	148	---	---	---	---	137	182	1370	1350	86	140	127
15	144	---	---	---	---	147	194	1560	1380	116	157	135
16	147	---	---	---	---	167	118	1670	1290	148	192	148
17	160	---	---	---	---	188	103	1590	1510	114	173	135
18	164	---	---	---	---	203	105	1660	1800	95	170	125
19	158	---	---	---	---	242	179	2010	1520	108	172	138
20	154	---	---	---	---	299	300	2470	1320	102	210	234
21	154	---	---	---	---	354	389	2590	1240	89	182	253
22	151	---	---	---	---	402	399	2580	1350	98	224	218
23	155	---	---	---	---	378	329	2780	1240	114	180	192
24	155	---	---	---	---	365	346	3000	1130	96	184	189
25	164	---	---	---	---	418	634	2830	1050	96	165	251
26	200	---	---	---	---	520	833	2510	966	96	150	214
27	198	---	---	---	---	521	799	2440	825	88	134	191
28	257	---	---	---	---	482	837	2300	762	92	147	179
29	230	---	---	---	---	422	796	2550	641	160	143	175
30	214	---	---	---	---	435	1280	2510	554	150	129	170
31	207	---	---	---	---	364	---	2330	---	159	140	---
TOTAL	4889	---	---	---	---	7849	10419	55783	40368	5499	4898	5235
MEAN	158	---	---	---	---	253	347	1799	1346	177	158	174
MAX	257	---	---	---	---	521	1280	3000	1960	520	227	253
MIN	102	---	---	---	---	124	61	870	554	86	97	121
AC-FT	9700	---	---	---	---	15570	20670	110600	80070	10910	9720	10380

09143000 SURFACE CREEK NEAR CEDAREDGE, CO

LOCATION.--Lat 38°59'05", long 107°51'13", in NW$^1/_4$NW$^1/_4$ sec.25, T.12 S., R.94 W., Delta County, Hydrologic Unit 14020005, on left bank 5 ft downstream from private bridge, 1.4 mi downstream from Caesar Creek, and 7.0 mi northeast of Cedaredge.

DRAINAGE AREA.--27.4 mi^2.

PERIOD OF RECORD.--July 1939 to current year. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WDR CO-83-2: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 8,261 ft above sea level, from topographic map.

REMARKS.-- Records good except for estimated daily discharges, which are poor. Flow regulated by many small reservoirs. Some water imported from Leon Lake in Plateau Creek drainage. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	58	3.6	e5.0	e4.0	e3.9	e4.4	e11	33	95	85	58	59
2	49	4.0	e4.9	e3.9	e3.8	e5.0	e12	32	115	84	42	63
3	48	e3.0	e4.8	e3.6	e4.0	e5.3	e11	30	120	81	41	46
4	46	e3.8	e4.5	e3.7	e4.1	e5.4	e11	27	124	77	48	41
5	36	4.6	e4.4	e3.8	e4.7	e5.1	e11	25	110	67	61	39
6	35	3.3	e3.8	e3.9	e5.2	e5.1	e11	24	97	64	48	41
7	32	e3.7	e3.4	e3.8	e4.4	e5.1	e11	33	97	56	40	41
8	31	e3.4	e4.2	e3.7	e4.2	e5.1	e12	61	106	61	36	49
9	28	e4.5	e4.1	e3.6	e4.3	e5.0	e11	79	111	62	31	51
10	27	e4.9	e3.7	e3.8	e3.9	e5.1	e11	62	112	55	33	64
11	27	5.4	e3.6	e3.8	e2.9	e5.0	e12	45	106	61	49	64
12	27	3.4	e4.1	e3.8	e4.2	e5.1	e12	48	100	63	41	60
13	28	3.3	e3.9	e3.4	e4.3	e5.2	e14	58	98	56	38	49
14	29	3.2	e3.9	e3.3	e4.5	e5.4	e15	71	99	52	37	49
15	28	3.3	e3.9	e3.5	e4.0	e6.0	e15	74	104	64	39	59
16	25	3.4	e3.9	e3.5	e4.1	e6.4	e15	74	105	45	37	53
17	25	3.4	e4.0	e4.1	e4.0	e7.6	e17	79	126	42	37	40
18	22	3.3	e4.1	e4.0	e4.0	e8.0	e18	90	142	41	55	39
19	12	e4.0	e4.2	e4.1	e4.4	e9.0	e21	103	121	42	57	45
20	14	e4.8	e4.0	e4.1	e4.2	e10	e26	107	113	43	68	49
21	33	e5.1	e3.2	e4.0	e4.0	e13	e25	105	114	42	78	42
22	33	e5.2	e2.6	e3.8	e4.1	e13	e24	109	116	45	67	42
23	17	e5.1	e3.0	e3.9	e3.5	e13	25	115	107	61	63	41
24	15	e5.0	e3.3	e4.0	e3.4	e14	35	112	100	59	61	41
25	16	e4.9	e3.7	e4.0	e4.2	e18	32	98	89	57	47	40
26	15	e5.0	e4.1	e4.0	e4.0	e17	26	98	81	52	49	38
27	14	e5.0	e4.2	e4.1	e4.1	e13	32	100	77	51	53	32
28	16	e5.1	e4.2	e3.0	e4.3	e13	34	105	76	56	54	33
29	12	e5.3	e4.3	e2.8	---	e12	39	109	73	55	54	45
30	3.6	e5.2	e4.0	e3.5	---	e12	40	106	90	57	52	43
31	3.5	---	e3.9	e4.1	---	e12	---	96	---	58	51	---
TOTAL	805.1	127.2	122.9	116.6	114.7	268.3	589	2308	3124	1794	1525	1398
MEAN	26.0	4.24	3.96	3.76	4.10	8.65	19.6	74.5	104	57.9	49.2	46.6
MAX	58	5.4	5.0	4.1	5.2	18	40	115	142	85	78	64
MIN	3.5	3.0	2.6	2.8	2.9	4.4	11	24	73	41	31	32
AC-FT	1600	252	244	231	228	532	1170	4580	6200	3560	3020	2770

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 1999, BY WATER YEAR (WY)

MEAN	17.4	7.58	5.36	5.00	5.07	7.02	33.8	128	139	77.6	55.0	34.3
MAX	58.5	35.2	16.7	14.7	12.5	15.2	89.5	258	343	191	93.4	65.5
(WY)	1942	1942	1987	1987	1987	1972	1943	1952	1983	1983	1983	1983
MIN	6.25	1.64	1.26	.92	1.11	1.57	9.13	29.2	16.0	12.2	15.9	11.0
(WY)	1978	1990	1977	1977	1977	1977	1964	1977	1977	1977	1977	1977

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1939 - 1999	
ANNUAL TOTAL	17918.1		12292.8			
ANNUAL MEAN	49.1		33.7		43.2	
HIGHEST ANNUAL MEAN					75.7	1983
LOWEST ANNUAL MEAN					10.6	1977
HIGHEST DAILY MEAN	341	May 21	142	Jun 18	695	Jun 16 1995
LOWEST DAILY MEAN	e2.6	Dec 22	e2.6	Dec 22	.80	Jan 15 1977
ANNUAL SEVEN-DAY MINIMUM	3.2	Jan 15	3.3	Nov 12	.89	Jan 9 1977
INSTANTANEOUS PEAK FLOW			198	Jun 17	892	Jun 15 1995
INSTANTANEOUS PEAK STAGE			2.43	Jun 17	a3.79	Jun 15 1995
ANNUAL RUNOFF (AC-FT)	35540		24380		31290	
10 PERCENT EXCEEDS	138		95		114	
50 PERCENT EXCEEDS	25		24		16	
90 PERCENT EXCEEDS	3.5		3.8		3.7	

e Estimated
a Maximum gage height, 5.10 ft, Apr 13, 1958, ice jam.

09143500 SURFACE CREEK AT CEDAREDGE, CO

LOCATION.--Lat 38°54'06", long 107°55'14", in $SW^1/_4SE^1/_4$ sec.20, T.13 S., R.94 W., Delta County, Hydrologic Unit 14020005, on left bank at Cedaredge, 700 ft east of State Highway 65, and 8.5 mi upstream from mouth.

DRAINAGE AREA.--39.0 mi^2.

PERIOD OF RECORD.--October 1916 to current year. Monthly discharge only for some periods, published in WSP 1313.

REVISED RECORDS.--WRD CO-83-2: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry, and concrete control. Elevation of gage is 6,220 ft above sea level, from topographic map. Prior to June 8, 1917, nonrecording gage at present site at datum 0.50 ft, higher.

REMARKS.--Records good except for estimated daily discharges, which are poor. Natural flow of stream affected by diversions to and from nearby streams, many small storage reservoirs, diversions for irrigation, and return flow from irrigated areas. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33	6.0	1.7	e1.7	e1.8	2.7	9.0	57	65	45	31	42
2	36	6.6	1.6	e1.6	e1.9	2.9	13	53	72	44	21	48
3	36	6.7	1.5	e1.4	e2.0	2.4	14	48	73	43	20	39
4	36	4.4	1.4	e1.4	e2.1	3.5	13	47	75	40	24	36
5	29	4.8	1.3	1.6	e2.3	3.3	11	39	70	35	39	32
6	28	5.1	.87	1.6	e2.2	3.1	12	37	70	34	34	29
7	24	2.7	1.3	1.5	e1.9	3.0	17	36	63	33	28	27
8	21	2.6	1.3	1.6	e1.9	3.0	20	44	73	39	23	26
9	19	1.9	1.3	1.7	e1.8	2.7	15	57	78	45	16	22
10	19	2.1	1.3	1.5	e1.6	2.7	14	80	70	34	16	22
11	19	2.2	1.3	e1.4	e1.7	2.8	13	55	71	39	32	22
12	19	2.1	1.4	e1.4	e2.2	2.6	15	66	71	44	25	20
13	19	1.1	1.4	e1.3	e2.2	2.7	25	69	76	36	20	19
14	20	1.5	1.5	e1.3	e2.4	3.0	40	85	81	35	19	21
15	20	1.2	1.3	e1.4	e2.2	3.7	33	76	86	52	22	34
16	18	1.9	1.1	1.5	e2.3	3.7	25	80	91	38	21	31
17	18	1.7	1.2	e1.5	e2.2	4.4	24	83	106	36	20	26
18	18	1.8	1.3	e1.3	e2.2	6.0	33	88	125	34	29	29
19	9.8	1.6	1.4	e1.4	1.8	9.4	50	97	79	38	28	32
20	8.8	1.7	e1.4	e1.5	2.0	14	67	94	66	37	35	39
21	15	1.9	e1.3	e1.6	1.9	18	53	86	80	34	49	29
22	12	1.9	e1.0	e1.4	1.9	19	47	83	84	27	37	28
23	11	1.8	e1.1	e1.5	2.3	13	39	89	76	24	43	26
24	11	1.9	e1.2	e1.7	2.2	9.7	70	86	78	20	38	28
25	11	1.5	e1.3	1.8	2.3	18	67	71	73	19	36	27
26	13	1.6	e1.4	1.8	2.4	19	49	72	70	20	39	25
27	13	1.3	e1.4	1.8	2.3	13	57	73	67	21	42	20
28	13	1.2	e1.4	e1.7	2.3	15	55	71	58	24	44	20
29	8.1	1.2	e1.4	e1.4	---	20	62	81	55	23	44	21
30	5.6	1.7	e1.4	e1.6	---	22	76	79	58	24	39	17
31	5.8	---	e1.3	e1.7	---	8.6	---	62	---	27	36	---
TOTAL	569.1	75.7	41.07	47.6	58.3	256.9	1038.0	2144	2260	1044	950	837
MEAN	18.4	2.52	1.32	1.54	2.08	8.29	34.6	69.2	75.3	33.7	30.6	27.9
MAX	36	6.7	1.7	1.8	2.4	22	76	97	125	52	49	48
MIN	5.6	1.1	.87	1.3	1.6	2.4	9.0	36	55	19	16	17
AC-FT	1130	150	81	94	116	510	2060	4250	4480	2070	1880	1660

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1918 - 1999, BY WATER YEAR (WY)

MEAN	10.9	5.19	3.37	3.17	3.32	5.04	34.6	109	84.2	36.1	22.8	15.4
MAX	49.3	27.3	15.0	14.0	12.8	21.3	83.7	302	313	112	39.3	29.9
(WY)	1942	1942	1926	1987	1987	1986	1942	1920	1983	1983	1975	1982
MIN	2.00	.95	.50	.40	.40	.65	1.00	28.4	8.83	5.95	8.77	3.37
(WY)	1919	1922	1934	1940	1940	1954	1920	1977	1977	1977	1977	1934

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1918 - 1999	
ANNUAL TOTAL	12755.87		9321.67			
ANNUAL MEAN	34.9		25.5		27.9	
HIGHEST ANNUAL MEAN					62.5	1983
LOWEST ANNUAL MEAN					7.87	1977
HIGHEST DAILY MEAN	280	May 21	125	Jun 18	640	May 30 1920
LOWEST DAILY MEAN	.87	Dec 6	.87	Dec 6	a.00	Sep 25 1939
ANNUAL SEVEN-DAY MINIMUM	1.2	Dec 5	1.2	Dec 5	.11	Mar 12 1954
INSTANTANEOUS PEAK FLOW			182	Jun 18	b1190	May 13 1941
INSTANTANEOUS PEAK STAGE			2.04	Jun 18	c2.50	May 13 1941
ANNUAL RUNOFF (AC-FT)	25300		18490		20220	
10 PERCENT EXCEEDS	104		71		73	
50 PERCENT EXCEEDS	19		19		9.7	
90 PERCENT EXCEEDS	1.6		1.4		2.0	

e Estimated
a No flow at times some years.
b From rating curve extended above 640 ft^3/s.
c Maximum gage height, 3.10 ft, May 21, 1993.

09144250 GUNNISON RIVER AT DELTA, CO

LOCATION.--Lat 38°45'11", long. 108°04'40", in $NW^1/_4NW^1/_4$ sec.13, T.15 S., R.96 W., Delta County, Hydrologic Unit 14020005, in Confluence Park on left bank, 0.7 mi downstream from U.S. Highway 50 bridge at north edge of Delta.

DRAINAGE AREA.--5,628 mi^2.

PERIOD OF RECORD.--May 1976 to current year. Gage-height records collected at this site 1912-77 (flood seasons only) are in reports of the National Weather Service.

GAGE.--Water-stage recorder with satellite telemetry and crest-stage gage. Elevation of gage is 4,910 ft above sea level, from topographic map. Prior to May 1976 nonrecording gage at site 0.7 mi upstream at datum 4.52 ft higher. June 1, 1976 to Mar. 19, 1998 water-stage recorder at site 0.7 mi upstream at datum 4.52 ft higher.

REMARKS.--Records good except for estimated daily discharges, which are fair. Natural flow of stream affected by transmountain and transbasin diversions, storage reservoirs, power developments, and many diversions for irrigation. Auxillary gage established 200 ft downstream from present site to collect streamflow data during bridge construction at principal site then in use, June 27, 1991 to September 30, 1992.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum gage height observed, 13.5 ft, June 6, 1957, from National Weather Service wire-weight gage at site 0.7 mi upstream, at datum 4.52 ft higher (discharge not determined).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	986	1150	1050	1110	928	852	921	2490	4310	2150	2540	1670
2	1040	1160	1120	1020	905	802	931	2160	3680	2110	2550	1780
3	1020	1150	1130	1000	916	885	945	2050	3330	2030	2500	2220
4	1030	1130	1120	1010	902	898	920	2180	2880	2020	2930	2400
5	1030	1100	1130	1010	945	897	864	1940	2650	1980	3190	2630
6	1090	1090	1120	914	931	825	829	1790	2440	1920	3210	2400
7	1100	1060	1080	990	926	770	804	1710	2040	1930	3110	2230
8	1090	1060	1030	1010	933	778	862	1830	2170	1710	3010	2170
9	1080	1160	1060	978	934	771	827	2100	2440	1570	2950	2140
10	1170	1100	1060	994	950	752	656	2410	2490	1520	2980	2090
11	1160	1100	1060	984	922	757	581	2240	2340	1510	2920	2070
12	1140	1100	1060	1010	860	778	515	1970	2270	1570	2570	2090
13	1130	1130	1070	1000	845	760	524	2180	2260	1440	2290	2090
14	1120	1130	1070	895	899	735	799	2560	2110	1470	2230	2050
15	1010	1140	1110	856	908	750	582	2760	1990	1590	2290	2130
16	996	1140	1070	837	798	773	525	2840	2000	1400	2350	2200
17	1060	1090	1070	863	854	786	479	2810	2220	1130	2300	2200
18	1070	1150	1080	882	e900	800	474	2820	2660	1100	2270	2350
19	1070	1160	1070	899	e910	831	516	3320	2360	1160	2240	2440
20	1050	1150	1090	976	e900	937	668	3990	2150	1130	1980	2610
21	1040	1120	1080	1030	e880	1030	774	4200	2240	1090	1710	2560
22	1040	1130	e1080	937	e860	1070	917	4170	2330	1050	1700	2380
23	1060	1140	e1030	898	e840	929	974	4540	2160	1080	1640	2300
24	1050	1140	e1060	901	e850	966	996	5070	2050	1040	1580	2350
25	1150	1140	1150	890	e840	1030	1280	5270	2140	1090	1540	2450
26	1270	1140	1150	827	849	1070	1470	5140	2240	1060	1460	2400
27	1190	1120	1060	881	845	1120	1500	5110	2100	1130	1370	2360
28	1370	1120	1050	878	846	1080	1450	4990	2030	1170	1360	2350
29	1200	1150	1060	839	---	1010	1450	5130	2260	1560	1360	2350
30	1170	1160	1040	831	---	1000	2010	5090	2200	1650	1390	2360
31	1190	---	1100	861	---	969	---	4910	---	2110	1480	---
TOTAL	34172	33810	33510	29011	24876	27411	27043	101770	72540	46470	69000	67820
MEAN	1102	1127	1081	936	888	884	901	3283	2418	1499	2226	2261
MAX	1370	1160	1150	1110	950	1120	2010	5270	4310	2150	3210	2630
MIN	986	1060	1030	827	798	735	474	1710	1990	1040	1360	1670
AC-FT	67780	67060	66470	57540	49340	54370	53640	201900	143900	92170	136900	134500

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1976 - 1999, BY WATER YEAR (WY)

MEAN	1384	1551	1628	1630	1673	1957	2532	4776	4284	2263	1213	1248
MAX	2833	3156	3103	3349	3381	3744	6641	11090	13520	10110	2752	2496
(WY)	1987	1987	1987	1985	1985	1997	1985	1984	1984	1995	1984	1986
MIN	398	467	440	480	491	506	366	411	331	275	269	335
(WY)	1978	1978	1978	1990	1990	1990	1977	1977	1977	1977	1977	1977

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1976 - 1999	
ANNUAL TOTAL	718550		567433			
ANNUAL MEAN	1969		1555		2202	
HIGHEST ANNUAL MEAN					4670	1984
LOWEST ANNUAL MEAN					601	1990
HIGHEST DAILY MEAN	7880	May 22	5270	May 25	20300	Jun 7 1984
LOWEST DAILY MEAN	883	Aug 18	474	Apr 18	208	Aug 11 1977
ANNUAL SEVEN-DAY MINIMUM	915	Aug 15	557	Apr 12	215	Aug 10 1977
INSTANTANEOUS PEAK FLOW			5560	May 25	a25500	Jun 7 1984
INSTANTANEOUS PEAK STAGE			5.41	May 25	a13.15	Jun 7 1984
ANNUAL RUNOFF (AC-FT)	1425000		1126000		1595000	
10 PERCENT EXCEEDS	4440		2550		4340	
50 PERCENT EXCEEDS	1560		1130		1580	
90 PERCENT EXCEEDS	1000		840		534	

e Estimated
a At site 0.7 mi upstream, at datum 4.52 ft higher.

09146200 UNCOMPAHGRE RIVER NEAR RIDGWAY, CO

LOCATION.--Lat 38°11'02", long 107°44'43", in SW$^1/_4$NE$^1/_4$ sec.4, T.45 N., R.8 W., Ouray County, Hydrologic Unit 14020006, on right bank 15 ft downstream from bridge, 0.2 mi downstream from Dry Creek, 0.5 mi upstream from Dallas Creek, and 2.3 mi north of Ridgway.

DRAINAGE AREA.--149 mi^2

PERIOD OF RECORD.--October 1958 to current year. Water-quality data available 1996-98.

REVISED RECORDS.--WSP 2124: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 6,877.58 ft above sea level, (levels by U.S. Bureau of Reclamation).

REMARKS.--Records good except for estimated daily discharges, which are poor. Diversions for irrigation upstream from station. Water is imported upstream from station in some years by Red Mountain ditch from Mineral Creek in San Juan River basin. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	82	81	68	e48	50	66	77	109	475	664	383	205
2	90	86	67	e52	50	67	75	135	523	638	367	217
3	83	84	67	54	49	61	69	128	400	568	356	255
4	120	79	66	53	49	64	67	117	430	543	339	227
5	104	76	66	53	51	59	66	110	368	526	354	200
6	104	77	61	52	52	54	69	105	283	483	312	181
7	107	78	62	53	53	54	71	105	276	447	279	167
8	99	80	59	53	e49	56	73	140	390	431	253	155
9	92	83	58	53	e47	54	70	198	535	414	250	145
10	89	79	57	51	e45	52	63	179	615	365	324	139
11	85	83	61	51	e44	51	61	157	636	330	356	133
12	83	84	65	52	53	53	62	145	618	391	301	133
13	82	87	61	50	53	51	73	183	589	341	263	124
14	82	89	60	50	55	58	74	256	720	314	240	119
15	79	96	59	50	53	66	71	269	588	327	253	140
16	81	96	57	50	50	63	66	243	689	322	232	139
17	89	91	57	50	49	63	65	230	1120	304	240	141
18	90	83	57	50	50	61	71	247	1040	287	231	127
19	91	80	57	53	50	61	82	302	794	392	218	138
20	86	74	57	55	49	72	99	342	786	342	243	138
21	83	72	57	54	50	77	108	369	707	307	269	128
22	86	76	e52	49	50	81	104	370	733	303	255	123
23	85	76	e45	51	47	81	100	393	809	285	221	121
24	83	73	e48	53	50	74	114	445	786	284	218	127
25	82	70	e50	54	55	83	112	325	752	421	219	129
26	120	71	53	54	57	91	99	290	805	371	204	119
27	100	73	54	51	56	82	89	308	766	358	203	115
28	98	72	53	50	58	77	97	331	773	346	240	110
29	89	72	54	50	---	75	96	448	657	392	209	107
30	84	69	54	51	---	84	113	419	641	396	247	106
31	82	---	54	50	---	79	---	471	---	441	208	---
TOTAL	2810	2390	1796	1600	1424	2070	2456	7869	19304	12333	8287	4408
MEAN	90.6	79.7	57.9	51.6	50.9	66.8	81.9	254	643	398	267	147
MAX	120	96	68	55	58	91	114	471	1120	664	383	255
MIN	79	69	45	48	44	51	61	105	276	284	203	106
AC-FT	5570	4740	3560	3170	2820	4110	4870	15610	38290	24460	16440	8740

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1959 - 1999, BY WATER YEAR (WY)

MEAN	89.2	68.2	52.2	44.7	45.6	60.1	111	324	600	344	162	109
MAX	153	94.4	67.3	61.5	61.5	102	188	765	914	848	313	250
(WY)	1985	1971	1971	1997	1995	1997	1985	1984	1984	1983	1995	1970
MIN	57.6	48.8	35.8	33.1	32.0	40.5	67.5	122	168	88.5	73.3	52.9
(WY)	1979	1990	1977	1977	1990	1964	1973	1977	1977	1977	1977	1959

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1959 - 1999	
ANNUAL TOTAL	57385		66747			
ANNUAL MEAN	157		183		168	
HIGHEST ANNUAL MEAN					270	1984
LOWEST ANNUAL MEAN					72.6	1977
HIGHEST DAILY MEAN	707	Jun 3	1120	Jun 17	1740	Jun 24 1983
LOWEST DAILY MEAN	e45	Dec 23	e44	Feb 11	26	Jan 13 1963
ANNUAL SEVEN-DAY MINIMUM	48	Mar 4	49	Feb 5	30	Feb 13 1990
INSTANTANEOUS PEAK FLOW			1980	Jun 17	a2100	Jun 24 1983
INSTANTANEOUS PEAK STAGE			5.56	Jun 17	5.73	Jun 24 1983
ANNUAL RUNOFF (AC-FT)	113800		132400		121600	
10 PERCENT EXCEEDS	397		430		436	
50 PERCENT EXCEEDS	84		89		80	
90 PERCENT EXCEEDS	51		51		43	

e Estimated
a From rating curve extended above 1800 ft^3/s.

09147000 DALLAS CREEK NEAR RIDGWAY, CO

LOCATION.--Lat 38°10'40", long 107°45'28", on line between sec. 4 and 5, T.45 N., R.8 W., Ouray County, Hydrologic Unit 14020006, on right bank 20 ft downstream from county road bridge, 1.5 mi upstream from mouth, and 1.5 mi northwest of Ridgway.

DRAINAGE AREA.--97.2 mi^2.

PERIOD OF RECORD.--March 1922 to October 1927, October 1955 to September 1971, October 1979 to current year.

REVISED RECORDS.--WSP 1924: 1960. WDR CO-88-2: Drainage area.

GAGE.--Water stage recorder with satellite telemetry and concrete control. Elevation of gage is 6,980 ft above sea level, from topographic map. Mar. 1, 1922 to Oct. 31, 1927, nonrecording gage at different datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. Diversions upstream from station for irrigation of about 4,500 acres upstream from and 700 acres downstream from station. One small ditch imports water from Leopard Creek (Dolores River basin) to drainage upstream from station. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	28	24	e19	e18	19	21	84	21	141	e200	e86
2	22	28	25	e19	e18	19	20	86	14	150	e180	e96
3	21	29	24	e19	e17	18	19	77	15	135	e170	e110
4	43	28	23	e18	e17	21	21	78	5.0	133	e160	e100
5	29	27	24	e17	e17	21	23	63	3.3	128	e150	e92
6	29	28	e23	e18	18	20	23	63	5.2	110	e160	e94
7	30	26	e21	e17	22	19	27	65	3.5	94	e150	e90
8	29	27	e19	18	24	20	34	68	2.3	96	e130	e82
9	28	26	e19	e17	24	19	33	64	3.7	84	e130	e74
10	28	23	e20	e17	21	18	25	50	8.9	71	e140	e72
11	26	25	e21	e17	15	18	26	40	12	71	e150	e66
12	26	27	e20	18	e16	20	26	35	15	82	e160	e66
13	26	32	e20	e17	e17	19	30	38	16	71	e140	e56
14	26	33	e19	e17	e17	20	26	43	31	64	e110	e56
15	26	32	e19	e18	e17	22	18	37	36	80	e100	e60
16	25	33	e19	e18	e16	25	14	31	47	92	e110	e64
17	29	31	e20	20	e16	27	13	26	209	87	e110	e64
18	28	30	e19	20	e16	28	10	21	208	97	e100	62
19	28	27	e19	24	e16	41	9.2	17	148	145	e96	62
20	27	23	e19	23	17	48	10	17	133	116	e100	63
21	28	29	e18	20	17	46	9.9	17	126	92	e110	60
22	28	30	e16	18	17	40	9.9	19	146	102	e100	55
23	27	29	e15	e17	16	33	12	19	157	100	e96	53
24	27	27	e14	18	18	31	44	25	148	102	e94	56
25	31	27	e16	18	18	34	45	26	128	146	e94	54
26	40	25	e18	19	17	34	45	19	147	124	e88	50
27	33	26	e18	e20	17	33	40	13	149	108	e90	48
28	33	26	e18	e19	17	32	34	12	177	98	e98	46
29	29	26	e18	e20	---	28	34	13	139	101	e90	44
30	28	24	e18	e18	---	25	79	18	125	156	e98	42
31	28	---	e18	e18	---	21	---	20	---	e600	e90	---
TOTAL	879	832	604	576	496	819	781.0	1204	2378.9	3776	3794	2023
MEAN	28.4	27.7	19.5	18.6	17.7	26.4	26.0	38.8	79.3	122	122	67.4
MAX	43	33	25	24	24	48	79	86	209	600	200	110
MIN	21	23	14	17	15	18	9.2	12	2.3	64	88	42
AC-FT	1740	1650	1200	1140	984	1620	1550	2390	4720	7490	7530	4010

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1922 - 1999, BY WATER YEAR (WY)

MEAN	25.5	24.6	20.3	18.0	18.9	25.8	59.1	52.5	63.2	77.6	60.8	39.9
MAX	65.1	39.1	33.9	32.0	32.0	59.4	183	249	171	230	141	117
(WY)	1985	1926	1924	1924	1924	1985	1985	1984	1984	1983	1983	1927
MIN	2.07	14.4	13.4	9.61	11.9	14.8	4.13	.67	2.45	16.7	6.25	2.58
(WY)	1957	1957	1994	1980	1994	1980	1990	1981	1989	1959	1956	1956

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1922 - 1999	
ANNUAL TOTAL	11764.7		18162.9			
ANNUAL MEAN	32.2		49.8		40.4	
HIGHEST ANNUAL MEAN					86.4	1984
LOWEST ANNUAL MEAN					13.8	1990
HIGHEST DAILY MEAN	180	Jul 11	e600	Jul 31	740	May 3 1924
LOWEST DAILY MEAN	1.8	May 23	2.3	Jun 8	.21	Jun 19 1981
ANNUAL SEVEN-DAY MINIMUM	2.3	May 22	4.6	Jun 4	.38	May 11 1981
INSTANTANEOUS PEAK FLOW			a3960	Jul 31	a3960	Jul 31 1999
INSTANTANEOUS PEAK STAGE			b8.42	Jul 31	b8.42	Jul 31 1999
ANNUAL RUNOFF (AC-FT)	23340		36030		29260	
10 PERCENT EXCEEDS	62		124		93	
50 PERCENT EXCEEDS	26		27		25	
90 PERCENT EXCEEDS	13		17		12	

e Estimated
a On basis of slope-area measurement of peak flow.
b From high water mark.

09147022 RIDGWAY RESERVOIR NEAR RIDGWAY, CO

LOCATION.--Lat 38°14'14", long 107°45'27", in NW$^{1}/_{4}$SW$^{1}/_{4}$ sec.16, T.46 N., R.8 W., Ouray County, Hydrologic Unit 14020006, in concrete gate house at base of Ridgway Reservoir on Uncompaghre River, 0.5 mi upstream from Fisher Creek, and 5.3 mi north of Ridgway.

DRAINAGE AREA.--265 mi^{2}.

PERIOD OF RECORD.--October 1988 to current year.

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 6,871.3 ft above sea level, (levels by U.S. Bureau of Reclamation); gage readings have been reduced to elevations above sea level.

REMARKS.--Reservoir is formed by an earthfill dam. Dam completed Mar. 22, 1988. Capacity 84,590 acre-ft between 6,680.0 ft, streambed at dam axis and 6,871.3 ft, crest of spillway. Dead storage below elevation 6,720.0 ft, 1,430 acre-ft. Figures given are live contents.

COOPERATION.--Capacity tables provided by U.S. Bureau of Reclamation.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 84,900 acre-ft, June 11, 1990, elevation, 6,872.93 ft; minimum contents, 49,810 acre-ft, June 2, 1995, elevation, 6834.93 ft.

EXTREMES FOR CURRENT YEAR.--Maximum daily mean contents, 82,770 acre-ft, Aug. 1, mean elevation, 6,870.93 ft; minimum daily mean contents, 64,910 acre-ft, Feb 27, 28; mean elevation, 6,852.78 ft.

MONTHEND ELEVATION AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Elevation (feet)	Contents (acre-feet)	Change in Contents (acre feet)
Sept. 30	6862.47	74,130	
Oct. 31	6859.03	70,780	-3,350
Nov. 30	6855.40	67,340	-3,440
Dec. 31	6853.35	65,430	-1,910
CAL YR 1998	-	-	4,010
Jan. 31	6853.16	65,260	-170
Feb. 28	6852.78	64,910	-350
Mar. 31	6854.01	66,040	+1,130
Apr. 30	6856.58	68,440	+2,400
May 31	6861.70	73,380	+4,940
June 30	6869.88	81,650	+8,270
July 31	6870.97	82,810	+1,160
Aug. 31	6867.61	79,290	-3,520
Sept. 30	6855.35	67,290	-12,000
WATER YEAR 1999	-	-	-6,840

09147025 UNCOMPAHGRE RIVER BELOW RIDGWAY RESERVOIR, CO

LOCATION.--Lat 38°14'17", long 107°45'31", in $NE^1/_4SE^1/_4$ sec.17, T.46 N., R.8 W., Ouray County, Hydrologic Unit 14020006, on right bank 1,600 ft upstream from Fisher Creek, 800 ft downstream from Ridgway Reservoir gate house, and 5.4 mi north of Ridgway.

DRAINAGE AREA.--265 mi^2.

PERIOD OF RECORD.--October 1988 to current year.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 6,650 ft above sea level, from topographic map.

REMARKS.-- No estimated daily discharges. Records good. Diversions for irrigation by means of numerous canals downstream from station. Flow regulated by Ridgway Reservoir, capacity 84,591 acre-ft. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	153	203	109	79	79	77	73	73	351	960	867	399
2	152	203	109	79	79	75	74	73	351	947	879	403
3	152	130	109	79	79	75	75	125	351	933	886	405
4	152	75	109	79	79	75	75	191	351	927	890	405
5	137	111	109	79	79	75	75	191	351	919	781	405
6	155	152	109	79	79	75	74	191	351	886	678	405
7	136	198	109	79	79	75	74	191	351	781	678	446
8	155	198	109	79	79	75	74	191	351	625	677	481
9	155	198	109	79	79	75	74	191	351	563	581	480
10	155	197	109	79	79	75	75	191	383	562	511	481
11	155	196	108	79	79	75	74	191	405	562	514	482
12	155	195	107	77	79	75	73	215	405	484	516	482
13	151	195	106	74	79	75	74	233	405	432	516	481
14	203	195	106	72	79	75	75	234	434	432	516	477
15	203	195	106	71	79	75	75	234	487	432	517	475
16	203	195	106	70	79	75	74	233	510	432	517	475
17	203	195	106	70	79	75	73	233	564	433	440	475
18	203	195	106	70	79	75	73	269	723	433	392	474
19	203	195	107	70	79	75	73	296	821	434	392	468
20	203	195	107	70	79	75	73	317	820	435	392	468
21	203	195	106	71	79	74	73	336	883	435	393	468
22	203	195	106	71	79	74	73	339	949	437	392	465
23	203	169	106	71	79	73	73	339	975	439	393	460
24	203	125	106	71	79	73	73	339	1080	439	396	460
25	203	117	106	71	79	73	73	339	1110	439	398	460
26	203	109	108	70	79	73	73	343	1110	439	399	460
27	203	109	109	71	79	73	73	347	1110	439	399	460
28	203	109	91	75	79	73	73	348	1100	439	399	459
29	203	109	79	79	---	73	73	349	1100	439	399	453
30	203	109	79	79	---	73	73	350	1020	439	399	453
31	203	---	79	79	---	74	---	350	---	475	399	---
TOTAL	5617	4962	3230	2321	2212	2308	2210	7842	19553	17471	16506	13665
MEAN	181	165	104	74.9	79.0	74.5	73.7	253	652	564	532	456
MAX	203	203	109	79	79	77	75	350	1110	960	890	482
MIN	136	75	79	70	79	73	73	73	351	432	392	399
AC-FT	11140	9840	6410	4600	4390	4580	4380	15550	38780	34650	32740	27100

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 1999, BY WATER YEAR (WY)

MEAN	123	91.8	77.8	61.8	63.5	96.3	267	333	422	438	357	213
MAX	307	165	105	76.5	93.9	179	560	510	652	846	535	456
(WY)	1998	1999	1993	1997	1997	1995	1997	1997	1999	1995	1992	1999
MIN	55.4	43.1	41.9	41.3	39.9	39.3	36.8	159	199	186	188	68.1
(WY)	1991	1990	1990	1992	1998	1990	1990	1989	1989	1989	1989	1993

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1989 - 1999	
ANNUAL TOTAL	71655		97897			
ANNUAL MEAN	196		268		213	
HIGHEST ANNUAL MEAN					311	1995
LOWEST ANNUAL MEAN					117	1989
HIGHEST DAILY MEAN	622	Jul 13	1110	Jun 25	1110	Jun 25 1999
LOWEST DAILY MEAN	38	Jan 18	70	Jan 16	34	Apr 21 1990
ANNUAL SEVEN-DAY MINIMUM	38	Jan 21	70	Jan 15	34	Apr 21 1990
INSTANTANEOUS PEAK FLOW			1130	Jun 24	1160	Jun 13 1990
INSTANTANEOUS PEAK STAGE			3.52	Jun 24	a3.56	Jun 13 1990
ANNUAL RUNOFF (AC-FT)	142100		194200		154100	
10 PERCENT EXCEEDS	424		516		477	
50 PERCENT EXCEEDS	170		191		118	
90 PERCENT EXCEEDS	40		73		49	

a-Maximum gage height, 3.63 ft, Jul 10, 1995.

09147500 UNCOMPAHGRE RIVER AT COLONA, CO

LOCATION.--Lat. 38°19'53", long. 107°46'44", in $NW^1/_4NW^1/_4$ sec.17, T.47 N., R.8 W., Ouray County, Hydrologic Unit 14020006, on right bank 75 ft downstream from county highway crossing, 0.2 mi north of Colona, and 1.0 mi upstream from Beaton Creek.

DRAINAGE AREA.--448 mi^2.

PERIOD OF RECORD.--April 1903 to November 1905, April to June 1906 (gage heights and discharge measurements only), October 1912 to current year. Monthly discharge only for some periods, published in WSP 1313. Published as "near Colona" 1904-06, 1922-34. Statistical summary computed for 1986 to current year. Water-quality data available 1990-93.

REVISED RECORDS.--WSP 1313: 1904. WDR CO-88-2: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 6,318.80 ft above sea level. See WSP 1713 or 1733 for history of changes prior to Sept. 30, 1949

REMARKS.--Records good except for estimated daily discharges, which are poor. Flow regulated by Ridgway Reservoir, 7.7 mi upstream, since 1986, total capacity 84,590 acre-ft. Diversions upstream from station for irrigation of about 2,600 acres downstream from station. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	122	352	138	90	92	94	106	94	476	1180	977	460
2	124	351	131	88	90	93	103	160	479	1130	989	461
3	121	272	129	89	89	91	97	204	448	1090	1020	467
4	150	135	128	86	88	95	93	281	469	1060	1040	458
5	135	161	123	85	89	94	90	282	450	1040	910	452
6	152	189	119	84	88	89	89	282	413	986	773	444
7	151	246	119	84	88	88	91	297	415	868	746	474
8	174	249	113	84	91	91	94	334	469	691	729	500
9	165	251	117	85	97	87	84	367	518	594	641	494
10	162	246	120	82	98	87	74	333	554	577	583	495
11	162	250	113	e84	88	86	70	287	582	572	576	511
12	161	253	116	e88	85	90	69	281	560	505	550	511
13	150	253	115	89	94	87	71	310	570	418	537	498
14	195	230	115	87	94	93	69	359	660	408	529	488
15	196	230	113	82	92	103	64	350	666	407	544	503
16	200	229	113	83	89	103	56	338	745	402	539	505
17	213	226	113	84	88	103	48	319	1000	401	480	499
18	218	221	112	83	87	101	47	341	1190	406	434	499
19	226	220	115	83	87	105	45	385	1220	445	438	507
20	233	214	117	84	86	116	44	419	1200	418	439	519
21	247	216	112	86	86	126	44	451	1170	411	461	e530
22	265	219	e105	82	86	132	44	452	1280	415	466	e520
23	278	204	e100	82	84	126	43	493	1310	419	459	e520
24	284	160	e100	83	87	118	49	539	1440	439	459	e520
25	296	149	e98	83	90	130	54	446	1530	474	457	e510
26	318	138	e96	83	90	137	50	427	1510	488	441	e520
27	322	139	e94	81	88	123	49	410	1460	519	450	e510
28	328	135	e92	83	90	112	55	423	1430	602	481	e510
29	330	135	91	90	---	113	54	457	1370	618	463	487
30	339	133	89	92	---	125	85	447	1260	589	472	486
31	345	---	89	91	---	113	---	478	---	576	461	---
TOTAL	6762	6406	3445	2640	2501	3251	2031	11046	26844	19148	18544	14858
MEAN	218	214	111	85.2	89.3	105	67.7	356	895	618	598	495
MAX	345	352	138	92	98	137	106	539	1530	1180	1040	530
MIN	121	133	89	81	84	86	43	94	413	401	434	444
AC-FT	13410	12710	6830	5240	4960	6450	4030	21910	53250	37980	36780	29470

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1986 - 1999, BY WATER YEAR (WY)

MEAN	151	114	94.0	81.8	82.6	123	316	526	659	471	313	209
MAX	353	214	132	105	121	213	683	926	1066	1226	598	495
(WY)	1998	1999	1993	1986	1997	1997	1997	1987	1995	1995	1999	1999
MIN	51.6	50.2	53.0	51.4	51.0	58.2	62.6	160	229	207	135	52.3
(WY)	1990	1990	1990	1990	1990	1990	1990	1988	1989	1988	1988	1989

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1986 - 1999	
ANNUAL TOTAL	88660		117476			
ANNUAL MEAN	243		322		a262	
HIGHEST ANNUAL MEAN					396	1997
LOWEST ANNUAL MEAN					129	1989
HIGHEST DAILY MEAN	737	May 4	1530	Jun 25	1900	Jul 11 1995
LOWEST DAILY MEAN	55	Jan 21	43	Apr 23	b25	Apr 28 1990
ANNUAL SEVEN-DAY MINIMUM	57	Jan 15	45	Apr 17	29	Sep 24 1989
INSTANTANEOUS PEAK FLOW			1740	Jun 25	c2230	Jul 12 1995
INSTANTANEOUS PEAK STAGE			4.44	Jun 25	4.76	Jul 12 1995
ANNUAL RUNOFF (AC-FT)	175900		233000		190100	
10 PERCENT EXCEEDS	562		597		612	
50 PERCENT EXCEEDS	191		214		131	
90 PERCENT EXCEEDS	59		84		65	

e Estimated
a Average discharge for 76 years (water years 1904-1905, 1913-1986), 271 ft^3/s, 196,300 acre-ft/yr, prior to completion of Ridgway Reservoir.
b Minimum daily discharge for period of record, 12 ft^3/s, Sep 19, 1956, and May 7, 1967.
c Maximum discharge for period of record, 4080 ft^3/s, June 13-14, 1921, gage height unknown.

09149500 UNCOMPAHGRE RIVER AT DELTA, CO

LOCATION.--Lat 38°44'31", long 108°04'49", in $SW^1/_4SW^1/_4$ sec.13, T.15 S., R.96 W., Delta County, Hydrologic Unit 14020006, on right bank 525 ft downstream from 5th Street Bridge at west edge of Delta and 1.1 mi upstream from mouth.

DRAINAGE AREA.--1,115 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1903 to October 1931 (no winter records in most years), September 1938 to current year. Monthly discharge only for some periods, published in WSP 1313. Published as "near Delta" 1907-24. Statistical summary computed for 1939 to current year.

REVISED RECORDS.--WSP 1243: 1904. WDR CO-88-2: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 4,926.49 ft above sea level. Feb. 18, 1960 to Mar. 26, 1963, water-stage recorder at site 750 ft upstream at datum 3.43 ft higher. Mar. 27, 1963 to May 12, 1965, water-stage recorder at site 1,050 ft upstream at datum 6.08 ft higher. See WSP 1733 or 1924 for history of changes prior to Feb. 18, 1960.

REMARKS.--Records good except for estimated daily discharges, which are poor. Natural flow of stream affected by water diverted from Gunnison River (see record of diversion through Gunnison tunnel published with station 09128000) and other adjacent basins, diversions for irrigation of about 90,000 acres upstream from station, and return flow from irrigated areas.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	550	546	314	252	216	203	215	856	346	777	1580	783
2	613	548	312	244	209	208	351	838	343	716	1420	865
3	591	542	310	241	211	203	366	872	330	680	1410	944
4	e650	430	308	238	208	203	345	935	276	660	1430	936
5	e665	398	306	236	221	203	345	981	257	630	1500	916
6	e700	438	302	234	216	199	304	759	297	570	1290	879
7	e685	499	295	235	211	197	228	737	242	578	1140	822
8	e670	502	285	234	210	198	172	784	222	493	1070	813
9	690	525	299	226	212	198	177	761	265	426	1030	794
10	605	488	300	224	220	194	221	714	298	371	898	e820
11	563	481	289	223	211	196	217	594	336	362	1020	e855
12	574	477	295	227	192	197	213	444	329	500	983	e850
13	579	480	292	223	202	196	94	361	340	298	875	e825
14	597	482	291	214	206	197	56	359	e405	265	852	e830
15	581	488	290	211	211	206	144	346	e450	313	871	e845
16	601	494	287	210	207	348	148	308	535	298	912	e875
17	652	482	287	206	209	328	123	274	786	302	823	e845
18	668	469	289	204	199	313	94	199	1360	295	717	e860
19	681	449	289	209	202	260	88	260	1340	378	655	e880
20	719	434	292	228	199	302	68	350	1250	416	708	e890
21	745	426	299	239	198	329	58	389	1170	360	797	e850
22	768	429	278	223	198	294	93	368	1320	328	835	e855
23	784	423	294	211	194	297	136	373	1280	313	811	e860
24	794	369	297	217	196	292	204	442	1300	311	806	e845
25	847	347	312	224	199	365	314	406	1350	496	768	e840
26	1080	330	321	228	201	307	353	338	1290	500	706	e815
27	957	326	319	224	197	250	383	294	1200	528	685	e813
28	1050	322	311	209	197	233	374	286	1210	600	826	e815
29	920	321	260	205	---	216	391	318	1040	865	797	e810
30	910	317	253	208	---	237	704	352	920	909	768	e830
31	724	---	251	211	---	184	---	371	---	1330	761	---
TOTAL	22213	13262	9127	6918	5752	7553	6979	15669	22087	15868	29744	25460
MEAN	717	442	294	223	205	244	233	505	736	512	959	849
MAX	1080	548	321	252	221	365	704	981	1360	1330	1580	944
MIN	550	317	251	204	192	184	56	199	222	265	655	783
AC-FT	44060	26310	18100	13720	11410	14980	13840	31080	43810	31470	59000	50500

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 1999, BY WATER YEAR (WY)

MEAN	409	254	167	138	134	165	313	513	571	326	297	393
MAX	844	442	294	223	222	367	1107	2542	1763	1170	959	944
(WY)	1998	1999	1999	1999	1997	1997	1985	1984	1984	1983	1999	1961
MIN	131	125	111	70.9	66.5	80.7	78.6	125	136	112	93.7	123
(WY)	1978	1950	1943	1943	1943	1951	1967	1954	1954	1955	1956	1956

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1939 - 1999	
ANNUAL TOTAL	123798		180632			
ANNUAL MEAN	339		495		307	
HIGHEST ANNUAL MEAN					688	1984
LOWEST ANNUAL MEAN					155	1951
HIGHEST DAILY MEAN	1080	Oct 26	1580	Aug 1	4520	May 15 1984
LOWEST DAILY MEAN	115	Mar 13	56	Apr 14	a20	Dec 26 1962
ANNUAL SEVEN-DAY MINIMUM	120	Mar 10	94	Apr 17	42	Mar 14 1959
INSTANTANEOUS PEAK FLOW			1780	Aug 1	b5800	May 15 1984
INSTANTANEOUS PEAK STAGE			6.45	Aug 1	8.85	May 15 1984
ANNUAL RUNOFF (AC-FT)	245600		358300		222400	
10 PERCENT EXCEEDS	589		909		614	
50 PERCENT EXCEEDS	299		352		207	
90 PERCENT EXCEEDS	151		202		108	

e Estimated
a Minimum daily discharge for period of record, no flow at times in 1908. Minimum daily determined since beginning of diversion through Gunnison Tunnel, 7.0 ft^3/s, Jul 10-15, 17, 21, 24-28, 1910.
b From rating curve extended above 3400 ft^3/s.

09149500 UNCOMPAHGRE RIVER AT DELTA, CO--Continued

PERIOD OF RECORD.--October 1958 to September 1980, October 1987 to September 1988 (revised), October 1990 to September 1993, October 1994 (revised) to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)
OCT											
16...	1200	606	1050	8.3	10.4	450	120	34	56	1	2.9
NOV											
24...	1045	359	1440	8.2	5.3	610	160	52	98	2	3.6
JAN											
14...	1115	213	1570	8.4	1.9	690	180	60	116	2	4.3
MAR											
10...	1100	195	1510	8.4	7.6	600	150	56	108	2	3.4
APR											
27...	0740	392	1050	8.0	8.7	430	110	34	67	1	3.6
MAY											
19...	1040	289	1140	8.0	12.5	490	140	36	69	1	3.8
JUN											
10...	0755	291	1240	8.3	12.6	530	150	39	73	1	3.4
23...	1000	1240	802	8.1	14.3	340	98	23	39	.9	2.7
JUL											
29...	1315	863	975	--	19.1	410	120	27	50	1	3.0
SEP											
07...	1000	812	972	8.0	14.3	400	110	30	53	1	2.7

DATE	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	ALKA-LINITY WAT.DIS FET LAB CACO3 (MG/L) (29801)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS-SOLVED (TONS PER DAY) (70302)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)
OCT										
16...	180	--	380	6.2	.55	15	721	.98	1180	7
NOV										
24...	192	--	580	11	.54	14	1040	1.41	1000	13
JAN										
14...	206	--	670	13	.57	14	1180	1.60	678	16
MAR										
10...	191	--	630	13	.56	11	1080	1.47	569	16
APR										
27...	156	--	400	8.5	.40	15	738	1.00	781	8
MAY										
19...	--	170	420	8.4	.55	15	790	1.07	617	9
JUN										
10...	--	190	480	8.8	.56	13	879	1.20	691	10
23...	--	140	280	5.2	.41	15	140	.74	1820	6
JUL										
29...	--	160	350	6.2	.48	15	665	.90	1550	6
SEP										
07...	--	160	340	6.2	.51	14	659	.90	1440	7

MISCELLANEOUS FIELD MEASUREMENTS, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)
OCT				
07...	1625	686	1080	13.6
NOV				
13...	1315	484	1480	6.7
JAN				
04...	1415	230	1640	3.0
FEB				
24...	1330	196	1560	6.5
APR				
05...	1445	383	873	8.4
20...	1210	76	1560	12.2
MAY				
18...	1445	210	1150	14.5
AUG				
09...	1210	1010	876	16.8
SEP				
08...	1620	821	972	17.8

09152500 GUNNISON RIVER NEAR GRAND JUNCTION, CO

LOCATION.--Lat 38°59'00", long 108°27'00", in NE$^1/_4$SW$^1/_4$ of sec.14, T.2 S., R.1 E., Ute Meridian, Mesa County, Hydrologic Unit 14020005, on right bank 180 ft upstream from bridge on State Highway 141, 0.4 mi downstream from Whitewater Creek, 0.5 mi south of Whitewater, and 8 mi southeast of Grand Junction.

DRAINAGE AREA.--7,928 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1894 to December 1895 (gage heights only), October 1896 to September 1899, October 1901 to October 1906, October 1916 to current year. Monthly discharge only for some periods, published in WSP 1313. Published as "at Whitewater" 1901-06.

REVISED RECORDS.--WSP 509: Drainage area at former site. WSP 2124: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry and crest-stage gage. Datum of gage is 4,628.12 ft above sea level. See WSP 1733 or 1924 for history of changes prior to October 1959.

REMARKS.--Records good except for estimated daily discharges, which are fair. Records show flow that enters Colorado River from Gunnison River basin except for about 60 ft^3/s diverted downstream from gage during irrigation season. Natural flow of river affected by diversions for irrigation of about 233,000 acres upstream from station, storage reservoirs, and return flow from irrigated lands.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1730	2000	1650	1590	1270	1200	1520	4210	5230	3220	4000	2750
2	1890	2000	1630	1600	1300	1170	1580	3730	4580	3100	4000	2840
3	1880	1980	1670	1480	1280	1190	1720	3740	4170	3000	3900	3260
4	1940	1900	1660	1450	1280	1240	1660	3770	3750	2930	4130	3500
5	2080	1780	1650	1440	1300	1240	1610	3680	3450	2910	4470	3580
6	2060	1770	1650	1390	1330	1230	1480	3370	3440	2790	4510	3510
7	2080	1780	1550	1370	1300	1120	1360	3160	3100	2820	4260	3250
8	2070	1810	1550	1420	1310	1120	1330	3230	2870	2690	4140	3170
9	2090	1880	1570	1400	1320	1130	1370	3560	3160	2440	4070	3160
10	2090	1900	1590	1390	1330	1100	1240	3870	3200	2300	3960	3120
11	2050	1840	1570	1390	1350	1100	1180	3780	3140	2230	4220	3070
12	2040	1830	1580	1400	1250	1110	1130	3290	3020	2460	3940	3090
13	2030	1860	1590	1420	1230	1130	977	3230	3000	2300	3440	3100
14	2020	1860	1590	1360	1280	1090	913	3540	2980	2120	3310	3000
15	1990	1870	1580	1260	1290	1100	1070	3870	2890	2540	3390	3060
16	1890	1880	1580	1220	1240	1230	1020	3810	2940	2380	3600	3150
17	1990	1840	1580	1240	1180	1300	994	3800	3200	2040	3430	3070
18	2080	1830	1580	1270	1240	1330	904	3630	4150	1920	3340	3190
19	2080	1860	1570	1280	1230	1280	895	3940	4070	1990	3210	3260
20	2080	1830	1570	1350	1220	1350	975	4640	3790	2130	3140	3620
21	2090	1810	e1560	1430	1210	1500	1180	5030	3730	1960	2970	3500
22	2100	1810	e1520	1410	1210	1580	1430	5010	3850	1810	3000	3230
23	2110	1820	e1500	1300	1190	1540	1670	5250	3820	1850	2920	3120
24	2120	1780	e1520	1290	1180	1550	1800	5830	3590	1780	2810	3100
25	2190	1720	e1540	1300	1210	1660	2190	6100	3660	2000	2720	3170
26	2610	1700	e1540	1270	1210	1740	2460	5950	3710	2150	2560	3130
27	2510	1690	1550	1270	1210	1770	2660	5840	3590	2030	2430	3060
28	2700	1690	1610	1280	1200	1720	2610	5670	3490	2210	2510	3010
29	2460	1700	1640	1230	---	1640	2670	5730	3490	2630	2570	3040
30	2370	1720	1620	1200	---	1580	3160	5820	3420	2940	2490	3060
31	2290	---	1600	1230	---	1560	---	5660	---	3430	2510	---
TOTAL	65710	54740	49160	41930	35150	41600	46758	135740	106480	75100	105950	95170
MEAN	2120	1825	1586	1353	1255	1342	1559	4379	3549	2423	3418	3172
MAX	2700	2000	1670	1600	1350	1770	3160	6100	5230	3430	4510	3620
MIN	1730	1690	1500	1200	1180	1090	895	3160	2870	1780	2430	2750
AC-FT	130300	108600	97510	83170	69720	82510	92740	269200	211200	149000	210200	188800

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1897 - 1999, BY WATER YEAR (WY)

MEAN	1460	1453	1351	1269	1272	1463	3116	7523	7124	2571	1396	1378
MAX	3479	3303	3225	3515	3844	4114	9184	18870	19630	11950	3639	4959
(WY)	1987	1987	1987	1974	1974	1997	1942	1920	1957	1995	1957	1929
MIN	268	497	500	500	500	500	580	698	577	165	153	267
(WY)	1935	1899	1899	1899	1899	1903	1977	1977	1934	1934	1934	1934

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1897 - 1999	
ANNUAL TOTAL	948420		853488			
ANNUAL MEAN	2598		2338		2618	
HIGHEST ANNUAL MEAN					5187	1984
LOWEST ANNUAL MEAN					838	1934
HIGHEST DAILY MEAN	e9360	May 22	6100	May 25	35200	May 23 1920
LOWEST DAILY MEAN	1250	Aug 18	895	Apr 19	106	Jul 20 1934
ANNUAL SEVEN-DAY MINIMUM	1300	Aug 15	967	Apr 14	116	Jul 14 1934
INSTANTANEOUS PEAK FLOW			6430	May 25	a35700	May 23 1920
INSTANTANEOUS PEAK STAGE			6.65	May 25	14.95	May 23 1920
ANNUAL RUNOFF (AC-FT)	1881000		1693000		1896000	
10 PERCENT EXCEEDS	5330		3800		6210	
50 PERCENT EXCEEDS	2090		1980		1370	
90 PERCENT EXCEEDS	1550		1230		700	

e Estimated
a Site and datum then in use, from rating curve extended above 22000 ft^3/s.

09152500 GUNNISON RIVER NEAR GRAND JUNCTION, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1931 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: November 1935 to September 1974, September 1975 to current year.
WATER TEMPERATURE: April 1949 to September 1974, September 1975 to current year.

INSTRUMENTATION.--Water-quality monitor since September 1975, November 1991 water-quality monitor with satellite telemetry.

REMARKS.--Daily specific-conductance data are good except for July 30 to Sept. 30, which is fair. Daily maximum and minimum specific-conductance data previous to water year 1995 are available in the district office. Daily water temperature data are good.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 3,000 microsiemens several days during July and Sept. 1974; minimum, 194 microsiemens June 6, 1979.
WATER TEMPERATURE: Maximum, 30.0°C Aug. 13, 1958; minimum, 0.0°C, on many days during winter months most years.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 1,260 microsiemens, Aug. 7; minimum, 398 microsiemens, May 26.
WATER TEMPERATURE: Maximum, 23.4°C, July 23; minimum, 0.0°C, on many days during winter months.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)
OCT											
16...	1000	1840	948	8.5	11.3	8.6	400	100	33	52	1
NOV											
18...	1215	1800	1010	8.4	6.8	12.3	420	100	39	66	1
JAN											
20...	1110	1350	896	8.3	4.2	10.0	360	87	34	57	1
MAR											
10...	1030	1110	852	8.3	7.5	10.3	340	81	32	52	1
APR											
16...	1315	948	740	8.1	9.0	10.7	310	79	26	43	1
JUN											
10...	1000	3020	605	8.1	16.5	8.0	250	67	19	29	.8
30...	1420	3360	593	8.3	19.5	8.0	240	68	18	27	.7
JUL											
29...	1000	2430	914	8.3	21.2	7.4	380	110	29	46	1
SEP											
09...	1240	3170	722	8.5	16.6	8.2	290	79	23	35	.9

DATE	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	ALKA-LINITY WAT.DIS FET LAB CACO3 (MG/L) (29801)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS-SOLVED (TONS PER DAY) (70302)
OCT										
16...	3.3	163	--	330	6.8	.50	14	645	.88	3200
NOV										
18...	3.4	157	--	360	8.9	.41	12	694	.94	3370
JAN										
20...	3.0	155	--	320	8.1	.34	12	613	.83	2230
MAR										
10...	3.2	146	--	300	8.7	.34	10	572	.78	1710
APR										
16...	3.1	135	--	250	8.6	.30	11	499	.68	1280
JUN										
10...	2.2	--	110	190	4.2	.25	12	390	.53	3180
30...	2.2	--	110	180	4.2	.34	13	380	.52	3450
JUL										
29...	3.4	--	150	320	6.7	.47	16	618	.84	4060
SEP										
09...	2.6	--	130	230	5.1	.39	13	469	.64	4020

09152500 GUNNISON RIVER NEAR GRAND JUNCTION, CO--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	1070	1060	1070	1000	954	984	940	915	926	896	868	880
2	1090	1050	1070	1070	1000	1030	951	917	943	891	873	881
3	1090	1080	1080	1050	1030	1040	950	905	923	902	878	890
4	1080	1040	1050	1060	1040	1050	916	907	911	896	862	883
5	1060	1020	1040	1070	1040	1050	916	904	912	880	862	872
6	1060	1020	1040	1070	1040	1040	918	903	910	874	856	866
7	1020	987	998	1080	1030	1040	909	900	905	910	869	896
8	996	971	982	1050	1000	1020	911	894	902	906	869	885
9	990	966	974	1020	1010	1010	916	868	890	876	862	869
10	971	955	962	1020	998	1010	936	885	913	869	849	860
11	955	930	943	1040	1020	1030	914	901	908	866	849	856
12	931	916	924	1040	1030	1030	901	858	881	873	845	858
13	927	912	917	1040	1020	1030	914	868	891	875	845	865
14	925	906	914	1040	1030	1030	910	878	894	878	867	873
15	928	905	916	1040	1020	1030	909	867	888	900	873	887
16	954	915	940	1050	1030	1040	908	863	885	915	882	893
17	956	945	950	1050	1030	1040	896	855	874	922	880	901
18	954	936	943	1040	1010	1030	886	857	872	918	893	904
19	955	945	950	1020	962	983	887	866	879	907	900	903
20	945	926	934	967	941	951	899	870	886	949	903	924
21	930	920	924	944	927	936	892	824	882	1070	949	1000
22	924	912	917	964	929	943	903	824	879	1160	1070	1100
23	925	915	920	942	930	937	912	851	893	1170	1090	1140
24	929	918	923	936	925	930	973	869	911	1090	1010	1040
25	1020	907	929	940	921	933	928	880	910	1020	1000	1010
26	1100	911	986	942	917	929	907	866	891	1020	999	1010
27	1130	1030	1090	929	920	924	887	849	871	1090	1010	1040
28	1090	971	1030	935	925	929	871	845	859	1110	1040	1080
29	1140	1060	1100	936	927	931	861	836	852	1040	968	1000
30	1060	976	1010	936	925	930	868	849	858	968	905	932
31	976	951	961	---	---	---	880	861	872	936	901	916
MONTH	1140	905	980	1080	917	993	973	824	893	1170	845	933

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	942	894	917	827	810	818	698	676	687	847	699	787
2	918	892	907	828	813	819	706	673	690	706	686	697
3	911	864	888	857	818	845	734	697	720	710	683	699
4	890	863	880	852	798	825	727	714	718	683	665	671
5	886	879	883	813	795	805	745	727	733	713	668	699
6	931	878	901	825	805	812	745	729	736	701	676	691
7	938	916	927	834	799	810	750	735	744	694	676	684
8	923	904	913	856	834	848	772	748	759	688	667	680
9	911	891	902	859	849	853	761	742	751	672	609	643
10	903	886	895	860	849	854	754	733	741	612	559	577
11	902	890	897	852	839	845	808	754	780	565	541	549
12	907	884	894	843	827	836	841	806	823	608	565	594
13	884	820	854	865	838	850	875	832	851	611	585	602
14	896	850	870	866	840	851	875	845	856	590	561	576
15	910	865	885	845	837	842	846	674	786	564	500	526
16	892	865	881	842	831	836	944	669	762	506	492	500
17	927	887	908	921	809	850	907	758	859	509	493	499
18	916	870	893	838	794	811	884	832	861	504	487	498
19	875	861	867	811	760	789	897	869	883	494	467	483
20	881	860	872	780	758	766	906	853	885	478	436	463
21	880	859	869	833	735	785	853	742	804	446	414	430
22	862	843	857	909	736	806	743	701	721	440	422	432
23	864	856	860	746	723	734	779	711	752	443	420	431
24	860	829	845	798	734	756	883	779	844	430	407	419
25	842	829	835	818	718	735	977	880	930	415	403	409
26	851	833	841	843	686	721	883	832	853	421	398	407
27	851	822	837	686	647	665	832	779	801	415	402	408
28	836	816	825	664	645	651	785	728	756	430	405	419
29	---	---	---	667	640	648	728	688	705	429	412	418
30	---	---	---	682	657	665	772	691	729	441	412	426
31	---	---	---	694	679	686	---	---	---	448	434	441
MONTH	942	816	879	921	640	788	977	669	784	847	398	541

09152500 GUNNISON RIVER NEAR GRAND JUNCTION, CO--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	463	440	447	646	606	621	1080	1010	1050	768	746	757
2	494	463	480	646	605	621	1120	1080	1100	746	729	737
3	550	494	520	640	610	622	1140	1120	1130	729	722	724
4	572	534	551	647	619	629	1160	1140	1150	723	717	721
5	587	567	575	660	633	642	1210	1160	1180	719	715	717
6	652	586	612	664	632	644	1250	1210	1230	717	713	715
7	698	652	674	670	630	649	1260	1220	1250	726	709	716
8	715	698	709	692	662	675	1220	1110	1170	727	723	725
9	702	645	666	780	692	736	1110	1080	1090	724	704	717
10	645	603	620	793	780	789	1080	1070	1080	704	658	680
11	631	608	618	800	767	785	1100	1070	1090	658	623	634
12	641	626	632	813	769	789	1130	1100	1120	624	611	616
13	646	629	637	834	813	820	1110	1100	1110	613	604	608
14	648	629	640	895	834	871	1110	1090	1100	610	602	605
15	682	647	657	931	895	918	1090	988	1040	604	600	602
16	703	682	690	961	929	942	1040	947	1000	623	602	613
17	774	703	722	987	960	972	955	828	873	629	623	627
18	778	727	755	995	985	990	955	810	895	624	601	615
19	727	687	698	1000	992	996	934	900	916	601	577	589
20	711	684	697	1010	996	1000	958	910	926	582	570	575
21	713	693	702	1010	1000	1010	927	876	898	589	581	586
22	721	675	698	1010	1000	1010	918	877	901	584	573	577
23	722	685	698	1010	1000	1000	924	892	906	573	568	571
24	706	677	689	1000	992	997	892	867	882	572	568	570
25	702	674	682	992	980	984	867	833	848	569	562	565
26	682	653	664	980	971	974	833	817	826	565	562	563
27	656	634	644	971	964	967	821	804	815	563	560	562
28	658	640	648	967	960	962	804	748	789	560	555	558
29	657	631	641	960	781	906	788	740	759	556	550	552
30	631	605	618	924	783	870	776	770	774	554	549	551
31	---	---	---	1010	924	970	776	766	773	---	---	---
MONTH	778	440	643	1010	605	850	1260	740	989	768	549	632
YEAR	1260	398	826									

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	16.8	15.3	15.9	10.8	8.8	9.8	7.1	5.5	6.3	.0	.0	.0
2	15.9	14.0	15.0	10.6	9.9	10.2	6.6	5.0	5.8	.0	.0	.0
3	15.1	13.5	14.3	10.0	9.1	9.5	6.3	4.6	5.5	.5	.0	.2
4	13.9	11.2	12.4	9.5	7.9	8.6	6.3	4.4	5.3	1.3	.1	.7
5	12.1	10.2	11.0	8.1	6.7	7.4	5.3	3.5	4.5	2.2	.8	1.4
6	12.3	9.7	11.0	7.3	5.8	6.6	3.5	1.7	2.4	2.6	1.0	1.8
7	12.6	10.1	11.4	7.7	6.2	6.9	2.4	1.2	1.8	2.2	1.4	1.8
8	13.1	10.9	12.0	7.7	6.7	7.2	1.6	.4	1.1	2.7	1.0	1.8
9	14.0	11.3	12.6	6.9	5.2	6.1	1.6	.7	1.2	2.3	.8	1.6
10	14.1	11.7	12.9	5.2	3.8	4.5	2.1	.8	1.5	2.1	.7	1.5
11	13.6	11.3	12.5	4.1	3.0	3.7	1.5	.4	1.0	2.2	.7	1.5
12	13.5	11.0	12.2	5.7	3.8	4.7	1.3	.0	.6	3.1	1.6	2.3
13	13.4	11.0	12.2	6.5	4.7	5.6	1.7	.0	.8	3.2	2.0	2.6
14	14.1	11.4	12.7	6.7	4.8	5.7	2.0	.5	1.2	2.7	1.3	2.1
15	14.3	12.2	13.2	7.0	5.2	6.1	2.2	.6	1.4	2.0	.9	1.3
16	13.0	11.4	12.0	7.6	5.7	6.7	2.5	.9	1.7	1.2	.0	.3
17	11.6	9.9	10.8	7.8	6.3	7.0	2.7	1.1	1.9	1.2	.0	.4
18	11.0	9.0	10.1	6.9	5.6	6.3	2.9	1.3	2.1	3.0	1.2	2.0
19	11.2	8.8	10.0	6.5	4.9	5.7	3.2	1.2	2.3	4.1	2.8	3.4
20	11.4	9.3	10.3	5.5	4.1	4.8	2.9	.6	2.0	4.5	3.7	4.1
21	11.1	9.6	10.4	4.9	3.4	4.1	.6	.0	.2	4.4	3.2	4.0
22	11.3	9.8	10.5	5.2	3.2	4.2	.0	.0	.0	3.7	2.4	3.0
23	12.5	10.6	11.4	6.2	4.2	5.0	.0	.0	.0	3.6	2.0	2.8
24	12.2	10.3	11.2	7.0	5.3	6.1	.0	.0	.0	4.1	3.2	3.6
25	11.3	10.2	10.7	6.7	5.1	5.9	.0	.0	.0	4.0	3.2	3.7
26	11.3	10.0	10.6	6.5	4.6	5.5	.0	.0	.0	4.3	3.4	3.9
27	11.2	10.2	10.7	6.5	4.8	5.7	.0	.0	.0	4.6	3.4	3.9
28	10.3	9.5	9.9	7.1	5.3	6.2	.0	.0	.0	4.2	2.7	3.5
29	9.9	9.1	9.5	7.4	6.0	6.7	.0	.0	.0	3.3	1.7	2.6
30	9.3	8.8	9.0	7.3	5.9	6.6	.0	.0	.0	2.6	1.1	1.9
31	10.0	8.6	9.2	---	---	---	.0	.0	.0	2.5	1.1	1.8
MONTH	16.8	8.6	11.5	10.8	3.0	6.3	7.1	.0	1.6	4.6	.0	2.1

09152500 GUNNISON RIVER NEAR GRAND JUNCTION, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	3.1	1.6	2.3	7.5	5.0	6.3	8.1	6.6	7.3	10.9	8.6	9.9
2	3.8	1.9	2.8	8.1	5.7	7.0	6.6	5.7	6.2	9.8	8.1	8.9
3	4.4	2.3	3.4	7.2	5.8	6.7	6.4	4.6	5.5	11.1	9.5	10.2
4	4.0	2.8	3.5	7.4	5.5	6.4	6.7	4.5	5.7	10.1	8.2	9.1
5	4.4	3.3	3.7	7.1	5.7	6.3	8.5	5.2	6.5	10.0	7.9	8.8
6	5.4	4.1	4.7	7.5	5.0	6.3	9.8	5.7	7.7	10.7	8.4	9.4
7	5.7	4.3	5.0	7.3	5.6	6.6	10.8	7.7	9.3	12.7	9.3	10.9
8	6.9	4.8	5.8	7.8	5.7	6.8	11.5	8.6	10.0	14.6	11.4	12.9
9	7.7	5.4	6.4	8.3	6.1	7.3	10.7	8.3	9.1	14.7	12.9	13.8
10	7.0	4.1	5.6	9.0	6.4	7.7	9.5	6.6	8.2	12.9	10.4	11.9
11	4.1	1.8	2.8	8.4	6.9	7.8	8.9	6.3	7.8	11.2	10.0	10.5
12	2.3	.3	1.3	8.1	5.7	7.0	11.8	8.0	9.5	12.3	9.8	10.9
13	2.7	.4	1.6	8.1	4.9	6.4	13.6	10.3	11.7	13.7	11.1	12.4
14	3.1	1.4	2.2	8.4	5.8	7.2	12.9	10.9	11.8	13.4	11.9	12.5
15	4.6	2.4	3.4	9.1	7.0	8.0	11.3	8.9	10.2	13.3	11.9	12.3
16	4.2	2.9	3.6	10.0	7.3	8.7	10.1	7.3	8.9	12.6	11.3	11.9
17	4.1	2.5	3.4	10.2	7.6	8.9	11.2	7.7	9.4	12.7	10.7	11.7
18	4.3	2.4	3.5	10.6	7.9	9.3	12.9	9.5	11.0	13.8	11.6	12.5
19	5.2	3.7	4.4	11.4	8.3	9.9	14.2	10.7	12.4	14.2	12.6	13.4
20	5.5	2.9	4.3	11.4	9.0	10.3	14.2	12.8	13.5	14.8	13.0	13.8
21	5.1	3.6	4.3	11.9	9.1	10.5	13.5	12.3	13.0	14.4	13.1	13.6
22	4.9	2.9	4.0	11.6	8.7	10.2	13.0	10.6	11.7	13.7	12.4	13.1
23	4.7	2.7	3.7	10.4	8.1	9.3	11.2	9.1	10.1	14.1	12.3	13.2
24	5.5	3.1	4.4	11.1	7.8	9.5	10.0	9.0	9.6	13.9	12.4	13.0
25	6.5	4.2	5.3	11.8	8.7	10.3	11.2	8.8	9.8	12.8	11.8	12.3
26	7.0	4.9	5.9	11.9	9.2	10.6	12.2	9.3	10.6	13.3	12.1	12.7
27	6.3	4.1	5.3	12.1	9.7	10.8	13.0	11.0	11.8	14.5	12.3	13.4
28	6.8	4.3	5.6	10.8	8.4	9.6	12.8	11.1	11.9	14.3	12.6	13.5
29	---	---	---	10.5	7.1	8.8	11.6	10.5	11.0	14.7	13.1	14.1
30	---	---	---	10.6	7.8	9.2	11.6	10.5	11.0	13.7	12.3	13.1
31	---	---	---	9.4	7.6	8.5	---	---	---	14.1	12.8	13.3
MONTH	7.7	.3	4.0	12.1	4.9	8.3	14.2	4.5	9.7	14.8	7.9	12.0

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	13.5	12.0	12.8	20.3	17.7	18.9	19.3	18.5	19.0	18.1	16.4	17.4
2	14.8	12.8	13.8	20.7	18.5	19.5	19.7	18.3	18.8	17.7	16.2	16.8
3	14.3	12.3	13.3	20.8	18.3	19.4	18.4	16.9	17.7	17.1	16.1	16.5
4	15.0	13.4	14.1	21.2	18.5	19.7	17.7	16.6	17.1	16.9	15.4	16.1
5	13.5	10.5	12.1	21.0	18.7	19.9	17.3	16.0	16.8	16.8	15.2	15.9
6	12.4	9.9	11.1	22.0	19.1	20.3	17.9	15.9	16.9	16.6	15.4	15.9
7	16.5	12.0	14.4	21.0	19.1	19.9	18.2	17.2	17.7	17.6	15.6	16.4
8	17.8	15.0	16.3	20.8	19.1	19.9	18.2	17.0	17.5	17.5	16.0	16.6
9	17.6	15.3	16.3	22.1	19.0	20.3	17.5	16.6	17.1	16.7	15.4	16.0
10	16.9	15.3	16.0	22.7	19.0	20.7	16.8	15.9	16.5	17.2	15.4	16.2
11	17.0	14.6	15.7	21.4	18.8	20.3	16.8	15.5	16.0	18.0	16.3	16.9
12	18.0	15.3	16.6	20.6	17.7	19.1	18.0	16.3	17.1	17.7	16.0	16.7
13	18.6	16.0	17.2	21.1	18.7	19.9	18.7	16.6	17.5	17.1	15.4	16.1
14	18.7	16.7	17.5	20.1	18.8	19.4	17.9	16.2	17.2	16.1	14.9	15.5
15	18.0	15.9	16.7	20.5	17.8	19.0	17.2	15.9	16.4	16.0	14.8	15.2
16	18.4	16.1	17.1	21.0	18.5	19.6	17.4	16.3	16.8	16.4	14.8	15.5
17	17.8	16.3	16.8	22.9	18.9	20.6	19.0	16.9	18.0	17.4	15.4	16.3
18	17.5	15.7	16.6	21.9	19.5	20.8	18.9	17.4	18.2	17.0	15.3	16.2
19	18.5	16.5	17.5	20.8	18.7	19.7	18.9	17.7	18.2	15.9	14.6	15.3
20	19.0	17.5	18.1	21.6	18.3	19.8	18.8	17.5	18.1	15.7	14.0	14.8
21	18.9	17.2	17.9	22.2	19.2	20.7	19.0	17.9	18.4	15.7	14.4	14.9
22	18.8	16.9	17.7	22.3	19.6	21.1	20.1	17.9	18.8	14.9	13.8	14.3
23	19.2	17.4	18.1	23.4	19.7	21.4	20.7	18.8	19.6	15.7	13.9	14.7
24	20.0	17.6	18.7	22.8	20.3	21.6	20.5	18.9	19.5	16.2	14.7	15.3
25	20.5	18.3	19.2	22.5	19.8	21.0	20.0	18.7	19.3	16.8	15.1	15.9
26	19.7	18.0	18.7	22.2	20.0	21.1	20.0	18.2	19.0	16.6	15.0	15.7
27	19.9	18.0	18.7	22.8	19.6	21.1	19.6	18.4	19.0	15.0	13.2	14.2
28	19.6	17.8	18.6	23.1	19.9	21.5	20.0	17.8	18.8	13.2	11.3	12.2
29	19.6	17.6	18.4	22.1	19.8	21.0	20.5	18.3	19.3	12.2	10.6	11.2
30	19.6	17.4	18.3	20.7	19.5	20.0	20.7	18.6	19.5	12.8	10.7	11.6
31	---	---	---	20.0	19.0	19.6	19.6	18.1	18.8	---	---	---
MONTH	20.5	9.9	16.5	23.4	17.7	20.2	20.7	15.5	18.0	18.1	10.6	15.4
YEAR	23.4	.0	10.5									

09153290 REED WASH NEAR MACK, CO

LOCATION.--Lat 39°12'41", long 108°48'11", in $SE^{1}/_{4}SW^{1}/_{4}$ sec.27, T.2 N., R.3 W., Ute Meridian, Mesa County, Hydrologic Unit 14010005, on right bank 250 ft upstream from unnamed tributary, 0.4 mi downstream from Peck and Beede Wash, and 3.5 mi east of Mack.

DRAINAGE AREA.--15.7 mi^2.

PERIOD OF RECORD.--October 1975 to current year. Water-quality data available 1995-98.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 4,505 ft above sea level, from topographic map.

REMARKS.--No estimated daily discharges. Records fair. Flow is mostly return flow and waste water from irrigated lands under Government Highline and Grand Valley Canals.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	58	50	7.9	5.9	4.1	3.3	57	68	38	63	68	65
2	61	50	7.7	5.6	4.0	3.3	90	68	44	63	73	59
3	59	55	7.7	5.3	4.0	3.4	81	67	51	70	75	62
4	59	60	7.6	5.2	3.9	3.4	79	63	42	74	72	58
5	59	59	7.5	5.2	3.9	3.2	70	60	42	76	69	55
6	55	26	7.3	5.0	3.7	3.2	74	58	46	77	69	56
7	55	12	7.1	5.1	3.6	3.3	93	58	57	76	71	57
8	53	12	7.0	4.9	3.6	3.2	90	45	56	72	71	58
9	51	12	7.1	4.8	3.5	3.2	85	37	50	84	71	59
10	56	11	7.1	4.7	4.1	3.2	80	52	54	69	73	66
11	56	11	7.1	4.8	3.5	3.3	64	56	54	87	74	63
12	58	10	7.0	4.8	3.5	3.2	55	58	52	64	70	59
13	53	10	6.9	4.6	3.4	3.2	40	60	51	58	67	57
14	50	10	7.0	4.6	3.5	3.1	33	58	52	63	63	59
15	53	9.8	6.9	4.7	3.4	3.2	40	56	53	77	62	54
16	56	9.8	6.8	4.7	3.3	3.1	40	54	53	63	59	53
17	57	9.7	6.8	4.6	3.3	3.1	40	51	56	57	59	52
18	54	9.4	6.9	4.4	3.2	3.0	40	46	58	56	65	52
19	57	9.3	6.7	4.3	3.2	3.1	43	40	53	60	65	51
20	54	9.2	6.8	4.4	3.2	3.1	45	34	51	53	60	52
21	52	9.2	6.7	4.6	3.3	3.2	50	35	50	53	68	48
22	60	9.1	6.6	4.3	3.1	3.1	54	35	47	76	78	54
23	61	8.7	6.4	4.4	3.1	3.0	52	40	54	84	73	52
24	61	8.3	6.3	4.3	3.1	3.0	56	44	58	85	68	51
25	71	8.1	6.2	4.3	3.3	3.6	55	47	55	85	66	53
26	61	8.1	6.2	4.3	3.3	6.5	63	53	53	79	68	54
27	61	8.1	6.1	4.0	3.1	11	59	56	54	74	67	55
28	57	8.2	6.0	3.9	3.1	19	67	58	60	69	69	55
29	54	8.3	5.9	3.8	---	21	72	55	63	75	74	56
30	56	8.0	5.9	3.9	---	17	74	53	60	72	78	56
31	54	---	6.0	4.1	---	22	---	45	---	63	70	---
TOTAL	1762	529.3	211.2	143.5	97.3	176.5	1841	1610	1567	2177	2135	1681
MEAN	56.8	17.6	6.81	4.63	3.48	5.69	61.4	51.9	52.2	70.2	68.9	56.0
MAX	71	60	7.9	5.9	4.1	22	93	68	63	87	78	66
MIN	50	8.0	5.9	3.8	3.1	3.0	33	34	38	53	59	48
AC-FT	3490	1050	419	285	193	350	3650	3190	3110	4320	4230	3330

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1976 - 1999, BY WATER YEAR (WY)

MEAN	76.2	21.5	13.5	5.85	4.52	7.14	47.6	65.3	65.7	73.1	76.6	75.9
MAX	99.4	39.5	29.0	15.3	6.67	26.8	65.3	112	95.9	98.1	96.3	115
(WY)	1977	1994	1989	1986	1976	1981	1986	1980	1978	1981	1978	1978
MIN	56.8	11.5	6.63	3.41	3.29	2.85	18.5	43.1	47.6	58.4	60.0	56.0
(WY)	1999	1976	1977	1982	1983	1983	1979	1992	1992	1991	1991	1999

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1976 - 1999	
ANNUAL TOTAL	14886.0		13930.8			
ANNUAL MEAN	40.8		38.2		44.6	
HIGHEST ANNUAL MEAN					54.0	1978
LOWEST ANNUAL MEAN					35.2	1992
HIGHEST DAILY MEAN	95	Apr 6	93	Apr 7	150	May 12 1980
LOWEST DAILY MEAN	3.1	Mar 30	3.0	Mar 18	2.0	Jan 31 1979
ANNUAL SEVEN-DAY MINIMUM	3.2	Mar 26	3.1	Mar 18	2.5	Jan 22 1982
INSTANTANEOUS PEAK FLOW			189	Jul 11	a390	Jul 23 1983
INSTANTANEOUS PEAK STAGE			6.12	Jul 11	b6.21	Sep 8 1991
ANNUAL RUNOFF (AC-FT)	29530		27630		32320	
10 PERCENT EXCEEDS	79		71		86	
50 PERCENT EXCEEDS	54		51		55	
90 PERCENT EXCEEDS	3.9		3.4		4.0	

a Gage height unknown.
b Maximum recorded gage height.

09163500 COLORADO RIVER NEAR COLORADO-UTAH STATE LINE

LOCATION.--Lat 39°07'58", long 109°01'35", in $SE^1/_4NW^1/_4$ sec.5, T.11 S., R.104 W., Mesa County, Hydrologic Unit 14010005, on right bank 0.5 mi downstream from McDonald Creek, 1.7 mi upstream from Colorado-Utah State line, and 12 mi southwest of Mack.

DRAINAGE AREA.--17,843 mi^2.

WATER-DISCHARGE RECORDS

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

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

GAGE.--Water-stage recorder with satellite telemetry and crest-stage gage. Elevation of gage is 4,325 ft above sea level, from topographic map. May 1951 to October 1979, water-stage recorder at site 5.7 mi upstream at different datum. October 1979 to March 1995, water stage recorder at site 0.2 mi downstream at same datum.

REMARKS.--Records good except for estimated daily discharges, which are fair. Natural flow of stream affected by transmountain diversions, storage reservoirs, power development, and diversions for irrigation. (Records include all return flow from irrigated areas).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4120	5050	4170	4060	3030	3090	3180	7570	17200	13000	7890	5270
2	4210	4930	4030	3780	3220	3090	3290	7550	15700	12800	8110	5730
3	4540	5040	4060	3520	3250	3080	3650	7180	16100	12400	7770	6200
4	4680	5120	4040	e3500	3230	3120	3820	7430	16500	11900	7640	6830
5	5060	4910	3920	3580	3260	3200	3620	7360	16100	11600	7860	6780
6	5180	5170	e3800	3520	3400	3080	3320	6640	16000	10900	8060	6640
7	5090	4770	e3500	3570	3390	2990	3150	5960	14700	10400	7910	6140
8	4920	4760	e3300	3640	3330	2940	3010	5760	13800	9820	7870	5800
9	4760	4880	3350	3190	3310	2930	2960	5980	15500	9350	7880	5610
10	4780	5120	e3400	3360	3480	2880	3040	6700	16600	8980	7630	5470
11	4740	4590	e3300	3530	3650	2840	2930	7660	16200	8450	8500	5390
12	4670	4560	e3200	3540	3340	2830	2730	6870	14600	8290	8870	5380
13	4640	4560	e3100	3600	3080	2700	2410	6080	14100	7890	7840	5600
14	4590	4630	e3100	3550	3020	2860	1900	6100	13800	7280	7160	5400
15	4560	4630	e3200	3150	3190	2840	2100	6840	13400	7920	6850	5270
16	4470	4650	3340	2970	3270	2880	2470	7400	13600	7740	7060	5450
17	4620	4660	3570	2970	3190	3040	2540	7470	13900	7180	6800	5730
18	4660	4580	e3500	3200	3180	3070	2280	7400	15800	6460	6570	5820
19	4750	4590	3600	3350	3180	3110	2000	7560	16200	6270	6320	5970
20	4730	4420	3770	3430	3160	3130	2010	9100	15500	6290	6320	6580
21	4700	4270	e3500	3620	3180	3310	2410	11000	15200	6240	6150	6900
22	4770	4280	e3000	3600	3120	3520	3010	11800	15500	5900	6330	6740
23	4860	4360	e2700	3400	3100	3590	3800	12400	15600	5620	6120	6440
24	4970	4420	e2700	3270	3100	3530	4240	14000	15100	5470	5750	6340
25	4840	4310	e2800	3310	3020	3600	4810	15600	15300	5690	5470	6380
26	5350	4250	e3000	3340	3120	3780	5180	16500	15500	5680	5210	6540
27	5500	4210	e3500	3330	3100	3870	5490	15800	15500	5620	5030	6390
28	5920	4180	e3700	3320	3100	4040	5250	15300	14900	5810	5070	6190
29	5740	4170	3990	3220	---	4130	5250	15700	14300	5790	5280	6110
30	5360	4180	3830	3100	---	3520	5760	17100	13500	6740	5180	6140
31	5400	---	4110	3000	---	3250	---	17200	---	7170	5050	---
TOTAL	151180	138250	108080	105520	90000	99840	101610	303010	455700	250650	211550	181230
MEAN	4877	4608	3486	3404	3214	3221	3387	9775	15190	8085	6824	6041
MAX	5920	5170	4170	4060	3650	4130	5760	17200	17200	13000	8870	6900
MIN	4120	4170	2700	2970	3020	2700	1900	5760	13400	5470	5030	5270
AC-FT	299900	274200	214400	209300	178500	198000	201500	601000	903900	497200	419600	359500

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 1999, BY WATER YEAR (WY)

MEAN	4013	4064	3642	3419	3493	3948	5984	14410	17630	8029	3988	3720
MAX	7672	6925	5993	6129	5996	7486	15600	37960	43830	29650	10190	7174
(WY)	1987	1987	1986	1985	1985	1986	1985	1984	1957	1995	1983	1997
MIN	1916	2363	2048	1871	1815	1984	1631	2283	2688	1662	1350	1361
(WY)	1957	1978	1964	1964	1964	1964	1977	1977	1977	1977	1977	1956

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1951 - 1999	
ANNUAL TOTAL	2518510		2196620			
ANNUAL MEAN	6900		6018		6394	
HIGHEST ANNUAL MEAN					13470	1984
LOWEST ANNUAL MEAN					2559	1977
HIGHEST DAILY MEAN	24700	May 22	17200	May 31	68300	May 27 1984
LOWEST DAILY MEAN	2700	Dec 23	1900	Apr 14	960	Sep 7 1956
ANNUAL SEVEN-DAY MINIMUM	3030	Dec 21	2190	Apr 14	1110	Sep 2 1956
INSTANTANEOUS PEAK FLOW			17900	Jun 1	a69800	May 27 1984
INSTANTANEOUS PEAK STAGE			8.66	Jun 1	b16.12	May 27 1984
ANNUAL RUNOFF (AC-FT)	4995000		4357000		4632000	
10 PERCENT EXCEEDS	14300		13500		14200	
50 PERCENT EXCEEDS	4880		4770		4060	
90 PERCENT EXCEEDS	3720		3040		2280	

e Estimated
a At site 0.2 mi downstream, at present datum.
b From high-water mark.

09163500 COLORADO RIVER NEAR COLORADO-UTAH STATE LINE--Continued
(National Water-Quality Assessment Program station)

WATER-QUALITY RECORDS

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

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1979 to current year.
WATER TEMPERATURE: October 1979 to current year.

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

REMARKS.-- Daily records of specific conductance are good, except for the period Oct. 4 to Jan. 28, which are fair. Daily records of water temperature are good. October 1979, water-quality data collection was moved 5.5 mi upstream to this site from previous site 09163530. Water-quality records for this site are considered to be equivalent to data obtained at old site. Data from the old site are stored with this station. Prior to October 1995, unpublished maximum and minimum specific conductance data available in district office.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 1,940 microsiemens Aug. 13, 1981; minimum, 277 microsiemens June 11, 1985.
WATER TEMPERATURE: Maximum, 27.0°C Aug. 7-9, 1981; minimum, -0.3°C on several days in Dec. 1996 and Jan. 1997

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 1,250 microsiemens, Oct. 28; minimum, 419 microsiemens, May 30.
WATER TEMPERATURE: Maximum, 24.5° C, July 28; minimum, 0.0° C, on many days in Dec. and Jan.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)
OCT												
08...	1200	5000	1070	8.4	11.9	8.8	370	97	31	84	2	5.5
NOV												
30...	1200	4250	1100	8.5	6.0	12.1	340	86	31	97	2	3.4
DEC												
14...	1340	3650	1160	8.4	.6	12.8	370	94	32	105	2	3.9
JAN												
28...	1100	3420	1160	8.1	3.3	11.2	360	92	31	111	3	4.3
FEB												
19...	1330	3190	1120	8.1	4.3	11.1	330	83	31	104	2	3.7
MAR												
15...	1015	2840	1170	8.5	8.5	10.3	340	83	31	120	3	4.1
APR												
01...	1400	3190	923	8.0	8.5	9.3	290	77	24	79	2	3.6
23...	1300	3950	1010	8.3	12.9	8.6	310	80	26	87	2	3.7
MAY												
13...	1130	6010	756	8.3	13.0	8.4	250	65	21	53	1	2.7
24...	1330	13700	482	8.0	15.4	7.9	160	45	12	30	1	1.9
JUN												
09...	1150	15700	473	8.2	15.5	8.2	160	44	12	28	1	1.7
JUL												
06...	1400	11000	523	8.0	21.2	7.6	180	50	12	33	1	1.9
19...	1320	6280	871	8.4	20.8	7.5	290	78	22	58	2	2.8
AUG												
12...	1430	8460	861	8.0	19.4	7.8	270	79	18	64	2	3.5
SEP												
20...	1240	6540	895	8.2	16.7	8.0	290	78	24	62	2	3.4

09163500 COLORADO RIVER NEAR COLORADO-UTAH STATE LINE--Continued
(National Water-Quality Assessment Program station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	BICARBONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CARBONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	ALKALINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	ALKALINITY WAT.DIS FET LAB CACO3 (MG/L) (29801)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLORIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUORIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS-SOLVED (TONS PER DAY) (70302)
OCT												
08...	165	10	151	--	290	76	.36	11	743	692	1.01	10000
NOV												
30...	173	6	152	--	270	92	.35	8.5	736	686	1.00	8450
DEC												
14...	184	7	163	--	270	110	.35	11	760	729	1.03	7490
JAN												
28...	188	--	154	--	280	110	.34	9.9	764	727	1.04	7050
FEB												
19...	188	--	154	--	260	110	.29	9.2	738	696	1.00	6360
MAR												
15...	165	7	147	160	260	130	.33	6.5	752	727	1.02	5770
APR												
01...	161	--	132	140	220	79	.28	9.6	608	574	.83	5240
23...	159	--	130	150	240	91	.28	7.3	659	611	.90	7030
MAY												
13...	146	--	120	140	170	45	.27	11	484	442	.66	7850
24...	107	--	88	100	94	25	.16	9.5	309	273	.42	11400
JUN												
09...	100	--	82	98	96	29	.17	8.5	291	270	.40	12300
JUL												
06...	90	--	74	100	110	30	.26	8.0	332	295	.45	9860
19...	134	5	118	130	220	57	.33	9.0	561	517	.76	9510
AUG												
12...	143	--	117	130	230	43	.31	11	565	526	.77	12900
SEP												
20...	144	--	118	180	230	55	.35	10	582	540	.79	10300

DATE	NITROGEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITROGEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITROGEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITROGEN,AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN,AMMONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOSPHORUS TOTAL (MG/L AS P) (00665)	PHOSPHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOSPHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	MANGANESE, DIS-SOLVED (UG/L AS MN) (01056)
OCT												
08...	<.010	.643	.026	.40	.19	.082	.016	.018	2.7	--	<10	5.3
NOV												
30...	.010	.515	<.020	.21	.19	.019	.013	<.010	2.6	.7	11	16
DEC												
14...	.021	.698	.024	.19	.12	<.050	.012	<.010	2.4	.7	13	27
JAN												
28...	.018	.627	.026	.43	.20	.069	.006	<.010	2.4	--	<10	28
FEB												
19...	.010	.540	<.020	.26	.18	.029	.007	.012	2.3	.6	<10	26
MAR												
15...	<.010	.255	<.020	.34	.19	.023	.008	<.010	2.9	.4	E7.7	28
APR												
01...	<.010	.453	.072	.70	.34	.132	.014	.011	3.3	.8	E8.3	15
23...	.014	.330	.088	.83	.39	.194	.032	.034	3.6	.5	E6.6	12
MAY												
13...	<.010	.474	.046	.85	.28	.291	.024	.026	4.1	--	<10	4.0
24...	<.010	.356	.083	1.7	.29	.662	.015	.017	3.9	1.0	10	4.2
JUN												
09...	<.010	.270	<.020	.54	.25	.270	.013	.013	3.0	1.4	<10	2.4
JUL												
06...	<.010	.291	.025	.37	.17	--	.016	.016	2.8	--	E6.4	E2.8
19...	<.010	.585	<.020	.39	.17	.095	.013	.015	2.9	.4	<10	E1.9
AUG												
12...	<.010	.748	<.020	.22	.20	1.38	.015	<.010	3.6	.8	<10	<3.0
SEP												
20...	<.010	.594	.020	1.8	.19	.861	.009	<.010	2.8	2.2	<10	<2.2

E Estimated.

09163500 COLORADO RIVER NEAR COLORADO-UTAH STATE LINE--Continued
(National Water-Quality Assessment Program station)

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DISCHARGE, INST. CUBIC FEET PER SECOND (00061)	SEDIMENT, SUSPENDED (MG/L) (80154)[a]	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SAMPLER TYPE (CODE)[b] (84164)
OCT						
08...	1115	5000	104	1400	--	3009
08...	1200	5000	82	1110	--	3039
NOV						
30...	1130	4250	20	225	--	3009
30...	1200	4250	12	138	--	3039
DEC						
14...	1300	3650	13	124	--	3009
14...	1340	3650	11	107	--	3039
JAN						
28...	1100	3420	74	684	--	3039
28...	1120	3420	91	838	--	3009
FEB						
19...	1300	3190	27	233	--	3009
19...	1330	3190	19	165	--	3039
MAR						
15...	1000	2840	14	108	--	3009
15...	1015	2840	8	61	--	3039
APR						
01...	1330	3190	134	1150	--	3009
01...	1400	3190	107	920	--	3039
23...	1230	3950	267	2850	93	3009
MAY						
13...	1100	6010	309	5010	87	3009
13...	1130	6010	296	4810	--	3039
24...	1300	13700	1290	47700	67	3009
24...	1330	13700	1160	43100	--	3039
JUN						
09...	1110	15700	465	19700	--	3009
09...	1150	15700	363	15400	--	3039
JUL						
06...	1330	11000	207	6150	62	3009
06...	1400	11000	124	3690	--	3039
19...	1240	6280	218	3700	85	3009
19...	1320	6280	122	2070	--	3039
AUG						
12...	1410	8460	4780	109000	97	3009
12...	1430	8460	5110	117000	--	3039
SEP						
20...	1200	6540	1350	23800	94	3009
20...	1240	6540	1190	21000	--	3039

a Suspended sediment concentrations associated with a sampler type coded 3039 were determined from a subsample split of a composite sample.
b Code 3009 is a D-74 suspended sediment sampler; Code 3039 is a D-77TM water-quality sampler.

09163500 COLORADO RIVER NEAR COLORADO-UTAH STATE LINE--Continued
(National Water-Quality Assessment Program station)

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	1150	1130	1140	1160	1150	1160	1140	1130	1130	985	977	982
2	1160	1150	1160	1180	1160	1170	1140	1110	1130	1000	984	996
3	1170	1030	1110	1200	1180	1190	1130	1110	1120	1010	1000	1000
4	---	---	---	1200	1190	1190	1130	1110	1120	1010	1000	1010
5	1110	1090	1100	1190	1190	1190	1110	1100	1100	1020	1010	1020
6	1100	1090	1100	1190	1160	1170	1100	1090	1100	1020	1020	1020
7	1100	1080	1090	1190	1150	1170	1100	1090	1100	1030	1010	1020
8	1110	1080	1100	1200	1190	1190	1110	1080	1090	1020	1020	1020
9	1120	1110	1120	1200	1170	1180	1130	1100	1110	1020	1020	1020
10	1130	1120	1130	1180	1150	1170	1130	1120	1120	1020	1010	1020
11	1130	1120	1130	1180	1160	1170	1170	1120	1140	1020	1020	1020
12	1130	1100	1120	1240	1140	1190	1160	1120	1140	1040	1020	1030
13	1120	1100	1110	1240	1200	1220	1120	1080	1100	1040	1030	1030
14	1110	1100	1110	1220	1200	1210	1130	1090	1110	1050	1030	1040
15	1120	1100	1110	1210	1180	1200	1130	1110	1110	1050	1040	1040
16	1120	1100	1120	1200	1180	1190	1110	1070	1080	1080	1050	1070
17	1130	1110	1120	1200	1190	1190	1080	1060	1070	1120	1070	1090
18	1130	1110	1120	1190	1180	1190	1060	1040	1050	1140	1120	1140
19	1130	1120	1120	1180	1170	1180	1050	1040	1040	1140	1120	1130
20	1140	1120	1130	1170	1140	1160	1040	1020	1030	1130	1100	1120
21	1130	1120	1120	1160	1130	1150	1030	1020	1020	1100	1080	1090
22	1120	1110	1120	1140	1130	1130	1060	1030	1040	1110	1100	1100
23	1120	1100	1120	1160	1130	1150	---	---	---	1160	1110	1140
24	1130	1110	1120	1170	1150	1160	---	---	---	1190	1160	1180
25	1130	1100	1120	1150	1140	1140	1130	1060	1080	1190	1180	1180
26	1150	1130	1140	1150	1140	1140	1160	1130	1150	1190	1170	1180
27	1200	1130	1160	1150	1130	1140	1160	1140	1160	1190	1180	1190
28	1250	1170	1210	1140	1130	1140	1150	1070	1120	1210	1170	1190
29	1200	1140	1170	1150	1130	1140	1070	995	1040	1240	1210	1220
30	1240	1190	1210	1140	1120	1130	995	968	982	1220	1190	1210
31	1200	1160	1170	---	---	---	977	968	973	1210	1170	1200
MONTH	---	---	---	1240	1120	1170	---	---	---	1240	977	1090

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	1220	1200	1210	1120	1080	1110	908	877	897	864	772	824
2	1240	1220	1230	1090	1060	1080	928	902	918	874	776	824
3	1240	1230	1230	1080	1050	1070	946	925	938	776	750	761
4	1240	1170	1190	1090	1060	1080	954	935	946	784	715	756
5	1170	1150	1160	1100	1070	1090	960	940	951	792	700	759
6	1170	1150	1160	1140	1090	1110	977	954	964	797	775	789
7	1170	1140	1150	1130	1110	1120	1010	976	990	775	753	758
8	1170	1160	1160	1140	1120	1130	1050	1010	1030	856	751	767
9	1170	1150	1160	1150	1130	1140	1050	1030	1040	867	839	848
10	1180	1150	1160	1160	1150	1160	1060	1040	1050	841	772	804
11	1180	1110	1140	1240	1160	1170	1060	1040	1050	793	736	757
12	1130	1110	1120	1190	1150	1180	1060	1040	1050	738	727	730
13	1150	1120	1130	1220	1160	1190	1070	1050	1060	768	738	755
14	1150	1120	1140	1220	1130	1160	1110	1070	1090	789	761	776
15	1200	1140	1170	1200	1170	1190	1160	1110	1140	761	728	740
16	1240	1200	1230	1180	1150	1170	1140	1100	1110	728	688	703
17	1220	1180	1190	1160	1090	1130	1110	1050	1080	688	663	671
18	1190	1160	1180	1120	1090	1110	1090	1050	1070	671	660	666
19	1160	1140	1150	1100	1060	1090	1120	1080	1100	671	644	664
20	1150	1120	1140	1110	1070	1090	1160	1110	1130	644	605	629
21	1140	1130	1130	1080	1040	1070	1170	1150	1160	605	535	573
22	1160	1130	1150	1040	1000	1030	1160	1040	1110	537	506	524
23	1130	1110	1110	1050	979	1020	1040	954	990	511	486	502
24	1140	1110	1130	1050	943	971	971	946	959	492	455	476
25	1140	1110	1130	996	924	934	984	950	963	460	437	449
26	1130	1110	1120	1000	893	930	995	957	972	439	420	430
27	1160	1110	1140	933	891	907	957	903	932	442	421	435
28	1120	1100	1110	910	870	886	903	870	879	455	442	450
29	---	---	---	872	862	868	929	878	900	452	437	447
30	---	---	---	867	843	850	878	803	841	463	419	430
31	---	---	---	900	850	874	---	---	---	427	421	425
MONTH	1240	1100	1160	1240	843	1060	1170	803	1010	874	419	649

09163500 COLORADO RIVER NEAR COLORADO-UTAH STATE LINE--Continued
(National Water-Quality Assessment Program station)

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	426	421	423	486	471	478	939	849	885	1030	1000	1020
2	447	421	438	489	477	484	849	805	824	1050	997	1010
3	452	440	446	493	479	487	806	780	793	1080	1020	1040
4	447	433	441	502	489	496	798	777	784	---	---	---
5	434	432	433	513	500	507	782	755	772	---	---	---
6	443	433	437	539	512	526	824	755	779	---	---	---
7	481	443	463	549	532	541	794	770	784	---	---	---
8	496	481	489	807	548	606	789	769	780	---	---	---
9	485	446	470	694	603	644	769	758	762	---	---	---
10	451	425	443	634	621	626	776	753	759	---	---	---
11	436	425	432	661	631	643	902	747	781	---	---	---
12	461	428	446	691	661	677	949	786	868	---	---	---
13	466	456	462	730	687	705	888	814	846	---	---	---
14	475	460	468	778	730	749	822	812	816	---	---	---
15	486	472	479	870	732	786	840	819	830	---	---	---
16	496	479	488	816	776	792	849	835	840	---	---	---
17	513	482	485	818	804	811	875	840	862	961	958	959
18	573	494	520	843	817	831	964	863	879	960	926	947
19	508	484	498	873	843	863	964	870	884	926	894	912
20	491	482	488	893	869	883	954	873	894	994	867	904
21	495	480	487	908	891	897	920	883	901	896	867	883
22	515	473	488	908	891	898	1020	920	973	893	870	885
23	492	475	485	915	893	907	1010	983	995	885	862	875
24	479	468	475	935	904	919	990	966	981	895	879	886
25	473	460	470	984	915	938	987	971	978	918	884	894
26	464	453	461	952	931	944	998	977	991	884	872	877
27	456	442	451	950	931	942	1020	992	1010	879	858	867
28	456	442	451	967	906	928	1020	1000	1020	861	854	856
29	465	451	459	917	904	910	1030	1000	1020	856	845	850
30	477	463	472	924	866	896	1060	1030	1040	864	851	858
31	---	---	---	1090	904	980	1050	1030	1040	---	---	---
MONTH	573	421	465	1090	471	751	1060	747	883	---	---	---

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	17.7	16.5	17.3	10.6	9.3	10.0	6.3	5.5	5.9	.2	.0	.1
2	16.5	15.1	15.8	10.8	10.0	10.4	6.1	5.4	5.8	.2	.0	.1
3	16.0	15.1	15.6	10.9	10.0	10.4	5.8	5.2	5.5	.0	.0	.0
4	15.1	13.1	13.8	10.2	9.0	9.5	5.4	4.8	5.2	.0	.0	.0
5	13.1	11.8	12.6	9.2	8.3	8.7	5.0	3.8	4.6	.3	.0	.1
6	12.4	10.6	11.6	8.3	7.5	7.8	3.8	2.4	3.0	.1	.0	.1
7	12.8	10.9	11.8	7.7	6.7	7.2	2.4	1.0	1.6	.5	.0	.2
8	13.0	11.3	12.2	7.2	6.7	6.8	1.0	.2	.5	1.0	.1	.5
9	13.7	11.9	12.8	6.9	5.8	6.5	1.3	.2	.7	.9	.0	.5
10	13.7	12.3	13.0	5.8	4.6	5.1	1.2	.4	.9	1.0	.0	.5
11	13.7	12.1	12.9	4.9	3.9	4.4	.7	.0	.3	1.2	.2	.7
12	13.6	12.0	12.8	5.2	3.6	4.3	.8	.0	.3	1.7	.8	1.2
13	13.3	11.8	12.6	5.5	4.4	5.0	.9	.0	.4	1.7	.9	1.3
14	13.5	11.8	12.7	5.9	4.8	5.4	.9	.0	.4	1.5	.8	1.1
15	13.4	12.2	12.9	6.1	5.0	5.6	1.0	.0	.5	1.1	.5	.9
16	13.1	11.9	12.5	6.5	5.4	6.0	1.4	.4	.9	.5	.0	.2
17	12.6	11.1	11.8	6.9	6.0	6.5	1.6	.6	1.1	.5	.0	.2
18	11.9	10.4	11.2	6.7	5.9	6.3	1.6	.8	1.2	1.5	.3	.8
19	11.4	10.0	10.8	5.9	5.2	5.6	1.3	.6	1.0	2.2	1.2	1.6
20	11.5	10.3	10.9	5.4	4.4	4.8	1.4	.5	1.0	2.4	1.6	2.0
21	11.3	10.5	11.0	4.6	3.7	4.2	.5	.0	.1	2.5	2.0	2.2
22	11.8	10.9	11.3	4.5	3.6	4.1	.0	.0	.0	2.9	1.8	2.3
23	12.8	11.4	12.0	4.8	3.7	4.2	.0	.0	.0	3.4	2.2	2.7
24	12.6	11.4	12.0	5.0	4.2	4.6	.0	.0	.0	3.2	2.6	2.8
25	12.2	11.1	11.6	5.7	4.8	5.2	.0	.0	.0	3.9	2.8	3.3
26	11.9	10.8	11.4	5.6	4.8	5.2	.0	.0	.0	4.3	3.5	3.9
27	11.7	11.0	11.4	5.6	4.7	5.2	.0	.0	.0	4.6	3.6	4.0
28	11.4	10.6	11.0	5.7	5.1	5.4	.0	.0	.0	3.9	2.8	3.3
29	10.8	9.8	10.2	6.4	5.7	6.0	.0	.0	.0	3.4	2.3	2.9
30	10.1	9.5	9.8	6.2	5.6	5.9	.0	.0	.0	3.2	1.8	2.5
31	10.5	9.2	9.8	---	---	---	.0	.0	.0	2.7	1.4	2.1
MONTH	17.7	9.2	12.2	10.9	3.6	6.2	6.3	.0	1.3	4.6	.0	1.4

09163500 COLORADO RIVER NEAR COLORADO-UTAH STATE LINE--Continued
(National Water-Quality Assessment Program station)

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	3.2	1.8	2.3	8.1	5.9	6.9	8.7	7.5	8.2	12.7	11.8	12.2
2	3.1	1.7	2.4	8.8	6.5	7.6	7.5	6.4	7.0	12.1	10.8	11.6
3	4.0	2.2	3.0	8.4	6.6	7.5	8.2	6.0	7.0	12.0	10.6	11.2
4	3.9	2.7	3.3	8.5	6.7	7.5	7.7	6.7	7.3	11.3	9.9	10.6
5	4.4	3.5	3.9	7.8	6.6	7.1	8.6	6.2	7.2	10.7	9.6	10.2
6	5.4	3.9	4.5	8.3	6.2	7.1	10.4	7.5	8.8	11.6	9.5	10.6
7	5.6	4.5	5.0	7.5	6.6	7.1	11.1	8.8	9.9	13.3	10.9	12.0
8	6.2	5.0	5.6	8.6	6.6	7.5	11.7	8.8	10.1	15.1	12.9	13.9
9	7.6	5.8	6.5	8.8	6.8	7.8	11.0	9.2	10.0	14.8	13.8	14.5
10	7.4	5.2	6.6	9.1	6.8	8.0	10.1	7.5	8.8	13.8	12.8	13.3
11	5.2	3.5	4.1	9.2	7.3	8.2	10.3	8.0	9.1	12.9	11.6	12.5
12	3.6	2.2	2.8	9.0	7.3	8.0	11.9	9.1	10.4	13.0	11.3	12.3
13	2.9	1.2	2.0	9.0	6.5	7.8	13.6	10.5	12.0	14.0	12.7	13.2
14	3.3	1.6	2.3	9.5	6.9	8.2	13.5	11.5	12.6	15.0	13.4	14.3
15	4.4	2.3	3.2	9.9	7.6	8.7	12.8	10.9	11.9	14.5	13.2	13.8
16	4.1	2.9	3.5	10.4	7.8	9.0	11.9	10.0	10.9	13.9	12.3	13.3
17	4.8	3.2	3.9	11.3	8.6	9.8	12.8	9.4	11.0	13.9	12.0	13.1
18	4.9	3.4	4.1	12.1	9.2	10.5	14.1	10.9	12.4	14.8	12.7	13.7
19	5.0	4.0	4.4	12.5	9.9	11.1	14.9	12.2	13.6	15.8	14.1	15.0
20	5.6	3.6	4.5	12.6	10.3	11.4	14.9	13.5	14.3	16.7	14.3	15.6
21	5.0	4.1	4.5	12.7	10.6	11.5	14.4	13.3	13.7	16.7	14.9	15.8
22	4.9	3.4	4.1	12.7	10.5	11.5	13.7	12.5	13.2	16.5	14.4	15.5
23	5.8	3.7	4.6	11.7	10.4	11.0	13.7	11.8	12.7	16.1	14.4	15.3
24	6.3	4.1	5.1	11.9	9.5	10.7	12.9	10.7	11.9	15.7	14.2	14.8
25	6.9	4.8	5.7	12.6	10.4	11.4	11.3	9.8	10.6	14.4	13.6	14.0
26	7.2	5.4	6.2	12.1	10.9	11.5	12.5	10.3	11.3	14.8	13.0	13.9
27	7.3	5.1	6.1	12.4	11.0	11.6	13.9	11.6	12.7	15.6	13.3	14.4
28	7.6	5.4	6.4	11.3	9.9	10.7	13.5	12.3	12.7	16.0	14.2	15.1
29	---	---	---	11.5	9.2	10.3	12.5	11.9	12.2	15.8	14.7	15.2
30	---	---	---	10.9	9.5	10.2	13.0	11.9	12.4	15.1	13.8	14.4
31	---	---	---	10.3	8.7	9.6	---	---	---	14.5	13.3	13.9
MONTH	7.6	1.2	4.3	12.7	5.9	9.3	14.9	6.0	10.9	16.7	9.5	13.5

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	14.4	12.9	13.7	19.4	17.7	18.6	22.0	20.1	21.1	20.8	19.3	20.0
2	14.5	13.1	13.7	19.8	18.4	19.1	22.0	20.5	21.3	19.7	18.4	19.0
3	14.3	12.7	13.4	19.9	18.2	19.1	21.7	20.0	20.8	19.4	18.4	18.9
4	13.9	12.6	13.3	20.4	18.9	19.7	21.1	19.7	20.4	18.7	17.4	18.1
5	13.4	11.8	12.6	20.9	18.8	19.9	21.0	19.6	20.1	18.4	16.9	17.8
6	12.9	11.2	12.0	21.8	19.3	20.6	20.7	19.1	19.9	18.8	17.3	18.1
7	14.7	12.5	13.5	22.2	20.0	21.1	20.9	19.6	20.3	19.0	17.7	18.4
8	15.9	13.8	14.8	21.7	20.5	21.1	21.0	20.0	20.5	19.6	17.9	18.7
9	16.1	14.6	15.3	22.1	19.7	20.9	21.0	19.8	20.3	19.1	17.8	18.4
10	15.6	14.6	15.1	22.2	20.1	21.3	20.4	19.3	19.7	19.6	17.9	18.6
11	15.5	14.0	14.7	22.1	20.4	21.2	19.7	18.4	19.0	20.2	18.5	19.3
12	16.4	14.5	15.5	21.5	19.1	20.3	19.8	18.0	19.0	19.9	18.2	19.1
13	16.9	14.9	15.9	21.5	20.4	21.0	20.4	18.9	19.7	19.3	17.8	18.6
14	17.1	15.7	16.4	21.2	20.2	20.7	20.6	19.7	20.1	18.5	17.5	17.8
15	16.6	15.7	16.0	21.6	19.9	20.7	20.6	18.9	19.6	18.1	17.1	17.5
16	16.6	15.0	15.8	21.3	20.0	20.7	20.3	18.6	19.5	18.3	16.4	17.3
17	16.6	15.4	16.0	22.0	20.0	20.9	20.7	19.5	20.0	18.5	17.0	17.9
18	16.6	14.4	15.4	22.2	21.2	21.8	21.7	19.7	20.7	18.6	17.3	18.0
19	17.2	15.6	16.4	21.7	20.3	21.0	21.6	20.3	21.0	18.1	16.6	17.5
20	17.8	16.4	17.1	22.3	20.2	21.1	21.5	20.2	20.9	17.2	15.7	16.4
21	18.0	16.6	17.2	22.6	21.0	21.8	21.6	20.5	21.1	16.8	15.5	16.2
22	17.8	16.4	17.1	23.6	21.2	22.3	22.1	20.2	21.1	16.3	15.0	15.7
23	18.1	16.5	17.4	23.9	22.2	23.1	22.8	21.1	21.9	16.7	15.4	16.0
24	18.6	17.1	17.8	23.5	22.6	23.0	23.0	21.3	22.1	17.4	16.0	16.6
25	18.7	17.4	18.1	23.6	21.9	22.7	23.0	21.4	22.1	17.6	16.3	17.0
26	18.5	17.3	18.0	23.5	21.8	22.7	22.7	21.2	21.9	17.5	16.5	17.0
27	18.4	17.3	17.9	24.0	21.8	22.8	22.1	21.0	21.6	16.7	15.2	15.9
28	18.6	17.3	18.0	24.5	22.4	23.3	22.7	20.4	21.6	15.2	13.3	14.0
29	18.6	17.5	18.1	23.9	22.8	23.3	23.2	21.5	22.4	13.6	11.9	12.7
30	18.9	17.5	18.3	23.4	21.9	22.6	23.0	21.8	22.4	13.0	11.5	12.3
31	---	---	---	22.2	21.0	21.6	21.9	20.8	21.3	---	---	---
MONTH	18.9	11.2	15.8	24.5	17.7	21.3	23.2	18.0	20.8	20.8	11.5	17.3
YEAR	24.5	.0	11.2									

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, 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 September 1996, October 1998 to September 1999.

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 8,422.23 ft above sea level.

REMARKS.--Records fair except for estimated daily discharges, which are poor. No diversion upstream from station. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e37	49	34	e19	e13	e26	92	146	694	359	191	358
2	e44	53	35	e18	e13	e29	78	132	657	333	222	352
3	e60	47	36	e16	e14	e31	68	133	590	302	254	372
4	e48	35	36	e16	e15	e33	65	120	606	279	269	310
5	e37	37	36	e16	e15	e29	61	109	540	252	267	268
6	e34	42	e35	e17	e14	e26	60	105	450	242	262	237
7	e31	37	e23	e17	e14	e26	67	125	455	240	218	211
8	e30	37	e23	e17	e15	e26	78	191	592	233	197	186
9	e30	33	e23	e15	e15	e23	75	271	662	211	182	168
10	29	44	e22	e16	e14	e22	68	289	688	185	243	153
11	26	54	e21	e17	e13	e22	65	272	649	179	291	144
12	25	58	e23	e17	e13	e21	80	272	608	180	235	135
13	24	47	e23	e16	e14	e22	117	361	587	159	196	122
14	24	41	e22	e15	e14	22	136	479	655	149	180	115
15	23	45	e22	e15	e15	30	145	505	678	160	210	134
16	25	46	e23	e15	e16	39	131	490	699	152	178	138
17	25	45	e24	e15	e16	47	124	480	791	141	208	168
18	25	42	e24	e15	e16	47	152	528	710	131	209	133
19	28	39	e23	e15	e16	48	207	559	684	228	355	132
20	37	32	e22	e15	e16	56	269	551	648	188	446	124
21	44	52	e20	e15	e15	66	262	565	619	173	442	108
22	48	49	e18	e15	e16	79	199	596	666	245	350	97
23	48	36	e18	e15	e17	88	167	630	615	242	298	121
24	41	35	e18	e15	e19	87	179	744	550	244	287	117
25	46	34	e18	e14	e20	92	155	597	522	394	274	97
26	66	34	e18	e14	e20	108	140	505	513	318	259	88
27	89	35	e19	e13	e20	110	141	519	495	281	280	81
28	76	35	e19	e13	e23	103	159	543	452	233	338	73
29	57	36	e19	e13	---	102	157	608	405	226	314	70
30	56	34	e19	e12	---	119	161	587	379	209	303	68
31	53	---	e19	e13	---	104	---	630	---	209	316	---
TOTAL	1266	1243	735	474	441	1683	3858	12642	17859	7077	8274	4880
MEAN	40.8	41.4	23.7	15.3	15.8	54.3	129	408	595	228	267	163
MAX	89	58	36	19	23	119	269	744	791	394	446	372
MIN	23	32	18	12	13	21	60	105	379	131	178	68
AC-FT	2510	2470	1460	940	875	3340	7650	25080	35420	14040	16410	9680

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1952 - 1999, BY WATER YEAR (WY)

MEAN	44.2	29.6	21.8	18.7	18.5	31.4	127	454	565	174	83.8	63.3
MAX	133	65.9	42.6	37.7	33.7	72.2	242	1015	1288	646	267	224
(WY)	1973	1987	1958	1958	1984	1972	1962	1958	1957	1957	1999	1982
MIN	14.5	12.1	7.81	7.74	7.49	11.0	42.9	98.9	70.7	37.1	29.7	17.1
(WY)	1957	1957	1990	1990	1994	1964	1975	1977	1977	1959	1996	1956

SUMMARY STATISTICS	FOR 1999 WATER YEAR		WATER YEARS 1952 - 1999	
ANNUAL TOTAL	60432			
ANNUAL MEAN	166		136	
HIGHEST ANNUAL MEAN			230	1957
LOWEST ANNUAL MEAN			40.1	1977
HIGHEST DAILY MEAN	791	Jun 17	1810	Jun 10 1952
LOWEST DAILY MEAN	e12	Jan 30	4.8	Nov 29 1989
ANNUAL SEVEN-DAY MINIMUM	13	Jan 27	6.3	Dec 11 1989
INSTANTANEOUS PEAK FLOW	923	Jun 17	a2170	May 24 1984
INSTANTANEOUS PEAK STAGE	5.14	Jun 17	b5.95	May 24 1984
ANNUAL RUNOFF (AC-FT)	119900		98650	
10 PERCENT EXCEEDS	515		405	
50 PERCENT EXCEEDS	78		40	
90 PERCENT EXCEEDS	16		15	

e Estimated
a From rating curve extended above 1620 ft^3/s.
b Maximum gage height, 6.15 ft, Jun 10, 1952.

09166500 DOLORES RIVER AT DOLORES, CO

LOCATION.--Lat 37°28'21", long 108°29'49", in $SW^1/_4SW^1/_4$ sec.10, T.37 N., R.15 W., Montezuma County, Hydrologic Unit 14030002, on left bank 0.25 mi upstream from bridge on State Highway 184 in Dolores and 0.8 mi upstream from Lost Canyon Creek.

DRAINAGE AREA.--504 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 with satellite telemetry. Elevation of gage is 6,940 ft above sea level, from topographic map. See WSP 1713 or 1733 for history of changes prior to Oct. 7, 1952. Oct. 7, 1952 to Nov. 16, 1983, at site 0.4 mi downstream at different datum.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Diversions for irrigation of about 2,000 acres upstream from station. Flow partly regulated by Ground Hog Reservoir, capacity, 21,710 acre-ft. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	71	137	99	e56	e38	e74	375	914	2240	721	454	815
2	77	144	104	e60	e39	e88	333	854	2200	675	428	787
3	71	141	99	e54	e40	104	271	965	1810	592	600	906
4	91	118	96	e48	e42	113	281	901	1840	553	608	779
5	94	101	98	e47	e45	113	243	809	1680	506	651	653
6	79	115	90	e49	e47	99	239	764	1360	472	770	581
7	75	112	76	e51	e41	96	275	850	1240	485	600	521
8	81	115	44	e51	e43	97	355	1080	1510	455	505	472
9	78	104	e55	e49	e46	90	366	1350	1740	425	454	427
10	70	105	e68	e46	e45	90	312	1430	1800	418	576	401
11	65	105	e68	e47	e43	91	302	1330	1700	378	751	374
12	62	122	e62	e49	e42	92	376	1200	1590	427	669	359
13	60	114	e66	e53	e40	81	593	1430	1420	361	542	335
14	58	120	e68	e48	e42	88	640	1870	1570	341	483	314
15	56	128	e66	e46	e43	107	641	2070	1690	364	512	320
16	62	131	e66	e46	e47	122	547	2040	1710	371	499	351
17	74	136	e68	e47	e49	140	505	1880	1970	323	528	386
18	69	126	e70	e48	e50	150	540	1950	1950	286	497	296
19	67	109	e70	e46	e50	165	653	2190	1660	393	639	263
20	73	94	e70	e47	e52	207	879	2480	1540	471	818	281
21	92	92	e70	e47	e47	254	980	2650	1390	355	987	233
22	113	e92	e64	e46	e47	304	835	2620	1460	528	815	212
23	112	e94	e56	e44	e49	329	723	2720	1410	610	679	226
24	111	e94	e52	e44	e52	305	837	3010	1290	562	723	264
25	111	e90	e52	e46	e60	357	836	2320	1150	763	692	220
26	206	e88	e52	e45	e63	419	806	1970	1160	794	657	201
27	214	e94	e52	e44	e63	396	1010	2020	1090	833	684	187
28	229	104	e55	e42	e64	382	1050	2030	1030	630	908	171
29	166	127	e57	e39	---	366	1120	2160	874	581	908	163
30	149	110	e58	e39	---	427	997	2050	766	543	773	159
31	148	---	e56	e36	---	409	---	2050	---	520	738	---
TOTAL	3084	3362	2127	1460	1329	6155	17920	53957	45840	15736	20148	11657
MEAN	99.5	112	68.6	47.1	47.5	199	597	1741	1528	508	650	389
MAX	229	144	104	60	64	427	1120	3010	2240	833	987	906
MIN	56	88	44	36	38	74	239	764	766	286	428	159
AC-FT	6120	6670	4220	2900	2640	12210	35540	107000	90920	31210	39960	23120

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1896 - 1999, BY WATER YEAR (WY)

MEAN	135	85.0	59.3	52.7	56.8	131	749	1755	1387	415	241	184
MAX	1247	453	199	151	140	458	1955	3625	3470	1490	650	1354
(WY)	1942	1942	1987	1987	1987	1997	1942	1922	1957	1957	1999	1927
MIN	26.0	20.0	19.8	19.3	20.0	25.0	158	235	108	55.4	29.0	33.5
(WY)	1902	1902	1990	1990	1902	1899	1977	1977	1934	1934	1900	1899

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1896 - 1999	
ANNUAL TOTAL	158514		182775			
ANNUAL MEAN	434		501		439	
HIGHEST ANNUAL MEAN					790	1942
LOWEST ANNUAL MEAN					87.0	1977
HIGHEST DAILY MEAN	3100	May 21	3010	May 24	6950	May 5 1922
LOWEST DAILY MEAN	44	Dec 8	e36	Jan 31	8.0	Aug 16 1896
ANNUAL SEVEN-DAY MINIMUM	54	Dec 23	39	Jan 28	12	Aug 10 1896
INSTANTANEOUS PEAK FLOW			3500	May 24	a10000	Oct 5 1911
INSTANTANEOUS PEAK STAGE			5.52	May 24	10.20	Oct 5 1911
ANNUAL RUNOFF (AC-FT)	314400		362500		317800	
10 PERCENT EXCEEDS	1550		1440		1410	
50 PERCENT EXCEEDS	140		254		123	
90 PERCENT EXCEEDS	60		47		41	

e Estimated
a Site and datum then in use, from rating curve extended above 2800 ft^3/s.

09166950 LOST CANYON CREEK NEAR DOLORES, CO

LOCATION.--Lat 37°26'46", long 108°28'07", in $SE^1/_4SE^1/_4$ sec.23, T.37N., R.15W., Montezuma County, Hydrologic Unit 14030002, on right bank 2.5 mi southeast of Dolores and 3.0 mi upstream from mouth.

DRAINAGE AREA.--71.3 mi^2.

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

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 7,030 ft above sea level, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Several small storage reservoirs and diversions for irrigation of about 4,700 acres in the San Juan River basin and one diversion for irrigation of about 10 acres in Lost Canyon in the Dolores River basin. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	2.0	3.0	e1.9	e1.4	4.0	1.9	69	41	.13	1.1	15
2	.00	2.4	2.8	e1.7	e1.3	4.0	2.0	59	5.0	.12	2.5	16
3	.00	2.7	2.3	e1.5	e1.3	4.2	1.7	105	2.4	.17	4.1	19
4	.00	2.1	2.1	e1.7	e1.3	4.6	1.9	107	1.6	.32	6.5	18
5	.00	1.8	2.1	e1.4	e1.4	4.1	1.8	90	1.6	.35	8.6	13
6	.00	1.6	2.4	e1.4	1.6	3.9	1.9	71	1.8	.35	8.8	9.9
7	.00	1.8	4.5	1.4	1.7	3.8	2.6	86	1.2	.34	7.4	8.2
8	.00	1.9	2.0	1.3	1.8	3.6	4.2	148	1.0	.44	5.3	6.4
9	.00	2.6	e1.7	1.3	1.9	3.6	6.3	182	.87	.28	4.4	5.4
10	.00	1.8	e1.7	1.1	2.0	3.6	5.3	149	.74	.27	5.0	4.8
11	.00	1.8	e1.7	1.0	2.3	3.7	5.0	128	.65	.30	6.9	4.2
12	.00	2.4	e1.6	1.1	2.4	3.9	7.5	119	.58	.20	7.8	4.0
13	.00	2.5	e1.4	1.4	2.3	3.4	40	138	.58	.21	5.2	3.6
14	.00	2.6	e1.1	1.5	2.2	3.7	53	196	.55	.33	4.1	3.0
15	.00	2.7	e.90	1.4	2.1	4.7	47	201	.56	.72	4.2	3.0
16	.00	2.8	e.74	1.2	2.2	4.4	21	166	.48	.77	4.1	4.0
17	.00	2.9	e.72	1.1	2.2	3.0	9.5	143	.54	.64	3.8	4.6
18	.00	2.5	e1.0	1.2	2.0	2.7	4.7	133	.81	.60	5.1	4.0
19	.00	2.4	e1.3	1.3	2.1	2.9	5.4	139	.67	.94	4.6	3.7
20	.00	2.5	e1.4	e1.4	2.3	3.1	18	143	.49	1.5	5.1	3.6
21	.00	1.9	e1.4	e1.6	2.6	3.5	27	129	.65	1.1	13	3.4
22	.00	2.2	e1.2	1.8	2.6	3.5	20	111	.47	2.7	18	2.9
23	.00	1.9	e1.5	e1.6	2.5	3.3	12	118	.39	2.7	12	3.1
24	.32	1.9	e1.4	e1.5	2.6	3.0	26	127	.36	3.2	9.5	3.8
25	1.5	1.7	e1.5	e1.5	2.9	2.5	56	90	.45	2.5	7.5	3.5
26	4.4	1.7	e1.7	e1.6	3.5	2.3	60	73	.47	1.9	6.2	2.9
27	5.1	1.8	e1.8	e1.5	3.7	2.2	145	67	.52	1.9	6.7	2.4
28	4.3	2.1	e1.8	e1.4	3.7	2.0	139	69	.34	1.4	7.9	2.1
29	2.8	3.6	e1.8	e1.3	---	1.8	142	63	.21	1.1	12	2.1
30	2.2	3.3	e1.8	e1.3	---	1.8	98	60	.16	1.1	10	2.0
31	2.1	---	2.0	e1.3	---	1.7	---	50	---	1.2	9.7	---
TOTAL	22.72	67.9	54.36	43.7	61.9	102.5	965.7	3529	67.14	29.78	217.1	181.6
MEAN	.73	2.26	1.75	1.41	2.21	3.31	32.2	114	2.24	.96	7.00	6.05
MAX	5.1	3.6	4.5	1.9	3.7	4.7	145	201	41	3.2	18	19
MIN	.00	1.6	.72	1.0	1.3	1.7	1.7	50	.16	.12	1.1	2.0
AC-FT	45	135	108	87	123	203	1920	7000	133	59	431	360

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984 - 1999, BY WATER YEAR (WY)

MEAN	2.56	4.95	2.37	1.66	2.47	37.8	122	119	11.2	.28	.73	1.25
MAX	17.7	45.2	14.8	5.00	6.85	110	265	293	91.2	.96	7.00	6.05
(WY)	1987	1987	1987	1987	1997	1997	1987	1993	1995	1999	1999	1999
MIN	.000	.000	.000	.000	.000	.87	.86	3.32	.005	.003	.000	.000
(WY)	1990	1990	1990	1990	1990	1990	1990	1990	1990	1989	1990	1984

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1984 - 1999	
ANNUAL TOTAL	9929.10		5343.40			
ANNUAL MEAN	27.2		14.6		25.3	
HIGHEST ANNUAL MEAN					49.9	1993
LOWEST ANNUAL MEAN					.43	1990
HIGHEST DAILY MEAN	373	Apr 24	201	May 15	555	Apr 2 1986
LOWEST DAILY MEAN	a.00	Jul 2	a.00	Oct 1	a.00	Jul 11 1984
ANNUAL SEVEN-DAY MINIMUM	.00	Jul 2	.00	Oct 1	.00	Aug 30 1984
INSTANTANEOUS PEAK FLOW			269	May 15	744	Apr 2 1986
INSTANTANEOUS PEAK STAGE			4.86	May 15	7.23	Apr 2 1986
ANNUAL RUNOFF (AC-FT)	19690		10600		18320	
10 PERCENT EXCEEDS	96		54		90	
50 PERCENT EXCEEDS	2.2		2.2		1.1	
90 PERCENT EXCEEDS	.00		.34		.00	

e Estimated
a No flow many days each year.

09168730 DOLORES RIVER NEAR SLICK ROCK, CO

LOCATION.--Lat 38°02'40", long 108°54'17", in NE$^1/_4$SE$^1/_4$ sec.25, T.44 N., R.19 W., San Miguel County, Hydrologic Unit 14030002, on left bank 15 ft downstream from county road S-8 bridge, 0.7 mi upstream from Summit Canyon, 1.2 mi northwest of Slick Rock Post Office, and 2 mi downstream from Colo. Hwy. 141 at Slick Rock Bridge.

DRAINAGE AREA.--1,432 mi^2.

PERIOD OF RECORD.--May 1997 to current year (seasonal records only).

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 5,400 ft above sea level, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. Diversions for several hundred acres upstream for irrigation and municipal water supply for city of Dove Creek. Also diversions upstream from station for irrigation in the San Juan River basin amount to about 74,760 acres. Flow regulated since Mar. 19, 1984, by McPhee Reservoir, capacity 381,000 acre-ft. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge during period of seasonal operation, 3,740 ft^3/s May 7, 1998, gage height 10.18 ft; minimum daily, 40 ft^3/s, Mar. 1, 1998.

EXTREMES OUTSIDE PERIOD OF RECORD.--Major flows occurred in Oct. 1911, Sept. 1970, and Apr. 1973. Minimum flow not determined.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period of seasonal operation, 3,350 ft^3/s at 1500 May 24, gage height 9.73 ft; minimum daily, 48 ft^3/s (estimated), Mar. 1.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	e48	76	e250	972	---	---	---
2	---	---	---	---	---	e50	88	e400	811	---	---	---
3	---	---	---	---	---	e55	97	e500	620	---	---	---
4	---	---	---	---	---	e63	94	e580	433	---	---	---
5	---	---	---	---	---	e67	92	e500	298	---	---	---
6	---	---	---	---	---	e70	87	e380	269	---	---	---
7	---	---	---	---	---	e70	86	e300	251	---	---	---
8	---	---	---	---	---	e70	99	e220	239	---	---	---
9	---	---	---	---	---	e70	128	e190	235	---	---	---
10	---	---	---	---	---	e69	145	e170	232	---	---	---
11	---	---	---	---	---	66	130	e160	774	---	---	---
12	---	---	---	---	---	66	137	e140	902	---	---	---
13	---	---	---	---	---	67	336	e130	893	---	---	---
14	---	---	---	---	---	69	e380	e130	781	---	---	---
15	---	---	---	---	---	69	e230	e130	918	---	---	---
16	---	---	---	---	---	73	e180	e250	1200	---	---	---
17	---	---	---	---	---	87	e150	e1000	1240	---	---	---
18	---	---	---	---	---	93	e130	e1600	1760	---	---	---
19	---	---	---	---	---	88	e110	1740	1820	---	---	---
20	---	---	---	---	---	90	e100	2140	1320	---	---	---
21	---	---	---	---	---	90	e120	2670	1100	---	---	---
22	---	---	---	---	---	86	e150	3000	853	---	---	---
23	---	---	---	---	---	85	e200	3020	671	---	---	---
24	---	---	---	---	---	81	e400	3170	617	---	---	---
25	---	---	---	---	---	78	e540	3290	1040	---	---	---
26	---	---	---	---	---	76	e560	2800	981	---	---	---
27	---	---	---	---	---	77	e400	2060	788	---	---	---
28	---	---	---	---	---	78	e360	1440	601	---	---	---
29	---	---	---	---	---	77	e310	1080	431	---	---	---
30	---	---	---	---	---	75	e290	1030	280	---	---	---
31	---	---	---	---	---	73	---	1010	---	---	---	---
TOTAL	---	---	---	---	---	2276	6205	35480	23330	---	---	---
MEAN	---	---	---	---	---	73.4	207	1145	778	---	---	---
MAX	---	---	---	---	---	93	560	3290	1820	---	---	---
MIN	---	---	---	---	---	48	76	130	232	---	---	---
AC-FT	---	---	---	---	---	4510	12310	70370	46280	---	---	---

e Estimated

09169500 DOLORES RIVER AT BEDROCK, CO

LOCATION.--Lat 38°18'37", long 108°53'05", in NW$^1/_4$SW$^1/_4$ 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 mi^2.

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. Statistical summary computed for 1985 to current year.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 4,940 ft above sea level, from topographic map. Prior to Aug. 1, 1971, nonrecording gage at different datum.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Diversions upstream from station for irrigation of about 5,000 acres upstream from station, and about 74,760 acres in the San Juan River basin. Flow regulated since Mar. 19, 1984, by McPhee Reservoir, capacity 381,000 acre-ft.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	135	96	54	e52	46	45	53	268	903	254	154	119
2	105	180	63	e54	e47	43	54	220	805	162	111	160
3	107	210	56	e50	e55	43	64	230	659	120	95	168
4	85	134	51	e48	62	46	75	388	495	111	213	201
5	53	94	e46	e48	e74	53	76	528	374	107	168	131
6	83	74	e43	e47	79	58	73	479	297	105	124	128
7	66	61	e41	e47	84	60	68	355	280	104	136	127
8	47	56	38	e47	96	59	60	277	263	144	123	239
9	41	63	e38	e47	90	59	61	221	249	119	112	546
10	41	69	e38	e47	83	61	90	177	245	121	146	568
11	45	74	e39	e46	78	61	114	158	341	102	275	565
12	45	71	e43	45	63	60	109	144	807	127	193	564
13	46	60	e43	e46	58	59	100	132	782	155	147	562
14	46	60	e42	e47	55	58	300	119	750	113	114	675
15	46	58	e41	e47	54	57	354	111	702	108	109	916
16	46	55	e41	e46	59	56	226	117	970	113	131	796
17	52	54	e40	e45	61	55	173	122	1110	126	116	708
18	53	55	e40	e45	60	64	135	340	1310	104	111	681
19	58	54	e40	e46	59	78	112	1320	1820	110	116	e500
20	57	52	e40	e48	56	80	98	1600	1460	100	280	e350
21	55	50	e40	e50	55	75	91	1930	1060	98	259	e300
22	57	48	40	e48	54	74	95	2590	862	100	368	e180
23	61	46	50	e46	52	73	110	2670	698	132	169	e120
24	61	47	49	e47	50	70	135	2740	547	100	182	e120
25	71	49	35	e48	49	69	294	3100	736	180	301	e115
26	103	48	31	e49	48	64	477	2920	940	147	201	e98
27	282	48	21	48	47	60	467	2260	781	102	169	e90
28	315	48	e47	32	46	57	511	1580	629	138	410	e84
29	195	51	e50	e42	---	55	328	1130	484	106	440	e80
30	111	50	e50	44	---	55	286	944	366	113	181	e78
31	100	---	e52	44	---	54	---	920	---	162	130	---
TOTAL	2668	2115	1342	1446	1720	1861	5189	30090	21725	3883	5784	9969
MEAN	86.1	70.5	43.3	46.6	61.4	60.0	173	971	724	125	187	332
MAX	315	210	63	54	96	80	511	3100	1820	254	440	916
MIN	41	46	21	32	46	43	53	111	245	98	95	78
AC-FT	5290	4200	2660	2870	3410	3690	10290	59680	43090	7700	11470	19770

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1985 - 1999, BY WATER YEAR (WY)

MEAN	92.8	90.5	72.5	71.1	81.7	264	988	1444	776	162	106	107
MAX	257	399	254	198	181	774	2551	3243	1794	626	242	332
(WY)	1987	1987	1987	1985	1987	1985	1993	1993	1995	1995	1987	1999
MIN	32.7	34.3	29.7	31.6	45.4	45.2	27.6	29.8	16.4	48.0	43.8	51.1
(WY)	1992	1991	1991	1991	1991	1990	1990	1990	1990	1990	1990	1991

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1985 - 1999	
ANNUAL TOTAL	144102		87792			
ANNUAL MEAN	395		241		a355	
HIGHEST ANNUAL MEAN					724	1993
LOWEST ANNUAL MEAN					53.5	1990
HIGHEST DAILY MEAN	3560	May 7	3100	May 25	4690	May 5 1986
LOWEST DAILY MEAN	21	Dec 27	21	Dec 27	b4.0	Jun 21 1990
ANNUAL SEVEN-DAY MINIMUM	38	Dec 21	38	Dec 21	8.6	Jun 15 1990
INSTANTANEOUS PEAK FLOW			3130	May 26	c5230	May 5 1986
INSTANTANEOUS PEAK STAGE			7.26	May 26	9.12	May 5 1986
ANNUAL RUNOFF (AC-FT)	285800		174100		257300	
10 PERCENT EXCEEDS	1250		641		1190	
50 PERCENT EXCEEDS	87		94		80	
90 PERCENT EXCEEDS	48		46		41	

e Estimated
a Average discharge for 17 years (water years 1918-22, 1972-83), 497 ft^3/s; 360100 acre-ft/yr, prior to completion of McPhee Reservoir.
b Minimum daily discharge for period of record, no flow, Sep 13, 1974, Aug 15-18, 1978.
c Maximum discharge and stage for period of record, 9280 ft^3/s, Apr 30, 1973, gage height, 12.09 ft, from floodmarks.

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 TEMPERATURE: November 1979 to current year.

INSTRUMENTATION.--Water-quality monitor since November 1979 and water-quality monitor with satellite telemetry since July 1991 to current year.

REMARKS.-- Specific conductance record is good except May 26-31 and June 13-21, which is poor. Water temperature record is good. Daily data that are not published are due to probes being isolated.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 6,970 microsiemens Aug. 14, 1987; minimum, 140 microsiemens May 25, 1983.
WATER TEMPERATURE: Maximum, 33.5°C Aug. 7, 1981; minimum, -0.5°C Dec. 3-8, 1982.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 2,980 microsiemens, Oct. 4; minimum, 251 microsiemens, June 18.
WATER TEMPERATURE: Maximum, 28.1°C, July 7; minimum, 0.0°C many days during winter months.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)
OCT											
15...	0900	47	855	8.6	11.1	250	71	17	77	2	4.2
DEC											
14...	1415	48	1040	8.3	.4	280	71	24	110	3	4.1
MAR											
10...	1505	61	1140	8.4	10.0	340	85	31	110	3	4.5
MAY											
04...	1050	406	790	8.4	10.6	280	65	28	56	1	3.0
26...	1145	3000	302	8.2	9.5	130	39	8.2	10	.4	1.6
JUN											
23...	1145	699	401	8.3	16.9	170	52	9.8	17	.6	2.1
AUG											
04...	1145	343	993	8.2	21.8	370	120	18	59	1	4.7
18...	1430	111	642	8.3	24.6	200	59	13	47	1	3.1
31...	1300	124	1340	7.9	22.0	610	210	24	51	.9	7.3

DATE	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	ALKA-LINITY WAT.DIS FET LAB CACO3 (29801)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS-SOLVED (TONS PER DAY) (70302)
OCT											
15...	110	18	120	--	160	96	.2	5.1	502	.68	63.7
DEC											
14...	136	34	168	--	160	140	.2	6.2	618	.84	79.9
MAR											
10...	165	11	154	--	280	110	.2	4.5	718	.98	118
MAY											
04...	166	7	148	--	250	24	.1	6.6	517	.70	566
26...	--	--	--	106	40	7.3	.1	5.8	176	.24	1430
JUN											
23...	--	--	--	106	78	13	.1	5.6	240	.33	453
AUG											
04...	--	--	--	97	310	68	.2	5.9	644	.88	597
18...	--	--	--	109	130	50	.1	5.8	373	.51	112
31...	--	--	--	78	590	38	.3	7.9	974	1.33	326

09169500 DOLORES RIVER AT BEDROCK, CO--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	640	430	526	1800	1510	1630	1100	970	1060	816	742	768
2	478	431	457	1510	689	1120	1020	961	986	790	754	771
3	812	466	492	834	418	661	987	944	966	811	781	797
4	2980	812	2570	706	561	629	972	940	953	834	798	811
5	2410	1360	1760	714	540	599	981	943	964	853	783	821
6	1560	1180	1410	944	714	806	961	926	943	850	794	829
7	1970	1070	1470	1370	944	1170	1130	961	1060	887	796	831
8	1920	1260	1550	1440	1330	1410	1230	1070	1140	842	803	827
9	1260	1040	1120	1330	1010	1170	1070	1020	1050	928	830	867
10	1040	926	978	1010	949	983	1100	1020	1060	986	871	928
11	1940	929	1380	950	896	916	1180	998	1050	1030	886	948
12	1920	1250	1560	961	913	929	1150	1060	1110	1020	877	933
13	1250	1010	1090	969	945	959	1180	1090	1140	961	833	902
14	1010	885	938	951	937	944	1130	1000	1060	947	863	895
15	885	830	853	987	950	962	1090	991	1040	1010	915	964
16	830	707	753	992	915	964	1110	1010	1050	1030	923	982
17	708	647	668	963	895	937	1090	954	1010	1020	944	969
18	749	641	677	1050	891	967	1020	938	978	960	848	899
19	727	641	659	1120	966	1040	992	899	956	997	834	913
20	649	629	640	1110	1060	1080	987	883	923	969	873	920
21	658	643	648	1090	977	1020	899	834	860	973	839	895
22	671	640	650	1060	966	1010	987	840	916	839	795	810
23	661	639	653	1100	1030	1070	1010	956	981	862	752	787
24	674	650	656	1140	1070	1110	1020	944	984	865	811	831
25	665	548	626	1130	1060	1100	991	884	947	930	865	901
26	781	539	624	1090	1030	1050	979	884	950	927	878	912
27	993	324	531	1040	934	979	992	949	964	954	895	922
28	1920	368	1160	970	855	909	1290	992	1080	953	733	867
29	1540	793	1060	979	877	929	1290	1010	1090	1090	742	913
30	1620	1480	1550	1020	971	1000	1100	1000	1040	1280	673	1030
31	1770	1380	1500	---	---	---	1010	816	926	1140	913	1050
MONTH	2980	324	1010	1800	418	1000	1290	816	1010	1280	673	887

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	1140	975	1050	1060	992	1030	930	870	906	649	614	626
2	1170	671	1030	1080	934	1010	1000	893	935	712	649	678
3	1130	978	1040	1080	996	1040	973	900	923	770	712	739
4	1080	914	989	1190	1030	1090	945	855	911	798	656	771
5	1100	932	994	1400	1190	1290	907	812	859	656	510	550
6	945	799	868	1220	1140	1190	919	876	896	553	446	487
7	961	710	835	1310	1180	1240	902	870	885	570	469	505
8	1040	737	895	1340	1210	1270	887	869	880	602	545	572
9	1070	781	924	1210	1060	1130	874	854	865	666	583	636
10	1060	780	909	1150	1050	1090	902	814	862	719	642	685
11	1010	919	952	1090	1040	1070	845	768	809	809	719	750
12	1240	983	1030	1070	1020	1040	1330	773	1070	838	801	811
13	1270	1020	1170	1040	1010	1020	1170	999	1070	885	838	868
14	1260	1000	1130	1040	979	1020	999	773	857	889	851	879
15	1050	997	1020	1040	981	1020	824	555	635	910	876	898
16	1220	1050	1110	1040	995	1020	555	510	525	942	910	925
17	1260	1140	1200	1030	971	1000	549	513	529	976	942	960
18	1180	1050	1150	1020	986	1000	582	549	557	970	773	927
19	1050	934	1000	1070	992	1040	650	582	627	773	383	440
20	1070	808	932	1050	992	1020	714	650	690	474	340	399
21	1160	880	1040	1010	955	979	795	705	745	341	325	335
22	1130	962	1080	955	872	904	835	776	797	332	308	320
23	1160	1010	1070	879	835	858	856	802	829	308	302	305
24	1120	968	1030	919	865	889	883	779	829	305	297	303
25	1080	948	1020	913	886	895	835	726	782	302	298	300
26	1060	1030	1050	935	902	918	753	623	671	305	296	299
27	1050	1030	1040	956	893	921	623	599	606	312	300	305
28	1050	992	1030	956	899	926	601	573	590	334	309	315
29	---	---	---	953	891	923	576	567	571	333	306	317
30	---	---	---	916	874	895	614	575	588	340	313	327
31	---	---	---	904	872	889	---	---	---	353	339	347
MONTH	1270	671	1020	1400	835	1020	1330	510	777	976	296	567

09169500 DOLORES RIVER AT BEDROCK, CO--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	352	345	350	448	395	417	829	773	796	---	---	---
2	358	347	350	519	448	479	---	724	---	---	772	---
3	370	358	363	572	519	553	---	935	---	779	532	647
4	404	370	389	621	572	609	1360	597	999	---	591	---
5	447	403	423	671	619	656	680	455	595	---	---	---
6	510	447	477	729	663	710	703	428	508	---	---	---
7	560	510	535	745	698	730	993	703	885	---	---	---
8	570	554	563	960	652	718	1470	857	1210	---	---	---
9	588	567	575	684	633	645	1020	869	920	---	---	---
10	599	558	588	670	623	648	1320	1020	1220	---	---	---
11	597	479	573	1250	646	821	1090	816	927	---	---	---
12	479	309	361	1280	848	1080	1090	806	920	---	---	---
13	315	306	310	1250	852	1080	1240	1090	1180	---	---	---
14	314	308	311	864	770	802	---	---	---	---	---	---
15	363	311	317	951	703	774	---	---	---	---	---	---
16	415	287	315	1520	811	1040	---	---	---	---	---	---
17	287	255	269	1520	1020	1270	---	---	---	---	---	---
18	283	251	259	1020	908	938	---	509	---	---	---	---
19	648	270	420	963	879	931	634	525	603	---	---	---
20	356	271	337	1720	879	1200	---	523	---	---	---	---
21	356	328	341	1480	903	1100	---	---	---	---	---	---
22	714	326	472	909	764	827	---	---	---	358	337	345
23	430	383	403	783	645	710	---	---	---	382	358	368
24	393	380	385	700	654	679	---	---	---	411	381	398
25	388	333	375	2230	664	1070	---	---	---	448	411	426
26	335	312	318	1840	657	1010	---	---	---	---	---	---
27	325	311	318	730	637	708	---	---	---	---	---	---
28	340	321	331	704	561	631	---	---	---	540	528	534
29	364	337	349	2030	675	1540	---	---	---	538	524	530
30	395	363	376	1560	855	1070	---	---	---	550	533	542
31	---	---	---	888	757	806	---	---	---	---	---	---
MONTH	714	251	392	2230	395	847	---	---	---	---	---	---

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	18.1	16.0	17.0	11.6	8.7	10.1	5.1	2.7	3.9	.6	.0	.1
2	17.4	13.9	15.6	10.9	8.7	9.5	4.9	2.1	3.5	.5	.0	.1
3	15.7	13.5	14.1	9.7	7.4	8.6	4.3	1.6	3.0	.5	.0	.1
4	14.7	11.8	13.1	8.5	6.0	7.2	3.8	1.5	2.7	.6	.0	.1
5	13.5	10.0	11.6	7.4	5.1	6.2	3.1	1.7	2.6	.7	.0	.2
6	12.9	8.6	10.8	7.6	4.9	6.2	1.7	.2	.9	.5	.0	.1
7	13.4	9.2	11.3	6.9	5.0	6.1	1.0	.0	.3	.7	.0	.2
8	13.8	10.0	12.0	6.0	5.5	5.7	.9	.0	.2	.7	.0	.2
9	14.4	10.4	12.4	5.6	4.3	5.1	.5	.0	.2	.5	.0	.1
10	14.0	10.5	12.4	5.0	2.5	3.7	.7	.0	.2	.6	.0	.1
11	13.8	9.8	11.9	3.2	1.8	2.4	.7	.0	.2	.5	.0	.1
12	14.0	10.1	12.1	4.1	2.2	3.2	.6	.0	.2	.6	.0	.2
13	13.1	10.2	11.9	5.9	4.0	4.6	.7	.0	.2	.6	.0	.2
14	14.3	10.8	12.7	4.8	3.2	3.9	.7	.0	.1	.6	.0	.1
15	13.6	10.9	12.5	5.8	3.0	4.3	.5	.0	.1	.2	.0	.0
16	12.4	10.2	11.2	6.2	3.3	4.8	.6	.0	.1	.2	.0	.0
17	11.9	8.7	10.2	5.5	3.8	4.7	.7	.0	.2	.2	.0	.1
18	11.8	8.3	10.1	5.4	3.4	4.4	.7	.0	.2	.6	.0	.2
19	12.0	8.1	10.1	5.3	2.6	3.9	.6	.0	.2	.7	.0	.2
20	12.1	9.3	10.7	3.7	1.5	2.6	.5	.0	.2	.4	.0	.1
21	11.2	9.6	10.2	3.3	.8	2.1	.6	.0	.1	.8	.0	.3
22	12.2	9.8	10.9	3.7	.8	2.3	.4	.0	.1	1.1	.0	.3
23	14.4	11.0	12.5	4.1	1.5	2.8	.4	.0	.1	.9	.0	.4
24	13.2	10.3	12.0	4.1	1.9	3.0	.4	.0	.1	1.9	.5	1.1
25	12.2	10.5	11.1	4.5	1.8	3.2	.4	.0	.1	1.2	.2	.8
26	12.2	10.2	11.1	4.2	1.7	3.0	.5	.0	.1	1.8	.7	1.2
27	11.2	10.0	10.8	3.7	1.7	2.8	.5	.0	.1	1.6	.0	.9
28	10.9	8.8	9.8	4.2	2.5	3.3	.4	.0	.1	1.7	.0	.7
29	9.7	7.8	8.8	6.5	4.1	5.1	.5	.0	.1	1.2	.0	.4
30	9.8	8.5	9.1	5.9	3.3	4.6	.4	.0	.1	1.1	.0	.3
31	11.5	8.9	10.1	---	---	---	.3	.0	.1	1.0	.0	.4
MONTH	18.1	7.8	11.6	11.6	.8	4.6	5.1	.0	.7	1.9	.0	.3

09169500 DOLORES RIVER AT BEDROCK, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	1.7	.0	.6	9.3	4.4	6.8	8.1	6.6	7.3	13.0	11.2	12.0
2	1.6	.0	.6	9.8	5.5	7.6	6.6	4.4	5.5	13.7	10.0	11.8
3	2.3	.0	1.0	9.2	5.2	7.3	8.4	3.7	6.0	12.7	10.5	11.4
4	1.4	.0	.5	9.3	5.5	7.4	7.4	5.9	6.6	13.2	9.8	11.3
5	2.8	.6	1.6	8.3	5.5	7.0	8.7	4.9	6.7	13.1	9.7	11.2
6	2.5	.8	1.8	9.4	5.3	7.2	11.7	5.7	8.5	12.9	8.2	10.5
7	3.3	.1	1.9	8.8	5.4	7.3	13.1	7.7	10.3	14.9	9.5	12.2
8	3.4	.1	2.0	9.3	5.7	7.4	13.5	8.1	10.5	17.1	12.2	14.6
9	3.3	.7	2.3	9.1	5.9	7.5	11.2	7.5	8.7	16.4	13.5	15.1
10	4.3	2.5	3.5	10.3	5.7	7.8	11.8	5.6	8.3	16.2	12.8	14.5
11	2.9	.2	1.6	8.6	6.6	7.8	10.6	7.0	8.9	16.1	12.2	14.2
12	2.0	.0	.8	7.6	6.8	7.2	12.3	8.7	10.3	17.1	12.0	14.6
13	2.1	.0	.8	10.3	5.6	7.8	14.7	10.1	12.1	17.0	14.3	15.7
14	2.0	.0	.9	10.7	5.7	8.2	14.3	10.9	12.8	17.4	13.6	15.2
15	4.1	.7	2.2	9.8	6.9	8.4	13.0	9.8	11.2	17.7	13.5	15.4
16	2.9	.7	2.0	11.6	6.3	8.8	12.0	7.6	9.9	18.1	13.2	15.5
17	3.8	.4	2.0	10.6	7.1	9.0	13.6	8.5	11.0	18.5	13.7	15.9
18	4.4	1.4	3.0	13.2	7.7	10.3	14.8	10.1	12.4	19.2	14.2	16.5
19	5.2	2.4	3.7	14.1	9.2	11.5	16.8	11.3	13.9	16.3	14.0	14.7
20	5.6	1.5	3.6	13.4	9.2	11.4	16.0	13.2	14.5	14.1	12.3	13.5
21	4.2	2.5	3.2	14.0	9.7	11.7	14.7	12.4	13.6	13.5	11.4	12.4
22	5.2	1.3	3.1	14.2	9.2	11.6	12.9	10.5	11.5	12.5	9.8	11.2
23	5.0	1.1	3.2	11.7	8.9	10.3	12.2	9.6	10.9	12.6	10.7	11.6
24	6.4	2.0	4.1	13.5	8.0	10.7	12.2	10.3	11.5	11.3	9.6	10.5
25	6.7	3.0	4.8	13.9	9.2	11.6	11.4	9.3	10.2	11.3	9.5	10.3
26	7.5	3.5	5.3	12.0	9.8	10.8	13.4	9.5	11.3	11.5	8.9	10.2
27	7.2	3.0	5.3	14.2	9.7	11.7	15.0	11.2	13.0	12.6	10.6	11.5
28	8.3	3.5	5.9	13.5	8.8	11.2	13.8	12.2	12.7	12.8	10.7	11.9
29	---	---	---	13.6	8.5	11.0	12.8	11.2	12.0	13.8	12.5	13.0
30	---	---	---	12.0	9.3	10.5	13.9	10.4	12.1	16.0	12.5	14.1
31	---	---	---	10.4	8.1	9.3	---	---	---	16.3	13.3	14.5
MONTH	8.3	.0	2.5	14.2	4.4	9.2	16.8	3.7	10.5	19.2	8.2	13.1

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	16.9	12.8	14.6	24.4	19.6	22.1	24.8	22.1	23.6	---	---	---
2	15.2	13.8	14.5	24.9	21.6	23.1	---	22.1	---	---	---	---
3	16.2	12.7	14.4	25.1	20.6	22.5	---	---	---	21.1	18.3	19.7
4	15.1	13.4	14.3	25.2	21.4	22.9	23.6	20.2	21.7	20.0	17.9	19.1
5	13.4	11.3	11.9	26.9	20.7	23.5	23.3	21.4	22.2	---	---	---
6	14.7	10.5	12.6	27.9	22.9	25.0	24.2	19.9	22.0	---	---	---
7	18.3	12.7	15.4	28.1	23.7	25.6	24.4	20.6	22.5	---	---	---
8	19.5	14.9	17.3	26.2	23.9	24.9	23.7	20.8	22.3	---	---	---
9	20.9	15.9	18.4	27.2	23.5	25.0	24.9	21.4	22.9	---	---	---
10	20.5	16.7	18.8	27.9	23.3	25.2	22.7	21.1	21.9	---	---	---
11	21.2	16.8	19.1	26.9	23.6	24.8	23.1	20.2	21.5	---	---	---
12	20.4	16.7	18.1	26.7	22.0	24.0	22.6	19.4	21.1	---	---	---
13	19.2	14.7	16.8	25.3	22.4	23.8	23.1	19.7	21.4	---	---	---
14	18.9	15.2	17.1	23.8	22.3	23.1	---	---	---	---	---	---
15	19.5	16.0	17.7	25.1	21.2	22.8	---	---	---	---	---	---
16	18.5	16.0	17.4	25.2	21.2	22.9	23.5	---	---	---	---	---
17	16.3	15.2	15.6	25.1	21.4	23.1	24.4	21.1	22.5	---	---	---
18	16.8	14.7	15.5	23.9	21.9	22.8	25.1	21.0	22.8	---	---	---
19	15.5	13.5	14.6	22.4	20.7	21.5	25.6	21.6	23.1	---	---	---
20	15.9	13.2	14.7	24.1	19.9	21.8	---	20.2	---	---	---	---
21	17.5	14.8	15.9	24.3	20.6	22.4	---	---	---	17.9	---	---
22	19.1	15.4	17.0	24.9	20.9	22.7	---	---	---	18.7	14.5	16.5
23	20.1	15.8	17.8	26.2	21.3	23.5	---	---	---	19.2	16.1	17.4
24	21.5	17.5	19.3	25.5	22.5	23.9	---	---	---	20.1	15.9	17.6
25	21.1	18.6	19.7	24.7	22.3	23.5	---	---	---	21.2	15.9	18.1
26	19.8	16.8	18.4	25.1	22.2	23.4	---	---	---	23.2	15.9	18.7
27	20.2	16.3	18.1	25.5	22.2	23.6	---	---	---	21.8	15.0	17.3
28	20.9	16.3	18.5	26.0	21.6	23.6	---	---	---	16.1	13.0	14.5
29	21.7	17.7	19.6	25.1	22.6	23.9	---	---	---	15.1	10.8	13.0
30	22.9	18.3	20.6	25.3	22.4	23.6	---	---	---	16.0	11.7	13.7
31	---	---	---	24.4	21.6	23.1	---	---	---	---	---	---
MONTH	22.9	10.5	16.8	28.1	19.6	23.5	---	---	---	---	---	---

09170800 WEST PARADOX CREEK ABOVE BEDROCK, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 38°19'54", long 108°53'59", in $NE^{1}/_{4}NW^{1}/_{4}$ sec.18, T.47 N., R.18 W., Montrose County. Site is 1,000 ft downstream from former surface water station, 1.3 mi northwest of Bedrock, and 2.6 mi upstream from mouth.

DRAINAGE AREA.-- 53.3 mi^2.

PERIOD OF RECORD.--Chemical analyses: August 1987 to current year.

REMARKS.--Natural flow affected by water imported from Rock Creek through Buckeye Reservoir. Diversion for irrigation of about 2,500 acres.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)
OCT										
15...	1050	1020	8.4	10.0	480	93	61	37	.7	4.2
DEC										
14...	1620	1050	8.4	1.3	550	120	62	28	.5	3.0
MAR										
10...	1300	1590	8.4	6.9	820	160	100	57	.9	4.3
MAY										
04...	0815	1660	8.4	8.3	840	150	110	64	1	4.2
26...	1100	1690	8.5	16.0	820	130	120	71	1	4.9
JUN										
23...	1020	1450	8.3	18.7	740	140	93	50	.8	5.3

DATE	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	ALKA-LINITY WAT.DIS FET LAB CACO3 (MG/L) (29801)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)
OCT										
15...	122	120	300	--	270	39	.4	13	702	.95
DEC										
14...	235	36	253	--	330	26	.3	14	732	1.00
MAR										
10...	328	4	275	--	580	60	.4	12	1140	1.55
MAY										
04...	351	7	300	--	560	71	.4	12	1160	1.57
26...	--	--	--	271	590	84	.5	6.0	1170	1.59
JUN										
23...	--	--	--	247	530	50	.4	11	1030	1.41

09171100 DOLORES RIVER NEAR BEDROCK, CO

LOCATION.--Lat 38°21'29", long 108°49'54", in SW$^{1}/_{4}$NW$^{1}/_{4}$ 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. Statistical summary computed for 1985 to current year.

REVISED RECORDS.--WDR CO-90-2: 1989.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 4,910 ft above sea level, from topographic map. Prior to Feb. 17, 1972, at site 400 ft upstream at datum 1.02 ft higher.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Diversions upstream from station for irrigation of about 80,000 acres, of which about 74,760 acres are in the San Juan River basin. Flow regulated by McPhee Reservoir, capacity 381,000 acre-ft, since Mar. 19, 1984.

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. 17, 1972 (discharge, 5,710 ft^{3}/s), by slope-area measurement at site 1,400 ft upstream.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	112	94	60	e67	e63	65	68	275	943	253	136	119
2	93	160	67	e70	64	64	72	228	848	153	108	150
3	88	224	64	71	e64	64	81	230	681	108	82	141
4	78	131	60	65	63	68	89	350	500	97	180	224
5	50	95	59	63	e72	73	90	475	364	91	152	131
6	64	75	e55	63	74	77	84	497	284	87	111	145
7	60	65	e50	62	82	78	81	336	263	87	110	149
8	45	61	45	63	83	75	73	269	245	117	107	203
9	39	66	e45	e62	74	73	75	224	233	109	94	602
10	39	69	e46	e62	74	73	95	179	229	104	116	738
11	43	74	46	e62	72	73	118	159	257	90	253	746
12	43	72	e50	62	69	71	115	143	846	90	177	752
13	43	64	e50	e62	64	71	108	130	819	148	133	750
14	44	64	e48	62	61	70	256	118	794	101	102	756
15	e44	65	e47	62	67	72	335	110	702	93	100	961
16	e48	62	e46	e62	72	70	233	111	1000	95	116	952
17	e52	61	e45	e62	74	70	177	114	1180	105	104	799
18	e52	61	e46	e62	66	81	136	214	1330	90	100	735
19	e57	60	e46	e64	65	91	118	1340	1890	90	99	598
20	e56	59	e46	e68	65	89	105	1600	1570	86	282	424
21	e55	58	e46	e68	66	86	101	1910	1150	81	204	295
22	e58	57	46	e62	64	88	106	2540	928	81	449	190
23	e60	55	e60	e63	64	87	120	2530	722	112	147	130
24	e62	56	e54	e66	64	86	137	2540	552	84	117	123
25	e74	57	e50	e68	65	81	251	3020	696	141	343	120
26	e105	57	e47	e68	64	74	455	3040	999	138	175	101
27	e280	57	45	e65	60	71	412	2280	826	88	131	92
28	327	57	e62	58	61	68	534	1640	645	115	424	86
29	192	59	e66	e58	---	69	328	1220	488	92	491	86
30	110	58	e66	59	---	70	276	986	360	94	187	83
31	96	---	e66	60	---	69	---	959	---	135	126	---
TOTAL	2569	2253	1629	1971	1896	2317	5229	29767	22344	3355	5456	11381
MEAN	82.9	75.1	52.5	63.6	67.7	74.7	174	960	745	108	176	379
MAX	327	224	67	71	83	91	534	3040	1890	253	491	961
MIN	39	55	45	58	60	64	68	110	229	81	82	83
AC-FT	5100	4470	3230	3910	3760	4600	10370	59040	44320	6650	10820	22570

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1985 - 1999, BY WATER YEAR (WY)

MEAN	99.4	98.3	77.9	78.9	92.7	276	1005	1450	786	167	110	117
MAX	269	430	262	208	207	811	2552	3219	1766	677	274	379
(WY)	1987	1987	1987	1985	1987	1985	1985	1993	1995	1995	1987	1999
MIN	33.3	38.8	33.1	34.5	48.2	46.6	27.3	30.4	16.0	44.9	44.7	53.0
(WY)	1992	1991	1991	1991	1991	1990	1990	1990	1990	1990	1990	1991

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1985 - 1999	
ANNUAL TOTAL	144952		90167			
ANNUAL MEAN	397		247		a364	
HIGHEST ANNUAL MEAN					711	1993
LOWEST ANNUAL MEAN					55.3	1990
HIGHEST DAILY MEAN	3490	May 7	3040	May 26	4550	May 6 1986
LOWEST DAILY MEAN	39	Oct 9	39	Oct 9	b7.1	Jun 21 1990
ANNUAL SEVEN-DAY MINIMUM	42	Oct 9	42	Oct 9	10	Jun 16 1990
INSTANTANEOUS PEAK FLOW			3280	May 26	c5260	May 6 1986
INSTANTANEOUS PEAK STAGE			9.03	May 26	10.82	May 6 1986
ANNUAL RUNOFF (AC-FT)	287500		178800		263500	
10 PERCENT EXCEEDS	1300		727		1220	
50 PERCENT EXCEEDS	89		88		87	
90 PERCENT EXCEEDS	55		56		45	

e Estimated
a Average discharge for 12 years (water years 1972-83), 502 ft^{3}/s; 363700 acre-ft/yr, prior to completion of McPhee Dam.
b Minimum daily discharge for period of record, 0.12 ft^{3}/s, Jul 17-18, 1977.
c Maximum discharge and stage for period of record, 9500 ft^{3}/s, Apr 30, 1973, gage height, 12.88 ft, from floodmarks.

09171100 DOLORES RIVER NEAR BEDROCK, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--December 1987 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: December 1987 to current year.
WATER TEMPERATURE: December 1987 to current year.

INSTRUMENTATION.--Water-quality monitor since December 1987.

REMARKS.--Daily specific conductance record is good except Oct. 1-15 which is fair and Oct. 26 to Nov. 1, Nov. 9-14, Dec. 20 to Jan. 17, May 4-11, May 31 to June 6, July 4-12, July 26 to Aug. 3 and Sep. 20-23 which is poor. Daily water temperature record is good. Daily data that are not published are due to instrument failure.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum recorded, 57,700 microsiemens, June 22, 1990 (may have been higher June 19-22, 1990 when probe was out of water); minimum recorded, 256 microsiemens, June 23, 1995 (may have been lower during period of missing record Apr. 3-20, 1993).
WATER TEMPERATURE: Maximum, 33.3°C, July 1, 1990; minimum, -1.0°C, Dec. 23, 1995 (temperatures published as 0.0°C may have been lower during water years 1988-95).

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 19,600 microsiemens, Jan. 30 (may have been higher during periods of no data in Nov. and Dec.); minimum, 297 microsiemens, Sep 16.
WATER TEMPERATURE: Maximum, 30.6°C, Jul. 10; minimum, -.5°C, Dec. 22 (may have been lower during period of no record in Nov. and Dec.).

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)
OCT											
15...	1245	43	2680	8.3	12.0	330	88	26	410	10	22
DEC											
14...	1115	34	7090	8.2	-.1	540	110	63	1200	23	63
MAR											
11...	1130	74	4880	8.4	7.6	450	99	50	830	17	39
MAY											
04...	1320	387	898	8.3	12.3	290	68	29	76	2	4.2
26...	0830	3140	318	8.1	9.3	130	38	8.2	13	.5	2.0
JUN											
23...	0800	765	427	8.3	15.9	180	54	10	20	.6	2.2
AUG											
04...	0900	94	2230	8.1	20.2	550	170	29	240	4	16
18...	1230	99	1550	8.3	24.8	250	71	18	210	6	10
31...	1530	123	1780	7.9	23.6	640	210	26	130	2	10

DATE	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	ALKA-LINITY WAT.DIS FET LAB CACO3 (MG/L) (29801)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS-SOLVED (TONS PER DAY) (70302)
OCT											
15...	92	30	125	--	210	650	.2	5.1	1490	2.02	173
DEC											
14...	206	--	169	--	330	2200	.2	6.6	4050	5.51	372
MAR											
11...	181	11	167	--	310	1300	.2	--	2750	3.74	550
MAY											
04...	176	--	144	--	250	57	.2	6.7	575	.78	601
26...	--	--	--	105	41	12	.1	5.8	182	.25	1540
JUN											
23...	--	--	--	107	85	16	.2	5.6	257	.35	530
AUG											
04...	--	--	--	87	520	340	.3	7.0	1370	1.87	349
18...	--	--	--	116	160	310	.1	5.9	851	1.16	228
31...	--	--	--	82	620	170	.2	8.0	1230	1.67	409

09171100 DOLORES RIVER NEAR BEDROCK, CO--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	1390	758	1050	3120	2440	2850	---	---	---	7090	6000	6310
2	888	785	834	2680	1170	2270	---	---	---	6700	4410	5750
3	1020	779	927	1220	610	906	---	---	---	6410	4940	5550
4	3110	817	1900	1270	1130	1190	---	---	---	5180	4940	5040
5	3170	2830	3060	1860	1270	1540	---	---	---	5380	5160	5280
6	2830	1890	2270	2420	1860	2180	---	---	---	5610	5370	5470
7	1970	1760	1840	3110	2420	2720	---	---	---	5410	4910	5280
8	2900	1970	2660	3650	3110	3430	---	---	---	4940	4670	4850
9	2880	2670	2750	3650	---	---	---	---	---	4680	3960	4470
10	2820	2670	2760	2890	2550	2700	---	---	---	4040	3950	3980
11	2670	2340	2450	---	---	---	---	---	---	4320	4000	4210
12	3350	2610	3180	---	2370	---	---	---	---	4580	4310	4450
13	3180	2810	2930	3050	2600	2880	---	---	---	4640	4200	4490
14	2820	2720	2770	---	2890	---	---	---	---	4260	4170	4220
15	2840	2720	2780	---	---	---	---	---	---	4340	4230	4290
16	2840	2640	2790	---	---	---	---	---	---	4500	4340	4400
17	2690	2330	2520	---	---	---	7150	3840	5020	4690	4500	4610
18	2470	2280	2360	---	---	---	7600	4100	5420	4830	4310	4650
19	2370	2250	2320	---	---	---	7370	3840	5180	4350	4150	4230
20	2340	2130	2220	---	---	---	6080	2950	3920	6280	4040	4600
21	2500	2320	2400	---	---	---	5380	4520	4940	4760	3910	4390
22	2520	2410	2450	---	---	---	16600	5380	8440	10800	2930	5160
23	2480	2290	2380	---	---	---	14600	4160	9040	12000	2820	5320
24	2420	2330	2380	---	---	---	11800	4880	7860	6570	4320	5450
25	2530	1990	2370	---	---	---	9830	6210	8140	7540	4840	5960
26	2050	1210	1730	---	---	---	9890	7820	8500	6110	4920	5490
27	1210	553	824	---	---	---	12400	9890	11800	8440	5080	5700
28	1070	474	764	---	---	---	12500	5370	8610	13200	5490	8060
29	1330	1060	1160	---	---	---	5670	4630	5280	13000	4020	6670
30	1990	1330	1650	---	---	---	6180	4680	5620	19600	3400	7210
31	2690	1990	2350	---	---	---	7070	5500	6340	17400	3340	8080
MONTH	3350	474	2160	---	---	---	---	---	---	19600	2820	5280

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	9150	4270	6190	6180	5660	5890	5350	4390	4970	818	732	764
2	15800	3620	6410	6170	5690	5870	4390	3870	4110	931	818	898
3	8110	3300	5350	6430	5720	5990	3870	3070	3440	942	924	933
4	12300	4040	6860	6190	5020	5690	3070	2780	2920	927	864	900
5	8300	3160	5010	5220	4650	4990	2850	2630	2730	877	594	667
6	6360	4160	4970	4870	4530	4670	3150	2850	3040	632	593	605
7	6370	3760	4410	5170	4490	4770	3420	3020	3170	698	598	641
8	5810	3460	4170	5100	4720	4880	3670	3330	3470	833	698	787
9	6100	4430	5210	5370	4920	5110	3550	2900	3390	1030	823	922
10	6570	5340	5770	5140	4660	4880	2900	2110	2460	1260	1030	1130
11	5940	4750	5210	5330	4890	5060	2110	1670	1810	1470	1260	1360
12	12400	3830	6400	5190	4840	5080	2520	1730	1930	1720	1470	1580
13	14000	3610	6340	5210	4610	4810	2670	2180	2400	2010	1720	1860
14	9350	5160	6720	5320	4800	5050	2300	986	1550	2270	1990	2080
15	7890	5640	6760	5270	4860	5040	1040	740	868	2340	2200	2270
16	6720	4490	5470	5470	4970	5140	780	738	765	2340	2030	2130
17	5940	4420	4960	5380	4990	5160	1020	778	882	2050	1850	1970
18	6740	5440	5850	5130	3880	4520	1310	1020	1140	2140	955	1890
19	7470	5280	6290	4150	3330	3720	1590	1310	1420	930	448	585
20	7300	5090	5980	4170	3240	3610	1880	1580	1710	448	423	432
21	6960	5320	6130	4390	3840	4040	2030	1840	1920	424	409	415
22	6500	5800	6090	4320	3530	3860	2020	1640	1880	420	378	402
23	6470	5880	6210	4260	3640	3940	1740	1510	1670	379	347	359
24	6580	6120	6330	4310	3650	4010	1680	1290	1550	349	337	343
25	6710	6310	6500	4620	3980	4280	1290	909	1150	343	330	338
26	6630	6270	6450	5000	4590	4750	909	679	788	330	306	319
27	7080	6250	6580	5200	4850	4960	679	643	655	314	303	308
28	7040	6040	6780	5150	4830	5010	643	571	608	328	307	315
29	---	---	---	5280	4590	4910	649	571	603	355	323	333
30	---	---	---	5310	4800	5050	732	649	695	365	353	359
31	---	---	---	5330	4870	5120	---	---	---	368	362	366
MONTH	15800	3160	5910	6430	3240	4830	5350	571	1990	2340	303	912

09171100 DOLORES RIVER NEAR BEDROCK, CO--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	367	358	362	595	426	486	1300	1080	1180	1970	1780	1880
2	372	360	366	842	595	709	1860	1110	1320	1780	1010	1510
3	400	370	387	1030	842	944	3090	1860	2510	1140	1030	1090
4	459	400	428	1090	1020	1050	2170	980	1710	1100	787	932
5	548	459	502	1170	1090	1120	1090	828	940	1820	1020	1300
6	691	548	615	1260	1140	1190	1280	977	1080	1840	1400	1670
7	783	689	724	1390	1240	1310	1440	1280	1360	1400	1100	1240
8	857	770	801	1460	902	1120	1880	1300	1540	1100	702	975
9	879	824	842	1200	897	1100	1830	1560	1660	702	395	501
10	918	852	875	1300	1060	1170	1730	1540	1640	396	357	371
11	1620	807	895	1780	1280	1500	1630	743	1050	358	347	351
12	904	346	441	2420	1580	2190	1560	726	975	349	342	345
13	346	340	342	1600	1120	1390	1780	1470	1640	343	332	339
14	344	337	340	1700	1590	1640	1970	1690	1760	334	328	331
15	352	342	347	1690	1570	1640	2000	1800	1930	375	323	334
16	387	331	346	1800	1580	1670	1950	1240	1650	433	297	354
17	347	319	327	2340	1660	1990	1540	1400	1490	448	327	361
18	342	315	322	1780	1640	1690	1620	1460	1540	366	324	333
19	499	314	417	1930	1530	1800	1520	1280	1460	371	339	354
20	390	340	354	2640	1540	1960	1280	677	856	440	371	409
21	347	328	341	2770	2120	2460	1070	766	889	602	440	506
22	684	333	457	2120	1870	1980	861	648	771	982	602	757
23	437	403	422	1870	1160	1420	899	644	720	1310	982	1190
24	403	390	395	1760	1480	1620	1500	899	1120	1380	1310	1360
25	401	347	382	1780	891	1420	1680	926	1200	1530	1350	1420
26	347	306	314	2220	1120	1590	926	792	842	1970	1530	1810
27	328	307	317	1710	1280	1490	1170	923	1010	2200	1940	2050
28	351	327	340	1680	1020	1260	1600	1010	1230	2300	2140	2210
29	375	350	358	2710	1110	1720	1610	1040	1400	2200	2050	2150
30	426	375	402	2710	1670	2130	1480	1040	1280	2160	1990	2060
31	---	---	---	1720	1130	1470	1900	1340	1730	---	---	---
MONTH	1620	306	459	2770	426	1490	3090	644	1340	2300	297	1020

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	18.2	14.8	16.4	13.7	8.0	10.5	---	---	---	-.1	-.2	-.2
2	19.2	12.4	15.6	11.6	8.7	9.9	---	---	---	-.1	-.2	-.2
3	15.7	12.1	13.9	10.2	7.0	8.6	---	---	---	-.1	-.2	-.2
4	14.6	10.8	12.6	10.0	5.2	7.3	---	---	---	-.2	-.2	-.2
5	15.8	9.1	11.9	8.9	4.5	6.4	---	---	---	-.2	-.2	-.2
6	15.6	6.7	10.8	9.5	4.2	6.5	---	---	---	-.2	-.2	-.2
7	16.3	7.5	11.6	9.0	4.7	6.6	---	---	---	.0	-.2	-.2
8	16.5	7.9	12.1	6.4	5.4	5.9	---	---	---	1.1	-.2	.1
9	17.1	8.5	12.7	6.2	---	---	---	---	---	.0	-.2	-.2
10	15.9	8.1	12.1	6.5	1.3	3.6	---	---	---	-.1	-.2	-.2
11	16.4	7.4	11.8	---	2.5	---	---	---	---	-.1	-.2	-.2
12	16.9	8.1	12.2	---	2.0	---	---	---	---	1.7	-.2	.3
13	16.3	8.0	12.1	6.4	3.6	4.6	---	---	---	1.4	-.3	.2
14	16.4	9.2	12.9	---	2.6	---	---	---	---	.3	-.2	-.1
15	15.1	8.9	12.1	---	---	---	---	---	---	-.1	-.3	-.2
16	11.8	9.4	10.4	---	---	---	---	---	---	-.2	-.2	-.2
17	14.7	8.0	10.7	---	---	---	---	---	---	-.2	-.2	-.2
18	14.8	6.6	10.4	---	---	---	---	---	---	1.7	-.2	.1
19	15.2	6.7	10.6	---	---	---	---	---	---	3.5	-.2	1.3
20	13.9	8.5	10.8	---	---	---	---	---	---	1.9	-.1	.8
21	10.9	8.0	9.6	---	---	---	---	---	---	2.7	.0	1.2
22	14.2	9.6	11.5	---	---	---	-.2	-.5	-.3	3.6	-.2	.8
23	16.7	10.8	13.1	---	---	---	-.1	-.4	-.3	4.3	-.2	1.0
24	15.7	8.6	11.9	---	---	---	-.1	-.3	-.2	3.8	1.1	2.1
25	12.1	10.4	11.0	---	---	---	-.2	-.3	-.2	2.2	.4	1.3
26	14.2	9.7	11.4	---	---	---	-.2	-.3	-.2	4.1	1.0	2.2
27	11.4	10.2	10.7	---	---	---	-.3	-.4	-.3	5.1	-.2	1.6
28	12.0	8.9	10.2	---	---	---	-.2	-.4	-.3	3.1	-.3	.6
29	10.6	7.4	8.9	---	---	---	-.1	-.2	-.2	3.5	-.4	.7
30	10.2	8.3	9.1	---	---	---	-.1	-.2	-.2	2.7	-.3	.3
31	13.0	8.7	10.3	---	---	---	-.1	-.2	-.2	2.2	-.4	.4
MONTH	19.2	6.6	11.7	---	---	---	---	---	---	5.1	-.4	.4

09171100 DOLORES RIVER NEAR BEDROCK, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	4.4	-.4	1.3	12.3	2.9	7.3	8.5	6.0	7.1	12.9	11.2	12.1
2	3.9	-.3	.9	13.1	4.0	8.2	6.4	4.6	5.6	14.7	9.9	12.1
3	6.0	-.2	2.0	12.1	3.3	7.5	11.4	3.4	7.0	13.2	10.6	11.7
4	2.0	-.3	.8	11.9	4.1	7.5	9.4	5.7	7.2	13.9	9.4	11.2
5	5.3	1.1	2.9	11.0	4.0	7.0	11.1	4.5	7.4	13.8	9.8	11.6
6	6.0	1.6	3.4	12.2	4.5	7.6	15.0	4.2	9.0	13.4	8.6	11.0
7	6.8	.7	3.3	11.0	4.0	7.3	15.5	5.9	10.2	16.2	9.6	12.6
8	7.1	.7	3.6	11.1	4.6	7.7	16.7	6.6	10.8	18.3	12.0	15.0
9	7.2	1.1	4.0	12.1	5.5	8.1	10.8	6.4	8.4	18.0	13.7	15.3
10	5.6	1.6	4.2	13.0	4.0	8.1	15.1	4.1	9.0	18.1	11.7	14.6
11	4.9	-.3	1.6	10.3	5.4	7.7	12.4	5.3	8.9	19.3	11.5	14.6
12	4.5	-.3	1.1	11.1	5.4	7.6	16.5	7.7	11.3	19.8	11.0	14.8
13	5.5	-.2	1.6	13.6	3.0	7.7	17.2	9.2	12.6	19.1	13.0	15.9
14	4.8	-.2	1.5	14.1	4.0	8.6	15.2	9.7	12.3	19.7	12.6	15.6
15	7.2	.6	3.2	11.7	5.2	8.4	13.6	9.6	11.3	19.1	11.7	15.2
16	5.1	-.2	2.2	14.6	4.4	9.0	13.5	7.0	10.2	20.0	11.7	15.5
17	5.9	-.2	2.4	13.1	5.2	8.9	16.0	7.7	11.4	21.9	11.6	16.3
18	7.7	.3	3.8	16.4	6.1	10.9	17.4	9.1	12.8	21.6	12.4	16.7
19	7.4	1.5	4.2	17.4	7.5	12.0	19.3	9.3	13.9	17.2	13.7	15.2
20	8.2	-.2	3.7	16.1	7.6	11.6	17.1	11.4	14.1	14.5	12.9	13.7
21	5.1	1.8	3.4	16.2	8.5	11.8	15.5	11.2	13.1	13.6	12.0	12.8
22	7.7	.1	3.5	17.0	7.0	11.5	12.2	10.3	11.2	12.9	10.1	11.7
23	8.5	-.2	3.7	12.9	6.9	9.9	14.0	9.1	11.4	12.8	10.8	11.9
24	9.9	.6	4.8	16.7	6.3	11.1	12.5	10.0	11.2	12.1	10.2	11.0
25	9.2	1.6	5.2	16.5	7.2	11.6	12.4	9.0	10.3	11.6	9.5	10.5
26	10.0	2.4	5.7	13.1	7.8	10.5	13.8	9.7	11.8	11.7	9.3	10.5
27	10.5	.9	5.4	16.5	8.7	12.0	15.8	10.9	13.3	12.7	10.6	11.7
28	11.8	1.9	6.4	15.7	6.1	10.7	13.9	12.2	12.9	13.5	11.1	12.3
29	---	---	---	16.7	5.9	11.0	13.5	11.2	12.4	14.7	12.6	13.3
30	---	---	---	12.8	7.2	9.8	15.3	10.6	12.6	16.1	12.3	14.2
31	---	---	---	11.8	6.8	9.0	---	---	---	16.6	13.5	15.0
MONTH	11.8	-.4	3.2	17.4	2.9	9.3	19.3	3.4	10.7	21.9	8.6	13.4

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	17.0	13.0	15.0	25.9	19.7	22.7	28.6	20.6	23.9	21.2	19.3	20.4
2	15.5	13.7	14.7	26.3	20.6	23.2	27.2	20.9	23.5	23.7	17.9	20.2
3	16.8	13.0	14.8	27.3	19.7	22.9	23.2	21.1	22.1	23.3	18.0	20.1
4	16.0	13.1	14.7	27.1	20.3	23.4	25.9	20.0	22.3	22.6	16.9	19.5
5	13.1	11.3	12.2	29.7	18.9	24.0	25.0	21.0	22.5	23.8	15.8	19.4
6	17.0	10.1	13.3	30.4	21.4	25.1	27.3	19.7	22.9	23.2	16.1	19.4
7	19.4	12.5	15.8	30.2	22.0	25.4	27.5	19.4	23.0	24.1	17.1	20.1
8	20.8	14.5	17.5	27.2	23.2	24.8	25.8	19.7	22.5	24.2	16.5	20.0
9	22.2	15.3	18.6	29.9	22.4	25.6	27.8	20.2	23.2	20.1	17.2	18.8
10	21.7	16.1	18.8	30.6	21.8	25.7	22.8	20.9	21.8	18.4	15.9	17.4
11	22.8	16.3	19.4	29.2	22.2	24.6	24.8	19.7	21.9	18.4	15.4	17.1
12	20.7	17.3	19.0	29.5	20.5	24.4	25.2	18.8	21.7	18.6	15.0	16.9
13	19.4	15.1	17.4	27.9	21.9	24.3	26.5	18.6	22.0	17.8	14.0	16.0
14	18.3	15.6	17.3	24.8	21.8	23.1	22.9	18.4	20.4	16.3	13.8	15.1
15	19.9	16.4	18.1	27.7	20.8	23.5	23.4	18.6	20.8	15.3	13.8	14.6
16	18.8	17.2	18.0	26.5	20.1	23.1	26.7	18.6	22.1	15.8	12.5	14.1
17	17.3	15.4	16.2	27.8	19.9	23.4	27.1	20.4	23.0	16.3	13.1	14.7
18	18.0	14.7	16.2	25.5	20.9	22.6	28.3	20.1	23.6	17.2	13.2	15.1
19	15.9	14.2	15.1	24.3	20.0	21.9	28.0	21.0	23.6	16.3	14.2	15.2
20	16.1	14.1	15.2	26.7	19.0	22.7	23.3	20.8	22.0	17.7	14.2	15.7
21	18.3	14.9	16.3	26.5	19.4	22.6	23.6	20.7	21.7	19.3	13.7	16.3
22	18.9	15.5	17.3	27.3	20.0	23.2	24.7	20.4	22.4	20.1	13.6	16.7
23	20.2	15.9	18.2	28.7	20.3	24.1	27.4	20.1	23.3	20.2	15.7	17.6
24	22.2	17.8	19.9	27.8	20.9	24.0	27.4	20.2	23.0	22.1	15.5	18.3
25	22.1	18.0	20.2	27.0	21.5	23.7	24.2	18.9	21.8	22.5	14.9	18.4
26	20.6	17.7	19.2	27.1	21.7	23.8	25.8	20.5	22.5	21.9	14.8	18.1
27	20.6	16.7	18.7	27.7	20.9	23.7	24.6	20.9	22.5	20.4	13.6	16.7
28	21.2	16.7	19.1	28.8	20.8	24.0	24.8	20.3	22.1	18.1	11.3	14.2
29	22.6	17.7	20.1	27.4	21.2	24.1	24.7	20.1	22.4	18.2	9.1	13.2
30	24.0	18.5	21.1	27.6	21.4	23.8	25.9	19.8	22.3	19.1	9.6	13.8
31	---	---	---	26.6	20.5	23.0	24.6	19.8	21.6	---	---	---
MONTH	24.0	10.1	17.2	30.6	18.9	23.8	28.6	18.4	22.4	24.2	9.1	17.1

09172500 SAN MIGUEL RIVER NEAR PLACERVILLE, CO

LOCATION.--Lat 38°02'33", long 108°07'54", in NW$^1/_4$NE$^1/_4$ sec.25, T.44 N., R.12 W., San Miguel County, Hydrologic Unit 14030003, on right bank 1.5 mi downstream from Specie Creek in vicinity of mile marker 88.68 on State Highway 145 and 4.5 mi northwest of Placerville.

DRAINAGE AREA.--310 mi^2.

PERIOD OF RECORD.--January to December 1909, September 1910 to November 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. Statistical summary computed for 1911 to current year.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 7,030 ft above sea level, from topographic map. See WSP 1713 or 1733 for history of changes prior to Oct. 21, 1958. Oct. 22, 1958 to Mar. 4, 1986, gage located 0.8 mi upstream from present site, at different datum. Mar. 5, 1986, gage moved to present site, at present datum.

REMARKS.-- Records fair except for estimated daily discharges, which are poor. Diversions for irrigation of about 1,700 acres upstream from station. One diversion from Fall Creek for irrigation of about 2,000 acres in Beaver and Saltado Creek basins. One small ditch diverts water from Leopard Creek to Uncompahgre River Basin. Slight regulation by Lake Hope and Trout lake operated by the City of Telluride, Public Service Company of Colorado, Pacific Light and Power Company, and Tri State Power Company, combined capacity, 5,040 acre-feet. Several measurements of specific conductance and water temperature were obtained and are published in the "supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	86	108	e90	e72	e64	77	142	392	818	916	709	571
2	89	124	e88	e74	e64	89	131	375	835	876	607	555
3	82	109	e88	e70	e64	91	123	425	741	855	585	590
4	120	105	e88	e73	e64	102	114	383	746	887	640	612
5	97	98	e84	e70	e66	98	113	363	671	762	724	554
6	89	99	77	e68	e66	80	117	344	583	756	616	500
7	94	99	e80	e68	66	65	130	417	573	729	466	463
8	92	104	e78	e70	72	75	148	683	708	757	402	441
9	88	122	e76	e68	e80	85	149	680	825	646	385	418
10	88	102	e74	e68	e80	86	126	517	870	606	456	402
11	86	100	e77	e66	e72	90	122	432	857	702	544	394
12	86	96	e83	e68	e70	88	138	382	819	740	537	385
13	80	95	e82	e68	e68	77	170	405	807	610	471	375
14	82	97	e78	e64	e70	62	172	494	906	549	414	362
15	84	107	e78	e64	e70	79	164	501	856	588	460	341
16	86	103	e75	e64	e64	103	153	474	929	503	433	327
17	93	101	e74	e64	e64	116	152	466	1200	505	455	354
18	89	95	e74	e66	e64	118	160	509	1080	541	496	332
19	91	94	e74	e68	e64	125	175	557	1110	766	580	328
20	93	e94	e74	e70	e63	133	199	622	1040	684	838	326
21	99	e94	e75	e72	62	145	219	674	998	746	665	309
22	101	e94	e77	e67	63	148	211	681	1020	788	607	319
23	99	e98	e92	e66	e60	141	210	733	1060	733	493	334
24	96	e98	e82	e67	e64	134	275	855	1100	717	447	319
25	105	e92	e80	e68	e68	151	283	743	1050	1170	438	283
26	174	e92	e72	e72	e70	159	294	668	1080	885	403	267
27	175	e94	e70	66	69	158	304	677	1040	751	401	264
28	167	94	e70	e66	63	143	313	651	1040	765	497	306
29	137	e94	e70	e65	---	137	309	701	954	851	464	326
30	131	e94	e70	e65	---	148	368	729	903	928	556	368
31	123	---	e70	e64	---	144	---	784	---	1080	541	---
TOTAL	3202	2996	2420	2101	1874	3447	5684	17317	27219	23392	16330	11725
MEAN	103	99.9	78.1	67.8	66.9	111	189	559	907	755	527	391
MAX	175	124	92	74	80	159	368	855	1200	1170	838	612
MIN	80	92	70	64	60	62	113	344	573	503	385	264
AC-FT	6350	5940	4800	4170	3720	6840	11270	34350	53990	46400	32390	23260

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1911 - 1999, BY WATER YEAR (WY)

MEAN	112	84.2	69.0	63.5	63.1	77.1	234	570	801	455	219	144
MAX	399	138	104	101	94.2	148	593	1515	1528	1197	527	391
(WY)	1912	1985	1987	1998	1987	1997	1942	1958	1983	1983	1999	1999
MIN	50.9	51.4	40.8	38.3	37.1	46.4	79.6	136	186	104	83.4	63.8
(WY)	1957	1990	1977	1977	1990	1980	1951	1977	1934	1977	1972	1956

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1911 - 1999	
ANNUAL TOTAL	88709		117707			
ANNUAL MEAN	243		322		240	
HIGHEST ANNUAL MEAN					414	1983
LOWEST ANNUAL MEAN					88.8	1977
HIGHEST DAILY MEAN	1000	Jun 3	1200	Jun 17	2740	Jun 21 1983
LOWEST DAILY MEAN	58	Mar 1	e60	Feb 23	26	Jan 5 1960
ANNUAL SEVEN-DAY MINIMUM	72	Dec 25	63	Feb 17	31	Dec 25 1976
INSTANTANEOUS PEAK FLOW			2190	Jul 31	a3830	Jun 24 1983
INSTANTANEOUS PEAK STAGE			5.59	Jul 31	b6.20	Jun 24 1983
ANNUAL RUNOFF (AC-FT)	176000		233500		174100	
10 PERCENT EXCEEDS	651		786		660	
50 PERCENT EXCEEDS	111		144		106	
90 PERCENT EXCEEDS	79		68		57	

e Estimated
a Maximum discharge for period of record, 10000 ft^3/s (estimated), Sep 5, 1909, gage height not determined; result of failure of Trout and Middle Reservoir Dams.
b Maximum gage height for statistical period of record, 8.58 ft, May 24, 1984, site and datum then in use.

09174600 SAN MIGUEL RIVER AT BROOKS BRIDGE NEAR NUCLA, CO

LOCATION.--Lat 38°14'39", long 108°30'05", in NE$^1/_4$NE$^1/_4$ sec.15, T.46 N., R.15 W., Montrose County, Hydrologic Unit 14030003, on right bank at downstream side of Brooks Bridge, 0.5 mi upstream from Tri-State Power Plant, 3 mi upstream from Naturita Creek, and 4.4 mi northeast of Naturita.

DRAINAGE AREA.--736 mi^2.

PERIOD OF RECORD.--March 1995 to current year.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 5,570 ft above sea level, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. Diversions for irrigation of several thousand acres upstream from station and diversions upstream for an additional several thousand acres downstream from the gage. One small ditch diverts water from Leopard Creek to Uncompahgre River basin. Slight regulation by Lake Hope and Trout Lake (combined capacity, 5,040 acre-ft) operated by the City of Telluride, Public Service of Colorado, Pacific Light and Power Company, and Tri State Power Company. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31	132	130	101	e72	64	188	1250	798	914	854	525
2	37	144	126	97	e74	110	182	1020	815	882	565	518
3	38	140	128	83	e80	108	166	1180	703	788	604	575
4	56	128	117	64	79	125	154	957	690	727	620	505
5	79	113	125	85	106	131	156	776	635	686	719	419
6	116	117	105	e85	91	118	153	656	562	637	626	362
7	107	115	100	e85	76	95	174	765	507	624	522	327
8	106	117	97	e80	76	98	245	1140	597	671	452	296
9	102	134	111	e80	88	111	294	1260	716	573	413	264
10	99	116	e100	e80	94	111	209	904	778	483	437	240
11	98	107	e105	e85	85	116	208	708	770	453	594	229
12	96	122	117	e85	74	119	213	606	747	542	528	225
13	94	115	94	e85	78	111	279	595	694	459	428	206
14	94	117	94	e80	87	89	294	665	827	378	372	189
15	93	122	106	e80	87	96	259	715	767	403	389	235
16	93	116	109	e80	74	130	205	674	808	436	396	227
17	108	78	e110	e80	81	149	176	629	1120	377	378	243
18	103	61	e110	e80	87	178	149	646	1310	338	490	232
19	102	57	e110	e80	88	212	162	704	1140	459	496	222
20	104	54	111	e80	79	255	194	802	1090	469	877	231
21	110	50	96	e80	69	279	225	843	1030	398	851	213
22	115	96	88	e80	31	288	233	832	999	464	745	182
23	116	94	88	e80	15	255	225	854	1120	421	569	176
24	116	115	88	e80	41	216	458	1080	1130	386	490	202
25	120	145	88	81	48	224	672	904	1050	707	450	193
26	180	142	88	e80	48	243	702	759	1140	627	438	160
27	182	136	88	76	46	226	885	753	1070	521	411	151
28	189	117	87	65	39	207	853	736	1110	454	495	162
29	161	120	91	58	---	187	650	806	967	560	472	157
30	145	120	98	68	---	196	1020	764	918	583	517	151
31	139	---	102	e70	---	192	---	755	---	814	511	---
TOTAL	3329	3340	3207	2473	1993	5039	9983	25738	26608	17234	16709	8017
MEAN	107	111	103	79.8	71.2	163	333	830	887	556	539	267
MAX	189	145	130	101	106	288	1020	1260	1310	914	877	575
MIN	31	50	87	58	15	64	149	595	507	338	372	151
AC-FT	6600	6620	6360	4910	3950	9990	19800	51050	52780	34180	33140	15900

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 1999, BY WATER YEAR (WY)

MEAN	157	112	98.3	95.2	91.2	254	686	1025	979	527	263	137
MAX	208	129	106	106	108	486	1127	1317	1631	1059	539	267
(WY)	1998	1998	1998	1998	1997	1997	1997	1995	1995	1995	1999	1999
MIN	107	90.1	80.1	79.8	71.2	84.7	333	622	389	101	11.0	36.6
(WY)	1999	1996	1996	1999	1999	1996	1999	1996	1996	1996	1996	1998

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1995 - 1999	
ANNUAL TOTAL	118413		123670			
ANNUAL MEAN	324		339		337	
HIGHEST ANNUAL MEAN					499	1997
LOWEST ANNUAL MEAN					178	1996
HIGHEST DAILY MEAN	2290	Apr 24	1310	Jun 18	a2370	Jun 17 1995
LOWEST DAILY MEAN	15	Sep 10	15	Feb 23	2.7	Sep 11 1996
ANNUAL SEVEN-DAY MINIMUM	21	Sep 6	38	Feb 22	3.6	Aug 14 1996
INSTANTANEOUS PEAK FLOW			1980	Aug 1	3290	Apr 24 1998
INSTANTANEOUS PEAK STAGE			5.23	Aug 1	b6.30	Apr 24 1998
ANNUAL RUNOFF (AC-FT)	234900		245300		244500	
10 PERCENT EXCEEDS	922		814		1090	
50 PERCENT EXCEEDS	116		182		166	
90 PERCENT EXCEEDS	53		80		72	

e Estimated
a Also occurred Jun 18, 1995.
b Maximum gage height, 6.32 ft., Jun 17, 1995.

09177000 SAN MIGUEL RIVER AT URAVAN, CO

LOCATION.--Lat 38°21'26", long 108°42'44", in SW$^1/_4$NE$^1/_4$ 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 September 1994, August 1996 to current year.

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

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 5,000 ft above sea level, from topographic map. Prior to Sept. 3, 1959, at site 0.5 mi downstream at different datum.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Natural flow of stream affected by storage reservoirs, diversions for irrigation of about 28,000 acres upstream from station, and return flow from irrigated areas. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

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.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	76	174	162	e120	e90	71	232	1800	1030	1000	1040	638
2	79	346	160	e110	95	136	233	1410	1030	970	661	629
3	84	215	162	e100	e100	136	218	1580	918	840	676	688
4	81	179	149	96	e100	144	199	1340	858	774	716	612
5	119	158	155	e100	e110	160	203	1140	804	728	880	511
6	148	151	138	e100	e110	147	201	911	757	659	749	444
7	137	152	116	e100	106	125	214	989	688	637	613	396
8	136	153	113	e100	99	120	290	1380	724	707	531	362
9	131	187	e120	e100	107	130	353	1760	841	623	486	329
10	125	168	e130	e100	121	133	290	1310	925	528	506	304
11	122	150	e120	e100	116	136	261	1010	919	491	695	304
12	118	160	e120	e100	82	144	259	865	884	581	633	321
13	115	160	120	e100	95	139	337	820	802	520	501	275
14	112	156	108	e100	103	119	422	885	928	450	436	254
15	109	160	119	93	112	114	378	979	893	463	467	368
16	108	168	109	95	100	146	314	928	896	513	480	330
17	129	132	120	e100	99	172	261	867	1210	451	436	318
18	128	122	127	e100	107	204	244	880	1670	416	553	312
19	123	118	e130	e100	113	238	253	951	1390	497	607	304
20	126	109	e130	e100	106	290	295	1080	1280	556	1200	319
21	131	92	128	e100	97	323	341	1140	1200	481	986	300
22	139	142	83	e100	80	340	359	1130	1160	518	840	276
23	147	162	106	e100	52	310	370	1140	1300	503	687	252
24	144	161	e110	e100	55	268	570	1420	1290	481	575	280
25	153	189	e110	e100	73	261	962	1270	1210	837	534	268
26	245	184	e110	e100	75	287	937	1070	1280	766	550	235
27	258	170	e110	e100	75	275	1240	1020	1200	621	521	220
28	257	154	e110	80	76	258	1260	1020	1260	602	637	227
29	213	153	e120	64	---	231	925	1070	1110	701	646	225
30	199	155	e130	65	---	231	1230	1040	1020	653	588	219
31	194	---	e130	85	---	233	---	990	---	1030	606	---
TOTAL	4386	4880	3855	3008	2654	6021	13651	35195	31477	19597	20036	10520
MEAN	141	163	124	97.0	94.8	194	455	1135	1049	632	646	351
MAX	258	346	162	120	121	340	1260	1800	1670	1030	1200	688
MIN	76	92	83	64	52	71	199	820	688	416	436	219
AC-FT	8700	9680	7650	5970	5260	11940	27080	69810	62430	38870	39740	20870

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1954 - 1999, BY WATER YEAR (WY)

MEAN	141	120	96.5	89.7	107	201	862	1214	1033	451	203	134
MAX	333	385	188	139	226	612	2154	3420	2361	1306	646	416
(WY)	1987	1987	1987	1985	1958	1997	1985	1984	1957	1957	1999	1982
MIN	30.6	60.9	49.6	49.9	54.1	66.8	110	86.6	177	103	37.2	16.8
(WY)	1957	1956	1977	1977	1990	1977	1977	1977	1977	1959	1994	1956

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1954 - 1999	
ANNUAL TOTAL	160338		155280			
ANNUAL MEAN	439		425		389	
HIGHEST ANNUAL MEAN					758	1984
LOWEST ANNUAL MEAN					89.3	1977
HIGHEST DAILY MEAN	2670	Apr 25	1800	May 1	5440	May 16 1984
LOWEST DAILY MEAN	55	Sep 29	52	Feb 23	9.4	Aug 10 1977
ANNUAL SEVEN-DAY MINIMUM	63	Sep 23	68	Feb 23	14	Aug 8 1977
INSTANTANEOUS PEAK FLOW			3380	Aug 20	a8050	May 10 1983
INSTANTANEOUS PEAK STAGE			6.71	Aug 20	10.14	May 10 1983
ANNUAL RUNOFF (AC-FT)	318000		308000		281700	
10 PERCENT EXCEEDS	1280		1030		1100	
50 PERCENT EXCEEDS	154		245		139	
90 PERCENT EXCEEDS	105		100		59	

e Estimated
a From rating curve extended above 4100 ft^3/s.

404417108524900 GREEN RIVER ABOVE GATES OF LODORE, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 40°44'17", long 108°52'49", in NE$^1/_4$ SE$^1/_4$ sec. 17, T.9 N., R.102 W., Moffat County. Hydrologic Unit 14040106, in Dinousaur National Monument, 0.83 mi upstream from the Lodore Ranger Station, and 18 mi west of Greystone.

DRAINAGE AREA.-- Not determined.

PERIOD OF RECORD.-- SUSPENDED SEDIMENT AND BEDLOAD: May 1998 to September 1999.

REMARKS.-- Natural flow regulated by Flaming Gorge Reservoir. Upstream diversions for an unknown amount of irrigation.

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
MAY					
24...	1150	4550	1880	153	42
26...	1235	6230	17000	1010	13
26...	1700	6230	7320	435	22
27...	0930	6230	4140	246	42
31...	1045	6000	3810	235	35
31...	1620	6000	6080	375	20
JUN					
01...	1000	6000	3290	203	32
04...	1030	8370	6170	273	38
07...	1030	8270	10700	480	14
07...	1540	8270	5810	260	28
08...	0955	8270	10500	470	13
15...	1015	10200	5890	214	28
15...	1530	10200	6170	224	24
17...	1030	10200	24300	884	55
17...	1530	10200	7630	277	43
18...	1045	10200	7970	288	25
22...	1840	8730	3180	135	31
23...	1215	7140	2310	120	36

BEDLOAD SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	TEMPER-ATURE WATER (DEG C) (00010)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	SEDI-MENT DIS-CHARGE, BEDLOAD (TONS/ DAY) (80225)	SED. BEDLOAD SIEVE DIAM. % FINER THAN .062 MM (80226)	SED. BEDLOAD SIEVE DIAM. % FINER THAN .125 MM (80227)
MAY							
24...	1150	11.5	4550	465	720	.000	.100
26...	1235	10.6	6230	640	1450	.000	.200
26...	1700	10.7	6230	630	1050	.000	.300
27...	0930	10.3	6230	646	972	.000	.300
31...	1045	9.5	6000	656	851	.000	.400
31...	1620	10.3	6000	651	771	.000	.200
JUN							
01...	1000	E10.1	6000	640	1540	.100	.200
04...	1030	8.6	8370	655	1040	.000	.200
07...	1030	8.9	8270	653	607	.000	.400
07...	1540	10.7	8270	652	1430	.000	.200
08...	0955	8.6	8270	650	1400	.100	.500
15...	1015	10.6	10200	642	1060	.000	.400
15...	1530	11.1	10200	460	1310	.000	.500
17...	1030	10.9	10200	643	619	.100	.600
17...	1530	11.3	10200	651	661	.000	.300
18...	1045	10.1	10200	648	1230	.000	.200
22...	1840	13.3	8730	656	674	.000	.200
23...	1215	12.4	7140	651	906	.000	.200

E Estimated.

404417108524900 GREEN RIVER ABOVE GATES OF LODORE, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	SED. BEDLOAD SIEVE DIAM. % FINER THAN .250 MM (80228)	SED. BEDLOAD SIEVE DIAM. % FINER THAN .500 MM (80229)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 1.00 MM (80230)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 2.00 MM (80231)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 4.00 MM (80232)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 8.00 MM (80233)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 16.0 MM (80234)
MAY							
24...	4	42	76	91	97	100	--
26...	7	60	89	96	98	99	100
26...	11	69	91	97	99	100	--
27...	10	67	89	96	99	100	--
31...	16	80	95	98	99	100	--
31...	11	71	91	97	99	100	--
JUN							
01...	12	76	93	97	99	100	--
04...	8	62	86	94	98	99	100
07...	15	79	94	97	98	99	100
07...	14	72	94	98	100	100	--
08...	21	81	95	98	99	100	--
15...	12	76	95	98	99	100	--
15...	18	85	96	98	99	100	--
17...	13	81	94	96	98	100	--
17...	16	78	91	96	99	100	--
18...	12	71	92	98	99	100	--
22...	15	77	95	98	99	100	--
23...	15	87	97	98	99	100	--

09237450 YAMPA RIVER ABOVE STAGECOACH RESERVOIR, CO

LOCATION.--Lat 40°16'09", long 106°52'49", in $SW^1/_4SW^1/_4$ sec.36, T.4 N., R.85 W., Routt County, Hydrologic Unit 14050001, on left bank 1.4 mi downstream from Jack Creek and 4.0 mi east of Oak Creek.

DRAINAGE AREA.--257 mi^2.

PERIOD OF RECORD.--October 1988 to current year. Water-quality data available, July 1984 to September 1992.

GAGE.--Water-stage recorder with satellite telemetry and concrete control. Elevation of gage is 7,240 ft above sea level, from topographic map.

REMARKS.--Records good except for daily discharges, which are poor. Diversions for irrigation of about 12,000 acres upstream from station. Natural flow of stream affected by 2 diversions for irrigation to Egeria Creek into Colorado River basin and by storage in Stillwater, Yampa and YamColo Reservoirs (total capacity 15,820 acre-ft). Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	45	65	52	e50	e46	e46	90	e119	126	103	166	85
2	74	65	51	e46	e46	e44	91	e121	112	98	134	89
3	58	66	49	e46	e45	e43	82	e103	121	93	127	90
4	68	61	49	e47	e45	e45	76	e102	121	97	125	91
5	66	60	46	e46	e45	e44	82	e110	128	105	144	83
6	64	62	e29	e47	e44	e44	84	e107	116	110	143	82
7	68	60	35	e47	e44	e46	91	e147	107	109	124	80
8	66	61	e32	e48	e44	e45	106	e146	108	133	118	77
9	62	63	e37	e42	e44	e45	83	e150	129	152	113	76
10	58	62	e37	e42	e45	e46	77	e158	130	121	124	79
11	51	67	e38	e45	e45	e45	74	e129	117	114	117	85
12	50	67	e30	e48	e44	e45	82	e125	98	138	104	82
13	48	79	e30	e53	e44	e45	99	121	95	115	96	77
14	48	76	e37	e52	e45	e45	116	142	104	116	92	76
15	47	63	e33	e52	e45	e47	90	137	155	138	90	75
16	48	62	e32	e47	e46	e60	78	135	205	134	91	73
17	53	59	e50	e47	e45	e75	72	132	194	136	90	72
18	53	60	e49	e47	e45	e90	76	125	192	131	98	71
19	53	59	e45	e48	e46	e100	83	124	180	150	88	72
20	53	56	e45	e48	e46	116	88	141	184	161	91	84
21	52	63	e49	e48	e45	137	e90	143	176	147	91	77
22	53	70	e49	e47	e46	132	e123	146	171	137	103	72
23	56	59	e49	e48	e45	113	e124	142	149	131	84	71
24	55	58	e50	e47	e46	128	e178	156	131	128	79	72
25	55	52	e49	e47	e45	137	e190	169	137	190	81	71
26	57	54	e46	e47	e45	148	e200	167	131	170	86	69
27	61	52	e46	e46	e45	136	e174	135	119	135	99	67
28	71	52	e48	e46	e45	96	e139	140	113	143	92	67
29	63	54	e48	e46	---	87	e160	148	104	148	94	65
30	60	54	e50	e45	---	100	e162	136	106	202	92	65
31	63	---	e49	e45	---	102	---	135	---	200	85	---
TOTAL	1779	1841	1339	1460	1261	2432	3260	4191	4059	4185	3261	2295
MEAN	57.4	61.4	43.2	47.1	45.0	78.5	109	135	135	135	105	76.5
MAX	74	79	52	53	46	148	200	169	205	202	166	91
MIN	45	52	29	42	44	43	72	102	95	93	79	65
AC-FT	3530	3650	2660	2900	2500	4820	6470	8310	8050	8300	6470	4550

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 1999, BY WATER YEAR (WY)

MEAN	53.4	54.2	43.8	41.3	42.0	65.0	119	132	131	111	80.7	56.6
MAX	116	85.1	71.1	74.2	75.4	113	259	278	348	167	153	135
(WY)	1998	1998	1996	1996	1996	1998	1996	1996	1997	1995	1997	1997
MIN	32.0	32.0	29.2	21.4	29.4	38.7	48.7	38.5	39.4	50.4	43.1	28.5
(WY)	1995	1995	1990	1990	1991	1992	1995	1990	1994	1994	1994	1994

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1989 - 1999	
ANNUAL TOTAL	35213		31363			
ANNUAL MEAN	96.5		85.9		77.6	
HIGHEST ANNUAL MEAN					135	1997
LOWEST ANNUAL MEAN					44.6	1994
HIGHEST DAILY MEAN	488	Mar 26	205	Jun 16	582	Jun 9 1997
LOWEST DAILY MEAN	e29	Dec 6	e29	Dec 6	14	Jan 24 1990
ANNUAL SEVEN-DAY MINIMUM	34	Dec 10	34	Dec 10	15	Jan 22 1990
INSTANTANEOUS PEAK FLOW			284	Jul 25	765	Mar 26 1998
INSTANTANEOUS PEAK STAGE			a4.76	Jul 25	b5.96	Mar 26 1998
ANNUAL RUNOFF (AC-FT)	69840		62210		56240	
10 PERCENT EXCEEDS	219		143		144	
50 PERCENT EXCEEDS	62		76		59	
90 PERCENT EXCEEDS	42		45		32	

e Estimated
a Maximum gage height 5.38 ft, Jan 30, backwater from ice.
b Maximum gage height, 7.31 ft, Dec 4, 1997, backwater from ice.

09237500 YAMPA RIVER BELOW STAGECOACH RESERVOIR, CO

LOCATION.--Lat 40°17'15", long 106°49'33", in $SE^1/_4NE^1/_4$ sec.29, T.4 N., R.84 W., Routt County, Hydrologic Unit 1405001, on left bank, 0.3 mi downstream from Stagecoach Reservoir, 1.0 mi downstream from Morrison Creek, and 6.5 mi east of Oak Creek.

DRAINAGE AREA.--278 mi^2.

PERIOD OF RECORD.--September 1939 to September 1944, monthly discharge only for some periods, published in WSP 1313; October 1956 to September 1972; October 1984 to current year. Water-quality data available, July 1984 to September 1992. Prior to October 1990, published as Yampa River near Oak Creek. Statistical summary computed for 1989 to current year.

REVISED RECORDS.--WDR CO-89-2: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 7,050 ft above sea level, from topographic map. Sept. 1939 to Nov. 15, 1939, nonrecording gage, Nov. 16, 1939 to Sept. 1944 and Oct. 1956 to Sept. 1972, water-stage recorder at site 0.5 mi upstream, at different datum.

REMARKS.--Records good except for estimated daily discharges, which are fair. Flow regulated since Dec. 20, 1988, by Stagecoach Reservoir (capacity 33,275 acre-ft), 0.3 mi upstream. Diversions for irrigation of about 12,0000 acres upstream from station. Natural flow of stream affected by 2 diversions for irrigation to Egeria Creek into Colorado River basin and by storage in Stillwater, Yampa and YamColo Reservoirs (total capacity, 15,820 acre-ft). Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	81	68	68	55	68	83	83	61	140	103	188	e100
2	75	75	66	53	71	83	84	64	134	102	168	e100
3	75	75	67	52	74	84	78	81	130	98	150	e100
4	77	75	67	57	75	85	78	81	127	97	140	e100
5	81	73	60	56	75	86	84	82	126	95	138	e100
6	81	73	58	57	66	81	84	85	124	94	144	e100
7	66	64	67	57	64	82	84	93	124	94	139	e100
8	73	64	65	57	76	88	78	93	120	92	132	e101
9	78	72	62	53	76	88	79	95	116	98	127	e99
10	62	70	62	52	75	88	52	96	121	99	126	e98
11	65	70	63	57	75	89	51	97	120	98	127	e98
12	78	69	55	57	76	87	69	100	115	99	121	e98
13	70	69	55	63	72	76	69	106	109	100	115	e98
14	79	60	62	57	72	76	68	115	95	97	109	e98
15	80	59	58	57	79	85	68	128	111	106	105	e98
16	79	67	55	52	80	84	68	133	131	109	104	94
17	70	66	56	52	81	84	51	136	166	118	101	94
18	69	67	56	61	81	84	50	137	189	122	101	87
19	79	67	51	66	81	84	67	135	185	125	99	87
20	79	67	51	66	73	77	67	135	181	134	98	95
21	77	58	56	66	73	77	66	139	177	137	96	94
22	78	59	56	65	82	84	65	145	177	136	98	91
23	77	66	55	59	82	84	66	146	168	133	97	90
24	67	66	55	59	82	84	50	150	156	130	89	88
25	66	66	56	66	82	84	52	158	145	143	94	72
26	75	66	52	67	83	84	72	169	135	164	95	71
27	76	65	51	68	74	77	85	166	126	154	98	88
28	75	58	55	68	74	75	82	158	116	148	76	87
29	75	58	56	68	---	83	71	150	110	143	e75	87
30	74	66	56	59	---	83	74	147	105	161	e99	86
31	68	---	55	59	---	83	---	142	---	184	e99	---
TOTAL	2305	1998	1807	1841	2122	2572	2095	3723	4079	3713	3548	2799
MEAN	74.4	66.6	58.3	59.4	75.8	83.0	69.8	120	136	120	114	93.3
MAX	81	75	68	68	83	89	85	169	189	184	188	101
MIN	62	58	51	52	64	75	50	61	95	92	75	71
AC-FT	4570	3960	3580	3650	4210	5100	4160	7380	8090	7360	7040	5550

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 1999, BY WATER YEAR (WY)

MEAN	64.6	62.9	63.2	62.9	61.2	61.0	73.8	121	128	95.9	84.9	75.5
MAX	110	94.7	93.3	89.8	84.8	88.0	166	303	377	172	156	135
(WY)	1998	1996	1996	1998	1997	1996	1996	1996	1997	1995	1997	1997
MIN	25.8	37.3	38.7	37.2	30.0	18.0	32.3	12.4	12.8	22.3	34.4	31.8
(WY)	1991	1991	1989	1989	1989	1989	1989	1989	1989	1989	1989	1990

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1989 - 1999	
ANNUAL TOTAL	38401		32602			
ANNUAL MEAN	105		89.3		a79.7	
HIGHEST ANNUAL MEAN					134	1997
LOWEST ANNUAL MEAN					32.1	1989
HIGHEST DAILY MEAN	329	May 9	189	Jun 18	b611	Jun 9 1997
LOWEST DAILY MEAN	26	Feb 24	50	Apr 18	c9.4	Jun 1 1989
ANNUAL SEVEN-DAY MINIMUM	43	Feb 22	54	Dec 18	10	May 29 1989
INSTANTANEOUS PEAK FLOW			197	Aug 1	d641	Jun 11 1997
INSTANTANEOUS PEAK STAGE			2.74	Aug 1	f3.82	Jun 11 1997
ANNUAL RUNOFF (AC-FT)	76170		64670		57740	
10 PERCENT EXCEEDS	164		137		130	
50 PERCENT EXCEEDS	90		81		66	
90 PERCENT EXCEEDS	62		57		40	

e Estimated
a Average discharge for 25 years (water years 1940-44, 1957-72, 1985-88), 89.4 ft^3/s; 64770 acre-ft/yr, prior to completion of Stagecoach Reservoir.
b Maximum daily discharge for period of record, 1020 ft^3/s, Apr 16, 1962.
c Minimum daily discharge for period of record, 8.9 ft^3/s, May 22, 1963.
d Maximum discharge and stage for period of record, 1400 ft^3/s, Apr 16, 1962, gage height, 7.56 ft, from rating curve extended above 570 ft^3/s, site and datum then in use.
f Maximum gage height, 8.08 ft, Mar 8, 1987, backwater from ice.

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

LOCATION.--Lat 40°28'30", long 106°47'11", in $SE^1/_4SE^1/_4$ sec.15, T.6 N., R.84 W., Routt County, Hydrologic Unit 14050001, on right bank 2.6 mi upstream from mouth, and 2.5 mi east of Steamboat Springs.

DRAINAGE AREA.--24.8 mi^2.

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

GAGE.--Water-stage recorder with satellite telemetry, and concrete control. Elevation of gage is 7,150 ft above sea level, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are fair. Diversions upstream from station by Mount Werner Recreation District and City of Steamboat Springs for domestic use began in 1972 (see table below for figures of diversion). Natural flow of stream affected by storage in Fish Creek and Long lake Reservoir, combined capacity 2,237 acre-ft. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.9	14	8.5	e2.9	3.1	3.8	23	60	302	148	25	9.9
2	6.3	16	9.2	e3.3	3.4	2.7	21	56	344	143	18	12
3	5.3	15	9.2	e3.8	3.2	3.0	20	47	429	132	16	6.0
4	5.1	13	7.9	e3.6	3.1	3.0	19	41	430	127	12	5.6
5	7.0	11	5.3	e3.8	3.2	2.8	16	e38	394	98	12	4.0
6	7.9	11	4.6	4.0	3.4	2.8	16	e36	349	72	15	3.5
7	7.7	11	6.5	3.8	3.2	2.6	18	e33	365	54	13	3.6
8	11	11	7.4	3.6	3.1	2.8	23	41	402	91	9.7	3.7
9	13	9.8	7.6	3.5	2.7	2.9	19	60	426	88	7.2	3.7
10	14	9.3	7.5	3.6	3.3	2.9	18	71	403	49	8.0	7.9
11	11	10	7.8	3.7	3.3	3.3	19	54	425	44	20	6.4
12	9.7	9.9	8.2	3.6	3.0	2.6	19	47	367	35	12	5.8
13	10	9.4	7.9	3.4	3.1	2.9	26	48	348	28	8.4	5.5
14	16	9.2	7.3	3.5	2.8	3.2	32	49	401	29	5.0	5.2
15	15	9.8	6.4	3.2	3.0	4.5	27	47	504	84	3.7	4.8
16	11	10	5.6	3.0	2.3	4.3	24	46	405	57	5.6	5.2
17	9.8	9.8	4.8	3.3	2.8	5.0	24	47	439	31	7.9	5.1
18	8.4	9.9	4.4	3.6	3.1	8.1	22	59	501	26	8.2	4.8
19	8.6	10	4.5	3.8	3.1	12	25	89	505	30	7.1	5.5
20	8.4	11	4.3	4.0	3.3	18	33	128	479	37	7.1	9.8
21	7.5	9.3	4.1	4.2	3.0	23	37	167	444	28	9.3	5.0
22	7.9	9.2	3.6	3.7	3.1	22	34	196	433	21	10	2.6
23	8.5	8.8	3.3	3.7	3.4	23	31	258	436	18	8.3	1.6
24	7.8	8.6	3.1	4.0	3.4	26	32	303	393	17	6.9	3.2
25	8.2	8.9	3.4	3.5	3.4	32	40	295	377	23	6.7	3.3
26	7.6	8.1	3.5	3.8	3.3	33	36	265	330	19	6.5	2.6
27	6.9	8.1	3.6	3.7	3.4	28	35	254	279	17	7.0	2.7
28	e10	8.1	3.3	3.5	3.2	23	39	305	222	18	8.2	3.7
29	14	8.7	3.5	3.3	---	21	52	339	182	22	10	4.1
30	12	8.7	3.1	3.0	---	23	66	451	153	37	8.3	4.9
31	14	---	2.8	3.0	---	26	---	379	---	33	8.9	---
TOTAL	293.5	306.6	172.2	110.4	87.7	373.2	846	4309	11467	1656	311.0	151.7
MEAN	9.47	10.2	5.55	3.56	3.13	12.0	28.2	139	382	53.4	10.0	5.06
MAX	16	16	9.2	4.2	3.4	33	66	451	505	148	25	12
MIN	3.9	8.1	2.8	2.9	2.3	2.6	16	33	153	17	3.7	1.6
AC-FT	582	608	342	219	174	740	1680	8550	22740	3280	617	301
a	148	132	133	194	181	207	130	130	257	382	321	180

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1967 - 1999, BY WATER YEAR (WY)

MEAN	12.1	10.9	8.17	6.35	5.89	9.56	34.6	207	384	88.8	9.78	10.8
MAX	51.9	31.6	23.3	19.2	15.8	17.0	59.0	358	580	331	21.6	74.0
(WY)	1998	1998	1998	1998	1998	1998	1987	1969	1997	1995	1997	1997
MIN	2.52	3.07	2.55	2.46	2.84	5.02	8.21	85.5	124	9.82	.86	.73
(WY)	1993	1989	1989	1989	1997	1984	1983	1983	1987	1987	1994	1994

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1967 - 1999	
ANNUAL TOTAL	24835.8		20084.3			
ANNUAL MEAN	68.0		55.0			
HIGHEST ANNUAL MEAN					98.6	1984
LOWEST ANNUAL MEAN					41.6	1989
HIGHEST DAILY MEAN	519	Jun 22	505	Jun 19	814	Jun 21 1968
LOWEST DAILY MEAN	1.7	Sep 25	1.6	Sep 23	.01	Aug 7 1972
ANNUAL SEVEN-DAY MINIMUM	2.8	Sep 24	2.8	Mar 2	.11	Aug 7 1972
INSTANTANEOUS PEAK FLOW			666	Jun 18	1110	Jun 20 1968
INSTANTANEOUS PEAK STAGE			2.58	Jun 18	3.14	Jun 20 1968
ANNUAL RUNOFF (AC-FT)	49260		39840			
10 PERCENT EXCEEDS	253		235		245	
50 PERCENT EXCEEDS	17		9.3		10	
90 PERCENT EXCEEDS	6.1		3.2		3.6	

e Estimated
a Diversions, in acre-feet, by Mount Werner Water and Sanitation District, and City of Steamboat Springs.

09239500 YAMPA RIVER AT STEAMBOAT SPRINGS, CO

LOCATION.--Lat 40°29'01", long 106°49'54", in NW$^1/_4$NE$^1/_4$ sec.17, T.6 N., R.84 W., Routt County, Hydrologic Unit 14050001, on left bank 30 ft upstream from Fifth Street Bridge in Steamboat Springs and 0.6 mi upstream from Soda Creek.

DRAINAGE AREA.--604 mi^2.

WATER-DISCHARGE RECORDS

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 with satellite telemetry. Datum of gage is 6,695.47 ft above sea level. 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 on right bank, 60 ft downstream, at datum 0.44 ft higher. Sept. 11, 1934 to Aug. 17, 1988, water-stage recorder on right bank, 60 ft downstream, at present datum.

REMARKS.--Records good, except for estimated daily discharges which are fair. Natural flow of stream affected by two diversions for irrigation to Egeria Creek in Colorado River basin, one diversion for irrigation from Trout Creek drainage to Oak Creek drainage, irrigation of about 19,700 acres upstream from station, and by storage in Stillwater, Yampa, YamColo, Stagecoach, and Catamount Reservoirs, (total capacity 56,895 acre-ft) and pumping of water to ski area for snow making during winter.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	117	206	135	e115	113	136	513	915	2430	613	376	174
2	137	214	135	e115	118	142	461	843	2370	560	315	177
3	147	212	133	e115	118	143	392	777	2620	511	270	172
4	160	201	132	e115	116	144	329	723	2600	495	242	172
5	153	196	127	e115	119	144	313	657	2420	424	235	165
6	148	193	121	120	117	142	315	587	2160	366	257	157
7	146	190	123	121	116	144	366	551	2100	327	260	147
8	147	190	130	113	111	148	483	582	2310	384	236	140
9	161	185	134	111	110	148	401	721	2400	433	216	139
10	171	186	135	112	116	151	351	883	2310	346	206	141
11	158	189	144	110	116	151	304	813	2260	305	224	142
12	148	191	151	107	119	151	329	723	2110	277	217	143
13	151	166	146	106	123	151	401	714	1980	258	198	141
14	155	136	145	102	126	148	486	767	1950	254	182	140
15	158	138	139	110	123	150	451	785	2150	334	172	130
16	145	139	134	108	131	159	381	774	2180	370	167	108
17	142	133	134	111	126	168	331	786	2160	310	164	113
18	132	135	142	110	129	177	312	838	2140	291	167	121
19	130	134	120	112	125	195	325	1020	2020	290	161	135
20	135	126	105	109	123	218	409	1300	1870	314	164	157
21	136	128	142	109	122	255	516	1570	1730	294	168	164
22	140	130	146	108	124	276	570	1750	1680	271	176	155
23	144	128	128	110	126	300	578	2000	1580	259	178	143
24	146	129	110	109	129	327	518	2340	1420	245	165	140
25	140	129	e110	107	134	364	664	2470	1310	284	154	142
26	143	130	e105	108	138	403	716	2510	1180	300	149	130
27	169	129	e105	107	138	417	754	2420	1030	285	159	121
28	220	130	e110	107	134	382	709	2500	882	264	175	128
29	203	133	e110	103	---	352	750	2610	769	266	167	134
30	205	134	e110	105	---	394	927	2820	674	312	167	137
31	209	---	e115	112	---	491	---	2810	---	383	171	---
TOTAL	4796	4760	3956	3422	3440	7071	14355	41559	56795	10625	6258	4308
MEAN	155	159	128	110	123	228	478	1341	1893	343	202	144
MAX	220	214	151	121	138	491	927	2820	2620	613	376	177
MIN	117	126	105	102	110	136	304	551	674	245	149	108
AC-FT	9510	9440	7850	6790	6820	14030	28470	82430	112700	21070	12410	8540

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1910 - 1999, BY WATER YEAR (WY)

MEAN	136	127	105	101	103	168	658	1730	1824	371	153	111
MAX	378	274	205	190	176	433	1675	3350	3771	1684	387	432
(WY)	1998	1998	1998	1998	1998	1910	1962	1984	1917	1957	1984	1997
MIN	49.6	69.3	56.6	45.0	50.0	73.5	236	702	141	16.2	40.5	19.5
(WY)	1935	1978	1916	1916	1916	1964	1995	1977	1934	1934	1931	1944

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1910 - 1999	
ANNUAL TOTAL	185440		161345			
ANNUAL MEAN	508		442		466	
HIGHEST ANNUAL MEAN					821	1984
LOWEST ANNUAL MEAN					169	1977
HIGHEST DAILY MEAN	2600	May 22	2820	May 30	5870	Jun 14 1921
LOWEST DAILY MEAN	105	Dec 20	102	Jan 14	a4.0	Sep 8 1934
ANNUAL SEVEN-DAY MINIMUM	109	Dec 24	107	Jan 24	4.9	Sep 9 1944
INSTANTANEOUS PEAK FLOW			3070	May 30	b6820	Jun 14 1921
INSTANTANEOUS PEAK STAGE			6.10	May 30	c7.08	Jun 14 1921
ANNUAL RUNOFF (AC-FT)	367800		320000		337900	
10 PERCENT EXCEEDS	1550		1300		1520	
50 PERCENT EXCEEDS	189		167		139	
90 PERCENT EXCEEDS	133		113		75	

e Estimated
a Also occurred Sep 10-13, 1944.
b Present datum, from rating curve extended above 4800 ft^3/s.
c Maximum gage height, 7.65 ft, Jun 3, 1997.

09239500 YAMPA RIVER AT STEAMBOAT SPRINGS, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1990 to September 1993, October 1996 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML) (31633)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)
OCT											
22...	1000	145	271	8.2	7.4	9.8	K18	K10	120	32	11
MAR											
19...	1115	181	288	8.4	2.6	13.5	K1	K1	140	35	11
JUN											
08...	0950	2130	60	7.6	6.3	9.7	K19	160	25	6.9	1.9
AUG											
19...	1200	160	294	8.6	17.8	7.5	22	20	130	34	11

DATE	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	ALKA-LINITY WAT.DIS FET LAB CACO3 (MG/L) (29801)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)
OCT											
22...	8.5	.3	1.6	--	--	112	--	28	2.6	.17	5.1
MAR											
19...	9.2	.3	1.8	--	--	122	--	29	3.9	.13	9.7
JUN											
08...	2.1	.2	.62	27	22	--	24	4.4	1.1	<.10	7.8
AUG											
19...	8.3	.3	1.8	--	115	--	120	30	2.3	.13	8.7

DATE	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS-SOLVED (TONS PER DAY) (70302)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)
OCT											
22...	156	.21	61.0	<.010	<.050	<.020	.28	.23	.014	.012	.018
MAR											
19...	174	.24	84.9	<.010	.068	<.020	.32	.21	.047	.014	.012
JUN											
08...	38	.05	219	<.010	<.050	<.020	.21	.20	.030	.009	<.010
AUG											
19...	165	.22	71.1	<.010	<.050	<.020	.34	.29	.029	.013	<.010

DATE	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
OCT										
22...	<1.0	<1.0	840	<1.0	44	140	<.1	<1	<.20	<20
MAR										
19...	<1.0	<1.0	340	<1.0	91	110	<.1	<1	<.20	<20
JUN										
08...	<1.0	<1.0	400	<1.0	10	21	<.1	<1	<.20	<20
AUG										
19...	<1.0	<1.0	180	<1.0	7.8	27	<.1	<1	<.20	<20

K Based on non-ideal colony count.

09239500 YAMPA RIVER AT STEAMBOAT SPRINGS, CO--Continued

MISCELLANEOUS FIELD MEASUREMENTS, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)
OCT				
14...	1320	155	238	11.0
NOV				
16...	0915	135	290	1.5
JAN				
07...	1030	112	309	.5
MAR				
03...	1240	168	333	2.0
23...	1120	279	298	3.3
MAY				
07...	1200	536	182	7.7
24...	0840	2300	95	7.1
JUN				
01...	0755	2460	68	6.0
21...	0800	1690	74	10.0
JUL				
13...	1255	264	169	20.1
AUG				
23...	1325	179	295	20.1

09240900 ELK RIVER ABOVE CLARK, CO

LOCATION.--Lat 40°44'36", long 106°51'17", in $SE^1/_4NW^1/_4$ sec.18, T.9 N., R.84 W., Routt County, Hydrologic Unit 14050001, on right bank 0.7 mi downstream from Coulton Creek, 1.5 mi upstream from Willow Creek, and 4.2 mi northeast of Clark.

DRAINAGE AREA.--122 mi^2.

PERIOD OF RECORD.--October 1987 to September 1993. April 1998 to current year (seasonal records only).

REVISED RECORDS.--WDR CO-92-2: 1991.

GAGE.--Water-stage recorder. Elevation of gage is 7,520 ft above sea level, from topographic map. Prior to Apr. 1998 at site 90 ft upstream at same datum.

REMARKS.--No estimated daily discharges. Records good. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

AVERAGE DISCHARGE.--5 years (water years 1988-93), 200 ft^3/s; 144,700 acre-ft/yr.

EXTREMES FOR PERIOD OF CONTINUOUS RECORD.--Maximum discharge, 2,430 ft^3/s, June 16, 1993, gage height, 6.13 ft; minimum daily, 17 ft^3/s, Nov. 9, 10, and 13, 1987.

EXTREMES FOR PERIOD OF SEASONAL RECORD.--Maximum discharge, 2,170 ft^3/s, May 30, 1999, gage height 4.35 ft.; minimum daily, 56 ft^3/s on Sept. 24, 28, and 30, 1998.

EXTREMES FOR CURRENT SEASON.--Maximum discharge, 2,170 ft^3/s, May 30, gage height, 4.35 ft; minimum daily, 58 ft^3/s Sept. 27.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	108	406	1240	901	220	89
2	---	---	---	---	---	---	106	385	1230	1070	191	186
3	---	---	---	---	---	---	97	361	1500	1050	170	159
4	---	---	---	---	---	---	93	298	1400	1030	162	121
5	---	---	---	---	---	---	89	250	1250	922	160	98
6	---	---	---	---	---	---	88	221	1100	807	170	87
7	---	---	---	---	---	---	96	238	1020	759	157	80
8	---	---	---	---	---	---	113	344	1190	740	143	75
9	---	---	---	---	---	---	100	514	1380	655	134	72
10	---	---	---	---	---	---	95	537	1370	565	129	70
11	---	---	---	---	---	---	90	384	1320	507	131	78
12	---	---	---	---	---	---	97	324	1330	473	133	79
13	---	---	---	---	---	---	119	336	1310	445	119	70
14	---	---	---	---	---	---	138	364	1320	429	111	66
15	---	---	---	---	---	---	124	365	1270	531	114	64
16	---	---	---	---	---	---	112	383	1240	442	116	63
17	---	---	---	---	---	---	107	351	1510	411	108	61
18	---	---	---	---	---	---	116	436	1540	380	106	61
19	---	---	---	---	---	---	150	603	1600	353	97	76
20	---	---	---	---	---	---	205	771	1550	332	101	104
21	---	---	---	---	---	---	227	907	1560	300	100	85
22	---	---	---	---	---	---	185	1050	1620	288	105	76
23	---	---	---	---	---	---	161	1240	1670	263	92	69
24	---	---	---	---	---	---	172	1390	1590	245	85	66
25	---	---	---	---	---	---	209	1350	1580	246	82	66
26	---	---	---	---	---	---	173	1250	1590	231	82	60
27	---	---	---	---	---	---	174	1170	1380	211	85	58
28	---	---	---	---	---	---	217	1220	1210	242	106	61
29	---	---	---	---	---	---	335	1360	1120	262	99	64
30	---	---	---	---	---	---	431	1700	934	277	88	72
31	---	---	---	---	---	---	---	1650	---	258	84	---
TOTAL	---	---	---	---	---	---	4527	22158	40924	15625	3780	2436
MEAN	---	---	---	---	---	---	151	715	1364	504	122	81.2
MAX	---	---	---	---	---	---	431	1700	1670	1070	220	186
MIN	---	---	---	---	---	---	88	221	934	211	82	58
AC-FT	---	---	---	---	---	---	8980	43950	81170	30990	7500	4830

09241000 ELK RIVER AT CLARK, CO

LOCATION.--Lat 40°43'03", long 106°54'55", in NW$^1/_4$NW$^1/_4$ sec.27, T.9 N., R.85 W., Routt County, Hydrologic Unit 14050001, on left bank 15 ft downstream from bridge on State Highway 129, 0.8 mi north of Clark, and 2.0 mi upstream from Cottonwood Gulch.

DRAINAGE AREA.--216 mi^2.

PERIOD OF RECORD.--May 1910 to September 1922 (published as "near Clark"), April 1930 to September 1991. Monthly discharge only for some periods, published in WSP 1313. April 1998 to current year (seasonal records only).

REVISED RECORDS.--WSP 1733: 1956. WDR CO-88-2: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 7,267.75 ft above sea level (State Highway bench mark). May 1910 to Sept. 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.--No estimated daily discharges. Records good. Diversions upstram from station for irrigation of about 230 acres upstream from and about 460 acres downstream from station. Natural flow of stream affected by storage in Lester Creek Reservoir (known also as Pearl Lake), capacity, 5,660 acre-ft, since 1963, and Steamboat Lake, capacity, 23,060 acre-ft, since 1968. Several measurements for specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report

AVERAGE DISCHARGE.--73 years (water years 1910-22, 1930-91), 333 ft^3/s; 241,300 acre-ft/yr.

EXTREMES FOR PERIOD OF CONTINUOUS RECORD.--Maximum discharge, 4,910 ft^3/s. May 23, 1984 gage height, 6.12 ft; minimum daily determined, 22 ft^3/s, Dec. 12, 1963, but a lesser discharge may have occurred during periods of no gage height record prior to 1939.

EXTREMES FOR PERIOD OF SEASONAL RECORD.--Maximum discharge, 3,360 ft^3/s, May 30, 1999, gage height, 4.93 ft minimum daily, 59 ft^3/s, Sept. 27, 1999.

EXTREMES FOR CURRENT SEASON.--Maximum discharge 3,360 ft^3/s, May 30, gage height, 4.93 ft; minimum daily, 59 ft^3/s, Sept. 27.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	160	966	1980	941	224	98
2	---	---	---	---	---	---	157	913	1800	1100	196	192
3	---	---	---	---	---	---	145	892	1970	1080	178	173
4	---	---	---	---	---	---	141	739	1740	1050	171	136
5	---	---	---	---	---	---	135	595	1460	905	170	110
6	---	---	---	---	---	---	133	541	1320	795	179	97
7	---	---	---	---	---	---	151	590	1190	748	167	89
8	---	---	---	---	---	---	183	766	1390	731	154	83
9	---	---	---	---	---	---	168	979	1550	650	145	79
10	---	---	---	---	---	---	156	962	1540	554	139	77
11	---	---	---	---	---	---	150	695	1470	489	140	85
12	---	---	---	---	---	---	164	573	1450	446	142	88
13	---	---	---	---	---	---	206	598	1420	412	129	78
14	---	---	---	---	---	---	250	692	1440	398	119	74
15	---	---	---	---	---	---	236	669	1400	499	120	72
16	---	---	---	---	---	---	215	681	1390	411	123	126
17	---	---	---	---	---	---	208	626	1700	382	113	263
18	---	---	---	---	---	---	236	726	1750	356	112	218
19	---	---	---	---	---	---	374	929	1850	335	101	82
20	---	---	---	---	---	---	559	1150	1760	319	105	114
21	---	---	---	---	---	---	668	1310	1780	294	104	92
22	---	---	---	---	---	---	654	1530	1850	283	110	80
23	---	---	---	---	---	---	595	1860	1900	261	96	73
24	---	---	---	---	---	---	624	2180	1790	243	88	67
25	---	---	---	---	---	---	700	2220	1790	243	85	67
26	---	---	---	---	---	---	592	2200	1780	230	84	61
27	---	---	---	---	---	---	597	2090	1510	212	87	59
28	---	---	---	---	---	---	692	2060	1250	236	110	62
29	---	---	---	---	---	---	897	2250	1140	257	104	65
30	---	---	---	---	---	---	1020	2770	962	273	93	75
31	---	---	---	---	---	---	---	2660	---	259	88	---
TOTAL	---	---	---	---	---	---	11166	38412	47322	15392	3976	3035
MEAN	---	---	---	---	---	---	372	1239	1577	497	128	101
MAX	---	---	---	---	---	---	1020	2770	1980	1100	224	263
MIN	---	---	---	---	---	---	133	541	962	212	84	59
AC-FT	---	---	---	---	---	---	22150	76190	93860	30530	7890	6020

09242500 ELK RIVER NEAR MILNER, CO

LOCATION.--Lat 40°30'53", long 106°57'12", in NW$^1/_4$NW$^1/_4$ sec.5, T.6 N., R.85 W., Routt County, Hydrologic Unit 14050001, on left bank 30 ft downstream from bridge on County Road 44, 2.5 mi upstream from mouth, and 3.2 mi east of Milner.

DRAINAGE AREA.--415 mi^2.

PERIOD OF RECORD.--May 1904 to September 1927, (published as "near Trull"). April 1990 to current year. Records for 1910-27 furnished by State Engineer of Colorado. Monthly discharge only for some periods, published in WSP 1313. Water-quality data available, August 1975 to September 1976 and April 1990 to September 1997.

REVISED RECORDS.--WDR CO-98-2: 1997 (M).

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 6,590 ft above sea level, from topographic map. May 1904 to Sept. 1909, nonrecording gage, at different datum, Oct. 1910 to Sept. 1927, water-stage recorder at different datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. During high flows, channel overflow may occur and cause some streamflow to bypass gage. Diversions upstream from station for irrigation of about 6,500 acres upstream from and about 1,000 acres downstream from station. Natural flow of stream affected by storage in Lester Creek Reservoir (known also as Pearl lake), capacity, 5,660 acre-ft, since 1963, and Steamboat lake, capacity, 23,060 acre-ft, since 1968. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	91	179	116	e109	e87	e115	420	1560	3070	1340	314	120
2	143	182	118	e108	e93	e120	394	1490	2760	1620	265	231
3	171	196	116	e109	e93	e125	344	1420	3130	1570	236	257
4	190	173	115	e110	e93	e130	309	1220	2880	1510	220	215
5	174	147	117	e110	e93	e125	292	983	2500	1330	226	166
6	152	157	110	e96	e90	e115	276	869	2180	1120	239	133
7	135	147	e112	e96	e88	e117	339	846	1920	1030	225	120
8	145	149	e120	e85	e84	e120	477	1060	2160	1060	205	110
9	157	143	e124	e83	e84	e115	372	1420	2490	998	190	99
10	158	130	e126	e84	e90	e120	336	1630	2530	766	182	97
11	148	133	e135	e82	e93	e115	307	1190	2360	666	181	105
12	132	150	e141	e81	e97	e130	338	947	2350	601	187	111
13	127	134	e136	e80	e100	e135	456	979	2250	544	172	92
14	133	136	e134	e76	e110	e140	580	1200	2240	521	156	88
15	147	139	e128	e85	e110	e150	497	1140	2280	707	148	85
16	130	139	e123	e82	e117	e155	419	1140	2220	612	161	89
17	125	137	e122	e84	e110	e165	367	1010	2480	533	148	238
18	122	139	e131	e83	e105	e180	421	1100	2720	501	152	269
19	119	135	e106	e84	e113	e195	582	1400	2800	456	134	128
20	116	118	e89	e81	e107	e215	899	1770	2760	445	128	142
21	113	124	e131	e81	e102	e250	1070	2020	2680	399	131	142
22	112	150	e135	e80	e112	e265	1070	2330	2680	373	136	120
23	116	129	e116	e84	e115	298	962	2750	2810	347	119	108
24	129	126	e94	e80	e120	314	987	3320	2670	317	104	96
25	126	122	e107	e79	e120	348	1260	3360	2550	320	95	93
26	121	122	e106	e80	e125	406	1070	3230	2650	302	90	87
27	121	119	e107	e79	e120	436	1020	3070	2270	276	96	82
28	167	120	e107	e78	e110	361	1120	3030	1850	272	122	84
29	175	130	e107	e77	---	345	1290	3300	1760	336	128	86
30	171	123	e108	e80	---	419	1670	3970	1480	361	125	90
31	184	---	e109	e88	---	483	---	4070	---	369	107	---
TOTAL	4350	4228	3646	2694	2881	6707	19944	58824	73480	21602	5122	3883
MEAN	140	141	118	86.9	103	216	665	1898	2449	697	165	129
MAX	190	196	141	110	125	483	1670	4070	3130	1620	314	269
MIN	91	118	89	76	84	115	276	846	1480	272	90	82
AC-FT	8630	8390	7230	5340	5710	13300	39560	116700	145700	42850	10160	7700

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1905 - 1999, BY WATER YEAR (WY)

MEAN	148	114	94.7	90.4	92.8	174	736	2121	2271	719	176	117
MAX	424	234	154	135	145	320	1214	3977	3824	1940	445	518
(WY)	1919	1919	1998	1998	1921	1916	1919	1920	1917	1917	1912	1997
MIN	58.9	58.0	48.8	51.5	45.9	52.0	377	940	767	160	59.6	33.1
(WY)	1993	1991	1993	1992	1991	1991	1995	1990	1992	1994	1994	1994

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1905 - 1999	
ANNUAL TOTAL	233768		207361			
ANNUAL MEAN	640		568		579	
HIGHEST ANNUAL MEAN					886	1917
LOWEST ANNUAL MEAN					282	1992
HIGHEST DAILY MEAN	3150	May 21	4070	May 31	5350	Jun 15 1921
LOWEST DAILY MEAN	55	Sep 10	e76	Jan 14	a17	Sep 12 1994
ANNUAL SEVEN-DAY MINIMUM	68	Sep 5	79	Jan 24	21	Sep 7 1994
INSTANTANEOUS PEAK FLOW			4580	May 31	b5740	Jun 3 1997
INSTANTANEOUS PEAK STAGE			6.57	May 31	c7.18	Jun 3 1997
ANNUAL RUNOFF (AC-FT)	463700		411300		419300	
10 PERCENT EXCEEDS	2150		2080		1980	
50 PERCENT EXCEEDS	143		147		139	
90 PERCENT EXCEEDS	110		90		68	

e Estimated
a A lesser discharge may have occurred during periods of no gage-height record prior to Sep 20, 1919.
b Peak discharge includes 370 ft^3/s overflow that bypassed the main channel.
c Gage height reflects the discharge flowing in the main channel (5370 ft^3/s).

09243700 MIDDLE CREEK NEAR OAK CREEK, CO

LOCATION.--Lat 40°23'08", long 106°59'33", in $SW^1/_4SW^1/_4$ sec.13, T.5 N., R.86 W., Routt County, Hydrologic Unit 14050001, on left bank 1.1 mi upstream from mouth of Foidel Creek and 13.5 mi northwest of Oak Creek.

DRAINAGE AREA.--23.5 mi^2.

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

GAGE.--Water-stage recorder. Elevation of gage is 6,720 ft above sea level, from topographic map. Oct. 1975 to Oct. 1, 1996, water-stage recorder at site 70 ft upstream at same datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.36	.89	e.74	.55	.69	.77	4.9	31	7.9	1.9	1.0	.71
2	.68	.90	e.76	.56	.71	.80	4.4	30	6.6	1.8	.94	.99
3	.72	.99	e.74	.57	.68	.78	3.7	29	6.4	1.6	.82	.95
4	1.1	.93	e.70	.58	.68	.76	4.3	30	6.0	1.6	.67	.75
5	1.3	.91	e.55	.60	.71	.72	2.8	28	5.9	1.5	.63	.66
6	1.1	.96	e.45	.62	.72	.75	2.9	25	5.7	1.6	1.8	.57
7	1.0	.96	.53	.65	.72	.81	3.4	23	5.2	1.5	3.8	.47
8	.92	.94	.41	.64	.81	e.90	4.6	21	4.9	1.8	3.5	.43
9	.81	.97	.49	.67	.93	e1.0	4.5	21	4.5	1.9	3.4	.54
10	.79	1.4	.59	.66	.90	e.90	4.2	25	4.4	1.7	3.6	.41
11	.76	1.6	.50	.69	.93	e1.0	4.2	24	4.0	1.6	4.3	.48
12	.73	.90	.45	.70	1.1	e1.0	3.9	21	3.7	1.5	3.6	.43
13	.79	1.7	.46	.64	.83	e1.0	4.5	20	3.5	2.0	2.4	.38
14	.75	1.5	.41	.63	.79	e1.5	6.2	23	3.3	1.9	1.8	.37
15	.72	.99	.40	.63	.79	e2.0	6.1	23	3.7	1.8	2.9	.37
16	.80	.87	.39	.64	.76	e2.2	5.5	21	4.9	1.6	3.3	.34
17	.88	.84	.40	.58	.75	e2.5	5.2	21	3.9	1.5	3.0	.32
18	.90	.82	.39	.68	.76	e2.7	5.1	19	4.0	1.3	2.4	.31
19	.84	.80	.39	.76	.76	3.6	5.3	18	6.7	1.2	1.7	.34
20	.82	e.85	.39	.70	.75	4.4	5.9	16	5.5	1.2	2.1	.61
21	.82	e.84	.42	.69	.74	4.3	8.6	15	3.5	1.1	2.8	.51
22	.79	e.82	.44	.71	.72	5.3	9.9	14	3.4	1.5	3.7	.39
23	.82	e.80	.44	.79	.75	5.1	10	13	3.1	2.1	3.9	.35
24	.85	e.78	.41	.73	.74	3.8	12	12	2.8	2.0	3.3	.35
25	.82	e.76	.39	.72	.76	3.3	15	12	2.6	1.9	2.8	.33
26	.81	e.76	.45	.70	.77	3.4	17	10	2.6	1.6	1.7	.31
27	.83	e.76	.48	.73	.75	4.3	20	9.1	2.4	1.4	1.1	.31
28	1.3	e.77	.47	.71	.75	5.1	19	8.6	2.2	1.2	.98	.32
29	1.0	.73	.52	.68	---	5.0	20	8.9	2.0	1.0	.94	.36
30	.92	.75	.53	.67	---	4.0	28	8.2	1.9	1.1	.70	.34
31	.91	---	.54	.67	---	5.8	---	7.4	---	1.1	.66	---
TOTAL	26.64	28.49	15.23	20.55	21.75	79.49	251.1	587.2	127.2	48.5	70.24	14.00
MEAN	.86	.95	.49	.66	.78	2.56	8.37	18.9	4.24	1.56	2.27	.47
MAX	1.3	1.7	.76	.79	1.1	5.8	28	31	7.9	2.1	4.3	.99
MIN	.36	.73	.39	.55	.68	.72	2.8	7.4	1.9	1.0	.63	.31
AC-FT	53	57	30	41	43	158	498	1160	252	96	139	28

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1976 - 1999, BY WATER YEAR (WY)

MEAN	.50	.65	.58	.55	.74	2.00	13.0	25.2	6.05	1.97	1.22	.41
MAX	1.85	1.98	1.83	1.85	2.46	7.90	41.9	98.2	26.1	5.89	9.06	2.52
(WY)	1998	1985	1985	1985	1986	1986	1996	1984	1984	1984	1995	1997
MIN	.000	.000	.000	.000	.000	.67	1.01	1.00	.49	.092	.000	.000
(WY)	1978	1978	1978	1977	1978	1991	1977	1981	1990	1989	1977	1976

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1976 - 1999	
ANNUAL TOTAL	3321.89		1290.39			
ANNUAL MEAN	9.10		3.54		4.45	
HIGHEST ANNUAL MEAN					13.2	1984
LOWEST ANNUAL MEAN					.50	1977
HIGHEST DAILY MEAN	e,a95	May 5	31	May 1	297	May 14 1984
LOWEST DAILY MEAN	.18	Sep 26	.31	Sep 18	b.00	Oct 1 1975
ANNUAL SEVEN-DAY MINIMUM	.28	Sep 5	.33	Sep 24	.00	Oct 1 1975
INSTANTANEOUS PEAK FLOW			34	Apr 30	c329	May 14 1984
INSTANTANEOUS PEAK STAGE			1.94	Apr 30	d4.08	May 14 1984
ANNUAL RUNOFF (AC-FT)	6590		2560		3220	
10 PERCENT EXCEEDS	28		9.0		12	
50 PERCENT EXCEEDS	.90		.97		.80	
90 PERCENT EXCEEDS	.46		.46		.00	

e Estimated
a May have been higher during period of no gage-height record, Apr 25 to May 8.
b No flow many days most years.
c From rating curve extended above 77 ft^3/s.
d Maximum gage height, 4.34 ft, Apr 24, 1996.

09243800 FOIDEL CREEK NEAR OAK CREEK, CO

LOCATION.--Lat 40°20'45", long 107°05'04", in NW$^1/_4$SW$^1/_4$ 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.

PERIOD OF RECORD.--October 1975 to October 1981, April 1982 to September 1983, October 1984 to current year. Water-quality data available, September 1975 to September 1983, and October 1984 to September 1993. Daily record for specific conductance and water temperature available, May 1976 to September 1981, April 1982 to September 1983, and March 1986 to September 1988.

GAGE.--Water-stage recorder. Elevation of gage is 6,880 ft above sea level, from topographic map.

REMARKS.--Records good except for estimated daily discharge, which are poor. Natural flow of stream effected by Reservoir No. 1, which is 2.3 mi upstream from station. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.30	.72	.43	.40	.37	.34	4.3	5.5	3.6	.59	.35	.29
2	.35	.68	.41	.37	e.45	.36	3.3	5.3	3.4	.57	.29	.31
3	.27	.67	.40	.34	.47	e.33	2.6	5.0	3.2	.57	.26	.32
4	.48	.61	.41	.34	e.45	.36	2.1	5.3	3.0	.56	.25	.31
5	.94	.59	.35	.36	.41	e.36	2.4	5.6	2.7	.57	.27	.30
6	1.0	.58	e.34	.37	.42	e.38	2.8	5.7	2.7	.58	.30	.32
7	1.0	.56	e.36	.35	.43	.41	3.6	5.2	2.6	.62	.25	.29
8	.94	.56	e.46	.32	.44	.43	4.0	4.9	2.4	.72	.23	.24
9	.89	.53	.56	.31	e.44	.45	2.8	4.6	2.5	.71	.21	.21
10	.83	.51	e.50	.32	e.44	.51	2.0	4.7	2.3	.64	.25	.23
11	.82	.53	e.50	.32	e.45	.46	1.6	4.7	2.2	.66	.26	.29
12	.78	.56	.50	.26	e.46	.43	2.1	4.7	2.1	.65	.22	.24
13	.75	.55	.51	e.22	e.47	.38	3.1	4.7	2.0	.61	.20	.22
14	.77	.61	e.46	e.22	e.47	.38	3.4	5.7	2.0	.62	.16	.21
15	.77	.57	e.50	e.22	.56	.38	2.2	5.8	2.3	.64	.17	.21
16	.72	.57	e.48	.34	e.50	.45	1.4	5.1	3.1	.56	.17	.22
17	.69	.55	e.48	.27	.41	.55	1.2	5.0	2.3	.54	.17	.23
18	.69	.51	e.50	.29	.47	.73	1.4	4.9	2.1	.49	.17	.25
19	.65	.48	e.50	.33	.46	.92	1.7	4.8	1.8	.50	.17	.27
20	.65	.56	e.49	.33	e.40	1.1	2.1	4.8	1.6	.46	.17	.30
21	.68	.56	e.49	.31	e.40	1.3	3.2	4.6	1.5	.44	.21	.26
22	.70	.61	e.52	e.32	.42	1.4	3.8	4.6	1.4	.43	.30	.26
23	.67	.50	e.50	.36	e.40	1.7	4.0	4.3	1.3	.38	.29	.26
24	.71	.51	e.50	.33	.40	2.4	7.1	4.2	1.1	.36	.21	.25
25	.69	.54	.50	.33	e.35	3.3	7.8	4.1	1.0	.36	.18	.25
26	.68	.57	.56	.33	.35	4.1	8.8	4.1	.88	.39	.17	.23
27	.65	.48	.53	e.26	.40	5.0	8.2	4.1	.81	.38	.21	.21
28	.90	.47	.49	e.30	e.35	4.2	5.6	4.0	.72	.34	.26	.22
29	.78	.46	.48	e.30	---	3.3	4.9	3.8	.63	.33	.29	.70
30	.73	.45	.43	e.30	---	4.6	5.1	3.8	.61	.34	.31	.25
31	.69	---	.38	e.30	---	5.8	---	3.5	---	.33	.30	---
TOTAL	22.17	16.65	14.52	9.72	12.04	46.81	108.6	147.1	59.85	15.94	7.25	8.15
MEAN	.72	.56	.47	.31	.43	1.51	3.62	4.75	2.00	.51	.23	.27
MAX	1.0	.72	.56	.40	.56	5.8	8.8	5.8	3.6	.72	.35	.70
MIN	.27	.45	.34	.22	.35	.33	1.2	3.5	.61	.33	.16	.21
AC-FT	44	33	29	19	24	93	215	292	119	32	14	16

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1976 - 1999, BY WATER YEAR (WY)

MEAN	.55	.55	.44	.42	.71	2.08	7.17	5.85	2.03	.84	.46	.38
MAX	3.37	2.24	1.11	1.13	6.34	7.90	23.5	17.2	6.63	2.09	1.43	2.15
(WY)	1986	1986	1986	1986	1986	1986	1996	1997	1997	1995	1985	1997
MIN	.000	.000	.000	.000	.000	.000	.11	.077	.024	.000	.000	.000
(WY)	1976	1976	1976	1976	1977	1978	1977	1977	1977	1977	1976	1976

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1976 - 1999	
ANNUAL TOTAL	1288.83		468.80			
ANNUAL MEAN	3.53		1.28		1.79	
HIGHEST ANNUAL MEAN					4.59	1996
LOWEST ANNUAL MEAN					.022	1977
HIGHEST DAILY MEAN	25	May 7	8.8	Apr 26	49	May 5 1996
LOWEST DAILY MEAN	.27	Oct 3	.16	Aug 14	a.00	Oct 1 1975
ANNUAL SEVEN-DAY MINIMUM	.38	Sep 27	.17	Aug 14	.00	Oct 1 1975
INSTANTANEOUS PEAK FLOW			13	Apr 26	b65	May 5 1996
INSTANTANEOUS PEAK STAGE			2.29	Apr 26	4.47	May 5 1996
ANNUAL RUNOFF (AC-FT)	2560		930		1300	
10 PERCENT EXCEEDS	12		4.1		4.8	
50 PERCENT EXCEEDS	.82		.50		.59	
90 PERCENT EXCEEDS	.45		.25		.00	

e Estimated
a No flow many days most years.
b From rating curve extended above 23 ft^3/s.

09243900 FOIDEL CREEK AT MOUTH NEAR OAK CREEK, CO

LOCATION.--Lat 40°23'25", long 106°59'39", in $SE^1/_4SE^1/_4$ sec.14, T.5 N., R.86 W., Routt County, Hydrologic Unit 14050001, on left bank 1.0 mi upstream from mouth and 13.6 mi northwest of Oak Creek.

DRAINAGE AREA.--17.5 mi^2.

PERIOD OF RECORD.--October 1975 to September 1981, June 1982 to current year. Water-quality data available, April 1976 to September 1981, June 1982 to September 1988. Daily records for water temperature and specific conductance are available, April 1976 to September 1981. Daily records for suspended-sediment discharge are available, January 1978 to September 1981. Precipitation records are available, July 1978 to September 1997.

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

GAGE.--Water-stage recorder and wooden control. Elevation of gage is 6,730 ft above sea level, from topographic map. Prior to Feb. 19, 1992, at site 600 ft downstream, at same datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.45	.87	.62	e.60	1.4	1.4	8.6	11	4.1	1.2	e.54	.34
2	.65	.92	.49	e.60	1.4	1.4	7.3	9.0	4.1	1.1	e.54	.62
3	1.0	1.1	.58	e.70	1.4	1.5	6.6	8.9	3.9	.85	e.50	.74
4	1.5	1.5	.64	e.80	1.3	1.5	5.6	9.4	2.0	.68	e.50	.49
5	1.8	1.0	.52	e.85	1.3	1.5	5.7	10	.00	.64	e.48	.35
6	1.7	1.1	.67	.85	1.2	1.6	6.6	10	.00	.57	e.48	.25
7	1.5	1.1	.30	.87	1.3	1.4	6.2	9.2	.00	.58	e.46	.19
8	1.2	.96	.20	.86	1.3	1.5	7.3	7.3	.02	.93	e.46	.16
9	1.1	1.0	.25	.89	1.3	1.6	6.3	6.1	.03	1.0	e.44	.14
10	1.1	.79	.31	.87	1.2	1.6	5.2	6.5	1.6	.80	e.42	.16
11	1.1	.95	.36	.88	1.5	1.7	4.8	7.5	3.6	.70	e.40	.21
12	1.0	1.1	.30	.94	2.0	1.7	4.5	7.3	3.6	.70	e.38	.25
13	1.0	.90	e.40	.93	1.7	1.8	5.1	7.4	3.0	.62	e.38	.23
14	1.0	.84	e.40	.99	1.7	1.8	6.0	9.2	3.2	.65	e.38	.19
15	.98	.82	e.40	1.0	1.5	1.8	5.0	11	3.6	.76	e.36	.19
16	.93	.80	e.41	1.0	1.6	1.8	4.4	8.4	4.6	.63	e.36	.20
17	1.0	.65	e.42	1.1	1.5	2.0	4.1	7.9	4.7	.65	e.36	.19
18	1.0	.69	e.42	1.1	1.6	2.2	3.6	6.9	3.9	.72	e.34	.17
19	.97	.83	e.42	1.0	1.5	4.5	3.6	6.7	3.2	.64	e.34	.18
20	.86	.75	e.44	1.0	1.6	11	4.0	6.3	2.8	e.66	e.32	.26
21	.78	.73	e.44	.91	1.7	13	5.4	6.0	2.7	e.66	e.32	.28
22	.89	.79	e.44	1.2	1.5	14	7.1	5.6	2.6	e.64	e.30	.24
23	1.2	.76	e.46	1.2	1.6	11	7.8	5.1	2.2	e.64	e.30	.26
24	1.0	.79	e.46	1.2	1.5	9.5	11	4.8	2.1	e.62	e.33	.28
25	.91	.69	e.46	1.2	1.5	11	15	5.0	2.0	e.62	e.20	.39
26	.88	.67	e.48	1.3	1.5	11	16	5.0	1.8	e.60	e.12	.38
27	1.1	e.68	e.48	1.2	1.5	13	23	5.1	1.5	e.60	.09	.38
28	1.7	e.68	e.48	1.2	1.4	11	12	3.9	1.5	e.58	.26	.40
29	1.5	e.68	e.50	1.3	---	7.5	8.8	3.9	1.4	e.58	.41	.47
30	1.2	e.68	e.55	1.3	---	8.5	9.2	4.1	1.3	e.56	.40	.42
31	.98	---	e.55	1.4	---	10	---	4.1	---	e.56	.28	---
TOTAL	33.98	25.82	13.85	31.24	41.5	164.8	225.8	218.6	71.05	21.74	11.45	9.01
MEAN	1.10	.86	.45	1.01	1.48	5.32	7.53	7.05	2.37	.70	.37	.30
MAX	1.8	1.5	.67	1.4	2.0	14	23	11	4.7	1.2	.54	.74
MIN	.45	.65	.20	.60	1.2	1.4	3.6	3.9	.00	.56	.09	.14
AC-FT	67	51	27	62	82	327	448	434	141	43	23	18

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1976 - 1999, BY WATER YEAR (WY)

MEAN	.90	1.07	.97	.96	1.44	5.28	14.9	10.1	3.36	1.47	.75	.56
MAX	4.05	5.03	5.96	6.01	10.4	17.0	41.1	34.9	10.9	3.68	2.84	3.39
(WY)	1986	1986	1986	1986	1986	1986	1996	1984	1984	1984	1983	1997
MIN	.000	.000	.000	.000	.000	.39	.41	.043	.000	.000	.000	.000
(WY)	1976	1977	1976	1977	1978	1977	1977	1977	1977	1976	1976	1976

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1976 - 1999	
ANNUAL TOTAL	2240.94		868.84			
ANNUAL MEAN	6.14		2.38		3.48	
HIGHEST ANNUAL MEAN					7.63	1986
LOWEST ANNUAL MEAN					.070	1977
HIGHEST DAILY MEAN	42	Apr 12	23	Apr 27	79	Apr 25 1984
LOWEST DAILY MEAN	.20	Dec 8	.00	Jun 5	a.00	Oct 1 1975
ANNUAL SEVEN-DAY MINIMUM	.30	Dec 7	.19	Sep 7	.00	Oct 1 1975
INSTANTANEOUS PEAK FLOW			26	Apr 27	b90	Apr 11 1996
INSTANTANEOUS PEAK STAGE			4.69	Apr 27	c6.43	Apr 11 1996
ANNUAL RUNOFF (AC-FT)	4440		1720		2520	
10 PERCENT EXCEEDS	26		7.3		9.3	
50 PERCENT EXCEEDS	1.5		1.0		1.0	
90 PERCENT EXCEEDS	.50		.32		.00	

e Estimated
a No flow many days, most years.
b Also occurred Apr 22, 1980.
c Maximum gage height, 6.75 ft, Mar 20, 1997, backwater from ice.

09246200 ELKHEAD CREEK ABOVE LONG GULCH, NEAR HAYDEN, CO

LOCATION.--Lat 40°35'30", long 107°19'13", in NW$^{1}/_{4}$SE$^{1}/_{4}$ sec.1, T.7 N., R.89 W., Routt County, Hydrologic Unit 14050001, on left bank 0.3 mi upstream from Long Gulch, and 9.0 mi northwest of Hayden.

DRAINAGE AREA.--171 mi^{2}.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1995 to current year.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage 6,405 ft above sea level, from topographic map.

REMARKS.--Record fair except for estimated daily discharges, which are poor. Natural flow affected by diversions for irrigation of several hundred acres upstream from station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.0	18	13	e9.0	e6.6	e15	151	676	446	38	12	7.8
2	4.5	15	12	e9.4	e9.4	e16	126	716	391	33	9.6	15
3	6.1	18	12	e7.2	e9.0	e17	114	640	399	28	7.0	20
4	14	19	12	e7.0	e11	e17	100	524	343	25	6.1	19
5	16	14	13	e8.0	e14	e18	95	410	307	23	5.7	15
6	13	13	e8.0	e10	e15	e17	86	350	333	20	6.0	9.5
7	11	12	e5.8	e10	e13	e16	102	350	351	19	7.1	7.2
8	11	12	e6.2	e11	e13	e18	145	591	284	18	6.1	5.5
9	13	12	e6.8	e8.0	e13	e18	116	981	255	25	5.2	4.6
10	11	11	e7.6	e8.4	e16	e19	112	986	226	21	5.1	4.4
11	9.3	15	e6.2	e8.6	e10	e20	117	541	207	17	6.7	4.9
12	8.9	14	e6.4	e8.6	e7.8	e20	143	374	180	15	7.4	5.6
13	8.2	9.7	e7.0	e9.6	e7.2	e22	206	408	159	13	6.7	5.7
14	8.4	13	e7.8	e20	e7.8	e22	241	591	149	13	5.2	5.1
15	8.0	14	e8.2	e16	e10	e28	181	540	148	20	4.3	4.4
16	7.6	15	e8.4	e15	e10	e34	140	545	164	28	4.0	4.2
17	7.4	15	e8.6	e14	e10	e42	114	433	148	18	3.7	4.1
18	7.9	17	e9.4	e11	e11	e54	130	523	173	15	4.0	4.0
19	8.9	14	e8.8	e12	e11	e66	200	732	e135	13	4.1	4.8
20	8.7	12	e5.0	e12	e12	116	354	827	e118	12	4.4	7.2
21	7.8	11	e4.2	e13	e10	137	494	862	e98	11	7.1	11
22	7.4	14	e3.4	e14	e11	131	350	841	e88	9.8	9.5	8.1
23	8.0	12	e2.6	e12	e11	128	280	855	83	9.0	7.8	6.7
24	10	13	e2.8	e13	e12	134	331	795	73	8.6	6.0	6.0
25	12	12	e3.5	e15	e13	159	636	721	65	8.1	5.3	5.7
26	10	12	e6.0	e14	e13	187	474	660	58	7.7	4.4	5.3
27	9.9	12	e7.8	e12	e13	187	432	622	54	8.7	3.9	4.9
28	23	13	e8.0	e9.0	e14	129	470	601	46	9.1	8.8	4.6
29	29	16	e10	e6.4	---	107	588	576	41	7.8	15	5.1
30	21	15	e10	e6.0	---	136	1010	609	39	7.3	15	6.2
31	19	---	e10	e6.0	---	172	---	558	---	11	9.1	---
TOTAL	344.0	412.7	240.5	335.2	313.8	2202	8038	19438	5561	512.1	212.3	221.6
MEAN	11.1	13.8	7.76	10.8	11.2	71.0	268	627	185	16.5	6.85	7.39
MAX	29	19	13	20	16	187	1010	986	446	38	15	20
MIN	4.0	9.7	2.6	6.0	6.6	15	86	350	39	7.3	3.7	4.0
AC-FT	682	819	477	665	622	4370	15940	38560	11030	1020	421	440

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 1999, BY WATER YEAR (WY)

MEAN	16.7	18.6	17.7	18.6	20.0	98.5	384	881	230	23.3	7.91	11.4
MAX	39.5	33.2	34.0	34.5	39.3	151	493	1189	337	42.5	13.5	37.6
(WY)	1998	1998	1998	1998	1998	1998	1998	1997	1997	1998	1997	1997
MIN	5.10	12.6	7.76	8.56	10.3	35.6	268	627	119	12.2	2.23	2.10
(WY)	1997	1997	1999	1996	1996	1996	1999	1999	1996	1996	1996	1996

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1995 - 1999	
ANNUAL TOTAL	62210.4		37831.2			
ANNUAL MEAN	170		104		145	
HIGHEST ANNUAL MEAN					187	1997
LOWEST ANNUAL MEAN					104	1999
HIGHEST DAILY MEAN	1740	May 4	1010	Apr 30	1860	May 7 1997
LOWEST DAILY MEAN	1.2	Sep 7	2.6	Dec 23	.10	Sep 4 1996
ANNUAL SEVEN-DAY MINIMUM	1.9	Sep 3	3.9	Dec 20	.36	Sep 1 1996
INSTANTANEOUS PEAK FLOW			1510	May 10	a2760	May 7 1997
INSTANTANEOUS PEAK STAGE			6.21	May 10	7.86	May 7 1997
ANNUAL RUNOFF (AC-FT)	123400		75040		104900	
10 PERCENT EXCEEDS	551		403		472	
50 PERCENT EXCEEDS	34		13		19	
90 PERCENT EXCEEDS	4.2		5.7		4.8	

e Estimated
a From rating extended above 1,120 ft^{3}/s.

09246200 ELKHEAD CREEK ABOVE LONG GULCH, NEAR HAYDEN, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--July 1995 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: August 1995 to September 1999 (discontinued).
WATER TEMPERATURE: September 1995 to September 1999 (discontinued).

INSTRUMENTATION.--Water-quality monitor with satellite telemetry.

REMARKS.--Specific conductance record is good except for Oct 4 - 21 and May 12 to June 8, which are fair. Water temperature record is good except for April 23 to May 12, which is fair.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 1,120 microsiemens, Mar. 19, 1999; minimum, 86 microsiemens, May 21, 1999.
WATER TEMPERATURE: Maximum, 29.0°C, July 23, 1999; minimum, 0.0°C, on many days during winter months.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 1,120 microsiemens, Mar. 19; minimum, 86 microsiemens, May 21.
WATER TEMPERATURE: Maximum, 29.0°C, July 23; minimum, 0.0°C, on many days during winter months.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)
OCT											
21...	1135	7.2	457	8.5	5.6	8.5	10.3	180	43	19	30
NOV											
10...	1655	8.9	572	8.4	1.3	7.4	11.8	220	49	24	41
DEC											
09...	1200	6.1	729	8.3	.3	8.5	11.3	300	71	31	48
JAN											
27...	1150	10	612	8.2	.0	5.3	10.6	250	57	25	42
FEB											
24...	1315	6.2	644	7.9	.0	5.8	10.5	250	57	27	45
MAR											
18...	1125	54	912	8.1	.2	69	10.8	330	68	39	78
APR											
14...	2005	195	339	8.3	5.8	150	10.1	130	29	13	19
MAY											
12...	1500	316	190	8.1	7.0	90	10.0	79	20	7.2	8.2
JUN											
08...	1535	283	151	8.1	15.4	120	8.7	63	16	5.4	5.8
JUL											
13...	0900	14	310	8.6	18.3	4.0	7.1	130	31	12	16
AUG											
03...	1325	6.9	319	8.6	21.8	15	8.4	130	32	12	18
SEP											
08...	1540	5.1	316	8.6	18.3	19	9.3	130	31	12	15

DATE	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	ALKA-LINITY WAT.DIS FET LAB CACO3 (MG/L) (29801)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)
OCT											
21...	1	2.2	--	169	--	71	6.1	.25	12	285	.39
NOV											
10...	1	2.1	--	161	--	140	7.4	.17	10	365	.50
DEC											
09...	1	1.8	--	219	--	180	8.1	.13	16	490	.67
JAN											
27...	1	1.6	157	--	--	160	6.1	.17	15	402	.55
FEB											
24...	1	1.9	161	--	--	170	6.4	.14	15	421	.57
MAR											
18...	2	2.4	--	136	--	350	7.9	.13	9.6	635	.86
APR											
14...	.7	1.6	--	76	--	88	2.1	.10	8.0	207	.28
MAY											
12...	.4	1.0	54	--	--	27	.93	<.10	10	108	.15
JUN											
08...	.3	.86	54	--	--	16	1.1	<.10	12	89	.12
JUL											
13...	.6	1.5	--	--	116	40	1.8	.13	8.6	180	.24
AUG											
03...	.7	2.0	--	--	124	35	2.5	.13	6.7	182	.25
SEP											
08...	.6	2.1	--	--	124	39	2.7	.13	10	187	.25

09246200 ELKHEAD CREEK ABOVE LONG GULCH, NEAR HAYDEN, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	SOLIDS, DIS-SOLVED (TONS PER DAY) (70302)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)
OCT											
21...	5.53	<.010	.050	<.020	.23	.19	<.050	.011	.011	--	--
NOV											
10...	8.78	<.010	<.050	<.020	.26	.19	.014	<.050	<.010	--	--
DEC											
09...	8.02	<.010	.065	.028	.21	.22	<.050	<.050	.011	--	--
JAN											
27...	11.1	<.010	.292	.040	.23	.21	.016	.004	<.010	--	--
FEB											
24...	7.04	<.010	.269	.040	.28	.27	.015	.004	<.010	--	--
MAR											
18...	92.2	<.010	.261	<.020	.56	.24	.122	.006	<.010	--	--
APR											
14...	109	<.010	.085	<.020	.88	.35	.265	.012	.012	11	6.4
MAY											
12...	92.1	<.010	.121	.022	.70	.33	.167	.010	.016	--	--
JUN											
08...	68.2	<.010	<.050	<.020	.51	.32	.137	.015	.014	7.3	6.4
JUL											
13...	6.66	<.010	<.050	<.020	.26	.24	.017	.005	<.010	5.6	4.6
AUG											
03...	3.40	<.010	<.050	<.020	.29	.22	.032	.009	<.010	5.2	4.6
SEP											
08...	2.56	<.010	<.050	<.020	.37	.29	.040	.005	.010	--	--

DATE	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL) (01105)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	ARSENIC TOTAL (UG/L AS AS) (01002)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA) (01007)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)
JUN										
08...	1600	<1	<1	30	100	<4.0	<1.0	<1	<1.0	2
AUG										
03...	470	1	1	55	100	<4.0	<1.0	<1	<1.0	<1

DATE	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO) (01037)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LITHIUM TOTAL RECOV-ERABLE (UG/L AS LI) (01132)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)
JUN										
08...	2	1.3	4	31	2600	<1.0	2	<10	9.0	67
AUG										
03...	<1	1.5	2	<10	650	<1.0	<1	E10	8.2	42

DATE	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO) (01062)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)
JUN										
08...	<.1	<.10	<1	5	<1	<1	<1.0	<1	<20	<40
AUG										
03...	<.1	<.10	1	2	<1	<1	<1.0	<1	<20	<40

E Estimated.

09246200 ELKHEAD CREEK ABOVE LONG GULCH, NEAR HAYDEN, CO--Continued

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
OCT				
21...	1135	7.2	14	.28
NOV				
10...	1655	8.9	12	.29
DEC				
09...	1200	6.1	13	.21
JAN				
27...	1150	10	10	.28
FEB				
24...	1315	6.2	8	.14
MAR				
18...	1125	54	137	20
APR				
14...	2005	195	388	204
MAY				
12...	1500	316	275	235
JUN				
08...	1535	283	228	174
JUL				
13...	0900	14	6	.24
AUG				
03...	1325	6.9	27	.50
SEP				
08...	1540	5.1	28	.38

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	577	569	572	577	533	556	514	504	510	524	517	521
2	580	569	575	579	526	556	542	512	529	525	514	522
3	578	555	574	526	502	512	549	520	534	522	513	519
4	555	489	516	507	490	495	566	516	535	517	513	515
5	489	446	462	521	507	513	574	517	533	530	516	522
6	460	449	454	523	503	511	671	---	---	530	527	528
7	477	456	465	513	495	507	736	649	692	529	523	526
8	475	463	469	543	479	519	721	704	712	529	524	526
9	467	444	453	518	478	496	734	704	718	530	527	529
10	445	434	440	571	518	549	717	707	713	534	529	531
11	442	432	437	698	543	616	717	678	703	544	531	537
12	453	440	446	570	481	510	678	662	668	562	544	551
13	463	446	453	559	523	541	688	668	681	580	562	575
14	477	461	469	609	514	556	678	664	672	588	574	582
15	483	470	477	571	500	525	674	641	660	577	571	574
16	489	479	483	561	512	534	641	598	621	580	571	576
17	489	483	487	567	510	532	599	576	589	586	572	579
18	491	481	485	538	494	511	589	573	581	589	583	586
19	481	471	476	541	503	515	598	576	589	602	584	592
20	471	459	465	569	541	558	598	586	591	608	601	604
21	459	450	454	631	---	---	589	584	586	622	603	613
22	454	451	452	674	520	578	584	562	574	623	605	612
23	456	445	452	575	530	546	568	557	562	621	614	618
24	456	444	452	606	514	546	564	551	557	618	612	616
25	444	420	427	593	526	567	551	544	547	619	615	617
26	421	416	420	645	554	578	554	550	553	619	613	616
27	422	415	417	618	532	562	559	554	557	621	613	616
28	451	415	429	601	526	551	554	542	548	617	612	614
29	561	443	510	562	507	536	542	529	535	612	596	606
30	598	561	587	511	497	504	532	529	531	605	596	601
31	573	557	564	---	---	---	529	517	524	605	598	601
MONTH	598	415	478	698	---	---	736	---	---	623	513	572

09246200 ELKHEAD CREEK ABOVE LONG GULCH, NEAR HAYDEN, CO--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	610	598	603	721	698	711	462	423	445	---	---	---
2	611	607	609	736	704	724	503	442	465	---	---	---
3	612	607	609	751	728	740	539	499	520	---	---	---
4	613	607	611	808	751	793	594	518	552	---	---	---
5	619	610	613	760	732	745	641	579	622	---	---	---
6	622	615	619	760	723	737	623	579	607	---	---	---
7	620	618	619	814	733	788	692	564	632	---	---	---
8	622	614	619	733	701	719	622	469	536	---	---	---
9	633	619	625	736	708	723	502	469	485	---	---	---
10	661	633	647	794	729	769	547	488	506	---	---	---
11	665	643	655	872	763	789	656	547	613	---	---	---
12	667	661	665	906	810	872	667	526	578	179	---	---
13	749	667	707	945	724	787	621	408	462	177	161	165
14	750	683	715	1010	809	904	441	311	344	309	163	217
15	697	683	690	933	818	873	363	335	347	235	180	201
16	699	676	690	918	794	865	377	345	364	180	158	165
17	690	675	683	1060	800	940	412	365	385	203	174	195
18	676	660	668	1080	821	958	436	394	417	190	150	162
19	660	654	659	1120	786	922	427	318	366	151	117	128
20	658	647	653	1020	750	812	332	239	264	125	104	116
21	651	642	648	828	679	737	---	---	---	122	86	109
22	652	644	648	734	642	692	---	---	---	126	88	112
23	644	634	639	697	591	645	---	---	---	122	104	112
24	644	637	640	612	509	571	---	---	---	112	101	108
25	663	643	651	569	478	523	---	---	---	120	103	110
26	672	663	668	574	431	481	---	---	---	142	110	119
27	686	672	679	525	471	493	---	---	---	146	127	134
28	712	682	698	563	492	514	---	---	---	127	114	120
29	---	---	---	571	508	530	---	---	---	124	112	117
30	---	---	---	611	517	570	---	---	---	126	115	121
31	---	---	---	616	411	468	---	---	---	117	103	110
MONTH	750	598	651	1120	411	722	---	---	---	---	---	---

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	139	117	129	294	286	290	326	287	310	272	251	259
2	138	131	135	296	287	291	317	291	301	295	272	287
3	146	133	140	297	289	292	328	308	318	295	270	284
4	145	136	140	291	286	288	328	316	322	271	265	268
5	143	134	137	292	286	290	336	328	332	288	265	275
6	169	137	145	294	286	291	340	336	338	300	287	293
7	169	149	154	294	283	289	348	338	344	310	295	301
8	159	142	148	296	286	289	344	331	340	321	309	312
9	154	145	150	296	280	287	347	337	341	345	321	335
10	158	144	151	299	277	291	342	330	338	363	345	355
11	166	154	160	303	291	299	341	329	337	377	363	369
12	171	160	166	320	302	312	342	333	337	379	376	378
13	176	170	173	317	307	312	342	323	333	385	375	378
14	184	175	178	310	299	306	330	319	323	382	370	375
15	199	183	188	307	288	298	327	320	323	370	366	368
16	240	197	218	351	262	295	342	325	336	369	358	365
17	225	200	212	348	329	334	347	335	341	374	361	370
18	234	180	208	331	324	327	357	346	352	383	372	378
19	222	214	218	337	320	329	360	353	357	382	377	380
20	226	220	222	328	315	323	364	351	360	385	376	382
21	233	222	227	327	315	322	368	349	358	376	355	364
22	238	228	231	327	317	323	357	334	345	355	339	348
23	247	230	238	326	315	323	345	309	327	339	327	331
24	252	239	245	320	314	317	324	315	319	340	335	338
25	253	243	247	324	307	317	325	314	321	352	340	345
26	262	250	256	326	297	314	328	310	318	365	352	359
27	261	256	258	322	286	309	341	322	334	371	362	366
28	268	261	265	324	279	297	347	324	334	379	371	376
29	274	267	270	350	324	341	328	285	322	382	375	378
30	291	272	276	351	345	349	285	250	263	379	375	377
31	---	---	---	346	326	338	266	252	259	---	---	---
MONTH	291	117	196	351	262	309	368	250	328	385	251	343

09246200 ELKHEAD CREEK ABOVE LONG GULCH, NEAR HAYDEN, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	16.2	12.8	14.4	9.6	5.8	7.4	4.1	.2	2.1	.1	.1	.1
2	15.1	11.5	13.1	8.8	6.6	7.6	3.5	.1	1.7	.1	.1	.1
3	12.9	10.4	11.4	7.3	4.3	6.1	2.8	.0	1.2	.1	.1	.1
4	10.4	6.4	8.1	6.2	2.9	4.3	2.4	.0	.9	.1	.1	.1
5	7.5	5.0	6.2	5.7	2.5	4.0	.5	.0	.2	.1	.1	.1
6	10.3	3.5	6.6	4.9	1.7	3.4	.4	.1	.1	.1	.1	.1
7	12.7	5.2	8.8	4.6	1.6	3.1	.3	.1	.1	.1	.1	.1
8	13.8	6.9	10.3	3.5	1.6	2.5	.2	.1	.1	.1	.1	.1
9	14.0	7.3	10.6	2.5	.5	1.3	.1	.1	.1	.1	.1	.1
10	13.6	7.5	10.6	1.6	.0	.6	.2	.1	.1	.1	.1	.1
11	12.5	6.5	9.5	1.6	.1	.7	.2	.1	.1	.1	.1	.1
12	12.3	6.1	9.2	3.3	.2	1.5	.2	.1	.1	.1	.1	.1
13	12.0	6.4	9.3	3.3	.1	1.5	.2	.1	.1	.1	.1	.1
14	14.2	8.5	11.2	5.0	.3	2.6	.2	.1	.1	.1	.1	.1
15	12.6	7.6	10.2	5.4	1.1	3.2	.2	.1	.1	.1	.1	.1
16	9.9	7.1	8.5	5.0	.7	2.9	.2	.1	.1	.1	.1	.1
17	8.3	6.5	7.3	5.3	1.2	3.2	.2	.1	.1	.1	.1	.1
18	10.3	4.7	7.3	3.7	2.1	2.8	.2	.1	.1	.1	.1	.1
19	9.9	4.0	7.0	2.7	.8	1.7	.1	.1	.1	.1	.1	.1
20	---	4.9	---	1.7	.0	.6	.1	.1	.1	.1	.1	.1
21	9.6	---	---	2.4	.1	1.0	.1	.1	.1	.1	.1	.1
22	10.4	6.7	8.4	2.5	.0	1.2	.1	.1	.1	.1	.1	.1
23	8.5	6.5	7.3	3.2	.0	1.5	.1	.1	.1	.1	.1	.1
24	10.4	5.3	7.7	2.2	.0	1.1	.1	.1	.1	.1	.1	.1
25	9.9	5.9	8.0	2.2	.0	.9	.1	.1	.1	.1	.1	.1
26	10.6	7.2	8.7	3.2	.0	1.4	.1	.1	.1	.1	.1	.1
27	8.7	6.5	7.8	3.6	.0	1.7	.1	.1	.1	.1	.0	.1
28	8.3	6.1	7.0	3.1	.2	1.8	.1	.1	.1	.1	.1	.1
29	6.8	5.3	6.0	4.0	2.3	3.1	.1	.1	.1	.1	.1	.1
30	7.9	4.8	6.3	4.8	1.1	2.8	.1	.1	.1	.1	.1	.1
31	7.1	5.9	6.4	---	---	---	.1	.1	.1	.1	.1	.1
MONTH	---	---	---	9.6	.0	2.6	4.1	.0	.3	.1	.0	.1

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	.1	.1	.1	.1	.1	.1	4.9	3.3	4.2	7.0	2.3	4.4
2	.1	.1	.1	.1	.1	.1	4.9	1.6	3.1	6.9	3.5	4.8
3	.1	.1	.1	.1	.1	.1	5.1	.1	2.6	5.1	3.8	4.3
4	.1	.1	.1	.1	.1	.1	6.0	.5	3.4	4.5	2.1	3.2
5	.1	.1	.1	.1	.1	.1	7.0	2.1	4.4	4.3	2.1	3.1
6	.1	.1	.1	.1	.1	.1	9.8	2.3	5.9	7.4	1.0	4.0
7	.1	.1	.1	.1	.1	.1	10.9	4.1	7.6	10.6	3.8	7.0
8	.1	.1	.1	.1	.1	.1	9.0	3.4	5.7	9.9	6.0	8.1
9	.1	.1	.1	.1	.1	.1	4.9	.8	2.7	9.7	4.5	7.2
10	.1	.1	.1	.1	.1	.1	6.3	.1	3.0	8.3	2.8	4.5
11	.1	.1	.1	.1	.1	.1	7.1	.7	4.2	6.0	2.2	4.1
12	.1	.1	.1	.1	.1	.1	9.0	4.3	6.7	9.0	2.9	5.9
13	.1	.1	.1	.1	.1	.1	10.7	5.1	7.9	8.3	5.6	7.3
14	.1	.1	.1	.1	.1	.1	9.2	4.6	6.5	6.3	3.5	4.8
15	.1	.1	.1	.2	.1	.1	5.7	2.1	4.2	9.5	4.8	7.0
16	.1	.1	.1	.2	.1	.1	5.0	1.4	3.2	8.5	4.8	6.1
17	.1	.1	.1	.2	.1	.1	9.2	.7	4.9	9.7	3.0	6.2
18	.1	.1	.1	.3	.0	.1	9.7	4.2	7.0	11.3	5.7	8.5
19	.1	.1	.1	.9	.0	.2	9.7	4.8	7.5	11.5	5.7	8.9
20	.1	.1	.1	1.5	.0	.4	9.0	4.4	6.3	12.3	6.0	9.2
21	.1	.1	.1	1.8	.0	.5	6.7	2.2	4.4	11.4	5.8	8.8
22	.1	.1	.1	2.3	.0	.7	5.8	2.2	4.1	12.7	6.0	9.4
23	.1	.1	.1	5.2	.0	1.7	5.5	3.3	4.3	13.1	6.9	10.1
24	.1	.0	.1	5.9	.1	2.5	9.1	4.0	6.3	12.3	7.8	10.1
25	.1	.1	.1	7.2	1.2	4.3	7.8	2.1	4.3	11.3	7.9	9.9
26	.1	.1	.1	5.6	1.8	4.1	5.4	2.0	3.5	10.7	7.6	9.2
27	.1	.1	.1	4.9	2.1	3.4	8.6	3.1	5.8	12.3	8.0	10.0
28	.1	.1	.1	5.5	.0	2.8	8.4	4.4	6.2	13.5	7.7	10.5
29	---	---	---	7.7	.1	4.0	9.0	4.6	6.9	12.9	9.4	10.9
30	---	---	---	9.1	3.0	6.0	6.9	2.7	3.8	14.0	8.3	11.0
31	---	---	---	6.9	4.0	5.3	---	---	---	13.2	9.1	10.8
MONTH	.1	.0	.1	9.1	.0	1.2	10.9	.1	5.0	14.0	1.0	7.4

09246200 ELKHEAD CREEK ABOVE LONG GULCH, NEAR HAYDEN, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	12.0	6.4	9.3	23.3	13.8	18.5	26.3	16.6	21.2	20.1	16.9	18.4
2	11.4	9.2	10.3	22.4	16.5	19.7	26.8	18.0	22.1	20.3	16.4	18.2
3	13.9	8.0	10.7	25.3	15.8	20.4	23.5	17.9	20.9	18.9	15.0	16.9
4	14.0	8.7	11.6	25.6	17.8	21.7	23.3	18.0	20.5	19.1	13.2	15.9
5	13.7	8.8	11.4	26.8	16.7	21.7	23.9	17.2	20.5	20.3	12.1	16.1
6	12.5	8.9	10.7	27.9	18.6	23.1	24.2	18.9	21.2	20.7	12.0	16.5
7	15.8	9.0	12.1	28.2	19.2	23.7	24.0	16.9	20.6	20.4	13.0	16.7
8	16.6	10.2	13.5	26.4	20.7	22.7	24.5	16.5	20.7	19.8	11.8	15.9
9	17.6	10.5	14.1	26.7	17.0	21.7	24.0	16.9	20.7	18.9	11.6	15.8
10	15.7	11.2	13.8	26.7	17.7	22.3	23.7	18.1	21.0	17.0	14.2	15.9
11	17.4	10.0	13.7	26.7	18.5	22.3	24.1	18.8	21.2	19.3	13.4	16.3
12	18.6	11.3	15.0	27.8	18.0	22.7	22.3	16.3	19.4	18.8	12.6	15.9
13	19.7	12.5	16.1	26.2	18.1	22.4	25.0	15.5	20.1	18.4	10.9	14.9
14	18.0	13.4	15.9	22.9	19.0	20.8	22.9	16.4	19.8	18.0	10.9	14.7
15	17.5	13.2	15.4	26.0	18.3	21.6	22.1	16.2	19.1	15.4	10.6	13.4
16	19.7	12.7	16.2	25.5	17.5	21.5	23.9	15.9	20.2	17.8	9.5	13.8
17	18.3	14.8	15.9	25.7	17.9	21.9	21.6	17.1	18.7	19.1	11.4	15.2
18	18.9	11.7	15.4	26.0	18.0	21.9	24.1	14.1	18.9	18.6	12.1	15.5
19	20.7	14.4	17.6	23.0	19.2	21.0	22.6	16.2	19.6	16.1	12.7	13.8
20	21.1	14.5	18.0	27.2	17.3	22.0	24.3	17.0	20.6	15.3	11.4	13.0
21	22.2	16.6	19.3	27.2	17.9	22.5	21.2	17.9	19.4	16.6	8.3	12.3
22	21.2	15.9	18.6	28.6	19.8	23.8	25.6	16.9	20.8	17.0	9.2	13.1
23	22.8	14.4	18.6	29.0	19.2	24.0	25.9	17.2	21.5	17.7	11.2	14.4
24	23.8	15.5	19.8	27.6	19.7	23.5	25.6	17.6	21.5	15.8	12.8	14.6
25	23.3	17.2	20.3	27.8	19.0	23.2	23.6	18.1	20.8	17.7	11.7	14.8
26	23.5	15.7	19.8	26.7	18.9	22.9	24.4	17.1	20.8	15.3	11.4	13.2
27	23.0	16.7	19.9	28.5	19.3	23.3	23.8	18.0	20.8	12.5	7.1	10.0
28	23.5	14.5	19.0	24.3	19.8	22.2	25.3	17.9	21.2	9.6	6.5	8.2
29	23.7	17.0	20.3	25.8	18.7	22.1	24.7	17.8	21.0	11.3	3.7	7.8
30	20.9	16.8	18.5	24.3	19.6	22.0	24.0	16.9	20.5	12.8	5.4	9.4
31	---	---	---	23.1	18.9	20.7	21.4	18.5	20.0	---	---	---
MONTH	23.8	6.4	15.7	29.0	13.8	22.1	26.8	14.1	20.5	20.7	3.7	14.4

ELKHEAD RESERVOIR NEAR CRAIG, CO

WATER-QUALITY RECORDS

REMARKS.--Samples and field measurements were collected at a number of sites within the reservoir.

403507107214900 ELKHEAD RESERVOIR SITE 1A

LOCATION.--Lat 40°35'07", long 107°21'49", in $NE^{1}/_{4}NW^{1}/_{4}$, sec.10, T.7 N., R.89 W., Routt County, Hydrological Unit 14050001, approximately 80 ft from northwest shore in transect approximately 3.2 mi upstream from Elkhead Dam.

PERIOD OF RECORD.--July 1995 to August 1999 (discontinued).

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	SAMPLING DEPTH (FEET) (00003)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	TRANSPARENCY (SECCHI DISK) (IN) (00077)	OXYGEN, DISSOLVED (MG/L) (00300)
OCT							
21...	1259	--	--	--	--	72.0	--
21...	1300	.000	333	8.1	10.7	--	6.6
21...	1301	2.00	333	8.1	10.6	--	7.0
21...	1302	4.00	333	8.1	10.5	--	6.9
21...	1303	6.00	333	8.1	10.4	--	6.9
21...	1304	8.00	343	8.1	9.7	--	7.2
21...	1305	10.0	380	8.2	9.1	--	7.2
21...	1306	12.0	424	8.2	8.5	--	7.6
21...	1307	14.0	455	8.2	8.1	--	7.8
MAY							
11...	1204	--	--	--	--	6.00	--
11...	1205	.000	158	8.0	4.2	--	10.0
11...	1206	2.00	159	8.0	4.3	--	9.9
11...	1207	4.00	157	8.0	4.1	--	9.9
11...	1208	6.00	156	8.0	4.1	--	9.8
11...	1209	8.00	155	8.0	4.1	--	9.8
AUG							
04...	1218	--	--	--	--	54.0	--
04...	1219	.000	254	8.0	21.3	--	7.7
04...	1220	2.00	254	8.0	21.2	--	7.7
04...	1221	4.00	256	8.0	20.8	--	7.7
04...	1222	5.00	268	8.0	20.4	--	7.0

ELKHEAD RESERVOIR NEAR CRAIG, CO--Continued

WATER-QUALITY RECORDS

403506107214500 ELKHEAD RESERVOIR SITE 1B

LOCATION.--Lat 40°35'06", long 107°21'45", in NE$^{1}/_{4}$NW$^{1}/_{4}$, sec.10, T.7 N., R.89 W., Routt County, Hydrological Unit 14050001, approximately 200 ft from southeast shore in transect approximately 3.2 mi upstream from Elkhead Dam.

PERIOD OF RECORD.--July 1995 to August 1999 (discontinued).

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	SAMPLING DEPTH (FEET) (00003)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	TRANSPARENCY (SECCHI DISK) (IN) (00077)	OXYGEN, DISSOLVED (MG/L) (00300)
OCT							
21...	1319	--	--	--	--	66.0	--
21...	1320	.000	332	8.2	10.7	--	6.8
21...	1321	2.00	332	8.2	10.6	--	7.2
21...	1322	4.00	331	8.1	10.5	--	7.1
21...	1323	6.00	338	8.1	10.2	--	7.0
21...	1324	8.00	339	8.2	10.0	--	7.1
21...	1325	10.0	350	8.2	9.9	--	7.3
21...	1326	12.0	449	8.3	9.3	--	7.9
21...	1327	14.0	474	8.3	9.2	--	8.0
21...	1328	14.5	475	8.3	9.1	--	8.0
21...	1345	2.00	--	--	--	--	--
21...	1400	12.0	--	--	--	--	--
MAY							
11...	1126	--	--	--	--	6.00	--
11...	1127	.000	148	8.0	5.5	--	9.5
11...	1128	3.00	147	8.0	4.7	--	9.4
11...	1129	6.00	144	8.0	4.4	--	9.4
11...	1130	9.00	143	8.0	4.3	--	9.4
11...	1131	12.0	138	8.0	4.6	--	9.4
11...	1132	15.0	136	8.0	4.8	--	9.4
11...	1133	16.0	136	8.0	4.8	--	9.4
11...	1135	--	--	--	--	--	--
11...	1145	12.0	--	--	--	--	--
11...	1200	3.00	--	--	--	--	--
AUG							
04...	1225	--	--	--	--	54.0	--
04...	1226	.000	254	8.0	21.5	--	7.7
04...	1227	2.00	253	8.0	21.1	--	7.7
04...	1228	4.00	252	8.0	20.7	--	7.6
04...	1229	6.00	254	8.0	20.7	--	7.6
04...	1230	8.00	259	8.0	20.6	--	7.5
04...	1231	10.0	270	7.9	20.4	--	7.0
04...	1232	12.0	283	7.8	20.2	--	6.4
04...	1233	13.0	287	7.7	20.0	--	6.1
04...	1240	2.0	--	--	--	--	--
04...	1250	10.0	--	--	--	--	--

DATE	TIME	SAMPLING DEPTH (FEET) (00003)	NITROGEN, NITRITE DISSOLVED (MG/L AS N) (00613)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	NITROGEN,AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN,AMMONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOSPHORUS TOTAL (MG/L AS P) (00665)	PHOSPHORUS DISSOLVED (MG/L AS P) (00666)	PHOSPHORUS ORTHO, DISSOLVED (MG/L AS P) (00671)	CHLOR-A PHYTOPLANKTON CHROMO FLUOROM (UG/L) (70953)	CHLOR-B PHYTOPLANKTON CHROMO FLUOROM (UG/L) (70954)
OCT												
21...	1345	2.00	.002	.015	.038	.4	.3	.015	.007	.001	1.2	<.1
21...	1400	12.0	.002	.027	.020	.5	.3	.063	.007	.001	--	--
MAY												
11...	1145	12.0	.002	.115	.011	.83	.33	.292	.014	.006	E.330	<.100
11...	1200	3.00	.002	.119	.007	.73	.31	.194	.014	.008	E.140	<.100
AUG												
04...	1240	2.0	.001	<.005	.005	.4	.2	.016	.004	.001	E1.0	<.1
04...	1250	10.0	.001	<.005	.006	.4	.2	.023	.004	<.001	--	--

E Estimated.

ELKHEAD RESERVOIR NEAR CRAIG, CO--Continued

WATER-QUALITY RECORDS

403439107223800 ELKHEAD RESERVOIR SITE 2A

LOCATION.--Lat 40°34'39", long 107°22'38", in $NE^{1}/_{4}SE^{1}/_{4}$, sec.9, T.7 N., R.89 W., Moffat County, Hydrological Unit 14050001, approximately 60 ft from northwest shore in transect approximately 1.5 mi upstream from Elkhead Dam.

PERIOD OF RECORD.--July 1995 to August 1999 (discontinued).

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	SAMPLING DEPTH (FEET) (00003)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	TRANSPARENCY (SECCHI DISK) (IN) (00077)	OXYGEN, DISSOLVED (MG/L) (00300)
OCT							
21...	1138	--	--	--	--	72.0	--
21...	1139	.000	305	7.9	10.5	--	6.1
21...	1140	3.00	305	7.9	10.5	--	6.1
21...	1141	6.00	304	7.9	10.2	--	6.1
21...	1142	9.00	304	7.9	10.1	--	6.0
21...	1143	12.0	305	7.9	10.1	--	6.0
21...	1144	15.0	306	7.9	10.1	--	6.0
21...	1145	18.0	306	7.9	10.1	--	6.0
21...	1146	21.0	308	7.9	10.1	--	5.9
MAY							
11...	1341	--	--	--	--	6.00	--
11...	1342	.000	216	8.0	7.6	--	9.0
11...	1343	3.00	206	8.0	7.1	--	9.0
11...	1344	6.00	192	8.0	7.1	--	8.9
11...	1345	9.00	190	8.0	7.1	--	8.8
11...	1346	12.0	181	8.0	7.1	--	8.8
11...	1347	15.0	172	8.0	7.0	--	8.8
11...	1348	18.0	169	8.0	7.0	--	8.8
11...	1349	21.0	163	8.0	6.8	--	8.8
11...	1350	24.0	159	8.0	6.8	--	8.8
11...	1351	26.0	154	8.0	6.5	--	8.9
AUG							
04...	1048	--	--	--	--	84.0	--
04...	1049	.000	230	8.0	20.8	--	7.8
04...	1050	3.00	230	8.0	20.7	--	7.8
04...	1051	6.00	230	8.0	20.7	--	7.6
04...	1052	9.00	231	8.0	20.6	--	7.5
04...	1053	12.0	233	7.9	20.3	--	7.0
04...	1054	15.0	229	7.5	19.8	--	5.5
04...	1055	17.0	222	7.2	18.5	--	3.4

ELKHEAD RESERVOIR NEAR CRAIG, CO--Continued

WATER-QUALITY RECORDS

403437107223300 ELKHEAD RESERVOIR SITE 2B

LOCATION.--Lat 40°34'37", long 107°22'33", in NE$^{1}/_{4}$SE$^{1}/_{4}$, sec.9, T.7 N., R.89 W., Moffat County, Hydrological Unit 14050001, approximate center of transect approximately 1.5 mi upstream from Elkhead Dam.

PERIOD OF RECORD.--July 1995 to August 1999 (discontinued).

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	SAMPLING DEPTH (FEET) (00003)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	TRANSPARENCY (SECCHI DISK) (IN) (00077)	OXYGEN, DISSOLVED (MG/L) (00300)
OCT							
21...	1159	--	--	--	--	66.0	--
21...	1200	.000	307	7.9	10.7	--	6.7
21...	1201	3.00	308	7.9	10.4	--	6.3
21...	1202	6.00	312	7.9	10.2	--	6.2
21...	1203	9.00	313	7.9	10.1	--	6.0
21...	1204	12.0	314	7.9	10.1	--	6.1
21...	1205	15.0	314	8.0	10.0	--	6.1
21...	1206	18.0	314	8.0	10.0	--	6.1
21...	1207	21.0	314	8.0	10.0	--	6.1
21...	1208	24.0	314	8.0	10.0	--	6.0
21...	1209	27.0	314	8.0	10.0	--	6.1
21...	1210	30.0	314	8.0	10.0	--	6.1
21...	1211	33.0	319	8.0	10.0	--	6.1
21...	1212	35.0	332	8.0	10.0	--	5.8
21...	1215	6.00	--	--	--	--	--
21...	1230	33.0	--	--	--	--	--
MAY							
11...	1407	--	--	--	--	6.00	--
11...	1408	.000	219	8.0	7.3	--	9.0
11...	1409	3.00	219	8.0	7.3	--	8.9
11...	1410	6.00	219	8.0	7.2	--	8.9
11...	1411	9.00	215	8.0	7.2	--	8.9
11...	1412	12.0	200	8.0	7.2	--	8.8
11...	1413	15.0	207	8.0	6.9	--	8.8
11...	1414	18.0	198	8.0	6.8	--	8.8
11...	1415	21.0	181	8.0	6.9	--	8.8
11...	1416	24.0	173	8.0	6.9	--	8.8
11...	1417	27.0	151	8.0	5.8	--	8.9
11...	1418	30.0	147	8.0	5.4	--	9.0
11...	1419	33.0	145	8.0	5.2	--	9.1
11...	1420	33.0	--	--	--	--	--
11...	1421	36.0	144	8.0	5.2	--	9.1
11...	1422	37.0	144	8.0	5.2	--	9.1
11...	1430	3.00	--	--	--	--	--
AUG							
04...	1115	--	--	--	--	102	--
04...	1116	.000	231	8.0	20.8	--	7.8
04...	1117	3.00	231	8.0	20.7	--	7.8
04...	1118	6.00	233	8.0	20.6	--	7.8
04...	1119	9.00	233	8.0	20.6	--	7.6
04...	1120	12.0	235	7.9	20.3	--	7.3
04...	1121	15.0	233	7.5	19.6	--	4.8
04...	1122	18.0	221	7.2	17.6	--	2.2
04...	1123	21.0	205	7.0	15.4	--	2.4
04...	1124	24.0	202	7.0	14.0	--	2.5
04...	1125	27.0	202	6.9	12.2	--	2.5
04...	1126	30.0	198	6.9	11.4	--	2.7
04...	1127	33.0	199	6.9	10.6	--	2.4
04...	1128	36.0	199	6.8	10.0	--	2.3
04...	1129	39.0	199	6.8	9.7	--	2.5
04...	1130	42.0	199	6.8	9.5	--	2.5
04...	1135	3.00	--	--	--	--	--
04...	1150	39.0	--	--	--	--	--

DATE	TIME	SAMPLING DEPTH (FEET) (00003)	NITROGEN, NITRITE DISSOLVED (MG/L AS N) (00613)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	NITROGEN,AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN,AMMONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOSPHORUS TOTAL (MG/L AS P) (00665)	PHOSPHORUS DISSOLVED (MG/L AS P) (00666)	PHOSPHORUS ORTHO, DISSOLVED (MG/L AS P) (00671)	CHLOR-A PHYTOPLANKTON CHROMO FLUOROM (UG/L) (70953)	CHLOR-B PHYTOPLANKTON CHROMO FLUOROM (UG/L) (70954)
OCT												
21...	1215	6.00	.002	.027	.016	.5	.4	.015	.006	.001	1.2	<.1
21...	1230	33.0	.001	.018	.043	--	.3	.018	.006	.001	.8	<.1
MAY												
11...	1420	33.0	.002	.095	.007	.8	.3	.25	.014	.007	E.3	<.1
11...	1430	3.00	.002	.075	.007	.6	.3	.13	.013	.006	E.3	<.1
AUG												
04...	1135	3.00	.001	<.005	.003	.4	.2	.016	<.004	.001	E.9	<.1
04...	1150	39.0	.002	.16	.013	.5	.2	.073	.01	.004	E.2	<.1

E Estimated.

ELKHEAD RESERVOIR NEAR CRAIG, CO--Continued

WATER-QUALITY RECORDS

403435107222900 ELKHEAD RESERVOIR SITE 2C

LOCATION.--Lat 40°34'35", long 107°22'29", in $NE^{1}/_{4}SE^{1}/_{4}$, sec.9, T.7 N., R.89 W., Moffat County, Hydrological Unit 14050001, approximately 30 ft from southeast shore in transect approximately 1.5 mi upstream from Elkhead Dam.

PERIOD OF RECORD.--July 1995 to August 1999 (discontinued).

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	SAMPLING DEPTH (FEET) (00003)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	TRANSPARENCY (SECCHI DISK) (IN) (00077)	OXYGEN, DISSOLVED (MG/L) (00300)
OCT							
21...	1119	--	--	--	--	72.0	--
21...	1120	.000	309	7.7	10.3	--	6.2
21...	1121	3.00	309	7.8	10.3	--	6.2
21...	1122	6.00	309	7.8	10.2	--	6.3
21...	1123	9.00	311	7.9	10.1	--	6.2
21...	1124	12.0	312	7.9	10.1	--	6.2
21...	1125	15.0	313	7.9	10.1	--	6.2
21...	1126	18.0	313	7.9	10.1	--	6.2
21...	1127	21.0	313	7.9	10.1	--	6.2
21...	1128	24.0	313	7.9	10.0	--	6.2
21...	1129	27.0	313	7.9	10.0	--	6.1
21...	1130	30.0	313	7.9	10.0	--	6.2
21...	1131	32.0	332	7.9	10.0	--	5.8
MAY							
11...	1353	--	--	--	--	6.00	--
11...	1354	.000	220	8.0	8.0	--	8.9
11...	1355	3.00	220	8.0	7.5	--	8.9
11...	1356	6.00	219	8.0	7.4	--	8.9
11...	1357	9.00	218	8.0	7.4	--	8.9
11...	1358	12.0	215	8.0	7.3	--	8.9
11...	1359	15.0	212	8.0	7.2	--	8.8
11...	1400	18.0	209	8.0	7.1	--	8.8
11...	1401	21.0	209	8.0	6.9	--	8.8
11...	1402	24.0	213	8.0	6.7	--	8.8
11...	1403	27.0	175	8.0	6.6	--	8.8
11...	1404	30.0	144	8.0	5.7	--	8.8
11...	1405	33.0	142	8.0	5.6	--	9.0
11...	1406	36.0	142	8.0	5.6	--	9.0
11...	1407	39.0	141	8.0	5.5	--	9.0
11...	1408	42.0	142	8.0	5.6	--	9.0
11...	1409	43.0	142	8.0	5.6	--	9.0
AUG							
04...	1102	--	--	--	--	90.0	--
04...	1103	.000	233	8.0	20.8	--	7.7
04...	1104	3.00	233	8.0	20.8	--	7.6
04...	1105	6.00	233	8.0	20.7	--	7.6
04...	1106	9.00	232	7.9	20.6	--	7.5
04...	1107	12.0	233	7.8	20.3	--	7.2
04...	1108	15.0	231	7.5	19.5	--	4.7
04...	1109	18.0	221	7.2	17.6	--	2.3
04...	1110	21.0	208	7.0	15.6	--	2.1
04...	1111	24.0	203	7.0	14.2	--	2.3
04...	1112	27.0	199	6.9	13.0	--	2.6
04...	1113	30.0	197	6.9	11.7	--	2.9

ELKHEAD RESERVOIR NEAR CRAIG, CO--Continued

WATER-QUALITY RECORDS

403336107230700 ELKHEAD RESERVOIR SITE 3A

LOCATION.--Lat 40°33'36", long 107°23'07", in $SE^{1}/_{4}SW^{1}/_{4}$, sec.16, T.7 N., R.89 W., Moffat County, Hydrological Unit 14050001, approximately 60 ft from northwest shore in transect approximately 800 ft upstream from Elkhead Dam.

PERIOD OF RECORD.--July 1995 to August 1999 (discontinued).

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	SAMPLING DEPTH (FEET) (00003)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	TRANSPARENCY (SECCHI DISK) (IN) (00077)	OXYGEN, DISSOLVED (MG/L) (00300)
OCT							
21...	0919	--	--	--	--	66.0	--
21...	0920	.000	296	7.5	10.1	--	5.3
21...	0921	3.00	296	7.6	10.1	--	5.5
21...	0922	6.00	296	7.6	10.1	--	5.7
21...	0923	9.00	296	7.6	10.1	--	5.8
21...	0924	12.0	296	7.6	10.1	--	6.3
21...	0925	15.0	296	7.7	10.1	--	6.3
21...	0926	17.0	296	7.7	10.1	--	6.0
MAY							
11...	0936	--	--	--	--	6.00	--
11...	0937	.000	262	8.3	6.7	--	8.9
11...	0938	3.00	261	8.0	6.4	--	8.8
11...	0939	6.00	261	7.9	6.4	--	8.8
11...	0940	9.00	261	7.9	6.4	--	8.8
11...	0941	12.0	261	7.9	6.4	--	8.8
11...	0942	15.0	260	7.9	6.4	--	8.8
11...	0943	18.0	259	7.9	6.4	--	8.8
11...	0944	21.0	258	7.9	6.4	--	8.8
11...	0945	24.0	258	7.9	6.4	--	8.8
11...	0946	25.0	258	7.9	6.4	--	8.8
AUG							
04...	0840	--	--	--	--	84.0	--
04...	0841	.000	228	7.8	20.6	--	7.4
04...	0842	3.00	228	7.8	20.6	--	7.4
04...	0843	6.00	228	7.8	20.6	--	7.4
04...	0844	9.00	228	7.8	20.6	--	7.4
04...	0845	12.0	229	7.8	20.6	--	7.4
04...	0846	15.0	228	7.7	20.4	--	7.1
04...	0847	18.0	220	7.4	19.0	--	4.9
04...	0848	21.0	199	7.0	15.4	--	3.4
04...	0849	24.0	192	6.9	13.4	--	4.1
04...	0850	27.0	189	6.9	12.2	--	4.5
04...	0851	30.0	188	6.9	11.0	--	5.0
04...	0852	33.0	191	6.9	10.0	--	5.3
04...	0853	36.0	192	6.9	9.6	--	5.4

ELKHEAD RESERVOIR NEAR CRAIG, CO--Continued

WATER-QUALITY RECORDS

403333107230100 ELKHEAD RESERVOIR SITE 3B

LOCATION.--Lat 40°33'33", long 107°23'01", in $SE^{1}/_{4}SW^{1}/_{4}$, sec.16, T.7 N., R.89 W., Moffat County, Hydrological Unit 14050001, approximately center of transect approximately 800 ft upstream from Elkhead Dam.

PERIOD OF RECORD.--July 1995 to August 1999 (discontinued).

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	SAMPLING DEPTH (FEET) (00003)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	TRANSPARENCY (SECCHI DISK) (IN) (00077)	OXYGEN, DISSOLVED (MG/L) (00300)
OCT							
21...	0949	--	--	--	--	66.0	--
21...	0950	.000	294	7.8	10.2	--	5.3
21...	0951	3.00	295	7.8	10.2	--	5.4
21...	0952	6.00	295	7.8	10.1	--	5.4
21...	0953	9.00	295	7.8	10.1	--	5.3
21...	0954	12.0	295	7.8	10.1	--	5.3
21...	0955	15.0	295	7.8	10.1	--	5.2
21...	0956	18.0	295	7.8	10.1	--	5.3
21...	0957	21.0	295	7.8	10.1	--	5.3
21...	0958	24.0	295	7.8	10.1	--	5.3
21...	0959	27.0	295	7.8	10.1	--	5.3
21...	1000	30.0	295	7.8	10.1	--	5.3
21...	1001	33.0	295	7.8	10.1	--	5.3
21...	1002	36.0	295	7.8	10.1	--	5.3
21...	1003	39.0	294	7.8	10.1	--	5.2
21...	1004	42.0	294	7.7	10.1	--	5.2
21...	1005	45.0	294	7.7	10.1	--	5.2
21...	1006	48.0	294	7.7	10.1	--	5.1
21...	1007	51.0	293	7.7	10.1	--	5.0
21...	1008	54.0	292	7.7	10.1	--	4.8
21...	1009	57.0	288	7.6	10.0	--	4.6
21...	1010	6.00	--	--	--	--	--
21...	1040	51.0	--	--	--	--	--
MAY							
11...	1004	--	--	--	--	6.00	--
11...	1005	.000	257	7.9	6.8	--	9.0
11...	1006	3.00	258	7.9	6.5	--	8.9
11...	1007	6.00	259	7.9	6.4	--	8.9
11...	1008	9.00	258	7.9	6.4	--	8.9
11...	1009	12.0	258	7.9	6.4	--	8.8
11...	1010	15.0	259	7.9	6.4	--	8.8
11...	1011	18.0	261	7.9	6.4	--	8.8
11...	1012	21.0	261	7.9	6.4	--	8.8
11...	1013	24.0	261	7.9	6.4	--	8.8
11...	1014	27.0	263	7.9	6.4	--	8.8
11...	1015	30.0	265	7.9	6.4	--	8.8
11...	1016	33.0	266	7.9	6.4	--	8.8
11...	1017	36.0	270	7.9	6.4	--	8.8
11...	1018	39.0	274	7.9	6.4	--	8.7
11...	1019	42.0	277	7.9	6.5	--	8.7
11...	1020	45.0	279	7.9	6.5	--	8.7
11...	1021	48.0	287	7.9	6.4	--	8.7
11...	1022	51.0	289	7.9	6.4	--	8.6
11...	1023	54.0	299	7.9	6.4	--	8.6
11...	1024	57.0	300	7.9	6.4	--	8.6
11...	1025	60.0	301	7.9	6.3	--	8.5
11...	1026	62.0	302	7.9	6.3	--	8.4
11...	1030	57.0	--	--	--	--	--
11...	1045	3.00	--	--	--	--	--
AUG							
04...	0924	--	--	--	--	84.0	--
04...	0925	.000	229	7.9	20.6	--	7.3
04...	0926	3.00	229	7.9	20.6	--	7.3
04...	0927	6.00	229	7.9	20.5	--	7.3
04...	0928	9.00	229	7.9	20.5	--	7.3
04...	0929	12.0	229	7.9	20.5	--	7.3
04...	0930	15.0	229	7.9	20.5	--	7.3
04...	0931	18.0	218	7.4	19.0	--	4.7
04...	0932	21.0	202	7.2	15.6	--	3.7
04...	0933	24.0	194	7.1	13.9	--	3.8
04...	0934	27.0	191	7.1	12.1	--	4.3
04...	0935	30.0	190	7.1	10.6	--	5.3
04...	0936	33.0	190	7.0	9.8	--	5.6
04...	0937	36.0	192	7.0	9.4	--	5.6
04...	0938	39.0	192	7.0	9.2	--	5.8
04...	0939	42.0	193	7.0	9.1	--	5.8
04...	0940	45.0	194	7.0	8.8	--	6.1
04...	0941	48.0	197	7.0	8.5	--	5.4
04...	0942	51.0	197	7.0	8.4	--	5.2
04...	0943	54.0	199	7.0	8.3	--	4.9
04...	0944	57.0	200	6.9	8.2	--	4.5
04...	0950	3.00	--	--	--	--	--
04...	1015	51.0	--	--	--	--	--

ELKHEAD RESERVOIR NEAR CRAIG, CO--Continued

403333107230100 ELKHEAD RESERVOIR SITE 3B--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	SAMPLING DEPTH (FEET) (00003)	NITROGEN, NITRITE DISSOLVED (MG/L AS N) (00613)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	NITROGEN,AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN,AMMONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOSPHORUS TOTAL (MG/L AS P) (00665)	PHOSPHORUS DISSOLVED (MG/L AS P) (00666)	PHOSPHORUS ORTHO, DISSOLVED (MG/L AS P) (00671)	CHLOR-A PHYTOPLANKTON CHROMO FLUOROM (UG/L) (70953)	CHLOR-B PHYTOPLANKTON CHROMO FLUOROM (UG/L) (70954)
OCT												
21...	1010	6.00	.002	.045	.011	.3	.3	.015	.008	.001	.420	<.100
21...	1040	51.0	.003	.045	.013	.3	.3	.015	.007	.001	--	--
MAY												
11...	1030	57.0	.003	.095	.013	.6	.4	.094	.013	.006	E.1	<.1
11...	1045	3.00	.002	.085	.010	.6	.3	.11	.012	.006	E.2	<.1
AUG												
04...	0950	3.00	.001	<.005	.021	.7	.6	.039	.028	.025	E.6	<.1
04...	1015	51.0	.001	.17	.004	.4	.2	.064	.014	.009	<.1	<.1

E Estimated.

ELKHEAD RESERVOIR NEAR CRAIG, CO--Continued

WATER-QUALITY RECORDS

403331107225500 ELKHEAD RESERVOIR SITE 3C

LOCATION.--Lat 40°33'31", long 107°22'55", in $SE^{1}/_{4}SW^{1}/_{4}$, sec.16, T.7 N., R.89 W., Moffat County, Hydrological Unit 14050001, approximately 40 ft from southeast shore in transect approximately 800 ft upstream from Elkhead Dam.

PERIOD OF RECORD.--July 1995 to August 1999 (discontinued).

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	SAMPLING DEPTH (FEET) (00003)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	TRANSPARENCY (SECCHI DISK) (IN) (00077)	OXYGEN, DISSOLVED (MG/L) (00300)
OCT							
21...	0928	--	--	--	--	66.0	--
21...	0929	.000	295	7.8	10.1	--	5.4
21...	0930	3.00	295	7.8	10.2	--	5.4
21...	0931	6.00	295	7.7	10.1	--	5.4
21...	0932	9.00	295	7.7	10.1	--	5.4
21...	0933	12.0	295	7.7	10.1	--	5.2
21...	0934	15.0	295	7.7	10.1	--	5.2
21...	0935	18.0	295	7.7	10.1	--	5.3
21...	0936	21.0	295	7.7	10.1	--	5.3
21...	0937	24.0	295	7.7	10.1	--	5.3
21...	0938	27.0	295	7.7	10.1	--	5.3
21...	0939	30.0	295	7.7	10.1	--	5.2
21...	0940	33.0	295	7.7	10.1	--	5.2
21...	0941	36.0	295	7.7	10.1	--	5.2
21...	0942	39.0	295	7.7	10.1	--	5.2
21...	0943	42.0	295	7.7	10.1	--	5.3
21...	0944	45.0	295	7.7	10.1	--	5.2
21...	0945	48.0	295	7.8	10.1	--	5.3
21...	0946	51.0	295	7.7	10.1	--	5.3
21...	0947	54.0	295	7.7	10.1	--	5.3
21...	0948	57.0	295	7.7	10.1	--	5.3
MAY							
11...	0949	--	--	--	--	6.00	--
11...	0950	.000	259	7.9	6.8	--	8.9
11...	0951	3.00	260	7.9	6.4	--	8.9
11...	0952	6.00	261	7.9	6.4	--	8.9
11...	0953	9.00	262	7.9	6.4	--	8.8
11...	0954	12.0	263	7.9	6.4	--	8.8
11...	0955	15.0	264	7.9	6.4	--	8.8
11...	0956	18.0	265	7.9	6.4	--	8.8
11...	0957	21.0	268	7.9	6.3	--	8.8
11...	0958	24.0	275	7.9	6.4	--	8.8
11...	0959	27.0	279	7.9	6.4	--	8.7
11...	1000	30.0	282	7.9	6.4	--	8.7
11...	1001	33.0	283	7.9	6.4	--	8.7
11...	1002	36.0	283	7.9	6.4	--	8.7
11...	1003	39.0	282	7.9	6.4	--	8.7
AUG							
04...	0910	--	--	--	--	96.0	--
04...	0911	.000	229	7.9	20.6	--	7.2
04...	0912	3.00	229	7.9	20.6	--	7.2
04...	0913	6.00	229	7.9	20.6	--	7.2
04...	0914	9.00	229	7.9	20.6	--	7.3
04...	0915	12.0	229	7.9	20.6	--	7.3
04...	0916	15.0	229	7.9	20.6	--	7.2
04...	0917	18.0	213	7.4	18.7	--	4.4
04...	0918	21.0	200	7.2	15.5	--	3.7
04...	0919	24.0	196	7.1	14.2	--	3.7
04...	0920	27.0	190	7.0	12.6	--	4.2
04...	0921	28.0	190	7.0	12.2	--	4.3

09246400 ELKHEAD CREEK BELOW MAYNARD GULCH, NEAR CRAIG, CO

LOCATION.--Lat 40°32'31", long 107°23'50", in $SW^1/_4SE^1/_4$ sec.20, T.7 N., R.89 W., Moffat County, Hydrologic Unit 14050001, on left bank 2.0 mi downstream from Maynard Gulch, and 8.5 mi northeast of Craig.

DRAINAGE AREA.--212 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1995 to current year.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 6,280 ft above sea level, from topographic map.

REMARKS.--Record good except for estimated daily discharges, which are poor. Natural flow affected by diversions for irrigation of several hundred acres upstream from station and storage in Elkhead Reservoir.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.1	21	15	e9.2	e7.0	16	141	689	483	27	7.5	8.2
2	3.4	19	14	e10	e9.8	17	125	644	415	27	6.8	8.6
3	3.6	20	13	e7.6	e9.4	18	107	578	408	30	5.9	14
4	6.5	20	12	e7.2	13	18	88	511	374	23	4.5	16
5	10	19	13	e8.2	15	19	84	403	328	21	4.2	15
6	12	19	e7.4	e11	16	18	74	331	304	13	3.8	13
7	12	18	e5.8	e11	14	17	71	315	372	9.4	4.2	8.9
8	11	17	e6.6	e12	14	19	95	406	301	13	4.5	6.2
9	10	17	e7.2	e8.2	14	19	104	708	258	17	3.0	4.9
10	9.7	14	e8.0	e8.6	17	20	99	938	224	14	2.3	4.3
11	9.0	12	e6.4	e9.0	e11	21	94	577	202	12	2.8	4.3
12	8.4	14	e6.6	e9.0	e8.2	21	113	414	176	8.7	3.0	3.9
13	8.0	14	e7.2	10	e7.4	23	147	406	147	7.9	3.3	3.6
14	8.1	13	e8.0	21	e8.2	23	210	525	131	11	3.2	3.2
15	7.5	14	e8.4	17	e11	28	199	618	135	17	2.9	3.3
16	7.3	14	e8.6	15	e11	36	156	564	154	20	2.5	2.9
17	8.5	14	e8.8	14	e11	46	121	485	140	21	2.4	2.9
18	6.6	15	e9.8	11	e12	57	111	479	161	18	2.4	3.0
19	7.2	15	e9.0	13	e12	70	150	658	136	14	2.3	3.2
20	7.4	14	e5.2	12	e13	88	283	795	110	12	2.0	3.4
21	7.7	12	e4.4	13	e11	117	442	867	90	11	3.3	3.6
22	8.4	12	e3.6	15	e12	124	406	852	77	8.7	4.3	3.6
23	9.9	12	e2.6	12	e12	121	328	864	70	8.0	3.9	3.9
24	11	13	e3.0	14	13	124	278	822	61	7.0	4.1	4.7
25	12	11	e3.6	16	14	132	550	737	53	6.8	3.9	4.4
26	13	11	e6.8	15	14	166	556	663	44	5.3	3.4	4.8
27	13	12	e8.2	13	14	180	525	624	39	4.7	3.4	3.5
28	20	12	e8.4	e10	15	142	502	589	34	5.9	4.0	3.7
29	27	13	e11	e6.8	---	100	522	560	31	5.5	5.7	3.0
30	27	15	e11	e6.2	---	96	902	589	29	6.1	8.4	2.6
31	24	---	e11	e6.2	---	131	---	561	---	6.3	8.8	---
TOTAL	332.3	446	253.6	351.2	339.0	2027	7583	18772	5487	411.3	126.7	170.6
MEAN	10.7	14.9	8.18	11.3	12.1	65.4	253	606	183	13.3	4.09	5.69
MAX	27	21	15	21	17	180	902	938	483	30	8.8	16
MIN	3.1	11	2.6	6.2	7.0	16	71	315	29	4.7	2.0	2.6
AC-FT	659	885	503	697	672	4020	15040	37230	10880	816	251	338

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 1999, BY WATER YEAR (WY)

MEAN	14.6	19.0	17.3	19.0	20.3	101	408	883	233	20.7	7.25	9.06
MAX	39.3	33.2	29.8	29.6	32.0	169	503	1224	362	39.3	13.6	32.0
(WY)	1998	1998	1998	1998	1998	1998	1998	1997	1997	1998	1997	1997
MIN	2.56	13.8	8.18	11.3	12.1	53.6	253	606	120	8.11	2.59	2.19
(WY)	1997	1997	1999	1999	1999	1996	1999	1999	1996	1996	1996	1996

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1995 - 1999	
ANNUAL TOTAL	61840.2		36299.7			
ANNUAL MEAN	169		99.5		147	
HIGHEST ANNUAL MEAN					192	1997
LOWEST ANNUAL MEAN					99.5	1999
HIGHEST DAILY MEAN	1870	May 4	938	May 10	1870	May 4 1998
LOWEST DAILY MEAN	2.0	Sep 9	2.0	Aug 20	1.4	Sep 2 1996
ANNUAL SEVEN-DAY MINIMUM	2.4	Sep 4	2.5	Aug 14	1.5	Aug 29 1996
INSTANTANEOUS PEAK FLOW			1120	May 10	2430	May 8 1997
INSTANTANEOUS PEAK STAGE			4.82	May 10	a6.83	May 8 1997
ANNUAL RUNOFF (AC-FT)	122700		72000		106400	
10 PERCENT EXCEEDS	569		407		484	
50 PERCENT EXCEEDS	29		13		19	
90 PERCENT EXCEEDS	3.7		3.8		3.0	

e Estimated
a Maximum gage height 8.00 ft, Dec 29, 1996, backwater from ice.

09246400 ELKHEAD CREEK BELOW MAYNARD GULCH, NEAR CRAIG, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--July 1995 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: August 1995 to September 1999 (discontinued).
WATER TEMPERTURE: August 1995 to September 1999 (discontinued).

REMARKS.--Published daily specific-conductance records are excellent except for Oct 1-21, Dec 7-10, 12-16, 18, Jan 13-17, 22-24, Feb 1, 10-12, 18, Mar 17- Apr 15, May 27 - June 22, July 13 - Aug 4, which are good. Published daily water-temperature records are excellent except for periods Oct 1 - 21, and June 10-22 which are good. Periods of missing or deleted record are due to sensor fouling.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum recorded, 588 microsiemens, Apr. 11, 1998: minimum recorded, 126 microsiemens, May 19, 1996.
WATER TEMPERATURE: Maximum recorded, 31.3°C, July 24, 1996: minimum recorded, 0.0°C, on many days during winter period.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 586 microsiemens, Apr. 3; minimum, 116 microsiemens, May 26.
WATER TEMPERATURE: Maximum, 28.7°C, July 7, 27; minimum, 0.0°C, on many days during winter period.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML) (31633)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)
OCT												
21...	1555	7.7	396	8.4	10.4	6.1	10.2	K3	K20	150	35	14
NOV												
11...	1130	11	381	8.3	3.8	4.2	10.8	--	--	140	34	14
DEC												
08...	1640	7.2	424	8.3	.2	3.6	11.9	--	--	160	38	15
JAN												
26...	1320	16	403	8.4	2.5	2.9	11.2	--	--	150	37	15
FEB												
25...	1040	14	448	8.4	2.0	2.7	11.2	--	--	160	39	16
MAR												
17...	1510	43	408	8.2	8.7	3.1	10.7	<1	K1	150	36	15
APR												
15...	1420	197	535	8.4	6.1	13	11.3	--	--	190	45	20
MAY												
13...	1340	413	259	8.2	7.5	100	10.6	--	--	98	24	9.5
JUN												
07...	1750	347	161	8.1	13.7	140	9.6	K25	>80	65	17	5.6
JUL												
13...	1455	7.5	248	8.5	27.4	7.7	7.7	--	--	96	24	8.7
AUG												
04...	1600	4.3	276	8.5	23.9	10	8.4	K14	K11	100	26	9.5
SEP												
09...	1045	5.1	275	8.4	15.0	9.8	8.6	--	--	100	25	9.6

DATE	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	ALKA-LINITY WAT.DIS FET LAB CACO3 (MG/L) (29801)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)
OCT												
21...	26	.9	1.4	--	122	--	68	5.9	.18	9.7	234	.32
NOV												
11...	23	.8	1.5	--	123	--	61	5.1	.14	9.4	221	.30
DEC												
08...	27	.9	1.8	--	136	--	74	6.4	.12	10	255	.35
JAN												
26...	25	.9	1.6	121	--	--	69	5.2	.12	10	241	.33
FEB												
25...	30	1	1.8	136	--	--	79	6.7	.15	10	266	.36
MAR												
17...	26	.9	1.6	--	131	--	68	5.0	.13	9.8	240	.33
APR												
15...	36	1	1.9	--	136	--	130	6.1	.15	9.7	328	.45
MAY												
13...	14	.6	1.5	--	--	70	52	1.8	<.10	8.7	148	.20
JUN												
07...	6.8	.4	.93	53	--	--	21	.95	.11	10	95	.13
JUL												
13...	14	.6	1.1	--	--	85	36	2.3	.11	12	149	.20
AUG												
04...	17	.7	1.2	--	--	91	39	3.0	.10	11	161	.22
SEP												
09...	16	.7	1.3	--	--	98	44	3.2	.11	11	169	.23

K Based on non-ideal colony count.

09246400 ELKHEAD CREEK BELOW MAYNARD GULCH, NEAR CRAIG, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	SOLIDS, DIS-SOLVED (TONS PER DAY) (70302)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)
OCT											
21...	4.89	.010	.057	.021	.30	.22	.010	<.050	.011	6.1	6.1
NOV											
11...	6.69	<.010	.071	<.020	.31	.27	.017	<.050	<.010	--	--
DEC											
08...	4.93	<.010	.080	.020	.25	.24	.014	<.050	.011	--	--
JAN											
26...	10.2	<.010	.084	<.020	.30	.27	.010	.004	<.010	--	--
FEB											
25...	9.85	<.010	.135	<.020	.28	.32	.011	.004	<.010	--	--
MAR											
17...	27.9	<.010	.094	<.020	.29	.24	.013	<.004	<.010	5.7	5.6
APR											
15...	175	<.010	.160	<.020	.44	.28	.041	.006	<.010	--	--
MAY											
13...	165	<.010	.117	.029	.67	.35	.120	.012	.015	--	--
JUN											
07...	91.0	<.010	.093	<.020	.47	.34	.091	.010	.021	6.5	6.2
JUL											
13...	3.01	<.010	<.050	<.020	.31	.30	.023	<.004	<.010	--	--
AUG											
04...	1.88	<.010	<.050	<.020	.45	.23	.026	<.004	<.010	6.8	5.8
SEP											
09...	2.30	<.010	<.050	<.020	.37	.28	.025	.004	<.010	--	--

DATE	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL) (01105)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	ARSENIC TOTAL (UG/L AS AS) (01002)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA) (01007)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)
JUN										
07...	4800	<1	1	28	54	<4.0	<1.0	<1	<1.0	4
AUG										
04...	260	<1	2	42	45	<4.0	<1.0	<1	<1.0	<1

DATE	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO) (01037)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LITHIUM TOTAL RECOV-ERABLE (UG/L AS LI) (01132)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)
JUN										
07...	1	1.4	4	26	2900	<1.0	1	E10	4.0	37
AUG										
04...	<1	1.2	2	12	410	<1.0	<1	<10	12	37

DATE	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO) (01062)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)
JUN										
07...	<.1	<.10	1	4	<1	<1	<1.0	<1	<20	<40
AUG										
04...	<.1	<.10	1	2	<1	1	<1.0	<1	<20	<40

E Estimated.

09246400 ELKHEAD CREEK BELOW MAYNARD GULCH, NEAR CRAIG, CO--Continued

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DISCHARGE, INST. CUBIC FEET PER SECOND (00061)	SEDIMENT, SUSPENDED (MG/L) (80154)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY) (80155)
OCT				
21...	1555	7.7	9	.19
NOV				
11...	1130	11	6	.19
DEC				
08...	1640	7.2	5	.10
JAN				
26...	1320	16	5	.20
FEB				
25...	1040	14	3	.11
MAR				
17...	1510	43	6	.65
APR				
15...	1420	197	17	9.1
MAY				
13...	1340	413	126	141
JUN				
07...	1750	347	67	62
JUL				
13...	1455	7.5	14	.29
AUG				
04...	1600	4.3	12	.14
SEP				
09...	1045	5.1	12	.16

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	516	508	513	330	327	329	368	365	366	388	377	383
2	535	516	523	335	329	333	373	366	368	392	377	385
3	534	513	527	339	334	336	376	369	373	392	379	386
4	513	487	498	346	339	344	382	372	376	388	379	384
5	494	415	464	349	346	348	379	370	374	385	370	379
6	415	363	380	349	344	346	390	361	378	382	371	377
7	363	355	358	351	346	349	399	390	394	388	376	382
8	364	354	359	354	346	350	400	396	399	389	380	385
9	363	359	361	350	345	348	398	388	393	385	376	381
10	364	357	360	358	347	352	402	390	394	380	373	377
11	367	360	364	366	356	360	405	396	401	382	374	379
12	369	359	365	366	359	364	411	394	402	386	380	383
13	378	366	372	361	355	358	407	396	402	388	376	383
14	382	373	378	366	358	363	410	401	406	393	380	388
15	382	374	378	365	360	362	410	402	406	392	385	389
16	387	378	382	361	358	359	410	399	404	396	383	390
17	388	374	380	363	358	360	405	396	400	385	378	383
18	381	374	377	365	360	362	---	393	---	385	380	382
19	395	381	391	361	359	360	396	391	393	380	371	374
20	397	383	388	363	358	361	392	376	387	380	373	378
21	388	378	383	375	361	367	387	375	381	381	370	376
22	378	369	373	378	373	375	406	387	397	379	370	374
23	369	359	363	374	368	372	413	397	405	387	379	385
24	359	353	355	372	367	370	412	405	408	386	368	381
25	355	346	349	376	366	370	406	398	402	378	368	374
26	348	345	346	380	375	377	406	400	403	384	377	381
27	346	343	344	378	376	377	406	396	401	386	382	384
28	344	332	339	378	373	375	405	397	401	398	382	387
29	332	320	325	377	371	374	400	393	397	416	382	396
30	322	319	321	371	366	368	398	391	395	425	382	392
31	327	321	325	---	---	---	399	388	395	401	372	385
MONTH	535	319	385	380	327	359	---	361	---	425	368	383

09246400 ELKHEAD CREEK BELOW MAYNARD GULCH, NEAR CRAIG, CO--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	384	363	373	402	396	400	555	537	546	395	355	376
2	402	371	385	402	395	400	542	517	532	377	345	355
3	386	371	379	398	394	397	586	516	556	351	320	338
4	393	378	385	400	392	397	547	532	541	325	303	313
5	383	372	379	395	391	392	565	525	544	309	288	301
6	382	372	378	396	392	394	576	526	549	302	286	293
7	390	382	387	402	396	400	577	537	553	289	276	285
8	394	388	391	400	395	398	545	534	540	294	267	281
9	400	390	395	402	398	400	558	535	546	293	275	285
10	402	383	390	404	400	402	550	534	544	292	268	280
11	398	378	386	404	400	402	554	537	547	276	254	267
12	401	375	393	411	403	404	555	539	548	270	252	264
13	408	372	382	405	399	402	545	537	541	263	239	253
14	397	376	387	408	400	402	540	515	522	249	237	243
15	395	382	391	411	400	403	515	511	513	239	221	229
16	401	386	394	409	398	403	511	509	510	226	221	223
17	395	386	392	401	391	394	513	507	510	222	217	219
18	398	387	391	396	388	392	513	508	510	218	214	216
19	396	388	393	398	390	393	510	499	505	214	210	211
20	401	390	395	404	394	399	501	466	493	211	200	206
21	402	387	395	413	402	408	503	432	476	202	186	193
22	396	387	392	424	412	419	490	432	477	188	177	183
23	402	390	397	437	424	431	500	477	485	185	161	172
24	405	397	400	446	430	439	480	457	468	181	124	149
25	406	397	402	457	441	450	491	464	482	134	121	125
26	406	398	403	464	450	457	489	462	476	121	116	119
27	405	392	398	470	451	461	462	435	451	132	118	127
28	403	392	398	481	456	466	474	432	450	129	127	127
29	---	---	---	489	457	473	456	422	435	150	127	131
30	---	---	---	557	463	497	423	393	410	174	130	141
31	---	---	---	569	519	541	---	---	---	163	137	140
MONTH	408	363	390	569	388	420	586	393	509	395	116	227

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	139	138	138	217	212	214	288	262	279	269	265	267
2	159	138	142	214	208	212	274	261	267	272	266	269
3	162	140	145	229	208	215	275	264	270	271	253	264
4	156	145	151	232	222	226	280	271	277	256	250	252
5	163	148	153	233	225	228	290	277	282	256	250	253
6	162	155	158	277	227	237	299	290	295	258	252	255
7	161	149	154	269	232	248	307	296	299	266	256	260
8	161	157	159	256	236	242	310	296	302	276	263	269
9	163	159	161	239	234	236	304	292	297	281	268	274
10	164	161	163	250	234	239	314	299	306	294	272	287
11	167	163	165	248	239	243	317	305	309	306	294	301
12	170	165	167	258	243	250	332	309	321	313	305	310
13	170	168	169	257	251	254	330	315	324	318	308	314
14	174	169	171	262	234	256	321	311	317	329	312	322
15	175	169	172	244	235	240	324	310	317	334	322	326
16	171	169	170	235	227	231	321	307	315	340	322	331
17	171	169	170	228	222	226	330	314	323	337	320	329
18	171	168	169	232	222	227	346	324	331	340	326	334
19	174	169	171	243	228	238	348	334	339	352	336	346
20	---	173	---	243	224	238	363	339	348	365	350	358
21	---	---	---	245	228	237	354	332	347	362	348	356
22	---	178	---	252	227	242	351	329	340	357	341	350
23	188	177	184	255	228	242	331	325	328	344	328	338
24	195	186	189	258	233	250	327	303	313	333	324	329
25	201	193	198	271	256	264	309	303	306	328	319	323
26	206	189	197	276	260	272	311	299	305	324	308	320
27	204	199	201	283	272	278	313	301	309	315	302	306
28	206	200	204	291	279	288	317	308	314	325	301	314
29	210	206	208	294	278	286	316	306	311	336	302	316
30	213	209	211	288	281	284	306	273	289	340	332	336
31	---	---	---	290	286	288	273	266	268	---	---	---
MONTH	---	---	---	294	208	246	363	261	308	365	250	307

09246400 ELKHEAD CREEK BELOW MAYNARD GULCH, NEAR CRAIG, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	16.1	12.2	14.2	10.7	7.5	9.0	4.5	2.0	3.5	.0	.0	.0
2	16.8	11.4	13.3	9.3	7.8	8.6	4.4	2.0	3.3	.0	.0	.0
3	13.1	10.4	11.8	8.5	6.2	7.4	4.1	1.7	2.9	.0	.0	.0
4	10.4	6.9	8.5	7.7	4.9	6.3	3.9	1.6	2.6	.0	.0	.0
5	7.6	5.2	6.5	7.7	5.1	6.5	2.0	.0	.9	.0	.0	.0
6	10.9	4.9	7.4	6.7	4.8	6.0	.6	.0	.1	.0	.0	.0
7	14.1	7.9	10.6	6.8	4.6	5.8	.2	.0	.0	.0	.0	.0
8	14.8	9.4	12.0	6.0	4.3	5.2	.1	.0	.0	.0	.0	.0
9	14.7	9.1	11.8	5.0	3.4	4.1	.0	.0	.0	.0	.0	.0
10	14.1	9.2	11.6	3.9	1.9	3.1	.0	.0	.0	.2	.0	.1
11	13.2	8.0	10.5	4.6	2.1	3.4	.0	.0	.0	.6	.1	.4
12	13.3	7.5	10.3	6.8	4.0	5.1	.0	.0	.0	.7	.0	.3
13	13.0	7.6	10.3	6.0	3.2	4.7	.1	.0	.0	.5	.0	.1
14	13.9	9.1	11.5	7.1	4.1	5.6	.1	.0	.0	.0	.0	.0
15	12.8	8.7	10.8	7.0	4.3	5.7	.1	.0	.0	.1	.0	.0
16	10.6	7.4	8.9	6.4	3.8	5.2	.1	.0	.0	.0	.0	.0
17	8.1	5.8	6.8	6.7	4.2	5.4	.1	.0	.0	.1	.0	.0
18	10.2	4.5	7.0	5.3	4.2	4.7	.1	.0	.0	.9	.0	.3
19	10.2	4.4	7.4	4.6	3.2	4.0	.0	.0	.0	1.8	.3	1.1
20	10.4	5.3	7.8	3.9	1.7	2.9	.0	.0	.0	2.1	.8	1.6
21	9.8	4.7	7.7	4.6	2.0	3.2	.0	.0	.0	2.0	.0	.9
22	11.3	7.8	9.4	5.3	2.7	3.9	.0	.0	.0	1.2	.0	.5
23	10.0	7.9	8.8	4.9	2.7	3.7	.0	.0	.0	1.9	.0	1.0
24	10.9	6.4	8.6	3.9	2.4	3.3	.0	.0	.0	1.7	.4	.9
25	10.5	8.1	9.2	3.9	1.0	2.5	.0	.0	.0	2.3	.2	1.3
26	11.1	8.6	9.5	5.1	2.0	3.5	.0	.0	.0	2.8	1.1	1.9
27	9.4	7.8	8.7	5.1	2.4	3.8	.0	.0	.0	2.2	.6	1.4
28	8.7	7.5	8.1	4.8	3.0	4.0	.0	.0	.0	.9	.0	.3
29	9.2	7.0	8.1	5.8	4.2	4.9	.0	.0	.0	.3	.0	.0
30	9.9	7.0	8.7	5.1	2.7	4.0	.0	.0	.0	.2	.0	.0
31	9.0	7.8	8.4	---	---	---	.0	.0	.0	.1	.0	.0
MONTH	16.8	4.4	9.5	10.7	1.0	4.8	4.5	.0	.4	2.8	.0	.4

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	.0	.0	.0	4.8	1.7	3.6	4.3	2.4	3.1	7.6	6.4	6.8
2	.1	.0	.0	5.5	1.5	3.7	5.2	2.1	3.2	7.2	5.6	6.5
3	.6	.0	.2	4.8	.4	3.1	6.2	1.5	3.3	6.7	5.9	6.3
4	1.2	.0	.5	4.7	1.8	2.9	7.0	1.7	3.6	6.5	5.6	6.1
5	2.4	.9	1.7	5.1	.1	2.7	6.9	1.8	3.7	6.8	5.5	5.9
6	3.9	1.3	2.7	5.1	.0	3.0	9.0	1.8	4.7	8.4	5.2	6.4
7	4.0	2.0	3.2	4.8	1.9	3.6	9.5	1.8	4.9	9.2	5.4	6.9
8	4.2	2.0	3.1	6.3	1.1	3.9	4.7	2.6	3.5	8.3	5.9	6.8
9	5.3	2.5	3.8	6.1	1.9	4.3	6.3	1.7	3.6	7.9	6.0	6.9
10	4.1	.0	1.2	6.9	1.4	4.3	8.2	1.8	4.4	7.1	6.2	6.6
11	.5	.0	.1	5.3	1.3	3.8	7.9	2.0	4.6	7.7	5.9	6.6
12	.5	.0	.1	6.3	2.3	4.5	8.2	3.9	5.6	8.8	5.7	6.8
13	1.0	.0	.2	7.1	.2	4.0	8.5	3.4	5.3	7.3	6.2	6.7
14	1.6	.0	.6	8.0	.8	4.8	7.4	4.3	5.3	7.9	6.6	6.9
15	2.6	.3	1.4	7.4	1.2	4.7	6.7	3.6	4.9	8.4	6.6	7.3
16	2.2	.0	1.0	8.3	1.0	4.6	6.6	3.8	4.9	7.6	6.8	7.1
17	1.5	.2	.9	9.1	1.2	4.7	9.7	3.5	6.1	9.6	6.4	7.5
18	2.5	.0	1.1	9.1	1.5	4.6	8.8	3.5	6.0	9.6	6.5	7.7
19	4.3	1.5	2.8	9.2	1.9	4.7	9.2	4.0	6.2	9.7	6.7	7.9
20	3.6	.1	1.9	8.8	2.3	4.7	7.5	5.1	6.0	10.3	6.9	8.8
21	2.9	.0	1.3	7.0	2.9	4.3	7.1	5.0	6.1	11.2	9.6	10.4
22	2.1	.0	1.0	6.3	2.7	4.1	7.9	6.2	6.8	12.0	9.9	10.8
23	3.9	.0	1.8	7.8	2.6	4.5	7.1	5.5	6.3	12.6	10.8	11.6
24	4.1	.5	2.5	8.1	2.8	4.7	8.2	5.7	6.7	13.2	9.8	11.8
25	5.0	.9	3.1	8.1	3.0	4.9	7.1	5.8	6.4	12.6	10.5	11.5
26	3.9	1.8	2.9	6.2	3.4	4.5	6.9	5.9	6.3	12.9	11.6	12.1
27	4.4	.2	2.4	5.2	3.0	4.0	7.9	6.2	6.8	12.9	10.9	12.1
28	5.0	.5	2.9	7.2	2.7	4.3	7.6	6.2	6.7	13.5	11.1	12.3
29	---	---	---	8.6	2.4	4.9	8.1	6.2	7.0	13.3	10.2	11.9
30	---	---	---	8.6	2.6	4.9	7.0	6.4	6.7	13.5	8.6	11.2
31	---	---	---	5.3	2.3	3.4	---	---	---	12.3	9.5	11.2
MONTH	5.3	.0	1.6	9.2	.0	4.2	9.7	1.5	5.3	13.5	5.2	8.6

09246400 ELKHEAD CREEK BELOW MAYNARD GULCH, NEAR CRAIG, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	13.0	10.9	11.7	21.5	16.2	18.9	25.8	17.5	21.3	19.8	17.2	18.2
2	12.7	10.6	11.5	21.4	17.5	19.4	26.6	18.6	22.2	20.8	16.6	18.3
3	13.0	9.6	11.4	22.8	17.2	19.9	23.9	18.6	21.4	19.0	16.0	17.4
4	14.8	10.1	11.8	23.3	15.9	19.9	24.4	18.6	21.1	19.7	14.4	16.9
5	13.7	10.0	11.3	24.6	15.5	20.3	24.1	17.7	20.8	20.0	14.6	17.5
6	13.3	9.9	11.2	26.7	17.8	21.9	25.3	19.2	21.7	20.4	15.1	17.8
7	14.4	10.5	12.0	28.7	21.2	24.6	25.7	18.1	22.0	21.1	15.4	18.0
8	14.5	10.6	12.3	26.4	19.6	21.8	26.1	18.0	22.1	21.0	13.6	17.1
9	15.7	11.1	12.9	24.3	18.6	21.2	25.9	18.4	21.9	20.8	13.3	17.1
10	16.8	12.2	14.3	27.3	20.3	22.9	24.3	18.7	21.2	18.9	15.1	16.8
11	17.2	12.0	14.4	26.3	20.0	22.3	23.2	19.1	20.8	20.1	14.2	17.0
12	18.5	14.4	16.4	27.8	18.6	22.6	22.9	17.2	19.8	20.5	13.5	16.8
13	19.4	15.1	17.1	27.3	18.7	22.6	25.6	16.1	20.7	20.1	12.4	16.1
14	19.6	14.3	16.8	23.0	19.6	20.7	22.8	16.6	19.8	19.4	12.1	15.6
15	17.1	14.0	15.1	24.5	18.7	21.0	22.4	16.4	19.2	16.4	11.6	14.3
16	18.5	13.9	15.9	22.9	19.4	21.2	25.9	16.2	20.9	19.8	10.7	14.9
17	16.5	14.7	15.7	23.2	19.2	21.5	21.5	17.5	19.1	20.4	12.5	15.9
18	18.7	13.9	15.8	23.6	20.0	21.8	24.8	15.4	19.8	20.8	12.7	16.4
19	19.9	14.6	16.7	22.3	19.5	21.0	22.7	17.1	19.9	16.2	13.4	14.7
20	20.7	14.6	17.1	25.2	18.5	21.6	26.9	17.3	21.1	16.1	12.1	13.7
21	20.8	15.2	17.5	26.5	20.3	22.8	22.4	18.2	20.0	17.7	9.9	13.5
22	20.4	14.6	17.1	27.8	20.2	23.4	26.7	17.3	21.5	18.2	10.3	14.1
23	21.5	13.8	17.4	28.6	20.6	24.1	26.8	18.0	22.2	18.5	12.0	15.1
24	22.4	14.2	18.2	27.8	20.8	23.5	26.9	18.3	22.4	16.7	13.3	15.1
25	21.9	15.6	19.0	27.5	19.8	23.1	24.8	19.1	21.6	18.4	12.4	15.3
26	21.1	13.5	17.8	27.3	19.6	23.3	25.5	18.1	21.6	16.5	12.0	13.9
27	20.5	15.5	18.3	28.7	19.5	23.6	23.7	18.1	20.7	14.2	8.3	10.9
28	20.8	14.8	18.2	25.6	20.8	22.9	25.4	18.3	21.4	11.1	7.9	9.3
29	21.1	16.6	19.3	26.8	19.8	22.9	24.5	17.9	21.0	13.0	5.4	9.0
30	20.6	17.6	18.5	24.9	20.0	22.3	23.0	18.4	20.7	14.7	6.5	10.2
31	---	---	---	23.1	19.4	20.9	20.6	18.6	19.6	---	---	---
MONTH	22.4	9.6	15.4	28.7	15.5	21.9	26.9	15.4	21.0	21.1	5.4	15.2
YEAR	28.7	.0	9.1									

09247600 YAMPA RIVER BELOW CRAIG, CO

LOCATION.--Lat 40°28'51", long 107°36'49", in SW$^1/_4$NW$^1/_4$ sec.16, T.6 N., R.91 W., Moffat County, Hydrologic Unit 14050001, on left bank 0.5 mi downstream from state highway 13-789 bridge, and 3.3 mi southwest of Craig.

DRAINAGE AREA.--1,750 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1975 to September 1980 (discharge measurements only). October 1984 to current year.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 6,100 ft above sea level, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Natural flow of stream affected by diversions for irrigation, Colorado Ute Power Plants at Hayden and Craig, transbasin diversions, storage reservoirs, and return flow from irrigated areas.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	185	459	299	e200	e130	e400	1700	4620	8660	2250	788	257
2	210	452	287	e230	e180	e410	1590	4200	6880	2310	692	282
3	271	471	287	e170	e170	e360	1450	3820	6840	2280	585	414
4	371	472	282	e160	e230	e410	1190	3580	7110	2170	505	476
5	420	440	272	e180	e220	e250	1080	3030	6600	2010	454	437
6	392	405	181	e240	e240	e250	1020	2590	5700	1680	475	388
7	367	409	e130	e250	e250	e300	1040	2370	5290	1470	514	320
8	321	405	e150	e260	e270	e360	1370	2500	5260	1380	497	280
9	334	407	e170	e220	e250	e320	1500	3260	5770	1610	429	271
10	362	382	e180	e220	e280	e370	1250	4280	5980	1350	391	267
11	368	356	e140	e240	e200	e340	1120	3830	5750	1110	391	268
12	339	382	e150	e250	e150	e380	1070	3010	5500	978	395	269
13	307	401	e170	e250	e130	e320	1270	2700	5230	862	354	280
14	297	363	e180	e220	e150	e370	1640	3000	4900	793	341	265
15	304	338	e190	e210	e190	e460	1780	3560	5120	866	312	251
16	311	339	e190	e240	e210	534	1490	3210	5520	1140	282	234
17	290	335	e200	e220	e200	651	1260	3060	5310	996	285	224
18	288	317	e220	e220	e210	718	1160	2950	5900	921	291	303
19	274	337	e200	e260	e220	828	1270	3430	5690	853	277	354
20	257	322	e120	e240	e230	908	1770	4210	5530	835	243	314
21	258	272	e94	e230	e200	1090	2520	4920	5220	796	255	314
22	260	283	e76	e220	e210	1250	2850	5520	5020	759	280	332
23	268	311	e56	e210	e200	1240	2770	6070	4970	694	277	309
24	282	291	e68	e230	e220	1250	2490	7000	4820	631	248	292
25	303	284	e82	e210	e240	1340	3310	7920	4360	597	248	273
26	304	287	e150	e200	e270	1600	3660	8030	4300	642	199	259
27	296	292	e180	e210	e280	1740	3930	7820	3890	612	187	239
28	354	289	e190	e190	e270	1660	3630	7500	3310	568	226	244
29	475	296	e250	e130	---	1360	3420	7660	2920	554	286	261
30	459	316	e240	e110	---	1250	4360	8210	2590	614	299	280
31	454	---	e240	e110	---	1610	---	9190	---	757	281	---
TOTAL	9981	10713	5624	6530	6000	24329	59960	147050	159940	35088	11287	8957
MEAN	322	357	181	211	214	785	1999	4744	5331	1132	364	299
MAX	475	472	299	260	280	1740	4360	9190	8660	2310	788	476
MIN	185	272	56	110	130	250	1020	2370	2590	554	187	224
AC-FT	19800	21250	11160	12950	11900	48260	118900	291700	317200	69600	22390	17770

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1985 - 1999, BY WATER YEAR (WY)

MEAN	347	325	248	238	297	827	2418	4956	4339	1115	302	255
MAX	884	506	407	371	841	1718	4835	7524	8471	3683	712	1011
(WY)	1998	1998	1985	1998	1986	1986	1985	1985	1995	1995	1997	1997
MIN	144	165	146	114	111	229	931	2172	1370	233	41.3	50.6
(WY)	1990	1995	1988	1989	1989	1988	1995	1990	1987	1989	1994	1994

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1985 - 1999	
ANNUAL TOTAL	585204		485459			
ANNUAL MEAN	1603		1330		1308	
HIGHEST ANNUAL MEAN					1925	1997
LOWEST ANNUAL MEAN					734	1989
HIGHEST DAILY MEAN	8170	May 22	9190	May 31	12000	Jun 4 1997
LOWEST DAILY MEAN	e56	Dec 23	e56	Dec 23	1.3	Sep 1 1988
ANNUAL SEVEN-DAY MINIMUM	92	Dec 20	92	Dec 20	13	Aug 31 1988
INSTANTANEOUS PEAK FLOW			9730	May 31	12900	Jun 4 1997
INSTANTANEOUS PEAK STAGE			8.73	May 31	10.78	Jun 4 1997
ANNUAL RUNOFF (AC-FT)	1161000		962900		947200	
10 PERCENT EXCEEDS	5190		4460		4300	
50 PERCENT EXCEEDS	440		362		369	
90 PERCENT EXCEEDS	207		195		157	

e Estimated

09247600 YAMPA RIVER BELOW CRAIG, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--June 1975 to September 1980. October 1990 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML) (31633)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)
OCT											
22...	1430	262	430	8.8	10.2	13.0	K14	K5	160	37	16
MAR											
16...	1405	503	871	8.3	3.0	12.3	K3	K1	290	60	35
JUN											
10...	1005	5980	94	7.8	11.2	9.0	70	78	37	9.6	3.1
AUG											
16...	1640	273	316	8.8	21.6	9.2	9	14	110	28	10

DATE	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	ALKA-LINITY WAT.DIS GRAN T. FIELD CACO3 (MG/L) (29802)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)
OCT											
22...	27	.9	2.1	--	119	--	84	9.9	.23	1.4	250
MAR											
16...	70	2	2.7	--	151	--	260	18	.21	7.6	550
JUN											
10...	4.2	.3	.76	29	--	--	11	2.1	<.10	7.6	56
AUG											
16...	18	.7	1.8	--	--	97	48	6.5	.17	.39	172

DATE	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS-SOLVED (TONS PER DAY) (70302)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)
OCT										
22...	.34	177	.011	<.050	<.020	.23	.15	.014	.012	.014
MAR										
16...	.75	747	<.010	1.38	.043	.56	.37	.096	.030	.024
JUN										
10...	.08	900	<.010	<.050	<.020	.35	.24	.107	.012	.019
AUG										
16...	.23	127	<.010	<.050	<.020	.35	.26	.027	.017	<.010

DATE	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
OCT										
22...	<1.0	<1.0	160	<1.0	18	28	<.1	<1	<.20	<20
MAR										
16...	<1.0	1.0	850	<1.0	78	140	<.1	6	<.20	<20
JUN										
10...	<1.0	<1.0	1700	<1.0	5.5	55	<.1	<1	<.20	<20
AUG										
16...	<1.0	<1.0	160	<1.0	11	40	<.1	<1	<.20	<20

K Based on non-ideal colony count.

09247600 YAMPA RIVER BELOW CRAIG, CO--Continued

MISCELLANEOUS FIELD MEASUREMENTS, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)
OCT				
01...	1117	176	446	15.7
NOV				
11...	1400	371	400	1.2
FEB				
25...	1550	285	600	.0
MAY				
12...	1720	2960	258	9.2
25...	1155	8060	119	10.1
JUL				
14...	1600	758	199	19.9
AUG				
23...	1500	285	359	23.5

09249750 WILLIAMS FORK RIVER AT MOUTH, NEAR HAMILTON, CO

LOCATION.--Lat 40°26'14", Long. 107°38'50", in $SE^1/_4NW^1/_4$ sec.31, T.6 N., R.91 W., Moffat County, Hydrologic Unit 14050001, on left bank at coal mine service road crossing, 2,300 ft upstream from confluence with Yampa River, 6.1 mi north-northeast of Hamilton, and 8 mi south-southwest of Craig.

DRAINAGE AREA.--419 mi^2.

PERIOD OF RECORD.--February 1984 to current year. Water-quality data available, June 1975 to September 1980, December 1985 to September 1992, and October 1993 to September 1996. Sediment data available, June 1975 to September 1980, and April 1987 to September 1991.

GAGE.--Water stage recorder with satellite telemetry. Elevation of gage is 6,170 ft above sea level, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	68	92	57	e64	73	83	138	669	1030	201	114	61
2	72	88	58	e64	e71	88	135	584	955	190	93	65
3	80	99	56	e65	e70	103	122	589	1050	172	80	85
4	94	95	53	e65	e70	101	111	589	1010	156	76	88
5	106	79	64	e65	e71	92	119	494	886	149	92	71
6	93	84	38	e65	e72	98	111	423	716	140	117	57
7	88	82	47	e66	e70	86	116	396	663	145	106	50
8	92	81	45	e66	e70	92	144	434	758	141	83	44
9	95	84	66	e66	e71	85	146	682	748	174	73	41
10	92	70	e68	e66	e72	99	134	880	668	143	77	42
11	86	66	e68	e66	e72	90	126	654	597	129	85	44
12	79	84	e67	e67	e71	89	129	552	550	124	97	46
13	75	67	e67	e66	e72	93	162	525	516	117	76	45
14	72	80	e66	e65	e72	90	250	647	510	111	65	43
15	73	81	e66	e65	e73	94	216	671	514	124	62	42
16	73	80	e65	e67	e74	96	174	628	640	122	60	42
17	79	72	e66	e67	e75	102	154	594	646	109	56	41
18	84	72	e65	e65	e77	102	168	637	607	103	58	39
19	82	68	e64	e64	83	111	195	850	528	100	57	41
20	84	55	e65	e63	82	122	303	1150	494	104	51	53
21	85	44	e66	e62	80	132	427	1270	459	97	59	75
22	84	83	e64	62	79	136	397	1350	e460	105	76	60
23	e86	66	e64	65	79	127	325	1340	e434	101	71	50
24	e84	67	e63	63	76	129	328	1420	391	92	54	45
25	e84	55	e60	69	81	133	462	1610	352	93	54	45
26	e86	57	e61	70	83	158	425	1630	326	91	58	46
27	e87	61	e61	70	81	170	440	1410	285	88	58	44
28	e88	61	e62	69	79	143	503	1300	249	94	69	50
29	e90	63	e62	e68	---	126	547	1310	229	121	69	53
30	97	65	e63	69	---	133	750	1390	215	107	83	51
31	96	---	e63	75	---	137	---	1380	---	117	63	---
TOTAL	2634	2201	1900	2049	2099	3440	7757	28058	17486	3860	2292	1559
MEAN	85.0	73.4	61.3	66.1	75.0	111	259	905	583	125	73.9	52.0
MAX	106	99	68	75	83	170	750	1630	1050	201	117	88
MIN	68	44	38	62	70	83	111	396	215	88	51	39
AC-FT	5220	4370	3770	4060	4160	6820	15390	55650	34680	7660	4550	3090

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984 - 1999, BY WATER YEAR (WY)

MEAN	71.9	67.7	60.2	60.7	63.2	102	322	1066	700	178	76.9	61.3
MAX	150	118	106	116	108	180	680	2228	1720	494	220	203
(WY)	1998	1998	1985	1998	1986	1998	1985	1984	1984	1984	1984	1997
MIN	32.3	34.4	38.3	37.9	40.8	64.1	101	396	147	28.0	25.3	19.7
(WY)	1993	1995	1995	1991	1991	1995	1995	1990	1994	1994	1994	1994

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1984 - 1999	
ANNUAL TOTAL	108136		75335			
ANNUAL MEAN	296		206		222	
HIGHEST ANNUAL MEAN					358	1985
LOWEST ANNUAL MEAN					105	1994
HIGHEST DAILY MEAN	1910	May 21	1630	May 26	3980	May 16 1984
LOWEST DAILY MEAN	38	Dec 6	38	Dec 6	13	Sep 13 1994
ANNUAL SEVEN-DAY MINIMUM	52	Dec 2	42	Sep 13	15	Sep 9 1994
INSTANTANEOUS PEAK FLOW			1870	May 26	4750	May 16 1984
INSTANTANEOUS PEAK STAGE			6.66	May 26	9.96	May 16 1984
ANNUAL RUNOFF (AC-FT)	214500		149400		161000	
10 PERCENT EXCEEDS	978		595		690	
50 PERCENT EXCEEDS	115		84		81	
90 PERCENT EXCEEDS	62		57		39	

e Estimated

09251000 YAMPA RIVER NEAR MAYBELL, CO

LOCATION.--Lat 40°30'10", long. 108°01'45", in $SE^{1}/_{4}NW^{1}/_{4}$ sec.2, T.6 N., R.95 W., Moffat County, Hydrologic Unit 14050002, on left bank 60 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 mi^2, 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 with satellite telemetry. Datum of gage is 5,900.23 ft above sea level. See WSP 1733 for history of changes prior to Mar. 9, 1937.

REMARKS.--Records good except for estimated daily discharges, which are poor. Natural flow of stream affected by transbasin diversions, numerous storage reservoirs, and diversions upstream from station for irrigation of about 65,000 acres upstream from, and about 800 acres downstream from station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	172	566	399	e380	e240	e480	1800	5320	9980	2470	772	280
2	176	569	378	e440	e340	e500	1720	4680	8190	2170	776	247
3	211	568	361	e320	e320	e480	1580	4450	7510	2340	653	296
4	323	606	357	e300	e430	e520	1400	4210	7950	2210	556	477
5	442	586	362	e350	e410	e400	1190	3770	7500	2100	497	479
6	462	536	240	e460	e460	e370	1150	3170	6660	1900	469	417
7	412	506	140	e470	e470	e380	1070	2780	5890	1600	501	357
8	394	509	205	e500	e500	472	1150	2660	5500	1500	535	287
9	365	515	290	e410	e480	540	1570	3240	5890	1480	490	230
10	376	503	e280	e420	e520	592	1440	4560	6290	1470	429	212
11	397	455	e270	e440	e350	621	1270	4970	6140	1220	396	218
12	401	444	e280	e480	e280	587	1140	3830	5810	1120	396	211
13	371	487	e320	e480	e250	570	1180	3230	5520	913	409	212
14	342	490	e340	e410	e280	612	1490	3390	5270	892	351	219
15	325	465	e360	e400	e360	613	1950	4170	5190	895	329	212
16	336	437	e360	e440	e390	639	1760	4010	5660	1000	307	201
17	359	434	e390	e410	e380	694	1490	3870	5830	1140	279	180
18	352	426	e420	e410	e390	795	1280	3560	5850	949	270	170
19	354	407	e370	e480	e420	870	1300	3950	6090	872	283	233
20	339	422	e210	e450	e440	985	1520	5070	5910	815	272	340
21	324	393	e170	e420	e380	1100	2420	6150	5630	810	248	285
22	329	337	e130	e420	e410	1300	3100	6910	5360	765	246	280
23	334	378	e110	e400	e400	1370	3040	7450	5200	722	284	298
24	360	393	e130	e440	e430	1310	2850	8200	5110	653	282	263
25	401	372	e150	e400	e480	1350	3130	9320	4760	608	237	243
26	408	356	e280	e380	e490	1480	4160	9850	4410	570	233	232
27	403	362	e350	e410	e420	1780	4180	9400	4270	608	198	237
28	407	372	e350	e340	e410	1900	4150	8770	3700	585	166	226
29	485	372	e480	e240	---	1570	3940	8600	3100	573	204	220
30	613	379	e450	e220	---	1320	4330	9130	2840	578	315	241
31	582	---	e460	e220	---	1370	---	9930	---	630	329	---
TOTAL	11555	13645	9392	12340	11130	27570	63750	172600	173010	36158	11712	8003
MEAN	373	455	303	398	398	889	2125	5568	5767	1166	378	267
MAX	613	606	480	500	520	1900	4330	9930	9980	2470	776	479
MIN	172	337	110	220	240	370	1070	2660	2840	570	166	170
AC-FT	22920	27060	18630	24480	22080	54690	126400	342400	343200	71720	23230	15870

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1916 - 1999, BY WATER YEAR (WY)

MEAN	354	357	299	279	335	721	2617	6295	5592	1424	390	250
MAX	1174	768	624	610	1071	2063	6496	14000	12810	5819	1052	1366
(WY)	1998	1998	1948	1948	1986	1986	1962	1984	1917	1957	1957	1997
MIN	117	184	137	115	160	221	735	1850	548	20.4	26.5	27.8
(WY)	1964	1977	1964	1934	1964	1964	1944	1977	1934	1934	1934	1934

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1916 - 1999	
ANNUAL TOTAL	743027		550865			
ANNUAL MEAN	2036		1509		1578	
HIGHEST ANNUAL MEAN					3025	1984
LOWEST ANNUAL MEAN					477	1977
HIGHEST DAILY MEAN	10400	May 5	9980	Jun 1	24400	May 17 1984
LOWEST DAILY MEAN	e110	Dec 23	e110	Dec 23	a2.0	Jul 17 1934
ANNUAL SEVEN-DAY MINIMUM	139	Sep 7	169	Dec 20	3.0	Jul 30 1934
INSTANTANEOUS PEAK FLOW			10700	May 31	25100	May 17 1984
INSTANTANEOUS PEAK STAGE			8.31	May 31	12.42	May 17 1984
ANNUAL RUNOFF (AC-FT)	1474000		1093000		1143000	
10 PERCENT EXCEEDS	6800		5090		5360	
50 PERCENT EXCEEDS	569		479		405	
90 PERCENT EXCEEDS	211		241		177	

e Estimated
a Also occurred Jul 18-19, 1934.

09251000 YAMPA RIVER NEAR MAYBELL, CO--Continued

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.
pH: November 1998 to September 1999
WATER TEMPERATURE: November 1950 to August 1973, July 1975 to current year.
SUSPENDED-SEDIMENT DISCHARGE: December 1950 to May 1958, October 1975 to September 1976, October 1977 to September 1978, October 1981 to September 1982.

INSTRUMENTATION:--Water-quality monitor July 1975 to October 1997; water-quality monitor with satellite telemetry October 24, 1997 to current year.

REMARKS.--Specific-conductance record is good, pH record is good, and water-temperature record is good. Periods of missing record are caused by sensor fouling or instrument malfunction. Unpublished maximum and minimum specific-conductance data for period of daily record available in district office.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 1260 microsiemens, Nov. 17, 1985; minimum, 78 microsiemens, June 1-2, 1994.
pH: Maximum, 9.0, Mar 18, 1999; minimum, 7.9, Jun 11-16, 19-21, 1999.
WATER TEMPERATURE: Maximum, 33.0°C, Aug. 29, 1976; minimum, 0.0°C, 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 Dec. 1975 to Feb. 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, 1,080 microsiemens, Feb. 11; minimum, 119 microsiemens, June 11.
pH: Maximum, 9.0, Mar. 18; minimum, 7.9, June 11-16, 19-21.
WATER TEMPERATURE: Maximum, 25.4° C, July 23; minimum, 0.0° C, on many days during winter months.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)
OCT											
20...	1330	339	621	8.6	9.1	10.5	240	46	31	42	1
NOV											
12...	1030	423	587	8.5	1.4	11.5	230	45	28	40	1
JAN											
28...	1230	363	827	8.3	.0	11.9	320	60	43	67	2
MAR											
05...	1325	492	962	8.5	.8	12.1	350	62	46	82	2
25...	1810	1290	762	8.5	9.4	9.9	280	57	34	56	1
MAY											
14...	1250	3370	361	8.3	8.3	9.8	140	31	15	18	.7
JUN											
09...	1000	5550	139	8.1	12.7	8.3	57	14	5.2	5.8	.3
JUL											
14...	1040	865	294	8.4	20.6	7.6	110	24	11	18	.8
AUG											
16...	1615	294	440	8.7	21.8	8.5	160	35	17	30	1

DATE	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	ALKA-LINITY WAT.DIS FET LAB CACO3 (MG/L) (29801)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)
OCT										
20...	2.5	--	--	--	154	--	150	15	.30	3.3
NOV										
12...	2.2	--	--	--	145	--	140	14	.20	4.0
JAN										
28...	2.8	--	--	--	179	--	240	20	.22	9.5
MAR										
05...	3.4	--	--	--	178	--	300	25	.21	6.8
25...	2.9	--	--	--	144	--	240	14	.21	9.7
MAY										
14...	1.4	100	--	82	--	92	77	5.4	.13	10
JUN										
09...	.80	51	--	42	--	44	19	1.6	<.10	8.2
JUL										
14...	1.3	--	--	--	--	80	53	7.3	.14	7.3
AUG										
16...	1.9	146	5	128	--	120	81	12	.17	3.5

09251000 YAMPA RIVER NEAR MAYBELL, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS-SOLVED (TONS PER DAY) (70302)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)
OCT										
20...	386	.53	353	--	--	--	--	--	--	--
NOV										
12...	364	.50	416	--	--	--	--	--	--	--
JAN										
28...	551	.75	540	--	--	--	--	--	--	--
MAR										
05...	637	.87	846	--	--	--	--	--	--	--
25...	499	.68	1740	--	--	--	--	--	--	--
MAY										
14...	208	.28	1900	--	--	--	--	--	--	--
JUN										
09...	80	.11	1200	--	--	--	--	--	--	--
JUL										
14...	170	.23	397	--	--	--	--	--	--	--
AUG										
16...	258	.35	205	<.010	<.050	<.020	.19	<.050	<.010	3.9

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	639	627	631	560	545	552	674	658	665	674	664	669
2	645	637	641	559	553	554	667	654	663	702	672	689
3	650	620	641	554	539	547	661	652	656	719	702	709
4	648	625	635	555	522	535	671	652	661	735	719	730
5	637	624	629	551	528	544	669	659	664	733	720	728
6	661	624	647	549	544	546	707	661	684	734	723	729
7	657	616	643	545	532	538	749	705	713	734	723	729
8	660	617	625	562	540	548	769	749	760	731	723	727
9	637	614	627	562	552	558	765	733	745	744	731	734
10	629	616	621	577	559	566	896	736	818	761	744	749
11	630	600	620	603	564	582	923	879	897	773	760	764
12	606	584	596	608	560	584	921	889	907	779	766	774
13	592	575	582	613	566	592	926	899	913	804	779	789
14	595	572	580	623	584	604	899	847	868	838	804	818
15	580	573	577	617	580	603	847	779	816	843	823	833
16	587	575	580	628	577	606	779	732	763	861	812	836
17	592	576	582	642	597	624	743	706	729	854	819	835
18	598	579	588	629	610	621	718	683	704	838	814	827
19	628	580	613	630	611	621	700	682	692	832	796	812
20	637	615	625	639	613	626	699	681	691	809	794	800
21	636	609	620	637	622	629	702	688	696	826	801	810
22	648	620	630	652	616	631	723	696	707	852	826	838
23	656	625	641	651	622	637	736	713	719	868	852	863
24	650	624	634	681	650	665	762	736	754	871	846	855
25	634	623	628	677	648	662	780	760	773	885	842	864
26	633	616	622	648	632	638	787	769	778	886	839	859
27	620	600	609	649	629	638	769	736	752	852	815	838
28	600	590	594	657	635	647	736	702	719	838	820	827
29	613	594	602	672	645	658	702	681	692	859	825	836
30	614	573	594	669	653	661	684	673	679	861	827	841
31	573	547	560	---	---	---	676	669	672	856	802	826
MONTH	661	547	613	681	522	601	926	652	740	886	664	792

09251000 YAMPA RIVER NEAR MAYBELL, CO--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	865	819	841	---	---	---	620	563	584	389	351	360
2	874	835	862	---	---	---	584	562	568	364	356	362
3	878	857	867	---	---	---	579	562	571	363	351	356
4	860	822	839	---	---	---	612	576	591	360	349	355
5	837	805	821	---	---	---	674	612	645	358	353	355
6	819	785	802	---	---	---	712	674	695	376	358	368
7	850	817	834	---	---	---	728	712	724	391	375	380
8	981	850	930	---	---	---	723	701	719	394	383	389
9	974	877	935	---	---	---	701	617	661	389	339	364
10	1030	869	960	---	---	---	617	564	579	341	292	307
11	1080	932	1020	---	---	---	572	561	566	292	280	284
12	1020	940	982	---	---	---	589	572	579	316	287	304
13	1020	947	979	---	---	---	603	589	597	346	316	326
14	1020	887	937	---	---	---	598	548	577	367	334	346
15	1020	987	1000	---	---	---	548	471	511	427	367	385
16	1010	975	992	---	---	---	471	453	464	423	397	404
17	992	961	978	---	910	---	479	467	475	403	361	382
18	964	918	943	933	898	915	500	479	490	362	358	360
19	950	905	919	935	898	916	516	500	507	362	326	342
20	945	893	917	941	899	911	514	490	502	326	267	291
21	936	906	920	975	911	944	490	419	455	267	228	244
22	929	887	906	956	871	913	419	395	402	228	206	215
23	933	858	891	904	823	862	427	402	416	206	188	197
24	947	859	898	867	772	814	471	427	446	188	172	180
25	958	870	905	780	720	749	611	471	528	179	166	171
26	972	889	928	748	687	712	657	507	552	177	167	172
27	1040	949	989	694	643	666	596	508	545	174	164	168
28	1040	---	---	666	628	642	593	543	568	168	162	165
29	---	---	---	670	626	647	543	448	478	164	156	161
30	---	---	---	653	620	634	448	389	419	170	151	159
31	---	---	---	635	605	624	---	---	---	169	154	161
MONTH	1080	---	---	---	---	---	728	389	547	427	151	291

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	155	145	150	179	165	174	356	345	350	538	517	528
2	169	154	160	203	176	190	357	336	347	517	506	512
3	169	152	160	199	175	188	339	328	332	520	496	509
4	164	140	148	178	171	175	351	338	342	506	493	501
5	153	133	143	177	168	173	372	351	361	527	481	504
6	151	134	141	188	169	178	395	372	386	481	461	473
7	163	146	152	208	187	197	397	387	393	461	447	454
8	174	156	163	267	207	213	395	383	389	466	446	452
9	168	135	147	267	220	241	389	376	382	486	466	479
10	145	124	133	246	229	236	387	380	384	499	486	493
11	139	119	129	253	233	244	407	387	399	514	499	509
12	141	123	132	277	253	266	415	403	410	521	512	516
13	141	123	132	285	276	280	421	412	417	534	521	529
14	145	123	133	299	284	293	427	415	422	548	534	542
15	145	130	138	314	291	300	439	419	428	553	546	550
16	152	133	140	324	314	319	442	431	436	551	543	548
17	165	151	157	316	286	297	446	434	438	562	546	553
18	162	150	156	286	269	277	464	446	453	567	560	564
19	156	136	145	297	283	289	469	462	465	578	554	570
20	151	129	138	310	297	303	473	464	468	554	542	548
21	144	126	135	326	309	316	476	470	473	544	516	526
22	145	126	135	333	321	327	488	476	480	520	484	503
23	145	127	136	343	327	334	492	475	480	491	474	480
24	142	124	133	348	333	341	509	492	500	501	483	492
25	145	122	132	349	336	341	518	509	513	510	487	498
26	146	131	139	357	347	351	519	506	512	526	510	521
27	143	121	132	358	349	353	522	509	514	530	520	525
28	150	134	141	358	347	352	543	521	536	554	530	544
29	160	147	153	362	351	356	551	540	547	573	554	563
30	165	160	163	375	357	368	554	542	548	579	573	576
31	---	---	---	376	356	369	544	519	529	---	---	---
MONTH	174	119	143	376	165	279	554	328	440	579	446	519

09251000 YAMPA RIVER NEAR MAYBELL, CO--Continued

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	---	---	---	---	---	---	8.8	8.8	8.8	8.4	8.4	8.4
2	---	---	---	---	---	---	8.8	8.8	8.8	8.4	8.4	8.4
3	---	---	---	---	---	---	8.9	8.8	8.8	8.4	8.4	8.4
4	---	---	---	---	---	---	8.9	8.8	8.8	8.4	8.4	8.4
5	---	---	---	---	---	---	8.8	8.8	8.8	8.4	8.4	8.4
6	---	---	---	---	---	---	8.8	8.8	8.8	8.4	8.4	8.4
7	---	---	---	---	---	---	8.8	8.7	8.8	8.4	8.4	8.4
8	---	---	---	---	---	---	8.8	8.6	8.7	8.4	8.4	8.4
9	---	---	---	---	---	---	8.8	8.7	8.7	8.5	8.4	8.5
10	---	---	---	---	---	---	8.8	8.7	8.7	8.5	8.4	8.5
11	---	---	---	---	---	---	8.7	8.7	8.7	8.5	8.5	8.5
12	---	---	---	---	---	---	8.7	8.6	8.7	8.5	8.5	8.5
13	---	---	---	---	---	---	8.6	8.6	8.6	8.6	8.5	8.6
14	---	---	---	---	---	---	8.6	8.6	8.6	8.6	8.5	8.6
15	---	---	---	---	---	---	8.6	8.6	8.6	8.5	8.5	8.5
16	---	---	---	---	---	---	8.6	8.6	8.6	8.5	8.5	8.5
17	---	---	---	---	---	---	8.6	8.6	8.6	8.5	8.5	8.5
18	---	---	---	---	---	---	8.6	8.6	8.6	8.5	8.5	8.5
19	---	---	---	---	---	---	8.6	8.6	8.6	8.5	8.5	8.5
20	---	---	---	---	---	8.8	8.6	8.5	8.6	8.5	8.5	8.5
21	---	---	---	8.9	8.8	8.8	8.5	8.5	8.5	8.6	8.5	8.6
22	---	---	---	8.9	8.7	8.8	8.5	8.4	8.5	8.6	8.6	8.6
23	---	---	---	8.9	8.7	8.8	8.4	8.4	8.4	8.6	8.5	8.5
24	---	---	---	8.8	8.8	8.8	8.4	8.3	8.4	8.5	8.5	8.5
25	---	---	---	8.8	8.8	8.8	8.3	8.3	8.3	8.5	8.5	8.5
26	---	---	---	8.8	8.8	8.8	8.3	8.3	8.3	8.5	8.5	8.5
27	---	---	---	8.8	8.8	8.8	8.3	8.3	8.3	8.6	8.3	8.5
28	---	---	---	8.8	8.8	8.8	8.3	8.3	8.3	8.4	8.4	8.4
29	---	---	---	8.8	8.7	8.8	8.3	8.3	8.3	8.5	8.4	8.4
30	---	---	---	8.8	8.8	8.8	8.4	8.3	8.4	8.5	8.4	8.4
31	---	---	---	---	---	---	8.4	8.4	8.4	8.5	8.4	8.4
MONTH	---	---	---	---	---	---	8.9	8.3	8.6	8.6	8.3	8.5

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	8.5	8.4	8.4	---	---	---	8.5	8.4	8.4	8.1	8.1	8.1
2	8.4	8.4	8.4	---	---	---	8.4	8.4	8.4	8.2	8.1	8.1
3	8.4	8.4	8.4	---	---	---	8.5	8.4	8.4	8.2	8.2	8.2
4	8.4	8.4	8.4	---	---	---	8.5	8.4	8.5	8.2	8.2	8.2
5	8.5	8.4	8.4	---	---	---	8.6	8.5	8.5	8.2	8.2	8.2
6	8.5	8.4	8.4	---	---	---	8.6	8.5	8.6	8.2	8.2	8.2
7	8.5	8.4	8.5	---	---	---	8.6	8.4	8.5	8.3	8.2	8.2
8	8.5	8.4	8.5	---	---	---	8.6	8.5	8.6	8.3	8.3	8.3
9	8.6	8.4	8.5	---	---	---	8.6	8.5	8.5	8.3	8.3	8.3
10	8.5	8.4	8.5	---	---	---	8.5	8.4	8.5	8.3	8.2	8.2
11	8.5	8.4	8.5	---	---	---	8.6	8.4	8.5	8.2	8.2	8.2
12	8.4	8.4	8.4	---	---	---	8.7	8.5	8.6	8.2	8.2	8.2
13	8.4	8.3	8.4	---	---	---	8.7	8.6	8.6	8.3	8.2	8.2
14	8.4	8.3	8.4	---	---	---	8.7	8.6	8.6	8.3	8.2	8.3
15	8.5	8.4	8.4	---	---	---	8.6	8.4	8.5	8.3	8.2	8.2
16	8.5	8.4	8.4	---	---	---	8.4	8.2	8.3	8.3	8.2	8.2
17	8.5	8.4	8.4	8.9	8.6	8.8	8.5	8.3	8.4	8.3	8.2	8.2
18	8.5	8.4	8.4	9.0	8.8	8.9	8.6	8.4	8.5	8.3	8.2	8.2
19	8.5	8.4	8.4	8.9	8.7	8.8	8.7	8.4	8.6	8.3	8.2	8.3
20	8.5	8.4	8.5	8.9	8.7	8.8	8.6	8.5	8.5	8.2	8.2	8.2
21	8.5	8.4	8.5	8.8	8.6	8.7	8.5	8.2	8.3	8.2	8.1	8.1
22	8.6	8.4	8.5	8.6	8.5	8.5	8.2	8.1	8.1	8.1	8.1	8.1
23	8.6	8.4	8.5	8.5	8.4	8.5	8.2	8.1	8.2	8.2	8.1	8.1
24	8.6	8.4	8.5	8.6	8.4	8.5	8.2	8.2	8.2	8.2	8.1	8.2
25	8.6	8.5	8.6	8.7	8.4	8.5	8.2	8.2	8.2	8.2	8.1	8.2
26	8.6	8.5	8.6	8.5	8.4	8.4	8.2	8.1	8.1	8.2	8.2	8.2
27	8.6	8.5	8.5	8.4	8.3	8.4	8.2	8.1	8.2	8.2	8.2	8.2
28	8.7	8.5	8.6	8.4	8.3	8.3	8.2	8.1	8.2	8.2	8.1	8.2
29	---	---	---	8.4	8.3	8.4	8.2	8.2	8.2	8.2	8.1	8.2
30	---	---	---	8.5	8.4	8.5	8.2	8.1	8.2	8.3	8.1	8.2
31	---	---	---	8.5	8.4	8.5	---	---	---	8.3	8.2	8.2
MONTH	8.7	8.3	8.5	---	---	---	8.7	8.1	8.4	8.3	8.1	8.2

09251000 YAMPA RIVER NEAR MAYBELL, CO--Continued

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	8.2	8.1	8.1	8.2	8.1	8.1	8.5	8.4	8.4	8.6	8.4	8.5
2	8.1	8.1	8.1	8.2	8.1	8.1	8.6	8.4	8.5	8.6	8.4	8.5
3	8.2	8.1	8.1	8.3	8.1	8.2	8.7	8.4	8.6	8.6	8.4	8.5
4	8.2	8.1	8.1	8.3	8.1	8.2	8.7	8.4	8.5	8.6	8.4	8.5
5	8.1	8.0	8.1	8.4	8.1	8.2	8.7	8.4	8.6	8.6	8.5	8.5
6	8.1	8.0	8.1	8.3	8.1	8.2	8.8	8.5	8.6	8.6	8.4	8.5
7	8.1	8.0	8.1	8.4	8.1	8.2	8.8	8.5	8.7	8.7	8.5	8.6
8	8.1	8.1	8.1	8.4	8.1	8.2	8.8	8.5	8.7	8.7	8.5	8.6
9	8.1	8.0	8.0	8.2	8.2	8.2	8.8	8.5	8.7	8.7	8.4	8.6
10	8.0	8.0	8.0	8.5	8.2	8.3	8.8	8.5	8.7	8.7	8.4	8.5
11	8.0	7.9	8.0	8.6	8.2	8.4	8.8	8.6	8.7	8.7	8.4	8.5
12	8.0	7.9	7.9	8.6	8.2	8.4	8.8	8.6	8.7	8.7	8.4	8.5
13	8.0	7.9	8.0	8.6	8.3	8.4	8.9	8.6	8.7	8.7	8.4	8.6
14	8.0	7.9	8.0	8.5	8.3	8.4	8.9	8.6	8.7	8.7	8.5	8.6
15	8.0	7.9	8.0	8.5	8.3	8.4	8.8	8.6	8.7	8.7	8.5	8.6
16	8.0	7.9	8.0	8.5	8.3	8.4	8.9	8.6	8.8	8.7	8.5	8.6
17	8.0	8.0	8.0	8.6	8.4	8.5	8.9	8.6	8.7	8.7	8.4	8.5
18	8.0	8.0	8.0	8.5	8.3	8.4	8.9	8.6	8.7	8.6	8.4	8.5
19	8.0	7.9	8.0	8.5	8.4	8.4	8.9	8.6	8.8	8.6	8.4	8.5
20	8.0	7.9	8.0	8.5	8.4	8.5	8.9	8.6	8.7	8.6	8.4	8.5
21	8.0	7.9	8.0	8.5	8.4	8.4	8.9	8.6	8.7	8.6	8.5	8.5
22	8.0	8.0	8.0	8.6	8.4	8.5	8.9	8.5	8.7	8.6	8.4	8.5
23	8.0	8.0	8.0	8.6	8.4	8.5	8.9	8.5	8.7	8.6	8.4	8.5
24	8.0	8.0	8.0	8.7	8.4	8.5	8.7	8.4	8.6	8.6	8.4	8.5
25	8.0	8.0	8.0	8.7	8.4	8.5	8.6	8.4	8.5	8.7	8.5	8.6
26	8.0	8.0	8.0	8.7	8.3	8.5	8.7	8.4	8.5	8.7	8.5	8.6
27	8.0	8.0	8.0	8.7	8.4	8.6	8.6	8.3	8.5	8.7	8.5	8.6
28	8.1	8.0	8.0	8.6	8.4	8.5	8.6	8.3	8.4	8.7	8.5	8.6
29	8.1	8.0	8.1	8.6	8.3	8.4	8.6	8.3	8.5	8.7	8.5	8.6
30	8.1	8.0	8.1	8.6	8.4	8.5	8.6	8.4	8.5	8.7	8.5	8.6
31	---	---	---	8.6	8.4	8.5	8.6	8.4	8.5	---	---	---
MONTH	8.2	7.9	8.0	8.7	8.1	8.4	8.9	8.3	8.6	8.7	8.4	8.5

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	15.7	13.3	14.4	7.8	6.2	7.0	4.3	2.6	3.4	.0	.0	.0
2	16.9	12.3	14.2	7.6	6.6	7.1	4.1	2.5	3.2	.0	.0	.0
3	13.7	11.4	13.0	7.6	6.0	6.7	3.7	2.0	2.7	.0	.0	.0
4	11.4	9.4	10.3	6.0	4.7	5.4	3.6	1.8	2.6	.0	.0	.0
5	9.6	8.2	9.0	6.1	4.6	5.3	2.9	.1	1.7	.0	.0	.0
6	9.8	7.2	8.5	6.2	4.7	5.2	.2	.0	.0	.0	.0	.0
7	11.1	7.8	9.5	5.4	4.1	4.6	.9	.0	.1	.1	.0	.0
8	12.1	9.0	10.6	5.0	3.0	3.9	.1	.0	.0	.0	.0	.0
9	12.9	9.7	11.2	3.0	1.5	2.3	.1	.0	.0	.0	.0	.0
10	12.4	9.9	11.2	1.5	.0	.8	.2	.0	.0	.0	.0	.0
11	11.9	9.0	10.6	1.3	.2	.8	.2	.0	.0	.1	.0	.0
12	12.1	9.1	10.6	2.0	.5	1.2	.1	.0	.0	.1	.0	.0
13	11.8	9.2	10.6	2.5	.7	1.6	.2	.0	.0	.0	.0	.0
14	13.1	9.8	11.3	3.6	1.6	2.6	.2	.0	.0	.0	.0	.0
15	12.3	9.7	10.9	4.5	2.4	3.4	.2	.0	.0	.0	.0	.0
16	10.8	8.8	9.7	4.5	2.9	3.7	.2	.0	.0	.0	.0	.0
17	8.8	7.4	8.1	4.7	3.1	3.9	.2	.0	.0	.0	.0	.0
18	9.4	6.1	7.6	4.3	3.0	3.6	.2	.0	.0	.0	.0	.0
19	9.3	6.4	7.9	4.2	2.6	3.3	.0	.0	.0	.0	.0	.0
20	9.9	7.0	8.3	2.9	1.3	2.0	.0	.0	.0	.0	.0	.0
21	9.4	6.4	8.0	3.0	1.1	1.9	.0	.0	.0	.0	.0	.0
22	11.3	8.3	9.5	3.6	1.9	2.6	.0	.0	.0	.0	.0	.0
23	10.7	9.0	9.6	3.8	2.1	2.8	.0	.0	.0	.0	.0	.0
24	10.3	7.7	9.0	3.7	2.7	3.2	.0	.0	.0	.0	.0	.0
25	9.7	8.3	8.9	3.1	1.3	2.2	.0	.0	.0	.0	.0	.0
26	9.6	8.5	8.9	3.2	1.2	2.1	.0	.0	.0	.0	.0	.0
27	9.0	7.7	8.4	3.5	1.4	2.3	.0	.0	.0	.0	.0	.0
28	8.8	7.8	8.2	3.8	2.1	2.9	.0	.0	.0	.1	.0	.0
29	8.1	7.1	7.7	4.6	3.6	3.9	.0	.0	.0	.0	.0	.0
30	7.7	6.5	7.2	4.5	2.6	3.5	.0	.0	.0	.0	.0	.0
31	7.1	6.5	6.8	---	---	---	.0	.0	.0	.0	.0	.0
MONTH	16.9	6.1	9.7	7.8	.0	3.4	4.3	.0	.4	.1	.0	.0

09251000 YAMPA RIVER NEAR MAYBELL, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	.0	.0	.0	---	---	---	6.5	5.1	6.0	8.9	7.4	8.0
2	.0	.0	.0	---	---	---	5.3	3.1	4.5	9.0	7.1	8.1
3	.1	.0	.0	---	---	---	5.4	2.1	3.8	8.8	7.5	8.4
4	.1	.0	.0	---	---	---	6.2	3.5	4.9	7.5	6.8	7.2
5	.1	.0	.0	---	---	---	7.8	4.7	6.0	6.8	5.5	6.0
6	.1	.0	.0	---	---	---	8.8	5.2	7.1	7.8	4.7	6.2
7	.0	.0	.0	---	---	---	9.8	5.7	7.9	10.3	6.2	8.2
8	.1	.0	.0	---	---	---	9.7	7.2	8.5	12.6	9.2	10.9
9	.1	.0	.0	---	---	---	8.4	5.6	6.8	12.2	10.7	11.6
10	.0	.0	.0	---	---	---	7.3	4.1	5.7	10.7	9.1	9.9
11	.0	.0	.0	---	---	---	7.9	4.5	6.3	9.1	7.4	8.0
12	.0	.0	.0	---	---	---	10.1	6.4	8.1	9.7	6.6	8.1
13	.1	.0	.0	---	---	---	11.8	8.1	9.9	9.2	8.7	8.9
14	.1	.0	.0	---	---	---	11.0	9.1	9.9	9.9	7.7	8.8
15	.1	.0	.0	3.6	---	---	9.4	7.3	8.1	10.2	8.1	9.1
16	.0	.0	.0	---	1.8	---	7.5	5.9	6.7	10.1	8.7	9.3
17	.1	.0	.0	6.4	---	---	8.8	4.9	6.8	10.6	7.6	9.1
18	.1	.0	.0	7.0	3.6	5.5	9.9	6.7	8.2	12.4	8.9	10.6
19	.1	.0	.0	7.7	4.3	6.3	11.6	7.4	9.5	13.9	10.9	12.3
20	.1	.0	.0	8.1	4.9	6.7	11.7	10.0	10.7	14.0	11.3	12.7
21	.0	.0	.0	7.8	5.3	6.6	10.3	9.0	9.4	13.4	11.8	12.6
22	.1	.0	.0	7.9	5.2	6.5	9.0	7.6	8.3	13.2	11.5	12.3
23	.1	.0	.0	7.8	4.9	6.5	8.1	6.7	7.3	13.2	11.7	12.5
24	.1	.0	.0	8.5	5.0	6.9	8.4	6.8	7.5	13.0	12.1	12.6
25	.2	.0	.0	9.4	5.9	7.8	9.0	7.0	7.8	12.5	10.7	11.6
26	.1	.0	.0	9.1	7.0	8.2	8.3	7.4	8.0	12.2	10.7	11.5
27	.2	.0	.0	8.1	6.3	7.3	8.4	6.8	7.6	12.3	11.1	11.8
28	---	.0	---	7.2	4.9	6.0	9.2	7.5	8.4	12.8	10.7	11.7
29	---	---	---	7.2	3.8	5.6	10.7	8.8	9.6	12.4	11.6	12.0
30	---	---	---	8.5	5.0	6.8	9.7	8.9	9.3	12.0	10.3	11.3
31	---	---	---	7.4	6.1	6.8	---	---	---	12.0	11.3	11.7
MONTH	---	.0	---	---	---	---	11.8	2.1	7.6	14.0	4.7	10.1

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	11.3	9.6	10.5	18.9	15.9	17.4	22.9	18.7	20.8	20.3	17.4	19.1
2	11.5	9.7	10.6	19.0	16.7	17.9	22.8	19.5	21.5	20.2	17.0	18.2
3	11.8	10.2	11.1	20.4	17.1	18.6	22.1	19.8	21.0	19.8	16.5	17.7
4	11.7	10.2	11.0	20.9	18.0	19.4	21.7	19.6	20.6	18.5	15.3	16.9
5	11.6	10.0	10.9	21.9	17.9	19.9	21.6	19.5	20.7	19.0	15.5	17.4
6	11.8	9.9	10.8	23.1	19.2	21.1	22.9	19.8	21.2	19.3	15.7	17.7
7	13.1	10.9	12.0	23.4	20.3	21.9	22.6	19.6	21.2	20.0	16.0	17.9
8	14.2	11.6	12.9	23.0	20.1	21.7	21.9	18.8	20.5	20.0	15.3	17.6
9	14.4	12.1	13.5	22.3	18.6	20.5	22.4	19.3	21.0	20.2	14.8	17.3
10	13.9	12.2	13.0	23.1	19.6	21.3	22.9	20.0	21.3	20.5	16.4	17.7
11	13.3	11.4	12.4	23.1	19.8	21.4	22.2	19.8	21.0	19.9	15.8	17.6
12	14.2	11.7	13.0	24.1	19.7	22.0	21.3	18.2	19.8	19.7	15.2	17.1
13	15.1	12.9	14.1	23.8	20.5	22.3	22.2	17.9	20.1	19.7	14.2	16.6
14	14.8	13.6	14.3	22.3	20.2	21.0	21.1	18.4	19.8	18.6	14.0	16.1
15	14.2	13.4	13.9	22.7	18.9	20.7	20.3	17.0	18.5	18.4	13.4	15.6
16	14.0	12.7	13.5	22.4	19.3	20.9	22.0	17.1	19.6	18.7	12.7	15.4
17	13.9	12.7	13.4	23.5	19.7	21.6	20.2	18.4	19.4	20.0	13.9	16.5
18	14.2	12.4	13.4	24.0	20.2	22.0	22.3	16.8	19.4	19.8	14.2	16.5
19	15.5	12.4	13.9	22.6	20.6	21.6	22.9	18.9	20.6	15.8	14.3	15.4
20	15.9	14.4	15.3	23.6	19.9	21.8	23.6	18.6	20.7	15.7	13.6	14.5
21	15.7	14.1	15.1	23.1	20.0	21.7	21.7	19.6	20.5	16.5	11.9	14.1
22	15.8	14.0	15.0	24.7	20.4	22.5	24.0	18.6	21.0	16.9	12.1	14.4
23	16.3	13.9	15.2	25.4	21.1	23.4	24.5	19.4	21.8	18.0	13.6	15.6
24	16.7	14.4	15.7	24.7	22.2	23.6	24.3	20.2	22.1	16.9	15.1	16.1
25	17.3	15.6	16.5	24.5	21.1	23.0	22.6	19.9	21.0	18.1	13.9	15.7
26	17.7	15.7	16.7	24.4	21.0	23.0	23.8	18.9	21.1	17.1	12.9	14.8
27	17.8	16.0	16.9	25.3	21.2	23.3	22.9	19.7	21.1	14.7	10.8	12.5
28	17.9	15.5	16.8	24.8	22.4	23.4	24.6	19.4	21.3	11.8	8.7	10.5
29	18.3	16.2	17.2	24.5	21.3	22.7	24.1	19.3	21.2	12.1	7.2	9.4
30	18.4	16.2	17.2	23.7	21.0	22.1	22.8	19.3	21.0	13.3	8.2	10.5
31	---	---	---	21.7	20.2	20.9	22.0	19.9	20.8	---	---	---
MONTH	18.4	9.6	13.9	25.4	15.9	21.4	24.6	16.8	20.7	20.5	7.2	15.7

09251100 YAMPA RIVER ABOVE LITTLE SNAKE RIVER, NEAR MAYBELL, CO

LOCATION.--Lat 40°27'39", long 108°25'30", in NW$^1/_4$NE$^1/_4$ sec.20, T.6 N., R.98 W., Moffat County, Hydrologic Unit 14050002, attached to center pier of Moffat Count Road 25 bridge 1 mi upstream from the mouth of Little Snake River and 18 mi west of Maybell.

DRAINAGE AREA.--3,837 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1996 to current year.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 5,640 ft above sea level, from topographic map.

REMARKS.--Record good, except for estimated daily discharges, which are poor. Natural flow of stream affected by transbasin diversions, numerous storage reservoirs and diversions for irrigation of about 65,800 acres upstream from station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	208	614	405	e400	e240	e490	1690	5130	9610	2670	759	365
2	225	601	420	e440	e340	517	1850	4910	8530	2330	860	325
3	243	612	400	e320	e330	487	1760	4580	7380	2350	811	293
4	337	609	388	e310	e440	527	1590	4300	7620	2320	685	359
5	431	646	390	e350	e420	530	1400	4040	7540	2220	603	523
6	522	603	321	e470	e460	465	1260	3430	6930	2080	554	481
7	529	560	182	e480	e470	502	1200	2990	6060	1790	511	431
8	472	539	225	e510	e510	497	1180	2770	5670	1630	563	375
9	461	546	226	e420	e480	509	1420	2930	5770	1590	569	307
10	420	543	309	e430	e540	538	1680	4050	6310	1720	506	250
11	446	516	248	e450	e350	590	1440	5080	6330	1550	434	235
12	466	472	274	e490	e280	637	1320	4230	6000	1300	404	233
13	460	468	358	e490	e260	590	1230	3470	5720	1140	423	223
14	426	520	372	e430	e280	589	1390	3330	5460	1030	414	226
15	387	504	418	e410	e370	660	1850	3860	5150	1000	356	236
16	380	474	498	e450	e390	672	1990	4270	5490	977	316	226
17	402	458	492	e420	e380	695	1710	3950	5890	1200	292	214
18	409	461	466	e420	e400	792	1500	3710	5680	1130	273	196
19	403	440	e330	e490	e420	870	1370	3720	6180	1000	266	190
20	400	427	e210	e460	e440	995	1480	4600	5910	934	280	263
21	381	437	e180	e440	e390	1120	2030	5720	5700	872	299	379
22	370	400	e150	e430	e410	1260	2890	6500	5400	886	260	339
23	383	353	e110	e410	e410	1440	3110	7020	5240	827	253	351
24	383	399	e130	e450	e440	1420	3000	7590	5150	763	290	350
25	405	410	e160	e410	e480	1410	2900	8500	4940	724	291	327
26	426	390	e290	e390	e500	1480	3880	9090	4430	655	262	309
27	434	376	e360	e410	e440	1730	4040	8940	4410	635	252	291
28	440	382	e370	e360	e420	1910	4200	8560	3940	665	218	285
29	443	416	e490	e250	---	1850	4000	8330	3350	652	193	273
30	557	398	e460	e220	---	1530	3930	8570	3000	636	237	265
31	640	---	e470	e220	---	1400	---	9240	---	655	353	---
TOTAL	12889	14574	10102	12630	11290	28702	64290	167410	174790	39931	12787	9120
MEAN	416	486	326	407	403	926	2143	5400	5826	1288	412	304
MAX	640	646	498	510	540	1910	4200	9240	9610	2670	860	523
MIN	208	353	110	220	240	465	1180	2770	3000	635	193	190
AC-FT	25570	28910	20040	25050	22390	56930	127500	332100	346700	79200	25360	18090

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 1999, BY WATER YEAR (WY)

MEAN	664	575	400	446	452	1370	3230	7610	6821	1661	562	549
MAX	1250	758	494	532	546	1908	4258	9419	9348	2004	921	1448
(WY)	1998	1998	1998	1998	1998	1998	1998	1997	1997	1998	1997	1997
MIN	328	481	326	398	403	926	2143	5400	5529	1288	368	211
(WY)	1997	1997	1999	1997	1999	1999	1999	1999	1998	1999	1996	1996

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1996 - 1999	
ANNUAL TOTAL	756428		558515			
ANNUAL MEAN	2072		1530		2056	
HIGHEST ANNUAL MEAN					2458	1997
LOWEST ANNUAL MEAN					1530	1999
HIGHEST DAILY MEAN	9590	May 6	9610	Jun 1	15500	Jun 5 1997
LOWEST DAILY MEAN	e110	Dec 23	e110	Dec 23	103	Sep 7 1996
ANNUAL SEVEN-DAY MINIMUM	171	Sep 8	176	Dec 20	121	Sep 4 1996
INSTANTANEOUS PEAK FLOW			9810	May 31	16400	Jun 5 1997
INSTANTANEOUS PEAK STAGE			8.98	May 31	10.74	Jun 5 1997
ANNUAL RUNOFF (AC-FT)	1500000		1108000		1490000	
10 PERCENT EXCEEDS	6740		5100		6820	
50 PERCENT EXCEEDS	560		497		613	
90 PERCENT EXCEEDS	256		264		284	

e Estimated

09251100 YAMPA RIVER ABOVE LITTLE SNAKE RIVER NEAR MAYBELL, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1997 to current year.

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SED. SUSP. FALL DIAM. % FINER THAN .062 MM (70342)	SED. SUSP. FALL DIAM. % FINER THAN .125 MM (70343)	SED. SUSP. FALL DIAM. % FINER THAN .250 MM (70344)	SED. SUSP. FALL DIAM. % FINER THAN .500 MM (70345)	SED. SUSP. FALL DIAM. % FINER THAN 1.00 MM (70346)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
MAR										
31...	1430	1420	372	97	--	--	--	--	--	79
MAY										
20...	1520	4820	5400	415	76	83	94	99	100	--

BEDLOAD SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	TEMPER-ATURE WATER (DEG C) (00010)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	SEDI-MENT DIS-CHARGE, BEDLOAD (TONS/ DAY) (80225)	SED. BEDLOAD SIEVE DIAM. % FINER THAN .062 MM (80226)	SED. BEDLOAD SIEVE DIAM. % FINER THAN .125 MM (80227)
MAR							
31...	1430	7.3	1420	698	26	.00	1
MAY							
20...	1520	14.8	4820	330	201	1	3

DATE	SED. BEDLOAD SIEVE DIAM. % FINER THAN .250 MM (80228)	SED. BEDLOAD SIEVE DIAM. % FINER THAN .500 MM (80229)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 1.00 MM (80230)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 2.00 MM (80231)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 4.00 MM (80232)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 8.00 MM (80233)
MAR						
31...	18	97	99	<100	100	100
MAY						
20...	21	66	84	95	100	--

09253000 LITTLE SNAKE RIVER NEAR SLATER, CO

LOCATION.--Lat 40°59'58", long 107°08'34", in $SW^1/_4NW^1/_4$ 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 mi^2.

PERIOD OF RECORD.--October 1942 to September 1947, October 1950 to September 1999 (discontinued).

REVISED RECORDS.--WSP 1733: 1960.

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 6,831.00 ft above sea level.

REMARKS.--Records good except for estimated daily discharges, which are poor. Diversions for irrigation of about 2,000 acres upstream from station. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33	83	56	e49	e50	e48	186	1050	1650	333	113	59
2	84	85	57	e49	e46	e48	161	996	1490	312	78	65
3	85	86	50	e48	e48	e49	142	947	1580	285	68	72
4	89	77	51	e49	e48	e49	134	783	1530	253	64	74
5	88	63	44	e45	e49	e47	127	627	1410	226	65	54
6	78	66	e43	e49	e50	e46	128	553	1470	205	68	43
7	81	63	e42	e49	e48	e49	157	562	1300	181	68	37
8	82	64	e50	e45	e47	e48	197	783	1290	174	66	34
9	82	61	e52	e44	e46	e49	165	1160	1320	175	55	33
10	79	56	e50	e45	e49	e50	151	1200	1270	148	53	33
11	76	64	e49	e45	e48	e49	147	850	1200	134	56	32
12	69	71	e50	e42	e50	e51	161	719	1170	128	61	32
13	63	67	e51	e47	e52	e51	216	753	1100	119	56	31
14	60	66	e51	e46	e51	e52	274	885	1070	115	47	30
15	58	65	e51	e49	e50	e51	235	805	1070	158	43	29
16	53	63	e52	e47	e48	e60	210	849	1090	125	47	29
17	52	62	e52	e48	e48	e60	202	737	1290	113	45	29
18	51	63	e52	e49	e47	e70	260	869	1250	110	44	28
19	49	63	e53	e50	e47	e80	373	1190	1200	101	41	39
20	49	50	e53	e49	e46	e95	533	1370	1160	101	43	77
21	46	59	e54	e50	e45	115	607	1520	1100	91	48	55
22	47	60	e54	e49	e50	114	460	1710	1060	98	63	42
23	48	57	e52	e46	e51	113	379	1960	927	90	45	37
24	59	55	e51	e50	e50	121	463	2060	837	81	37	35
25	53	50	e51	e51	e50	140	583	2010	775	77	36	36
26	49	52	e51	e53	e51	166	458	1910	698	74	35	33
27	48	52	e50	e50	e50	177	457	1850	614	71	35	31
28	106	55	e50	e48	e49	151	622	1840	546	70	44	34
29	87	61	e50	e49	---	145	887	1880	499	85	53	37
30	81	60	e50	e51	---	158	1100	2010	426	109	53	40
31	86	---	e49	e51	---	186	---	2020	---	140	50	---
TOTAL	2071	1899	1571	1492	1364	2688	10175	38458	33392	4482	1680	1240
MEAN	66.8	63.3	50.7	48.1	48.7	86.7	339	1241	1113	145	54.2	41.3
MAX	106	86	57	53	52	186	1100	2060	1650	333	113	77
MIN	33	50	42	42	45	46	127	553	426	70	35	28
AC-FT	4110	3770	3120	2960	2710	5330	20180	76280	66230	8890	3330	2460

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1944 - 1999, BY WATER YEAR (WY)

MEAN	39.6	36.5	32.4	31.9	32.8	51.4	263	1095	959	163	40.1	29.8
MAX	91.8	77.8	59.4	74.5	59.5	139	842	2122	2231	519	97.3	80.5
(WY)	1962	1962	1983	1983	1962	1989	1974	1984	1983	1983	1945	1997
MIN	17.6	18.4	14.8	16.3	20.4	23.8	77.6	405	178	33.4	17.0	11.0
(WY)	1953	1959	1977	1945	1945	1977	1973	1977	1987	1977	1954	1944

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1944 - 1999	
ANNUAL TOTAL	102195		100512			
ANNUAL MEAN	280		275		232	
HIGHEST ANNUAL MEAN					423	1984
LOWEST ANNUAL MEAN					86.6	1977
HIGHEST DAILY MEAN	1870	May 21	2060	May 24	3960	May 24 1984
LOWEST DAILY MEAN	31	Sep 6	28	Sep 18	4.2	Sep 9 1988
ANNUAL SEVEN-DAY MINIMUM	31	Sep 5	30	Sep 12	6.2	Sep 4 1988
INSTANTANEOUS PEAK FLOW			2580	May 23	4780	May 23 1984
INSTANTANEOUS PEAK STAGE			7.32	May 23	a8.78	May 23 1984
ANNUAL RUNOFF (AC-FT)	202700		199400		167900	
10 PERCENT EXCEEDS	1100		1070		836	
50 PERCENT EXCEEDS	66		61		41	
90 PERCENT EXCEEDS	38		44		21	

e Estimated
a Maximum gage height, 9.95 ft, Apr 25, 1974.

09255000 SLATER FORK NEAR SLATER, CO

LOCATION.--Lat 40°58'57", long 107°22'56", in SW$^{1}/_{4}$NE$^{1}/_{4}$ 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 mi^{2}.

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 with satellite telemetry. Elevation of gage is 6,600 ft above sea level, 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 for estimated daily discharges, which are poor. Diversions for irrigation of about 500 acres upstream from station. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.2	30	e23	e22	32	40	78	488	536	86	19	19
2	12	28	e23	e22	25	39	65	485	480	78	15	26
3	15	29	22	23	31	38	56	519	556	67	13	29
4	26	28	22	24	29	39	53	429	498	58	13	35
5	30	24	18	25	30	36	48	279	453	51	14	25
6	24	26	7.6	25	30	24	50	236	427	43	20	19
7	24	24	10	25	29	27	61	268	385	37	15	14
8	29	27	16	25	29	24	87	391	424	38	13	13
9	30	25	19	24	36	25	70	637	428	43	11	9.7
10	25	29	20	24	33	26	60	604	399	37	10	9.1
11	21	32	19	25	24	25	59	359	361	32	13	9.6
12	19	25	19	25	21	27	68	289	325	25	16	12
13	18	32	20	23	30	26	102	327	307	20	14	13
14	18	33	20	19	30	30	138	428	298	17	11	13
15	17	28	20	25	30	34	98	368	309	27	9.0	13
16	17	27	20	23	27	36	77	399	325	28	9.5	12
17	18	26	20	24	30	38	68	306	409	21	12	13
18	19	26	21	25	28	42	85	369	407	21	12	13
19	18	26	20	26	32	43	138	530	322	19	9.2	16
20	19	17	20	25	27	50	227	579	310	19	8.7	29
21	17	34	22	26	26	56	316	592	275	17	13	22
22	18	25	e22	25	35	54	241	641	255	16	21	19
23	19	22	e22	24	32	59	188	695	223	15	16	e17
24	25	23	e22	28	33	76	262	682	205	14	12	e16
25	24	21	e22	27	34	89	323	648	198	13	12	e16
26	22	24	e22	29	36	83	255	622	156	13	14	e14
27	21	24	e22	28	30	98	263	666	134	12	14	e13
28	51	24	e22	24	36	64	333	665	121	17	15	e15
29	42	e24	e22	18	---	55	490	688	106	23	22	e17
30	34	e24	e22	26	---	60	622	760	96	19	22	e19
31	32	---	e22	28	---	78	---	751	---	20	17	---
TOTAL	713.2	787	621.6	762	845	1441	4981	15700	9728	946	435.4	510.4
MEAN	23.0	26.2	20.1	24.6	30.2	46.5	166	506	324	30.5	14.0	17.0
MAX	51	34	23	29	36	98	622	760	556	86	22	35
MIN	9.2	17	7.6	18	21	24	48	236	96	12	8.7	9.1
AC-FT	1410	1560	1230	1510	1680	2860	9880	31140	19300	1880	864	1010

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1932 - 1999, BY WATER YEAR (WY)

MEAN	20.1	19.3	17.5	17.2	18.7	29.9	118	384	257	38.7	10.1	11.7
MAX	62.4	49.2	44.1	36.9	46.5	144	323	801	660	189	38.4	55.0
(WY)	1986	1985	1985	1985	1986	1998	1985	1984	1995	1983	1945	1984
MIN	7.29	7.73	7.30	4.42	9.82	12.6	25.2	45.7	23.6	1.27	1.39	3.20
(WY)	1934	1934	1932	1992	1981	1965	1933	1934	1977	1977	1994	1960

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1932 - 1999	
ANNUAL TOTAL	41777.9		37470.6			
ANNUAL MEAN	114		103		78.7	
HIGHEST ANNUAL MEAN					157	1984
LOWEST ANNUAL MEAN					20.5	1934
HIGHEST DAILY MEAN	728	May 21	760	May 30	1500	May 16 1984
LOWEST DAILY MEAN	6.0	Sep 2	7.6	Dec 6	a.00	Aug 2 1934
ANNUAL SEVEN-DAY MINIMUM	6.8	Sep 1	10	Aug 14	.00	Aug 2 1934
INSTANTANEOUS PEAK FLOW			886	May 31	b2250	May 16 1984
INSTANTANEOUS PEAK STAGE			8.20	May 31	c11.78	May 16 1984
ANNUAL RUNOFF (AC-FT)	82870		74320		57020	
10 PERCENT EXCEEDS	414		375		258	
50 PERCENT EXCEEDS	26		26		20	
90 PERCENT EXCEEDS	11		14		7.2	

e Estimated
a Also occurred several days during years 1936, 1954, and 1977.
b From rating curve extended above 1000 ft^{3}/s.
c From floodmark.

09260000 LITTLE SNAKE RIVER NEAR LILY, CO

LOCATION.--Lat 40°32'50", long 108°25'25", in NW$^1/_4$NE$^1/_4$ 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.

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. Suspended-sediment data available 1969-86, 1994-98.

REVISED RECORDS.--WSP 1713: 1959.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 5,685 ft above sea level, 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 fair except for estimated daily discharges, which are poor. Diversions for irrigation of about 21,000 acres upstream from station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	39	320	260	e220	e130	e450	613	3950	4590	1060	105	40
2	41	279	305	e240	e190	e440	809	3410	4340	964	167	45
3	51	286	286	e180	e180	762	782	3410	3370	833	189	64
4	106	273	262	e170	e250	726	643	3350	3180	740	172	71
5	78	260	254	e190	e240	486	562	3310	3140	681	147	112
6	189	276	136	e260	e260	490	532	2230	2990	659	142	215
7	271	257	81	e270	e270	440	617	1820	2760	535	138	172
8	232	242	144	e280	e280	370	630	1760	3040	487	116	137
9	187	253	161	e240	e270	318	659	1810	2660	378	90	124
10	177	220	e140	e250	e290	324	818	2710	2720	348	103	109
11	203	228	e150	e260	e210	327	676	3630	2680	e330	91	94
12	223	217	e160	e270	e160	364	577	2710	2620	e280	83	73
13	215	217	e190	e270	e140	406	497	2270	2490	e240	68	72
14	200	240	e210	e240	e160	355	559	2290	2340	e200	59	63
15	187	251	e220	e230	e200	367	674	3440	2240	e200	53	58
16	174	235	e230	e250	e220	435	928	3190	2250	186	50	54
17	186	252	e230	e240	e210	650	761	2540	2250	320	54	51
18	185	261	e240	e240	e220	699	640	2260	2420	351	56	51
19	180	269	e200	e270	e230	624	572	2110	3140	239	43	56
20	184	265	e120	e250	e250	533	670	2630	2850	197	36	74
21	183	258	e96	e240	e220	561	1060	3250	2700	170	44	75
22	184	244	e78	e240	e230	655	1900	3610	2510	175	47	65
23	212	210	e64	e230	e230	747	1820	3930	2490	155	50	78
24	241	238	e78	e250	e250	701	1580	4600	2260	154	63	125
25	e190	254	e88	e230	e270	639	1570	5260	2030	144	61	113
26	e202	233	e160	e220	e370	692	3430	4410	1800	125	58	83
27	e211	238	e190	e230	e320	753	3550	4140	1650	111	62	78
28	e237	202	e200	e200	e370	899	2360	4050	1490	99	53	80
29	e218	259	e260	e140	---	912	2370	4290	1350	99	46	92
30	219	260	e250	e120	---	618	2690	4390	1220	111	44	94
31	388	---	e260	e120	---	535	---	4540	---	120	43	---
TOTAL	5793	7497	5703	7040	6620	17278	35549	101300	77570	10691	2533	2618
MEAN	187	250	184	227	236	557	1185	3268	2586	345	81.7	87.3
MAX	388	320	305	280	370	912	3550	5260	4590	1060	189	215
MIN	39	202	64	120	130	318	497	1760	1220	99	36	40
AC-FT	11490	14870	11310	13960	13130	34270	70510	200900	153900	21210	5020	5190

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1922 - 1999, BY WATER YEAR (WY)

MEAN	116	123	99.4	91.8	125	383	1076	2599	1920	310	71.3	56.0
MAX	385	363	244	227	595	1260	3259	5967	4601	1395	534	314
(WY)	1926	1928	1928	1999	1986	1962	1952	1984	1983	1995	1941	1965
MIN	.000	.000	25.0	16.0	18.0	80.5	320	477	36.7	.29	.000	.000
(WY)	1935	1935	1931	1933	1933	1964	1961	1934	1934	1934	1924	1934

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1922 - 1999	
ANNUAL TOTAL	265475		280192			
ANNUAL MEAN	727		768		582	
HIGHEST ANNUAL MEAN					1252	1984
LOWEST ANNUAL MEAN					110	1934
HIGHEST DAILY MEAN	4370	Jun 18	5260	May 25	13400	May 18 1984
LOWEST DAILY MEAN	13	Sep 11	36	Aug 20	a.00	Jul 30 1924
ANNUAL SEVEN-DAY MINIMUM	14	Sep 16	47	Aug 16	.00	Jul 30 1924
INSTANTANEOUS PEAK FLOW			6480	May 25	16700	May 18 1984
INSTANTANEOUS PEAK STAGE			6.83	May 25	b9.85	May 18 1984
ANNUAL RUNOFF (AC-FT)	526600		555800		421600	
10 PERCENT EXCEEDS	2710		2680		1980	
50 PERCENT EXCEEDS	240		250		130	
90 PERCENT EXCEEDS	46		74		13	

e Estimated
a Also occurred Jul 31 to Sep 11, Sep 13-20, 1924, Aug 25-29, Aug 31 to Sep 13, and Sep 28-29, 1994.
b Maximum gage height, 11.10 ft, Feb 13, 1962, backwater from ice.

09260050 YAMPA RIVER AT DEERLODGE PARK, CO

LOCATION.--Lat 40°27'06", long 108°31'28", in $SE^1/_4SW^1/_4$ sec.21, T.6 N., R.99 W., Moffat County, Hydrologic Unit 14050002, in Dinosaur National Monument, on left bank at Deerlodge Park, 1,150 ft upstream from Disappointment Draw and 5.5 mi downstream from Little Snake River.

DRAINAGE AREA.--7,660 mi^2, approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1975 and January 1978 (discharge measurements only), April 1982 to September 1994, and October 1996 to current year.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 5,600 ft above sea level, from topographic map. Prior to Oct. 1, 1996, gage located 100 ft upstream at same datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. Natural flow of stream affected by transbasin diversions, numerous storage reservoirs and diversions for irrigation of about 86,800 acres upstream from station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	280	946	626	e520	e320	1070	2300	8750	13700	3520	827	439
2	296	883	680	e580	e460	1050	2650	8460	12500	3070	983	402
3	328	901	666	e420	e440	1200	2570	8060	10600	2930	1040	392
4	477	876	625	e410	e590	1390	2320	7600	10500	2820	920	444
5	526	899	628	e460	e560	1090	2060	7560	10500	2650	801	600
6	653	871	549	e620	e620	1090	1860	6080	9820	2500	740	730
7	811	822	275	e640	e640	1010	1890	5130	8870	2190	667	682
8	727	780	268	e680	e680	1010	1880	4700	8680	2050	738	559
9	634	794	375	e560	e640	910	2080	4820	8440	1860	708	466
10	572	754	327	e580	e720	914	2550	6570	8880	1910	647	387
11	588	745	357	e620	e520	993	2230	8300	9000	1800	571	350
12	624	695	369	e640	e380	1030	2030	7300	8750	1560	554	334
13	625	667	458	e640	e340	1060	1870	5990	8400	1370	540	311
14	588	729	505	e560	e380	1010	2000	5600	8040	1240	523	305
15	545	738	519	e540	e480	1060	2490	6860	7680	1240	465	303
16	520	678	540	e600	e520	1100	2950	7420	7890	1180	417	295
17	541	672	553	e560	e500	1340	2600	6530	8250	1360	398	279
18	548	677	582	e560	e540	1540	2290	6080	8120	1530	384	262
19	522	677	472	e660	e560	1590	2070	5790	8970	1240	351	260
20	517	656	e280	e600	e600	1590	2190	6980	8620	1130	357	308
21	509	661	e230	e580	e520	1720	2910	8440	8290	1040	380	428
22	505	625	e190	e580	e540	1920	4440	9520	7870	1040	360	387
23	520	561	e150	e540	e540	2210	5040	10400	7650	964	322	377
24	517	582	e170	e600	608	2210	4670	11300	7430	891	369	426
25	540	641	e210	e560	657	2120	4550	12800	7060	829	387	407
26	571	592	e380	e520	887	2190	6760	13500	6320	775	360	366
27	587	587	e470	e540	747	2450	7520	13200	6020	731	345	333
28	615	570	e480	e480	874	2770	6980	12600	5350	743	323	328
29	601	626	e640	e320	---	2860	6660	12200	4560	718	292	323
30	695	631	e600	e290	---	2300	6760	12300	4020	729	315	319
31	936	---	e620	e290	---	2060	---	13100	---	748	423	---
TOTAL	17518	21536	13794	16750	15863	47857	101170	263940	250780	48358	16507	11802
MEAN	565	718	445	540	567	1544	3372	8514	8359	1560	532	393
MAX	936	946	680	680	887	2860	7520	13500	13700	3520	1040	730
MIN	280	561	150	290	320	910	1860	4700	4020	718	292	260
AC-FT	34750	42720	27360	33220	31460	94920	200700	523500	497400	95920	32740	23410

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1983 - 1999, BY WATER YEAR (WY)

MEAN	628	651	464	447	595	1557	3873	8730	7608	1853	573	417
MAX	1412	1127	832	742	1811	3200	8211	18330	16120	5890	1537	1594
(WY)	1998	1986	1985	1998	1986	1986	1985	1984	1984	1983	1984	1997
MIN	133	189	236	210	223	653	1965	3120	2117	202	66.6	66.4
(WY)	1990	1990	1990	1989	1989	1988	1992	1990	1992	1994	1994	1994

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1983 - 1999	
ANNUAL TOTAL	1044819		825875			
ANNUAL MEAN	2863		2263		2286	
HIGHEST ANNUAL MEAN					4286	1984
LOWEST ANNUAL MEAN					1062	1992
HIGHEST DAILY MEAN	13900	May 23	13700	Jun 1	32300	May 18 1984
LOWEST DAILY MEAN	e150	Dec 23	e150	Dec 23	29	Sep 11 1989
ANNUAL SEVEN-DAY MINIMUM	214	Sep 8	230	Dec 20	36	Sep 5 1989
INSTANTANEOUS PEAK FLOW			14300	Jun 1	33200	May 18 1984
INSTANTANEOUS PEAK STAGE			10.92	Jun 1	19.13	May 18 1984
ANNUAL RUNOFF (AC-FT)	2072000		1638000		1656000	
10 PERCENT EXCEEDS	9770		7760		7000	
50 PERCENT EXCEEDS	794		695		711	
90 PERCENT EXCEEDS	328		351		235	

e Estimated

09260050 YAMPA RIVER AT DEERLODGE PARK, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1977 to September 1981 published as "09260025, below Little Snake River." April 1982 to September 1983, October 1993 to September 1994, October 1996 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: November 1977 to September 1982.
WATER TEMPERATURE: October 1979 to September 1982 .

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

REMARKS.--Unpublished maximum and minimum specific conductance data for period of daily record available in district office. November 1977 to April 1980, all water-quality data collected approximately 3.5 mi upstream. All data subsequent to April 1980 were collected at present site.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 1040 microsiemens Oct. 4, 1979; minimum, 64 microsiemens July 13, 1978.
WATER TEMPERATURE: Maximum, 29.5°C Aug. 2, 1980; minimum, 0.0°C on many days during winter months.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	E. COLI WATER WHOLE TOTAL UREASE (COL / 100 ML) (31633)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)
OCT											
23...	1030	519	616	8.4	9.6	9.0	40	31	220	47	24
MAR											
04...	1230	1400	719	8.4	.1	11.5	K12	K8	210	45	25
JUN											
09...	1345	8590	178	8.2	15.1	8.5	67	>49	73	19	6.5
AUG											
18...	1530	385	536	8.5	26.0	7.2	--	--	180	42	18

DATE	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)
OCT										
23...	43	1	2.3	--	161	130	16	.26	6.6	369
MAR										
04...	68	2	2.4	145	--	180	23	.25	8.4	463
JUN										
09...	7.7	.4	.95	54	--	26	2.0	.10	9.3	103
AUG										
18...	41	1	2.4	148	--	100	16	.20	6.1	315

DATE	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS-SOLVED (TONS PER DAY) (70302)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)
OCT										
23...	.50	516	<.010	.052	<.020	.15	.11	.010	<.050	.012
MAR										
04...	.63	1750	<.010	.357	<.020	1.3	E.10	1.03	.019	.017
JUN										
09...	.14	2400	<.010	.062	<.020	.47	.26	.191	.015	.029
AUG										
18...	.43	328	<.010	<.050	<.020	.29	.22	.039	.004	<.010

DATE	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
OCT										
23...	<1.0	<1.0	820	<1.0	E1.7	37	<.1	<1	<.20	<20
MAR										
04...	<1.0	1.1	20000	<1.0	4.9	510	<.1	2	<.20	<20
JUN										
09...	<1.0	2.8	2600	<1.0	E3.0	90	<.1	<1	<.20	<20
AUG										
18...	<1.0	1.0	580	<1.0	E2.1	32	<.1	<1	<.20	<20

E Estimated.
K Based on non-ideal colony count.

09260050 YAMPA RIVER AT DEERLODGE PARK, CO--Continued

MISCELLANEOUS FIELD MEASUREMENTS, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)
OCT				
09...	1230	641	654	13.0
NOV				
13...	1100	669	573	2.1
FEB				
27...	1140	760	684	.9
MAR				
30...	1410	2300	652	7.6
MAY				
19...	1230	5690	333	8.2
25...	1030	12600	192	13.6
27...	1415	12800	175	13.6
JUN				
02...	1105	12700	152	12.3
23...	1650	7840	162	16.9
AUG				
05...	1330	759	401	23.1

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SED. SUSP. FALL DIAM. % FINER THAN .062 MM (70342)	SED. SUSP. FALL DIAM. % FINER THAN .125 MM (70343)	SED. SUSP. FALL DIAM. % FINER THAN .250 MM (70344)	SED. SUSP. FALL DIAM. % FINER THAN .500 MM (70345)	SED. SUSP. FALL DIAM. % FINER THAN 1.00 MM (70346)
MAR									
04...	1230	1400	5180	1370	92	95	99	100	--
30...	1410	2300	2400	386	76	78	81	85	86
MAY									
19...	1230	5690	7650	498	50	59	71	99	100
25...	1030	12600	49000	1440	54	68	74	88	96
27...	1415	12800	30700	887	57	84	93	98	100
JUN									
02...	1105	12700	20500	597	46	69	93	100	100
23...	1650	7840	4950	234	50	62	66	95	100

BEDLOAD SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	TEMPER-ATURE WATER (DEG C) (00010)	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	SEDI-MENT DIS-CHARGE, BEDLOAD (TONS/ DAY) (80225)	SED. BEDLOAD SIEVE DIAM. % FINER THAN .062 MM (80226)	SED. BEDLOAD SIEVE DIAM. % FINER THAN .125 MM (80227)
MAR							
30...	1410	7.6	2300	652	2020	.00	.00
MAY							
19...	1230	8.2	5690	333	1490	--	.00
25...	1030	13.6	12600	192	3540	.00	.00
27...	1415	13.6	12800	175	673	.00	.00
JUN							
02...	1105	12.3	12700	152	247	.00	1
23...	1650	16.9	7840	162	1790	--	.00

DATE	SED. BEDLOAD SIEVE DIAM. % FINER THAN .250 MM (80228)	SED. BEDLOAD SIEVE DIAM. % FINER THAN .500 MM (80229)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 1.00 MM (80230)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 2.00 MM (80231)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 4.00 MM (80232)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 8.00 MM (80233)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 16.0 MM (80234)
MAR							
30...	4	44	83	95	98	100	--
MAY							
19...	4	44	81	96	99	100	100
25...	1	10	40	68	82	90	100
27...	3	20	53	81	92	96	100
JUN							
02...	18	76	92	98	99	100	--
23...	2	31	72	91	96	99	100

09303000 NORTH FORK WHITE RIVER AT BUFORD, CO

LOCATION.--Lat 39°59'15", long 107°36'50", in $NW^1/_4NW^1/_4$ 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.--259 mi^2.

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-89-2: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 7,010 ft above sea level, from topographic map. May 24, 1910 to May 27, 1914, nonrecording gage at site 1.5 mi upstream at different datum. May 28, 1914 to Dec. 7, 1915, and July 1, 1919 to Oct. 9, 1920, nonrecording gage at present site at different datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. Diversions upstream from station for irrigation of about 900 acres, and 300 acres downstream from station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	232	221	195	195	182	169	206	468	940	535	280	240
2	242	225	192	195	188	169	201	461	954	508	267	244
3	232	225	190	199	188	169	195	450	975	464	269	253
4	252	213	191	190	184	172	190	414	955	443	284	245
5	248	212	191	185	177	170	188	373	905	423	284	233
6	240	215	165	184	176	171	188	351	813	402	288	228
7	244	213	165	184	175	169	200	367	832	388	274	226
8	252	213	166	181	175	170	221	472	901	400	263	224
9	251	213	195	183	177	168	204	608	914	392	252	222
10	244	206	179	181	181	170	204	598	873	370	254	218
11	235	212	173	184	169	168	198	478	846	361	292	221
12	227	208	185	181	170	168	208	438	854	355	270	222
13	226	205	164	178	e175	168	232	471	875	346	258	214
14	224	205	e155	187	e170	169	274	524	864	345	252	212
15	220	209	e160	e185	178	172	241	492	894	347	252	208
16	220	208	e175	e180	172	173	223	493	1040	337	250	203
17	226	206	e170	e175	176	175	222	496	1020	328	249	204
18	222	207	e160	183	176	181	234	603	995	328	254	203
19	222	206	e165	182	174	190	281	755	971	331	246	211
20	221	191	e160	181	171	197	370	855	925	322	239	235
21	217	204	e170	187	172	205	402	908	879	314	256	219
22	218	202	e175	179	172	203	353	972	893	316	263	208
23	229	199	e165	186	173	196	311	972	879	304	241	204
24	225	198	e170	180	172	201	341	1020	861	296	236	207
25	219	196	e165	180	171	216	387	1230	801	298	234	207
26	219	195	e175	183	169	232	360	1090	764	299	230	199
27	218	195	e180	180	169	227	377	1060	714	286	247	197
28	240	195	e170	174	171	207	446	1080	660	281	241	199
29	230	199	e175	175	---	202	507	1070	620	283	250	202
30	226	196	e165	181	---	209	568	1170	577	284	241	205
31	224	---	e170	188	---	211	---	1110	---	286	239	---
TOTAL	7145	6192	5376	5686	4903	5767	8532	21849	25994	10972	7955	6513
MEAN	230	206	173	183	175	186	284	705	866	354	257	217
MAX	252	225	195	199	188	232	568	1230	1040	535	292	253
MIN	217	191	155	174	169	168	188	351	577	281	230	197
AC-FT	14170	12280	10660	11280	9730	11440	16920	43340	51560	21760	15780	12920

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1910 - 1999, BY WATER YEAR (WY)

MEAN	202	185	170	163	157	161	278	781	855	401	248	210
MAX	348	273	257	234	240	237	584	1749	1618	1131	447	384
(WY)	1998	1985	1985	1985	1985	1985	1985	1985	1984	1957	1984	1997
MIN	122	112	122	118	116	125	168	282	217	116	127	114
(WY)	1978	1978	1964	1964	1977	1973	1920	1977	1977	1977	1977	1977

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1910 - 1999	
ANNUAL TOTAL	143364		116884			
ANNUAL MEAN	393		320		318	
HIGHEST ANNUAL MEAN					523	1984
LOWEST ANNUAL MEAN					157	1977
HIGHEST DAILY MEAN	1620	May 21	1230	May 25	3150	May 30 1912
LOWEST DAILY MEAN	e155	Dec 14	e155	Dec 14	90	Feb 21 1955
ANNUAL SEVEN-DAY MINIMUM	164	Dec 14	164	Dec 14	106	Jul 26 1977
INSTANTANEOUS PEAK FLOW			1340	May 25	3550	May 24 1984
INSTANTANEOUS PEAK STAGE			5.69	May 25	a6.76	May 24 1984
ANNUAL RUNOFF (AC-FT)	284400		231800		230500	
10 PERCENT EXCEEDS	961		806		740	
50 PERCENT EXCEEDS	240		221		198	
90 PERCENT EXCEEDS	189		171		141	

e Estimated
a Maximum gage height, 7.22 ft, Jan 9, 1961, backwater from ice.

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

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1976 to December 1978, October 1982 to September 1992. October 1994 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)
NOV								
05...	0930	205	307	8.2	2.0	11.1	1.3	K3
APR								
07...	1315	192	345	8.6	6.9	10.4	1.4	K1
MAY								
26...	0900	1010	170	8.0	6.9	9.0	1.8	K9
JUL								
28...	1212	281	336	8.4	15.1	8.3	.4	26
SEP								
01...	1521	239	303	8.3	12.9	8.4	1.2	K14

DATE	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)
NOV								
05...	<.010	.091	.045	<.10	<.10	.024	.011	.029
APR								
07...	<.010	.094	<.020	E.09	.11	.014	.019	.016
MAY								
26...	<.010	.112	.020	.39	.24	.074	.020	.022
JUL								
28...	<.010	<.050	<.020	.11	E.10	.022	.015	.013
SEP								
01...	<.010	<.050	<.020	E.08	E.10	.024	.014	.015

E Estimated.
K Based on non-ideal colony count.

MISCELLANEOUS FIELD MEASUREMENTS, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)
OCT				
19...	1407	226	318	6.1
NOV				
16...	1130	204	321	2.9
JAN				
27...	1402	177	334	1.5
FEB				
22...	1410	172	330	1.8
MAY				
11...	0935	448	268	2.8
25...	1000	1270	163	5.1
JUN				
30...	1401	581	218	14.4
JUL				
02...	0920	523	232	10.4
SEP				
22...	1459	218	324	10.9
30...	1221	203	330	10.9

09304000 SOUTH FORK WHITE RIVER AT BUFORD, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 39°58'28", long 107°37'30", in NW$^{1}/_{4}$NE$^{1}/_{4}$ sec.17, T.1 S., R.91 W., Rio Blanco County, Hydrologic Unit 14050005, on right 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.--October 1976 to December 1978, October 1984 to September 1992. October 1994 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)
NOV										
05...	1330	155	260	8.5	4.0	10.1	.7	K1	--	--
APR										
07...	1045	132	280	8.7	4.8	10.9	2.1	K1	--	--
MAY										
26...	1100	1000	218	8.3	5.7	8.8	2.2	12	110	33
JUL										
28...	0955	194	288	8.3	13.0	8.1	.6	39	--	--
SEP										
01...	1315	165	268	8.3	12.8	8.1	.4	12	140	41

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)
NOV									
05...	--	<.010	<.050	.045	<.10	<.10	.022	<.050	.027
APR									
07...	--	<.010	.061	<.020	E.09	E.10	.016	.008	.010
MAY									
26...	7.6	<.010	.161	.025	.41	.17	.085	.011	.017
JUL									
28...	--	<.010	<.050	<.020	.11	E.10	.021	.015	.011
SEP									
01...	9.4	<.010	<.050	<.020	E.09	<.10	.016	.011	<.010

DATE	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL) (01105)	ARSENIC TOTAL (UG/L AS AS) (01002)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA) (01007)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO) (01037)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)
MAY										
26...	E6.2	660	<1	27	<4.0	<16	<1	1	<1	2
SEP										
01...	<10	30	<1	16	<4.0	<16	<1	<2	<1	<1

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LITHIUM TOTAL RECOV-ERABLE (UG/L AS LI) (01132)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO) (01062)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS SR) (01082)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)
MAY									
26...	820	<1	<10	27	<1	2	<1	110	<40
SEP									
01...	60	<1	<10	6	<1	<1	<1	250	<40

E Estimated.
K Based on non-ideal colony count.

09304000 SOUTH FORK WHITE RIVER AT BUFORD, CO--Continued

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
MAY				
26...	1100	1000	138	373
SEP				
01...	1315	165	2	1.1

395650107435600 WHITE RIVER ABOVE DRY CREEK NR MEEKER, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 39°56'50", long. 107°43'56", in $SW^1/_4SW^1/_4$ sec.21, T.1 S., R.92 W., Rio Blanco County, Hydrologic Unit 14050005, on right bank 100 ft downstream from highway bridge, 1.5 mi upstream from Dry Creek, and 13.0 mi southeast of Meeker, Co.

DRAINAGE AREA.--Not determined.

PERIOD OF RECORD.-- December 1997 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)
NOV										
12...	1255	422	317	8.5	4.1	11.3	2.6	<1	--	--
APR										
08...	1225	442	340	8.0	3.7	10.2	1.8	K1	--	--
MAY										
27...	1000	2480	209	8.5	5.8	9.1	1.1	14	110	31
JUL										
29...	1215	568	329	8.5	14.9	8.6	1.2	20	--	--
SEP										
01...	1730	418	325	8.4	13.7	7.9	.9	K12	170	50

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)
NOV									
12...	--	<.010	.100	.020	.12	<.10	.020	.012	.012
APR									
08...	--	<.010	.071	<.020	.14	.11	.024	.010	<.010
MAY									
27...	6.5	<.010	.116	.025	.39	.19	.100	.013	.020
JUL									
29...	--	<.010	<.050	<.020	.12	E.10	.014	.011	<.010
SEP									
01...	9.9	<.010	<.050	<.020	.12	E.10	.021	.013	.010

DATE	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL) (01105)	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	ARSENIC TOTAL (UG/L AS AS) (01002)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA) (01007)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO) (01037)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)
MAY										
27...	990	<10	1	0	<4.0	E8.0	<1	2	<1	2
SEP										
01...	60	<15	<1	0	<4.0	E15	<1	<1	<1	<1

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LITHIUM TOTAL RECOV-ERABLE (UG/L AS LI) (01132)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO) (01062)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS SR) (01082)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)
MAY									
27...	1300	<1	<10	43	<1	4	<1	210	<40
SEP									
01...	100	<1	<10	9	<1	<1	<1	460	<40

395650107435600 WHITE RIVER ABOVE DRY CREEK NR MEEKER, CO--Continued

PESTICIDE ANALYSES, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	ALDICARB, WATER, FLTRD, GF 0.7U REC (UG/L) (49312)	ALDICARB SULFONE WAT,FLT GF 0.7U REC (UG/L) (49313)	ALDICARB SULFOXIDE, WAT,FLT GF 0.7U REC (UG/L) (49314)	CARBARYL, WATER, FLTRD, GF 0.7U REC (UG/L) (49310)	CARBOFURAN, WATER, FLTRD, GF 0.7U REC (UG/L) (49309)	3HYDRXY CARBOFURAN WAT,FLT GF 0.7U REC (UG/L) (49308)	METHIOCARB, WATER, FLTRD, GF 0.7U REC (UG/L) (38501)	METHOMYL, WATER, FLTRD, GF 0.7U REC (UG/L) (49296)	OXAMYL, WATER, FLTRD, GF 0.7U REC (UG/L) (38866)	PROPHAM, WATER, FLTRD, GF 0.7U REC (UG/L) (49236)
APR										
08...	<.550	<.100	<.0210	<.0080	<.120	<.0140	<.0260	<.0170	<.0180	<.0350
MAY										
27...	<.550	<.100	<.0210	<.0080	<.120	<.0140	<.0260	<.0170	<.0180	<.0350
JUL										
29...	<.550	<.100	<.0210	<.0080	<.120	<.0140	<.0260	<.0170	<.0180	<.0350

DATE	PROPOXUR, WATER, FLTRD, GF 0.7U REC (UG/L) (38538)	2,4-D, DISSOLVED (UG/L) (39732)	DICHLORPROP, WATER, FLTRD, GF 0.7U REC (UG/L) (49302)	2,4-DB WATER, FLTRD, GF 0.7U REC (UG/L) (38746)	MCPA, WATER, FLTRD, GF 0.7U REC (UG/L) (38482)	MCPB, WATER, FLTRD, GF 0.7U REC (UG/L) (38487)	2,4,5-T DISSOLVED (UG/L) (39742)	SILVEX, DISSOLVED (UG/L) (39762)	TRICLOPYR, WATER, FLTRD, GF 0.7U REC (UG/L) (49235)	ORYZALIN, WATER, FLTRD, GF 0.7U REC (UG/L) (49292)
APR										
08...	<.0350	<.150	<.0320	<.240	<.170	<.140	<.0350	<.0210	<.250	<.310
MAY										
27...	<.0350	<.150	<.0320	<.240	<.170	<.140	<.0350	<.0210	<.250	<.310
JUL										
29...	<.0350	<.150	<.0320	<.240	<.170	<.140	<.0350	<.0210	<.250	<.310

DATE	CHLOROTHALONIL, WAT,FLT GF 0.7U REC (UG/L) (49306)	DACTHAL MONOACID, WAT,FLT GF 0.7U REC (UG/L) (49304)	DICHLOBENIL, WATER, FLTRD, GF 0.7U REC (UG/L) (49303)	FENURON, WATER, FLTRD, GF 0.7U REC (UG/L) (49297)	DIURON, WATER, FLTRD, GF 0.7U REC (UG/L) (49300)	FLUOMETURON WATER, FLTRD, GF 0.7U REC (UG/L) (38811)	LINURON WATER, FLTRD, GF 0.7U REC (UG/L) (38478)	NEBURON, WATER, FLTRD, GF 0.7U REC (UG/L) (49294)	ACIFLUORFEN WATER, FLTRD, GF 0.7U REC (UG/L) (49315)	BENTAZON, WATER, FLTRD, GF 0.7U REC (UG/L) (38711)
APR										
08...	<.480	<.0170	<1.20	<.0130	<.0200	<.0350	<.0180	<.0150	<.0350	<.0140
MAY										
27...	<.480	<.0170	<1.20	<.0130	<.0200	<.0350	<.0180	<.0150	<.240	<.0140
JUL										
29...	<.480	<.0170	<1.20	<.0130	<.0200	<.0350	<.0180	<.0150	<.0350	<.0140

DATE	BROMOXYNIL WATER, FLTRD, GF 0.7U REC (UG/L) (49311)	CHLORAMBEN, WATER, FLTRD, GF 0.7U REC (UG/L) (49307)	CLOPYRALID, WATER, FLTRD, GF 0.7U REC (UG/L) (49305)	DICAMBA WATER, FLTRD, GF 0.7U REC (UG/L) (38442)	DINOSEB WATER, FLTRD, GF 0.7U REC (UG/L) (49301)	NORFLURAZON, WATER, FLTRD, GF 0.7U REC (UG/L) (49293)	PICLORAM, WATER, FLTRD, GF 0.7U REC (UG/L) (49291)	DNOC WAT,FLT GF 0.7U REC (UG/L) (49299)	BROMACIL, WATER, DISS, REC (UG/L) (04029)	GLYPHOSATE, WATER, UNFLTRD REC (UG/L) (39941)
APR										
08...	<.0350	<.420	<.230	<.0350	<.0350	<.0240	<.0500	<.420	<.0350	<5.00
MAY										
27...	<.0350	<.420	<.230	<.0350	<.0350	<.0240	<.0500	<.420	<.0350	<5.00
JUL										
29...	<.0350	<.420	<.230	<.0350	<.0350	<.0240	<.0500	<.420	<.0350	<5.00

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DISCHARGE, INST. CUBIC FEET PER SECOND (00061)	SEDIMENT, SUSPENDED (MG/L) (80154)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY) (80155)
MAY				
27...	1000	2480	85	568
SEP				
01...	1730	418	6	7.2

09304200 WHITE RIVER ABOVE COAL CREEK NEAR MEEKER, CO

LOCATION.--Lat 40°00'18", long 107°49'29", in $NW^1/_4NW^1/_4$ sec.3, T.1 S., R.93 W., Rio Blanco County, Hydrologic Unit 14050005, on left bank 15 ft downstream from county road bridge, 2.3 mi upstream from Coal Creek, and 5.0 mi southeast of Meeker.

DRAINAGE AREA.--648 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 with satellite telemetry. Elevation of gage is 6,400 ft above sea level, from topographic map. Oct. 1, 1961 to Sept. 30, 1976, at site 76 ft upstream at datum 2.00 ft higher.

REMARKS.--Records good except for estimated daily discharges, which are poor. Diversion upstream from station for irrigation of about 8,000 acres and about 4,000 acres downstream from station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	392	500	411	e330	e390	382	438	910	2630	739	489	387
2	433	513	408	e340	e360	377	434	869	2610	684	474	386
3	419	516	404	e335	e365	365	418	856	2580	640	450	396
4	478	489	405	e345	e345	374	407	826	2510	567	468	388
5	481	497	412	e330	e380	372	409	732	2310	539	467	355
6	470	518	e340	e335	393	362	401	613	2080	550	477	339
7	499	515	e330	e345	390	369	415	718	1740	551	456	325
8	510	516	e310	e330	390	376	447	812	1920	568	437	293
9	504	546	e395	e335	388	369	428	1040	2060	599	427	278
10	478	556	e380	e330	408	373	420	1140	2080	563	426	269
11	453	487	e335	e350	e350	370	400	956	1960	543	469	261
12	445	454	e385	e355	e310	376	427	913	1770	530	449	249
13	444	448	e415	e365	e390	359	443	941	1810	522	425	239
14	432	463	e410	e360	e390	374	507	1040	1720	525	413	232
15	424	454	e405	e385	e385	376	471	1010	1440	558	408	229
16	423	440	438	e380	e350	376	435	1010	1650	532	401	222
17	434	435	e425	e390	402	383	443	999	2100	507	375	229
18	451	432	e415	e375	383	387	459	1150	1980	512	383	240
19	445	421	e390	e390	392	407	490	1420	1990	534	367	246
20	441	371	e410	e385	372	424	596	1660	1810	561	358	275
21	438	401	e390	e400	366	438	676	1890	1620	588	375	254
22	447	425	e370	e390	391	435	644	1960	1650	578	398	233
23	466	427	e350	e385	367	424	595	2070	1570	511	353	234
24	468	426	e335	e400	376	426	622	2430	1500	510	341	242
25	458	407	e340	e390	375	447	704	2760	1310	519	338	251
26	470	414	e335	e395	376	474	688	2480	1200	516	312	244
27	480	411	e340	e380	365	473	677	2400	1070	500	337	238
28	532	413	e345	e340	366	427	800	2490	953	477	358	247
29	507	421	e340	e325	---	420	852	2550	893	472	388	258
30	500	419	e335	e350	---	437	1030	2660	808	488	388	272
31	500	---	340	e380	---	440	---	2890	---	503	374	---
TOTAL	14322	13735	11643	11225	10515	12392	16176	46195	53324	16986	12581	8311
MEAN	462	458	376	362	376	400	539	1490	1777	548	406	277
MAX	532	556	438	400	408	474	1030	2890	2630	739	489	396
MIN	392	371	310	325	310	359	400	613	808	472	312	222
AC-FT	28410	27240	23090	22260	20860	24580	32090	91630	105800	33690	24950	16480

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 1999, BY WATER YEAR (WY)

MEAN	357	342	306	291	286	307	512	1529	1793	602	304	265
MAX	616	488	426	405	387	448	1034	2785	3526	1924	759	586
(WY)	1998	1987	1998	1998	1986	1986	1985	1985	1984	1995	1984	1997
MIN	141	229	184	181	208	225	319	397	194	29.3	42.4	71.7
(WY)	1978	1978	1977	1977	1978	1977	1991	1977	1977	1977	1994	1977

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1962 - 1999	
ANNUAL TOTAL	273756		227405			
ANNUAL MEAN	750		623		575	
HIGHEST ANNUAL MEAN					966	1984
LOWEST ANNUAL MEAN					208	1977
HIGHEST DAILY MEAN	3010	May 21	2890	May 31	5360	Jun 26 1983
LOWEST DAILY MEAN	170	Sep 10	222	Sep 16	6.5	Jul 19 1977
ANNUAL SEVEN-DAY MINIMUM	202	Sep 5	234	Sep 13	8.8	Jul 16 1977
INSTANTANEOUS PEAK FLOW			3060	May 31	5740	Jun 26 1983
INSTANTANEOUS PEAK STAGE			5.33	May 31	7.07	Jun 26 1983
ANNUAL RUNOFF (AC-FT)	543000		451100		416600	
10 PERCENT EXCEEDS	1940		1430		1430	
50 PERCENT EXCEEDS	438		426		331	
90 PERCENT EXCEEDS	334		335		220	

e Estimated

09304200 WHITE RIVER ABOVE COAL CREEK NEAR MEEKER, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1973 to June 1975, July 1978 to September 1984, October 1986 to September 1992, October 1994 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: March 1973 to September 1975 (revised), July 1978 to September 1984.
WATER TEMPERATURE: March 1973 to September 1975 (revised), July 1978 to September 1984.

INSTRUMENTATION.--Water-quality monitor July 1978 to September 1984.

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

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 511 microsiemens Dec. 24, 1981; minimum 152 microsiemens June 14, 1980.
WATER TEMPERATURE: Maximum, 22.0°C July 8, 1981; minimum, 0.0°C on many days during winter months.

EXTREME OUTSIDE PERIOD OF DAILY RECORD.--A specific conductance of 544 microsiemens was measured Sept. 5, 1990.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)
NOV										
06...	1045	537	368	8.5	2.8	11.2	1.5	K4	--	--
APR										
15...	0945	478	370	8.3	2.9	11.5	3.3	K7	--	--
MAY										
28...	0815	2620	221	8.2	6.3	9.1	1.0	42	110	34
JUL										
28...	1445	487	389	8.3	16.1	8.1	.6	27	--	--
SEP										
02...	1015	396	386	8.3	13.1	8.7	.8	91	200	63

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)
NOV										
06...	--	--	<.010	<.050	.040	<.10	<.10	<.050	<.050	.019
APR										
15...	--	--	<.010	.053	<.020	.26	.14	.032	.006	.014
MAY										
28...	6.4	.72	<.010	.127	.021	.56	.14	.128	.014	.020
JUL										
28...	--	--	<.010	<.050	<.020	.12	E.10	.013	.009	.010
SEP										
02...	11	1.9	<.010	<.050	<.020	.16	E.10	.019	.011	.010

DATE	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL) (01105)	ARSENIC TOTAL (UG/L AS AS) (01002)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA) (01007)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO) (01037)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)
MAY										
28...	<10	940	<1	<100	<4.0	<16	<1	3	<1	2
SEP										
02...	<10	60	<1	0	<4.0	E9.8	<1	<1	<1	<1

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LITHIUM TOTAL RECOV-ERABLE (UG/L AS LI) (01132)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO) (01062)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS SR) (01082)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)
MAY									
28...	1200	<1	<10	43	<1	5	<1	220	80
SEP									
02...	90	<1	E0	10	1	<1	<1	560	<40

E Estimated.
K Based on non-ideal colony count.

09304200 WHITE RIVER ABOVE COAL CREEK NEAR MEEKER, CO--Continued

MISCELLANEOUS FIELD MEASUREMENTS, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)
OCT				
19...	1640	444	389	7.6
NOV				
27...	1135	398	397	3.0
JAN				
05...	1559	393	390	.4
FEB				
04...	1430	331	419	2.4
MAR				
06...	1256	306	423	3.9
APR				
05...	1244	404	412	5.8
MAY				
07...	1410	701	372	9.2
24...	1304	2270	235	10.0
JUN				
30...	1050	852	301	12.6
JUL				
22...	1105	610	363	14.8
SEP				
08...	1450	274	410	13.1

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
MAY				
28...	0815	2620	92	651
SEP				
02...	1015	396	6	6.8

09304500 WHITE RIVER NEAR MEEKER, CO

LOCATION.--Lat 40°02'01", long 107°51'42", in NE$^1/_4$NE$^1/_4$ sec.30, T.1 N., R.93 W., Rio Blanco County, Hydrologic Unit 14050005, on left bank at downstream abutment of private bridge, 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 with satellite telemetry. Elevation of gage is 6,300 ft above sea level, 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 for estimated daily discharges, which are poor. Diversions upstream from station for irrigation of about 12,000 acres upstream from station, and about 3,000 acres downstream from station. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	445	503	448	e360	444	405	464	983	2630	844	508	431
2	477	497	442	e370	398	402	460	925	2520	790	491	432
3	453	515	436	e365	404	391	450	906	2530	745	465	464
4	513	492	437	e360	392	400	431	875	2510	662	480	452
5	532	480	444	e365	412	393	440	818	2390	634	472	418
6	499	487	369	e360	409	379	425	754	2050	618	481	400
7	519	488	362	e365	405	391	438	746	1870	593	467	385
8	521	484	340	e360	415	398	470	817	2220	608	451	361
9	523	488	425	e365	441	390	452	1060	2400	648	437	356
10	511	470	413	e360	469	396	448	1180	2340	612	446	355
11	500	462	364	e365	379	390	438	996	2150	587	495	346
12	490	488	414	e370	339	394	452	914	2070	575	483	337
13	481	474	445	389	413	379	460	926	2100	565	457	336
14	480	483	446	385	412	388	536	1020	2000	568	446	324
15	472	480	439	413	414	400	507	1010	2030	599	440	316
16	472	478	461	406	382	397	470	988	2160	584	435	306
17	483	473	455	416	407	406	467	973	2160	553	407	309
18	494	477	444	403	394	416	485	1100	2150	548	411	319
19	485	473	418	413	404	435	513	1340	2120	576	397	314
20	483	429	441	415	381	452	630	1670	1950	602	388	346
21	475	449	421	423	376	467	731	1950	1780	632	399	333
22	480	479	398	413	402	474	706	2100	1790	604	432	309
23	498	466	382	414	378	456	649	2230	1720	529	394	307
24	512	461	368	418	392	456	682	2420	1610	532	382	308
25	504	453	365	412	397	473	813	2890	1420	538	383	316
26	502	449	367	415	399	507	816	2660	1300	529	364	313
27	498	448	e365	402	380	515	827	2550	1180	515	383	307
28	552	447	e375	366	386	474	893	2550	1050	496	408	311
29	529	450	e370	346	---	450	897	2700	956	496	422	322
30	514	455	e375	369	---	462	1090	2860	897	507	430	338
31	511	---	e370	402	---	464	---	3050	---	522	411	---
TOTAL	15408	14178	12599	11985	11224	13200	17540	47961	58053	18411	13465	10471
MEAN	497	473	406	387	401	426	585	1547	1935	594	434	349
MAX	552	515	461	423	469	515	1090	3050	2630	844	508	464
MIN	445	429	340	346	339	379	425	746	897	496	364	306
AC-FT	30560	28120	24990	23770	22260	26180	34790	95130	115100	36520	26710	20770

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1910 - 1999, BY WATER YEAR (WY)

MEAN	394	371	334	314	310	344	550	1565	1917	694	393	360
MAX	687	648	472	441	420	522	1094	2829	4091	2524	866	735
(WY)	1998	1929	1998	1998	1930	1986	1962	1985	1921	1957	1984	1997
MIN	215	255	233	225	232	261	313	499	264	116	140	156
(WY)	1978	1978	1978	1981	1935	1935	1944	1977	1934	1977	1994	1977

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1910 - 1999	
ANNUAL TOTAL	304996		244495			
ANNUAL MEAN	836		670		629	
HIGHEST ANNUAL MEAN					1044	1984
LOWEST ANNUAL MEAN					274	1977
HIGHEST DAILY MEAN	3400	May 22	3050	May 31	6320	May 25 1984
LOWEST DAILY MEAN	288	Sep 10	306	Sep 16	78	Jul 16 1977
ANNUAL SEVEN-DAY MINIMUM	311	Sep 5	310	Sep 22	86	Jul 13 1977
INSTANTANEOUS PEAK FLOW			3190	May 31	6950	May 25 1984
INSTANTANEOUS PEAK STAGE			5.01	May 31	a6.12	May 25 1984
ANNUAL RUNOFF (AC-FT)	605000		485000		455900	
10 PERCENT EXCEEDS	2130		1500		1500	
50 PERCENT EXCEEDS	480		460		372	
90 PERCENT EXCEEDS	390		365		270	

e Estimated
a Maximum gage height, 7.60 ft, Jun 16, 1921, present datum.

09304800 WHITE RIVER BELOW MEEKER, CO

LOCATION.--Lat 40°00'48", long 108°05'33", in $SW^1/_4NE^1/_4$ 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. WDR CO-86-2: 1985.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 5,928 ft above sea level, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. Diversions upstream from station for irrigation of about 22,000 acres upstream and a few small hay meadows downstream from station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	516	564	469	e410	461	434	472	1140	2720	1000	598	483
2	570	559	465	e420	406	429	472	1030	2510	950	562	488
3	548	584	459	e415	433	401	463	995	2530	892	525	549
4	666	555	459	e410	430	426	434	978	2500	811	544	525
5	715	537	473	e415	447	402	454	917	2430	776	536	476
6	667	549	379	e410	441	374	429	830	2130	756	548	455
7	660	548	359	e415	456	407	440	815	1900	725	534	437
8	653	543	345	e410	489	413	476	848	2160	730	499	408
9	644	553	414	423	536	402	464	1050	2390	761	477	399
10	625	523	438	411	582	409	452	1270	2360	726	473	393
11	604	504	376	386	408	399	443	1110	2190	676	529	391
12	590	542	426	369	338	402	465	999	2120	667	544	384
13	579	519	464	355	352	379	461	976	2150	651	511	373
14	575	532	471	338	457	391	535	1080	2080	658	488	364
15	564	525	467	336	414	411	526	1100	2110	708	471	346
16	578	521	483	350	373	407	474	1070	2250	697	464	330
17	599	514	513	352	423	415	463	1050	2260	653	439	318
18	584	518	496	350	376	421	484	1130	2290	634	452	346
19	571	511	459	355	391	442	503	1370	2210	655	430	336
20	562	453	484	367	377	463	610	1710	2110	665	420	390
21	553	471	440	375	347	479	752	2020	1940	701	453	388
22	561	517	403	373	422	487	760	2170	1950	724	515	365
23	579	495	363	362	371	465	697	2280	1890	599	446	353
24	592	489	349	371	405	461	744	2490	1790	599	412	354
25	569	478	393	418	429	476	939	2920	1620	629	422	371
26	570	474	e415	424	438	514	969	2810	1480	592	404	369
27	563	474	e420	406	387	532	968	2670	1360	580	410	362
28	648	474	e425	371	391	490	971	2610	1210	559	454	367
29	605	480	e420	328	---	450	969	2750	1090	578	480	382
30	585	486	e425	358	---	468	1200	2860	1030	599	488	392
31	584	---	e420	395	---	463	---	3060	---	618	452	---
TOTAL	18479	15492	13372	11878	11780	13512	18489	50108	60760	21569	14980	11894
MEAN	596	516	431	383	421	436	616	1616	2025	696	483	396
MAX	715	584	513	424	582	532	1200	3060	2720	1000	598	549
MIN	516	453	345	328	338	374	429	815	1030	559	404	318
AC-FT	36650	30730	26520	23560	23370	26800	36670	99390	120500	42780	29710	23590

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 1999, BY WATER YEAR (WY)

MEAN	461	418	369	340	341	395	599	1593	1933	779	434	401
MAX	793	638	536	493	457	586	1141	2979	3904	2155	837	821
(WY)	1985	1985	1985	1986	1986	1986	1985	1985	1983	1995	1984	1997
MIN	260	282	266	230	251	285	393	374	283	147	172	213
(WY)	1978	1978	1964	1976	1977	1981	1977	1977	1977	1977	1990	1990

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1962 - 1999	
ANNUAL TOTAL	329919		262313			
ANNUAL MEAN	904		719		673	
HIGHEST ANNUAL MEAN					1069	1985
LOWEST ANNUAL MEAN					290	1977
HIGHEST DAILY MEAN	3400	May 22	3060	May 31	6060	Jun 26 1983
LOWEST DAILY MEAN	286	Sep 10	318	Sep 17	85	Jun 28 1977
ANNUAL SEVEN-DAY MINIMUM	321	Sep 5	345	Sep 13	90	Jun 25 1977
INSTANTANEOUS PEAK FLOW			3200	May 31	6590	Jun 26 1983
INSTANTANEOUS PEAK STAGE			3.49	May 31	4.97	Jun 26 1983
ANNUAL RUNOFF (AC-FT)	654400		520300		487300	
10 PERCENT EXCEEDS	2290		1660		1540	
50 PERCENT EXCEEDS	543		488		420	
90 PERCENT EXCEEDS	400		373		285	

e Estimated

09304800 WHITE RIVER BELOW MEEKER, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1974 to September 1984, December 1985 to September 1992, October 1994 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: July 1978 to September 1983.
WATER TEMPERATURE: July 1978 to September 1983.

INSTRUMENTATION.--Water-quality monitor July 1978 to September 1983.

REMARKS.--Unpublished maximum and minimum specific conductance data for period of daily record available in district office.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 908 microsiemens Aug. 30, 1981; minimum, 221 microsiemens June 13, 1980.
WATER TEMPERATURE: Maximum, 25.0°C Aug. 7, 1978, Aug. 7, 1980; minimum, 0.0°C many days during winter months.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)
NOV										
06...	0800	549	532	8.1	3.1	10.4	1.1	K13	--	--
APR										
15...	1300	524	495	8.6	6.6	12.1	1.7	K3	--	--
MAY										
27...	1430	2620	279	8.2	11.1	8.8	2.2	250	130	38
JUL										
29...	1615	575	545	8.4	19.0	8.4	1.8	320	--	--
SEP										
02...	1330	488	550	8.5	15.5	9.2	1.1	70	270	75

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)
NOV										
06...	--	--	<.010	<.050	.040	.13	<.10	<.050	<.050	.015
APR										
15...	--	--	<.010	<.050	<.020	.35	.11	.050	.005	.011
MAY										
27...	9.3	2.0	<.010	.187	.023	.74	.35	.206	.019	.024
JUL										
29...	--	--	<.010	<.050	<.020	.26	.17	.017	.025	.012
SEP										
02...	21	7.1	<.010	<.050	<.020	.21	.11	.024	.011	<.010

DATE	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL) (01105)	ARSENIC TOTAL (UG/L AS AS) (01002)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA) (01007)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO) (01037)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)
MAY										
27...	<10	1500	<1	55	<4.0	<16	<1	3	2	3
SEP										
02...	<10	110	<1	31	<4.0	26	<1	<1	<1	1

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LITHIUM TOTAL RECOV-ERABLE (UG/L AS LI) (01132)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO) (01062)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS SR) (01082)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)
MAY									
27...	2100	2	<10	86	<1	5	<1	290	E20
SEP									
02...	190	<1	10	23	1	<1	2	680	<40

E Estimated.
K Based on non-ideal colony count.

09304800 WHITE RIVER BELOW MEEKER, CO--Continued

MISCELLANEOUS FIELD MEASUREMENTS, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)
OCT				
07...	1450	629	549	9.6
NOV				
09...	1055	549	540	3.1
JAN				
25...	1100	430	577	1.7
MAR				
08...	0907	433	571	2.5
APR				
28...	0936	1040	510	7.4
JUN				
29...	1246	1110	492	17.1
JUL				
26...	0859	609	533	16.3
SEP				
07...	1240	443	556	16.4

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
MAY				
27...	1430	2620	258	1830
SEP				
02...	1330	488	13	17

09306200 PICEANCE CREEK BELOW RYAN GULCH, NEAR RIO BLANCO, CO

LOCATION.--Lat 39°55'16", long 108°17'49", in $SE^1/_4NE^1/_4$, 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 September 1998, August to September 1999.

REVISED RECORDS.--WDR CO-79-3: 1977 (M).

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 6,070 ft above sea level, from topographic map.

REMARKS.--No estimated daily discharges. Records good. Diversions for irrigation upstream from station.

AVERAGE DISCHARGE.--34 years (water years 1965-98), 32.2 ft^3/s; 23,360 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 550 ft^3/s, May 5, 1985 gage height, 7.70 ft; maximum gage height, 7.95 ft, May 5, 1998; minimum daily, 0.15 ft^3/s, June 7, 1981.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period August to September, 64 ft^3/s, August 29, gage height, 4.23 ft; minimum daily, 24 ft^3/s, September 28-30.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	---	---	37
2	---	---	---	---	---	---	---	---	---	---	---	37
3	---	---	---	---	---	---	---	---	---	---	---	40
4	---	---	---	---	---	---	---	---	---	---	---	40
5	---	---	---	---	---	---	---	---	---	---	47	37
6	---	---	---	---	---	---	---	---	---	---	49	35
7	---	---	---	---	---	---	---	---	---	---	49	34
8	---	---	---	---	---	---	---	---	---	---	46	32
9	---	---	---	---	---	---	---	---	---	---	44	31
10	---	---	---	---	---	---	---	---	---	---	43	31
11	---	---	---	---	---	---	---	---	---	---	45	32
12	---	---	---	---	---	---	---	---	---	---	46	32
13	---	---	---	---	---	---	---	---	---	---	49	30
14	---	---	---	---	---	---	---	---	---	---	47	30
15	---	---	---	---	---	---	---	---	---	---	45	30
16	---	---	---	---	---	---	---	---	---	---	43	29
17	---	---	---	---	---	---	---	---	---	---	43	31
18	---	---	---	---	---	---	---	---	---	---	43	30
19	---	---	---	---	---	---	---	---	---	---	40	31
20	---	---	---	---	---	---	---	---	---	---	41	33
21	---	---	---	---	---	---	---	---	---	---	42	32
22	---	---	---	---	---	---	---	---	---	---	42	31
23	---	---	---	---	---	---	---	---	---	---	40	28
24	---	---	---	---	---	---	---	---	---	---	38	28
25	---	---	---	---	---	---	---	---	---	---	38	29
26	---	---	---	---	---	---	---	---	---	---	37	27
27	---	---	---	---	---	---	---	---	---	---	37	25
28	---	---	---	---	---	---	---	---	---	---	38	24
29	---	---	---	---	---	---	---	---	---	---	46	24
30	---	---	---	---	---	---	---	---	---	---	46	24
31	---	---	---	---	---	---	---	---	---	---	37	---
TOTAL	---	---	---	---	---	---	---	---	---	---	---	934
MEAN	---	---	---	---	---	---	---	---	---	---	---	31.1
MAX	---	---	---	---	---	---	---	---	---	---	---	40
MIN	---	---	---	---	---	---	---	---	---	---	---	24
AC-FT	---	---	---	---	---	---	---	---	---	---	---	1850

09306200 PICEANCE CREEK BELOW RYAN GULCH, NEAR RIO BLANCO, CO--Continued

WATER-QUALITY RECORDS

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

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: December 1979 to September 1982, November 1985 to September 1998.
WATER TEMPERATURE: December 1979 to September 1982, November 1985 to September 1998.
SUSPENDED-SEDIMENT DISCHARGE: October 1972 to September 1983.

INSTRUMENTATION.--Automatic pumping sediment sampler October 1972 to September 1983. Water-quality monitor December 1979 to September 1982 and November 1985 to July 1996 (revised); water-quality monitor with satellite telemetry July 1, 1996 to September 30, 1998.

REMARKS.--Prior to Oct. 1995, unpublished maximum and minimum specific conductance data for daily record are available in district office.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum 2,920 microsiemens, July 18, 1981; minimum, 398 microsiemens, Mar. 11, 1997.
WATER TEMPERATURE: Maximum 28.0°C Sept. 4, 1990, minimum, -0.4°C many days during the fall-winter period Oct. 1997 to March 1998.
SEDIMENT CONCENTRATION: Maximum daily, 21,700 mg/L, July 20, 1977; minimum daily, 8 mg/L, Oct. 14, 1979, and several days in September 1981.
SEDIMENT LOADS: Maximum daily, 5,390 tons July 23, 1983; minimum daily, 0.05 ton, Sept. 27, 30, 1981.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)
AUG 11...	1400	46	1520	8.2	18.1	6.7	510	80	76	152

DATE	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WAT.DIS FET LAB CACO3 (MG/L) (29801)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)
AUG 11...	3	3.3	470	380	16	.60	19	990	1010	1.35

DATE	SOLIDS, DIS-SOLVED (TONS PER DAY) (70302)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)
AUG 11...	123	116	<.010	.648	<.020	.28	<.050	.035	7.3

DATE	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	ANTI-MONY, DIS-SOLVED (UG/L AS SB) (01095)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (01010)	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)
AUG 11...	2.0	<1.0	3	102	<1.0	172	<1.0	<1.0	<1.0	2.3	E7.9	<1.0

DATE	LITHIUM DIS-SOLVED (UG/L AS LI) (01130)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	THAL-LIUM, DIS-SOLVED (UG/L AS TL) (01057)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	URANIUM NATURAL DIS-SOLVED (UG/L AS U) (22703)
AUG 11...	8	32	<.1	8.6	3.4	1	<1.0	2620	<.50	E7	1.6	4.0

E Estimated.

09306200 PICEANCE CREEK BELOW RYAN GULCH, NEAR RIO BLANCO, CO--Continued

RADIOCHEMICAL ANALYSES, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	ALPHA COUNT, 2 SIGMA WAT DIS AS TH-230 (PCI/L) (75987)	ALPHA RADIO. WATER DISS AS TH-230 (PCI/L) (04126)	BETA, 2 SIGMA WATER, DISS, AS CS-137 (PCI/L) (75989)	GROSS BETA, DIS-SOLVED (PCI/L AS CS-137) (03515)
AUG				
11...	.94	3.2	5.1	7.8

MISCELLANEOUS FIELD MEASUREMENTS, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)
AUG					SEP				
03...	1610	45	1540	15.7	03...	1120	39	1420	13.5

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
AUG				
11...	1400	46	287	36

09306222 PICEANCE CREEK AT WHITE RIVER, CO

LOCATION.--Lat 40°04'14", long 108°14'09", in $SE^1/_4SE^1/_4$ sec.2, T.1 N., R.97 W., Rio Blanco County, Hydrologic Unit 14050006, on downstream side of box culvert on county highway, 1.0 mi southwest of White River City, 1.3 mi upstream from mouth, and 17 mi west of Meeker.

DRAINAGE AREA.--652 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1964 to September 1966, October 1970 to current year.

REVISED RECORDS.--WDR CO-82-3: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 5,730 ft above sea level, from topographic map. Oct. 1, 1964 to Sept. 30, 1966, Oct. 1, 1970 to July 12, 1974, at several sites 0.1 mi upstream at different datums, and Oct. 1, 1987 to Nov. 18, 1994, at site 1.0 mi downstream at different datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. Diversions for irrigation of about 5,500 acres upstream from station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	44	54	47	e34	47	49	45	98	25	14	65	42
2	45	55	47	e35	44	50	46	98	e25	14	60	43
3	46	55	47	e33	47	48	50	101	e23	14	56	43
4	50	53	48	e36	45	49	49	98	e24	14	57	43
5	51	53	e45	e32	47	48	48	104	e26	14	58	43
6	50	54	e44	e33	49	47	47	114	e25	14	59	43
7	51	54	e41	e31	50	47	46	103	e27	15	57	41
8	50	53	e43	e35	54	50	46	102	e24	17	56	40
9	49	55	e39	e33	60	48	45	101	e27	19	55	38
10	48	53	e37	e37	64	e47	44	110	e28	20	54	38
11	46	53	e36	e40	57	e47	43	107	e27	21	55	37
12	46	52	e38	e37	54	46	43	106	e26	21	53	37
13	45	53	e34	e39	52	46	40	101	e29	23	55	35
14	45	53	e33	e36	53	46	28	95	e27	25	54	34
15	55	52	e36	e37	53	46	33	101	e29	25	53	33
16	55	51	e35	e40	47	47	34	97	e32	28	52	33
17	58	52	e38	e39	48	50	32	94	e31	29	51	33
18	56	50	e37	e41	47	52	31	78	e33	33	50	33
19	54	50	e34	e43	48	52	32	72	20	29	48	33
20	53	49	e36	e45	48	55	31	65	20	33	48	35
21	52	49	e38	50	47	58	31	62	16	35	48	36
22	53	49	e37	49	48	59	30	51	16	34	49	36
23	53	50	e39	47	46	56	30	43	15	30	48	35
24	53	48	e37	47	48	52	29	37	16	31	48	32
25	53	48	e35	47	50	49	41	30	15	34	47	32
26	53	48	e36	47	50	47	56	28	15	38	44	32
27	52	48	e33	47	47	47	55	28	15	40	44	30
28	64	48	e32	46	48	47	58	24	14	45	43	30
29	58	48	e30	44	---	46	50	24	14	43	46	30
30	56	48	e36	43	---	45	63	24	15	65	51	30
31	55	---	e37	43	---	43	---	27	---	65	44	---
TOTAL	1599	1538	1185	1246	1398	1519	1256	2323	679	882	1608	1080
MEAN	51.6	51.3	38.2	40.2	49.9	49.0	41.9	74.9	22.6	28.5	51.9	36.0
MAX	64	55	48	50	64	59	63	114	33	65	65	43
MIN	44	48	30	31	44	43	28	24	14	14	43	30
AC-FT	3170	3050	2350	2470	2770	3010	2490	4610	1350	1750	3190	2140

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 1999, BY WATER YEAR (WY)

MEAN	29.6	34.5	29.9	27.2	31.6	48.5	64.5	85.6	40.5	30.3	35.7	26.3
MAX	86.1	76.9	72.0	64.9	86.6	123	284	369	247	125	109	75.4
(WY)	1986	1986	1986	1986	1986	1986	1998	1998	1983	1984	1984	1984
MIN	1.60	10.1	13.5	11.4	16.3	17.2	3.54	2.27	1.40	1.56	1.67	2.03
(WY)	1965	1965	1991	1973	1973	1972	1972	1972	1994	1972	1990	1966

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1965 - 1999	
ANNUAL TOTAL	39047		16313			
ANNUAL MEAN	107		44.7		40.4	
HIGHEST ANNUAL MEAN					110	1985
LOWEST ANNUAL MEAN					12.5	1990
HIGHEST DAILY MEAN	539	May 7	114	May 6	539	May 7 1998
LOWEST DAILY MEAN	e29	Jan 8	14	Jun 28	a.50	Jul 21 1966
ANNUAL SEVEN-DAY MINIMUM	33	Jan 6	14	Jun 28	.84	Jul 30 1971
INSTANTANEOUS PEAK FLOW			127	May 1	b628	Sep 7 1978
INSTANTANEOUS PEAK STAGE			3.75	May 1	7.04	Sep 7 1978
ANNUAL RUNOFF (AC-FT)	77450		32360		29280	
10 PERCENT EXCEEDS	285		57		79	
50 PERCENT EXCEEDS	55		46		27	
90 PERCENT EXCEEDS	36		26		4.2	

e Estimated
a Also occurred Jul 22, 1966.
b On basis of slope-area measurement of peak flow.

09306222 PICEANCE CREEK AT WHITE RIVER, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--December 1970 to July 1986, March 1987, March 1990 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: January 1971 to June 1974, May 1975 to September 1983.
WATER TEMPERATURE: January 1971 to September 1974, May 1975 to September 1983.
SUSPENDED-SEDIMENT DISCHARGE: March 1974 to September 1983.

INSTRUMENTATION.--Water-quality monitor May 1975 to September 1983. Pumping sediment sampler March 1974 to September 1983.

REMARKS.--Unpublished maximum and minimum specific conductance data for period of daily record available in district office. The maximum extreme specific conductance value of 10,000 microsiemens represents a value of 10,000 microsiemens or higher due to instrument limitations.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 10,000 microsiemens, June 18, 1981; minimum, 460 microsiemens, Feb. 28 and Mar. 2, 1983.
WATER TEMPERATURE: Maximum, 32.0°C, July 14, 1978; minimum, 0.0°C, many days during winter months.
SEDIMENT CONCENTRATION: Maximum daily, 25,000 mg/L, estimated Sept. 7, 1978; 4 mg/L, Oct. 2, 1977.
SEDIMENT LOADS: Maximum daily, 6,095 tons, estimated, May 28, 1983; minimum daily, 0.10 ton, June 22, 1978.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)
NOV										
13...	0930	53	1600	8.5	1.9	11.4	500	76	75	220
MAR										
10...	1115	47	1730	8.6	5.9	10.5	450	67	69	210
APR										
06...	1145	50	1670	8.6	7.0	10.3	490	72	74	217
AUG										
12...	1005	54	1730	8.3	14.5	8.5	480	67	75	213

DATE	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	ALKA-LINITY WAT.DIS FET LAB CACO3 (MG/L) (29801)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)
NOV										
13...	4	2.1	524	--	370	26	.71	16	--	1100
MAR										
10...	4	2.2	525	--	370	30	.78	13	--	1080
APR										
06...	4	2.4	505	--	360	29	.74	13	--	1070
AUG										
12...	4	3.1	--	520	390	27	.73	18	1050	1100

DATE	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS-SOLVED (TONS PER DAY) (70302)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)
NOV										
13...	1.50	157	--	--	--	--	--	--	--	--
MAR										
10...	1.47	137	--	--	--	--	--	--	--	--
APR										
06...	1.46	145	--	<.010	.686	.020	.29	<.050	.014	4.5
AUG										
12...	1.43	154	123	<.010	.907	<.020	.33	<.050	.032	6.2

DATE	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	ANTI-MONY, DIS-SOLVED (UG/L AS SB) (01095)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (01010)	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)
APR												
06...	--	--	2	74	--	185	--	--	<1.0	--	<10	--
AUG												
12...	2.0	<1.0	3	103	<1.0	214	<1.0	<1.0	<1.0	2.2	<10	<1.0

09306222 PICEANCE CREEK AT WHITE RIVER, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	LITHIUM DIS-SOLVED (UG/L AS LI) (01130)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	THAL-LIUM, DIS-SOLVED (UG/L AS TL) (01057)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	URANIUM NATURAL DIS-SOLVED (UG/L AS U) (22703)
APR												
06...	19	6.4	--	5.5	<1.0	--	--	2470	--	--	<20	--
AUG												
12...	16	4.6	<.1	9.4	2.9	2	<1.0	2400	<.50	E7	1.5	4.2

E Estimated.

RADIOCHEMICAL ANALYSES, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	ALPHA COUNT, 2 SIGMA WAT DIS AS TH-230 (PCI/L) (75987)	ALPHA RADIO. WATER DISS AS TH-230 (PCI/L) (04126)	BETA, 2 SIGMA WATER, DISS, AS CS-137 (PCI/L) (75989)	GROSS BETA, DIS-SOLVED (PCI/L AS CS-137) (03515)
AUG				
12...	.95	3.2	5.6	8.4

MISCELLANEOUS FIELD MEASUREMENTS, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)
OCT					MAY				
06...	1540	51	1770	11.7	12...	0850	96	1340	8.5
NOV					JUN				
17...	1020	51	1680	3.7	18...	0850	31	2870	12.3
JAN					JUL				
07...	1558	30	1390	.1	15...	1015	26	2210	17.9
FEB					SEP				
17...	0920	45	1750	1.1	28...	1346	29	1940	8.1
MAR									
11...	1336	47	1740	6.5					

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
NOV				
13...	0930	53	143	20
MAR				
10...	1115	47	217	28
APR				
06...	1145	50	215	29
AUG				
12...	1005	54	273	40

09306242 CORRAL GULCH NEAR RANGELY, CO

LOCATION.--Lat 39°55'13", long 108°28'20", in $SE^1/_4NW^1/_4$ sec.35, T.1 S., R.99 W., Rio Blanco County, Hydrologic Unit 14050006, on left bank 5 ft downstream from Box Elder Gulch, 3.5 mi upstream from confluence with Stake Springs Draw, and 21 mi southeast of Rangely.

DRAINAGE AREA.--31.6 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 1974 to current year.

GAGE.--Water-stage recorder. Concrete V-notch control since July 20, 1974. Elevation of gage is 6,580 ft above sea level, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. No diversions upstream from station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e1.7	1.6	1.7	e1.1	1.3	1.5	1.1	1.4	8.3	2.3	1.7	1.8
2	e1.7	1.7	1.7	e1.1	1.3	1.4	1.1	3.3	8.2	2.2	1.7	1.8
3	e1.7	1.6	1.7	e1.1	1.4	1.4	1.1	5.0	7.9	2.1	1.9	1.8
4	e1.7	1.7	1.7	e1.0	1.4	1.4	1.1	5.9	7.6	2.0	2.0	1.7
5	e1.8	1.6	e1.6	e1.2	1.4	1.4	1.1	6.1	7.6	2.0	2.0	1.7
6	e1.8	1.7	e1.5	e1.1	1.4	1.3	1.1	6.3	7.0	1.8	1.9	1.7
7	1.6	1.7	e1.4	e1.4	1.4	1.4	1.1	6.5	6.3	1.7	1.8	1.8
8	1.6	1.7	e1.3	e1.3	1.4	1.4	1.1	6.8	6.1	1.9	1.8	1.8
9	1.6	1.7	e1.4	e1.2	1.7	1.3	1.1	7.3	5.8	1.8	1.8	1.8
10	1.6	1.7	e1.5	e1.1	1.4	1.3	1.1	8.4	5.6	1.8	1.8	1.7
11	1.6	1.7	e1.5	e1.1	1.2	1.3	1.1	8.7	5.4	1.8	2.0	1.6
12	1.6	1.7	e1.4	e1.0	1.2	1.3	1.1	9.0	5.1	1.8	2.0	1.6
13	1.6	1.7	e1.4	e1.1	1.2	1.3	1.1	9.4	4.7	1.7	1.9	1.6
14	1.5	1.8	e1.3	e1.2	1.3	1.3	1.1	9.7	4.6	1.9	2.0	1.5
15	1.6	1.8	e1.5	e1.4	1.3	1.3	1.1	9.7	4.8	1.8	1.9	1.3
16	1.6	1.8	e1.3	e1.4	1.3	1.2	1.1	10	4.6	1.8	1.9	1.3
17	1.7	1.8	e1.5	e1.5	1.4	1.2	1.1	10	5.1	1.7	1.9	1.2
18	1.7	1.8	e1.5	e1.4	1.3	1.2	1.1	10	4.5	1.7	1.9	1.2
19	1.6	1.8	e1.5	e1.4	1.3	1.1	1.1	9.8	4.0	1.7	1.9	1.3
20	1.6	1.8	e1.4	e1.5	1.3	1.2	1.1	10	3.8	1.7	2.0	1.2
21	1.6	1.8	e1.3	e1.5	1.3	1.1	1.2	10	3.7	1.7	2.2	1.2
22	1.5	1.8	e1.4	e1.5	1.3	1.1	1.3	10	3.6	1.6	2.1	1.2
23	1.5	1.8	e1.4	e1.4	1.3	1.1	1.3	10	3.2	1.7	2.0	1.2
24	1.6	1.8	e1.3	e1.3	1.4	1.1	1.2	10	3.1	1.7	2.1	1.2
25	1.6	1.8	e1.5	e1.3	1.5	1.1	1.2	10	2.9	1.7	2.0	1.2
26	1.6	1.7	e1.3	e1.4	1.4	1.1	1.2	10	2.8	1.7	1.9	1.2
27	1.6	1.7	e1.3	e1.3	1.3	1.1	1.1	10	2.7	1.6	1.9	1.2
28	1.6	1.7	e1.5	1.4	1.5	1.1	1.1	9.5	2.5	1.6	1.8	1.2
29	1.6	1.7	e1.4	1.3	---	1.1	1.1	9.1	2.4	2.1	1.9	1.2
30	1.6	1.7	e1.2	1.2	---	1.1	1.3	8.8	2.4	1.8	1.8	1.2
31	1.6	---	e1.1	1.2	---	1.1	---	8.7	---	1.8	1.8	---
TOTAL	50.3	51.9	44.5	39.4	37.9	38.3	34.0	259.4	146.3	56.2	59.3	43.4
MEAN	1.62	1.73	1.44	1.27	1.35	1.24	1.13	8.37	4.88	1.81	1.91	1.45
MAX	1.8	1.8	1.7	1.5	1.7	1.5	1.3	10	8.3	2.3	2.2	1.8
MIN	1.5	1.6	1.1	1.0	1.2	1.1	1.1	1.4	2.4	1.6	1.7	1.2
AC-FT	100	103	88	78	75	76	67	515	290	111	118	86

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1974 - 1999, BY WATER YEAR (WY)

MEAN	1.09	.89	.82	.77	.83	1.31	2.85	7.90	4.76	2.03	1.64	1.35
MAX	2.88	1.99	2.07	2.40	2.22	4.99	14.9	41.7	33.4	8.98	5.56	3.39
(WY)	1979	1984	1979	1979	1979	1998	1998	1984	1983	1984	1984	1978
MIN	.30	.25	.27	.30	.30	.31	.22	.15	.094	.17	.29	.32
(WY)	1991	1993	1992	1977	1993	1977	1992	1992	1992	1992	1977	1991

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1974 - 1999	
ANNUAL TOTAL	2019.59		860.9			
ANNUAL MEAN	5.53		2.36		2.25	
HIGHEST ANNUAL MEAN					7.75	1984
LOWEST ANNUAL MEAN					.27	1992
HIGHEST DAILY MEAN	35	May 5	10	May 16	207	Jun 1 1983
LOWEST DAILY MEAN	e.43	Jan 7	e1.0	Jan 4	a.06	Apr 10 1974
ANNUAL SEVEN-DAY MINIMUM	.62	Jan 4	1.1	Dec 31	.07	Apr 10 1974
INSTANTANEOUS PEAK FLOW			14	Jul 29	b1780	Aug 18 1984
INSTANTANEOUS PEAK STAGE			2.26	Jul 29	6.12	Aug 18 1984
ANNUAL RUNOFF (AC-FT)	4010		1710		1630	
10 PERCENT EXCEEDS	14		5.8		4.4	
50 PERCENT EXCEEDS	2.0		1.6		.90	
90 PERCENT EXCEEDS	.86		1.1		.31	

e Estimated
a Also occurred Apr 11-14, 1974.
b From rating curve extended above 70 ft^3/s, on basis of slope-area measurements at gage heights, 3.89 ft, 4.08 ft, and 6.12 ft.

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 September 1989.
WATER TEMPERATURE: January 1975 to September 1989.
SUSPENDED-SEDIMENT DISCHARGE: October 1974 to September 1985.

INSTRUMENTATION.--Water-quality monitor October 1974 to August 1989. Pumping sediment sampler October 1974 to September 1985.

REMARKS.--Unpublished maximum and minimum specific conductance data for period of daily record available in district office.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 3,000 microsiemens, July 17, 1976; minimum, 271 microsiemens, Feb. 18, 1980.
WATER TEMPERATURE: Maximum, 29.0°C, Aug. 5, 1979; minimum, 0.0°C, on several days during winter months some years.
SEDIMENT CONCENTRATIONS: Maximum daily, 35,800 mg/L, Aug. 2, 1982; minimum daily, 2 mg/L, May 24, 1981.
SEDIMENT LOADS: Maximum daily, 43,600 tons, Aug. 18, 1984; minimum daily, 0.00 ton, on many days during 1981.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)
NOV										
13...	1105	1.7	1410	7.8	6.8	7.8	610	100	85	131
APR										
09...	1045	1.2	1540	8.0	6.4	7.2	590	100	82	122
AUG										
11...	1205	2.5	1410	7.9	17.5	7.0	550	97	75	110

DATE	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	ALKA-LINITY WAT.DIS FET LAB CACO3 (MG/L) (29801)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)
NOV										
13...	2	1.1	394	--	430	16	.31	20	1020	1.39
APR										
09...	2	1.1	--	370	410	16	.30	20	981	1.33
AUG										
11...	2	1.3	--	380	380	15	.27	21	935	1.27

DATE	SOLIDS, DIS-SOLVED (TONS PER DAY) (70302)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	BORON, DIS-SOLVED (UG/L AS B) (01020)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)
NOV										
13...	4.70	--	--	--	--	--	--	--	116	2450
APR										
09...	3.18	<.010	.498	<.020	.21	<.050	.030	5.9	110	2430
AUG										
11...	5.17	<.010	1.18	<.020	.37	<.050	.012	7.6	103	2220

MISCELLANEOUS FIELD MEASUREMENTS, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)
OCT				
06...	1010	1.8	1450	6.8
NOV				
17...	0847	1.8	1560	5.6
JAN				
07...	1233	1.4	1610	7.2
27...	1207	1.3	1570	6.7
MAR				
09...	0844	1.4	1510	6.7
APR				
27...	1110	1.2	1610	13.2
MAY				
19...	1016	10	1310	12.6
JUL				
06...	0959	2.1	1430	12.2
SEP				
03...	0944	2.0	1500	11.0

09306242 CORRAL GULCH NEAR RANGELY, CO--Continued

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
NOV				
13...	1105	1.7	8	.04
APR				
09...	1045	1.2	4	.01
AUG				
11...	1205	2.5	37	.25

09306255 YELLOW CREEK NEAR WHITE RIVER, CO

LOCATION.--Lat 40°10'07", long 108°24'02", in NE$^1/_4$SW$^1/_4$ sec.4, T.2 N., R.98 W., Rio Blanco County, Hydrologic Unit 14050006, on left bank 160 ft downstream from bridge on State Highway 64, 0.3 mi upstream from mouth, and 10.0 mi northwest of White River City.

DRAINAGE AREA.--262 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1972 to September 1982, May 1988 to current year.

GAGE.--Water-stage recorder with satellite telemetry, and v-notch concrete control. Elevation of gage is 5,535 ft above sea level, from topographic map.

REMARKS.--Record good except for discharges above 11 ft^3/s, which are fair, and estimated daily discharges, which are poor. Diversions upstream from station for irrigation of about 300 acres.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	11	12	9.2	8.9	9.1	8.9	9.5	10	5.4	10	6.8
2	11	12	12	9.1	9.1	8.9	9.0	9.4	10	5.2	6.6	7.2
3	11	13	12	8.7	9.0	8.9	8.5	10	10	4.7	6.7	6.8
4	11	12	12	8.8	9.0	9.1	8.9	9.3	10	4.6	7.1	6.6
5	10	12	12	8.8	10	9.1	8.8	8.9	10	4.7	8.2	6.5
6	9.4	12	e10	8.9	11	9.1	8.5	8.6	10	4.7	7.8	6.3
7	9.1	12	e9.7	9.0	11	9.1	8.4	8.7	10	4.6	8.1	6.5
8	9.1	12	e9.1	8.9	9.9	9.1	8.6	8.6	9.7	5.1	7.9	6.2
9	9.1	12	9.5	8.9	12	9.1	8.6	8.7	10	5.2	7.6	6.0
10	9.1	11	e9.3	8.9	11	9.0	8.6	9.4	10	5.0	7.5	6.2
11	9.1	10	e10	8.9	11	9.0	8.6	9.1	10	5.0	8.0	6.2
12	9.2	11	e11	9.0	e11	9.0	8.6	9.0	9.7	5.1	6.9	6.2
13	9.4	11	13	9.0	e12	8.9	8.4	9.2	9.2	5.1	6.7	6.1
14	9.4	11	12	8.9	12	9.0	8.3	9.9	9.1	5.8	6.4	6.2
15	9.4	11	10	9.0	9.0	9.0	8.4	9.1	9.3	6.8	6.5	6.4
16	9.7	12	9.4	8.9	8.9	8.9	8.2	9.5	16	7.0	6.5	6.4
17	10	12	9.5	9.0	9.1	8.9	8.3	9.5	13	7.4	6.7	6.3
18	9.8	12	9.4	9.1	9.1	8.8	8.4	9.4	8.3	6.6	6.8	6.2
19	9.9	13	e8.4	9.2	9.3	8.7	8.3	9.4	7.4	6.6	6.5	6.5
20	10	12	e8.5	9.1	9.0	8.6	8.5	9.3	7.3	6.6	6.5	6.8
21	10	12	e8.3	9.2	8.9	8.8	8.8	9.3	7.3	6.8	7.0	6.8
22	10	13	e8.4	9.1	8.8	8.8	8.9	9.5	7.2	7.2	7.0	6.6
23	11	13	e8.2	9.1	8.6	8.7	9.1	9.8	6.8	6.8	6.6	6.6
24	11	13	e8.3	9.1	8.9	8.8	10	9.9	6.4	6.7	6.3	6.6
25	11	13	e8.1	9.2	10	8.7	9.5	10	6.3	7.2	6.4	6.6
26	11	13	e8.2	9.3	9.1	8.7	11	11	6.0	7.0	6.5	6.5
27	11	13	e8.1	9.1	8.5	8.8	9.2	10	5.9	7.3	6.5	6.7
28	12	14	9.1	9.1	8.8	8.5	9.1	11	5.7	9.4	6.7	6.7
29	11	13	9.1	9.3	---	8.6	9.1	11	5.6	13	7.0	6.8
30	11	12	9.1	9.3	---	8.8	11	11	5.5	14	6.6	7.0
31	11	---	9.1	9.3	---	8.7	---	11	---	14	6.3	---
TOTAL	315.7	363	302.8	280.4	272.9	275.2	266.5	298.0	261.7	210.6	217.9	195.3
MEAN	10.2	12.1	9.77	9.05	9.75	8.88	8.88	9.61	8.72	6.79	7.03	6.51
MAX	12	14	13	9.3	12	9.1	11	11	16	14	10	7.2
MIN	9.1	10	8.1	8.7	8.5	8.5	8.2	8.6	5.5	4.6	6.3	6.0
AC-FT	626	720	601	556	541	546	529	591	519	418	432	387

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1973 - 1999, BY WATER YEAR (WY)

MEAN	2.50	2.87	2.51	2.36	4.30	4.73	3.18	4.51	3.70	3.28	2.58	3.47
MAX	10.2	12.1	9.77	9.05	12.7	18.1	8.88	24.1	19.9	18.5	9.34	17.1
(WY)	1999	1999	1999	1999	1980	1997	1999	1985	1985	1985	1998	1978
MIN	.50	.78	.15	.008	.22	1.64	1.37	1.03	.68	.34	.30	.80
(WY)	1979	1978	1979	1979	1979	1982	1978	1978	1977	1976	1978	1976

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1973 - 1999	
ANNUAL TOTAL	3267.6		3260.0			
ANNUAL MEAN	8.95		8.93		3.05	
HIGHEST ANNUAL MEAN					8.93	1999
LOWEST ANNUAL MEAN					1.28	1977
HIGHEST DAILY MEAN	31	Feb 25	16	Jun 16	500	Sep 7 1978
LOWEST DAILY MEAN	e3.8	Jan 7	4.6	Jul 4	a.00	Sep 11 1978
ANNUAL SEVEN-DAY MINIMUM	4.0	Jan 1	4.8	Jul 2	.00	Dec 15 1978
INSTANTANEOUS PEAK FLOW			133	Jun 16	b6800	Sep 7 1978
INSTANTANEOUS PEAK STAGE			7.36	Jun 16	12.97	Sep 7 1978
ANNUAL RUNOFF (AC-FT)	6480		6470		2210	
10 PERCENT EXCEEDS	12		12		6.3	
50 PERCENT EXCEEDS	9.5		9.0		2.2	
90 PERCENT EXCEEDS	4.5		6.4		.91	

e Estimated
a Also occurred Sep 12-16, 1978, and Dec 15, 1978 to Jan 14, 1979.
b On basis of contracted-opening, and flow-over-road measurement of peak flow.

09306255 YELLOW CREEK NEAR WHITE RIVER, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1974 to September 1982, March 1988 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: April 1975 to September 1982.
WATER TEMPERATURE: April 1975 to September 1982.
SUSPENDED-SEDIMENT DISCHARGE: April 1974 to September 1982.

INSTRUMENTATION.--Automatic pumping sediment sampler April 1974 to September 1982. Water-quality monitor April 1975 to September 1982.

REMARKS.--Unpublished maximum and minimum specific conductance data for the period of daily record are available in the district office.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum 5,790 microsiemens, Sept. 17, 1978; minimum, 457 microsiemens, July 21, 1979.
WATER TEMPERATURE: Maximum 35.0°C, July 25, 1978; minimum, 0.0°C, on many days during the winter period.
SEDIMENT CONCENTRATIONS: Maximum daily, 24,000 mg/L, Sept. 7, 1978; minimum daily, no flow several days during Sept. 1978, many days during 1979.
SEDIMENT LOADS: Maximum daily, 290,000 tons, Sept. 7, 1978; minimum daily, no flow several days during Sept. 1978, many days during 1979.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)
NOV											
12...	1550	11	2810	8.6	6.9	9.8	890	76	168	445	7
MAR											
10...	1315	8.9	3120	--	9.0	9.8	920	78	176	427	6
APR											
06...	1415	8.7	3160	8.7	12.3	11.2	970	76	187	452	6
AUG											
12...	1230	6.5	3040	8.6	18.7	11.8	860	63	168	441	7

DATE	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	ALKA-LINITY WAT.DIS FET LAB CACO3 (MG/L) (29801)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)
NOV										
12...	3.0	--	--	--	717	--	920	54	.92	15
MAR										
10...	2.9	744	96	780	--	--	990	53	.89	17
APR										
06...	2.9	854	--	709	--	--	1000	56	.80	14
AUG										
12...	2.9	--	--	--	--	730	970	55	.90	14

DATE	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS-SOLVED (TONS PER DAY) (70302)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)
NOV										
12...	2110	2.87	62.7	--	--	--	--	--	--	--
MAR										
10...	2210	3.00	53.1	--	--	--	--	--	--	--
APR										
06...	2270	3.08	53.3	<.010	2.56	<.020	.52	<.050	.016	8.5
AUG										
12...	2160	2.94	39.7	.021	2.74	<.020	.46	<.050	<.010	10

DATE	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BORON, DIS-SOLVED (UG/L AS B) (01020)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LITHIUM DIS-SOLVED (UG/L AS LI) (01130)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
APR											
06...	5	52	428	<1.0	E29	58	43	21	<1.0	4910	<60
AUG											
12...	5	73	415	<1.0	<30	58	<9.0	32	1.3	4530	<60

E Estimated.

09306255 YELLOW CREEK NEAR WHITE RIVER, CO--Continued

MISCELLANEOUS FIELD MEASUREMENTS, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)
OCT				
07...	0904	9.4	2830	5.5
JAN				
07...	1005	8.9	3110	3.5
FEB				
25...	1349	9.1	2900	8.6
MAR				
30...	0930	8.8	3170	5.1
APR				
27...	1413	9.4	3110	7.3
JUN				
17...	1015	9.4	2940	11.1
JUL				
15...	1510	6.7	3050	24.9
SEP				
08...	1110	6.4	3100	10.8

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
NOV				
12...	1550	11	115	3.4
MAR				
10...	1315	8.9	243	5.8
APR				
06...	1415	8.7	40	.95
AUG				
12...	1230	6.5	52	.92

09306290 WHITE RIVER BELOW BOISE CREEK NEAR RANGELY, CO

LOCATION.--Lat 40°10'47", long 108°33'53", in SW$^1/_4$SE$^1/_4$ sec.36, T.3 N., R.100 W., Rio Blanco County, Hydrologic Unit 14050007, on left bank at bridge on County Road 73, 0.5 mi downstream from Boise Creek, and 16.4 mi east of Rangely.

DRAINAGE AREA.--2,530 mi^2.

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 5,395 ft above sea level, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. Diversions upstream from station for irrigation of about 31,500 acres.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	551	628	533	e410	e495	549	542	e1240	3010	933	696	542
2	574	618	524	e420	e460	583	559	e1130	2610	891	647	563
3	591	643	518	e400	e465	561	558	e1090	2600	847	610	581
4	651	631	517	e380	e450	554	545	e1080	2540	774	608	608
5	736	599	531	e385	e470	560	524	e1020	2510	739	625	557
6	716	602	495	e380	e485	538	517	e930	2280	697	618	524
7	677	614	404	e385	e465	495	507	e915	2000	707	646	500
8	672	604	419	e380	e480	527	533	887	2030	685	599	479
9	664	618	426	e400	e500	527	557	1020	2320	736	565	459
10	651	595	e490	e415	e530	522	539	1260	2390	712	556	457
11	631	576	e500	e405	e520	510	541	1280	2260	676	573	453
12	617	581	e450	e410	e400	508	523	1130	2100	620	632	446
13	604	596	e490	e415	e450	500	532	1050	2090	607	604	433
14	598	583	e495	e425	e470	483	543	1100	2070	629	575	420
15	600	584	e485	e420	e465	496	610	1190	2040	701	559	421
16	601	580	e480	e430	e470	506	573	1110	2170	734	549	390
17	649	575	e475	e440	e450	505	542	1080	2250	667	528	375
18	636	574	e470	e445	e460	518	532	1070	2320	645	528	392
19	615	571	e450	e455	e475	538	535	1240	2180	640	519	389
20	607	555	e475	e450	e485	560	581	1470	2130	679	502	428
21	598	504	e480	e445	e500	576	728	1770	1940	718	511	453
22	602	549	e450	e460	e510	599	813	1990	1860	747	585	437
23	620	561	e465	e470	e520	592	779	2110	1840	662	550	418
24	639	545	e420	e465	e530	594	735	2290	1720	613	493	404
25	622	538	e410	e480	473	584	e1000	2510	1600	660	496	417
26	619	531	e405	e475	549	579	e1060	2870	1430	626	494	424
27	619	530	e410	e460	530	617	e1030	2650	1330	625	471	414
28	685	532	e435	e430	528	e590	e1050	2580	1180	607	515	415
29	693	539	e440	e410	---	e550	e1040	2670	1050	616	544	427
30	646	547	e450	e430	---	e570	e1310	2840	980	679	584	439
31	647	---	e455	e460	---	e565	---	3040	---	727	558	---
TOTAL	19631	17303	14447	13235	13585	16956	20438	49612	60830	21599	17540	13665
MEAN	633	577	466	427	485	547	681	1600	2028	697	566	456
MAX	736	643	533	480	549	617	1310	3040	3010	933	696	608
MIN	551	504	404	380	400	483	507	887	980	607	471	375
AC-FT	38940	34320	28660	26250	26950	33630	40540	98410	120700	42840	34790	27100

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1983 - 1999, BY WATER YEAR (WY)

MEAN	560	529	453	410	409	544	800	1878	2181	974	544	482
MAX	858	710	663	572	531	752	1512	3434	4572	2175	1117	944
(WY)	1985	1986	1986	1986	1986	1986	1985	1984	1984	1995	1984	1997
MIN	359	362	301	260	268	324	370	566	542	254	202	237
(WY)	1993	1991	1991	1991	1991	1995	1995	1990	1994	1994	1990	1990

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1983 - 1999	
ANNUAL TOTAL	368337		278841			
ANNUAL MEAN	1009		764		815	
HIGHEST ANNUAL MEAN					1345	1984
LOWEST ANNUAL MEAN					428	1990
HIGHEST DAILY MEAN	3560	May 22	3040	May 31	6170	May 26 1984
LOWEST DAILY MEAN	344	Sep 10	375	Sep 17	109	Aug 6 1994
ANNUAL SEVEN-DAY MINIMUM	383	Sep 5	387	Jan 3	147	Aug 3 1994
INSTANTANEOUS PEAK FLOW			3290	May 31	6440	Jun 7 1984
INSTANTANEOUS PEAK STAGE			a6.26	May 31	8.45	Jun 7 1984
ANNUAL RUNOFF (AC-FT)	730600		553100		590100	
10 PERCENT EXCEEDS	2450		1520		1820	
50 PERCENT EXCEEDS	602		563		531	
90 PERCENT EXCEEDS	478		427		324	

e Estimated
a Maximum gage height, 7.75 ft, Dec 10, backwater from ice.

09306290 WHITE RIVER BELOW BOISE CREEK, NEAR RANGELY, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1982 to September 1993. October 1994 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)
NOV										
04...	1355	627	735	8.6	6.4	11.4	1.9	K28	--	--
APR										
14...	1545	523	706	8.4	11.6	9.7	5.6	K1	--	--
MAY										
26...	1500	2900	314	8.3	12.6	8.1	4.9	590	140	37
JUL										
30...	0950	708	707	8.4	19.2	8.3	2.7	82	--	--
SEP										
02...	1730	567	665	8.3	18.9	7.9	1.0	900	280	67

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)
NOV									
04...	--	<.010	.071	.057	.20	.14	.026	<.050	.016
APR									
14...	--	<.010	.051	<.020	.36	.20	.042	.004	.013
MAY									
26...	11	<.010	.187	.045	1.6	.28	.587	.019	.020
JUL									
30...	--	<.010	<.050	<.020	.44	.18	.068	.007	<.010
SEP									
02...	27	<.010	.064	<.020	.24	.11	.041	<.004	<.010

DATE	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL) (01105)	ARSENIC TOTAL (UG/L AS AS) (01002)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA) (01007)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO) (01037)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)
MAY										
26...	<10	4900	3	156	<4.0	17	<1	9	4	9
SEP										
02...	<10	660	1	48	<4.0	50	<1	<1	<1	1

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LITHIUM TOTAL RECOV-ERABLE (UG/L AS LI) (01132)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO) (01062)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS SR) (01082)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)
MAY									
26...	7300	7	E10	300	<1	10	<1	430	E30
SEP									
02...	740	<1	10	34	2	1	2	870	<40

E Estimated.
K Based on non-ideal colony count.

MISCELLANEOUS FIELD MEASUREMENTS, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)
OCT				
07...	1115	661	737	7.9
FEB				
26...	1030	577	859	4.8
MAR				
23...	1110	602	569	6.7
APR				
29...	1247	1000	670	12.0
JUN				
29...	1002	1010	472	16.8
JUL				
20...	0905	688	667	19.2
AUG				
19...	1610	506	687	22.0
SEP				
08...	0907	471	703	14.2

09306290 WHITE RIVER BELOW BOISE CREEK, NEAR RANGELY, CO--Continued

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
NOV				
04...	1355	627	49	83
FEB				
26...	1030	577	626	975
APR				
14...	1545	523	54	76
MAY				
26...	1500	2900	1010	7910
AUG				
19...	1610	506	42	57
SEP				
02...	1730	567	58	88

09306305 WHITE RIVER BELOW TAYLOR DRAW RESERVOIR, ABOVE RANGELY, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 40°06'12", long 108°42'56"in $NW^1/_4NE^1/_4$ sec.34, T.2 N., R.101 W., Rio Blanco County, Hydrologic Unit 14050007, on left bank 0.2 mi downstream from Taylor Draw Dam, and 4.7 mi east of Rangely.

DRAINAGE AREA.--2,776 mi^2, revised.

PERIOD OF RECORD.--October 1994 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)
NOV										
04...	1110	e640	725	8.4	7.9	9.3	.7	K5	--	--
APR										
14...	1300	564	793	8.5	8.7	8.8	3.6	<1	--	--
JUN										
16...	1150	1310	333	8.2	15.2	8.0	1.0	38	140	38
AUG										
04...	1315	611	704	8.2	20.9	6.2	.4	K25	--	--
SEP										
03...	1215	554	711	8.2	20.0	7.5	2.4	47	280	64

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)
NOV									
04...	--	<.010	.120	.064	.14	.15	<.050	<.050	.016
APR									
14...	--	<.010	.082	<.020	.25	.16	.015	<.004	.010
JUN									
16...	12	<.010	.069	.022	.23	.19	.047	.016	.018
AUG									
04...	--	<.010	<.050	.033	.28	.17	.027	.008	.017
SEP									
03...	28	.010	.100	.033	.20	.18	.019	.006	<.010

DATE	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL) (01105)	ARSENIC TOTAL (UG/L AS AS) (01002)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA) (01007)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO) (01037)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)
JUN										
16...	<10	490	<1	0	<4.0	21	<1	<1	<1	2
SEP										
03...	<10	300	1	0	<4.0	59	<1	2	<1	<1

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LITHIUM TOTAL RECOV-ERABLE (UG/L AS LI) (01132)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MOLYB-DENUM, TOTAL RECOV-ERABLE (UG/L AS MO) (01062)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS SR) (01082)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)
JUN									
16...	550	<1	<10	29	1	1	<1	310	<40
SEP									
03...	290	<1	10	33	2	1	2	870	<40

e Estimated.
K Based on non-ideal colony count.

09306305 WHITE RIVER BELOW TAYLOR DRAW RESERVOIR, ABOVE RANGELY, CO--Continued

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
NOV				
04...	1110	e640	10	e17
JUN				
16...	1150	1310	16	56
SEP				
03...	1215	554	12	17

e Estimated.

09339900 EAST FORK SAN JUAN RIVER ABOVE SAND CREEK, NEAR PAGOSA SPRINGS, CO

LOCATION.--Lat 37°23'23", long 106°50'26", in NE$^{1}/_{4}$ sec.4, T.36 N., R.1 E., 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 September 1996, October 1998 to September 1999. Prior to October 1959, published as San Juan River above Sand Creek, near Pagosa Springs.

REVISED RECORDS.--WSP 1713: 1957.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 7,940 ft above sea level, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Diversions upstream from station for irrigation of about 500 acres of hay meadows upstream from station. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e28	e72	e42	e19	e13	e29	75	163	395	273	121	145
2	e35	e65	e40	e18	e14	e31	66	147	385	251	119	166
3	e20	e56	e40	e16	e15	e35	60	137	339	217	136	187
4	e18	e50	e40	e16	e16	e34	60	127	347	209	189	159
5	e17	e45	e35	e17	e16	e31	60	112	318	187	208	140
6	e16	e43	e30	e17	e15	e29	61	105	273	171	228	130
7	e16	e42	e24	e17	e15	e28	63	118	277	184	216	119
8	e15	e40	e23	e16	e15	e27	65	161	339	200	170	105
9	e15	e35	e23	e16	e15	e25	64	212	393	173	153	96
10	e14	e33	e21	e16	e15	e25	64	223	426	144	180	90
11	e14	e35	e22	e17	e14	e25	65	207	431	135	202	88
12	e14	e37	e22	e17	e14	e24	75	190	414	119	172	84
13	e14	e40	e22	e16	e15	e24	90	215	391	106	145	73
14	e14	e46	e22	e16	e15	e32	80	249	417	100	137	70
15	e14	e54	e23	e16	e16	e38	83	263	415	107	288	90
16	e14	e54	e23	e16	e17	e40	80	272	411	91	246	85
17	e15	e50	e23	e16	e17	e44	80	267	412	87	203	86
18	e16	e45	e23	e16	e17	36	85	282	407	109	170	116
19	e20	e40	e23	e16	e17	38	88	325	412	131	160	131
20	e25	e35	e21	e16	e17	44	110	365	391	126	168	122
21	e27	e35	e20	e15	e16	55	137	395	387	157	160	109
22	e50	e35	e19	e15	e17	66	125	414	388	193	162	99
23	e48	e35	e18	e16	e18	69	113	435	385	227	180	100
24	e41	e35	e18	e16	e20	70	122	426	390	182	213	90
25	e140	e35	e18	e15	e21	78	137	350	391	169	181	83
26	e140	e35	e19	e15	e22	88	124	292	386	143	155	76
27	e130	e38	e19	e14	e24	85	121	273	386	152	175	70
28	e110	e45	e19	e14	e27	76	126	288	366	143	186	65
29	e80	e45	e19	e13	---	73	131	333	318	155	172	62
30	e82	e43	e19	e13	---	79	169	359	288	140	159	58
31	e80	---	e19	e12	---	78	---	377	---	118	143	---
TOTAL	1282	1298	749	488	473	1456	2779	8082	11278	4899	5497	3094
MEAN	41.4	43.3	24.2	15.7	16.9	47.0	92.6	261	376	158	177	103
MAX	140	72	42	19	27	88	169	435	431	273	288	187
MIN	14	33	18	12	13	24	60	105	273	87	119	58
AC-FT	2540	2570	1490	968	938	2890	5510	16030	22370	9720	10900	6140

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1957 - 1999, BY WATER YEAR (WY)

MEAN	35.1	22.9	14.5	12.1	13.1	27.0	105	299	341	119	56.8	44.4
MAX	107	74.9	30.3	21.7	24.6	62.9	248	520	788	395	177	207
(WY)	1987	1987	1987	1973	1995	1986	1985	1984	1957	1957	1999	1970
MIN	8.39	8.31	4.68	5.00	5.66	8.86	29.2	70.4	60.2	23.9	15.6	10.6
(WY)	1957	1961	1959	1959	1990	1977	1977	1977	1977	1959	1972	1978

SUMMARY STATISTICS	FOR 1999 WATER YEAR		WATER YEARS 1957 - 1999	
ANNUAL TOTAL	41375			
ANNUAL MEAN	113		90.9	
HIGHEST ANNUAL MEAN			155	1985
LOWEST ANNUAL MEAN			31.5	1977
HIGHEST DAILY MEAN	435	May 23	1180	May 27 1993
LOWEST DAILY MEAN	e12	Jan 31	3.4	Dec 26 1958
ANNUAL SEVEN-DAY MINIMUM	13	Jan 27	3.7	Dec 13 1958
INSTANTANEOUS PEAK FLOW	567	Aug 15	a2260	Sep 14 1970
INSTANTANEOUS PEAK STAGE	4.41	Aug 15	6.75	Sep 14 1970
ANNUAL RUNOFF (AC-FT)	82070		65880	
10 PERCENT EXCEEDS	318		275	
50 PERCENT EXCEEDS	72		30	
90 PERCENT EXCEEDS	16		10	

e Estimated
a From rating curve extended above 460 ft^3/s, on basis of slope-area measurement at gage height, 6.13 ft.

09340800 WEST FORK SAN JUAN RIVER AT WEST FORK CAMPGROUND, NEAR PAGOSA SPRINGS, CO

LOCATION.--Lat 37°27'01", long 106°54'40", NE$^1/_4$NE$^1/_4$ sec. 18, T. 37 N., R. 1 E., Mineral County, Hydrologic Unit 14080101, on right bank 30 ft upstream from West Fork bridge, 1.8 mi upstream from Wolf Creek, and 15 mi northeast of Pagosa Springs.

DRAINAGE AREA.--50.5 mi^2.

PERIOD OF RECORD.--October 1984 to September 1987. May 1997 to September 1999, seasonal records only (discontinued). Water-quality data available, November 1984 to September 1987.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 7,935 ft above sea level, from topographic map.

REMARKS.--No estimated daily discharges. Records fair. No regulations or diversions. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

EXTREMES FOR PERIOD OF CONTINUOUS RECORD.--Maximum discharge, 1050 ft^3/s, May 8, 1985, gage height, 5.25 ft; minimum daily, 11 ft^3/s, Feb. 2, 1985.

EXTREMES FOR PERIOD OF SEASONAL RECORD.--Maximum discharge, 967 ft^3/s, June 2, 1997, gage height, 4.85 ft; minimum daily, 14 ft^3/s, Oct. 15, 16, 1998.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum flood known occurred Oct. 5, 1911.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period of seasonal operation, 622 ft^3/s at 1930 June 11, gage height, 4.26 ft; minimum daily, 14 ft^3/s, Oct. 15, 16.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	58	47	---	---	---	---	41	71	488	282	141	254
2	43	47	---	---	---	---	35	58	432	255	145	317
3	36	41	---	---	---	---	36	52	381	226	160	377
4	34	39	---	---	---	---	36	48	392	216	295	293
5	28	37	---	---	---	---	33	44	342	187	320	233
6	24	36	---	---	---	---	32	44	295	169	390	205
7	26	33	---	---	---	---	33	59	336	170	289	182
8	25	32	---	---	---	---	33	98	426	165	221	151
9	24	30	---	---	---	---	31	129	496	141	179	127
10	21	34	---	---	---	---	30	130	525	124	218	113
11	18	34	---	---	---	---	32	115	526	121	232	121
12	17	33	---	---	---	---	41	106	492	112	194	115
13	16	32	---	---	---	---	47	157	463	93	160	104
14	16	35	---	---	---	---	43	209	526	87	142	99
15	14	38	---	---	---	---	45	216	510	111	297	164
16	14	40	---	---	---	---	43	221	529	90	252	160
17	15	40	---	---	---	---	41	219	535	87	207	143
18	19	37	---	---	---	---	44	241	524	91	178	187
19	20	35	---	---	---	---	53	299	520	166	179	200
20	33	33	---	---	---	---	74	336	517	141	154	178
21	34	33	---	---	---	---	88	358	473	127	174	154
22	47	33	---	---	---	---	70	397	481	130	161	131
23	51	33	---	---	---	---	62	429	485	123	161	132
24	41	33	---	---	---	---	74	402	494	136	176	114
25	65	32	---	---	---	---	71	308	465	127	200	102
26	93	34	---	---	---	---	66	281	436	108	199	95
27	97	37	---	---	---	---	70	287	416	96	172	89
28	67	37	---	---	---	---	70	335	378	99	230	83
29	47	37	---	---	---	---	70	418	329	118	221	79
30	50	35	---	---	---	---	80	431	300	116	204	76
31	50	---	---	---	---	---	---	477	---	110	204	---
TOTAL	1143	1077	---	---	---	---	1524	6975	13512	4324	6455	4778
MEAN	36.9	35.9	---	---	---	---	50.8	225	450	139	208	159
MAX	97	47	---	---	---	---	88	477	535	282	390	377
MIN	14	30	---	---	---	---	30	44	295	87	141	76
AC-FT	2270	2140	---	---	---	---	3020	13830	26800	8580	12800	9480

09341300 WOLF CREEK AT WOLF CREEK CAMPGROUND, NEAR PAGOSA SPRINGS, CO

LOCATION.--Lat 37°26'31", long 106°53'11", NW$^{1}/_{4}$ SW$^{1}/_{4}$ sec. 16, T. 37 N., R. 1 E., Mineral County, Hydrologic Unit 14080101, on left bank 10 ft downstream from bridge at Wolf Creek Campground, 0.8 mi upstream from mouth and 14 mi northeast of Pagosa Springs.

DRAINAGE AREA.--18.0 mi^{2}.

PERIOD OF RECORD.--October 1984 to September 1987. May 1997 to September 1999, seasonal records only (discontinued). Streamflow and water quality records for station 09341200, Wolf Creek near Pagosa Springs, 0.3 mi upstream, for period October 1968 to September 1975 are not equivalent because of inflow between sites. Water-quality data available for this site, November 1984 to September 1987.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 7,830 ft above sea level, from topographic map.

REMARKS.--No estimated daily discharges. Records fair. No regulations. Small transmountain diversion upstream from station by Treasure Pass diversion ditch to South Fork Rio Grande drainage and small diversion by U.S. Forest Service for fish ponds 0.3 mi upstream from gage. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

EXTREMES FOR PERIOD OF CONTINUOUS RECORD.--Maximum discharge, 526 ft^{3}/s, June 7, 1985, gage height, 3.79 ft; minimum daily, 3.1 ft^{3}/s, Jan. 25, 1987.

EXTREMES FOR PERIOD OF SEASONAL RECORD.--Maximum discharge, 454 ft^{3}/s, June 1, 1997, gage height, 3.37 ft; minimum daily, 1.8 ft^{3}/s, Oct. 15, 1998.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum flood known occurred Oct. 5, 1911.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period of seasonal operation, 297 ft^{3}/s at 1830 June 1, gage height, 2.92 ft; minimum daily, 1.8 ft^{3}/s, Oct. 15.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.8	16	---	---	---	---	17	28	241	99	29	45
2	7.3	16	---	---	---	---	15	25	205	89	32	67
3	5.8	13	---	---	---	---	13	22	185	80	35	87
4	5.2	11	---	---	---	---	12	20	191	74	58	68
5	4.3	10	---	---	---	---	11	19	166	66	75	56
6	3.4	9.6	---	---	---	---	12	19	144	61	110	57
7	3.2	8.4	---	---	---	---	15	24	162	58	80	56
8	3.0	8.8	---	---	---	---	16	39	196	55	61	45
9	2.8	7.9	---	---	---	---	12	56	227	48	51	39
10	2.6	7.5	---	---	---	---	12	62	228	44	67	35
11	2.3	7.9	---	---	---	---	14	54	228	44	94	43
12	2.1	8.2	---	---	---	---	19	56	210	39	76	41
13	1.9	7.6	---	---	---	---	22	74	197	33	60	34
14	1.9	9.8	---	---	---	---	19	95	217	32	54	32
15	1.8	11	---	---	---	---	21	118	204	40	92	48
16	1.9	12	---	---	---	---	20	119	201	32	78	45
17	2.1	12	---	---	---	---	19	118	190	33	66	44
18	2.5	11	---	---	---	---	20	121	188	40	55	76
19	2.6	9.9	---	---	---	---	23	148	187	52	53	76
20	5.8	8.9	---	---	---	---	31	170	187	45	45	66
21	6.0	8.6	---	---	---	---	37	177	171	42	42	56
22	9.7	8.7	---	---	---	---	31	199	169	44	37	47
23	13	8.7	---	---	---	---	28	227	164	44	33	47
24	10	8.7	---	---	---	---	28	195	164	41	33	40
25	20	8.5	---	---	---	---	28	163	162	37	30	35
26	32	8.9	---	---	---	---	25	157	154	32	28	31
27	34	10	---	---	---	---	25	157	148	31	28	28
28	23	10	---	---	---	---	25	185	137	26	41	26
29	17	10	---	---	---	---	26	204	121	30	37	24
30	20	10	---	---	---	---	30	202	109	27	34	22
31	19	---	---	---	---	---	---	217	---	25	31	---
TOTAL	272.0	298.6	---	---	---	---	626	3470	5453	1443	1645	1416
MEAN	8.77	9.95	---	---	---	---	20.9	112	182	46.5	53.1	47.2
MAX	34	16	---	---	---	---	37	227	241	99	110	87
MIN	1.8	7.5	---	---	---	---	11	19	109	25	28	22
AC-FT	540	592	---	---	---	---	1240	6880	10820	2860	3260	2810

09342500 SAN JUAN RIVER AT PAGOSA SPRINGS, CO

LOCATION.--Lat 37°15'58", long 107°00'37", in NE$^1/_4$SW$^1/_4$ sec.13, T.35 N., R.2 W., Archuleta County, Hydrologic Unit 14080101, on right bank at former bridge site in Pagosa Springs, 0.2 mi upstream from McCabe Creek, 0.6 mi downstream from bridge on U.S. Highway 160, and 2.0 mi upstream from Mill Creek.

DRAINAGE AREA.--298 mi^2.

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 with satellite telemetry. Datum of gage is 7,052.04 ft above sea level. 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 upstream, at different datum.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Diversions for irrigation of large areas upstream from station. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

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 ft^3/s, from information by local residents.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	98	305	176	88	e58	123	314	703	1750	788	385	759
2	152	306	173	77	57	131	274	687	1630	731	425	983
3	94	258	170	71	62	140	249	716	1350	634	489	1210
4	82	220	168	67	66	153	245	731	1410	621	845	964
5	73	196	166	71	71	136	220	571	1280	553	1050	773
6	67	181	150	75	69	123	218	506	1070	499	1400	673
7	66	174	105	75	e60	121	298	530	1070	492	1210	653
8	65	172	96	73	e64	119	367	664	1320	564	835	545
9	64	153	101	65	e68	107	318	833	1540	505	684	474
10	59	142	100	68	e66	103	261	868	1700	421	767	437
11	60	143	88	71	64	103	289	804	1670	398	893	401
12	57	156	98	76	57	105	376	706	1580	386	763	440
13	57	161	99	71	e63	98	468	819	1390	320	631	375
14	58	180	94	66	e63	110	396	1080	1550	291	560	349
15	59	221	94	67	e68	135	413	1110	1520	370	1220	457
16	59	235	96	69	70	145	379	1140	1590	328	987	507
17	61	232	102	71	73	169	355	1080	1550	278	786	471
18	66	207	100	67	73	161	368	1140	1500	354	659	534
19	67	182	100	69	76	166	396	1320	1480	589	642	614
20	105	156	101	69	74	210	478	1540	1460	512	586	570
21	107	149	91	69	e68	260	581	1570	1340	565	620	506
22	200	154	80	64	e70	308	566	1670	1330	620	579	443
23	208	153	e76	64	72	310	506	1780	1320	637	595	438
24	186	148	e76	68	83	308	546	1820	1310	616	681	404
25	169	144	75	65	93	329	646	1530	1290	583	659	368
26	625	144	79	64	94	374	560	1310	1240	477	623	341
27	587	162	e80	62	92	362	541	1280	1180	474	569	312
28	469	168	82	56	104	324	536	1330	1110	415	746	282
29	326	196	83	60	---	306	532	1650	943	429	692	266
30	344	181	84	e56	---	335	694	1670	842	418	702	251
31	361	---	e82	e52	---	327	---	1710	---	356	670	---
TOTAL	5051	5579	3265	2106	1998	6201	12390	34868	41315	15224	22953	15800
MEAN	163	186	105	67.9	71.4	200	413	1125	1377	491	740	527
MAX	625	306	176	88	104	374	694	1820	1750	788	1400	1210
MIN	57	142	75	52	57	98	218	506	842	278	385	251
AC-FT	10020	11070	6480	4180	3960	12300	24580	69160	81950	30200	45530	31340

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1936 - 1999, BY WATER YEAR (WY)

MEAN	148	95.7	65.1	55.9	62.8	151	562	1291	1354	404	187	156
MAX	937	399	160	107	142	442	1210	2665	3066	1515	740	859
(WY)	1942	1987	1987	1986	1995	1986	1985	1941	1957	1941	1999	1970
MIN	23.3	33.6	27.5	26.8	29.2	50.3	141	253	163	62.8	28.9	18.8
(WY)	1957	1956	1990	1990	1964	1964	1977	1977	1977	1959	1972	1956

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1936 - 1999	
ANNUAL TOTAL	133686		166750			
ANNUAL MEAN	366		457		378	
HIGHEST ANNUAL MEAN					730	1941
LOWEST ANNUAL MEAN					115	1977
HIGHEST DAILY MEAN	2070	Jun 2	1820	May 24	4640	May 13 1941
LOWEST DAILY MEAN	50	Sep 27	e52	Jan 31	9.7	Oct 5 1956
ANNUAL SEVEN-DAY MINIMUM	52	Sep 23	57	Jan 27	11	Oct 4 1956
INSTANTANEOUS PEAK FLOW			2120	May 24	25000	Oct 5 1911
INSTANTANEOUS PEAK STAGE			4.78	May 24	a17.80	Oct 5 1911
ANNUAL RUNOFF (AC-FT)	265200		330700		274100	
10 PERCENT EXCEEDS	1030		1280		1170	
50 PERCENT EXCEEDS	163		310		111	
90 PERCENT EXCEEDS	65		67		44	

e Estimated
a From floodmarks.

09346400 SAN JUAN RIVER NEAR CARRACAS, CO

LOCATION.--Lat 37°00'49", long 107°18'42", in $SE^1/_4SW^1/_4$ sec.17, T.32 N., R.4 W., Archuleta County, Hydrologic Unit 14080101, on right bank five feet above the maximum water surface of Navajo Reservoir, 3 mi northwest of Carracas, 7.2 mi upstream from Piedra River.

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. Statistical summary computed for 1971 to current year.

GAGE.--Water-stage recorder with satellite telemetry and crest-stage gage. Elevation of gage is 6,090 ft above sea level, from river-profile map.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Diversions for irrigation of about 11,000 acres upstream from station. Highwater diversions upstream from station into Rio Grande basin through Azotea tunnel (station 08284160) began in March 1971. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

EXTREMES OUTSIDE PERIOD OF RECORD.--Major floods occurred Sept. 5 or 6, 1909; Oct. 5, 1911; June 29, 1927.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	134	729	329	e210	e140	271	455	1670	2230	898	715	893
2	248	676	e330	e220	e150	315	460	1600	2170	842	799	1140
3	211	582	e330	e200	e150	314	421	1670	1790	750	951	1550
4	180	443	333	e180	e160	316	420	1900	1800	704	1630	1250
5	173	406	314	e170	e170	301	385	1380	1730	656	1530	986
6	157	380	319	e180	e180	272	384	1040	1490	606	1960	829
7	149	320	261	e180	e170	264	528	980	1370	575	1580	794
8	141	322	e255	e190	e160	272	936	1040	1600	623	1130	675
9	141	596	e240	e180	e170	255	1030	1170	1880	623	928	588
10	139	348	e240	e170	e170	244	770	1240	2010	587	839	540
11	128	322	e230	e170	e160	237	763	1160	2030	477	1100	498
12	129	361	e220	e180	e160	242	795	1010	2010	496	1010	521
13	118	428	e230	e190	e150	234	1000	1030	1820	406	822	471
14	118	525	e240	e180	e160	242	864	1310	1910	369	706	440
15	119	523	e230	e170	e170	265	797	1360	1970	421	1620	471
16	120	587	e230	e170	e180	285	736	1400	2030	431	1590	647
17	129	572	e240	e170	e190	304	766	1330	2030	370	1070	579
18	127	531	e250	e180	e190	325	616	1330	2010	396	874	596
19	133	462	e250	e170	e200	320	681	1420	1960	641	833	691
20	148	418	e250	e180	e200	343	837	1700	1960	699	721	691
21	252	348	e240	e180	e180	393	951	1740	1850	672	837	624
22	273	354	e220	e170	e180	456	988	1830	1800	843	739	550
23	356	357	e210	e160	e180	448	968	1940	1710	969	738	512
24	388	315	e190	e160	198	436	934	2130	1610	775	814	537
25	302	299	e190	e170	244	441	1140	1900	1490	804	844	472
26	1280	281	e190	e170	263	487	1240	1600	1440	729	740	423
27	1320	286	e190	e160	241	490	1190	1540	1310	808	691	386
28	1130	289	e200	e160	243	469	1090	1500	1260	788	853	361
29	654	321	e200	e150	---	429	1030	1790	1090	815	813	353
30	601	366	e210	e140	---	441	1270	2070	969	808	837	338
31	735	---	e200	e140	---	455	---	2140	---	668	813	---
TOTAL	10233	12747	7561	5400	5109	10566	24445	46920	52329	20249	31127	19406
MEAN	330	425	244	174	182	341	815	1514	1744	653	1004	647
MAX	1320	729	333	220	263	490	1270	2140	2230	969	1960	1550
MIN	118	281	190	140	140	234	384	980	969	369	691	338
AC-FT	20300	25280	15000	10710	10130	20960	48490	93070	103800	40160	61740	38490

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1971 - 1999, BY WATER YEAR (WY)

MEAN	317	254	180	161	200	616	1088	1763	1853	675	355	306
MAX	932	983	406	296	481	1369	2524	3195	4039	2427	1004	880
(WY)	1987	1987	1987	1987	1986	1995	1979	1973	1985	1995	1999	1982
MIN	106	104	72.9	74.7	85.0	134	233	395	251	132	69.0	61.2
(WY)	1979	1990	1990	1990	1990	1977	1977	1977	1977	1972	1972	1978

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1971 - 1999	
ANNUAL TOTAL	201593		246092			
ANNUAL MEAN	552		674		a648	
HIGHEST ANNUAL MEAN					b1191	1985
LOWEST ANNUAL MEAN					b200	1977
HIGHEST DAILY MEAN	2470	May 22	2230	Jun 1	b6700	Mar 12 1985
LOWEST DAILY MEAN	98	Sep 27	118	Oct 13	c28	Sep 14 1974
ANNUAL SEVEN-DAY MINIMUM	102	Sep 23	123	Oct 12	39	Sep 14 1978
INSTANTANEOUS PEAK FLOW			4400	Aug 4	d8590	Mar 6 1995
INSTANTANEOUS PEAK STAGE			f5.50	Aug 4	g8.10	Mar 6 1995
ANNUAL RUNOFF (AC-FT)	399900		488100		469600	
10 PERCENT EXCEEDS	1390		1600		1730	
50 PERCENT EXCEEDS	314		469		293	
90 PERCENT EXCEEDS	151		170		115	

e Estimated
a Average discharge for 9 years (water years 1962-70), 632 ft^3/s; 457900 acre-ft/yr, prior to completion of Azotea tunnel.
b Also the highest (or lowest, as is appropriate) for the period of record.
c Also minimum daily discharge for period of record, (corrected).
d Maximum discharge for period of record, 9730 ft^3/s, Sep 6, 1970, gage height, 8.34 ft, from rating curve extended above 6000 ft^3/s, on basis of slope-area measurement of peak flow.
f Maximum gage height, 9.25 ft, Jan 14 and 15, backwater from ice.
g Maximum gage height for statistical period, and period of record, 9.63 ft, Jan 4, 1994, backwater from ice.

09349800 PIEDRA RIVER NEAR ARBOLES, CO

LOCATION.--Lat 37°05'18", long 107°23'50", in NE$^1/_4$SW$^1/_4$ sec.21, T.33 N., R.5 W., Archuleta County, Hydrologic Unit 14080102, on left bank 2.5 mi upstream from Navajo Reservoir, 3.0 mi downstream from Ignacio Creek, and 4.6 mi northeast of Arboles Post Office.

DRAINAGE AREA.--629 mi^2.

PERIOD OF RECORD.--August 1962 to current year. Gage operated 1895-99 and 1910-27 at site 7.5 mi downstream at elevation 6,000 ft. Low-flow records probably not equivalent. Water-quality data available, July 1969 to August 1973, December 1988 to May 1989.

GAGE.--Water-stage recorder with satellite telemetry, and crest-stage gage. Datum of gage is 6,147.52 ft above sea level, Colorado State Highway Department benchmark.

REMARKS.--Records good except for estimated daily discharges, which are poor. Diversions for irrigation of about 2,800 acres upstream from station. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

EXTREMES OUTSIDE PERIOD OF RECORD.--Major floods occurred Sept. 5 or 6, 1909, and Oct. 5, 1911.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	181	464	243	104	e67	165	343	1020	1400	626	459	673
2	302	439	240	99	e70	179	332	983	1360	591	454	812
3	200	405	234	89	69	176	275	1070	1120	529	813	1340
4	170	353	227	83	76	186	313	1290	1090	623	1230	1170
5	151	310	225	86	86	182	271	1050	1060	552	1810	888
6	133	281	207	93	92	170	276	849	891	468	2050	720
7	123	271	167	93	85	168	349	782	804	469	1910	639
8	118	273	153	95	e73	168	522	820	970	612	1320	540
9	110	344	156	86	e80	162	540	937	1150	594	974	472
10	103	244	173	82	e82	156	454	1010	1260	534	1050	432
11	98	235	138	86	85	152	460	974	1260	437	1340	391
12	94	260	129	87	68	152	564	878	1200	438	1080	408
13	93	259	155	88	75	142	882	941	1030	368	818	361
14	96	267	148	83	e76	152	767	1190	1150	329	658	349
15	92	298	146	80	e77	168	794	1230	1170	400	1060	473
16	87	323	150	82	e80	179	644	1220	1170	389	1270	659
17	97	329	158	85	80	192	579	1160	1180	316	1010	554
18	98	312	149	81	82	194	560	1160	1210	325	812	557
19	102	285	146	81	88	194	605	1230	1170	489	979	590
20	114	250	e145	84	e88	212	701	1360	1210	718	864	590
21	170	224	141	87	e88	241	828	1390	1110	713	1110	514
22	243	230	129	83	e98	280	866	1450	1110	775	1140	454
23	266	219	118	78	e105	316	813	1440	1120	678	1030	437
24	286	206	118	83	109	319	975	1520	1070	652	956	430
25	239	203	e110	82	e130	345	1280	1380	1010	560	1110	394
26	657	205	e115	84	e130	358	1110	1200	1010	503	802	357
27	645	227	e120	80	e140	354	1000	1210	926	446	660	325
28	749	227	e120	74	151	343	946	1180	874	437	640	299
29	494	264	119	68	---	331	939	1370	766	442	607	281
30	452	268	110	e72	---	354	996	1360	676	562	676	267
31	504	---	108	e66	---	342	---	1340	---	430	749	---
TOTAL	7267	8475	4797	2604	2530	7032	19984	35994	32527	16005	31441	16376
MEAN	234	282	155	84.0	90.4	227	666	1161	1084	516	1014	546
MAX	749	464	243	104	151	358	1280	1520	1400	775	2050	1340
MIN	87	203	108	66	67	142	271	782	676	316	454	267
AC-FT	14410	16810	9510	5170	5020	13950	39640	71390	64520	31750	62360	32480

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1963 - 1999, BY WATER YEAR (WY)

MEAN	180	131	92.8	76.6	95.1	331	880	1311	1072	357	235	223
MAX	618	517	257	153	244	895	2126	2926	2526	1133	1014	943
(WY)	1973	1987	1987	1987	1986	1995	1979	1979	1979	1975	1999	1970
MIN	51.2	48.4	31.2	31.2	34.7	47.4	126	168	121	69.8	37.0	35.3
(WY)	1979	1968	1990	1990	1964	1964	1977	1977	1977	1972	1972	1978

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1963 - 1999	
ANNUAL TOTAL	136159		185032			
ANNUAL MEAN	373		507		416	
HIGHEST ANNUAL MEAN					822	1979
LOWEST ANNUAL MEAN					94.0	1977
HIGHEST DAILY MEAN	1500	May 4	2050	Aug 6	5360	Sep 6 1970
LOWEST DAILY MEAN	67	Sep 28	e66	Jan 31	19	Nov 29 1989
ANNUAL SEVEN-DAY MINIMUM	72	Sep 24	69	Jan 28	26	Dec 11 1989
INSTANTANEOUS PEAK FLOW			2310	Aug 6	a8370	Sep 6 1970
INSTANTANEOUS PEAK STAGE			4.11	Aug 6	b6.38	Sep 6 1970
ANNUAL RUNOFF (AC-FT)	270100		367000		301400	
10 PERCENT EXCEEDS	1050		1170		1210	
50 PERCENT EXCEEDS	225		349		156	
90 PERCENT EXCEEDS	81		86		55	

e Estimated
a From rating curve extended above 4,400 ft^3/s, on basis of slope-area measurement of peak flow.
b Gage height, 6.38 ft, recorded, 7.55 ft, from floodmarks.

09352900 VALLECITO CREEK NEAR BAYFIELD, CO
(Hydrologic Benchmark Station)

LOCATION.--Lat 37°28'39", long 107°32'35", in NE$^{1}/_{4}$NW$^{1}/_{4}$ 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 mi^{2}.

PERIOD OF RECORD.--October 1962 to current year. Water-quality data available, October 1963 to September 1968, and October 1969 to September 1996.

GAGE.--Water-stage recorder with satellite telemetry and concrete control. Datum of gage is 7,906.08 ft above sea level.

REMARKS.--Records good except for estimated daily discharges, which are poor. No diversion upstream from station. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data for Gaging Stations" section of this report.

EXTREMES OUTSIDE PERIOD OF RECORD.--Major floods occurred in October 1911 and June 1927.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	109	99	62	31	e19	25	76	131	683	439	374	289
2	112	101	62	30	e20	27	69	123	611	397	341	409
3	103	93	61	e25	e21	27	71	122	461	356	405	640
4	101	85	63	e24	22	29	71	116	495	376	550	450
5	89	81	62	e23	23	28	70	107	428	332	535	339
6	82	79	e54	e22	23	26	64	102	334	328	662	268
7	84	75	e40	e22	e21	25	65	106	408	331	493	228
8	81	74	e40	e21	e22	25	67	132	583	482	371	192
9	76	76	e40	e23	23	24	63	178	733	355	303	169
10	73	76	e37	e25	e22	23	60	193	778	294	774	153
11	68	73	e38	26	e20	23	57	189	726	270	845	141
12	64	70	e39	26	e20	22	66	198	600	255	515	136
13	61	68	e40	25	e21	22	83	275	624	232	384	123
14	59	70	e38	e23	e22	23	85	371	718	222	311	122
15	56	73	e38	e23	e23	26	93	381	622	225	493	131
16	54	74	e40	24	25	27	89	371	659	209	405	131
17	55	74	e40	24	24	30	87	375	724	192	367	131
18	53	71	e40	23	23	29	96	431	683	197	317	170
19	53	69	e40	22	22	32	114	515	688	612	620	187
20	59	65	41	22	22	41	144	580	679	497	464	171
21	63	e62	40	e22	22	52	160	646	577	490	493	155
22	71	63	e32	e21	21	64	146	657	665	493	412	136
23	77	62	e30	e22	22	71	134	701	646	428	371	163
24	73	61	e30	23	23	69	148	641	629	362	359	170
25	98	59	e30	22	22	82	139	442	631	533	332	143
26	129	e58	e30	22	22	95	136	380	596	440	311	127
27	130	62	e31	e21	22	87	141	393	584	344	316	121
28	119	63	e31	e19	23	79	144	453	519	336	472	116
29	107	65	e31	e20	---	79	133	539	453	353	446	109
30	104	62	32	e18	---	89	138	532	424	358	370	103
31	101	---	31	e19	---	82	---	577	---	324	303	---
TOTAL	2564	2163	1263	713	615	1383	3009	10957	17961	11062	13714	5923
MEAN	82.7	72.1	40.7	23.0	22.0	44.6	100	353	599	357	442	197
MAX	130	101	63	31	25	95	160	701	778	612	845	640
MIN	53	58	30	18	19	22	57	102	334	192	303	103
AC-FT	5090	4290	2510	1410	1220	2740	5970	21730	35630	21940	27200	11750

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1963 - 1999, BY WATER YEAR (WY)

MEAN	80.5	45.4	28.1	21.4	20.4	35.3	111	399	533	254	142	119
MAX	280	104	52.0	42.5	44.5	80.8	226	629	927	596	442	455
(WY)	1973	1987	1986	1986	1986	1989	1989	1993	1980	1995	1999	1970
MIN	22.3	16.7	9.89	9.51	8.42	9.11	40.3	138	152	80.5	44.1	25.1
(WY)	1979	1976	1977	1977	1977	1977	1964	1977	1977	1972	1996	1978

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1963 - 1999	
ANNUAL TOTAL	46136		71327			
ANNUAL MEAN	126		195		150	
HIGHEST ANNUAL MEAN					226	1973
LOWEST ANNUAL MEAN					63.3	1977
HIGHEST DAILY MEAN	697	May 29	845	Aug 11	3020	Sep 6 1970
LOWEST DAILY MEAN	e15	Feb 26	e18	Jan 30	6.7	Dec 28 1976
ANNUAL SEVEN-DAY MINIMUM	17	Feb 22	19	Jan 27	7.4	Dec 23 1976
INSTANTANEOUS PEAK FLOW			1420	Aug 10	a7050	Sep 6 1970
INSTANTANEOUS PEAK STAGE			2.82	Aug 10	b6.51	Sep 6 1970
ANNUAL RUNOFF (AC-FT)	91510		141500		108300	
10 PERCENT EXCEEDS	341		537		424	
50 PERCENT EXCEEDS	71		89		63	
90 PERCENT EXCEEDS	19		23		18	

e Estimated
a From rating curve extended above 1400 ft^{3}/s, on basis of slope-area measurement of peak flow.
b Maximum gage height, 6.51 ft, from water-stage recorder, 6.76 ft, from floodmarks.

09353000 VALLECITO RESERVOIR NEAR BAYFIELD, CO

LOCATION.--Lat 37°23'00", long 107°34'30", in $SW^1/_4SW^1/_4$ 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.

DRAINAGE AREA.--270 mi^2, approximately.

PERIOD OF RECORD.--April 1941 to current year.

REVISED RECORDS.--WSP 959: 1941. WSP 1513: 1956.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 7,580 ft above sea level (levels by U.S. Bureau of Reclamation); gage readings have been reduced to elevations above sea level.

REMARKS.--Reservoir is formed by earth and rockfill dam; dam completed in March 1941. Capacity of reservoir, 125,640 acre-ft between elevations 7,580 ft, sill of outlet gate, and 7,665 ft, top of spillway gates. Dead storage, 4,314 acre-ft. Figures given are usable contents. Reservoir is used to store water for irrigation in Los Pinos (Pine) River basin and provide hydroelectric power.

COOPERATION.--Records provided by Pine River Irrigation District.

EXTREMES (AT 0900) 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 (AT 0900) FOR CURRENT YEAR.--Maximum contents, 124,560 acre-ft, June 9, elevation, 7,664.68 ft; minimum, 58,680 acre-ft, Oct. 19, elevation, 7,637.31 ft.

MONTHEND ELEVATION AND CONTENTS, AT 0900, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	7,639.48	63,180	-
Oct. 31	7,640.04	64,370	+1,190
Nov. 30	7,644.89	75,030	+10,660
Dec. 31	7,643.74	72,440	-2,590
CAL YR 1998	-	-	+430
Jan. 31	7,644.91	75,070	+2,630
Feb. 28	7,645.79	77,080	+2,010
Mar. 31	7,647.75	81,630	+4,550
Apr. 30	7,653.78	96,210	+14,580
May 31	7,662.05	117,490	+21,280
June 30	7,663.42	121,150	+3,660
July 31	7,662.07	117,540	-3,610
Aug. 31	7,653.66	95,910	-21,630
Sept. 30	7,647.44	80,900	-15,010
WTR YR 1999	-	-	+17,720

09354500 LOS PINOS RIVER AT LA BOCA, CO

LOCATION.--Lat 37°00'34", long 107°35'56", in NE$^1/_4$NW$^1/_4$ 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, 0.5 mi upstream from Spring Creek, and 2 mi upstream from maximum elevation of Navajo Reservoir.

DRAINAGE AREA.--510 mi^2, approximately.

PERIOD OF RECORD.--October 1950 to current year. Monthly discharge only for some periods, published in WSP 1733. Water-quality data available, July 1969 to August 1973, January 1988 to September 1991.

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 6,143.59 ft above sea level.

REMARKS.--Records good except for estimated daily discharges, which are poor. Flow regulated by Vallecito Reservoir (station 09353000) 24 mi upstream since April 1941. Diversions for irrigation of about 55,000 acres upstream from station. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

EXTREMES OUTSIDE PERIOD OF RECORD.--A flood on Oct. 5, 1911 has not yet been exceeded.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	564	249	80	86	75	103	65	122	463	305	523	705
2	200	202	72	66	66	104	79	130	559	265	544	819
3	134	188	204	e52	58	104	72	142	810	290	1090	1270
4	139	159	223	e52	57	104	79	207	692	362	1240	1400
5	148	157	231	53	68	103	72	187	370	380	1700	1020
6	147	151	231	51	e78	103	77	134	737	277	2070	988
7	134	155	260	e47	e78	104	84	425	378	249	952	971
8	125	165	409	e48	79	109	133	610	285	247	820	944
9	124	367	432	e50	99	107	132	609	642	254	922	937
10	124	219	436	e52	89	86	108	572	1160	312	1460	909
11	119	154	458	53	73	82	99	520	1330	284	2010	803
12	108	150	548	e52	69	83	110	505	1190	265	2060	549
13	102	167	549	51	68	71	136	436	984	402	1290	481
14	104	155	491	e48	64	54	143	388	911	500	800	378
15	117	158	119	e47	60	51	136	369	1200	792	964	368
16	120	151	92	e50	59	50	128	354	1120	379	904	410
17	112	128	85	e48	60	51	121	304	1150	353	999	407
18	99	110	80	47	58	54	112	251	1270	371	956	384
19	91	98	78	67	58	54	108	209	1290	557	1240	368
20	223	88	77	102	e54	54	105	160	1220	472	1500	363
21	182	84	73	110	e57	58	90	162	1200	425	1790	342
22	264	82	73	134	60	60	82	788	1080	783	1710	335
23	191	80	100	136	55	61	97	1030	928	1110	1670	347
24	154	75	145	117	56	61	99	1070	968	1240	1640	348
25	155	72	145	112	66	59	158	1090	962	1120	1590	335
26	607	69	145	87	89	63	162	963	960	727	1560	334
27	266	67	147	78	98	65	141	562	970	479	1620	324
28	337	e75	151	78	102	62	127	549	960	369	1850	315
29	177	e80	146	82	---	60	117	499	867	359	1590	320
30	162	e80	136	81	---	59	116	488	635	459	1510	316
31	299	---	113	78	---	60	---	482	---	565	1240	---
TOTAL	5828	4135	6529	2215	1953	2299	3288	14317	27291	14952	41814	17790
MEAN	188	138	211	71.5	69.8	74.2	110	462	910	482	1349	593
MAX	607	367	549	136	102	109	162	1090	1330	1240	2070	1400
MIN	91	67	72	47	54	50	65	122	285	247	523	315
AC-FT	11560	8200	12950	4390	3870	4560	6520	28400	54130	29660	82940	35290

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 1999, BY WATER YEAR (WY)

MEAN	198	139	106	76.2	98.9	222	348	440	520	309	244	221
MAX	672	709	396	182	362	972	1339	1719	1555	1381	1349	725
(WY)	1987	1987	1983	1985	1993	1993	1979	1958	1979	1957	1999	1997
MIN	47.9	32.1	33.8	33.9	38.6	45.1	22.8	44.3	74.5	81.6	80.4	58.3
(WY)	1978	1960	1964	1978	1978	1977	1951	1951	1977	1959	1977	1951

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1951 - 1999	
ANNUAL TOTAL	65324		142411			
ANNUAL MEAN	179		390		247	
HIGHEST ANNUAL MEAN					582	1973
LOWEST ANNUAL MEAN					77.4	1959
HIGHEST DAILY MEAN	807	Mar 27	2070	Aug 6	4560	Jul 27 1957
LOWEST DAILY MEAN	e64	Feb 1	e47	Jan 7	6.1	May 1 1977
ANNUAL SEVEN-DAY MINIMUM	66	Feb 10	49	Jan 12	8.3	Apr 30 1977
INSTANTANEOUS PEAK FLOW			2370	Aug 6	a6400	Jul 27 1957
INSTANTANEOUS PEAK STAGE			6.85	Aug 6	b8.95	Jul 27 1957
ANNUAL RUNOFF (AC-FT)	129600		282500		179000	
10 PERCENT EXCEEDS	335		1090		561	
50 PERCENT EXCEEDS	147		158		134	
90 PERCENT EXCEEDS	76		60		50	

e Estimated
a From rating curve extended above 5100 ft^3/s.
b Maximum gage height, 9.00 ft, backwater from ice, sometime during period, Dec 23, 1990 to Jan 17, 1991.

09355000 SPRING CREEK AT LA BOCA, CO

LOCATION.--Lat 37°00'40", long 107°35'47", in SE$^1/_4$SW$^1/_4$ 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 mi^2, approximately.

PERIOD OF RECORD.--October 1950 to current year. Monthly discharge only for some periods, published in WSP 1733. Water-quality data available May 1974, January 1988 to September 1991.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 6,160 ft above sea level, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Part of flow is return waste from irrigation. Nearly all irrigation in this basin is water diverted from Los Pinos River which causes a considerable change in the annual pattern and natural flow. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	227	51	e7.8	e4.8	4.3	2.7	2.4	7.7	50	76	79	57
2	55	23	e7.2	e4.4	e4.0	2.7	4.1	8.6	50	80	100	105
3	49	19	e6.4	e4.2	e3.6	2.5	4.2	8.8	52	90	255	122
4	50	17	e6.0	e4.2	e3.4	2.4	4.5	12	54	94	81	32
5	48	17	6.1	e4.4	e3.9	2.7	4.7	10	54	88	65	26
6	46	17	e5.8	e4.5	e4.4	2.4	4.7	8.6	58	100	75	29
7	45	16	5.7	e4.4	e4.6	2.8	3.4	8.1	59	89	23	32
8	45	18	5.1	e4.0	e4.7	3.0	3.8	10	57	88	28	32
9	44	85	e5.2	e4.0	e5.3	2.5	3.7	11	57	119	28	30
10	44	31	e5.2	e4.3	5.7	2.4	2.9	13	58	117	43	32
11	44	16	e5.4	e4.6	e4.5	2.3	2.0	27	61	99	31	31
12	43	15	e5.7	e4.4	e3.8	2.5	1.8	24	61	96	16	31
13	43	21	e5.5	e4.5	3.4	2.3	1.7	22	65	96	22	36
14	43	14	e5.5	e4.5	3.6	2.3	2.0	22	66	106	24	34
15	43	13	e5.6	e4.5	3.5	2.2	1.5	20	70	131	61	33
16	44	13	e5.9	e4.4	3.0	2.3	1.4	24	75	111	31	31
17	45	13	e5.8	e4.4	2.7	2.4	1.4	25	83	124	26	30
18	44	12	e5.8	e6.0	3.3	2.7	1.4	33	84	130	25	26
19	44	e10	e5.9	e7.4	3.6	2.8	1.4	31	84	127	60	38
20	45	e9.0	e5.2	e8.8	3.0	2.6	1.4	30	84	101	23	36
21	31	e8.6	e4.8	e10	3.0	2.4	1.6	34	88	72	51	30
22	33	e8.4	e4.7	e11	3.1	2.2	22	36	85	111	31	35
23	23	e8.2	e4.3	11	2.4	2.0	7.1	37	83	72	32	49
24	19	e7.7	e4.3	11	2.8	2.1	3.8	41	82	74	50	51
25	18	e7.2	e4.6	10	2.9	2.0	5.4	45	84	72	36	51
26	66	e7.0	e4.6	9.7	2.8	2.4	6.1	45	79	67	42	49
27	36	e6.8	e4.8	9.6	2.7	2.3	4.7	45	86	82	42	48
28	44	e7.4	e5.0	7.3	2.7	1.9	4.0	48	81	80	61	42
29	16	e7.8	e5.0	e7.8	---	1.9	3.5	48	75	58	51	40
30	17	e8.0	e4.9	3.4	---	1.8	7.9	50	75	59	46	42
31	56	---	e4.8	e4.0	---	1.8	---	50	---	61	52	---
TOTAL	1450	507.1	168.6	191.5	100.7	73.3	120.5	834.8	2100	2870	1590	1260
MEAN	46.8	16.9	5.44	6.18	3.60	2.36	4.02	26.9	70.0	92.6	51.3	42.0
MAX	227	85	7.8	11	5.7	3.0	22	50	88	131	255	122
MIN	16	6.8	4.3	3.4	2.4	1.8	1.4	7.7	50	58	16	26
AC-FT	2880	1010	334	380	200	145	239	1660	4170	5690	3150	2500

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 1999, BY WATER YEAR (WY)

MEAN	35.0	10.8	5.54	4.79	10.0	18.6	13.4	39.3	58.0	68.1	66.4	58.9
MAX	87.9	29.6	20.4	19.3	54.8	89.7	41.1	64.5	79.3	111	132	92.0
(WY)	1973	1956	1985	1980	1980	1979	1979	1992	1986	1996	1996	1983
MIN	5.25	3.68	1.74	2.04	2.24	2.36	3.77	15.7	24.4	21.2	32.1	26.5
(WY)	1978	1978	1960	1973	1996	1999	1978	1978	1977	1977	1977	1951

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1951 - 1999	
ANNUAL TOTAL	10108.5		11266.5			
ANNUAL MEAN	27.7		30.9		32.8	
HIGHEST ANNUAL MEAN					47.7	1987
LOWEST ANNUAL MEAN					15.6	1977
HIGHEST DAILY MEAN	227	Oct 1	255	Aug 3	918	Mar 6 1995
LOWEST DAILY MEAN	1.5	Mar 13	1.4	Apr 16	1.0	Feb 25 1951
ANNUAL SEVEN-DAY MINIMUM	1.8	Mar 10	1.4	Apr 15	1.0	Dec 7 1959
INSTANTANEOUS PEAK FLOW			496	Oct 1	a1980	Sep 6 1970
INSTANTANEOUS PEAK STAGE			3.78	Oct 1	b4.62	Sep 6 1970
ANNUAL RUNOFF (AC-FT)	20050		22350		23760	
10 PERCENT EXCEEDS	56		81		72	
50 PERCENT EXCEEDS	19		17		23	
90 PERCENT EXCEEDS	3.3		2.6		3.2	

e Estimated
a From rating curve extended above 160 ft^3/s, on the basis of field estimate of peak flow.
b Maximum gage height, 5.98 ft, Mar 9, 1960, backwater from ice.

09358000 ANIMAS RIVER AT SILVERTON, CO

LOCATION.--Lat 37°48'40", long 107°39'31", in $SE^1/_4NW^1/_4$ sec.17, T.41 N., R.7 W., San Juan County, Hydrologic Unit 14080104, on right bank at southeast end of 14th Street, 800 feet upstream from Cement Creek, in the city of Silverton.

DRAINAGE AREA.--70.6 mi^2.

PERIOD OF RECORD.--June to October 1903 (staff gage), monthly discharge only, published in WSP 1313. October 1991 to September 1993, October 1994 to current year.

REVISED RECORDS.--WDR CO 92-2: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 9,290 ft above sea level, from topographic map.

REMARKS.--Records poor. No diversions upstream for irrigation in Animas River drainage. Natural regulation by many lakes upstream from station. Mineral Point Ditch exports 100 to 400 acre feet of water per year from headwaters of Animas River to Uncompahgre River drainage. City of Silverton diverts some water from Boulder Creek (tributary) for municipal use. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1884, was probably that of October 5, 1911.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e57	e60	e44	e19	e23	e23	e50	63	502	634	246	210
2	e65	e60	e44	e25	e22	e22	e48	59	516	588	256	231
3	e63	59	e44	e27	e23	e23	e46	62	415	537	255	313
4	e63	53	e44	e25	e23	e23	e43	56	467	547	253	286
5	e64	51	e42	e24	e24	e20	e43	52	412	509	243	248
6	e63	e50	e43	e26	e25	e19	e42	40	349	479	254	218
7	61	e48	e41	e27	e26	e17	e42	51	436	494	245	194
8	63	e48	e38	e26	e24	e17	e44	72	613	535	219	172
9	63	e48	e36	e26	e22	e18	e44	104	727	440	208	156
10	65	e46	e36	e24	e22	e19	e42	111	761	394	261	144
11	63	e47	e37	e23	e25	e19	e39	99	761	375	291	137
12	62	e48	e36	e25	e25	e19	e39	100	764	370	265	117
13	62	e48	e35	e29	e24	e19	46	138	847	338	234	89
14	61	e49	e33	e28	e23	e17	48	194	874	305	210	85
15	60	e52	e33	e27	e24	e17	47	216	771	312	225	113
16	59	e53	e34	e27	e24	e19	45	212	852	299	209	91
17	57	e52	e34	e28	e26	e21	45	208	897	279	213	119
18	52	e51	e35	e26	e25	e24	47	240	827	260	191	87
19	53	e49	e35	e27	e25	e25	55	297	887	317	198	92
20	57	e48	e35	e29	e25	e26	72	352	856	316	201	113
21	59	e47	e32	e29	e25	e28	82	411	781	310	200	85
22	59	e46	e31	e29	e23	e30	75	438	897	296	184	71
23	59	e45	e30	e26	e22	e34	72	478	825	264	190	67
24	56	e45	e29	e17	e22	e38	71	471	780	252	207	71
25	61	e46	e27	e16	e23	e40	66	339	783	301	199	e71
26	64	e45	e27	e17	e23	e41	63	329	683	268	184	e71
27	70	e45	e28	e20	e25	e43	62	340	713	252	191	e71
28	69	e45	e27	e23	e25	e45	67	354	641	259	224	e70
29	63	e46	e23	e25	---	e48	65	456	597	248	225	e70
30	65	e44	e24	e25	---	e54	66	440	606	231	218	e70
31	e61	---	e24	e24	---	e52	---	470	---	241	204	---
TOTAL	1899	1474	1061	769	668	860	1616	7252	20840	11250	6903	3932
MEAN	61.3	49.1	34.2	24.8	23.9	27.7	53.9	234	695	363	223	131
MAX	70	60	44	29	26	54	82	478	897	634	291	313
MIN	52	44	23	16	22	17	39	40	349	231	184	67
AC-FT	3770	2920	2100	1530	1320	1710	3210	14380	41340	22310	13690	7800

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 1999, BY WATER YEAR (WY)

MEAN	67.6	41.9	30.4	26.2	25.7	30.6	55.8	297	595	343	142	86.1
MAX	136	64.9	41.4	33.8	36.1	43.3	69.4	454	794	734	253	131
(WY)	1998	1998	1998	1995	1995	1995	1996	1996	1997	1995	1995	1999
MIN	33.4	27.0	18.9	13.8	15.7	18.6	39.6	147	403	122	44.4	53.0
(WY)	1993	1993	1992	1992	1992	1992	1993	1995	1992	1996	1996	1996

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1992 - 1999	
ANNUAL TOTAL	42177		58524			
ANNUAL MEAN	116		160		145	
HIGHEST ANNUAL MEAN					194	1995
LOWEST ANNUAL MEAN					103	1992
HIGHEST DAILY MEAN	660	Jun 2	897	Jun 17	1180	Jun 4 1997
LOWEST DAILY MEAN	e20	Mar 1	e16	Jan 25	12	Jan 1 1992
ANNUAL SEVEN-DAY MINIMUM	23	Feb 24	18	Mar 6	13	Jan 16 1992
INSTANTANEOUS PEAK FLOW			1090	Jun 13	1470	Jun 4 1997
INSTANTANEOUS PEAK STAGE			4.19	Jun 13	a3.99	Jun 4 1997
ANNUAL RUNOFF (AC-FT)	83660		116100		105400	
10 PERCENT EXCEEDS	343		468		421	
50 PERCENT EXCEEDS	54		59		52	
90 PERCENT EXCEEDS	26		23		22	

e Estimated
a Maximum gage height during period Jun to Oct 1903, 4.90 ft, Jun 17, 1903, site and datum then in use, maximum discharge unknown.

09358550 CEMENT CREEK AT SILVERTON, CO

LOCATION.--Lat 37°49'11", long 107°39'47", in $SW^1/_4SW^1/_4$ sec.8, T.41 N., R.7 W., San Juan County, Hydrologic Unit 14080104, on left bank, at abandoned railroad crossing Cement Creek, 0.1 mile north of Silverton, and 0.8 mile upstream from mouth.

DRAINAGE AREA.--20.1 mi^2.

PERIOD OF RECORD.--October 1991 to September 1993, October 1994 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 9,380 ft above sea level, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Natural regulation by many lakes upstream from station. Diversions for mining operations upstream from station. However, these diversions are returned to the creek upstream of the gage. Mine drainage contributes considerable amounts of water to the creek. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

EXTREMES OUTSIDE PERIOD OF RECORD.--A major flood occurred October 5, 1911. A more recent flood occurred June 6, 1978, when Lake Emma (6.5 mi northeast of Silverton) was undermined by mining operations, and released a large quantity of water into the headwaters of Cement Creek. Discharge not determined.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	21	19	e9.4	e12	e13	23	21	165	151	54	52
2	19	21	19	e13	e12	e14	21	20	152	135	54	60
3	18	20	19	e12	e12	e14	20	20	133	117	54	72
4	22	19	19	e12	e13	e13	18	19	138	113	60	62
5	20	19	19	e13	e14	e12	17	18	116	105	57	52
6	20	20	e18	e14	e14	e11	17	18	92	97	58	46
7	19	20	e17	e14	e14	e10	18	20	106	97	53	41
8	18	20	e16	e14	e13	e10	18	31	147	99	47	38
9	18	20	e17	e13	e12	e11	18	45	174	87	45	35
10	19	20	e17	e12	e13	e11	17	45	185	82	72	33
11	18	21	e16	e12	e14	e12	17	39	179	81	79	32
12	18	19	e16	e14	e14	e12	20	40	157	79	67	29
13	18	19	e16	e15	e13	e11	24	66	174	73	57	27
14	18	20	e15	e14	e13	e11	24	91	193	66	50	29
15	18	21	e16	e14	e13	e11	23	85	168	64	52	31
16	18	21	e15	e14	e13	e12	22	78	183	61	44	29
17	18	21	e16	e13	e14	e14	21	76	206	57	48	34
18	18	20	e16	e14	e14	16	25	90	193	57	41	29
19	18	19	e16	e15	e15	e16	32	108	191	79	46	30
20	19	20	e15	e15	e15	e17	39	120	190	74	46	28
21	19	20	e14	e16	e14	e19	38	131	174	72	45	26
22	19	19	e14	e15	e13	e21	30	138	193	69	42	25
23	20	19	e14	e11	e13	24	26	151	192	62	45	27
24	19	19	e13	e8.5	e14	25	25	141	182	63	52	27
25	20	19	e13	e8.2	e14	e26	23	105	184	83	44	25
26	21	19	e14	e10	e14	e25	22	98	188	72	40	25
27	22	20	e13	e12	e15	24	23	104	190	65	40	24
28	21	20	e12	e13	e14	22	24	118	182	59	43	24
29	20	20	e11	e13	---	25	23	133	157	58	44	23
30	21	19	e12	e13	---	28	22	132	153	54	46	23
31	20	---	e11	e13	---	25	---	147	---	56	47	---
TOTAL	596	595	478	399.1	378	515	690	2448	5037	2487	1572	1038
MEAN	19.2	19.8	15.4	12.9	13.5	16.6	23.0	79.0	168	80.2	50.7	34.6
MAX	22	21	19	16	15	28	39	151	206	151	79	72
MIN	18	19	11	8.2	12	10	17	18	92	54	40	23
MED	19	20	16	13	14	14	22	85	176	73	47	29
AC-FT	1180	1180	948	792	750	1020	1370	4860	9990	4930	3120	2060

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 1999, BY WATER YEAR (WY)

MEAN	19.7	16.5	13.7	12.9	13.5	16.7	27.4	102	156	71.9	31.0	23.6
MAX	28.9	19.8	15.6	15.8	17.8	22.7	35.4	145	263	149	50.7	34.6
(WY)	1998	1999	1995	1995	1995	1995	1996	1996	1995	1995	1999	1999
MIN	14.0	13.3	10.6	8.63	9.91	13.4	22.6	57.2	85.2	29.3	18.1	17.5
(WY)	1992	1992	1992	1992	1993	1993	1998	1995	1996	1996	1996	1996

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1992 - 1999	
ANNUAL TOTAL	13175		16233.1			
ANNUAL MEAN	36.1		44.5		42.1	
HIGHEST ANNUAL MEAN					56.3	1995
LOWEST ANNUAL MEAN					32.1	1992
HIGHEST DAILY MEAN	209	Jun 2	206	Jun 17	385	Jun 16 1995
LOWEST DAILY MEAN	e11	Dec 29	e8.2	Jan 25	7.5	Jan 2 1992
ANNUAL SEVEN-DAY MINIMUM	12	Dec 25	11	Jan 23	8.4	Dec 30 1991
INSTANTANEOUS PEAK FLOW			235	Jun 13	471	Jun 14 1995
INSTANTANEOUS PEAK STAGE			2.12	Jun 13	2.85	Jun 14 1995
ANNUAL RUNOFF (AC-FT)	26130		32200		30530	
10 PERCENT EXCEEDS	96		124		110	
50 PERCENT EXCEEDS	19		21		19	
90 PERCENT EXCEEDS	13		13		13	

e Estimated

09359010 MINERAL CREEK AT SILVERTON, CO

LOCATION.--Lat 37°48'10", long 107°40'20", in NW$^{1}/_{4}$NE$^{1}/_{4}$ sec.19, T.41 N., R.7 W., San Juan County, Hydrologic Unit 14080104, on right bank at southwest end of Greene Street at abandoned bridge crossing Mineral Creek, 300 ft downstream from U. S. Highway 550 crossing Mineral Creek, 1,400 ft upstream from mouth, and 0.5 mi southwest of Silverton.

DRAINAGE AREA.--52.5 mi^{2}.

PERIOD OF RECORD.--October 1991 to September 1993, October 1994 to current year.

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 9245.98 ft above sea level, from San Juan County bench mark.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Natural regulation by many lakes upstream from station. Diversions upstream from Mineral Creek drainage to Uncompahgre River drainage consists of 100 to 200 acre-feet per year through Red Mountain Ditch and 400 to 500 acre-feet per year through Carbon Lake Ditch. City of Silverton diverts some water from Bear Creek (tributary) for municipal use. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum flood known occurred October 5, 1911. An indirect determination of peak flow for flood of September 5, 1970, was run in very close proximity to present site, discharge, 3070 ft^{3}/s, gage height not determined.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	43	42	e33	e16	e18	e19	e43	49	424	815	233	342
2	42	45	e32	e21	e18	e19	e42	47	415	702	252	383
3	40	42	e32	e20	e18	e20	e39	46	349	626	269	382
4	47	41	e32	e19	e19	e19	e38	45	370	590	318	293
5	43	e40	e31	e19	e20	e17	e37	43	308	524	279	229
6	40	40	e30	e21	e21	e16	e38	41	236	523	257	192
7	43	39	e29	e22	e21	e15	e39	43	265	617	229	163
8	43	39	e28	e21	e20	e14	e39	56	377	570	202	142
9	41	e38	e27	e20	e18	e15	39	82	468	437	198	127
10	40	e37	e27	e19	e19	e16	38	87	478	378	381	116
11	39	e37	e28	e18	e21	e16	36	82	473	361	453	110
12	38	36	e27	e20	e21	e16	38	86	456	361	314	101
13	36	e36	e26	e23	e18	e16	45	124	472	296	233	93
14	36	e37	e25	e22	e19	e15	48	178	497	265	197	97
15	35	e38	e26	e21	e19	e14	48	181	433	281	219	109
16	36	e39	e25	e22	e19	e16	47	170	505	253	190	109
17	36	e38	e25	e22	e21	e18	45	170	663	228	229	128
18	36	e37	e26	e21	e21	e20	50	197	600	236	216	120
19	36	e36	e26	e22	e21	e22	61	242	626	530	362	122
20	39	e35	e26	e23	e21	e22	77	283	597	403	400	116
21	40	e34	e24	e24	e20	e23	82	328	552	348	335	105
22	41	e34	e23	e23	e19	e26	69	349	673	330	260	98
23	42	e33	e23	e18	e18	e30	63	370	673	287	219	109
24	40	e33	e23	e13	e19	e33	62	373	616	401	209	109
25	43	e32	e22	e12	e20	e34	56	270	646	612	193	100
26	46	e33	e21	e15	e20	e36	53	246	713	376	171	94
27	48	e33	e22	e17	e21	e38	53	258	807	294	184	89
28	46	e33	e21	e19	e20	e41	58	275	819	238	237	83
29	43	e34	e18	e20	---	e43	53	342	791	231	240	78
30	44	e33	e18	e20	---	e47	52	330	794	235	277	75
31	43	---	e19	e19	---	e45	---	372	---	286	292	---
TOTAL	1265	1104	795	612	550	741	1488	5765	16096	12634	8048	4414
MEAN	40.8	36.8	25.6	19.7	19.6	23.9	49.6	186	537	408	260	147
MAX	48	45	33	24	21	47	82	373	819	815	453	383
MIN	35	32	18	12	18	14	36	41	236	228	171	75
AC-FT	2510	2190	1580	1210	1090	1470	2950	11430	31930	25060	15960	8760

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 1999, BY WATER YEAR (WY)

MEAN	52.0	33.8	24.9	20.9	20.6	25.6	48.9	230	458	283	139	85.5
MAX	96.4	46.9	30.6	27.1	29.5	36.1	64.2	337	635	540	260	147
(WY)	1998	1998	1998	1995	1995	1995	1992	1996	1997	1995	1999	1999
MIN	28.3	24.7	18.3	13.4	14.7	18.4	35.4	96.5	257	86.5	44.3	55.6
(WY)	1992	1992	1992	1992	1992	1992	1998	1995	1996	1996	1996	1996

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1992 - 1999	
ANNUAL TOTAL	34576		53512			
ANNUAL MEAN	94.7		147		119	
HIGHEST ANNUAL MEAN					147	1999
LOWEST ANNUAL MEAN					82.9	1996
HIGHEST DAILY MEAN	528	Jun 2	819	Jun 28	964	Jun 4 1997
LOWEST DAILY MEAN	e16	Mar 1	e12	Jan 25	12	Jan 2 1992
ANNUAL SEVEN-DAY MINIMUM	18	Feb 23	15	Mar 6	13	Jan 12 1992
INSTANTANEOUS PEAK FLOW			1300	Jun 27	1670	Jun 15 1995
INSTANTANEOUS PEAK STAGE			3.05	Jun 27	3.41	Jun 15 1995
ANNUAL RUNOFF (AC-FT)	68580		106100		86090	
10 PERCENT EXCEEDS	288		408		341	
50 PERCENT EXCEEDS	40		43		43	
90 PERCENT EXCEEDS	21		19		19	

e Estimated

09359020 ANIMAS RIVER BELOW SILVERTON, CO

LOCATION.--Lat 37°47'25", long 107°40'01", in $SW^1/_4SW^1/_4$ sec.20, T.41 N., R.7 W., San Juan County, Hydrologic Unit 14080104, on right bank 500 ft upstream from Durango-Silverton Railroad, crossing Animas River, 0.7 mi downstream from Mineral Creek, and 1.1 mi south of Silverton.

DRAINAGE AREA.--146 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1991 to current year.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 9,200 ft above sea level, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Natural regulation by many lakes upstream from station. Diversions from Animas River and Mineral Creek drainages through Red Mountain, Carbon Lake and Mineral Point ditches amount to 600 to 1100 acre-feet per year. City of Silverton diverts some water for municipal use from Bear Creek and Boulder Creek, both tributaries upstream.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum flood known occurred October 5, 1911.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	118	136	99	e45	e50	e51	e115	157	1100	1540	472	557
2	118	140	98	e61	e49	e51	e110	147	1100	1350	505	591
3	112	129	99	e58	e52	e54	e100	150	916	1150	532	643
4	139	117	97	e54	e54	e51	e98	139	958	1100	561	573
5	127	114	e96	e58	e57	e45	e97	131	803	947	542	506
6	117	117	e93	e63	e59	e42	e98	119	618	873	546	449
7	126	116	e87	e63	e59	e40	e100	132	720	949	518	399
8	148	117	e84	e60	e52	e39	e105	182	1050	988	467	366
9	147	119	e82	e58	e50	e41	102	266	1340	697	452	335
10	141	114	e85	e54	e53	e42	98	284	1500	614	620	310
11	134	115	e83	e52	e58	e43	92	261	1430	618	673	299
12	128	114	e80	e60	e58	e43	101	262	1320	616	583	280
13	123	114	e78	e65	e50	e41	122	352	1450	562	514	261
14	116	114	e78	e63	e53	e38	130	464	1520	515	457	266
15	112	119	e78	e61	e52	e41	130	479	1210	518	492	288
16	112	120	e75	e64	e53	e45	124	468	1470	494	444	281
17	110	118	e76	e60	e57	e50	123	461	1790	472	486	310
18	104	115	e80	e60	e58	e57	134	518	1540	476	449	290
19	106	111	e80	e63	e58	e59	165	636	1650	677	555	298
20	113	106	e75	e66	e57	e60	208	748	1630	585	581	289
21	120	106	e70	e68	e56	e64	225	851	1470	552	553	274
22	127	103	e68	e65	e52	e70	199	898	1840	532	483	260
23	123	101	e68	e48	e50	e80	184	974	1920	489	454	276
24	116	101	e65	e37	e54	e88	184	990	1870	545	465	278
25	130	100	e62	e36	e54	e92	168	720	1960	718	432	265
26	140	100	e68	e43	e55	e95	159	668	1990	564	406	252
27	152	100	e68	e48	e57	e100	158	704	2030	498	427	239
28	150	100	e59	e54	e55	e105	175	745	1830	479	502	224
29	137	102	e52	e58	---	e120	166	921	1570	466	502	213
30	141	98	e55	e56	---	e125	166	893	1560	451	527	206
31	138	---	e49	e54	---	e125	---	985	---	490	517	---
TOTAL	3925	3376	2387	1755	1522	1997	4136	15705	43155	21525	15717	10078
MEAN	127	113	77.0	56.6	54.4	64.4	138	507	1438	694	507	336
MAX	152	140	99	68	59	125	225	990	2030	1540	673	643
MIN	104	98	49	36	49	38	92	119	618	451	406	206
AC-FT	7790	6700	4730	3480	3020	3960	8200	31150	85600	42690	31170	19990

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 1999, BY WATER YEAR (WY)

MEAN	140	94.7	70.8	63.4	61.8	75.4	153	660	1226	634	298	206
MAX	270	136	92.9	79.8	85.6	105	192	1002	1647	1393	520	336
(WY)	1998	1998	1998	1998	1995	1995	1996	1996	1997	1995	1995	1999
MIN	82.0	70.9	52.5	40.2	46.1	59.7	122	301	741	225	116	129
(WY)	1992	1992	1992	1992	1992	1992	1993	1995	1996	1994	1996	1996

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1992 - 1999	
ANNUAL TOTAL	94756		125278			
ANNUAL MEAN	260		343		308	
HIGHEST ANNUAL MEAN					395	1997
LOWEST ANNUAL MEAN					235	1992
HIGHEST DAILY MEAN	1460	Jun 2	2030	Jun 27	2350	Jul 10 1995
LOWEST DAILY MEAN	e49	Dec 31	e36	Jan 25	35	Jan 2 1992
ANNUAL SEVEN-DAY MINIMUM	59	Feb 24	41	Mar 8	39	Jan 18 1992
INSTANTANEOUS PEAK FLOW			2730	Jun 27	2970	Jul 9 1995
INSTANTANEOUS PEAK STAGE			4.56	Jun 27	a4.89	Jul 9 1995
ANNUAL RUNOFF (AC-FT)	187900		248500		222800	
10 PERCENT EXCEEDS	739		931		863	
50 PERCENT EXCEEDS	118		128		118	
90 PERCENT EXCEEDS	68		53		59	

e Estimated
a Maximum gage height, 4.90 ft, Jun 1, 1997.

09359020 ANIMAS RIVER BELOW SILVERTON, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1993 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)
NOV												
13...	1130	113	447	6.7	1.0	10.0	210	75	4.7	2.8	.1	.72
APR												
08...	1500	95	474	6.4	9.3	7.9	220	79	4.7	2.9	.1	.84
JUN												
03...	0945	819	158	7.2	4.4	9.6	65	23	1.7	1.2	.1	.39
AUG												
26...	1015	411	239	7.1	8.5	9.4	110	39	2.8	1.7	.1	.50

DATE	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS-SOLVED (TONS PER DAY) (70302)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL) (01105)	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)
NOV												
13...	12	10	200	1.2	.64	13	345	309	.47	105	2200	42
APR												
08...	9	7	220	1.2	.68	13	361	331	.49	92.6	2100	68
JUN												
03...	20	16	53	.41	.29	6.6	119	97	.16	263	540	24
AUG												
26...	26	21	86	.53	.38	8.8	162	153	.22	180	840	20

DATE	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
NOV												
13...	1.4	24	5.7	3800	2200	<1.0	1100	1090	<.1	<1	<.20	453
APR												
08...	1.9	21	9.2	4100	2200	<1.0	1400	1370	<.1	<1	<.20	557
JUN												
03...	1.3	25	7.6	1300	150	<1.0	380	344	<.1	<1	<.20	260
AUG												
26...	1.8	27	3.9	1500	170	<1.0	550	526	<.1	<1	<.20	308

MISCELLANEOUS FIELD MEASUREMENTS, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)
OCT				
07...	1425	120	434	9.4
FEB				
19...	1140	59	592	1.4
AUG				
09...	1300	432	233	12.3

09361500 ANIMAS RIVER AT DURANGO, CO

LOCATION.--Lat 37°16'45", long 107°52'47", in SW$^{1}/_{4}$SW$^{1}/_{4}$ sec.20, T.35 N., R.9 W., La Plata County, Hydrologic Unit 14080104, on left bank at abandoned power 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 with satellite telemetry. Datum of gage is 6,501.57 ft above sea level. See WSP 1713 or 1733 for history of changes prior to Mar. 2, 1921.

REMARKS.--No estimated daily discharges. Records good. Diversions for irrigation of about 4,000 acres upstream from station. Natural regulation by many lakes and regulation for power upstream from station. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	332	430	367	257	194	196	468	1130	3360	2920	1340	1790
2	385	431	368	243	213	222	445	1000	3700	2920	1230	1910
3	368	439	370	210	211	230	426	997	2890	2530	1410	2730
4	355	402	370	202	225	232	422	995	2980	2460	1650	2680
5	381	370	368	237	235	236	394	893	2790	2320	1860	2170
6	372	367	345	246	228	232	399	815	2190	2130	1970	1810
7	358	363	322	235	193	210	402	809	1990	2140	2020	1570
8	365	356	309	236	192	210	432	944	2640	2340	1640	1330
9	361	375	305	227	219	227	459	1290	3270	2240	1380	1180
10	353	351	326	198	228	229	447	1530	3640	1870	1500	1080
11	329	341	303	211	224	224	408	1450	3580	1700	2420	994
12	315	354	298	256	195	225	428	1310	3310	1750	2280	942
13	314	357	292	256	210	224	588	1480	3000	1610	1760	864
14	303	360	281	241	206	205	681	2080	3630	1410	1460	786
15	299	373	285	237	207	211	731	2380	3270	1370	1490	842
16	304	399	277	254	224	255	686	2270	3300	1380	1530	878
17	319	446	286	228	222	267	638	2130	3960	1240	1570	895
18	290	440	288	226	224	282	590	2220	4210	1160	1760	869
19	280	420	284	255	223	281	629	2570	4010	1810	2200	834
20	304	389	270	258	226	299	768	2980	4070	2390	2270	869
21	336	375	259	269	197	320	921	3220	3630	1830	2330	817
22	374	373	251	251	196	367	908	3410	3720	1940	2150	744
23	394	365	255	241	213	429	776	3590	4090	1730	1790	726
24	387	375	238	221	212	433	837	4160	3920	1530	1910	784
25	367	369	228	223	219	438	989	3290	3720	2110	1950	720
26	578	364	263	255	225	492	910	2600	3960	1980	1660	654
27	630	370	245	250	224	511	913	2590	3730	1640	1540	618
28	697	373	245	241	194	468	972	2520	3790	1430	1950	606
29	531	385	264	221	---	448	1010	3030	3200	1300	2230	575
30	470	357	262	220	---	494	1060	2990	2920	1290	2020	562
31	462	---	253	189	---	508	---	2990	---	1320	1730	---
TOTAL	11913	11469	9077	7294	5979	9605	19737	65663	102470	57790	56000	33829
MEAN	384	382	293	235	214	310	658	2118	3416	1864	1806	1128
MAX	697	446	370	269	235	511	1060	4160	4210	2920	2420	2730
MIN	280	341	228	189	192	196	394	809	1990	1160	1230	562
AC-FT	23630	22750	18000	14470	11860	19050	39150	130200	203200	114600	111100	67100

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1898 - 1999, BY WATER YEAR (WY)

MEAN	414	288	223	203	206	299	838	2304	2898	1226	598	469
MAX	1866	814	412	326	352	844	1818	4791	5846	3057	1806	1709
(WY)	1942	1942	1942	1973	1920	1916	1985	1920	1917	1995	1999	1970
MIN	162	158	129	103	110	133	246	474	395	211	179	161
(WY)	1957	1935	1990	1933	1933	1990	1977	1977	1934	1934	1900	1956

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1898 - 1999	
ANNUAL TOTAL	270520		390826			
ANNUAL MEAN	741		1071		830	
HIGHEST ANNUAL MEAN					1366	1917
LOWEST ANNUAL MEAN					302	1977
HIGHEST DAILY MEAN	3650	Jun 3	4210	Jun 18	10700	Jun 19 1949
LOWEST DAILY MEAN	176	Mar 2	189	Jan 31	94	Mar 2 1913
ANNUAL SEVEN-DAY MINIMUM	202	Feb 24	209	Feb 7	100	Dec 19 1917
INSTANTANEOUS PEAK FLOW			4640	Jun 18	a25000	Oct 5 1911
INSTANTANEOUS PEAK STAGE			5.93	Jun 18	11.00	Oct 5 1911
ANNUAL RUNOFF (AC-FT)	536600		775200		601000	
10 PERCENT EXCEEDS	1880		2900		2250	
50 PERCENT EXCEEDS	390		462		345	
90 PERCENT EXCEEDS	224		224		180	

a Present site and datum, from rating extended above 13000 ft^{3}/s.

09362550 WILSON GULCH NEAR DURANGO, CO

LOCATION.--Lat 37°14'36", long 107°50'33", in NE$^1/_4$NW$^1/_4$ sec.10, T.34 N., R.9 W., La Plata County, Hydrologic Unit 14080104, on right bank 0.4 mi upstream from intersection of U.S. Highways 160 and 550, 0.9 mi upstream from mouth, and 4.5 mi southeast of Durango.

DRAINAGE AREA.--6.5 mi^2.

PERIOD OF RECORD.--June 1995 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 6,580 ft above sea level, from topographic map.

REMARKS.--Records poor. Florida Farmers Ditch diverts some project water from Florida River drainage to headwaters of Wilson Gulch for irrigation of several acres upstream in Artesian Valley. No diversions upstream from gage for irrigation downstream. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.3	1.2	1.1	.60	.54	.72	.29	.39	.54	1.5	1.2	1.5
2	1.2	1.6	1.0	.64	.54	.74	.24	.46	.56	1.3	1.4	2.8
3	1.5	1.1	.92	.60	.54	.72	.21	.54	.55	1.3	3.9	3.3
4	1.6	.80	.70	.52	.58	.72	.20	.71	.71	1.4	2.4	1.7
5	1.6	.73	.65	.50	.68	.72	.17	.63	1.4	1.4	7.5	1.3
6	1.3	.69	.61	.50	.78	.72	.19	.55	.93	1.1	11	1.2
7	1.3	.73	.51	.50	.64	.72	.22	.54	.85	1.2	2.0	1.2
8	1.3	.96	.43	.54	.92	.77	.18	.55	.93	1.4	1.2	1.2
9	1.4	2.1	.42	.54	1.7	.77	.12	.48	.88	1.5	1.1	1.2
10	1.5	1.3	.42	.52	1.1	.75	.09	.59	.84	1.8	e6.0	1.3
11	1.4	1.0	.44	.53	.81	.74	.09	.54	.85	1.5	e4.0	1.2
12	1.3	1.2	.44	.54	.80	.77	.07	.49	.79	1.4	e2.0	1.2
13	1.4	1.3	.46	.56	.85	.77	.08	.45	.76	1.4	e3.0	1.2
14	1.4	1.5	.48	.57	.86	.78	.23	.63	.78	1.9	e3.0	1.2
15	1.4	1.9	.53	.53	.80	.81	.52	.58	.81	1.7	e5.0	1.4
16	1.5	1.4	.52	.54	.80	.81	.56	.58	.91	1.4	e3.0	1.4
17	1.3	.97	.54	.52	.77	.81	.61	.58	1.0	1.3	e2.0	1.3
18	1.1	.87	.54	.56	.77	.81	.63	.57	1.2	1.5	e2.0	1.2
19	1.0	.81	.54	.65	.77	.77	.63	.55	1.2	2.2	3.2	1.3
20	1.1	.66	.56	.67	.77	.77	.61	.54	1.3	1.4	1.4	1.2
21	1.8	.65	.53	.67	.77	.74	.60	.54	1.3	1.2	3.8	1.2
22	2.5	.65	.45	.60	.76	.63	.53	.54	1.2	1.9	2.3	1.2
23	1.1	.67	.43	.55	.72	.51	.50	.55	1.1	1.3	1.4	1.3
24	.65	.67	.40	.55	.72	.71	.45	.69	1.5	1.2	1.3	1.3
25	3.0	.65	.39	.58	.72	.66	.45	.60	1.1	1.3	1.3	1.2
26	6.3	.64	.40	.58	.72	.57	.50	.58	1.0	1.4	1.2	1.2
27	2.0	.87	.43	.58	.72	.59	.40	.58	1.3	1.2	2.1	1.2
28	1.7	.98	.46	.54	.72	.56	.34	.58	1.2	1.5	3.7	1.2
29	.95	2.1	.46	.53	---	.50	.33	.58	1.3	1.3	1.5	1.2
30	.99	1.2	.51	.53	---	.45	.53	.58	1.8	1.3	1.3	1.2
31	1.3	---	.54	.53	---	.38	---	.57	---	1.5	1.3	---
TOTAL	49.19	31.90	16.81	17.37	21.87	21.49	10.57	17.34	30.59	44.7	87.5	41.5
MEAN	1.59	1.06	.54	.56	.78	.69	.35	.56	1.02	1.44	2.82	1.38
MAX	6.3	2.1	1.1	.67	1.7	.81	.63	.71	1.8	2.2	11	3.3
MIN	.65	.64	.39	.50	.54	.38	.07	.39	.54	1.1	1.1	1.2
AC-FT	98	63	33	34	43	43	21	34	61	89	174	82

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 1999, BY WATER YEAR (WY)

MEAN	1.47	1.18	.95	.89	.95	1.29	.77	1.11	1.65	1.76	1.71	1.41
MAX	1.85	1.53	1.45	1.38	1.30	2.43	1.03	1.92	2.98	3.23	2.82	2.40
(WY)	1998	1996	1996	1996	1996	1997	1997	1997	1997	1997	1999	1997
MIN	.77	.82	.54	.56	.75	.69	.35	.56	1.00	.84	.81	.71
(WY)	1997	1997	1999	1999	1997	1999	1999	1999	1996	1996	1996	1996

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1995 - 1999	
ANNUAL TOTAL	429.70		390.83			
ANNUAL MEAN	1.18		1.07		1.26	
HIGHEST ANNUAL MEAN					1.60	1997
LOWEST ANNUAL MEAN					1.07	1999
HIGHEST DAILY MEAN	6.3	Oct 26	11	Aug 6	14	Sep 21 1997
LOWEST DAILY MEAN	.24	Aug 31	.07	Apr 12	.07	Apr 12 1999
ANNUAL SEVEN-DAY MINIMUM	.35	Sep 5	.12	Apr 7	.12	Apr 7 1999
INSTANTANEOUS PEAK FLOW			34	Aug 6	34	Aug 6 1999
INSTANTANEOUS PEAK STAGE			3.86	Aug 6	3.86	Aug 6 1999
ANNUAL RUNOFF (AC-FT)	852		775		913	
10 PERCENT EXCEEDS	1.9		1.7		2.1	
50 PERCENT EXCEEDS	1.0		.78		1.0	
90 PERCENT EXCEEDS	.53		.46		.64	

e Estimated

09362800 LEMON RESERVOIR NEAR DURANGO, CO

LOCATION.--Lat 37°22'57", long 107°39'44", in $SE^1/_4SW^1/_4$ sec.17, T.36 N., R.7 W., LaPlata County, Hydrologic Unit 14080104, in gatehouse at Lemon Dam on Florida River, 2.3 mi upstream from True Creek, and 15 mi northeast of Durango.

DRAINAGE AREA.--68.3 mi^2.

PERIOD OF RECORD.--October 1989 to current year.

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 7,948.00 ft above sea level, (levels by U.S. Bureau of Reclamation); gage readings have been reduced to elevations above sea level.

REMARKS.--Reservoir is formed by an earthfill dam. Dam was completed in 1963. Capacity, 40,100 acre-ft, between elevations 7,948.00 ft, sill of outlet gate, and 8,148.00 ft, normal reservoir water surface elevation. Dead storage below elevation 8,005.00 ft, 354 acre-ft. Figures given are total contents.

EXTREMES (AT 2400) FOR PERIOD OF RECORD.--Maximum contents, 40,180 acre-ft, July 3-4, 1997, elevation, 8,148.06 ft; minimum contents, 5,320 acre-ft, Sept. 13, 1996, elevation, 8,057.55 ft.

EXTREMES (AT 2400) FOR CURRENT YEAR.--Maximum daily mean contents, 40,120 acre-ft, June 13, daily mean elevation, 8,147.96 ft; minimum daily mean contents, 13,690 acre-ft, Oct. 15, daily mean elevation, 8,093.03 ft.

MONTHEND ELEVATION AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	8,096.83	14,960	-
Oct. 31	8,097.03	15,030	+70
Nov. 30	8,100.45	16,250	+1220
Dec. 31	8,102.48	17,010	+760
CAL YR 1998	-	-	-14,330
Jan. 31	8,103.21	17,290	+280
Feb. 28	8,103.39	17,360	+70
Mar. 31	8,105.58	18,210	+850
Apr. 30	8,113.69	21,620	+3,410
May 31	8,137.89	34,100	+12,480
June 30	8,147.89	40,080	+5,980
July 31	8,147.57	39,880	-200
Aug. 31	8,142.56	36,830	-3,050
Sept. 30	8,136.76	33,460	-3,370
WTR YR 1999	-	-	+18,500

09365500 LA PLATA RIVER AT HESPERUS, CO

LOCATION.--Lat 37°17'23", long 108°02'24", in NE$^1/_4$SW$^1/_4$ 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 with satellite telemetry. Datum of gage is 8,104.71 ft above sea level. 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 except for estimated daily discharges, which are poor. Cherry Creek ditch exports water upstream from station for irrigation of about 2,000 acres in Cherry Creek drainage. The Pine Ridge ditch diverts water upstream from station for irrigation of about 300 acres downstream, and also for irrigation of about 300 acres in each of the Lightner and Basin Creek drainages. The Pine River ditch also diverts up to 1,000 acre-ft for storage in the Lightner Creek drainage.

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

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum flood observed occurred Oct. 5, 1911.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.4	17	14	4.4	e6.0	11	43	56	181	57	28	68
2	6.5	18	14	e4.5	e6.0	11	40	54	182	49	34	69
3	5.8	18	12	e4.5	e7.0	11	35	55	147	38	54	103
4	6.4	17	11	e4.5	e7.0	12	33	54	154	42	75	89
5	6.1	17	11	e4.5	e7.0	12	30	52	146	33	92	78
6	6.3	17	10	e4.5	e7.0	13	29	52	101	32	113	67
7	6.2	17	e9.0	e4.5	e7.0	14	30	53	84	31	124	56
8	6.0	17	e8.0	e4.5	e7.0	15	32	62	106	26	86	47
9	6.0	17	10	e4.5	7.2	17	32	89	148	25	75	41
10	6.1	15	e9.0	e4.2	e7.2	18	31	97	163	25	82	37
11	6.1	14	e8.0	e4.2	e6.0	19	31	95	158	21	83	33
12	6.2	e13	e8.0	4.4	e5.0	19	32	96	144	22	79	31
13	6.1	13	7.6	e4.2	e6.0	19	34	120	133	20	70	27
14	6.0	13	e7.0	e4.0	e7.0	19	37	156	145	21	62	25
15	6.0	13	e7.0	e4.0	e7.0	19	44	164	160	20	68	26
16	7.1	13	6.4	e4.0	e7.0	19	43	140	166	19	64	26
17	7.4	13	7.9	e4.0	e7.0	19	44	136	166	18	107	26
18	7.2	13	8.4	3.9	e7.0	19	48	144	146	17	90	22
19	6.9	13	8.4	3.9	7.2	20	53	160	132	40	94	20
20	6.7	e12	8.2	4.0	e7.0	20	67	185	110	61	83	19
21	9.2	13	e8.0	e4.0	7.2	22	81	212	100	44	83	18
22	10	14	e7.0	e4.0	e7.0	25	77	220	112	51	86	16
23	9.5	14	e6.0	e4.0	e6.0	37	64	224	106	68	78	19
24	8.2	14	e5.0	4.2	e7.0	41	59	217	89	54	83	19
25	12	14	e5.0	e5.0	8.0	47	57	171	84	60	93	19
26	15	14	e5.0	e6.0	8.0	57	55	129	82	57	78	20
27	13	14	e5.0	e6.0	e8.5	54	54	129	77	47	72	19
28	13	15	e5.0	e5.0	e9.0	48	56	142	71	40	81	18
29	12	16	5.4	e5.0	---	44	58	160	63	39	87	18
30	14	15	5.2	e5.0	---	48	57	165	61	34	78	18
31	17	---	5.2	e5.0	---	46	---	177	---	29	70	---
TOTAL	260.4	443	246.7	138.4	195.3	795	1386	3966	3717	1140	2452	1094
MEAN	8.40	14.8	7.96	4.46	6.97	25.6	46.2	128	124	36.8	79.1	36.5
MAX	17	18	14	6.0	9.0	57	81	224	182	68	124	103
MIN	5.8	12	5.0	3.9	5.0	11	29	52	61	17	28	16
AC-FT	517	879	489	275	387	1580	2750	7870	7370	2260	4860	2170

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1918 - 1999, BY WATER YEAR (WY)

MEAN	15.4	10.7	8.27	7.02	7.44	15.8	81.9	171	134	38.6	24.3	20.5
MAX	148	54.3	20.4	15.0	18.0	54.2	203	384	421	154	79.1	124
(WY)	1942	1942	1987	1926	1971	1997	1924	1941	1980	1957	1999	1927
MIN	3.27	3.11	2.94	2.65	3.06	3.83	8.40	19.8	15.6	8.80	6.58	3.73
(WY)	1957	1938	1938	1990	1977	1977	1977	1977	1934	1939	1939	1956

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1918 - 1999	
ANNUAL TOTAL	11622.6		15833.8			
ANNUAL MEAN	31.8		43.4		44.7	
HIGHEST ANNUAL MEAN					90.5	1941
LOWEST ANNUAL MEAN					9.94	1977
HIGHEST DAILY MEAN	209	May 29	224	May 23	934	Jun 28 1927
LOWEST DAILY MEAN	e5.0	Dec 24	e3.9	Jan 18	1.0	Feb 22 1939
ANNUAL SEVEN-DAY MINIMUM	5.1	Dec 24	4.0	Jan 14	1.9	Oct 13 1917
INSTANTANEOUS PEAK FLOW			256	May 22	a1880	Sep 22 1941
INSTANTANEOUS PEAK STAGE			b3.36	May 22	c4.30	Sep 22 1941
ANNUAL RUNOFF (AC-FT)	23050		31410		32400	
10 PERCENT EXCEEDS	94		116		127	
50 PERCENT EXCEEDS	13		20		14	
90 PERCENT EXCEEDS	6.4		5.2		5.2	

e Estimated
a Present datum, from rating curve extended above 620 ft^3/s, on basis of slope-area measurement of peak flow.
b Maximum gage height, 3.43 ft, Dec 23, backwater from ice.
c Maximum gage height, for period of record, 5.13 ft, Sep 6, 1970.

09366500 LA PLATA RIVER AT COLORADO-NEW MEXICO STATE LINE

LOCATION.--Lat 36°59'59", long 108°11'17", in NW$^1/_4$SE$^1/_4$ sec.10, T.32 N., R.13 W., La Plata County, CO, Hydrologic Unit 14080105, on right bank at Colorado-New Mexico State line, 0.5 mi downstream from Johnny Pond Arroyo, and 4.9 mi north of La Plata, NM.

DRAINAGE AREA.--331 mi^2.

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 with satellite telemetry. Datum of gage is 5,972.03 ft above sea level. See WSP 1713 or 1733 for history of changes prior to Mar. 17, 1934. Mar. 17, 1934 to July 1, 1996, water-stage recorder at same site, and at datum 3.12 ft higher.

REMARKS.--Records good except for estimated daily discharges, which are poor. Diversions upstream from station for irrigation of about 15,000 acres, mostly upstream from station.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.0	16	18	14	12	14	15	24	88	38	15	41
2	3.4	15	17	14	13	15	17	26	90	28	24	52
3	3.3	15	16	e13	14	15	17	31	57	23	58	74
4	3.7	14	16	e13	13	14	17	43	74	26	123	57
5	4.7	13	16	e13	15	14	16	42	86	30	79	50
6	4.7	13	16	e14	15	14	13	34	62	26	42	55
7	5.2	13	15	e13	14	13	13	34	66	23	58	44
8	4.9	15	e14	e13	14	14	13	32	44	23	34	31
9	4.4	21	e13	e12	14	13	14	32	49	22	39	23
10	4.4	16	e13	e12	15	13	13	36	87	23	85	20
11	4.3	14	e13	e12	14	14	11	38	87	21	57	17
12	4.4	15	e14	12	16	15	10	42	78	13	39	15
13	4.4	16	e14	13	15	14	11	48	90	13	35	11
14	4.4	15	e14	13	13	13	13	72	105	12	49	11
15	4.4	15	e14	15	13	12	16	93	85	14	61	12
16	5.0	16	e14	14	13	10	18	70	75	14	50	15
17	5.6	16	e13	e13	14	11	25	58	80	10	47	20
18	5.5	15	e13	12	13	11	26	73	83	10	33	19
19	5.5	15	e13	12	12	11	30	71	70	15	55	16
20	6.0	14	13	13	10	11	32	69	86	38	51	14
21	7.2	13	13	14	11	12	33	70	83	14	53	11
22	9.1	13	e13	13	11	15	40	46	74	17	47	8.3
23	10	13	e13	14	12	14	31	83	50	53	35	9.3
24	9.4	13	e12	13	11	15	27	103	37	29	64	11
25	12	13	e13	13	11	17	35	72	60	30	62	11
26	32	13	e13	13	11	32	31	51	72	44	35	9.4
27	24	13	e13	13	11	39	26	80	44	26	40	7.8
28	21	14	e14	14	12	27	22	98	31	26	52	7.6
29	16	20	14	14	---	25	23	81	31	46	40	7.4
30	15	21	14	13	---	20	23	80	41	23	41	8.3
31	17	---	14	14	---	18	---	73	---	15	33	---
TOTAL	263.9	448	435	408	362	495	631	1805	2065	745	1536	688.1
MEAN	8.51	14.9	14.0	13.2	12.9	16.0	21.0	58.2	68.8	24.0	49.5	22.9
MAX	32	21	18	15	16	39	40	103	105	53	123	74
MIN	3.0	13	12	12	10	10	10	24	31	10	15	7.4
AC-FT	523	889	863	809	718	982	1250	3580	4100	1480	3050	1360

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1921 - 1999, BY WATER YEAR (WY)

MEAN	13.8	12.2	12.3	12.0	17.1	37.6	106	109	67.5	20.4	12.4	11.5
MAX	260	99.2	53.9	38.3	53.9	139	364	506	306	99.4	65.1	126
(WY)	1942	1942	1987	1942	1924	1997	1980	1941	1957	1957	1957	1927
MIN	.097	.98	1.24	.80	2.96	.63	3.06	5.32	1.94	.019	.006	.000
(WY)	1935	1940	1978	1930	1977	1977	1977	1977	1924	1922	1922	1956

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1921 - 1999	
ANNUAL TOTAL	10199.9		9882.0			
ANNUAL MEAN	27.9		27.1		36.0	
HIGHEST ANNUAL MEAN					109	1973
LOWEST ANNUAL MEAN					4.44	1977
HIGHEST DAILY MEAN	155	Mar 26	123	Aug 4	1120	May 4 1941
LOWEST DAILY MEAN	1.7	Aug 31	3.0	Oct 1	a.00	Jul 3 1922
ANNUAL SEVEN-DAY MINIMUM	1.9	Aug 28	4.0	Oct 1	.00	Jul 3 1922
INSTANTANEOUS PEAK FLOW			638	Aug 4	b4750	Aug 24 1927
INSTANTANEOUS PEAK STAGE			6.01	Aug 4	11.36	Aug 24 1927
ANNUAL RUNOFF (AC-FT)	20230		19600		26100	
10 PERCENT EXCEEDS	72		69		86	
50 PERCENT EXCEEDS	19		15		13	
90 PERCENT EXCEEDS	3.6		11		1.8	

e Estimated
a No flow at times in many years.
b From rating curve extended above 750 ft^3/s, on basis of slope-area measurement of peak flow, at datum then in use.

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.

PERIOD OF RECORD.--October 1920 to September 1943, February 1951 to current year. Monthly discharge only for some periods, published in WSP 1313. Water-quality data available, August 1969 to June 1972, October 1983 to September 1986. Sediment data available, April to December 1961.

REVISED RECORDS.--WSP 1733: 1924 (monthly figures only). WDR CO-83-3: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 5,055.98 ft above sea level. See WSP 1713 or 1733 for history of changes prior to Mar. 11, 1954.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Diversions for irrigation of about 10,000 acres upstream from station. One diversion upstream from station for irrigation of about 100 acres downstream from station. Flow regulated by Jackson Gulch Reservoir, capacity, 10,000 acre-ft since March 1949. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	33	28	e15	13	7.9	7.9	69	143	15	27	98
2	9.7	28	22	e13	10	8.4	8.1	92	143	12	52	79
3	7.9	47	19	e12	9.6	9.2	8.7	118	129	12	69	95
4	7.4	28	18	e10	11	8.1	8.2	213	96	9.5	86	77
5	13	21	e17	11	14	7.7	9.5	217	94	7.0	169	70
6	13	18	e15	e12	19	7.7	9.9	170	97	6.4	105	65
7	11	14	12	e13	19	7.0	9.7	137	68	6.1	82	68
8	11	17	12	e12	16	6.5	8.8	138	48	6.3	65	61
9	10	109	14	e11	e15	7.6	11	140	57	73	58	55
10	8.3	39	16	e10	e14	8.0	11	141	69	161	54	54
11	8.4	27	e14	e12	e13	6.6	8.2	135	67	321	81	52
12	8.3	26	e14	e13	9.4	6.7	6.5	122	62	404	98	48
13	8.0	29	e15	e11	6.6	5.9	5.6	116	59	281	66	44
14	7.4	34	e15	e10	15	5.6	11	144	51	56	53	41
15	7.2	38	e15	e9.5	16	6.7	15	169	56	57	51	37
16	7.8	39	e15	e10	13	8.4	11	156	59	69	58	49
17	10	36	e15	e11	12	3.7	9.4	133	68	60	54	49
18	14	30	e15	12	13	3.6	9.9	157	102	48	65	45
19	13	25	e14	e12	12	4.2	7.8	163	71	211	105	45
20	13	20	e14	e12	13	4.2	9.0	162	78	173	86	47
21	13	15	e14	e11	12	3.8	9.6	167	57	161	111	44
22	20	17	e12	10	14	3.8	14	167	50	270	82	43
23	35	20	11	9.0	9.2	5.4	18	160	53	451	67	44
24	25	17	6.4	e12	6.0	7.3	15	195	55	147	56	52
25	58	16	10	e13	7.1	7.6	17	181	46	100	70	47
26	152	15	e14	e13	9.2	7.7	42	153	34	80	58	47
27	280	15	e15	12	11	9.3	67	135	35	60	93	44
28	156	15	e15	9.1	9.3	9.3	72	128	33	47	64	41
29	47	19	e15	9.8	---	7.7	75	131	30	49	74	42
30	34	43	e15	10	---	6.9	84	142	21	37	88	43
31	36	---	e15	11	---	6.7	---	142	---	31	93	---
TOTAL	1062.4	850	461.4	351.4	341.4	209.2	599.8	4593	2031	3421.3	2340	1626
MEAN	34.3	28.3	14.9	11.3	12.2	6.75	20.0	148	67.7	110	75.5	54.2
MAX	280	109	28	15	19	9.3	84	217	143	451	169	98
MIN	7.2	14	6.4	9.0	6.0	3.6	5.6	69	21	6.1	27	37
AC-FT	2110	1690	915	697	677	415	1190	9110	4030	6790	4640	3230

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1921 - 1999, BY WATER YEAR (WY)

MEAN	27.3	20.1	14.6	13.6	25.6	59.0	125	179	86.3	30.0	29.3	26.9
MAX	459	113	45.5	45.6	92.1	198	330	642	395	185	364	137
(WY)	1942	1987	1942	1942	1993	1993	1980	1922	1957	1921	1921	1970
MIN	.11	1.00	.39	.31	7.24	5.26	.15	.000	.000	.000	.000	.000
(WY)	1978	1935	1960	1960	1977	1977	1977	1959	1951	1939	1922	1922

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1921 - 1999	
ANNUAL TOTAL	17479.02		17886.9			
ANNUAL MEAN	47.9		49.0		52.3	
HIGHEST ANNUAL MEAN					138	1973
LOWEST ANNUAL MEAN					4.28	1959
HIGHEST DAILY MEAN	324	May 22	451	Jul 23	3050	Oct 14 1941
LOWEST DAILY MEAN	e.00	Aug 12	3.6	Mar 18	a.00	Jul 12 1922
ANNUAL SEVEN-DAY MINIMUM	.00	Aug 12	4.1	Mar 17	.00	Jul 12 1922
INSTANTANEOUS PEAK FLOW			1350	Jul 23	b5300	Oct 14 1941
INSTANTANEOUS PEAK STAGE			5.64	Jul 23	c7.30	Oct 14 1941
ANNUAL RUNOFF (AC-FT)	34670		35480		37920	
10 PERCENT EXCEEDS	158		137		147	
50 PERCENT EXCEEDS	19		19		16	
90 PERCENT EXCEEDS	4.7		7.8		.15	

e Estimated
a No flow at times in most years.
b Present site and datum, from rating curve extended above 200 ft^3/s, on basis of slope-area measurement of peak flow.
c Maximum gage height, 8.50 ft, Sep 6, 1970.

09371492 MUD CREEK AT HIGHWAY 32, NEAR CORTEZ, CO

LOCATION.--Lat 37°18'46", long 108°39'38", in $SW^1/_4SW^1/_4$ 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.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1981 to September 1986, August 1993 to current year.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 5,765 ft above sea level, from topographic map. Prior to Aug. 25, 1993, gage at present site and datum.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Some small diversions upstream from station for irrigation. Most of flow is from diversion of water from Dolores River through Dolores Project and Montezuma Valley Irrigation Company.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	2.5	1.7	e1.3	1.3	1.3	1.9	1.9	14	9.4	14	18
2	11	3.9	1.6	e1.1	1.3	1.3	2.4	2.5	13	8.5	17	24
3	11	2.8	1.6	e.96	1.4	1.3	2.3	1.8	13	9.4	16	25
4	17	2.1	1.5	e.86	1.4	1.4	2.1	5.0	13	9.7	19	19
5	14	2.2	1.7	1.0	2.3	1.3	1.9	1.7	14	10	18	15
6	11	3.8	1.8	e1.0	2.2	1.2	1.5	1.4	19	10	23	13
7	11	3.2	1.3	e1.0	2.3	1.2	1.2	1.4	17	10	15	13
8	11	5.8	1.0	e1.0	1.9	1.3	1.0	1.1	14	13	13	13
9	10	44	e.95	e.90	1.8	1.3	1.1	.79	12	13	12	12
10	10	6.9	1.2	e.90	1.9	1.2	1.0	.79	12	14	11	11
11	9.3	4.0	1.1	e1.0	1.2	1.2	.99	.70	9.6	18	15	10
12	9.3	3.4	e.95	e1.1	1.2	1.4	.98	.65	13	16	12	13
13	9.5	2.8	1.1	e.90	1.3	1.3	.98	.65	12	16	9.5	12
14	9.7	2.3	1.1	e.84	1.4	1.1	.89	.78	11	15	8.3	10
15	9.4	2.1	e1.1	e.88	1.5	1.1	.84	.79	12	19	8.3	11
16	10	2.1	e1.1	e.90	1.4	1.1	.84	3.1	14	19	9.2	12
17	16	1.9	e1.1	1.1	1.4	1.2	.90	7.2	15	15	9.7	13
18	13	1.8	e1.1	1.3	1.4	1.3	1.0	5.3	21	17	8.7	12
19	11	1.6	e1.0	e1.3	1.4	1.2	.93	5.9	20	20	10	13
20	2.7	1.4	e1.0	e1.5	1.3	1.3	.82	7.4	15	21	11	14
21	1.9	1.4	e1.0	e1.7	1.3	1.2	.94	10	14	19	9.8	12
22	2.0	1.6	e.85	e1.6	1.3	1.2	1.8	14	10	23	9.9	13
23	2.6	1.6	e1.0	1.4	1.2	1.1	2.3	12	11	15	7.6	16
24	2.8	1.6	e1.0	1.5	1.3	1.0	2.0	16	10	15	9.8	19
25	7.7	1.6	e1.2	1.5	1.3	1.1	6.7	21	10	14	15	18
26	12	1.6	e1.3	1.6	1.3	1.7	4.0	21	8.9	14	12	16
27	26	1.6	e1.3	1.4	1.2	1.1	1.9	23	9.2	14	12	15
28	16	1.8	e1.3	1.3	1.2	.94	1.9	17	9.1	14	14	14
29	3.4	4.3	e1.3	1.3	---	.88	1.8	16	10	15	15	13
30	3.0	2.3	e1.3	1.2	---	.98	1.6	20	10	16	14	15
31	5.3	---	e1.3	1.3	---	1.4	---	18	---	12	14	---
TOTAL	299.6	120.0	37.85	36.64	41.4	37.60	50.51	238.85	385.8	454.0	392.8	434
MEAN	9.66	4.00	1.22	1.18	1.48	1.21	1.68	7.70	12.9	14.6	12.7	14.5
MAX	26	44	1.8	1.7	2.3	1.7	6.7	23	21	23	23	25
MIN	1.9	1.4	.85	.84	1.2	.88	.82	.65	8.9	8.5	7.6	10
AC-FT	594	238	75	73	82	75	100	474	765	901	779	861

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1982 - 1999, BY WATER YEAR (WY)

MEAN	8.50	3.54	2.94	2.46	3.06	3.61	3.29	9.93	14.2	15.2	15.6	13.1
MAX	17.5	5.94	6.00	3.86	7.99	10.3	5.60	13.1	18.1	18.0	21.5	17.6
(WY)	1994	1994	1985	1997	1983	1983	1994	1982	1985	1986	1983	1986
MIN	5.02	1.55	1.22	1.18	1.35	1.11	1.06	7.48	10.5	12.3	11.8	9.53
(WY)	1996	1998	1999	1999	1998	1998	1998	1986	1994	1994	1995	1995

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1982 - 1999	
ANNUAL TOTAL	2759.03		2529.05			
ANNUAL MEAN	7.56		6.93		8.03	
HIGHEST ANNUAL MEAN					9.47	1985
LOWEST ANNUAL MEAN					6.63	1996
HIGHEST DAILY MEAN	44	Nov 9	44	Nov 9	75	Mar 6 1995
LOWEST DAILY MEAN	.62	Mar 15	.65	May 12	.62	Mar 15 1998
ANNUAL SEVEN-DAY MINIMUM	.79	Mar 9	.74	May 9	.74	May 9 1999
INSTANTANEOUS PEAK FLOW			84	Nov 9	a598	Aug 24 1982
INSTANTANEOUS PEAK STAGE			3.32	Nov 9	8.53	Aug 24 1982
ANNUAL RUNOFF (AC-FT)	5470		5020		5820	
10 PERCENT EXCEEDS	17		16		17	
50 PERCENT EXCEEDS	2.7		2.5		5.6	
90 PERCENT EXCEEDS	1.0		1.0		1.5	

e Estimated
a From rating curve extended above 26 ft^3/s, on basis of slope-area measurement of peak flow.

09371492 MUD CREEK AT HIGHWAY 32, NEAR CORTEZ, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--August 1993 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: September 1993 to current year.
WATER TEMPERATURE: September 1993 to current year.

INSTRUMENTATION.--Water-quality monitor since September 1993.

REMARKS.--Daily records of specific conductance are good except Oct. 1-13, Jan. 25 to Feb. 4 and May 18 to Sep. 30 which are poor. Daily records of water temperature are good. Daily data that are not published are due to probes being isolated by ice.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 12,000 microsiemens, Apr. 25, 1999; minimum, 981 microsiemens, June 8 and 9, 1998.
WATER TEMPERATURE: Maximum, 25.6°C, July 6, 1996; minimum, -0.5°C, Dec. 2, 1995.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 12,000 microsiemens, Apr 25; minimum, 1,330 microsiemens, Oct 27.
WATER TEMPERATURE: Maximum, 25.2°C, Jul 7; minimum, -.4°C, Jan 21-22.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)
NOV											
04...	1520	2.0	4360	8.4	5.8	2000	310	290	450	4	8.1
24...	1115	1.7	5440	8.4	1.3	2600	410	390	570	5	7.4
FEB											
24...	1445	1.6	5020	8.3	4.0	2700	450	370	510	4	6.6
APR											
28...	1245	1.9	4670	8.3	10.6	2100	330	320	490	5	8.2
MAY											
18...	1420	5.4	2530	8.3	16.4	1200	250	150	180	2	4.4
JUN											
15...	1330	12	1810	8.3	19.7	910	210	94	97	1	4.2
JUL											
27...	1445	16	1800	8.2	22.8	880	200	91	89	1	5.0
AUG											
16...	1345	8.8	1970	8.3	20.1	960	220	100	100	1	4.8
SEP											
03...	1415	25	1650	8.3	18.2	800	190	79	72	1	5.1

DATE	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	ALKA-LINITY WAT.DIS FET LAB CACO3 (MG/L) (29801)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS-SOLVED (TONS PER DAY) (70302)
NOV											
04...	358	28	339	--	2400	74	.5	9.9	3770	5.12	20.3
24...	455	12	393	--	3200	88	.5	12	4900	6.66	22.5
FEB											
24...	409	27	380	--	2900	84	.5	13	4610	6.27	19.9
APR											
28...	435	--	357	--	2700	79	.5	6.6	4100	5.57	21.0
MAY											
18...	--	--	--	234	1300	36	.4	5.2	2050	2.79	29.9
JUN											
15...	--	--	--	236	820	19	.4	9.2	1390	1.90	45.2
JUL											
27...	--	--	--	236	790	18	.3	14	1350	1.83	58.2
AUG											
16...	--	--	--	247	900	20	.4	12	1510	2.05	35.8
SEP											
03...	--	--	--	236	710	18	.3	12	1230	1.67	82.8

09371492 MUD CREEK AT HIGHWAY 32, NEAR CORTEZ, CO--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	2170	2000	2100	4350	4280	4320	5710	5640	5660	---	---	---
2	2210	2120	2180	6020	4140	4780	5660	5620	5640	---	---	---
3	2320	2160	2260	5200	4370	4550	5660	5600	5620	---	---	---
4	2420	2060	2280	4490	4320	4400	5630	5550	5600	---	---	---
5	2300	1970	2070	4510	4200	4280	6740	5470	5560	---	---	---
6	2290	2100	2150	4400	3160	3400	7630	5770	6600	---	---	---
7	2240	2190	2210	3750	3140	3510	5880	5640	5740	5280	3970	4530
8	2280	2170	2210	5660	2800	3540	5890	5720	5830	5530	5280	5410
9	2260	2190	2220	5190	2090	2920	5840	5550	5680	5610	5350	5490
10	2330	2130	2210	4130	3800	3950	5620	5490	5540	5650	5430	5530
11	2130	2090	2100	4780	4130	4580	5630	5500	5560	5620	5390	5510
12	2170	2090	2130	5340	4780	5250	5540	5240	5360	5560	5380	5460
13	2260	2150	2210	5360	5160	5230	5290	4510	4780	5550	5380	5470
14	2280	2230	2250	5480	5230	5370	---	---	---	5650	5400	5520
15	2300	2240	2260	5560	5400	5490	---	---	---	5610	5320	5460
16	2530	2230	2300	5600	5520	5570	---	---	---	5400	5260	5320
17	2620	2220	2340	5630	5560	5600	---	---	---	5400	5150	5270
18	2260	2210	2240	5610	5560	5590	---	---	---	5190	5020	5110
19	2520	2220	2270	5610	5550	5580	---	---	---	5210	4940	5090
20	4120	2520	3240	5710	5550	5620	---	---	---	6130	5110	5440
21	4110	3660	3840	5700	5550	5630	5610	5390	5500	10000	6130	9060
22	4550	3860	4060	5660	5540	5590	5970	5470	5680	9590	5960	7060
23	5330	3720	4170	5650	5480	5560	---	---	---	6030	5520	5760
24	5330	3850	4070	5610	5430	5520	---	---	---	5670	5410	5460
25	4340	1730	3410	5550	5410	5480	---	---	---	5870	5470	5680
26	4230	3320	3710	5520	5420	5470	---	---	---	5940	5700	5810
27	3690	1330	2470	5480	5430	5460	---	---	---	6040	5630	5770
28	3890	2290	3140	5490	5370	5440	---	---	---	5890	5610	5760
29	4260	3890	4050	8960	5330	7370	---	---	---	5730	5500	5610
30	4360	3650	4190	6600	5710	5960	---	---	---	5610	5270	5400
31	6230	3990	4450	---	---	---	---	---	---	5500	5050	5200
MONTH	6230	1330	2800	8960	2090	5030	---	---	---	---	---	---

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	5460	5130	5250	5200	5100	5160	5060	4520	4860	8760	4590	5450
2	5420	5250	5320	5250	5070	5160	8280	4460	4930	8660	4980	6760
3	5380	4830	5100	5240	5130	5190	10500	7000	8050	7130	5320	5760
4	5070	4820	4920	5290	5170	5230	10400	6160	7340	10300	5800	7160
5	8540	4830	6320	5290	5110	5210	7840	6250	6990	6060	5680	5880
6	9610	5280	5960	5310	5210	5260	7180	5750	6350	5690	4890	5110
7	9240	5650	6570	5400	5290	5360	5790	5550	5660	6040	4940	5210
8	5650	5330	5500	5440	5300	5350	5790	5510	5630	5500	5090	5300
9	5430	5300	5380	5450	5310	5350	5690	5550	5620	5500	5220	5360
10	5380	5290	5340	5410	5290	5360	5650	5440	5560	5490	5040	5270
11	5710	5210	5410	5460	5340	5380	5630	5420	5530	5570	5300	5410
12	5680	5080	5400	5510	5340	5410	5590	5320	5470	5510	5310	5390
13	5670	4890	5280	5540	5390	5460	5640	5450	5530	5460	5210	5350
14	5610	5000	5180	5500	5350	5420	5750	5550	5620	5460	4890	5200
15	5390	4990	5090	5500	5380	5430	5800	5530	5680	5530	5030	5230
16	5470	5010	5170	5540	5400	5470	5800	5610	5680	5550	2900	4270
17	5620	5010	5170	5590	5430	5500	5830	5470	5690	2990	2420	2610
18	5500	4970	5110	5440	5350	5400	6330	5390	5830	2700	2510	2590
19	5180	5060	5120	5460	5330	5380	6450	5460	5710	2760	2430	2580
20	5440	5010	5140	5490	5320	5380	5920	5620	5800	2780	2320	2610
21	5110	5040	5070	5430	5280	5350	5960	5690	5820	2440	2310	2370
22	5160	4940	5080	5480	5210	5310	6210	5690	5850	2530	2200	2340
23	5410	5040	5160	5420	5270	5340	9570	6210	7480	2430	2260	2330
24	5410	4960	5110	5470	5320	5400	11900	5160	6150	2460	2120	2320
25	5160	5050	5110	5570	5370	5450	12000	6200	7600	2560	1960	2100
26	5210	5090	5150	5600	3500	4590	8360	5560	6310	2620	1820	1990
27	5350	5060	5160	5450	4470	5160	6190	5040	5540	2170	1740	1890
28	5240	5020	5130	5610	5450	5540	5140	4590	4900	1800	1710	1760
29	---	---	---	5680	5460	5570	4850	4640	4740	1800	1740	1770
30	---	---	---	5780	5260	5630	4740	4450	4570	1740	1600	1670
31	---	---	---	5390	5060	5220	---	---	---	1640	1610	1630
MONTH	9610	4820	5310	5780	3500	5340	12000	4450	5880	10300	1600	3890

09371492 MUD CREEK AT HIGHWAY 32, NEAR CORTEZ, CO--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	1730	1630	1680	1860	1780	1820	1750	1610	1660	1810	1660	1750
2	1730	1680	1710	1900	1800	1850	1610	1560	1580	2020	1780	1860
3	1720	1700	1710	1930	1770	1830	1740	1590	1670	2110	1650	1840
4	1740	1680	1710	1840	1690	1780	2020	1710	1810	2030	1860	1940
5	1780	1680	1720	1820	1690	1750	2210	1700	1810	1980	1890	1940
6	1760	1640	1700	1760	1660	1710	2120	1760	1890	1940	1890	1920
7	1670	1620	1640	1740	1620	1680	1810	1760	1790	1950	1900	1930
8	1710	1650	1680	1700	1620	1670	1790	1770	1780	1940	1850	1920
9	1770	1660	1730	1680	1640	1660	1820	1780	1800	1970	1840	1930
10	1790	1730	1760	1780	1610	1690	1840	1780	1820	2040	1930	1990
11	1900	1730	1830	1710	1610	1670	2400	1820	2070	2060	2010	2040
12	1850	1740	1800	1650	1610	1640	1980	1910	1930	2110	1870	2010
13	1820	1740	1790	1630	1570	1600	1960	1920	1940	1920	1870	1900
14	1840	1770	1810	1640	1580	1610	2000	1900	1950	1990	1920	1970
15	1870	1710	1780	1610	1570	1590	2030	1960	2010	2050	1930	2000
16	1760	1650	1720	1600	1530	1560	2000	1830	1970	2010	1940	1980
17	1790	1670	1740	1640	1570	1620	2120	1790	2010	1960	1900	1920
18	1760	1580	1690	1610	1540	1560	2130	1980	2060	1960	1910	1940
19	1730	1630	1680	1540	1500	1520	2040	1920	1990	1960	1870	1930
20	1790	1690	1760	1520	1480	1490	1950	1880	1920	1900	1840	1870
21	2140	1750	1870	1680	1520	1590	1960	1880	1930	1910	1870	1900
22	2150	1960	2050	1790	1660	1730	1920	1880	1900	1950	1840	1910
23	2000	1920	1960	1770	1680	1740	2050	1910	1990	1970	1840	1900
24	1960	1920	1940	1840	1680	1750	2040	1870	1980	1900	1810	1840
25	1940	1900	1920	1770	1690	1730	1910	1750	1810	1840	1780	1820
26	1960	1900	1930	1800	1740	1770	1830	1740	1790	1810	1770	1790
27	1950	1870	1910	1970	1740	1810	1850	1790	1820	1820	1770	1790
28	1930	1860	1910	1860	1760	1790	1850	1750	1800	1820	1790	1800
29	1900	1810	1860	1830	1740	1790	1880	1750	1810	1870	1810	1840
30	1890	1790	1830	1850	1770	1810	1810	1680	1780	1850	1800	1830
31	---	---	---	1870	1750	1820	1760	1650	1710	---	---	---
MONTH	2150	1580	1790	1970	1480	1700	2400	1560	1860	2110	1650	1900

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	15.7	13.2	14.6	8.6	6.5	7.8	4.4	2.1	3.2	-.2	-.3	-.3
2	14.2	10.4	12.4	8.5	6.8	7.7	4.5	2.4	3.4	-.2	-.2	-.2
3	13.3	10.2	11.8	6.8	4.4	5.8	3.7	1.7	2.8	-.2	-.2	-.2
4	12.4	10.5	11.6	6.0	3.4	4.9	3.3	1.2	2.3	-.2	-.2	-.2
5	11.3	8.4	10.0	5.0	2.9	4.1	2.3	1.1	1.8	-.2	-.2	-.2
6	11.0	6.6	8.9	6.3	2.8	4.4	1.5	-.2	.5	.0	-.2	-.2
7	11.5	7.0	9.3	6.3	4.1	5.2	.2	-.2	-.1	.6	-.2	.0
8	12.1	7.6	9.7	5.9	3.9	5.3	.0	-.2	-.2	.9	-.2	.2
9	12.8	8.0	10.2	3.9	2.0	2.8	.2	-.2	.0	.1	-.2	-.1
10	12.3	7.9	10.0	3.4	.5	2.0	.1	-.2	-.1	.1	-.2	-.1
11	11.9	7.1	9.4	3.5	1.1	2.2	-.1	-.2	-.2	.3	-.2	.0
12	12.1	7.3	9.5	4.9	2.6	3.8	-.1	-.2	-.1	1.1	-.1	.3
13	12.3	7.4	9.7	4.4	2.0	3.4	-.1	-.2	-.2	.5	-.2	.0
14	13.4	9.4	11.1	4.7	2.3	3.7	-.1	-.2	-.2	.0	-.2	-.2
15	12.1	8.4	10.1	5.0	2.4	3.9	-.1	-.2	-.2	-.1	-.2	-.2
16	9.5	7.0	8.1	4.8	2.5	3.8	-.1	-.2	-.2	.0	-.2	-.1
17	9.5	6.5	7.7	4.6	2.4	3.6	-.1	-.3	-.2	.4	-.2	.0
18	9.7	6.0	7.9	4.2	2.3	3.3	-.2	-.3	-.2	1.3	-.1	.3
19	10.6	6.2	8.3	3.0	1.0	2.1	.0	-.3	-.2	1.7	.0	.6
20	11.7	8.6	10.1	1.9	-.1	.9	.9	-.1	.4	1.0	-.1	.6
21	11.2	9.3	9.7	1.9	-.2	.7	.6	-.2	.0	1.0	-.4	.3
22	10.3	9.0	9.6	2.5	-.2	1.2	-.2	-.2	-.2	1.0	-.4	.0
23	11.2	9.6	10.3	3.1	.1	1.7	-.2	-.2	-.2	.7	-.3	.1
24	10.0	6.5	8.6	2.7	.2	1.7	---	---	---	2.6	.4	1.4
25	10.0	7.8	9.0	2.7	.2	1.6	---	---	---	2.4	.8	1.7
26	10.0	8.6	9.2	2.9	.3	1.7	---	---	---	2.4	1.3	2.0
27	9.5	7.4	8.2	3.5	.7	2.2	---	---	---	2.0	.5	1.2
28	8.3	5.8	7.1	4.3	2.7	3.3	---	---	---	1.0	-.2	.3
29	8.1	4.7	6.5	5.3	3.6	4.5	---	---	---	.2	-.2	-.1
30	9.0	7.3	8.1	3.6	1.4	2.6	---	---	---	.1	-.2	-.1
31	9.2	7.0	8.1	---	---	---	---	---	---	1.1	-.2	.3
MONTH	15.7	4.7	9.5	8.6	-.2	3.4	---	---	---	2.6	-.4	.2

09371492 MUD CREEK AT HIGHWAY 32, NEAR CORTEZ, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	1.9	-.2	.7	6.3	1.1	3.9	6.0	3.5	4.4	11.5	7.8	9.1
2	.8	-.2	.2	6.7	2.0	4.5	3.8	2.1	3.0	13.0	6.2	9.5
3	2.1	-.2	.8	6.2	1.0	3.8	5.4	.9	3.1	11.9	7.7	9.0
4	1.7	-.2	.6	7.1	2.1	4.6	5.6	2.9	4.2	9.7	5.7	7.7
5	3.0	1.0	2.0	5.9	2.2	4.4	7.3	2.9	4.9	11.6	4.8	7.9
6	2.4	1.0	1.7	7.0	1.5	4.4	11.0	3.1	6.8	13.4	5.1	9.1
7	3.1	-.2	1.6	7.1	3.8	5.5	11.6	4.3	7.9	15.7	6.2	10.9
8	3.3	.3	2.1	7.0	3.6	5.2	11.4	5.0	8.0	17.5	8.3	12.9
9	4.5	.6	2.8	7.1	1.5	4.5	8.1	4.8	6.2	16.5	9.8	13.2
10	4.0	.7	2.8	7.5	2.7	5.1	9.7	2.4	5.9	16.3	9.5	12.7
11	.7	-.2	.0	6.6	2.3	4.7	10.3	2.2	6.4	16.6	9.4	12.6
12	.0	-.2	-.1	5.7	3.5	4.6	13.8	5.8	9.6	17.5	7.9	12.6
13	1.0	-.2	.2	7.3	1.4	4.4	13.8	8.0	10.9	18.6	10.0	14.2
14	1.5	-.2	.4	7.8	1.7	4.9	13.6	7.4	10.2	18.3	11.5	14.7
15	2.7	-.2	1.1	7.9	2.8	5.5	11.7	5.5	8.3	18.0	9.9	13.9
16	1.9	-.2	.6	8.9	2.6	5.7	10.4	2.2	6.3	18.6	9.5	13.7
17	1.9	-.2	.5	7.7	3.7	5.9	12.0	3.0	7.4	18.6	10.3	14.0
18	3.4	-.2	1.5	9.4	3.7	6.7	13.0	5.0	8.9	18.9	9.5	13.9
19	4.8	.9	2.8	10.5	4.4	7.5	14.2	5.3	9.8	20.0	11.0	15.2
20	3.7	-.2	2.0	10.3	4.1	7.5	13.8	6.2	10.4	19.4	11.8	15.6
21	4.6	.9	3.0	12.1	6.5	9.0	11.8	9.2	10.6	18.6	12.5	15.7
22	4.2	1.0	2.5	10.7	4.6	7.6	10.0	7.9	8.5	19.1	13.5	16.4
23	3.6	-.2	1.4	8.2	3.1	6.1	13.2	6.4	9.7	17.4	13.9	15.8
24	4.4	-.2	1.9	10.6	3.9	7.2	12.1	8.4	10.0	16.0	12.9	14.6
25	5.4	.4	2.9	10.7	4.5	7.7	9.7	5.1	7.4	15.2	12.5	13.6
26	5.6	1.7	3.6	9.3	4.5	7.2	14.0	6.6	10.1	15.6	10.8	13.4
27	5.2	.2	2.9	12.5	6.8	9.3	15.6	8.2	12.1	16.7	12.3	14.7
28	5.8	.4	3.3	10.7	3.9	7.5	13.3	9.9	11.1	18.6	12.8	15.8
29	---	---	---	11.1	3.6	7.4	10.5	8.6	9.8	18.5	14.6	16.5
30	---	---	---	9.5	4.7	7.4	13.3	7.1	10.1	17.1	13.1	15.3
31	---	---	---	7.3	3.7	5.9	---	---	---	18.9	14.0	16.5
MONTH	5.8	-.2	1.6	12.5	1.0	6.0	15.6	.9	8.1	20.0	4.8	13.2

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	19.4	13.0	16.4	24.1	17.2	20.7	23.1	19.1	21.2	19.3	17.1	17.7
2	17.0	14.0	15.5	23.3	18.0	20.6	22.4	19.8	21.0	18.2	15.9	17.1
3	18.1	12.4	15.2	23.8	18.0	20.8	21.0	19.1	19.7	19.1	16.2	17.6
4	17.4	12.2	14.8	24.5	19.2	21.7	21.8	17.6	19.6	18.5	14.4	16.6
5	13.8	10.2	11.1	24.4	18.2	21.5	20.5	18.5	19.1	18.5	13.9	16.3
6	16.1	8.8	12.2	24.4	20.7	22.5	21.5	17.7	19.4	18.0	14.0	16.2
7	18.8	12.7	15.8	25.2	20.4	22.4	22.4	17.8	20.1	18.9	14.0	16.6
8	19.1	13.2	16.4	23.5	20.1	21.9	20.8	17.8	19.6	18.7	14.0	16.5
9	20.0	13.3	16.8	23.1	20.5	21.8	21.7	18.2	19.9	18.1	13.8	16.2
10	20.2	13.5	16.9	22.6	19.4	21.2	20.3	18.3	19.1	19.5	14.9	17.2
11	21.0	12.9	16.8	23.5	19.3	21.5	20.8	16.4	18.5	18.1	14.7	16.4
12	18.5	14.0	16.5	23.3	18.9	21.4	20.8	15.4	18.2	18.3	13.8	16.1
13	21.7	14.1	17.8	22.6	18.5	20.8	21.5	15.4	18.4	18.1	13.3	15.9
14	22.1	16.6	19.2	21.7	19.5	20.2	19.7	16.4	18.0	16.6	13.8	15.4
15	21.6	16.7	19.2	21.9	18.3	19.8	21.5	16.8	18.6	17.1	13.5	15.3
16	22.0	17.3	19.8	21.8	17.6	19.9	20.8	16.9	19.0	15.9	12.8	14.6
17	20.4	18.1	19.1	21.8	18.1	20.2	22.7	17.9	20.0	16.9	12.7	14.8
18	21.1	16.0	18.7	21.2	19.2	19.9	23.1	17.6	20.3	16.9	12.3	14.6
19	22.4	17.2	20.1	19.8	18.0	18.8	22.0	18.9	20.3	16.8	13.5	15.0
20	22.0	17.9	20.1	21.9	16.7	19.2	21.9	18.7	20.2	16.6	12.7	14.6
21	22.1	16.5	19.4	21.7	18.2	20.1	22.9	18.2	20.5	16.0	11.8	13.9
22	22.9	17.1	20.0	21.9	18.5	20.3	22.3	17.6	19.8	14.1	10.6	12.7
23	22.6	16.4	19.6	23.1	18.2	20.6	22.6	17.2	19.8	14.7	13.3	13.9
24	22.8	16.1	19.6	23.5	19.2	21.1	22.2	16.8	19.5	16.1	12.3	14.1
25	23.0	17.2	20.2	22.5	19.3	20.8	22.5	18.1	20.2	16.6	12.8	14.8
26	22.7	16.7	19.8	23.6	18.5	21.0	22.0	18.0	19.9	16.6	12.8	14.9
27	23.5	17.0	20.2	24.0	20.1	22.0	20.9	18.3	19.5	15.7	12.0	14.0
28	23.1	16.0	19.6	24.4	20.5	22.5	22.2	18.6	20.1	13.6	9.5	11.4
29	22.9	16.2	19.6	23.1	20.5	21.9	21.9	17.5	19.9	12.1	7.2	9.8
30	23.2	16.5	19.8	23.6	20.1	21.9	21.2	18.1	19.7	12.5	7.7	10.2
31	---	---	---	23.9	19.2	21.6	20.5	17.5	19.2	---	---	---
MONTH	23.5	8.8	17.9	25.2	16.7	21.0	23.1	15.4	19.6	19.5	7.2	15.0

09371520 McELMO CREEK ABOVE TRAIL CANYON, NEAR CORTEZ, CO

LOCATION.--Lat 37°19'36", long 108°42'00", in NE$^1/_4$NE$^1/_4$ sec.3, T.35 N., R.17 W., Montezuma County, Hydrologic Unit 14080202, on left bank adjacent to abandoned gravel pit 1.5 mi downstream from Mud Creek, 1.9 mi upstream from Trail Canyon, and 5.5 mi south of Cortez.

DRAINAGE AREA.--234 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1993 to current year.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 5,690 ft above sea level, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. A few small diversions upstream from station. Most of flow comes from diversions through the Dolores Project and Montezuma Valley Irrigation Company (water imported from Dolores River Basin).

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Sept. 9, 1927 at location 1.5 mi upstream was determined to be 5,560 ft^3/s, gage height, 5.72 ft, site and datum then in use. Feb. 20, 1993, 890 ft^3/s, gage height, 7.57 ft, present datum, on basis of slope-area measurement at site 1 mi upstream.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	97	98	57	e38	33	25	19	23	68	62	136	129
2	97	131	52	e36	28	24	27	36	65	59	150	185
3	93	126	49	e32	e28	24	34	29	64	63	160	197
4	129	87	49	e28	28	25	34	72	62	67	162	154
5	99	81	49	e32	41	25	31	48	69	66	137	135
6	83	93	52	e33	40	21	32	35	101	63	185	124
7	82	94	45	e34	38	21	31	26	81	65	130	115
8	83	103	e40	e32	33	23	23	22	70	82	115	101
9	82	247	e42	e29	32	24	22	19	65	84	112	87
10	84	145	e44	e29	32	22	22	17	63	92	108	83
11	82	105	e40	e33	25	22	19	19	63	104	140	81
12	82	105	e45	35	e22	24	17	33	65	90	114	86
13	81	127	e45	e29	26	22	15	33	63	86	101	83
14	76	107	e44	e26	e26	20	18	30	67	83	98	83
15	72	97	e44	e25	27	19	20	29	69	98	109	86
16	90	89	e45	e29	25	19	17	27	71	93	106	107
17	118	78	e46	e32	25	20	16	26	93	80	104	115
18	96	68	e43	e33	26	20	16	20	124	87	99	107
19	85	63	e43	31	28	19	12	32	103	105	106	112
20	84	56	41	37	26	21	11	39	87	121	105	118
21	85	54	37	48	25	22	12	57	91	98	103	97
22	106	53	e27	41	25	22	20	93	85	193	102	98
23	99	53	e33	35	23	19	26	95	78	141	91	119
24	84	50	e30	39	26	17	21	116	82	143	94	138
25	120	48	e36	41	26	17	47	128	80	130	99	121
26	280	47	e42	39	25	17	53	128	77	131	90	114
27	242	47	e42	37	25	18	33	151	75	135	98	106
28	357	49	e42	e32	25	15	24	109	68	122	110	99
29	129	97	e42	e30	---	14	24	95	64	140	110	103
30	105	75	e43	e30	---	13	22	96	63	147	105	109
31	141	---	e41	e30	---	16	---	91	---	127	105	---
TOTAL	3543	2673	1330	1035	789	630	718	1774	2276	3157	3584	3392
MEAN	114	89.1	42.9	33.4	28.2	20.3	23.9	57.2	75.9	102	116	113
MAX	357	247	57	48	41	25	53	151	124	193	185	197
MIN	72	47	27	25	22	13	11	17	62	59	90	81
AC-FT	7030	5300	2640	2050	1560	1250	1420	3520	4510	6260	7110	6730

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 1999, BY WATER YEAR (WY)

MEAN	89.3	56.4	37.4	36.7	41.2	46.7	38.5	64.6	84.7	98.1	109	107
MAX	125	89.1	42.9	58.8	62.5	87.4	82.8	83.0	100	108	125	126
(WY)	1994	1999	1999	1997	1994	1995	1997	1998	1997	1997	1995	1997
MIN	68.1	37.1	27.5	23.4	26.7	19.9	22.6	50.7	59.0	82.4	94.2	80.4
(WY)	1995	1997	1996	1996	1996	1996	1996	1996	1994	1994	1996	1996

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1993 - 1999	
ANNUAL TOTAL	26470		24901			
ANNUAL MEAN	72.5		68.2		67.7	
HIGHEST ANNUAL MEAN					78.8	1997
LOWEST ANNUAL MEAN					54.2	1996
HIGHEST DAILY MEAN	357	Oct 28	357	Oct 28	757	Mar 6 1995
LOWEST DAILY MEAN	23	Apr 26	11	Apr 20	11	Apr 9 1996
ANNUAL SEVEN-DAY MINIMUM	26	Apr 24	15	Apr 15	13	Apr 6 1996
INSTANTANEOUS PEAK FLOW			552	Oct 28	1080	Mar 6 1995
INSTANTANEOUS PEAK STAGE			5.82	Oct 28	8.42	Mar 6 1995
ANNUAL RUNOFF (AC-FT)	52500		49390		49040	
10 PERCENT EXCEEDS	117		126		118	
50 PERCENT EXCEEDS	77		62		58	
90 PERCENT EXCEEDS	30		22		26	

e Estimated

09371520 McELMO CREEK ABOVE TRAIL CANYON, NEAR CORTEZ, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1990 to current year.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1990 to current year.
WATER TEMPERATURES: October 1990 to current year.

INSTRUMENTATION.--Water-quality monitor since October 1990.

REMARKS.--Daily water temperature data are good. Daily specific conductance data are good except Nov. 23 to Jan. 25, Sep. 3-30 which are fair and Feb. 24 to July 27 which are poor.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 3,820 microsiemens, Jan. 22, 1999; minimum, 966 microsiemens, July 10, 1999.
WATER TEMPERATURE: Maximum, 26.3°C, July 5-6, 1996; minimum, -0.4°C during winter months most years.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 3,820 microsiemens, Jan. 22; minimum, 966 microsiemens, July 10.
WATER TEMPERATURE: Maximum, 25.7°C, July 7; minimum, -0.1°C, many days.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)
NOV											
04...	1330	85	2170	8.5	7.1	1200	260	120	100	1	5.9
23...	1245	52	2550	8.4	3.9	1400	300	150	130	1	4.3
FEB											
24...	1300	25	3020	8.5	5.0	1600	350	190	180	2	4.4
APR											
29...	1340	23	3220	8.4	11.9	1700	330	220	230	2	6.8
MAY											
17...	1400	25	2220	8.5	17.6	1100	230	130	140	2	4.9
JUN											
15...	1045	71	1340	8.4	17.9	660	150	68	62	1	4.0
JUL											
27...	1315	147	1240	8.3	22.3	610	150	58	47	.8	4.3
AUG											
16...	1245	107	1270	8.4	19.4	610	150	58	44	.8	3.8
SEP											
03...	1300	205	1310	8.4	17.6	630	150	61	47	.8	4.7

DATE	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	ALKA-LINITY WAT.DIS FET LAB CACO3 (MG/L) (29801)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS-SOLVED (TONS PER DAY) (70302)
NOV											
04...	322	10	281	--	1100	25	.4	12	1750	2.38	402
23...	338	27	322	--	1300	26	.3	13	2130	2.89	299
FEB											
24...	308	10	268	--	1700	39	.4	10	2620	3.56	177
APR											
29...	285	29	282	--	1800	46	.4	7.6	2820	3.83	173
MAY											
17...	--	--	--	190	1100	32	.3	4.0	1800	2.45	122
JUN											
15...	--	--	--	213	530	14	.4	10	972	1.32	186
JUL											
27...	--	--	--	204	480	12	.3	13	888	1.21	353
AUG											
16...	--	--	--	211	500	11	.3	12	909	1.24	263
SEP											
03...	--	--	--	213	520	13	.3	12	936	1.27	518

09371520 McELMO CREEK ABOVE TRAIL CANYON, NEAR CORTEZ, CO--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	1440	1340	1360	2120	2030	2100	2780	2740	2760	2640	2530	2590
2	1390	1370	1380	2270	1930	2100	2780	2740	2760	2750	2600	2660
3	1390	1360	1370	2110	1940	2030	2780	2750	2760	2950	2570	2760
4	1640	1340	1460	2210	2110	2160	2770	2690	2740	3080	2650	2830
5	1640	1550	1590	2220	2170	2190	2710	2650	2680	2950	2560	2800
6	1610	1560	1580	2380	1980	2100	2850	2680	2750	2860	2510	2720
7	1630	1590	1610	1990	1960	1970	2940	2610	2770	2800	2580	2700
8	1640	1610	1620	1980	1810	1940	3040	1810	2780	2770	2600	2680
9	1630	1580	1600	2190	1810	2020	2810	1730	2280	2920	2570	2700
10	1620	1550	1580	2270	2120	2210	2740	2590	2650	2910	2530	2680
11	1630	1600	1610	2360	2260	2320	2850	2600	2770	2780	2520	2640
12	1640	1610	1630	2390	2300	2350	2920	2580	2790	2670	2540	2610
13	1680	1630	1660	2470	2300	2360	2750	2490	2670	2680	2480	2560
14	1700	1660	1670	2530	2330	2440	2720	2470	2640	2780	2290	2540
15	1780	1690	1720	2540	2470	2500	2750	2550	2670	2870	2150	2490
16	1780	1630	1710	2510	2470	2490	2850	2530	2690	2960	2670	2790
17	1880	1640	1790	2530	2440	2500	2730	2560	2630	2920	2620	2800
18	1860	1800	1830	2560	2520	2540	2740	2570	2650	2810	2690	2750
19	1840	1800	1810	2560	2530	2540	2730	2560	2640	2790	2720	2760
20	1840	1740	1780	2560	2500	2540	2710	2600	2670	2880	2690	2790
21	1810	1730	1780	2560	2460	2510	2730	2570	2640	3750	2870	3250
22	1910	1730	1850	2590	2510	2550	2940	2540	2770	3820	2450	3250
23	1900	1850	1880	2600	2520	2550	2960	2590	2810	3500	2980	3130
24	2110	1900	1980	2580	2520	2550	2930	2740	2840	3150	3030	3080
25	1980	1510	1850	2620	2570	2600	2850	2660	2750	3080	3020	3050
26	2050	1830	1980	2640	2610	2620	2750	2600	2680	3170	3080	3120
27	2000	1550	1820	2660	2620	2640	2680	2540	2610	3180	3080	3120
28	1880	1570	1780	2680	2600	2650	2620	2520	2580	3270	2960	3080
29	2020	1880	1950	2840	2600	2710	2610	2480	2540	3380	2790	3000
30	2020	1940	2000	2820	2750	2780	2630	2500	2550	3290	2680	2940
31	2260	1900	2050	---	---	---	2670	2520	2590	3160	2730	2870
MONTH	2260	1340	1720	2840	1810	2390	3040	1730	2680	3820	2150	2830

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	3020	2740	2880	3070	2970	3020	2790	2630	2720	3190	3010	3090
2	3170	2680	2860	3080	2940	3000	2680	2540	2620	3730	2690	3240
3	3060	2670	2840	3100	2940	3030	2760	2540	2670	3420	3130	3260
4	2950	2680	2830	3120	2990	3040	2840	2670	2720	3630	3010	3270
5	2990	2710	2830	3120	2990	3050	2740	2670	2690	3330	3140	3260
6	2940	2810	2860	3130	3000	3060	2740	2550	2670	3140	2790	2980
7	3340	2940	3100	3190	3060	3120	2620	2430	2520	2790	2620	2670
8	3150	3020	3080	3170	3040	3100	2500	2410	2450	2780	2620	2660
9	3160	3020	3070	3150	3020	3060	2480	2400	2430	2730	2630	2670
10	3160	3030	3080	3160	3030	3090	2410	2330	2380	2800	2640	2700
11	3650	2850	3130	3140	3010	3060	2360	2290	2320	2720	2480	2610
12	3650	2830	3250	3100	2830	3040	2560	2310	2400	2500	1840	2210
13	3390	2790	3020	3070	2830	3000	2680	2540	2620	2040	1840	1940
14	3250	2490	2830	3100	2990	3040	2690	2150	2560	2120	1920	1970
15	3150	2930	3040	3120	3010	3050	2330	2130	2220	2140	1970	2030
16	3150	2890	3020	3130	3030	3070	2410	2240	2330	2320	2040	2130
17	3120	2870	2980	3160	3010	3070	2490	2320	2390	2280	2070	2210
18	3190	2870	3030	3040	2890	2970	2690	2390	2590	2230	2030	2120
19	3160	2970	3060	2980	2900	2930	2740	2530	2640	2250	1840	2040
20	3140	2810	3000	2990	2800	2920	2900	2670	2780	1870	1670	1820
21	3090	2940	3010	2870	2710	2800	3010	2730	2890	1670	1420	1490
22	3140	3000	3080	2720	2550	2660	3210	2920	3000	1640	1400	1480
23	3340	2970	3080	2690	2570	2640	3500	2970	3190	1430	1340	1380
24	3190	2990	3090	2860	2650	2690	3160	3020	3090	1460	1320	1380
25	3130	2960	3040	2770	2640	2690	3520	2650	2970	1360	1240	1290
26	3140	3030	3070	2830	2520	2690	2980	2660	2830	1390	1220	1270
27	3130	2990	3060	2800	2520	2650	3080	2980	3010	1360	1100	1260
28	3100	2980	3040	2970	2790	2870	3200	3080	3150	1330	1140	1240
29	---	---	---	2950	2770	2900	3260	3160	3200	1320	1170	1250
30	---	---	---	2840	2740	2780	3270	3090	3170	1240	1150	1190
31	---	---	---	2870	2760	2810	---	---	---	1240	1120	1170
MONTH	3650	2490	3010	3190	2520	2930	3520	2130	2710	3730	1100	2110

09371520 McELMO CREEK ABOVE TRAIL CANYON, NEAR CORTEZ, CO--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	1250	1120	1170	1540	1450	1480	1390	1300	1320	1540	1310	1390
2	1270	1050	1130	1540	1490	1520	1320	1230	1290	1520	1310	1430
3	1330	1260	1300	1520	1420	1450	1660	1300	1390	1470	1320	1370
4	1360	1150	1240	1460	1410	1430	1440	1340	1370	1400	1340	1370
5	1180	1080	1140	1430	1370	1390	1450	1360	1390	1410	1390	1400
6	1090	1060	1070	1440	1350	1390	1790	1380	1520	1460	1390	1410
7	1150	1060	1120	1390	1310	1350	1510	1420	1440	1510	1460	1490
8	1220	1150	1170	1320	1040	1160	1430	1370	1380	1620	1510	1540
9	1260	1180	1190	1040	978	1000	1390	1330	1350	1690	1600	1650
10	1240	1150	1190	1300	966	1030	1400	1350	1390	1700	1660	1680
11	1260	1180	1220	1600	1190	1340	1760	1340	1450	1740	1670	1700
12	1310	1200	1240	1270	1190	1220	1510	1310	1350	1720	1660	1700
13	1370	1200	1300	1190	1080	1160	1340	1260	1290	1700	1640	1670
14	1360	1250	1280	1200	1080	1130	1320	1260	1290	1680	1630	1660
15	1350	1270	1310	1170	1130	1150	1340	1260	1300	1740	1620	1690
16	1450	1270	1320	1240	1160	1200	1360	1290	1320	1780	1570	1630
17	1530	1030	1410	1240	1210	1220	1380	1320	1350	1620	1520	1550
18	1750	1300	1470	1240	1140	1200	1380	1360	1370	1560	1530	1550
19	1450	1320	1370	1230	1200	1220	1410	1350	1380	1550	1470	1510
20	1410	1290	1330	1330	1190	1240	1410	1340	1360	1580	1520	1530
21	1720	1340	1430	1270	1050	1200	1340	1300	1310	1620	1530	1580
22	1580	1300	1400	1260	986	1090	1380	1290	1310	1530	1510	1520
23	1650	1550	1610	1130	1060	1090	1380	1300	1350	1530	1440	1480
24	1730	1600	1640	1110	1040	1080	1620	1330	1390	1540	1490	1510
25	1730	1560	1630	1170	1100	1140	1380	1240	1300	1540	1510	1530
26	1570	1470	1500	1260	1170	1210	1380	1180	1240	1540	1500	1520
27	1520	1480	1490	1320	1220	1280	1480	1330	1370	1550	1480	1510
28	1770	1500	1570	1340	1300	1320	1400	1340	1360	1550	1510	1530
29	1650	1550	1580	1400	1260	1310	1490	1360	1390	1530	1480	1500
30	1560	1480	1500	1400	1240	1300	1460	1350	1390	1560	1530	1540
31	---	---	---	1390	1300	1330	1430	1340	1390	---	---	---
MONTH	1770	1030	1340	1600	966	1250	1790	1180	1360	1780	1310	1540
YEAR	3820	966	2150									

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	16.2	13.5	14.9	9.8	7.2	8.4	5.6	3.0	4.2	.1	.0	.0
2	14.7	10.9	12.9	9.4	7.5	8.4	5.9	3.3	4.5	.1	.0	.0
3	13.6	10.5	12.2	7.9	6.0	7.0	5.2	2.6	4.0	.0	.0	.0
4	12.8	10.7	11.8	7.5	5.1	6.4	4.7	2.2	3.4	.0	.0	.0
5	11.6	8.6	10.1	6.3	4.4	5.3	3.4	2.1	2.6	.0	.0	.0
6	11.3	7.1	9.3	6.7	4.1	5.4	2.1	.1	1.0	.1	.0	.0
7	12.1	7.7	9.8	6.9	5.0	6.0	.5	.0	.2	.1	.0	.0
8	12.4	8.4	10.4	6.5	4.9	6.0	.1	.1	.1	.3	.0	.1
9	13.3	8.9	11.0	4.9	3.0	3.6	.1	.1	.1	.1	.0	.0
10	12.6	8.8	10.7	3.3	1.4	2.5	.1	.0	.1	.1	.0	.0
11	12.2	8.1	10.1	3.9	2.1	2.9	.1	.1	.1	.2	.0	.0
12	12.4	8.1	10.2	6.0	3.6	4.7	.1	.1	.1	1.3	.0	.4
13	12.6	8.3	10.4	5.3	3.3	4.4	.1	.1	.1	1.0	-.1	.2
14	13.9	10.0	11.8	5.8	3.3	4.6	.1	.1	.1	.5	-.1	.0
15	12.3	8.9	10.7	6.5	3.7	5.1	.1	.0	.1	.0	-.1	.0
16	10.2	7.1	8.5	6.6	4.0	5.3	.1	.0	.0	.0	.0	.0
17	9.8	6.4	7.9	6.3	4.0	5.2	.4	.0	.0	.2	.0	.0
18	10.2	6.5	8.3	5.8	3.4	4.7	.4	.0	.0	2.9	-.1	1.0
19	10.9	6.7	8.9	4.6	2.3	3.5	.7	.0	.2	4.3	.7	2.4
20	13.0	9.7	11.1	3.3	.7	2.1	2.1	.3	1.2	3.4	2.0	2.9
21	11.4	9.7	10.3	3.1	.3	1.8	1.4	-.1	.3	2.9	.8	1.9
22	11.0	9.5	10.1	4.0	.8	2.4	.0	.0	.0	2.5	-.1	.8
23	12.0	10.1	10.8	4.8	1.5	3.2	.0	.0	.0	2.4	-.1	.7
24	11.4	8.1	9.9	4.6	1.6	3.2	.0	.0	.0	3.6	.7	2.1
25	11.3	9.4	9.9	4.6	1.6	3.1	.0	.0	.0	3.5	1.8	2.6
26	10.1	9.2	9.6	5.0	1.7	3.4	.0	.0	.0	3.6	1.9	2.7
27	9.9	8.5	9.3	5.5	2.2	3.9	.0	.0	.0	2.9	1.1	1.8
28	8.5	7.0	7.8	5.4	3.9	4.7	.0	.0	.0	2.9	.0	1.0
29	8.9	6.3	7.6	6.7	4.8	5.7	.0	.0	.0	2.3	-.1	.5
30	9.6	8.1	8.7	5.1	3.1	4.2	.1	.0	.0	2.0	-.1	.4
31	9.3	7.9	8.6	---	---	---	.1	.0	.0	3.1	.0	1.0
MONTH	16.2	6.3	10.1	9.8	.3	4.6	5.9	-.1	.7	4.3	-.1	.7

09371520 McELMO CREEK ABOVE TRAIL CANYON, NEAR CORTEZ, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	3.3	-.1	1.4	9.2	2.5	5.8	6.8	4.1	5.2	12.2	8.8	10.1
2	2.9	.0	.9	9.5	3.3	6.3	4.4	2.4	3.4	15.8	7.0	11.2
3	3.6	-.1	1.5	9.1	2.5	5.8	6.4	1.6	3.9	12.7	8.4	10.4
4	2.3	-.1	1.3	9.7	3.5	6.3	6.0	3.2	4.3	9.3	6.9	8.0
5	4.3	1.9	2.9	8.9	3.5	6.1	9.1	3.4	5.7	12.8	5.4	8.8
6	4.0	2.1	2.9	9.9	2.8	6.2	13.3	3.4	8.1	15.1	6.0	10.3
7	5.3	1.1	3.1	9.5	4.2	6.7	14.7	5.5	9.8	18.0	7.4	12.5
8	5.0	1.6	3.5	9.6	4.3	6.5	14.8	6.1	10.0	20.6	9.8	15.0
9	6.8	2.0	4.2	10.1	2.8	6.2	10.0	5.9	7.7	19.6	11.8	15.5
10	4.9	1.1	3.7	10.3	3.4	6.6	12.6	3.0	7.5	18.9	10.4	14.4
11	2.4	-.1	.5	9.2	3.6	6.2	13.9	3.4	8.6	19.2	10.8	14.4
12	1.4	-.1	.2	6.6	4.1	5.5	17.3	7.2	11.9	19.0	9.4	14.2
13	3.0	.0	.6	10.0	2.2	5.8	16.5	9.6	13.0	20.3	11.8	15.9
14	2.6	-.1	.9	11.0	2.8	6.8	16.0	7.9	11.7	20.4	12.9	16.4
15	4.4	.2	2.0	10.6	4.1	7.4	14.4	6.7	10.2	20.1	11.9	15.8
16	3.7	-.1	1.5	12.4	4.0	7.9	13.4	3.7	8.5	19.8	11.3	15.3
17	3.7	-.1	1.4	10.3	5.0	7.7	15.2	4.6	9.7	19.8	10.1	14.8
18	5.2	-.1	2.5	12.6	4.7	8.5	16.6	6.7	11.5	20.9	10.1	15.4
19	7.0	1.7	4.1	13.9	5.7	9.6	18.2	7.3	12.6	21.3	12.1	16.6
20	5.8	.6	3.3	13.7	5.9	9.7	17.5	8.3	13.0	21.6	12.6	17.0
21	5.5	1.7	3.9	14.9	7.0	10.6	14.8	10.7	12.6	19.9	12.3	16.3
22	5.8	1.1	3.3	13.7	5.7	9.6	11.6	8.7	9.8	20.1	13.9	16.9
23	6.1	-.1	2.6	11.0	4.8	8.0	15.2	7.2	11.0	18.0	14.5	16.3
24	6.8	.1	3.3	14.1	4.8	9.2	12.9	9.2	11.0	17.4	13.2	15.4
25	7.9	1.6	4.5	13.7	5.9	9.8	11.8	7.4	9.2	15.6	13.2	14.2
26	7.8	2.5	4.8	11.7	6.2	9.1	15.5	7.8	11.2	17.1	11.4	14.3
27	7.6	1.2	4.3	15.3	7.7	10.9	17.4	9.8	13.5	17.5	13.0	15.4
28	8.4	1.5	4.9	13.9	5.3	9.5	14.0	11.1	12.3	19.2	13.2	16.4
29	---	---	---	14.9	5.2	9.9	12.1	9.5	10.8	18.4	14.8	16.6
30	---	---	---	12.7	6.1	9.6	15.3	7.6	11.2	17.5	12.9	15.4
31	---	---	---	9.7	5.2	7.6	---	---	---	20.0	14.3	16.9
MONTH	8.4	-.1	2.6	15.3	2.2	7.8	18.2	1.6	9.6	21.6	5.4	14.4

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	20.6	13.2	16.8	24.9	17.3	21.1	24.2	19.3	21.7	19.0	16.9	17.6
2	17.5	14.3	15.8	23.8	18.1	20.9	22.8	19.9	21.1	18.4	15.5	17.0
3	19.8	12.3	15.9	24.9	18.0	21.1	20.5	19.0	19.5	19.2	16.1	17.5
4	18.5	12.3	15.2	24.7	19.3	21.9	21.8	17.7	19.5	18.7	14.6	16.8
5	13.8	10.0	11.0	25.3	18.0	21.7	20.4	18.6	19.2	19.0	14.2	16.6
6	17.2	8.7	12.6	24.9	20.4	22.6	21.7	17.7	19.5	18.4	14.6	16.5
7	20.4	12.6	16.3	25.7	20.2	22.6	22.8	17.8	20.2	19.5	14.7	17.1
8	20.8	13.3	17.0	24.6	20.2	22.3	21.5	17.8	19.8	19.4	14.4	17.0
9	21.4	13.8	17.5	24.0	20.1	21.8	21.8	18.3	20.0	18.3	14.3	16.6
10	21.2	13.7	17.4	24.8	19.1	21.6	20.1	18.3	19.2	20.1	15.5	17.7
11	21.3	13.3	17.2	23.7	18.9	21.2	20.6	16.8	18.6	18.6	15.3	17.0
12	19.6	13.6	16.9	23.8	18.7	21.3	21.0	15.9	18.4	19.2	14.5	16.9
13	22.3	13.9	18.0	23.5	18.3	20.8	21.8	15.9	18.8	18.9	14.1	16.6
14	23.1	16.2	19.4	20.8	19.1	19.8	19.3	16.6	18.0	16.9	14.3	15.9
15	22.3	16.7	19.4	23.7	18.1	20.4	20.7	16.8	18.5	17.4	14.1	15.8
16	23.4	16.9	19.9	22.4	17.5	20.1	20.8	16.9	19.0	16.8	13.4	15.2
17	20.3	16.0	18.7	22.8	17.9	20.4	22.9	17.9	20.2	17.7	13.3	15.4
18	21.0	15.5	18.4	21.1	19.1	20.0	23.2	18.1	20.6	17.8	13.1	15.4
19	23.1	16.8	19.9	20.5	18.0	19.0	22.6	18.9	20.6	17.0	13.9	15.4
20	22.9	17.6	20.0	22.4	16.8	19.5	22.4	18.8	20.4	17.1	13.2	15.1
21	22.3	16.3	19.3	22.3	18.1	20.2	22.5	18.4	20.4	16.5	12.3	14.5
22	23.1	17.0	20.0	21.5	18.8	20.2	22.8	18.0	20.2	14.6	11.4	13.4
23	22.8	16.0	19.5	23.0	18.5	20.6	22.7	17.6	20.0	15.2	13.8	14.4
24	23.4	16.1	19.8	23.1	19.3	21.1	22.6	17.7	20.0	17.1	12.7	14.8
25	23.8	17.2	20.5	22.1	19.4	20.8	23.4	18.3	20.6	17.7	13.5	15.6
26	22.8	17.0	20.1	23.7	18.9	21.3	21.9	18.2	20.0	17.5	13.4	15.5
27	23.9	17.3	20.5	24.4	20.1	22.1	21.3	18.3	19.8	16.3	12.6	14.5
28	23.4	16.4	20.0	25.0	20.7	22.7	23.0	18.5	20.3	13.7	10.2	11.8
29	23.5	16.2	19.8	23.3	20.5	21.9	21.8	17.8	19.8	12.6	7.7	10.2
30	23.9	16.6	20.2	23.4	20.1	21.7	22.0	18.1	20.0	13.1	8.3	10.7
31	---	---	---	24.5	19.4	21.8	20.6	17.8	19.3	---	---	---
MONTH	23.9	8.7	18.1	25.7	16.8	21.1	24.2	15.9	19.8	20.1	7.7	15.5
YEAR	25.7	-.1	10.5									

09372000 McELMO CREEK NEAR COLORADO-UTAH STATE LINE

LOCATION.--Lat 37°19'27", long 109°00'54", in NE$^1/_4$ 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 mi^2.

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WSP 1925: 1951-52 (M), 1957 (M). WRD CO-1972: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 4,890 ft above sea level, from topographic map.

REMARKS.--No estimated daily discharges. Records fair. Diversions for irrigation of about 1,780 acres upstream from station. One diversion upstream from station for irrigation of about 60 acres downstream from station. Part of flow is return water from irrigated lands of Montezuma Irrigation District (water imported from Dolores River basin).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	94	127	68	44	35	23	18	14	53	31	116	106
2	87	111	60	41	30	23	22	20	42	34	119	163
3	84	116	58	34	30	23	31	21	46	37	149	188
4	108	105	56	29	32	23	33	40	44	49	159	157
5	114	89	55	35	36	24	31	54	49	51	151	129
6	88	98	57	36	47	23	30	38	74	46	185	115
7	83	102	51	36	42	21	30	27	71	42	164	106
8	83	126	41	37	37	22	26	19	51	53	133	99
9	84	327	53	30	34	24	23	13	44	79	122	92
10	78	228	48	30	34	23	23	10	43	80	117	83
11	78	134	42	34	32	22	21	6.3	47	84	122	81
12	81	116	48	38	23	22	18	5.1	45	77	140	81
13	84	132	49	31	26	23	17	9.4	40	66	131	86
14	82	135	49	29	31	21	15	8.7	47	67	117	76
15	75	121	48	27	30	21	18	6.4	39	72	111	76
16	81	109	47	31	27	19	19	6.9	45	73	113	86
17	129	98	51	30	26	19	17	4.2	49	64	109	102
18	110	86	47	37	27	20	15	5.6	117	59	105	106
19	97	79	47	34	26	20	16	3.9	87	72	98	104
20	95	72	48	34	28	20	13	7.2	68	94	104	115
21	99	68	46	42	25	21	9.3	12	64	92	101	112
22	110	67	29	43	25	22	14	41	61	141	97	103
23	114	66	37	35	23	21	20	58	51	186	89	108
24	105	63	34	37	24	18	21	75	49	141	85	122
25	112	60	38	38	24	18	21	95	50	131	87	129
26	319	58	44	38	24	17	46	114	47	129	87	125
27	306	57	46	38	24	18	33	129	45	145	79	119
28	403	57	44	34	23	17	19	109	37	126	83	109
29	203	84	44	32	---	16	17	78	32	116	90	106
30	131	98	46	32	---	14	14	75	30	145	89	113
31	128	---	45	31	---	15	---	74	---	130	88	---
TOTAL	3845	3189	1476	1077	825	633	650.3	1179.7	1567	2712	3540	3297
MEAN	124	106	47.6	34.7	29.5	20.4	21.7	38.1	52.2	87.5	114	110
MAX	403	327	68	44	47	24	46	129	117	186	185	188
MIN	75	57	29	27	23	14	9.3	3.9	30	31	79	76
AC-FT	7630	6330	2930	2140	1640	1260	1290	2340	3110	5380	7020	6540

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 1999, BY WATER YEAR (WY)

MEAN	59.8	51.2	39.8	33.9	49.0	59.1	41.5	47.9	56.1	54.1	65.6	61.7
MAX	161	122	95.4	68.4	192	197	148	108	105	132	160	226
(WY)	1973	1988	1966	1969	1993	1973	1973	1992	1969	1957	1967	1986
MIN	1.84	14.0	13.5	16.1	17.9	15.7	2.23	6.79	2.60	1.19	2.69	.43
(WY)	1957	1957	1978	1978	1964	1951	1977	1977	1977	1951	1972	1956

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR		FOR 1999 WATER YEAR		WATER YEARS 1951 - 1999	
ANNUAL TOTAL	25637.5		23991.0			
ANNUAL MEAN	70.2		65.7		52.1	
HIGHEST ANNUAL MEAN					94.6	1973
LOWEST ANNUAL MEAN					16.2	1977
HIGHEST DAILY MEAN	403	Oct 28	403	Oct 28	1200	Aug 7 1967
LOWEST DAILY MEAN	9.5	May 4	3.9	May 19	.08	Sep 9 1977
ANNUAL SEVEN-DAY MINIMUM	16	Apr 29	6.1	May 14	.14	Sep 21 1956
INSTANTANEOUS PEAK FLOW			559	Oct 28	a3040	Aug 7 1967
INSTANTANEOUS PEAK STAGE			5.93	Oct 28	b,c7.58	Aug 7 1967
ANNUAL RUNOFF (AC-FT)	50850		47590		37750	
10 PERCENT EXCEEDS	113		126		99	
50 PERCENT EXCEEDS	66		49		39	
90 PERCENT EXCEEDS	31		19		13	

a From rating curve extended above 2100 ft^3/s.
b From floodmark in gage well.
c Maximum gage height, 8.21 ft, Sep 21, 1997.

09372000 McELMO CREEK NEAR COLORADO-UTAH STATE LINE, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1977 to September 1981, August 1987 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)
NOV											
04...	1100	112	2180	8.4	7.1	1100	250	120	110	1	6.6
23...	0945	68	2560	8.4	2.8	1300	290	150	140	2	4.8
FEB											
24...	1030	25	2950	8.4	3.3	1500	310	190	200	2	4.5
APR											
29...	1100	18	3340	8.4	12.1	1800	340	220	250	3	8.0
MAY											
17...	1115	5.2	2790	8.3	15.6	1400	260	170	190	2	6.1
JUN											
15...	0900	40	1750	8.4	17.5	850	190	93	98	1	5.1
JUL											
27...	1045	135	1290	8.3	21.8	610	150	60	56	1	4.9
AUG											
16...	1045	117	1430	8.4	19.4	660	160	66	56	1	4.2
SEP											
03...	1100	199	1460	8.4	18.0	720	170	72	61	1	5.6

DATE	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	ALKA-LINITY WAT.DIS FET LAB CACO3 (MG/L) (29801)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS-SOLVED (TONS PER DAY) (70302)
NOV											
04...	307	13	274	--	1100	26	.4	14	1750	2.38	529
23...	388	--	318	--	1300	28	.3	12	2110	2.87	387
FEB											
24...	296	4	248	--	1600	39	.4	6.2	2540	3.45	171
APR											
29...	307	36	312	--	1900	45	.4	8.7	2940	4.00	141
MAY											
17...	318	--	261	--	1500	39	.4	6.2	2310	3.14	32.4
JUN											
15...	--	--	--	251	770	21	.4	11	1340	1.82	145
JUL											
27...	--	--	--	198	510	12	.3	13	923	1.25	336
AUG											
16...	--	--	--	225	580	13	.3	13	1030	1.40	324
SEP											
03...	--	--	--	216	610	16	.3	12	1070	1.46	576

MISCELLANEOUS FIELD MEASUREMENTS, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)
OCT				
26...	1415	388	2080	10.5

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 RIVER BASIN	
09010000	Grand River Ditch	09042000	Hoosier Pass Tunnel	09118200	Tarbell Ditch
09012000	Eureka Ditch	09061500	Columbine Ditch	09121000	Tabor Ditch
09013000	Alva B. Adams Tunnel	09062500	Wurtz Ditch	09341000	Treasure Pass Ditch
09021500	Berthoud Pass Ditch	09063700	Homestake Tunnel	09347000	Don LaFont Ditches 1 & 2
09022500	Moffat Water Tunnel	09073000	Twin Lakes Tunnel	09348000	Williams Creek Squaw Pass Ditch
09046000	Boreas Pass Ditch	09077160	Charles H. Boustead Tunnel	09351000	Pine River-Weminuche Pass Ditch
09047300	Vidler Tunnel	09077500	Busk-Ivanhoe Tunnel	09351500	Weminuche Pass
09050590	Harold D. Roberts Tunnel	09115000	Larkspur Ditch		

As the number of streams on which streamflow information is likely to be desired far exceeds the number of stream-gaging stations feasible to operate at one time, the Geological Survey collects limited streamflow data at sites other than stream-gaging stations. When limited streamflow data are collected on a systematic basis over a period of years for use in hydrologic analyses, the site at which the data are collected is called a partial-record station. Data collected at these partial-record stations are usable in low-flow or floodflow analyses, depending on the type of data collected. In addition, discharge measurements are made at other sites not included in the partial-record program. These measurements are generally made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

Records collected at partial-record stations are presented in two tables. The first is a table of discharge measurements at low-flow partial-record stations, and the second is a table of annual maximum stage and discharge at crest-stage stations.

LOW-FLOW PARTIAL-RECORD STATIONS

Measurements of streamflow in the area covered by this report made at low-flow, partial-record stations are given in the following table. Most of these measurements were made during periods of base flow when streamflow is primarily from ground-water storage. These measurements, when correlated with the simultaneous discharge of a nearby stream where continuous records are available, will give a picture of the low-flow potentiality of the stream. The column headed "Period of record" shows the water years in which measurements were made at the same, or practically the same, site.

DISCHARGE MEASUREMENTS MADE AT LOW-FLOW PARTIAL-RECORD STATIONS DURING WATER YEAR 1999

PINEY RIVER BASIN

Station no	Station name	Location	Drainage area (mi^2)	Period of record	Date	Discharge (ft^3/s)
*09058900	Moniger Creek near Minturn, CO	Lat 39°43'37", long 106°28'50", in Eagle County, on left bank 1.5 mi upstream from mouth, 7.5 mi north of Minturn.	0.76	1965-99	10-14-98	0.14
					7-21-99	0.17
					8-31-99	0.07

*-Also a crest-stage partial-record station. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

As the number of streams on which streamflow information is likely to be desired far exceeds the number of stream-gaging stations feasible to operate at one time, the Geological Survey collects limited streamflow data at sites other than stream-gaging stations. When limited streamflow data are collected on a systematic basis over a period of years for use in hydrologic analyses, the site at which the data are collected is called a partial-record station. Data collected at these partial-record stations are usable in low-flow or flood-flow analyses, depending on the type of data collected. In addition, discharge measurements are made at other sites not included in the partial-record program. These measurements are generally made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

Records collected at crest-stage partial-record stations are presented in the following table. Discharge measurements made at low-flow partial-record sites and at miscellaneous sites and for special studies are given in separate tables.

CREST-STAGE PARTIAL-RECORD STATIONS

The following table contains annual maximum discharge for crest-stage stations. A crest-stage gage is a device that 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.

MAXIMUM DISCHARGE AT CREST-STAGE PARTIAL-RECORD STATIONS

Station name and number	Location and drainage area	Period of record	Water year 1999 maximum			Period of record maximum		
			Date	Gage height (ft)	Discharge (ft^3/s)	Date	Gage height (ft)	Discharge (ft^3/s)
PINEY RIVER BASIN								
*Moniger Creek near Minturn, CO (09058900)	Lat 39°43'37", long 106°28'50", in Eagle County, on left bank 1.5 mi upstream from mouth, 7.5 mi north of Minturn. Drainage area is 0.76 mi^2.	1965-99	5-25-99	1.73	11.5	5-21-89	2.05	29

*-Also a low-flow partial-record station.

375546107412000 IRONTON METEOROLOGICAL STATION NEAR OURAY, CO

LOCATION.--Lat 37°55'46", long 107°41'20", Ouray County, Hydrologic Unit 14020006, 0.8 mi southwest of Ironton, and 1.2 mi north of Red Mountain No. 2.

PERIOD OF RECORD.--July 1992 to current year.

GAGE.--Weighing-bucket rain gage with satellite telemetry. Elevation of gage is 10,020 ft above sea level, from topographic map.

REMARKS.--Unpublished air-temperature and rainfall data for water years 1992 and 1993 are available in district office. Daily record for air temperature is good. Daily record for precipitation is good.

EXTREMES FOR PERIOD OF RECORD.--
AIR TEMPERATURE: Maximum, 29.7°C, Oct. 9, 1997; minimum, -32.4°C, Dec. 17, 18, 1996.
PRECIPITATION: Maximum daily, 2.3 inches, Oct. 3, 1996.

EXTREMES FOR CURRENT YEAR.--
AIR TEMPERATURE: Maximum, 22.9° C, July 1; minimum, -23.1° C, Dec. 21.
PRECIPITATION: Maximum daily, 1.4 inches, Feb. 12.

TEMPERATURE, AIR, DEGREES CELSIUS, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	---	---	---	---	---	---	8.5	-4.9	.0	-4.2	-14.9	-8.2
2	---	---	---	---	---	---	9.2	-5.3	.2	-4.6	-16.6	-12.0
3	---	---	---	---	---	---	9.2	-7.9	-1.4	-9.0	-20.7	-13.4
4	---	---	---	---	---	---	3.9	-3.8	-.3	-2.1	-17.4	-9.2
5	---	---	---	---	---	---	-3.5	-16.2	-7.6	.4	-12.5	-5.5
6	---	---	---	---	---	---	-8.3	-19.3	-14.9	6.0	-12.5	-5.5
7	---	---	---	---	---	---	-9.8	-22.1	-17.2	4.2	-6.4	-1.5
8	---	---	---	---	---	---	2.5	-21.6	-11.6	-5.3	-16.6	-9.4
9	---	---	---	---	---	---	-9.8	-18.8	-13.7	.4	-16.2	-9.9
10	---	---	---	---	---	---	-2.4	-19.3	-14.6	2.1	-12.9	-7.0
11	---	---	---	-4.2	-12.1	-6.7	1.8	-16.6	-9.5	6.0	-10.1	-4.2
12	---	---	---	6.0	-9.4	-3.8	.0	-12.1	-7.8	.4	-12.5	-5.9
13	---	---	---	6.0	-10.5	-4.2	7.4	-10.9	-3.9	-2.1	-14.1	-10.4
14	---	---	---	8.5	-6.0	-.6	6.4	-9.0	-2.7	3.2	-14.9	-7.4
15	---	---	---	9.9	-4.2	1.5	8.5	-10.9	-5.2	5.3	-9.0	-3.6
16	---	---	---	10.6	-6.4	-.4	5.7	-8.6	-4.2	-1.7	-8.6	-5.5
17	---	---	---	9.2	-3.8	1.7	7.8	-8.3	-2.2	-3.8	-6.4	-5.5
18	---	---	---	3.2	-10.9	-3.9	4.9	-9.4	-3.4	3.9	-4.2	-.8
19	---	---	---	-1.4	-14.9	-7.6	-.3	-8.6	-3.9	2.8	-3.1	-.9
20	---	---	---	3.9	-16.2	-8.8	-3.5	-9.0	-6.9	-2.4	-9.4	-4.6
21	---	---	---	8.5	-11.7	-1.7	-8.6	-23.1	-16.0	-6.0	-10.9	-8.1
22	---	---	---	11.0	-4.6	1.2	-6.0	-18.3	-12.5	-4.6	-15.3	-10.8
23	---	---	---	9.5	-4.6	1.2	-7.9	-19.3	-15.5	2.1	-9.4	-3.2
24	---	---	---	6.4	-5.3	.7	-4.2	-20.2	-13.3	4.2	-4.2	.1
25	---	---	---	7.4	-7.5	-2.2	-1.0	-17.9	-11.0	4.2	-4.2	.3
26	---	---	---	13.1	-5.3	1.2	2.1	-11.3	-4.7	-.3	-17.0	-7.9
27	---	---	---	12.8	-3.1	2.4	-3.1	-12.5	-7.7	-5.7	-17.9	-11.0
28	---	---	---	7.4	-3.5	.2	.4	-12.9	-3.1	-4.9	-20.7	-14.4
29	---	---	---	3.2	-8.3	-1.9	3.9	-9.8	-4.2	1.1	-17.9	-11.0
30	---	---	---	7.4	-9.0	-1.7	4.2	-9.0	-4.4	3.9	-14.1	-6.8
31	---	---	---	---	---	---	4.9	-6.4	-1.0	3.5	-7.9	-2.9
MONTH	---	---	---	---	---	---	9.2	-23.1	-7.2	6.0	-20.7	-6.6

375546107412000 IRONTON METEOROLOGICAL STATION NEAR OURAY, CO--Continued

TEMPERATURE, AIR, DEGREES CELSIUS, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	-5.7	-15.7	-9.3	7.1	-7.5	-.3	-4.6	-7.1	-5.7	.4	-2.8	-2.0
2	-1.4	-18.8	-10.3	1.4	-9.8	-3.6	-2.8	-10.5	-8.2	4.9	-4.2	.3
3	2.5	-8.3	-3.4	6.7	-8.6	.0	-5.3	-12.1	-9.6	.7	-4.2	-1.8
4	4.2	-8.3	-2.3	4.2	-4.2	-.3	-4.6	-11.3	-8.5	-4.2	-7.5	-6.0
5	-1.0	-9.8	-4.5	-3.8	-8.3	-6.1	.7	-12.1	-6.1	-3.8	-10.5	-7.0
6	.0	-9.0	-5.3	2.1	-8.3	-1.8	2.8	-8.3	-2.6	1.4	-14.1	-5.6
7	7.1	-6.0	-.6	1.4	-6.8	-3.1	7.8	-7.9	.0	9.5	-9.4	.6
8	6.4	-7.1	-1.5	-1.0	-10.1	-6.3	3.9	-10.1	-3.6	12.8	-1.0	6.3
9	5.3	-7.1	-.5	.0	-7.1	-3.4	-3.1	-10.9	-6.8	9.2	.7	5.9
10	.4	-17.4	-6.7	2.8	-12.1	-3.4	.4	-16.2	-8.0	2.8	-5.3	.1
11	-12.1	-20.7	-17.9	2.5	-6.8	-2.4	5.7	-12.9	-2.0	4.2	-6.0	-1.7
12	3.5	-18.8	-8.5	-4.6	-8.3	-6.8	9.5	-2.8	3.1	10.2	-7.1	2.7
13	9.2	-10.9	-2.9	1.8	-14.9	-6.3	7.1	-2.8	3.0	13.1	2.1	7.5
14	3.5	-8.3	-2.7	9.5	-10.9	-1.5	1.8	-6.8	-1.7	9.5	1.8	6.0
15	-3.5	-16.2	-7.3	8.8	-6.4	.9	-4.2	-13.3	-7.2	8.5	-.7	5.5
16	-1.4	-17.9	-9.5	8.5	-7.1	.0	-3.1	-13.3	-7.0	9.5	-3.5	3.2
17	-1.7	-9.8	-4.8	8.1	-7.5	-.4	4.2	-8.6	-2.7	10.2	-7.5	1.6
18	1.1	-14.9	-5.0	5.3	-8.6	-.9	8.8	-5.7	1.4	13.1	-2.8	5.8
19	.4	-13.7	-4.4	8.1	-5.3	.6	11.7	-3.1	3.8	13.5	1.1	8.0
20	-1.4	-17.9	-8.8	9.2	-4.9	2.0	11.3	-2.1	4.1	13.9	-1.4	6.8
21	1.8	-8.6	-3.1	8.8	-3.5	2.5	5.7	-4.9	-.6	15.0	-1.4	7.5
22	-2.8	-17.9	-11.6	5.7	-6.0	-.7	.4	-4.6	-2.0	15.8	.7	7.6
23	1.8	-17.4	-8.0	6.4	-8.3	-.6	3.2	-1.0	.9	15.8	1.4	8.1
24	6.0	-12.1	-4.1	8.5	-7.5	.1	3.2	-5.3	-.2	10.2	-.3	4.0
25	6.0	-9.0	-1.7	8.8	-4.9	1.8	1.4	-7.5	-3.0	10.2	-2.1	2.8
26	1.4	-7.5	-2.8	7.1	-4.9	.7	3.2	-5.3	-1.2	11.3	-1.4	4.3
27	2.1	-13.7	-5.0	4.9	-4.9	1.0	8.8	-1.7	3.4	10.2	-.7	4.1
28	4.2	-10.9	-3.9	4.2	-9.0	-2.3	6.4	-1.0	1.2	15.4	-1.0	6.6
29	---	---	---	9.9	-7.9	.8	6.0	-1.4	2.1	11.0	.4	5.3
30	---	---	---	7.1	-3.5	2.6	4.6	-2.8	.4	12.1	.4	6.7
31	---	---	---	3.2	-5.7	-1.2	---	---	---	11.7	1.4	7.8
MONTH	9.2	-20.7	-5.6	9.9	-14.9	-1.2	11.7	-16.2	-2.1	15.8	-14.1	3.3

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	13.1	-1.0	6.5	22.9	6.0	14.8	16.5	4.6	10.9	13.9	5.3	8.3
2	11.0	2.5	6.7	20.5	7.4	14.5	17.3	5.3	9.7	12.4	3.5	7.1
3	12.4	.0	7.2	18.1	7.1	13.1	12.8	7.4	10.0	13.1	1.1	7.0
4	12.1	-2.4	6.5	18.9	6.7	12.6	15.0	6.4	9.5	15.0	-.7	6.2
5	2.5	-3.5	-1.5	22.1	6.4	15.0	12.8	5.7	9.4	16.1	-.7	7.3
6	11.7	-3.5	4.1	20.1	8.5	14.0	15.0	6.0	10.1	16.9	1.4	8.7
7	15.4	-.7	7.7	18.9	7.4	12.9	16.9	2.8	9.9	16.5	1.8	8.6
8	14.6	1.1	8.2	16.1	8.1	11.4	19.7	3.2	10.9	17.7	.7	8.6
9	15.4	-.7	7.8	16.5	6.7	11.0	14.6	6.4	10.1	17.7	1.4	9.0
10	14.3	.4	7.6	19.7	3.9	11.9	14.6	6.4	9.0	15.4	5.3	9.9
11	14.3	-1.7	6.8	18.1	5.3	9.6	15.4	2.8	9.2	13.5	1.8	6.4
12	13.1	-.3	6.6	19.3	3.2	10.7	15.4	.4	7.9	15.0	.0	7.0
13	17.7	.0	9.1	19.7	5.7	11.8	18.5	1.4	9.9	15.4	-1.4	7.0
14	13.1	1.8	6.4	13.9	7.1	10.0	17.7	5.3	10.3	12.8	1.4	5.4
15	12.8	1.8	6.6	13.1	4.9	9.0	16.1	4.9	9.2	8.5	1.4	4.1
16	17.3	3.9	8.7	17.7	2.5	10.4	16.5	3.5	9.4	11.3	.4	4.7
17	12.4	1.1	5.3	16.5	4.6	10.8	16.1	5.7	9.6	12.4	1.1	5.8
18	15.0	1.1	8.1	12.1	7.4	9.6	16.9	4.2	9.8	13.1	1.4	6.6
19	18.1	2.1	10.3	13.1	6.7	8.8	17.3	5.7	9.8	8.8	1.1	4.1
20	17.7	4.9	10.1	17.7	4.6	11.6	15.4	6.4	10.0	9.9	-.7	4.3
21	15.8	4.9	10.0	17.7	6.0	10.8	15.4	7.1	10.6	12.1	-3.8	3.1
22	17.7	3.5	10.2	14.3	5.3	9.9	17.3	6.0	10.8	14.6	-.7	6.7
23	18.9	3.5	12.0	18.9	4.9	11.6	16.5	4.9	9.7	8.5	2.8	5.2
24	19.7	3.9	12.2	17.7	6.4	10.8	18.5	4.9	10.7	9.5	2.8	4.5
25	19.7	5.7	13.0	16.5	6.0	11.1	16.1	4.9	9.8	16.1	2.8	8.8
26	19.7	3.5	12.8	17.7	6.4	11.1	19.3	4.2	10.7	18.1	3.9	10.2
27	19.3	3.5	11.9	18.5	6.7	11.6	18.5	7.1	10.6	10.6	-1.7	5.1
28	20.5	3.5	12.4	20.1	6.7	11.4	13.9	6.0	9.7	3.9	-6.4	-2.1
29	19.3	4.9	13.0	16.9	6.0	10.9	18.5	6.0	11.1	13.1	-6.4	3.8
30	20.9	4.6	13.4	16.1	6.0	10.6	16.5	6.0	10.8	15.8	-2.4	5.3
31	---	---	---	16.5	4.2	9.4	15.4	6.4	9.7	---	---	---
MONTH	20.9	-3.5	8.7	22.9	2.5	11.4	19.7	.4	10.0	18.1	-6.4	6.2

375546107412000 IRONTON METEOROLOGICAL STATION NEAR OURAY, CO--Continued

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.4	.0	.0	.5	.1	.0	.6	.0	.0	.0	.0	.3
2	.0	.3	.0	.0	.0	.0	.3	.0	.0	.0	.3	.3
3	.3	.0	.0	.0	.0	.0	.3	.0	.0	.0	.1	.2
4	.6	.0	.0	.0	.1	.0	.0	.0	.0	.0	.3	.0
5	.2	.0	.3	.0	.2	.0	.1	.0	.0	.0	.0	.0
6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7	.0	.1	.1	.0	.0	.3	.0	.0	.0	.0	.0	.0
8	.0	.9	.0	.0	.0	.3	.0	.0	.0	.0	.2	.0
9	.0	.8	.0	.0	.0	.0	.1	.0	.0	.0	.2	.0
10	.0	.0	.6	.0	.6	.0	.0	.0	.0	.0	.6	.0
11	.0	.2	.0	.0	.1	.0	.0	.0	.0	.6	.1	.0
12	.0	.0	.0	.0	1.4	.5	.0	.0	.0	.0	.0	.0
13	.0	.0	.0	.0	.0	.4	.0	.0	.0	.0	.0	.0
14	.0	.0	.0	.0	.0	.0	.0	.0	.2	.1	.0	.4
15	.0	.0	.0	.0	.1	.0	.0	.0	.3	.1	.3	.3
16	.2	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.3
17	.1	.0	.0	.2	.1	.0	.0	.0	.0	.0	.4	.0
18	.0	.0	.0	.0	.0	.0	.0	.0	.0	.6	.1	.0
19	.0	.0	.0	.1	.0	.0	.0	.0	.0	.4	.4	.1
20	.3	.0	.3	.3	.0	.0	.0	.0	.0	.0	.1	.1
21	.3	.0	.3	.6	.1	.0	.6	.0	.0	.3	.1	.0
22	.0	.0	.0	.3	.1	.0	.3	.0	.0	.1	.0	.0
23	.1	.0	.0	.2	.0	.0	.9	.0	.0	.0	.0	.2
24	.0	.0	.0	.0	.0	.0	.1	.0	.0	.5	.0	.3
25	1.1	.0	.0	.2	.0	.0	.0	.0	.0	.3	.0	.0
26	.5	.0	.0	.2	.0	.0	.0	.0	.0	.6	.1	.0
27	.2	.0	.0	.2	.0	.0	.0	.0	.0	.0	.3	.0
28	.0	.2	.0	.0	.0	.0	.0	.0	.0	.2	.2	.0
29	.0	.1	.0	.0	---	.0	.0	.0	.0	.0	.1	.0
30	.2	.0	.0	.0	---	.0	.0	.0	.0	.3	.1	.0
31	.0	---	.0	.0	---	.1	---	.0	---	.2	.2	---
TOTAL	4.5	2.6	1.6	2.9	2.9	1.6	3.3	0.0	0.5	4.3	4.2	2.5

375852107455200 GOVERNOR BASIN METEOROLOGICAL STATION NEAR TELLURIDE, CO

LOCATION.--Lat 37°58'52", long 107°45'52", Ouray County, Hydrologic Unit 14020006, 0.4 mi east of Stony Mountain, and 4.5 mi north of Telluride.

PERIOD OF RECORD.--October 1992 to current year.

GAGE.--Weighing-bucket rain gage with satellite telemetry. Elevation of gage is 11,150 ft above sea level, from topographic map.

REMARKS.--Unpublished air-temperature and rainfall data for water year 1993 are available in district office. Daily record for air temperature is good. Daily record for accumulated rainfall is good.

EXTREMES FOR PERIOD OF RECORD.--
AIR TEMPERATURE: Maximum recorded, 21.3°C, June 26, 1994, June 29, 1998; minimum recorded, -31.7°C, Dec. 17, 18, 1996.
PRECIPITATION: Maximum daily, 2.7 inches, Oct. 3, 1996.

EXTREMES FOR CURRENT YEAR.--
AIR TEMPERATURE: Maximum recorded, 19.3°C, July 1, 5; minimum, -22.6°C, Dec. 21, Feb. 11.
PRECIPITATION: Maximum daily, 1.3 inches, Nov. 8.

TEMPERATURE, AIR, DEGREES CELSIUS, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	6.7	-1.4	2.3	4.2	-6.8	-1.9	5.3	-2.8	.8	-5.3	-14.9	-8.9
2	8.1	-1.4	2.0	-2.1	-6.0	-4.2	3.9	-4.2	-.8	-6.8	-17.4	-11.5
3	6.4	-.3	3.8	---	---	---	4.2	-4.9	-1.4	-12.1	-20.7	-15.6
4	-.3	-7.9	-4.6	-2.1	-12.5	-7.5	.7	-5.3	-1.5	-3.8	-15.7	-9.3
5	-2.8	-10.5	-7.2	---	---	---	-5.3	-14.5	-9.2	-3.8	-11.7	-6.8
6	5.7	-10.5	-2.1	-3.1	-9.8	-6.3	-13.7	-18.8	-16.3	-.3	-11.3	-5.3
7	11.3	-1.0	5.0	-5.7	-11.7	-8.6	-16.2	-22.1	-19.6	-1.0	-8.3	-4.3
8	12.1	1.8	6.1	-4.9	-6.8	-6.0	-3.5	-18.3	-11.0	-6.8	-16.6	-11.2
9	11.7	1.1	5.4	-6.0	-15.3	-11.9	-10.9	-18.3	-13.9	-4.6	-13.7	-9.4
10	9.5	.0	4.7	-8.6	-18.3	-13.4	-9.8	-17.9	-14.4	-2.4	-12.1	-6.9
11	11.3	-2.4	3.9	-5.3	-9.8	-6.6	-4.2	-12.5	-9.0	2.1	-7.1	-3.0
12	11.3	2.1	6.0	-1.0	-8.6	-5.4	-3.8	-9.4	-7.2	-4.2	-12.1	-6.8
13	11.7	1.4	7.0	1.4	-8.6	-4.2	1.1	-7.5	-3.0	-4.6	-13.3	-9.9
14	11.0	4.9	7.6	4.2	-4.2	-.4	2.5	-6.8	-3.4	.0	-12.5	-5.1
15	6.0	-1.4	3.6	6.7	-1.7	1.5	-1.0	-7.5	-5.2	1.8	-7.5	-3.4
16	.4	-8.3	-4.1	5.3	-3.5	.4	-.7	-6.8	-4.2	-3.8	-8.6	-6.5
17	-1.4	-9.0	-6.0	3.9	-4.9	.6	1.8	-6.0	-2.2	-5.3	-7.9	-7.0
18	6.0	-6.8	-1.5	-.7	-10.9	-6.5	.0	-6.4	-3.5	.4	-5.3	-2.7
19	7.1	-2.8	1.1	-3.8	-14.1	-9.6	-2.4	-8.6	-4.9	-1.7	-5.3	-3.8
20	4.6	-1.7	.8	-1.4	-14.9	-8.1	-6.0	-10.9	-9.0	-4.2	-7.5	-6.1
21	3.2	-2.1	.5	3.5	-6.8	-.2	-10.9	-22.6	-17.2	-7.1	-12.9	-10.1
22	4.2	.7	2.0	6.0	-3.8	.5	-7.9	-16.2	-12.1	-8.6	-16.6	-13.0
23	2.5	-2.4	.2	5.7	-2.8	.9	-10.5	-18.3	-15.0	-1.4	-9.8	-5.0
24	5.3	-5.7	-.9	1.8	-5.7	-.6	-8.3	-18.3	-11.8	.0	-3.8	-2.2
25	3.5	-1.4	.7	3.5	-6.4	-2.1	-5.3	-17.0	-10.6	2.1	-4.2	-.3
26	2.5	-1.7	.0	6.4	-3.1	1.1	-2.1	-9.4	-4.8	-4.2	-14.9	-9.5
27	---	---	---	6.0	-.7	2.0	-6.4	-9.8	-8.1	-10.9	-17.9	-13.5
28	-.7	-7.5	-3.8	4.9	-3.1	.6	-1.4	-7.9	-4.4	-8.6	-18.3	-14.6
29	4.2	-7.9	-1.8	-1.4	-9.4	-4.1	-1.4	-9.4	-5.1	-5.3	-14.1	-10.6
30	2.5	-3.5	-.5	3.2	-8.3	-2.2	1.4	-6.8	-3.1	-1.4	-10.1	-7.1
31	1.8	-4.6	-2.3	---	---	---	1.8	-5.3	-1.2	.7	-7.1	-3.7
MONTH	---	---	---	---	---	---	5.3	-22.6	-7.5	2.1	-20.7	-7.5

375852107455200 GOVERNOR BASIN METEOROLOGICAL STATION NEAR TELLURIDE, CO--Continued

TEMPERATURE, AIR, DEGREES CELSIUS, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	-4.9	-17.0	-11.0	4.2	-4.9	-1.4	-6.0	-9.0	-7.1	-.3	-6.0	-3.4
2	-4.2	-17.4	-9.8	-1.0	-8.6	-4.9	-5.3	-12.5	-9.9	1.1	-5.3	-1.6
3	-1.7	-8.6	-4.1	3.2	-7.5	-2.1	-9.8	-14.1	-11.9	-1.0	-6.0	-3.8
4	.7	-5.3	-2.5	-.3	-7.1	-3.3	-7.1	-14.1	-10.7	-6.0	-9.8	-8.2
5	-3.5	-10.1	-6.1	-6.4	-9.0	-7.8	-3.1	-14.9	-8.8	-4.9	-12.5	-8.9
6	-4.6	-10.1	-7.2	-1.0	-7.1	-3.7	.0	-8.3	-3.1	-1.0	-17.4	-7.4
7	3.2	-5.3	-1.6	-1.0	-9.0	-4.7	3.5	-9.4	-.7	6.4	-7.9	.1
8	1.4	-7.1	-2.8	-6.0	-11.3	-8.6	.4	-12.5	-6.7	8.1	-1.7	4.7
9	1.4	-5.7	-1.9	-1.4	-6.4	-4.6	-4.9	-13.3	-8.9	5.3	-2.4	3.3
10	-1.7	-19.3	-8.3	-.3	-12.1	-5.6	-3.1	-16.6	-10.0	.4	-7.1	-2.5
11	-15.3	-22.6	-18.9	-1.4	-8.6	-4.2	1.8	-9.8	-2.4	1.1	-7.1	-3.6
12	-.7	-15.3	-7.4	-6.8	-10.1	-8.7	6.0	-2.1	2.0	6.4	-5.3	1.4
13	4.9	-5.7	-1.8	.4	-15.3	-7.3	3.9	-2.4	.7	9.5	3.5	6.1
14	.4	-6.8	-3.1	4.9	-7.9	-1.7	-.7	-8.3	-4.2	6.0	2.1	4.2
15	-3.5	-15.3	-8.4	6.4	-4.2	.9	-6.8	-14.9	-9.7	6.0	-1.0	3.4
16	-4.9	-12.9	-8.6	4.6	-6.0	-1.0	-5.7	-14.9	-9.5	4.9	-5.3	1.2
17	-2.8	-8.6	-5.8	3.9	-6.0	-1.6	1.8	-10.9	-4.4	7.1	-9.0	-.1
18	-3.5	-15.3	-7.3	2.1	-7.9	-3.0	6.0	-3.8	1.4	11.0	-1.4	5.4
19	-3.8	-15.3	-6.6	4.6	-6.4	-1.1	8.5	-2.1	3.2	10.2	2.5	6.4
20	-4.2	-17.4	-10.1	5.3	-4.2	.8	7.8	-2.1	2.7	9.5	-1.0	5.0
21	-.3	-6.0	-3.4	6.0	-2.8	.9	2.8	-6.4	-2.3	11.3	1.4	6.4
22	-6.0	-16.2	-13.1	2.8	-6.4	-2.4	-.7	-5.7	-3.9	11.7	2.5	6.1
23	-1.7	-14.9	-7.6	3.9	-6.4	-2.2	2.8	-2.1	-.4	12.8	.0	6.3
24	2.1	-10.1	-4.4	4.2	-9.4	-2.0	1.1	-7.1	-1.7	7.8	-1.7	2.8
25	1.4	-6.8	-2.4	6.0	-3.1	1.6	-1.7	-9.4	-5.6	6.7	-1.4	1.9
26	-2.4	-8.6	-5.5	3.9	-2.8	.1	1.8	-6.8	-2.2	7.8	-1.4	2.5
27	-1.0	-10.1	-6.1	2.1	-6.8	-1.5	5.7	-1.4	2.4	7.8	.0	3.0
28	2.1	-8.6	-3.2	1.4	-8.6	-3.7	3.5	-2.8	.7	9.9	.4	5.5
29	---	---	---	7.8	-6.4	.7	3.2	-2.8	-.6	8.5	2.8	4.7
30	---	---	---	2.8	-.7	1.4	1.4	-5.3	-2.5	9.2	1.4	5.6
31	---	---	---	.4	-6.4	-2.7	---	---	---	7.8	2.5	5.6
MONTH	4.9	-22.6	-6.4	7.8	-15.3	-2.7	8.5	-16.6	-3.8	12.8	-17.4	1.7

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	10.2	1.4	5.4	19.3	10.6	17.7	12.8	4.9	8.6	10.6	5.7	8.0
2	8.1	2.1	4.9	16.9	8.5	13.3	12.4	5.7	8.0	9.2	2.8	5.9
3	7.8	-1.7	4.5	15.4	7.8	11.5	9.9	6.0	8.0	9.9	1.8	5.9
4	8.1	-3.1	4.8	16.1	7.1	11.7	12.4	5.7	7.7	11.0	1.4	5.8
5	-1.4	-5.7	-3.6	19.3	7.8	13.8	9.9	5.7	7.7	13.1	1.4	6.7
6	8.1	-4.9	3.0	16.9	7.4	12.3	10.6	5.3	7.7	13.5	3.2	8.3
7	11.3	2.8	7.5	13.9	7.8	10.6	14.6	3.5	8.8	13.5	4.2	8.6
8	11.3	2.5	7.9	12.4	8.1	9.7	15.4	5.3	10.2	14.6	3.9	8.8
9	11.7	.7	6.3	11.3	6.7	9.0	12.4	5.7	9.0	14.6	4.6	9.1
10	10.6	1.4	6.3	16.5	5.7	11.0	11.3	5.7	7.9	12.1	4.6	7.8
11	10.2	-.3	5.3	14.3	4.6	8.1	10.6	3.9	7.4	11.0	2.8	6.1
12	11.0	1.4	6.0	16.1	3.9	9.8	12.8	1.8	7.3	10.2	1.8	6.3
13	13.5	2.5	8.1	14.6	6.4	10.6	16.1	2.8	9.4	12.8	1.8	7.1
14	11.3	1.8	6.0	10.6	6.7	8.6	13.9	6.0	9.6	9.9	1.1	4.5
15	9.9	1.8	5.9	9.9	3.9	7.2	10.6	4.6	7.5	6.0	.7	2.6
16	14.3	2.5	7.2	14.6	3.9	9.0	13.9	4.2	8.5	7.1	.4	3.3
17	8.1	.4	3.7	15.0	6.0	10.1	12.4	5.7	8.8	8.5	.7	4.3
18	12.8	1.8	7.3	9.9	5.3	7.8	13.5	5.7	9.4	10.2	1.8	4.6
19	14.6	4.2	9.3	9.5	5.3	7.3	13.9	4.6	8.2	3.9	.7	2.3
20	13.9	4.9	8.3	14.3	4.2	9.8	13.1	5.7	8.5	7.4	-.7	3.5
21	11.7	3.9	7.5	14.3	6.7	9.4	12.8	6.0	8.9	8.5	-2.8	2.7
22	13.1	2.5	8.8	11.0	5.3	8.3	13.9	4.9	9.5	12.1	-.3	5.9
23	15.4	5.7	10.7	14.6	5.3	9.7	15.0	6.0	8.5	5.3	1.8	4.1
24	16.9	5.7	10.8	13.9	6.7	10.0	15.8	6.0	9.2	8.1	1.8	4.1
25	16.5	7.1	11.7	13.9	5.7	9.5	13.9	5.3	8.9	12.8	4.6	8.7
26	16.5	5.3	11.1	16.1	6.4	10.5	15.8	6.4	9.8	14.6	7.1	9.9
27	16.1	5.3	11.2	15.4	6.7	10.8	13.1	6.4	8.9	7.8	-1.4	4.7
28	17.3	6.7	12.2	15.4	6.7	10.3	10.6	5.7	8.0	.4	-6.8	-3.2
29	16.9	7.1	12.2	13.5	6.7	9.4	14.3	5.3	9.6	12.8	-3.8	4.1
30	---	---	---	13.9	5.3	8.9	15.0	6.4	9.6	13.1	-.3	6.6
31	---	---	---	13.5	4.9	8.5	13.1	6.4	9.1	---	---	---
MONTH	---	---	---	19.3	3.9	10.1	16.1	1.8	8.7	14.6	-6.8	5.6

375852107455200 GOVERNOR BASIN METEOROLOGICAL STATION NEAR TELLURIDE, CO--Continued

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.0	.0	.0	1.0	.0	.0	.4	.0	.0	.0	.5	.2
2	.0	.4	.0	.0	.0	.0	.6	.0	.0	.0	.3	.5
3	.3	.0	.0	.0	.0	.0	.2	.0	.0	.0	.1	.4
4	.7	.0	.0	.0	.0	.0	.1	.0	.0	.0	.3	.0
5	.3	.0	.3	.0	.0	.0	.2	.0	.0	.0	.1	.0
6	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7	.0	.2	.0	.0	.0	.2	.0	.0	.0	.7	.0	.0
8	.0	1.3	.0	.0	.3	.3	.1	.0	.0	.0	.0	.0
9	.0	.7	.1	.0	.0	.0	.1	.0	.0	.2	.2	.0
10	.0	.0	.0	.0	.2	.0	.1	.0	.0	.0	.3	.0
11	.0	.6	.0	.0	.1	.1	.0	.0	.0	.7	.4	.0
12	.0	.1	.0	.0	.0	.3	.0	.0	.0	.0	.0	.0
13	.0	.0	.0	.0	.0	.8	.0	.0	.0	.0	.0	.0
14	.0	.0	.0	.0	.0	.0	.1	.0	.0	.2	.2	.5
15	.0	.0	.0	.0	.1	.0	.0	.0	.0	.5	.3	.6
16	.3	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.4
17	.2	.0	.0	.1	.2	.0	.0	.0	.0	.0	.2	.0
18	.0	.0	.0	.1	.0	.0	.0	.0	.0	.7	.1	.2
19	.0	.0	.0	.3	.0	.0	.0	.0	.0	.3	.7	.5
20	.2	.0	.4	.5	.0	.0	.0	.0	.0	.0	.4	.1
21	.1	.0	.4	.3	.2	.0	.9	.0	.0	.2	.3	.0
22	.0	.0	.0	.0	.1	.0	.4	.0	.0	.1	.0	.0
23	.1	.0	.0	.3	.0	.0	.2	.0	.0	.1	1.1	.4
24	.0	.0	.0	.0	.0	.0	.0	.0	.0	.5	.4	.2
25	.9	.0	.0	.1	.0	.0	.0	.0	.0	.8	.2	.0
26	.3	.0	.0	.0	.0	.0	.0	.0	.0	.1	.2	.0
27	.3	.0	.0	.1	.0	.1	.0	.0	.0	.0	.4	.0
28	.1	.2	.0	.0	.0	.0	.0	.0	.0	.3	.5	.0
29	.0	.1	.0	.0	---	.0	.0	.0	.0	.5	.0	.0
30	.2	.0	.0	.5	---	.0	.0	.0	.0	.4	.2	.0
31	.0	---	.1	.0	---	.0	---	.0	---	.1	.3	---
TOTAL	4.0	3.8	1.3	3.5	1.2	1.8	3.4	0.0	0.0	6.4	7.7	4.0

380102107402200 OURAY METEOROLOGICAL STATION AT OURAY, CO

LOCATION.--Lat 38°01'02", long 107°40'22", in SW$^{1}/_{4}$ sec.31,T.43 N, R.7 W., Ouray County, Hydrologic Unit 14020006, 0.4 mi southwest of post office in Ouray.

PERIOD OF RECORD.--December 1992 to current year.

GAGE.--Weighing-bucket rain gage with satellite telemetry. Elevation of gage is 7,960 ft above sea level, from topographic map.

REMARKS.--Unpublished air-temperature and rainfall data for water year 1993 are available in district office. Daily record for air temperature is good. Daily record for precipitation is good.

EXTREMES FOR PERIOD OF RECORD.--
AIR TEMPERATURE: Maximum recorded, 31.1°C, June 29, 1998; minimum recorded, -24.1°C, Dec. 17, 18, 1996.
PRECIPITATION: Maximum daily, 2.2 inches, Oct. 3, 1996.

EXTREMES FOR CURRENT YEAR.--
AIR TEMPERATURE: Maximum, 29.2°C, July 1, 5; minimum, -19.7°C, Dec. 21.
PRECIPITATION: Maximum daily, 1.7 inches, Jan. 21.

TEMPERATURE, AIR, DEGREES CELSIUS, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	11.7	3.5	7.4	10.2	.7	4.4	12.8	1.8	7.3	-.7	-8.6	-4.2
2	15.0	2.8	8.7	4.6	-1.4	1.4	11.0	.7	4.5	.7	-9.4	-6.3
3	14.6	4.2	11.0	4.9	-2.1	.6	10.2	-2.4	2.7	-5.3	-13.7	-8.9
4	6.4	-.7	1.8	4.2	-4.6	-1.0	8.5	1.1	5.6	.7	-10.1	-4.8
5	5.3	-2.8	-.5	7.8	-4.2	1.4	2.8	-10.5	-4.0	4.6	-5.3	-1.1
6	11.7	-3.8	2.8	6.0	-3.1	1.6	-7.5	-13.7	-10.5	4.9	-6.0	-2.0
7	18.5	1.1	8.9	2.5	-4.6	-1.4	-8.3	-15.3	-11.9	7.1	-3.1	1.0
8	20.9	6.0	13.3	2.1	-3.5	.3	-2.8	-16.6	-9.9	-.3	-9.4	-4.0
9	20.1	7.1	12.6	-3.5	-8.6	-6.6	-7.5	-13.3	-9.8	1.8	-9.4	-4.8
10	18.1	5.3	12.1	-3.5	-11.3	-8.1	-6.0	-14.1	-10.8	2.8	-6.0	-2.3
11	18.5	3.5	10.1	-3.1	-9.4	-5.6	-1.0	-12.9	-6.7	8.1	-2.4	.7
12	19.7	8.8	13.3	2.8	-5.7	-2.4	5.7	-7.9	-2.4	3.9	-2.8	.8
13	20.5	7.8	14.6	4.9	-6.4	-1.0	6.0	-7.1	-.6	-.7	-7.5	-4.2
14	20.1	12.8	15.8	7.8	-1.4	2.8	6.4	-3.1	2.2	4.6	-9.0	-2.5
15	14.3	6.7	11.1	13.5	1.1	6.0	6.4	-5.3	-.6	5.7	-3.1	-.4
16	7.8	-3.1	2.9	10.2	.4	4.4	7.1	-3.8	.2	2.8	-6.0	-2.0
17	4.2	-3.5	-1.0	11.3	1.8	8.0	8.8	-4.2	.5	1.1	-3.5	-.9
18	9.2	-3.1	2.2	3.9	-4.6	-.4	8.1	-1.7	2.2	10.2	-.3	4.6
19	14.3	2.8	7.6	.7	-5.3	-3.0	4.2	1.4	3.1	8.1	-.7	3.3
20	14.3	4.6	8.4	2.8	-9.8	-4.0	2.8	-12.1	-1.7	3.9	-2.8	-.1
21	10.2	1.8	6.2	9.9	-4.2	2.2	-10.9	-19.7	-14.3	-1.4	-6.8	-4.4
22	9.5	3.5	6.8	14.3	.4	7.9	-7.5	-18.3	-13.2	-3.8	-9.4	-6.8
23	8.1	2.1	5.3	13.5	.4	8.2	-3.8	-16.6	-12.2	7.4	-6.0	1.9
24	12.4	-.7	5.2	11.0	.7	7.3	-1.0	-13.7	-8.3	8.8	3.2	5.4
25	10.6	1.4	6.0	10.2	-1.0	3.1	3.5	-10.5	-5.2	9.5	4.2	6.7
26	10.6	2.5	6.5	11.7	.0	5.4	5.3	-5.7	-1.2	4.6	-7.9	-2.0
27	9.2	.7	4.9	15.8	3.5	8.8	1.8	-6.0	-2.9	-2.4	-10.1	-6.0
28	7.4	-.3	2.6	13.1	1.8	7.4	4.6	-6.0	-.1	-3.5	-13.3	-9.3
29	9.9	-1.0	5.1	5.3	-1.4	2.0	6.4	-2.4	.7	-.7	-12.5	-8.0
30	10.6	2.5	5.1	9.5	-2.1	3.6	7.1	-2.8	1.1	5.7	-11.3	-4.5
31	3.2	1.8	2.7	---	---	---	8.8	-3.1	1.9	5.3	-7.1	-.1
MONTH	20.9	-3.8	7.1	15.8	-11.3	1.8	12.8	-19.7	-3.0	10.2	-13.7	-2.1

380102107402200 OURAY METEOROLOGICAL STATION AT OURAY, CO--Continued

TEMPERATURE, AIR, DEGREES CELSIUS, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	1.1	-9.0	-3.8	11.0	-.3	5.4	1.1	-4.9	-1.7	4.2	-.3	.8
2	2.5	-11.3	-4.8	6.0	-3.1	1.3	-3.1	-6.0	-5.0	10.2	-1.0	4.7
3	6.0	-3.8	.1	12.8	-1.4	5.2	-1.0	-7.5	-4.4	6.7	-1.0	3.0
4	8.8	-3.5	3.9	9.5	.0	5.0	-2.1	-5.7	-4.1	-.3	-3.5	-2.0
5	5.3	-3.1	.8	1.4	-3.8	-1.5	4.2	-6.4	-1.2	2.5	-6.0	-2.5
6	3.5	-4.6	-1.4	8.1	-4.2	2.4	8.8	-.3	4.6	6.4	-7.9	-.4
7	9.5	-3.8	2.0	6.7	-2.8	2.3	12.4	-2.1	6.8	14.6	-1.7	6.1
8	8.1	-1.4	2.9	3.2	-3.8	-1.7	7.4	-4.2	1.2	18.9	4.2	12.0
9	10.6	2.1	6.1	5.3	-1.4	2.5	2.8	-4.9	-.6	15.0	5.3	12.1
10	6.7	-12.9	-2.1	6.0	-3.8	1.3	3.2	-7.5	-2.4	7.8	-2.4	2.9
11	-6.4	-15.7	-13.2	7.4	-2.8	3.8	11.0	-4.6	3.4	9.2	-1.4	2.6
12	3.9	-15.3	-6.0	-2.8	-4.2	-3.4	16.5	3.5	9.3	15.8	-.7	8.1
13	9.5	-7.1	1.0	4.6	-9.0	-2.4	12.4	3.9	8.6	18.5	9.2	13.8
14	8.5	.0	4.0	12.4	-4.9	3.4	7.1	-1.4	3.4	16.1	10.2	13.0
15	3.5	-7.5	-1.7	13.9	4.2	8.0	1.1	-6.0	-1.9	15.8	8.1	12.2
16	4.2	-9.4	-2.9	12.4	.7	6.0	2.8	-8.6	-2.1	14.3	1.8	9.2
17	4.9	-3.8	.5	11.3	.4	5.3	9.2	-2.8	2.6	14.6	-1.4	6.7
18	4.2	-5.7	-.1	10.2	-1.0	4.6	15.0	1.1	7.3	20.1	4.6	13.2
19	4.2	-6.4	-.3	11.7	.4	5.6	18.1	3.5	10.3	20.1	9.9	14.7
20	1.1	-9.8	-4.4	14.6	2.5	8.6	17.3	5.7	10.9	19.3	7.8	13.7
21	7.8	-6.0	1.5	14.6	4.2	9.0	9.9	.4	3.1	20.5	10.2	15.3
22	3.5	-9.4	-5.8	10.2	-.3	5.0	2.8	-.7	.3	21.3	11.3	14.9
23	4.6	-9.0	-2.5	12.1	.7	6.0	7.4	-.3	2.7	21.3	7.1	14.9
24	8.1	-4.9	1.1	13.5	-1.4	5.7	8.8	-.7	3.7	15.8	4.9	10.7
25	10.2	-.3	5.5	14.6	3.9	8.9	5.3	-2.4	.7	15.4	4.6	9.3
26	6.7	-2.8	1.5	12.1	2.8	7.5	8.1	-1.4	2.5	15.8	4.9	10.1
27	5.3	-7.5	-1.5	11.7	-.3	6.4	15.0	2.5	8.6	12.8	5.3	9.5
28	9.2	-3.8	1.7	10.6	-1.7	4.2	10.6	3.2	6.8	20.1	6.0	13.2
29	---	---	---	15.8	-1.0	7.3	11.0	1.8	5.8	16.9	8.5	12.1
30	---	---	---	12.1	6.4	9.4	7.8	-.3	2.8	17.7	6.0	12.6
31	---	---	---	8.8	.0	5.8	---	---	---	18.1	10.6	14.5
MONTH	10.6	-15.7	-.6	15.8	-9.0	4.4	18.1	-8.6	2.7	21.3	-7.9	9.1

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	20.1	4.9	12.9	29.2	12.8	21.1	21.3	8.5	14.5	18.9	11.3	14.2
2	17.7	7.4	12.3	26.9	15.0	21.1	21.3	11.3	15.0	17.7	7.8	12.8
3	18.1	9.2	13.3	22.5	16.5	19.7	17.3	12.4	15.1	18.9	7.1	12.9
4	18.1	3.9	13.7	24.2	14.3	19.4	17.3	11.3	13.2	18.9	7.1	12.1
5	8.8	-1.0	2.7	29.2	15.8	22.1	18.9	10.6	13.8	20.1	6.4	12.9
6	16.5	.4	9.1	24.6	16.1	19.8	19.7	11.3	14.2	20.5	8.8	14.8
7	21.7	9.2	15.5	25.1	16.1	19.7	21.7	9.9	15.7	22.1	10.6	15.5
8	21.3	9.2	15.9	19.7	13.5	15.7	22.5	11.3	16.9	22.9	11.0	15.6
9	22.5	8.8	14.9	19.3	11.7	14.3	20.1	10.2	15.4	22.5	10.6	16.4
10	19.7	7.4	14.2	24.6	10.2	17.2	17.3	10.2	12.9	19.7	11.3	15.3
11	20.1	5.7	13.1	22.9	10.2	15.7	20.5	9.5	13.6	17.7	7.8	12.3
12	19.7	7.8	13.0	25.1	8.5	16.8	20.1	7.1	13.5	20.1	7.1	12.8
13	23.3	8.5	15.5	24.2	13.9	18.3	23.3	10.2	16.3	20.1	7.4	13.2
14	18.9	9.5	13.4	18.9	13.9	15.8	22.5	11.3	17.0	16.9	8.5	11.5
15	20.5	9.2	12.8	16.9	10.6	13.6	18.9	10.6	13.1	12.1	4.6	7.9
16	21.7	9.2	14.4	21.7	9.2	15.8	21.3	10.6	15.1	16.9	4.2	9.3
17	15.4	6.0	10.1	21.7	12.4	16.5	16.9	10.6	14.0	15.8	5.7	10.4
18	20.5	6.0	13.0	16.9	11.0	14.4	20.5	10.6	15.4	16.9	6.0	10.3
19	23.8	10.2	16.6	15.8	10.2	12.9	20.9	10.6	14.5	11.0	6.4	8.0
20	22.9	12.1	16.2	22.9	10.2	16.5	18.9	11.0	14.4	12.4	5.3	8.6
21	22.1	9.9	15.4	21.7	12.4	16.4	19.3	10.6	14.5	15.0	2.5	8.2
22	23.3	9.9	16.2	19.7	10.6	14.2	22.1	9.5	15.2	18.1	5.7	11.4
23	24.2	11.0	17.4	22.9	10.6	16.5	23.3	11.3	16.2	13.9	7.1	10.4
24	25.5	11.7	18.4	20.9	13.9	17.1	23.8	12.4	17.2	14.6	7.4	9.4
25	26.0	14.3	20.0	20.9	10.2	15.5	20.1	12.1	15.6	20.9	8.1	13.2
26	26.4	11.0	19.2	22.9	12.1	15.9	23.3	11.0	16.7	23.3	8.5	14.5
27	25.5	12.1	18.6	22.9	12.1	17.7	19.7	12.4	15.8	14.3	3.2	8.3
28	27.3	11.3	19.2	24.2	12.1	16.1	18.9	11.3	14.4	7.4	-2.4	1.8
29	25.1	13.1	19.6	20.9	10.2	15.8	22.5	12.1	15.9	16.9	-3.1	5.7
30	26.9	11.7	19.0	20.5	11.0	14.6	21.7	13.1	17.0	19.3	3.5	10.4
31	---	---	---	19.3	8.5	12.7	19.7	11.7	15.3	---	---	---
MONTH	27.3	-1.0	14.9	29.2	8.5	16.7	23.8	7.1	15.1	23.3	-3.1	11.3
YEAR	29.2	-19.7	6.5									

380102107402200 OURAY METEOROLOGICAL STATION AT OURAY, CO--Continued

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.3	.0	.0	1.1	.1	.0	.3	1.0	.0	.0	.0	.0
2	.0	.3	.0	.0	.0	.0	.4	.1	.0	.0	.2	.2
3	.2	.1	.0	.1	.0	.0	.1	.4	.0	.0	.0	.1
4	.6	.0	.0	.0	.0	.0	.2	.3	.0	.0	.1	.0
5	.2	.0	.3	.0	.1	.0	.0	.0	.0	.0	.0	.0
6	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7	.0	.1	.1	.0	.0	.3	.0	.0	.0	.0	.0	.0
8	.0	.6	.0	.0	.0	.1	.1	.0	.0	.2	.1	.0
9	.0	1.0	.0	.0	.0	.0	.0	.0	.0	.5	.1	.0
10	.0	.0	.0	.0	.4	.0	.0	.0	.0	.0	.3	.0
11	.0	.1	.0	.0	.2	.1	.0	.0	.0	.3	.1	.0
12	.0	.0	.0	.0	.0	1.0	.0	.0	.0	.0	.0	.0
13	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
14	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1
15	.0	.0	.0	.0	.2	.0	.0	.0	.0	.3	.2	.4
16	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2
17	.3	.0	.0	.0	.0	.0	.0	.0	.0	.1	.1	.0
18	.0	.0	.0	.0	.0	.0	.0	.0	.0	.4	.0	.1
19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.2	.1
20	.1	.0	.0	.2	.0	.0	.0	.0	.0	.0	.1	.0
21	.1	.0	.5	1.7	.1	.0	.5	.0	.0	.1	.1	.0
22	.0	.0	.0	.2	.0	.0	.2	.0	.0	.0	.0	.0
23	.1	.0	.0	.0	.0	.0	.6	.0	.0	.1	.0	.0
24	.0	.0	.0	.0	.0	.0	.5	.0	.0	.1	.0	.0
25	.9	.0	.0	.0	.0	.0	.1	.0	.0	.3	.0	.0
26	.1	.0	.0	.2	.0	.0	.1	.0	.0	.2	.0	.0
27	.2	.0	.0	.1	.0	.0	.0	.0	.0	.0	.4	.0
28	.0	.1	.0	.0	.0	.0	.2	.0	.0	1.2	.1	.0
29	.0	.0	.0	.0	---	.0	.1	.0	.0	.0	.1	.0
30	.2	.0	.0	.0	---	.0	.6	.0	.0	.2	.1	.0
31	.0	---	.1	.0	---	.0	---	.0	---	.0	.1	---
TOTAL	3.5	2.3	1.0	3.6	1.1	1.5	4.0	1.8	0.0	4.2	2.4	1.2

380251107513000 WEST FORK DALLAS CREEK METEOROLOGICAL STATION NEAR RIDGWAY, CO

LOCATION.--Lat 38°02'51", long 107°51'30", Ouray County, Hydrologic Unit 14020006, 5.2 mi north of Mears Peak.

PERIOD OF RECORD.--October 1992 to current year.

GAGE.--Weighing-bucket rain gage with satellite telemetry. Elevation of gage is 9,260 ft above sea level, from topographic map.

REMARKS.--Unpublished air-temperature and rainfall data for water year 1993 are available in district office. Daily record for air temperature is good. Daily record for precipitation is good.

EXTREMES FOR PERIOD OF RECORD.--
AIR TEMPERATURE: Maximum, 26.9°C, June 26, 1994, July 29, 1995, June 30, 1998; minimum, -29.8°C, Dec. 18, 1996.
PRECIPITATION: Maximum daily, 2.8 inches, Oct. 3, 1996.

EXTREMES FOR CURRENT YEAR.--
AIR TEMPERATURE: Maximum, 24.6°C, July 1, 5; minimum, -24.1°C, Dec. 21.
PRECIPITATION: Maximum daily, 1.5 inches, July 31.

TEMPERATURE, AIR, DEGREES CELSIUS, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	---	---	---	6.7	-2.1	1.5	10.6	-3.5	1.3	-3.1	-12.1	-6.4
2	---	---	---	1.4	-3.5	-1.6	9.5	-3.8	-.1	-2.4	-14.9	-10.3
3	---	---	---	.7	-5.7	-2.5	8.8	-7.1	-2.1	-7.9	-18.8	-13.3
4	---	---	---	1.8	-9.4	-4.7	5.7	-2.4	1.9	-2.8	-15.3	-9.3
5	---	---	---	5.3	-9.4	-2.4	-1.4	-13.3	-5.9	2.8	-10.9	-4.1
6	---	---	---	2.5	-5.7	-1.5	-8.6	-18.3	-13.3	4.2	-12.1	-6.4
7	---	---	---	-.3	-9.0	-4.7	-9.4	-22.1	-16.4	4.6	-4.2	.5
8	---	---	---	-.7	-3.5	-1.9	-1.4	-22.1	-12.9	-4.2	-14.9	-7.8
9	---	---	---	-3.5	-11.7	-8.5	-9.4	-15.7	-12.3	-.3	-15.3	-9.9
10	---	---	---	-4.6	-17.9	-12.1	-6.4	-19.7	-14.9	2.1	-11.7	-7.5
11	---	---	---	-2.4	-14.1	-7.2	.4	-17.0	-10.7	8.1	-11.3	-4.4
12	---	---	---	7.4	-8.6	-4.6	-.7	-12.1	-8.6	1.4	-9.4	-2.2
13	---	---	---	7.4	-10.1	-4.3	2.8	-12.9	-8.0	-1.4	-13.7	-8.8
14	---	---	---	5.3	-4.9	-1.9	3.2	-10.5	-6.5	4.9	-14.9	-7.6
15	---	---	---	8.5	-4.9	-.2	3.2	-12.5	-8.3	6.4	-10.1	-1.2
16	---	---	---	10.6	-6.4	-1.7	5.7	-9.8	-5.7	.7	-11.3	-4.7
17	---	---	---	7.8	-4.6	2.1	8.5	-9.4	-5.3	.0	-3.5	-2.3
18	---	---	---	4.6	-8.6	-2.8	5.3	-9.8	-3.1	6.4	-1.0	2.3
19	---	---	---	-1.4	-13.3	-7.5	1.8	-2.1	-.1	4.9	-1.4	.8
20	---	---	---	.4	-17.4	-10.1	-1.0	-13.3	-3.9	.7	-4.6	-1.7
21	---	---	---	8.5	-11.3	-2.9	-12.5	-24.1	-16.9	-3.1	-9.4	-6.2
22	---	---	---	10.6	-3.8	3.6	-10.5	-23.6	-16.7	-5.7	-14.1	-10.0
23	---	---	---	11.7	-4.9	2.3	-6.8	-20.7	-16.8	3.5	-9.4	-1.7
24	10.6	-4.2	.5	6.7	-3.5	3.4	-2.8	-21.1	-13.7	5.3	.7	2.8
25	8.1	-1.4	2.5	8.8	-6.8	-1.8	-1.4	-16.6	-11.1	7.1	1.1	4.0
26	4.6	-.3	1.3	13.1	-4.9	-.8	4.2	-12.5	-4.9	1.4	-12.5	-5.9
27	5.3	-1.0	1.1	10.6	-4.6	1.4	-1.7	-11.7	-6.4	-3.8	-13.7	-8.6
28	4.9	-4.2	-.9	8.1	-.3	4.5	5.3	-12.1	-1.2	-3.8	-19.7	-13.9
29	6.7	-4.9	.3	1.4	-7.1	-1.7	5.7	-6.4	-3.0	-2.4	-19.7	-13.3
30	5.3	-.3	2.0	8.8	-7.1	-2.5	6.7	-8.3	-3.7	3.9	-17.0	-9.6
31	1.8	-.7	.2	---	---	---	6.4	-9.4	-2.4	4.9	-14.1	-5.4
MONTH	---	---	---	13.1	-17.9	-2.4	10.6	-24.1	-7.5	8.1	-19.7	-5.6

380251107513000 WEST FORK DALLAS CREEK METEOROLOGICAL STATION NEAR RIDGWAY, CO--Continued

TEMPERATURE, AIR, DEGREES CELSIUS, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	-.7	-14.5	-6.8	8.5	-5.7	1.5	-1.7	-7.9	-4.2	1.1	-3.1	-1.1
2	.0	-18.3	-9.2	3.9	-7.9	-2.3	-3.8	-8.6	-6.9	5.3	-3.5	1.0
3	5.3	-9.0	-2.4	9.2	-2.1	2.7	-2.8	-10.1	-7.6	3.2	-3.1	.6
4	5.3	-9.0	-.5	---	---	---	-3.8	-9.8	-7.2	-.7	-6.8	-4.1
5	1.8	-8.6	-2.2	-1.0	-6.8	-3.9	2.8	-12.1	-5.6	-1.4	-8.3	-5.3
6	1.8	-8.6	-4.0	5.3	-6.8	-.6	7.1	-9.4	-1.2	3.9	-11.7	-3.8
7	8.8	-7.5	-1.0	4.2	-4.9	-.4	10.2	-5.7	1.9	11.7	-6.8	1.5
8	7.4	-6.8	-1.8	-.3	-9.0	-5.3	3.9	-7.9	-2.4	16.1	-2.1	6.8
9	6.7	-5.7	1.3	4.6	-4.9	-.8	-.3	-8.6	-4.1	12.1	1.4	8.0
10	3.2	-15.3	-4.4	4.2	-4.9	-1.2	-.3	-14.1	-6.5	5.3	-2.8	1.4
11	-9.8	-21.6	-16.6	4.6	-4.9	.6	7.4	-14.1	-2.9	5.7	-4.2	-.3
12	3.9	-17.4	-9.2	-4.2	-6.4	-5.2	12.4	-.7	5.4	11.0	-5.3	3.6
13	9.9	-12.9	-5.7	4.2	-13.7	-5.6	9.5	-2.4	3.4	16.1	6.7	10.0
14	4.6	-7.5	-.8	10.2	-9.8	-2.1	4.2	-4.2	-.3	11.7	6.0	8.8
15	.7	-13.3	-4.5	12.4	-6.4	2.4	-1.4	-10.5	-5.6	12.4	2.8	7.9
16	.0	-15.3	-7.3	9.9	-6.4	.4	.7	-12.1	-5.3	10.2	-3.1	5.2
17	2.1	-6.0	-1.7	9.5	-6.0	.8	6.0	-7.9	-1.4	12.1	-5.3	2.5
18	2.5	-10.9	-3.1	7.1	-5.7	.6	11.3	-4.2	2.7	16.9	-2.4	7.4
19	1.4	-10.5	-2.4	9.9	-3.8	1.5	13.9	-2.8	5.0	17.7	.0	8.7
20	-.7	-16.2	-8.7	10.2	-4.2	2.6	12.8	.4	6.2	16.1	-1.0	7.4
21	4.6	-11.3	-1.6	11.3	1.1	5.6	4.9	-2.8	.2	18.5	-1.0	7.5
22	-.3	-16.2	-9.9	8.1	-4.6	1.7	.0	-3.1	-2.0	18.5	1.1	7.8
23	2.1	-15.7	-7.4	8.8	-4.9	1.2	1.4	-1.7	-.3	18.5	1.1	8.4
24	7.4	-11.3	-4.1	9.9	-4.6	1.1	2.1	-3.8	-.1	11.0	.4	5.1
25	8.5	-9.0	-.2	12.8	-3.8	3.5	3.5	-5.7	-1.8	9.9	-.7	4.5
26	3.9	-2.8	-.4	8.8	-2.4	3.7	4.9	-3.5	.6	11.7	-.3	4.9
27	4.2	-12.9	-4.8	8.1	-3.8	3.2	11.7	-1.0	4.5	12.4	.0	5.5
28	7.4	-9.8	-3.1	6.7	-4.6	.3	8.8	.0	4.2	16.5	.0	7.0
29	---	---	---	12.4	-6.0	3.1	5.3	-.7	1.3	13.1	1.4	6.3
30	---	---	---	9.2	3.5	5.9	2.8	-1.4	.3	15.0	2.8	9.3
31	---	---	---	5.7	-2.1	2.2	---	---	---	14.3	4.2	10.1
MONTH	9.9	-21.6	-4.4	---	---	---	13.9	-14.1	-1.0	18.5	-11.7	4.6

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	16.1	.4	8.5	24.6	7.4	---	16.5	4.6	9.9	15.0	7.4	10.5
2	13.1	4.9	9.1	23.8	12.8	17.6	17.3	5.7	10.0	13.1	5.7	9.0
3	13.9	3.2	9.3	20.9	13.5	17.0	14.6	7.4	10.6	14.6	5.3	9.3
4	15.0	-1.0	8.3	22.5	9.5	15.2	13.5	7.4	10.2	16.9	3.5	9.3
5	3.5	-4.6	-.9	24.6	7.4	15.7	14.6	7.4	10.0	---	---	---
6	13.1	-2.1	5.5	22.1	7.8	14.7	16.5	7.1	11.0	16.9	2.8	9.4
7	18.5	1.4	10.4	20.1	8.1	12.9	19.3	4.6	10.4	18.9	3.5	10.1
8	18.1	1.1	11.3	15.4	9.5	12.2	19.7	4.9	11.6	20.1	2.5	9.4
9	18.1	1.8	9.8	18.1	8.5	13.0	16.5	7.8	11.7	18.9	2.5	10.4
10	16.9	1.1	8.8	21.7	5.3	13.0	14.3	7.1	9.5	18.1	7.4	11.5
11	15.0	.0	7.6	18.5	6.4	10.6	15.0	5.3	9.9	16.1	4.6	9.5
12	16.1	.4	8.0	21.3	5.3	12.0	17.3	2.1	9.2	18.1	3.2	9.1
13	19.3	1.4	9.6	19.7	6.0	12.3	20.9	2.5	10.6	17.7	.7	8.4
14	17.3	3.9	8.6	17.7	8.8	11.4	19.3	6.0	13.4	14.3	2.1	6.9
15	15.4	2.5	8.0	15.4	6.4	10.6	15.4	5.7	10.0	9.9	2.1	5.6
16	18.9	4.9	9.4	18.1	4.6	10.8	18.5	4.6	9.3	13.5	1.1	6.5
17	11.7	3.5	7.1	18.9	5.7	11.8	16.5	7.1	10.4	11.0	1.8	6.0
18	17.3	3.2	9.0	14.6	8.1	11.0	18.1	5.7	9.9	14.6	1.8	7.1
19	20.5	2.8	10.9	12.8	7.4	10.1	17.7	7.8	10.9	10.2	2.1	5.5
20	19.3	3.9	9.0	21.3	6.0	12.6	15.0	8.1	10.6	12.4	1.4	6.5
21	16.9	3.5	9.3	19.7	6.4	11.3	15.8	7.4	10.9	13.1	-2.1	3.9
22	18.9	3.9	11.4	16.1	7.4	11.1	17.7	5.7	10.5	15.4	-1.7	6.0
23	20.9	3.5	12.4	19.7	6.0	12.0	16.5	5.7	10.4	10.2	5.7	7.8
24	21.3	4.6	12.9	17.7	6.7	11.9	20.1	6.4	11.4	11.3	3.9	6.4
25	22.5	6.4	14.1	15.0	7.4	11.0	17.3	6.4	10.9	17.7	3.5	8.6
26	22.1	6.0	14.5	18.9	6.7	11.6	18.1	5.3	10.4	20.5	4.6	12.0
27	---	---	---	17.3	6.4	11.9	17.7	8.5	11.3	12.1	1.1	7.0
28	22.5	4.9	14.2	18.1	6.7	11.7	15.4	7.4	11.2	4.6	-5.7	-.7
29	22.5	7.8	14.8	16.9	8.1	11.9	18.1	5.3	11.3	15.4	-7.1	2.2
30	22.5	4.6	14.4	16.1	7.4	11.1	17.3	6.4	11.1	17.3	-2.4	4.9
31	---	---	---	16.1	4.2	9.0	16.9	8.1	11.3	---	---	---
MONTH	---	---	---	24.6	4.2	---	20.9	2.1	10.6	---	---	---

380251107513000 WEST FORK DALLAS CREEK METEOROLOGICAL STATION NEAR RIDGWAY, CO--Continued

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	.0	.0	.5	.0	.0	.7	.0	.0	.0	.3	.1
2	---	.2	.0	.0	.0	.0	.8	.0	.0	.0	.0	.3
3	---	.0	.0	.0	.0	.0	.2	.0	.0	.0	.3	.4
4	---	.0	.0	.0	.0	.0	.2	.0	.0	.0	.5	.0
5	---	.0	.3	.0	.1	.0	.0	.0	.0	.0	.2	.0
6	---	.2	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
7	---	.1	.0	.0	.0	.2	.1	.0	.0	.5	.0	.0
8	---	.5	.0	.0	.0	.3	.0	.0	.0	.2	.0	.0
9	---	1.0	.1	.0	.0	.0	.0	.0	.0	.0	.1	.0
10	---	.1	.0	.0	.3	.0	.0	.0	.0	.0	.5	.0
11	---	.2	.0	.0	.2	.1	.0	.0	.0	.5	.3	.0
12	---	.0	.0	.0	.0	.7	.0	.0	.0	.0	.0	.0
13	---	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
14	---	.0	.0	.0	.0	.0	.0	.0	.0	.1	.2	.4
15	---	.0	.0	.0	.2	.0	.0	.0	.0	.3	.6	.3
16	---	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0
17	---	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0
18	---	.0	.0	.0	.0	.0	.0	.0	.0	.5	.2	.0
19	---	.0	.0	.1	.0	.0	.0	.0	.0	.1	.4	.3
20	---	.0	.1	.1	.0	.0	.1	.0	.0	.0	.1	.1
21	---	.0	.3	.8	.0	.0	.5	.0	.0	.2	.5	.0
22	---	.0	.0	.2	.1	.0	.6	.0	.0	.2	.0	.0
23	---	.0	.0	.1	.0	.0	1.0	.0	.0	.0	.1	.1
24	.0	.0	.0	.0	.0	.0	.6	.0	.0	.2	.0	.3
25	.8	.0	.0	.0	.0	.0	.1	.0	.0	.4	.1	.0
26	.1	.0	.0	.4	.0	.0	.0	.0	.0	.1	.1	.0
27	.3	.0	.0	.0	.0	.0	.0	.0	.0	.1	.3	.0
28	.0	.1	.0	.0	.0	.0	.3	.0	.0	.1	.3	.0
29	.0	.1	.0	.0	---	.0	.3	.0	.0	.0	.0	.0
30	.0	.0	.0	.0	---	.0	.7	.0	.0	1.3	.2	.0
31	.0	---	.2	.0	---	.0	---	.0	---	1.5	.1	---
TOTAL	---	2.5	1.1	2.2	0.9	1.3	6.2	0.0	0.0	6.3	5.7	2.3

380324107444500 WHITEHOUSE CREEK METEOROLOGICAL STATION NEAR OURAY, CO

LOCATION.--Lat 38°03'24", long 107°44'45", in NW$^{1}/_{4}$NW$^{1}/_{4}$ sec.21, T.44 N, R.8 W., Ouray County, Hydrologic Unit 14020006, 3.0 mi north of Whitehouse Mountain, and 4.7 mi northwest of Ouray.

PERIOD OF RECORD.--October 1992 to current year.

GAGE.--Weighing-bucket rain gage with satellite telemetry. Elevation of gage is 9,480 ft above sea level, from topographic map.

REMARKS.--Unpublished air-temperature and rainfall data for water year 1993 are available in district office. Daily record for air temperature is good. Daily record for precipitation is good

EXTREMES FOR PERIOD OF RECORD.--
AIR TEMPERATURE: Maximum recorded, 27.3°C, June 29, 1998; minimum recorded, -29.8°C, Dec. 17, 18, 1996.
PRECIPITATION: Maximum daily, 2.5 inches, Oct. 3, 1996.

EXTREMES FOR CURRENT YEAR.--
AIR TEMPERATURE: Maximum, 26.4°C, July 5; minimum, -22.1°C, Dec. 21.
PRECIPITATION: Maximum daily, 1.2 inches, Nov. 9.

TEMPERATURE, AIR, DEGREES CELSIUS, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	9.9	.4	4.4	7.1	-1.7	1.6	10.6	-3.8	.3	-3.1	-11.7	-6.9
2	12.4	-.3	4.9	.7	-4.6	-1.9	9.2	-3.8	-.1	-2.4	-14.1	-9.8
3	11.3	.0	6.0	1.4	-6.4	-2.9	9.9	-5.7	-1.1	-8.3	-18.8	-12.5
4	3.9	-4.2	-1.1	2.1	-9.0	-4.2	6.4	-3.5	1.3	-1.7	-14.9	-8.1
5	1.4	-6.4	-3.6	5.7	-8.6	-2.4	-2.1	-13.7	-6.9	2.8	-9.8	-4.3
6	8.5	-6.8	-.8	2.8	-6.0	-1.5	-7.9	-17.4	-13.3	3.9	-10.5	-5.3
7	15.4	-1.7	3.3	1.1	-10.5	-4.7	-9.0	-20.2	-15.9	5.3	-7.5	-1.8
8	18.9	-.3	5.5	.0	-6.4	-2.4	-1.0	-20.2	-11.4	-2.8	-14.1	-7.9
9	16.1	1.1	6.4	-6.0	-11.7	-9.0	-9.8	-15.7	-12.4	1.1	-14.1	-8.6
10	15.8	.0	6.1	-1.0	-17.4	-10.9	-5.7	-17.9	-13.6	3.9	-10.5	-6.0
11	15.8	-1.4	5.2	-4.6	-12.9	-7.1	1.1	-14.9	-8.8	7.4	-8.6	-3.6
12	17.3	1.1	6.9	5.7	-7.9	-3.9	2.5	-10.5	-7.2	1.8	-10.1	-3.3
13	16.9	.7	8.4	5.3	-8.6	-3.3	3.2	-10.5	-6.2	-1.4	-12.5	-8.6
14	16.9	5.3	11.7	8.5	-4.2	-.6	4.6	-9.0	-4.8	4.2	-13.3	-6.1
15	11.0	1.8	6.7	13.1	-4.6	2.0	2.8	-10.1	-6.2	5.7	-7.9	-3.9
16	4.9	-6.0	-1.1	11.0	-5.3	-.6	5.7	-7.1	-3.6	.7	-10.1	-5.3
17	3.9	-6.0	-3.0	8.5	-4.2	2.2	9.5	-6.0	-2.6	-2.1	-4.9	-3.6
18	9.2	-6.8	-1.0	3.5	-9.0	-3.7	6.0	-7.1	-1.6	8.5	-2.8	1.8
19	11.3	-3.5	1.6	-.7	-13.7	-7.3	2.5	-1.0	.9	5.3	-3.5	.8
20	11.7	-.7	2.8	2.5	-15.3	-8.5	-1.0	-14.9	-4.6	1.8	-6.8	-2.7
21	7.4	-1.7	2.0	9.2	-9.4	-2.2	-10.1	-22.1	-16.6	-3.8	-9.8	-6.7
22	5.7	-.7	2.0	11.7	-3.8	2.3	-9.4	-21.1	-15.1	-2.8	-14.1	-9.7
23	5.7	-1.0	1.8	11.7	-4.2	1.8	-5.3	-19.3	-15.0	5.3	-9.0	-1.1
24	9.9	-4.2	1.3	8.5	-4.6	4.2	-4.2	-18.8	-12.7	5.3	1.8	3.5
25	10.6	-1.0	2.5	9.2	-5.7	-1.2	-.3	-15.7	-9.8	7.4	.4	4.4
26	6.7	.0	2.1	14.6	-3.5	1.0	4.2	-10.5	-4.0	.4	-13.3	-5.7
27	6.4	-1.7	1.9	12.4	-2.4	2.0	-1.7	-11.3	-7.0	-6.0	-15.7	-9.9
28	4.9	-4.2	-.5	9.5	-1.4	3.2	1.8	-12.1	-3.8	-4.2	-18.8	-12.8
29	8.5	-4.2	1.1	4.2	-6.4	-1.5	5.3	-7.1	-2.8	-.7	-17.0	-10.7
30	7.1	-.7	1.9	9.5	-6.4	-1.9	6.7	-7.1	-2.9	4.9	-14.1	-7.6
31	.7	-1.0	-.2	---	---	---	6.7	-7.9	-1.5	5.7	-12.1	-3.5
MONTH	18.9	-6.8	2.7	14.6	-17.4	-2.0	10.6	-22.1	-6.7	8.5	-18.8	-5.3

380324107444500 WHITEHOUSE CREEK METEOROLOGICAL STATION NEAR OURAY, CO--Continued

TEMPERATURE, AIR, DEGREES CELSIUS, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	-.3	-14.9	-7.0	9.5	-4.9	1.2	-1.4	-7.9	-4.0	1.1	-3.1	-1.3
2	.7	-16.6	-8.5	2.8	-7.1	-2.0	-2.1	-9.0	-6.7	8.5	-4.6	2.6
3	4.9	-7.5	-3.1	9.9	-4.9	1.5	-2.1	-10.9	-7.3	4.2	-3.8	1.0
4	7.1	-7.1	-.5	7.1	-3.1	1.1	-3.8	-10.5	-7.5	-.3	-6.0	-4.2
5	3.5	-8.6	-2.2	-.7	-7.9	-4.6	2.5	-10.1	-4.6	.4	-8.6	-4.8
6	.7	-9.0	-4.7	6.4	-6.8	-.1	9.2	-9.4	-.6	3.9	-12.1	-3.4
7	7.4	-6.8	-.6	4.6	-5.7	.0	9.2	-6.0	2.2	11.3	-6.0	2.5
8	6.7	-5.3	-1.3	-.3	-7.9	-4.8	4.2	-7.9	-2.6	15.8	-1.0	7.9
9	8.5	-5.7	1.0	3.9	-6.0	-1.0	.0	-8.3	-4.0	12.1	.7	8.2
10	3.5	-15.3	-4.6	3.9	-9.0	-2.3	.7	-14.1	-6.5	4.6	-4.6	.1
11	-8.6	-19.7	-15.4	3.9	-5.7	-.2	6.7	-10.9	-1.9	6.0	-5.7	-.8
12	6.7	-16.2	-7.1	-4.6	-7.1	-5.8	12.1	-1.4	4.9	11.3	-4.6	3.9
13	10.2	-9.8	-3.6	4.9	-12.9	-4.4	8.5	-.7	4.1	15.0	5.7	10.5
14	5.7	-6.8	-.3	11.3	-9.0	-1.0	3.5	-4.9	-.5	12.8	6.7	9.2
15	-.3	-13.3	-4.6	12.4	-4.9	2.5	-1.7	-10.5	-5.6	12.8	4.6	8.4
16	1.4	-14.1	-6.8	9.9	-5.3	1.1	1.4	-12.5	-5.7	10.2	-1.7	5.3
17	2.8	-9.8	-3.8	9.2	-5.7	1.3	6.4	-8.3	-1.3	11.0	-5.3	3.0
18	2.8	-12.1	-3.3	6.4	-5.7	1.0	10.6	-3.1	3.1	16.5	-1.0	7.3
19	2.1	-10.9	-3.3	9.5	-3.5	2.0	14.3	-1.4	5.8	16.9	1.8	9.0
20	.4	-15.3	-8.1	11.0	-4.2	3.1	13.5	.0	6.8	16.5	-.3	8.1
21	7.1	-10.1	-.7	11.0	-.7	5.9	5.3	-3.5	.3	16.5	.7	8.1
22	-.7	-14.9	-9.4	7.4	-4.6	1.6	.0	-3.8	-2.2	16.5	2.1	8.1
23	2.5	-14.5	-6.1	8.8	-4.9	1.3	2.8	-2.1	.2	17.7	2.1	9.4
24	7.4	-9.8	-2.7	10.6	-5.3	1.5	---	---	---	12.8	.4	6.5
25	8.8	-7.1	.6	12.4	-3.8	4.5	3.9	-6.4	---	11.7	.0	5.1
26	3.9	-5.7	-.9	9.5	-1.7	3.8	4.2	-4.2	.1	11.7	.0	5.8
27	4.6	-12.1	-4.4	8.5	-3.8	3.0	10.6	-1.0	4.5	12.4	.7	6.0
28	7.1	-8.6	-1.9	7.1	-5.3	.2	8.5	-.3	3.4	16.9	.7	7.4
29	---	---	---	12.4	-5.7	3.0	7.8	-1.0	2.5	12.4	2.1	6.6
30	---	---	---	8.5	2.1	6.2	6.4	-2.4	.5	14.3	2.5	9.6
31	---	---	---	5.3	-1.7	2.6	---	---	---	15.0	4.9	10.5
MONTH	10.2	-19.7	-4.0	12.4	-12.9	.7	---	---	---	17.7	-12.1	5.0

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	15.0	.7	7.8	24.2	9.2	17.2	15.4	6.4	10.1	16.5	6.0	10.2
2	12.4	3.2	7.9	24.2	11.7	18.0	18.9	6.7	10.8	15.0	4.9	8.5
3	13.5	2.1	9.5	19.3	10.2	15.6	14.3	8.8	11.0	15.4	4.9	9.5
4	13.5	-1.7	9.1	20.9	10.6	15.7	13.5	7.4	9.9	15.8	2.8	8.2
5	3.5	-4.6	-.9	26.4	8.5	16.3	15.0	7.4	10.0	17.3	2.1	8.7
6	14.6	-2.8	5.3	20.9	9.9	14.4	14.3	7.8	10.4	17.3	3.9	9.6
7	17.7	.7	9.9	20.9	9.5	13.5	18.9	5.7	10.5	19.3	4.9	10.7
8	18.1	4.6	12.0	16.1	9.5	12.1	19.7	5.3	11.4	19.3	4.2	10.4
9	16.5	2.1	9.2	17.7	9.2	12.8	16.1	7.4	10.8	18.9	4.9	10.7
10	16.1	1.8	9.3	20.5	6.4	13.4	13.1	7.4	9.5	17.7	7.4	11.0
11	15.0	.7	8.1	17.7	6.7	11.1	17.3	5.7	10.3	15.8	3.9	9.0
12	15.8	1.4	8.8	20.9	6.0	12.5	17.3	3.2	9.9	15.8	3.2	8.7
13	19.7	2.5	10.6	19.3	7.4	13.2	20.1	4.2	11.5	---	---	---
14	17.7	4.2	9.0	15.0	9.9	11.7	17.3	7.1	11.4	---	---	---
15	15.8	3.2	8.3	14.3	7.1	10.9	14.6	6.7	10.1	---	---	---
16	18.9	4.9	9.9	19.7	6.0	11.5	16.9	5.7	10.6	---	---	---
17	13.5	3.5	7.3	17.7	6.7	11.9	15.0	7.4	10.7	12.1	2.5	6.2
18	17.7	3.5	9.5	14.3	8.5	11.0	16.1	6.4	10.0	13.5	2.8	6.6
19	20.5	4.2	10.4	12.8	7.1	10.0	16.1	8.5	11.0	---	---	---
20	18.9	5.3	9.8	19.7	6.4	12.5	15.8	8.5	10.6	10.6	1.8	5.7
21	16.5	5.3	10.4	20.1	8.5	12.3	14.6	7.1	10.6	12.8	-1.7	---
22	17.7	4.6	11.7	16.9	7.8	11.1	18.9	6.4	11.4	15.8	.4	6.9
23	20.9	5.7	13.3	19.7	7.1	12.5	17.7	7.1	11.6	9.9	5.3	7.1
24	22.1	6.7	13.8	17.7	8.5	11.9	19.7	7.4	11.6	10.2	4.2	6.4
25	21.7	8.5	14.9	18.5	7.4	11.9	17.7	7.8	10.6	18.1	4.6	9.7
26	22.1	6.7	14.5	19.7	7.8	11.8	18.9	6.4	10.9	20.5	5.3	12.1
27	20.5	7.8	15.2	18.5	7.8	12.4	17.3	8.8	10.9	11.3	-.3	5.6
28	21.7	6.7	14.8	17.7	7.4	11.9	15.4	8.5	11.1	4.6	-4.9	-.9
29	22.1	10.6	16.0	17.7	8.5	11.7	17.7	6.7	11.0	14.6	-5.3	3.4
30	22.9	7.1	15.1	16.5	7.4	10.8	16.9	7.4	11.4	16.9	-.7	6.3
31	---	---	---	15.0	5.7	9.5	16.1	7.8	11.0	---	---	---
MONTH	22.9	-4.6	10.4	26.4	5.7	12.7	20.1	3.2	10.7	---	---	---

380324107444500 WHITEHOUSE CREEK METEOROLOGICAL STATION NEAR OURAY, CO--Continued

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.2	.0	.0	1.1	.0	.0	.7	.0	.0	.0	.1	.0
2	.0	.2	.0	.0	.0	.0	.6	.0	.0	.0	.1	.2
3	.5	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.3
4	.5	.0	.0	.0	.0	.0	.3	.0	.0	.0	.7	.0
5	.2	.0	.4	.0	.2	.0	.2	.0	.0	.0	.0	.0
6	.0	.2	.1	.0	.0	.0	.0	.0	.0	.0	.2	.0
7	.0	.0	.0	.0	.0	.4	.0	.0	.0	.0	.1	.0
8	.0	.5	.0	.0	.0	.2	.0	.0	.0	.4	.0	.0
9	.0	1.2	.1	.0	.0	.0	.0	.0	.0	.0	.4	.0
10	.0	.2	.0	.0	.3	.0	.0	.0	.0	.0	.3	.0
11	.0	.3	.0	.0	.3	.4	.0	.0	.0	.3	.1	.1
12	.0	.1	.0	.0	.0	1.1	.0	.0	.0	.0	.0	.0
13	.0	.0	.0	.0	.0	.4	.0	.0	.0	.0	.0	.0
14	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3
15	.0	.0	.0	.0	.2	.0	.0	.0	.1	.2	.2	.1
16	.6	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.1
17	.4	.0	.0	.0	.0	.0	.0	.0	1.1	.0	.2	.0
18	.0	.0	.0	.0	.0	.0	.0	.0	.0	.5	.3	.1
19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.2	.2
20	.0	.0	.1	.1	.0	.0	.1	.0	.0	.0	.2	.0
21	.1	.0	.4	1.0	.1	.0	.4	.0	.0	.1	.4	.0
22	.0	.0	.0	.0	.0	.0	.3	.0	.0	.5	.0	.0
23	.1	.0	.0	.4	.0	.0	.5	.0	.0	.0	.0	.1
24	.0	.0	.0	.0	.0	.0	.6	.0	.0	.2	.0	.1
25	.7	.0	.0	.0	.0	.0	.2	.0	.0	.2	.2	.0
26	.1	.0	.0	.5	.0	.0	.0	.0	.0	.1	.1	.0
27	.2	.0	.0	.0	.0	.0	.0	.0	.0	.3	.1	.0
28	.0	.0	.0	.0	.0	.0	.1	.0	.0	.1	.3	.0
29	.0	.1	.0	.0	---	.0	.2	.0	.0	.1	.0	.0
30	.0	.0	.0	.0	---	.0	.0	.0	.0	.6	.0	.0
31	.0	---	.1	.0	---	.0	---	.0	---	.5	.1	---
TOTAL	3.6	2.8	1.2	3.1	1.1	2.5	4.3	0.0	1.3	4.2	4.3	1.6

380436107411500 PORTLAND METEOROLOGICAL STATION NEAR OURAY, CO

LOCATION.--Lat 38°04'36", long 107°41'15", in $SE^{1}/_{4}NW^{1}/_{4}$ sec.12, T.44 N, R.8 W., Ouray County, Hydrologic Unit 14020006, 4 mi north of Ouray, and 8.6 mi east of Black Lake.

PERIOD OF RECORD.--May 1992 to current year.

GAGE.--Weighing-bucket rain gage with satellite telemetry. Elevation of gage is 8,080 ft above sea level, from topographic map.

REMARKS.--Unpublished air-temperature and precipitation data for water years 1992 and 1993 are available in district office. Daily record for air temperature is good. Daily record for precipitation is good.

EXTREMES FOR PERIOD OF RECORD.--
AIR TEMPERATURE: Maximum, 31.1°C, June 26, 1994; minimum, -23.6°C, Dec. 17, 18, 1996.
PRECIPITATION: Maximum daily, 2.3 inches, Oct. 3, 1996.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURE: Maximum, 29.2°C, July 1; minimum, -19.7°C, Dec. 21.
PRECIPITATION: Maximum daily, 1.2 inches, Jan. 21.

TEMPERATURE, AIR, DEGREES CELSIUS, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	14.6	4.2	8.1	8.8	1.1	4.1	12.4	2.8	6.4	-1.0	-6.8	-4.0
2	15.8	4.6	10.1	3.9	-.3	1.2	10.6	1.8	5.4	-.7	-9.0	-6.0
3	16.5	3.2	11.2	4.2	-1.7	.6	10.6	-.7	4.1	-5.3	-12.9	-8.9
4	7.1	-1.7	1.6	4.2	-4.9	-.8	11.0	.7	5.4	.0	-9.8	-4.9
5	5.3	-3.1	-.3	7.8	-3.1	1.6	2.5	-11.7	-4.3	4.9	-3.1	.0
6	11.3	-3.1	3.6	6.4	-3.8	1.7	-6.0	-13.7	-10.4	5.3	-4.6	-.2
7	18.9	2.1	10.2	1.8	-5.7	-1.8	-7.9	-15.3	-11.9	7.1	-.3	2.6
8	21.3	8.1	13.6	2.5	-3.8	.1	-2.4	-16.6	-9.6	-.3	-8.6	-3.7
9	19.7	9.5	13.6	-3.8	-9.0	-6.7	-7.9	-12.1	-10.1	2.1	-8.6	-3.8
10	18.9	7.4	12.2	-3.1	-10.1	-7.6	-6.4	-12.5	-10.1	3.9	-3.8	-.8
11	18.9	5.7	11.2	-3.1	-9.0	-5.5	.4	-11.3	-5.7	8.8	-1.0	2.9
12	20.5	9.5	13.7	2.8	-6.0	-2.3	4.2	-6.4	-1.4	5.3	-3.1	1.1
13	21.3	9.5	15.2	4.9	-6.0	-.1	8.5	-4.9	1.1	.4	-6.4	-3.5
14	20.9	11.3	15.7	11.3	.0	5.5	7.8	-2.1	2.7	4.9	-7.1	-.6
15	16.5	7.4	11.7	16.1	3.5	8.1	8.1	-3.5	.7	7.4	-2.4	.9
16	7.4	-3.8	2.1	10.6	1.8	5.6	7.4	-1.7	1.4	3.2	-4.9	-1.4
17	3.9	-3.8	-.9	11.7	1.8	7.7	9.5	-2.4	2.6	.7	-2.8	-.5
18	9.9	-2.4	3.0	4.6	-3.1	-.1	8.5	.0	3.8	9.5	.0	4.7
19	12.8	2.1	6.6	.4	-6.0	-3.0	4.6	2.8	3.7	7.8	.7	3.9
20	13.5	4.6	8.5	2.5	-8.6	-3.5	2.8	-12.5	-1.8	3.2	-1.7	.2
21	10.2	2.5	6.1	11.0	-3.8	4.1	-9.4	-19.7	-14.5	-1.4	-7.1	-4.5
22	8.8	2.8	6.1	15.0	1.8	7.7	-6.8	-17.9	-12.7	-2.4	-8.3	-6.7
23	8.5	3.5	5.8	13.1	2.8	7.5	-7.9	-16.2	-11.8	8.8	-5.7	2.4
24	12.4	1.1	6.2	12.4	1.8	7.7	-1.0	-11.7	-6.9	9.2	6.0	7.1
25	13.5	1.8	5.9	11.0	.7	4.7	1.1	-9.4	-4.4	9.9	4.2	7.4
26	12.4	2.1	6.6	13.9	2.1	6.8	5.7	-3.8	-.1	4.2	-7.5	-2.6
27	10.6	.7	4.7	15.8	5.3	9.4	1.8	-4.2	-1.7	-2.1	-9.8	-6.4
28	7.8	.4	3.3	13.5	2.1	8.0	5.3	-4.2	1.5	-4.2	-12.1	-8.6
29	9.9	.0	4.9	6.4	-1.4	2.2	7.4	-.7	2.4	-1.7	-11.3	-7.0
30	9.2	2.1	4.9	9.2	-1.4	3.4	8.5	-.7	2.6	4.6	-9.0	-2.9
31	2.8	1.8	2.2	---	---	---	7.8	-1.7	2.4	6.0	-4.2	.8
MONTH	21.3	-3.8	7.3	16.1	-10.1	2.2	12.4	-19.7	-2.3	9.9	-12.9	-1.4

380436107411500 PORTLAND METEOROLOGICAL STATION NEAR OURAY, CO--Continued

TEMPERATURE, AIR, DEGREES CELSIUS, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	1.1	-6.8	-3.5	11.0	.4	6.2	1.8	-5.7	-1.9	3.5	-1.0	.7
2	1.8	-9.8	-3.6	6.7	-2.1	2.0	-1.7	-6.8	-4.7	11.7	.4	5.3
3	6.4	-1.7	1.5	12.8	.7	6.6	.4	-7.9	-4.3	8.5	-1.4	3.7
4	9.5	-1.7	3.3	---	---	---	-2.4	-6.0	-4.4	1.1	-3.5	-1.6
5	5.7	-3.1	.3	2.1	-4.6	-1.9	4.6	-6.4	-1.6	1.1	-6.0	-2.5
6	3.2	-4.2	-1.3	9.9	-5.3	1.8	10.2	-3.8	3.7	7.8	-7.1	.2
7	9.5	-2.8	2.5	8.8	-3.5	2.6	12.8	-2.4	7.0	15.4	.7	8.5
8	8.5	-.3	3.6	3.2	-4.6	-1.5	8.1	-5.3	.9	20.5	8.1	14.0
9	11.3	2.1	6.4	7.8	-2.8	3.0	3.5	-5.3	-.3	16.5	4.6	12.7
10	6.4	-12.9	-1.6	7.1	-3.1	2.1	4.2	-8.6	-2.4	7.8	-3.1	3.0
11	-9.8	-15.7	-13.3	7.8	-3.5	3.7	11.7	-4.2	3.1	9.5	-1.7	2.6
12	1.1	-14.5	-5.7	-2.8	-4.6	-3.5	16.1	3.5	10.1	16.5	.4	8.6
13	9.9	-4.2	2.7	6.0	-8.3	-1.6	12.8	3.9	8.3	20.1	9.5	14.6
14	9.5	2.5	5.4	12.8	-1.4	5.7	7.8	-1.4	3.6	16.9	10.2	13.4
15	3.5	-6.4	-1.4	15.4	5.3	9.7	1.8	-6.4	-2.2	18.5	7.8	12.5
16	3.2	-6.4	-1.4	13.1	2.1	7.0	3.9	-7.9	-2.1	15.0	1.1	8.6
17	4.6	-2.8	.5	10.6	.0	5.6	9.9	-4.2	2.7	16.5	-1.4	6.9
18	3.9	-5.3	-.1	9.9	-.3	5.0	15.0	3.2	8.9	20.5	5.3	13.6
19	4.9	-5.7	.1	12.4	1.4	6.7	17.7	6.4	12.1	20.9	10.2	15.5
20	1.8	-9.0	-3.9	14.6	3.5	9.1	18.1	3.2	11.6	19.7	7.4	14.1
21	7.8	-5.7	1.4	15.0	5.7	10.1	8.8	.0	3.4	21.7	10.6	15.9
22	3.5	-8.6	-5.4	11.3	1.1	5.8	1.8	-1.4	-.1	20.9	12.1	15.5
23	4.6	-7.9	-1.6	12.4	1.1	6.5	7.1	-.7	2.6	22.1	7.4	15.2
24	8.8	-2.4	2.7	13.9	-.7	6.0	9.9	-1.4	3.3	16.5	6.4	11.8
25	11.0	1.1	5.7	16.5	4.9	10.0	5.7	-3.1	.6	14.6	6.0	9.3
26	6.0	-2.1	2.2	13.5	4.9	8.5	8.1	-1.4	3.4	18.1	4.9	10.5
27	5.7	-7.9	-1.1	12.1	1.1	6.6	15.4	4.6	9.8	16.1	5.7	10.7
28	9.9	-3.5	3.3	10.6	.4	4.8	11.7	2.5	8.3	20.5	7.8	13.9
29	---	---	---	17.3	-.3	8.3	12.1	1.1	5.8	16.5	8.5	11.9
30	---	---	---	13.9	6.7	10.0	7.8	-.3	2.4	19.3	6.0	13.3
31	---	---	---	9.9	.0	6.0	---	---	---	18.9	10.2	14.3
MONTH	11.3	-15.7	-.1	---	---	---	18.1	-8.6	2.9	22.1	-7.1	9.6

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	20.5	5.7	12.8	29.2	13.5	21.7	20.5	9.5	15.0	16.9	11.3	13.7
2	17.7	8.8	12.5	26.4	18.1	22.0	21.7	12.1	15.6	17.7	8.5	12.7
3	18.9	8.5	13.5	23.8	15.4	19.3	18.1	11.7	15.2	20.5	7.8	13.7
4	19.3	2.1	12.9	26.4	15.4	20.2	16.5	11.3	13.0	19.3	8.5	12.9
5	8.8	-1.7	2.3	28.2	15.0	22.2	19.7	11.3	14.1	21.3	7.8	13.7
6	19.3	1.1	10.2	25.5	14.3	19.2	20.1	11.0	14.1	22.1	10.6	16.3
7	22.1	9.9	16.2	24.2	14.6	18.7	21.7	11.0	16.0	22.9	11.7	16.7
8	22.5	9.9	16.7	19.3	13.1	15.6	24.2	11.7	17.4	23.3	9.2	16.1
9	21.7	9.9	15.4	20.5	12.4	15.7	20.5	11.0	15.8	22.9	11.3	16.4
10	20.1	8.8	15.1	24.6	12.4	18.4	16.9	10.6	13.2	21.7	12.1	16.3
11	21.3	6.0	13.2	22.9	10.6	15.5	20.9	9.5	14.0	18.9	7.4	12.5
12	20.9	7.8	14.1	25.1	8.8	17.6	21.3	8.8	14.4	20.1	7.4	12.7
13	24.2	8.8	16.2	23.8	14.6	18.5	24.2	10.6	17.2	20.9	8.8	14.7
14	20.1	9.5	13.9	19.3	13.1	15.4	21.7	10.6	17.0	17.7	7.4	11.4
15	21.3	9.5	13.7	19.3	11.0	14.3	19.3	10.2	13.1	13.5	5.3	8.3
16	22.9	9.5	14.9	22.5	10.6	16.2	22.5	10.6	15.4	16.9	5.7	10.4
17	16.9	6.0	10.3	21.7	12.1	16.7	17.7	10.2	13.7	16.9	6.7	10.8
18	21.7	7.4	14.4	17.3	10.6	14.5	20.5	10.2	15.2	16.9	7.1	11.0
19	22.5	12.4	17.6	17.7	9.5	13.3	19.3	11.7	14.5	13.9	6.0	9.0
20	22.9	12.4	16.2	23.8	10.2	17.1	18.1	11.0	14.1	14.6	6.0	9.0
21	22.5	8.8	15.1	23.8	12.4	16.8	18.5	10.2	14.0	15.8	2.8	8.6
22	23.3	9.9	16.7	20.5	11.0	14.8	22.9	9.5	16.0	18.1	5.7	11.2
23	25.5	12.4	18.9	25.1	12.4	17.4	22.1	12.4	16.5	13.9	8.1	10.7
24	26.9	12.8	19.3	20.9	13.1	16.5	23.3	13.5	16.9	14.6	8.1	10.3
25	26.0	14.6	20.7	21.7	11.0	16.0	21.3	12.1	15.1	21.7	10.2	15.3
26	25.1	12.4	19.2	23.3	12.8	16.2	22.9	11.0	16.3	22.9	8.8	16.4
27	26.0	15.0	20.1	22.9	12.1	17.6	20.9	13.1	15.8	14.6	3.5	8.7
28	26.9	12.4	19.9	24.6	12.4	16.6	20.5	11.3	15.0	8.1	-3.5	2.3
29	25.5	12.8	20.0	22.1	11.7	16.2	22.1	12.1	16.4	16.9	-2.4	6.2
30	26.4	12.4	19.9	20.1	10.2	13.9	21.7	12.8	16.6	20.1	4.2	11.6
31	---	---	---	17.3	9.2	12.4	20.1	11.7	15.6	---	---	---
MONTH	26.9	-1.7	15.4	29.2	8.8	17.0	24.2	8.8	15.2	23.3	-3.5	12.0

380436107411500 PORTLAND METEOROLOGICAL STATION NEAR OURAY, CO--Continued

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.2	.1	.0	.9	.1	.0	.4	1.0	.0	.0	.0	.0
2	.0	.2	.0	.0	.0	.0	.4	.1	.0	.0	.0	.2
3	.3	.0	.0	.0	.0	.0	.0	.2	.0	.4	.0	.2
4	.5	.0	.0	.0	.0	.0	.1	.7	.0	.0	.3	.0
5	.2	.0	.4	.0	.1	.0	.1	.2	.1	.0	.4	.0
6	.0	.1	.0	.0	.0	.0	.0	.0	.1	.4	.0	.0
7	.0	.0	.1	.0	.0	.3	.0	.0	.0	.0	.1	.0
8	.0	.6	.0	.0	.0	.1	.0	.0	.0	.6	.2	.0
9	.0	1.1	.1	.0	.0	.0	.0	.0	.0	.0	.1	.0
10	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.3	.0
11	.0	.2	.0	.0	.1	.1	.0	.0	.0	.2	.0	.1
12	.0	.0	.0	.0	.0	.9	.0	.0	.0	.0	.0	.1
13	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
14	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.2
15	.0	.0	.0	.0	.1	.0	.0	.0	.1	.2	.2	.2
16	.5	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.1
17	.4	.0	.0	.0	.0	.0	.0	.0	.7	.0	.1	.0
18	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3	.0	.2
19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.2
20	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.1
21	.1	.0	.5	1.2	.1	.0	.3	.0	.0	.1	.3	.0
22	.0	.0	.0	.3	.0	.0	.2	.0	.0	.1	.0	.0
23	.1	.0	.0	.0	.0	.0	.5	.1	.0	.0	.0	.0
24	.0	.0	.0	.0	.0	.0	.5	.1	.0	.2	.5	.0
25	.6	.0	.0	.0	.0	.0	.1	.0	.0	.5	.1	.0
26	.1	.0	.0	.3	.0	.0	.0	.0	.0	.2	.0	.0
27	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0
28	.0	.0	.0	.0	.0	.0	.1	.0	.0	.1	.2	.0
29	.0	.0	.0	.0	---	.0	.1	.0	.0	.0	.0	.0
30	.0	.0	.0	.0	---	.0	.7	.0	.0	.3	.3	.0
31	.0	---	.1	.0	---	.0	---	.0	---	.1	.0	---
TOTAL	3.2	2.3	1.2	2.7	0.6	1.4	3.5	2.4	1.2	3.7	3.6	1.6

380844107512200 PLEASANT VALLEY METEOROLOGICAL STATION NEAR RIDGWAY, CO

LOCATION.--Lat 38°08'44", long 107°51'22", in $SE^1/_4SE^1/_4$ sec.16, T.45 N, R.9 W., Ouray County, Hydrologic Unit 14020006, 5.3 mi west of Ridgway.

PERIOD OF RECORD.--October 1994 to current year.

GAGE.--Weighing-bucket rain gage with satellite telemetry. Elevation of gage is 7,530 ft above sea level, from topographic map.

REMARKS.--Daily record for air temperature is good. Daily record for precipitation is good.

EXTREMES FOR PERIOD OF RECORD.--
AIR TEMPERATURE: Maximum recorded, 30.6°C, Aug. 13, 1996, and June 29, 30, and July 20, 1998; minimum recorded, -25.7°C, Dec. 18, 1996.
PRECIPITATION: Maximum daily, 3.1 inches, July 31, 1999.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURE: Maximum, 29.2°C, July 5; minimum, -23.1°C, Dec. 21.
PRECIPITATION: Maximum daily, 1.0 inches, Aug. 17.

TEMPERATURE, AIR, DEGREES CELSIUS, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	---	---	---	11.3	2.5	5.8	13.1	-1.0	4.9	-.3	-11.7	-4.2
2	---	---	---	6.4	-.7	2.1	13.1	-1.7	3.9	-.7	-12.5	-7.3
3	---	---	---	5.3	-1.7	1.7	12.1	-4.6	2.8	-2.4	-14.5	-8.3
4	---	---	---	5.3	-4.2	-.4	11.3	-1.4	4.4	1.8	-13.3	-4.9
5	---	---	---	8.5	-5.7	1.2	1.4	-12.1	-3.2	7.4	-5.7	-.3
6	---	---	---	6.7	-2.4	2.9	-5.3	-16.2	-10.7	6.7	-9.0	-1.0
7	---	---	---	3.2	-4.9	-.8	-5.7	-19.3	-12.4	7.8	-1.7	2.2
8	---	---	---	4.2	-1.7	1.5	-2.8	-19.3	-10.7	.7	-11.3	-3.7
9	---	---	---	-1.7	-9.8	-5.8	-5.7	-12.5	-8.7	3.2	-11.3	-5.1
10	---	---	---	-3.1	-10.9	-7.5	-4.6	-15.7	-10.1	6.0	-6.8	-1.6
11	---	---	---	-1.4	-12.1	-5.3	1.4	-16.2	-8.7	9.5	-4.2	1.7
12	---	---	---	3.5	-9.0	-3.0	4.9	-10.5	-4.2	5.7	-5.7	1.1
13	---	---	---	6.0	-8.6	-2.1	7.8	-10.1	-2.2	1.4	-8.3	-4.6
14	---	---	---	13.9	-4.9	2.0	10.2	-7.5	-.8	6.4	-11.3	-3.6
15	15.8	6.7	12.1	14.6	-.7	6.4	9.2	-9.0	-2.4	6.7	-6.0	-.5
16	8.5	-2.4	2.5	11.3	-2.4	3.8	7.8	-7.5	-.9	4.2	-8.3	-2.1
17	5.7	-4.6	-.5	12.4	.0	6.5	9.9	-6.4	.2	2.1	-3.1	-.2
18	11.0	-6.0	1.4	6.4	-4.2	.3	9.2	-3.1	3.3	10.2	-1.7	5.4
19	15.0	-1.7	5.2	2.8	-7.9	-2.6	7.1	3.2	4.8	8.1	.0	4.3
20	13.5	1.8	7.4	3.9	-10.5	-4.3	3.2	-11.3	-.8	4.9	-1.4	1.3
21	12.8	.4	6.0	10.6	-7.1	2.3	-8.6	-23.1	-14.2	.7	-6.0	-2.8
22	10.2	1.8	5.7	14.3	.0	6.6	-7.1	-22.6	-16.1	-.3	-10.5	-5.7
23	11.3	1.4	6.6	15.4	-1.0	5.5	-5.7	-20.7	-13.9	7.4	-7.5	2.0
24	13.5	-1.4	5.5	11.3	-1.4	7.5	1.1	-19.3	-9.4	9.2	4.2	6.9
25	13.9	2.8	5.6	11.7	-3.1	3.2	2.8	-12.9	-5.3	11.3	3.2	7.4
26	12.8	3.2	6.5	15.8	-1.4	5.5	5.7	-7.5	-.9	6.4	-7.5	-1.5
27	11.0	1.8	4.8	17.3	.4	6.7	3.5	-6.0	-1.5	.0	-10.1	-6.0
28	7.8	.7	4.3	13.9	1.8	7.7	7.4	-6.8	1.4	-2.4	-14.1	-8.5
29	10.6	-2.4	4.2	7.4	-1.0	2.7	8.1	-3.5	1.2	.4	-14.5	-7.9
30	10.2	3.2	5.8	11.0	-4.2	2.4	8.5	-3.8	.6	5.7	-13.3	-5.0
31	5.7	2.1	4.0	---	---	---	8.1	-4.6	1.2	7.1	-9.0	-.4
MONTH	---	---	---	17.3	-12.1	1.8	13.1	-23.1	-3.5	11.3	-14.5	-1.7

380844107512200 PLEASANT VALLEY METEOROLOGICAL STATION NEAR RIDGWAY, CO--Continued

TEMPERATURE, AIR, DEGREES CELSIUS, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	3.9	-9.8	-3.1	12.1	-2.4	5.5	3.9	-4.9	-.6	5.3	-1.0	1.8
2	2.1	-13.3	-3.9	7.4	-3.5	2.0	.0	-5.7	-3.5	11.0	1.1	6.4
3	7.1	-4.2	1.6	13.1	-3.5	4.5	-1.0	-6.4	-3.7	8.5	.0	5.1
4	9.2	-5.3	1.8	9.5	-2.1	5.9	-.3	-6.0	-3.4	2.1	-2.4	-.3
5	4.9	-3.8	.8	3.2	-4.2	-.7	3.5	-6.0	-1.4	3.5	-3.8	-.5
6	3.2	-3.8	-.7	9.9	-3.8	3.3	11.0	-5.7	3.2	8.1	-7.5	.6
7	9.5	-2.1	3.3	9.5	-2.1	4.6	14.6	-3.1	7.0	15.4	-3.1	7.2
8	8.5	-2.1	3.7	3.2	-3.8	-.7	7.8	-4.6	.8	20.5	2.5	12.7
9	9.5	-.7	5.7	8.5	-2.8	3.4	5.3	-4.6	.0	16.5	4.9	13.3
10	7.8	-11.3	-.2	7.1	-2.8	2.1	4.2	-9.0	-2.0	7.4	-1.4	3.9
11	-6.0	-18.8	-12.8	9.5	-2.8	3.5	11.3	-8.3	2.6	9.9	-1.4	3.5
12	1.4	-18.8	-8.7	-1.0	-3.1	-2.1	17.3	2.5	10.0	15.8	-2.4	8.1
13	12.1	-11.3	-.6	5.7	-10.1	-1.7	13.5	.7	8.3	19.3	7.8	15.2
14	8.8	-3.8	3.0	13.5	-5.3	3.8	8.5	-2.1	4.4	16.5	11.0	13.9
15	1.8	-9.8	-1.7	15.8	.0	7.2	1.8	-8.6	-1.4	16.5	8.5	13.3
16	4.2	-9.8	-2.7	13.5	-.3	6.0	5.3	-9.4	-1.4	14.3	.4	8.9
17	5.3	-3.8	1.5	13.1	-2.1	5.5	10.6	-6.4	2.7	15.8	-3.5	6.6
18	5.3	-7.5	.7	11.3	-2.4	5.4	15.0	-1.0	7.4	20.5	1.1	12.1
19	5.7	-6.0	1.3	13.1	-1.4	6.0	18.9	.7	10.6	20.9	5.7	14.8
20	2.5	-9.8	-3.1	15.0	-1.4	7.2	17.7	4.2	12.3	20.5	4.2	13.8
21	8.8	-6.0	2.6	15.4	4.6	10.4	10.2	.4	3.8	22.5	3.9	13.9
22	3.9	-8.3	-4.6	11.0	-2.1	5.6	2.1	-.3	1.0	21.7	6.0	13.7
23	5.3	-9.4	-1.5	13.9	-3.5	5.4	8.1	.0	3.6	22.5	7.1	14.0
24	9.5	-6.0	1.5	13.5	-3.1	5.4	9.2	-.7	3.9	18.9	3.2	11.9
25	11.7	-3.5	4.5	16.5	-2.1	8.1	6.4	-1.7	1.9	15.0	3.5	8.6
26	6.4	-1.0	3.1	14.3	1.4	7.8	10.2	-.3	4.7	17.3	3.2	10.7
27	6.4	-9.4	-1.0	12.1	-1.7	7.4	15.0	1.4	8.8	16.9	3.9	10.8
28	10.6	-4.9	2.4	11.3	-3.8	3.6	13.5	3.5	8.0	22.1	3.9	13.4
29	---	---	---	16.1	-4.6	6.6	12.4	1.8	6.8	16.1	6.0	11.6
30	---	---	---	14.6	8.1	11.1	8.1	-.3	3.3	18.1	3.5	12.0
31	---	---	---	11.0	1.8	7.0	---	---	---	19.3	7.1	14.5
MONTH	12.1	-18.8	-.3	16.5	-10.1	4.8	18.9	-9.4	3.3	22.5	-7.5	9.5

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	19.7	2.5	12.4	27.8	10.6	20.8	21.3	8.8	14.6	18.9	9.9	14.0
2	18.1	5.7	12.0	26.9	16.5	21.9	22.5	10.6	15.9	16.9	8.1	12.1
3	18.9	7.8	13.6	26.0	14.6	20.9	20.1	12.8	15.1	19.3	7.4	13.3
4	18.1	3.2	12.2	25.5	12.8	19.6	18.5	11.3	14.1	18.9	4.6	12.0
5	8.5	-1.4	3.0	29.2	11.3	21.0	20.1	11.3	14.4	21.3	3.9	12.5
6	18.9	.7	10.3	25.5	13.1	19.2	21.3	11.3	15.3	22.5	6.0	14.6
7	21.3	4.2	14.4	24.6	12.8	18.9	23.8	8.5	15.9	22.9	8.1	16.0
8	21.7	6.4	15.1	20.5	14.3	17.4	23.8	8.8	16.7	23.8	6.0	14.2
9	21.3	6.4	14.6	22.9	13.1	17.6	22.5	11.3	16.3	23.3	4.9	15.1
10	20.5	5.3	13.7	26.0	10.2	18.8	17.7	9.9	13.2	20.9	12.1	16.1
11	20.5	2.8	12.5	23.8	8.8	16.0	21.3	9.2	14.2	19.7	7.4	12.6
12	20.1	3.9	13.1	25.5	6.7	16.6	20.9	6.0	14.2	20.1	5.7	12.4
13	22.9	5.3	14.9	26.0	9.9	18.4	24.6	6.7	16.1	20.9	4.2	13.2
14	21.3	8.8	14.3	18.9	13.1	15.4	22.5	10.2	15.8	18.9	6.4	11.7
15	20.5	8.1	13.7	19.3	10.2	14.5	20.1	9.9	13.8	15.8	4.6	9.8
16	23.8	9.5	15.6	22.9	7.4	15.2	23.3	8.5	15.2	17.7	3.2	10.5
17	18.5	6.7	11.9	23.8	9.5	17.3	19.7	10.2	13.4	19.3	4.6	10.5
18	20.9	5.3	13.2	20.1	11.0	15.4	23.3	8.8	14.4	18.9	5.3	11.6
19	23.8	7.4	16.5	19.7	9.9	14.4	20.9	11.3	15.6	13.1	6.0	8.7
20	24.2	8.8	15.1	23.8	8.8	17.3	19.7	11.3	14.6	15.4	3.9	8.8
21	22.5	9.2	15.0	23.8	12.1	17.2	18.5	10.6	13.9	16.5	.4	8.0
22	22.9	7.8	15.9	21.3	11.3	16.5	23.3	8.8	15.6	18.9	.7	10.0
23	25.1	8.8	18.1	25.5	9.5	17.3	23.8	9.5	16.2	15.4	8.8	12.3
24	26.0	8.8	18.3	22.1	11.7	16.7	24.6	10.6	17.0	15.8	7.4	10.8
25	24.6	11.3	19.1	22.9	9.9	16.9	22.5	11.0	15.8	21.3	9.2	15.3
26	25.5	10.6	18.6	24.2	11.0	16.7	23.3	9.9	15.2	22.5	7.8	15.8
27	25.1	11.0	19.1	25.5	11.0	17.0	21.7	11.7	14.9	15.0	2.5	8.2
28	26.0	7.4	18.7	24.2	11.7	16.9	22.1	10.2	15.4	8.1	-3.5	2.5
29	25.5	13.1	20.2	22.1	11.0	17.0	23.8	10.2	17.0	17.7	-6.0	5.4
30	26.9	8.1	19.4	22.1	10.2	15.1	22.5	10.2	16.7	20.1	-.7	9.8
31	---	---	---	19.3	8.8	12.2	20.9	11.7	15.8	---	---	---
MONTH	26.9	-1.4	14.8	29.2	6.7	17.3	24.6	6.0	15.2	23.8	-6.0	11.6

380844107512200 PLEASANT VALLEY METEOROLOGICAL STATION NEAR RIDGWAY, CO--Continued

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	.0	.0	.3	.0	.0	.3	.2	.0	.0	.2	.0
2	---	.0	.0	.0	.0	.0	.1	.0	.2	.0	.0	.0
3	---	.0	.0	.0	.0	.0	.1	.2	.0	.0	.3	.2
4	---	.0	.0	.0	.0	.0	.0	.3	.0	.0	.2	.0
5	---	.0	.2	.0	.0	.0	.0	.0	.1	.0	.0	.0
6	---	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7	---	.1	.0	.0	.1	.1	.0	.0	.0	.0	.0	.0
8	---	.1	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0
9	---	.5	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
10	---	.1	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0
11	---	.2	.0	.0	.0	.0	.0	.0	.0	.2	.1	.2
12	---	.1	.0	.0	.0	.2	.0	.0	.0	.0	.0	.0
13	---	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
14	---	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.1
15	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.3	.1
16	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17	.1	.0	.0	.0	.0	.0	.0	.0	.6	.0	1.0	.0
18	.0	.0	.0	.0	.0	.0	.0	.0	.0	.6	.1	.0
19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.2
20	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1
21	.0	.0	.3	.3	.0	.0	.3	.0	.2	.0	.5	.0
22	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0
23	.0	.0	.0	.0	.0	.0	.3	.0	.0	.0	.0	.0
24	.0	.0	.0	.0	.0	.0	.2	.0	.0	.1	.0	.1
25	.7	.0	.0	.0	.0	.0	.1	.0	.0	.2	.0	.0
26	.0	.0	.0	.1	.0	.0	.0	.0	.0	.1	.5	.0
27	.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3	.0
28	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.2	.0
29	.0	.0	.0	.0	---	.0	.1	.0	.0	.0	.1	.0
30	.0	.0	.0	.0	---	.0	.7	.0	.0	.7	.0	.0
31	.0	---	.1	.0	---	.0	---	.0	---	3.1	.0	---
TOTAL	---	1.1	0.7	0.7	0.1	0.4	2.5	0.7	1.2	5.2	4.1	1.0

380916107452200 RIDGWAY METEOROLOGICAL STATION AT RIDGWAY, CO

LOCATION.--Lat 38°09'16", long 107°45'22", in SW$^{1}/_{4}$NW$^{1}/_{4}$ sec.16, T.45 N, R.8 W., Ouray County, Hydrologic Unit 14020006, 0.2 mi north of post office in Ridgway, and 0.3 mi north of State Highway 62.

PERIOD OF RECORD.--December 1992 to current year.

GAGE.--Weighing-bucket rain gage with satellite telemetry. Elevation of gage is 7,000 ft above sea level, from topographic map.

REMARKS.--Unpublished air-temperature and precipitation data for water year 1993 are available in district office. Daily record for air temperature is good. Daily record for precipitation is good.

EXTREMES FOR PERIOD OF RECORD.--
AIR TEMPERATURE: Maximum, 32.1°C, June 26, 1994, and June 29, and July 19, 20, 1998; minimum, -32.4°C, Dec. 21, 1998.
PRECIPITATION: Maximum daily, 2.0 inches, Oct. 3, 1996.

EXTREMES FOR CURRENT YEAR.--
AIR TEMPERATURE: Maximum, 30.6°C, July 5; minimum, -32.4°C, Dec. 21.
PRECIPITATION: Maximum daily, 1.6 inches, July 30.

TEMPERATURE, AIR, DEGREES CELSIUS, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	15.4	2.5	8.9	12.1	3.2	6.4	13.9	-7.1	1.0	.7	-17.4	-4.9
2	17.7	1.1	8.9	7.1	-1.7	2.3	12.8	-6.8	.9	-1.4	-21.6	-11.9
3	18.5	-1.7	8.6	5.7	-1.7	2.0	12.4	-8.3	-.7	-5.7	-15.3	-9.6
4	8.1	.0	3.6	5.7	-6.4	-.4	12.1	-6.4	.9	.4	-19.3	-9.0
5	7.1	-3.8	1.1	8.8	-8.6	-1.1	.4	-12.1	-5.0	5.3	-13.3	-3.2
6	12.8	-7.1	---	7.8	-1.7	3.8	-5.3	-21.1	-11.8	4.9	-14.5	-7.3
7	20.5	-4.6	6.9	4.6	-3.8	.2	-6.4	-22.6	-12.7	7.4	-7.1	-.7
8	21.7	-3.1	8.7	6.0	-2.1	1.2	-3.1	-23.1	-13.5	.7	-14.5	-5.4
9	20.5	-2.8	8.3	-2.1	-9.0	-5.2	-5.3	-14.1	-9.0	3.2	-17.0	-9.1
10	20.5	-4.2	7.2	-2.1	-12.9	-8.2	-4.9	-21.6	-12.0	4.2	-12.9	-6.4
11	19.7	-5.7	6.0	-1.7	-12.9	-5.6	.4	-22.6	-13.1	9.5	-13.3	-4.4
12	21.7	-3.8	7.3	2.8	-9.8	-3.8	5.7	-17.9	-10.1	6.4	-7.9	-.4
13	22.5	-4.6	8.0	4.6	-14.5	-6.9	6.4	-17.4	-9.1	1.4	-11.3	-6.4
14	22.1	4.6	13.6	8.8	-10.5	-3.5	7.4	-17.4	-7.9	5.7	-15.7	-7.8
15	17.7	.7	10.0	13.9	-8.3	.9	6.0	-16.2	-7.8	4.6	-12.9	-5.3
16	8.8	-2.4	2.1	12.4	-7.5	.3	6.7	-13.7	-5.9	2.8	-12.9	-5.4
17	7.1	-8.3	-.4	14.3	-5.3	4.1	8.5	-12.9	-4.7	3.2	-4.2	.1
18	12.4	-9.8	-1.0	5.7	-6.8	-.4	9.5	-11.7	-1.9	10.6	-2.1	4.1
19	15.4	-6.0	3.1	2.8	-8.3	-3.4	7.8	5.3	6.6	8.5	-1.0	4.8
20	15.4	-1.4	6.2	4.6	-11.7	-5.2	5.7	-10.5	.2	4.9	-1.7	1.9
21	13.5	-3.8	4.4	11.3	-10.9	-1.7	-9.8	-32.4	-15.9	1.1	-5.7	-2.6
22	11.7	-.3	4.7	15.4	-5.3	3.2	-12.1	-31.7	-22.7	.0	-14.9	-6.6
23	11.7	.0	5.9	16.1	-5.7	2.5	-6.8	-28.6	-20.3	9.2	-10.9	.2
24	14.3	-4.9	4.0	13.5	-4.9	3.5	.4	---	---	9.5	1.8	7.4
25	13.5	-1.0	4.9	13.1	-7.5	.7	-.3	-22.1	-12.9	11.7	-2.1	5.4
26	14.6	3.5	6.7	15.8	-6.8	1.4	2.5	-14.9	-6.0	6.7	-10.1	-.8
27	10.6	.7	5.3	17.7	-6.4	2.2	3.5	-12.5	-5.7	-.3	-12.9	-7.1
28	9.2	-2.8	4.7	15.4	-4.2	5.3	8.1	-12.9	-.9	-2.1	-13.7	-8.1
29	11.7	-4.6	2.9	8.5	-3.1	3.5	8.8	-9.4	-1.8	.7	-15.3	-8.6
30	10.6	3.5	---	11.3	-7.5	-.2	8.1	-10.5	-3.3	6.0	-14.9	-6.6
31	6.0	3.2	4.7	---	---	---	8.5	-10.1	-1.8	7.1	-12.5	-2.6
MONTH	22.5	-9.8	---	17.7	-14.5	-.1	13.9	---	---	11.7	-21.6	-3.8

380916107452200 RIDGWAY METEOROLOGICAL STATION AT RIDGWAY, CO--Continued

TEMPERATURE, AIR, DEGREES CELSIUS, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	4.6	-10.9	-2.2	13.5	-6.4	4.4	3.5	-3.8	.4	6.4	-.3	2.3
2	3.9	-14.9	-5.4	8.8	-7.1	1.3	-1.0	-4.9	-3.0	12.1	-.3	6.6
3	7.8	-7.5	.9	14.6	-7.1	2.6	.7	-5.3	-2.6	10.6	.4	4.8
4	11.0	-9.4	-.4	11.3	-3.5	4.5	1.1	-6.0	-2.7	2.8	-2.1	.1
5	5.3	-4.2	1.7	4.9	-2.8	.2	4.9	-6.4	-.6	3.9	-3.8	-.3
6	4.2	-4.9	-.2	11.7	-3.8	2.6	12.1	-7.9	2.5	8.8	-6.4	1.5
7	11.3	-3.5	2.8	11.0	-1.0	5.4	15.0	-6.0	5.3	16.5	-5.3	6.5
8	10.6	-2.4	3.0	5.7	-2.8	.3	9.5	-2.8	2.0	20.9	-1.0	11.2
9	11.3	-3.8	4.1	10.2	-4.2	3.5	6.7	-4.6	-.1	18.1	3.2	11.8
10	9.2	-10.5	.2	9.5	-5.3	2.7	5.3	-6.4	-1.0	9.2	-.7	4.8
11	-6.0	-23.1	-13.0	10.6	-5.3	2.8	12.8	-12.1	1.6	11.0	-2.8	3.8
12	1.8	-24.1	-12.6	-1.0	-2.4	-1.6	18.5	-.7	9.2	17.3	-6.4	7.5
13	10.2	-17.4	-6.6	6.7	-14.1	-2.6	15.4	-2.1	7.7	21.7	3.2	14.0
14	9.5	-10.5	-.3	15.4	-9.0	1.8	10.2	-5.3	3.7	18.5	8.8	15.3
15	1.4	-10.5	-2.3	17.3	-4.9	5.4	3.2	-8.3	-2.3	18.9	2.5	13.6
16	4.6	-14.5	-4.0	14.6	-5.3	4.2	6.4	-13.7	-2.3	15.8	.0	9.8
17	6.7	-5.7	.2	13.1	-7.1	4.2	11.7	-8.3	2.9	16.1	-4.9	6.1
18	6.4	-7.1	.7	13.1	-5.3	4.8	16.9	-6.8	5.8	22.5	-4.2	10.6
19	6.4	-4.9	1.7	14.3	-4.6	4.9	19.7	-5.7	8.5	23.3	.7	14.0
20	3.2	-9.0	-2.7	16.5	-6.0	5.8	19.3	-.7	10.4	20.9	2.8	14.2
21	9.2	-6.0	2.1	16.1	-3.5	11.1	12.1	-.3	4.9	23.3	-.7	13.1
22	5.7	-8.3	-3.6	12.4	-4.9	5.4	3.5	-.3	1.9	23.3	3.5	14.6
23	7.4	-10.1	-1.9	14.6	-8.6	4.5	9.2	.4	4.5	23.8	3.5	14.1
24	11.3	-7.5	.5	15.8	-5.3	5.4	12.1	.4	5.4	18.5	2.8	12.5
25	12.4	-6.8	3.2	16.5	-5.7	6.2	7.8	-1.4	2.8	16.1	1.4	9.2
26	8.1	-4.9	2.1	15.0	-3.8	7.0	10.6	.7	5.1	18.9	2.5	10.9
27	7.1	-9.4	-1.3	13.9	-4.2	7.5	16.9	-1.7	8.2	17.3	2.5	11.1
28	12.4	-7.9	1.0	12.8	-10.9	2.1	13.5	.7	7.5	22.5	.0	12.8
29	---	---	---	18.1	-9.8	4.5	15.0	2.5	7.8	17.7	4.6	11.2
30	---	---	---	15.8	-.3	10.0	8.8	.4	4.4	19.7	.0	11.8
31	---	---	---	12.1	3.2	8.8	---	---	---	20.1	7.4	15.0
MONTH	12.4	-24.1	-1.2	18.1	-14.1	4.2	19.7	-13.7	3.3	23.8	-6.4	9.5

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	21.3	-.7	12.1	30.1	5.7	---	22.5	7.8	15.4	18.5	9.9	14.4
2	19.7	1.4	10.4	29.2	7.4	19.6	24.2	7.8	15.3	18.5	7.8	12.9
3	20.9	1.1	13.9	25.1	14.6	21.2	20.5	12.8	16.0	21.7	4.9	14.0
4	20.5	.4	11.2	27.8	11.0	21.1	19.7	11.0	14.9	20.9	.7	10.8
5	10.2	-4.2	3.2	30.6	6.7	20.1	20.9	10.6	14.8	22.5	.7	11.5
6	20.5	.0	10.7	27.3	11.7	18.9	22.5	11.0	16.0	23.8	1.4	12.6
7	23.8	-.7	13.6	26.0	9.5	19.1	24.2	6.7	15.5	24.6	2.8	13.8
8	23.8	-1.0	13.7	22.5	14.6	18.1	25.5	6.0	16.2	25.1	1.1	12.5
9	22.5	-.7	13.1	23.8	12.4	17.9	23.3	11.0	16.0	25.1	-.3	13.0
10	22.5	-.3	12.8	27.3	6.7	18.3	18.5	9.5	13.6	22.9	10.2	16.4
11	22.1	-.3	12.1	24.2	9.9	15.9	22.1	7.8	14.9	21.3	4.6	13.0
12	21.3	.0	12.1	27.3	5.7	16.7	22.5	3.2	13.6	21.7	2.5	12.1
13	25.1	.4	13.7	26.4	6.0	17.6	26.0	3.9	15.1	22.5	1.1	12.2
14	22.5	5.7	13.7	20.9	11.7	15.7	24.6	6.0	14.3	20.1	2.1	10.4
15	22.1	4.2	13.5	20.1	11.0	15.0	19.7	9.5	14.5	15.8	3.9	10.0
16	24.6	8.5	15.7	25.1	5.7	15.2	25.1	6.4	15.1	18.5	1.4	10.4
17	18.9	7.4	12.4	25.5	6.7	16.3	19.7	9.9	13.8	19.7	1.8	10.2
18	22.1	3.2	13.2	21.3	11.7	15.7	25.1	6.4	14.5	19.3	2.1	10.4
19	26.0	3.9	16.1	19.7	10.2	15.0	21.3	12.8	16.6	13.9	4.2	8.3
20	25.5	7.1	15.6	25.5	8.5	17.8	20.9	11.0	15.4	15.0	3.2	9.4
21	22.9	7.4	14.7	25.1	9.2	17.2	20.1	11.0	14.9	16.9	-1.7	6.9
22	25.1	7.4	16.7	24.6	11.0	16.8	25.1	8.1	15.9	20.1	-3.1	8.8
23	26.9	3.5	16.6	27.8	7.1	17.4	26.4	6.7	16.0	16.9	7.4	12.3
24	28.2	5.3	17.7	23.8	8.8	17.0	26.0	6.4	15.9	17.3	4.9	10.8
25	26.9	6.7	18.5	23.3	11.0	17.3	23.3	8.1	15.6	23.3	2.8	12.6
26	27.3	4.2	17.9	26.0	9.5	16.5	25.1	6.7	15.3	24.2	1.8	12.7
27	26.9	7.1	19.3	25.1	8.8	16.7	23.8	9.9	14.6	16.5	-2.1	6.8
28	28.2	2.8	17.0	25.5	10.2	17.3	22.5	10.2	16.0	9.9	-7.5	1.9
29	26.9	4.6	16.8	22.5	10.2	16.5	25.1	7.1	16.4	18.5	-10.1	3.1
30	28.7	4.2	17.5	23.8	11.7	15.3	23.8	8.1	16.3	21.3	-6.0	6.7
31	---	---	---	19.3	9.2	13.2	23.3	8.8	15.9	---	---	---
MONTH	28.7	-4.2	14.2	30.6	5.7	---	26.4	3.2	15.3	25.1	-10.1	10.7

380916107452200 RIDGWAY METEOROLOGICAL STATION AT RIDGWAY, CO--Continued

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.1	.0	.0	.4	.0	.0	.2	.6	.0	.0	.0	.0
2	.0	.1	.0	.0	.0	.0	.4	.0	.0	.0	.0	.1
3	.4	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.2
4	.5	.0	.0	.0	.0	.0	.1	.5	.0	.0	.2	.0
5	.1	.0	.1	.0	.0	.0	.0	.1	.1	.0	.3	.0
6	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7	.0	.1	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0
8	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9	.0	.8	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
10	.0	.1	.0	.0	.2	.0	.0	.0	.0	.0	.3	.0
11	.0	.2	.0	.0	.0	.1	.0	.0	.0	.0	.1	.2
12	.0	.0	.0	.0	.1	.3	.0	.0	.0	.0	.0	.0
13	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
14	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
15	.0	.0	.0	.0	.0	.0	.0	.0	.0	.5	.3	.2
16	.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17	.4	.0	.0	.0	.0	.0	.0	.0	1.1	.0	.9	.4
18	.0	.0	.0	.0	.0	.0	.0	.0	.0	.3	.0	.0
19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.2
20	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1
21	.0	.0	.4	.5	.0	.0	.2	.0	.2	.0	.4	.0
22	.0	.0	.0	.1	.0	.0	.3	.0	.0	.1	.0	.0
23	.0	.0	.0	.0	.0	.0	.2	.1	.0	.0	.0	.0
24	.0	.0	.0	.0	.0	.0	.3	.0	.0	.2	.0	.0
25	.5	.0	.0	.0	.0	.0	.0	.1	.0	.3	.0	.0
26	.1	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0
27	.2	.0	.0	.0	.0	.0	.1	.0	.0	.1	.1	.0
28	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0
29	.0	.0	.0	.0	---	.0	.0	.0	.0	.4	.0	.0
30	.0	.0	.0	.0	---	.0	.6	.0	.0	1.6	.0	.0
31	.0	---	.1	.0	---	.0	---	.0	---	.3	.0	---
TOTAL	2.6	1.6	0.7	1.1	0.3	0.5	2.4	1.5	1.4	3.8	2.9	1.4

381001107412300 DRY CREEK METEOROLOGICAL STATION NEAR RIDGWAY, CO

LOCATION.--Lat 38°10'01", long 107°41'23", in $SE^1/_4NE^1/_4$ sec.12, T.45 N, R.8 W., Ouray County, Hydrologic Unit 14020006, 3.7 mi east of Ridgway.

PERIOD OF RECORD.--October 1994 to current year.

GAGE.--Weighing-bucket rain gage with satellite telemetry. Elevation of gage is 7,360 ft above sea level, from topographic map.

REMARKS.--Daily record for air temperature is good. Daily record for precipitation is good.

EXTREMES FOR PERIOD OF RECORD.--
AIR TEMPERATURE: Maximum recorded, 32.6°C, July 18, 19, 1998; minimum recorded, -26.9°C, Dec. 18, 1996.
PRECIPITATION: Maximum daily, 1.8 inches, Oct. 3, 1996.

EXTREMES FOR CURRENT YEAR.--
AIR TEMPERATURE: Maximum, 28.2°C, June 24, July 10, 12; minimum, -25.2°C, Dec. 21-22.
PRECIPITATION: Maximum daily, 1.1 inches, June 17.

TEMPERATURE, AIR, DEGREES CELSIUS, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	16.1	3.2	9.2	13.5	2.5	5.9	16.1	-2.4	4.7	.0	-12.1	-3.5
2	18.5	3.2	10.4	6.0	.0	2.6	15.4	-2.8	4.3	4.6	-13.3	-7.2
3	17.3	3.2	10.6	6.4	-.7	2.1	13.9	-4.9	2.7	-1.4	-11.7	-7.3
4	7.1	-1.0	2.7	8.5	-4.6	.7	12.1	-2.4	3.9	3.2	-12.9	-5.3
5	9.5	-2.4	1.4	11.0	-6.0	.6	-.3	-12.9	-4.5	9.2	-7.9	.1
6	14.3	-5.3	3.9	8.1	-2.4	3.2	-.7	-17.0	-10.0	9.9	-10.5	-1.6
7	22.1	-1.7	9.3	4.6	-3.8	-.3	-3.1	-21.1	-11.2	6.0	-2.4	1.7
8	22.9	1.8	11.7	4.9	-2.8	1.5	1.1	-21.1	-11.2	3.5	-11.3	-3.3
9	22.1	2.8	11.9	-2.8	-7.9	-5.0	-3.8	-14.1	-8.8	6.4	-14.1	-5.7
10	20.1	2.1	10.4	4.2	-10.9	-6.0	-1.0	-16.2	-9.9	7.1	-9.4	-2.3
11	21.3	.0	9.4	-.7	-12.1	-5.1	2.8	-17.0	-8.7	13.1	-6.4	1.0
12	23.3	2.5	11.4	8.1	-7.9	-2.1	9.5	-12.1	-4.3	7.1	-5.7	1.2
13	22.5	2.8	12.2	11.0	-10.5	-2.3	12.4	-10.9	-2.6	3.5	-10.5	-4.8
14	21.7	10.6	16.1	17.3	-6.0	2.1	11.0	-9.4	-1.5	8.8	-12.1	-4.2
15	17.3	5.3	12.0	15.8	-2.8	5.4	10.2	-10.5	-2.7	6.0	-7.5	-2.2
16	8.1	-2.4	2.4	13.9	-4.2	3.6	9.9	-7.9	-.8	4.2	-9.8	-2.8
17	8.5	-4.2	.7	13.1	-1.0	6.2	12.8	-8.6	-.4	1.8	-2.1	-.2
18	14.6	-7.1	1.9	8.5	-4.9	.6	10.2	-5.3	2.2	9.5	-.3	5.1
19	18.5	-3.5	5.7	6.0	-7.5	-2.3	7.4	4.2	6.2	8.8	1.4	5.1
20	15.8	1.8	7.8	7.4	-10.9	-4.1	4.9	-10.9	-.9	4.6	-1.0	1.9
21	14.6	-.3	6.1	12.1	-8.6	1.5	-3.5	-25.2	-12.9	.7	-5.7	-2.6
22	11.3	1.8	6.2	15.0	-1.0	5.7	-5.3	-25.2	-16.8	3.5	-10.1	-4.6
23	12.8	2.8	6.9	17.7	-2.8	5.7	---	---	---	9.2	-6.8	1.7
24	15.8	-2.4	5.9	13.5	-.3	7.2	---	---	---	8.5	4.9	6.8
25	14.3	1.4	5.6	15.4	-4.9	3.5	2.5	-15.7	-6.9	12.4	4.2	8.2
26	15.0	3.5	6.9	17.7	-3.5	4.7	5.3	-7.9	-2.3	5.7	-7.1	-1.4
27	11.0	1.8	5.6	19.3	-1.7	6.4	3.2	-6.4	-2.0	2.8	-12.1	-6.3
28	9.2	.0	4.7	14.3	1.8	7.5	9.2	-6.4	1.3	.4	-15.7	-7.9
29	13.1	-2.4	4.8	8.5	-1.4	3.7	14.3	-5.3	1.7	6.4	-16.6	-7.9
30	11.3	3.9	6.8	14.3	-5.3	2.4	9.9	-6.0	.1	9.5	-15.7	-5.5
31	5.7	2.8	4.0	---	---	---	9.2	-6.4	.7	9.2	-10.5	-.7
MONTH	23.3	-7.1	7.2	19.3	-12.1	1.9	---	---	---	13.1	-16.6	-1.8

381001107412300 DRY CREEK METEOROLOGICAL STATION NEAR RIDGWAY, CO--Continued

TEMPERATURE, AIR, DEGREES CELSIUS, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	4.2	-9.8	-2.3	12.1	-2.8	5.3	4.2	-4.2	-.1	6.7	-.3	2.1
2	7.1	-12.9	-3.8	9.5	-4.2	1.9	3.5	-5.3	-2.5	12.4	1.1	6.3
3	9.9	-4.2	2.0	13.1	-3.8	5.1	.0	-6.0	-3.2	9.2	-.3	5.0
4	10.2	-6.8	1.4	9.9	.7	6.0	.7	-6.4	-2.9	2.5	-2.4	.0
5	5.3	-3.1	1.4	3.5	-3.5	-.4	6.0	-4.9	-.3	3.2	-4.6	-.8
6	6.0	-4.6	-.3	11.7	-3.8	3.4	12.1	-6.0	3.8	8.5	-5.7	1.5
7	10.2	-4.2	2.6	9.5	-1.7	5.1	14.6	-2.4	6.7	19.3	-3.5	7.8
8	12.4	-1.4	4.4	5.3	-3.1	.0	10.6	-4.2	2.0	20.5	1.1	12.4
9	10.2	-1.7	5.3	9.2	-2.1	3.9	6.0	-4.6	1.2	16.9	5.7	12.7
10	8.5	-11.7	.5	9.2	-2.8	3.2	6.7	-6.0	-1.0	9.2	-1.4	4.3
11	-1.0	-20.7	-12.2	9.5	-2.1	4.2	12.4	-9.4	3.0	10.2	-1.0	3.8
12	5.7	-21.6	-9.6	1.1	-2.8	-1.6	18.1	2.8	10.3	18.1	-4.2	8.4
13	15.0	-13.7	-1.7	12.8	-10.1	-.2	16.1	.7	8.3	21.7	6.7	15.2
14	10.6	-6.4	2.6	16.1	-7.9	3.9	10.2	-2.4	4.7	18.1	10.2	14.5
15	4.2	-9.8	-1.3	17.7	-1.0	7.6	3.5	-6.8	-1.2	18.1	5.3	13.5
16	4.9	-13.3	-3.1	15.8	-1.0	6.6	6.4	-11.7	-1.2	15.8	.4	9.5
17	6.0	-3.8	.9	12.8	-2.4	5.7	13.5	-4.2	3.7	18.1	-4.6	7.5
18	5.7	-7.1	.8	13.1	-2.4	5.6	17.3	-2.4	8.2	21.7	-.3	12.3
19	4.9	-5.7	1.1	15.4	-.7	6.9	20.1	-.3	10.7	22.1	4.6	14.8
20	5.7	-10.5	-3.0	18.1	-1.7	8.4	18.9	4.6	11.9	22.5	4.6	14.8
21	8.8	-6.4	2.1	16.1	2.8	11.1	12.4	.4	4.7	22.5	2.8	14.4
22	3.9	-8.3	-4.0	12.8	-.7	6.5	5.3	.0	1.7	23.8	5.7	14.8
23	9.2	-10.9	-1.6	13.9	-4.6	5.8	8.8	.0	4.1	24.2	6.4	14.6
24	12.4	-7.1	1.9	15.8	-3.8	6.6	12.8	.4	4.9	18.9	3.9	12.5
25	14.6	-4.2	3.4	16.9	-2.8	8.4	7.8	-2.1	2.4	16.5	3.5	9.5
26	7.4	-3.5	2.3	14.6	-.7	8.1	10.2	.0	4.8	17.3	2.5	10.9
27	8.1	-9.4	-.8	13.1	-.3	7.8	16.1	1.4	9.5	17.7	4.2	11.5
28	12.4	-7.5	2.2	13.1	-5.7	4.0	15.0	4.2	9.3	23.3	3.9	13.9
29	---	---	---	18.5	-6.8	7.3	14.3	2.1	7.2	17.3	6.7	12.2
30	---	---	---	15.0	4.9	10.6	8.8	.0	4.0	20.1	3.2	12.6
31	---	---	---	11.7	2.5	8.3	---	---	---	18.9	9.5	15.2
MONTH	15.0	-21.6	-.3	18.5	-10.1	5.3	20.1	-11.7	3.8	24.2	-5.7	9.9

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	21.3	1.4	12.9	---	---	---	23.3	8.5	16.1	18.9	10.6	14.5
2	19.3	6.0	11.9	---	---	---	24.6	9.9	16.7	20.5	9.2	13.5
3	20.1	4.2	14.2	---	---	---	20.9	13.1	16.6	21.3	9.2	14.6
4	20.1	1.8	12.4	---	---	---	20.1	11.7	14.6	21.3	4.6	13.0
5	10.6	-1.7	3.6	---	---	---	22.1	11.3	15.0	24.6	2.8	13.6
6	19.7	1.4	11.1	---	---	---	22.9	12.1	16.3	23.8	4.2	15.1
7	22.9	3.2	14.9	27.8	10.6	19.4	24.6	8.8	16.7	25.1	7.8	16.5
8	22.9	4.6	15.5	22.5	13.5	17.6	26.9	7.4	17.1	26.0	4.9	15.3
9	22.5	3.9	14.8	23.3	13.5	17.8	23.8	11.7	16.3	24.6	4.6	15.4
10	21.7	4.2	14.0	28.2	10.2	19.7	18.5	10.2	13.8	22.9	11.7	17.2
11	22.5	2.1	13.4	25.1	10.2	16.9	22.5	9.9	15.4	21.7	6.7	13.5
12	22.5	3.9	13.9	28.2	6.7	17.4	23.3	5.3	15.1	22.9	4.6	13.4
13	25.1	3.9	15.6	27.8	10.2	19.0	27.8	6.4	16.8	23.8	3.5	13.9
14	21.3	6.7	13.7	20.9	13.1	16.2	24.2	9.9	15.6	20.5	5.3	12.1
15	22.9	6.4	14.1	19.7	11.7	15.1	18.9	10.6	14.1	16.9	5.3	10.1
16	23.3	9.2	15.0	25.1	8.5	16.3	23.8	8.1	15.9	19.7	3.5	11.0
17	19.3	6.4	11.9	24.2	9.5	17.6	19.7	10.2	14.1	18.5	4.6	11.1
18	23.3	5.3	14.0	20.1	12.1	15.8	25.5	8.5	15.5	20.1	4.2	11.9
19	25.5	6.7	16.9	19.7	9.9	15.2	22.1	12.4	16.7	15.0	5.7	9.1
20	25.1	8.5	16.1	26.9	9.5	18.6	21.7	11.7	15.8	15.0	3.5	9.6
21	22.1	9.5	15.4	25.5	10.6	17.9	20.1	11.0	15.1	18.9	.0	9.0
22	24.6	7.4	16.8	22.9	11.0	16.8	25.1	9.2	17.0	21.3	.0	10.7
23	26.4	7.8	18.6	27.3	9.5	18.3	26.0	9.5	17.6	16.1	9.5	12.7
24	28.2	8.8	18.9	24.2	11.3	17.6	26.0	9.2	16.9	17.3	7.8	12.0
25	26.0	9.9	19.3	24.2	10.6	17.5	23.3	11.0	16.6	23.8	9.5	15.8
26	26.4	9.2	18.9	26.9	10.2	17.1	25.1	8.8	16.3	24.2	7.4	15.7
27	26.4	9.9	19.5	26.0	10.6	17.4	23.3	11.7	15.4	16.9	.7	8.5
28	27.3	8.5	19.0	27.3	11.7	17.8	24.2	12.1	16.3	11.0	-3.1	3.0
29	26.9	9.2	19.0	24.2	11.3	17.6	26.0	9.5	17.8	18.9	-6.4	5.8
30	---	---	---	23.8	11.3	15.0	26.0	9.9	17.4	22.5	-1.7	10.1
31	---	---	---	19.3	9.2	13.4	23.3	10.6	16.2	---	---	---
MONTH	---	---	---	---	---	---	27.8	5.3	16.0	26.0	-6.4	12.3

381001107412300 DRY CREEK METEOROLOGICAL STATION NEAR RIDGWAY, CO--Continued

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.2	.0	.0	.7	.0	.0	.1	.8	.0	---	.0	.0
2	.0	.2	.0	.0	.0	.0	.5	.2	.0	---	.0	.2
3	.3	.0	.0	.1	.0	.0	.0	.1	.0	---	.0	.0
4	.5	.0	.0	.0	.0	.0	.0	.6	.0	---	.1	.0
5	.2	.0	.2	.0	.0	.0	.0	.1	.0	---	.2	.0
6	.0	.1	.0	.1	.0	.0	.0	.0	.1	---	.0	.0
7	.0	.2	.1	.0	.0	.0	.1	.0	.0	.0	.0	.0
8	.0	.2	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0
9	.0	.8	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0
10	.0	.3	.0	.0	.3	.0	.0	.0	.0	.0	.2	.0
11	.0	.2	.1	.0	.0	.2	.0	.0	.0	.0	.1	.1
12	.0	.0	.0	.0	.1	.4	.0	.0	.0	.0	.0	.0
13	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
14	.0	.1	.0	.0	.0	.1	.0	.0	.1	.0	.0	.1
15	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.3	.2
16	.5	.0	.0	.0	.1	.0	.0	.0	.1	.0	.0	.0
17	.5	.0	.0	.0	.0	.0	.0	.0	1.1	.0	.2	.0
18	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0	.0
19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.2
20	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1
21	.0	.0	.4	.8	.0	.0	.3	.0	.3	.0	.4	.0
22	.0	.0	.0	.2	.0	.0	.2	.0	.0	.0	.0	.0
23	.0	.0	.0	.1	.0	.0	.3	.0	.0	.0	.0	.0
24	.0	.0	.0	.0	.0	.0	.4	.0	.0	.0	.3	.0
25	.5	.0	.0	.0	.0	.0	.0	.0	.0	.3	.0	.0
26	.1	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0
27	.2	.0	.0	.0	.0	.0	.1	.0	.0	.0	.1	.0
28	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0
29	.0	.0	.0	.0	---	.0	.0	.1	.0	.0	.0	.0
30	.0	.0	.0	.0	---	.0	.6	.0	---	.9	.0	.0
31	.0	---	.0	.0	---	.0	---	.0	---	.2	.0	---
TOTAL	3.0	2.1	0.8	2.2	0.6	0.8	2.6	1.9	---	---	2.1	0.9

381422107453000 RIDGWAY RESERVOIR METEOROLOGICAL STATION NEAR RIDGWAY, CO

LOCATION.--Lat 38°14'22", long 107°45'30", in NE$^{1}/_{4}$SE$^{1}/_{4}$ sec.17, T.46 N, R.8 W., Ouray County, Hydrologic Unit 14020006, 6.3 mi north of Ridgway, and 6.7 mi south of Colona.

PERIOD OF RECORD.--October 1991 to current year.

GAGE.--Weighing-bucket rain gage with satellite telemetry. Elevation of gage is 6,710 ft above sea level, from topographic map.

REMARKS.--Unpublished air-temperature and precipitation data for water years 1992 and 1993 are available in district office. Daily record for air temperature is good. Daily record for precipitation is good.

EXTREMES FOR PERIOD OF RECORD.--
AIR TEMPERATURE: Maximum recorded, 33.2°C, June 26, 1994, and June 29, 30 and July 19, 1998; minimum recorded, -23.6°C, Dec. 13, 1993.
PRECIPITATION: Maximum daily, 1.7 inches, Oct. 3, 1996.

EXTREMES FOR CURRENT YEAR.--
AIR TEMPERATURE: Maximum, 31.6°C, July 1, 5; minimum, -23.1°C, Dec. 22.
PRECIPITATION: Maximum daily, 1.1 inches, July 30.

TEMPERATURE, AIR, DEGREES CELSIUS, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	16.9	5.3	10.6	12.4	3.5	7.1	14.6	-2.8	3.9	3.2	-9.4	-2.2
2	19.7	4.2	11.3	7.4	.7	4.0	13.5	-2.8	3.5	-.3	-12.5	-6.7
3	19.3	2.1	11.1	5.3	-.7	3.0	12.4	-5.3	1.9	-1.0	-10.5	-6.2
4	8.1	.4	3.8	6.4	-3.8	.6	13.5	-3.8	3.0	3.2	-12.1	-5.2
5	8.1	-1.4	2.3	11.7	-5.3	.8	-.3	-10.5	-5.4	10.2	-6.4	-.1
6	12.8	-3.5	2.3	8.8	-1.7	4.3	-4.9	-14.1	-9.6	4.9	-9.0	-2.2
7	20.5	-2.8	5.7	6.4	-2.1	1.5	-5.7	-17.4	-10.7	8.1	-2.8	1.3
8	21.7	-2.4	8.0	6.7	-1.7	2.3	-1.0	-18.3	-10.3	.7	-10.1	-3.3
9	22.1	-.7	9.3	-1.7	-7.9	-4.8	-5.3	-11.3	-7.7	3.5	-12.1	-5.4
10	21.7	.7	9.9	2.1	-10.9	-6.2	-5.3	-14.9	-9.2	5.3	-7.5	-2.5
11	19.7	-2.1	7.0	.0	-10.5	-4.6	2.5	-16.2	-8.9	10.6	-7.1	-.2
12	21.7	-1.4	8.0	5.3	-4.9	-1.6	7.8	-12.5	-4.6	8.1	-3.1	1.9
13	24.2	-1.4	9.7	7.4	-8.3	-1.6	7.8	-10.5	-3.5	1.1	-7.5	-4.0
14	22.9	7.8	14.1	11.0	-5.7	1.4	6.4	-10.1	-2.4	4.9	-11.7	-4.6
15	18.9	2.1	9.6	17.3	-1.7	5.7	7.8	-10.5	-3.4	3.2	-9.4	-3.3
16	9.9	-4.9	1.9	12.4	-3.5	3.3	6.4	-8.3	-2.1	6.0	-7.9	-2.6
17	7.8	-6.8	-.9	15.4	-.7	6.9	10.6	-7.5	-.8	3.2	-2.1	.7
18	13.5	-7.9	.1	6.0	-3.8	.7	12.4	-6.8	2.7	12.1	.4	6.1
19	15.8	-4.6	2.6	3.9	-6.0	-1.6	9.2	.0	6.8	9.2	.7	6.2
20	16.1	-1.7	4.9	5.3	-9.8	-3.5	6.4	-10.1	-.1	6.7	-.3	2.7
21	14.3	-2.1	3.7	8.8	-7.9	.3	-6.4	-22.1	-13.7	3.2	-4.2	-1.7
22	11.7	-1.7	3.9	16.5	-2.4	5.7	-5.7	-23.1	-16.6	3.2	-9.4	-4.2
23	12.8	-.7	7.1	17.3	-1.7	4.8	-9.0	-21.1	-15.6	10.6	-7.5	2.2
24	14.6	-1.0	6.6	14.6	-1.4	5.6	.0	-19.3	-12.2	11.0	2.1	8.6
25	15.0	2.5	6.7	13.9	-3.5	3.5	.7	-15.3	-8.5	12.4	.0	5.2
26	14.3	4.2	7.6	14.3	-3.1	4.1	2.1	-10.1	-4.4	7.1	-6.4	1.1
27	10.2	2.5	6.0	17.7	-1.4	5.7	6.4	-8.3	-2.2	2.8	-9.8	-5.1
28	10.6	.0	5.9	16.1	.0	7.2	9.5	-6.8	.3	-1.0	-11.3	-6.6
29	12.8	-1.0	4.9	9.2	-1.0	4.5	11.7	-3.8	1.5	1.1	-13.7	-7.2
30	10.6	1.4	6.4	11.3	-4.2	2.2	7.8	-5.3	-.4	4.2	-12.5	-5.0
31	6.4	3.9	5.0	---	---	---	8.8	-5.3	.5	9.5	-8.6	-.7
MONTH	24.2	-7.9	6.3	17.7	-10.9	2.0	14.6	-23.1	-4.1	12.4	-13.7	-1.4

381422107453000 RIDGWAY RESERVOIR METEOROLOGICAL STATION NEAR RIDGWAY, CO--Continued

TEMPERATURE, AIR, DEGREES CELSIUS, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	5.3	-7.1	-.7	15.0	-2.1	6.9	5.7	-3.1	.6	7.4	.4	2.9
2	5.7	-11.7	-3.1	10.2	-4.2	3.0	1.8	-4.2	-2.4	12.4	.7	7.3
3	9.5	-4.6	3.3	15.8	-3.5	5.8	2.5	-5.7	-1.6	9.9	-.3	6.3
4	11.3	-5.7	1.5	12.4	1.4	8.1	1.8	-4.2	-1.5	3.2	-1.0	.6
5	8.5	-2.1	2.7	3.5	-2.1	.5	7.4	-3.8	.8	5.7	-2.8	.7
6	6.7	-2.8	.8	13.5	-2.8	3.8	13.5	-5.3	4.1	9.2	-5.3	2.3
7	8.1	-3.1	2.5	11.7	.0	6.5	15.4	-1.7	6.9	17.7	-2.4	8.0
8	10.6	-1.7	4.3	6.4	-1.7	1.0	10.2	-1.7	2.9	22.1	1.4	12.8
9	13.5	-1.4	6.4	10.6	-.7	5.0	7.8	-4.2	.8	18.9	4.9	13.2
10	9.9	-10.1	1.0	10.2	-2.4	3.5	6.0	-4.9	.0	10.2	-.3	5.2
11	-2.8	-18.8	-11.2	11.3	-2.8	3.3	12.8	-7.9	3.4	9.5	-.3	4.7
12	.7	-20.2	-9.6	.0	-2.1	-1.0	18.9	1.8	10.3	17.7	-2.4	9.0
13	9.5	-13.7	-2.9	6.7	-8.3	-.4	16.9	.4	9.0	22.5	6.4	15.4
14	11.7	-7.9	2.2	16.5	-4.9	4.7	10.2	-2.8	4.8	18.9	7.1	15.4
15	3.9	-6.0	-.6	18.1	-.3	7.4	4.2	-6.0	-1.3	19.3	4.6	14.4
16	5.3	-9.8	-1.7	15.8	-1.4	6.3	6.7	-10.1	-.8	16.9	1.8	10.3
17	8.5	-3.1	2.1	14.3	-2.1	6.1	12.1	-4.6	4.0	16.5	-2.1	7.5
18	7.4	-5.7	1.6	13.9	-2.1	6.4	17.3	-1.0	8.4	23.3	.7	12.8
19	8.5	-4.6	1.8	15.0	-.7	6.8	20.9	.4	11.3	24.2	6.4	16.0
20	4.2	-9.0	-2.2	17.7	-.7	7.9	19.7	4.9	13.0	21.7	6.0	15.4
21	9.5	-5.3	3.0	17.3	1.4	10.9	12.4	1.1	5.9	24.6	4.9	15.0
22	6.4	-5.7	-2.3	13.1	-1.7	6.2	4.6	-.3	2.3	24.6	6.0	15.4
23	8.1	-7.9	-.4	15.8	-3.1	6.8	8.8	1.1	5.1	25.1	6.0	15.1
24	13.1	-5.3	2.8	16.1	-1.7	7.4	13.1	1.1	6.0	20.1	4.2	13.3
25	14.3	-3.1	5.4	19.7	-1.0	8.5	9.2	-.3	3.9	17.7	4.2	10.7
26	9.9	-2.4	4.3	16.1	.7	8.7	11.7	2.5	6.5	20.1	4.2	12.4
27	7.8	-8.3	-.3	15.0	-.7	8.7	17.3	2.1	10.2	19.7	4.9	12.9
28	13.1	-5.7	3.2	13.9	-3.5	5.1	15.0	3.5	9.3	22.9	4.6	15.0
29	---	---	---	18.5	-4.6	7.0	14.6	2.8	8.5	20.1	7.1	13.1
30	---	---	---	16.1	1.8	10.4	8.1	1.4	4.9	20.5	4.2	13.6
31	---	---	---	12.8	4.6	9.8	---	---	---	22.5	9.5	16.3
MONTH	14.3	-20.2	.5	19.7	-8.3	5.8	20.9	-10.1	4.5	25.1	-5.3	10.7

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	21.7	3.2	13.5	31.6	11.0	21.9	23.3	9.5	16.5	20.5	10.6	15.2
2	20.1	6.0	12.1	30.1	13.5	22.1	25.1	11.0	17.7	19.7	9.9	14.1
3	21.7	2.5	13.9	27.8	12.4	21.8	21.3	13.9	17.7	22.1	8.5	15.5
4	20.1	1.8	12.0	29.2	13.5	22.4	20.1	13.5	16.1	20.9	5.7	13.3
5	11.0	-1.7	4.4	31.6	11.7	22.4	23.3	12.4	16.2	24.2	4.2	14.1
6	20.5	2.8	12.2	28.7	13.5	20.1	23.8	12.8	16.9	25.5	6.7	16.3
7	24.2	4.2	15.3	28.7	11.3	20.6	26.4	9.5	17.5	26.9	7.8	17.7
8	24.6	4.9	16.0	22.1	15.4	18.4	27.8	9.5	17.9	25.1	5.3	15.1
9	24.2	4.9	15.2	24.6	14.3	18.9	24.2	12.8	17.4	26.9	5.7	16.1
10	23.3	5.3	15.3	28.7	10.6	20.0	20.9	10.6	14.8	24.2	12.4	18.3
11	23.3	3.5	14.0	26.4	11.7	17.9	23.3	11.0	15.8	20.9	7.8	13.7
12	22.9	4.6	14.5	27.8	8.1	18.5	23.8	8.1	16.2	21.7	6.0	13.6
13	24.6	4.9	15.9	29.2	11.3	19.8	26.9	7.4	17.3	24.6	4.9	14.4
14	23.8	6.4	14.3	21.7	14.3	17.5	26.0	9.9	16.8	21.3	7.1	13.3
15	23.8	7.4	15.4	20.5	13.1	15.9	20.9	11.0	15.2	15.8	6.4	11.3
16	25.1	8.8	16.6	25.1	8.8	16.7	25.5	9.2	16.7	19.7	4.6	12.3
17	18.9	9.9	13.0	25.1	10.2	18.3	20.5	12.1	15.1	19.7	5.3	12.1
18	24.2	6.0	14.8	21.7	12.4	16.9	24.6	9.2	16.2	20.9	4.9	13.2
19	26.4	7.8	17.6	20.5	11.7	15.9	22.1	13.5	17.8	16.9	6.0	10.2
20	26.4	8.8	16.8	26.4	9.9	18.8	20.9	12.8	16.5	15.4	5.3	10.4
21	23.3	9.2	15.4	26.0	12.4	18.8	22.1	12.8	15.6	18.1	1.8	9.1
22	26.0	8.5	17.7	24.6	12.4	18.6	24.2	10.2	17.2	20.1	.7	10.8
23	27.3	8.1	18.9	28.7	11.0	19.2	26.0	9.9	18.3	17.3	9.5	14.0
24	29.7	9.9	19.8	24.6	11.7	18.1	26.9	10.2	18.3	18.5	9.2	13.1
25	27.8	11.3	20.2	23.8	13.5	18.2	23.8	11.3	17.5	24.2	9.2	16.3
26	28.7	10.6	20.2	25.5	11.7	17.9	24.6	10.2	16.9	25.5	8.5	16.4
27	27.8	9.5	20.4	26.0	11.0	17.9	23.8	12.1	16.3	16.1	.7	8.4
28	29.2	8.5	19.9	27.3	12.4	18.8	24.6	13.1	17.0	9.9	-3.8	3.0
29	28.2	9.5	20.2	24.2	12.8	18.0	26.4	10.2	18.8	17.7	-5.3	5.4
30	29.7	9.5	20.1	24.2	12.8	16.6	24.6	11.3	18.8	20.9	-1.4	9.2
31	---	---	---	20.1	11.0	14.2	23.8	12.1	17.9	---	---	---
MONTH	29.7	-1.7	15.9	31.6	8.1	18.7	27.8	7.4	16.9	26.9	-5.3	12.9
YEAR	31.6	-23.1	7.4									

381422107453000 RIDGWAY RESERVOIR METEOROLOGICAL STATION NEAR RIDGWAY, CO--Continued

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.1	.0	.0	.4	.0	.0	.1	.7	.0	.0	.0	.0
2	.0	.1	.0	.0	.0	.0	.4	.0	.1	.0	.0	.2
3	.1	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0
4	.3	.0	.0	.0	.0	.0	.1	.4	.0	.0	.1	.0
5	.0	.0	.2	.0	.0	.0	.0	.1	.1	.0	.1	.0
6	.1	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8	.0	.3	.0	.0	.0	.1	.0	.0	.0	.2	.1	.0
9	.0	.5	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
10	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0	.2	.1
11	.0	.2	.0	.0	.1	.1	.0	.0	.0	.0	.2	.4
12	.0	.0	.0	.0	.0	.3	.0	.0	.0	.0	.0	.0
13	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
14	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0
15	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.1	.1
16	.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
17	.6	.0	.0	.0	.0	.0	.0	.0	1.0	.3	.5	.0
18	.0	.0	.0	.0	.0	.0	.0	.0	.0	.4	.0	.0
19	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.4
20	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.2
21	.0	.0	.4	.5	.0	.0	.3	.0	.3	.0	.6	.0
22	.0	.0	.0	.1	.0	.0	.3	.0	.0	.0	.0	.0
23	.1	.0	.0	.1	.0	.0	.1	.0	.0	.1	.0	.0
24	.0	.0	.0	.0	.0	.0	.3	.0	.0	.1	.0	.0
25	.6	.0	.0	.0	.0	.0	.0	.0	.0	.3	.0	.0
26	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0
27	.1	.0	.0	.0	.0	.0	.0	.0	.0	.1	.1	.0
28	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.2	.0
29	.0	.0	.0	.0	---	.0	.1	.0	.0	.3	.0	.0
30	.0	.0	.0	.0	---	.0	.6	.0	.0	1.1	.0	.0
31	.0	---	.0	.0	---	.0	---	.0	---	.4	.0	---
TOTAL	2.5	1.3	0.8	1.2	0.3	0.5	2.3	1.4	1.6	3.5	2.3	1.4

MISCELLANEOUS STATION ANALYSES

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)
09010500 COLORADO RIVER BELOW BAKER GULCH, NEAR GRAND LAKE, CO (LAT 40 19 33N LONG 105 51 22W)				
OCT 1998				
06...	1500	39	67	2.0
NOV				
03...	1315	32	68	2.5
DEC				
03...	0932	11	76	.0
APR 1999				
13...	1336	24	67	1.5
MAY				
14...	1022	87	62	3.0
JUN				
03...	1014	277	45	4.0
JUL				
08...	1110	161	55	9.5
AUG				
05...	1044	66	65	11.5
SEP				
02...	0946	46	70	11.0
09019500 COLORADO RIVER NEAR GRANBY, CO (LAT 40 07 15N LONG 105 54 00W)				
OCT 1998				
06...	1230	24	64	6.0
APR 1999				
13...	0800	29	78	1.0
MAY				
14...	0842	90	63	7.0
JUN				
03...	1258	458	57	9.0
JUL				
08...	1242	376	55	8.0
AUG				
05...	0855	32	79	8.5
SEP				
02...	0809	24	78	9.5
09024000 FRASER RIVER AT WINTER PARK, CO (LAT 39 54 00N LONG 105 46 34W)				
OCT 1998				
08...	1424	14	99	5.5
NOV				
05...	1302	6.9	126	1.0
DEC				
02...	1132	4.9	119	.0
FEB 1999				
16...	1236	6.3	134	.0
APR				
14...	1535	6.3	182	1.5
MAY				
12...	1540	10	169	6.6
JUN				
02...	0822	33	75	3.0
JUL				
07...	0831	64	55	5.5
AUG				
03...	1256	49	66	8.0
31...	1226	12	105	12.0
09025000 VASQUEZ CREEK AT WINTER PARK, CO (LAT 39 55 13N LONG 105 47 05W)				
OCT 1998				
08...	1119	4.7	62	3.5
NOV				
05...	0900	3.9	54	.0
DEC				
02...	1412	5.5	52	.0
FEB 1999				
16...	1435	8.1	54	.0
APR				
12...	1352	11	59	1.5
JUN				
01...	1426	20	41	7.0
JUL				
06...	1348	9.6	37	13.0
AUG				
03...	1425	9.0	43	11.5
SEP				
01...	1524	8.6	46	12.0
09025300 ELK CREEK AT UPPER STATION, NEAR FRASER, CO (LAT 39 53 21N LONG 105 49 55W)				
OCT 1998				
07...	1451	.92	48	1.0
JUN 1999				
01...	1634	1.3	44	3.5
JUL				
06...	1452	3.1	33	9.0
AUG				
31...	1621	1.5	41	8.5
09026500 ST. LOUIS CREEK NEAR FRASER, CO (LAT 39 54 36N LONG 105 52 40W)				
OCT 1998				
07...	1746	7.2	95	3.5
NOV				
05...	1225	5.8	96	.0
DEC				
02...	1600	8.5	93	.0
FEB 1999				
16...	1631	6.2	73	.0
APR				
14...	1746	6.4	96	.5
MAY				
13...	1044	9.9	91	3.0
JUN				
02...	1103	35	72	4.5
JUL				
07...	0952	16	78	7.5
AUG				
04...	0810	14	75	9.0
SEP				
01...	0807	14	76	7.5

MISCELLANEOUS STATION ANALYSES--Continued

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)
09032000 RANCH CREEK NEAR FRASER, CO (LAT 39 57 00N LONG 105 45 54W)				
OCT 1998				
08...	1500	4.5	51	3.5
NOV				
04...	1455	4.1	49	.5
05...	1245	4.7	49	.1
DEC				
03...	1420	3.0	52	.0
FEB 1999				
18...	0935	2.7	57	.0
APR				
06...	1355	3.1	59	1.1
14...	1249	3.8	59	.5
MAY				
13...	1449	7.0	52	5.0
JUN				
02...	1536	26	37	7.5
09...	1515	25	35	8.3
JUL				
07...	1355	4.2	38	13.0
AUG				
04...	1200	4.2	42	10.3
04...	1234	4.2	42	11.0
SEP				
01...	1405	4.8	45	10.0
09032100 CABIN CREEK NEAR FRASER, CO (LAT 39 59 09N LONG 105 44 40W)				
OCT 1998				
07...	1154	4.8	45	.0
NOV				
04...	1330	3.8	42	.0
DEC				
09...	1227	1.6	27	.0
APR 1999				
15...	1324	2.7	19	.0
MAY				
13...	1605	1.1	33	3.0
JUN				
02...	1449	3.5	28	6.5
JUL				
07...	1658	13	34	11.0
AUG				
04...	1005	7.7	41	7.5
SEP				
01...	1252	5.7	46	10.0
400016105490800 MEADOW CREEK AT MOUTH NEAR TABERNASH, CO (LAT 40 00 16N LONG 105 49 08W)				
OCT 1998				
07...	0949	.38	85	1.0
NOV				
04...	1152	.80	58	2.0
DEC				
03...	1245	.60	63	.0
FEB 1999				
17...	1601	.61	58	.0
APR				
14...	1047	4.5	66	.0
MAY				
13...	1230	11	55	5.5
JUN				
02...	1903	3.5	62	11.5
JUL				
07...	1209	1.7	67	17.5
AUG				
04...	1440	.32	85	16.5
SEP				
01...	0939	.15	106	10.0
09034900 BOBTAIL CREEK NEAR JONES PASS, CO (LAT 39 45 37N LONG 105 54 21W)				
OCT 1998				
08...	1326	3.9	64	4.0
JAN 1999				
14...	1055	.85	66	.0
MAR				
03...	1135	.70	71	.0
APR				
26...	1454	.96	67	.0
MAY				
20...	1000	7.1	50	.0
JUN				
15...	1310	53	34	2.5
JUL				
09...	1330	29	39	11.0
AUG				
09...	1305	13	50	10.5
SEP				
01...	1306	11	55	8.5
09035500 WILLIAMS FORK BELOW STEELMAN CREEK, CO (LAT 39 46 44N LONG 105 55 40W)				
OCT 1998				
08...	1120	8.3	59	1.0
JAN 1999				
14...	1150	3.6	--	.0
MAR				
03...	1300	4.5	68	.0
APR				
26...	1129	5.4	62	.0
JUN				
02...	1055	78	37	2.0
JUL				
09...	1020	76	39	6.0
AUG				
09...	1033	30	50	7.5
SEP				
01...	1026	21	57	7.0

MISCELLANEOUS STATION ANALYSES--Continued

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)
09035700 WILLIAMS FORK ABOVE DARLING CREEK, NEAR LEAL, CO (LAT 39 47 22N LONG 106 01 18W)									
OCT 1998					MAY				
20...	1420	12	64	3.0	26...	1200	108	45	4.0
NOV					JUN				
12...	1230	16	64	.0	22...	1125	255	35	5.5
JAN 1999					JUL				
21...	1645	11	72	.0	21...	1440	65	49	11.5
FEB					AUG				
23...	1630	8.2	70	.0	18...	1400	42	56	14.0
MAR					SEP				
29...	1620	13	71	.5	21...	1210	23	62	6.5
APR									
28...	1130	13	66	3.5					
09035800 DARLING CREEK NEAR LEAL, CO (LAT 39 48 17N LONG 106 01 11W)									
OCT 1998					MAY				
20...	1300	4.4	74	1.5	26...	1300	19	59	3.5
NOV					JUN				
12...	1105	4.0	74	.0	22...	1355	55	47	6.5
JAN 1999					JUL				
22...	0950	2.5	78	.0	21...	1255	10	62	9.0
FEB					AUG				
23...	1415	2.6	84	.5	18...	1600	6.5	71	10.5
MAR					SEP				
29...	1430	2.6	84	1.5	23...	1050	4.9	74	4.0
APR									
28...	1300	2.9	80	2.5					
09035900 SOUTH FORK OF WILLIAMS FORK NEAR LEAL, CO (LAT 39 47 44N LONG 106 01 49W)									
OCT 1998					MAY				
20...	1600	13	86	3.5	26...	1445	84	61	6.0
NOV					JUN				
12...	1515	12	87	.0	22...	1300	170	47	6.0
JAN 1999					JUL				
21...	1330	9.1	91	.0	21...	1605	44	65	11.0
FEB					AUG				
23...	1130	10	94	.0	18...	1240	28	75	10.0
MAR					SEP				
31...	1115	9.4	95	1.0	21...	1400	16	81	7.0
APR									
28...	1450	15	90	4.0					
09036000 WILLIAMS FORK NEAR LEAL, CO (LAT 39 49 53N LONG 106 03 15W)									
OCT 1998					MAY				
21...	1545	35	79	6.5	26...	1750	251	56	6.0
NOV					JUN				
13...	0940	28	81	.5	22...	1740	595	46	7.0
JAN 1999					JUL				
22...	1240	21	84	1.0	21...	1730	144	60	11.5
FEB					AUG				
25...	1015	20	86	1.0	18...	1730	91	70	16.5
MAR					SEP				
31...	1300	29	82	4.0	23...	1437	53	76	10.0
APR									
28...	1640	42	80	5.5					
09037500 WILLIAMS FORK NEAR PARSHALL, CO (LAT 40 00 01N LONG 106 10 45W)									
OCT 1998					MAY				
22...	0900	58	101	4.0	27...	1700	323	59	7.5
NOV					JUN				
13...	1115	52	102	.0	24...	1050	509	48	8.0
JAN 1999					JUL				
21...	1020	39	104	.0	22...	0945	63	85	12.5
FEB					AUG				
25...	1230	35	111	.0	19...	0930	61	93	12.5
MAR					SEP				
31...	0945	62	115	2.5	21...	1540	50	97	12.0
APR									
30...	0930	117	86	5.0					

MISCELLANEOUS STATION ANALYSES--Continued

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)
09038500 WILLIAMS FORK BELOW WILLIAMS FORK RESERVOIR, CO (LAT 40 02 07N LONG 106 12 17W)				
OCT 1998				
22...	1150	113	96	9.5
NOV				
13...	1300	166	104	7.0
JAN 1999				
21...	1130	99	109	3.5
FEB				
25...	1400	101	113	3.5
APR				
30...	1115	17	109	4.5
MAY				
28...	1050	89	109	6.5
JUN				
24...	1215	198	108	7.0
JUL				
22...	1115	153	104	8.5
AUG				
19...	1130	107	103	9.0
SEP				
16...	1235	108	101	9.5
09041000 MUDDY CREEK NEAR KREMMLING, CO (LAT 40 17 37N LONG 106 28 59W)				
OCT 1998				
13...	1425	12	233	8.5
NOV				
12...	1600	13	260	.3
DEC				
15...	1055	4.9	337	.2
JAN 1999				
20...	1300	11	171	.0
FEB				
09...	1214	8.8	316	.0
MAR				
24...	0952	E21	380	.0
APR				
12...	1615	28	366	10.0
MAY				
10...	1655	211	198	5.0
JUN				
02...	1430	340	87	9.0
JUL				
09...	0945	32	401	14.0
AUG				
11...	0940	17	267	16.3
09046490 BLUE RIVER AT BLUE RIVER, CO (LAT 39 27 21N LONG 106 01 52W)				
OCT 1998				
08...	1118	37	151	7.5
NOV				
02...	1216	16	158	3.5
JAN 1999				
12...	1000	3.9	194	2.0
MAY				
03...	1540	9.9	184	3.0
20...	1320	42	162	4.5
26...	0956	80	146	5.0
JUN				
16...	1410	182	130	6.0
AUG				
24...	1807	18	148	15.5
09046600 BLUE RIVER NEAR DILLON, CO (LAT 39 34 00N LONG 106 02 56W)				
OCT 1998				
08...	1205	64	157	10.0
NOV				
02...	1417	44	158	6.5
JAN 1999				
12...	1254	27	166	3.5
MAR				
10...	1147	21	178	3.5
APR				
07...	1140	25	186	6.5
MAY				
03...	1720	62	193	5.0
26...	1225	344	140	6.5
JUN				
16...	1635	480	118	8.0
JUL				
29...	1510	150	122	14.0
AUG				
26...	1020	70	145	12.5
09047500 SNAKE RIVER NEAR MONTEZUMA, CO (LAT 39 36 20N LONG 105 56 33W)				
OCT 1998				
07...	0930	32	125	1.0
NOV				
02...	1545	25	119	2.0
JAN 1999				
13...	0927	12	109	.5
MAR				
11...	1010	9.1	139	.5
APR				
08...	1205	16	183	1.0
MAY				
04...	1230	14	220	2.0
24...	1352	130	116	6.0
JUL				
29...	1313	270	77	10.0
AUG				
25...	1647	70	94	10.0
09047700 KEYSTONE GULCH NEAR DILLON, CO (LAT 39 35 40N LONG 105 58 19W)				
OCT 1998				
07...	1050	2.8	87	1.0
NOV				
03...	0941	3.2	88	1.0
JAN 1999				
13...	1145	2.8	90	.000
MAR				
11...	1133	2.3	88	.000
APR				
06...	1255	2.5	90	1.0
MAY				
04...	1400	2.5	94	2.5
24...	1530	14	77	6.5
JUN				
17...	1215	26	60	5.5
JUL				
29...	1044	8.6	79	9.0
AUG				
25...	1814	5.1	85	11.0

MISCELLANEOUS STATION ANALYSES--Continued

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)
09050100 TENMILE CREEK BELOW NORTH TENMILE CREEK, AT FRISCO, CO (LAT 39 34 37N LONG 106 06 33W)				
OCT 1998				
13...	1533	39	900	7.5
15...	1225	3.8	229	4.0
NOV				
10...	1150	30	--	.0
JAN 1999				
13...	1445	18	1040	.5
MAR				
10...	1505	20	1190	2.5
APR				
07...	1735	32	1020	7.5
MAY				
05...	1039	46	890	1.5
25...	1910	487	325	5.0
AUG				
26...	1743	84	673	12.5
09050700 BLUE RIVER BELOW DILLON, CO (LAT 39 37 32N LONG 106 03 57W)				
OCT 1998				
08...	1455	236	222	6.0
NOV				
02...	1712	240	221	6.0
JAN 1999				
12...	1412	98	265	3.5
MAR				
11...	1320	100	318	4.0
APR				
09...	1256	67	325	4.0
MAY				
05...	1148	94	324	3.5
26...	1655	95	309	4.0
JUL				
29...	1012	394	184	15.0
09051050 STRAIGHT CREEK BELOW LASKEY GULCH NEAR DILLON, CO (LAT 39 38 23N LONG 106 02 23W)				
OCT 1998				
07...	1218	7.1	207	3.0
NOV				
03...	1121	5.1	178	2.5
JAN 1999				
13...	1317	3.9	177	.5
MAR				
10...	1342	3.4	396	1.0
APR				
09...	1045	3.4	287	1.0
MAY				
04...	1600	5.7	390	3.5
27...	0758	28	158	2.0
JUN				
17...	1440	69	91	9.5
JUL				
27...	1840	18	103	12.0
AUG				
26...	1837	11	126	10.5
09058500 PINEY RIVER BELOW PINEY LAKE, NEAR MINTURN, CO (LAT 39 42 29N LONG 106 25 38W)				
OCT 1998				
14...	1135	12	45	6.5
JAN 1999				
14...	1250	3.8	58	.1
MAR				
18...	1010	3.2	62	.1
APR				
13...	1430	14	64	.2
MAY				
26...	1025	86	38	3.3
JUN				
08...	1325	104	35	10.0
JUL				
21...	1655	25	36	14.4
SEP				
01...	0930	9.5	50	12.7
09058610 DICKSON CREEK NEAR VAIL, CO (LAT 39 42 14N LONG 106 27 25W)				
OCT 1998				
14...	1345	1.7	372	8.5
DEC				
03...	1445	1.2	380	.1
JAN 1999				
14...	1350	1.1	374	.2
MAR				
18...	1045	.94	372	.4
APR				
14...	1100	2.2	352	.1
MAY				
26...	1310	13	220	6.8
JUN				
08...	1540	13	265	12.2
JUL				
21...	1045	3.4	345	13.5
AUG				
31...	1400	2.2	365	15.5
09058700 FREEMAN CREEK NEAR MINTURN, CO (LAT 39 41 55N LONG 106 26 41W)				
OCT 1998				
14...	1500	.21	215	8.5
DEC				
03...	1550	.08	231	.1
JAN 1999				
14...	1440	.23	164	.1
APR				
13...	1600	.12	--	.1
MAY				
27...	1000	14	105	2.6
JUN				
08...	1620	5.7	142	13.4
JUL				
21...	1255	.73	224	17.7
AUG				
31...	1540	.40	240	16.0

MISCELLANEOUS STATION ANALYSES--Continued

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)
09058800 EAST MEADOW CREEK NEAR MINTURN, CO (LAT 39 43 54N LONG 106 25 36W)				
OCT 1998				
14...	0945	2.0	63	2.0
DEC 1999				
03...	1130	2.0	63	.1
APR				
13...	1150	1.3	73	.2
JUN				
08...	0920	23	40	1.5
JUL				
21...	1500	4.2	52	9.5
SEP				
01...	1120	1.9	70	8.3
09058900 MONIGER CREEK NEAR MINTURN, CO (LAT 39 43 37N LONG 106 28 50W)				
OCT 1998				
14...	1240	.14	140	4.5
JUL 1999				
21...	0900	.17	160	8.0
AUG				
31...	1220	.07	155	9.1
09059500 PINEY RIVER NEAR STATE BRIDGE, CO (LAT 39 48 00N LONG 106 35 00W)				
OCT 1998				
07...	1305	26	305	6.5
NOV				
17...	1150	26	306	2.0
JAN 1999				
12...	1105	14	376	.6
FEB				
25...	1045	18	381	.0
APR				
07...	1300	27	291	5.7
MAY				
20...	1610	282	159	9.2
JUN				
23...	1050	291	107	8.4
AUG				
12...	1140	63	188	12.5
09060550 ROCK CREEK AT CRATER, CO (LAT 39 58 42N LONG 106 42 34W)				
OCT 1998				
07...	1000	16	125	2.0
NOV				
17...	1430	18	134	2.0
JAN 1999				
12...	0850	11	120	.5
FEB				
25...	1155	11	133	.8
APR				
07...	1625	33	122	5.2
MAY				
20...	1340	150	57	7.5
JUN				
23...	1325	51	70	13.1
AUG				
12...	0900	1.8	160	11.3
09063200 WEARYMAN CREEK NEAR RED CLIFF, CO (LAT 39 31 14N LONG 106 19 06W)				
OCT 1998				
14...	1800	2.9	243	3.5
DEC				
02...	1250	1.7	289	.2
JAN 1999				
13...	1550	1.2	280	.4
MAR				
16...	1610	1.4	294	.7
APR				
13...	1030	1.2	300	.7
MAY				
25...	1110	16	242	1.8
JUN				
09...	1140	36	220	4.2
JUL				
20...	0905	17	251	4.9
09063400 TURKEY CREEK NEAR RED CLIFF, CO (LAT 39 31 32N LONG 106 20 08W)				
OCT 1998				
15...	0905	5.7	287	2.0
DEC				
02...	1350	4.4	282	.2
JAN 1999				
13...	1650	3.2	281	.3
MAR				
16...	1700	3.3	277	.8
APR				
13...	1255	5.8	283	1.1
MAY				
25...	1255	66	220	2.8
JUN				
09...	1320	103	193	5.8
JUL				
20...	1110	35	241	7.0
09063900 MISSOURI CREEK NEAR GOLD PARK, CO (LAT 39 23 25N LONG 106 28 10W)				
OCT 1998				
13...	1455	4.7	33	5.0
DEC				
01...	1600	1.3	34	.2
JAN 1999				
13...	1200	1.4	38	.2
MAR				
17...	1025	.79	42	.3
APR				
14...	1005	2.1	37	.1
MAY				
24...	1355	13	30	1.9
JUN				
07...	1455	15	30	6.8
JUL				
20...	1450	8.6	26	11.7

MISCELLANEOUS STATION ANALYSES--Continued

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)
09064000 HOMESTAKE CREEK AT GOLD PARK, CO (LAT 39 24 20N LONG 106 25 58W)				
OCT 1998				
13...	1545	9.9	34	6.0
DEC				
02...	1030	7.3	34	.3
JAN 1999				
13...	1330	8.7	27	.3
MAR				
17...	1145	4.7	36	.6
APR				
14...	1135	12	38	1.0
MAY				
24...	1605	81	29	6.0
JUN				
07...	1630	46	30	9.9
JUL				
20...	1555	37	26	13.3
09064500 HOMESTAKE CREEK NEAR RED CLIFF, CO (LAT 39 28 24N LONG 106 22 02W)				
OCT 1998				
13...	1645	18	38	7.5
DEC				
02...	1150	14	39	.5
JAN 1999				
13...	1420	14	--	.2
MAR				
17...	1300	6.9	38	1.0
APR				
13...	1515	30	39	3.5
MAY				
25...	0910	250	29	2.2
JUN				
09...	0945	162	27	4.5
JUL				
20...	1715	56	33	17.4
SEP				
01...	1530	28	38	14.6
09064600 EAGLE RIVER NEAR MINTURN, CO (LAT 39 33 14N LONG 106 24 07W)				
OCT 1998				
13...	1740	48	162	6.5
NOV				
16...	1230	42	179	.5
JAN 1999				
11...	1435	33	154	.0
FEB				
24...	1000	29	184	.0
MAR				
11...	1235	22	203	2.5
18...	1155	30	220	3.1
APR				
06...	1315	59	170	3.5
MAY				
20...	0815	385	110	3.5
JUN				
24...	1320	621	106	9.4
JUL				
28...	0730	--	106	10.8
AUG				
11...	1245	--	122	13.5
11...	1325	139	126	13.8
09065100 CROSS CREEK NEAR MINTURN, CO (LAT 39 34 05N LONG 106 24 45W)				
OCT 1998				
13...	1835	19	43	5.5
NOV				
16...	1350	13	49	1.5
JAN 1999				
11...	1240	3.4	74	.5
MAR				
18...	1330	5.9	53	.7
APR				
06...	1440	18	52	4.3
MAY				
20...	0935	121	29	2.5
JUN				
24...	1535	283	23	9.3
AUG				
11...	1205	118	34	12.5
09065500 GORE CREEK AT UPPER STATION, NEAR MINTURN, CO (LAT 39 37 40N LONG 106 16 24W)				
OCT 1998				
14...	1421	10	62	5.5
NOV				
09...	1107	6.9	62	.5
JAN 1999				
27...	1215	2.2	67	.5
FEB				
24...	1210	2.1	70	.5
APR				
06...	1137	8.4	60	.0
28...	1015	--	47	1.6
MAY				
12...	1005	18	55	.5
JUN				
09...	0848	151	33	2.0
JUL				
08...	1054	80	35	7.5
27...	1600	32	44	13.5
AUG				
10...	1133	30	52	10.0
11...	1030	28	52	8.9
SEP				
02...	1502	13	64	10.5
09066000 BLACK GORE CREEK NEAR MINTURN, CO (LAT 39 35 47N LONG 106 15 52W)				
OCT 1998				
15...	1220	3.8	229	4.0
NOV				
09...	1154	3.5	247	.0
JAN 1999				
27...	1003	4.7	350	.0
FEB				
24...	1115	2.8	350	.5
APR				
06...	1040	5.2	420	.5
MAY				
13...	0900	9.2	222	2.0
JUN				
08...	1100	97	112	4.5
JUL				
07...	1045	31	128	8.0
AUG				
10...	1025	11	180	9.5
SEP				
03...	0825	6.7	205	7.0

MISCELLANEOUS STATION ANALYSES--Continued

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)
09066100 BIGHORN CREEK NEAR MINTURN, CO (LAT 39 38 24N LONG 106 17 34W)				
OCT 1998				
14...	1300	4.3	60	7.0
NOV				
09...	1315	1.9	64	.0
JAN 1999				
27...	1418	.99	68	.5
FEB				
23...	1230	.90	76	.5
APR				
06...	1526	2.2	62	1.5
MAY				
12...	1207	6.6	57	1.5
JUN				
08...	1223	36	37	5.0
JUL				
08...	1244	23	38	7.5
27...	1330	10	44	11.1
AUG				
10...	1240	9.5	51	9.5
10...	1830	16	46	9.0
SEP				
02...	1535	4.0	61	10.0
09066150 PITKIN CREEK NEAR MINTURN, CO (LAT 39 38 37N LONG 106 18 07W)				
OCT 1998				
14...	0831	6.1	66	4.5
NOV				
09...	1430	3.9	58	.0
FEB 1999				
23...	1140	1.3	92	.5
APR				
05...	1130	2.8	88	.5
MAY				
12...	1307	7.2	89	3.0
JUN				
09...	1010	45	42	3.0
JUL				
07...	1218	28	42	8.0
27...	1215	12	51	8.9
AUG				
10...	1515	18	51	9.0
10...	1745	25	47	9.7
SEP				
02...	1630	5.2	77	9.5
09066200 BOOTH CREEK NEAR MINTURN, CO (LAT 39 39 02N LONG 106 19 16W)				
OCT 1998				
14...	0952	3.5	85	5.0
NOV				
09...	1716	2.5	92	.0
JAN 1999				
26...	1450	.90	117	1.0
FEB				
23...	1040	.64	128	1.5
APR				
05...	1255	3.1	121	2.0
MAY				
12...	1440	9.0	127	6.0
JUN				
08...	1548	76	48	6.0
JUL				
07...	1543	25	46	12.0
27...	1130	7.7	67	10.5
AUG				
10...	1645	13	64	10.5
11...	0835	14	63	8.5
SEP				
03...	0930	2.8	101	8.5
09066300 MIDDLE CREEK NEAR MINTURN, CO (LAT 39 38 50N LONG 106 22 48W)				
OCT 1998				
14...	1110	1.3	198	5.5
JAN 1999				
26...	1400	.20	229	2.0
FEB				
23...	0930	.12	246	.0
APR				
05...	1448	.56	222	2.5
MAY				
12...	1620	2.4	238	3.5
JUN				
08...	1443	26	123	6.0
JUL				
07...	1436	12	129	11.0
27...	0745	4.0	176	7.7
AUG				
10...	1015	5.3	158	9.1
11...	0952	5.7	162	9.0
SEP				
03...	1052	2.0	193	8.5
09066310 GORE CREEK, LOWER STATION, AT VAIL, CO (LAT 39 38 28N LONG 106 23 37W)				
OCT 1998				
15...	0945	36	205	4.5
NOV				
10...	0945	22	300	.0
JAN 1999				
28...	1115	17	413	.0
FEB				
24...	1430	12	423	3.0
APR				
07...	0925	23	302	1.0
27...	1230	49	270	5.8
MAY				
13...	1035	71	228	5.5
JUN				
09...	1301	567	101	7.0
JUL				
08...	1003	297	106	8.5
26...	1800	100	156	13.4
AUG				
10...	0730	110	147	9.4
11...	1140	117	147	11.5
SEP				
03...	1310	44	218	11.5

MISCELLANEOUS STATION ANALYSES--Continued

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)
09066400 RED SANDSTONE CREEK NEAR MINTURN, CO (LAT 39 40 58N LONG 106 24 03W)				
OCT 1998				
14...	1615	2.1	91	5.5
DEC				
03...	1700	1.8	87	.2
JAN 1999				
14...	1540	1.3	87	.2
MAR				
18...	1230	1.5	89	.7
APR				
13...	1720	3.3	76	1.6
MAY				
25...	1705	58	51	2.2
27...	1215	42	55	2.7
JUN				
10...	0820	48	51	2.1
JUL				
22...	0905	6.2	87	7.1
SEP				
01...	1325	3.0	96	9.2
09067000 BEAVER CREEK AT AVON, CO (LAT 39 37 47N LONG 106 31 20W)				
OCT 1998				
06...	1035	5.1	264	2.0
NOV				
17...	0855	3.9	298	.0
JAN 1999				
11...	1605	2.7	358	.8
APR				
06...	0920	2.7	384	.1
MAY				
20...	1145	28	179	5.3
JUN				
24...	1120	75	66	8.1
AUG				
12...	1055	18	129	11.5
09067200 LAKE CREEK NEAR EDWARDS, CO (LAT 39 38 51N LONG 106 36 31W)				
OCT 1998				
06...	0900	25	516	5.5
NOV				
17...	0940	25	402	2.0
JAN 1999				
13...	0950	9.3	477	.5
FEB				
24...	1500	12	442	2.3
APR				
07...	1020	12	452	3.9
MAY				
20...	1040	113	173	5.5
JUN				
23...	1535	209	144	11.6
AUG				
11...	0750	107	190	11.0
09070000 EAGLE RIVER BELOW GYPSUM, CO (LAT 39 38 58N LONG 106 57 11W)				
OCT 1998				
06...	1430	294	925	8.0
NOV				
18...	0900	274	902	2.5
JAN 1999				
13...	1055	181	--	.0
FEB				
25...	1430	193	1210	5.3
APR				
07...	0855	252	908	4.2
MAY				
19...	1645	982	333	13.0
JUN				
25...	0810	2660	173	10.0
AUG				
10...	1520	631	453	12.9
09070500 COLORADO RIVER NEAR DOTSERO, CO (LAT 39 38 38N LONG 107 04 38W)				
OCT 1998				
07...	1535	1280	539	10.5
NOV				
18...	1030	1350	497	4.0
JAN 1999				
13...	1440	1110	565	.2
FEB				
23...	1450	825	574	2.9
APR				
05...	1415	1120	527	7.1
MAY				
19...	1455	2860	347	13.2
JUN				
08...	1045	7810	230	10.4
29...	0915	6520	220	12.6
AUG				
12...	1400	2500	364	16.8
09073400 ROARING FORK RIVER NEAR ASPEN, CO (LAT 39 10 48N LONG 106 48 05W)				
OCT 1998				
01...	1540	50	87	9.6
NOV				
17...	1005	36	88	1.0
JAN 1999				
12...	1315	24	91	.6
FEB				
22...	1450	41	88	.8
APR				
06...	1315	32	91	3.5
MAY				
17...	1335	146	61	6.6
JUN				
28...	1450	729	51	11.2
JUL				
27...	1320	166	57	12.9
SEP				
13...	1305	69	78	9.4

MISCELLANEOUS STATION ANALYSES--Continued

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)
09074000 HUNTER CREEK NEAR ASPEN, CO (LAT 39 12 21N LONG 106 47 49W)				
OCT 1998				
01...	1155	7.1	77	8.9
NOV				
17...	1140	10	67	.8
JAN 1999				
12...	1415	5.6	81	.1
FEB				
22...	1640	7.2	79	.6
APR				
06...	1440	21	66	5.7
MAY				
17...	1435	90	42	7.8
JUN				
16...	1522	135	48	12.1
JUL				
27...	1445	74	40	15.2
SEP				
13...	1415	30	56	11.5
09080400 FRYINGPAN RIVER NEAR RUEDI, CO (LAT 39 21 56N LONG 106 49 30W)				
OCT 1998				
06...	1255	340	183	9.7
NOV				
16...	1525	84	187	8.2
JAN 1999				
06...	1230	78	249	7.0
FEB				
25...	1310	84	262	4.4
APR				
18...	1315	92	277	4.0
MAY				
19...	1540	140	232	5.4
JUN				
07...	1410	450	187	9.1
28...	1700	693	190	7.3
JUL				
27...	1705	229	196	7.8
SEP				
07...	1420	223	172	9.4
09085100 COLORADO RIVER BELOW GLENWOOD SPRINGS, CO (LAT 39 33 18N LONG 107 20 13W)				
OCT 1998				
05...	1240	2840	616	9.0
NOV				
18...	1300	2120	732	5.0
JAN 1999				
13...	1600	1560	716	1.3
FEB				
23...	1000	1400	787	1.1
APR				
05...	1050	1610	737	4.9
MAY				
19...	1035	4430	392	9.5
JUN				
07...	1400	10200	347	11.0
28...	1040	11800	288	10.0
AUG				
10...	1105	4070	560	15.1
09089500 WEST DIVIDE CREEK NEAR RAVEN, CO (LAT 39 19 52N LONG 107 34 46W)				
OCT 1998				
05...	1035	5.6	491	3.0
NOV				
19...	0955	3.1	499	.0
JAN 1999				
14...	1405	4.8	495	.0
MAR				
19...	1035	9.6	444	1.7
APR				
08...	0950	25	327	1.8
MAY				
21...	1150	244	198	5.8
JUN				
22...	1015	132	165	8.9
AUG				
10...	0835	24	206	13.0
09106150 COLORADO RIVER BELOW GRAND VALLEY DIVERSION NEAR PALISADE CO (LAT 39 05 55N LONG 108 21 16W)				
OCT 1998				
08...	1225	1530	900	11.5
NOV				
23...	1430	2350	1060	4.3
JAN 1999				
11...	1340	2060	1070	.6
FEB				
24...	1345	1680	1120	5.8
APR				
16...	1405	700	1040	11.0
JUN				
07...	1310	10200	360	12.3
JUL				
28...	1415	2710	663	22.9
SEP				
13...	1430	1380	850	18.6
09107000 TAYLOR RIVER AT TAYLOR PARK, CO (LAT 38 50 59N LONG 106 34 21W)				
OCT 1998				
21...	1020	54	117	1.1
JAN 1999				
07...	1510	30	121	1.4
MAR				
02...	1429	36	116	3.6
APR				
20...	1100	97	85	2.6
MAY				
26...	1023	405	67	4.1
JUN				
30...	0738	399	88	6.4
SEP				
02...	0941	110	112	9.80

MISCELLANEOUS STATION ANALYSES--Continued

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)
09109000 TAYLOR RIVER BELOW TAYLOR PARK RESERVOIR, CO (LAT 38 49 06N LONG 106 36 31W)				
OCT 1998				
21...	1125	187	104	9.3
NOV				
17...	1630	98	105	4.9
JAN 1999				
07...	1352	98	111	3.4
MAR				
02...	1148	101	114	3.6
APR				
20...	1240	180	116	3.7
MAY				
26...	1212	264	113	4.2
JUN				
30...	1047	474	90	7.0
SEP				
02...	1125	305	86	10.5
09115500 TOMICHI CREEK AT SARGENTS, CO (LAT 38 23 42N LONG 106 25 19W)				
OCT 1998				
20...	0930	35	169	2.3
DEC				
02...	1310	50	140	1.4
JAN 1999				
13...	1130	17	115	.0
MAR				
03...	0929	26	160	.0
APR				
06...	1815	38	178	6.9
MAY				
19...	1145	139	115	9.2
JUN				
29...	1010	81	143	12.1
SEP				
01...	1130	43	165	14.2
09118450 COCHETOPA CREEK BELOW ROCK CREEK NEAR PARLIN, CO (LAT 38 20 08N LONG 106 46 18W)				
OCT 1998				
20...	1100	38	209	4.0
DEC				
02...	1430	42	220	.0
JAN 1999				
13...	1415	14	237	.0
MAR				
03...	1220	20	257	.3
APR				
07...	1835	31	206	9.3
MAY				
19...	1412	130	122	11.9
JUN				
29...	0800	101	161	10.2
AUG				
11...	1230	207	151	13.5
09126000 CIMARRON RIVER NEAR CIMARRON, CO (LAT 38 15 26N LONG 107 32 46W)				
OCT 1998				
19...	1530	40	147	9.5
DEC				
01...	1200	20	146	3.5
JAN 1999				
12...	1125	19	148	2.6
MAR				
04...	1405	20	151	2.5
APR				
08...	1318	23	130	5.0
MAY				
25...	1106	136	96	6.3
JUN				
10...	1040	416	98	9.5
28...	1315	484	79	10.6
AUG				
31...	1157	113	109	13.6
09132500 NORTH FORK GUNNISON RIVER NEAR SOMERSET, CO (LAT 38 55 33N LONG 107 26 01W)				
OCT 1998				
07...	1030	196	223	7.8
NOV				
10...	1025	99	--	2.5
JAN 1999				
05...	1050	56	--	.5
FEB				
23...	1405	79	--	1.1
APR				
07...	1225	137	138	6.5
MAY				
10...	1050	1290	151	5.9
AUG				
03...	1040	213	134	13.7
30...	1055	247	142	13.6
SEP				
14...	1030	205	184	12.8
09134000 MINNESOTA CREEK NEAR PAONIA, CO (LAT 38 52 13N LONG 107 30 06W)				
OCT 1998				
01...	1205	2.3	496	13.0
NOV				
10...	1205	3.0	645	1.4
JAN 1999				
05...	1255	2.0	636	.3
FEB				
23...	1545	3.7	--	1.0
APR				
07...	1430	4.8	966	12.6
MAY				
10...	1600	16	406	8.8
20...	1545	27	234	16.1
AUG				
03...	1255	24	235	17.4
SEP				
14...	1230	15	189	13.8

MISCELLANEOUS STATION ANALYSES--Continued

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)
09135950 NORTH FORK GUNNISON RIVER BELOW LEROUX CREEK NEAR HOTCHKISS, CO (LAT 38 47 18N LONG 107 44 21W)				
OCT 1998				
07...	1205	152	1280	11.1
NOV				
10...	1445	189	969	5.2
FEB 1999				
23...	1100	83	--	2.0
APR				
07...	1625	177	546	13.7
MAY				
21...	1015	2820	218	8.5
JUN				
21...	1430	1220	275	13.1
AUG				
03...	1450	124	1360	21.9
SEP				
14...	1455	132	1440	18.3
09143000 SURFACE CREEK NEAR CEDAREDGE, CO (LAT 38 59 05N LONG 107 51 13W)				
OCT 1998				
08...	0935	33	72	4.2
NOV				
13...	1015	3.8	147	.0
JAN 1999				
05...	1635	3.8	225	.3
FEB				
24...	1600	3.3	143	.4
APR				
09...	1015	12	142	.2
MAY				
18...	1525	85	107	9.6
JUL				
26...	1655	47	75	17.4
SEP				
15...	1005	56	72	10.9
09143500 SURFACE CREEK AT CEDAREDGE, CO (LAT 38 54 06N LONG 107 55 14W)				
OCT 1998				
08...	1100	20	92	6.5
NOV				
13...	1200	1.8	257	3.4
JAN 1999				
04...	1605	1.5	248	.5
FEB				
26...	1000	1.3	214	1.3
APR				
05...	1635	18	148	.7
MAY				
20...	1730	80	137	9.5
JUN				
24...	1730	80	125	11.2
JUL				
26...	1535	21	92	14.2
SEP				
15...	1145	36	80	11.6
09144250 GUNNISON RIVER AT DELTA, CO (LAT 38 45 01N LONG 108 04 06W)				
OCT 1998				
07...	1330	1110	886	11.6
NOV				
09...	1540	1140	820	5.4
FEB 1999				
24...	1105	876	607	3.9
MAR				
10...	1410	780	628	7.6
APR				
05...	1315	901	641	6.7
27...	0915	1600	723	9.0
MAY				
18...	1010	2990	430	10.1
19...	1125	3560	364	11.4
JUN				
23...	1325	2150	521	17.6
JUL				
29...	1600	1490	692	22.3
SEP				
15...	1410	2130	579	15.1
09146200 UNCOMPAHGRE RIVER NEAR RIDGWAY, CO (LAT 38 11 02N LONG 107 44 43W)				
OCT 1998				
06...	1250	97	708	9.1
JAN 1999				
26...	1535	51	846	4.8
MAR				
30...	0800	85	559	3.8
MAY				
03...	1305	121	616	7.0
25...	1425	286	300	11.3
JUN				
14...	1150	668	281	10.0
18...	1045	885	278	8.3
JUL				
13...	1230	329	421	15.0
AUG				
17...	1330	220	474	15.1
09147000 DALLAS CREEK NEAR RIDGWAY, CO (LAT 38 10 40N LONG 107 45 28W)				
OCT 1998				
06...	1125	29	651	5.2
JAN 1999				
26...	1400	20	645	2.5
MAR				
29...	1750	24	518	11.0
MAY				
03...	1145	66	419	5.1
25...	1305	31	610	13.3
JUN				
30...	0955	138	398	9.8
JUL				
13...	1115	77	520	13.4
AUG				
04...	1130	158	432	12.0
17...	1225	107	351	11.5
SEP				
17...	1325	64	376	11.9

MISCELLANEOUS STATION ANALYSES--Continued

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)
09147025 UNCOMPAHGRE RIVER BELOW RIDGWAY RESERVOIR, CO (LAT 38 14 17N LONG 107 45 31W)				
OCT 1998				
06...	1415	154	427	13.1
JAN 1999				
27...	0940	69	588	3.1
MAR				
30...	1000	72	622	4.8
MAY				
03...	1415	121	618	7.2
25...	1540	334	613	6.6
JUN				
21...	1230	941	589	8.3
JUL				
13...	1350	431	396	10.7
AUG				
17...	1445	388	382	12.9
09147500 UNCOMPAHGRE RIVER AT COLONA, CO (LAT 38 19 53N LONG 107 46 44W)				
OCT 1998				
06...	1520	154	509	15.4
JAN 1999				
21...	1205	83	610	2.0
MAR				
30...	1145	130	525	6.1
MAY				
07...	1020	278	593	5.6
JUN				
04...	1050	468	520	8.7
21...	1315	1140	513	11.5
JUL				
13...	1440	406	422	14.1
AUG				
18...	0755	438	419	11.9
09153290 REED WASH NEAR MACK, CO (LAT 39 12 41N LONG 108 48 11W)				
OCT 1998				
02...	1424	63	1890	15.2
NOV				
23...	1125	8.7	4370	7.9
JAN 1999				
05...	1510	5.2	4480	5.4
FEB				
25...	1225	3.4	4400	6.8
MAR				
23...	1115	3.0	4440	7.8
31...	1416	24	1630	8.0
MAY				
07...	1010	63	1330	10.1
JUN				
22...	1340	46	1490	19.5
AUG				
19...	1136	68	1740	18.5
09165000 DOLORES RIVER BELOW RICO, CO (LAT 37 38 20N LONG 108 03 35W)				
DEC 1998				
17...	1200	24	459	.0
MAR 1999				
12...	1215	22	465	2.1
APR				
13...	1300	110	274	4.6
MAY				
25...	0730	650	139	2.0
JUN				
22...	1045	618	125	6.1
AUG				
03...	1015	242	213	9.3
SEP				
01...	1330	344	189	9.5
09166500 DOLORES RIVER AT DOLORES, CO (LAT 37 28 21N LONG 108 29 49W)				
OCT 1998				
20...	1445	71	426	--
DEC				
17...	1330	97	451	.2
MAR 1999				
03...	1345	85	421	5.7
APR				
23...	1145	695	209	3.8
MAY				
24...	0730	3300	137	4.7
JUN				
16...	1445	1660	143	11.7
AUG				
12...	1415	650	187	15.1
09166950 LOST CANYON CREEK NEAR DOLORES, CO (LAT 37 26 45N LONG 108 28 03W)				
DEC 1998				
17...	1430	.70	251	.5
MAR 1999				
03...	1500	3.2	166	4.5
APR				
23...	1300	14	123	7.3
28...	0950	143	69	4.3
MAY				
24...	0900	153	60	6.3
JUN				
16...	1515	.46	451	25.3
AUG				
12...	1215	8.2	165	18.0
09168730 DOLORES RIVER NEAR SLICK ROCK, CO (LAT 38 02 40N LONG 108 54 17W)				
MAY 1999				
03...	1145	421	650	9.9
26...	1415	2720	306	9.7
JUN				
23...	1615	641	353	17.0
AUG				
04...	1600	110	642	23.1

MISCELLANEOUS STATION ANALYSES--Continued

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)
09172500 SAN MIGUEL RIVER NEAR PLACERVILLE, CO (LAT 38 02 05N LONG 108 07 15W)				
OCT 1998				
14...	1445	82	413	12.1
DEC				
11...	1000	63	390	.0
JAN 1999				
26...	1305	74	388	.7
MAR				
12...	0945	74	386	2.3
MAY				
06...	1315	298	394	6.1
25...	0930	746	258	5.1
JUN				
22...	1300	932	206	10.0
AUG				
03...	1330	610	260	11.8
SEP				
01...	1100	564	273	10.4
09174600 SAN MIGUEL RIVER AT BROOKS BRIDGE NEAR NUCLA, CO (LAT 38 14 39N LONG 108 30 05W)				
OCT 1998				
14...	1800	95	440	14.0
MAR 1999				
11...	1545	140	420	6.5
MAY				
03...	1330	1010	250	6.3
25...	1145	881	245	8.8
JUN				
22...	1615	920	216	14.4
AUG				
03...	1900	579	272	15.4
SEP				
01...	0745	567	307	13.6
09177000 SAN MIGUEL RIVER AT URAVAN, CO (LAT 38 21 26N LONG 108 42 44W)				
OCT 1998				
15...	1325	112	850	13.3
MAR 1999				
11...	0830	121	710	4.8
MAY				
03...	1545	1390	345	8.9
25...	1430	1250	358	12.4
JUN				
22...	1930	1130	329	16.3
AUG				
03...	1600	662	425	16.6
31...	1800	565	460	19.2
09237450 YAMPA RIVER ABOVE STAGECOACH RESERVOIR, CO (LAT 40 16 09N LONG 106 52 49W)				
OCT 1998				
14...	1728	49	412	10.5
NOV				
16...	1325	60	377	4.0
MAR 1999				
23...	0905	99	495	1.2
MAY				
10...	1335	158	370	6.0
24...	1320	154	285	11.6
JUN				
01...	1000	130	347	8.4
07...	1045	111	293	11.4
21...	1225	185	382	15.1
JUL				
13...	0925	116	459	13.5
20...	1405	163	385	15.0
AUG				
23...	0955	87	410	13.9
09237500 YAMPA RIVER BELOW STAGECOACH RESERVOIR, CO (LAT 40 17 15N LONG 106 49 33W)				
OCT 1998				
14...	1637	88	426	12.5
NOV				
16...	1125	72	428	6.5
JAN 1999				
07...	1155	62	439	3.0
MAR				
03...	0955	87	429	3.0
MAY				
10...	1425	95	421	5.7
24...	1230	153	413	9.5
JUN				
07...	1255	122	405	10.5
21...	1125	177	394	15.1
JUL				
13...	1030	102	407	15.4
AUG				
23...	1115	100	410	15.5
SEP				
08...	1600	101	405	14.6
09238900 FISH CREEK AT UPPER STATION NEAR STEAMBOAT SPRINGS, CO (LAT 40 28 30N LONG 106 47 11W)				
NOV 1998				
16...	1015	9.3	29	.0
MAR 1999				
03...	1125	3.5	35	1.0
MAY				
24...	1035	277	18	3.3
JUN				
21...	0950	368	13	5.2
JUL				
13...	1150	33	21	13.7
09240900 ELK RIVER ABOVE CLARK, CO (LAT 40 44 36N LONG 106 51 17W)				
MAR 1999				
25...	0940	84	87	.9
APR				
27...	1150	160	80	4.2
JUN				
08...	1215	1020	37	5.7
30...	1135	921	30	6.1
JUL				
19...	1220	352	41	10.8
AUG				
16...	1145	123	64	11.9

MISCELLANEOUS STATION ANALYSES--Continued

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)
09241000 ELK RIVER AT CLARK, CO (LAT 40 43 03N LONG 106 54 55W)				
MAR 1999				
24...	0950	93	105	.2
APR				
27...	1345	560	89	6.0
MAY				
27...	1225	1940	54	5.0
JUN				
01...	1145	1830	51	6.5
08...	1020	1230	43	3.9
30...	1320	919	34	7.0
JUL				
19...	1105	332	44	11.3
AUG				
16...	1300	124	66	13.5
09242500 ELK RIVER NEAR MILNER, CO (LAT 40 30 53N LONG 106 57 12W)				
OCT 1998				
14...	1125	128	109	9.5
NOV				
16...	0815	132	123	.5
MAR 1999				
23...	1310	268	188	1.4
MAY				
07...	1345	838	135	8.6
27...	1410	2790	62	7.3
JUN				
08...	0825	2210	50	5.7
30...	0925	1570	41	8.6
JUL				
19...	0945	458	64	14.1
AUG				
16...	1430	161	90	19.3
09243700 MIDDLE CREEK NEAR OAK CREEK, CO (LAT 40 23 08N LONG 106 59 33W)				
OCT 1998				
13...	1030	.81	893	5.0
NOV				
17...	0940	.67	884	.5
FEB 1999				
02...	1105	.90	290	.0
MAR				
16...	0855	2.2	843	.0
APR				
13...	1010	4.6	716	5.7
MAY				
20...	0930	16	475	9.6
JUN				
02...	1020	6.8	609	12.2
JUL				
01...	1050	2.2	690	17.1
20...	1255	1.1	687	23.4
AUG				
24...	1000	3.7	349	14.8
26...	1030	1.9	388	16.6
09243800 FOIDEL CREEK NEAR OAK CREEK, CO (LAT 40 20 45N LONG 107 05 04W)				
OCT 1998				
13...	0905	.58	3170	3.5
NOV				
17...	0850	.45	3010	.0
FEB 1999				
02...	1315	.45	2900	.5
MAR				
16...	1050	.45	2370	.5
APR				
13...	1225	3.0	1680	10.0
MAY				
20...	1125	5.0	2310	14.6
JUN				
02...	0915	3.4	2330	15.8
JUL				
01...	1250	.80	2960	22.2
20...	1125	.54	3270	19.7
AUG				
24...	1320	.28	3390	19.7
09243900 FOIDEL CREEK AT MOUTH, NEAR OAK CREEK, CO (LAT 40 23 25N LONG 106 59 39W)				
OCT 1998				
13...	1000	1.0	2710	4.5
NOV				
17...	1015	.61	2760	.5
FEB 1999				
02...	0930	1.5	2810	.0
MAR				
16...	0950	1.8	2580	.5
APR				
13...	1110	4.4	2160	7.2
MAY				
20...	1025	6.4	2420	11.6
JUN				
02...	1110	4.2	2460	13.1
JUL				
01...	1140	1.2	2430	17.9
20...	1220	.86	2140	20.5
AUG				
24...	1120	.33	2060	17.3
09249750 WILLIAMS FORK RIVER AT MOUTH, NEAR HAMILTON, CO (LAT 40 26 14N LONG 107 38 50W)				
OCT 1998				
01...	0943	70	672	13.4
14...	0926	73	599	8.0
NOV				
17...	1210	84	692	4.0
JAN 1999				
14...	1040	65	759	.0
MAR				
02...	1200	87	722	1.0
15...	1250	95	747	5.5
JUN				
01...	1455	963	243	9.6
08...	1530	727	220	12.8
21...	1430	479	279	16.2
29...	1415	238	351	19.6
JUL				
13...	1445	114	446	23.7
AUG				
23...	1535	65	520	24.4

MISCELLANEOUS STATION ANALYSES--Continued

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)
09253000 LITTLE SNAKE RIVER NEAR SLATER, CO (LAT 40 59 58N LONG 107 08 34W)				
OCT 1998				
19...	1138	52	157	2.5
NOV				
23...	0920	46	162	.0
MAR 1999				
15...	1035	51	190	1.0
MAY				
03...	1050	888	95	3.0
25...	1115	1830	59	5.5
JUN				
09...	1100	1240	56	6.9
29...	1110	504	58	11.9
JUL				
21...	1220	93	113	17.9
AUG				
25...	1020	36	154	15.5
09255000 SLATER FORK NEAR SLATER, CO (LAT 40 58 54N LONG 107 22 58W)				
OCT 1998				
19...	0947	20	256	3.0
NOV				
23...	0805	23	254	.5
FEB 1999				
08...	0940	28	251	.5
MAR				
15...	0850	35	349	.5
MAY				
03...	0855	460	150	3.5
25...	0920	633	94	6.8
JUN				
09...	0920	431	84	7.3
29...	0940	109	130	13.0
JUL				
21...	1020	17	276	19.3
AUG				
25...	0915	13	303	18.0
09260000 LITTLE SNAKE RIVER NEAR LILY, CO (LAT 40 32 50N LONG 108 25 25W)				
OCT 1998				
08...	1515	223	495	14.8
NOV				
12...	1400	213	499	2.8
FEB 1999				
26...	1350	367	420	.4
MAR				
26...	0810	678	531	6.5
MAY				
20...	1635	2980	260	16.3
26...	0830	4570	153	12.8
JUN				
11...	0900	2740	159	12.9
JUL				
15...	0745	204	444	16.3
SEP				
10...	0830	107	701	13.4
09304500 WHITE RIVER NEAR MEEKER, CO (LAT 40 02 01N LONG 107 51 42W)				
OCT 1998				
02...	1300	487	489	11.5
NOV				
25...	1320	434	492	3.2
JAN 1999				
09...	1310	371	508	1.2
FEB				
22...	1115	407	489	.6
MAR				
15...	1320	417	480	6.3
APR				
02...	0954	470	450	2.9
MAY				
24...	0940	2350	238	8.7
JUN				
02...	0753	2650	231	6.7
JUL				
07...	1040	607	383	17.1
SEP				
30...	1344	330	371	10.1
09339900 EAST FORK SAN JUAN RIVER ABOVE SAND CREEK, NEAR PAGOSA SPRINGS, CO (LAT 37 23 23N LONG 106 50 26W)				
APR 1999				
27...	1400	114	113	8.6
MAY				
19...	1430	310	95	11.9
JUN				
01...	1100	372	84	6.7
JUL				
30...	0930	141	109	10.6
SEP				
02...	1100	161	117	11.9
09340800 WEST FORK SAN JUAN RIVER AT WEST FORK CAMPGROUND NEAR PAGOSA SPRINGS, CO (LAT 37 27 01N LONG 106 54 40W)				
OCT 1998				
05...	1430	23	56	5.7
DEC				
04...	1215	35	52	1.7
APR 1999				
30...	1115	80	50	1.9
JUN				
01...	1245	430	34	5.9
JUL				
30...	1230	118	42	10.9
SEP				
02...	1230	281	43	9.5
09341300 WOLF CREEK AT WOLF CREEK CAMPGROUND NEAR PAGOSA SPRINGS, CO (LAT 37 26 31N LONG 106 53 11W)				
OCT 1998				
05...	1510	4.1	56	6.5
DEC				
04...	1315	10	65	3.2
APR 1999				
30...	1215	30	63	2.5
JUN				
01...	1400	196	44	7.2
JUL				
30...	1100	27	62	11.5
SEP				
02...	1345	49	67	12.3

MISCELLANEOUS STATION ANALYSES--Continued

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)
09342500 SAN JUAN RIVER AT PAGOSA SPRINGS, CO (LAT 37 15 58N LONG 107 00 37W)				
OCT 1998				
05...	1645	71	153	10.2
DEC				
04...	1500	164	133	4.2
MAR 1999				
15...	1130	130	150	4.2
APR				
30...	1430	739	125	5.9
JUN				
01...	1630	1620	64	11.3
JUL				
30...	1430	390	101	18.8
09346400 SAN JUAN RIVER NEAR CARRACAS, CO (LAT 37 00 49N LONG 107 18 42W)				
OCT 1998				
28...	1100	1160	238	6.5
MAR 1999				
02...	1330	324	312	6.3
MAY				
10...	1445	1290	178	11.9
24...	1415	2120	97	8.1
JUL				
08...	1200	748	176	21.8
AUG				
30...	1145	885	141	18.4
09349800 PIEDRA RIVER NEAR ARBOLES, CO (LAT 37 05 18N LONG 107 23 50W)				
OCT 1998				
28...	1300	717	218	8.0
JAN 1999				
14...	0915	68	416	.0
MAR				
02...	1215	199	354	5.2
MAY				
10...	1230	1040	185	9.6
24...	1500	1510	120	8.3
JUL				
08...	1345	618	124	19.9
AUG				
30...	1330	674	215	18.1
09352900 VALLECITO CREEK NEAR BAYFIELD, CO (LAT 37 28 39N LONG 107 32 35W)				
OCT 1998				
01...	1130	108	69	7.5
DEC				
04...	1520	68	73	2.0
JAN 1999				
08...	1030	21	86	.0
FEB				
22...	1500	22	85	1.2
AUG				
10...	1930	1320	82	9.2
09354500 LOS PINOS RIVER AT LA BOCA, CO (LAT 37 00 34N LONG 107 35 56W)				
OCT 1998				
29...	1415	169	276	10.5
DEC				
04...	1145	223	196	4.5
JAN 1999				
14...	1100	40	308	.4
MAR				
15...	1300	51	281	9.2
MAY				
11...	1400	500	140	12.5
JUN				
10...	1245	1210	118	13.0
11...	1200	1370	112	12.3
AUG				
11...	0900	1970	138	15.5
SEP				
15...	0915	353	144	14.7
09355000 SPRING CREEK AT LA BOCA, CO (LAT 37 00 40N LONG 107 35 47W)				
OCT 1998				
28...	1445	42	442	10.0
DEC				
04...	1000	5.9	999	.5
JAN 1999				
14...	1200	4.5	1070	.0
MAR				
15...	1500	2.5	1290	12.3
MAY				
11...	1500	33	267	16.5
JUN				
10...	1030	59	309	13.5
AUG				
13...	0930	24	410	14.8
SEP				
14...	0830	34	292	12.2
09358000 ANIMAS RIVER AT SILVERTON, CO (LAT 37 48 40N LONG 107 39 32W)				
OCT 1998				
06...	1525	49	309	10.1
NOV				
13...	1515	46	315	3.6
FEB 1999				
17...	1445	27	360	.4
APR				
12...	1300	38	376	7.5
29...	1200	61	323	5.1
JUN				
03...	1515	367	147	9.8
AUG				
09...	1500	205	193	11.5

MISCELLANEOUS STATION ANALYSES--Continued

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)
09358550 CEMENT CREEK AT SILVERTON, CO (LAT 37 49 11N LONG 107 39 47W)				
OCT 1998				
07...	1045	18	987	4.8
NOV				
13...	1500	19	1010	4.6
FEB 1999				
09...	1420	13	1110	5.4
JUN				
03...	1345	119	258	7.9
09...	1245	150	215	8.0
AUG				
09...	1615	45	525	11.8
09359010 MINERAL CREEK AT SILVERTON, CO (LAT 37 48 10N LONG 107 40 20W)				
OCT 1998				
07...	0845	42	398	1.3
NOV				
13...	1330	47	445	1.9
FEB 1999				
24...	1540	21	470	3.6
APR				
07...	1310	39	461	5.5
JUN				
03...	0800	310	152	2.5
AUG				
09...	1400	178	200	9.8
09361500 ANIMAS RIVER AT DURANGO, CO (LAT 37 16 45N LONG 107 52 47W)				
OCT 1998				
29...	1430	516	409	7.5
NOV				
30...	1110	352	483	4.4
MAR 1999				
02...	1435	223	572	8.8
30...	1430	494	400	7.3
APR				
27...	1400	918	333	8.9
30...	1530	1030	320	8.3
JUN				
02...	1250	4090	154	6.5
18...	0935	4410	136	7.0
JUL				
29...	1415	1360	258	16.8
SEP				
24...	1015	771	348	10.4
09362550 WILSON GULCH NEAR DURANGO, CO (LAT 37 13 37N LONG 107 50 31W)				
OCT 1998				
01...	1450	1.4	661	14.8
26...	1110	5.2	545	8.5
MAR 1999				
02...	1240	.78	748	8.5
JUL				
06...	1245	1.1	540	21.2
AUG				
10...	1545	22	343	18.3
09371000 MANCOS RIVER NEAR TOWAOC, CO (LAT 37 01 39N LONG 108 44 27W)				
OCT 1998				
13...	1000	7.7	1840	9.5
NOV				
24...	0930	16	1810	1.9
FEB 1999				
25...	1500	7.7	2140	9.7
APR				
28...	1130	64	1080	11.5
MAY				
18...	1145	174	495	13.1
JUN				
16...	1215	57	805	24.4
JUL				
28...	1245	45	1130	25.6
SEP				
23...	1115	42	900	15.9

NORTH FORK ELK RIVER BLOWDOWN STUDY

In October of 1997 an unusual windstorm blew down thousands of acres of trees on the western side of the continental divide, and on the western edge of the Mt. Zirkel Wilderness Area, between Steamboat Springs, Colorado and the Wyoming border. This area is referred to as the "Routt Divide Blowdown" by the U.S. Forest Service, and this area lies within the watershed which is drained by the Elk River and it's tributaries. This two year cooperative water-quality study between the USGS and the U.S. Forest Service may help determine the effects of the blowndown and salvage logging operations on water-quality in the Elk River watershed.

405057106451000 NORTH FORK ELK RIVER ABOVE AGNES CREEK NEAR CLARK, CO.

WATER-QUALITY RECORDS

LOCATION.--Lat. 40°50'57", long 106°45'10", in $SE^1/_4SW^1/_4$ sec.1, T.10 N, R.84 W., Routt County, Hydrologic Unit 14050001, on right bank 100 ft upstream from the confluence with Agnes Creek, 200 ft downstream from private cabins, 6.8 mi upstream from the mouth, and 17.3 mi northeast of Clark, Co.

PERIOD OF RECORD.--March to September 1999.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)
MAR											
02...	1420	.62	38	6.6	.5	.6	9.8	17	5.1	.97	1.1
APR											
28...	1230	11	40	6.8	2.4	1.4	9.6	17	5.2	.96	1.3
JUN											
09...	1100	149	27	6.8	3.3	1.4	9.6	11	3.4	.59	.7
24...	1100	218	21	7.2	5.0	1.5	9.0	9	2.8	.47	.6
AUG											
11...	1030	26	29	7.2	8.9	.50	8.2	12	3.8	.60	.80
SEP											
23...	1110	9.2	35	7.3	6.1	.4	8.7	15	4.5	.80	.9

DATE	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	ALKA-LINITY WAT.DIS FET LAB CACO3 (MG/L) (29801)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)
MAR										
02...	.1	.9	15	18	--	2.5	.3	.1	6.2	28
APR										
28...	.1	1.1	--	18	--	2.2	.2	<.1	6.6	29
JUN										
09...	.1	.6	--	--	12	1.6	.3	<.1	4.8	20
24...	.1	.5	--	--	10	1.1	.3	.1	3.9	16
AUG										
11...	.1	.70	--	--	14	1.5	<.10	<.10	4.2	20
SEP										
23...	.1	.9	--	--	17	2.0	<.30	<.1	5.2	25

DATE	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS-SOLVED (TONS PER DAY) (70302)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)
MAR										
02...	.04	.05	<.001	.14	.003	<.1	E.05	<.004	<.004	.001
APR										
28...	.04	.85	<.001	.12	.005	<.1	E.06	.006	<.004	.002
JUN										
09...	.03	7.89	.001	.069	.004	.2	.1	.007	<.004	.001
24...	.02	9.52	<.001	.076	<.002	.2	E.09	.01	<.004	.001
AUG										
11...	.03	1.44	<.001	.053	.008	<.1	.1	<.004	<.004	.001
SEP										
23...	.03	.63	.002	.076	.006	E.08	E.09	<.004	<.004	<.001

E Estimated.

NORTH FORK ELK RIVER BLOWDOWN STUDY--Continued

405057106451000 NORTH FORK ELK RIVER ABOVE AGNES CREEK NEAR CLARK, CO.--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL) (01105)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)
APR								
28...	11.1	E19.0	<1	<1	<1	<1	46	63.4
JUN								
09...	51.2	63.1	<1	<1	1	2	28	49.8
24...	47.7	196	<1	<1	<1	<1	20	280

DATE	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)
APR							
28...	<1	<1	E3	<3	<.20	<20	<40
JUN							
09...	<1	<1	<3	E2.7	<.20	<20	<40
24...	<1	<1	<3	6.8	<.20	E8	<40

E Estimated.

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
MAR				
02...	1420	.62	<1	e.000
APR				
28...	1230	11	<1	e.01
JUN				
09...	1100	149	5	1.9
24...	1100	218	8	4.8
AUG				
11...	1030	26	<1	e.01
SEP				
23...	1110	9.2	<1	e.01

e Estimated.

NORTH FORK ELK RIVER BLOWDOWN STUDY--Continued

404950106462700 NORTH FORK ELK RIVER ABOVE TRAIL CREEK NEAR CLARK, CO.

WATER-QUALITY RECORDS

LOCATION.--Lat. 40°49'50", long. 106°46'27", in $NW^{1}/_{4}SE^{1}/_{4}$ sec.14, T.10 N, R.84 W., Routt County, Hydrologic Unit 14050001, on left bank approximately 100 ft upstream from the confluence with Trail Creek, 4.5 mi upstream from the mouth, and 15.0 mi northeast of Clark.

PERIOD OF RECORD.--March to September 1999.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)
MAR											
02...	1330	6.4	47	6.9	.1	.7	10.3	20	6.2	1.2	1.7
APR											
28...	1300	21	42	7.0	3.7	2	9.4	24	7.8	1.2	1.6
JUN											
09...	1305	248	28	7.1	6.4	1.5	9.0	11	3.6	.60	.8
24...	1400	282	21	7.2	8.1	1.7	8.3	9	2.7	.46	.6
AUG											
11...	1130	33	33	7.3	10.7	.4	7.7	13	4.0	.66	.9
SEP											
23...	1230	12	39	7.4	8.5	.4	8.4	17	5.2	.91	1.2

DATE	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	ALKA-LINITY WAT.DIS FET LAB CACO3 (MG/L) (29801)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)
MAR										
02...	.2	.8	20	23	--	2.5	.5	.1	8.2	35
APR										
28...	.1	.8	--	27	--	2.9	.3	<.1	7.4	39
JUN										
09...	.1	.6	--	--	12	1.4	.2	<.1	5.1	20
24...	.1	.5	--	--	10	1.1	.4	<.1	4.1	16
AUG										
11...	.1	.7	--	--	15	1.6	<.10	<.1	4.9	22
SEP										
23...	.1	.8	--	--	19	2.0	<.30	<.1	5.8	28

DATE	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS-SOLVED (TONS PER DAY) (70302)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)
MAR										
02...	.05	.61	<.001	.098	.003	E.08	E.06	<.004	<.004	.001
APR										
28...	.05	2.15	<.001	.080	.004	E.06	.1	.008	<.004	.002
JUN										
09...	.03	13.3	.001	.051	.004	.1	.1	.005	<.004	.001
24...	.02	12.4	<.001	.053	.003	.3	E.09	.009	<.004	.001
AUG										
11...	.03	1.95	<.001	.035	.006	E.08	E.07	<.004	<.004	.001
SEP										
23...	.04	.94	<.001	.049	.004	.1	.1	<.004	<.004	.001

DATE	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL) (01105)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)
APR								
28...	16.4	43.7	<1	<1	<1	<1	82	159
JUN								
09...	60.6	79.3	<1	<1	1	<1	36	66.5
24...	45.1	129	<1	<1	<1	1	22	167

E Estimated.

NORTH FORK ELK RIVER BLOWDOWN STUDY--Continued

404950106462700 NORTH FORK ELK RIVER ABOVE TRAIL CREEK NEAR CLARK, CO.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)
APR							
28...	<1	<1	9	8.7	<.20	<20	<40
JUN							
09...	<1	<1	<3	E2.7	<.20	<20	<40
24...	<1	<1	<3	5.4	<.20	<20	<40

E Estimated.

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
MAR				
02...	1330	6.4	1	.02
APR				
28...	1300	21	2	.13
JUN				
09...	1305	248	4	2.6
24...	1400	282	4	3.0
AUG				
11...	1130	33	<1	e.04
SEP				
23...	1230	12	<1	e.01

e Estimated.

NORTH FORK ELK RIVER BLOWDOWN STUDY--Continued

404750106454200 LOST DOG CREEK ABOVE MOUTH NEAR CLARK, CO.

WATER-QUALITY RECORDS

LOCATION.--Lat. 40°47'50", long. 106°45'42", in $SW^{1}/_{4}NW^{1}/_{4}$ sec.25, T.10 N, R.84 W., Routt County, Hydrologic Unit 14050001, on left bank 30 ft upstream from the Forest Service Road---culvert, 0.5 mi upstream from the confluence with North Fork Elk River, 12.4 mi northeast of Clark.

PERIOD OF RECORD.--March to September 1999.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)
MAR											
03...	1000	2.2	38	7.2	.3	.7	10.7	16	4.4	1.3	2.1
APR											
29...	1010	10	33	7.0	.4	8	10.1	13	3.6	1.0	1.5
JUN											
02...	1100	37	22	6.9	2.3	1.5	11.0	9	2.4	.63	1.1
23...	1050	14	21	7.1	5.3	1.5	9.2	9	2.4	.64	1.2
AUG											
10...	1120	4.6	35	7.4	10.5	.3	8.0	14	3.9	1.0	1.7
SEP											
22...	1310	4.2	36	7.4	5.4	.5	9.1	16	4.3	1.2	1.8

DATE	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	ALKA-LINITY WAT.DIS FET LAB CACO3 (MG/L) (29801)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)
MAR										
03...	.2	.4	18	20	--	1.1	.2	<.1	14	35
APR										
29...	.2	.6	--	15	--	1.1	.3	<.1	10	28
JUN										
02...	.2	.4	--	--	9.6	1.3	.4	<.1	6.9	19
23...	.2	.4	--	--	10	.8	.3	<.1	7.3	19
AUG										
10...	.2	.4	--	--	--	.9	.2	<.1	11	--
SEP										
22...	.2	.5	--	--	18	1.1	E.30	<.1	11	31

DATE	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS-SOLVED (TONS PER DAY) (70302)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)
MAR										
03...	.05	.21	<.001	.033	.002	.1	.1	.006	<.004	.002
APR										
29...	.04	.75	.001	.038	.006	.3	.3	.009	.005	.002
JUN										
02...	.03	1.91	.001	.033	<.002	.2	.2	.008	.004	.001
23...	.03	.73	.001	.026	.003	.2	.1	.005	.004	.002
AUG										
10...	--	--	<.001	<.005	.006	.1	E.08	.004	<.004	.001
SEP										
22...	.04	.35	.002	.007	.008	.2	.1	.004	<.004	.001

DATE	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL) (01105)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)
APR								
29...	68.2	59.3	<1	<1	2	<1	130	207
JUN								
02...	78.1	96.4	<1	<1	<1	<1	76	124
23...	54.4	50.1	<1	<1	<1	<1	54	51.4

E Estimated.

NORTH FORK ELK RIVER BLOWDOWN STUDY--Continued

404750106454200 LOST DOG CREEK ABOVE MOUTH NEAR CLARK, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)
APR							
29...	<1	<1	3	8.3	<.20	<20	<40
JUN							
02...	<1	<1	E2	3.7	<.20	<20	<40
23...	<1	<1	E2	E2.6	<.20	<20	<40

E Estimated.

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
MAR				
03...	1000	2.2	1	.01
APR				
29...	1010	10	2	.06
JUN				
02...	1100	37	3	.30
23...	1050	14	6	.22
AUG				
10...	1120	4.6	1	.01
SEP				
22...	1310	4.2	<1	e.01

e Estimated.

NORTH FORK ELK RIVER BLOWDOWN STUDY--Continued

404727106453700 ENGLISH CREEK ABOVE MOUTH NEAR CLARK, CO

WATER-QUALITY RECORDS

LOCATION.--Lat. 40°47'27", long. 106°45'37", in $NW^{1}/_{4}NW^{1}/_{4}$ sec.36, T.10 N, R.84 W., Routt County, Hydrologic Unit 14050001, on left bank 30 ft upstream from the Forest Service Road---culvert, 0.5 mi upstream from the confluence with North Fork Elk River, 11.5 mi northeast of Clark.

PERIOD OF RECORD.--March to September 1999.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)
MAR											
03...	1200	1.2	37	7.2	.3	.6	10.5	15	4.3	1.1	2.2
APR											
29...	1100	5.0	33	7.0	.8	1.4	10.4	13	3.6	.96	1.7
JUN											
02...	1230	24	23	6.8	3.4	1.5	9.2	8	2.3	.55	1.2
23...	1220	26	19	7.1	7.5	1.5	8.7	7	2.1	.50	1.2
AUG											
10...	1220	6.3	33	7.4	10.3	.5	8.1	13	3.8	.88	1.9
SEP											
22...	1420	1.8	35	7.2	5.3	.6	9.2	14	4.0	.99	2.0

DATE	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	ALKA-LINITY WAT.DIS FET LAB CACO3 (MG/L) (29801)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)
MAR										
03...	.2	.5	17	19	--	1.3	.1	<.1	14	36
APR										
29...	.2	.5	--	15	--	1.4	.2	<.1	12	29
JUN										
02...	.2	.5	--	--	9.2	1.4	.3	<.1	7.3	19
23...	.2	.4	--	--	9.1	.9	.3	<.1	7.5	19
AUG										
10...	.2	.3	--	--	17	1.0	<.10	<.1	12	31
SEP										
22...	.2	.5	--	--	18	1.2	E.20	<.1	12	31

DATE	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS-SOLVED (TONS PER DAY) (70302)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)
MAR										
03...	.05	.12	.001	.015	.002	E.08	E.08	<.004	.004	.002
APR										
29...	.04	.39	.001	.023	.006	.2	.3	.01	.005	.002
JUN										
02...	.03	1.24	.001	.02	<.002	.2	.2	.009	.005	.001
23...	.03	1.30	<.001	.011	<.002	.2	.1	.007	.004	.002
AUG										
10...	.04	.52	<.001	<.005	.004	.4	E.08	.005	.004	.002
SEP										
22...	.04	.15	.003	.008	.005	.2	.1	.005	<.004	.001

DATE	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL) (01105)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)
APR								
29...	68.5	93.8	<1	<1	<1	<1	150	238
JUN								
02...	75.6	88.6	<1	<1	<1	<1	73	113
23...	59.6	82.8	<1	<1	<1	<1	51	111

E Estimated.

NORTH FORK ELK RIVER BLOWDOWN STUDY--Continued

404727106453700 ENGLISH CREEK ABOVE MOUTH NEAR CLARK, CO-Contiuned

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)
APR							
29...	<1	<1	E3	5.3	<.20	<20	<40
JUN							
02...	<1	<1	E2	3.1	<.20	<20	<40
23...	<1	<1	E2	4.9	<.20	<20	<40

E Estimated.

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
MAR				
03...	1200	1.2	1	.00
APR				
29...	1100	5.0	2	.02
JUN				
02...	1230	24	2	.15
23...	1220	26	2	.13
AUG				
10...	1220	6.3	<1	e.01
SEP				
22...	1420	1.8	<1	e.000

e Estimated.

NORTH FORK ELK RIVER BLOWDOWN STUDY--Continued

404620106461900 NORTH FORK ELK RIVER ABOVE MOUTH NEAR CLARK, CO

WATER-QUALITY RECORDS

LOCATION.--Lat. 40°46'20", long. 106°46'19", in SW$^{1}/_{4}$ NE$^{1}/_{4}$ sec.2, T.9 N, R.84 W., Routt County, Hydrologic Unit 14050001, on left bank 30 ft upstream from the Forest Service Road 433, 500 ft upstream from mouth, and 10.7 mi northeast of Clark.

PERIOD OF RECORD.--March to September 1999.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)
MAR											
03...	1440	16	67	7.5	.000	.7	10.6	31	9.5	1.8	2.2
APR											
29...	1400	75	58	7.3	2.8	9	9.9	24	7.3	1.3	1.6
JUN											
01...	1545	422	33	7.3	5.8	2	8.8	14	4.4	.76	1.0
23...	1450	402	24	7.2	9.7	2	8.6	11	3.3	.60	.9
AUG											
10...	1450	44	44	7.6	15.7	.3	7.5	18	5.6	.98	1.3
SEP											
22...	1020	26	54	7.7	3.9	.5	10.0	24	7.3	1.3	1.6

DATE	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CACO3) (90410)	ALKA-LINITY WAT.DIS FET LAB CACO3 (MG/L) (29801)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)
MAR										
03...	.2	.7	28	32	--	4.9	.5	<.1	9.9	49
APR										
29...	.1	.6	--	25	--	3.2	.3	<.1	8.2	38
JUN										
01...	.1	.4	--	--	15	2.0	.2	<.1	5.8	24
23...	.1	.4	--	--	12	1.1	.8	.2	5.1	20
AUG										
10...	.1	.7	--	--	20	2.5	<.10	<.1	6.4	30
SEP										
22...	.1	.8	--	--	26	3.5	E.15	<.1	7.1	38

DATE	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS-SOLVED (TONS PER DAY) (70302)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)
MAR										
03...	.07	2.18	<.001	.062	.003	E.08	E.06	<.004	<.004	.002
APR										
29...	.05	7.68	.001	.043	.005	.2	.2	.021	<.004	.002
JUN										
01...	.03	27.1	.001	.023	<.002	.2	.2	.015	.004	.001
23...	.03	21.5	.001	.023	.005	.2	E.09	.011	<.004	.001
AUG										
10...	.04	3.51	<.001	.013	.007	E.08	E.08	<.004	<.004	.001
SEP										
22...	.05	2.61	.003	.021	.005	.1	.1	<.004	<.004	.001

DATE	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL) (01105)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)
APR								
29...	38.2	212	<1	<1	<1	1	79	296
JUN								
01...	67.9	198	<1	<1	<1	<1	60	237
23...	43.4	125	<1	<1	<1	<1	30	149

E Estimated.

NORTH FORK ELK RIVER BLOWDOWN STUDY--Continued

404620106461900 NORTH FORK ELK RIVER ABOVE MOUTH NEAR CLARK, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)
APR							
29...	<1	<1	3	13.7	<.20	<20	<40
JUN							
01...	<1	<1	E2	9.7	<.20	<20	<40
23...	<1	<1	E2	7.2	<.20	<20	<40

E Estimated.

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
MAR				
03...	1440	16	1	.04
APR				
29...	1400	75	7	1.4
JUN				
01...	1545	422	8	9.3
23...	1450	402	7	7.2
AUG				
10...	1450	44	<.5	e.05
SEP				
22...	1020	26	<.5	e.01

e Estimated.

LA PLATA COUNTY

371127107484801 NB03400915BDD1 SIMON

LOCATION.--Lat 37°11'27", long 107°48'48", in $SE^{1}/_{4}NW^{1}/_{4}$ sec.15, T.34 N., R.9 W., La Plata County, Hydrologic Unit 14080104, 0.5 mi southwest of Pastorius Reservoir, 7.5 mi southeast of Durango, Colo.

AQUIFER.--Animas Formation of Paleocene-Upper Cretaceous age. Aquifer code: 125ANMS.

WELL CHARACTERISTICS.--Drilled, observation well, diameter 3 in., depth 300 ft.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 6,845 ft above sea level, from topographic map. Measuring point: screw in recorder shelf above well casing, 3.00 ft above land-surface datum.

REMARKS.--Daily record is good.

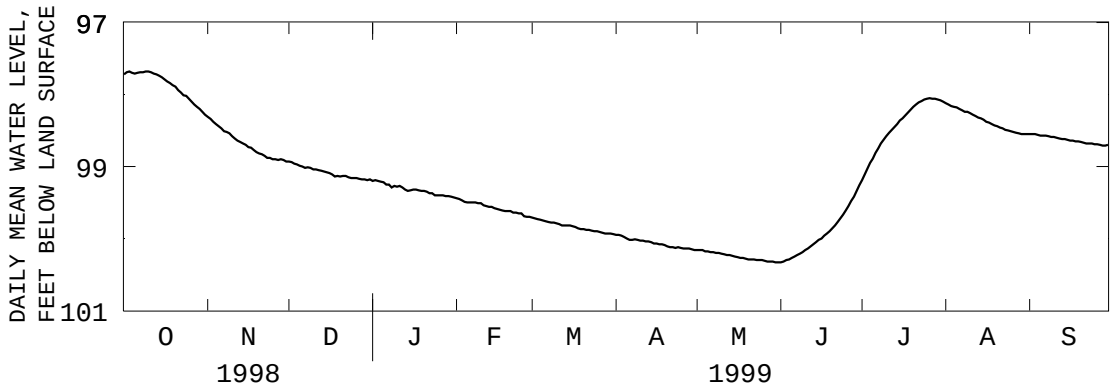
PERIOD OF RECORD.--June 1995 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level 97.66 ft below land-surface datum, Sept. 25, 1998; lowest, 100.43 ft below land-surface datum, Mar. 22-24, 1998.

EXTREMES FOR CURRENT YEAR.--Highest water level 97.67 ft below land-surface datum, Oct. 2; lowest, 100.35 ft below land-surface datum, May 29.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	97.72	98.31	98.93	99.20	99.44	99.71	99.95	100.16	100.33	99.19	98.12	98.55
2	97.69	98.34	98.94	99.19	99.45	99.72	99.95	100.16	100.32	99.11	98.14	98.55
3	97.68	98.38	98.96	99.20	99.47	99.73	99.96	100.16	100.30	99.03	98.16	98.55
4	97.70	98.41	98.97	99.21	99.49	99.74	99.98	100.18	100.29	98.95	98.17	98.56
5	97.71	98.44	98.99	99.22	99.50	99.75	100.00	100.18	100.27	98.89	98.18	98.57
6	97.70	98.47	99.00	99.25	99.50	99.76	100.02	100.19	100.25	98.81	98.20	98.57
7	97.69	98.51	99.02	99.25	99.50	99.77	100.02	100.19	100.23	98.75	98.22	98.57
8	97.69	98.52	99.01	99.29	99.50	99.78	100.01	100.20	100.21	98.68	98.24	98.58
9	97.68	98.54	99.02	99.27	99.51	99.78	100.02	100.20	100.19	98.63	98.24	98.59
10	97.68	98.58	99.04	99.28	99.51	99.79	100.03	100.21	100.16	98.58	98.26	98.59
11	97.69	98.61	99.04	99.27	99.54	99.80	100.03	100.22	100.14	98.53	98.28	98.60
12	97.71	98.64	99.05	99.29	99.55	99.82	100.04	100.23	100.11	98.49	98.30	98.61
13	97.72	98.66	99.06	99.32	99.56	99.82	100.04	100.23	100.08	98.45	98.32	98.62
14	97.74	98.68	99.07	99.34	99.56	99.82	100.05	100.24	100.05	98.41	98.33	98.62
15	97.76	98.70	99.08	99.33	99.58	99.82	100.07	100.25	100.02	98.36	98.35	98.63
16	97.79	98.73	99.09	99.32	99.59	99.83	100.07	100.26	100.00	98.33	98.38	98.64
17	97.82	98.74	99.11	99.32	99.60	99.84	100.08	100.27	99.96	98.29	98.39	98.64
18	97.84	98.77	99.14	99.33	99.61	99.86	100.08	100.27	99.93	98.25	98.41	98.65
19	97.87	98.80	99.13	99.34	99.62	99.87	100.09	100.28	99.90	98.21	98.43	98.65
20	97.89	98.82	99.14	99.34	99.62	99.87	100.11	100.29	99.86	98.17	98.44	98.66
21	97.94	98.83	99.13	99.35	99.62	99.88	100.12	100.29	99.82	98.14	98.46	98.67
22	97.97	98.85	99.13	99.37	99.64	99.88	100.12	100.29	99.77	98.11	98.47	98.68
23	98.01	98.88	99.15	99.37	99.64	99.89	100.13	100.30	99.72	98.09	98.49	98.68
24	98.02	98.88	99.16	99.40	99.65	99.90	100.12	100.30	99.67	98.07	98.50	98.68
25	98.06	98.90	99.16	99.40	99.65	99.90	100.13	100.30	99.61	98.06	98.51	98.69
26	98.10	98.90	99.16	99.40	99.69	99.91	100.14	100.31	99.55	98.05	98.52	98.69
27	98.14	98.91	99.17	99.40	99.70	99.92	100.14	100.32	99.48	98.06	98.53	98.70
28	98.17	98.90	99.18	99.41	99.70	99.93	100.14	100.32	99.42	98.06	98.54	98.71
29	98.20	98.91	99.18	99.41	---	99.93	100.15	100.32	99.34	98.07	98.55	98.71
30	98.24	98.93	99.19	99.42	---	99.93	100.16	100.33	99.26	98.08	98.55	98.70
31	98.28	---	99.18	99.43	---	99.94	---	100.33	---	98.10	98.55	---
MEAN	97.87	98.68	99.08	99.32	99.57	99.84	100.06	100.25	99.94	98.42	98.36	98.63
MAX	98.28	98.93	99.19	99.43	99.70	99.94	100.16	100.33	100.33	99.19	98.55	98.71
MIN	97.68	98.31	98.93	99.19	99.44	99.71	99.95	100.16	99.26	98.05	98.12	98.55



LA PLATA COUNTY

371422107473301 NB03400807BBA1 ROYCE

LOCATION.--Lat 37°14'22", long 107°47'33", in $NW^{1}/_{4}NW^{1}/_{4}$ sec.7, T.34 N., R.8 W., La Plata County, Hydrologic Unit 14080104, 0.5 mi north of the Florida Mesa School, 7.0 mi southeast of Durango, Colo.

AQUIFER.--Animas Formation of Paleocene-Upper Cretaceous age. Aquifer code: 125ANMS.

WELL CHARACTERISTICS.--Drilled, unused well, diameter 3 in., depth 110 ft.

INSTRUMENTATION.--Water-level recorder.

DATUM.--Elevation of land-surface datum is 7,000 ft above sea level, from topographic map. Measuring point: screw in recorder shelf above well casing, 3.00 ft above land-surface datum.

REMARKS.--Daily record is good.

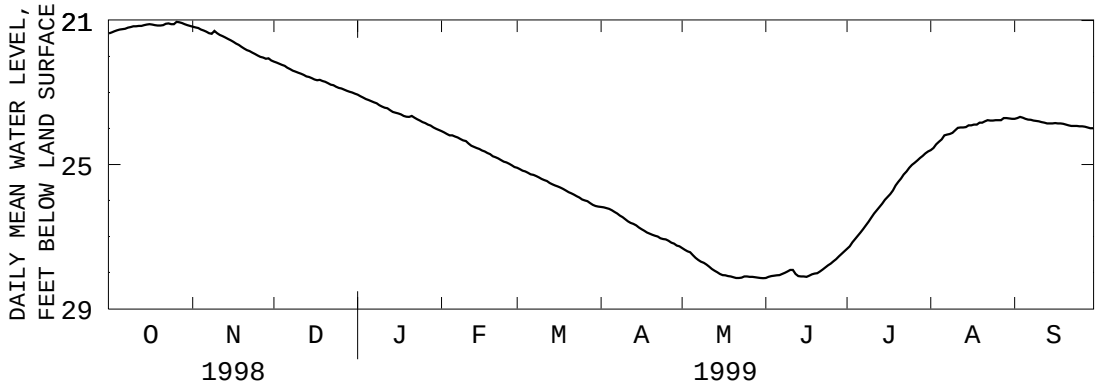
PERIOD OF RECORD.--June 1995 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level 21.03 ft below land-surface datum, Oct. 26, 1998; lowest, 28.74 ft below land-surface datum, May 20, 1996.

EXTREMES FOR CURRENT YEAR.--Highest water level 21.03 ft below land-surface datum, Oct. 26; lowest, 28.17 ft below land-surface datum, May 30.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21.36	21.17	22.14	23.06	24.07	25.09	26.18	27.32	28.15	27.34	24.60	23.73
2	21.33	21.19	22.17	23.10	24.11	25.13	26.19	27.37	28.12	27.27	24.54	23.71
3	21.30	21.21	22.20	23.14	24.15	25.17	26.21	27.41	28.10	27.16	24.44	23.68
4	21.27	21.25	22.23	23.18	24.19	25.19	26.23	27.44	28.09	27.07	24.37	23.70
5	21.25	21.28	22.26	23.21	24.19	25.23	26.27	27.52	28.08	26.98	24.30	23.73
6	21.24	21.31	22.31	23.24	24.22	25.27	26.32	27.59	28.07	26.89	24.19	23.75
7	21.23	21.35	22.35	23.27	24.25	25.29	26.36	27.65	28.04	26.79	24.17	23.76
8	21.20	21.37	22.39	23.30	24.29	25.32	26.42	27.70	28.01	26.69	24.15	23.78
9	21.18	21.29	22.42	23.35	24.33	25.36	26.46	27.73	27.97	26.59	24.12	23.79
10	21.16	21.35	22.45	23.39	24.35	25.40	26.52	27.78	27.93	26.48	24.05	23.80
11	21.16	21.40	22.48	23.42	24.42	25.43	26.58	27.84	27.93	26.36	23.98	23.82
12	21.15	21.43	22.51	23.44	24.48	25.46	26.62	27.90	28.04	26.27	23.97	23.84
13	21.15	21.47	22.55	23.49	24.51	25.51	26.65	27.95	28.10	26.18	23.97	23.86
14	21.13	21.51	22.57	23.54	24.54	25.55	26.69	27.99	28.11	26.09	23.96	23.86
15	21.11	21.55	22.60	23.56	24.57	25.58	26.75	28.04	28.11	25.98	23.91	23.86
16	21.10	21.59	22.64	23.58	24.61	25.61	26.80	28.07	28.12	25.90	23.91	23.85
17	21.11	21.64	22.66	23.61	24.64	25.64	26.84	28.08	28.09	25.82	23.89	23.86
18	21.13	21.68	22.65	23.65	24.68	25.68	26.89	28.10	28.05	25.72	23.89	23.86
19	21.14	21.73	22.68	23.67	24.71	25.72	26.92	28.11	28.03	25.58	23.84	23.87
20	21.14	21.78	22.70	23.68	24.77	25.77	26.95	28.13	28.02	25.48	23.84	23.89
21	21.13	21.82	22.74	23.65	24.80	25.80	26.98	28.15	27.97	25.39	23.80	23.91
22	21.09	21.85	22.78	23.70	24.83	25.84	27.00	28.15	27.92	25.28	23.77	23.93
23	21.08	21.89	22.80	23.74	24.88	25.88	27.05	28.14	27.86	25.19	23.78	23.93
24	21.10	21.93	22.84	23.78	24.92	25.92	27.07	28.11	27.80	25.09	23.78	23.93
25	21.10	21.97	22.87	23.82	24.94	25.97	27.08	28.11	27.75	25.01	23.77	23.94
26	21.04	22.01	22.89	23.85	24.98	26.00	27.12	28.12	27.69	24.95	23.77	23.94
27	21.05	22.03	22.92	23.89	25.02	26.02	27.17	28.12	27.63	24.89	23.77	23.95
28	21.07	22.06	22.95	23.92	25.07	26.07	27.20	28.13	27.55	24.82	23.71	23.97
29	21.10	22.05	22.98	23.97	---	26.12	27.25	28.14	27.48	24.76	23.71	23.99
30	21.13	22.11	23.00	24.01	---	26.15	27.27	28.15	27.41	24.69	23.72	23.99
31	21.15	---	23.03	24.04	---	26.17	---	28.16	---	24.64	23.73	---
MEAN	21.16	21.61	22.61	23.56	24.55	25.62	26.73	27.91	27.94	25.91	23.98	23.85
MAX	21.36	22.11	23.03	24.04	25.07	26.17	27.27	28.16	28.15	27.34	24.60	23.99
MIN	21.04	21.17	22.14	23.06	24.07	25.09	26.18	27.32	27.41	24.64	23.71	23.68



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CONVERSION FACTORS AND VERTICAL DATUM

Multiply	By	To obtain
	Length	
inch (in.)	2.54×10^{1}	millimeter
	2.54×10^{-2}	meter
foot (ft)	3.048×10^{-1}	meter
mile (mi)	1.609×10^{0}	kilometer
	Area	
acre	4.047×10^{3}	square meter
	4.047×10^{-1}	square hectometer
	4.047×10^{-3}	square kilometer
square mile (mi^2)	2.590×10^{0}	square kilometer
	Volume	
gallon (gal)	3.785×10^{0}	liter
	3.785×10^{0}	cubic decimeter
	3.785×10^{-3}	cubic meter
million gallons (Mgal)	3.785×10^{3}	cubic meter
	3.785×10^{-3}	cubic hectometer
cubic foot (ft^3)	2.832×10^{1}	cubic decimeter
	2.832×10^{-2}	cubic meter
cubic-foot-per-second day [(ft^3/s) d]	2.447×10^{3}	cubic meter
	2.447×10^{-3}	cubic hectometer
acre-foot (acre-ft)	1.233×10^{3}	cubic meter
	1.233×10^{-3}	cubic hectometer
	1.233×10^{-6}	cubic kilometer
	Flow	
cubic foot per second (ft^3/s)	2.832×10^{1}	liter per second
	2.832×10^{1}	cubic decimeter per second
	2.832×10^{-2}	cubic meter per second
gallon per minute (gal/min)	6.309×10^{-2}	liter per second
	6.309×10^{-2}	cubic decimeter per second
	6.309×10^{-5}	cubic meter per second
million gallons per day (Mgal/d)	4.381×10^{1}	cubic decimeter per second
	4.381×10^{-2}	cubic meter per second
	Mass	
ton (short)	9.072×10^{-1}	megagram or metric ton

Sea level: In this report "sea level" refers to the National Geodetic Vertical Datum of 1929 (NGVD of 1929)—a geodetic datum derived from a general adjustment for the first-order level nets of both the United States and Canada, formerly called Sea Level Datum of 1929.