

# Water Resources Data Colorado Water Year 2001

Volume 1. Missouri River Basin, Arkansas River Basin,  
and Rio Grande Basin

By R.M. Crowfoot, R.D. Steger, W.F. Payne, and G.B. O'Neill

Water-Data Report CO-01-1

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

UNITED STATES DEPARTMENT OF THE INTERIOR

GALE A. NORTON, Secretary

U. S. GEOLOGICAL SURVEY

Charles G. Groat, Director

For information on the water program in Colorado contact:

District Chief, Water Resources Division  
U.S. Geological Survey  
Box 25046, Mail Stop 415  
Denver Federal Center  
Lakewood, CO 80225  
(303) 236-4882

<http://co.water.usgs.gov>

2002

About 25 copies of this report were distributed with incorrect information on page 163 (see below). This version of the report, however, is correct.



IN REPLY REFER TO:

## United States Department of the Interior

U. S. GEOLOGICAL SURVEY

Box 25046 M.S. 415

Denver Federal Center

Denver, Colorado 80225

Water Resources Division

Colorado District

July 25, 2002

### MEMORANDUM

**TO:** All concerned

**FROM:** Richard M. Crowfoot  
Hydrologist, Data Management Unit, Colorado District Office

**SUBJECT:** PUBLICATIONS--**Errata sheet** for: "Water Resources Data, Colorado, Water Year 2001, Volume 1, Missouri River Basin, Arkansas River Basin, and Rio Grande Basin".

Page 163 (station 06764000 South Platte River at Julesburg, CO) of the subject report was published with incorrect daily values (and corresponding yearly statistics) for many days during the winter period of Dec. 16, 2000, to Mar. 5, 2001, and for the peak flow period of May 9-11, 2001.

Attached over the old page 163 in this report is a replacement page containing the revised daily values and statistics.

We apologize for any inconvenience to you.

Sincerely,

*Richard M. Crowfoot*

# CALENDAR FOR WATER YEAR 2001

## 2000

OCTOBER							NOVEMBER							DECEMBER						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
1	2	3	4	5	6	7				1	2	3	4						1	2
8	9	10	11	12	13	14	5	6	7	8	9	10	11	3	4	5	6	7	8	9
15	16	17	18	19	20	21	12	13	14	15	16	17	18	10	11	12	13	14	15	16
22	23	24	25	26	27	28	19	20	21	22	23	24	25	17	18	19	20	21	22	23
29	30	31					26	27	28	29	30			24	25	26	27	28	29	30
														31						

## 2001

JANUARY							FEBRUARY							MARCH						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
	1	2	3	4	5	6					1	2	3					1	2	3
7	8	9	10	11	12	13	4	5	6	7	8	9	10	4	5	6	7	8	9	10
14	15	16	17	18	19	20	11	12	13	14	15	16	17	11	12	13	14	15	16	17
21	22	23	24	25	26	27	18	19	20	21	22	23	24	18	19	20	21	22	23	24
28	29	30	31				25	26	27	28				25	26	27	28	29	30	31

APRIL							MAY							JUNE						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
1	2	3	4	5	6	7			1	2	3	4	5						1	2
8	9	10	11	12	13	14	6	7	8	9	10	11	12	3	4	5	6	7	8	9
15	16	17	18	19	20	21	13	14	15	16	17	18	19	10	11	12	13	14	15	16
22	23	24	25	26	27	28	20	21	22	23	24	25	26	17	18	19	20	21	22	23
29	30						27	28	29	30	31			24	25	26	27	28	29	30

JULY							AUGUST							SEPTEMBER						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
1	2	3	4	5	6	7				1	2	3	4							1
8	9	10	11	12	13	14	5	6	7	8	9	10	11	2	3	4	5	6	7	8
15	16	17	18	19	20	21	12	13	14	15	16	17	18	9	10	11	12	13	14	15
22	23	24	25	26	27	28	19	20	21	22	23	24	25	16	17	18	19	20	21	22
29	30	31					26	27	28	29	30	31		23	24	25	26	27	28	29
														30						

## PREFACE

Volume 1 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 1 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:

B. D. Bemis	S. T. Green	M. L. Morey	C. J. Smith
R. J. Brandle	M. J. Haley	S. V. Muro	G. J. Smith
A. J. Brogan	D. L. Harbour	R. M. Neam	D. E. Smits
J. B. Brown	T. J. Hennessy	M. A. Penrod	J. L. Stewart
J. F. Bruce	W. B. Herbert	K. G. Petty	W. J. Thomas
J. A. Collins	L. A. Klausner	S. M. Powers Clendening	C. H. Thompson
R. L. Dixon	J. M. Kuzmiak	S. A. Rafferty	W. J. Walker
A. M. Duran	M. Lewis	R. L. Reed	L. A. Walsh
E. E. Evans	J. D. Martinez	E. A. Samuels	N. O. Young
J. S. Ferarese	M. Messer	B. G. Scott	
S. A. Ferguson	J. K. Monson	D. G. Shubert	

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

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13. ABSTRACT <i>(Maximum 200 words)</i> Water-resources data for Colorado for the 2001 water year consist of records of stage, discharge, and water quality of streams; stage, contents, and water-quality of lakes and reservoirs; meteorological data; and water levels and water quality of wells and springs. This report (Volumes 1 and 2) contains discharge records for 313 gaging stations, stage and contents of 16 lakes and reservoirs, discharge measurements for 1 partial-record low-flow station and 1 miscellaneous site, peak flow information for 22 crest-stage partial-record stations; water-quality for 125 gaging stations and for 10 lakes and reservoirs, supplemental water-quality for 181 gaged sites; water-quality for 77 miscellaneous sites and 14 observation wells; water levels for 3 observation wells, and meteorological data for 55 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.
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SURFACE-WATER STATIONS, IN DOWNSTREAM ORDER, FOR WHICH RECORDS ARE PUBLISHED IN  
THIS VOLUME

NOTE.--Data for partial-record stations and miscellaneous sites for both surface-water  
discharge and quality are published in separate 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.)

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**VOLUME 1: MISSOURI RIVER, ARKANSAS RIVER, AND RIO GRANDE BASINS**

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By R.M. Crowfoot, R.D. Steger, W.F. Payne, and G.B. O'Neill

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**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 1 of two volumes) includes records on both surface and ground water in the State, east of the Continental Divide. Specifically, it contains: (1) discharge records for 149 surface-water stations, peak discharges for 21 partial-record surface-water stations and discharge measurements only for 1 miscellaneous site; (2) stage and contents for 7 lakes and reservoirs; (3) water-quality data for 54 surface-water stations, 5 reservoirs, 14 wells, and miscellaneous surface-water-quality data for 76 gaged sites and 37 miscellaneous sites; and (4) ground-water level records for 1 site, and meteorological data for 45 sites. Locations of lake and surface-water stations and surface-water-quality stations are shown in figure 1, locations of crest-stage partial-record stations are shown in figure 2. Three pertinent stations operated by bordering States are included in this report. 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, surface-water data were released by the Survey in annual reports on a State-boundary basis. Surface-water-quality records for water years 1964 through 1970 were similarly released either in separate reports or in conjunction with surface-water records.

Beginning with the 1971 water year, water data on surface-water, water quality, and ground-water are published in official Survey reports on a State-boundary basis. These official Survey reports carry an identification number consisting of the two-letter State abbreviation, the last two digits of the water year, and the volume number. For example, this volume is identified as "**U.S. Geological Survey Water-Data Report CO-01-1.**" 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 Chief at the address given on the back of the title page or by telephone (303) 236-4882.

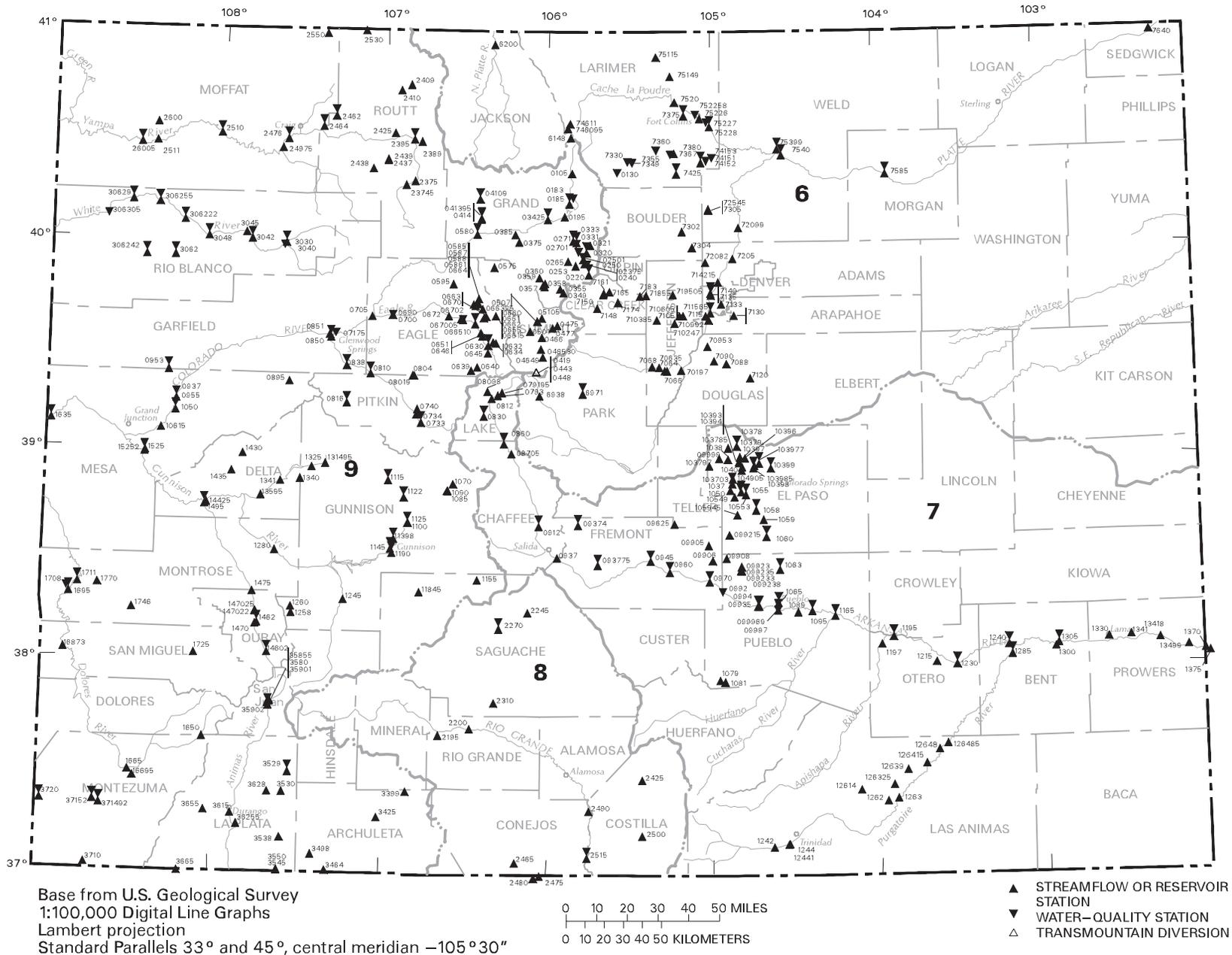
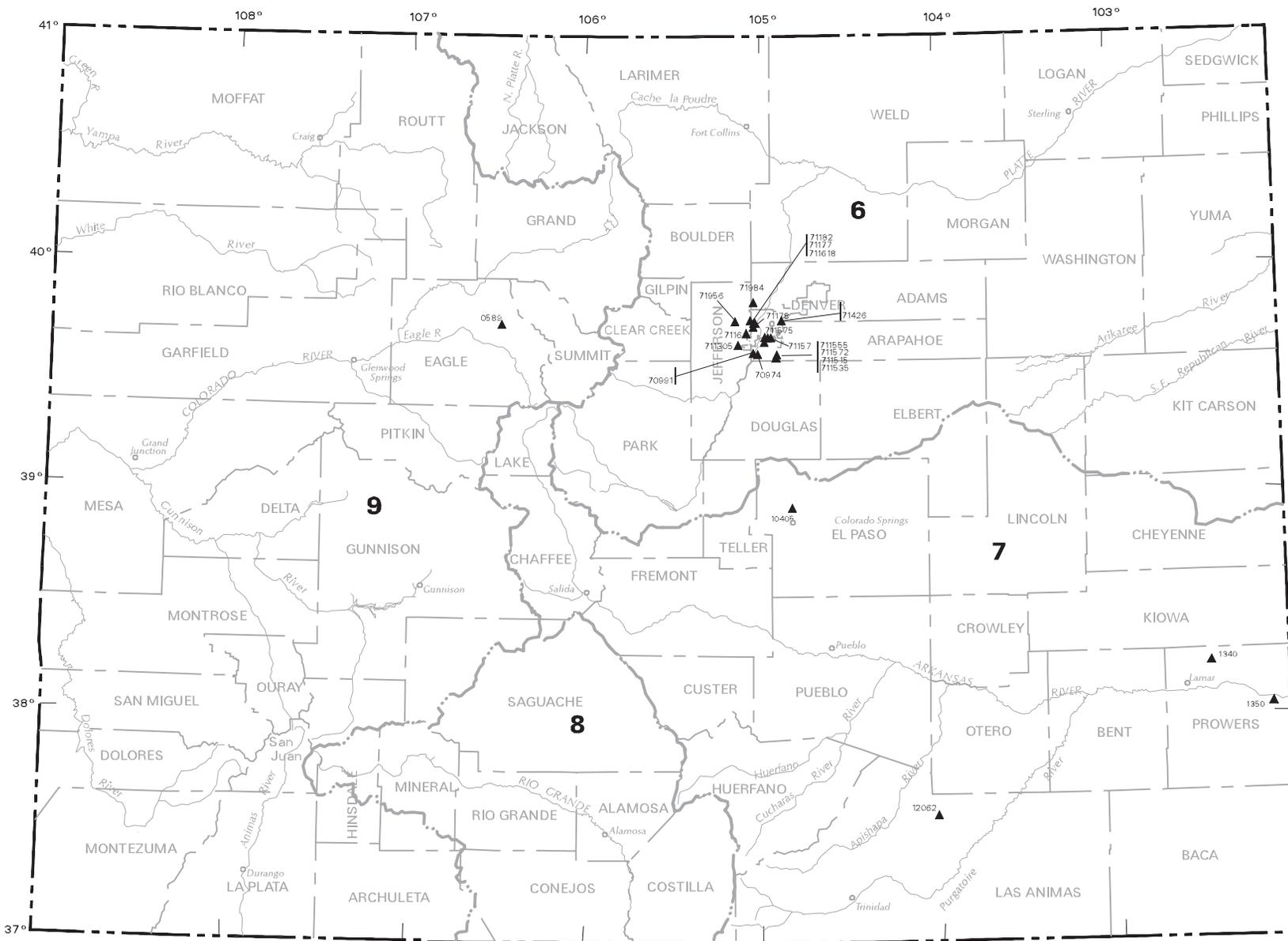
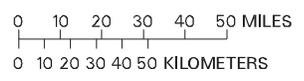


Figure 1.--Map showing locations of lake and surface-water stations and surface-water-quality stations in Colorado.



Base from U.S. Geological Survey  
 1:100,000 Digital Line Graphs  
 Lambert projection  
 Standard Parallels 33° and 45°, central meridian -105°30"



▲ PARTIAL RECORD STATION

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 **2001 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 and County 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.  
 Gilpin County.  
 Grand County.  
 La Plata County.  
 Lower Fountain Water-Quality Management Association.  
 Meeker Sanitation District.  
 Metro Wastewater Reclamation District.  
 Moffat County Commissioners.  
 Mount Crested Butte Water and Sanitation District.  
 North Front Range Water Quality Planning Association.  
 Northern Colorado Water Conservancy District.  
 Northwest Colorado Council of Governments.  
 Plum Creek Wastewater Authority.  
 Pueblo Board of Water Works.  
 Pueblo County.  
 Pueblo West Metropolitan District.  
 Rio Blanco County Board of County Commissioners.  
 Rio Grande Water Conservation 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 Eagle.  
 Town of Gypsum.  
 Town of Hotchkiss.  
 Town of Meeker.  
 Town of Paonia.  
 Town of Rangely.  
 Town of Red Cliff.  
 Town of Vail.  
 Trinchera Water Conservancy District.  
 Upper Arkansas River Water Conservancy District.  
 Upper Eagle Regional Water Authority.  
 Upper Gunnison River Water Conservancy District.  
 Upper Yampa Water Conservancy District.  
 Urban Drainage and Flood Control District.  
 Western State College of Colorado.  
 Wyoming State Engineer.  
 Yellowjacket Water Conservancy District.

Financial assistance was also provided by the U.S. Air Force Academy; 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 streamflow 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. At 10 of these sites, water-quality information is being gathered on major ions and nutrients, primarily to assess the effects of acid deposition on stream chemistry. Additional information on the Hydrologic Benchmark Program can be found at <http://water.usgs.gov/hbn/>.

**National Stream-Quality Accounting Network** (NASQAN) monitors the water quality of large rivers within the Nation's largest river basins. From 1995 through 1999, a network of approximately 40 stations were operated in the Mississippi, Columbia, Colorado, and Rio Grande basins. From 2000 through 2004, sampling was reduced to a few index stations on the Colorado and Columbia so that a network of 5 stations could be implemented on the Yukon River. 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. Additional information about the NASQAN Program can be found at <http://water.usgs.gov/nasqan/>.

**The National Atmospheric Deposition Program/National Trends Network** (NADP/NTN) provides continuous measurement and assessment of the chemical constituents in precipitation throughout the United States. As the lead federal agency, the USGS works together with over 100 organizations to provide a long-term, spatial and temporal record of atmospheric deposition generated from a network of 225 precipitation chemistry monitoring sites. This long-term, nationally consistent monitoring program, coupled with ecosystem research, provides critical information toward a national scorecard to evaluate the effectiveness of ongoing and future regulations intended to reduce atmospheric emissions and subsequent impacts to the Nation's land and water resources. Reports and other information on the NADP/NTN Program, as well as all data from the individual sites, can be found at <http://bqs.usgs.gov/acidrain/>.

**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 59 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 can be found at [http://water.usgs.gov/nawqa/nawqa\\_home.html](http://water.usgs.gov/nawqa/nawqa_home.html).

## EXPLANATION OF THE RECORDS

**The surface-water and ground-water records published in this report are for the 2001 water year that began on October 1, 2000, and ended September 30, 2001.** 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.

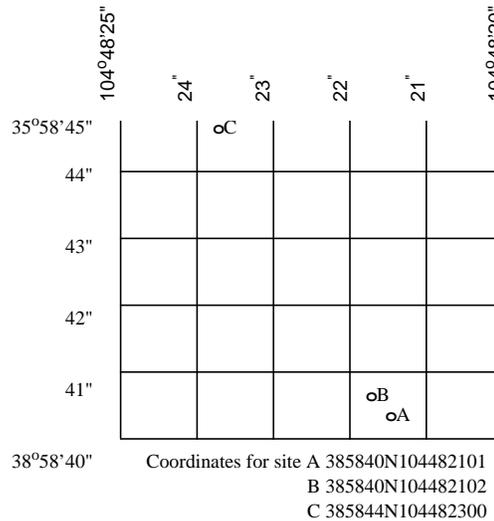
Downstream Order System

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 indentation in the "List of Stations" in the front of this report. Each indentation represents one rank. This downstream order and system of indentation 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).



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<sup>2</sup> area described by the township and range designation is subdivided into 1-mi<sup>2</sup> 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<sup>3</sup>/s; to the nearest tenth between 1.0 and 10 ft<sup>3</sup>/s; to whole numbers between 10 and 1,000 ft<sup>3</sup>/s; and to 3 significant figures for more than 1,000 ft<sup>3</sup>/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:	$\pm 0.3$ degree C.
*	Specific Conductance:	$\pm 5 \mu\text{S/cm}$ or $\pm 5\%$ whichever is greater
*	pH:	$\pm 0.2$ pH units
*	Dissolved Oxygen:	$\pm 0.3 \text{ mg/L}$ or $\pm 5\%$ 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; Book 9, Chap. A1-A9. 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.

### Miscellaneous Water-Quality Data

Miscellaneous water-quality data refers to measurements of water temperature and specific conductance that are made in streams concurrently with discharge measurements. Miscellaneous water-quality measurements typically are made at an individual point in a stream cross section. If the stream is well mixed and its chemistry is relatively uniform, a single point measurement may be sufficient to represent the stream cross section. Point measurements of water temperature and specific conductance in streams that are not well mixed may not be representative of the cross section.

## 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.

## Water-Quality Data Reporting Convention

The USGS National Water Quality Laboratory collects quality-control data on a continuing basis to evaluate selected analytical methods to determine long-term method detection levels (LT-MDL's) and laboratory reporting levels (LRL's). These values are re-evaluated each year on the basis of the most recent quality-control data and, consequently, may change from year to year.

This reporting procedure limits the occurrence of false positive error. The chance of falsely reporting a concentration greater than the LT-MDL for a sample in which the analyte is present is 1 percent or less. Application of the LRL limits the occurrence of false negative error. The chance of falsely reporting a non-detection for a sample in which the analyte is present at a concentration equal to or greater than the LRL is 1 percent or less.

Accordingly, concentrations are reported as <LRL for samples in which the analyte was either not detected or did not pass identification. Analytes that are detected at concentrations between the LT-MDL and LRL and that pass identification criteria are estimated. Estimated concentrations will be noted with a remark code of "E". These data should be used with the understanding that their uncertainty is greater than that of data reported without the "E" remark code.

## 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 in the U.S. Geological Survey's distributed data system, NWIS, and subsequently to its web-based National data system, NWISWeb [<http://water.usgs.gov/nwis/nwis>]. 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 NWIS or NWISWeb to ensure the most recent updates. Updates to NWISWeb are currently made on an annual basis.

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 remarks codes may appear with the water-quality data in this report:

#### PRINTED OUTPUT REMARK

E	Estimated laboratory analysis 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 :

<a href="http://waterdata.usgs.gov/nwis">http://waterdata.usgs.gov/nwis</a>	National water data page
<a href="http://co.water.usgs.gov">http://co.water.usgs.gov</a>	Colorado home page

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

Specialized technical terms related to streamflow, water-quality, and other hydrologic data, as used in this report, are defined below. Terms such as algae, water level, precipitation are used in their common everyday meanings, definitions of which are given in standard dictionaries. Not all terms defined in this alphabetical list apply to every State. 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 a unit of volume, commonly used to measure quantities of water used or stored, equivalent to the volume of water required to cover 1 acre to a depth of 1 foot and equivalent to 43,560 cubic feet, 325,851 gallons, or 1,233 cubic meters. (See also "Annual runoff")

**Adenosine triphosphate (ATP)** is an organic, phosphate-rich, compound important in the transfer of energy in organisms. Its central role in living cells makes ATP 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.

**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** is the capacity of solutes in an aqueous system to neutralize acid. This term designates titration of a "filtered" sample.

**Annual runoff** is the total quantity of water that is discharged ("runs off") from a drainage basin in a year. Data reports may present annual runoff data as volumes in acre-feet, as discharges per unit of drainage area in cubic feet per second per square mile, or as depths of water on the drainage basin in inches.

**Annual 7-day minimum** is the lowest mean value for any 7-consecutive-day period in a year. Annual 7-day minimum values are reported herein for the calendar year and the water year (October 1 to September 30). Most low-flow frequency analyses use a climatic year (April 1-March 31), which tends to prevent the low-flow period from being artificially split between adjacent years. 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.)

**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.

**Artificial substrate** is a device that 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. (See also "Substrate")

**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 °C for 1 hour. Ash mass of zooplankton and phytoplankton is expressed in grams per cubic meter ( $\text{g/m}^3$ ), and periphyton and benthic organisms in grams per square meter ( $\text{g/m}^2$ ). (See also "Biomass")

**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.

**Base discharge (for peak discharge)** is a discharge value, determined for selected stations, above which peak discharge data are published. The base discharge at each station is selected so that an average of about three peaks per year will be published.

**Base flow** is sustained flow of a stream in the absence of direct runoff. It includes natural and human-induced streamflows. Natural base flow is sustained largely by ground-water discharge.

**Bedload** is material in transport that is supported primarily by the streambed. In this report, bedload is considered to consist of particles in transit from the bed to an elevation equal to the top of the bedload sampler nozzle (ranging from 0.25 to 0.5 ft) that are retained in the bedload sampler. A sample collected with a pressure-differential bedload sampler may also contain a component of the suspended load.

**Bedload discharge (tons per day)** is rate of sediment moving as bedload, reported as dry weight, that passes through a cross section in a given time. NOTE: Bedload discharge values in this report may include a component of the suspended-sediment discharge. A correction may be necessary when computing the total sediment discharge by summing the bedload discharge and the suspended-sediment discharge. (See also "Bedload" and "Sediment")

**Bed material** is the sediment mixture of which a streambed, lake, pond, reservoir, or estuary bottom is composed. (See also "Bedload" and "Sediment")

**Benthic organisms** are the group of organisms 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.

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

**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. Concentrations are expressed as a number of cells per milliliter (cells/mL) of sample. (See also "Phytoplankton")

**Bottom material** (See "Bed material")

**Cells/volume** refers to the number of cells of any organism that is counted by using a microscope and grid or counting cell. Many planktonic organisms are multicelled and are counted according to the number of contained cells per sample volume, and are generally reported as cells or units per milliliter (mL) or liter (L).

**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 ( $\mu\text{m}^3$ ) 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:

$$\text{sphere } \frac{4}{3} \pi r^3 \quad \text{cone } \frac{1}{3} \pi r^2 h \quad \text{cylinder } \pi r^2 h.$$

pi is the ratio of the circumference to the diameter of a circle; pi = 3.14159...

From cell volume, total algal biomass expressed as biovolume ( $\mu\text{m}^3/\text{mL}$ ) 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.

**Cfs-day** (See "Cubic foot per second-day")

**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. [See also "Biochemical oxygen demand (BOD)"]

**Clostridium perfringens** (*C. perfringens*) is a spore-forming bacterium that is common in the feces of human and other warm-blooded animals. Clostridial spores are being used experimentally as an indicator of past fecal contamination and presence of microorganisms that are resistant to disinfection and environmental stresses. (See also "Bacteria")

**Coliphages** are viruses that infect and replicate in coliform bacteria. They are indicative of sewage contamination of waters and of the survival and transport of viruses in the environment.

**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 where data are collected with sufficient frequency to define daily mean values and variations within a day.

**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 gage. 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,  $\text{ft}^3/\text{s}$ ) 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 or approximately 449 gallons per minute, or 0.02832 cubic meters per second. The term "second-feet" sometimes is used synonymously with "cubic feet per second" but is now obsolete.

**Cubic foot per second-day** (CFS-DAY, Cfs-day,  $[(\text{ft}^3/\text{s})/\text{d}]$ ) 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, 1.98347 acre-feet, 646,317 gallons, or 2,446.6 cubic meters. The daily-mean discharges reported in the daily-value data tables are numerically equal to the daily volumes in cfs-days, and the totals also represent volumes in cfs-days.

**Cubic foot per second per square mile** [CFSM,  $(\text{ft}^3/\text{s})/\text{mi}^2$ ] 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. (See also "Annual runoff")

**Daily mean suspended-sediment concentration** is the time-weighted concentration of suspended sediment passing a stream cross section during a 24-hour day. (See also "Mean concentration of suspended sediment," "Sediment," and "Suspended-sediment concentration")

**Daily-record station** is a site where data are collected with sufficient frequency to develop a record of one or more data values per day. The frequency of data collection can range from continuous recording to periodic sample or data collection on a daily or near-daily basis.

**Data Collection Platform** (DCP) is an electronic instrument that collects, processes, and stores data from various sensors, and transmits the data by satellite data relay, line-of-sight radio, and/or landline telemetry.

**Data logger** is a microprocessor-based data acquisition system designed specifically to acquire, process, and store data. Data are usually downloaded from onsite data loggers for entry into office data systems.

**Datum** is a surface or point relative to which measurements of height and/or horizontal position are reported. A vertical datum is a horizontal surface used as the zero point for measurements of gage height, stage, or elevation; a horizontal datum is a reference for positions given in terms of latitude-longitude, State Plane coordinates, or UTM coordinates. (See also "Gage datum," "Land-surface datum," "National Geodetic Vertical Datum of 1929," and "North American Vertical Datum of 1988")

**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. (See also "Phytoplankton")

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

**Discharge**, or flow, is the rate that matter passes through a cross section of a stream channel or other water body per unit of time. The term commonly refers to the volume of water (including, unless otherwise stated, any sediments or other constituents suspended or dissolved in the water) that passes a cross section in a stream channel, canal, pipeline, etc., within a given period of time (cubic feet per second). Discharge also can apply to the rate at which constituents such as suspended sediment, bedload, and dissolved or suspended chemical constituents, pass through a cross section, in which cases the quantity is expressed as the mass of constituent that passes the cross section in a given period of time (tons per day).

**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 and State agencies that collect water-quality data. Determinations of "dissolved" constituent concentrations are made on sample water that has been filtered.

**Dissolved oxygen (DO)** is the molecular oxygen (oxygen gas) dissolved in water. The concentration in water 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 concentration. Photosynthesis and respiration by plants commonly cause diurnal variations in dissolved-oxygen concentration in water from some streams.

**Dissolved-solids concentration** in water is the quantity of dissolved material in a sample of water. It 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 the analytical determination, the bicarbonate (generally a major dissolved component of water) is converted to carbonate. In the mathematical calculation, the bicarbonate value, in milligrams per liter, is multiplied by 0.4926 to convert it to carbonate. Alternatively, alkalinity concentration (as mg/L CaCO<sub>3</sub>) can be converted to carbonate concentration by multiplying by 0.60.

**Diversity index (H)** (Shannon 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  $n_i$  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. 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 stream at a specific location is that area upstream from the location, measured in a horizontal plane, that has a common outlet at the site for its surface runoff from precipitation that normally drains by gravity into a stream. Drainage areas 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 contains a drainage system with a common outlet for its surface runoff. (See "Drainage area")

**Dry mass** refers to the mass of residue present after drying in an oven at 105 °C, until the mass remains unchanged. This mass represents the total organic matter, ash and sediment, in the sample. Dry-mass values are expressed in the same units as ash mass. (See also "Ash mass," "Biomass," and "Wet mass")

**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. (See also "Wet weight")

**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. (See also "Bacteria")

**EPT Index** is the total number of distinct taxa within the insect orders Ephemeroptera, Plecoptera, and Trichoptera. This index summarizes the taxa richness within the aquatic insects that are generally considered pollution sensitive, the index usually decreases with pollution.

**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. (See also "Bacteria")

**Estimated (E) value** of a concentration is reported when an analyte is detected and all criteria for a positive result are met. If the concentration is less than the method detection limit (MDL), an 'E' code will be reported with the value. If the analyte is qualitatively identified as present, but the quantitative determination is substantially more uncertain, the National Water Quality Laboratory will identify the result with an 'E' code even though the measured value is greater than the MDL. A value reported with an 'E' code should be used with caution. When no analyte is detected in a sample, the default reporting value is the MDL preceded by a less than sign (<).

**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. (See also "Phytoplankton")

**Extractable organic halides (EOX)** are organic compounds that contain halogen atoms such as chlorine. These organic compounds are semi-volatile and extractable by ethyl acetate from air-dried streambed sediments. The ethyl acetate extract is combusted, and the concentration is determined by microcoulometric determination of the halides formed. The concentration is reported as micrograms of chlorine per gram of the dry weight of the streambed sediments.

**Fecal coliform bacteria** 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. (See also "Bacteria")

**Fecal streptococcal bacteria** are present in the intestine of warm-blooded animals and are ubiquitous in the environment. 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 °C plus or minus 1.0 °C on KF-streptococcus medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample. (See also "Bacteria")

**Fire algae** (*Pyrrhophyta*) are free-swimming unicells characterized by a red pigment spot. (See also "Phytoplankton")

**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 a horizontal surface used as a zero point for measurement of stage or gage height. This surface usually is located slightly below the lowest point of the stream bottom such that the gage height is usually slightly larger than the maximum depth of water. Because the gage datum itself is not an actual physical object, the datum usually is defined by specifying the elevations of permanent reference marks such as bridge abutments and survey monuments, and the gage is set to agree with the reference marks. Gage datum is a local datum that is maintained independently of any National geodetic datum. However, if the elevation of the gage datum relative to the National datum (North American Vertical Datum of 1988 or National Geodetic Vertical Datum of 1929) has been determined, then the gage readings can be converted to elevations above the National datum by adding the elevation of the gage datum to the gage reading.

**Gage height** (G.H.) is the water-surface elevation, in feet above the gage datum. If the water surface is below the gage datum, the gage height is negative. Gage height is often used interchangeably with the more general term "stage," although gage height is more appropriate when used in reference to a reading on a gage.

**Gage values** are values that are recorded, transmitted and/or computed from a gaging station. Gage values typically are collected at 5-, 15-, or 30-minute intervals.

**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.

**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. (See also "Phytoplankton")

**Habitat quality index** is the qualitative description (level 1) of instream habitat and riparian conditions surrounding the reach sampled. Scores range from 0 to 100 percent with higher scores indicative of desirable habitat conditions for aquatic life. Index only applicable to wadable streams.

**Hardness** of water is a physical-chemical characteristic that is commonly recognized by the increased quantity of soap required to produce lather. It is computed as the sum of equivalents of polyvalent cations (primarily calcium and magnesium) and is expressed as the equivalent concentration of calcium carbonate (CaCO<sub>3</sub>).

**High tide** is the maximum height reached by each rising tide. The high-high and low-high tides are the higher and lower of the two high tides, respectively, of each tidal day. See NOAA web site: <http://www.co-ops.nos.noaa.gov/tideglos.html>

**Hilsenhoff's Biotic Index** (HBI) is an indicator of organic pollution which uses tolerance values to weight taxa abundances; usually increases with pollution. It is calculated as follows:

$$HBI = \frac{\sum(n)(a)}{N}$$

where  $n$  is the number of individuals of each taxon,  $a$  is the tolerance value of each taxon, and  $N$  is the total number of organisms in the sample.

**Horizontal datum** (See "Datum")

**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 index stations** referred to in this report are four continuous-record gaging stations that have been selected as representative of streamflow patterns for their respective regions. Station locations are shown on index maps.

**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 USGS. Each hydrologic unit is identified by an 8-digit number.

**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. (See also "Annual runoff")

**Instantaneous discharge** is the discharge at a particular instant of time. (See also "Discharge")

**Laboratory Reporting Level** (LRL) is generally equal to twice the yearly determined long-term method detection level (LT-MDL). The LRL controls false negative error. The probability of falsely reporting a non-detection for a sample that contained an analyte at a concentration equal to or greater than the LRL is predicted to be less than or equal to 1 percent. The value of the LRL will be reported with a "less than" (<) remark code for samples in which the analyte was not detected. The National Water Quality Laboratory collects quality-control data from selected analytical methods on a continuing basis to determine LT-MDLs and to establish LRLs. These values are reevaluated annually based on the most current quality-control data and may, therefore, change. [Note: In several previous NWQL documents (Connor and others, 1998; NWQL Technical Memorandum 98.07, 1998), the LRL was called the non-detection value or NDV—a term that is no longer used.]

**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

$$I = I_0 e^{-\lambda L},$$

where  $I_0$  is the source light intensity,  $I$  is the light intensity at length  $L$  (in meters) from the source,  $\lambda$  is the light-attenuation coefficient, and  $e$  is the base of the natural logarithm. The light attenuation coefficient is defined as

$$\lambda = -\frac{1}{L} \log_e \frac{I}{I_0} .$$

**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.

**Long-Term Method Detection Level (LT-MDL)** is a detection level derived by determining the standard deviation of a minimum of 24 method detection limit (MDL) spike sample measurements over an extended period of time. LT-MDL data are collected on a continuous basis to assess year-to-year variations in the LT-MDL. The LT-MDL controls false positive error. The chance of falsely reporting a concentration at or greater than the LT-MDL for a sample that did not contain the analyte is predicted to be less than or equal to 1 percent.

**Low tide** is the minimum height reached by each falling tide. The high-low and low-low tides are the higher and lower of the two low tides, respectively, of each tidal day. See NOAA web site: <http://www.co-ops.nos.noaa.gov/tideglos.html>

**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.

**Mean concentration of suspended sediment** (Daily mean suspended-sediment concentration) is the time-weighted concentration of suspended sediment passing a stream cross section during a given time period. (See also "Daily mean suspended-sediment concentration" and "Suspended-sediment concentration")

**Mean discharge (MEAN)** is the arithmetic mean of individual daily mean discharges during a specific period. (See also "Discharge")

**Mean high or low tide** is the average of all high or low tides, respectively, over a specific period.

**Mean sea level** is a local tidal datum. It is the arithmetic mean of hourly heights observed over the National Tidal Datum Epoch. Shorter series are specified in the name; for example, monthly mean sea level and yearly mean sea level. In order that they may be recovered when needed, such datums are referenced to fixed points known as benchmarks. (See also "Datum")

**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.

**Method Detection Limit (MDL)** is the minimum concentration of a substance that can be measured and reported with 99-percent confidence that the analyte concentration is greater than zero. It is determined from the analysis of a sample in a given matrix containing the analyte. At the MDL concentration, the risk of a false positive is predicted to be less than or equal to 1 percent.

**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,  $\mu\text{g/g}$ )** 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,  $\mu\text{g/kg}$ )** 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,  $\mu\text{g/L}$ )** 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. One microgram per liter is equivalent to 1 part per billion.

**Microsiemens per centimeter (US/CM,  $\mu\text{S/cm}$ )** 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,  $\text{mg/L}$ )** 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  $\text{mg/L}$  and is based on the mass of dry sediment per liter of water-sediment mixture.

**Minimum Reporting Level (MRL)** is the smallest measured concentration of a constituent that may be reliably reported by using a given analytical method (Timme, 1995).

**Miscellaneous site**, miscellaneous station, or miscellaneous sampling site is a site where streamflow, sediment, and/or water-quality data or water-quality or sediment samples are collected once, or more often on a random or discontinuous basis to provide better areal coverage for defining hydrologic and water-quality conditions over a broad area in a river basin.

**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,  $\text{ng/L}$ )** 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 fixed reference adopted as a standard geodetic datum for elevations determined by leveling. It was formerly called "Sea Level Datum of 1929" or "mean sea level." Although the datum was derived from the mean sea level at 26 tide stations, 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> (See "North American Vertical Datum of 1988")

**Natural substrate** refers to any naturally occurring immersed or submersed solid surface, such as a rock or tree, upon which an organism lives. (See also "Substrate")

**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.

**North American Vertical Datum of 1988 (NAVD 1988)** is a fixed reference adopted as the official civilian vertical datum for elevations determined by Federal surveying and mapping activities in the U.S. This datum was established in 1991 by minimum-constraint adjustment of the Canadian, Mexican, and U.S. first-order terrestrial leveling networks.

**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), particulate organic carbon (POC), or total organic carbon (TOC).

**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. (See also "Ash mass," "Biomass," and "Dry mass")

**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 (m<sup>2</sup>), 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.

**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 USGS 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**, as 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.

**Peak flow (peak stage)** is an instantaneous local maximum value in the continuous time series of streamflows or stages, preceded by a period of increasing values and followed by a period of decreasing values. Several peak values ordinarily occur in a year. The maximum peak value in a year is called the annual peak; peaks lower than the annual peak are called secondary peaks. Occasionally, the annual peak may not be the maximum value for the year; in such cases, the maximum value occurs at midnight at the beginning or end of the year, on the recession from or rise toward a higher peak in the adjoining year. If values are recorded at a discrete series of times, the peak recorded value may be taken as an approximation to the true peak, which may occur between the recording instants. If the values are recorded with finite precision, a sequence of equal recorded values may occur at the peak; in this case, the first value is taken as the peak.

**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, mass, or volume.

**Percent shading** is determined by using a clinometer to estimate left and right bank shading. The values are added together and divided by 180 to determine percent shading relative to a horizontal surface.

**Periodic-record station** is a site where stage, discharge, sediment, chemical, physical, 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.

**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. (See also "Plankton")

**Picocurie** (PC, pCi) is one trillionth ( $1 \times 10^{-12}$ ) of the amount of radioactive nuclide represented by a curie (Ci). A curie is the quantity of radioactive nuclide that yields  $3.7 \times 10^{10}$  radioactive disintegrations per second (dps). A picocurie yields 0.037 dps, or 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).

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

**Polychlorinated naphthalenes** (PCNs) are industrial chemicals that are mixtures of chlorinated naphthalene compounds. They have properties and applications similar to polychlorinated biphenyls (PCBs) 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 [ $\text{mg C}/(\text{m}^2/\text{time})$ ] for periphyton and macrophytes or per volume [ $\text{mg C}/(\text{m}^3/\text{time})$ ] 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. (See also "Primary productivity")

**Primary productivity (oxygen method)** is expressed as milligrams of oxygen per area per unit time [ $\text{mg O}/(\text{m}^2/\text{time})$ ] for periphyton and macrophytes or per volume [ $\text{mg O}/(\text{m}^3/\text{time})$ ] 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. (See also "Primary productivity")

**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 bed (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. (See also "Bed material")

**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 ( $7Q_{10}$ ) 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  $7Q_{10}$  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  $7Q_{10}$ .

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

**Return period** (See "Recurrence interval")

**River mileage** is the curvilinear distance, in miles, measured upstream from the mouth along the meandering path of a stream channel in accordance with Bulletin No. 14 (October 1968) of the Water Resources Council, and typically used to denote location along a river.

**Runoff** is the quantity of water that is discharged ("runs off") from a drainage basin in a given time period. Runoff data may be presented as volumes in acre-feet, as mean discharges per unit of drainage area in cubic feet per second per square mile, or as depths of water on the drainage basin in inches. (See also "Annual runoff")

**Sea level**, as used in this report, refers to one of the two commonly used national vertical datums, (NGVD 1929 or NAVD 1988). See separate entries for definitions of these datums. See conversion of units page (inside back cover) for identification of the datum used in this report.

**Sediment** is solid material that originates mostly from disintegrated rocks; when transported by, suspended in, or deposited from water, it is referred to as "fluvial sediment." Sediment 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 and land-use factors. Some major factors are topography, soil characteristics, land cover, and depth and intensity of precipitation.

**Seven-day 10-year low flow (7Q10)** is the discharge below which the annual 7-day minimum flow falls in 1 year out of 10 on the long-run average. The recurrence interval of the 7Q10 is 10 years; the chance that the annual 7-day minimum flow will be less than the 7Q10 is 10 percent in any given year. (See also "Recurrence interval" and "Annual 7-day minimum")

**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. Sodium hazard in water is an index that can be used to evaluate the suitability of water for irrigating crops.

**Specific electrical conductance (conductivity)** is a measure of the capacity of water (or other media) to conduct an electrical current. It is expressed in microsiemens per centimeter at 25 °C. Specific electrical conductance is a function of the types and quantity of dissolved substances in water 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 MIL/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.

**Substrate Embeddedness Class** is a visual estimate of riffle streambed substrate larger than gravel that is surrounded or covered by fine sediment (<2mm, sand or finer). Below are the class categories expressed as percent covered by fine sediment:

0	< no gravel or larger substrate		
1	> 75%		
2	51-75%	4	5-25%
3	26-50%	5	< 5%

**Surface area of a lake** is that area (acres) encompassed by the boundary of the lake as shown on USGS topographic maps, or other available maps or photographs. Because surface area changes with lake stage, surface areas listed in this report represent those determined for the stage at the time the maps or photographs were obtained.

**Surficial bed material** is the upper surface (0.1 to 0.2 ft) of the bed material such as that material which 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 operationally defined as 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 water-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 directly analyzing the suspended material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total recoverable concentrations of the constituent. (See also "Suspended")

**Suspended sediment** is the sediment maintained in suspension by the upward components of turbulent currents or that exists in suspension as a colloid. (See also "Sediment")

**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 analytical technique uses the mass of all of the sediment and the net weight of the water-sediment mixture in a sample to compute the suspended-sediment concentration. (See also "Sediment" and "Suspended sediment")

**Suspended-sediment discharge** (tons/day) is the rate of sediment transport, as measured by dry mass or volume, 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 (ft<sup>3</sup>/s) x 0.0027. (See also "Sediment," "Suspended sediment," and "Suspended-sediment concentration")

**Suspended-sediment load** is a general term that refers to a given characteristic of the material in suspension that passes a point during a specified period of time. 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. (See also "Sediment")

**Suspended, total** is the total amount of a given constituent in the part of a water-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 directly analyzing portions of the suspended material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total concentrations of the constituent. (See also "Suspended")

**Suspended solids, total residue at 105 °C concentration** is the concentration of inorganic and organic material retained on a filter, expressed as milligrams of dry material per liter of water (mg/L). An aliquot of the sample is used for this analysis.

**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.

**Taxa richness** is the total number of distinct species or groups and usually decreases with pollution. (See also "Percent Shading")

**Taxonomy** is the division of biology concerned with the classification and naming of organisms. The classification of organisms is based upon a hierarchical 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:	<i>Hexagenia</i>
Species:	<i>Hexagenia limbata</i>

**Temperature preferences:**

Cold – preferred water temperature for the species is less than 20 °C or spawning temperature preference less than 16 °C and native distribution is considered to be predominantly north of 45° N. latitude.

Warm – preferred water temperatures for the species is greater than 20 °C or spawning temperature preference greater than 16 °C and native distribution is considered to be predominantly south of 45° N. latitude.

Cool – intermediate between cold and warm water temperature preferences.

**Thermograph** is an instrument that continuously records variations of temperature on a chart. The more general term "temperature recorder" is used in the table descriptions and refers to any instrument that records temperature whether on a chart, a tape, or any other medium.

**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 resulting from the mixing of flow proportionally to the duration of the concentration.

**Tons per acre-foot (T/acre-ft)** is the dry mass (tons) of a constituent per unit volume (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 a common chemical or sediment discharge unit. It is the quantity of a substance in solution, in suspension, or as bedload that passes a stream section during a 24-hour period. It is equivalent to 2,000 pounds per day, or 0.9072 metric tons per day.

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

**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. (See also "Bacteria")

**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 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 organism count** is the number of organisms collected and enumerated in any particular sample. (See also "Organism count/volume.")

**Total recoverable** is the amount of a given constituent in a whole-water sample after a 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 for whole-water samples, equivalent digestion procedures are required of all laboratories performing such analyses because different digestion procedures may produce different analytical results.

**Total sediment discharge** is the mass of suspended-sediment plus bed-load transport, measured as dry weight, that passes a cross section in a given time. It is a rate and is reported as tons per day. (See also "Sediment," "Suspended sediment," "Suspended-Sediment Concentration," "Bedload," and "Bedload discharge")

**Total sediment load** or total load is the sediment in transport as bedload and suspended-sediment load. The term may be qualified, such as "annual suspended-sediment load" or "sand-size suspended-sediment load," and so on. It differs from total sediment discharge in that load refers to the material whereas discharge refers to the quantity of material, expressed in units of mass per unit time. (See also "Sediment," "Suspended-Sediment Load," and "Total load")

**Trophic group:**

**Filter feeder** – diet composed of suspended plant and/or animal material.

**Herbivore** – diet composed predominantly of plant material.

**Invertivore** – diet composed predominantly of invertebrates.

**Omnivore** – diet composed of at least 25-percent plant and 25-percent animal material.

**Piscivore** – diet composed predominantly of fish.

**Turbidity** is the reduction in the transparency of a solution due to the presence of suspended and some dissolved substances. The measurement technique records the collective optical properties of the solution that cause light to be scattered and attenuated rather than transmitted in straight lines; the higher the intensity of scattered or attenuated light, the higher the value of the turbidity. Turbidity is expressed in nephelometric turbidity units (NTU). Depending on the method used, the turbidity units as NTU can be defined as the intensity of light of a specified wavelength scattered or attenuated by suspended particles or absorbed at a method specified angle, usually 90 degrees, from the path of the incident light. Currently approved methods for the measurement of turbidity in the USGS include those that conform to EPA Method 180.1, ASTM D1889-00, and ISO 7027. Measurements of turbidity by these different methods and different instruments are unlikely to yield equivalent values. Consequently, the method of measurement and type of instrument used to derive turbidity records should be included in the "REMARKS" column of the Annual Data Report.

**Ultraviolet (UV) absorbance (absorption)** at 254 or 280 nanometers is a measure of the aggregate concentration of the mixture of UV absorbing organic materials dissolved in the analyzed water, such as lignin, tannin, humic substances, and various aromatic compounds. UV absorbance (absorption) at 254 or 280 nanometers is measured in UV absorption units per centimeter of pathlength of UV light through a sample.

**Vertical datum** (See "Datum")

**Volatile organic compounds (VOCs)** 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 VOCs are human-made 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 table** is the level in the saturated zone at which the pressure is equal to the atmospheric pressure.

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

**Water year** in USGS 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, 2001, is called the "2001 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.

**Wet mass** is the mass of living matter plus contained water. (See also "Biomass" and "Dry mass")

**Wet weight** refers to the weight of animal tissue or other substance including its contained water. (See also "Dry weight")

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

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

**SELECTED REFERENCES**

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

- American Public Health Association, and others, 1980, Standard methods for the examination of water and waste water, 13th ed: American Public Health Assoc., New York, 1134 p.
- Box, George E. P., Hunter, William G., and Hunter, J. Stuart, 1978, Statistics for Experimenters: New York, John Wiley, and Sons, 653 p.
- Cain, D. L., 1984, Quality of the Arkansas River and irrigation-return flows in the lower Arkansas River Valley of Colorado: Water-Resources Investigation Report 84-4273, 91 p.
- Carter, R. W., and Davidian, Jacob, 1968, General procedures for gaging streams: U.S. Geological Survey Techniques of Water-Resources Investigations, Book 3, Chapter A6, 13 p.
- Clarke, F. W., 1924, The composition of the river and lake waters of the United States: U.S. Geological Survey Professional Paper 135, 199 p.
- Colby, B. R., 1963, Fluvial sediments--a summary of source, transportation, deposition, and measurements of sediment discharge: U.S. Geological Survey Bulletin 1181-A, 47 p.
- Colby, B. R., and Hembree, C. H., 1955, Computations of total sediment discharge, Niobrara River near Cody, Nebraska: U.S. Geological Survey Water-Supply Paper 1357, 187 p.
- Colby, B. R., and Hubbell, D. W., 1961, Simplified methods for computing total sediment discharge with the modified Einstein procedure: U.S. Geological Survey Water-Supply Paper 1593, 17 p.
- Collins, W. D., and Howard, C. S., 1928, Quality of water of Colorado River in 1925-26: U.S. Geological Survey Water-Supply Paper 596 B, p. 33-43.
- Corbett, D. M., and others, 1942, Stream-gaging procedure, a manual describing methods and practices of the Geological Survey: U.S. Geological Survey Water-Supply Paper 888, 245 p.
- Crouch, T. M., and others, 1984, Water-Resources Appraisal of the upper Arkansas River basin from Leadville to Pueblo, Colorado: Water-Resources Investigation Report 82-4114, 123p.
- Fishman, M. J., and Bradford, W. L., 1982, A supplement to methods for the determination of inorganic substances in water and fluvial sediments: U.S. Geological Survey Techniques of Water-Resources Investigations, Book 5, Laboratory Analysis, Chapter A1, open-file report 82-272, 136 p.
- Goerlitz, D. F., and Brown, Eugene, 1972, Methods for analysis of organic substances in water: U.S. Geological Survey Techniques of Water-Resources Investigations, Book 5, Chapter A3, 40 p.
- Gregg, D. O., and others, 1961, Public water supplies of Colorado (1959-60): Fort Collins, Colorado State University Agricultural Experiment Station, General Service 757, 128 p.
- Guy, H. P., 1970, Fluvial sediment concepts: U.S. Geological Survey Techniques of Water-Resources Investigation, Book 3, Chapter C1, 55 p.
- \_\_\_\_\_, 1969, Laboratory theory and methods for sediment analysis: U.S. Geological Survey Techniques of Water-Resources Investigations, Book 5, Chapter C1, 57 p.
- Guy, H. P., and Norman, V. W., 1970, Field methods for measurement of fluvial sediment: U.S. Geological Survey Techniques of Water-Resources Investigations, Book 3, Chapter C2, 59 p.
- Hawley, Gessner G., 1981, The condensed chemical dictionary; Van Nostrand-Reinhold Publication Corporation, New York, 10th edition, 1135 p.
- Hem, John D., 1970, Study and interpretation of the chemical characteristics of natural water, 2d ed.: U.S. Geological Survey Water-Supply Paper 1473, 363 p.
- Horowitz, A.J., and others, 1994, U.S. Geological Survey protocol for the collection and processing of surface-water samples for the subsequent determination of inorganic constituents in filtered water: U.S. Geological Survey open-file report 94-539, 57 p.
- Howard, C. W., 1955, Quality of water of the Colorado River, 1925-40: U.S. Geological Survey open-file report, 103 p.
- Jorns, W. V., and others, 1964, Water Resources of the Upper Colorado River basin--basic data: U.S. Geological Survey Professional Paper 442, 1,036 p.
- \_\_\_\_\_, 1965, Water Resources of the Upper Colorado River basin--technical report: U.S. Geological Survey Professional Paper 441, 370 p.

- Lane, E. W., and others, 1947, Reports of Subcommittee on terminology: American Geophysical Union Transaction, v. 28, p. 937.
- Langbein, W. B., and Iseri, K. T., 1960, General introduction and hydrologic definitions: U.S. Geological Survey Water-Supply Paper 1541-A, 29 p.
- Lohman, S. W., and others, 1972, Definitions of selected ground-water terms--revisions and conceptual refinements: U.S. Geological Survey Water-Supply Paper 1988, p. 2.
- McGuinness, C. L., 1963, The role of ground water in the national water situation: U.S. Geological Survey Water-Supply Paper 1800, 1121 p.
- Meinzer, O. E., 1923, The occurrence of ground water in the United States: U.S. Geological Survey Water-Supply Paper 489, 321 p.
- \_\_\_\_\_, 1923, Outline of ground-water hydrology, with definitions: U.S. Geological Survey Water-Supply Paper 494, 71 p.
- Moran, R. E., and Wentz, D. A., 1974, Effects of metal-mine drainage on water quality in selected areas of Colorado, 2 of 3, 1972-73: Colorado Water Conservation Board Circular 25, 250 p.
- Ott, R.L., 1993, An introduction to statistical methods and data analysis, 4th ed: Duxbury Press, 1051 p.
- Porterfield, George, 1972, Computations of fluvial-sediment discharge: U.S. Geological Survey Techniques of Water-Resources Investigations, Book 3, Chapter C3, 66 p.
- Rantz, S. E. and others, Measurement and Computation of Streamflow: Volume 1. Measurement of Stage and Discharge: U.S. Geological Survey Water-Supply Paper 2175, 284 p.
- Rantz, S. E. and others, Measurement and Computation of Streamflow: Volume 2. Computation of Discharge: U.S. Geological Survey Water-Supply Paper 2175, 285-631 p.
- Ritter, J. R., and Helley, E. J., 1969, Optical method for determining particle sizes of coarse sediment: U.S. Geological Survey Techniques of Water-Resources Investigations, Book 5, Chapter C3, 33 p.
- Slack, K. V., and others, 1973, Methods for collection and analysis of aquatic biological and microbiological samples: U.S. Geological Survey Techniques of Water-Resources Investigations, Book 5, Chapter A4, 165 p.
- Spahr, N. E., Blakely, S. R., and Hammond, S. E., 1985, Selected Hydrologic Data for the South Platte River through Denver, Colorado: U. S. Geological Survey open file report 84-703, 225 p.
- Stabler, Herman, 1911, Some stream waters of the Western United States: U.S. Geological Survey Water-Supply Paper 274, 188 p.
- U.S. Inter-Agency Committee on Water Resources, A study of methods used in measurements and analysis of sediment loads in streams:
- Report 11, 1957, The development and calibration of visual accumulation tube: St. Anthony Falls Hydraulic Lab., Minneapolis, Minn., 109 p.
- Report 12, 1957, Some fundamentals of particle-size analysis: Washington, D. C., U.S. Government Printing Office, 55 p.
- Report AA, 1959, Federal Inter-Agency sedimentation instruments and reports: St. Anthony Falls Hydraulic Laboratory, Minneapolis, Minn., 41 p.
- Report 13, 1961, The single-stage sampler for suspended sediment: Washington, D. C., U.S. Government Printing Office, 105 p.
- Report 14, 1963, Determinations of fluvial sediment discharge: Washington, D. C., U.S. Government Printing Office, 151 p.

## 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)
Colorado Creek near Spicer, CO	06611000	25.8	1950-55
Grizzly Creek near Spicer, CO	06611100	118	1976-80
Buffalo Creek near Hebron, CO	06611200	56.3	1976-80
Grizzly Creek near Hebron, CO	06611300	223	1976-80
Grizzly Creek near Walden, CO	06611500	258	1904-05, 1923, 1926-47
Little Grizzly Creek near Coalmont, CO	06611700	10.1	1967-73
Little Grizzly Creek above Coalmont, CO	06611800	35.4	1976-80
Little Grizzly Creek above Hebron, CO	06611900	52.2	1976-80
Little Grizzly Creek near Hebron, CO	06612000	98.6	1904-05, 1931-45
Roaring Fork near Walden, CO	06612500	79.1	1904-05, 1923-47
North Platte River near Walden, CO	06613000	469	1904-05, 1923-47
North Fork North Platte River near Walden, CO	06614000	160	1923-28, 1936-45
South Fork Michigan River near Gould, CO	06615000	11.4	1950-58
Michigan River near Lindland, CO	06615500	60.9	1931-41
North Fork Michigan River near Gould, CO	06616000	20.5	1950-82
Michigan River at Walden, CO	06617100	182	1904-05, 1923-47
Illinois Creek near Rand, CO	06617500	70.6	1931-40
Willow Creek near Rand, CO	06618000	55.9	1931-40
Illinois Creek at Walden, CO	06618500	259	1923-47
Michigan River near Cowdrey, CO	06619000	478	1904-05, 1937-47
Canadian River near Lindland, CO	06619400	44.0	1978-83
Bush Draw near Walden, CO	06619415	4.10	1980-83
Williams Draw near Walden, CO	06619420	3.95	1979-83
Canadian River near Brownlee, CO	06619450	158	1978-83
Canadian River at Cowdrey, CO	06619500	181	1904-05, 1929-31, 1937-47
Laramie River near Glendevey, CO	06657500	101	1904-05, 1910-82
Middle Fork South Platte River above Fairplay, CO	06693980	62.2	1978-80
Middle Fork South Platte River near Hartsel, CO	06694100	250	1978-80
South Fork South Platte River above Fairplay, CO	06694400	50.3	1978-80
Fourmile Creek near Fairplay, CO	06694700	12.0	1978-80
Elevenmile Canyon Reservoir	06695500	963	1932-98
South Platte River near Lake George, CO	06696000	963	1929-98
South Platte River at Lake George, CO	06696200	1,084	1910-11, 1929
Tarryall Creek at Upper Station near Como, CO	06696980	23.7	1978-86
Tarryall Creek below Park Gulch near Como, CO	06697100	76.1	1997-2001
French Creek near Jefferson, CO	06697200	4.63	1986-90
Michigan Creek above Jefferson, CO	06697450	23.1	1978-86
Jefferson Creek near Jefferson, CO	06698000	11.8	1910-12, 1978-86
Tarryall Creek near Jefferson, CO	06698500	183	1910-11, 1912-17, 1977-81
Rock Creek near Jefferson, CO	06699000	45.5	1986-90
Tarryall Creek below Rock Creek, near Jefferson, CO	06699005	230	1983-97
Tarryall Creek near Lake George, CO	06699500	434	1910-12, 1925-55
South Platte River above Cheesman Lake, CO	06700000	1,628	1899-1901, 1924-43
Goose Creek above Cheesman Lake, CO	06700500	86.6	1899, 1924-82
Cheesman Lake	06701000	1,752	1900-98
South Platte River below Cheesman Lake, CO	06701500	1,752	1924-98
South Platte River above North Fork at South Platte, CO	06702000	2,098	1905-12

## 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)
North Fork South Platte River at Grant, CO	06702500	49.0	1910-17
Duck Creek near Grant, CO	06704500	7.78	1995-97
Geneva Creek at Grant, CO	06705500	74.6	1908-18 1995-97
North Fork South Platte River below Geneva Creek, at Grant, CO	06706000	127	1908-13, 1942-98
North Fork South Platte River at Pine, CO	06706500	374	1942-46
North Fork South Platte River at South Platte, CO	06707000	479	1909-10, 1913-82
South Platte River at South Platte, CO	06707500	2,579	1887-92, 1895-97, 1898-1982
South Platte River at Waterton, CO	06708000	2,621	1926-80
East Plum Creek at Castle Rock, CO	06708750	102	1985-89
Plum Creek near Louviers, CO	06709500	302	1947-90
Chatfield Lake near Littleton, CO	06709600	3,018	1975-98
South Platte River at Littleton, CO	06710000	3,069	1941-86
South Platte River at Union Avenue, at Englewood, CO	06710245	3,043	1989-95
Turkey Creek at mouth of canyon near Morrison, CO	06710995	47.4	1998-2001
Turkey Creek above Bear Creek Lake, near Morrison, CO	06711040	50.6	1986-89
Little Dry Creek at Greenwood Village, CO	06711545	14.4	1994-97
South Platte River at Florida Avenue, at Denver, CO	06711590	--	1981-82
Cherry Creek near Melvin, CO	06712500	360	1939-69
Cherry Creek Lake near Denver, CO	06712990	385	1960-98
South Platte River at 50th Avenue at Denver, CO	06714130	3,810	1980-81
Senac Creek at North Border Sludge Area, near Aurora, CO	06714220	7.81	1989-93
South Clear Creek above Lower Cabin Creek Reservoir, near Georgetown, CO	06714400	--	1996-97
South Clear Creek above Leavenworth Creek, near Georgetown, CO	06714600	16.0	1995-97
West Fork Clear Creek above Empire, CO	06715500	40.5	1942-46
West Fork Clear Creek near Empire, CO	06716000	58.2	1929-31
Clear Creek below Idaho Springs, CO	06718000	259	1951-55
North Clear Creek near Blackhawk, CO	06718500	52.2	1951-55
Clear Creek at Forks Creek, CO	06719000	339	1899-1912
Clear Creek near Golden, CO	06719500	399	1908-09, 1911-74
Clear Creek at Tabor Street, at Lakewood, CO	06719526	427	1981-83
Ralston Creek near Plainview, CO	06719725	36.9	1983-84
Schwartzwalder Mine Effluent near Plainview, CO	06719730	--	1983-84
Ralston Creek below Schwartzwalder Mine near Plainview, CO	06719735	38.9	1983-84
Ralston Creek above Ralston Reservoir near Golden, CO	06719740	42.7	1983-84
Clear Creek at Mouth near Derby, CO	06720000	575	1914, 1927-82
Grange Hall Creek at Grant Park at Northglenn, CO	06720330	--	1978-79
Grange Hall Creek at Northglenn, CO	06720415	3.08	1978-81
Grange Hall Creek below Northglenn, CO	06720417	--	1981-82
First Creek below Buckley Road, near Rocky Mountain Arsenal, CO	06720460	26.4	1992-94
First Creek at Highway 2, near Rocky Mountain Arsenal, CO	06720490	39.0	1992-94
Woman Creek near Plainview, CO	06720690	--	1973-74
South Platte River at Fort Lupton, CO	06721000	5,010	1906, 1929-57
North Saint Vrain Creek near Allens Park, CO	06721500	32.6	1926-30, 1987-97
North Saint Vrain Creek at Longmont Dam near Lyons, CO	06722000	106	1925-53
South Saint Vrain Creek near Ward, CO	06722500	14.4	1925-27, 1928-31, 1954-73
Middle Saint Vrain Creek near Raymond, CO	06722900	16.8	1956-58
Middle Saint Vrain Creek near Allens Park, CO	06723000	28.0	1925-30, <sup>a</sup>
South Saint Vrain Creek above Lyons, CO	06723400	81.4	1971-80
St. Vrain Creek at Lyons, CO	06724000	212	1887-1895 1895-1998
Lefthand Creek near Boulder, CO	06724500	52.0	1929-31, 1947-53, 1976-80

## 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)
Lefthand Creek at Mouth at Longmont, CO	06725000	72.0	1927-42, 1953-55, 1976-79
Saint Vrain Creek near Longmont, CO	06725100	370	1964-68
North Boulder Creek at Silver Lake, CO	06726000	8.70	1913-32
North Boulder Creek near Nederland, CO	06726500	30.4	1929-31
Bummers Gulch near El Vado, CO	06726900	3.87	1983-95
Fourmile Creek at Orodell, CO	06727500	24.1	1947-53, 1983-95
South Boulder Creek near Rollinsville, CO	06729000	42.7	1910-18, 1945-49
South Boulder Creek at Pinecliff, CO	06729300	72.7	1979-80
Coal Creek near Plainview, CO	06730300	15.1	1959-82
Boulder Creek at Mouth near Longmont, CO	06730500	439	1927-49, 1951-55, 1978-90
St. Vrain Creek at Mouth near Platteville, CO	06731000	976	1904-06, 1915, 1927-98
Boulder Brook near Estes Park, CO	06731800	3.83	1968-70
Glacier Creek near Estes Park, CO	06732000	20.8	1941-57, 1968-70
Beaver Brook near Estes Park, CO	06732300	1.49	1968-70
Fall River at Estes Park, CO	06732500	39.8	1945-53 <sup>a</sup>
Big Thompson River at Estes Park, CO	06733000	137	1946-98
Fish Creek near Estes Park, CO	06734500	15.8	1947-55
North Fork Big Thompson River at Drake, CO	06736000	85.1	1947-55
Big Thompson River below Power House near Drake, CO	06736500	278	1917-55
Dry Creek near Pinewood, CO	06740000	7.11	1950-52
Cottonwood Creek near Pinewood, CO	06741000	14.7	1947-53
Big Thompson River near Loveland, CO	06741500	505	1947-55
Little Thompson River near Berthoud, CO	06742000	100	1929-30, 1947-61
Little Thompson River at Milliken, CO	06743500	199	1951-55
Big Thompson River at Mouth near La Salle, CO	06744000	830	1914-15, 1927-82
Cache La Poudre River above Chambers Lake Outlet, CO	06745000	89.7	1929-31
Joe Wright Creek near Cameron Pass, CO	06746100	5.05	1974-78
Cache La Poudre River near Rustic, CO	06747500	198	1956-68
Cache La Poudre River near Log Cabin, CO	06748000	234	1909-11, 1929-31
Fall Creek near Rustic, CO	06748200	3.59	1960-73
South Fork Cache La Poudre near Eggers, CO	06748500	70.6	1929-31
Little Beaver Creek near Idylwilde, CO	06748510	0.88	1960-73
Little Beaver Creek near Rustic, CO	06748530	12.3	1960-73
South Fork Cache La Poudre River near Rustic, CO	06748600	92.4	1956-79
Cache La Poudre River below Elkhorn, CO	06749000	409	1946-59
North Fork Cache La Poudre River near Livermore, CO	06751500	567	1947-65
Cache La Poudre River near Greeley, CO	06752500	1,877	1903-04, 1914-19, 1924-98
Lonetree Creek at Carr, CO	06753400	167	1993-95
Lonetree Creek near Nunn, CO	06753500	199	1951-57
Crow Creek near Barnsville, CO	06756500	1,324	1951-57
South Platte River at Masters, CO	06756995	12,175	1976-88
South Platte River at Sublette, CO	06757000	12,170	1926-42, 1943-55
Kiowa Creek at K-79 Reservoir near Eastonville, CO	06757600	3.20	1955-65
Kiowa Creek at Elbert, CO	06758000	28.6	1955-65
West Kiowa Creek at Elbert, CO	06758100	35.9	1962-65
Kiowa Creek at Kiowa, CO	06758200	111	1955-65
Kiowa Creek at Bennett, CO	06758300	236	1960-65

WATER RESOURCES DATA - COLORADO, 2001  
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)
Bijou Creek near Wiggins, CO	06759000	1,314	1950-56
Bijou Creek near Fort Morgan, CO	06759100	1,500	1976-87
South Platte River at Fort Morgan, CO	06759500	14,810	1943-58
South Platte River at Cooper Bridge near Balzac, CO	06759910	16,852	1987-98
South Platte River at Balzac, CO	06760000	16,852	1916-80
South Platte River near Crook, CO	06760500	19,238	1953-58
North Fork Republican River near Wray, CO	06822000	1,019	1937-46, 1951-57, 1962-64
South Fork Republican River near Idalia, CO	06825000	1,300	1950-71, 1972-81
Landsman Creek near Hale, CO	06825500	268	1950-76, 1977-81
Bonny Reservoir near Hale, CO	06826000	1,820	1950-95
South Fork Republican River near Hale, CO	06826500	1,825	1946-48, 1951-86
Leadville Mine Drainage Tunnel at Leadville, CO	07079200	--	1990-93
East Fork Arkansas River near Leadville, CO	07079500	50.0	1890-1903, 1910-24
Saint Kevin Gulch above Temple Gulch, near Leadville, CO	07080980	1.84	1993-96
Tennessee Creek near Leadville, CO	07081000	48.0	1890-1903, 1910-24
California Gulch at Malta, CO	07081800	8.13	1991-92
Lake Fork above Sugar Loaf Reservoir, CO	07082000	23.9	1946-67
Halfmoon Creek near Leadville, CO	07083500	25.2	1911-14
Arkansas River near Malta, CO	07083700	228	1964-67, 1976-84
Arkansas River below Empire Gulch, near Malta, CO	07083710	237	1990-93
Lake Creek above Twin Lakes Reservoir, CO	07084500	75	1946-98
Arkansas River at Buena Vista, CO	07087200	611	1964-80, 1986-93
Cottonwood Creek below Hot Springs near Buena Vista, CO	07089000	65.0	1910-23, 1949-86
Chalk Creek Upper Station near Saint Elmo, CO	07090000	48.0	1913-19
Chalk Creek near Saint Elmo, CO	07090500	83.0	1910-16
Chalk Creek near Nathrop, CO	07091000	97.0	1910, 1949-56, <sup>a</sup>
Arkansas River at Salida, CO	07091500	1,218	1895-97, 1901-03, 1909-80
South Arkansas River at Poncha, CO	07092000	140	1910-18
Poncha Creek at Poncha, CO	07093000	56.0	1910-18
South Arkansas River near Salida, CO	07093500	208	1922-23, 1929-40
South Colony Creek near Westcliffe, CO	07094600	6.03	1974-78
Middle Taylor Creek near Westcliffe, CO	07094900	3.19	1974-78, 1984-85
Fourmile Creek near Canon City, CO	07096500	434	1910-11, 1949-53, 1971-97
Beaver Creek near Portland, CO	07099100	214	1971-81
Arkansas River near Portland, CO	07099200	4,280	1964-79
Little Turkey Creek near Fountain, CO	07099220	9.59	1978-88
Arkansas River near Pueblo, CO	07099500	4,686	1885-87, 1889, 1894-1975
Monument Creek at Palmer Lake, CO	07103747	25.9	1977-90
Monument Creek at Monument, CO	07103750	28.5	1976-77
West Monument Creek near Pikeview, CO	07103900	15.4	1957-70
Kettle Creek near Black Forest, CO	07103950	9.01	1976-86
Templeton Gap Floodway at Colorado Springs, CO	07104500	8.73	1951-81
B Ditch Drain near Security, CO	07105780	--	1981-88
Clover Ditch near Widefield, CO	07105820	--	1981-88

## 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)
Little Fountain Creek above Keaton Reservoir, CO	07105920	11.0	1978-88, 1995-98
Womack Ditch near Fort Carson, CO	07105924	--	1978-91
Little Fountain Creek near Fort Carson, CO	07105928	11.8	1978-89, 1995-98
Little Fountain Creek near Fountain, CO	07105940	26.9	1978-88
Rock Creek near Fort Carson, CO	07105950	7.79	1978-98
Rock Creek near Fountain, CO	07105960	16.9	1978-88
Saint Charles River at San Isabel, CO	07107000	16.0	1936-41
Saint Charles River at Burnt Mill, CO	07107500	166	1923-34
Greenhorn Creek near Rye, CO	07107900	9.56	1974-80,1999-2001
Greenhorn Creek near Colorado City, CO	07108050	29.6	1974-79
Graneros Creek near Rye, CO	07108100	4.32	1999-2001
Saint Charles River near Pueblo, CO	07108500	467	1941-53,
Saint Charles River near Vineland, CO	07108800	473	1968-74
Saint Charles River at Mouth near Pueblo, CO	07109000	475	1922-25
Sixmile Creek near Avondale, CO	07110000	45.0	1922-24, 1941-46
Chico Creek near Pueblo Chemical Depot, CO	07110400		1997-99
Chico Creek near North Avondale, CO	07110500	864	1941-46
Huerfano River at Malachite, CO	07111500	107	1923-25
Huerfano River near Badito, CO	07112000	499	1941-46, 1978-81
Huerfano River at Badito, CO	07112500	532	1912, 1923-25, 1938-41, 1946-54
Huerfano River at Huerfano, CO	07113000	717	1923-28
Huerfano River near Mustang, CO	07113500	803	1942-47
Cucharas River at Boyd Ranch near La Veta, CO	07114000	56.0	1934-82
Cucharas River near La Veta, CO	07114500	75.0	1923-34
Huerfano River below Huerfano Valley Dam near Undercliffe, CO	07116000	1,673	1939-67
Arkansas River at Nepesta, CO	07117500	9,460	1898-1902, 1904-06, 1936
Chicosa Creek near Fowler, CO	07117600	109	1968-74
Apishapa River near Aguilar, CO	07118000	126	1939-50
Apishapa River at Aguilar, CO	07118500	149	1938-39, 1978-81
Apishapa River near White Rock, CO	07119000	737	1942-47
Big Arroyo near Thatcher, CO	07120620	15.5	1983-90 <sup>a</sup>
Timpas Creek near Rocky Ford, CO	07121000	451	1922-27, 1940-50
Fort Lyon Canal near Casa, CO	07122060	--	1988-90
Fort Lyon Canal near Cornelia, CO	07122105	--	1988-90
Fort Lyon Canal near Hastly, CO	07122200	--	1968-75 1988-90
Fort Lyon Canal near Big Bend, CO	07122350	--	1988-90
Crooked Arroyo near Swink, CO	07122400	108	1968-93
Crooked Arroyo near La Junta, CO	07122500	--	1922-25
Horse Creek near Sugar City, CO	07123500	1,080	1940-47
Horse Creek near Las Animas, CO	07123675	1,403	1979-93
Middle Fork Purgatoire River at Stonewall, CO	07124050	57.1	1978-81
Molino Canyon near Weston, CO	07124100	4.23	1978-81
Sarcillo Canyon near Segundo, CO	07124120	35.3	1978-81
Mulligan Canyon near Boncarbo, CO	07124210	4.53	1978-81
Reilly Canyon at Cokedale, CO	07124220	35.1	1978-81
Long Canyon Creek near Madrid, CO	07124300	100	1972-89
Carpitos Canyon near Jansen, CO	07124350	4.57	1978-81
Purgatoire River at Trinidad, CO	07124500	795	1895-99, 1905-12, 1915-60, 1961-82
Purgatoire River near Hoehne, CO	07125000	857	1954-68
Frijole Creek near Alfalfa, CO	07125100	80.0	1957-68
San Francisco Creek near Alfalfa, CO	07125500	160	1954-68

## 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)
Purgatoire River near Alfalfa, CO	07126000	1,320	1905-07, 1924-28, 1951-68
Van Bremer Arroyo near Thatcher, CO	07126130	80.6	1983-85
Burke Arroyo Tributary near Thatcher, CO	07126320	4.66	1983-87
Chacuaco Creek at Mouth, near Timpas, CO	07126470	424	1983-92 <sup>a</sup>
Purgatoire River at Highland Dam near Las Animas, CO	07128000	3,376	1898, 1931-55
Rule Creek near Caddoa, CO	07129500	435	1941-46
Caddoa Creek at Caddoa, CO	07131000	131	1941-46
Willow Creek near Lamar, CO	07133050	42.0	1974-77
Big Sandy Creek above Amity Canal near Korman, CO	07134000	3,396	1941-46
Two Butte Creek near Holly	07135000	817	1942-46, 1995-99 <sup>a</sup>
Arkansas River at Holly, CO	07135500	25,073	1894, 1901-02, 1907-53
Wild Horse Creek at Holly, CO	07136000	270	1922-35, 1938-50
Holly Drain near Holly, CO	07136500	--	1924-50
Rio Grande at Thirtymile Bridge near Creede, CO	08213500	163	1909-23 1925-98
North Clear Creek below Continental Reservoir, CO	08214500	51.7	1929-98
Willow Creek at Creede, CO	08216500	51.7	1951-82
Rio Grande at Wason below Creede, CO	08217000	705	1907-54
Rio Grande at Wagonwheel Gap, CO	08217500	780	1951-2000
Goose Creek near Wagonwheel Gap, CO	08218000	53.6	1924-26, 1939-52
Goose Creek at Wagonwheel Gap, CO	08218500	90.0	1954-91
Pinos Creek near Del Norte, CO	08220500	53.0	1919-24, 1936-82
San Francisco Creek at upper station near Del Norte, CO	08220900	11.8	1967-69
Rio Grande near Monte Vista, CO	08221500	1,590	1926-80
Rock Creek near Monte Vista, CO	08223500	32.9	1935-55, 1966-70
San Luis Creek near Poncha Pass, CO	08224110	6.57	1979-85
San Luis Creek above Villa Grove, CO	08224113	11.2	1979-85
Raspberry Creek near Villa Grove, CO	08224200	1.78	1967-70, 1936-82
Noland Gulch Tributary Reservoir Inflow, near Villa Grove, CO	08226600	0.08	1979-89
Cotton Creek near Mineral Hot Springs, CO	08226700	13.6	1967-70
Anaconda Reservoir near Villa Grove, CO	08227300	0.17	1979-85
Tracy Pit Reservoir Inflow near Saguache, CO	08227400	0.05	1979-89
North Crestone Creek near Crestone, CO	08227500	10.7	1936-82
Cottonwood Creek near Crestone, CO	08229500	6.77	1936, 1967-70
Carnero Creek near La Garita, CO	08230500	117	1919-82
Mosca Creek near Mosca, CO	08234200	3.67	1967-70
Alamosa River above Wightman Fork near Jasper, CO	08235250	37.8	1995-99
Wightman Fork below Cropsy Creek at Summitville, CO	08235270	4.44	1995-99
Wightman Fork at mouth near Jasper, CO	08235290	16.1	1995-99
Alamosa River above Jasper, CO	08235350	58.1	1995-99
Alamosa River below Castleman Gulch near Jasper, CO	08235700	76.3	1995-99
Alamosa Creek above Terrace Reservoir, CO	08236000	107	1911-12, 1914-27, 1934-82
Alamosa Creek below Terrace Reservoir, CO	08236500	116	1909-55
La Jara Creek at Gallegos Ranch near Capulin, CO	08238000	98.0	1916-17, 1919-23, 1936-82
Yellow Warbler Reservoir Inflow near Antonito, CO	08238350	0.18	1979-89
Turkey Reservoir Inflow near Conejos, CO	08238380	0.24	1979-89
Bobolink Reservoir near Conejos, CO	08238400	0.23	1979-89
Rio Grande above Mouth of Trinchera Creek near Lasauces, CO	08240000	5,740	1936-98
Trinchera Creek above Turners Ranch near Fort Garland, CO	08240500	45.0	1923-82

## 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)
Trinchera Creek above Mountain Home Reservoir near Fort Garland, CO	08241000	61.0	1923-55
Sangre De Cristo Creek near Fort Garland, CO	08241500	190	1916, 1923-30, 1931-82
Trinchera Creek below Smith Reservoir near Blanca, CO	08243500	396	1928-82
Conejos River at Platoro, CO	08245500	44.4	1936-53
Conejos River at Counsellors Cabin near Mogote, CO	08246000	211	1943-47
San Antonio River at mouth near Manassa, CO	08248500	348	1923-82
Culebra Creek near Chama, CO	08249400	72.4	1967-70
Culebra Creek below San Luis, CO	08250500	255	1938-55
Rio Grande at CO-NM State Line	08252000	--	1953-82

a-Converted to a crest-stage partial-record station.

WATER RESOURCES DATA - COLORADO, 2001  
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)
Canadian River near Lindland, CO	06619400	44.0	Temp., S.C., Sed.	1978-83
Canadian River near Brownlee, CO	06619450	158	Temp., S.C., Sed.	1978-83
Duck Creek near Grant, CO	06704500	7.78	Temp., S.C., Sed.	1995-97
Geneva Creek at Grant, CO	06705500	74.6	Temp., S.C., Sed.	1995-97
South Platte River at Littleton, CO	06710000	3,069	Temp. S.C.	1970-86 1984-86
South Platte River at 64th Ave. at Commerce City, CO	06714215	3,884	Temp., pH, D.O.	1987
South Clear Creek above Lower Cabin Creek Reservoir near Georgetown, CO	06714400	--	Temp., S.C., Sed.	1995-97 1995,1997
South Clear Creek above Leavenworth Creek near Georgetown, CO	06714600	16.0	Temp., S.C. Sed.	1995-97 1995
Leavenworth Creek at mouth, near Georgetown, CO	06714800	12.0	Temp., S.C. Sed.	1995-97 1995
Clear Creek at Golden, CO	06719505	400	pH, D.O., Sed. Temp., S.C.	1981 1981-95
Ralston Creek near Plainview, CO	06719725	36.9	Temp., S.C., pH, D.O.	1983-84
Schwartzwalder Mine Effluent near Plainview, CO	06719730	--	Temp., S.C., pH, D.O.	1983-84
Ralston Creek below Schwartzwalder Mine, CO	06719735	38.9	Temp., S.C., pH, D.O.	1983-84
Ralston Creek above Ralston Res. near Plainview, CO	06719740	42.7	Temp., S.C., pH, D.O.	1983-84
Cache La Poudre River at Fort Collins	06752260	1,127	Temp., S.C., pH	1987-99
Cache La Poudre River near Greeley, CO	06752500	1,877	Temp., S.C., pH, D.O.	1975
South Platte River near Kersey, CO	06754000	8,598	Temp.	1950-53
Kiowa Creek at Elbert, CO	06758000	28.6	Sed.	1957-68, 1960-62, 1964-65
West Kiowa Creek at Elbert, CO	06758100	35.9	Sed.	1962-65
Kiowa Creek at Kiowa, CO	06758200	111	Sed.	1956-65
South Platte River at Julesburg, CO (Chan. 2)	06763990	--	Temp. S.C.	1967-73 1971-73
North Fork Republican River near Wray, CO	06822000	1,019	Temp., Sed.	1962-63
East Fork Arkansas River at Highway 24 near Leadville, CO	07079300	49.9	Temp., S.C., pH	1990-96
Arkansas River near Leadville, CO	07081200	98.8	Temp., S.C., pH	1990-96
California Gulch at Malta, CO	07081800	8.13	Temp., S.C., pH	1991-92
Halfmoon Creek near Malta, CO	07083000	23.6	Temp.	1967-82
Arkansas River below Empire Gulch, near Malta, CO	07083710	237	Temp., S.C., pH	1990-93
Arkansas River at Buena Vista, CO	07087200	611	Temp., S.C.	1986-93
Arkansas River near Nathrop, CO	07091200	1,060	Temp., S.C., pH	1989-93
Arkansas River at Parkdale, CO	07094500	2,548	Temp., S.C.	1986-93
Monument Creek at Pikeview, CO	07104000	204	Sed.	1995-97
Fountain Creek at Security, CO	07105800	495	Temp., S.C., pH, D.O.	1991-98
Fountain Creek near Pinon, CO	07106300	849	Temp., S.C.	1976-79
Apishapa River at Aguilar, CO	07118500	149	Sed.	1979-81
Apishapa River near Fowler, CO	07119500	1,125	Temp., S.C.	1966-68
Big Arroyo near Thatcher, CO	07120620	15.5	Temp., S.C., Sed.	1983-90 <sup>a</sup>
Arkansas River near La Junta, CO	07122000	--	Temp., S.C.	1966-68
Horse Creek near Las Animas, CO	07123675	1,403	Temp., S.C.	1987-93
Middle Fork Purgatoire River at Stonewall, CO	07124050	52.1	Temp., S.C. Sed.	1978-81 1979-81
Molino Canyon near Weston, CO	07124100	4.23	Sed.	1979-81
Sarcillo Canyon near Segundo, CO	07124120	35.3	Sed.	1980-81
Purgatoire River at Madrid, CO	07124200	550	Temp., S.C. Sed.	1979-81 1978-81
Mulligan Canyon near Boncarbo, CO	07124210	4.53	Sed.	1979-81
Reilly Canyon at Cokedale, CO	07124220	35.1	Sed.	1979-81
Carpitos Canyon near Jansen, CO	07124350	100	Sed.	1979-81
Purgatoire River below Trinidad Lake, CO	07124410	672	Sed.	1977-82
Luning Arroyo Tributary near Model, CO	07126110	--	Temp., S.C.	1984
Van Bremer Arroyo near Thatcher, CO	07126130	80.6	Temp., S.C.	1985
Van Bremer Arroyo near Tyrone, CO	07126140	132	Temp., S.C.	1985-98
Van Bremer Arroyo near Model, CO	07126200	175	Temp., S.C.	1983-98

## 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)
Purgatoire River near Thatcher, CO	07126300	1,791	Sed.	1983-92
			Temp., S.C.	1983-98
Burke Arroyo Tributary near Thatcher, CO	07126320	4.66	Temp., S.C.	1983-86
			Sed.	1984-86
Taylor Arroyo below Rock Crossing near Thatcher, CO	07126325	48.4	Temp., S.C.	1983-98
Lockwood Canyon Creek near Thatcher, CO	07126390	41.4	Temp., S.C., Sed.	1989-92
Red Rock Canyon Creek at Mouth, near Thatcher, CO	07126415	48.8	Temp., S.C.	1983-90 <sup>a</sup>
Chacuaco Creek at Mouth near Timpas, CO	07126470	424	Temp., S.C., Sed.	1983-92
Bent Canyon Creek at Mouth near Timpas, CO	07126480	56.2	Temp., S.C.	1983-90 <sup>a</sup>
Purgatoire River at Rock Crossing near Timpas, CO	07126485	2,635	Temp., S.C., Sed.	1983-92
Purgatoire River at Highland Dam near Las Animas, CO	07128000	3,376	S.C.	1967-68
Purgatoire River near Las Animas, CO	07128500	3,318	Temp., S.C.	1986-96
Willow Creek at Creede, CO	08216500	35.3	Temp., S.C.	1976-77
Rio Grande at Wagonwheel Gap, CO	08217500	780	Temp., S.C.	1976-77
San Luis Creek near Poncha Pass, CO	08224110	6.57	Sed.	1981-83
San Luis Creek above Villa Grove, CO	08224113	11.2	Sed.	1981-83
Alamosa River above Wightman Fork near Jasper, CO	08235250	37.8	Temp., S.C., pH	1995-97,99
Wightman Fork at mouth near Jasper, CO	08235290	16.1	Temp., S.C., pH	1995-97,99
Alamosa River above Terrace Reservoir, CO	08236000	106	Temp., S.C., pH	1994-97
Alamosa River below Terrace Reservoir, CO	08236500	116	Temp., S.C., pH	1995-97,99
Rio Grande above Culebra Creek near Lobatos, CO	08249200	--	Temp., S.C.	1964-66

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

a-Converted to a crest-stage partial-record station.

## TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS OF THE U.S. GEOLOGICAL SURVEY

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 p.
- 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 p.

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

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

#### 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 p.

### 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 p.
- 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 p.
- 3-A3. *Measurement of peak discharge at culverts by indirect methods*, by G.L. Bodhaine: USGS–TWRI book 3, chap. A3. 1968. 60 p.
- 3-A4. *Measurement of peak discharge at width contractions by indirect methods*, by H.F. Matthai: USGS–TWRI book 3, chap. A4. 1967. 44 p.
- 3-A5. *Measurement of peak discharge at dams by indirect methods*, by Harry Hulsing: USGS–TWRI book 3, chap. A5. 1967. 29 p.

- 3-A6. *General procedure for gaging streams*, by R.W. Carter and Jacob Davidian: USGS–TWRI book 3, chap. A6. 1968. 13 p.
- 3-A7. *Stage measurement at gaging stations*, by T.J. Buchanan and W.P. Somers: USGS–TWRI book 3, chap. A7. 1968. 28 p.
- 3-A8. *Discharge measurements at gaging stations*, by T.J. Buchanan and W.P. Somers: USGS–TWRI book 3, chap. A8. 1969. 65 p.
- 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 p.
- 3-A10. *Discharge ratings at gaging stations*, by E.J. Kennedy: USGS–TWRI book 3, chap. A10. 1984. 59 p.
- 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 p.
- 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 p.
- 3-A13. *Computation of continuous records of streamflow*, by E.J. Kennedy: USGS–TWRI book 3, chap. A13. 1983. 53 p.
- 3-A14. *Use of flumes in measuring discharge*, by F.A. Kilpatrick and V.R. Schneider: USGS–TWRI book 3, chap. A14. 1983. 46 p.
- 3-A15. *Computation of water-surface profiles in open channels*, by Jacob Davidian: USGS–TWRI book 3, chap. A15. 1984. 48 p.
- 3-A16. *Measurement of discharge using tracers*, by F.A. Kilpatrick and E.D. Cobb: USGS–TWRI book 3, chap. A16. 1985. 52 p.
- 3-A17. *Acoustic velocity meter systems*, by Antonius Laenen: USGS–TWRI book 3, chap. A17. 1985. 38 p.
- 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 p.
- 3-A19. *Levels at streamflow gaging stations*, by E.J. Kennedy: USGS–TWRI book 3, chap. A19. 1990. 31 p.
- 3-A20. *Simulation of soluble waste transport and buildup in surface waters using tracers*, by F.A. Kilpatrick: USGS–TWRI book 3, chap. A20. 1993. 38 p.
- 3-A21. *Stream-gaging cableways*, by C. Russell Wagner: USGS–TWRI book 3, chap. A21. 1995. 56 p.

### **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 p.
- 3-B2. *Introduction to ground-water hydraulics, a programmed text for self-instruction*, by G.D. Bennett: USGS–TWRI book 3, chap. B2. 1976. 172 p.
- 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 p.
- 3-B4. *Regression modeling of ground-water flow*, by R.L. Cooley and R.L. Naff: USGS–TWRI book 3, chap. B4. 1990. 232 p.
- 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 p.
- 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 p.
- 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 p.

- 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 p.
- 3-B8. *System and boundary conceptualization in ground-water flow simulation*, by T.E. Reilly: USGS–TWRI book 3, chap. B8. 2001. 29 p.

### **Section C. Sedimentation and Erosion Techniques**

- 3-C1. *Fluvial sediment concepts*, by H.P. Guy: USGS–TWRI book 3, chap. C1. 1970. 55 p.
- 3-C2. *Field methods for measurement of fluvial sediment*, by T.K. Edwards and G.D. Glysson: USGS–TWRI book 3, chap. C2. 1999. 89 p.
- 3-C3. *Computation of fluvial-sediment discharge*, by George Porterfield: USGS–TWRI book 3, chap. C3. 1972. 66 p.

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

### **Section B. Surface Water**

- 4-B1. *Low-flow investigations*, by H.C. Riggs: USGS–TWRI book 4, chap. B1. 1972. 18 p.
- 4-B2. *Storage analyses for water supply*, by H.C. Riggs and C.H. Hardison: USGS–TWRI book 4, chap. B2. 1973. 20 p.
- 4-B3. *Regional analyses of streamflow characteristics*, by H.C. Riggs: USGS–TWRI book 4, chap. B3. 1973. 15 p.

### **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 p.

## **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 p.
- 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 p.
- 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 p.
- 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 p.
- 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 p.
- 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 p.

### **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 p.

**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 p.
- 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 p.
- 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 p.
- 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 p.
- 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 p.
- 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: USGS–TWRI book 6, chap. A5, 1996. 125 p.

**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 p.
- 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 p.
- 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 p.

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

**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 p.

**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 p.
- 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 p.

HYDROLOGIC-DATA STATION RECORDS  
PLATTE RIVER BASIN

06614800 MICHIGAN RIVER NEAR CAMERON PASS, CO

LOCATION.--Lat 40°29'46", long 105°51'52", in S<sup>1</sup>/<sub>2</sub> sec.12, T.6 N., R.76 W. (unsurveyed), Jackson County, Hydrologic Unit 10180001, on right bank 500 ft upstream from Michigan ditch, 2.2 mi southeast of Cameron Pass, 8 mi east of Gould, and 27 mi southeast of Walden.

DRAINAGE AREA.--1.53 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1973 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 10,390 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 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.3	e.72	e.46	e.31	e.29	e.26	.30	1.4	20	6.4	1.2	1.2
2	2.2	e.70	e.45	e.31	e.29	e.25	.30	1.5	22	5.8	1.1	.97
3	2.2	e.68	e.44	e.30	e.29	e.26	.30	1.1	19	5.5	1.0	.96
4	2.1	e.67	e.44	e.30	e.29	e.26	.30	.99	14	5.2	1.0	.92
5	2.1	e.67	e.43	e.30	e.29	e.28	.31	.93	13	4.9	1.0	.89
6	1.9	e.66	e.43	e.30	e.29	e.27	.31	.91	16	4.5	1.1	.99
7	1.8	e.65	e.42	e.30	e.29	e.26	.30	.96	19	4.8	1.1	1.1
8	1.8	e.65	e.43	e.30	e.29	e.26	.30	1.2	19	5.1	1.1	1.2
9	1.7	e.63	e.42	e.30	e.28	e.26	.30	1.5	16	4.3	1.1	1.4
10	1.7	e.62	e.43	e.29	e.29	e.26	.30	2.1	17	3.9	1.4	1.5
11	1.6	e.61	e.43	e.29	e.28	e.26	.30	2.8	17	3.6	1.2	1.3
12	1.5	e.60	e.43	e.29	e.28	e.26	.31	3.5	15	3.2	1.1	1.2
13	1.3	e.59	e.43	e.29	e.28	e.26	.32	4.4	11	3.1	1.0	1.2
14	1.3	e.58	e.41	e.29	e.29	e.25	.34	4.8	8.4	3.1	1.2	1.2
15	1.3	e.57	e.42	e.29	e.29	.26	.34	5.3	7.3	2.7	1.6	1.3
16	1.2	e.57	e.41	e.29	e.29	.26	.34	7.0	6.9	2.4	1.9	1.3
17	1.1	e.56	e.38	e.29	e.29	.26	.36	8.0	7.6	2.3	1.5	1.8
18	1.0	e.55	e.38	e.28	e.29	.26	.41	8.7	8.5	2.1	1.3	2.3
19	.97	e.54	e.37	e.28	e.29	.28	.43	9.1	8.8	2.0	1.2	2.1
20	.95	e.53	e.37	e.28	e.29	.29	.43	9.0	8.6	2.0	1.2	1.9
21	.91	e.52	e.36	e.29	e.29	.28	.40	7.7	8.4	1.9	1.1	1.7
22	.88	e.52	e.35	e.29	e.29	.28	.40	6.4	8.5	1.8	1.2	1.6
23	.88	e.51	e.35	e.29	e.29	.28	.42	5.9	8.1	1.7	1.2	1.6
24	.80	e.50	e.35	e.28	e.29	.28	.42	7.1	8.4	1.5	1.1	1.5
25	.82	e.50	e.34	e.29	e.29	.28	.46	8.2	8.7	1.5	1.0	1.4
26	.81	e.48	e.34	e.28	e.28	.28	.60	9.9	8.1	1.6	.99	1.3
27	.80	e.48	e.33	e.29	e.28	.28	.77	14	8.0	1.6	.94	1.2
28	.79	e.47	e.33	e.28	e.28	.30	.99	14	7.3	1.4	.92	1.2
29	.77	e.47	e.33	e.29	---	.30	1.1	16	7.1	1.3	.91	1.1
30	.74	e.46	e.32	e.28	---	.30	1.1	15	6.8	1.2	.94	1.1
31	e.73	---	e.31	e.29	---	.31	---	17	---	1.2	1.1	---
TOTAL	40.95	17.26	12.09	9.03	8.05	8.43	13.26	196.39	353.5	93.6	35.70	40.43
MEAN	1.32	.58	.39	.29	.29	.27	.44	6.34	11.8	3.02	1.15	1.35
MAX	2.3	.72	.46	.31	.29	.31	1.1	17	22	6.4	1.9	2.3
MIN	.73	.46	.31	.28	.28	.25	.30	.91	6.8	1.2	.91	.89
AC-FT	81	34	24	18	16	17	26	390	701	186	71	80

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1974 - 2001, BY WATER YEAR (WY)

MEAN	.93	.57	.43	.36	.32	.33	.41	3.99	16.5	8.95	2.77	1.45
MAX	2.25	1.11	.88	.57	.55	.86	.80	9.50	27.1	24.8	6.83	4.82
(WY)	1998	1996	1996	1988	1986	1986	1994	1974	1990	1995	1983	1997
MIN	.32	.20	.25	.17	.16	.17	.22	.70	10.9	2.06	1.15	.49
(WY)	1980	1979	1979	1991	1977	1974	1982	1995	1992	1994	2001	1988

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1974 - 2001

ANNUAL TOTAL	1080.01	828.69	
ANNUAL MEAN	2.95	2.27	3.08
HIGHEST ANNUAL MEAN			4.61
LOWEST ANNUAL MEAN			1.97
HIGHEST DAILY MEAN	33	May 31	69
LOWEST DAILY MEAN	.30	Mar 6	.08
ANNUAL SEVEN-DAY MINIMUM	.30	Apr 5	.14
MAXIMUM PEAK FLOW			33
MAXIMUM PEAK STAGE			3.45
ANNUAL RUNOFF (AC-FT)	2140	1640	2230
10 PERCENT EXCEEDS	8.0	7.6	9.7
50 PERCENT EXCEEDS	.80	.80	.61
90 PERCENT EXCEEDS	.34	.28	.26

e Estimated.

a From rating curve extended above 82 ft<sup>3</sup>/s.

b Also occurred Jul 13, 1995.

c Maximum gage height, 3.70 ft, Jun 20, 1997.

## PLATTE RIVER BASIN

06620000 NORTH PLATTE RIVER NEAR NORTHGATE, CO

LOCATION.--Lat 40°56'15", long 106°20'16", in NE<sup>1</sup>/<sub>4</sub> SW<sup>1</sup>/<sub>4</sub> SE<sup>1</sup>/<sub>4</sub> sec.11, T.11 N., R.80 W., Jackson County, Hydrologic Unit 10180001, on right bank 1,000 ft downstream from bridge on State Highway 125, 0.7 mi upstream from Camp Creek, 4.2 mi northwest of Northgate, and 4.4 mi south of Colorado-Wyoming State line.

DRAINAGE AREA.--1,431 mi<sup>2</sup>.

PERIOD OF RECORD.--May to November 1904 (published as "near Pinkhampton"), May 1915 to current year. Monthly discharge only for some periods, published in WSP 1310.

REVISED RECORDS.--WSP 1310: 1916-21, 1929(M), 1930-32. WSP 1730: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 7,810.39 ft above sea level. See WSP 1730 for history of changes prior to Apr. 8, 1918. Apr. 8, 1918, to Aug. 21, 1961, water-stage recorder at site 0.7 mi downstream at datum 3.36 ft lower. Aug. 22, 1961, to Sept. 18, 1984, at site 650 ft upstream at same datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Diversions for irrigation of about 130,000 acres of hay meadows upstream from station. Transbasin diversions upstream from station to Cache la Poudre River basin. National Weather Service data collection platform with satellite telemetry at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	101	116	e80	e68	e74	e105	e230	702	618	291	98	59
2	95	110	e80	e66	e76	e100	e240	671	617	271	99	61
3	88	e96	e84	e68	e78	e100	e360	702	691	268	90	62
4	86	e90	e86	e70	e82	e105	e600	625	788	259	85	60
5	81	e94	e86	e70	e88	e110	e640	550	702	256	80	56
6	76	e90	e84	e72	e92	e115	e660	608	590	242	77	54
7	76	e86	e86	e68	e92	e115	619	550	518	216	77	57
8	74	e86	e88	e66	e90	e115	508	423	482	220	94	66
9	72	e88	e88	e66	e86	e115	431	359	523	289	144	92
10	72	e94	e88	e68	e86	e120	377	351	595	263	191	109
11	75	e90	e86	e72	e88	e115	358	431	615	235	161	102
12	77	e82	e82	e74	e90	e115	333	534	595	248	155	88
13	77	e74	e82	e74	e94	e120	313	565	598	243	142	92
14	77	e76	e84	e72	e100	e115	305	583	629	264	129	72
15	78	e82	e84	e70	e98	e110	294	651	611	256	137	73
16	82	e84	e84	e68	e96	e110	294	798	508	237	151	72
17	83	e80	e82	e66	e98	e115	317	893	412	199	156	75
18	83	e74	e80	e68	e105	e115	375	1030	355	167	135	80
19	83	e74	e80	e70	e110	e115	476	1060	322	148	116	90
20	83	e76	e78	e72	e110	e120	549	1060	330	142	101	85
21	83	e80	e78	e70	e110	e130	525	991	351	130	91	70
22	83	e84	e80	e70	e110	e150	466	802	329	122	89	60
23	83	e82	e82	e70	e115	e190	401	586	322	107	92	55
24	87	e78	e80	e68	e115	e230	385	465	325	99	95	53
25	100	e78	e78	e70	e110	e270	458	411	319	94	90	53
26	102	e82	e74	e72	e110	e250	462	425	318	92	77	48
27	105	e84	e72	e72	e105	e240	453	463	337	119	66	46
28	108	e82	e74	e74	e105	e230	503	557	366	142	60	46
29	115	e84	e72	e76	---	e230	604	718	348	126	57	45
30	111	e84	e68	e76	---	e240	705	725	326	107	56	44
31	115	---	e70	e74	---	e230	---	634	---	95	55	---
TOTAL	2711	2560	2500	2180	2713	4640	13241	19923	14440	5947	3246	2025
MEAN	87.5	85.3	80.6	70.3	96.9	150	441	643	481	192	105	67.5
MAX	115	116	88	76	115	270	705	1060	788	291	191	109
MIN	72	74	68	66	74	100	230	351	318	92	55	44
AC-FT	5380	5080	4960	4320	5380	9200	26260	39520	28640	11800	6440	4020

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1904 - 2001, BY WATER YEAR (WY)

MEAN	161	153	104	84.0	89.4	177	753	1139	1472	637	265	149
MAX	538	366	215	177	199	722	2444	3649	3296	2367	763	712
(WY)	1962	1962	1998	1984	1986	1986	1962	1984	1983	1957	1983	1997
MIN	31.7	54.2	33.9	27.5	35.7	47.8	131	212	89.4	26.7	38.5	23.8
(WY)	1935	1935	1977	1977	1933	1964	1981	1981	1934	1934	1934	1934

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1904 - 2001

ANNUAL TOTAL	110675	76126	
ANNUAL MEAN	302	209	433
HIGHEST ANNUAL MEAN			878
LOWEST ANNUAL MEAN			117
HIGHEST DAILY MEAN	2030	Jun 1	1060
LOWEST DAILY MEAN	48	Sep 12	44
ANNUAL SEVEN-DAY MINIMUM	48	Sep 12	48
MAXIMUM PEAK FLOW			1100
MAXIMUM PEAK STAGE			a5.12
ANNUAL RUNOFF (AC-FT)	219500	151000	313900
10 PERCENT EXCEEDS	871	572	1200
50 PERCENT EXCEEDS	100	100	162
90 PERCENT EXCEEDS	74	70	70

e Estimated.

a Maximum gage height, backwater from ice jam.

b Maximum gage height, 9.65 ft, Apr 25, 1980, backwater from ice jam.

06693800 MOSQUITO CREEK NEAR ALMA, CO

LOCATION.--Lat 39°16'12", long 106°03'02", in SE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec.13, T.9 S., R.78 W., Park County, Hydrologic Unit 10190001, on left bank 0.1 mi upstream from confluence with Middle Fork South Platte River, and 1.2 mi south of Alma.

DRAINAGE AREA.--16.2 mi<sup>2</sup>.

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

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 10,220 ft above sea level, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. Natural flow of stream affected by minor 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 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	e8.6	e5.8	e3.5	e3.5	e3.8	e4.1	23	91	62	27	15
2	10	e8.9	e5.6	e3.5	e3.5	e3.8	e4.1	21	103	55	27	14
3	9.9	e8.8	e5.4	e3.5	e3.5	e3.8	e4.1	16	99	52	25	12
4	10	e8.8	e5.4	e3.5	e3.5	e3.8	e4.3	16	83	53	28	12
5	11	e8.4	e5.4	e3.5	e3.5	e3.8	e4.5	13	71	49	25	11
6	10	e8.0	e5.2	e3.5	e3.5	e3.8	e4.8	10	80	45	27	11
7	9.6	e8.0	e5.2	e3.5	e3.7	e3.8	e4.5	11	96	44	56	13
8	9.4	e8.0	e5.2	e3.5	e3.7	e3.8	e4.5	14	98	61	41	14
9	9.4	e8.2	e5.2	e3.5	e3.8	e3.8	e4.5	19	89	73	37	12
10	9.3	e8.0	e5.2	e3.5	e3.8	e3.8	e4.5	22	86	90	35	12
11	9.0	e7.8	e5.2	e3.5	e3.8	e3.8	e4.5	25	90	73	33	11
12	8.9	e7.8	e4.9	e3.5	e3.8	e3.8	e4.5	32	83	87	29	10
13	8.6	e7.4	e4.8	e3.5	e3.8	e3.8	e4.5	42	70	81	26	11
14	8.5	e7.2	e4.8	e3.5	e3.8	e3.8	e4.5	60	51	68	30	14
15	8.8	e6.8	e4.8	e3.5	e3.8	e3.8	e4.5	e83	43	64	27	12
16	8.4	e6.6	e4.8	e3.4	e3.8	e3.8	e4.8	86	44	55	24	11
17	8.2	e6.6	e4.8	e3.3	e3.8	e3.8	e5.2	73	52	46	22	13
18	8.1	e6.4	e4.8	e3.4	e3.8	e3.8	e5.9	57	57	41	21	13
19	8.1	e6.2	e4.6	e3.4	e3.8	e3.8	e5.8	59	60	37	20	12
20	8.2	e6.0	e4.3	e3.4	e3.8	e3.8	e5.7	65	63	35	21	11
21	8.0	e6.0	e4.3	e3.4	e3.8	e3.8	e5.5	59	63	33	23	11
22	8.2	e6.0	e4.3	e3.4	e3.8	e4.0	e5.2	45	67	34	19	10
23	8.9	e6.0	e4.3	e3.4	e3.8	e4.1	e4.5	48	66	32	18	10
24	9.9	e6.0	e4.3	e3.4	e3.8	e4.1	5.6	62	64	34	17	9.9
25	9.1	e6.0	e4.3	e3.4	e3.8	e4.1	7.5	71	67	31	16	9.8
26	9.0	e6.0	e4.0	e3.5	e3.8	e4.1	9.5	83	69	29	16	9.6
27	8.9	e6.0	e3.9	e3.5	e3.8	e4.1	12	88	84	29	15	9.3
28	9.3	e6.0	e3.8	e3.5	e3.8	e4.1	14	91	71	26	14	9.4
29	8.9	e6.0	e3.7	e3.5	---	e4.1	15	84	72	24	14	9.3
30	8.5	e5.9	e3.6	e3.5	---	e4.1	17	79	70	23	14	9.4
31	8.2	---	e3.5	e3.5	---	e4.1	---	84	---	23	15	---
TOTAL	280.3	212.4	145.4	107.4	104.4	120.7	189.6	1541	2202	1489	762	341.7
MEAN	9.04	7.08	4.69	3.46	3.73	3.89	6.32	49.7	73.4	48.0	24.6	11.4
MAX	11	8.9	5.8	3.5	3.8	4.1	17	91	103	90	56	15
MIN	8.0	5.9	3.5	3.3	3.5	3.8	4.1	10	43	23	14	9.3
AC-FT	556	421	288	213	207	239	376	3060	4370	2950	1510	678

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2001, BY WATER YEAR (WY)

MEAN	9.67	7.44	4.95	4.14	4.06	4.22	6.21	42.4	80.7	47.6	23.6	13.1
MAX	10.0	7.63	5.75	5.03	4.45	4.44	6.98	49.7	116	67.1	33.3	15.8
(WY)	2000	2000	2000	2000	2000	1999	2000	2001	1999	1999	1999	1999
MIN	9.04	7.08	4.43	3.46	3.73	3.89	5.33	30.8	52.8	27.8	13.0	11.4
(WY)	2001	2001	1999	2001	2001	2001	1999	1999	2000	2000	2000	2001

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1999 - 2001

ANNUAL TOTAL	5924.5	7495.9										
ANNUAL MEAN	16.2	20.5								20.7		
HIGHEST ANNUAL MEAN										25.3		1999
LOWEST ANNUAL MEAN										16.4		2000
HIGHEST DAILY MEAN	111	May 30				103	Jun 2			161		Jun 24 1999
LOWEST DAILY MEAN	e3.5	Dec 31				e3.3	Jan 17			e3.3		Jan 17 2001
ANNUAL SEVEN-DAY MINIMUM	e3.8	Dec 25				e3.4	Jan 16			e3.4		Jan 16 2001
MAXIMUM PEAK FLOW						129	Jun 2			217		Jun 23 1999
MAXIMUM PEAK STAGE						5.87	Jun 2			6.34		Jun 23 1999
ANNUAL RUNOFF (AC-FT)	11750	14870				15020						
10 PERCENT EXCEEDS	41	66				61						
50 PERCENT EXCEEDS	8.6	8.6				8.4						
90 PERCENT EXCEEDS	4.3	3.5				3.9						

e Estimated.

## PLATTE RIVER BASIN

06697100 TARRYALL CREEK BELOW PARK GULCH NEAR COMO, CO

LOCATION.--Lat 39°16'54", long 105°47'13", in NW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec.9, T.9 S., R.75 W., Park County, Hydrologic Unit 10190001, on left bank 300 ft downstream from confluence with Park Gulch, and 6.5 mi southeast of Como.

DRAINAGE AREA.--76.1 mi<sup>2</sup>, of which 3.2 mi<sup>2</sup> is noncontributing.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1997 to September 2001 (discontinued).

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 9,260 ft above sea level, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. Natural flow of stream affected by minor transmountain diversion from Colorado River basin through Boreas Pass ditch, diversions for irrigation, and return flow from irrigated areas.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.2	e5.0	e4.0	e3.5	e3.5	e3.5	e6.6	21	51	41	16	10
2	4.8	e5.2	e4.0	e3.5	e3.5	e3.5	e6.6	27	54	37	20	8.0
3	4.7	e5.4	e4.0	e3.5	e3.5	e3.5	e6.6	21	57	34	18	6.9
4	4.8	e5.2	e4.0	e3.6	e3.5	e3.5	e7.0	19	57	32	16	6.2
5	1.5	e5.2	e4.2	e3.7	e3.5	e3.5	e7.5	19	52	30	15	6.2
6	1.2	e5.2	e4.0	e3.6	e3.5	e3.7	e8.0	21	49	29	14	7.2
7	1.5	e5.2	e4.0	e3.5	e3.5	e3.9	e7.5	33	49	32	21	7.2
8	2.1	e5.2	e4.0	e3.5	e3.5	e3.7	e7.4	32	53	29	17	9.1
9	2.3	e5.0	e4.0	e3.5	e3.5	e3.7	e7.4	20	54	32	16	9.5
10	2.7	e5.0	e4.0	e3.5	e3.5	e4.0	e7.4	17	52	19	17	8.4
11	2.9	e5.0	e4.0	e3.5	e3.5	e4.0	e7.4	18	49	15	18	7.2
12	3.0	e5.0	e4.0	e3.5	e3.5	e4.0	e8.2	19	44	15	15	6.4
13	2.9	e5.0	e4.0	e3.5	e3.5	e4.0	e9.0	22	45	16	13	6.4
14	3.3	e5.0	e4.0	e3.5	e3.5	e4.0	e8.6	24	48	15	17	9.5
15	3.5	e5.0	e4.0	e3.5	e3.5	e4.0	e8.3	36	40	13	16	7.6
16	3.7	e5.0	e4.0	e3.5	e3.5	e4.5	e8.0	46	34	11	15	6.9
17	3.8	e4.9	e3.7	e3.5	e3.5	e4.8	e8.0	52	30	9.5	12	6.9
18	3.9	e4.7	e3.7	e3.5	e3.5	e5.0	e9.0	50	27	9.5	10	6.9
19	4.0	e4.5	e3.7	e3.5	e3.5	e5.4	e12	52	26	13	9.3	6.5
20	4.0	e4.5	e3.7	e3.5	e3.5	e5.6	14	53	26	18	9.5	5.8
21	3.8	e4.5	e3.7	e3.5	e3.5	e5.9	9.0	51	24	19	11	5.6
22	4.0	e4.5	e3.7	e3.7	e3.5	e6.0	11	45	21	25	9.8	5.3
23	5.0	e4.7	e3.7	e3.5	e3.5	e6.0	6.8	40	22	21	11	3.5
24	7.6	e4.5	e3.7	e3.5	e3.5	e6.2	9.8	46	24	24	8.9	3.4
25	6.5	e4.5	e3.7	e3.5	e3.5	e6.2	13	43	35	24	8.4	3.5
26	5.4	e4.5	e3.5	e3.5	e3.5	e7.1	16	43	39	20	8.6	3.7
27	5.0	e4.2	e3.5	e3.5	e3.5	e6.8	16	42	45	20	7.5	3.5
28	6.7	e4.0	e3.5	e3.5	e3.5	e6.6	17	49	36	17	7.6	3.4
29	6.5	e4.0	e3.5	e3.5	---	e6.6	17	50	32	16	8.2	3.5
30	5.4	e4.0	e3.5	e3.5	---	e6.6	20	46	37	15	7.9	3.7
31	5.1	---	e3.5	e3.5	---	e6.6	---	49	---	14	9.2	---
TOTAL	126.8	143.6	118.5	109.1	98.0	152.4	300.1	1106	1212	665.0	402.9	187.9
MEAN	4.09	4.79	3.82	3.52	3.50	4.92	10.0	35.7	40.4	21.5	13.0	6.26
MAX	7.6	5.4	4.2	3.7	3.5	7.1	20	53	57	41	21	10
MIN	1.2	4.0	3.5	3.5	3.5	3.5	6.6	17	21	9.5	7.5	3.4
AC-FT	252	285	235	216	194	302	595	2190	2400	1320	799	373

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2001, BY WATER YEAR (WY)

	1997	1998	1999	2000	2001
MEAN	9.24	8.15	5.01	4.05	3.76
MAX	12.0	11.6	5.60	4.86	4.09
(WY)	1999	1999	1999	2000	2000
MIN	4.09	4.79	3.82	3.52	3.41
(WY)	2001	2001	2001	2001	1998

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1997 - 2001	
	Value	Date	Value	Date	Value	Date
ANNUAL TOTAL	3864.5		4622.3			
ANNUAL MEAN	10.6		12.7		15.9	
HIGHEST ANNUAL MEAN					26.7	1999
LOWEST ANNUAL MEAN					11.6	2000
HIGHEST DAILY MEAN	44	Jun 2	57	Jun 3	163	Jun 9 1997
LOWEST DAILY MEAN	1.2	Oct 6	1.2	Oct 6	1.2	Oct 6 2000
ANNUAL SEVEN-DAY MINIMUM	2.0	Oct 5	2.0	Oct 5	2.0	Oct 5 2000
MAXIMUM PEAK FLOW			62	May 19	173	Jun 9 1997
MAXIMUM PEAK STAGE			4.54	May 19	5.91	Jun 9 1997
ANNUAL RUNOFF (AC-FT)	7670		9170		11520	
10 PERCENT EXCEEDS	26		36		43	
50 PERCENT EXCEEDS	5.2		6.2		9.8	
90 PERCENT EXCEEDS	3.9		3.5		3.7	

e Estimated.

06697100 TARRYALL CREEK BELOW PARK GULCH NEAR COMO, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1997 to August 2001 (discontinued).

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

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 CAC03) (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)	BICAR-BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)
DEC 13...	1250	4.0	253	7.8	.1	9.7	127	39.1	6.99	4.2	.164	1.34	131
MAY 02...	1550	27	202	7.9	4.4	9.9	95.3	28.8	5.66	3.7	.166	1.27	95
JUN 14...	0910	48	202	8.1	2.6	12.9	95.5	29.5	5.32	3.4	.153	.75	103
JUL 17...	1415	11	208	8.6	16.1	8.7	98.3	30.5	5.35	3.7	.163	.75	94
AUG 28...	0935	8.0	206	8.4	11.3	8.3	103	31.8	5.70	3.7	.159	.90	99

DATE	CAR-BONATE WATER DIS IT FIELD MG/L AS CO3 (00452)	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)	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 13...	--	107	21.7	.8	E.1	9.3	162	148	.2	1.7	<.006	<.047	<.041
MAY 02...	--	78	21.3	.6	E.1	7.2	141	116	.2	10	<.006	<.047	<.041
JUN 14...	--	84	13.2	.3	E.1	8.9	128	112	.2	17	<.001	.005	.006
JUL 17...	2	81	15.3	.4	E.1	8.5	131	113	.2	4.0	<.006	<.050	<.040
AUG 28...	7	93	13.7	.7	E.1	8.7	133	121	.2	2.9	<.006	<.050	<.040

DATE	NITRO-GEN, AM-MONIA + ORGANIC (MG/L AS N) (00625)	NITRO-GEN, AM-MONIA + ORGANIC (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)	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)
DEC 13...	.13	E.08	.006	E.004	<.018	2.4	1.9	1	E.04	<2.0	91.3	<.06	<.04
MAY 02...	.51	.18	.107	.009	<.018	8.6	3.3	3	E.04	<2.0	62.2	<.06	<.04
JUN 14...	.28	.21	.038	.008	<.007	5.7	4.2	2	E.03	<2.0	57.6	<.06	<.04
JUL 17...	.12	.12	.013	E.005	<.020	2.7	3.7	2	.05	<2.0	71.0	<.06	<.04
AUG 28...	.17	.12	.010	E.003	<.020	--	--	2	E.03	<2.0	82.1	<.06	<.04

DATE	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)	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)
DEC 13...	<.8	.11	1.1	30	E.04	23.4	1.2	.22	<2.4	<1.0	<1	.78
MAY 02...	<.8	.12	1.2	110	.09	25.9	1.1	<.06	<2.4	<1.0	1	.76
JUN 14...	<.8	.10	1.3	70	E.05	9.3	.8	<.06	<2.0	<1.0	<1	.94
JUL 17...	<.8	.06	.8	100	<.08	14.9	1.1	<.06	<2.0	<1.0	<1	.70
AUG 28...	<.8	.04	.8	80	E.05	13.1	1.2	<.06	<2.0	<1.0	1	.37

E Estimated laboratory analysis value.

## PLATTE RIVER BASIN

06697100 TARRYALL CREEK BELOW PARK GULCH NEAR COMO, CO--Continued

## SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SEDI- MENT, SUS- PENDE D (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE D (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
DEC 13...	1250	4.0	1	.01	67
MAY 02...	1550	27	97	7.1	84
JUN 14...	0910	48	45	5.8	47
JUL 17...	1415	11	4	.12	86
AUG 28...	0935	8.0	4	.09	78

PLATTE RIVER BASIN

392144105132401 SPRING CREEK RAIN GAGE AT LONG SCRAGGY RANCH, CO

PRECIPITATION RECORDS

LOCATION.--Lat 39°21'44", long 105°13'24", in SW<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec.9, T.8 S., R.70 W., Jefferson County, Hydrologic Unit 10190002, on left bank of Spring Creek along road to Long Scraggy Ranch, 0.2 mi from Spring Creek Road, and 3.0 mi southeast of the community of Buffalo Creek.

PERIOD OF RECORD.--April 1997 to current year (seasonal records only).

GAGE.--Tipping-bucket rain gage, with wind shields, with satellite telemetry. Elevation of gage is 7,280 ft above sea level, from topographic map.

REMARKS.--Records good.

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum daily rainfall, 1.75 inches, May 25, 1999.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum daily rainfall, 0.89 inches, May 5.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	.00	.00	.00	.00	.35	.03
2	---	---	---	---	---	---	.00	.00	.00	.01	.07	.03
3	---	---	---	---	---	---	.00	.08	.00	.09	.01	.00
4	---	---	---	---	---	---	.00	.05	.00	.00	.02	.00
5	---	---	---	---	---	---	.00	.89	.00	.02	.00	.04
6	---	---	---	---	---	---	.05	.57	.00	.00	.01	.00
7	---	---	---	---	---	---	.00	.00	.03	.07	.10	.06
8	---	---	---	---	---	---	.00	.00	.45	.44	.04	.60
9	---	---	---	---	---	---	.00	.00	.02	.00	.05	.01
10	---	---	---	---	---	---	.00	.00	.00	.02	.09	.00
11	---	---	---	---	---	---	.02	.00	.00	.08	.01	.00
12	---	---	---	---	---	---	---	.00	.00	.07	.00	.00
13	---	---	---	---	---	---	---	.00	.68	.04	.77	.09
14	---	---	---	---	---	---	.00	.08	.01	.09	.53	.01
15	---	---	---	---	---	---	.00	.00	.00	.01	.13	.00
16	---	---	---	---	---	---	.00	.00	.00	.00	.01	.10
17	---	---	---	---	---	---	.00	.40	.00	.00	.00	.17
18	---	---	---	---	---	---	.00	.00	.00	.00	.00	.00
19	---	---	---	---	---	---	.00	.14	.00	.00	.00	.00
20	---	---	---	---	---	---	.05	.01	.00	.00	.00	.00
21	---	---	---	---	---	---	.08	.29	.00	.00	.44	.00
22	---	---	---	---	---	---	---	.00	.00	.00	.13	.01
23	---	---	---	---	---	---	---	.00	.00	.00	.00	.00
24	---	---	---	---	---	---	.00	.00	.00	.02	.00	.00
25	---	---	---	---	---	---	.00	.00	.00	.10	.00	.00
26	---	---	---	---	---	---	.00	.00	.02	.00	.00	.00
27	---	---	---	---	---	---	.00	.00	.00	.01	.00	.00
28	---	---	---	---	---	---	.00	.00	.00	.00	.00	.00
29	---	---	---	---	---	---	.00	.08	.00	.00	.00	.00
30	---	---	---	---	---	---	.00	.00	.00	.00	.45	.00
31	---	---	---	---	---	---	---	.00	---	.03	.00	---
TOTAL	---	---	---	---	---	---	---	2.59	1.21	1.10	3.21	1.15

## PLATTE RIVER BASIN

06701970 SPRING CREEK ABOVE MOUTH NEAR SOUTH PLATTE, CO

LOCATION.--Lat 39°23'37", long 105°11'01", in SE<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec.35, T.7 S., R.70 W., Jefferson County, Hydrologic Unit 10190002, on right bank 0.9 mi upstream from mouth and 1.3 mi southwest of the community of South Platte.

DRAINAGE AREA.--9.79 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1997 to current year (seasonal records only).

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 6,320 ft above sea level, from topographic map.

REMARKS.--Records 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.

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum discharge, 6,380 ft<sup>3</sup>/s, Aug. 31, 1997, gage height, 13.45 ft, from slope-area measurement of peak flow; minimum daily, 0.47 ft<sup>3</sup>/s, July 23, 2001.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum discharge, 9.2 ft<sup>3</sup>/s, Aug. 13, gage height, 4.82 ft; minimum daily, 0.47 ft<sup>3</sup>/s, July 23.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.3	---	---	---	---	---	e.98	.89	1.1	.65	.60	1.0
2	1.2	---	---	---	---	---	e.97	.97	1.0	.62	.66	.97
3	1.2	---	---	---	---	---	e.94	1.1	1.1	.62	.64	.97
4	1.3	---	---	---	---	---	e.93	1.2	1.1	.63	.58	.97
5	1.3	---	---	---	---	---	e.92	1.8	1.1	.59	.58	.99
6	1.3	---	---	---	---	---	e.90	2.2	1.1	.56	.60	.96
7	1.4	---	---	---	---	---	e.88	2.3	1.1	.54	.67	.85
8	1.4	---	---	---	---	---	e.88	e2.1	1.1	.56	.68	1.1
9	1.4	---	---	---	---	---	e.88	e2.0	1.2	.61	.69	1.0
10	1.3	---	---	---	---	---	e.89	e2.0	1.1	.57	.73	.86
11	1.3	---	---	---	---	---	e.88	e1.9	1.2	.55	.72	.77
12	1.3	---	---	---	---	---	e.90	e1.9	1.1	.69	.66	.82
13	1.3	---	---	---	---	---	e.90	e1.8	1.4	.70	1.2	.82
14	1.3	---	---	---	---	---	e.90	e1.8	1.4	.73	1.7	.81
15	1.3	---	---	---	---	---	e.92	e1.7	1.3	.76	1.7	.82
16	1.3	---	---	---	---	---	e.92	e1.7	1.3	.68	1.3	.84
17	1.3	---	---	---	---	---	e.96	e1.6	1.2	.64	1.2	.80
18	1.3	---	---	---	---	---	e1.0	1.6	.82	.60	.96	.80
19	1.3	---	---	---	---	---	e1.0	1.5	.85	.60	.82	.68
20	1.3	---	---	---	---	---	e.99	1.5	.86	.59	.76	.72
21	1.3	---	---	---	---	---	e.97	1.6	.87	.59	.79	.60
22	1.3	---	---	---	---	---	e.97	1.5	.85	.56	.83	.54
23	1.4	---	---	---	---	---	e.96	1.3	.78	.47	.84	.57
24	1.3	---	---	---	---	---	e.93	1.2	.77	.54	.77	.64
25	1.3	---	---	---	---	---	e.94	1.1	.78	.54	.78	.80
26	1.3	---	---	---	---	---	e.95	1.2	.78	.54	.76	1.0
27	1.3	---	---	---	---	---	e.96	1.1	.77	.53	.76	1.0
28	1.3	---	---	---	---	---	e.97	1.1	.75	.49	.71	1.0
29	1.4	---	---	---	---	---	e.95	1.2	.74	.49	.72	1.0
30	1.3	---	---	---	---	---	e.89	1.2	.70	.52	.76	1.1
31	1.4	---	---	---	---	---	---	1.1	---	.55	1.0	---
TOTAL	40.7	---	---	---	---	---	28.03	47.16	30.22	18.31	26.17	25.80
MEAN	1.31	---	---	---	---	---	.93	1.52	1.01	.59	.84	.86
MAX	1.4	---	---	---	---	---	1.0	2.3	1.4	.76	1.7	1.1
MIN	1.2	---	---	---	---	---	.88	.89	.70	.47	.58	.54
AC-FT	81	---	---	---	---	---	56	94	60	36	52	51

e Estimated.

PLATTE RIVER BASIN

06701970 SPRING CREEK ABOVE MOUTH NEAR SOUTH PLATTE, CO--Continued

PRECIPITATION RECORDS

PERIOD OF RECORD.--April 1997 to current year (seasonal records only).

GAGE.--Tipping-bucket rain gage (no wind shields used) with satellite telemetry.

REMARKS.--Records good.

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum daily rainfall, 2.38 inches, July 16, 2000.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum daily rainfall, 1.96 inches, Aug. 13.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	.00	.00	.00	.00	.26	.00
2	---	---	---	---	---	---	.00	.00	.00	.00	.03	.00
3	---	---	---	---	---	---	.00	.15	.00	.23	.00	.00
4	---	---	---	---	---	---	.00	.17	.00	.00	.00	.00
5	---	---	---	---	---	---	.00	1.06	.00	.00	.00	.03
6	---	---	---	---	---	---	.04	.00	.00	.00	.01	.00
7	---	---	---	---	---	---	.00	.00	.00	.04	.05	.16
8	---	---	---	---	---	---	.00	.00	.13	.17	.01	.61
9	---	---	---	---	---	---	.00	.00	.07	.00	.03	.16
10	---	---	---	---	---	---	.00	.00	.00	.00	.07	.00
11	---	---	---	---	---	---	---	.00	.00	.12	.00	.00
12	---	---	---	---	---	---	---	.00	.00	.32	.00	.00
13	---	---	---	---	---	---	.00	.00	.59	.00	1.96	.05
14	---	---	---	---	---	---	.00	.18	.00	.31	.27	.00
15	---	---	---	---	---	---	.00	.00	.00	.00	.07	.00
16	---	---	---	---	---	---	.00	.00	.00	.00	.00	.02
17	---	---	---	---	---	---	.00	.24	.00	.00	.00	.12
18	---	---	---	---	---	---	.00	.00	.00	.00	.00	.00
19	---	---	---	---	---	---	.00	.05	.00	.00	.00	.00
20	---	---	---	---	---	---	.05	.00	.00	.00	.00	.00
21	---	---	---	---	---	---	---	.31	.00	.00	.09	.00
22	---	---	---	---	---	---	---	.00	.00	.00	.09	.00
23	---	---	---	---	---	---	---	.00	.00	.00	.00	.00
24	---	---	---	---	---	---	.00	.00	.00	.02	.00	.00
25	---	---	---	---	---	---	.00	.00	.01	.07	.00	.00
26	---	---	---	---	---	---	.00	.00	.07	.00	.00	.00
27	---	---	---	---	---	---	.00	.00	.00	.05	.00	.00
28	---	---	---	---	---	---	.00	.00	.00	.00	.00	.00
29	---	---	---	---	---	---	.00	.39	.00	.00	.00	.00
30	---	---	---	---	---	---	.00	.00	.00	.00	.42	.00
31	---	---	---	---	---	---	---	.00	---	.03	.00	---
TOTAL	---	---	---	---	---	---	---	2.55	0.87	1.36	3.36	1.15

## PLATTE RIVER BASIN

06706350 WANDCREST GULCH NEAR PINE, CO

## PRECIPITATION RECORDS

LOCATION.--Lat 39°24'41", long 105°21'44", in SE<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec.29, T.7 S., R.71 W., Jefferson County, Hydrologic Unit 10190002, on left bank, approximately 600 ft above mouth, and 2 mi west of the community of Pine.

PERIOD OF RECORD.--April to September 2001 (seasonal records only).

GAGE.--Tipping-bucket rain gage (no wind shields used) with satellite telemetry. Elevation of gage is 6,905 ft above sea level, from topographic map.

REMARKS.--Records good.

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum daily rainfall, 1.15 inches, May 5, 2001.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum daily rainfall, 1.15 inches, May 5.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	.00	.00	.00	.00	.38	.03
2	---	---	---	---	---	---	.00	.00	.00	.00	.02	.00
3	---	---	---	---	---	---	.00	.03	.00	.00	.00	.00
4	---	---	---	---	---	---	.00	.45	.00	.00	.38	.00
5	---	---	---	---	---	---	.00	1.15	.00	.44	.00	.00
6	---	---	---	---	---	---	.03	.26	.00	.00	.05	.00
7	---	---	---	---	---	---	.00	.00	.04	.02	.02	.05
8	---	---	---	---	---	---	.00	.00	.12	.29	.00	.44
9	---	---	---	---	---	---	.00	.00	.00	.00	.07	.00
10	---	---	---	---	---	---	.00	.00	.00	.00	.21	.00
11	---	---	---	---	---	---	---	.00	.00	.04	.01	.00
12	---	---	---	---	---	---	---	.07	.00	.58	.05	.00
13	---	---	---	---	---	---	.00	.00	.48	.02	.02	.12
14	---	---	---	---	---	---	.00	.00	.00	.01	.09	.01
15	---	---	---	---	---	---	.00	.00	.00	.01	.08	.00
16	---	---	---	---	---	---	.00	.00	.00	.00	.04	.10
17	---	---	---	---	---	---	.00	.49	.00	.00	.00	.14
18	---	---	---	---	---	---	.00	.00	.00	.00	.00	.00
19	---	---	---	---	---	---	.00	.15	.00	.00	.00	.00
20	---	---	---	---	---	---	.02	.00	.02	.00	.00	.00
21	---	---	---	---	---	---	---	.37	.00	.00	.00	.00
22	---	---	---	---	---	---	---	.00	.00	.00	.17	.00
23	---	---	---	---	---	---	---	.00	.00	.29	.00	.00
24	---	---	---	---	---	---	.00	.00	.01	.08	.00	.00
25	---	---	---	---	---	---	.00	.00	.47	.04	.00	.00
26	---	---	---	---	---	---	.00	.00	.57	.00	.00	.00
27	---	---	---	---	---	---	.00	.00	.00	.02	.00	.00
28	---	---	---	---	---	---	.00	.00	.00	.00	.01	.00
29	---	---	---	---	---	---	.00	.18	.00	.00	.00	.00
30	---	---	---	---	---	---	.00	.08	.00	.00	.00	.00
31	---	---	---	---	---	---	---	.00	---	.26	.00	---
TOTAL	---	---	---	---	---	---	---	3.23	1.71	2.10	1.60	0.89
MAX	---	---	---	---	---	---	---	1.15	.57	.58	.38	.44
MIN	---	---	---	---	---	---	---	.00	.00	.00	.00	.00



## PLATTE RIVER BASIN

06706400 NORTH FORK SOUTH PLATTE RIVER ABOVE ELK CREEK AT PINE, CO--Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	63	---	---	---	---	---	e220	371	275	482	318	222
2	60	---	---	---	---	---	e220	358	398	477	340	214
3	59	---	---	---	---	---	e210	185	407	467	322	211
4	58	---	---	---	---	---	272	135	370	437	309	187
5	59	---	---	---	---	---	308	125	300	347	332	70
6	60	---	---	---	---	---	301	84	338	353	324	67
7	59	---	---	---	---	---	295	99	470	363	319	68
8	57	---	---	---	---	---	294	118	616	432	311	193
9	54	---	---	---	---	---	291	131	750	547	331	221
10	58	---	---	---	---	---	298	148	706	328	328	235
11	57	---	---	---	---	---	270	176	662	273	334	244
12	55	---	---	---	---	---	209	236	660	286	318	314
13	55	---	---	---	---	---	204	375	651	293	308	382
14	55	---	---	---	---	---	206	478	482	341	359	395
15	54	---	---	---	---	---	225	513	275	191	324	330
16	55	---	---	---	---	---	299	515	288	173	268	219
17	55	---	---	---	---	---	307	420	413	164	243	221
18	---	---	---	---	---	---	315	353	400	210	231	217
19	---	---	---	---	---	---	323	282	439	269	222	215
20	---	---	---	---	---	---	326	256	430	357	233	210
21	---	---	---	---	---	---	310	259	337	327	289	223
22	---	---	---	---	---	---	284	221	339	280	269	260
23	---	---	---	---	---	---	149	225	262	280	236	265
24	---	---	---	---	---	---	149	345	525	288	225	279
25	---	---	---	---	---	---	164	449	572	279	220	295
26	---	---	---	---	---	---	201	574	505	265	226	299
27	---	---	---	---	---	---	297	525	539	285	216	298
28	---	---	---	---	---	---	327	384	502	328	213	322
29	---	---	---	---	---	---	364	381	495	316	214	366
30	---	---	---	---	---	---	384	332	489	308	214	363
31	---	---	---	---	---	---	---	238	---	308	214	---
TOTAL	---	---	---	---	---	---	8022	9291	13895	10054	8610	7405
MEAN	---	---	---	---	---	---	267	300	463	324	278	247
MAX	---	---	---	---	---	---	384	574	750	547	359	395
MIN	---	---	---	---	---	---	149	84	262	164	213	67
AC-FT	---	---	---	---	---	---	15910	18430	27560	19940	17080	14690

e Estimated.

PLATTE RIVER BASIN

06706400 NORTH FORK SOUTH PLATTE RIVER ABOVE ELK CREEK AT PINE, CO--Continued

PRECIPITATION RECORDS

PERIOD OF RECORD.--April to September 2001 (seasonal records only).

GAGE.--Tipping-bucket rain gage (no wind shields used) with satellite telemetry.

REMARKS.--Records good.

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum daily rainfall, 1.89 inches, Aug. 28, 2000.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum daily rainfall, 1.25 inches, June 26.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	.00	.00	.00	.00	.64	.10
2	---	---	---	---	---	---	.00	.00	.00	.00	.04	.00
3	---	---	---	---	---	---	.00	.22	.00	.03	.00	.00
4	---	---	---	---	---	---	.00	.24	.00	.00	.85	.00
5	---	---	---	---	---	---	.00	.00	.00	.50	.00	.00
6	---	---	---	---	---	---	.00	.00	.00	.00	.03	.00
7	---	---	---	---	---	---	.00	.00	.00	.05	.11	.53
8	---	---	---	---	---	---	.00	.00	.50	.41	.02	.50
9	---	---	---	---	---	---	.00	.00	.04	.00	.05	.00
10	---	---	---	---	---	---	.00	.00	.00	.00	.37	.00
11	---	---	---	---	---	---	.77	.00	.00	.09	.00	.00
12	---	---	---	---	---	---	.04	.24	.00	.85	.03	.00
13	---	---	---	---	---	---	.00	.00	.47	.26	.03	.21
14	---	---	---	---	---	---	.00	.00	.00	.03	.47	.00
15	---	---	---	---	---	---	.00	.00	.00	.00	.12	.00
16	---	---	---	---	---	---	.00	.00	.00	.00	.02	.47
17	---	---	---	---	---	---	.00	.34	.00	.00	.00	.19
18	---	---	---	---	---	---	.00	.00	.00	.00	.00	.00
19	---	---	---	---	---	---	.00	.06	.00	.00	.00	.00
20	---	---	---	---	---	---	.00	.00	.01	.00	.00	.00
21	---	---	---	---	---	---	.08	.28	.00	.00	.03	.00
22	---	---	---	---	---	---	.37	.00	.00	.00	.54	.00
23	---	---	---	---	---	---	.00	.00	.00	.18	.00	.00
24	---	---	---	---	---	---	.00	.00	.00	.11	.00	.00
25	---	---	---	---	---	---	.00	.00	.38	.00	.00	.00
26	---	---	---	---	---	---	.00	.00	1.25	.00	.00	.00
27	---	---	---	---	---	---	.00	.00	.00	.07	.00	.00
28	---	---	---	---	---	---	.00	.00	.00	.00	.00	.00
29	---	---	---	---	---	---	.00	.22	.00	.00	.00	.00
30	---	---	---	---	---	---	.00	.03	.01	.00	.12	.00
31	---	---	---	---	---	---	---	.00	---	.17	.00	---
TOTAL	---	---	---	---	---	---	1.26	1.63	2.66	2.75	3.47	2.00

## PLATTE RIVER BASIN

06706600 MILLER GULCH NEAR BUFFALO CREEK, CO

LOCATION.--Lat 39°23'31", long 105°17'03", SW<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec.36, T.7 S., R.71 W., Jefferson County, Hydrologic Unit 10190002, on right bank, 1200 ft upstream from mouth and 0.5 mi northwest of the community of Buffalo Creek.

DRAINAGE AREA.--3.16 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 2000 to current year (seasonal records only).

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 6,675 ft above sea level, from topographic map.

REMARKS.--Records poor.

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum discharge, 240 ft<sup>3</sup>/s (estimated) on July 17, 2000, gage height 8.56 ft, from high water marks; minimum daily, 0.11 ft<sup>3</sup>/s, Aug. 1-2, 2000.

EXTREMES FOR WATER YEAR 2000 (seasonal only).--Maximum discharge during period August to September, 48 ft<sup>3</sup>/s, Aug. 28, gage height, 7.20 ft; minimum daily, 0.11 ft<sup>3</sup>/s, Aug. 1-2.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum discharge, 75 ft<sup>3</sup>/s, Aug. 14, gage height 7.51 ft; minimum daily, 0.13 ft<sup>3</sup>/s, Aug. 12.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	---	e.11	e.26
2	---	---	---	---	---	---	---	---	---	---	.11	e.25
3	---	---	---	---	---	---	---	---	---	---	.12	e.24
4	---	---	---	---	---	---	---	---	---	---	.18	e.24
5	---	---	---	---	---	---	---	---	---	---	.15	e.23
6	---	---	---	---	---	---	---	---	---	---	.13	e.23
7	---	---	---	---	---	---	---	---	---	---	.13	e.22
8	---	---	---	---	---	---	---	---	---	---	.13	e.22
9	---	---	---	---	---	---	---	---	---	---	.13	e.21
10	---	---	---	---	---	---	---	---	---	---	.13	e.21
11	---	---	---	---	---	---	---	---	---	---	.13	e.21
12	---	---	---	---	---	---	---	---	---	---	.13	e.22
13	---	---	---	---	---	---	---	---	---	---	.13	e.21
14	---	---	---	---	---	---	---	---	---	---	.14	e.21
15	---	---	---	---	---	---	---	---	---	---	.13	e.22
16	---	---	---	---	---	---	---	---	---	---	.13	e.22
17	---	---	---	---	---	---	---	---	---	---	.16	e.22
18	---	---	---	---	---	---	---	---	---	---	.25	e.22
19	---	---	---	---	---	---	---	---	---	---	.17	e.22
20	---	---	---	---	---	---	---	---	---	---	.15	e.22
21	---	---	---	---	---	---	---	---	---	---	.16	e.22
22	---	---	---	---	---	---	---	---	---	---	.16	e.22
23	---	---	---	---	---	---	---	---	---	---	.17	e.23
24	---	---	---	---	---	---	---	---	---	---	.16	e.24
25	---	---	---	---	---	---	---	---	---	---	.16	e.24
26	---	---	---	---	---	---	---	---	---	---	.22	e.25
27	---	---	---	---	---	---	---	---	---	---	.20	e.26
28	---	---	---	---	---	---	---	---	---	---	1.1	e.27
29	---	---	---	---	---	---	---	---	---	---	e.48	e.27
30	---	---	---	---	---	---	---	---	---	---	e.34	e.28
31	---	---	---	---	---	---	---	---	---	---	e.28	---
TOTAL	---	---	---	---	---	---	---	---	---	---	6.27	6.96
MEAN	---	---	---	---	---	---	---	---	---	---	.20	.23
MAX	---	---	---	---	---	---	---	---	---	---	1.1	.28
MIN	---	---	---	---	---	---	---	---	---	---	.11	.21
AC-FT	---	---	---	---	---	---	---	---	---	---	12	14

e Estimated.

06706600 MILLER GULCH NEAR BUFFALO CREEK, CO--Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e.28	---	---	---	---	---	e.30	.21	.38	e.21	.21	.30
2	e.28	---	---	---	---	---	e.31	.21	.28	e.21	e.18	.27
3	e.27	---	---	---	---	---	e.31	.23	.30	e.21	.15	.23
4	.28	---	---	---	---	---	.32	.24	.36	e.21	.16	.21
5	.29	---	---	---	---	---	.34	.26	.40	e.21	.17	.23
6	.31	---	---	---	---	---	.34	.30	.42	e.22	.16	.23
7	.32	---	---	---	---	---	.32	.32	.31	e.22	.85	.23
8	.32	---	---	---	---	---	.32	.28	.91	e.22	e.20	.30
9	.32	---	---	---	---	---	.32	.27	e.29	e.21	e.18	.29
10	.31	---	---	---	---	---	.31	.26	e.29	e.22	.16	.23
11	.30	---	---	---	---	---	.29	.25	e.29	e.22	.14	.23
12	.29	---	---	---	---	---	.31	.24	e.29	e.22	.13	.22
13	.30	---	---	---	---	---	.32	.23	e.28	e.22	.26	.24
14	.31	---	---	---	---	---	.34	.25	e.27	e.22	1.7	.27
15	.31	---	---	---	---	---	.34	.41	e.27	e.22	.27	.25
16	.31	---	---	---	---	---	.31	.44	e.25	e.22	.39	.27
17	.30	---	---	---	---	---	.31	.46	e.25	e.22	.40	.28
18	---	---	---	---	---	---	.31	.30	e.24	e.21	.33	.28
19	---	---	---	---	---	---	.29	.34	e.24	.21	.35	.26
20	---	---	---	---	---	---	.27	.42	e.23	.21	.34	.26
21	---	---	---	---	---	---	.26	.37	e.23	.21	.32	.25
22	---	---	---	---	---	---	.28	.29	e.23	.21	.31	.24
23	---	---	---	---	---	---	.28	.30	e.23	.20	.30	.22
24	---	---	---	---	---	---	.29	.27	e.23	.21	.30	.23
25	---	---	---	---	---	---	.27	.36	e.23	.21	.31	.23
26	---	---	---	---	---	---	.25	.51	e.23	.21	.26	.23
27	---	---	---	---	---	---	.25	.51	e.22	.21	.28	.23
28	---	---	---	---	---	---	.24	.61	e.22	.20	.30	.21
29	---	---	---	---	---	---	.23	.50	e.21	.20	.29	.22
30	---	---	---	---	---	---	.22	.35	e.21	.20	.27	.22
31	---	---	---	---	---	---	---	.44	---	.20	.28	---
TOTAL	5.10	---	---	---	---	---	8.85	10.43	8.79	6.57	9.95	7.36
MEAN	.30	---	---	---	---	---	.30	.34	.29	.21	.32	.25
MAX	.32	---	---	---	---	---	.34	.61	.91	.22	1.7	.30
MIN	.27	---	---	---	---	---	.22	.21	.21	.20	.13	.21
AC-FT	10	---	---	---	---	---	18	21	17	13	20	15

e Estimated.

## PLATTE RIVER BASIN

06706600 MILLER GULCH NEAR BUFFALO CREEK, CO--Continued

## PRECIPITATION RECORDS

PERIOD OF RECORD.--April to September 2001 (seasonal records only).

GAGE.--Tipping-bucket rain gage (no wind shields used) with satellite telemetry.

REMARKS.--Records good.

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum daily rainfall, 0.90 inches, Aug. 31, 2000.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum daily rainfall, 0.78 inches, May 5.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	.00	.00	.00	.00	.31	.05
2	---	---	---	---	---	---	.00	.00	.00	.00	.11	.03
3	---	---	---	---	---	---	.00	.14	.00	.06	.00	.00
4	---	---	---	---	---	---	.00	.54	.00	.01	.20	.00
5	---	---	---	---	---	---	.00	.78	.00	.11	.00	.00
6	---	---	---	---	---	---	.00	.00	.00	.00	.00	.00
7	---	---	---	---	---	---	.00	.00	.00	.00	.14	.18
8	---	---	---	---	---	---	.00	.00	.24	.31	.00	.49
9	---	---	---	---	---	---	.00	.00	.00	.00	.20	.01
10	---	---	---	---	---	---	.00	.00	.00	.00	.14	.00
11	---	---	---	---	---	---	---	.00	.00	.04	.00	.00
12	---	---	---	---	---	---	---	.00	.00	.63	.02	.00
13	---	---	---	---	---	---	.00	.00	.43	.20	.56	.16
14	---	---	---	---	---	---	.00	.00	.00	.18	.52	.00
15	---	---	---	---	---	---	.00	.00	.00	.00	.10	.00
16	---	---	---	---	---	---	.00	.00	.00	.00	.01	.05
17	---	---	---	---	---	---	.00	.38	.00	.00	.00	.15
18	---	---	---	---	---	---	.00	.00	.00	.00	.00	.00
19	---	---	---	---	---	---	.00	.03	.00	.00	.00	.00
20	---	---	---	---	---	---	.00	.00	.00	.00	.00	.00
21	---	---	---	---	---	---	---	.23	.00	.00	.23	.00
22	---	---	---	---	---	---	---	.00	.00	.00	.12	.00
23	---	---	---	---	---	---	---	.00	.00	.00	.00	.00
24	---	---	---	---	---	---	.00	.00	.00	.10	.00	.00
25	---	---	---	---	---	---	.00	.00	.05	.00	.00	.00
26	---	---	---	---	---	---	.00	.00	.13	.00	.00	.00
27	---	---	---	---	---	---	.00	.00	.00	.08	.00	.00
28	---	---	---	---	---	---	.00	.00	.00	.00	.00	.05
29	---	---	---	---	---	---	.00	.07	.00	.00	.00	.02
30	---	---	---	---	---	---	.00	.00	.00	.00	.00	.00
31	---	---	---	---	---	---	---	.00	---	.16	.00	---
TOTAL	---	---	---	---	---	---	---	2.17	0.85	1.88	2.66	1.19
MEAN	---	---	---	---	---	---	---	.07	.03	.06	.09	.04
MAX	---	---	---	---	---	---	---	.78	.43	.63	.56	.49

PLATTE RIVER BASIN

392133105184401 BUFFALO CREEK RAIN GAGE AT MORRISON CREEK, CO

PRECIPITATION RECORDS

LOCATION.--Lat 39°21'33", long 105°18'44", in SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec.11, T.8 S., R.71 W., Jefferson County, Hydrologic Unit 10190002, on left bank of Buffalo Creek near confluence with Morrison Creek, and 3.0 mi southwest of the community of Buffalo Creek.

PERIOD OF RECORD.--April 1997 to current year (seasonal records only).

GAGE.--Tipping-bucket rain gage, (with wind shields), with satellite telemetry. Elevation of gage is 7,120 ft above sea level, from topographic map.

REMARKS.--Records good.

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum daily rainfall, 1.67 inches, June 6, 1997.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum daily rainfall, 0.53 inches, July 8.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	.00	.00	.00	.00	.20	.06
2	---	---	---	---	---	---	.00	.00	.00	.00	.00	.00
3	---	---	---	---	---	---	.00	.00	.00	.03	.00	.00
4	---	---	---	---	---	---	.00	.15	.00	.00	.30	.00
5	---	---	---	---	---	---	.00	.33	.00	.24	.00	.01
6	---	---	---	---	---	---	.01	.14	.00	.00	.00	.00
7	---	---	---	---	---	---	.00	.00	.05	.00	.10	.08
8	---	---	---	---	---	---	.00	.00	.36	.53	.04	.33
9	---	---	---	---	---	---	.00	.00	.00	.00	.02	.00
10	---	---	---	---	---	---	.00	.03	.00	.00	.00	.00
11	---	---	---	---	---	---	.00	.00	.00	.02	.00	.00
12	---	---	---	---	---	---	---	.03	.00	.41	.03	.00
13	---	---	---	---	---	---	---	.00	.29	.01	.03	.17
14	---	---	---	---	---	---	.00	.00	.00	.09	.29	.01
15	---	---	---	---	---	---	.00	.00	.00	.00	.07	.00
16	---	---	---	---	---	---	.00	.00	.00	.00	.02	.11
17	---	---	---	---	---	---	.00	.38	.00	.00	.00	.17
18	---	---	---	---	---	---	.00	.00	.00	.00	.00	.00
19	---	---	---	---	---	---	.00	.07	.00	.01	.00	.00
20	---	---	---	---	---	---	.00	.00	.00	.00	.00	.00
21	---	---	---	---	---	---	.07	.31	.00	.00	.04	.00
22	---	---	---	---	---	---	---	.00	.00	.00	.12	.00
23	---	---	---	---	---	---	---	.00	.00	.00	.00	.00
24	---	---	---	---	---	---	.00	.00	.00	.03	.00	.00
25	---	---	---	---	---	---	.00	.00	.02	.01	.00	.00
26	---	---	---	---	---	---	.00	.01	.06	.00	.00	.00
27	---	---	---	---	---	---	.00	.00	.00	.00	.00	.00
28	---	---	---	---	---	---	.00	.00	.00	.00	.00	.03
29	---	---	---	---	---	---	.00	.11	.00	.00	.00	.00
30	---	---	---	---	---	---	.00	.00	.00	.00	.00	.00
31	---	---	---	---	---	---	---	.00	---	.10	.01	---
TOTAL	---	---	---	---	---	---	---	1.56	0.78	1.48	1.27	0.97

## PLATTE RIVER BASIN

06706800 BUFFALO CREEK AT MOUTH AT BUFFALO CREEK, CO

LOCATION.--Lat 39°23'27", long 105°16'15", in SE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec.31, T.7 S., R.70 W., Jefferson County, Hydrologic Unit 10190002, on left bank 0.2 mi downstream from State Highway 67, 0.5 mi upstream from mouth, and in the community of Buffalo Creek.

DRAINAGE AREA.--47.4 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1997 to current year (seasonal records only).

REVISED RECORDS.--WDR CO-00-1: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 6,630 ft above sea level, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Flow is slightly regulated by Wellington Lake 7.2 mi upstream. 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 (seasonal only).--Maximum discharge 3,400 ft<sup>3</sup>/s, July 31, 1998, gage height, 10.80 ft, from high water marks; minimum daily, 1.9 ft<sup>3</sup>/s, July 19, 2001.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum discharge, 31 ft<sup>3</sup>/s, May 13, gage height, 4.15 ft; minimum daily, 1.9 ft<sup>3</sup>/s, July 19.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.3	---	---	---	---	---	4.3	6.8	4.9	3.9	3.2	3.3
2	4.1	---	---	---	---	---	5.0	8.1	7.9	3.6	4.4	3.1
3	4.0	---	---	---	---	---	5.1	8.4	9.3	3.6	3.6	2.8
4	4.1	---	---	---	---	---	5.4	7.9	9.4	3.5	3.4	2.6
5	4.0	---	---	---	---	---	5.5	8.9	9.1	3.5	3.9	2.6
6	4.2	---	---	---	---	---	5.4	9.7	8.5	3.4	3.5	2.6
7	4.2	---	---	---	---	---	4.9	11	8.4	3.3	3.9	2.7
8	4.2	---	---	---	---	---	4.8	12	8.9	4.1	3.5	3.9
9	4.1	---	---	---	---	---	4.6	13	8.0	6.0	4.6	3.7
10	---	---	---	---	---	---	4.7	15	7.5	3.9	5.7	3.6
11	---	---	---	---	---	---	4.7	23	6.9	3.5	5.5	3.2
12	---	---	---	---	---	---	4.5	29	6.4	4.2	4.8	3.0
13	---	---	---	---	---	---	4.3	30	7.3	e4.0	4.2	2.8
14	---	---	---	---	---	---	4.6	30	8.3	e3.7	3.0	3.2
15	---	---	---	---	---	---	4.5	28	7.1	e3.3	3.2	3.0
16	---	---	---	---	---	---	4.9	9.7	6.3	e2.9	3.3	3.0
17	---	---	---	---	---	---	4.3	8.9	6.0	2.3	2.9	3.1
18	---	---	---	---	---	---	4.9	9.5	5.7	2.2	2.7	3.0
19	---	---	---	---	---	---	5.1	8.5	5.6	1.9	2.5	2.8
20	---	---	---	---	---	---	5.3	8.4	5.6	2.8	2.5	2.7
21	---	---	---	---	---	---	4.8	8.2	5.4	3.3	2.6	2.7
22	---	---	---	---	---	---	5.5	7.5	5.4	3.3	3.0	2.8
23	---	---	---	---	---	---	5.0	6.9	5.2	3.2	3.7	2.7
24	---	---	---	---	---	---	5.4	6.4	5.2	3.4	3.0	2.7
25	---	---	---	---	---	---	5.4	5.9	5.3	3.6	2.9	2.6
26	---	---	---	---	---	---	4.9	5.8	5.2	3.5	2.9	2.6
27	---	---	---	---	---	---	5.0	5.7	5.5	3.4	2.7	2.6
28	---	---	---	---	---	---	5.0	5.6	4.7	3.2	2.9	2.6
29	---	---	---	---	---	---	7.1	5.6	4.3	3.0	2.8	2.6
30	---	---	---	---	---	---	7.1	5.6	4.1	2.9	2.9	2.9
31	---	---	---	---	---	---	---	5.3	---	3.1	3.3	---
TOTAL	---	---	---	---	---	---	152.0	354.3	197.4	105.5	107.0	87.5
MEAN	---	---	---	---	---	---	5.07	11.4	6.58	3.40	3.45	2.92
MAX	---	---	---	---	---	---	7.1	30	9.4	6.0	5.7	3.9
MIN	---	---	---	---	---	---	4.3	5.3	4.1	1.9	2.5	2.6
AC-FT	---	---	---	---	---	---	301	703	392	209	212	174

e Estimated.

PLATTE RIVER BASIN

06706800 BUFFALO CREEK AT MOUTH AT BUFFALO CREEK , CO--Continued

PRECIPITATION RECORDS

PERIOD OF RECORD.--June 1997 to current year (seasonal records only).

GAGE.--Tipping-bucket rain gage (no wind shields used) with satellite telemetry.

REMARKS.--Records good.

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum daily rainfall, 1.63 inches, May 25, 1999.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum daily rainfall, 0.68 inches, Aug. 13.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	.00	.00	.00	.00	.41	.00
2	---	---	---	---	---	---	.00	.00	.00	.00	.00	.00
3	---	---	---	---	---	---	.00	.00	.00	.00	.00	.00
4	---	---	---	---	---	---	.00	.00	.00	.00	.15	.00
5	---	---	---	---	---	---	.00	.30	.00	.00	.00	.00
6	---	---	---	---	---	---	.00	.00	.00	.00	.00	.00
7	---	---	---	---	---	---	.00	.00	.00	.00	.00	.28
8	---	---	---	---	---	---	.00	.00	.22	.28	.00	.39
9	---	---	---	---	---	---	.00	.00	.00	.00	.00	.00
10	---	---	---	---	---	---	.00	.00	.00	.00	.00	.00
11	---	---	---	---	---	---	---	.00	.00	.00	.00	.00
12	---	---	---	---	---	---	---	.00	.00	.48	.00	.00
13	---	---	---	---	---	---	.00	.00	.46	.00	.68	.00
14	---	---	---	---	---	---	.00	.00	.24	.41	.54	.00
15	---	---	---	---	---	---	.00	.00	.00	.00	.00	.00
16	---	---	---	---	---	---	.00	.00	.00	.00	.00	.00
17	---	---	---	---	---	---	.00	.32	.00	.00	.00	.00
18	---	---	---	---	---	---	.00	.00	.00	.00	.00	.00
19	---	---	---	---	---	---	.00	.00	.00	.00	.00	.00
20	---	---	---	---	---	---	.00	.00	.00	.00	.00	.00
21	---	---	---	---	---	---	.00	.22	.00	.00	.42	.00
22	---	---	---	---	---	---	.00	.00	.00	.00	.00	.00
23	---	---	---	---	---	---	.00	.00	.00	.00	.00	.00
24	---	---	---	---	---	---	.00	.00	.00	.00	.00	.00
25	---	---	---	---	---	---	.00	.00	.00	.00	.00	.00
26	---	---	---	---	---	---	.00	.00	.00	.00	.00	.00
27	---	---	---	---	---	---	.00	.00	.00	.00	.00	.00
28	---	---	---	---	---	---	.00	.00	.00	.00	.00	.00
29	---	---	---	---	---	---	.00	.00	.00	.00	.00	.00
30	---	---	---	---	---	---	.00	.00	.00	.00	.00	.00
31	---	---	---	---	---	---	---	.00	---	.16	.00	---
TOTAL	---	---	---	---	---	---	---	0.84	0.92	1.33	2.20	0.67

## PLATTE RIVER BASIN

06708800 EAST PLUM CREEK BELOW HASKINS GULCH NEAR CASTLE ROCK, CO

LOCATION.--Lat 39°25'28", long 104°54'27", in SE<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec.20, T.7 S., R.67 W., Douglas County, Hydrologic Unit 10190002, on right bank at the Plum Creek Wastewater Treatment Plant, 0.1 mi southeast of Happy Canyon Road, 3.0 mi east of Sedalia, and 3.6 mi northwest of Castle Rock.

DRAINAGE AREA.--117 mi<sup>2</sup>.

PERIOD OF RECORD.--April 1999 to current year.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 5,940 ft above sea level, from topographic map.

REMARKS.--Records poor. Diversions upstream from station 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 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.0	8.1	3.7	6.1	15	4.8	11	e11	17	1.9	1.3	1.2
2	5.8	8.2	3.6	6.2	20	5.3	8.4	e11	15	1.7	2.0	.88
3	5.3	6.9	3.4	6.5	13	5.1	8.3	e16	15	1.8	1.3	.68
4	5.9	7.1	4.4	7.2	8.0	5.1	7.7	e17	13	1.8	1.2	.61
5	6.1	8.8	3.6	7.3	7.9	5.3	11	68	19	1.9	1.2	.64
6	7.4	8.5	5.1	7.4	8.0	5.8	9.8	17	18	1.9	1.1	e.56
7	7.5	8.3	5.6	7.2	6.8	5.8	9.8	22	11	2.1	1.1	e5.2
8	7.6	8.5	5.0	5.1	4.6	4.3	9.1	28	16	2.1	1.2	21
9	7.4	7.7	5.6	6.0	6.0	3.8	8.7	25	13	2.1	2.1	e8.9
10	7.6	7.7	5.7	7.2	8.5	5.7	8.8	27	11	2.2	1.9	e2.9
11	8.5	7.9	4.7	6.9	9.1	7.9	18	26	7.9	2.3	2.0	e1.8
12	9.5	7.6	4.3	7.8	5.7	6.0	19	25	8.1	2.2	1.6	e1.3
13	9.1	5.8	4.4	7.5	7.3	6.8	18	23	14	5.9	1.4	e.65
14	10	6.2	5.9	7.6	5.5	7.8	19	23	10	12	2.0	e.83
15	9.6	6.3	5.3	8.9	4.7	7.4	20	21	8.7	5.3	1.9	e.92
16	7.6	4.3	3.4	6.4	4.6	6.3	25	22	7.2	3.6	1.7	e1.6
17	7.3	4.2	3.8	5.4	5.7	7.1	25	24	9.4	3.6	1.6	e6.8
18	7.2	5.0	3.2	7.0	5.0	7.4	26	26	6.3	1.9	1.6	e7.1
19	6.8	5.3	3.9	7.4	5.1	6.5	27	26	6.5	1.4	1.3	e4.8
20	7.0	5.1	3.9	6.0	6.3	6.3	29	27	5.8	1.3	1.4	e6.5
21	8.1	4.9	2.7	6.1	6.9	5.6	29	29	4.9	e1.0	1.3	e6.0
22	8.9	5.0	3.9	5.8	7.1	6.9	31	26	5.1	1.1	1.6	e4.2
23	7.9	5.2	3.9	3.8	5.8	6.5	e29	25	4.5	e1.4	1.7	e5.1
24	6.7	4.9	4.0	4.5	7.1	8.4	e28	24	4.4	2.8	1.3	e4.9
25	7.2	5.4	3.6	3.9	6.3	9.6	e26	19	3.2	3.1	1.6	e2.4
26	7.2	4.8	3.5	7.1	5.5	10	e25	19	2.3	2.0	1.5	e3.4
27	6.0	5.3	4.6	6.8	5.5	8.5	e24	19	2.1	1.7	.96	e3.4
28	6.5	5.0	5.6	7.5	5.4	8.8	e26	20	2.3	1.6	.79	e2.5
29	7.6	3.9	6.0	9.3	---	9.2	e18	21	2.2	1.3	1.3	e3.8
30	8.0	3.9	6.8	9.8	---	9.4	e11	21	1.9	1.3	.94	e5.1
31	8.4	---	6.3	11	---	10	---	22	---	1.4	1.3	---
TOTAL	230.7	185.8	139.4	212.7	206.4	213.4	565.6	730	264.8	77.7	45.19	115.67
MEAN	7.44	6.19	4.50	6.86	7.37	6.88	18.9	23.5	8.83	2.51	1.46	3.86
MAX	10	8.8	6.8	11	20	10	31	68	19	12	2.1	21
MIN	5.0	3.9	2.7	3.8	4.6	3.8	7.7	11	1.9	1.0	.79	.56
AC-FT	458	369	276	422	409	423	1120	1450	525	154	90	229

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2001, BY WATER YEAR (WY)

	1999	2000	2001	1999	2000	2001	1999	2000	2001	1999	2000	2001
MEAN	9.24	8.83	7.57	8.43	8.22	10.9	25.1	52.4	26.5	9.55	11.9	8.51
MAX	11.0	11.5	10.6	10.0	9.04	15.0	31.4	109	61.2	21.6	29.0	14.6
(WY)	2000	2000	2000	2000	2000	2000	2000	1999	1999	1999	1999	1999
MIN	7.44	6.19	4.50	6.86	7.37	6.88	18.9	23.5	8.83	2.51	1.46	3.86
(WY)	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR
ANNUAL TOTAL	4084.69	2987.36				
ANNUAL MEAN	11.2	8.18				
HIGHEST ANNUAL MEAN			10.3			
LOWEST ANNUAL MEAN			12.4			2000
HIGHEST DAILY MEAN	41	Apr 30	8.18			2001
LOWEST DAILY MEAN	.86	Aug 11	410	May 5		Apr 30 1999
ANNUAL SEVEN-DAY MINIMUM	1.1	Aug 6	e.56	Sep 6		Sep 6 2001
MAXIMUM PEAK FLOW			.84	Aug 31		Aug 31 2001
MAXIMUM PEAK STAGE			184	May 5		Apr 30 1999
ANNUAL RUNOFF (AC-FT)	8100	5930	666	May 5		Apr 30 1999
10 PERCENT EXCEEDS	27	20	7.13			
50 PERCENT EXCEEDS	8.0	6.1				
90 PERCENT EXCEEDS	3.3	1.6	2.1			

e Estimated.



## PLATTE RIVER BASIN

06709530 PLUM CREEK AT TITAN ROAD NEAR LOUVIERS, CO

LOCATION.--Lat 39°30'27", long 105°01'26", on line between sec.20 and sec.29, T.6 S., R.68 W., Douglas County, Hydrologic Unit 10190002, on left bank, on downstream side of bridge on Titan Road, 2.4 mi north of Louviers.

DRAINAGE AREA.--315 mi<sup>2</sup>.

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

REVISED RECORDS.--WDR CO-86-1: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 5,520 ft above sea level, from topographic map. Prior to July 10, 1996, at same site, but different datum.

REMARKS.--Records poor. Diversions upstream from station 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 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	18	15	8.2	10	12	e25	41	58	3.1	e.18	.00
2	9.2	20	e12	11	14	12	e26	42	56	2.7	e.15	.00
3	8.8	17	e16	9.7	e14	12	e26	55	53	2.1	e.12	.00
4	8.8	14	13	14	e11	13	e28	59	50	1.5	e.09	.00
5	8.3	22	12	13	e11	11	e25	122	42	.92	e.04	.00
6	12	24	e9.9	e10	e12	11	e25	74	36	.27	.00	.00
7	12	14	13	e9.4	e12	13	e24	69	36	e.3	.00	.00
8	12	14	e8.7	e7.4	e9.4	14	e28	90	34	e.3	.00	.00
9	12	13	e11	e9.4	e4.6	15	e25	92	27	e.40	.00	.00
10	11	13	e12	e11	e8.6	16	e29	95	31	.56	.00	.00
11	9.2	15	e8.0	e5.3	e8.4	18	e33	100	34	.63	.00	.00
12	7.5	22	e10	e6.5	e9.2	21	e35	122	26	1.3	.00	.00
13	6.5	21	e11	e8.6	e11	22	e36	111	33	1.1	.00	.00
14	5.8	13	e13	e6.0	e8.7	17	34	98	56	3.4	.00	.00
15	6.6	20	e14	e10	e8.7	19	32	137	47	11	.00	.00
16	6.1	e15	e10	e11	e10	22	32	112	31	4.7	.00	.00
17	5.9	e14	e7.0	e12	e11	23	31	86	21	4.3	.00	.00
18	6.1	e15	e5.9	e15	e9.4	17	32	78	17	3.9	.00	.00
19	8.1	17	e9.4	e16	11	20	38	71	10	3.4	.00	.00
20	9.7	13	e8.8	e12	13	14	46	66	9.8	2.8	.00	.00
21	11	20	e11	e10	15	15	50	77	11	2.2	.00	.00
22	11	11	18	e10	15	e14	67	68	7.5	1.5	.00	.00
23	12	15	e12	e7.5	14	e17	60	71	5.0	.99	.00	.00
24	11	13	e11	e5.4	11	e29	47	71	4.8	1.2	.00	.00
25	9.6	9.8	e11	e6.3	11	e23	53	64	4.6	.48	.00	.00
26	8.6	13	8.6	e7.7	12	e18	52	74	4.5	.79	.00	.00
27	8.1	19	7.9	e7.6	11	e19	46	77	4.4	.55	.00	.00
28	9.6	17	e12	e8.6	e10	e19	51	70	4.0	e.42	.00	.00
29	12	13	9.7	8.9	---	e18	48	64	3.5	e.35	.00	.00
30	15	11	11	10	---	e24	43	64	3.2	e.29	.00	.00
31	16	---	e13	10	---	e25	---	66	---	e.22	.00	---
TOTAL	300.5	475.8	344.9	297.5	306.0	543	1127	2486	760.3	57.67	0.58	0.00
MEAN	9.69	15.9	11.1	9.60	10.9	17.5	37.6	80.2	25.3	1.86	.019	.000
MAX	16	24	18	16	15	29	67	137	58	11	.18	.00
MIN	5.8	9.8	5.9	5.3	4.6	11	24	41	3.2	.22	.00	.00
AC-FT	596	944	684	590	607	1080	2240	4930	1510	114	1.2	.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984 - 2001, BY WATER YEAR (WY)

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
MEAN	12.4	17.3	14.8	14.2	16.8	26.3	72.4	168	49.4	16.5	16.5	6.35						
MAX	71.8	75.9	44.3	32.1	42.7	62.1	184	779	135	66.5	63.4	31.1						
(WY)	1985	1985	1985	1998	1988	1988	1988	1988	1984	1984	1984	1984						
MIN	.000	2.15	4.40	4.86	5.14	6.55	18.9	10.4	5.89	.002	.000	.000						
(WY)	1995	1995	1996	1991	1990	1995	1996	1989	1990	1993	1993	1990						

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1984 - 2001
ANNUAL TOTAL	8133.48	6699.25	
ANNUAL MEAN	22.2	18.4	32.0
HIGHEST ANNUAL MEAN			73.6
LOWEST ANNUAL MEAN			7.84
HIGHEST DAILY MEAN	92	Apr 30	137
LOWEST DAILY MEAN	.00	Aug 4	.00
ANNUAL SEVEN-DAY MINIMUM	.00	Aug 4	.00
MAXIMUM PEAK FLOW		325	May 5
MAXIMUM PEAK STAGE		8.11	May 5
ANNUAL RUNOFF (AC-FT)	16130	13290	23220
10 PERCENT EXCEEDS	63	52	70
50 PERCENT EXCEEDS	16	11	14
90 PERCENT EXCEEDS	.20	.00	.00

e Estimated.

a No flow many days, most years.

b From rating curve extended above 450 ft<sup>3</sup>/s.

c Maximum gage height, 10.63 ft, Jun 28, 1995, datum then in use.

06710247 SOUTH PLATTE RIVER BELOW UNION AVENUE, AT ENGLEWOOD, CO

LOCATION.--Lat 39°37'57", long 105°00'52", in SW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec.9, T.5 S., R.68 W., Arapahoe County, Hydrologic Unit 10190002, on right bank 100 ft downstream from Englewood Water Treatment Plant, 200 ft downstream from Union Avenue bridge in Englewood, and 7.7 mi downstream from Chatfield Dam.

DRAINAGE AREA.--3,043 mi<sup>2</sup>.

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

GAGE.--Water-stage recorder with satellite telemetry and concrete control. Elevation of gage is 5,290 ft above sea level, from topographic map.

REMARKS.--Records fair. Flow regulated by Chatfield Reservoir (station 06709600) 7.7 mi upstream. Diversions for municipal use by City of Englewood 100 ft 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.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	93	36	26	79	33	74	75	62	154	204	132	83
2	81	29	25	74	36	76	79	62	42	384	127	47
3	34	28	26	65	38	83	75	113	47	366	114	32
4	36	29	25	67	35	83	62	190	64	328	137	31
5	35	76	14	67	37	80	62	524	116	319	106	41
6	32	49	21	67	41	66	51	304	101	229	148	44
7	39	44	21	66	41	63	37	239	166	237	172	26
8	40	40	17	64	47	63	38	213	263	345	188	133
9	42	39	16	64	63	65	40	256	247	245	153	52
10	39	33	15	65	94	86	24	343	230	203	119	38
11	37	32	13	63	108	93	189	324	233	228	212	32
12	35	31	12	65	115	85	207	272	252	84	200	28
13	35	30	11	64	135	96	139	192	331	100	141	51
14	31	29	13	62	131	90	60	183	285	163	90	72
15	31	33	19	63	143	82	55	161	246	e198	153	74
16	32	32	42	67	131	77	48	179	214	e107	193	72
17	30	34	47	65	96	62	66	188	223	88	104	85
18	28	36	46	67	95	61	66	187	178	115	42	113
19	29	35	50	69	99	61	69	183	101	48	38	111
20	33	33	50	69	95	62	69	192	115	68	36	88
21	42	27	52	72	94	58	71	201	128	135	34	52
22	55	27	54	70	90	56	119	171	53	123	41	65
23	57	27	55	69	89	54	104	153	56	292	58	61
24	58	27	55	67	90	52	120	133	86	215	31	61
25	60	26	55	69	89	53	82	127	208	226	36	58
26	58	26	62	63	82	66	76	147	287	225	52	53
27	46	27	75	35	71	61	75	215	161	225	52	34
28	37	39	75	35	69	63	76	222	56	170	49	26
29	37	31	76	36	---	63	75	202	49	76	57	75
30	36	30	77	34	---	70	68	137	109	78	78	24
31	36	---	79	33	---	76	---	130	---	95	132	---
TOTAL	1314	1015	1224	1915	2287	2180	2377	6205	4801	5919	3225	1762
MEAN	42.4	33.8	39.5	61.8	81.7	70.3	79.2	200	160	191	104	58.7
MAX	93	76	79	79	143	96	207	524	331	384	212	133
MIN	28	26	11	33	33	52	24	62	42	48	31	24
AC-FT	2610	2010	2430	3800	4540	4320	4710	12310	9520	11740	6400	3490

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2001, BY WATER YEAR (WY)

	1996	1997	1998	1999	2000	2001
MEAN	63.1	55.8	44.2	46.9	54.4	64.5
MAX	111	83.5	76.4	73.6	81.7	112
(WY)	1999	1998	1998	1998	2001	1998
MIN	30.5	28.5	14.7	12.7	20.0	27.1
(WY)	1997	1999	1999	1997	1999	1996

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1996 - 2001

ANNUAL TOTAL	39382	34224		
ANNUAL MEAN	108	93.8	184	
HIGHEST ANNUAL MEAN			293	1999
LOWEST ANNUAL MEAN			93.8	2001
HIGHEST DAILY MEAN	671	Jul 17	524	May 5
LOWEST DAILY MEAN	11	Dec 13	11	Dec 13
ANNUAL SEVEN-DAY MINIMUM	14	Dec 8	14	Dec 8
MAXIMUM PEAK FLOW			1540	Jul 23
MAXIMUM PEAK STAGE			13.68	Jul 23
ANNUAL RUNOFF (AC-FT)	78110	67880	133300	
10 PERCENT EXCEEDS	249	210	434	
50 PERCENT EXCEEDS	70	67	76	
90 PERCENT EXCEEDS	27	31	18	

e Estimated.

## PLATTE RIVER BASIN

06710385 BEAR CREEK ABOVE EVERGREEN, CO

LOCATION (REVISED).--Lat 39°37'58", long 105°20'10", in SE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec.9, T.5 S., R.71 W., Jefferson County, Hydrologic Unit 10190002, on right bank 0.9 mi upstream from Evergreen Lake dam at Evergreen.

DRAINAGE AREA.--104 mi<sup>2</sup>.

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

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage 7,080 ft (revised) above sea level, from topographic map. Prior to May 1, 1986, at site 800 ft downstream at different datum.. May 1, 1986 to Apr 2, 2001, at site 600 ft downstream at different datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. Natural flow of stream affected by small 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 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e16	e18	e11	e7.9	e7.9	e12	15	40	47	26	30	33
2	e17	e17	e11	e7.9	e8.0	e12	17	55	48	26	42	28
3	e17	e18	e11	e7.8	e8.2	e12	17	37	48	26	49	26
4	e20	e13	e11	e7.8	e8.3	e13	18	33	45	24	35	26
5	e26	e15	e11	e7.7	e8.4	e13	20	34	40	23	48	26
6	e28	e15	e10	e7.6	e8.6	e13	18	40	39	28	40	25
7	e30	e11	e10	e7.6	e8.7	e13	15	49	39	28	36	27
8	e32	e13	e10	e7.6	e8.9	e14	16	55	42	30	33	31
9	e36	e17	e10	e7.5	e9.0	e14	15	68	49	70	42	32
10	e38	e15	e10	e7.4	e9.1	e14	16	79	43	53	44	39
11	e40	e14	e10	e7.3	e9.3	e14	e15	86	39	83	46	33
12	e33	e17	e10	e7.2	e9.4	e14	15	86	38	72	39	29
13	e19	e14	e9.8	e7.2	e9.5	e15	13	86	41	95	43	28
14	e15	e14	e9.7	e7.1	e9.6	e15	16	88	43	109	47	33
15	e15	e14	e9.5	e7.0	e9.7	e15	17	88	39	83	50	29
16	e16	e13	e9.4	e7.0	e9.7	e15	18	99	35	69	52	27
17	e16	e13	e9.3	e6.9	e9.8	e16	17	93	33	60	45	27
18	e16	e13	e9.1	e6.8	e10	e16	22	79	31	55	38	27
19	e16	e13	e9.1	e6.8	e10	e16	26	75	31	52	35	26
20	e15	e13	e9.0	e6.8	e10	e16	25	68	33	50	37	24
21	e15	e12	e9.0	e6.8	e11	e16	20	63	31	47	43	23
22	e16	e12	e8.9	e6.8	e11	e16	19	51	31	45	38	23
23	e18	e12	e8.7	e6.9	e11	e16	20	48	31	44	40	23
24	e20	e12	e8.6	e6.9	e11	e16	23	51	29	49	34	23
25	e18	e12	e8.5	e7.0	e11	e15	26	49	32	46	32	22
26	e18	e12	e8.4	e7.1	e11	e14	31	52	31	40	32	21
27	e17	e12	e8.3	e7.2	e12	e13	31	55	34	45	30	20
28	e15	e12	e8.3	e7.3	e12	e13	35	58	32	42	29	20
29	e16	e12	e8.2	e7.5	---	e13	35	62	29	35	29	20
30	e16	e12	e8.1	e7.6	---	e13	43	54	26	31	28	21
31	e19	---	e8.0	e7.8	---	13	---	47	---	30	29	---
TOTAL	649	410	292.9	225.8	272.1	440	634	1928	1109	1516	1195	792
MEAN	20.9	13.7	9.45	7.28	9.72	14.2	21.1	62.2	37.0	48.9	38.5	26.4
MAX	40	18	11	7.9	12	16	43	99	49	109	52	39
MIN	15	11	8.0	6.8	7.9	12	13	33	26	23	28	20
AC-FT	1290	813	581	448	540	873	1260	3820	2200	3010	2370	1570

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1985 - 2001, BY WATER YEAR (WY)

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
MEAN	29.0	23.4	16.5	13.7	12.9	16.2	36.4	98.9	104	61.1	53.7	34.5					
MAX	85.1	56.2	32.8	19.6	18.2	26.7	89.7	238	280	134	129	54.2					
(WY)	1985	1985	1985	1998	1996	1992	1987	1998	1995	1995	1999	1997					
MIN	16.0	9.65	8.67	7.28	8.68	9.57	13.9	44.1	31.3	27.5	20.1	17.2					
(WY)	1995	1993	1995	2001	1994	1995	1991	1993	2000	1994	1994	1994					

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1985 - 2001
ANNUAL TOTAL	8523.9	9463.8	
ANNUAL MEAN	23.3	25.9	41.9
HIGHEST ANNUAL MEAN			70.5
LOWEST ANNUAL MEAN			22.5
HIGHEST DAILY MEAN	109	109	421
LOWEST DAILY MEAN	e8.0	e6.8	e6.8
ANNUAL SEVEN-DAY MINIMUM	e8.3	e6.8	e6.8
MAXIMUM PEAK FLOW		210	573
MAXIMUM PEAK STAGE		5.96	a5.39
ANNUAL RUNOFF (AC-FT)	16910	18770	30320
10 PERCENT EXCEEDS	41	49	91
50 PERCENT EXCEEDS	18	18	26
90 PERCENT EXCEEDS	12	8.2	11

e Estimated.

a Maximum gage height, 5.96 ft, Jul 13, 2001, present site and datum.

06710500 BEAR CREEK AT MORRISON, CO

LOCATION.--Lat 39°39'11", long 105°11'43", in SE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec.35, T.4 S., R.70 W., Jefferson County, Hydrologic Unit 10190002, on left bank at Morrison, 180 ft upstream from bridge on State Highway 8, and 0.2 mi upstream from Mount Vernon Creek.

DRAINAGE AREA.--164 mi<sup>2</sup>.

PERIOD OF RECORD.--September 1887 to September 1891, May 1895 to December 1901, February 1902 (gage heights only), October 1919 to current year. No winter records for water years 1888-90, 1896, 1898, 1900. Monthly discharge only for some periods, published in WSP 1310. Published as "near Morrison" 1900-1902, as "at Starbuck" 1919-28, and as "at Idledale" 1929-34. Water-quality data available, October 1976 to September 1981.

REVISED RECORDS.--WSP 976: 1942. WSP 1310: 1888, 1890-91, 1898, 1935(M). WSP 1730: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 5,780.43 ft above sea level. See WSP 1710 or 1730 for history of changes prior to Oct. 1, 1934. Oct. 1, 1934 to Oct. 10, 1961, water-stage recorder at site 80 ft downstream at present datum.

REMARKS.--Records good except for period Mar. 1-14, and estimated daily discharges, which are poor. Small diversions for irrigation of about 1,000 acres 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 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	18	17	e13	e12	e10	12	19	46	46	23	35	39
2	16	15	e13	e12	e10	12	22	57	46	22	44	33
3	15	15	e12	e12	e10	12	24	48	48	22	54	29
4	15	15	e12	e11	e10	12	26	44	52	21	39	27
5	16	16	e12	e12	e11	12	27	58	48	19	49	26
6	17	15	e12	e12	e11	13	26	60	43	24	43	27
7	17	12	e13	e13	e11	14	22	72	42	28	39	27
8	17	14	e14	e13	e11	14	21	78	42	28	36	40
9	17	15	e15	e16	e11	14	19	86	44	60	59	40
10	17	16	e12	e15	e11	16	21	92	42	52	52	42
11	16	e14	e12	e12	e11	14	26	95	40	84	56	38
12	16	e12	e12	e13	e11	13	26	93	36	69	45	33
13	15	e12	e12	e13	e11	13	20	91	39	79	48	30
14	16	e12	e12	e13	e11	15	24	90	46	99	58	36
15	16	e12	e13	e12	e11	14	24	89	39	84	57	35
16	16	e12	e13	e12	e11	14	27	91	33	70	57	32
17	17	e12	e13	e12	e11	15	24	90	30	62	50	31
18	16	e13	e14	e12	e11	13	33	85	27	55	42	31
19	16	15	e14	e12	e11	14	37	78	26	51	40	28
20	16	15	e14	e11	e12	17	39	78	29	49	42	26
21	16	15	e13	e11	e12	16	32	81	28	46	46	25
22	16	17	e13	e11	e12	20	42	72	26	45	42	26
23	17	17	e13	e12	e12	23	33	63	25	43	45	25
24	17	16	e13	e11	e13	23	40	62	24	51	40	24
25	17	16	e13	e11	e13	19	43	61	26	48	37	23
26	17	17	e13	e10	e13	21	45	59	26	42	37	23
27	16	14	e13	e10	e12	20	45	56	31	45	36	21
28	16	14	e13	e10	e12	19	49	61	28	43	34	21
29	17	e14	e13	e10	---	19	48	65	25	39	34	21
30	16	e14	e13	e10	---	17	51	56	22	35	32	21
31	16	---	e13	e10	---	19	---	53	---	33	34	---
TOTAL	506	433	400	366	316	489	935	2210	1059	1471	1362	880
MEAN	16.3	14.4	12.9	11.8	11.3	15.8	31.2	71.3	35.3	47.5	43.9	29.3
MAX	18	17	15	16	13	23	51	95	52	99	59	42
MIN	15	12	12	10	10	12	19	44	22	19	32	21
AC-FT	1000	859	793	726	627	970	1850	4380	2100	2920	2700	1750

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1900 - 2001, BY WATER YEAR (WY)

MEAN	31.1	23.6	17.1	13.9	14.4	20.3	53.5	148	137	72.2	64.5	43.6
MAX	115	86.7	57.0	34.0	36.0	48.3	296	525	551	249	307	371
(WY)	1985	1924	1924	1924	1924	1960	1942	1973	1949	1949	1923	1938
MIN	9.52	9.59	7.31	5.19	4.00	4.00	13.1	12.4	11.5	5.72	6.58	5.41
(WY)	1935	1957	1940	1950	1933	1933	1982	1963	1954	1963	1978	1978

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1900 - 2001
ANNUAL TOTAL	8548.8	10427	
ANNUAL MEAN	23.4	28.6	52.8
HIGHEST ANNUAL MEAN			125
LOWEST ANNUAL MEAN			14.6
HIGHEST DAILY MEAN	80	Jul 17	1410
LOWEST DAILY MEAN	9.8	Aug 11	a.80
ANNUAL SEVEN-DAY MINIMUM	11	Aug 7	3.0
MAXIMUM PEAK FLOW			e8600
MAXIMUM PEAK STAGE		5.16	Jul 13
ANNUAL RUNOFF (AC-FT)	16960	20680	38280
10 PERCENT EXCEEDS	42	57	120
50 PERCENT EXCEEDS	19	20	26
90 PERCENT EXCEEDS	13	12	11

e Estimated.  
a Result of freezeup.

## PLATTE RIVER BASIN

06710605 BEAR CREEK ABOVE BEAR CREEK LAKE NEAR MORRISON, CO

LOCATION.--Lat 39°39'08", long 105°10'23", in NW<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec.1, T.5 S. R.70 W., Jefferson County, Hydrologic Unit 10190002, on right bank, 0.9 mi downstream from Strain Gulch, 1.0 mi east of Morrison, and 1.1 mi downstream from Mt. Vernon Creek.

DRAINAGE AREA.--176 mi<sup>2</sup>.

PERIOD OF RECORD.--May 1986 to current year.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage 5,645 ft above sea level, from topographic map. Prior to Apr. 21, 1989, at datum 3.37 ft higher.

REMARKS.--Records good except for estimated daily discharges, which are poor. Natural flow of stream affected by diversions to Harriman Canal, and Ward Canal, 0.7 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.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	7.8	.79	16	14	12	13	32	31	11	11	14
2	9.2	2.5	6.2	14	11	12	13	42	30	10	19	10
3	7.0	3.0	1.8	14	11	11	11	37	31	9.8	31	7.6
4	7.4	2.9	2.3	12	10	11	11	35	32	9.9	15	6.6
5	8.3	4.2	2.1	13	11	7.8	12	56	20	8.1	26	7.2
6	9.9	4.1	1.9	14	11	5.0	10	59	8.5	14	20	8.9
7	e11	1.1	6.4	14	e12	6.2	8.2	72	14	19	15	8.3
8	10	1.6	8.7	13	e13	6.9	7.3	75	19	15	10	22
9	9.7	1.6	10	16	e13	7.3	6.5	81	24	44	38	23
10	10	4.1	8.9	15	e13	7.7	7.4	83	22	33	34	24
11	9.7	4.2	e9.4	12	e11	7.1	22	82	18	62	37	17
12	8.9	.78	e9.4	13	e9.4	3.8	25	79	15	52	27	13
13	8.2	.66	e9.8	13	e9.7	3.4	18	77	19	70	28	11
14	8.8	.62	e10	14	e16	5.2	22	74	27	101	39	16
15	9.1	1.4	e8.4	12	e14	6.7	22	73	17	70	39	14
16	8.7	2.7	e7.5	14	e11	3.1	18	76	11	60	40	12
17	10	1.2	8.1	e14	e9.4	3.5	13	75	8.8	53	31	11
18	10	2.6	e12	e12	e11	2.0	18	70	6.7	41	24	15
19	9.4	2.2	8.7	e9.5	12	2.1	21	61	8.7	31	19	15
20	9.5	2.1	e7.8	e11	12	5.6	22	60	13	28	20	13
21	9.4	2.1	e6.9	11	13	4.7	17	61	12	24	27	11
22	10	2.0	e10	11	14	8.4	25	51	10	22	22	7.8
23	14	1.6	15	11	13	9.8	17	42	11	19	26	5.9
24	13	2.4	13	10	13	13	24	38	10	29	19	5.5
25	13	3.4	14	11	13	11	26	37	11	26	15	5.4
26	11	2.7	e15	9.7	12	13	31	38	12	19	14	5.4
27	8.2	2.4	e12	11	e11	13	33	39	15	23	13	4.9
28	8.8	1.8	16	10	e12	12	35	43	9.8	22	11	3.4
29	9.5	1.2	15	10	---	12	36	50	7.3	15	10	2.7
30	7.8	3.5	16	11	---	10	37	40	9.2	10	9.9	2.6
31	10	---	13	10	---	12	---	35	---	11	10	---
TOTAL	301.5	74.46	286.09	381.2	335.5	248.3	581.4	1773	483.0	961.8	699.9	323.2
MEAN	9.73	2.48	9.23	12.3	12.0	8.01	19.4	57.2	16.1	31.0	22.6	10.8
MAX	14	7.8	16	16	16	13	37	83	32	101	40	24
MIN	7.0	.62	.79	9.5	9.4	2.0	6.5	32	6.7	8.1	9.9	2.6
AC-FT	598	148	567	756	665	493	1150	3520	958	1910	1390	641

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1986 - 2001, BY WATER YEAR (WY)

	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
MEAN	16.9	17.0	18.4	16.7	16.0	18.7	50.2	129	114	45.7	37.7	20.8				
MAX	38.8	44.9	33.8	32.3	25.1	47.0	191	382	512	216	127	58.7				
(WY)	1998	1998	1998	1998	1998	1998	1998	1998	1995	1995	1999	1997				
MIN	4.34	.38	9.23	1.69	.23	1.26	2.83	6.95	7.44	5.23	2.80	4.17				
(WY)	1990	1990	2001	1995	1995	1995	1989	1989	2000	1989	1989	1989				

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR
ANNUAL TOTAL	5148.83	6449.35				
ANNUAL MEAN	14.1	17.7				
HIGHEST ANNUAL MEAN			42.6			
LOWEST ANNUAL MEAN			96.1			1995
HIGHEST DAILY MEAN			10.4			1989
LOWEST DAILY MEAN			684			Jun 18 1995
HIGHEST DAILY MEAN	62	Jul 17	101	Jul 14		
LOWEST DAILY MEAN	.62	Nov 14	.62	Nov 14	.10	Feb 23 1995
ANNUAL SEVEN-DAY MINIMUM	1.4	Nov 12	1.4	Nov 12	.16	Feb 22 1995
MAXIMUM PEAK FLOW			214	Jul 13	841	Jun 9 1995
MAXIMUM PEAK STAGE			5.21	Jul 13	6.45	Jun 9 1995
ANNUAL RUNOFF (AC-FT)	10210	12790	30830			
10 PERCENT EXCEEDS	26	38	92			
50 PERCENT EXCEEDS	10	12	20			
90 PERCENT EXCEEDS	3.3	3.5	4.1			

e Estimated.

PLATTE RIVER BASIN

06710992 TURKEY CREEK NEAR INDIAN HILLS, CO

LOCATION.--Lat 39°37'03", long 105°13'24", in SE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec.16, T.5 S., R.70 W., Jefferson County, Hydrologic Unit 10190002, on left bank 0.5 mi downstream from Parmalee Gulch and 1.0 mi east of Indian Hills.

DRAINAGE AREA.--45.9 mi<sup>2</sup>.

PERIOD OF RECORD.--April to September 2001.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 6,620 ft above sea level, from topographic map.

REMARKS.--No estimated daily discharges. Records good.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period April to September, 64 ft<sup>3</sup>/s, May 7, gage height, 4.77 ft; minimum daily, 0.11 ft<sup>3</sup>/s, Aug. 8.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	8.7	6.3	.26	.47	.45
2	---	---	---	---	---	---	---	8.5	5.6	.19	1.2	.46
3	---	---	---	---	---	---	---	9.9	5.3	.23	.85	.34
4	---	---	---	---	---	---	---	11	5.8	.23	.50	.23
5	---	---	---	---	---	---	---	16	6.0	.23	.31	.18
6	---	---	---	---	---	---	---	27	4.9	.22	.19	.15
7	---	---	---	---	---	---	---	39	4.9	.48	.13	.21
8	---	---	---	---	---	---	---	41	4.8	.36	.11	1.4
9	---	---	---	---	---	---	---	37	4.0	.82	6.9	1.8
10	---	---	---	---	---	---	---	34	3.4	.76	7.0	1.5
11	---	---	---	---	---	---	---	31	2.8	.71	5.8	1.0
12	---	---	---	---	---	---	---	27	2.2	.74	2.6	.72
13	---	---	---	---	---	---	4.9	23	4.5	2.2	1.8	.60
14	---	---	---	---	---	---	5.6	21	6.8	3.3	1.9	.77
15	---	---	---	---	---	---	8.2	19	4.4	3.2	2.7	.92
16	---	---	---	---	---	---	9.4	17	3.1	1.4	2.1	.76
17	---	---	---	---	---	---	9.7	18	2.2	.78	1.6	.74
18	---	---	---	---	---	---	11	18	1.7	.49	1.3	.78
19	---	---	---	---	---	---	11	15	1.2	.34	.97	.72
20	---	---	---	---	---	---	10	15	1.3	.25	.83	.60
21	---	---	---	---	---	---	9.6	18	1.4	.21	.83	.50
22	---	---	---	---	---	---	12	15	1.1	.14	1.6	.47
23	---	---	---	---	---	---	13	12	.96	.25	1.5	.44
24	---	---	---	---	---	---	15	10	.96	7.0	1.0	.41
25	---	---	---	---	---	---	15	9.3	.92	3.8	.75	.38
26	---	---	---	---	---	---	14	8.8	1.2	1.6	.61	.37
27	---	---	---	---	---	---	13	8.4	1.2	1.2	.49	.32
28	---	---	---	---	---	---	11	7.8	.93	.82	.40	.26
29	---	---	---	---	---	---	11	9.0	.55	.53	.32	.24
30	---	---	---	---	---	---	9.7	7.9	.42	.34	.24	.24
31	---	---	---	---	---	---	---	7.1	---	.21	.23	---
TOTAL	---	---	---	---	---	---	---	549.4	90.84	33.29	47.23	17.96
MEAN	---	---	---	---	---	---	---	17.7	3.03	1.07	1.52	.60
MAX	---	---	---	---	---	---	---	41	6.8	7.0	7.0	1.8
MIN	---	---	---	---	---	---	---	7.1	.42	.14	.11	.15
AC-FT	---	---	---	---	---	---	---	1090	180	66	94	36

## PLATTE RIVER BASIN

06710995 TURKEY CREEK AT MOUTH OF CANYON NEAR MORRISON, CO

LOCATION.--Lat 39°37'13", long 105°11'41", in NE<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec.14, T.5 S., R.70 W. , Jefferson County, Hydrologic Unit 10190002, on left bank 0.45 mi above county road 48, and 2.7 mi south of Morrison.

DRAINAGE AREA.--47.4 mi<sup>2</sup>.

PERIOD OF RECORD.--April 1998 to April 2001 (discontinued).

GAGE.--Water-stage recorder. Elevation of gage is 6,050 ft above sea level, from topographic map.

REMARKS.--Records poor. Natural flow of stream affected by several diversions for irrigation, upstream of 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 FOR PERIOD OF RECORD.--Maximum discharge, 248 ft<sup>3</sup>/s, May 25, 1999, gage height, 6.16 ft; minimum daily, no flow on many days.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period October to April 18, 21 ft<sup>3</sup>/s Apr. 18, gage height, 4.46 ft; minimum daily, 0.02 ft<sup>3</sup>/s, Oct. 13-21.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.06	.09	.36	.25	e.20	2.4	3.4	---	---	---	---	---
2	.05	.08	.30	.19	e.20	1.4	4.4	---	---	---	---	---
3	.03	.09	.30	.17	e.30	.72	4.9	---	---	---	---	---
4	.03	.08	.34	.15	e.50	1.1	4.9	---	---	---	---	---
5	.03	.10	.34	.16	e.20	.72	4.9	---	---	---	---	---
6	.04	.07	.38	.28	e.15	4.7	4.6	---	---	---	---	---
7	.06	.09	.46	.31	e.15	2.7	4.8	---	---	---	---	---
8	.07	.11	.49	.21	e.15	2.8	5.0	---	---	---	---	---
9	.06	.13	.48	.17	e.15	2.9	4.9	---	---	---	---	---
10	.06	.10	.47	.23	e.15	2.7	5.4	---	---	---	---	---
11	.06	.11	.50	e.20	e.15	2.7	5.1	---	---	---	---	---
12	.05	e.10	.43	e.20	e.15	3.4	6.8	---	---	---	---	---
13	.02	e.10	.45	e.20	e.15	3.8	6.7	---	---	---	---	---
14	.02	e.10	.49	e.20	e.20	3.7	8.7	---	---	---	---	---
15	.02	e.06	.50	e.20	e.25	4.8	11	---	---	---	---	---
16	.02	e.06	.49	e.20	.32	3.6	15	---	---	---	---	---
17	.02	e.10	.51	e.20	.76	2.6	11	---	---	---	---	---
18	.02	e.10	.45	e.20	1.7	2.2	15	---	---	---	---	---
19	.02	e.20	.41	e.20	e4.0	2.1	---	---	---	---	---	---
20	.02	e.30	.43	e.20	e4.8	2.1	---	---	---	---	---	---
21	.02	e.50	.42	e.20	e4.2	2.6	---	---	---	---	---	---
22	.03	e1.0	.41	e.20	e3.0	3.9	---	---	---	---	---	---
23	.07	e1.5	.40	e.20	2.2	5.1	---	---	---	---	---	---
24	.08	e1.2	.37	e.20	1.6	2.5	---	---	---	---	---	---
25	.06	e1.8	.35	e.20	1.6	.82	---	---	---	---	---	---
26	.04	e1.6	.31	e.20	2.0	2.4	---	---	---	---	---	---
27	.04	1.6	.30	e.20	2.0	3.9	---	---	---	---	---	---
28	.05	.46	.31	e.20	.75	3.4	---	---	---	---	---	---
29	.06	.36	.30	e.20	---	3.6	---	---	---	---	---	---
30	.06	.35	.28	e.20	---	3.3	---	---	---	---	---	---
31	.07	---	.27	e.20	---	3.1	---	---	---	---	---	---
TOTAL	1.34	12.62	12.30	6.32	31.98	87.76	---	---	---	---	---	---
MEAN	.043	.42	.40	.20	1.14	2.83	---	---	---	---	---	---
MAX	.08	1.8	.51	.31	4.8	5.1	---	---	---	---	---	---
MIN	.02	.07	.27	.15	.15	.72	---	---	---	---	---	---
AC-FT	2.7	25	24	13	63	174	---	---	---	---	---	---

e Estimated.

PLATTE RIVER BASIN

06711500 BEAR CREEK AT MOUTH, AT SHERIDAN, CO

LOCATION.--Lat 39°39'08", long 105°01'57", in NW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec.5, T.5 S., R.68 W., Arapahoe County, Hydrologic Unit 10190002, on left bank just downstream from bridge on road to Fort Logan Mental Health Center, at Highway Department maintenance building at northwest city limits of Sheridan, 1.3 mi upstream from mouth, and 2.1 mi west of city hall in Englewood.

DRAINAGE AREA.--260 mi<sup>2</sup>.

PERIOD OF RECORD.--April to November 1914, March 1927 to current year. Monthly discharge only prior to October 1933, published in WSP 1310. Published as "at Sheridan Junction" 1934-41.

REVISED RECORDS.--WSP 1730: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 5,295 ft above sea level, from topographic map. See WSP 1710 or 1730 for history of changes prior to Oct. 9, 1953. Oct. 9, 1953 to Aug. 6, 1969, water-stage recorder at present site at datum 1.0 ft higher.

REMARKS.--Records good except for estimated daily discharges, which are fair. Flow regulated by Bear Creek Lake since July 1979. Storage and diversions upstream from station for irrigation of about 12,000 acres.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	17	6.9	16	15	19	18	41	54	13	62	16
2	13	9.3	6.0	16	15	18	19	45	45	12	41	18
3	13	8.5	6.7	16	14	16	18	73	42	11	35	15
4	13	8.1	7.2	17	15	15	17	86	44	11	30	12
5	16	22	8.0	16	15	17	15	176	44	12	23	12
6	17	32	8.7	17	16	15	16	97	29	9.8	31	12
7	16	40	8.7	17	15	14	15	95	23	12	28	13
8	15	8.4	11	15	16	14	13	111	29	42	21	40
9	15	8.4	13	13	18	15	11	109	30	31	35	34
10	14	8.0	14	14	e17	21	12	106	31	61	53	30
11	14	8.4	13	15	e18	23	50	116	26	118	50	28
12	12	8.0	e12	15	19	19	43	114	23	93	41	22
13	13	7.7	12	15	18	15	32	114	42	91	33	20
14	14	7.5	12	14	19	15	26	110	45	102	43	23
15	14	7.4	11	14	e19	17	27	107	36	101	52	25
16	13	7.8	11	14	18	16	28	102	27	102	56	23
17	12	9.2	11	e15	18	15	25	109	21	63	50	23
18	13	9.1	11	e15	18	13	25	109	16	41	42	24
19	15	7.2	e12	e14	19	11	24	93	14	39	32	23
20	15	7.1	e14	13	19	11	24	95	18	41	26	21
21	16	6.8	e13	14	20	12	27	103	19	40	29	19
22	23	6.9	e12	14	20	13	60	87	17	40	34	16
23	20	6.8	14	16	21	16	42	71	17	55	35	15
24	19	6.7	16	17	20	18	35	61	15	37	31	14
25	17	6.5	16	15	19	20	38	54	15	40	26	12
26	15	6.4	17	13	19	23	36	53	15	33	20	11
27	15	6.3	16	13	19	23	35	53	18	33	19	12
28	16	6.3	16	14	17	22	37	51	19	31	18	12
29	16	6.3	17	15	---	23	40	72	15	27	16	12
30	16	6.5	16	14	---	21	41	68	13	20	15	10
31	17	---	17	14	---	18	---	59	---	16	15	---
TOTAL	470	306.6	379.2	460	496	528	849	2740	802	1377.8	1042	567
MEAN	15.2	10.2	12.2	14.8	17.7	17.0	28.3	88.4	26.7	44.4	33.6	18.9
MAX	23	40	17	17	21	23	60	176	54	118	62	40
MIN	12	6.3	6.0	13	14	11	11	41	13	9.8	15	10
AC-FT	932	608	752	912	984	1050	1680	5430	1590	2730	2070	1120

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1927 - 2001, BY WATER YEAR (WY)

MEAN	23.9	23.6	21.9	19.9	19.4	22.4	54.2	154	105	38.1	39.7	25.2
MAX	151	99.8	61.3	46.3	43.5	94.4	394	859	630	238	255	256
(WY)	1985	1985	1985	1970	1942	1960	1942	1973	1949	1983	1984	1938
MIN	1.52	3.53	8.21	3.85	5.09	5.35	3.33	1.16	1.67	1.77	3.05	1.82
(WY)	1955	1955	1951	1945	1945	1935	1935	1963	1966	1963	1954	1956

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1927 - 2001

ANNUAL TOTAL	8132.8	10017.6	
ANNUAL MEAN	22.2	27.4	46.1
HIGHEST ANNUAL MEAN			157
LOWEST ANNUAL MEAN			6.53
HIGHEST DAILY MEAN	103	Apr 30	4020
LOWEST DAILY MEAN	4.5	Jun 11	.00
ANNUAL SEVEN-DAY MINIMUM	5.3	Jun 10	.33
MAXIMUM PEAK FLOW			a8150
MAXIMUM PEAK STAGE			10.50
ANNUAL RUNOFF (AC-FT)	16130	19870	33390
10 PERCENT EXCEEDS	41	55	98
50 PERCENT EXCEEDS	18	17	17
90 PERCENT EXCEEDS	6.8	11	6.0

e Estimated.

a Present datum, from floodmarks, from rating curve extended above 3400 ft<sup>3</sup>/s.

## PLATTE RIVER BASIN

06711565 SOUTH PLATTE RIVER AT ENGLEWOOD, CO

LOCATION.--Lat 39°39'54", long 105°00'13", in NW<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec.33, T.4 S., R.68 W., Arapahoe County, Hydrologic Unit 10190002, on right bank, 0.3 mi downstream from Dartmouth Ave bridge at Englewood, and 1.4 mi downstream from Bear Creek.

DRAINAGE AREA.--3,387 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 5,250 ft above sea level, from topographic map.

REMARKS.--No estimated daily discharges. Records good. Natural flow of stream affected by transmountain diversions, storage and flood control reservoirs, power developments, diversions for irrigation and municipal use, and return flow from irrigated areas. Flow regulated by Chatfield Dam since May 29, 1975 (station 06709600), and Bear Creek Dam since July 1979.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	111	64	43	108	56	100	99	106	232	234	213	112
2	103	49	40	103	60	96	105	116	88	433	222	71
3	57	45	41	88	64	97	105	242	88	425	158	53
4	56	44	42	91	60	97	91	432	109	373	182	47
5	62	148	31	91	61	95	91	1180	177	377	135	55
6	62	107	39	91	68	78	91	582	148	269	195	60
7	67	100	44	92	68	73	73	358	233	279	219	48
8	63	57	40	90	77	72	67	329	377	606	228	269
9	65	55	40	86	101	76	64	363	355	426	212	102
10	60	50	41	84	124	120	51	465	333	286	183	80
11	57	50	39	85	140	142	372	467	335	386	373	74
12	55	49	35	85	152	112	333	406	354	242	276	56
13	56	48	32	87	165	119	219	309	574	302	211	73
14	52	45	34	87	162	114	108	293	465	392	159	98
15	54	51	38	86	176	105	94	251	331	344	223	104
16	54	50	68	93	161	101	91	272	270	233	290	101
17	52	53	71	88	119	80	103	312	263	156	185	117
18	51	52	72	88	118	78	105	306	217	179	96	148
19	52	55	75	91	122	75	105	285	121	88	77	144
20	57	53	78	90	121	75	110	306	135	103	71	125
21	67	48	87	94	119	73	115	357	166	191	68	78
22	96	45	76	94	115	75	252	260	70	169	80	87
23	96	45	81	92	116	74	177	218	82	494	105	84
24	88	43	84	90	116	74	184	186	106	318	72	82
25	87	42	83	90	113	76	135	178	251	306	72	79
26	85	42	91	85	110	100	125	195	352	316	78	75
27	72	44	104	58	102	84	123	286	203	286	75	56
28	64	57	107	58	94	87	126	298	80	229	70	41
29	63	47	107	60	---	91	123	298	60	110	75	114
30	62	47	106	59	---	103	116	204	123	103	101	47
31	65	---	108	56	---	102	---	191	---	115	167	---
TOTAL	2091	1685	1977	2640	3060	2844	3953	10051	6698	8770	4871	2680
MEAN	67.5	56.2	63.8	85.2	109	91.7	132	324	223	283	157	89.3
MAX	111	148	108	108	176	142	372	1180	574	606	373	269
MIN	51	42	31	56	56	72	51	106	60	88	68	41
AC-FT	4150	3340	3920	5240	6070	5640	7840	19940	13290	17400	9660	5320

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1983 - 2001, BY WATER YEAR (WY)

MEAN	152	158	96.5	82.8	87.8	131	369	853	756	548	423	156
MAX	1050	733	268	216	166	261	1074	2576	2479	2337	1574	724
(WY)	1985	1985	1985	1985	1985	1983	1984	1987	1995	1995	1984	1984
MIN	44.8	39.3	48.9	45.4	35.5	51.7	123	209	223	79.0	98.8	43.7
(WY)	1993	1990	1995	1991	1991	1991	1991	1989	2001	1994	1994	1992

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1983 - 2001
ANNUAL TOTAL	55129	51320	
ANNUAL MEAN	151	141	295
HIGHEST ANNUAL MEAN			692
LOWEST ANNUAL MEAN			124
HIGHEST DAILY MEAN	1070	1180	4010
LOWEST DAILY MEAN	31	31	20
ANNUAL SEVEN-DAY MINIMUM	37	37	24
MAXIMUM PEAK FLOW		2630	a9710
MAXIMUM PEAK STAGE		4.34	7.21
ANNUAL RUNOFF (AC-FT)	109300	101800	213800
10 PERCENT EXCEEDS	317	307	746
50 PERCENT EXCEEDS	104	96	136
90 PERCENT EXCEEDS	45	50	51

a From rating curve extended above 3800 ft<sup>3</sup>/s.

06711565 SOUTH PLATTE RIVER AT ENGLEWOOD, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--March 1985 to current year.  
 PERIOD OF DAILY RECORD.--  
 SPECIFIC CONDUCTANCE: March 1985 to current year.  
 pH: March 1985 to current year.  
 WATER TEMPERATURE: March 1985 to current year.  
 DISSOLVED OXYGEN: March 1985 to current year.

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

REMARKS.--Water temperature record is good, except for July 12 to Sept 30 which is fair. Specific conductance record is fair. pH record is fair. Dissolved oxygen record is fair except for Oct. 16, Oct. 30 to Nov. 1, Jan. 2 to Feb. 5, July 8-12, and July 25 which is poor.

EXTREMES FOR PERIOD OF DAILY RECORD.--  
 SPECIFIC CONDUCTANCE: Maximum, 1860 microsiemens/cm, Dec. 7, 2000; minimum, 139 microsiemens/cm, Aug. 17, 2000.  
 pH: Maximum, 10.4 units, Aug. 27, 1997; minimum, 6.4 units, Oct. 18, 1989.  
 WATER TEMPERATURE: Maximum, 29.0°C, Aug. 17, 1986, July 30, 1987; minimum, 0.0°C, freezing point on many days during winter.  
 DISSOLVED OXYGEN: Maximum, 19.0 mg/L, Feb. 7 and 9, 1995; minimum, 3.4 mg/L, Jul. 31, 1987.

EXTREMES FOR CURRENT YEAR.--  
 SPECIFIC CONDUCTANCE: Maximum, 1860 microsiemens/cm, Dec. 7; minimum, 141 microsiemens/cm, July 23.  
 pH: Maximum, 9.4 units, Feb. 22-26 and June 10-12; minimum, 7.3 units, Dec. 6.  
 WATER TEMPERATURE: Maximum, 26.6°C, July 25; minimum, 0.0°C, Dec. 21.  
 DISSOLVED OXYGEN: Maximum, 17.6 mg/L, Mar. 6,7; minimum, 4.1 mg/L, June 23,24 and July 28.

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	10.9	6.9	8.4	14.3	8.1	10.1	15.3	10.4	12.1	13.3	10.2	11.3
2	11.0	6.5	8.3	14.8	8.0	10.3	14.9	10.3	11.8	13.6	10.5	11.5
3	10.7	6.3	8.1	14.4	8.0	10.3	14.9	10.0	11.6	14.4	10.5	11.9
4	11.6	7.0	8.6	14.9	8.4	10.6	14.9	9.7	11.6	14.3	10.3	11.6
5	9.9	7.2	8.3	10.7	8.0	9.3	14.1	9.6	11.2	14.5	10.1	11.6
6	10.8	8.3	9.4	11.9	9.8	10.5	13.1	10.1	11.2	14.6	10.1	11.5
7	11.9	9.1	10.1	12.0	9.0	10.5	13.6	9.5	11.2	14.9	10.3	11.8
8	12.5	8.5	10.1	12.6	8.9	10.2	14.1	9.4	11.0	14.6	10.7	12.1
9	12.5	8.1	9.9	12.8	8.9	10.3	14.4	9.4	11.0	14.4	10.9	12.0
10	13.0	7.8	9.6	13.1	9.3	10.7	12.4	9.4	10.7	14.6	10.4	11.8
11	12.9	7.4	9.4	13.4	9.6	11.1	14.2	10.9	12.3	14.8	10.3	11.9
12	13.3	7.0	9.3	13.4	10.4	11.6	12.9	9.7	11.3	14.8	10.3	11.9
13	13.5	6.9	9.4	13.5	10.7	11.8	13.4	9.6	11.1	14.8	10.0	11.6
14	14.1	7.4	9.8	13.3	10.4	11.5	12.4	9.6	10.8	15.4	10.4	12.3
15	14.4	7.7	10.1	13.4	10.1	11.3	12.5	9.8	10.9	14.9	10.9	12.3
16	13.8	7.7	9.9	13.7	10.4	11.7	13.1	10.2	11.5	15.1	10.5	11.9
17	14.1	7.0	9.6	14.2	10.5	11.8	12.4	10.2	11.1	14.4	10.4	11.8
18	14.0	6.8	9.5	14.1	10.5	12.0	13.2	10.3	11.6	14.7	10.4	11.9
19	14.6	6.4	9.4	14.4	10.4	11.8	12.8	9.9	11.3	14.9	10.3	11.9
20	14.6	6.6	9.3	14.5	10.2	11.8	12.6	9.9	11.0	14.6	10.3	11.8
21	14.0	6.8	9.3	14.8	10.0	11.7	12.8	10.9	11.7	15.5	10.3	11.8
22	9.1	6.7	7.7	15.0	9.6	11.5	12.6	10.2	11.3	15.0	10.0	11.8
23	10.9	7.2	8.4	15.0	9.7	11.7	12.6	10.3	11.1	15.6	9.8	11.7
24	11.4	7.0	8.4	15.2	10.1	11.9	12.7	10.4	11.2	15.2	9.8	11.7
25	11.7	7.0	8.6	15.4	9.7	11.7	12.2	10.4	11.1	14.8	9.7	11.3
26	11.8	7.1	8.8	14.7	9.7	11.5	12.6	10.5	11.3	15.4	9.8	11.8
27	12.7	7.0	9.0	15.5	10.0	12.0	12.7	10.0	11.1	14.2	9.5	11.2
28	12.8	6.7	8.8	14.9	10.0	11.7	12.6	9.8	10.8	13.8	9.7	11.2
29	12.9	6.9	9.0	15.5	10.3	12.2	13.0	10.0	11.1	14.0	9.8	11.3
30	14.2	6.9	9.3	15.3	10.4	12.0	13.0	10.2	11.3	13.7	9.4	10.8
31	11.6	7.2	8.8	---	---	---	12.9	10.1	11.0	13.6	9.5	11.1
MONTH	14.6	6.3	9.1	15.5	8.0	11.2	15.3	9.4	11.3	15.6	9.4	11.7

## PLATTE RIVER BASIN

06711565 SOUTH PLATTE RIVER AT ENGLEWOOD, CO--Continued

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	13.6	9.9	11.2	16.2	9.1	11.7	14.4	7.5	10.2	10.7	5.9	7.8
2	13.2	9.1	10.6	16.5	8.6	11.4	14.6	6.7	9.6	8.7	5.8	7.6
3	12.7	9.0	10.3	16.8	8.5	11.6	14.6	6.6	9.6	9.5	8.4	9.0
4	13.6	8.8	10.6	17.0	8.6	11.6	14.8	6.3	9.3	10.1	9.2	9.5
5	13.9	8.7	10.6	17.1	8.5	11.5	14.5	6.1	9.3	10.5	9.6	10.1
6	14.3	9.3	11.0	17.6	7.9	11.5	12.0	6.5	8.7	9.8	7.8	8.9
7	12.3	9.2	10.5	17.6	7.6	11.1	14.2	6.7	9.9	9.2	7.6	8.4
8	13.8	10.4	11.8	16.9	7.5	10.9	15.1	6.1	9.6	9.1	7.5	8.3
9	13.5	10.8	11.9	16.4	7.6	10.8	15.2	6.0	9.6	8.7	7.3	8.3
10	13.0	10.4	11.6	11.1	7.4	9.4	11.0	5.8	8.0	8.8	7.9	8.4
11	13.0	10.2	11.3	12.0	9.6	10.5	10.8	7.6	9.7	8.9	7.8	8.4
12	12.9	10.1	11.2	12.9	8.6	10.6	10.3	8.3	9.5	8.9	7.4	8.2
13	13.1	9.9	11.2	13.6	8.0	10.4	10.8	7.8	9.5	8.7	7.3	8.0
14	13.4	10.1	11.6	13.6	7.9	10.3	10.7	7.8	8.9	8.9	7.4	8.0
15	13.2	10.3	11.5	14.5	8.7	10.9	11.5	7.2	9.2	8.7	7.2	7.9
16	13.7	10.2	11.7	14.7	8.4	10.9	11.2	7.1	9.1	8.8	7.2	8.0
17	14.5	9.8	11.6	15.0	8.0	10.7	12.0	7.3	9.6	8.7	7.3	7.9
18	14.7	9.7	11.6	15.1	8.5	11.1	12.2	7.0	8.9	9.1	7.2	8.1
19	15.0	9.4	11.6	15.2	7.8	10.9	12.3	6.7	8.8	8.5	7.3	7.9
20	15.5	9.4	11.5	14.3	7.3	10.1	11.8	6.5	8.8	9.2	7.5	8.2
21	15.9	9.3	11.3	14.6	6.5	10.0	12.5	7.1	9.4	9.5	7.8	8.8
22	15.8	8.9	11.5	14.7	6.5	9.2	10.2	7.5	9.1	9.6	7.5	8.5
23	16.0	8.8	11.3	13.1	6.8	9.3	12.5	7.5	10.1	9.7	7.3	8.3
24	15.8	8.7	11.2	13.0	7.5	9.6	12.1	7.0	9.3	10.0	7.0	8.4
25	15.9	9.1	11.7	12.4	8.5	10.0	12.8	6.8	9.1	9.9	7.0	8.3
26	16.5	9.0	11.8	12.7	9.0	10.3	12.7	6.4	8.9	10.0	6.9	8.2
27	14.7	9.2	11.6	13.9	7.6	10.1	12.5	6.1	8.7	9.7	7.1	8.2
28	16.2	9.7	12.3	13.1	7.3	9.8	12.2	6.1	8.4	9.7	7.1	8.0
29	---	---	---	14.1	7.7	9.9	12.0	6.2	8.4	9.7	7.0	8.0
30	---	---	---	13.6	7.9	10.0	11.6	6.2	8.4	10.0	7.0	8.3
31	---	---	---	14.2	7.8	10.0	---	---	---	10.6	7.0	8.4
MONTH	16.5	8.7	11.3	17.6	6.5	10.5	15.2	5.8	9.2	10.7	5.8	8.3
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	10.1	6.2	8.3	10.7	5.5	7.6	10.6	5.4	7.3	9.7	5.8	7.5
2	10.2	6.0	7.8	8.7	6.6	7.2	9.2	5.5	7.0	9.9	5.7	7.3
3	9.9	5.9	7.5	8.5	6.7	7.4	11.2	5.4	7.4	9.9	5.6	7.3
4	10.3	6.2	8.0	9.1	6.5	7.5	10.4	5.4	7.4	9.8	5.5	7.2
5	11.1	6.6	8.6	8.8	5.6	7.3	12.3	5.3	7.7	9.6	5.7	7.2
6	11.7	6.2	8.6	9.7	5.7	7.3	12.1	5.3	7.4	9.2	5.9	7.1
7	11.7	5.7	7.8	9.5	5.8	7.5	10.7	6.0	7.7	9.8	5.9	7.5
8	10.1	6.7	8.2	9.8	6.5	7.9	10.0	5.7	7.2	9.1	6.6	8.2
9	10.3	6.8	8.1	8.6	5.4	7.5	8.6	5.8	6.9	9.6	7.0	8.5
10	10.7	6.5	8.3	9.2	5.5	7.2	9.1	6.4	7.4	9.5	6.6	8.0
11	10.8	6.5	8.2	8.4	---	---	8.5	6.5	7.4	9.4	6.4	7.7
12	10.4	6.4	8.0	---	---	---	8.4	6.4	7.4	10.0	6.3	7.7
13	9.6	6.4	7.6	8.3	6.3	7.2	8.6	6.4	7.2	9.4	6.2	7.4
14	9.3	6.7	8.0	8.1	6.6	7.3	8.8	6.2	7.4	9.6	6.5	7.6
15	9.8	6.4	8.0	7.9	6.3	7.1	9.1	6.8	7.6	9.5	6.5	7.6
16	10.3	6.4	8.0	8.7	6.0	7.0	9.1	6.6	7.6	9.6	6.7	7.7
17	10.2	6.6	8.0	8.8	6.0	7.2	9.3	6.2	7.7	9.7	6.7	7.8
18	10.2	5.8	8.0	8.8	5.4	7.3	9.3	5.8	7.4	9.6	6.7	7.9
19	10.8	5.6	7.8	8.9	5.4	7.0	9.4	5.7	7.1	9.9	6.5	8.0
20	11.4	5.8	8.1	9.3	5.7	7.3	9.7	5.9	7.5	10.2	6.5	7.9
21	10.8	5.5	8.0	9.1	5.7	7.2	10.9	5.9	7.7	10.6	6.4	8.0
22	12.1	5.2	7.8	9.8	5.9	7.4	11.3	6.0	7.7	10.7	6.4	8.1
23	12.4	4.1	7.8	9.6	5.9	7.5	11.3	6.1	8.0	11.2	6.7	8.4
24	11.2	4.1	7.1	7.9	6.5	7.1	11.6	5.8	8.2	11.6	6.6	8.4
25	10.8	6.1	7.8	7.9	6.3	7.0	12.2	5.7	7.7	12.0	6.5	8.5
26	9.0	6.2	7.4	7.8	6.1	7.0	12.6	5.7	8.4	11.9	6.4	8.4
27	10.2	5.5	7.7	8.1	6.2	6.9	12.5	5.6	8.2	12.2	6.2	8.4
28	11.6	4.8	7.7	8.5	4.1	6.9	12.4	5.8	8.3	11.8	5.9	8.2
29	11.8	4.5	7.6	8.9	5.0	6.8	12.9	5.9	8.4	10.1	5.8	7.6
30	11.5	4.8	7.5	10.4	5.6	7.4	11.2	5.9	8.0	11.3	5.7	7.8
31	---	---	---	10.9	5.5	7.5	9.4	6.1	7.4	---	---	---
MONTH	12.4	4.1	7.9	---	---	---	12.9	5.3	7.6	12.2	5.5	7.8

PLATTE RIVER BASIN

06711565 SOUTH PLATTE RIVER AT ENGLEWOOD, CO--Continued

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	8.7	7.7	8.5	7.7	8.1	7.7	8.4	7.8	7.9	7.6	9.3	8.0
2	8.9	7.7	8.4	7.8	8.0	7.3	8.2	7.8	8.0	7.6	9.2	8.0
3	8.3	7.8	8.3	7.8	8.1	7.6	8.2	7.5	8.0	7.6	9.3	7.9
4	8.4	7.9	8.3	7.8	8.1	7.7	8.3	7.5	8.0	7.6	9.3	7.9
5	8.4	7.9	8.2	7.8	8.0	7.6	8.3	7.5	8.4	7.6	9.3	7.9
6	8.1	7.8	8.0	7.7	7.9	7.3	8.4	7.6	8.6	7.9	9.2	7.9
7	8.3	7.9	8.0	7.7	7.9	7.6	8.4	7.6	8.5	8.0	9.2	7.9
8	8.6	7.9	8.0	7.7	8.0	7.6	8.3	7.6	8.6	8.1	9.1	7.9
9	8.6	7.9	8.0	7.7	8.1	7.7	8.3	7.6	8.8	8.1	9.1	7.9
10	8.5	7.9	8.0	7.7	7.8	7.4	8.4	7.6	8.8	8.1	8.8	7.9
11	8.5	7.9	8.0	7.8	7.8	7.5	8.4	7.6	8.9	8.1	8.7	7.9
12	8.5	7.9	7.9	7.7	7.8	7.4	8.5	7.6	8.7	8.1	8.9	7.9
13	8.5	7.9	7.9	7.7	8.1	7.6	8.4	7.6	9.0	8.1	9.0	7.9
14	8.4	7.8	7.9	7.7	7.9	7.4	8.5	7.6	8.8	8.1	9.1	7.9
15	8.5	7.9	8.0	7.7	7.8	7.4	8.3	7.6	8.8	8.1	9.1	7.9
16	8.6	7.9	8.0	7.7	7.8	7.6	8.2	7.6	9.0	8.1	9.2	7.9
17	8.6	7.9	8.0	7.7	7.9	7.6	8.3	7.5	9.1	8.1	9.0	7.9
18	8.6	7.9	8.0	7.7	7.9	7.6	8.3	7.5	9.1	8.1	9.1	7.9
19	8.6	7.9	8.1	7.7	8.0	7.7	8.4	7.5	9.1	8.1	9.1	7.9
20	8.7	7.9	8.1	7.7	8.0	7.8	8.4	7.5	9.2	8.0	8.9	7.9
21	8.7	7.9	8.1	7.7	8.1	7.8	8.5	7.6	9.2	8.1	9.1	7.9
22	8.5	7.9	8.2	7.8	8.1	7.8	8.4	7.5	9.4	8.1	8.9	7.9
23	8.2	7.7	8.1	7.8	8.2	7.8	8.5	7.6	9.4	8.0	8.9	7.9
24	8.4	7.8	8.1	7.7	8.1	7.8	8.5	7.5	9.4	8.0	8.8	7.9
25	8.5	7.8	8.2	7.7	8.1	7.8	8.4	7.6	9.4	8.0	8.6	7.9
26	8.6	7.8	8.0	7.7	8.3	7.8	8.6	7.6	9.4	8.0	8.8	7.9
27	8.6	7.8	8.1	7.8	8.3	7.7	8.2	7.5	9.1	8.0	9.0	7.9
28	8.5	7.8	8.2	7.8	8.4	7.8	8.0	7.6	9.2	8.0	8.9	8.0
29	8.5	7.8	8.1	7.7	8.3	7.8	8.0	7.6	---	---	9.0	8.0
30	8.4	7.8	8.1	7.7	8.3	7.7	7.9	7.6	---	---	9.1	8.0
31	8.3	7.7	---	---	8.6	7.9	7.9	7.6	---	---	9.1	7.9
MONTH	8.9	7.7	8.5	7.7	8.6	7.3	8.6	7.5	9.4	7.6	9.3	7.9

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	9.2	7.9	8.7	7.9	9.0	8.0	9.0	7.8	8.9	7.8	8.6	7.9
2	9.2	7.9	8.3	7.9	8.5	7.8	8.6	7.8	8.8	7.8	8.4	7.9
3	9.2	7.9	8.3	8.1	8.5	7.9	8.6	7.8	8.9	7.8	8.3	7.9
4	9.1	7.9	8.2	8.1	8.9	7.9	8.7	7.8	9.0	7.8	8.2	7.8
5	9.1	7.9	8.2	7.9	9.3	8.0	8.7	7.7	9.1	7.8	8.3	7.9
6	8.7	7.9	8.4	8.1	9.2	7.9	8.8	7.6	9.1	7.8	8.2	7.9
7	8.7	7.9	8.4	8.1	9.3	7.9	8.7	7.7	9.0	7.8	8.2	7.8
8	8.8	7.9	8.5	8.1	9.3	8.0	8.6	7.7	8.9	7.9	8.1	7.9
9	8.8	8.1	8.4	8.1	9.1	7.9	8.6	7.8	8.2	7.8	8.2	7.9
10	8.6	8.0	8.4	8.2	9.4	8.0	8.5	7.8	8.6	7.8	8.3	8.0
11	8.2	8.0	8.5	8.2	9.4	7.9	8.1	7.8	8.7	8.0	8.3	7.9
12	8.6	8.1	8.5	8.1	9.4	7.9	8.1	7.8	8.8	8.0	8.2	7.9
13	8.7	8.1	8.5	8.0	8.9	8.0	8.2	7.8	8.7	7.9	8.4	8.0
14	8.5	8.0	8.4	7.9	9.2	8.1	8.4	7.9	8.6	7.8	8.6	8.0
15	8.6	8.0	8.5	7.9	9.0	8.0	8.4	7.9	8.9	8.0	8.6	8.0
16	8.5	8.0	8.5	7.9	9.0	7.8	8.4	7.8	8.9	8.0	8.6	8.0
17	8.8	8.0	8.2	7.9	9.0	7.8	8.7	7.8	9.0	7.9	8.5	7.9
18	8.8	7.9	8.6	7.9	8.9	7.8	8.6	7.9	8.6	7.8	8.7	8.0
19	9.0	7.9	8.3	7.9	8.8	7.7	8.2	7.8	8.4	7.8	8.8	8.0
20	9.0	7.9	8.6	7.9	8.9	7.7	8.5	7.8	8.4	7.9	8.8	7.9
21	9.0	7.9	8.6	8.0	9.0	7.8	8.7	7.9	8.5	7.9	8.5	7.8
22	8.5	7.9	8.6	7.9	8.4	7.6	8.7	7.9	8.5	7.9	8.8	7.9
23	9.2	8.0	8.6	7.9	8.5	7.7	8.6	7.8	8.9	7.8	8.7	7.9
24	9.2	8.0	8.8	7.9	8.8	7.6	8.3	7.9	8.6	7.8	8.8	7.8
25	9.1	7.8	8.8	7.9	8.9	7.8	8.7	8.0	8.5	7.8	8.8	7.8
26	9.1	7.8	8.8	7.9	8.6	7.8	8.6	7.9	8.7	7.9	8.8	7.8
27	9.1	7.8	8.9	7.9	8.9	7.8	8.7	7.9	8.7	7.8	8.4	7.8
28	9.0	7.8	8.8	7.9	8.7	7.6	8.7	7.9	8.6	7.8	8.2	7.8
29	8.9	7.8	8.8	7.8	8.6	7.8	8.6	7.8	8.7	7.8	8.8	7.8
30	8.9	7.8	8.9	7.9	8.9	7.8	8.7	7.8	8.7	7.9	8.2	7.6
31	---	---	9.2	7.8	---	---	8.8	7.8	8.8	8.0	---	---
MONTH	9.2	7.8	9.2	7.8	9.4	7.6	9.0	7.6	9.1	7.8	8.8	7.6

## PLATTE RIVER BASIN

06711565 SOUTH PLATTE RIVER AT ENGLEWOOD, CO--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN									
1	661	569	623	924	798	874	1020	877	947	708	609	660
2	667	572	633	944	825	891	1020	896	967	716	619	669
3	828	663	763	972	884	934	1020	890	966	797	640	705
4	888	784	847	991	884	947	1030	868	962	751	638	705
5	913	828	869	972	479	754	1190	933	1040	791	639	704
6	913	846	881	793	542	682	1820	1020	1340	739	627	692
7	930	810	879	817	601	675	1860	1430	1610	746	635	695
8	846	769	814	911	772	847	1620	1070	1300	958	634	708
9	868	776	827	926	828	885	1130	949	1040	777	707	746
10	873	794	838	971	862	915	1020	921	980	734	672	703
11	871	783	834	1090	893	984	1120	914	998	734	667	702
12	875	791	835	1070	907	1010	1140	973	1050	730	678	708
13	848	784	820	1160	930	1040	1180	1030	1090	735	675	713
14	863	774	829	1210	1010	1100	1400	1000	1140	745	676	711
15	897	809	854	1110	949	1030	1300	986	1080	762	665	710
16	907	811	860	1080	926	1000	1070	747	893	823	664	723
17	913	822	871	1050	872	959	801	701	757	1010	739	842
18	893	807	856	1040	834	942	828	658	736	1040	847	934
19	886	801	852	1030	861	956	796	650	722	936	825	876
20	876	812	848	1020	850	959	797	661	723	877	788	831
21	853	737	793	1030	933	991	796	660	735	827	739	775
22	817	606	729	1030	953	995	807	686	751	824	737	776
23	825	704	736	1010	926	979	808	662	736	775	705	745
24	729	660	696	1020	913	972	807	641	709	749	675	710
25	734	652	704	1020	908	972	742	643	700	721	671	700
26	738	653	702	1040	924	978	1070	651	811	716	656	692
27	804	684	763	1040	919	990	862	710	785	876	685	797
28	838	754	803	1030	811	904	1030	652	785	1080	838	915
29	888	778	833	951	808	887	747	624	680	1540	933	1180
30	875	795	841	962	858	918	720	616	659	1650	1250	1440
31	875	741	822	---	---	---	712	606	664	1520	1130	1320
MONTH	930	569	802	1210	479	932	1860	606	915	1650	609	800
DAY	MAX	MIN	MEAN									
1	1190	1000	1080	885	732	826	704	576	649	814	619	672
2	1080	940	999	838	667	747	690	576	642	698	597	658
3	1090	936	1010	726	627	681	669	579	630	687	499	599
4	962	888	920	716	621	671	685	618	657	528	380	474
5	947	871	901	705	619	669	900	622	698	418	176	326
6	911	835	875	714	673	699	718	607	650	643	399	523
7	855	806	834	748	658	709	819	619	708	647	583	616
8	818	713	768	748	645	701	783	672	722	612	555	580
9	997	709	771	732	663	705	854	708	779	607	496	548
10	929	666	779	889	658	755	878	700	816	529	471	501
11	1130	817	937	1230	754	899	814	442	616	527	463	495
12	1100	736	854	1060	696	812	581	456	528	555	451	497
13	804	609	664	767	650	721	725	522	568	516	450	476
14	704	604	660	759	616	680	1000	696	806	556	459	488
15	1120	615	831	680	601	647	1060	730	897	545	474	504
16	1040	648	751	682	597	644	1220	766	972	513	467	490
17	738	653	702	737	676	713	1050	688	823	559	428	494
18	776	634	701	757	662	712	854	651	740	512	432	466
19	745	647	685	752	670	716	745	640	677	579	455	487
20	788	637	698	748	674	717	857	627	682	511	420	478
21	706	634	680	748	678	709	734	616	671	561	440	478
22	699	613	669	787	643	728	655	517	576	539	481	502
23	712	615	662	828	709	783	684	544	623	564	489	518
24	679	606	653	760	700	737	615	531	581	566	517	545
25	690	595	647	755	698	731	671	594	641	578	511	548
26	681	608	651	851	691	787	684	607	650	669	510	551
27	1040	676	814	767	647	721	688	592	644	510	451	476
28	950	726	820	843	656	707	688	598	646	538	450	485
29	---	---	---	838	614	709	690	595	643	521	440	486
30	---	---	---	847	632	719	676	602	645	550	487	515
31	---	---	---	690	598	655	---	---	---	611	453	559
MONTH	1190	595	786	1230	597	723	1220	442	686	814	176	517

PLATTE RIVER BASIN

06711565 SOUTH PLATTE RIVER AT ENGLEWOOD, CO--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	581	451	495	527	429	486	594	270	484	634	539	577
2	680	550	633	450	413	431	613	469	523	713	598	670
3	737	624	690	457	407	431	605	496	555	810	668	740
4	729	645	684	467	422	443	580	450	504	837	711	776
5	671	505	566	493	395	446	599	500	561	834	677	762
6	624	523	570	517	342	460	571	420	505	760	663	713
7	639	456	549	523	432	461	547	457	505	843	666	768
8	491	439	470	509	167	401	533	450	483	843	375	496
9	502	453	481	550	234	441	591	494	528	768	523	648
10	505	436	475	559	428	528	598	500	573	848	695	761
11	541	442	472	734	422	498	776	358	464	730	614	680
12	477	428	456	559	442	497	517	432	471	824	691	748
13	532	340	444	739	227	496	865	469	534	803	610	733
14	473	350	435	492	260	422	627	533	562	684	590	641
15	500	452	472	520	439	479	566	471	517	657	577	619
16	506	450	484	578	437	513	677	440	486	671	588	632
17	518	449	481	622	525	585	536	478	494	664	600	642
18	606	445	493	629	492	532	645	521	579	645	524	563
19	650	536	596	694	604	646	685	543	628	585	524	558
20	622	531	585	707	602	642	970	638	681	651	523	566
21	608	475	529	606	471	519	859	485	634	735	615	676
22	978	579	707	567	506	539	703	538	610	721	598	650
23	737	487	650	564	141	447	696	368	561	733	602	650
24	799	511	693	462	254	411	694	413	580	715	607	666
25	517	433	486	730	422	490	727	527	635	762	611	673
26	536	422	453	508	406	461	754	552	669	724	622	676
27	607	449	510	526	440	484	722	543	635	807	648	737
28	662	517	600	596	458	502	669	479	591	880	741	809
29	762	620	698	673	568	613	655	531	610	831	475	616
30	697	513	593	651	562	613	831	535	614	885	582	766
31	---	---	---	653	548	595	657	477	527	---	---	---
MONTH	978	340	548	739	141	500	970	270	558	885	375	674

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	18.5	14.3	16.4	11.5	8.5	9.6	4.5	1.8	3.2	3.0	1.1	2.2
2	18.4	13.9	16.4	10.9	7.7	9.1	4.5	1.6	2.9	3.7	1.1	2.4
3	17.1	13.9	15.5	10.0	7.8	8.7	5.0	2.1	3.5	4.6	1.6	3.1
4	15.5	13.3	14.5	10.4	6.5	8.4	5.1	2.6	3.8	5.6	2.6	4.1
5	14.6	10.7	12.7	9.0	4.7	6.9	4.4	2.5	3.2	5.9	2.8	4.5
6	10.7	8.9	9.6	7.0	4.6	5.7	4.2	1.3	2.6	5.9	3.9	4.8
7	10.0	8.5	9.2	7.7	4.7	6.2	4.7	2.4	3.6	5.7	3.3	4.5
8	13.5	8.8	10.8	8.5	5.2	6.8	5.6	3.5	4.5	4.2	1.4	2.9
9	13.9	9.0	11.6	8.1	5.2	6.6	6.9	3.6	5.1	3.3	1.2	2.4
10	15.2	10.0	12.7	6.3	4.5	5.3	4.7	1.2	3.3	5.1	2.0	3.6
11	16.1	11.4	13.8	5.1	2.9	3.8	2.0	.1	.8	4.4	1.8	3.3
12	16.9	12.5	14.5	3.5	1.4	2.5	2.0	.1	.9	5.0	2.0	3.5
13	15.3	11.5	13.4	3.8	.4	2.1	2.0	.1	1.1	4.7	3.1	3.7
14	13.2	9.9	11.7	4.4	1.1	2.7	3.2	.1	1.6	3.6	1.6	2.5
15	13.4	9.1	11.3	4.2	1.8	3.0	3.8	1.0	2.1	2.9	.6	1.9
16	13.9	9.5	11.8	4.1	1.0	2.6	2.4	.1	1.3	2.8	1.8	2.3
17	14.3	9.8	12.0	3.6	.7	2.3	5.0	1.2	2.6	2.6	.4	1.6
18	14.9	10.3	12.5	3.5	.3	2.2	2.4	.4	1.4	3.6	1.1	2.4
19	14.8	10.6	12.7	4.5	1.3	3.1	3.8	.2	2.0	3.7	1.2	2.6
20	14.9	11.1	13.0	5.5	1.9	3.8	3.4	.9	2.3	3.9	2.0	2.9
21	14.6	10.3	12.7	5.7	2.6	4.3	1.7	.0	.7	4.9	1.8	3.4
22	13.6	9.8	11.2	6.8	4.2	5.3	3.2	.3	1.7	4.2	2.3	3.3
23	12.6	9.6	11.0	5.9	3.3	4.6	3.7	1.3	2.5	5.6	3.0	4.0
24	14.5	11.3	12.7	6.0	2.7	4.3	2.7	1.3	2.1	4.9	1.9	3.6
25	13.4	10.2	12.1	6.6	4.1	5.1	2.2	1.7	1.9	4.8	2.6	3.8
26	12.8	9.4	11.4	4.7	3.1	3.9	3.3	.9	2.1	4.4	2.0	3.4
27	12.6	9.3	11.1	5.9	3.0	4.3	4.0	.9	2.5	3.7	2.6	3.0
28	12.0	10.1	11.2	5.9	3.1	4.4	4.7	2.6	3.7	2.8	1.9	2.5
29	14.5	11.1	12.5	4.8	1.9	3.4	3.4	1.4	2.7	4.2	1.2	2.6
30	13.0	9.5	11.3	5.3	2.1	3.6	2.6	1.2	2.1	4.8	2.1	3.4
31	11.3	9.1	9.7	---	---	---	4.4	2.2	3.2	4.2	.9	2.6
MONTH	18.5	8.5	12.4	11.5	.3	4.8	6.9	.0	2.5	5.9	.4	3.1

## PLATTE RIVER BASIN

06711565 SOUTH PLATTE RIVER AT ENGLEWOOD, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	4.2	.2	2.3	8.9	3.7	6.3	13.9	7.2	10.4	19.2	13.1	16.3
2	5.8	1.5	3.7	9.1	4.5	7.0	14.2	9.4	11.9	17.0	8.9	11.9
3	5.6	3.4	4.6	8.5	4.1	6.6	15.0	9.2	12.2	8.9	7.7	8.1
4	6.9	2.6	4.7	9.6	4.6	7.2	14.7	10.6	12.8	8.0	6.2	7.4
5	8.1	3.3	5.7	8.7	4.7	7.0	14.2	10.8	12.5	7.2	4.8	5.9
6	7.4	4.2	5.9	10.4	6.5	8.7	12.3	9.2	10.7	14.3	7.0	10.2
7	5.6	2.5	3.6	11.8	7.8	9.7	13.1	7.4	10.3	16.9	9.1	12.6
8	2.5	.1	1.0	11.6	6.9	9.5	15.1	8.7	11.8	18.2	10.0	13.6
9	2.1	.1	1.0	11.3	7.1	9.4	15.2	8.5	11.9	17.3	10.7	13.3
10	3.7	.1	1.9	9.7	3.4	6.6	12.2	5.7	9.5	15.9	11.0	13.1
11	5.2	.8	3.1	4.8	3.2	3.8	6.1	2.4	4.4	17.5	11.1	13.7
12	6.0	1.5	3.8	8.6	2.0	5.3	11.2	4.6	8.0	19.1	11.8	15.0
13	6.5	1.7	4.2	10.6	4.7	7.8	13.6	6.0	9.6	19.9	11.9	15.6
14	4.0	1.3	2.6	8.5	5.1	6.9	12.5	8.0	10.3	18.1	12.4	15.2
15	5.7	.5	3.0	8.4	3.3	5.9	14.8	7.9	11.4	19.0	12.7	15.7
16	5.0	1.8	3.5	8.0	3.5	6.0	13.4	8.2	9.6	18.0	12.9	15.4
17	7.1	2.9	5.0	7.3	5.2	6.1	15.3	7.6	11.2	15.7	13.5	14.3
18	5.6	3.1	4.5	8.3	4.3	6.5	16.3	10.3	13.3	19.9	12.4	15.7
19	7.5	3.2	5.4	11.2	4.8	8.1	17.0	11.2	14.3	16.3	13.6	15.0
20	6.8	3.2	5.4	9.3	7.0	8.1	14.9	11.4	13.0	18.4	9.4	14.1
21	7.2	4.5	5.9	11.7	7.0	9.5	12.2	9.4	11.0	16.8	8.6	12.4
22	7.8	3.3	5.8	13.5	8.6	11.0	10.4	6.0	7.1	17.3	10.6	14.0
23	7.2	4.0	5.9	11.5	7.7	9.9	14.8	5.5	9.7	18.3	11.8	15.1
24	7.7	5.2	6.2	9.3	6.5	7.8	16.1	8.1	12.3	19.8	11.8	15.8
25	8.1	2.8	5.6	6.5	5.5	6.1	17.5	10.5	14.1	19.1	12.3	15.9
26	6.9	3.8	5.5	6.6	4.5	5.6	18.5	11.4	15.1	19.9	13.3	16.7
27	5.3	2.9	3.7	10.9	6.0	8.5	18.8	12.5	15.8	20.7	13.8	16.9
28	5.5	1.7	3.7	9.1	6.6	8.0	18.0	12.9	15.7	18.0	14.4	16.1
29	---	---	---	9.2	6.5	7.9	18.8	12.4	15.8	19.7	14.8	17.1
30	---	---	---	11.8	6.5	9.1	17.6	12.6	15.3	18.3	14.3	16.4
31	---	---	---	11.0	6.5	8.9	---	---	---	22.0	14.3	17.7
MONTH	8.1	.1	4.2	13.5	2.0	7.6	18.8	2.4	11.7	22.0	4.8	14.1
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	22.2	14.2	18.1	24.6	18.0	21.1	25.1	19.2	21.7	22.8	17.1	19.8
2	21.8	16.2	19.3	24.3	19.0	21.0	24.7	19.3	22.0	22.6	17.4	20.1
3	19.9	16.9	18.3	23.7	19.1	21.1	26.4	19.3	22.7	23.2	17.5	20.3
4	18.0	16.0	17.0	25.1	18.9	21.4	26.1	19.7	23.0	23.8	17.9	20.5
5	21.0	14.2	17.5	25.4	19.6	22.0	26.4	20.6	23.4	21.8	17.1	19.6
6	22.2	15.0	18.8	26.0	19.3	22.3	25.3	19.5	22.3	20.8	17.1	18.9
7	20.7	16.7	18.7	25.7	19.5	22.3	26.4	19.3	22.4	20.9	15.6	17.8
8	22.6	15.6	18.6	25.3	17.3	21.0	26.3	19.5	22.5	16.5	11.4	12.8
9	20.2	15.9	18.0	25.0	17.8	21.3	21.7	18.7	19.7	17.3	10.1	13.5
10	22.6	15.4	18.7	25.9	18.8	21.8	22.6	17.7	19.9	19.6	13.2	16.3
11	22.6	15.6	18.7	25.6	19.4	22.0	25.3	17.9	21.0	20.2	14.5	17.2
12	21.8	16.4	18.9	24.1	19.9	22.0	25.7	18.8	22.0	20.4	14.7	17.3
13	18.2	13.5	16.0	23.5	19.7	21.3	24.5	19.7	21.8	19.5	15.6	17.6
14	20.5	13.3	16.5	23.0	19.3	21.1	22.1	19.5	20.7	20.9	15.6	18.1
15	22.4	14.4	18.1	25.3	19.0	21.8	23.6	18.6	20.8	19.5	16.8	18.0
16	22.2	15.2	18.7	24.5	18.6	21.7	23.5	18.7	20.7	19.0	16.1	17.7
17	23.1	15.9	19.3	24.0	19.0	21.3	24.1	17.4	20.6	18.6	15.6	17.0
18	23.3	16.0	19.5	25.4	18.5	22.0	24.3	17.7	21.2	19.9	14.7	17.3
19	20.5	17.0	18.9	24.5	19.9	22.4	24.2	18.8	21.3	20.5	14.2	17.4
20	22.1	16.2	19.3	25.6	19.9	22.8	22.0	18.9	20.2	20.5	14.5	17.5
21	23.6	16.9	20.2	25.0	19.7	22.4	23.6	18.0	20.5	20.3	15.1	17.8
22	23.9	18.2	20.9	26.1	19.1	22.6	23.0	18.4	20.4	19.2	15.7	17.5
23	24.7	17.4	20.8	23.7	15.6	20.6	23.7	17.8	20.5	18.9	14.6	16.9
24	23.7	18.3	21.1	23.5	19.5	21.1	24.2	17.8	21.1	19.3	14.5	17.0
25	23.7	17.6	20.2	26.6	19.0	22.1	23.2	18.6	20.8	19.5	14.9	17.2
26	23.1	18.5	20.4	24.3	19.2	21.3	23.8	17.8	20.8	19.2	15.0	17.3
27	24.5	17.7	20.9	26.0	19.7	22.4	23.1	18.6	20.9	20.2	14.9	17.3
28	25.5	19.1	22.2	26.5	19.0	22.4	21.4	18.1	19.8	19.5	15.0	17.0
29	25.5	20.0	22.8	25.4	19.4	22.5	22.7	17.2	19.7	19.7	15.5	16.7
30	24.6	20.1	22.8	25.3	19.7	22.6	21.9	17.8	19.7	19.4	14.3	16.5
31	---	---	---	24.8	20.1	22.3	22.9	17.8	20.1	---	---	---
MONTH	25.5	13.3	19.3	26.6	15.6	21.8	26.4	17.2	21.1	23.8	10.1	17.5

06712000 CHERRY CREEK NEAR FRANKTOWN, CO

LOCATION.--Lat 39°21'21", long 104°45'46", in NE<sup>1</sup>/<sub>4</sub> sec.15, T.8 S., R.66 W., Douglas County, Hydrologic Unit 10190003, on right bank 1.3 mi downstream from Castlewood Dam site, 1.5 mi upstream from Russellville Gulch, and 2.5 mi south of Franktown.

DRAINAGE AREA.--169 mi<sup>2</sup>.

PERIOD OF RECORD.--November 1939 to current year.

REVISED RECORDS.--WSP 1730: Drainage area. WDR CO-87-1: 1983-85 (P).

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 6,150 ft above sea level, from topographic map. See WSP 1730 for history of changes prior to Oct. 1, 1953.

REMARKS.--Records fair except for estimated discharges, which are poor. Many small diversions upstream from station for irrigation of about 800 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.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Aug. 3, 1933, caused by Castlewood Dam failure, exceeded all other observed floods at this location.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.7	e7.5	e7.1	e6.6	e7.1	e13	15	8.6	8.6	1.9	1.5	1.6
2	5.5	e7.8	e7.0	e6.6	e7.2	13	15	8.7	8.5	1.9	1.6	1.6
3	5.4	7.8	e7.2	e6.8	e8.5	13	14	9.4	7.9	1.9	1.4	1.9
4	5.4	7.9	e7.3	e7.1	e8.9	13	14	16	7.9	1.9	1.6	1.9
5	5.7	e8.0	e7.3	e7.4	e8.7	13	13	83	7.1	1.6	1.7	1.7
6	5.6	e8.1	e7.9	e7.4	e9.2	14	13	127	6.4	1.5	1.7	1.7
7	5.9	e8.2	e8.5	e8.1	e9.4	15	12	65	5.4	2.1	1.6	2.1
8	6.2	e8.3	e8.6	e7.7	e9.2	15	12	36	5.0	2.3	2.2	3.6
9	6.4	e8.2	e8.5	e7.7	e8.3	15	11	31	4.8	1.8	9.0	3.7
10	e6.3	e8.2	e8.3	e8.5	e9.0	15	11	27	4.7	2.1	7.3	2.8
11	e6.0	e8.2	e7.8	e7.3	e9.6	14	e11	e21	4.6	2.1	5.5	2.5
12	e5.8	e8.1	e7.7	e7.2	e11	e14	12	18	4.0	1.9	3.7	2.2
13	5.6	e7.6	e7.7	e8.1	e12	14	16	16	4.6	2.2	3.1	2.0
14	5.6	e7.6	e7.7	e7.7	e11	16	24	15	6.5	2.4	2.7	1.8
15	e5.7	e8.1	e8.1	e7.5	e11	15	33	14	6.1	2.4	1.9	2.2
16	e5.6	e8.0	e7.4	e7.9	e11	14	29	12	5.0	2.0	1.8	2.4
17	5.6	e7.5	e7.8	e7.8	e11	12	25	11	4.1	1.7	1.5	2.7
18	5.6	e7.6	e6.8	e7.8	e12	e12	23	22	3.9	1.6	1.5	2.4
19	5.7	e7.6	e6.4	e8.0	e12	13	19	14	3.4	1.5	1.5	2.5
20	5.6	e7.5	e6.5	e8.1	e13	15	17	19	3.4	1.4	1.7	2.1
21	5.7	e7.7	e5.3	e8.1	e14	15	14	23	3.3	1.4	1.7	1.9
22	6.1	e8.6	e5.7	e8.2	e14	14	e14	20	3.2	1.3	1.7	2.0
23	6.6	e8.1	e7.1	e8.4	e17	14	16	16	3.2	1.5	1.7	2.2
24	6.6	e7.5	e6.7	e8.3	e15	15	16	14	3.0	1.6	1.6	2.1
25	6.5	e7.6	e7.2	e8.3	e15	17	14	e11	2.7	1.6	1.6	2.1
26	6.5	e7.9	e6.8	e8.4	e14	16	14	10	2.6	1.5	1.6	2.0
27	6.5	e8.4	e6.8	e8.6	e14	16	13	10	2.7	1.4	1.4	1.9
28	6.6	e7.9	e7.2	e8.2	e13	15	12	9.5	2.6	1.3	1.4	2.0
29	7.0	e7.5	e6.6	e7.6	---	15	6.8	9.9	2.5	1.2	1.4	2.0
30	7.0	e7.4	e6.7	e8.3	---	15	7.9	9.7	2.3	1.3	1.5	2.0
31	7.2	---	e7.3	e7.8	---	15	---	8.8	---	1.3	1.6	---
TOTAL	187.2	236.4	225.0	241.5	315.1	445	466.7	715.6	140.0	53.6	71.7	65.6
MEAN	6.04	7.88	7.26	7.79	11.3	14.4	15.6	23.1	4.67	1.73	2.31	2.19
MAX	7.2	8.6	8.6	8.6	17	17	33	127	8.6	2.4	9.0	3.7
MIN	5.4	7.4	5.3	6.6	7.1	12	6.8	8.6	2.3	1.2	1.4	1.6
AC-FT	371	469	446	479	625	883	926	1420	278	106	142	130

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2001, BY WATER YEAR (WY)

MEAN	4.51	5.73	5.21	5.34	8.72	22.0	19.7	16.2	8.80	7.14	8.93	3.49
MAX	29.1	30.7	25.2	17.7	29.3	184	138	138	42.6	43.8	59.9	18.2
(WY)	1985	1985	1985	1985	1948	1960	1984	1973	1983	1957	1945	1984
MIN	.97	1.32	1.41	1.57	1.99	2.36	1.70	1.43	1.12	.80	.76	.78
(WY)	1953	1955	1964	1951	1956	1972	1963	1963	1954	1981	1962	1950

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1940 - 2001

ANNUAL TOTAL	3792.0	3163.4	
ANNUAL MEAN	10.4	8.67	9.67
HIGHEST ANNUAL MEAN			31.9
LOWEST ANNUAL MEAN			2.89
HIGHEST DAILY MEAN	43	Apr 5	127
LOWEST DAILY MEAN	1.1	Aug 9	1.2
ANNUAL SEVEN-DAY MINIMUM	1.2	Aug 6	1.4
MAXIMUM PEAK FLOW			262
MAXIMUM PEAK STAGE			5.02
ANNUAL RUNOFF (AC-FT)	7520	6270	7000
10 PERCENT EXCEEDS	20	15	17
50 PERCENT EXCEEDS	7.8	7.5	4.5
90 PERCENT EXCEEDS	2.6	1.7	1.3

e Estimated.  
a Also occurred Sep 30 and Oct 1, 1950.  
b Site and datum then in use, by float measurement.  
c Maximum gage height, 7.43 ft, Aug 2, 1997, current site and datum.

## PLATTE RIVER BASIN

393109104464500 CHERRY CREEK NEAR PARKER, CO

LOCATION.--Lat 39°31'09", long 104°46'45", in SE<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec.21, T.6 S., R.67 W., Douglas County, Hydrologic Unit 10190003, on right bank 200 ft upstream from Main Street, 1,100 ft downstream from mouth of Sulphur Gulch, and 0.8 mi west of City of Parker.

DRAINAGE AREA.--Not determined.

PERIOD OF RECORD.--October 1991 to current year.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 5,805 ft above sea level, from topographic map.

REMARKS.--Records fair except for discharges above 200 ft<sup>3</sup>/s, and estimated discharges, which are poor. Several diversions upstream from station 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 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.5	6.5	7.4	9.1	8.1	16	15	e13	8.0	5.4	4.8	3.1
2	5.4	6.7	7.5	9.7	11	17	15	e14	7.1	5.4	18	3.1
3	5.3	7.6	7.9	11	15	17	14	e14	6.8	5.3	5.5	3.1
4	5.7	8.7	8.4	11	13	17	14	e22	6.5	3.9	5.3	3.6
5	5.0	9.5	8.1	11	15	17	12	e89	5.2	3.9	5.4	3.6
6	5.7	9.6	9.2	12	15	16	13	e137	5.0	5.1	30	2.2
7	5.6	8.9	10	12	15	16	12	90	4.3	4.7	6.7	2.0
8	5.8	9.2	11	10	12	17	11	49	3.5	5.2	5.9	7.0
9	5.9	9.2	10	11	8.2	17	11	39	3.3	5.0	6.7	3.4
10	6.0	9.8	9.7	14	9.8	18	11	33	2.7	5.1	6.5	3.0
11	5.4	8.2	6.8	9.3	14	18	13	29	2.3	4.9	6.4	2.9
12	4.0	7.1	6.9	8.9	16	15	18	24	1.3	e4.9	6.2	2.7
13	2.7	5.6	7.7	11	17	17	19	22	3.0	e5.1	4.3	1.7
14	4.1	5.4	8.0	9.0	16	18	21	21	2.9	e5.2	e3.9	1.5
15	3.9	8.2	9.9	8.1	14	18	27	22	2.3	e4.9	e2.7	2.7
16	4.7	7.1	8.3	10	15	16	28	20	3.8	3.3	2.5	2.7
17	4.4	6.7	10	9.1	16	16	25	19	3.6	1.6	2.4	2.6
18	4.0	6.7	8.0	9.1	17	13	22	25	3.6	3.0	2.3	3.0
19	4.3	7.7	6.5	9.6	17	12	21	22	3.7	4.0	2.3	3.1
20	4.5	7.5	8.2	11	17	15	20	25	3.7	3.5	2.2	3.1
21	5.2	8.6	5.4	11	19	16	18	28	2.7	3.5	2.3	2.9
22	5.6	9.9	10	11	19	16	17	29	3.8	3.9	2.1	3.4
23	4.4	8.7	10	12	20	15	17	25	3.8	3.9	2.0	3.5
24	3.9	7.6	9.1	11	20	15	e18	21	4.1	4.1	3.1	3.7
25	4.0	8.7	11	12	19	14	e18	17	4.3	4.5	3.5	3.8
26	4.2	8.3	10	12	17	15	e19	14	5.5	4.2	3.1	3.6
27	6.3	10	9.7	13	17	16	e19	12	3.6	4.4	3.0	1.8
28	7.7	9.8	12	12	16	16	e19	11	3.0	4.3	3.1	2.3
29	8.6	8.2	9.4	10	---	16	e12	11	4.5	4.6	3.2	4.2
30	9.4	8.8	10	13	---	16	e13	11	5.3	3.7	3.1	4.4
31	8.0	---	12	10	---	15	---	8.9	---	3.7	2.6	---
TOTAL	165.2	244.5	278.1	332.9	428.1	496	512	916.9	123.2	134.2	161.1	93.7
MEAN	5.33	8.15	8.97	10.7	15.3	16.0	17.1	29.6	4.11	4.33	5.20	3.12
MAX	9.4	10	12	14	20	18	28	137	8.0	5.4	30	7.0
MIN	2.7	5.4	5.4	8.1	8.1	12	11	8.9	1.3	1.6	2.0	1.5
AC-FT	328	485	552	660	849	984	1020	1820	244	266	320	186

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 2001, BY WATER YEAR (WY)

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001		
MEAN	3.73	5.42	6.18	8.18	11.9	17.5	19.9	21.7	12.2	7.03	8.39	3.57
MAX	9.72	9.85	14.9	21.0	21.4	42.8	47.4	87.9	47.5	18.3	29.1	10.3
(WY)	2000	2000	2000	2000	2000	1992	1998	1999	1999	1998	1998	1999
MIN	1.26	.79	.76	1.51	1.74	3.82	8.15	4.15	1.87	1.04	.58	.73
(WY)	1992	1995	1995	1995	1995	1995	1997	1997	1994	1994	1994	1994

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1992 - 2001
ANNUAL TOTAL	4480.88	3885.9	
ANNUAL MEAN	12.2	10.6	10.5
HIGHEST ANNUAL MEAN			21.8
LOWEST ANNUAL MEAN			5.03
HIGHEST DAILY MEAN	47	Apr 6	e348
LOWEST DAILY MEAN	.71	Aug 23	.43
ANNUAL SEVEN-DAY MINIMUM	1.3	Aug 19	.45
MAXIMUM PEAK FLOW		247	a900
MAXIMUM PEAK STAGE		6.47	b9.65
ANNUAL RUNOFF (AC-FT)	8890	7710	7590
10 PERCENT EXCEEDS	25	19	22
50 PERCENT EXCEEDS	8.7	8.6	6.2
90 PERCENT EXCEEDS	3.2	3.1	1.3

e Estimated.

a From slope-area measurement of peak flow.

b From floodmark.



## PLATTE RIVER BASIN

06713300 CHERRY CREEK AT GLENDALE, CO

LOCATION.--Lat 39°42'22", long 104°56'13", in SW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec.18, T.4 S., R.67 W., Denver County, Hydrologic Unit 10190003, on left bank 900 ft upstream from Colorado Boulevard, on Cherry Creek South Drive and Ash Court, in the City of Glendale, and 6 mi downstream from Cherry Creek Reservoir.

DRAINAGE AREA.--404 mi<sup>2</sup>.

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

REVISED RECORDS.--WDR CO-96-1: 1995 (M).

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 5,320 ft above sea level, from topographic map. From Feb. 24 to Aug. 2, 2000, at site 0.5 mi upstream at different datum.

REMARKS.--Records fair except for estimated daily discharges and those above 800 ft<sup>3</sup>/s, which are poor. Flow regulated by Cherry Creek Lake (see station 06712990). 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 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22	15	22	23	11	45	21	26	29	11	19	13
2	23	14	23	25	14	43	21	32	27	12	43	12
3	23	14	24	24	13	43	21	64	33	12	20	12
4	23	13	24	24	11	43	20	153	30	12	17	12
5	27	65	25	22	11	45	21	394	25	44	16	11
6	27	24	28	24	9.7	44	35	83	23	33	17	16
7	26	16	25	23	9.0	43	33	33	24	13	16	14
8	25	13	e24	21	8.5	44	32	66	23	413	15	65
9	27	13	e25	22	8.3	41	31	94	24	94	17	21
10	25	16	e25	22	8.4	55	33	124	22	16	18	16
11	24	16	e24	20	13	52	168	187	21	29	19	14
12	24	16	e24	23	16	41	79	215	18	e51	17	13
13	25	18	e25	23	16	38	40	216	139	e130	20	12
14	24	21	26	e23	16	36	52	221	49	e112	18	12
15	24	21	25	22	22	34	76	219	18	e35	18	11
16	25	22	21	23	17	33	78	156	15	e25	17	11
17	25	23	20	22	22	32	62	86	14	25	17	13
18	24	21	21	24	22	33	78	81	14	32	16	11
19	23	22	22	25	24	33	83	73	13	35	16	10
20	24	21	21	24	23	31	84	98	13	46	16	9.6
21	24	16	21	24	22	25	83	79	13	37	16	9.5
22	41	16	19	24	26	29	126	69	13	34	16	9.2
23	28	17	19	26	35	25	92	65	19	132	16	9.0
24	33	16	e19	25	35	24	79	58	13	71	16	9.1
25	33	15	e19	22	36	24	61	40	11	40	18	8.7
26	35	15	e20	12	38	32	55	37	15	49	15	8.4
27	33	15	20	11	42	24	36	38	13	53	14	8.4
28	33	17	23	11	44	24	29	46	13	39	14	8.4
29	35	22	23	11	---	23	28	56	13	36	14	8.4
30	30	24	22	12	---	25	27	134	14	34	18	8.4
31	18	---	24	11	---	27	---	36	---	20	15	---
TOTAL	833	577	703	648	572.9	1091	1684	3279	711	1725	544	396.1
MEAN	26.9	19.2	22.7	20.9	20.5	35.2	56.1	106	23.7	55.6	17.5	13.2
MAX	41	65	28	26	44	55	168	394	139	413	43	65
MIN	18	13	19	11	8.3	23	20	26	11	11	14	8.4
AC-FT	1650	1140	1390	1290	1140	2160	3340	6500	1410	3420	1080	786

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1985 - 2001, BY WATER YEAR (WY)

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
MEAN	15.5	14.3	12.5	14.4	19.6	30.8	45.1	49.8	38.7	29.6	29.7	19.9					
MAX	38.0	33.8	29.8	45.7	53.2	75.2	104	147	101	55.9	72.0	43.0					
(WY)	1986	1998	1988	1985	1988	1985	1998	1999	1999	1995	1998	1995					
MIN	4.65	4.42	1.94	3.01	3.46	4.41	9.81	16.2	13.7	5.71	8.41	3.90					
(WY)	1995	1995	1995	1995	1990	1995	1991	1993	1990	1994	1986	1994					

## SUMMARY STATISTICS

## FOR 2000 CALENDAR YEAR

## FOR 2001 WATER YEAR

## WATER YEARS 1985 - 2001

ANNUAL TOTAL	11988.8	12764.0		
ANNUAL MEAN	32.8	35.0	26.2	
HIGHEST ANNUAL MEAN			46.8	1999
LOWEST ANNUAL MEAN			10.9	1994
HIGHEST DAILY MEAN	317	Jul 17	413	Jul 8
LOWEST DAILY MEAN	7.5	Aug 15	8.3	Feb 9
ANNUAL SEVEN-DAY MINIMUM	8.5	Jul 3	8.5	Sep 24
MAXIMUM PEAK FLOW			a2720	Jul 8
MAXIMUM PEAK STAGE			9.36	Jul 8
ANNUAL RUNOFF (AC-FT)	23780	25320	18950	
10 PERCENT EXCEEDS	57	67	62	
50 PERCENT EXCEEDS	25	23	15	
90 PERCENT EXCEEDS	11	12	4.4	

e Estimated.

a From rating curve extended above 800 ft<sup>3</sup>/s.

b Also occurred Jul 28, 1997.



PLATTE RIVER BASIN

06713500 CHERRY CREEK AT DENVER, CO--Continued  
(National Water-Quality Assessment Program station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1993 to July 1995, February to September 2001.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

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)	BICAR-BONATE WATER DIS IT FIELD (MG/L) AS HCO3 (00453)
FEB 06...	1015	15	1170	8.4	8.0	11.6	335	104	18.2	111	2.65	6.87	253
MAR 13...	1020	42	960	8.3	7.2	11.0	286	86.4	17.1	91.2	2.35	6.08	206
APR 03...	0940	28	1000	8.4	11.3	11.3	316	98.0	17.2	80.9	1.98	6.23	190
MAY 09...	1040	112	779	8.3	12.6	9.6	245	74.8	14.1	62.1	1.73	5.55	177
JUN 05...	0955	33	948	8.6	16.8	8.3	303	93.6	16.8	78.6	1.97	5.32	185
JUL 02...	1105	18	1090	8.6	23.9	13.9	349	109	18.6	93.2	2.17	6.27	204
AUG 07...	1100	22	1010	8.4	23.8	7.8	312	95.4	17.8	88.0	2.17	5.70	177
SEP 10...	1030	20	958	8.3	17.4	9.4	308	93.3	18.2	81.4	2.02	5.41	203

DATE	CAR-BONATE WATER DIS IT FIELD (MG/L) AS CO3 (00452)	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 DAY) (70302)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	NITRO-GEN, NITRITE 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)
FEB 06...	6	220	213	120	.7	16.9	810	736	33	1.1	.083	3.09	.051
MAR 13...	--	169	181	95.2	.6	15.9	640	602	73	.9	.088	1.40	E.023
APR 03...	19	188	204	74.9	.7	16.0	670	618	51	.9	.056	1.52	.075
MAY 09...	--	145	152	58.0	.7	13.9	531	472	161	.7	.014	.715	<.041
JUN 05...	14	176	199	64.3	.8	15.7	642	589	57	.9	.017	1.94	<.040
JUL 02...	23	205	232	79.6	.8	16.9	700	691	34	1.0	.035	2.42	<.040
AUG 07...	6	155	215	72.7	.7	16.2	652	612	39	.9	.021	1.49	.050
SEP 10...	--	166	202	68.2	.6	15.9	648	594	35	.9	.015	1.90	<.040

DATE	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L) AS N (00607)	NITRO-GEN, AM-MONIA + ORGANIC (MG/L) AS N (00625)	NITRO-GEN, AM-MONIA + ORGANIC (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)	IRON, DIS-SOLVED (UG/L) AS FE (01046)	MANGA-NESE, DIS-SOLVED (UG/L) AS MN (01056)	CARBON, ORGANIC DIS-SOLVED (MG/L) AS C (00681)	CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L) AS C (00689)	ACETO-CHLOR, WATER FLTRD REC (UG/L) (49260)	ALA-CHLOR, WATER, DISS, REC, (UG/L) (46342)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)
FEB 06...	.362	.57	.41	.264	.241	.217	M	29.8	3.8	.6	<.004	<.002	<.006
MAR 13...	--	.77	.38	.198	.099	.101	<10	8.1	5.2	1.6	<.004	<.002	E.003
APR 03...	.396	.63	.47	.219	.188	.169	<10	10.6	4.3	1.1	<.004	<.002	<.006
MAY 09...	--	.82	.45	.270	.127	.117	<10	4.7	5.5	2.9	<.004	<.002	<.006
JUN 05...	--	.46	.34	.216	.186	.178	<10	12.0	4.4	--	<.004	<.002	E.004
JUL 02...	--	.47	.33	.276	.237	.226	M	17.9	4.2	.6	--	--	--
AUG 07...	.358	.54	.41	.242	.209	.197	10	23.6	5.1	.7	<.004	<.002	<.006
SEP 10...	--	.35	.34	.190	.195	.183	M	19.8	--	.6	<.004	<.002	<.006

PLATTE RIVER BASIN

06713500 CHERRY CREEK AT DENVER, CO--Continued  
(National Water-Quality Assessment Program station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	BEN- FLUR- ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	BUTYL- ATE, WATER, DISS, REC (UG/L) (04028)	CAR- BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBO- FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933)	CYANA- ZINE, WATER, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	P,P' DDE DISSOLV (UG/L) (34653)	DI- AZINON, DIS- SOLVED (UG/L) (39572)	DI- ELDRIN DIS- SOLVED (UG/L) (39381)	2,6-DI- ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)
FEB 06...	E.004	<.050	<.010	<.002	E.147	<.020	<.005	<.018	E.001	<.003	<.005	<.005	<.002
MAR 13...	E.006	<.050	<.010	<.002	E.041	<.020	<.005	<.018	<.003	<.003	<.005	<.005	<.002
APR 03...	E.005	<.050	<.010	<.002	E.008	<.020	<.005	<.018	<.003	<.003	<.005	<.005	<.002
MAY 09...	<.007	<.050	<.010	<.002	E.009	<.020	<.005	<.018	<.003	<.003	.018	<.005	<.002
JUN 05...	.012	<.050	<.010	<.002	E.081	<.020	<.005	<.018	<.003	<.003	.014	<.005	<.002
JUL 02...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG 07...	.008	<.050	<.010	<.002	E.069	<.020	<.005	<.018	<.003	<.003	.033	<.005	<.002
SEP 10...	.007	<.050	<.010	<.002	E.374	<.020	<.005	<.018	<.003	<.003	.009	<.005	<.002

DATE	DISUL- FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	ETHAL- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	ETHO- PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	FONOFOS WATER DISS REC (UG/L) (04095)	ALPHA BHC DIS- SOLVED (UG/L) (34253)	LINDANE DIS- SOLVED (UG/L) (39341)	LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA- THION, DIS- SOLVED (UG/L) (39532)	METHYL PARA- THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	METRI- BUZIN WATER DISSOLV (UG/L) (82630)	MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)
FEB 06...	<.021	<.002	<.009	<.005	<.003	<.005	<.004	<.035	<.027	<.006	<.013	<.006	<.002
MAR 13...	<.021	<.002	<.009	<.005	<.003	<.005	<.004	<.035	<.027	<.006	<.013	<.006	<.002
APR 03...	<.021	<.002	<.009	<.005	<.003	<.005	<.004	<.035	<.027	<.006	<.013	<.006	<.002
MAY 09...	<.021	<.002	<.009	<.005	<.003	<.005	<.004	<.035	<.027	<.006	E.002	<.006	<.002
JUN 05...	<.021	<.002	<.009	<.005	<.003	<.005	<.004	<.035	<.027	<.006	E.002	<.006	<.002
JUL 02...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG 07...	<.021	<.002	<.009	<.005	<.003	<.005	<.004	<.035	<.027	<.006	<.013	<.006	<.002
SEP 10...	<.021	<.002	<.009	<.005	<.003	<.005	<.004	<.035	<.027	<.006	<.013	<.006	<.002

DATE	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PARA- THION, DIS- SOLVED (UG/L) (39542)	PEB- ULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PER- METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	PRO- METON, WATER, DISS, REC (UG/L) (04037)	PRON- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	PROPA- CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO- PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)
FEB 06...	<.007	<.007	<.002	<.010	<.006	<.011	.047	<.004	<.010	<.011	<.023	E.007	E.014
MAR 13...	<.007	<.007	<.002	<.010	<.006	<.011	.025	<.004	<.010	<.011	<.023	E.004	<.016
APR 03...	<.007	<.007	<.002	<.010	<.006	<.011	.028	<.004	<.010	<.011	<.023	E.004	<.016
MAY 09...	<.007	<.007	<.002	<.010	<.006	<.011	.023	<.004	<.010	<.011	<.023	<.011	<.016
JUN 05...	<.007	<.007	<.002	E.008	<.006	<.011	.028	<.004	<.010	<.011	<.023	E.005	E.007
JUL 02...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG 07...	<.007	<.007	<.002	.015	<.006	<.011	.044	<.004	<.010	<.011	<.023	E.006	<.016
SEP 10...	<.007	<.007	<.002	<.010	<.006	<.011	.038	<.004	<.010	<.011	<.023	E.005	<.016

## PLATTE RIVER BASIN

06713500 CHERRY CREEK AT DENVER, CO--Continued  
(National Water-Quality Assessment Program station)

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER- BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	TRIAL- LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)
	FEB 06...	<.034	<.017	<.005	<.002
MAR 13...	<.034	<.017	<.005	<.002	<.009
APR 03...	<.034	<.017	<.005	<.002	<.009
MAY 09...	<.034	<.017	<.005	<.002	<.009
JUN 05...	<.034	<.017	<.005	<.002	<.009
JUL 02...	--	--	--	--	--
AUG 07...	<.034	<.017	<.005	<.002	<.009
SEP 10...	<.034	<.017	<.005	<.002	<.009

E Estimated laboratory analysis value.

M Presence of material verified but not quantified.

## MISCELLANEOUS FIELD MEASUREMENTS, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

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 06...	1325	36	929	10.5	FEB 22...	1047	28	1110	7.1
NOV 01...	1358	24	1100	12.5	APR 25...	1453	60	907	17.0
DEC 15...	1310	35	1060	5.7	AUG 24...	1405	28	958	25.1
JAN 19...	1448	32	1100	5.3	SEP 26...	1140	17	1060	18.5

## SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
FEB 06...	1015	15	4	.16	100
MAR 13...	1020	42	22	2.5	93
APR 03...	0940	28	9	.68	98
MAY 09...	1040	112	85	26	91
JUN 05...	0955	33	9	.80	88
JUL 02...	1105	18	10	.49	98
AUG 07...	1100	22	--	--	--
SEP 10...	1030	20	6	.35	--

06714000 SOUTH PLATTE RIVER AT DENVER, CO

LOCATION.--Lat 39°45'35", long 105°00'10", in NW<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec.28, T.3 S., R.68 W., Denver County, Hydrologic Unit 10190003, on right bank 90 ft upstream from Nineteenth Street Bridge in Denver, and 0.4 mi downstream from Cherry Creek.

DRAINAGE AREA.--3,861 mi<sup>2</sup>.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May to October 1889, June to October 1890, July 1895 to current year. Monthly discharge only for some periods, published in WSP 1310. Statistical summary computed for 1976 to current year.

REVISED RECORDS.--WSP 1310: 1934(M). WSP 1730: 1957(M). WDR CO-86-1: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 5,157.64 ft above sea level, adjustment of 1960. Prior to Aug. 12, 1909, nonrecording gages, and Aug. 12, 1909 to Aug. 28, 1931, water-stage recorder, at several sites within 0.5 mi of present site at various datums. Aug. 29, 1931 to June 28, 1965, water-stage recorder at site 70 ft downstream at datum 3.66 ft lower. June 29, 1965 to Mar. 18, 1966, water-stage recorder at site 70 ft downstream at present datum.

REMARKS.--No estimated daily discharges. Records good except for flows above 473 ft<sup>3</sup>/s, which are fair. Natural flow of stream affected by transmountain diversions, storage reservoirs, power developments, ground-water withdrawals and diversions for irrigation of about 79,000 acres and municipal use, and return flow from irrigated areas.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	207	123	110	172	114	189	157	178	334	268	513	202
2	194	104	112	171	126	186	157	211	185	450	409	151
3	138	97	113	153	126	188	172	446	172	479	243	129
4	139	96	117	153	118	186	161	828	206	404	270	120
5	155	363	103	152	114	191	149	2120	244	520	211	124
6	160	205	111	154	119	175	171	831	218	372	299	137
7	153	171	115	156	119	164	155	448	261	349	300	121
8	148	117	104	155	127	162	145	434	395	1650	308	546
9	156	111	106	150	136	163	145	467	391	769	308	214
10	142	111	108	145	177	238	142	589	364	450	263	167
11	136	116	107	147	211	279	802	628	358	548	429	149
12	134	118	98	150	226	219	499	612	376	427	349	128
13	139	118	91	154	230	199	335	507	854	603	296	138
14	124	115	101	155	224	198	217	500	613	647	242	169
15	126	119	102	156	256	175	226	450	397	493	291	173
16	125	120	115	164	235	176	222	437	344	360	363	172
17	118	119	135	170	205	156	223	464	340	259	277	183
18	103	127	135	165	195	144	231	448	320	316	190	209
19	115	124	137	164	202	138	233	403	213	215	164	202
20	122	122	142	160	201	136	238	474	227	221	162	192
21	130	112	140	165	194	125	240	538	271	308	153	139
22	229	109	140	163	195	127	514	369	160	276	163	146
23	192	106	144	157	204	130	336	329	174	872	197	146
24	168	104	146	158	199	128	310	293	177	572	166	147
25	164	100	143	152	198	134	239	266	289	408	167	140
26	159	102	152	139	197	186	228	267	423	447	160	141
27	142	107	164	117	196	143	201	349	283	411	161	123
28	137	117	167	115	192	143	196	389	176	351	146	105
29	137	117	165	121	---	154	196	438	142	223	150	163
30	132	115	166	121	---	177	189	375	181	203	181	119
31	136	---	171	112	---	187	---	272	---	199	241	---
TOTAL	4560	3785	3960	4666	5036	5296	7429	15360	9088	14070	7772	4995
MEAN	147	126	128	151	180	171	248	495	303	454	251	166
MAX	229	363	171	172	256	279	802	2120	854	1650	513	546
MIN	103	96	91	112	114	125	142	178	142	199	146	105
AC-FT	9040	7510	7850	9260	9990	10500	14740	30470	18030	27910	15420	9910

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1976 - 2001, BY WATER YEAR (WY)

	202	193	143	130	146	194	435	923	834	590	489	233
MEAN	202	193	143	130	146	194	435	923	834	590	489	233
MAX	1184	809	366	282	273	420	1377	2970	2759	2546	1774	911
(WY)	1985	1985	1985	1985	1984	1983	1984	1980	1983	1995	1984	1984
MIN	66.8	94.4	84.1	64.9	80.7	94.9	99.1	218	164	139	177	76.5
(WY)	1978	1976	1978	1979	1977	1978	1982	1978	1981	1994	1981	1977

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1976 - 2001

ANNUAL TOTAL	87482	86017										
ANNUAL MEAN	239	236								a377		
HIGHEST ANNUAL MEAN										961		1983
LOWEST ANNUAL MEAN										138		1978
HIGHEST DAILY MEAN	1880	Jul 17				2120	May 5			b4020	May 27	1987
LOWEST DAILY MEAN	91	Dec 13				91	Dec 13			c43	Apr 8	1978
ANNUAL SEVEN-DAY MINIMUM	101	Sep 13				102	Dec 9			50	Apr 2	1978
MAXIMUM PEAK FLOW						8620	Jul 8			d12600	Jul 25	1998
MAXIMUM PEAK STAGE						9.63	Jul 8			10.90	Jul 25	1998
ANNUAL RUNOFF (AC-FT)	173500	170600								273200		
10 PERCENT EXCEEDS	411	441								765		
50 PERCENT EXCEEDS	190	172								192		
90 PERCENT EXCEEDS	113	116								89		

- a Average discharge for 79 years (water years 1896-1974), 344 ft<sup>3</sup>/s; 249200 acre-ft/yr, prior to completion of Chatfield Dam.
- b Maximum daily discharge for period of record, 12000 ft<sup>3</sup>/s, Jun 17, 1965.
- c Minimum daily discharge for period of record, 8.8 ft<sup>3</sup>/s, Mar 25, 1951.
- d Maximum discharge and stage for period of record, 40300 ft<sup>3</sup>/s, Jun 17, 1965, gage height, 18.66 ft, from floodmarks, present datum, from rating curve extended above 2700 ft<sup>3</sup>/s, on basis of contracted-opening measurement of peak flow.

PLATTE RIVER BASIN

06714000 SOUTH PLATTE RIVER AT DENVER, CO--Continued  
(National Water-Quality Assessment Program station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1993 to September 1995, May 1997 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

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 CAC03 (00900)	CALCIUM DIS-SOLVED (MG/L) AS CA (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L) AS NA (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)
OCT 02...	1025	187	803	8.1	16.0	8.1	235	69.1	15.2	71.1	2.02	5.21	188
NOV 07...	1035	170	769	8.0	8.9	9.9	233	69.0	14.7	72.9	2.08	5.81	196
DEC 01...	0955	94	1010	7.7	6.2	11.3	315	94.0	19.4	93.6	2.30	7.17	199
JAN 03...	1035	134	863	8.0	4.8	11.7	250	73.9	15.9	76.2	2.10	6.17	187

DATE	TIME	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L) AS CAC03 (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 (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) AS SIO2 (70301)	SOLIDS, DIS-SOLVED PER DAY (70302)	SOLIDS, DIS-SOLVED PER DAY (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)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L) AS N (00607)
OCT 02...	154	140	56.9	.9	10.2	503	480	254	.7	.055	3.83	.150	.514	
NOV 07...	161	135	59.0	.7	11.5	490	485	225	.7	.064	4.25	.248	.580	
DEC 01...	163	198	84.3	.8	12.4	682	652	173	.9	.137	9.24	.384	.898	
JAN 03...	155	157	73.2	.9	9.2	564	533	204	.8	.088	5.95	.314	.657	

DATE	TIME	NITRO-GEN, AM-MONIA + ORGANIC (MG/L) AS N (00625)	NITRO-GEN, AM-MONIA + ORGANIC (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)	IRON, DIS-SOLVED (UG/L) AS FE (01046)	MANGA-NESE, DIS-SOLVED (UG/L) AS MN (01056)	CARBON, ORGANIC DIS-SOLVED (MG/L) AS C (00681)	CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L) AS C (00689)
OCT 02...		.98	.66	.631	.506	.486	20	56.0	--	--
NOV 07...		.96	.83	.648	.580	.515	30	55.5	5.1	1.1
DEC 01...		1.4	1.3	1.01	.902	.871	30	89.3	5.4	.8
JAN 03...		1.3	.97	.677	.580	.569	40	81.6	4.9	.8

WATER-QUALITY DATA, PESTICIDE AND ORGANIC CARBON SAMPLING, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD) UNITS (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	ACETO-CHLOR, WATER FLTRD REC (49260)	ALA-CHLOR, WATER, DISS, REC (46342)	DEETHYL ATRA-ZINE, WATER, DISS, REC (04040)	ATRA-ZINE, WATER, DISS, REC (39632)	METHYL PHOS, WAT FLT 0.7 U GF, REC (82686)	BEN-FLUR-ALIN WAT FLD 0.7 U GF, REC (82673)	BUTYL-ATE, WATER, DISS, REC (04028)
FEB 28...	1100	176	6.5	11.1	8.0	994	<.004	<.002	<.006	E.004	<.050	<.010	<.002
JUN 18...	1200	326	21.7	8.3	8.3	574	<.004	<.002	<.006	.008	<.050	<.010	<.002
SEP 08...	1230	819	13.0	8.5	8.1	415	<.004	<.002	<.006	.019	<.050	<.010	<.002

DATE	TIME	CAR-BARYL WATER FLTRD 0.7 U GF, REC (82680)	CARBO-FURAN WATER FLTRD 0.7 U GF, REC (82674)	CHLOR-PYRIFOS DIS-SOLVED (UG/L) (38933)	CYANA-ZINE, WATER, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (82682)	P,P' DDE DISSOLV (34653)	DI-AZINON, SOLVED (UG/L) (39572)	DI-ELDRIN SOLVED (UG/L) (39381)	2,6-DI-ETHYL ANILINE WAT FLT 0.7 U GF, REC (82660)	DISUL-FOTON WATER FLTRD 0.7 U GF, REC (82677)	EPTC WATER FLTRD 0.7 U GF, REC (82668)	ETHAL-FLUR-ALIN WAT FLT 0.7 U GF, REC (82663)	ETHO-PROP WATER FLTRD 0.7 U GF, REC (82672)
FEB 28...	E.018	<.020	<.005	<.018	<.003	<.003	<.003	<.005	<.005	<.002	<.021	<.002	<.009	<.005
JUN 18...	E.058	<.020	<.005	<.018	<.003	<.003	.044	<.005	<.002	<.021	<.002	<.002	<.009	<.005
SEP 08...	E.360	<.020	<.005	<.018	E.002	<.003	.070	<.005	<.002	<.021	<.002	<.002	<.009	<.005

PLATTE RIVER BASIN

06714000 SOUTH PLATTE RIVER AT DENVER, CO--Continued  
(National Water-Quality Assessment Program station)

WATER-QUALITY DATA, PESTICIDE AND ORGANIC CARBON SAMPLING, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	FONOFOS WATER DISS REC (UG/L) (04095)	ALPHA BHC DIS- SOLVED (UG/L) (34253)	LINDANE DIS- SOLVED (UG/L) (39341)	LIN- URON WATER FLTRD 0.7 U (UG/L) (82666)	MALA- THION, DIS- SOLVED (UG/L) (39532)	METHYL PARA- THION WAT FLT (UG/L) (82667)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	METRI- BUZIN WATER DISSOLV (UG/L) (82630)	MOL- INATE WATER FLTRD (UG/L) (82671)	NAPROP- AMIDE WATER FLTRD (UG/L) (82684)	PARA- THION, DIS- SOLVED (UG/L) (39542)	PEB- ULATE WATER FILTRD 0.7 U (UG/L) (82669)	PENDI- METH- ALIN WAT FLT (UG/L) (82683)
FEB 28...	<.003	<.005	<.004	<.035	<.027	<.006	<.013	<.006	<.002	<.007	<.007	<.002	<.010
JUN 18...	<.003	<.005	<.004	<.035	<.027	<.006	<.013	<.006	<.002	<.007	<.007	<.002	<.010
SEP 08...	<.003	<.005	<.004	<.035	.092	<.006	<.013	<.006	<.002	<.007	<.007	<.002	<.010

DATE	PER- METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	PRO- METON, WATER, DISS, REC (UG/L) (04037)	PRON- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	PROPA- CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO- PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER- BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	TRIAL- LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)
FEB 28...	<.006	<.011	.017	<.004	<.010	<.011	<.023	<.011	<.016	<.034	<.017	<.005	<.002
JUN 18...	<.006	<.011	E.014	<.004	<.010	<.011	<.023	<.011	E.014	<.034	<.017	<.005	<.002
SEP 08...	<.006	<.011	.022	<.004	<.010	<.011	<.023	<.011	<.016	--	<.017	<.005	<.002

DATE	TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC- ULATE TOTAL (MG/L AS C) (00689)
FEB 28...	<.009	5.3	.7
JUN 18...	<.009	3.9	.9
SEP 08...	<.009	8.0	>5.0

E Estimated laboratory analysis value.

WATER-QUALITY DATA, VOLATILE ORGANIC CARBON SAMPLING, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DI- BROMO- METHANE WATER WHOLE RECOVER (UG/L) (30217)	BROMO- DI- CHLORO- METHANE TOTAL (UG/L) (32101)	CARBON TETRA- CHLORO- RIDE TOTAL (UG/L) (32102)	1,2-DI- CHLORO- ETHANE TOTAL (UG/L) (32103)	BROMO- FORM TOTAL (UG/L) (32104)	CHLORO- DI- METHANE TOTAL (UG/L) (32105)	CHLORO- FORM TOTAL (UG/L) (32106)	TOLUENE TOTAL (UG/L) (34010)	BENZENE TOTAL (UG/L) (34030)	ACRYLO- NITRILE TOTAL (UG/L) (34215)	CHLORO- BENZENE TOTAL (UG/L) (34301)	CHLORO- ETHANE TOTAL (UG/L) (34311)
FEB 28...	1059	<.05	E.05	<.06	<.1	<.06	<.2	.11	.19	E.04	<.1	<.03	<.1
JUN 18...	1159	<.05	<.05	<.06	<.1	<.06	<.2	E.06	E.03	<.04	<.1	<.03	<.1
SEP 08...	1229	<.05	<.05	<.06	<.1	<.06	<.2	E.05	.14	E.01	<.1	<.03	<.1

DATE	ETHYL- BENZENE TOTAL (UG/L) (34371)	ETHANE HEXA- CHLORO- WATER UNFLTRD RECOVER (UG/L) (34396)	METHYL- BROMIDE TOTAL (UG/L) (34413)	METHYL- CHLO- RIDE TOTAL (UG/L) (34418)	METHYL ENE CHLO- RIDE TOTAL (UG/L) (34423)	TETRA- CHLORO- ETHYL- ENE TOTAL (UG/L) (34475)	TRI- CHLORO- FLUORO- METHANE TOTAL (UG/L) (34488)	1,1-DI- CHLORO- ETHANE TOTAL (UG/L) (34496)	1,1-DI- CHLORO- ETHYL- ENE TOTAL (UG/L) (34501)	1,1,1- TRI- CHLORO- ETHANE TOTAL (UG/L) (34506)	1,1,2- TRI- CHLORO- ETHANE TOTAL (UG/L) (34511)	ETHANE, 1,1,2,2 TETRA- CHLORO- WAT UNF REC (UG/L) (34516)	BENZENE O-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34536)
FEB 28...	E.02	<.2	<.3	<.2	M	.2	<.09	<.04	<.04	E.01	<.06	<.09	<.03
JUN 18...	<.03	<.2	<.3	<.2	<.2	E.1	<.09	<.04	<.04	<.03	<.06	<.09	<.03
SEP 08...	<.03	<.2	<.3	<.2	<.2	M	<.09	<.04	<.04	<.03	<.06	<.09	<.03

## PLATTE RIVER BASIN

06714000 SOUTH PLATTE RIVER AT DENVER, CO--Continued  
(National Water-Quality Assessment Program station)

## WATER-QUALITY DATA, VOLATILE ORGANIC CARBON SAMPLING, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	1,2-DI- CHLORO- PROPANE (UG/L) (34541)	TRANS- 1,2-DI- CHLORO- ETHENE (UG/L) (34546)	BENZENE 1,2,4- TRI- CHLORO- WAT UNF REC (UG/L) (34551)	BENZENE 1,3-DI- CHLORO- WATER UNFLTRD (UG/L) (34566)	BENZENE 1,4-DI- CHLORO- WATER UNFLTRD (UG/L) (34571)	DI- CHLORO- DI- FLUORO- METHANE (UG/L) (34668)	NAPHTH- ALENE (UG/L) (34696)	TRANS- 1,3-DI- CHLORO- PROPENE (UG/L) (34699)	CIS 1,3-DI- CHLORO- PROPENE (UG/L) (34704)	VINYL CHLO- RIDE (UG/L) (39175)	TRI- CHLORO- ETHYL- ENE (UG/L) (39180)	HEXA- CHLORO- BUT- ADIENE (UG/L) (39702)	METHYL ACRY- LATE WATER UNFLTRD (UG/L) (49991)
FEB 28...	<.03	<.03	<.2	<.03	<.05	<.3	<.2	<.09	<.09	<.1	E.09	<.1	<.1
JUN 18...	<.03	<.03	<.2	<.03	<.05	<.3	<.2	<.09	<.09	<.1	E.05	<.1	<.1
SEP 08...	<.03	<.03	<.2	<.03	<.05	<.3	<.5	<.09	<.09	<.1	E.05	<.1	<.1
DATE	1234- TETRA METHYL BENZENE UNFLTRD (UG/L) (49999)	ISO- DURENE WATER UNFLTRD (UG/L) (50000)	BROMO- ETHENE WATER UNFLTRD (UG/L) (50002)	ETHER TERT- BUTYL METHYL RECOVER (UG/L) (50004)	ETHER TERT- PENTYL METHYL RECOVER (UG/L) (50005)	2BUTENE TRANS-1 4-DI- CHLORO WATER UNFLTRD (UG/L) (73547)	METHAC- RYLATE ETHYL- WATER RECOVER (UG/L) (73570)	CARBON DI- SULFIDE WHOLE TOTAL (UG/L) (77041)	CIS-1,2 -DI- CHLORO- ETHENE WATER WHOLE TOTAL (UG/L) (77093)	2-HEXA- NONE WATER WHOLE TOTAL (UG/L) (77103)	STYRENE WHOLE TOTAL (UG/L) (77128)	O- XYLENE WATER WHOLE TOTAL (UG/L) (77135)	1,1-DI CHLORO- PRO- PENE, WAT, WH TOTAL (UG/L) (77168)
FEB 28...	<.2	<.2	<.1	<.05	<.1	<.7	<.2	E.01	E.06	<.7	<.04	E.03	<.03
JUN 18...	<.2	<.2	<.1	<.05	<.1	<.7	<.2	<.07	E.02	<.7	<.04	<.04	<.03
SEP 08...	<.2	<.2	<.1	<.05	<.1	<.7	<.2	<.07	E.02	<.7	<.04	E.02	<.03
DATE	2,2-DI CHLORO- PRO- PANE WAT, WH TOTAL (UG/L) (77170)	1,3-DI- CHLORO- PROPANE WAT. WH (UG/L) (77173)	TOLUENE O-ETHYL WATER UNFLTRD (UG/L) (77220)	BENZENE 123-TRI METHYL- WATER UNFLTRD (UG/L) (77221)	BENZENE 124-TRI METHYL UNFLTRD (UG/L) (77222)	ISO- PROPYL- BENZENE WATER WHOLE RECOVER (UG/L) (77223)	BENZENE N-PROPY WATER UNFLTRD REC (UG/L) (77224)	BENZENE 135-TRI METHYL WATER UNFLTRD REC (UG/L) (77226)	O- CHLORO- TOLUENE WHOLE TOTAL (UG/L) (77275)	TOLUENE P-CHLOR WATER UNFLTRD REC (UG/L) (77277)	METHANE BROMO CHLORO- WAT UNFLTRD REC (UG/L) (77297)	BENZENE N-BUTYL WATER UNFLTRD REC (UG/L) (77342)	BENZENE SEC BUTYL- WATER UNFLTRD REC (UG/L) (77350)
FEB 28...	<.05	<.1	<.06	<.1	<.06	<.03	<.04	<.04	<.03	<.06	<.04	<.2	<.03
JUN 18...	<.05	<.1	<.06	<.1	<.06	<.03	<.04	<.04	<.03	<.06	<.04	<.2	<.03
SEP 08...	<.05	<.1	<.06	<.1	<.06	<.03	<.04	<.04	<.03	<.06	<.04	<.2	<.03
DATE	BENZENE TERT- BUTYL- WATER UNFLTRD REC (UG/L) (77353)	P-ISO- PROPYL- TOLUENE WATER WHOLE REC (UG/L) (77356)	METHYL IODIDE WATER UNFLTRD (UG/L) (77424)	123-TRI CHLORO- PROPANE WATER WHOLE TOTAL (UG/L) (77443)	ETHANE, 1112- TRI- TETRA- CHLORO- WAT UNF REC (UG/L) (77562)	1,2,3- TRI- CHLORO ETHANE BENZENE WAT, WH TOTAL (UG/L) (77613)	1,2- DIBROMO ETHANE WATER WHOLE TOTAL (UG/L) (77651)	FREON- 113 WATER UNFLTRD REC (UG/L) (77652)	METHYL TERT- BUTYL ETHER WAT UNF REC (UG/L) (78032)	PROPENE 3- CHLORO- WATER UNFLTRD REC (UG/L) (78109)	METHYL ISO- BUTYL KETONE WAT. WH. TOTAL (UG/L) (78133)	ACETONE WATER WHOLE TOTAL (UG/L) (81552)	BROMO- BENZENE WATER, WHOLE, TOTAL (UG/L) (81555)
FEB 28...	<.06	<.07	<.1	<.2	<.03	<.3	<.04	<.06	E.1	<.1	E.1	<.7	<.04
JUN 18...	<.06	<.07	<.1	<.2	<.03	<.3	<.04	<.06	E.1	<.1	<.4	<.7	<.04
SEP 08...	<.06	E.04	<.1	<.2	<.03	<.3	<.04	<.06	E.1	<.1	E.5	7	<.04
DATE			ETHER ETHYL WATER UNFLTRD RECOVER (UG/L) (81576)	DI-ISO- PROPYL- ETHER, WATER, UNFLTRD RECOVER (UG/L) (81577)	METH- ACRYLO- NITRILE WATER UNFLTRD RECOVER (UG/L) (81593)	METHYL- ETHYL- KETONE WATER WHOLE TOTAL (UG/L) (81595)	METHAC- RYLATE METHYL WATER UNFLTRD RECOVER (UG/L) (81597)	FURAN, TETRA- HYDRO- WATER UNFLTRD RECOVER (UG/L) (81607)	DIBROMO CHLORO- PROPANE WATER WHOLE TOT. REC (UG/L) (82625)	META/ PARA- XYLENE WATER UNFLTRD REC (UG/L) (85795)			
FEB 28...			E.2	<.1	<.6	<.2	<.3	<.2	<.2	E.05			
JUN 18...			<.2	<.1	<.6	<.2	<.3	<.2	<.2	<.06			
SEP 08...			<.2	<.1	<.6	<.2	<.3	<.2	<.5	E.03			

E Estimated laboratory analysis value.

M Presence of material verified but not quantified.

PLATTE RIVER BASIN

06714000 SOUTH PLATTE RIVER AT DENVER, CO--Continued  
 (National Water-Quality Assessment Program station)

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SEDI- MENT, SUS- PENDEDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDEDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT					
02...	1025	187	18	9.1	96
NOV					
07...	1035	170	14	6.4	100
DEC					
01...	0955	94	6	1.5	96
JAN					
03...	1035	134	8	2.9	97

PLATTE RIVER BASIN

06714215 SOUTH PLATTE RIVER AT 64TH AVENUE, AT COMMERCE CITY, CO

LOCATION.--Lat 39°48'44", long 104°57'28", in NW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec.12, T.3 S., R.68 W., Adams County, Hydrologic Unit 10190003, on left bank 300 ft southeast of intersection of York Street and East 64th Avenue, and 1,900 ft upstream from mouth of Sand Creek at northwest corner of Metro Denver Sewage Disposal plant at Commerce City.

DRAINAGE AREA.--3,884 mi<sup>2</sup>.

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

REVISED RECORDS.--WDR CO-86-1: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry, and concrete control. Elevation of gage is 5,105 ft above sea level, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are fair. Natural flow of stream affected by transmountain diversions, storage and flood-control reservoirs, power developments, diversions for irrigation and municipal use, 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 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.2	7.8	15	18	18	72	209	15	387	202	524	149
2	8.8	7.5	15	18	17	72	97	21	220	417	430	89
3	9.8	7.7	16	18	19	70	27	469	178	460	172	65
4	9.1	7.1	16	18	19	77	24	1010	154	363	200	57
5	10	230	16	18	18	83	22	2530	148	510	124	54
6	10	34	16	18	20	61	25	975	56	344	289	66
7	9.0	8.5	16	18	18	33	24	470	27	309	261	60
8	9.0	7.3	17	18	17	22	22	446	59	1660	267	360
9	8.3	6.7	17	18	17	21	22	480	21	878	193	14
10	8.3	7.3	17	18	17	91	22	690	19	219	112	11
11	8.2	7.8	17	19	18	148	912	779	19	146	285	11
12	8.1	7.4	17	18	54	66	616	776	19	28	202	10
13	8.0	7.9	e17	18	123	29	406	586	521	268	142	11
14	8.1	7.5	e18	17	260	28	266	376	337	284	72	9.8
15	8.0	7.7	18	17	299	20	267	196	33	42	159	9.2
16	8.3	7.5	19	18	273	21	129	170	17	15	131	9.4
17	7.8	7.7	19	17	245	21	48	115	15	15	32	9.4
18	9.0	7.8	18	17	189	20	46	87	118	83	17	8.4
19	8.6	8.0	17	17	167	20	52	27	89	86	15	9.9
20	8.2	41	17	17	168	20	17	86	147	121	26	9.8
21	8.4	106	18	17	140	20	16	186	169	218	56	10
22	104	53	18	17	75	20	293	21	94	209	99	9.8
23	48	14	18	18	89	21	292	19	144	832	138	10
24	10	14	18	18	84	21	310	18	160	379	107	11
25	47	14	18	17	83	20	137	18	257	22	100	11
26	78	15	18	18	80	96	53	18	412	310	102	39
27	e46	15	18	19	80	201	24	18	246	385	99	55
28	13	15	18	18	78	197	19	40	148	312	82	43
29	12	15	19	18	---	206	17	322	92	144	84	93
30	10	15	19	18	---	236	15	421	106	119	114	73
31	e9.0	---	19	19	---	244	---	306	---	108	183	---
TOTAL	559.2	710.2	539	552	2685	2277	4429	11691	4412	9488	4817	1377.7
MEAN	18.0	23.7	17.4	17.8	95.9	73.5	148	377	147	306	155	45.9
MAX	104	230	19	19	299	244	912	2530	521	1660	524	360
MIN	7.8	6.7	15	17	17	20	15	15	15	15	15	8.4
AC-FT	1110	1410	1070	1090	5330	4520	8780	23190	8750	18820	9550	2730

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1982 - 2001, BY WATER YEAR (WY)

	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
MEAN	112	100	69.2	96.1	71.6	117	312	731	563	466	385	129								
MAX	1286	927	199	235	325	305	1335	2675	2560	2130	1410	755								
(WY)	1985	1985	1986	1984	1984	1984	1984	1987	1995	1995	1984	1984								
MIN	10.0	9.00	8.79	11.2	8.58	6.81	21.0	33.2	47.3	42.5	125	20.1								
(WY)	1989	1989	1991	1995	1982	1995	1991	1997	1990	1994	1994	1992								

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1982 - 2001

ANNUAL TOTAL	41821.6	43537.1		
ANNUAL MEAN	114	119	271	
HIGHEST ANNUAL MEAN			825	1983
LOWEST ANNUAL MEAN			50.5	1994
HIGHEST DAILY MEAN	2020	Jul 17	2530	May 5
LOWEST DAILY MEAN	6.7	Nov 9	6.7	Nov 9
ANNUAL SEVEN-DAY MINIMUM	7.4	Nov 8	7.4	Nov 8
MAXIMUM PEAK FLOW			8020	Jul 8
MAXIMUM PEAK STAGE			6.96	Jul 8
ANNUAL RUNOFF (AC-FT)	82950	86360	196400	
10 PERCENT EXCEEDS	290	310	639	
50 PERCENT EXCEEDS	34	24	77	
90 PERCENT EXCEEDS	9.0	9.2	9.3	

e Estimated.

PLATTE RIVER BASIN

394839104570300 SAND CREEK AT MOUTH NEAR COMMERCE CITY, CO

LOCATION.--Lat 39°48'39", long 104°57'03", in SE<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec.12, T.3 S., R.68 W., Adams County, Hydrologic Unit 10190003, on left bank 800 ft upstream from mouth and 50 ft upstream from confluence of Burlington Ditch and Sand Creek in northeast corner of Metro Wastewater Plant.

DRAINAGE AREA.--191 mi<sup>2</sup>.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1992 to current year.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 5,120 ft above sea level, from topographic map. Prior to Mar 1, 2000, at site 400 ft downstream at different datum. Supplementary recorder on Burlington Ditch return flows, 50 ft downstream from gage.

REMARKS.--Records fair, except for estimated daily discharges, which are poor. Records include return flows from Burlington ditch.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	19	16	13	18	39	e20	23	e45	70	84	63
2	16	18	16	13	25	40	e18	49	e40	69	135	53
3	15	18	16	13	29	38	20	196	e35	72	74	49
4	17	17	16	13	24	36	18	e403	74	69	71	49
5	18	86	16	13	26	37	18	e1040	31	194	63	48
6	19	67	18	14	23	30	37	e284	29	182	122	51
7	21	33	22	13	19	15	56	e181	30	131	80	55
8	19	24	19	12	16	15	45	e175	43	347	78	208
9	17	21	17	13	e20	14	61	e161	45	251	86	58
10	17	20	15	14	e22	50	62	e132	44	87	123	33
11	16	19	e15	14	22	91	e373	e106	43	89	133	30
12	15	19	e16	14	e92	77	e236	e94	44	94	119	24
13	15	21	e16	13	e109	59	e115	e107	e56	313	145	21
14	14	21	e16	13	e37	53	e72	e172	e80	128	131	37
15	14	20	e17	13	e36	37	e47	e145	e32	58	137	36
16	14	19	e17	14	e31	39	e59	e103	e25	43	137	26
17	14	19	e17	15	e28	24	62	e116	e24	29	135	29
18	14	18	15	17	e39	15	57	e122	e113	98	132	30
19	15	16	16	16	e69	14	51	e120	99	103	109	22
20	14	16	e18	17	e73	14	53	e125	72	90	139	23
21	15	16	e18	16	e61	e15	74	e171	91	89	98	21
22	48	17	e18	15	e60	e16	228	e108	83	68	57	20
23	50	17	16	14	e53	24	e132	e77	55	116	57	20
24	25	16	15	14	e34	16	e66	e46	43	132	60	19
25	20	16	15	15	e34	16	52	e36	41	90	65	19
26	18	16	15	14	e34	85	52	e34	88	125	68	42
27	18	16	16	14	e42	e23	46	e42	82	100	59	49
28	18	17	15	15	45	e18	39	e61	70	88	52	48
29	19	16	15	17	---	e18	29	e106	95	71	52	47
30	18	16	14	19	---	e34	22	e62	99	67	77	42
31	18	---	15	18	---	e23	---	e44	---	67	57	---
TOTAL	588	674	506	448	1121	1025	2220	4641	1751	3530	2935	1272
MEAN	19.0	22.5	16.3	14.5	40.0	33.1	74.0	150	58.4	114	94.7	42.4
MAX	50	86	22	19	109	91	373	1040	113	347	145	208
MIN	14	16	14	12	16	14	18	23	24	29	52	19
AC-FT	1170	1340	1000	889	2220	2030	4400	9210	3470	7000	5820	2520

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 2001, BY WATER YEAR (WY)

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	
MEAN	38.3	26.1	20.7	17.8	28.4	38.7	62.2	83.7	79.6	117	110	64.2									
MAX	107	49.0	35.5	27.7	102	124	168	150	137	260	204	162									
(WY)	1998	1998	1998	1997	1997	1997	1999	2001	1995	1997	1997	1997									
MIN	17.8	16.8	13.3	12.9	14.6	13.6	25.2	46.1	33.9	68.0	53.6	16.9									
(WY)	1993	1995	1995	1995	1995	1995	1996	1993	1996	1994	1993	1992									

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1992 - 2001

ANNUAL TOTAL	17439	20711																			
ANNUAL MEAN	47.6	56.7								58.4											
HIGHEST ANNUAL MEAN										99.9											1997
LOWEST ANNUAL MEAN										35.5											1993
HIGHEST DAILY MEAN				545	Aug 17		1040	May 5		1100	Jul 29	1997									
LOWEST DAILY MEAN				12	Jan 9		12	Jan 8		4.0	Jul 4	1996									
ANNUAL SEVEN-DAY MINIMUM				13	Jan 5		13	Jan 2		7.2	Jun 28	1996									
MAXIMUM PEAK FLOW							2190	Jul 13		a5750	Jul 29	1997									
MAXIMUM PEAK STAGE							6.43	Jul 13		b12.12	Jul 29	1997									
ANNUAL RUNOFF (AC-FT)	34590	41080								42310											
10 PERCENT EXCEEDS				91			122			125											
50 PERCENT EXCEEDS				24			34			33											
90 PERCENT EXCEEDS				15			15			14											

e Estimated.  
a From rating curve extended above 500 ft<sup>3</sup>/s.  
b Maximum gage height, 13.18 ft, Jul 31, 1999, backwater from construction, site and datum then in use.

PLATTE RIVER BASIN

394839104570300 SAND CREEK AT MOUTH NEAR COMMERCE CITY, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.-- February to September 2001.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS-CHARGE,	TEMPER- ATURE (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	PH	SPE- CIFIC CON- DUCT- ANCE (US/CM)	ACETO- CHLOR, WATER, FLTRD REC (UG/L)	ALA- CHLOR, WATER, DISS, REC, (UG/L)	DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L)	METHYL AZIN- PHOS WAT FLT GF, REC (UG/L)	BEN- FLUR- ALIN WAT FLD GF, REC (UG/L)	BUTYL- ATE, WATER, DISS, REC (UG/L)		
		INST. CUBIC FEET PER SECOND (00061)			(00010)		(00300)	(00400)	(00095)	(49260)	(46342)	(04040)	(39632)	(82686)
FEB 28...	1610	42	9.5	9.2	8.0	--	<.004	<.002	E.009	.020	<.050	<.010	<.002	
JUN 20...	0930	71	17.2	8.5	8.3	1270	<.004	<.002	E.011	.037	<.050	<.010	<.002	
SEP 08...	1040	241	12.8	8.6	8.1	700	<.004	<.002	<.006	.033	<.050	<.010	<.002	
DATE		CAR- BARYL WATER FLTRD 0.7 U GF, REC (UG/L)	CARBO- FURAN WATER FLTRD 0.7 U GF, REC (UG/L)	CHLOR- PYRIFOS DIS- SOLVED (UG/L)	CYANA- ZINE, WATER, DISS, REC (UG/L)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L)	P,P' DDE DISSOLV (UG/L)	DI- AZINON, DI- SOLVED (UG/L)	DI- ELDRIN DIS- SOLVED (UG/L)	2,6-DI- ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L)	DISUL- FOTON WATER FLTRD 0.7 U GF, REC (UG/L)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L)	ETHAL- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L)	ETHO- PROP WATER FLTRD 0.7 U GF, REC (UG/L)
FEB 28...	<.041	<.020	<.005	<.018	E.002	<.003	.016	<.005	<.002	<.021	<.002	<.002	<.009	<.005
JUN 20...	E.036	<.020	<.005	<.018	<.003	<.003	.069	<.005	<.002	<.021	<.002	<.002	<.009	<.005
SEP 08...	E.177	<.020	<.005	<.018	<.003	<.003	.060	<.005	<.002	<.021	<.002	<.002	<.009	<.005
DATE		FONOFOFOS WATER DISS REC (UG/L)	ALPHA BHC DIS- SOLVED (UG/L)	LINDANE DIS- SOLVED (UG/L)	LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L)	MALA- THION, DIS- SOLVED (UG/L)	METHYL PARA- THION WAT FLT 0.7 U GF, REC (UG/L)	METO- LACHLOR WATER DISSOLV (UG/L)	METRI- BUZIN SENCOR WATER DISSOLV (UG/L)	MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L)	PARA- THION, DIS- SOLVED (UG/L)	PEB- ULATE WATER FLTRD 0.7 U GF, REC (UG/L)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L)
FEB 28...	<.003	<.005	<.004	<.035	<.027	<.006	<.013	<.006	<.002	<.007	<.007	<.007	<.002	<.010
JUN 20...	<.003	<.005	<.007	<.035	E.011	<.006	E.003	<.006	<.002	<.007	<.007	<.007	<.002	<.010
SEP 08...	<.003	<.005	<.004	<.035	<.027	<.006	<.013	<.006	<.002	<.007	<.007	<.007	<.002	<.010
DATE		PER- METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L)	PRO- METON, WATER, DISS, REC (UG/L)	PRON- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L)	PROPA- CHLOR, WATER, DISS, REC (UG/L)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (UG/L)	PRO- PARGITE WATER FLTRD 0.7 U GF, REC (UG/L)	SI- MAZINE, WATER, DISS, REC (UG/L)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L)	TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L)	TER- BUFOS WATER FLTRD 0.7 U GF, REC (UG/L)	THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L)	TRIAL- LATE WATER FLTRD 0.7 U GF, REC (UG/L)
FEB 28...	<.006	<.011	.055	<.004	<.010	<.011	<.023	<.011	<.060	<.034	<.017	<.005	<.002	
JUN 20...	<.006	<.011	.041	<.004	<.010	<.011	<.023	<.011	.096	<.034	<.017	<.005	<.002	
SEP 08...	<.006	<.011	.032	<.004	<.010	<.011	<.023	<.011	<.016	<.034	<.017	<.005	<.002	
DATE						TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C)	CARBON, ORGANIC PARTIC- ULATE TOTAL (MG/L AS C)						
FEB 28...						<.009	7.6	1.2						
JUN 20...						<.009	7.0	.4						
SEP 08...						<.009	6.9	>5.0						

E Estimated laboratory analysis value.

394839104570300 SAND CREEK AT MOUTH NEAR COMMERCE CITY, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	DI-BROMO-METHANE WATER WHOLE RECOVER (UG/L) (30217)	BROMO-DI-CHLORO-METHANE TOTAL (UG/L) (32101)	CARBON TETRA-CHLORO-TOTAL (UG/L) (32102)	1,2-DI-CHLORO-ETHANE TOTAL (UG/L) (32103)	BROMO-FORM TOTAL (UG/L) (32104)	CHLORO-DI-BROMO-TOTAL (UG/L) (32105)	CHLORO-FORM TOTAL (UG/L) (32106)	TOLUENE TOTAL (UG/L) (34010)	BENZENE TOTAL (UG/L) (34030)	ACRYLO-NITRILE TOTAL (UG/L) (34215)	CHLORO-BENZENE TOTAL (UG/L) (34301)
FEB 28...	1609	42	<.05	<.05	<.06	<.1	<.06	<.2	E.03	E.04	E.03	<1	<.03
JUN 20...	0929	71	<.05	<.05	<.06	<.1	<.06	<.2	E.01	E.05	E.09	<1	<.03
SEP 08...	1039	241	<.05	<.05	<.06	<.1	<.06	<.2	E.02	.12	E.01	<1	<.03
DATE	CHLORO-ETHANE TOTAL (UG/L) (34311)	ETHYL-BENZENE TOTAL (UG/L) (34371)	ETHANE-CHLORO-WATER UNFLTRD RECOVER (UG/L) (34396)	METHYL-BROMIDE TOTAL (UG/L) (34413)	METHYL-CHLORIDE TOTAL (UG/L) (34418)	METHYL-CHLORIDE TOTAL (UG/L) (34423)	TETRA-CHLORO-ETHYL-ENE TOTAL (UG/L) (34475)	TRI-CHLORO-FLUORO-METHANE TOTAL (UG/L) (34488)	1,1-DI-CHLORO-ETHANE TOTAL (UG/L) (34496)	1,1-DI-CHLORO-ETHANE TOTAL (UG/L) (34501)	1,1,1-TRI-CHLORO-ETHANE TOTAL (UG/L) (34506)	1,1,2-TRI-CHLORO-ETHANE TOTAL (UG/L) (34511)	ETHANE, 1,1,2,2-TETRA-CHLORO-WAT UNF REC (UG/L) (34516)
FEB 28...	<.1	<.03	<.2	<.3	<.2	<.2	E.1	<.09	<.04	<.04	E.01	<.06	<.09
JUN 20...	<.1	<.03	<.2	<.3	<.2	<.2	M	<.09	<.04	<.04	<.03	<.06	<.09
SEP 08...	<.1	<.03	<.2	<.3	<.2	<.2	<.1	<.09	<.04	<.04	<.03	<.06	<.09
DATE	BENZENE O-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34536)	1,2-DI-CHLORO-PROPANE TOTAL (UG/L) (34541)	TRANS-1,2-DI-CHLORO-ETHENE TOTAL (UG/L) (34546)	BENZENE 1,2,4-TRI-CHLORO-WAT UNF REC (UG/L) (34551)	BENZENE 1,3-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34566)	BENZENE 1,4-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34571)	DI-CHLORO-DI-FLUORO-ALENE TOTAL (UG/L) (34668)	NAPHTH-ALENE TOTAL (UG/L) (34696)	TRANS-1,3-DI-CHLORO-PROPENE TOTAL (UG/L) (34699)	CIS-1,3-DI-CHLORO-PROPENE TOTAL (UG/L) (34704)	VINYL-CHLORIDE TOTAL (UG/L) (39175)	TRI-CHLORO-ETHYL-ENE TOTAL (UG/L) (39180)	HEXA-CHLORO-BUT-ADIENE TOTAL (UG/L) (39702)
FEB 28...	<.03	<.03	<.03	<.2	<.03	<.05	<.3	<.2	<.09	<.09	<.1	E.03	<.1
JUN 20...	<.03	<.03	<.03	<.2	<.03	<.05	<.3	<.2	<.09	<.09	<.1	E.02	<.1
SEP 08...	<.03	<.03	<.03	<.2	<.03	<.05	<.3	<.5	<.09	<.09	<.1	<.04	<.1
DATE	METHYL-ACRYLATE WATER UNFLTRD RECOVER (UG/L) (49991)	1234-TETRA-METHYL-BENZENE UNFLTRD REC (UG/L) (49999)	ISO-DURENE WATER UNFLTRD RECOVER (UG/L) (50000)	BROMO-ETHENE WATER UNFLTRD RECOVER (UG/L) (50002)	ETHER-TERT-BUTYL ETHYL UNFLTRD RECOVER (UG/L) (50004)	ETHER-TERT-PENTYL METHYL UNFLTRD RECOVER (UG/L) (50005)	2BUTENE TRANS-1 4-DI-CHLORO UNFLTRD RECOVER (UG/L) (73547)	METHACRYLATE ETHYL-WATER UNFLTRD RECOVER (UG/L) (73570)	CARBON DI-SULFIDE WATER WHOLE TOTAL (UG/L) (77041)	CIS-1,2-DI-CHLORO-ETHENE WATER WHOLE TOTAL (UG/L) (77093)	2-HEXA-NONE WATER WHOLE TOTAL (UG/L) (77103)	STYRENE TOTAL (UG/L) (77128)	O-XYLENE WATER WHOLE TOTAL (UG/L) (77135)
FEB 28...	<1	<.2	<.2	<.1	<.05	.1	<.7	<.2	E.02	E.04	<.7	<.04	<.04
JUN 20...	<1	<.2	<.2	<.1	<.05	.2	<.7	<.2	<.07	E.03	<.7	<.04	<.04
SEP 08...	<1	<.2	<.2	<.1	<.05	<.1	<.7	<.2	<.07	<.04	<.7	<.04	<.04
DATE	1,1-DI-CHLORO-PROPENE, WAT, WH TOTAL (UG/L) (77168)	2,2-DI-CHLORO-PROPANE WAT, WH TOTAL (UG/L) (77170)	1,3-DI-CHLORO-PROPANE WAT. WH TOTAL (UG/L) (77173)	TOLUENE O-ETHYL WATER UNFLTRD RECOVER (UG/L) (77220)	BENZENE 123-TRI-METHYL-WATER UNFLTRD RECOVER (UG/L) (77221)	BENZENE 124-TRI-METHYL UNFLTRD RECOVER (UG/L) (77222)	ISO-PROPYL-BENZENE WATER WHOLE REC (UG/L) (77223)	BENZENE N-PROPY WATER UNFLTRD REC (UG/L) (77224)	BENZENE 135-TRI-METHYL WATER UNFLTRD REC (UG/L) (77226)	O-CHLORO-TOLUENE WATER WHOLE TOTAL (UG/L) (77275)	TOLUENE P-CHLOR WATER UNFLTRD REC (UG/L) (77277)	METHANE BROMO-CHLORO-WAT UNFLTRD REC (UG/L) (77297)	BENZENE N-BUTYL WATER UNFLTRD REC (UG/L) (77342)
FEB 28...	<.03	<.05	<.1	<.06	<.1	<.06	<.03	<.04	<.04	<.03	<.06	<.04	<.2
JUN 20...	<.03	<.05	<.1	<.06	<.1	<.06	<.03	<.04	<.04	<.03	<.06	<.04	<.2
SEP 08...	<.03	<.05	<.1	<.06	<.1	<.06	<.03	<.04	<.04	<.03	<.06	<.04	<.2

PLATTE RIVER BASIN

394839104570300 SAND CREEK AT MOUTH NEAR COMMERCE CITY, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	BENZENE SEC BUTYL-WATER UNFLTRD REC (UG/L) (77350)	BENZENE TERT-BUTYL-WATER UNFLTRD REC (UG/L) (77353)	P-ISO-PROPYL-TOLUENE WATER WHOLE REC (UG/L) (77356)	METHYL IODIDE WATER UNFLTRD RECOVER (UG/L) (77424)	123-TRI CHLORO-PROPANE WATER WHOLE TOTAL (UG/L) (77443)	ETHANE, 1112-TETRA-CHLORO-BENZENE WAT UNF REC (UG/L) (77562)	1,2,3-TRI-CHLORO-BENZENE WAT, WH REC (UG/L) (77613)	1,2-DIBROMO ETHANE WATER WHOLE TOTAL (UG/L) (77651)	FREON-113 WATER UNFLTRD REC (UG/L) (77652)	METHYL TERT-BUTYL ETHER WAT UNF REC (UG/L) (78032)	PROPENE 3-CHLORO-WATER UNFLTRD RECOVER (UG/L) (78109)	METHYL ISO-BUTYL KETONE WAT. WH. TOTAL (UG/L) (78133)	ACETONE WATER WHOLE TOTAL (UG/L) (81552)
FEB 28...	<.03	<.06	<.07	<.1	<.2	<.03	<.3	<.04	<.06	6.7	<.1	E.5	E4
JUN 20...	<.03	<.06	<.07	<.1	<.2	<.03	<.3	<.04	<.06	9.0	<.1	<.4	<7
SEP 08...	<.03	<.06	E.03	<.1	<.2	<.03	<.3	<.04	<.06	.5	<.1	E.5	<7

DATE	BROMO-BENZENE WATER, WHOLE, TOTAL (UG/L) (81555)	ETHER ETHYL WATER UNFLTRD RECOVER (UG/L) (81576)	DI-ISO-PROPYL-ETHER, WATER, UNFLTRD RECOVER (UG/L) (81577)	METH-ACRYLO-NITRILE WATER UNFLTRD RECOVER (UG/L) (81593)	METHYL-ETHYL-KETONE WATER WHOLE TOTAL (UG/L) (81595)	METHAC-RYLATE METHYL WATER UNFLTRD RECOVER (UG/L) (81597)	FURAN, TETRA-HYDRO-WATER UNFLTRD RECOVER (UG/L) (81607)	DIBROMO CHLORO-PROPANE WATER WHOLE TOT. REC (UG/L) (82625)	META/PARA-XYLENE WATER UNFLTRD REC (UG/L) (85795)
FEB 28...	<.04	<.2	<.1	<.6	<2	<.3	<2	<.2	<.06
JUN 20...	<.04	<.2	<.1	<.6	<2	<.3	<2	<.2	<.06
SEP 08...	<.04	<.2	<.1	<.6	<2	<.3	<2	<.5	<.06

E Estimated laboratory analysis value.  
M Presence of material verified but not quantified.

MISCELLANEOUS FIELD MEASUREMENTS, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

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 13...	1320	14	1840	17.8	MAY 03...	1205	128	778	7.0
NOV 14...	1520	19	2070	5.7	NOV 30...	1250	43	1160	20.3
DEC 14...	1050	12	2300	4.6	JUN 20...	0930	71	1270	17.2
JAN 05...	0920	15	2020	3.3	JUL 11...	1145	50	818	23.9
FEB 06...	0920	22	2030	4.9	AUG 03...	1600	29	1210	30.5
FEB 28...	1610	42	--	9.5	SEP 05...	0830	17	1590	17.5
APR 05...	1500	17	1710	16.2	SEP 08...	1040	241	700	12.8

06714800 LEAVENWORTH CREEK AT MOUTH NEAR GEORGETOWN, CO

LOCATION.--Lat 39°41'14", long 105°41'59", in NE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec.20, T.4 S., R.74 W., Clear Creek County, Hydrologic Unit 10190004, on left bank 400 ft upstream from confluence of South Clear Creek, 0.3 mi south of Georgetown Reservoir, and 1.3 mi south of Georgetown.

DRAINAGE AREA.--12.0 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1994 to September 2000. October 2000 to September 2001 (seasonal records only).

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 9,280 ft above sea level, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. Vidler tunnel (transmountain diversion) imports water from Peru Creek. There is seasonal diversion into Green Lake. 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, 168 ft<sup>3</sup>/s, July 12, 1995, gage height, 4.79 ft; minimum daily, 1.2 ft<sup>3</sup>/s, Feb. 12, 1995.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum discharge, 96 ft<sup>3</sup>/s, July 8, gage height 4.65 ft; minimum daily, 1.7 ft<sup>3</sup>/s, Apr. 17.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.4	e4.3	---	---	---	---	---	12	54	35	24	16
2	5.9	e4.5	---	---	---	---	---	11	62	33	26	15
3	5.8	e4.7	---	---	---	---	---	8.1	63	32	23	15
4	6.0	e4.4	---	---	---	---	---	6.9	55	32	21	14
5	6.2	e4.5	---	---	---	---	---	5.7	49	31	21	14
6	5.9	e4.6	---	---	---	---	---	5.3	54	36	21	15
7	5.7	e4.7	---	---	---	---	---	5.4	61	38	18	15
8	5.6	e4.6	---	---	---	---	---	6.4	67	46	23	15
9	5.7	e4.5	---	---	---	---	---	8.3	64	41	25	16
10	5.6	e4.5	---	---	---	---	---	9.6	60	39	22	16
11	5.4	e4.4	---	---	---	---	---	12	57	46	21	14
12	5.3	e4.3	---	---	---	---	---	16	52	43	19	13
13	5.1	e4.4	---	---	---	---	---	21	48	49	19	14
14	5.0	---	---	---	---	---	---	30	42	50	26	15
15	5.0	---	---	---	---	---	---	31	41	44	25	13
16	5.1	---	---	---	---	---	---	34	35	40	21	13
17	5.0	---	---	---	---	---	---	1.7	32	33	20	14
18	5.0	---	---	---	---	---	---	2.4	29	34	20	13
19	5.0	---	---	---	---	---	---	3.4	29	36	32	19
20	5.0	---	---	---	---	---	---	2.8	31	39	32	19
21	4.9	---	---	---	---	---	---	2.6	25	39	32	19
22	4.8	---	---	---	---	---	---	2.7	23	39	31	19
23	5.0	---	---	---	---	---	---	2.8	27	36	30	19
24	5.1	---	---	---	---	---	---	2.9	30	36	29	18
25	4.8	---	---	---	---	---	---	3.5	30	40	29	18
26	4.4	---	---	---	---	---	---	4.7	35	51	30	17
27	4.8	---	---	---	---	---	---	6.4	42	44	27	17
28	4.9	---	---	---	---	---	---	8.0	41	39	25	16
29	4.9	---	---	---	---	---	---	9.8	44	37	24	16
30	4.5	---	---	---	---	---	---	9.7	43	36	23	17
31	4.2	---	---	---	---	---	---	46	46	---	22	17
TOTAL	162.0	---	---	---	---	---	---	729.7	1403	1070	626	392
MEAN	5.23	---	---	---	---	---	---	23.5	46.8	34.5	20.2	13.1
MAX	6.4	---	---	---	---	---	---	46	67	50	26	16
MIN	4.2	---	---	---	---	---	---	5.3	33	22	16	10
AC-FT	321	---	---	---	---	---	---	1450	2780	2120	1240	778

e Estimated.

PLATTE RIVER BASIN

394308105413800 CLEAR CREEK ABOVE GEORGETOWN LAKE NEAR GEORGETOWN, CO

LOCATION.--Lat 39°43'08", long 105°41'38", in SW<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub>, sec.8, T.4 S., R.74 W., Clear Creek County, Hydrologic Unit 10190004, on left bank 300 ft upstream from Georgetown Lake, and 1.0 mi north of Georgetown.

DRAINAGE AREA.--80.0 mi<sup>2</sup>.

PERIOD OF RECORD.--July 1997 to September 1999, October 1999 to current year (seasonal records only).

GAGE.--Water-stage recorder. Elevation of gage is 8,460 ft above sea level, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are fair. 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 726 ft<sup>3</sup>/s, Jul 28, 1999, gage height 5.78 ft; minimum daily, 9.0 ft<sup>3</sup>/s (estimated), Feb. 5, 1999.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum discharge 426 ft<sup>3</sup>/s, June 8, gage height, 4.77 ft; minimum daily, 13 ft<sup>3</sup>/s, Mar. 10, 14, and Apr 9, 15.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	46	27	---	---	---	---	22	88	298	217	114	72
2	44	28	---	---	---	---	23	92	324	206	125	66
3	43	27	---	---	---	---	21	70	326	202	111	65
4	45	23	---	---	---	---	24	60	296	200	105	62
5	48	24	---	---	---	---	22	56	273	193	102	64
6	43	21	---	---	---	---	16	55	298	198	104	65
7	39	e20	---	---	---	---	14	54	332	209	96	69
8	39	23	---	---	---	e16	15	60	347	250	107	71
9	39	24	---	---	---	15	13	75	325	239	108	75
10	38	29	---	---	---	13	15	85	315	222	100	73
11	39	26	---	---	---	14	15	100	321	239	103	67
12	38	e25	---	---	---	16	15	123	301	221	96	62
13	35	e25	---	---	---	14	17	151	271	249	95	64
14	36	e26	---	---	---	13	15	186	229	265	122	82
15	35	e25	---	---	---	e14	13	214	218	232	128	68
16	35	e24	---	---	---	e16	16	222	216	212	114	65
17	35	e22	---	---	---	15	23	220	216	192	105	69
18	35	e23	---	---	---	e14	30	204	226	180	99	67
19	35	e24	---	---	---	e16	38	201	246	173	93	63
20	33	e25	---	---	---	17	34	208	251	166	93	64
21	36	e28	---	---	---	18	26	189	245	159	97	61
22	35	---	---	---	---	20	23	168	247	150	90	60
23	35	---	---	---	---	22	22	175	240	145	94	59
24	37	---	---	---	---	21	24	194	241	142	90	57
25	32	---	---	---	---	24	30	209	261	135	82	56
26	29	---	---	---	---	23	40	226	269	144	76	57
27	33	---	---	---	---	20	45	255	266	135	76	57
28	35	---	---	---	---	19	58	258	241	124	76	56
29	35	---	---	---	---	19	71	244	237	117	73	55
30	31	---	---	---	---	23	76	246	232	110	73	52
31	32	---	---	---	---	22	---	264	---	110	75	---
TOTAL	1150	---	---	---	---	---	816	4952	8108	5736	3022	1923
MEAN	37.1	---	---	---	---	---	27.2	160	270	185	97.5	64.1
MAX	48	---	---	---	---	---	76	264	347	265	128	82
MIN	29	---	---	---	---	---	13	54	216	110	73	52
AC-FT	2280	---	---	---	---	---	1620	9820	16080	11380	5990	3810

e Estimated.

394359105411900 CLEAR CREEK BELOW GEORGETOWN LAKE NEAR GEORGETOWN, CO

LOCATION.--Lat 39°43'59", long 105°41'19", in SE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub>, sec.5, T.4 S., R.74 W., Clear Creek County, Hydrologic Unit 10190004, on left bank 30 ft upstream from spillway on Georgetown Lake, and 2.0 mi north of Georgetown.

DRAINAGE AREA.--82.4 mi<sup>2</sup>.

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

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 8,450 ft above sea level, from topographic map.

REMARKS.--Records fair. 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 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40	18	21	15	11	16	24	78	273	203	104	67
2	41	25	21	14	11	14	24	87	300	194	116	61
3	41	24	21	14	9.8	14	23	66	300	188	105	60
4	42	20	20	14	9.5	14	25	54	278	189	99	58
5	43	21	20	14	11	15	25	52	250	179	97	60
6	40	18	20	15	10	15	22	47	268	179	99	61
7	36	17	20	15	11	15	19	49	298	194	92	63
8	36	21	20	15	12	17	19	54	316	224	96	66
9	36	22	20	16	11	18	20	67	302	224	103	65
10	36	22	20	15	12	17	22	77	289	197	94	68
11	35	24	19	14	12	18	22	91	295	225	96	57
12	34	23	20	15	12	17	21	111	285	202	91	53
13	34	21	20	15	12	16	20	139	258	220	89	53
14	32	24	19	15	13	17	19	170	215	249	111	70
15	31	24	19	13	12	17	19	199	204	213	118	57
16	33	22	18	14	13	17	20	206	208	197	106	56
17	33	21	19	14	14	18	25	205	210	180	98	57
18	33	22	17	14	14	17	30	189	217	168	92	58
19	32	21	17	13	16	19	35	190	231	162	87	54
20	32	22	16	14	15	20	36	193	235	157	86	53
21	35	22	17	13	15	21	31	182	228	150	89	52
22	34	24	16	13	16	22	30	155	232	140	83	52
23	33	23	15	13	17	24	25	163	223	133	88	51
24	34	22	14	13	16	24	25	183	220	133	83	49
25	30	21	13	13	16	25	32	196	238	126	77	48
26	27	21	13	13	15	25	40	214	244	133	73	48
27	31	21	14	12	16	23	46	238	243	126	72	47
28	32	21	15	13	16	22	55	249	223	116	70	47
29	32	22	15	12	---	22	66	230	219	110	68	45
30	28	23	15	13	---	24	69	232	215	104	68	45
31	30	---	15	12	---	24	---	247	---	101	69	---
TOTAL	1066	652	549	428	368.3	587	889	4613	7517	5316	2819	1681
MEAN	34.4	21.7	17.7	13.8	13.2	18.9	29.6	149	251	171	90.9	56.0
MAX	43	25	21	16	17	25	69	249	316	249	118	70
MIN	27	17	13	12	9.5	14	19	47	204	101	68	45
AC-FT	2110	1290	1090	849	731	1160	1760	9150	14910	10540	5590	3330

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2001, BY WATER YEAR (WY)

	1997	1998	1999	2000	2001	2000	2001	2000	2001	1997	1998	1999	2000	2001
MEAN	37.7	25.6	20.5	16.4	15.1	17.4	27.1	131	273	196	121	61.8		
MAX	44.8	28.2	24.5	21.8	18.9	19.4	36.7	173	368	279	215	82.0		
(WY)	2000	1999	2000	2000	2000	2000	2000	2000	1999	1999	1999	1999		
MIN	33.2	21.7	17.7	13.5	12.9	15.6	19.3	92.6	220	135	69.8	56.0		
(WY)	1998	2001	2001	1999	1999	1998	1998	1999	1998	2000	2000	2001		

SUMMARY STATISTICS

FOR 2000 CALENDAR YEAR

FOR 2001 WATER YEAR

WATER YEARS 1997 - 2001

ANNUAL TOTAL	26199	26485.3		
ANNUAL MEAN	71.6	72.6	79.0	
HIGHEST ANNUAL MEAN			99.5	1999
LOWEST ANNUAL MEAN			70.4	1998
HIGHEST DAILY MEAN	376	May 30	316	Jun 8
LOWEST DAILY MEAN	13	Dec 25	9.5	Feb 4
ANNUAL SEVEN-DAY MINIMUM	14	Dec 23	10	Feb 1
MAXIMUM PEAK FLOW			360	Jun 8
MAXIMUM PEAK STAGE			4.14	Jun 8
ANNUAL RUNOFF (AC-FT)	51970	52530	57230	
10 PERCENT EXCEEDS	193	215	223	
50 PERCENT EXCEEDS	34	32	36	
90 PERCENT EXCEEDS	19	14	15	

## PLATTE RIVER BASIN

06715000 CLEAR CREEK ABOVE WEST FORK CLEAR CREEK NEAR EMPIRE, CO

LOCATION.--Lat 39°45'07", long 105°39'41", in NE<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec.34, T.3 S., R.74 W., Clear Creek County, Hydrologic Unit 10190004, on left bank, 1.1 mi west of exit 232 on I-70, 1.3 mi southeast of Empire, and 2.1 mi west of Lawson.

DRAINAGE AREA.--86.1 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1994 to September 2000. October 2000 to September 2001.(seasonal records only)

GAGE.--Water-stage recorder. Elevation of gage is 8,280 ft above sea level, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are fair. 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, 1030 ft<sup>3</sup>/s, June 17, 1995, gage height, 6.63 ft; minimum daily, 8.5 ft<sup>3</sup>/s (estimated), Mar. 8, 1997.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum discharge, 368 ft<sup>3</sup>/s, June 7, gage height, 5.08 ft; minimum daily, 15 ft<sup>3</sup>/s, Apr. 9.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	44	26	---	---	---	---	23	e50	284	206	106	68
2	40	26	---	---	---	---	23	e54	316	197	120	61
3	40	26	---	---	---	---	22	e45	315	191	110	59
4	44	21	---	---	---	---	23	e43	294	191	99	57
5	44	24	---	---	---	---	23	e37	264	185	95	58
6	41	19	---	---	---	---	19	e34	278	192	98	60
7	38	18	---	---	---	---	17	e32	308	212	93	63
8	37	19	---	---	---	e18	17	e50	322	238	94	68
9	38	22	---	---	---	19	15	68	308	248	108	67
10	37	22	---	---	---	19	19	77	292	212	96	72
11	38	23	---	---	---	19	19	89	295	246	98	62
12	35	22	---	---	---	17	18	110	286	219	93	56
13	34	e20	---	---	---	17	18	143	263	234	89	57
14	33	e23	---	---	---	18	17	180	223	267	113	75
15	32	e26	---	---	---	18	16	212	205	224	121	61
16	34	e25	---	---	---	20	18	226	204	207	110	59
17	34	e23	---	---	---	20	21	228	203	190	102	60
18	33	e25	---	---	---	19	27	209	209	177	93	62
19	32	e26	---	---	---	19	e29	207	226	171	87	57
20	32	e25	---	---	---	19	e31	213	236	164	86	56
21	32	---	---	---	---	22	e25	204	229	158	90	54
22	32	---	---	---	---	22	e28	174	233	147	84	53
23	32	---	---	---	---	24	e25	176	226	137	89	52
24	33	---	---	---	---	23	e25	196	223	139	83	50
25	30	---	---	---	---	24	e27	212	243	132	77	49
26	27	---	---	---	---	25	e30	230	250	137	72	48
27	30	---	---	---	---	23	e33	253	252	132	70	48
28	32	---	---	---	---	22	e37	263	226	121	71	49
29	32	---	---	---	---	22	e42	244	221	113	67	47
30	27	---	---	---	---	23	e45	244	217	107	67	46
31	31	---	---	---	---	24	---	257	---	103	70	---
TOTAL	1078	---	---	---	---	---	732	4760	7651	5597	2851	1734
MEAN	34.8	---	---	---	---	---	24.4	154	255	181	92.0	57.8
MAX	44	---	---	---	---	---	45	263	322	267	121	75
MIN	27	---	---	---	---	---	15	32	203	103	67	46
AC-FT	2140	---	---	---	---	---	1450	9440	15180	11100	5650	3440

e Estimated.

PLATTE RIVER BASIN

06716100 WEST FORK CLEAR CREEK ABOVE MOUTH NEAR EMPIRE, CO

LOCATION.--Lat 39°45'32", long 105°39'34", in NE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec.27, T.3 S., R.74 W., Clear Creek County, Hydrologic Unit 10190004, on left bank, 75 ft (revised) downstream from frontage road bridge and 1.2 mi east of Empire.

DRAINAGE AREA.--57.6 mi<sup>2</sup>.

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

GAGE.--Water-stage recorder. Elevation of gage is 8,235 ft above sea level, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Natural flow of stream affected by transbasin 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.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	42	25	e27	e13	e16	e15	15	61	403	268	88	45
2	40	e30	e31	e13	e18	e14	16	72	450	262	91	44
3	39	e29	e29	e13	e17	e13	15	60	464	250	85	42
4	44	e27	e28	e12	e16	e13	17	54	460	240	78	40
5	43	e32	e27	e11	e16	e12	18	52	429	230	75	39
6	40	e31	e26	e10	e18	e13	16	48	e410	229	88	40
7	38	e29	e26	e9.8	e19	e14	17	45	e430	237	83	44
8	37	e30	e23	e9.6	e20	e16	17	48	e460	280	69	48
9	36	e31	e24	e9.4	e21	e15	17	55	e440	261	73	48
10	35	e30	e25	e16	e22	e15	18	67	e430	230	78	45
11	32	e30	e26	e15	e21	e15	18	84	e450	241	74	41
12	31	e29	e28	e14	e20	14	17	108	e400	227	68	39
13	31	e29	e31	e13	e19	14	17	135	e380	234	68	37
14	32	e31	e30	e13	e18	14	17	171	e350	228	81	42
15	30	e32	e29	e12	e17	15	17	219	e330	214	83	40
16	30	e31	e25	e12	e18	16	18	250	e325	193	75	38
17	29	e29	e23	e11	e19	16	19	261	e320	174	69	40
18	28	e32	e25	e12	e18	15	21	257	e325	161	62	42
19	29	e35	e23	e13	e18	14	23	256	e340	150	60	39
20	29	e37	e20	e12	e17	15	23	259	e350	140	59	37
21	27	e34	e21	e11	e18	15	22	254	e340	136	60	36
22	28	e32	e22	e12	e19	17	23	225	e350	128	63	35
23	29	e30	e20	e13	e20	16	22	218	e340	124	63	36
24	28	e29	e19	e16	e19	16	22	220	e330	119	55	34
25	27	e28	e18	e15	e17	17	25	244	e340	114	54	33
26	26	e28	e21	e16	e16	17	27	274	e300	122	52	33
27	27	e28	e22	e15	e15	16	31	307	307	111	49	33
28	27	e27	e17	e14	e15	16	36	353	288	101	47	33
29	28	e29	e15	e13	---	16	44	342	283	93	45	32
30	26	e30	e16	e14	---	15	53	344	277	88	44	33
31	26	---	e13	e15	---	15	---	357	---	84	45	---
TOTAL	994	904	730	397.8	507	464	661	5700	11101	5669	2084	1168
MEAN	32.1	30.1	23.5	12.8	18.1	15.0	22.0	184	370	183	67.2	38.9
MAX	44	37	31	16	22	17	53	357	464	280	91	48
MIN	26	25	13	9.4	15	12	15	45	277	84	44	32
AC-FT	1970	1790	1450	789	1010	920	1310	11310	22020	11240	4130	2320

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 2001, BY WATER YEAR (WY)

MEAN	31.8	24.9	19.8	16.4	15.1	15.3	23.2	136	362	219	97.0	47.1
MAX	41.5	30.1	26.1	23.5	20.1	19.3	35.2	199	504	395	199	66.5
(WY)	2000	2001	1999	1999	2000	1999	2000	2000	1997	1995	1999	1999
MIN	22.0	15.9	10.4	9.92	11.1	12.7	15.3	47.2	207	126	51.6	37.2
(WY)	1995	1995	1995	1995	1995	1998	1995	1995	1998	2000	2000	1996

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1995 - 2001

ANNUAL TOTAL	28232	30379.8		
ANNUAL MEAN	77.1	83.2	84.2	
HIGHEST ANNUAL MEAN			96.2	1999
LOWEST ANNUAL MEAN			60.9	1998
HIGHEST DAILY MEAN	442	Jun 2	464	Jun 3
LOWEST DAILY MEAN	e13	Dec 31	e9.4	Jan 9
ANNUAL SEVEN-DAY MINIMUM	e17	Mar 11	e11	Jan 3
MAXIMUM PEAK FLOW			515	Jun 2
MAXIMUM PEAK STAGE			5.78	Jun 2
ANNUAL RUNOFF (AC-FT)	56000	60260	61010	
10 PERCENT EXCEEDS	219	275	261	
50 PERCENT EXCEEDS	32	31	30	
90 PERCENT EXCEEDS	19	15	13	

e Estimated.

## PLATTE RIVER BASIN

06716500 CLEAR CREEK NEAR LAWSON, CO

LOCATION.--Lat 39°45'57", long 105°37'32", in NW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec.25, T.3 S., R.74 W., Clear Creek County, Hydrologic Unit 10190004, at east edge of Lawson, on left bank, 30 ft downstream from private bridge, and 2.0 mi downstream from West Fork Clear Creek.

DRAINAGE AREA.--147 mi<sup>2</sup>.

PERIOD OF RECORD.--March 1946 to September 1986; October 1994 to current year. Records prior to 1959 include inflow from August P. Gumlick Tunnel (formerly Jones Pass tunnel).

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 8,080 ft above sea level, from topographic map. Mar. 29, 1946 to Sept. 30, 1967, at site 1.5 mi upstream at different datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. Natural flow affected by minor transmountain diversion from Colorado River basin through Berthoud Pass ditch (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 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	76	50	37	33	e34	32	42	138	492	364	171	108
2	69	48	44	33	38	32	42	164	541	351	189	101
3	66	49	39	33	33	32	41	127	554	340	169	100
4	74	44	38	31	31	33	43	109	527	333	151	96
5	73	47	e33	32	31	34	45	105	481	322	145	96
6	70	41	37	32	33	34	40	96	498	324	157	99
7	66	35	38	32	36	34	38	92	545	343	147	104
8	63	43	e30	30	38	36	39	97	574	387	134	112
9	62	43	e28	e23	e40	37	37	115	555	391	154	111
10	62	42	e30	33	41	36	40	137	527	343	145	114
11	65	43	35	31	36	37	41	173	540	376	144	101
12	65	39	e37	31	37	36	39	215	525	343	131	94
13	63	41	e35	30	32	36	39	255	494	366	127	91
14	63	55	48	e27	30	37	38	296	432	396	164	116
15	60	54	39	e25	30	37	37	342	401	351	175	102
16	62	52	32	e24	29	38	39	371	385	321	154	98
17	61	e45	48	e22	30	39	43	384	377	299	140	100
18	58	e49	46	e25	30	38	50	366	381	284	126	106
19	57	62	58	e27	29	38	60	364	401	275	118	99
20	57	64	47	e25	29	39	62	371	414	264	115	94
21	56	55	48	e23	29	42	54	358	408	256	133	88
22	56	55	51	e27	30	43	56	319	412	242	144	86
23	57	46	44	e31	31	45	49	316	398	233	149	84
24	57	39	42	34	31	44	49	332	398	232	137	81
25	54	39	38	31	31	46	56	355	419	219	127	80
26	51	38	34	33	31	47	64	385	430	229	118	78
27	53	38	39	31	33	44	73	423	428	217	114	78
28	56	38	35	31	32	41	86	450	397	202	112	80
29	56	39	33	30	---	42	104	430	390	185	107	76
30	50	39	35	e27	---	43	119	433	380	171	107	77
31	53	---	33	e30	---	43	---	450	---	164	110	---
TOTAL	1891	1372	1211	907	915	1195	1565	8568	13704	9123	4314	2850
MEAN	61.0	45.7	39.1	29.3	32.7	38.5	52.2	276	457	294	139	95.0
MAX	76	64	58	34	41	47	119	450	574	396	189	116
MIN	50	35	28	22	29	32	37	92	377	164	107	76
AC-FT	3750	2720	2400	1800	1810	2370	3100	16990	27180	18100	8560	5650

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1946 - 2001, BY WATER YEAR (WY)

MEAN	61.1	43.5	34.2	29.1	27.8	28.2	43.1	199	605	405	174	90.5
MAX	132	79.9	52.2	41.0	37.3	39.0	89.1	431	1000	943	404	193
(WY)	1962	1985	2000	1971	2000	2000	1962	1958	1952	1957	1984	1984
MIN	35.6	30.2	24.5	18.2	16.8	17.6	26.3	83.4	223	125	69.9	45.6
(WY)	1957	1961	1955	1955	1955	1951	1964	1995	1954	1954	1977	1954

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1946 - 2001
ANNUAL TOTAL	48152	47615	
ANNUAL MEAN	132	130	146
HIGHEST ANNUAL MEAN			225
LOWEST ANNUAL MEAN			72.3
HIGHEST DAILY MEAN	691	574	1660
LOWEST DAILY MEAN	e28	e22	13
ANNUAL SEVEN-DAY MINIMUM	33	e24	15
MAXIMUM PEAK FLOW		634	6130
MAXIMUM PEAK STAGE		5.08	a7.41
ANNUAL RUNOFF (AC-FT)	95510	94440	105600
10 PERCENT EXCEEDS	337	384	421
50 PERCENT EXCEEDS	62	57	51
90 PERCENT EXCEEDS	37	31	26

e Estimated.

a Site and datum then in use.

06717400 CHICAGO CREEK BELOW DEVILS CANYON, NEAR IDAHO SPRINGS, CO

LOCATION.--Lat 39°42'59", long 105°34'15", in NW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec.9, T.4 S., R.73 W., Clear Creek County, Hydrologic Unit 10190004, on left bank, 50 ft upstream from Highway 103 bridge, 5.6 mi upstream from intersection of I-70 and Colorado Highway 103, and 3.2 mi southwest of Idaho Springs.

DRAINAGE AREA.--43.7 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1994 to September 1999. October 1999 to current year (seasonal records only). Records for May 14, 1996 (when gage was located 700 ft upstream) to April 10, 1998, may not be equivalent to other records because gage was moved upstream of inflow from Devils Canyon.

GAGE.--Water-stage recorder. Elevation of gage is 8,040 ft above sea level, from topographic map. Prior to May 14, 1996, at site 150 ft downstream at different datum. May 14, 1996 to Apr. 10, 1998, at site 700 ft upstream at different datum.

REMARKS.--Records good except for estimated daily discharges, which are fair. 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 175 ft<sup>3</sup>/s, June 8, 1997, gage height 6.51 ft; minimum daily, .30 ft<sup>3</sup>/s (estimated), Nov. 13, 14, 2000.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum discharge, 64 ft<sup>3</sup>/s, July 8, gage height, 5.26 ft; minimum daily, .30 ft<sup>3</sup>/s (estimated), Nov. 13, 14.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	1.6	---	---	---	---	e7.0	11	35	20	19	16
2	9.5	1.7	---	---	---	---	e7.0	12	35	20	24	15
3	9.3	1.7	---	---	---	---	e7.4	6.2	34	20	21	15
4	4.9	1.8	---	---	---	---	e7.4	4.8	33	19	19	14
5	4.1	1.6	---	---	---	---	e7.6	4.4	31	19	21	14
6	4.0	.90	---	---	---	---	e7.6	6.2	30	22	20	15
7	2.1	.82	---	---	---	---	e8.0	8.4	30	27	22	15
8	1.9	.95	---	---	---	---	e8.0	11	30	30	19	16
9	2.1	e.70	---	---	---	---	e8.0	14	33	42	21	17
10	2.1	e.60	---	---	---	---	e8.0	16	31	34	22	17
11	2.0	e.50	---	---	---	---	e8.5	17	30	31	22	16
12	2.2	e.40	---	---	---	---	e8.5	21	28	34	21	15
13	1.5	e.30	---	---	---	---	e8.5	26	29	40	20	14
14	1.5	e.30	---	---	---	---	e9.0	28	29	43	28	18
15	1.4	e.50	---	---	---	---	e9.0	36	29	35	28	15
16	1.2	e.70	---	---	---	---	e9.0	42	25	31	28	14
17	1.8	e.80	---	---	---	---	e9.3	38	24	29	26	15
18	2.2	e1.0	---	---	---	---	10	42	22	27	25	15
19	4.4	e1.0	---	---	---	---	8.0	52	23	27	24	15
20	4.0	e1.0	---	---	---	---	1.3	49	23	26	24	14
21	2.5	e1.0	---	---	---	---	.65	47	23	26	24	14
22	3.2	e1.0	---	---	---	---	.52	43	23	27	23	14
23	2.5	e1.0	---	---	---	---	.83	42	23	24	22	13
24	4.4	e1.0	---	---	---	---	1.0	42	23	24	20	14
25	5.1	e1.0	---	---	---	---	1.7	40	24	23	19	14
26	6.0	e1.0	---	---	---	---	3.7	41	24	22	18	14
27	5.3	e1.0	---	---	---	---	5.1	38	24	21	18	14
28	6.2	e1.0	---	---	---	---	7.2	37	22	20	19	13
29	3.6	e1.0	---	---	---	---	8.9	38	22	18	17	12
30	2.3	e1.0	---	---	---	---	9.5	36	21	18	17	14
31	3.2	---	---	---	---	---	---	34	---	17	17	---
TOTAL	116.5	28.87	---	---	---	---	196.20	883.0	813	816	668	441
MEAN	3.76	.96	---	---	---	---	6.54	28.5	27.1	26.3	21.5	14.7
MAX	10	1.8	---	---	---	---	10	52	35	43	28	18
MIN	1.2	.30	---	---	---	---	.52	4.4	21	17	17	12
AC-FT	231	57	---	---	---	---	389	1750	1610	1620	1320	875

e Estimated.

## PLATTE RIVER BASIN

06718300 CLEAR CREEK ABOVE JOHNSON GULCH NEAR IDAHO SPRINGS, CO

LOCATION.--Lat 39°44'47", long 105°26'08", in NE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec.34, T.3 S., R.72 W., Clear Creek County, Hydrologic Unit 10190004, on left bank 150 ft downstream from I-70 exit 243 bridge over Clear Creek, and 2 mi east of Idaho Springs.

DRAINAGE AREA.--267 mi<sup>2</sup>.

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

GAGE.--Water-stage recorder. Elevation of gage is 7,210 ft above sea level, from topographic map.

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 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	107	e54	e50	e58	e44	45	e46	125	e595	456	216	154
2	105	e53	e50	e56	e45	42	e45	152	e575	439	241	145
3	113	e55	e50	e55	e47	42	e46	125	e620	420	229	140
4	120	e52	e45	e53	e50	43	e48	114	e590	411	214	133
5	119	e50	e45	e52	e49	e38	e50	113	e560	393	206	132
6	116	e48	e46	e54	e50	e37	e48	105	e550	397	214	135
7	111	e47	e45	e52	e49	e32	e45	104	e575	439	221	141
8	109	e45	e38	e50	e48	41	e42	108	e600	508	198	152
9	109	e55	e33	e60	e46	42	e40	123	e625	547	220	150
10	108	e54	e37	e70	e47	42	e42	138	e590	455	202	152
11	108	e55	e40	e64	e45	42	e44	159	e580	512	198	136
12	104	e58	e38	e60	e43	e39	e42	195	e585	454	186	128
13	101	e60	e45	e56	e42	e38	e42	258	e575	479	180	128
14	93	e58	e50	e52	e43	e40	e40	341	e560	530	216	155
15	e90	e56	e45	e47	e45	e38	e43	437	e530	453	228	133
16	e88	e54	e43	e40	e45	e39	e50	473	e500	411	212	130
17	e80	e60	e50	e36	e44	e39	e58	489	e470	369	199	130
18	e72	e64	e60	e45	e43	e40	64	463	e450	340	185	135
19	e66	e68	e58	e48	e45	e39	72	472	e480	328	176	129
20	e64	e70	e54	e45	e47	e42	73	476	e500	310	175	125
21	e64	e62	e56	e44	e49	e44	66	461	e510	300	188	125
22	e64	e62	e60	e43	e50	e45	69	390	521	284	187	134
23	e66	e60	e54	e45	49	e45	63	377	503	268	191	132
24	e64	e58	e52	e47	47	e46	63	401	501	275	178	129
25	e58	e45	e50	e48	45	e49	69	435	530	260	174	135
26	e58	e45	e52	e46	45	e50	76	479	543	264	167	133
27	e62	e47	e48	e45	45	e50	82	528	537	252	160	131
28	e64	e42	e45	e45	46	e48	91	575	496	233	158	132
29	e66	e42	e56	e44	---	e45	105	541	485	219	152	130
30	e64	e47	e52	e47	---	e44	117	542	474	211	151	130
31	e62	---	e60	e44	---	e45	---	555	---	214	155	---
TOTAL	2675	1626	1507	1551	1293	1311	1781	10254	16210	11431	5977	4074
MEAN	86.3	54.2	48.6	50.0	46.2	42.3	59.4	331	540	369	193	136
MAX	120	70	60	70	50	50	117	575	625	547	241	155
MIN	58	42	33	36	42	32	40	104	450	211	151	125
AC-FT	5310	3230	2990	3080	2560	2600	3530	20340	32150	22670	11860	8080

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 2001, BY WATER YEAR (WY)

MEAN	106	67.8	53.6	45.2	42.6	47.8	74.3	371	911	619	306	162
MAX	126	83.6	62.6	54.6	54.7	58.8	106	549	1325	1398	526	213
(WY)	1999	2000	2000	1996	2000	2000	2000	1996	1995	1995	1999	1999
MIN	65.0	49.6	43.2	34.1	30.5	42.3	49.9	221	540	282	157	128
(WY)	1995	1995	1995	1995	1995	2001	1995	1995	2001	2000	2000	2000

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1995 - 2001	
ANNUAL TOTAL	63249		59690			
ANNUAL MEAN	173		164		235	
HIGHEST ANNUAL MEAN					326	
LOWEST ANNUAL MEAN					164	
HIGHEST DAILY MEAN	910		e625		2080	
LOWEST DAILY MEAN	e26		e32		e26	
ANNUAL SEVEN-DAY MINIMUM	e37		Jan 1		Mar 12	
MAXIMUM PEAK FLOW			776		Jul 8	
MAXIMUM PEAK STAGE			6.09		Jul 8	
ANNUAL RUNOFF (AC-FT)	125500		118400		169900	
10 PERCENT EXCEEDS	449		482		630	
50 PERCENT EXCEEDS	94		68		91	
90 PERCENT EXCEEDS	47		43		42	

e Estimated.

a Maximum gage height, 8.23 ft, Jun 17, 1995.

06718550 NORTH CLEAR CREEK ABOVE MOUTH NEAR BLACKHAWK, CO

LOCATION.--Lat 39°44'56", long 105°23'57", in NE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec.36, T.3 S., R.72 W., Clear Creek County, Hydrologic Unit 10190004, on left bank 150 ft upstream from intersection of Hwy 6 and Hwy 119 bridge over North Clear Creek, 0.2 mi above mouth, and 6.5 mi southeast of Blackhawk.

DRAINAGE AREA.--59.4 mi<sup>2</sup>.

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

GAGE.--Water-stage recorder. Elevation of gage is 6,910 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 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.2	5.1	e3.2	e2.6	e3.0	3.4	6.4	20	54	13	7.9	6.7
2	4.9	4.7	e3.4	e2.6	e3.0	3.2	7.1	24	53	12	21	6.2
3	4.8	e4.8	e3.4	e2.6	e3.0	e3.4	7.2	21	53	12	12	6.1
4	5.1	4.8	e3.0	e3.0	e3.2	e3.6	7.6	21	52	12	8.2	5.7
5	5.2	e4.8	e2.8	e3.0	e3.2	e3.8	8.2	23	48	12	7.3	5.7
6	5.2	e4.6	e2.6	e3.0	e3.0	3.9	8.2	25	45	13	15	5.7
7	5.2	e4.6	e2.2	e3.0	e3.0	3.9	7.5	25	44	12	16	6.6
8	5.3	e4.6	e2.2	e3.0	e3.0	4.0	7.6	27	43	19	13	9.6
9	5.2	e4.6	e2.4	e3.0	e3.0	4.1	7.5	31	41	21	27	7.8
10	5.0	4.6	e2.4	e3.2	e3.0	4.4	8.4	35	37	14	16	8.1
11	5.1	e4.4	e2.4	e3.2	e3.0	4.2	8.4	41	35	15	14	6.5
12	5.0	e4.0	e2.4	e3.2	e3.0	4.5	8.1	47	33	17	13	5.3
13	4.9	e3.6	e2.4	e3.2	e3.0	4.2	7.4	54	33	31	16	5.8
14	5.0	e3.6	e2.4	e3.2	e3.2	4.2	7.8	65	31	31	16	7.7
15	5.1	e3.6	e2.4	e3.0	e3.2	4.1	8.3	72	29	17	18	5.2
16	5.0	e3.6	e2.4	e3.0	e3.2	4.6	8.8	74	25	14	15	4.8
17	4.9	e3.6	e2.6	e2.8	e3.2	4.2	8.9	77	24	13	13	6.4
18	4.9	e3.4	e2.6	e3.0	e3.2	5.3	11	78	22	12	12	5.7
19	4.9	e3.4	e2.6	e3.2	e3.2	5.3	12	75	21	11	11	5.3
20	4.8	e3.6	e2.6	e3.0	e3.2	4.9	13	75	20	11	12	5.1
21	4.9	e3.8	e2.8	e3.0	e3.2	5.5	11	72	20	11	11	4.9
22	5.3	e3.6	e2.8	e3.0	e3.2	6.7	12	66	20	10	10	5.0
23	5.4	e3.4	e2.6	e3.2	e3.2	7.2	12	61	19	10	11	5.1
24	5.2	e3.2	e2.6	e3.2	e3.0	6.4	12	57	18	14	9.8	5.1
25	5.2	e3.2	e2.6	e3.2	e3.0	6.5	13	56	19	13	9.2	5.0
26	5.0	e3.2	e2.6	e3.2	e2.8	7.1	15	57	19	10	9.0	5.2
27	5.0	e3.2	e2.6	e3.0	2.7	6.6	15	62	18	9.9	7.8	5.2
28	5.1	e3.2	e2.8	e3.0	2.9	6.1	16	62	16	9.0	6.8	5.3
29	5.2	e3.2	e2.8	e3.0	---	5.9	18	62	15	8.4	6.9	5.4
30	5.1	e3.2	e2.6	e3.0	---	6.0	19	57	14	7.9	6.8	5.8
31	5.3	---	e2.6	e3.0	---	6.0	---	55	---	7.7	6.5	---
TOTAL	157.4	117.2	81.8	93.6	85.8	153.2	312.4	1577	921	422.9	378.2	178.0
MEAN	5.08	3.91	2.64	3.02	3.06	4.94	10.4	50.9	30.7	13.6	12.2	5.93
MAX	5.4	5.1	3.4	3.2	3.2	7.2	19	78	54	31	27	9.6
MIN	4.8	3.2	2.2	2.6	2.7	3.2	6.4	20	14	7.7	6.5	4.8
AC-FT	312	232	162	186	170	304	620	3130	1830	839	750	353

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 2001, BY WATER YEAR (WY)

	1995	1996	1997	1998	1999	2000	2001	2000	2000	2000	2000	2000
MEAN	6.16	4.73	3.59	3.17	3.29	5.52	15.0	82.7	87.6	22.7	17.5	7.35
MAX	12.3	8.09	6.42	4.92	5.79	8.46	24.5	112	228	49.7	50.8	13.3
(WY)	2000	2000	2000	2000	2000	2000	1998	1995	1995	1999	1999	1999
MIN	3.08	2.68	1.68	1.30	1.38	2.21	7.60	50.9	29.3	9.32	4.03	4.28
(WY)	1995	1995	1995	1995	1995	1995	1995	2001	2000	2000	2000	2000

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1995 - 2001
ANNUAL TOTAL	4769.59	4478.5	
ANNUAL MEAN	13.0	12.3	21.7
HIGHEST ANNUAL MEAN			35.6
LOWEST ANNUAL MEAN			12.3
HIGHEST DAILY MEAN	74 May 8	78 May 18	415 May 31 1995
LOWEST DAILY MEAN	e.00 Aug 7	e2.2 Dec 7	e.00 Aug 7 2000
ANNUAL SEVEN-DAY MINIMUM	e.00 Aug 7	e2.3 Dec 7	e.00 Aug 7 2000
MAXIMUM PEAK FLOW		151 Aug 2	a759 Jun 2 1995
MAXIMUM PEAK STAGE		5.00 Aug 2	5.87 Jun 2 1995
ANNUAL RUNOFF (AC-FT)	9460	8880	15700
10 PERCENT EXCEEDS	44	31	64
50 PERCENT EXCEEDS	5.9	5.3	6.5
90 PERCENT EXCEEDS	2.6	3.0	2.5

e Estimated.  
a From rating curve extended above 300 ft<sup>3</sup>/s.

## PLATTE RIVER BASIN

06719505 CLEAR CREEK AT GOLDEN, CO

LOCATION.--Lat 39°45'11", long 105°14'05", in NE<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec.33, T.3 S., R.70 W., Jefferson County, Hydrologic Unit 10190004, on left bank 100 ft downstream from U.S. Highway 6 bridge at west edge of Golden, 0.7 mi downstream from headgate of Church ditch, and 13.3 mi downstream from North Clear Creek.

DRAINAGE AREA.--400 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1974 to current year. Records for station at site 0.8 mi upstream (October 1908 to December 1909, June 1911 to September 1974) are not equivalent due to diversions by Church ditch. Water-quality data available, November 1977 to August 1995. Sediment data available, April to September 1981, and April 1993 to August 1995.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 5,695 ft above sea level, from topographic map. Prior to Sept. 12, 1980, at site 80 ft downstream. Prior to Jan. 22, 1987, at datum 2.00 ft higher, at both sites.

REMARKS.--Records good except for estimated daily discharges, which are poor. Natural flow of stream affected by minor transmountain diversions from Colorado River basin through Berthoud Pass ditch (see elsewhere in this report) and several small reservoirs upstream from station. Diversion by Welch ditch 1.4 mi upstream from station and by Church Ditch 0.7 mi upstream from station for irrigation of about 5,200 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 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	123	e87	e71	e63	e60	49	56	173	593	427	174	153
2	116	e81	e74	e63	e59	45	58	221	653	410	215	141
3	129	e78	e74	e62	e61	44	60	190	679	388	203	133
4	137	e73	e68	e64	e66	45	60	173	670	379	175	122
5	138	e79	e60	e63	e65	45	66	181	603	360	167	117
6	132	e77	e55	e63	e66	46	63	169	598	364	173	126
7	120	e71	e50	e62	e65	47	56	163	644	406	196	137
8	116	e75	e48	e62	e64	48	54	163	670	438	169	162
9	116	e77	e50	e61	e62	50	53	191	675	551	216	159
10	114	e76	e55	e64	e60	52	57	210	627	428	183	161
11	112	e75	e60	e65	e60	49	68	241	640	491	170	132
12	106	e76	e72	e64	e59	49	63	280	631	428	155	118
13	104	e77	e73	e63	e58	47	56	342	601	481	162	112
14	92	e78	e80	e63	e58	48	57	410	531	582	193	166
15	93	e79	e74	e61	e56	43	58	483	476	489	208	132
16	93	e78	e68	e59	e53	46	59	507	448	445	193	124
17	91	e77	e69	e56	e50	52	61	529	437	395	173	123
18	91	e74	e70	e61	e49	48	72	511	441	363	153	137
19	88	e76	e70	e63	e48	49	82	511	461	350	141	124
20	88	e78	e68	e60	e47	50	94	508	483	336	139	113
21	88	e85	e72	e60	e46	54	83	499	480	322	153	113
22	90	e77	e70	e64	e43	59	100	431	491	310	149	122
23	100	e76	e69	e67	e45	61	85	411	480	288	162	120
24	96	e74	e68	e70	46	61	84	431	476	297	143	118
25	91	e71	e67	e69	44	60	90	455	503	273	139	127
26	e86	e71	e66	e68	45	65	102	489	519	235	134	125
27	e88	e71	e65	e67	44	64	111	527	521	229	133	119
28	e90	e71	e67	e67	45	55	121	580	475	202	136	121
29	e91	e71	e64	e65	---	54	141	557	461	185	127	118
30	e86	e72	e63	e64	---	54	165	557	446	174	125	119
31	e87	---	e63	e62	---	56	---	558	---	176	144	---
TOTAL	3192	2281	2043	1965	1524	1595	2335	11651	16413	11202	5103	3894
MEAN	103	76.0	65.9	63.4	54.4	51.5	77.8	376	547	361	165	130
MAX	138	87	80	70	66	65	165	580	679	582	216	166
MIN	86	71	48	56	43	43	53	163	437	174	125	112
AC-FT	6330	4520	4050	3900	3020	3160	4630	23110	32560	22220	10120	7720

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 2001, BY WATER YEAR (WY)

MEAN	86.8	63.9	51.0	45.1	43.5	44.8	75.9	326	783	469	217	129
MAX	192	115	89.6	74.3	67.3	64.2	126	655	1522	1203	535	231
(WY)	1985	1985	2000	2000	2000	2000	2000	1984	1995	1995	1999	1984
MIN	54.3	39.2	33.5	29.3	25.9	31.2	39.0	123	382	161	100	78.8
(WY)	1982	1982	1990	1995	1995	1976	1982	1981	1977	1977	1977	1977

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1975 - 2001
ANNUAL TOTAL	67126	63198	
ANNUAL MEAN	183	173	195
HIGHEST ANNUAL MEAN			321
LOWEST ANNUAL MEAN			109
HIGHEST DAILY MEAN	900	679	2300
LOWEST DAILY MEAN	e48	e43	18
ANNUAL SEVEN-DAY MINIMUM	e54	45	24
MAXIMUM PEAK FLOW		744	2370
MAXIMUM PEAK STAGE		6.76	a6.44
ANNUAL RUNOFF (AC-FT)	133100	125400	141300
10 PERCENT EXCEEDS	439	482	545
50 PERCENT EXCEEDS	106	90	81
90 PERCENT EXCEEDS	63	53	38

e Estimated.

a Maximum gage height, 8.10 ft, Jun 21, 1995.

06720500 SOUTH PLATTE RIVER AT HENDERSON, CO

LOCATION.--Lat 39°55'19", long 104°52'04", in SE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec.34, T.1 S., R.67 W., Adams County, Hydrologic Unit 10190003, on right bank 500 ft upstream from bridge on State Highway 22, and 0.2 mi northwest of Henderson.

DRAINAGE AREA.--4,713 mi<sup>2</sup>.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1926 to current year. Prior to October 1933, monthly discharge only, published in WSP 1310. Statistical summary computed for 1976 to current year.

REVISED RECORDS.--WSP 1310: 1934-36(M). WSP 1730: Drainage area. WDR C0-88-1: 1986.

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 4999.12 ft above sea level. See WSP 1710 or 1730 for history of changes prior to June 1, 1960. June 1, 1960, to May 10, 1969, water-stage recorder at site 1,200 ft upstream at datum 5.00 ft higher. May 11 to Oct. 2, 1969, nonrecording gage at site 500 ft downstream at datum 3.00 ft higher. Oct. 3, 1969 to Jan. 15, 1986, at present site, at datum 3.00 ft higher.

REMARKS.--No estimated daily discharges. Records good except for flows above 831 ft<sup>3</sup>/s, which are fair. Natural flow of stream affected by transmountain diversions, storage reservoirs, ground-water withdrawals, diversions for irrigation of about 253,000 acres, and return flow from irrigated areas.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	305	271	251	273	284	344	456	296	817	546	570	405
2	286	262	259	276	292	358	373	348	897	682	1030	337
3	274	262	256	280	307	365	268	968	799	644	495	316
4	278	270	255	285	299	360	265	1730	902	545	426	321
5	302	542	244	287	307	354	271	4530	783	604	367	292
6	314	480	241	277	302	323	280	2090	645	809	533	287
7	315	299	250	275	291	304	318	952	568	682	585	327
8	311	283	249	282	279	286	299	774	670	1360	537	969
9	311	266	253	276	277	309	307	773	611	2280	589	393
10	308	264	255	270	275	382	307	928	480	619	487	262
11	304	260	258	269	291	578	1530	997	420	911	626	243
12	297	261	249	271	348	519	1320	1020	398	521	459	211
13	272	253	245	270	463	407	777	873	950	709	411	209
14	245	251	246	264	528	359	555	812	1330	1620	427	249
15	241	251	251	271	529	318	520	607	493	725	546	271
16	247	250	238	277	574	319	445	520	365	545	498	235
17	249	252	240	267	508	326	367	416	307	336	334	237
18	257	250	232	281	476	319	355	474	383	320	295	247
19	262	251	237	281	466	301	358	405	419	314	257	242
20	258	264	243	279	474	296	320	355	467	329	297	240
21	256	361	232	281	446	305	348	776	505	423	297	233
22	348	359	240	279	377	299	821	369	428	393	323	218
23	431	264	247	271	387	315	764	297	464	641	390	213
24	287	252	235	271	358	302	645	246	447	846	370	224
25	295	252	230	271	354	300	477	227	481	245	351	222
26	319	256	255	274	355	466	398	213	659	395	353	254
27	314	259	287	279	354	505	352	229	586	498	359	292
28	267	252	284	283	359	434	316	347	447	445	310	294
29	262	247	282	287	---	425	309	858	446	358	308	316
30	263	249	278	299	---	484	314	805	446	344	330	322
31	274	---	276	286	---	491	---	667	---	322	405	---
TOTAL	8952	8493	7798	8592	10560	11453	14435	24902	17613	20011	13565	8881
MEAN	289	283	252	277	377	369	481	803	587	646	438	296
MAX	431	542	287	299	574	578	1530	4530	1330	2280	1030	969
MIN	241	247	230	264	275	286	265	213	307	245	257	209
AC-FT	17760	16850	15470	17040	20950	22720	28630	49390	34940	39690	26910	17620

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1976 - 2001, BY WATER YEAR (WY)

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
MEAN	357	337	306	330	322	362	539	1123	1269	827	660	385														
MAX	1835	1268	554	592	642	842	1732	3923	4796	3204	2074	1141														
(WY)	1985	1985	1984	1984	1984	1983	1983	1980	1995	1995	1984	1984														
MIN	144	173	177	155	156	118	140	324	334	269	279	157														
(WY)	1978	1978	1976	1977	1977	1982	1982	1986	1981	1994	1977	1977														

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1976 - 2001
ANNUAL TOTAL	148516	155255	
ANNUAL MEAN	406	425	a569
HIGHEST ANNUAL MEAN			1379
LOWEST ANNUAL MEAN			252
HIGHEST DAILY MEAN	4090	Jul 17	b6500 Jun 9 1995
LOWEST DAILY MEAN	170	Sep 12	c27 Apr 7 1977
ANNUAL SEVEN-DAY MINIMUM	173	Sep 11	227 Sep 19
MAXIMUM PEAK FLOW		7080	Jul 8 d12300 Jun 27 1983
MAXIMUM PEAK STAGE		7.88	Jul 8 f7.58 Jun 27 1983
ANNUAL RUNOFF (AC-FT)	294600	307900	412300
10 PERCENT EXCEEDS	567	715	1070
50 PERCENT EXCEEDS	344	316	348
90 PERCENT EXCEEDS	242	248	182

- a Average discharge for 48 years (water years 1927-74), 366 ft<sup>3</sup>/s; 265200 acre-ft/yr, prior to completion of Chatfield Dam.
- b Maximum daily discharge for period of record, 13200 ft<sup>3</sup>/s, May 7, 1973.
- c Minimum daily discharge for period of record, 4.4 ft<sup>3</sup>/s, Apr 1, 1950.
- d Maximum discharge and stage for period of record, 33000 ft<sup>3</sup>/s, May 6, 1973, gage height, 11.67 ft, from rating curve extended above 7200 ft<sup>3</sup>/s, partly on basis of flow-over-road measurement of peak flow; maximum gage height, 12.93 ft, Jun 17, 1965, site and datum then in use.
- f Maximum gage height for statistical period, 9.91 ft, May 17, 1995.

PLATTE RIVER BASIN

06720500 SOUTH PLATTE RIVER AT HENDERSON, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--July 1955 to September 1957, June 1962 to September 1973, April 1988 to September 1995, March to September 2001.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPERATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	SPECIFIC CONDUCTANCE (US/CM) (00095)	ACETO-CHLOR, WATER FLTRD REC (UG/L) (49260)	ALA-CHLOR, WATER, DISS, REC, (UG/L) (46342)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	METHYL AZIN-PHOS, WAT FLT 0.7 U (UG/L) (82686)	BEN-FLUR-ALIN, WAT FLD 0.7 U (UG/L) (82673)	BUTYL-ATE, WATER, DISS, REC (UG/L) (04028)	
MAR 05...	1550	385	14.0	8.6	--	970	<.004	<.002	<.006	E.006	<.050	<.010	<.002	
JUN 18...	0910	--	19.2	6.2	7.8	861	<.004	<.002	E.006	.017	<.050	<.010	<.002	
DATE	TIME	CARBARYL WATER FLTRD 0.7 U (UG/L) (82680)	CARBON-FURAN WATER FLTRD 0.7 U (UG/L) (82674)	CHLOR-PYRIFOS DIS-SOLVED (UG/L) (38933)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U (UG/L) (82682)	P,P' DDE DISSOLV (34653)	DI-AZINON, DISS (39572)	DI-ELDRIN DIS- (39381)	2,6-DI-ETHYL ANILINE WAT FLT 0.7 U (UG/L) (82660)	DISUL-FOTON WATER FLTRD 0.7 U (UG/L) (82677)	EPTC WATER FLTRD 0.7 U (UG/L) (82668)	ETHAL-FLUR-ALIN WAT FLT 0.7 U (UG/L) (82663)	ETHO-PROP WATER FLTRD 0.7 U (UG/L) (82672)
MAR 05...		<.041	<.020	<.005	<.018	<.003	<.003	E.004	<.005	<.002	<.021	<.015	<.009	<.005
JUN 18...		E.052	<.020	<.005	<.018	E.002	<.003	.080	<.005	<.002	<.021	<.002	<.009	<.005
DATE	TIME	FONOFOS WATER DISS REC (UG/L) (04095)	ALPHA BHC DIS-SOLVED (UG/L) (34253)	LINDANE DIS-SOLVED (UG/L) (39341)	LIN-URON WATER FLTRD 0.7 U (UG/L) (82666)	MALA-THION, DIS-SOLVED (UG/L) (39532)	METHYL PARA-THION WAT FLT 0.7 U (UG/L) (82667)	METO-LACHLOR WATER DISSOLV (39415)	METRI-SENCOB WATER DISSOLV (82630)	MOL-INATE WATER FLTRD 0.7 U (UG/L) (82671)	NAPROP-AMIDE WATER FLTRD 0.7 U (UG/L) (82684)	PARA-THION, DIS-SOLVED (UG/L) (39542)	PEB-ULATE WATER FILTRD 0.7 U (UG/L) (82669)	PENDI-METH-ALIN WAT FLT 0.7 U (UG/L) (82683)
MAR 05...		<.003	<.005	<.010	<.035	E.011	<.006	<.013	<.006	<.002	<.007	<.007	<.002	<.010
JUN 18...		<.003	<.005	<.010	<.035	<.027	<.006	E.003	<.006	<.002	<.007	<.007	<.002	<.010
DATE	TIME	PER-METHRIN CIS WAT FLT 0.7 U (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U (UG/L) (82664)	PRO-METON, WATER, DISS, REC (UG/L) (04037)	PRON-AMIDE WATER FLTRD 0.7 U (UG/L) (82676)	PROPA-CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO-PANIL WATER FLTRD 0.7 U (UG/L) (82679)	PRO-PARGITE WATER FLTRD 0.7 U (UG/L) (82685)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU-THIURON WATER FLTRD 0.7 U (UG/L) (82670)	TER-BACIL WATER FLTRD 0.7 U (UG/L) (82665)	TER-BUFOS WATER FLTRD 0.7 U (UG/L) (82675)	THIO-BENCARB WATER FLTRD 0.7 U (UG/L) (82681)	TRIAL-LATE WATER FLTRD 0.7 U (UG/L) (82678)
MAR 05...		<.006	<.011	.028	<.004	<.010	<.011	<.023	E.007	.053	<.034	<.017	<.005	<.002
JUN 18...		<.006	<.011	.019	<.004	<.010	<.020	<.023	<.011	<.030	<.034	<.017	<.005	<.002
DATE	TIME	TRI-FLUR-ALIN WAT FLT 0.7 U (UG/L) (82661)	CARBON, ORGANIC DIS-SOLVED (MG/L) (00681)	CARBON, ORGANIC PARTICULATE TOTAL (MG/L) (00689)	DATE	THIO-FLUR-ALIN WAT FLT 0.7 U (UG/L) (82661)	CARBON, ORGANIC DIS-SOLVED (MG/L) (00681)	CARBON, ORGANIC PARTICULATE TOTAL (MG/L) (00689)	DATE	THIO-FLUR-ALIN WAT FLT 0.7 U (UG/L) (82661)	CARBON, ORGANIC DIS-SOLVED (MG/L) (00681)	CARBON, ORGANIC PARTICULATE TOTAL (MG/L) (00689)	DATE	THIO-FLUR-ALIN WAT FLT 0.7 U (UG/L) (82661)
MAR 05...		<.009	8.0	3.3		<.009	8.0	3.3		<.009	8.0	3.3		<.009
JUN 18...		<.009	6.7	1.0		<.009	6.7	1.0		<.009	6.7	1.0		<.009

E Estimated laboratory analysis value.

06720500 SOUTH PLATTE RIVER AT HENDERSON, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	DI-BROMO-METHANE WATER WHOLE RECOVER (UG/L) (30217)	BROMO-DI-CHLORO-METHANE TOTAL (UG/L) (32101)	CARBON TETRA-CHLORIDE TOTAL (UG/L) (32102)	1,2-DI-CHLORO-ETHANE TOTAL (UG/L) (32103)	BROMO-FORM TOTAL (UG/L) (32104)	CHLORO-DI-BROMO-METHANE TOTAL (UG/L) (32105)	CHLORO-FORM TOTAL (UG/L) (32106)	TOLUENE TOTAL (UG/L) (34010)	BENZENE TOTAL (UG/L) (34030)	ACRYLO-NITRILE TOTAL (UG/L) (34215)	CHLORO-BENZENE TOTAL (UG/L) (34301)
MAR 05...	1549	385	<.05	.10	E.02	<.1	<.06	<.2	.68	.14	E.02	<.1	<.03
JUN 18...	0909	--	<.05	.11	<.06	<.1	<.06	<.2	.76	E.06	<.04	<.1	<.03
DATE	CHLORO-ETHANE TOTAL (UG/L) (34311)	ETHYL-BENZENE (UG/L) (34371)	ETHANE HEXA-CHLORO-WATER UNFLTRD RECOVER (UG/L) (34396)	METHYL-BROMIDE TOTAL (UG/L) (34413)	METHYL-CHLORIDE TOTAL (UG/L) (34418)	METHYL-CHLORIDE TOTAL (UG/L) (34423)	TETRA-ETHYL-ENE TOTAL (UG/L) (34475)	TRI-FLUORO-METHANE TOTAL (UG/L) (34488)	1,1-DI-CHLORO-ETHANE TOTAL (UG/L) (34496)	1,1-DI-CHLORO-ETHANE TOTAL (UG/L) (34501)	1,1,1-TRI-ETHANE TOTAL (UG/L) (34506)	1,1,2-TRI-ETHANE TOTAL (UG/L) (34511)	ETHANE, 1,1,2,2-TETRA-CHLORO-WAT UNF REC (UG/L) (34516)
MAR 05...	<.1	<.03	<.2	<.3	<.2	.2	E.1	<.09	<.04	<.04	<.03	<.06	<.09
JUN 18...	<.1	<.03	<.2	<.3	<.2	.4	M	<.09	<.04	<.04	<.03	<.06	<.09
DATE	BENZENE O-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34536)	1,2-DI-CHLORO-PROPANE TOTAL (UG/L) (34541)	TRANS-1,2-DI-CHLORO-ETHENE TOTAL (UG/L) (34546)	BENZENE 1,2,4-TRI-CHLORO-WAT UNF REC (UG/L) (34551)	BENZENE 1,3-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34566)	BENZENE 1,4-DI-CHLORO-WATER UNFLTRD REC (UG/L) (34571)	DI-CHLORO-DI-FLUORO-METHANE TOTAL (UG/L) (34668)	NAPHTH-ALENE TOTAL (UG/L) (34696)	TRANS-1,3-DI-CHLORO-PROPENE TOTAL (UG/L) (34699)	CIS-1,3-DI-CHLORO-PROPENE TOTAL (UG/L) (34704)	VINYL-CHLORIDE TOTAL (UG/L) (39175)	TRI-CHLORO-ETHENE TOTAL (UG/L) (39180)	HEXA-CHLORO-BUT-ADIENE TOTAL (UG/L) (39702)
MAR 05...	E.03	<.03	<.03	<.2	<.03	.43	<.3	<.2	<.09	<.09	<.1	E.02	<.1
JUN 18...	<.03	<.03	<.03	<.2	<.03	.23	<.3	<.2	<.09	<.09	<.1	<.04	<.1
DATE	METHYL-ACRYLATE WATER UNFLTRD RECOVER (UG/L) (49991)	1234-TETRA-METHYL-BENZENE UNFLTRD REC (UG/L) (49999)	ISO-DURENE WATER UNFLTRD RECOVER (UG/L) (50000)	BROMO-ETHENE WATER UNFLTRD RECOVER (UG/L) (50002)	ETHER-TERT-BUTYL ETHYL UNFLTRD RECOVER (UG/L) (50004)	ETHER-TERT-PENTYL METHYL UNFLTRD RECOVER (UG/L) (50005)	2BUTENE TRANS-1 4-DI-CHLORO UNFLTRD RECOVER (UG/L) (73547)	METHAC-RYLATE ETHYL-WATER UNFLTRD RECOVER (UG/L) (73570)	CARBON DI-SULFIDE WATER WHOLE TOTAL (UG/L) (77041)	CIS-1,2-DI-CHLORO-ETHENE WATER TOTAL (UG/L) (77093)	2-HEXA-NONE WATER WHOLE TOTAL (UG/L) (77103)	STYRENE TOTAL (UG/L) (77128)	O-XYLENE WATER WHOLE TOTAL (UG/L) (77135)
MAR 05...	<.1	<.2	<.2	<.1	<.05	<.1	<.7	<.2	E.04	E.02	<.7	<.04	<.04
JUN 18...	<.1	<.2	<.2	<.1	<.05	<.1	<.7	<.2	<.07	<.04	<.7	<.04	<.04
DATE	1,1-DI-CHLORO-PROPENE, WAT, WH TOTAL (UG/L) (77168)	2,2-DI-CHLORO-PROPANE WAT, WH TOTAL (UG/L) (77170)	1,3-DI-CHLORO-PROPANE WAT, WH TOTAL (UG/L) (77173)	TOLUENE O-ETHYL WATER UNFLTRD RECOVER (UG/L) (77220)	BENZENE 123-TRI-METHYL-WATER UNFLTRD RECOVER (UG/L) (77221)	BENZENE 124-TRI-METHYL-WATER UNFLTRD RECOVER (UG/L) (77222)	ISO-PROPYL-BENZENE WATER WHOLE REC (UG/L) (77223)	BENZENE N-PROPY WATER UNFLTRD REC (UG/L) (77224)	BENZENE 135-TRI-METHYL WATER UNFLTRD REC (UG/L) (77226)	O-CHLORO-TOLUENE WATER WHOLE TOTAL (UG/L) (77275)	TOLUENE P-CHLOR WATER UNFLTRD REC (UG/L) (77277)	METHANE BROMO-CHLORO-WAT UNFLTRD REC (UG/L) (77297)	BENZENE N-BUTYL WATER UNFLTRD REC (UG/L) (77342)
MAR 05...	<.03	<.05	<.1	<.06	<.1	<.06	<.03	<.04	<.04	<.03	<.06	<.04	<.2
JUN 18...	<.03	<.05	<.1	<.06	<.1	<.06	<.03	<.04	<.04	<.03	<.06	<.04	<.2
DATE	BENZENE SEC BUTYL-WATER UNFLTRD REC (UG/L) (77350)	BENZENE TERT-BUTYL-WATER UNFLTRD REC (UG/L) (77353)	P-ISO-PROPYL-TOLUENE WATER WHOLE REC (UG/L) (77356)	METHYL IODIDE WATER UNFLTRD RECOVER (UG/L) (77424)	123-TRI-CHLORO-PROPANE WATER WHOLE TOTAL (UG/L) (77443)	ETHANE, 1112-TETRA-CHLORO-WAT UNF REC (UG/L) (77562)	1,2,3-TRI-CHLORO-BENZENE WAT, WH REC (UG/L) (77613)	1,2-DIBROMO-ETHANE WATER WHOLE TOTAL (UG/L) (77651)	FREON-113 WATER UNFLTRD REC (UG/L) (77652)	METHYL TERT-BUTYL ETHER WAT UNF REC (UG/L) (78032)	PROPENE 3-CHLORO-WATER UNFLTRD RECOVER (UG/L) (78109)	METHYL ISO-BUTYL-KETONE WAT, WH. TOTAL (UG/L) (78133)	ACETONE WATER WHOLE TOTAL (UG/L) (81552)
MAR 05...	<.03	<.06	E.01	<.1	<.2	<.03	<.3	<.04	<.06	.7	<.1	<.4	E3
JUN 18...	<.03	<.06	<.07	<.1	<.2	<.03	<.3	<.04	<.06	.3	<.1	<.4	<.7

## PLATTE RIVER BASIN

06720500 SOUTH PLATTE RIVER AT HENDERSON, CO--Continued

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	BROMO- BENZENE WATER, WHOLE, TOTAL (UG/L) (81555)	ETHER ETHYL WATER UNFLTRD RECOVER (UG/L) (81576)	DI-ISO- PROPYL- ETHER, WATER, UNFLTRD RECOVER (UG/L) (81577)	METH- ACRYLO- NITRILE WATER UNFLTRD RECOVER (UG/L) (81593)	METHYL- ETHYL- KETONE WATER WHOLE TOTAL (UG/L) (81595)	METHAC- RYLATE METHYL WATER UNFLTRD RECOVER (UG/L) (81597)	FURAN, TETRA- HYDRO- WATER UNFLTRD RECOVER (UG/L) (81607)	DIBROMO CHLORO- PROPANE WATER WHOLE TOT.REC (UG/L) (82625)	META/ PARA- XYLENE WATER UNFLTRD REC (UG/L) (85795)
MAR 05...	<.04	<.2	<.1	<.6	<2	<.3	<2	<.2	<.06
JUN 18...	<.04	<.2	<.1	<.6	<2	<.3	<2	<.2	<.06

E Estimated laboratory analysis value.

M Presence of material verified but not quantified.

06720820 BIG DRY CREEK AT WESTMINSTER, CO

LOCATION.--Lat 39°54'20", long 105°02'04", in NE<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec.6, T.2 S., R.68 W., Adams County, Hydrologic Unit 10190003, on left bank 0.75 mi upstream from bridge on 120th Ave., and 5.2 mi downstream from outlet of Standley Lake.

DRAINAGE AREA.--43.8 mi<sup>2</sup>.

PERIOD OF RECORD.--July 1987 to September 1995, November 1996 to current year.

REVISED RECORDS.--WDR CO-91-1: Drainage area.

GAGE.--Water-stage recorder and concrete and steel v-notched control. Elevation of gage is 5,215 ft above sea level, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Flow affected by storage diversions, ground-water withdrawals and 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 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.4	5.0	3.1	e1.6	2.3	1.6	2.1	2.2	5.4	29	32	39
2	2.2	2.6	5.7	e1.6	2.7	1.6	1.8	6.5	3.3	30	36	38
3	2.6	2.2	2.6	1.6	3.5	1.5	1.8	29	20	29	34	39
4	2.6	2.0	2.1	1.7	2.9	1.5	1.5	82	75	30	31	39
5	4.9	26	2.2	1.6	2.9	1.7	1.5	232	70	28	27	38
6	5.6	8.5	2.7	1.6	2.4	e1.6	1.7	75	79	23	33	33
7	3.9	4.2	3.7	1.5	1.8	e1.6	1.7	21	106	23	35	23
8	3.6	3.4	1.9	1.4	1.3	1.8	1.6	14	102	28	34	65
9	3.5	3.4	1.7	.80	1.3	1.6	.99	11	102	29	30	13
10	3.4	2.5	1.6	1.2	1.2	8.1	1.6	11	103	43	20	6.7
11	3.2	2.7	1.7	1.5	1.8	10	67	8.9	102	103	19	4.8
12	3.1	2.8	1.7	1.6	2.5	5.3	32	7.6	107	40	32	4.2
13	2.3	2.7	1.6	1.6	2.0	3.5	15	6.7	127	129	32	4.5
14	1.8	4.4	1.9	2.0	1.6	4.2	7.4	8.5	120	229	31	9.4
15	1.7	6.1	2.3	1.9	1.7	3.4	5.0	8.3	105	159	45	5.8
16	1.8	5.5	1.8	2.3	1.8	4.1	3.8	6.7	99	23	35	4.4
17	1.1	5.2	1.7	2.5	e1.9	5.5	2.8	7.4	99	7.0	32	5.6
18	1.2	5.1	1.6	2.6	e1.7	3.9	2.6	8.5	86	5.4	31	4.8
19	1.9	4.3	1.6	3.0	e1.8	3.0	2.3	12	46	4.5	30	3.7
20	3.0	3.5	1.6	3.0	e1.9	2.6	3.2	14	21	3.6	39	2.6
21	3.0	6.4	1.6	2.8	e1.8	2.8	3.2	26	21	3.4	31	2.8
22	16	5.4	1.8	2.7	e1.7	3.5	40	16	21	3.1	31	3.2
23	14	5.1	2.1	2.6	e2.7	11	14	14	23	3.0	31	2.8
24	6.5	4.7	e1.8	2.4	2.1	4.7	9.5	17	17	3.4	31	3.4
25	3.2	4.3	e1.8	2.1	1.8	2.0	5.3	16	15	3.3	36	10
26	2.4	3.8	e1.9	2.0	1.1	12	3.6	21	18	3.1	42	8.5
27	2.2	3.5	2.1	2.0	1.5	5.8	3.0	21	24	7.7	41	3.7
28	2.2	3.4	1.9	e2.0	1.6	3.5	2.8	41	23	8.6	41	2.9
29	2.3	3.2	1.6	e2.3	---	2.4	2.6	42	25	7.9	44	3.7
30	2.2	2.2	1.5	2.6	---	2.5	2.3	12	26	16	45	3.5
31	3.8	---	e1.6	2.3	---	2.8	---	10	---	24	43	---
TOTAL	113.6	144.1	64.5	62.40	55.3	121.1	243.69	808.3	1790.7	1079.0	1054	428.0
MEAN	3.66	4.80	2.08	2.01	1.98	3.91	8.12	26.1	59.7	34.8	34.0	14.3
MAX	16	26	5.7	3.0	3.5	12	67	232	127	229	45	65
MIN	1.1	2.0	1.5	.80	1.1	1.5	.99	2.2	3.3	3.0	19	2.6
AC-FT	225	286	128	124	110	240	483	1600	3550	2140	2090	849

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 2001, BY WATER YEAR (WY)

	4.98	2.95	1.83	1.65	1.99	4.96	11.1	30.5	51.8	38.9	34.0	20.2
MEAN	4.98	2.95	1.83	1.65	1.99	4.96	11.1	30.5	51.8	38.9	34.0	20.2
MAX	12.0	4.80	3.71	3.16	3.85	16.2	34.8	66.4	82.4	79.8	49.6	47.9
(WY)	2000	2001	1998	1994	1993	1992	1998	2000	1999	1995	1999	1999
MIN	1.55	1.33	.88	.76	1.00	1.30	1.52	9.98	13.0	19.5	24.0	6.27
(WY)	1989	1989	1999	1995	1988	1989	1989	1989	1989	1990	1992	1987

SUMMARY STATISTICS

FOR 2000 CALENDAR YEAR

FOR 2001 WATER YEAR

WATER YEARS 1987 - 2001

ANNUAL TOTAL	7554.22	5964.69	
ANNUAL MEAN	20.6	16.3	17.4
HIGHEST ANNUAL MEAN			25.2
LOWEST ANNUAL MEAN			7.72
HIGHEST DAILY MEAN	199	Jul 17	232
LOWEST DAILY MEAN	.75	Apr 18	.80
ANNUAL SEVEN-DAY MINIMUM	1.1	Mar 7	1.4
MAXIMUM PEAK FLOW			674
MAXIMUM PEAK STAGE			5.65
ANNUAL RUNOFF (AC-FT)	14980	11830	12630
10 PERCENT EXCEEDS	72	40	51
50 PERCENT EXCEEDS	4.0	3.7	3.9
90 PERCENT EXCEEDS	1.6	1.6	1.2

e Estimated.

a Maximum gage height, 6.08 ft, Aug 4, 1997.

## PLATTE RIVER BASIN

06720990 BIG DRY CREEK AT MOUTH NEAR FORT LUPTON, CO

LOCATION.--Lat 40°04'09", long 104°49'52", in NE<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec.12, T.1 N., R.67 W., Weld County, Hydrologic Unit 10190003, on left bank 1.0 mi west of State Highway 85, 1.1 mi south of State Highway 52, and 25 mi northeast of Denver.

DRAINAGE AREA.--107 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1991 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 4,900 ft above sea level, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Natural flow of stream affected by 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 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	38	26	e24	46	24	29	31	127	54	71	47
2	13	35	27	e29	48	24	27	31	155	40	141	43
3	12	34	29	e35	50	23	59	79	149	30	94	48
4	12	36	27	e40	49	24	49	219	160	50	73	47
5	27	41	26	51	51	24	44	314	114	73	69	42
6	57	125	26	49	49	24	44	324	67	81	56	38
7	51	52	27	47	45	23	42	169	60	63	45	44
8	56	41	27	47	e44	23	42	84	69	92	49	65
9	59	37	26	43	e44	23	42	62	63	76	31	85
10	58	34	26	42	e41	24	41	55	56	30	40	47
11	47	33	e24	40	e39	34	68	45	45	117	44	41
12	44	e33	e24	39	46	36	294	39	40	198	37	33
13	38	e33	e24	38	29	30	218	27	46	98	38	29
14	29	e34	e24	51	e27	27	143	31	64	204	41	27
15	30	e34	e24	52	e24	26	118	31	41	296	41	29
16	27	35	e24	54	e25	25	100	37	47	208	59	32
17	25	35	e24	47	e25	26	82	27	42	107	47	32
18	23	34	e23	45	26	28	46	36	30	92	38	31
19	21	36	e23	46	28	27	32	44	32	106	26	25
20	20	37	e22	45	28	25	28	55	36	92	26	22
21	17	38	e22	45	27	18	26	119	40	83	27	21
22	17	45	e22	46	27	13	103	84	32	87	24	21
23	45	37	e22	57	26	14	182	40	31	78	25	20
24	38	35	e21	54	26	18	79	27	31	140	24	20
25	33	35	e21	52	26	15	45	54	31	52	24	21
26	30	34	e21	47	26	16	30	50	33	58	21	25
27	28	36	e19	48	24	28	16	56	35	68	18	24
28	27	33	16	54	24	21	14	98	30	51	17	23
29	27	32	23	55	---	22	35	283	35	49	16	23
30	26	30	23	53	---	25	42	210	48	47	34	54
31	29	---	24	50	---	27	---	146	---	51	49	---
TOTAL	980	1172	737	1425	970	737	2120	2907	1789	2871	1345	1059
MEAN	31.6	39.1	23.8	46.0	34.6	23.8	70.7	93.8	59.6	92.6	43.4	35.3
MAX	59	125	29	57	51	36	294	324	160	296	141	85
MIN	12	30	16	24	24	13	14	27	30	30	16	20
AC-FT	1940	2320	1460	2830	1920	1460	4210	5770	3550	5690	2670	2100

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 2001, BY WATER YEAR (WY)

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001		
MEAN	40.0	29.6	23.2	25.0	23.4	31.7	56.6	58.7	56.1	52.2	46.1	46.7
MAX	64.3	39.1	35.2	46.0	34.6	50.1	79.1	93.8	117	111	75.1	67.0
(WY)	1995	2001	1998	2001	2001	1992	1999	2001	1995	1995	1997	1993
MIN	30.2	21.8	19.6	14.0	12.0	18.4	34.9	26.4	34.8	27.3	26.7	21.2
(WY)	1992	1997	1994	1995	1995	1993	2000	1993	2000	1999	2000	2000

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR
ANNUAL TOTAL	11558.0	18112				
ANNUAL MEAN	31.6	49.6			40.8	
HIGHEST ANNUAL MEAN					53.2	1995
LOWEST ANNUAL MEAN					31.6	2000
HIGHEST DAILY MEAN	251	May 18	324	May 6	454	Jul 31 1997
LOWEST DAILY MEAN	6.5	Sep 19	12	Oct 3	.32	Apr 18 1994
ANNUAL SEVEN-DAY MINIMUM	7.7	Sep 13	17	Mar 20	3.6	Sep 3 1992
MAXIMUM PEAK FLOW			433	Apr 12	541	Aug 6 1997
MAXIMUM PEAK STAGE			8.42	Apr 12	9.04	Aug 6 1997
ANNUAL RUNOFF (AC-FT)	22930	35930			29580	
10 PERCENT EXCEEDS	50	89			73	
50 PERCENT EXCEEDS	25	36			30	
90 PERCENT EXCEEDS	14	22			17	

e Estimated.

06725450 ST. VRAIN CREEK BELOW LONGMONT, CO

LOCATION.--Lat 40°09'30", long 105°00'48", in NW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec.9, T.2 N., R.68 W., Weld County, Hydrologic Unit 10190005, on right bank 1,750 ft upstream from mouth of Boulder Creek, 1.8 mi downstream from Spring Gulch, and 4.7 mi southeast of Longmont.

DRAINAGE AREA.--424 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1976 to September 1982, August 1984 to current year. Water-quality data available, October 1976 to February 1981.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 4,852 ft, above sea level, from topographic map. Prior to Aug. 15, 1984, at site 150 ft downstream at same datum. Aug. 15, 1984 to Oct. 1, 1997 at site 70 ft downstream at same datum. Oct. 2, 1997 to Apr. 18, 2000 at site 100 ft upstream at same datum.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Natural flow of stream affected by 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 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	62	89	e40	43	44	41	43	48	111	145	143	109
2	64	72	e39	45	42	42	43	82	105	156	154	108
3	64	71	e38	45	42	42	44	92	106	151	155	101
4	66	73	e38	44	41	41	46	116	136	160	151	94
5	65	83	e37	44	44	42	45	185	212	165	149	90
6	66	81	e35	45	43	42	44	106	145	164	160	90
7	64	75	e30	45	43	41	44	87	127	164	151	98
8	70	71	e35	45	41	41	43	79	125	215	131	126
9	66	64	e35	46	44	42	42	79	119	205	148	104
10	66	64	e34	44	45	50	e50	102	117	180	145	96
11	63	64	e33	45	47	53	e233	94	126	182	137	91
12	59	60	e35	44	43	49	80	71	117	173	139	86
13	64	58	e35	45	42	48	58	72	136	166	141	85
14	57	57	e34	44	41	45	51	70	133	167	136	91
15	58	55	e33	48	45	43	47	71	120	167	140	88
16	59	54	e33	45	40	44	44	72	112	150	137	85
17	60	54	e34	46	41	45	43	85	108	136	135	86
18	60	52	e32	47	41	44	43	98	117	137	130	83
19	61	51	e35	45	41	43	43	97	130	143	131	79
20	59	50	e35	44	43	44	42	108	144	140	129	74
21	57	51	e37	43	41	44	48	114	140	136	125	72
22	74	53	e39	44	42	44	112	111	130	138	122	69
23	76	52	e38	45	42	43	61	108	148	139	119	67
24	75	51	e39	43	42	41	53	119	143	141	122	67
25	76	50	e41	43	40	41	51	115	151	138	118	66
26	70	e45	45	42	42	53	50	116	152	139	114	62
27	69	e43	45	42	40	49	48	115	133	144	114	61
28	68	e42	46	43	39	48	45	145	127	143	112	59
29	78	e43	45	46	---	46	44	154	124	142	110	58
30	77	e44	44	44	---	46	45	148	132	140	107	57
31	89	---	44	43	---	47	---	155	---	139	111	---
TOTAL	2062	1772	1163	1377	1181	1384	1685	3214	3926	4805	4116	2502
MEAN	66.5	59.1	37.5	44.4	42.2	44.6	56.2	104	131	155	133	83.4
MAX	89	89	46	48	47	53	233	185	212	215	160	126
MIN	57	42	30	42	39	41	42	48	105	136	107	57
AC-FT	4090	3510	2310	2730	2340	2750	3340	6370	7790	9530	8160	4960

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1977 - 2001, BY WATER YEAR (WY)

	MEAN	MAX	(WY)	MIN	(WY)	MEAN	MAX	(WY)	MIN	(WY)	MEAN	MAX	(WY)	MIN	(WY)
1977	70.6	159	1985	45.5	1990	59.0	126	1985	34.5	1979	50.3	91.5	1985	25.7	1979
1978	45.3	92.8	1980	25.7	1978	45.3	92.8	1980	25.7	1978	44.4	94.0	1980	27.9	1978
1979	44.4	94.0	1980	27.9	1978	44.4	94.0	1980	27.9	1978	48.6	111	1980	28.9	1982
1980	48.6	111	1980	28.9	1982	48.6	115	1980	27.5	1977	88.1	275	1998	27.5	1982
1981	88.1	275	1998	27.5	1982	88.1	1155	1980	63.3	1981	246	1227	1980	35.8	1977
1982	246	1227	1980	35.8	1977	246	1155	1980	100	1981	370	485	1995	88.9	1977
1983	370	485	1995	88.9	1977	370	485	1995	100	1981	178	246	1999	53.7	1977
1984	178	246	1999	53.7	1977	178	485	1995	100	1981	148	246	1999	53.7	1977
1985	148	246	1999	53.7	1977	148	485	1995	100	1981	148	246	1999	53.7	1977

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1977 - 2001

ANNUAL TOTAL	32187	29187	
ANNUAL MEAN	87.9	80.0	121
HIGHEST ANNUAL MEAN			257
LOWEST ANNUAL MEAN			54.8
HIGHEST DAILY MEAN	424	233	2580
LOWEST DAILY MEAN	e30	e30	20
ANNUAL SEVEN-DAY MINIMUM	e34	e34	22
MAXIMUM PEAK FLOW		567	3600
MAXIMUM PEAK STAGE		4.80	6.87
ANNUAL RUNOFF (AC-FT)	63840	57890	87640
10 PERCENT EXCEEDS	169	144	208
50 PERCENT EXCEEDS	64	62	68
90 PERCENT EXCEEDS	41	41	35

e Estimated.

## PLATTE RIVER BASIN

06730200 BOULDER CREEK AT NORTH 75TH STREET NEAR BOULDER, CO

LOCATION.--Lat 40°03'06", long 105°10'42", in SE<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec.13, T.1 N., R.70 W., Boulder County, Hydrologic Unit 10190005, on left bank, 50 ft upstream from bridge on North 75th Street, 0.2 mi downstream from Boulder feeder ditch, and 6 mi northeast of Boulder.

DRAINAGE AREA.--304 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1986 to current year.

GAGE.--Water-stage recorder with satellite telemetry, and concrete control. Elevation of gage is 5,106 ft above sea level, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Flow is partially regulated by Barker Reservoir, and affected by Boulder feeder ditch, Boulder sewage treatment plant, and Public Service power plant. 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 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	46	e52	55	33	34	27	34	69	203	173	195	151
2	42	42	65	34	35	26	36	139	131	180	222	154
3	43	43	54	37	31	30	33	153	131	185	228	148
4	41	42	63	37	29	30	35	149	186	149	223	147
5	50	50	59	34	30	27	36	223	199	138	225	142
6	64	48	49	34	30	29	36	165	179	154	239	138
7	57	44	58	33	29	31	36	152	199	162	249	137
8	55	41	49	34	28	28	35	149	258	200	234	202
9	57	38	54	35	29	31	35	143	253	223	297	134
10	52	57	51	38	31	32	38	116	206	215	249	71
11	48	72	48	36	32	35	94	123	208	226	209	63
12	e49	63	51	32	31	33	62	110	214	188	185	59
13	e47	60	51	33	27	33	48	107	217	205	174	57
14	e48	54	43	30	25	30	42	107	183	236	162	66
15	e49	57	38	34	26	29	40	131	131	197	170	75
16	e49	67	38	32	25	28	41	111	e130	171	171	67
17	e52	67	37	33	25	31	40	126	e133	148	172	76
18	e60	67	36	35	24	31	42	114	e135	134	158	92
19	e57	68	39	33	26	31	41	105	e147	123	141	84
20	e53	58	39	33	29	31	45	110	158	114	138	76
21	e50	67	37	30	26	31	46	132	176	103	135	66
22	e70	63	44	36	26	33	112	120	181	101	135	56
23	e52	61	36	31	29	31	74	112	176	116	154	53
24	e44	57	35	33	26	28	66	102	175	134	149	59
25	e40	66	33	36	25	27	59	97	189	138	143	55
26	e38	65	41	35	26	38	57	146	192	126	128	56
27	e41	76	43	33	26	38	56	236	206	134	129	59
28	e47	66	41	32	39	34	56	252	186	121	143	56
29	e49	68	33	36	---	32	55	248	184	132	139	53
30	e45	69	29	34	---	40	61	242	188	150	150	50
31	e49	---	31	30	---	34	---	235	---	162	145	---
TOTAL	1544	1748	1380	1046	799	969	1491	4524	5454	4938	5591	2702
MEAN	49.8	58.3	44.5	33.7	28.5	31.3	49.7	146	182	159	180	90.1
MAX	70	76	65	38	39	40	112	252	258	236	297	202
MIN	38	38	29	30	24	26	33	69	130	101	128	50
AC-FT	3060	3470	2740	2070	1580	1920	2960	8970	10820	9790	11090	5360

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 2001, BY WATER YEAR (WY)

MEAN	49.3	55.9	51.5	48.4	46.6	51.4	87.9	190	300	216	146	76.8
MAX	77.8	81.7	74.9	68.3	61.3	90.6	236	465	868	492	235	111
(WY)	1997	1998	1989	1987	1996	1998	1998	1995	1995	1995	1999	1995
MIN	31.5	37.7	36.1	33.7	28.5	31.2	37.4	114	127	154	95.5	50.8
(WY)	1987	1993	1988	2001	2001	1989	1989	1991	1992	1988	1991	1992

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1987 - 2001
ANNUAL TOTAL	35932	32186	
ANNUAL MEAN	98.2	88.2	110
HIGHEST ANNUAL MEAN			198
LOWEST ANNUAL MEAN			85.5
HIGHEST DAILY MEAN	446	297	1450
LOWEST DAILY MEAN	29	24	20
ANNUAL SEVEN-DAY MINIMUM	36	25	23
MAXIMUM PEAK FLOW		548	1950
MAXIMUM PEAK STAGE		6.21	7.85
ANNUAL RUNOFF (AC-FT)	71270	63840	79830
10 PERCENT EXCEEDS	206	190	221
50 PERCENT EXCEEDS	63	57	64
90 PERCENT EXCEEDS	42	30	36

e Estimated.

06730400 COAL CREEK NEAR LOUISVILLE, CO

LOCATION.--Lat 39°58'34", long 105°07'00", in NW<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec.9, T.1 S., R.69 W., Boulder County, Hydrologic Unit 10190005, on left bank on upstream side of County road 62 bridge, and 1.1 mi northeast of Louisville.

DRAINAGE AREA.--27.3 mi<sup>2</sup>.

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

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 5,280 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 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.4	2.3	2.0	1.1	1.1	.62	2.3	2.5	7.5	2.9	5.7	2.3
2	2.5	2.0	1.9	1.0	1.2	.63	2.4	4.4	7.0	3.5	2.9	2.3
3	2.5	2.2	1.7	1.0	1.2	.57	2.7	6.5	7.0	2.2	2.5	2.2
4	2.6	1.9	1.7	1.0	1.2	.49	2.9	9.1	7.2	2.3	2.6	2.2
5	3.0	3.4	1.7	1.1	1.3	.42	2.9	26	6.9	2.5	2.6	2.5
6	3.2	2.2	1.7	1.1	1.2	.45	3.0	13	6.7	3.2	3.0	2.7
7	2.6	1.8	1.7	1.1	1.1	.49	2.9	12	7.1	3.1	2.6	3.1
8	2.4	1.8	1.7	1.0	.95	.57	3.0	14	7.5	3.4	2.3	7.8
9	2.4	1.8	1.7	1.0	e1.0	.57	3.3	12	7.3	2.9	8.2	1.3
10	2.4	1.6	1.5	1.1	e1.1	1.9	3.4	10	8.6	3.0	2.5	1.2
11	2.4	1.8	1.5	1.1	e1.2	1.7	11	9.0	9.6	5.7	1.8	1.5
12	2.4	1.7	1.3	1.0	e1.3	1.3	7.9	5.2	12	2.7	1.7	1.6
13	2.3	1.5	1.3	.98	e1.4	1.2	6.1	4.3	15	2.3	1.5	1.9
14	2.2	1.3	1.3	.94	1.2	.93	4.3	3.8	22	6.6	1.5	2.1
15	2.2	1.3	1.4	.92	1.3	.90	3.5	4.2	15	2.1	1.6	2.0
16	2.2	1.3	1.3	.91	1.0	.98	2.8	5.5	7.0	1.2	1.7	1.9
17	2.2	1.2	1.4	.88	1.0	1.1	2.9	5.1	7.1	.98	2.0	2.0
18	2.4	1.2	1.3	.90	1.1	1.2	3.0	7.9	4.5	.97	2.3	2.3
19	2.4	1.2	1.3	.88	1.1	1.2	3.0	7.0	3.2	1.1	2.7	2.3
20	2.4	1.1	1.3	.94	1.1	1.3	2.8	7.5	3.2	1.2	2.7	2.4
21	2.3	1.1	1.4	.92	1.0	1.4	3.6	7.2	3.5	1.3	2.7	2.3
22	5.3	1.1	1.4	.95	.91	1.6	9.6	8.2	3.2	1.8	2.7	2.3
23	3.3	1.2	1.4	1.0	.86	1.6	4.3	9.1	3.0	2.1	2.8	2.2
24	2.3	1.2	1.3	1.0	.87	1.4	3.3	8.6	3.0	2.5	2.7	2.4
25	2.0	1.1	1.4	1.0	.79	1.4	3.1	8.4	3.2	4.3	2.7	2.7
26	1.9	1.1	1.4	.99	.69	3.2	3.5	8.3	3.0	2.6	2.7	2.8
27	2.0	1.1	1.3	.98	.57	2.3	3.8	8.8	2.8	2.6	2.7	2.9
28	2.1	1.0	1.3	.98	.61	2.1	3.2	9.0	2.7	2.8	2.5	2.9
29	2.3	1.0	1.2	.99	---	2.0	2.7	9.3	2.8	2.8	2.3	2.9
30	2.2	1.5	1.2	.97	---	2.1	2.4	9.1	2.6	3.7	2.4	2.7
31	2.2	---	1.2	.98	---	2.1	---	8.9	---	6.1	2.3	---
TOTAL	77.0	46.0	45.2	30.71	29.35	39.72	115.6	263.9	201.2	86.45	82.9	73.7
MEAN	2.48	1.53	1.46	.99	1.05	1.28	3.85	8.51	6.71	2.79	2.67	2.46
MAX	5.3	3.4	2.0	1.1	1.4	3.2	11	26	22	6.6	8.2	7.8
MIN	1.9	1.0	1.2	.88	.57	.42	2.3	2.5	2.6	.97	1.5	1.2
AC-FT	153	91	90	61	58	79	229	523	399	171	164	146

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2001, BY WATER YEAR (WY)

	1997	1998	1999	2000	2001	1997	1998	1999	2000	2001		
MEAN	2.94	2.49	2.35	1.86	1.84	3.13	16.2	17.7	8.89	3.26	5.50	2.52
MAX	3.85	3.42	3.23	2.45	2.44	6.17	36.1	34.9	13.2	4.25	14.5	3.10
(WY)	1998	2000	2000	2000	2000	1998	1998	1999	1999	1999	1999	2000
MIN	2.01	1.53	1.46	.99	1.05	1.28	3.85	4.15	4.18	2.28	1.04	1.99
(WY)	1999	2001	2001	2001	2001	2001	2001	2000	2000	2000	2000	1997

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1997 - 2001

ANNUAL TOTAL	991.64	1091.73	
ANNUAL MEAN	2.71	2.99	5.71
HIGHEST ANNUAL MEAN			8.48
LOWEST ANNUAL MEAN			2.99
HIGHEST DAILY MEAN	12 Jul 16	26 May 5	277 Apr 30 1999
LOWEST DAILY MEAN	.21 Aug 21	.42 Mar 5	.21 Aug 21 2000
ANNUAL SEVEN-DAY MINIMUM	.27 Aug 19	.51 Mar 3	.27 Aug 19 2000
MAXIMUM PEAK FLOW		57 Jul 14	a643 Apr 30 1999
MAXIMUM PEAK STAGE		1.89 Jul 14	3.42 Apr 30 1999
ANNUAL RUNOFF (AC-FT)	1970	2170	4140
10 PERCENT EXCEEDS	5.3	7.1	11
50 PERCENT EXCEEDS	2.3	2.2	2.5
90 PERCENT EXCEEDS	1.1	.99	1.2

e Estimated.  
a From rating curve extended above 150 ft<sup>3</sup>/s.

PLATTE RIVER BASIN

06730500 BOULDER CREEK AT MOUTH NEAR LONGMONT, CO

LOCATION.--Lat 40°09'08", long 105°00'52", in NW 1/4 SW 1/4 sec.9, T.2 N., R.68 W., Weld County, Hydrologic Unit 10190005, on left bank 0.6 mi upstream from mouth, 1.0 mi downstream from State Highway 254, and 4.8 mi southeast of Longmont.

DRAINAGE AREA.--439 mi<sup>2</sup>.

PERIOD OF RECORD.--March 1927 to September 1949, May 1951 to September 1955, October 1978 to September 1990, October 1991 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 4,860 ft above sea level, from topographic map. Prior to June 10, 1939, at site 0.8 mi upstream at different datum. June 10, 1939 to Sept. 30, 1949, at site 1.0 mi upstream, at different datum. May 1, 1951 to Sept. 30, 1955, at site 1.4 mi upstream, at different datum.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Natural flow of stream affected by transmountain, transbasin, and storage diversions, diversions for irrigation, water-treatment plants, and return flows 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 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27	26	73	46	54	52	46	24	102	25	11	7.7
2	26	23	77	45	53	51	45	41	36	24	12	7.9
3	26	23	65	50	52	51	46	80	20	25	16	7.9
4	24	24	73	50	51	50	46	84	33	24	11	e8.0
5	23	25	72	48	53	49	46	266	66	23	10	e7.8
6	37	36	64	49	51	49	44	236	64	32	11	e7.6
7	35	41	68	49	50	50	45	126	59	30	14	e10
8	33	56	67	48	50	49	43	112	88	43	11	e16
9	37	53	67	49	52	49	42	99	89	48	50	e12
10	36	62	66	50	52	51	42	70	61	33	60	e10
11	28	88	75	48	50	57	74	64	53	36	20	e8.8
12	29	88	e78	44	52	59	106	66	54	36	9.2	e8.2
13	28	87	e80	47	52	57	77	60	63	38	5.0	e8.2
14	25	84	e83	47	50	54	61	58	75	53	5.2	e9.0
15	33	73	51	50	51	52	54	69	32	79	5.5	e11
16	32	80	47	49	53	50	50	53	14	26	7.8	e10
17	23	82	50	48	49	50	48	73	18	10	8.8	e12
18	22	81	50	42	47	53	46	70	24	9.9	7.9	e13
19	20	81	54	37	49	52	45	59	31	11	8.3	e12
20	20	81	48	38	52	50	44	57	24	11	8.0	e10
21	21	74	53	40	51	50	45	99	32	11	8.6	e9.5
22	22	78	71	44	50	50	95	88	43	10	9.1	e9.0
23	38	78	55	48	53	50	95	55	40	11	11	e8.8
24	30	74	53	49	51	48	70	38	39	11	11	e10
25	27	73	52	53	50	48	60	30	50	12	8.2	e9.0
26	26	78	57	53	51	52	50	34	40	12	7.4	e9.8
27	25	80	59	52	51	58	36	119	41	11	7.2	e10
28	25	80	57	52	56	56	24	133	33	11	8.1	e9.8
29	26	76	50	53	---	53	14	160	33	12	15	e9.6
30	27	77	47	52	---	48	17	125	30	11	12	e9.5
31	25	---	46	50	---	47	---	113	---	12	12	---
TOTAL	856	1962	1908	1480	1436	1595	1556	2761	1387	740.9	401.3	292.1
MEAN	27.6	65.4	61.5	47.7	51.3	51.5	51.9	89.1	46.2	23.9	12.9	9.74
MAX	38	88	83	53	56	59	106	266	102	79	60	16
MIN	20	23	46	37	47	47	14	24	14	9.9	5.0	7.6
AC-FT	1700	3890	3780	2940	2850	3160	3090	5480	2750	1470	796	579

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1927 - 2001, BY WATER YEAR (WY)

	35.3	44.7	49.5	51.3	50.7	52.3	95.7	174	191	45.3	23.9	24.2
MEAN	35.3	44.7	49.5	51.3	50.7	52.3	95.7	174	191	45.3	23.9	24.2
MAX	127	109	93.8	104	120	148	581	1101	976	367	164	440
(WY)	1985	1998	1939	1980	1980	1983	1942	1942	1947	1983	1999	1938
MIN	.70	.48	1.16	2.94	2.75	2.58	1.15	1.06	1.22	1.09	.55	.54
(WY)	1955	1955	1940	1935	1935	1935	1954	1955	1954	1954	1954	1954

SUMMARY STATISTICS

FOR 2000 CALENDAR YEAR

FOR 2001 WATER YEAR

WATER YEARS 1927 - 2001

ANNUAL TOTAL	18211.5	16375.3	
ANNUAL MEAN	49.8	44.9	70.1
HIGHEST ANNUAL MEAN			220
LOWEST ANNUAL MEAN			3.93
HIGHEST DAILY MEAN	557	Jul 17	266
LOWEST DAILY MEAN	4.0	Jul 22	5.0
ANNUAL SEVEN-DAY MINIMUM	5.6	Jul 21	6.9
MAXIMUM PEAK FLOW			377
MAXIMUM PEAK STAGE			2.75
ANNUAL RUNOFF (AC-FT)	36120	32480	50750
10 PERCENT EXCEEDS	79	78	128
50 PERCENT EXCEEDS	46	48	36
90 PERCENT EXCEEDS	9.9	10	2.0

e Estimated.

a No flow at times many years.

b Site and datum then in use, from rating curve extended above 340 ft<sup>3</sup>/s, on basis of slope-area measurement of peak flow.

PLATTE RIVER BASIN

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06731000 ST. VRAIN CREEK AT MOUTH, NEAR PLATTEVILLE, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 40°15'29", long 104°52'45", in SE<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec.3, T.3 N., R.67 W., Weld County, Hydrologic Unit 10190005, on right bank 140 ft downstream from bridge on county road, 1.3 mi upstream from mouth, and 4.2 mi northwest of Platteville.

DRAINAGE AREA.--976 mi<sup>2</sup>.

PERIOD OF RECORD.--June to September 2001.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	ACETO-CHLOR, WATER, FLTRD REC (UG/L) (49260)	ALA-CHLOR, WATER, DISS, REC, (UG/L) (46342)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	METHYL AZIN-PHOS, WATER, GF, REC (UG/L) (82686)	BEN-FLUR-ALIN, WATER, GF, REC (UG/L) (82673)	BUTYL-ATE, WATER, DISS, REC (UG/L) (04028)		
JUN 20...	1440	178	23.8	11.5	8.7	1130	<.004	<.002	E.009	.033	<.050	<.010	<.002	
AUG 14...	1200	186	21.8	7.7	8.2	1210	<.004	<.002	E.015	.038	<.050	<.010	<.002	
DATE	TIME	CAR-BARYL WATER FLTRD 0.7 U (UG/L) (82680)	CARBO-FURAN WATER FLTRD 0.7 U (UG/L) (82674)	CHLOR-PYRIFOS DIS-SOLVED (UG/L) (38933)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U (UG/L) (82682)	DI-P,P' DDE DISSOLV (UG/L) (34653)	DI-AZINON, DIS-SOLVED (UG/L) (39572)	DI-ELDRIN DIS-SOLVED (UG/L) (39381)	2,6-DI-ETHYL ANILINE WAT FLT 0.7 U (UG/L) (82660)	DISUL-FOTON WATER FLTRD 0.7 U (UG/L) (82677)	EPTC WATER FLTRD 0.7 U (UG/L) (82668)	ETHAL-FLUR-ALIN WAT FLT 0.7 U (UG/L) (82663)	ETHO-PROP WATER FLTRD 0.7 U (UG/L) (82672)
JUN 20...	E.003	<.020	.009	<.018	<.003	<.003	.006	<.005	<.002	<.021	E.002	<.009	<.005	
AUG 14...	<.041	<.020	<.005	<.018	<.003	<.003	.009	<.005	<.002	<.021	<.002	<.009	<.005	
DATE	TIME	FONOFOS WATER DISS REC (UG/L) (04095)	ALPHA BHC DIS-SOLVED (UG/L) (34253)	LINDANE DIS-SOLVED (UG/L) (39341)	LIN-URON WATER FLTRD 0.7 U (UG/L) (82666)	MALA-THON, DIS-SOLVED (UG/L) (39532)	METHYL PARA-THION WAT FLT 0.7 U (UG/L) (82667)	METO-LACHLOR WATER DISSOLV (UG/L) (39415)	METRI-BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	MOL-INATE WATER FLTRD 0.7 U (UG/L) (82671)	NAPROP-AMIDE WATER FLTRD 0.7 U (UG/L) (82684)	PARA-THON, DIS-SOLVED (UG/L) (39542)	PEB-ULATE WATER FILTRD 0.7 U (UG/L) (82669)	PENDI-METH-ALIN WAT FLT 0.7 U (UG/L) (82683)
JUN 20...	<.003	<.005	<.004	<.035	<.027	<.006	.014	<.006	<.002	<.007	<.007	<.002	E.009	
AUG 14...	<.003	<.005	<.004	<.035	<.027	<.006	.034	<.006	<.002	<.007	<.007	<.002	<.010	
DATE	TIME	PER-METHRIN CIS WAT FLT 0.7 U (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U (UG/L) (82664)	PRO-METON, WATER, DISS, REC (UG/L) (04037)	PRON-AMIDE WATER FLTRD 0.7 U (UG/L) (82676)	PROPA-CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO-PANIL WATER FLTRD 0.7 U (UG/L) (82679)	PRO-PARGITE WATER FLTRD 0.7 U (UG/L) (82685)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU-THIURON WATER FLTRD 0.7 U (UG/L) (82670)	TER-BACIL WATER FLTRD 0.7 U (UG/L) (82665)	TER-BUFOS WATER FLTRD 0.7 U (UG/L) (82675)	THIO-BENCARB WATER FLTRD 0.7 U (UG/L) (82681)	TRIAL-LATE WATER FLTRD 0.7 U (UG/L) (82678)
JUN 20...	<.006	<.011	E.015	<.004	<.010	<.011	<.023	<.011	<.016	<.034	<.017	<.005	.006	
AUG 14...	<.006	<.011	E.014	<.004	<.010	<.011	<.023	E.001	<.016	<.034	<.017	<.005	<.002	
DATE	TIME	TRI-FLUR-ALIN WAT FLT 0.7 U (UG/L) (82661)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689)										
JUN 20...		<.009	6.2	.6										
AUG 14...		<.009	5.1	2.8										

E Estimated laboratory analysis value.

## PLATTE RIVER BASIN

402114105350101 BIG THOMPSON RIVER BELOW MORAINES PARK NEAR ESTES PARK, CO

LOCATION.--Lat 40°21'14", long 105°35'01", in SE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec.33, T.5 N., R.73 W., Larimer County, Hydrologic Unit 10190006, on left upstream wingwall of bridge at lower Moraine Park parking lot, in Rocky Mountain National Park, and 4.0 mi southwest of Estes Park.

DRAINAGE AREA.--39.8 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1995 to September 1997, April to September 2001.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 8,005 ft above sea level, from topographic map.

REMARKS.--No estimated daily discharges. Records fair. No diversion or regulation upstream from gage.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 787 ft<sup>3</sup>/s, June 20, 1997, gage height, 6.78 ft; minimum daily, 3.4 ft<sup>3</sup>/s, Feb. 27, Mar. 4, and 7-8, 1996 (all estimated discharges).

EXTREMES FOR CURRENT YEAR.--Maximum discharge for period April to September, 321 ft<sup>3</sup>/s, June 3, gage height, 5.67 ft; minimum daily, 6.1 ft<sup>3</sup>/s, Apr. 17.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	59	216	115	34	26
2	---	---	---	---	---	---	---	70	245	109	37	24
3	---	---	---	---	---	---	---	51	237	106	34	23
4	---	---	---	---	---	---	---	37	187	105	32	22
5	---	---	---	---	---	---	---	33	157	98	32	20
6	---	---	---	---	---	---	---	35	161	95	52	20
7	---	---	---	---	---	---	---	31	191	98	67	20
8	---	---	---	---	---	---	---	32	195	116	90	26
9	---	---	---	---	---	---	---	47	191	104	140	25
10	---	---	---	---	---	---	---	64	182	90	93	26
11	---	---	---	---	---	---	---	88	188	81	77	21
12	---	---	---	---	---	---	---	99	172	75	67	18
13	---	---	---	---	---	---	---	126	148	76	57	17
14	---	---	---	---	---	---	---	166	116	79	54	19
15	---	---	---	---	---	---	---	186	99	80	60	20
16	---	---	---	---	---	---	---	191	94	67	59	19
17	---	---	---	---	---	---	6.1	187	99	57	51	21
18	---	---	---	---	---	---	9.0	193	111	47	43	26
19	---	---	---	---	---	---	12	189	120	45	39	23
20	---	---	---	---	---	---	13	181	121	44	41	20
21	---	---	---	---	---	---	12	143	125	44	57	18
22	---	---	---	---	---	---	11	109	129	43	45	17
23	---	---	---	---	---	---	14	125	122	42	40	17
24	---	---	---	---	---	---	12	157	121	41	35	17
25	---	---	---	---	---	---	15	175	152	39	34	16
26	---	---	---	---	---	---	17	191	148	44	31	16
27	---	---	---	---	---	---	24	219	151	46	29	15
28	---	---	---	---	---	---	35	233	135	41	27	15
29	---	---	---	---	---	---	49	223	125	36	25	15
30	---	---	---	---	---	---	57	222	117	33	25	15
31	---	---	---	---	---	---	---	215	---	32	24	---
TOTAL	---	---	---	---	---	---	---	4077	4555	2128	1531	597
MEAN	---	---	---	---	---	---	---	132	152	68.6	49.4	19.9
MAX	---	---	---	---	---	---	---	233	245	116	140	26
MIN	---	---	---	---	---	---	---	31	94	32	24	15
AC-FT	---	---	---	---	---	---	---	8090	9030	4220	3040	1180

PLATTE RIVER BASIN

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402114105350101 BIG THOMPSON RIVER BELOW MORAINNE PARK NEAR ESTES PARK, CO--Continued  
(National Water-Quality Assessment Program station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--January 1995 to September 1998, February to September 2001.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

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) (00900)	CALCIUM DIS-SOLVED (MG/L) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L) (00925)	SODIUM, DIS-SOLVED (MG/L) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L) (00935)	BICAR-BONATE WATER DIS IT FIELD HCO3 (00453)
FEB 09...	1310	2.4	29	7.2	.2	9.8	10.1	2.81	.758	1.8	.245	.31	27
MAR 14...	1030	4.7	30	7.0	.1	10.3	9.89	2.75	.737	1.9	.262	.46	11
APR 04...	1110	4.3	34	7.5	7.0	9.3	9.81	2.74	.719	1.7	.240	.38	7
MAY 10...	1125	60	23	7.0	8.4	9.7	8.87	2.49	.643	1.3	.186	.34	5
JUN 07...	1220	161	14	6.8	8.8	9.1	5.30	1.49	.383	.7	.136	.17	3
JUL 03...	1115	105	13	7.1	12.3	10.4	4.13	1.20	.275	.6	.133	.18	5
AUG 06...	1015	35	15	7.2	13.8	10.7	5.00	1.43	.345	.8	.155	.23	6
SEP 11...	1050	21	19	7.2	8.6	10.6	6.47	1.86	.447	1.1	.182	.26	6

DATE	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L) (39086)	SULFATE DIS-SOLVED (MG/L) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L) (00950)	SILICA, DIS-SOLVED (MG/L) (00955)	SOLIDS, RESIDUE AT 180 DEG. C (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER DAY) (70302)	NITRO-GEN, NITRITE (MG/L) (00613)	NITRO-GEN, NO2+NO3 (MG/L) (00631)	NITRO-GEN, AMMONIA (MG/L) (00608)	NITRO-GEN, DIS-SOLVED (MG/L) (00607)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L) (00625)
FEB 09...	22	2.9	.4	.2	7.2	21	30.3	.14	<.001	.149	.008	--	.09
MAR 14...	9	3.0	.5	E.1	7.0	23	22.5	.29	.001	.132	.013	--	.14
APR 04...	6	3.1	.5	E.1	6.1	27	19.4	.31	.002	.100	.006	.098	.33
MAY 10...	4	2.5	1.1	E.1	5.7	37	17.2	6.0	.001	.084	.005	.213	.26
JUN 07...	3	1.4	.1	E.1	3.6	24	9.9	10	<.001	.078	.004	.102	.16
JUL 03...	4	.9	.1	<.2	2.6	23	8.6	6.5	.001	.079	.004	--	.16
AUG 06...	5	1.2	.1	E.1	3.1	<10	10.5	.98	<.001	.096	<.002	--	E.06
SEP 11...	5	1.8	.2	<.2	4.2	21	13.2	1.2	.001	.122	<.002	--	E.07

DATE	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L) (00623)	PHOS-PHORUS TOTAL (MG/L) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L) (00671)	CARBON, ORGANIC DIS-SOLVED (MG/L) (00681)	CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L) (00689)	ACETO-CHLOR, WATER FLTRD REC (UG/L) (49260)	ALA-CHLOR, WATER, DISS, REC, (UG/L) (46342)	DEETHYL ATRA-ZINE, WATER, DISS, REC, (UG/L) (04040)	ATRA-ZINE, WATER, DISS, REC, (UG/L) (39632)	METHYL AZIN-FLUR, WAT FLT 0.7 U (UG/L) (82686)	BEN-FLUR-ALIN WAT FLD 0.7 U (UG/L) (82673)	BUTYL-ATE, WATER, DISS, REC (UG/L) (04028)
FEB 09...	E.06	.004	<.006	<.007	1.3	.3	<.004	<.002	<.006	<.007	<.050	<.010	<.002
MAR 14...	E.06	.008	E.004	<.007	1.8	.3	<.004	<.002	<.006	<.007	<.050	<.010	<.002
APR 04...	.10	.008	<.006	<.007	2.0	.3	<.004	<.002	<.006	<.007	<.050	<.010	<.002
MAY 10...	.22	.011	E.004	<.007	8.4	.5	<.004	<.002	<.006	<.007	<.050	<.010	<.002
JUN 07...	.11	.010	E.005	<.007	3.4	--	<.004	<.002	<.006	<.007	<.050	<.010	<.002
JUL 03...	E.08	.005	<.006	<.007	1.7	.3	<.004	<.002	<.006	<.007	<.050	<.010	<.002
AUG 06...	.10	.007	<.006	<.007	--	--	<.004	<.002	<.006	<.007	<.050	<.010	<.002
SEP 11...	E.08	E.003	<.006	<.007	1.6	.2	<.004	<.002	<.006	<.007	<.050	<.010	<.002

## PLATTE RIVER BASIN

402114105350101 BIG THOMPSON RIVER BELOW MORAINNE PARK NEAR ESTES PARK, CO--Continued  
(National Water-Quality Assessment Program station)

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	CAR- BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBO- FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933)	CYANA- ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	P,P' DDE DISSOLV (UG/L) (34653)	DI- AZINON, DIS- SOLVED (UG/L) (39572)	DI- ELDRIN DIS- SOLVED (UG/L) (39381)	2,6-DI- ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	DISUL- FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	ETHAL- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	ETHO- PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)
FEB 09...	<.041	<.020	<.005	<.018	<.003	<.003	<.005	<.005	<.002	<.021	<.002	<.009	<.005
MAR 14...	<.041	<.020	<.005	<.018	<.003	<.003	<.005	<.005	<.002	<.021	<.002	<.009	<.005
APR 04...	<.041	<.020	<.005	<.018	<.003	<.003	<.005	<.005	<.002	<.021	<.002	<.009	<.005
MAY 10...	<.041	<.020	<.005	<.018	<.003	<.003	<.005	<.005	<.002	<.021	<.002	<.009	<.005
JUN 07...	<.041	<.020	<.005	<.018	<.003	<.003	<.005	<.005	<.002	<.021	<.002	<.009	<.005
JUL 03...	<.041	<.020	<.005	<.018	<.003	<.003	<.005	<.005	<.002	<.021	<.002	<.009	<.005
AUG 06...	<.041	<.020	<.005	<.018	<.003	<.003	<.005	<.005	<.002	<.021	<.002	<.009	<.005
SEP 11...	<.041	<.020	<.005	<.018	<.003	<.003	<.005	<.005	<.002	<.021	<.002	<.009	<.005
DATE	FONOFOS WATER DISS REC (UG/L) (04095)	ALPHA BHC DIS- SOLVED (UG/L) (34253)	LINDANE DIS- SOLVED (UG/L) (39341)	LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA- THION, DIS- SOLVED (UG/L) (39532)	METHYL PARA- THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	METRI- BUZIN WATER DISSOLV (UG/L) (82630)	MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	METHYL PARA- THION, DIS- SOLVED (UG/L) (39542)	PEB- ULATE WATER FLTRD 0.7 U GF, REC (UG/L) (82669)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)
FEB 09...	<.003	<.005	<.004	<.035	<.027	<.006	<.013	<.006	<.002	<.007	<.007	<.002	<.010
MAR 14...	<.003	<.005	<.004	<.035	<.027	<.006	<.013	<.006	<.002	<.007	<.007	<.002	<.010
APR 04...	<.003	<.005	<.004	<.035	<.027	<.006	<.013	<.006	<.002	<.007	<.007	<.002	<.010
MAY 10...	<.003	<.005	<.004	<.035	<.027	<.006	<.013	<.006	<.002	<.007	<.007	<.002	<.010
JUN 07...	<.003	<.005	<.004	<.035	<.027	<.006	<.013	<.006	<.002	<.007	<.007	<.002	<.010
JUL 03...	<.003	<.005	<.004	<.035	<.027	<.006	<.013	<.006	<.002	<.007	<.007	<.002	<.010
AUG 06...	<.003	<.005	<.004	<.035	<.027	<.006	<.013	<.006	<.002	<.007	<.007	<.002	<.010
SEP 11...	<.003	<.005	<.004	<.035	<.027	<.006	<.013	<.006	<.002	<.007	<.007	<.002	<.010
DATE	PER- METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	PRO- METON, WATER, DISS, REC (UG/L) (04037)	PRON- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	PROPA- CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO- PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER- BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	TRIAL- LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)
FEB 09...	<.006	<.011	<.015	<.004	<.010	<.011	<.023	<.011	<.016	<.034	<.017	<.005	<.002
MAR 14...	<.006	<.011	<.015	<.004	<.010	<.011	<.023	<.011	<.016	<.034	<.017	<.005	<.002
APR 04...	<.006	<.011	<.015	<.004	<.010	<.011	<.023	<.011	<.016	<.034	<.017	<.005	<.002
MAY 10...	<.006	<.011	<.015	<.004	<.010	<.011	<.023	<.011	<.016	<.034	<.017	<.005	<.002
JUN 07...	<.006	<.011	<.015	<.004	<.010	<.011	<.023	<.011	<.016	<.034	<.017	<.005	<.002
JUL 03...	<.006	<.011	<.015	<.004	<.010	<.011	<.023	<.011	<.016	<.034	<.017	<.005	<.002
AUG 06...	<.006	<.011	<.015	<.004	<.010	<.011	<.023	<.011	<.016	<.034	<.017	<.005	<.002
SEP 11...	<.006	<.011	<.015	<.004	<.010	<.011	<.023	<.011	<.016	<.034	<.017	<.005	<.002

402114105350101 BIG THOMPSON RIVER BELOW MORAINES PARK NEAR ESTES PARK, CO--Continued  
(National Water-Quality Assessment Program station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)
FEB 09...	<.009
MAR 14...	<.009
APR 04...	<.009
MAY 10...	<.009
JUN 07...	<.009
JUL 03...	<.009
AUG 06...	<.009
SEP 11...	<.009

E Estimated laboratory analysis value.

WATER-QUALITY DATA, DISSOLVED METALS SAMPLING, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	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)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)
MAR 14...	1031	<1.0	<1.0	150	<1.00	18.0	<.10	<5.00	<.1
APR 04...	1111	<1.0	<1.0	160	<1.00	14.0	<.10	<5.00	<.1
MAY 10...	1126	<1.0	2.0	130	<1.00	5.0	<.10	<5.00	<.1
JUN 07...	1221	<1.0	<1.0	100	<1.00	<5.0	<.10	<5.00	<.1
JUL 03...	1116	<5.0	<2.0	<100	<1.00	<5.0	<.10	<5.00	<.1
AUG 06...	1016	<5.0	<2.0	<100	<1.00	<5.0	<.10	<5.00	<.1
SEP 11...	1051	<5.0	<2.0	<100	<1.00	5.1	<.10	<3.00	<.1

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SEDI- MENT, SUS- PENDEED (MG/L) (80154)	SEDI- MENT, CHARGE, SUS- PENDEED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
FEB 09...	1310	2.4	1	.01	75
MAR 14...	1030	4.7	5	.06	44
APR 04...	1110	4.3	4	.05	79
MAY 10...	1125	60	6	.98	65
JUN 07...	1220	161	6	2.6	66
JUL 03...	1115	105	2	.57	80
AUG 06...	1015	35	5	.47	96
SEP 11...	1050	21	1	.07	--

PLATTE RIVER BASIN

402231105291900 LAKE ESTES NEAR DAM NEAR ESTES PARK, CO

WATER-QUALITY RECORDS

LOCATION.--Lat. 40°22'31", long 105°29'19", in SE<sup>1</sup>/<sub>4</sub> NW<sup>1</sup>/<sub>4</sub> sec.29, T.5 N, R.72 W., Larimer County, Hydrologic Unit 14010001, 1 mi southeast of Estes Park.

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

REMARKS.--Samples were collected near-surface and near-bottom at estimated deepest point near Olympus Dam.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	SAM-PLING DEPTH (FEET) (000003)	SPE-CIFIC CONDUCTANCE (US/CM) (000095)	PH WATER WHOLE FIELD (STANDARD WATER) (DEG C) (00010)	TEMPERATURE (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STANDARD WATER) (DEG C) (00010)	TEMPERATURE (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STANDARD WATER) (DEG C) (00010)	TEMPERATURE (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STANDARD WATER) (DEG C) (00010)	TEMPERATURE (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)
OCT															
30...	1135	.10	37	7.6	7.9	9.0									
30...	1136	5.00	37	7.7	7.9	9.0									
30...	1137	10.0	37	7.6	7.9	9.0									
30...	1138	15.0	37	7.6	7.8	8.9									
30...	1139	20.0	37	7.6	7.8	8.9									
30...	1140	25.0	37	7.6	7.8	8.8									
30...	1141	30.0	38	7.6	7.7	8.8									
MAY															
30...	1101	.50	25	6.4	8.4	8.5									
30...	1102	5.00	25	6.4	8.1	8.4									
30...	1103	10.0	24	6.4	7.9	8.4									
30...	1104	15.0	24	6.4	7.8	8.3									
30...	1105	20.0	21	6.3	6.9	8.4									
30...	1106	25.0	21	6.3	6.8	8.4									
30...	1107	30.0	21	6.3	6.7	8.5									
30...	1108	35.0	20	6.3	6.5	8.6									
AUG															
28...	1200	.50	44	7.6	17.8	7.1									
28...	1201	5.00	44	7.7	16.9	7.2									
28...	1202	10.0	44	7.3	16.4	6.6									
28...	1203	15.0	41	6.9	15.7	6.4									
28...	1204	20.0	40	6.7	15.0	5.9									
28...	1205	25.0	40	6.5	14.5	4.9									
28...	1206	30.0	40	6.4	14.3	4.3									
DATE	TIME	SPE-CIFIC CONDUCTANCE (US/CM) (000095)	PH WATER WHOLE FIELD (STANDARD WATER) (DEG C) (00010)	TEMPERATURE (DEG C) (00010)	TRANS-PAR-ENCY (SECCHI DISK) (IN) (00077)	OXYGEN, DIS-SOLVED (MG/L) (00300)	COLI-FORM, FECAL, UM-MF (COLS./100 ML) (31625)	HARD-NESS (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-SORPTION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)		
OCT															
30...	1145	37	7.6	7.9	112	9.0	E7	16.1	4.85	.957	1.7	.182	.55		
30...	1200	38	7.6	7.7	--	8.8	--	16.4	4.94	.979	1.7	.181	.51		
MAY															
30...	1115	24	6.4	8.0	90.0	8.4	23	10.6	3.12	.686	1.2	.165	.41		
30...	1130	20	6.3	6.6	--	8.6	--	9.43	2.73	.631	1.2	.167	.39		
AUG															
28...	1215	44	7.6	17.8	96.0	7.1	E4	17.3	5.28	.988	1.8	.186	.54		
28...	1230	40	6.4	14.3	--	4.3	--	16.0	4.69	1.02	1.8	.192	.51		
DATE	TIME	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)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOSPHORUS TOTAL (MG/L AS P) (00665)	
OCT															
30...	18	2.2	.6	E.1	4.7	36	26.4	.0	<.001	.021	.010	.26	.020		
30...	18	2.2	.7	E.1	4.7	31	26.8	.0	<.001	.024	.026	.12	.017		
MAY															
30...	11	1.7	.6	E.1	4.5	12	19.4	.0	<.001	.063	.020	.21	.009		
30...	10	1.7	.6	E.1	4.3	<10	17.9	.0	<.001	.073	.020	.21	.011		
AUG															
28...	20	2.3	.6	E.1	4.3	42	28.1	.1	.002	.018	<.002	.54	.012		
28...	18	2.0	.7	E.1	4.7	34	26.5	.0	.002	.045	.105	.32	.023		

402231105291900 LAKE ESTES NEAR DAM NEAR ESTES PARK, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	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)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, DIS-SOLVED (UG/L AS FE) (01046)
OCT													
30...	E.003	E.006	1.8	<.1	3.8	5.6	<1.00	<13	<.14	<.8	.02	.3	20
30...	<.006	<.007	--	--	3.7	5.6	<1.00	<13	<.14	<.8	.02	.4	20
MAY													
30...	E.004	<.007	.6	<.1	4.9	4.7	<1.00	<13	<.10	<.8	.04	1.0	60
30...	E.004	<.007	--	--	4.5	4.3	<1.00	<13	<.10	<.8	.05	1.0	80
AUG													
28...	E.004	<.007	2.1	<.1	3.6	5.5	<1.00	<13	<.10	<.8	.02	.7	30
28...	.006	<.007	--	--	3.2	5.7	<1.00	<13	<.10	<.8	.02	.5	--

DATE	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									
30...	<.08	.7	.6	.3	.46	<.2	24.2	E.1	1
30...	<.08	.7	.5	.3	.47	<.2	24.4	E.2	<1
MAY									
30...	<.08	.6	4.3	.3	.19	<.2	15.9	E.2	1
30...	E.05	.6	5.3	.3	.19	<.2	13.8	E.2	1
AUG									
28...	E.06	.8	1.4	.4	<.06	<1.0	32.1	.3	<1
28...	E.06	.8	1.9	.5	<.06	<.2	28.0	.3	<1

E Estimated laboratory analysis value.

PLATTE RIVER BASIN

06737500 HORSETOOTH RESERVOIR NEAR FORT COLLINS, CO

LOCATION.--Lat 40°36'00", long 105°10'06", in NW 1/4 SW 1/4 sec.6, T.7 N., R.69 W., Larimer County, Hydrologic Unit 10190007, on right bank near abutment of Horsetooth Dam on tributaries to Cache la Poudre River, 4.8 mi west of city hall in Fort Collins.

RESERVOIR ELEVATIONS AND CONTENTS RECORDS

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

GAGE.--Nonrecording gage read at irregular intervals from 1 to 10 days. Datum of gage is 5,430.00 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 earth and rockfill dike and dams closing openings in subsequent valleys between hogbacks; storage began Jan. 10, 1951; dams completed July 21, 1949. Usable capacity, 143,500 acre-ft above elevations 5,320 ft, invert of channel from Spring Canyon Dam, 5,310 ft, invert of channel from Dixon Canyon Dam, 5,270 ft, trashrack sill of outlet at Soldier Canyon Dam, and below maximum water-surface elevation, 5,430 ft, 6 ft below crest of Satanka Dike. Dead storage, 7,003 acre ft. Figures given represent usable contents. Water is diverted from Colorado River basin through Alva B. Adams tunnel for supplemental irrigation supply to Cache la Poudre River. Water-quality sampling at two sites in reservoir.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 148,400 acre-ft, June 26-27, 1995, elevation, 5,429.36 ft; minimum observed, 9 acre-ft, Nov. 16-30, 1977, elevation, 5,270.25 ft; no storage prior to Apr. 18, 1951.

EXTREMES (AT 0800) FOR CURRENT YEAR.--Maximum contents, observed, 40,040 acre-ft, June 5, elevation, 5,359.91 ft; minimum observed, 0 acre-ft, Sept. 30, elevation, 5,291.42 ft during repairs to dam and outlet structure.

MONTHEND ELEVATION AND CONTENTS AT 0800, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30. . . . .	5,335.25	17,460 (revised)	-
Oct. 31. . . . .	5,315.20	5,190	-12,270
Nov. 30. . . . .	5,299.22	a0	-5,190
Dec. 31. . . . .	5,322.62	9,180	+9,180
CAL YR 2000 . . . . .	-	-	-99,320
Jan. 31. . . . .	5,336.68	18,520	+9,340
Feb. 28. . . . .	5,346.84	26,860	+8,340
Mar. 31. . . . .	5,358.93	38,960	+12,100
Apr. 30. . . . .	5,358.27	38,250	-710
May 31. . . . .	5,358.92	38,950	+700
June 30. . . . .	5,355.63	35,440	-3,510
July 31. . . . .	5,350.33	30,120	-5,320
Aug. 31. . . . .	5,310.70	3,070	-27,050
Sept. 30. . . . .	5,291.42	a0	-3,070
WTR YR 2001. . . . .	-	-	-17,460

a Reservoir drawn down below dead storage to allow for repair on the dam and outlet structures.

06737500 HORSETOOTH RESERVOIR NEAR FORT COLLINS, CO--Continued

WATER-QUALITY RECORDS

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

REMARKS.--Samples collected near the north end of reservoir near Soldier Canyon Dam.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	SAM-PLING DEPTH (FEET) (00003)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD WATER UNITS) (00400)	TEMPER-ATURE (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)
OCT						
18...	1000	.10	82	7.8	13.1	7.6
18...	1001	5.00	82	7.8	13.0	7.6
18...	1002	10.0	82	7.8	13.0	7.6
18...	1003	15.0	82	7.8	12.9	7.6
18...	1004	20.0	82	7.8	12.9	7.6
18...	1005	25.0	82	7.8	12.9	7.5
18...	1006	30.0	82	7.7	12.8	7.6
18...	1007	40.0	82	7.7	12.8	7.6
18...	1008	50.0	82	7.7	12.7	7.5
18...	1009	60.0	82	7.7	12.7	7.5
18...	1010	70.0	82	7.7	12.7	7.4
MAY						
29...	1000	.50	69	7.5	14.6	8.6
29...	1001	5.00	68	7.5	14.4	8.5
29...	1002	10.0	67	7.3	12.7	8.7
29...	1003	15.0	67	7.2	12.2	8.2
29...	1004	20.0	67	7.1	11.8	8.0
29...	1005	25.0	66	7.1	11.6	8.1
29...	1006	30.0	66	7.1	11.6	8.1
29...	1007	35.0	66	7.1	11.5	8.0
29...	1008	40.0	65	7.1	11.2	8.0
29...	1009	45.0	66	7.0	10.9	8.0
29...	1010	50.0	66	7.0	10.6	8.0
29...	1011	55.0	65	7.0	10.1	8.0
29...	1012	60.0	65	7.0	9.7	7.9
29...	1013	65.0	64	6.9	8.8	7.9
29...	1014	70.0	64	6.8	8.1	7.8
29...	1015	75.0	64	6.8	8.0	7.7
29...	1016	80.0	64	6.8	8.0	7.7
29...	1017	85.0	64	6.8	8.0	7.7
29...	1018	90.0	64	6.8	8.0	7.7

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD WATER UNITS) (00400)	TEMPER-ATURE (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 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													
18...	1015	82	7.8	13.1	55.0	7.6	<1	35.8	11.1	1.96	2.6	.190	.65
18...	1030	82	7.7	12.7	--	7.4	--	36.0	11.1	1.97	2.6	.192	.69
MAY													
29...	1030	68	7.4	10.4	96.0	8.5	E1	29.8	9.18	1.66	2.3	.180	.70
29...	1045	65	6.9	9.4	--	7.8	--	29.7	9.13	1.67	2.2	.179	.76

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)	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)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)
OCT													
18...	35	5.3	1.3	.2	4.1	53	48.7	.1	.001	.122	.002	.17	.029
18...	35	5.3	1.2	.2	4.2	53	48.9	.1	.002	.124	.003	.20	.032
MAY													
29...	30	4.8	.7	.2	4.8	34	42.5	.0	.001	.072	.014	.27	.006
29...	29	4.7	.7	E.2	5.0	54	42.2	.1	.001	.078	.028	.20	.010

## PLATTE RIVER BASIN

06737500 HORSETOOTH RESERVOIR NEAR FORT COLLINS, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	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)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, DIS-SOLVED (UG/L AS FE) (01046)
OCT													
18...	.006	E.005	.7	<.1	3.5	27.7	<1.00	E10	<.14	<.8	.05	2.1	10
18...	.007	.007	--	--	3.5	27.5	<1.00	<13	<.14	<.8	.06	2.2	10
MAY													
29...	<.006	<.007	.9	<.1	3.2	19.8	<1.00	<13	<.10	<.8	.04	3.0	M
29...	E.005	<.007	--	--	3.2	19.2	<1.00	<13	<.10	<.8	.02	2.9	M

DATE	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)
OCT										
18...	<.08	1.2	26	6.4	.6	.54	<.2	48.3	.6	<1
18...	<.08	1.1	46	19.1	.6	.65	<.2	48.5	.7	<1
MAY										
29...	<.08	1.1	8	6.0	.4	.23	<.2	39.4	.4	<1
29...	E.05	.8	7	2.5	.4	.19	<.2	40.0	.4	<1

E Estimated laboratory analysis value.

M Presence of material verified but not quantified.

PLATTE RIVER BASIN

403147105083800 HORSETOOTH RESERVOIR NEAR FORT COLLINS, CO

WATER-QUALITY RECORDS

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

REMARKS.--Samples collected near the south end of reservoir near Spring Canyon Dam.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	SAM-PLING DEPTH (FEET) (00003)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD WATER UNITS) (00400)	TEMPER-ATURE (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)
OCT						
18...	1110	.10	108	7.6	11.6	7.9
18...	1111	5.00	107	7.6	11.1	7.8
18...	1112	10.0	106	7.6	10.9	7.9
18...	1113	15.0	107	7.6	10.8	7.6
18...	1114	20.0	108	7.6	10.5	7.2
18...	1115	25.0	117	7.4	10.0	3.9
18...	1116	30.0	88	7.3	9.0	.4
18...	1117	40.0	88	7.3	8.7	.2
18...	1118	50.0	93	7.2	8.5	.2
18...	1119	60.0	102	7.2	8.3	.1
MAY						
29...	1120	.50	62	7.0	15.2	8.2
29...	1121	5.00	62	7.1	14.6	8.0
29...	1122	10.0	60	7.1	13.5	8.1
29...	1123	15.0	53	7.0	13.0	8.1
29...	1124	20.0	53	6.9	12.5	7.9
29...	1125	25.0	58	7.0	12.0	7.9
29...	1126	30.0	61	7.0	11.7	7.8
29...	1127	35.0	60	7.0	11.5	7.9
29...	1128	40.0	59	7.0	11.3	7.8
29...	1129	45.0	60	6.9	10.5	7.7
29...	1130	50.0	61	6.9	9.6	7.5
29...	1131	55.0	62	6.8	8.3	7.6
29...	1132	60.0	63	6.8	7.7	7.5
29...	1133	65.0	62	6.8	7.4	7.5
29...	1134	70.0	62	6.8	7.2	7.4
29...	1135	75.0	63	6.8	7.1	7.2
29...	1136	80.0	63	6.7	6.9	6.9
29...	1137	85.0	64	6.7	6.8	6.5
29...	1138	90.0	64	6.6	6.8	6.0
29...	1139	95.0	65	6.6	6.8	5.8

DATE	TIME	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD WATER UNITS) (00400)	TEMPER-ATURE (DEG C) (00010)	TRANS-ENCY (SECCHI DISK) (IN) (00077)	OXYGEN, DIS-SOLVED (MG/L) (00300)	COLI-FORM, FECAL, 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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)
OCT													
18...	1130	108	7.6	11.6	123	7.9	E9	44.6	13.6	2.58	2.9	.191	.71
18...	1145	102	7.2	8.3	--	.1	--	40.1	12.3	2.24	2.8	.194	.64
MAY													
29...	1145	59	7.0	14.1	84.0	8.1	E3	25.8	7.88	1.46	2.3	.197	.66
29...	1200	62	6.8	8.3	--	7.2	--	29.0	8.93	1.60	2.3	.188	.69

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)	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)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)
OCT													
18...	39	12.6	1.1	.2	5.0	70	63.0	.1	.002	.108	.056	.23	.019
18...	42	5.1	1.7	.2	5.7	66	58.0	.1	.003	.146	.165	.36	.096
MAY													
29...	25	4.1	1.1	E.2	4.9	28	38.1	.0	.001	.071	.031	.24	.011
29...	28	4.0	.9	E.2	5.0	28	40.7	.0	.001	.037	.090	.25	.018

## PLATTE RIVER BASIN

403147105083800 HORSETOOTH RESERVOIR NEAR FORT COLLINS, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	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)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, DIS-SOLVED (UG/L AS FE) (01046)
OCT													
18...	E.004	<.007	1.6	<.1	3.4	30.4	<1.00	E11	<.14	<.8	.17	2.0	20
18...	.027	.024	--	--	4.0	30.1	<1.00	E10	<.14	E.6	.28	86.2	140
MAY													
29...	E.004	<.007	.7	.1	3.5	17.7	<1.00	<13	.32	<.8	.05	3.1	20
29...	.009	E.004	--	--	3.6	18.6	<1.00	<13	<.10	<.8	.05	3.1	20
DATE	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)			
OCT													
18...	<.08	1.2	208	209	.6	.69	<.2	68.5	.5	<1			
18...	<.08	1.2	684	685	.7	3.81	<.2	59.3	.5	<1			
MAY													
29...	E.05	1.1	13	9.7	.4	.26	<.2	34.6	.4	1			
29...	<.08	1.1	47	38.7	.4	.26	<.2	39.6	.4	5			

E Estimated laboratory analysis value.

06738000 BIG THOMPSON RIVER AT MOUTH OF CANYON, NEAR DRAKE, CO

LOCATION.--Lat 40°25'18", long 105°13'34", in SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec.3, T.5 N., R.70 W., Larimer County, Hydrologic Unit 10190006, on right bank at mouth of canyon, 400 ft upstream from Handy Ditch diversion dam, and 6.0 mi east of Drake.

DRAINAGE AREA.--305 mi<sup>2</sup>.

PERIOD OF RECORD.--August 1887 to September 1892, May 1895 to September 1903, October 1926 to September 1933 (no winter records prior to October 1932, except water years 1927-28), April 1938 to September 1949, March 1951 to current year. Monthly discharge only for some periods, published in WSP 1310. Published as Big Thompson Creek at Arkins 1887-92, Big Thompson Creek near Arkins 1901-3, and as Thompson River at mouth of canyon, near Drake 1927-30, 1938-47.

REVISED RECORDS.--WSP 1310: 1891, 1927. WSP 1730: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry and concrete control. Datum of gage is 5,305.47 ft above sea level (levels by U.S. Bureau of Reclamation). Oct. 1, 1949 to Sept. 18, 1977, at present site, datum 8.00 ft lower, Sept. 19, 1977 to July 27, 1980, at present site, datum 7.37 ft lower. See WSP 1710 or 1730 for history of changes prior to Oct. 1, 1949.

REMARKS.--Records good except for estimated daily discharges, which are poor. Diversions upstream from station for irrigation. Diversions from Colorado River basin to Big Thompson River basin upstream from station through Alva B. Adams tunnel began Aug. 10, 1947; since Apr. 15, 1953, this imported water has been diverted from Lake Estes through Olympus tunnel bypassing this station. Part of the natural flow of the Big Thompson River has also been diverted through Olympus tunnel since May 17, 1955, and Dille tunnel since Apr. 20, 1959, and may be returned to the river just downstream from this station.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 31,200 ft<sup>3</sup>/s, July 31, 1976, gage height, 19.86 ft. from floodmarks, from slope-area measurements of peak flow; no flow at times in 1976 (all flow above station diverted through Olympus and Dille tunnels after flood of July 31, 1976), 1979-80 (all flow above station diverted through Dille tunnel).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 440 ft<sup>3</sup>/s, May 19, gage height, 3.47 ft; minimum daily, 7.8 ft<sup>3</sup>/s, Mar. 27.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	125	60	e35	e31	e36	e38	37	134	112	81	84	74
2	122	41	e35	e31	e36	e37	34	141	110	69	87	76
3	116	46	e35	e31	e36	e37	38	138	156	62	88	71
4	149	52	e35	e31	e36	e37	39	e138	155	64	84	69
5	167	58	e35	e31	e36	e36	39	e155	168	63	80	69
6	163	51	e35	e31	e36	37	38	e175	151	71	85	72
7	155	48	e34	e31	e36	39	37	e190	122	77	98	80
8	161	47	e34	e32	e36	39	36	e200	120	85	145	80
9	128	44	e34	e32	e36	41	36	e205	144	88	198	93
10	122	47	e34	e31	e36	42	37	206	154	91	220	91
11	113	45	e33	e31	e36	40	40	203	159	89	177	90
12	111	39	e33	e30	e36	40	38	192	119	86	123	90
13	87	44	e33	e30	e36	38	38	189	109	104	98	82
14	80	35	e33	e30	e36	39	39	120	93	108	116	83
15	70	44	e33	e30	e36	34	38	130	80	102	111	84
16	62	36	e33	e30	e36	36	39	173	65	82	193	90
17	60	31	e33	e30	e36	39	37	187	59	94	230	95
18	61	35	e33	e30	e36	37	39	355	55	98	204	97
19	198	36	e33	e29	e37	37	41	254	61	88	135	97
20	132	38	e32	e29	e37	39	42	179	65	116	116	91
21	257	e38	e32	e29	e37	38	e42	165	65	138	117	84
22	254	e37	e32	e29	e37	41	e45	82	67	136	117	74
23	256	e37	e32	e29	e37	42	e55	47	83	132	96	72
24	326	e37	e32	e29	e37	40	e70	55	66	138	83	74
25	203	e37	e32	e30	e37	40	78	89	68	136	67	72
26	96	e36	e32	e30	e38	19	79	64	72	125	72	66
27	74	e35	e31	e30	e38	7.8	85	71	79	117	80	63
28	74	e35	e31	e30	e38	31	98	112	71	107	78	62
29	80	e35	e31	e30	---	39	126	169	74	110	77	58
30	74	e35	e31	e32	---	36	150	175	79	109	73	58
31	78	---	e31	e34	---	36	---	145	---	90	71	---
TOTAL	4154	1239	1022	943	1021	1131.8	1590	4838	2981	3056	3603	2357
MEAN	134	41.3	33.0	30.4	36.5	36.5	53.0	156	99.4	98.6	116	78.6
MAX	326	60	35	34	38	42	150	355	168	138	230	97
MIN	60	31	31	29	36	7.8	34	47	55	62	67	58
AC-FT	8240	2460	2030	1870	2030	2240	3150	9600	5910	6060	7150	4680

CAL YR 2000 TOTAL 33001 MEAN 90.2 MAX 478 MIN 31 AC-FT 65460  
WTR YR 2001 TOTAL 27935.8 MEAN 76.5 MAX 355 MIN 7.8 AC-FT 55410

e Estimated.

## PLATTE RIVER BASIN

06741510 BIG THOMPSON RIVER AT LOVELAND, CO

LOCATION.--Lat 40°22'43", long 105°03'38", in SE<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec.24, T.5 N., R.69 W., Larimer County, Hydrologic Unit 10190006, on right bank 690 ft downstream from county road bridge C-13, 1.7 mi south of sugar refinery in Loveland, and 1.9 mi downstream from Farmers Ditch diversion.

DRAINAGE AREA.--535 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 4,906 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 developments, diversions for irrigation, and return flow from irrigated areas. Water-quality data for this site is included in the "Big Thompson Project" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	5.3	3.3	10	12	7.7	4.9	2.3	63	48	41	81
2	21	3.1	3.0	10	13	7.8	4.9	3.8	74	34	37	84
3	30	2.8	e2.7	10	9.1	7.9	4.9	6.2	87	28	38	92
4	25	2.8	e2.5	8.7	8.8	7.7	4.5	5.0	83	30	35	88
5	16	2.7	e2.2	8.6	8.7	7.3	2.8	8.5	88	35	38	94
6	18	2.6	e2.2	8.5	8.8	7.6	2.3	4.3	85	41	53	93
7	21	2.5	e2.2	8.5	8.6	7.8	2.0	3.8	76	41	41	89
8	20	2.5	e2.2	9.0	11	7.8	2.3	3.5	83	54	59	74
9	20	2.5	e2.0	11	10	8.0	2.1	3.2	80	53	206	49
10	17	2.5	e2.0	10	11	8.6	2.2	3.0	75	39	235	33
11	13	2.5	e2.0	8.5	9.8	9.7	11	3.0	72	34	96	32
12	12	2.5	e1.9	10	11	8.9	3.4	2.9	83	43	69	30
13	11	2.5	e1.8	7.8	10	8.4	2.4	2.8	90	60	59	24
14	8.4	2.8	e1.7	7.7	8.6	7.8	2.5	16	71	54	72	24
15	11	2.8	e1.7	12	11	7.2	2.4	40	65	45	75	18
16	15	2.8	e1.6	8.3	11	8.0	2.4	38	66	26	126	24
17	16	2.8	e1.6	10	8.1	8.2	2.2	71	74	25	150	28
18	16	2.8	e1.6	9.2	7.7	8.2	2.2	53	67	30	101	30
19	102	2.8	e1.6	10	7.7	8.0	2.0	24	52	36	97	23
20	212	2.8	e1.6	11	7.9	8.3	1.6	28	40	44	83	23
21	226	3.0	e1.4	12	7.9	8.3	2.7	31	39	38	74	25
22	216	2.9	e1.4	11	7.7	8.2	12	34	39	39	74	20
23	213	2.5	e1.4	8.4	7.7	8.1	6.7	36	54	33	79	13
24	238	2.4	e1.4	9.1	7.9	15	3.0	36	47	40	77	6.1
25	232	2.2	e1.4	8.8	7.6	41	2.7	39	46	40	69	8.7
26	162	2.2	e1.4	11	7.3	30	2.5	30	52	35	70	13
27	93	2.2	e4.5	8.5	7.6	7.1	2.5	30	47	29	76	8.8
28	90	5.4	9.5	8.7	7.5	5.9	2.5	31	36	31	90	19
29	87	10	12	8.9	---	5.9	2.5	65	58	28	97	8.4
30	82	3.7	11	9.1	---	6.1	2.5	87	62	32	89	5.4
31	45	---	8.7	11	---	5.2	---	65	---	34	89	---
TOTAL	2308.4	92.9	95.5	295.3	255.0	301.7	104.6	806.3	1954	1179	2595	1160.4
MEAN	74.5	3.10	3.08	9.53	9.11	9.73	3.49	26.0	65.1	38.0	83.7	38.7
MAX	238	10	12	12	13	41	12	87	90	60	235	94
MIN	8.4	2.2	1.4	7.7	7.3	5.2	1.6	2.3	36	25	35	5.4
AC-FT	4580	184	189	586	506	598	207	1600	3880	2340	5150	2300

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1979 - 2001, BY WATER YEAR (WY)

MEAN	31.5	21.5	13.1	17.4	17.2	13.2	44.8	228	296	117	75.9	37.4
MAX	111	95.8	51.9	95.5	129	61.4	292	2078	1493	418	153	83.9
(WY)	1998	1985	1998	1998	1998	1998	1980	1980	1983	1995	1981	1982
MIN	6.15	3.10	2.86	2.55	2.42	2.19	3.49	4.07	25.0	29.9	29.0	16.6
(WY)	1988	2001	1993	1994	1993	1996	2001	1981	1982	1987	1997	1990

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1979 - 2001	
ANNUAL TOTAL	14927.4		11148.1			
ANNUAL MEAN	40.8		30.5		76.3	
HIGHEST ANNUAL MEAN					321	
LOWEST ANNUAL MEAN					28.4	
HIGHEST DAILY MEAN	238	Oct 24	238	Oct 24	4240	May 1 1980
LOWEST DAILY MEAN	e1.4	Dec 21	e1.4	Dec 21	.80	May 11 1981
ANNUAL SEVEN-DAY MINIMUM	e1.4	Dec 20	e1.4	Dec 20	.89	May 10 1981
MAXIMUM PEAK FLOW			468		6970	
MAXIMUM PEAK STAGE			3.26		a,b10.10	
ANNUAL RUNOFF (AC-FT)	29610		22110		55280	
10 PERCENT EXCEEDS	87		83		134	
50 PERCENT EXCEEDS	31		11		20	
90 PERCENT EXCEEDS	2.7		2.4		3.4	

e Estimated.

a From high-water mark.

b Maximum gage height, 10.48 ft, Apr 30, 1999.

06742500 CARTER LAKE NEAR BERTHOUD, CO

LOCATION.--Lat 40°19'28", long 105°12'41", in SE<sup>1</sup>/<sub>4</sub> sec.10, T.4 N., R.70 W., Larimer County, Hydrologic Unit 10190006, in hoist house 293 ft from right abutment of Carter Lake Dam on Dry Creek, 7.0 mi west of Berthoud, and 8.9 mi upstream from mouth. Water-quality sampling site near center of reservoir.

RESERVOIR ELEVATIONS AND CONTENTS RECORDS

PERIOD OF RECORD.--March 1954 to current year.

GAGE.--Nonrecording gage read at irregular intervals from 1 to 13 days. Datum of gage is 5,763.00 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 earth and rockfill dam and dikes enlarging the natural basin of Carter Lake. Storage began in February 1954. Usable capacity, 113,500 acre-ft between elevations 5,618.00 ft, trashrack sill at outlet, and 5,763.00 ft, maximum water surface, 6 ft below crest of dam. Dead storage, 3,306 acre-ft. Figures given represent usable contents. Water diverted from Colorado River basin through Alva B. Adams tunnel is pumped from Flatiron Reservoir into Carter Lake for supplemental irrigation supply to Little Thompson River and St. Vrain and Boulder Creek basins. Water above elevation 5,620 ft may be released for return to Flatiron Reservoir where pump turbines can operate in reverse to generate power and water can be used for irrigation in Big Thompson or Cache la Poudre River basins.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 109,100 acre-ft, Apr. 27-29, 1971, elevation, 5,759.12 ft; minimum observed since appreciable storage was attained, 960 acre-ft, Oct. 25, 1954, elevation, 5,621.40 ft.

EXTREMES (AT 0800) FOR CURRENT YEAR.--Maximum contents, 106,300 acre-ft, Mar. 6, 7, elevation, 5,756.71 ft; minimum contents, 37,590 acre-ft, Sept. 30, elevation, 5,686.52 ft.

MONTHEND ELEVATION AND CONTENTS AT 0800, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30. . . . .	5,699.82	48,700	-
Oct. 31. . . . .	5,690.53	40,850	-7,850
Nov. 30. . . . .	5,701.95	50,610	+9,760
Dec. 31. . . . .	5,723.12	70,540	+19,930
CAL YR 2000 . . . . .	-	-	+1,320
Jan. 31. . . . .	5,740.97	88,970	+18,430
Feb. 28. . . . .	5,753.95	103,200	+14,230
Mar. 31. . . . .	5,755.43	104,900	+1,700
Apr. 30. . . . .	5,752.13	101,200	-3,700
May 31. . . . .	5,751.30	100,200	-1,000
June 30. . . . .	5,753.26	102,400	+2,200
July 31. . . . .	5,733.10	80,680	-21,720
Aug. 31. . . . .	5,708.28	56,320	-24,360
Sept. 30. . . . .	5,686.52	37,590	-18,730
WTR YR 2001. . . . .	-	-	-11,110

## PLATTE RIVER BASIN

06742500 CARTER LAKE NEAR BERTHOUD, CO--Continued

## WATER-QUALITY RECORDS

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

REMARKS.--Samples collected near the southeast end of reservoir.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	SAM- PLING DEPTH (FEET) (00003)	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)
OCT						
17...	1020	.10	56	7.9	13.8	7.3
17...	1021	5.00	56	7.9	13.8	7.2
17...	1022	10.0	56	7.9	13.7	7.1
17...	1023	15.0	56	7.8	13.7	7.1
17...	1024	20.0	56	7.8	13.7	7.1
17...	1025	25.0	56	7.8	13.7	7.1
17...	1026	30.0	56	7.8	13.7	7.1
17...	1027	40.0	56	7.8	13.7	7.0
17...	1028	50.0	56	7.7	13.7	7.0
17...	1029	60.0	56	7.7	13.7	7.0
17...	1030	70.0	56	7.7	13.7	7.0
17...	1031	80.0	56	7.7	13.6	7.0
17...	1032	90.0	56	7.7	13.6	6.9
MAY						
30...	0903	.50	56	7.1	14.1	8.4
30...	0904	5.00	56	7.1	14.1	8.4
30...	0905	10.0	55	7.1	14.0	8.4
30...	0906	15.0	55	7.1	13.1	8.5
30...	0907	20.0	55	7.2	10.9	9.0
30...	0908	25.0	54	7.1	10.2	8.8
30...	0909	30.0	53	6.9	9.4	8.6
30...	0910	35.0	53	6.8	7.9	8.6
30...	0911	40.0	52	6.8	7.5	8.6
30...	0912	45.0	52	6.8	7.3	8.5
30...	0913	50.0	52	6.8	7.1	8.6
30...	0914	55.0	51	6.8	6.9	8.6
30...	0915	60.0	50	6.7	6.7	8.5
30...	0916	65.0	50	6.7	6.6	8.6
30...	0917	70.0	50	6.7	6.6	8.6
30...	0918	75.0	51	6.8	6.6	8.6
30...	0919	80.0	51	6.8	6.6	8.5
30...	0920	85.0	51	6.8	6.5	8.6
30...	0921	90.0	51	6.8	6.5	8.6
30...	0922	100	51	6.7	6.4	8.5
30...	0923	110	51	6.7	6.4	8.4
30...	0924	120	51	6.7	6.2	8.3
30...	0925	130	51	6.7	6.0	8.3
30...	0926	140	52	6.7	5.9	8.2
AUG						
28...	0915	.50	66	7.2	21.3	6.6
28...	0916	5.00	66	7.2	21.1	6.6
28...	0917	10.0	66	7.2	21.0	6.6
28...	0918	15.0	66	7.2	21.0	6.6
28...	0919	20.0	65	7.0	20.7	6.4
28...	0920	25.0	61	6.8	19.0	5.8
28...	0921	30.0	53	6.5	14.0	5.6
28...	0922	35.0	50	6.5	11.9	5.6
28...	0923	40.0	49	6.4	11.1	5.8
28...	0924	45.0	48	6.4	10.8	6.0
28...	0925	50.0	48	6.4	10.6	6.1
28...	0926	55.0	48	6.4	10.4	6.0
28...	0927	60.0	47	6.4	10.3	6.0
28...	0928	65.0	47	6.4	10.2	6.1
28...	0929	70.0	47	6.4	10.1	5.8
28...	0930	75.0	47	6.4	9.9	6.0
28...	0931	80.0	47	6.4	9.5	5.9
28...	0932	85.0	47	6.4	9.1	5.9
28...	0933	90.0	47	6.3	8.6	5.6
28...	0934	100	47	6.3	8.4	5.4

PLATTE RIVER BASIN

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06742500 CARTER LAKE NEAR BERTHOUD, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

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 CAC03) (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													
17...	1045	56	7.9	13.8	149	7.3	<1	25.4	8.18	1.19	1.9	.162	.62
17...	1100	56	7.7	13.6	--	6.9	--	25.1	8.08	1.17	1.8	.159	.57
MAY													
30...	0930	55	7.1	13.2	126	8.5	E1	24.2	7.68	1.20	1.8	.162	.58
30...	0945	51	6.7	6.6	--	8.5	--	23.5	7.42	1.20	1.8	.164	.60
AUG													
28...	0945	66	7.2	21.3	69.0	6.6	<1	27.8	8.98	1.30	1.9	.159	.63
28...	1000	47	6.3	8.4	--	5.4	--	20.5	6.36	1.12	1.7	.161	.59

DATE	TIME	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CAC03) (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 SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 SOLVED (MG/L AS N) (00631)	NITRO- GEN, 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)
OCT														
17...	26	2.3	.8	E.1	4.1	37	35.1	.1	<.001	.032	.004	.22	.010	
17...	27	2.3	.7	E.1	4.0	37	34.9	.1	<.001	.033	.004	.20	.010	
MAY														
30...	26	2.4	.6	E.1	2.6	20	32.6	.0	<.001	.005	<.002	.15	.004	
30...	25	2.3	.6	E.1	3.2	26	32.4	.0	<.001	.013	.015	.17	.004	
AUG														
28...	31	2.4	.6	E.1	1.0	54	35.7	.1	<.001	.005	.002	.20	.011	
28...	23	2.2	.6	E.1	3.7	46	30.3	.1	<.001	.047	.003	.13	.006	

DATE	TIME	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, 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)	COBALT, DIS- SOLVED (UG/L AS CO) (01035)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, DIS- SOLVED (UG/L AS FE) (01046)
OCT														
17...	E.003	<.007	1.2	<.1	3.4	18.8	<1.00	<13	<.14	<.8	.03	2.0	<10	
17...	E.003	<.007	--	--	3.5	18.6	<1.00	<13	E.12	<.8	.05	1.4	M	
MAY														
30...	<.006	<.007	.5	<.1	3.5	14.9	<1.00	<13	<.10	<.8	.02	1.6	<10	
30...	<.006	<.007	--	--	3.5	13.8	<1.00	<13	<.10	<.8	.02	1.7	M	
AUG														
28...	<.006	<.007	.8	<.1	3.6	23.4	<1.00	<13	<.10	<.8	E.01	1.3	<10	
28...	<.006	<.007	--	--	3.5	11.5	<1.00	<13	<.10	<.8	E.01	1.5	M	

DATE	TIME	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)
OCT											
17...		<.08	.9	13	.5	.3	.62	<.2	31.7	.3	<1
17...		<.08	1.0	14	1.1	.4	.81	<.2	31.6	.4	<1
MAY											
30...		<.08	.9	5	.9	.3	.15	<.2	31.6	.2	<1
30...		<.08	.9	9	1.0	.3	.19	<.2	32.1	.2	<1
AUG											
28...		E.04	.7	4	E.1	.4	<.06	<.2	37.5	.3	<1
28...		E.04	.7	5	1.3	.3	<.06	<.2	31.2	E.2	<1

E Estimated laboratory analysis value.  
M Presence of material verified but not quantified.

PLATTE RIVER BASIN

06744000 BIG THOMPSON RIVER AT MOUTH NEAR LA SALLE, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 40°21'00", long 104°47'04", in SW<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec.33, T.5 N., R.66 W., Weld County, Hydrologic Unit 10190006, on left bank just southeast of gage on Evans Town ditch, 0.7 mi upstream from highway bridge, 1.6 mi upstream from mouth, and 4.2 mi west of La Salle.

DRAINAGE AREA.--830 mi<sup>2</sup>.

PERIOD OF RECORD.--August 1954 to July 1956, October 1967 to September 1968, October 1970 to September 1982, June to September 2001.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	ACETO-CHLOR, WATER FLTRD REC (UG/L) (49260)	ALA-CHLOR, WATER, DISS, REC (UG/L) (46342)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	METHYL AZIN-PHOS, WAT FLT (UG/L) (82686)	BEN-FLUR-ALIN, WAT FLD (UG/L) (82673)	BUTYL-ATE, WATER, DISS, REC (UG/L) (04028)	
JUN 21...	1030	18	18.2	8.1	8.1	1420	<.004	<.002	E.011	.038	<.050	<.010	<.002	
AUG 14...	1000	66	19.7	6.8	8.0	1360	<.004	<.002	E.024	.033	<.050	<.010	<.002	
DATE	TIME	CAR-BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBO-FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	CHLOR-PYRIFOS DIS-SOLVED (UG/L) (38933)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	P,P' DDE DISSOLV (UG/L) (34653)	DI-AZINON, DISS (UG/L) (39572)	DI-ELDRIN DIS- (UG/L) (39381)	2,6-DI-ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	DISUL-FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	EPIC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	ETHAL-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	ETHO-PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)
JUN 21...		<.041	<.020	E.002	<.018	<.003	<.003	.006	<.005	<.002	<.021	.002	<.009	<.005
AUG 14...		E.007	<.020	<.005	<.018	<.003	<.003	.014	<.005	<.002	<.021	<.002	<.009	<.005
DATE	TIME	FONOFOF WATER DISS REC (UG/L) (04095)	ALPHA BHC DIS-SOLVED (UG/L) (34253)	LINDANE DIS-SOLVED (UG/L) (39341)	LIN-URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA-THION, DIS- REC (UG/L) (39532)	METHYL PARA-THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	METO-LACHLOR WATER DISSOLV (UG/L) (39415)	METRI-BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	MOL-INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPPROP-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	METHYL PARA-THION, DIS- SOLVED (UG/L) (39542)	PEB-ULATE WATER FLTRD 0.7 U GF, REC (UG/L) (82669)	PENDI-METH-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)
JUN 21...		<.003	<.005	<.004	<.035	E.004	<.006	.016	<.006	<.002	<.007	<.007	<.002	<.010
AUG 14...		<.003	<.005	<.004	<.035	<.027	<.006	.058	<.006	<.002	<.007	<.007	<.002	<.010
DATE	TIME	PER-METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	PRO-METON, WATER, DISS, REC (UG/L) (04037)	PRON-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	PROPA-CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO-PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO-PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU-THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER-BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER-BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	THIO-BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	TRIAL-LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)
JUN 21...		<.006	<.011	.027	<.004	<.010	<.011	<.023	<.011	<.016	<.034	<.017	<.005	<.002
AUG 14...		<.006	<.011	.025	<.004	<.010	<.011	.155	<.011	<.016	<.034	<.017	<.005	<.002
DATE	TIME	TRI-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L AS C) (00689)										
JUN 21...		<.009	6.3	.7										
AUG 14...		<.009	4.7	4.1										

E Estimated laboratory analysis value.

06746095 JOE WRIGHT CREEK ABOVE JOE WRIGHT RESERVOIR, CO

LOCATION.--Lat 40°32'24", long 105°52'56", in SE<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec.26, T.7 N., R.76 W., Larimer County, Hydrologic Unit 10190007, on left bank 150 ft downstream from unnamed tributary and Colorado Highway 14 culvert crossing, 1.5 mi northeast of Cameron Pass, 1.5 mi southwest of Joe Wright Dam, and 8 mi east of Gould.

DRAINAGE AREA.--3.01 mi<sup>2</sup>.

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

GAGE.--Water-stage recorder. Elevation of gage is 9,990 ft above sea level, from topographic map. Prior to Aug. 7, 1989, at datum 3.40 ft higher.

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 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.4	e.70	e.70	e.89	e.88	e.75	e.98	e4.1	72	18	6.8	4.4
2	8.0	e.66	e.72	e.90	e.89	e.78	e.98	e4.4	76	17	6.4	3.9
3	7.9	e.64	e.73	e.91	e.88	e.78	e.98	e3.9	77	17	6.3	3.9
4	7.8	e.63	e.74	e.91	e.88	e.80	e.98	e3.7	67	16	5.8	3.8
5	7.5	e.62	e.74	e.91	e.88	e.81	e1.0	e3.7	61	16	5.6	3.5
6	7.1	e.61	e.75	e.92	e.88	e.77	e1.0	e4.0	54	17	5.8	4.0
7	6.9	e.61	e.75	e.93	e.88	e.77	e1.0	e4.3	63	21	5.7	4.2
8	6.9	e.59	e.76	e.94	e.88	e.77	e1.0	e4.9	57	23	6.0	4.6
9	6.6	e.60	e.77	e.94	e.86	e.75	e1.0	e6.0	62	21	6.0	6.0
10	3.8	e.60	e.77	e.94	e.86	e.75	e1.0	e6.9	49	19	8.3	6.1
11	1.2	e.61	e.77	e.94	e.86	e.75	e1.0	e8.1	41	17	6.0	5.1
12	1.2	e.61	e.78	e.93	e.86	e.75	e1.1	e9.4	39	16	5.5	4.4
13	1.1	e.61	e.78	e.92	e.85	e.75	e1.2	e11	36	16	5.4	4.5
14	1.1	e.61	e.79	e.92	e.84	e.74	e1.4	e11	32	16	5.8	4.6
15	1.3	e.61	e.79	e.92	e.84	e.74	e1.4	e12	29	14	6.8	4.6
16	1.2	e.61	e.81	e.93	e.84	e.74	e1.4	e15	28	13	8.0	5.3
17	1.2	e.61	e.82	e.91	e.85	e.75	e1.4	16	27	12	6.5	8.0
18	1.1	e.61	e.83	e.90	e.83	e.81	e1.4	17	26	11	5.9	10
19	.96	e.61	e.83	e.90	e.83	e.89	e1.4	22	25	11	5.5	7.8
20	.97	e.61	e.84	e.90	e.83	e.89	e1.5	19	25	11	5.4	6.6
21	.91	e.62	e.84	e.90	e.83	e.87	e1.5	22	24	10	5.4	6.1
22	.90	e.63	e.85	e.90	e.82	e.87	e1.6	27	24	9.8	5.2	5.9
23	.93	e.63	e.86	e.90	e.81	e.87	e1.6	27	23	9.5	5.2	5.6
24	.90	e.64	e.87	e.89	e.80	e.87	e1.8	32	23	9.3	5.0	5.5
25	.95	e.65	e.87	e.88	e.79	e.87	e2.2	36	22	8.7	4.6	5.4
26	e.90	e.65	e.88	e.88	e.80	e.87	e2.5	42	22	9.5	4.6	5.0
27	e.90	e.66	e.88	e.88	e.75	e.94	e2.8	53	20	9.0	4.2	5.0
28	e.90	e.67	e.88	e.88	e.75	e.94	e2.9	59	20	8.1	4.2	4.7
29	e.79	e.68	e.88	e.88	---	e.98	e3.2	64	19	7.6	3.8	4.6
30	e.81	e.69	e.88	e.88	---	e1.0	e3.4	64	18	7.3	3.8	4.2
31	e.76	---	e.88	e.88	---	e.98	---	64	---	6.9	4.0	---
TOTAL	91.88	18.88	25.04	28.11	23.55	25.60	46.62	676.4	1161	417.7	173.5	157.3
MEAN	2.96	.63	.81	.91	.84	.83	1.55	21.8	38.7	13.5	5.60	5.24
MAX	8.4	.70	.88	.94	.89	1.0	3.4	64	77	23	8.3	10
MIN	.76	.59	.70	.88	.75	.74	.98	3.7	18	6.9	3.8	3.5
AC-FT	182	37	50	56	47	51	92	1340	2300	829	344	312

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1979 - 2001, BY WATER YEAR (WY)

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	
MEAN	3.00	1.49	1.01	.85	.74	.73	1.13	14.3	52.9	27.3	8.60	4.53												
MAX	10.5	3.51	2.50	2.39	1.79	1.50	3.39	34.6	88.5	90.8	21.5	17.3												
(WY)	1998	1998	1998	1998	1998	1994	1994	1994	1988	1995	1995	1997												
MIN	.54	.36	.28	.25	.20	.20	.39	3.58	25.5	6.75	1.88	1.06												
(WY)	1981	1979	1981	1981	1979	1979	1979	1982	1989	1989	1985	1980												

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1979 - 2001

ANNUAL TOTAL	4089.56	2845.58		
ANNUAL MEAN	11.2	7.80	9.72	
HIGHEST ANNUAL MEAN			16.9	1995
LOWEST ANNUAL MEAN			5.40	1981
HIGHEST DAILY MEAN	125	Jun 1	150	Jul 11 1995
LOWEST DAILY MEAN	e.58	Apr 8	e.59	Nov 8
ANNUAL SEVEN-DAY MINIMUM	e.60	Nov 6	e.60	Nov 6
MAXIMUM PEAK FLOW			94	Jun 1
MAXIMUM PEAK STAGE			5.25	Jun 1
ANNUAL RUNOFF (AC-FT)	8110	5640	7050	
10 PERCENT EXCEEDS	25	22	30	
50 PERCENT EXCEEDS	.97	1.2	1.6	
90 PERCENT EXCEEDS	.66	.74	.48	

e Estimated.

a Also occurred Jan 31 to Apr 4, 1979, and Feb 9 to Apr 9, 1981.

b Maximum gage height, 10.64 ft, May 15, 1993, present datum, backwater from ice.

## PLATTE RIVER BASIN

06746110 JOE WRIGHT CREEK BELOW JOE WRIGHT RESERVOIR, CO

LOCATION.--Lat 40°33'43", long 105°51'48", in SE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec.24, T.7 N., R.76 W., Larimer County, Hydrologic Unit 10190007, on left bank 500 ft downstream from unnamed tributary, 2,000 ft downstream from Joe Wright Dam, and 3 mi southwest of Chambers Lake.

DRAINAGE AREA.--6.90 mi<sup>2</sup>.

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

GAGE.--Water-stage recorder. Elevation of gage is 9,710 ft above sea level, from topographic map. Prior to Aug. 7, 1989, at datum 0.50 ft higher.

REMARKS.--Records good except for estimated daily discharges, which are poor. Flow regulated by Joe Wright Reservoir, 2000 ft upstream. 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 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	2.5	e4.4	e2.2	e2.2	e2.2	3.0	4.4	77	7.1	2.8	50
2	6.8	2.5	e4.4	e2.2	e2.2	e2.1	3.0	4.2	81	7.1	2.8	50
3	3.0	2.5	e4.4	e2.2	e2.2	e2.2	3.0	3.6	81	7.1	2.7	50
4	3.0	2.5	e4.4	e2.2	e2.2	e2.3	3.0	3.6	76	7.1	2.6	50
5	3.0	2.5	e4.4	e2.2	e2.2	e2.4	3.0	3.6	71	7.1	2.5	50
6	3.0	2.5	e4.4	e2.2	e2.2	e2.4	3.0	3.4	50	10	2.6	49
7	3.1	2.5	e4.4	e2.2	e2.2	e2.4	3.0	4.9	28	12	2.5	52
8	3.1	e2.5	e3.4	e2.2	e2.2	e2.4	3.0	6.3	24	12	2.6	56
9	3.0	e15	e3.0	e2.2	e2.2	e2.4	3.0	6.8	24	12	2.6	61
10	3.0	e101	e2.8	e2.2	e2.2	e2.4	3.0	7.6	24	12	5.0	57
11	3.0	e101	e2.7	e2.2	e2.2	e2.4	3.0	8.2	24	12	6.1	52
12	2.9	e101	e2.6	e2.2	e2.2	e2.4	3.0	8.6	24	12	5.0	54
13	2.8	e101	e2.6	e2.2	e2.2	e2.4	3.0	9.0	25	11	2.8	57
14	2.8	e101	e2.6	e2.2	e2.2	e2.4	3.0	9.7	27	9.7	3.7	54
15	2.8	e102	e2.6	e2.2	e2.2	e2.4	3.0	10	27	9.2	6.2	54
16	2.8	e104	e2.6	e2.2	e2.2	2.3	3.0	11	30	8.7	6.2	53
17	2.8	e104	e2.5	e2.2	e2.2	2.4	3.1	11	31	9.0	6.1	53
18	2.8	e105	e2.5	e2.2	e2.2	2.5	3.2	11	31	8.1	6.0	54
19	2.8	e105	e2.4	e2.2	e2.2	2.7	3.2	13	31	6.0	6.0	58
20	2.8	e24	e2.4	e2.2	e2.2	2.9	3.1	11	36	5.5	5.4	62
21	2.8	e8.0	e2.4	e2.2	e2.2	2.9	3.0	10	46	4.9	5.1	69
22	2.8	e4.7	e2.3	e2.2	e2.2	3.0	3.0	10	46	4.9	5.0	68
23	2.8	e4.6	e2.3	e2.2	e2.2	3.0	3.0	11	45	4.9	5.0	68
24	2.8	e4.6	e2.3	e2.2	e2.2	3.0	3.0	30	45	4.8	4.0	68
25	2.8	e4.6	e2.3	e2.2	e2.2	3.0	3.1	51	35	4.0	3.2	67
26	2.8	e4.6	e2.2	e2.2	e2.2	3.0	3.3	50	24	2.8	2.3	66
27	2.8	e4.6	e2.2	e2.2	e2.2	3.0	3.5	50	15	2.9	2.3	57
28	2.8	e4.4	e2.2	e2.2	e2.2	2.9	3.8	50	9.5	2.8	22	38
29	2.8	e4.4	e2.2	e2.2	---	2.9	4.0	51	7.5	2.8	55	38
30	2.7	e4.4	e2.2	e2.2	---	2.9	4.0	53	7.4	2.8	52	38
31	2.5	---	e2.2	e2.2	---	2.9	---	64	---	2.8	51	---
TOTAL	99.7	1132.9	90.3	68.2	61.6	80.5	94.3	580.9	1102.4	225.1	289.1	1653
MEAN	3.22	37.8	2.91	2.20	2.20	2.60	3.14	18.7	36.7	7.26	9.33	55.1
MAX	10	105	4.4	2.2	2.2	3.0	4.0	64	81	12	55	69
MIN	2.5	2.5	2.2	2.2	2.2	2.1	3.0	3.4	7.4	2.8	2.3	38
AC-FT	198	2250	179	135	122	160	187	1150	2190	446	573	3280

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1979 - 2001, BY WATER YEAR (WY)

	4.32	2.82	.96	.84	.80	.83	1.01	13.0	61.4	37.3	30.3	32.0
MEAN	4.32	2.82	.96	.84	.80	.83	1.01	13.0	61.4	37.3	30.3	32.0
MAX	20.8	37.8	2.91	2.20	2.20	2.60	3.14	48.0	100	90.8	84.7	61.8
(WY)	1995	2001	2001	2001	2001	2001	2001	1998	1996	1993	1991	1995
MIN	.54	.34	.21	.24	.22	.23	.29	1.21	12.6	2.49	6.44	1.13
(WY)	1989	1995	1993	1993	1995	1995	1991	1980	1980	1989	1981	1991

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1979 - 2001	
ANNUAL TOTAL	6300.5		5478.0			
ANNUAL MEAN	17.2		15.0		15.5	
HIGHEST ANNUAL MEAN					24.4	
LOWEST ANNUAL MEAN					3.69	
HIGHEST DAILY MEAN	106	Jun 3	e105	Nov 18	245	Jul 1 1993
LOWEST DAILY MEAN	e1.7	Feb 1	e2.1	Mar 2	.17	Apr 3 1991
ANNUAL SEVEN-DAY MINIMUM	e1.8	Jan 27	e2.2	Feb 24	.18	Mar 31 1991
MAXIMUM PEAK FLOW			a,b		284	Aug 18 1991
MAXIMUM PEAK STAGE			a,c		d2.71	Aug 18 1991
ANNUAL RUNOFF (AC-FT)	12500		10870		11220	
10 PERCENT EXCEEDS	60		53		57	
50 PERCENT EXCEEDS	4.1		3.0		1.9	
90 PERCENT EXCEEDS	1.9		2.2		.35	

e Estimated.

a Not determined.

b Maximum estimated daily discharge, 105 ft<sup>3</sup>/s, Nov 18, reservoir releases, during period of no gage height record.

c Maximum recorded gage height, 1.79 ft, Jun 1; may have been higher during period of reservoir releases, Nov.10-19.

d Maximum gage height, 2.78 ft, Jul 10, 1997.

06751150 NORTH FORK CACHE LA POUFRE RIVER BELOW HALLIGAN RESERVOIR NEAR VIRGINIA DALE, CO

LOCATION.--Lat 40°52'42", long 105°20'15", in NE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec.34, T.11 N., R.71 W., Larimer County, Hydrologic Unit 10190007, on left bank 500 ft downstream from Halligan Dam, 4.0 mi west of Highway 287, and 5.0 mi south of Virginia Dale.

DRAINAGE AREA.--355 mi<sup>2</sup>.

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

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 6,310 ft above sea level, from topographic map.

REMARKS.--No estimated daily discharges. Records good. Natural flow affected by transbasin diversions, storage reservoirs, and 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 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.7	3.7	3.3	3.3	3.7	94	68	86	177	104	92	47
2	5.0	3.7	3.3	3.3	3.7	95	67	87	157	110	68	47
3	4.4	3.7	3.3	3.3	3.7	94	67	89	149	110	51	45
4	4.8	3.8	3.3	3.3	3.7	94	67	89	158	89	56	44
5	5.0	3.3	3.3	3.3	3.7	93	66	89	153	86	56	42
6	5.1	3.1	3.3	3.3	3.7	92	66	90	138	87	56	40
7	5.1	3.2	3.3	3.3	3.7	92	66	91	124	91	56	39
8	5.0	3.2	3.3	3.3	3.3	92	66	92	115	91	67	39
9	5.1	3.1	3.3	3.3	3.2	92	66	94	110	91	71	38
10	5.1	3.0	3.3	3.3	3.3	92	66	95	103	91	72	37
11	5.1	3.0	3.3	3.3	3.3	92	66	97	99	91	72	35
12	5.2	2.9	3.3	3.3	3.3	67	66	102	97	90	72	34
13	5.2	2.7	3.3	3.4	3.3	51	65	221	96	89	71	34
14	5.2	2.8	3.3	3.3	19	50	65	259	95	89	70	35
15	3.4	3.0	3.3	3.3	61	50	65	257	95	89	70	40
16	2.1	3.0	3.3	3.3	74	52	53	254	95	89	70	41
17	2.7	3.0	3.3	3.3	72	54	47	256	95	89	70	41
18	3.0	3.0	3.3	3.3	71	54	46	273	93	94	70	40
19	3.7	3.2	3.3	3.3	77	53	45	279	93	87	69	53
20	3.7	3.2	3.3	3.4	84	53	45	277	93	87	69	58
21	3.7	3.2	3.3	3.3	83	56	45	250	93	91	69	58
22	3.7	3.2	3.3	3.4	83	59	45	244	93	93	70	57
23	3.8	3.2	3.3	3.5	82	59	45	224	92	92	69	56
24	3.9	3.3	3.3	3.5	82	59	46	208	91	92	70	56
25	3.9	3.3	3.3	3.5	82	59	58	195	91	91	70	54
26	3.9	3.3	3.3	3.5	82	65	65	188	91	91	69	54
27	3.8	3.3	3.3	3.5	90	69	68	194	90	95	69	41
28	3.9	3.3	3.3	3.5	94	69	79	199	90	95	68	33
29	3.9	3.3	3.3	3.5	---	68	85	198	89	95	68	25
30	3.9	3.3	3.3	3.6	---	68	86	186	88	93	58	18
31	3.8	---	3.3	3.7	---	68	---	194	---	93	49	---
TOTAL	131.8	96.3	102.3	104.7	1181.6	2205	1850	5457	3243	2865	2077	1281
MEAN	4.25	3.21	3.30	3.38	42.2	71.1	61.7	176	108	92.4	67.0	42.7
MAX	5.7	3.8	3.3	3.7	94	95	86	279	177	110	92	58
MIN	2.1	2.7	3.3	3.3	3.2	50	45	86	88	86	49	18
AC-FT	261	191	203	208	2340	4370	3670	10820	6430	5680	4120	2540

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 - 2001, BY WATER YEAR (WY)

	1998	1999	2000	2001	1998	1999	2000	2001	1998	1999	2000	2001
MEAN	10.0	4.30	10.5	24.9	41.8	62.6	84.9	305	192	96.3	84.3	63.5
MAX	22.1	5.71	17.9	37.2	46.3	80.7	131	641	369	129	120	105
(WY)	2000	2000	1999	2000	1999	1999	1998	1999	1999	1999	1999	1999
MIN	3.69	3.21	3.30	3.38	37.1	36.0	61.7	143	101	57.7	41.9	23.2
(WY)	1999	2001	2001	2001	2000	2000	2001	2000	2000	2000	2000	2000

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1998 - 2001

ANNUAL TOTAL	17360.3	20594.7	
ANNUAL MEAN	47.4	56.4	80.5
HIGHEST ANNUAL MEAN			135 1999
LOWEST ANNUAL MEAN			49.7 2000
HIGHEST DAILY MEAN	155	279	1500 May 1 1999
LOWEST DAILY MEAN	2.1	2.1	1.3 Oct 16 1998
ANNUAL SEVEN-DAY MINIMUM	2.9	2.9	1.5 Sep 29 1998
MAXIMUM PEAK FLOW		295	1840 May 19 1999
MAXIMUM PEAK STAGE		3.83	6.47 May 19 1999
ANNUAL RUNOFF (AC-FT)	34430	40850	58310
10 PERCENT EXCEEDS	130	96	181
50 PERCENT EXCEEDS	35	56	58
90 PERCENT EXCEEDS	3.3	3.3	3.8

## PLATTE RIVER BASIN

06751490 NORTH FORK CACHE LA POUDE RIVER AT LIVERMORE, CO

LOCATION.--Lat 40°47'15", long 105°15'06", in SW<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec.32, T.10 N., R.70 W., Larimer County, Hydrologic Unit 10190007, on left bank 30 ft downstream from bridge on Colorado State Highway 200, 2.0 mi west of Livermore, and 2.9 mi downstream from Stonewall Creek.

DRAINAGE AREA.--539 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1986 to current year. May 1929 to September 1931, May 1947 to September 1965 (published as "near Livermore", station 06751500); records are not considered equivalent. Water-quality data available, November 1986 to September 1999.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 5,715 ft above sea level, from topographic map.

REMARKS.--Records good except for May 2-16 which is fair, and for estimated daily discharges, which are poor. Natural flow affected by transbasin diversions, storage reservoirs, and irrigation.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	12	8.2	e9.2	e8.3	e8.3	10	8.8	116	11	7.7	3.8
2	11	10	9.0	e9.2	e8.3	e7.3	10	20	94	8.9	6.0	3.5
3	10	11	8.6	e9.3	e8.3	e6.7	10	41	86	9.3	5.3	3.2
4	10	10	8.1	e9.4	e8.3	e7.8	8.6	51	91	8.9	4.7	3.0
5	10	10	7.7	e9.6	e7.8	e7.3	7.4	120	99	9.1	4.6	2.7
6	11	10	7.6	e9.7	e7.5	e7.0	7.7	239	86	8.3	4.9	1.6
7	11	8.5	7.6	e10	e7.2	6.5	7.6	308	70	8.5	6.1	1.7
8	11	9.6	7.9	e10	e7.2	7.2	7.2	346	56	9.9	6.6	4.1
9	10	10	7.9	e10	e7.2	7.4	6.6	331	43	10	11	4.5
10	10	10	7.4	e10	e6.9	8.1	6.8	252	33	10	10	4.5
11	10	10	7.8	e11	e6.7	8.7	8.1	178	29	11	8.6	4.2
12	9.9	9.6	8.1	e11	e6.4	8.3	7.2	128	24	14	9.2	4.0
13	10	9.5	e8.5	e11	e6.1	8.3	7.1	208	23	13	8.8	3.1
14	10	9.3	e8.9	e11	e6.1	8.9	6.6	267	23	13	9.0	3.2
15	10	9.4	e8.9	e10	e6.0	8.8	6.3	243	21	14	10	3.9
16	9.6	9.2	e9.1	e10	e26	8.9	6.1	219	24	11	10	4.5
17	6.7	8.6	e9.1	e10	e14	8.7	4.6	215	21	9.3	10	4.8
18	6.3	8.6	e9.1	e10	e12	8.0	4.2	249	20	8.2	9.4	5.5
19	6.5	8.4	e8.9	e9.7	e9.7	7.8	4.5	252	20	8.1	8.3	5.0
20	7.7	8.4	e8.5	e9.3	e9.2	8.5	4.5	263	20	8.1	8.0	4.7
21	8.2	7.9	e8.5	e9.3	e8.9	9.0	4.7	221	19	7.5	7.7	4.3
22	8.9	8.4	e8.7	e9.1	e8.3	9.3	8.1	203	19	7.1	7.0	4.3
23	9.9	8.7	e8.7	e9.1	e7.8	9.8	12	177	20	7.7	6.6	3.9
24	9.6	8.5	e9.1	e8.9	e8.1	10	20	153	19	8.8	6.0	4.0
25	9.6	8.6	e9.1	e8.9	e8.1	10	30	122	17	9.2	5.4	3.7
26	9.3	8.6	e9.1	e8.7	e9.2	10	39	110	15	8.3	5.0	3.5
27	9.3	8.5	e9.1	e8.7	e14	10	36	118	14	8.1	4.7	3.5
28	9.4	8.6	e8.9	e8.7	e15	9.8	34	127	13	7.5	4.3	3.6
29	9.1	8.3	e9.1	e8.5	---	10	25	128	13	6.9	4.1	3.6
30	9.0	8.7	e9.2	e8.5	---	10	17	131	12	6.5	4.1	7.7
31	11	---	e9.2	e8.5	---	10	---	134	---	7.2	4.1	---
TOTAL	295.0	276.9	265.6	296.3	312.6	266.4	366.9	5562.8	1160	288.4	217.2	117.6
MEAN	9.52	9.23	8.57	9.56	11.2	8.59	12.2	179	38.7	9.30	7.01	3.92
MAX	11	12	9.2	11	60	10	39	346	116	14	11	7.7
MIN	6.3	7.9	7.4	8.5	6.1	6.5	4.2	8.8	12	6.5	4.1	1.6
AC-FT	585	549	527	588	620	528	728	11030	2300	572	431	233

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 2001, BY WATER YEAR (WY)

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
MEAN	12.3	16.9	11.8	14.0	17.5	20.7	64.1	185	203	28.7	17.5	10.0			
MAX	41.0	98.8	34.3	46.2	48.2	55.5	244	904	857	133	52.5	23.6			
(WY)	1998	1998	1998	1999	1996	1990	1990	1999	1995	1995	1991	1997			
MIN	4.85	6.62	3.58	3.60	5.00	6.35	4.57	10.3	12.8	5.23	4.24	3.92			
(WY)	1989	1988	1988	1988	1995	1995	1995	1989	2000	1989	1988	2001			

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1987 - 2001
ANNUAL TOTAL	7211.6	9425.7	
ANNUAL MEAN	19.7	25.8	50.1
HIGHEST ANNUAL MEAN			141
LOWEST ANNUAL MEAN			8.06
HIGHEST DAILY MEAN	91	346	2760
LOWEST DAILY MEAN	3.3	1.6	1.6
ANNUAL SEVEN-DAY MINIMUM	3.8	2.8	2.8
MAXIMUM PEAK FLOW		395	5430
MAXIMUM PEAK STAGE		9.33	17.53
ANNUAL RUNOFF (AC-FT)	14300	18700	36270
10 PERCENT EXCEEDS	46	53	99
50 PERCENT EXCEEDS	10	9.1	11
90 PERCENT EXCEEDS	5.7	4.7	5.2

e Estimated.

06752000 CACHE LA POUVRE RIVER AT MOUTH OF CANYON, NEAR FORT COLLINS, CO

LOCATION.--Lat 40°39'52", long 105°13'26", in NW<sup>1</sup>/<sub>4</sub> sec.15, T.8 N., R.70 W., Larimer County, Hydrologic Unit 10190007, on left bank at mouth of canyon, 0.5 mi downstream from headgate of Poudre Valley Canal, 1.2 mi upstream from Lewstone Creek, and 9.3 mi northwest of courthouse in Fort Collins.

DRAINAGE AREA.--1,056 mi<sup>2</sup>.

PERIOD OF RECORD.--Streamflow records, June to August 1881, May to July 1883, October 1883 to current year. Monthly discharge only for some periods, published in WSP 1310. Records for March 23 to April 30 and July 4 to August 20, 1883, published in WSP 9, have been found to be unreliable and should not be used. Prior to 1902, published as Cache la Poudre Creek or River at or near Fort Collins. Water-quality data available, June 1962 to October 1965, October 1971 to September 1982, and April 1993 to September 1995.

REVISED RECORDS.--WSP 1310: 1885-87, 1889, 1892, 1894-96, 1934. WSP 1730: 1960, drainage area. See also PERIOD OF RECORD.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 5,220 ft above sea level, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. Natural flow of stream affected by transbasin and transmountain diversions (see elsewhere in this report), diversions upstream from station for irrigation of about 50,000 acres, most of which is downstream from station, and diversions for municipal use.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	78	62	e34	e26	e22	e23	32	166	1230	478	171	32
2	70	26	e29	e26	e25	e24	32	250	1400	416	176	29
3	64	33	e24	e24	e23	e25	35	299	1540	374	162	20
4	60	33	e28	e23	e26	e26	39	119	1440	360	167	25
5	69	33	e25	e25	e28	e25	44	134	1150	349	165	23
6	61	42	e25	e26	e26	32	36	306	1010	356	161	29
7	55	31	e34	e26	e25	31	35	351	897	384	263	37
8	52	41	e34	e24	e29	36	30	311	987	510	256	63
9	46	56	e33	e21	e26	31	27	306	924	476	360	46
10	47	53	e28	e21	e29	35	29	195	964	533	287	40
11	52	52	e25	e24	e24	29	42	241	1090	499	256	38
12	51	61	e28	e23	e28	27	30	276	1110	443	215	47
13	51	e22	e28	e23	e21	26	28	367	962	414	191	69
14	51	e22	e28	e25	e29	27	27	594	859	369	180	59
15	52	e30	e28	e24	e29	20	26	688	714	315	192	63
16	56	e33	e31	e26	e37	19	26	682	656	252	224	60
17	58	e41	e26	e25	e50	25	28	788	614	240	209	65
18	54	e37	e24	e26	e35	24	27	752	587	255	175	105
19	52	e32	e26	e27	e31	27	34	803	558	233	166	108
20	51	e32	e22	e23	e30	34	46	815	613	222	159	72
21	50	e35	e26	e23	e31	37	53	700	661	245	157	49
22	51	e38	e22	e22	e33	36	77	617	663	240	158	46
23	58	e40	e23	e24	e32	38	49	775	623	239	141	78
24	63	e31	e21	e29	e31	37	62	951	654	243	103	67
25	70	e33	e21	e30	e30	36	73	1030	730	239	80	62
26	41	e31	e28	e27	e34	38	95	988	734	222	67	54
27	16	e30	e30	e24	e28	38	114	1100	740	233	58	52
28	16	e34	e27	e27	e25	34	124	1250	632	187	45	54
29	16	e31	e27	e29	---	32	138	1400	594	187	50	59
30	15	e34	e26	e26	---	37	149	1460	533	177	91	58
31	44	---	e26	e25	---	39	---	1270	---	175	64	---
TOTAL	1570	1109	837	774	817	948	1587	19984	25869	9865	5149	1609
MEAN	50.6	37.0	27.0	25.0	29.2	30.6	52.9	645	862	318	166	53.6
MAX	78	62	34	30	50	39	149	1460	1540	533	360	108
MIN	15	22	21	21	21	19	26	119	533	175	45	20
AC-FT	3110	2200	1660	1540	1620	1880	3150	39640	51310	19570	10210	3190

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1881 - 2001, BY WATER YEAR (WY)

	1881	1882	1883	1884	1885	1886	1887	1888	1889	1890	1891	1892	1893	1894	1895	1896	1897	1898	1899	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
MEAN	90.4	61.7	44.8	41.2	43.6	53.6	149	927	1824	783	329	163																																																																																																													
MAX	270	177	125	158	138	149	743	2807	4812	2225	792	443																																																																																																													
(WY)	1943	1998	1984	1984	1984	1980	1900	1900	1884	1983	1884	1938																																																																																																													
MIN	21.7	8.14	12.6	9.00	10.2	10.6	19.5	204	442	158	61.2	37.3																																																																																																													
(WY)	1995	1939	1965	1930	1967	1939	1991	1977	1934	1966	1954	1962																																																																																																													

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1881 - 2001
ANNUAL TOTAL	75767	70118	
ANNUAL MEAN	207	192	
HIGHEST ANNUAL MEAN			891
LOWEST ANNUAL MEAN			129
HIGHEST DAILY MEAN	1320	1540	7550
LOWEST DAILY MEAN	15	15	a1.6
ANNUAL SEVEN-DAY MINIMUM	20	23	3.9
MAXIMUM PEAK FLOW		1740	b21000
MAXIMUM PEAK STAGE		4.88	May 30
ANNUAL RUNOFF (AC-FT)	150300	139100	
10 PERCENT EXCEEDS	625		1190
50 PERCENT EXCEEDS	79		46
90 PERCENT EXCEEDS	28		24

e Estimated.  
a Also occurred Nov 28, 1948, caused by diversion of Poudre Valley Canal, 0.5 mi upstream.  
b Maximum discharge determined, caused by failure of Chambers Lake Dam, from reports of State Engineers Office. A greater discharge, but not determined, occurred May 20, 1904.

## PLATTE RIVER BASIN

06752258 CACHE LA POUVRE RIVER AT SHIELDS STREET, AT FORT COLLINS, CO

## WATER-QUALITY RECORDS

LOCATION.--Lat 40°36'11", long 105°05'43", in NE<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec.3, T.7 N., R.69 W., Larimer County, Hydrologic Unit 10190007, at Shields Street bridge, 0.8 mi downstream from Larimer-Weld Canal, and 1.0 mi northwest of Fort Collins.

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

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

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)	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)	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 DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)
OCT													
11...	1045	7.8	273	8.2	12.0	--	125	37.0	7.95	--	--	112	--
NOV													
13...	0920	3.2	370	8.3	2.5	10.3	174	50.9	11.5	--	--	157	--
DEC													
05...	0905	23	408	8.4	0	12.7	188	55.1	12.2	--	--	134	--
JAN													
02...	1140	38	368	--	0	12.5	192	57.3	11.9	8.7	.274	129	60.5
FEB													
07...	1515	15	449	8.4	3.0	14.1	222	64.8	14.6	--	--	140	--
MAR													
05...	1345	15	438	8.4	8.5	11.3	210	61.2	14.0	--	--	133	--
APR													
10...	1610	4.0	407	8.2	9.5	10.2	193	56.1	12.9	--	--	138	--
MAY													
10...	0935	66	219	8.1	11.0	9.4	95.2	27.4	6.48	--	--	84	--
JUN													
19...	1010	182	71	7.9	13.5	8.6	30.8	9.14	1.94	--	--	27	--
JUL													
24...	0800	64	92	7.8	18.5	7.4	38.9	11.6	2.39	2.7	.187	34	8.6
AUG													
23...	1100	74	92	8.3	19.5	8.3	38.9	11.7	2.36	--	--	37	--
SEP													
17...	1445	6.1	307	7.8	16.0	8.7	138	40.3	8.99	--	--	124	--
OCT													
11...	--	--	--	--	<.006	.223	<.041	<.060	<.018	--	--	--	--
NOV													
13...	--	--	--	--	<.006	.009	<.041	<.060	<.018	--	--	--	--
DEC													
05...	--	--	--	--	E.003	.121	<.041	<.060	E.009	--	--	--	--
JAN													
02...	4.6	.4	7.6	237	.009	.188	<.041	<.060	<.018	1	<2.0	<.14	<.8
FEB													
07...	--	--	--	--	E.004	.193	<.041	<.060	<.018	--	--	--	--
MAR													
05...	--	--	--	--	E.003	.067	<.041	<.060	<.018	--	--	--	--
APR													
10...	--	--	--	--	E.003	.062	E.027	<.060	<.018	--	--	--	--
MAY													
10...	--	--	--	--	<.006	.252	<.041	<.060	<.018	--	--	--	--
JUN													
19...	--	--	--	--	<.006	.049	<.040	<.060	<.020	--	--	--	--
JUL													
24...	1.2	.2	5.8	56	E.004	.087	<.040	<.060	<.020	5	<2.0	<.10	E.4
AUG													
23...	--	--	--	--	<.006	.060	<.040	<.060	<.020	--	--	--	--
SEP													
17...	--	--	--	--	E.003	.104	<.040	<.060	<.020	--	--	--	--

PLATTE RIVER BASIN

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06752258 CACHE LA POUFRE RIVER AT SHIELDS STREET, AT FORT COLLINS, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	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)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	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)
OCT										
11...	1.3	--	M	--	--	--	--	--	<.2	--
NOV										
13...	1.0	--	M	--	--	--	--	--	<.2	--
DEC										
05...	1.1	--	30	--	--	--	--	--	<.2	--
JAN										
02...	1.0	--	30	<1.00	28	<.23	<2.40	E.3	<.2	2
FEB										
07...	1.4	--	40	--	--	--	--	--	<.2	--
MAR										
05...	1.2	140	60	--	--	--	--	--	<.2	--
APR										
10...	1.1	170	90	--	--	--	--	--	<.2	--
MAY										
10...	1.2	370	30	--	--	--	--	--	<.2	--
JUN										
19...	1.2	190	40	--	--	--	--	--	<.2	--
JUL										
24...	1.7	240	20	<1.00	21	<.01	<2.00	<.3	<.2	<1
AUG										
23...	1.8	370	M	--	--	--	--	--	<.2	--
SEP										
17...	1.2	170	20	--	--	--	--	--	<.2	--

E Estimated laboratory analysis value.  
M Presence of material verified but not quantified.

## PLATTE RIVER BASIN

06752260 CACHE LA POUVRE RIVER AT FORT COLLINS, CO

LOCATION.--Lat 40°35'21", long 105°04'09", in SE<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec.12, T.7 N., R.69 W., Larimer County, Hydrologic Unit 10190007, on left bank 100 ft upstream from Lincoln Street Bridge in Fort Collins.

DRAINAGE AREA.--1,127 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1975 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 May 22, 1987, at site 300 ft downstream, at different datum. May 22, 1987 to Nov. 10, 1988 at site 4,300 ft upstream, at different datum. Nov. 10, 1988 to Oct. 16, 1996, at site 100 ft upstream, at same datum.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Natural flow of stream affected by transmountain and transbasin diversions, storage reservoirs, power developments, diversion for municipal supply, diversions upstream from station for irrigation, and return flow from irrigated areas.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.9	8.2	4.7	30	17	16	16	4.1	237	149	17	48
2	6.6	5.9	4.7	30	16	17	6.0	10	320	117	19	21
3	5.9	6.0	4.7	29	16	18	4.4	24	422	94	20	20
4	6.3	6.3	7.6	28	15	19	4.0	15	447	92	23	22
5	6.7	5.9	24	30	15	17	4.1	11	259	101	13	12
6	7.2	5.6	24	30	15	17	3.9	89	220	106	12	14
7	7.2	7.6	31	28	18	19	3.3	395	51	128	85	11
8	7.1	6.3	31	25	e18	23	3.1	319	127	221	62	28
9	7.4	6.7	32	25	e17	23	2.8	252	34	160	183	11
10	9.0	7.0	29	23	e16	22	4.4	82	27	203	126	1.6
11	12	7.0	e25	23	15	23	9.3	24	97	226	85	e1.0
12	9.4	6.5	e27	22	14	21	3.8	94	97	131	45	e1.0
13	8.3	5.9	e28	22	14	19	3.5	174	176	86	20	1.5
14	9.0	6.2	e27	22	14	19	2.7	292	322	23	33	22
15	9.7	6.0	28	21	16	15	2.4	346	144	22	41	18
16	9.1	5.9	30	18	e21	15	2.4	283	100	9.9	64	7.6
17	8.1	6.0	28	18	e25	15	3.5	414	224	12	44	6.8
18	7.5	6.2	25	18	28	15	2.8	455	279	9.4	27	5.2
19	9.7	6.2	28	17	24	15	e1.0	516	144	3.5	33	4.5
20	10	6.1	25	17	23	16	e1.0	363	62	8.7	25	3.7
21	9.1	5.6	27	17	25	41	5.2	242	85	61	32	3.4
22	14	5.6	25	17	25	28	7.9	33	80	81	28	5.4
23	10	5.4	22	17	24	21	1.9	36	41	36	34	8.2
24	7.0	5.2	21	17	23	20	1.5	113	68	48	31	17
25	7.5	5.0	25	19	21	20	2.0	59	118	52	19	9.6
26	6.5	4.8	28	17	26	20	2.3	33	105	40	19	8.0
27	5.4	4.8	32	18	20	18	2.3	95	272	50	14	7.0
28	7.3	4.8	32	18	17	18	2.9	228	266	28	3.9	1.9
29	6.5	4.8	32	18	---	17	3.2	359	218	18	6.2	3.7
30	6.5	4.5	31	17	---	14	3.7	485	190	14	9.0	2.5
31	10	---	31	16	---	16	---	266	---	17	30	---
TOTAL	252.9	178.0	769.7	667	538	597	117.3	6111.1	5232	2347.5	1203.1	326.6
MEAN	8.16	5.93	24.8	21.5	19.2	19.3	3.91	197	174	75.7	38.8	10.9
MAX	14	8.2	32	30	28	41	16	516	447	226	183	48
MIN	5.4	4.5	4.7	16	14	14	1.0	4.1	27	3.5	3.9	1.0
AC-FT	502	353	1530	1320	1070	1180	233	12120	10380	4660	2390	648

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 2001, BY WATER YEAR (WY)

	MEAN	27.4	30.5	25.8	32.2	33.8	35.0	106	457	916	240	74.7	36.0
MAX	182	183	97.3	123	135	136	652	2720	4771	1450	301	207	
(WY)	1998	1998	1985	1984	1984	1980	1983	1980	1983	1983	1997	1997	
MIN	2.45	1.79	1.91	2.29	1.30	1.91	.37	14.9	158	39.2	12.8	4.79	
(WY)	1978	1978	1978	1978	1987	1988	1988	1976	1989	1988	1988	1987	

## SUMMARY STATISTICS

## FOR 2000 CALENDAR YEAR

## FOR 2001 WATER YEAR

## WATER YEARS 1975 - 2001

ANNUAL TOTAL	26325.7	18340.2	
ANNUAL MEAN	71.9	50.2	170
HIGHEST ANNUAL MEAN			779
LOWEST ANNUAL MEAN			41.8
HIGHEST DAILY MEAN	620	Jun 10	6080
LOWEST DAILY MEAN	1.2	Feb 29	a.00
ANNUAL SEVEN-DAY MINIMUM	1.4	Feb 29	.00
MAXIMUM PEAK FLOW			7710
MAXIMUM PEAK STAGE			10.46
ANNUAL RUNOFF (AC-FT)	52220	36380	123000
10 PERCENT EXCEEDS	177	146	355
50 PERCENT EXCEEDS	32	18	27
90 PERCENT EXCEEDS	4.5	4.4	2.9

e Estimated.

a Also occurred Aug 19, Sep 4, 18-19, 1987, and many days in 1988.

06752260 CACHE LA POUVRE RIVER AT FORT COLLINS, CO--Continued

WATER-QUALITY RECORDS

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

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 CAC03) (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)	ANC UNFLTRD TIT 4.5 LAB (MG/L AS CAC03) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	
OCT														
11...	0900	13	391	8.3	10.0	7.7	181	51.9	12.4	--	--	163	--	
NOV														
13...	1045	5.3	489	7.5	3.0	11.3	215	59.6	16.0	--	--	189	--	
DEC														
05...	1040	27	422	7.3	.5	12.3	192	55.6	13.0	--	--	141	--	
JAN														
02...	1430	41	408	--	0	11.8	200	59.7	12.4	11.2	.345	135	65.8	
FEB														
07...	1330	18	488	7.6	1.5	12.3	232	66.9	15.7	--	--	158	--	
MAR														
06...	0910	17	477	8.4	7.0	10.3	226	65.0	15.5	--	--	149	--	
APR														
11...	0935	15	398	--	4.5	10.2	156	40.2	13.6	--	--	109	--	
MAY														
09...	1425	267	234	8.7	13.0	9.4	99.2	28.2	6.97	--	--	88	--	
JUN														
19...	1155	201	81	8.0	13.5	8.7	34.7	10.2	2.25	--	--	30	--	
JUL														
23...	1650	36	125	8.3	21.5	7.6	52.6	15.3	3.48	4.0	.240	46	11.1	
AUG														
23...	0835	30	157	7.9	19.0	7.6	59.7	17.3	4.00	--	--	54	--	
SEP														
18...	0950	3.0	410	8.2	15.5	8.5	179	50.2	13.0	--	--	158	--	
DATE		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)	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, DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P) (00671)	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	ARSENIC, DIS-SOLVED (UG/L AS AS) (01000)	CADMIUM, DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)
OCT														
11...	--	--	--	--		E.003	.341	<.041	<.060	<.018	--	--	--	--
NOV														
13...	--	--	--	--		E.004	.424	<.041	<.060	<.018	--	--	--	--
DEC														
05...	--	--	--	--		E.003	.171	<.041	<.060	E.009	--	--	--	--
JAN														
02...	7.1	.4	7.9	255	.011	.200	<.041	<.060	<.018	3	<2.0	<.14	<.8	
FEB														
07...	--	--	--	--		E.005	.278	<.041	<.060	<.018	--	--	--	--
MAR														
06...	--	--	--	--		E.003	.171	<.041	<.060	<.018	--	--	--	--
APR														
11...	--	--	--	--		.013	.377	E.031	.060	E.015	--	--	--	--
MAY														
09...	--	--	--	--		<.006	.177	<.041	<.060	<.018	--	--	--	--
JUN														
19...	--	--	--	--		<.006	.048	<.040	<.060	<.020	--	--	--	--
JUL														
23...	2.6	.2	6.2	73	E.003	.099	<.040	<.060	<.020	7	<2.0	<.10	E.8	
AUG														
23...	--	--	--	--		<.006	.138	<.040	<.060	<.020	--	--	--	--
SEP														
18...	--	--	--	--		E.005	.369	<.040	<.060	<.020	--	--	--	--

## PLATTE RIVER BASIN

06752260 CACHE LA POUFRE RIVER AT FORT COLLINS, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	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)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	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)
OCT										
11...	1.4	--	<10	--	--	--	--	--	<.2	--
NOV										
13...	1.2	--	M	--	--	--	--	--	<.2	--
DEC										
05...	1.0	--	30	--	--	--	--	--	<.2	--
JAN										
02...	1.1	--	30	<1.00	25	<.23	<2.40	.5	<.2	4
FEB										
07...	1.3	--	50	--	--	--	--	--	<.2	--
MAR										
06...	1.3	190	70	--	--	--	--	--	<.2	--
APR										
11...	2.5	1290	50	--	--	--	--	--	<.2	--
MAY										
09...	1.1	370	20	--	--	--	--	--	<.2	--
JUN										
19...	1.2	190	40	--	--	--	--	--	<.2	--
JUL										
23...	1.8	240	10	<1.00	23	<.01	<2.00	<.3	<.2	<1
AUG										
23...	2.0	350	M	--	--	--	--	--	<.2	--
SEP										
18...	1.5	160	20	--	--	--	--	--	<.2	--

E Estimated laboratory analysis value.

M Presence of material verified but not quantified.

06752270 CACHE LA POUVRE RIVER BELOW FORT COLLINS, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 40°34'01", long 105°01'36", in NW<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec.20, T.7 N., R.68 W., Larimer County, Hydrologic Unit 10190007, 1.4 mi west of Interstate 25 on Prospect Street in Fort Collins.

DRAINAGE AREA.--1,240 mi<sup>2</sup>.

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

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 CAC03) (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)	ANC TIT 4.5 LAB (MG/L AS CAC03) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)
OCT													
10...	1030	4.8	1030	8.4	10.0	--	480	132	36.8	--	--	250	--
NOV													
13...	1240	6.2	1070	7.9	3.5	12.2	462	124	36.8	--	--	265	--
DEC													
04...	1415	5.1	1030	7.9	5.0	14.5	487	132	38.4	--	--	244	--
JAN													
03...	1120	15	746	--	1.0	13.3	347	99.0	24.2	34.5	.807	182	175
FEB													
07...	0820	6.0	1150	7.9	2.0	10.2	507	137	40.1	--	--	264	--
MAR													
05...	1305	4.0	1200	8.1	7.5	14.1	572	152	46.7	--	--	223	--
APR													
11...	1120	49	649	8.0	6.0	9.8	296	77.7	24.7	--	--	198	--
MAY													
10...	1110	37	412	8.3	12.0	10.8	176	49.0	13.0	--	--	116	--
JUN													
19...	1425	175	152	8.6	15.5	9.3	61.8	17.6	4.33	--	--	45	--
JUL													
23...	1115	52	344	8.3	21.5	8.5	144	40.5	10.5	13.7	.498	85	78.6
AUG													
24...	0930	28	476	8.4	19.0	8.6	195	54.2	14.5	--	--	102	--
SEP													
17...	1300	16	802	8.1	16.0	8.7	353	96.6	27.2	--	--	184	--

DATE	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)	NITRO-GEN, NITRITE (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 DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)
OCT													
10...	--	--	--	--	.018	.837	<.041	<.060	<.018	--	--	--	--
NOV													
13...	--	--	--	--	.016	2.08	E.023	.076	.052	--	--	--	--
DEC													
04...	--	--	--	--	.019	2.18	.045	<.060	<.018	--	--	--	--
JAN													
03...	27.3	.6	8.9	500	.018	1.61	<.041	.123	.111	2	<2.0	<.14	E.4
FEB													
07...	--	--	--	--	.013	1.95	E.033	<.060	<.018	--	--	--	--
MAR													
05...	--	--	--	--	.014	1.40	<.041	<.060	<.018	--	--	--	--
APR													
11...	--	--	--	--	.020	1.06	.149	<.060	<.018	--	--	--	--
MAY													
10...	--	--	--	--	.008	.549	<.041	<.060	.019	--	--	--	--
JUN													
19...	--	--	--	--	E.004	.264	<.040	<.060	.032	--	--	--	--
JUL													
23...	7.7	.3	7.2	226	.025	.506	.045	E.052	.043	5	<2.0	<.10	<.8
AUG													
24...	--	--	--	--	.014	1.14	<.040	.155	.105	--	--	--	--
SEP													
17...	--	--	--	--	.015	.807	E.028	E.044	.038	--	--	--	--

## PLATTE RIVER BASIN

06752270 CACHE LA POUFRE RIVER BELOW FORT COLLINS, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	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)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	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)
OCT										
10...	2.0	--	<10	--	--	--	--	--	<.2	--
NOV										
13...	2.3	--	10	--	--	--	--	--	<.2	--
DEC										
04...	1.9	--	<10	--	--	--	--	--	<.2	--
JAN										
03...	1.8	--	30	<1.00	32	<.23	<2.40	1.8	<.2	6
FEB										
07...	2.0	--	M	--	--	--	--	--	<.2	--
MAR										
05...	2.2	200	10	--	--	--	--	--	<.2	--
APR										
11...	1.5	1180	M	--	--	--	--	--	<.2	--
MAY										
10...	1.1	360	20	--	--	--	--	--	<.2	--
JUN										
19...	1.4	240	30	--	--	--	--	--	<.2	--
JUL										
23...	1.8	250	10	<1.00	25	<.01	<2.00	.5	<.2	2
AUG										
24...	2.2	240	<10	--	--	--	--	--	<.2	--
SEP										
17...	2.4	200	10	--	--	--	--	--	<.2	--

E Estimated laboratory analysis value.

M Presence of material verified but not quantified.

06752280 CACHE LA POUDBRE RIVER ABOVE BOX ELDER CREEK NEAR TIMNATH, CO

LOCATION.--Lat 40 33'07", long 105 00'39", in NE<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec.28, T.7 N., R.68 W., Larimer County, Hydrologic Unit 10190007, on left bank 4,000 ft upstream from Box Elder Creek, 2.0 mi upstream from Interstate Highway 25 bridge, and 3.8 mi southeast of intersection of College Avenue and Prospect Street in Fort Collins.

DRAINAGE AREA.--1,245 mi<sup>2</sup>.

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 4,860 ft above sea level, from topographic map. Prior to March 24, 1994, at site 1,900 ft downstream at different datum.

REMARKS.--Records good, except for estimated daily discharges, which are poor. Natural flow of stream affected by transmountain and transbasin diversions, storage reservoirs, power developments, diversion for municipal supply, diversions upstream from station for irrigation, and return flow from irrigated areas.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.8	21	5.9	e5.1	3.5	4.8	6.9	2.9	153	64	4.3	9.3
2	2.5	5.6	6.4	e5.6	3.3	4.8	10	4.6	196	46	3.6	5.0
3	2.6	5.4	5.8	e6.3	3.2	4.8	12	12	274	27	2.2	4.6
4	2.6	5.5	5.8	e5.0	3.9	5.0	6.0	15	308	23	4.3	4.5
5	2.6	8.1	9.0	e5.0	e4.3	5.2	3.1	16	171	26	1.9	4.2
6	2.6	7.6	12	e4.7	4.7	5.8	2.8	13	148	30	1.5	4.3
7	2.4	6.8	15	e4.4	4.6	5.8	3.0	218	32	42	19	4.5
8	2.4	6.6	17	e4.3	e4.4	5.8	2.4	156	73	103	8.8	9.3
9	2.3	6.3	17	e4.2	e4.0	6.2	1.1	125	17	75	75	3.2
10	2.3	6.7	18	e4.1	3.7	6.2	1.3	37	11	88	53	2.7
11	2.2	7.3	e13	e4.2	3.8	6.5	7.0	5.8	47	103	28	2.5
12	2.0	7.3	e9.2	e4.0	3.9	6.1	6.0	15	54	46	5.1	2.7
13	2.1	7.0	e10	e4.3	4.3	5.9	5.6	48	80	29	4.8	2.8
14	2.3	6.4	e11	e4.3	4.3	5.5	5.1	128	210	6.4	2.5	3.3
15	2.3	6.4	e10	e4.3	4.3	4.9	4.0	188	97	8.9	3.8	4.2
16	2.3	6.6	e7.0	e4.3	4.2	5.1	3.8	174	45	5.3	10	3.5
17	2.1	6.4	e5.3	e4.3	4.3	5.0	3.8	289	125	5.0	5.3	3.7
18	1.9	6.5	e7.0	e4.4	4.3	4.9	3.5	321	178	2.9	3.1	3.6
19	2.0	6.4	e7.0	e4.4	4.3	4.5	2.8	382	91	1.3	2.9	4.0
20	2.6	6.3	e7.5	e4.4	4.7	4.6	3.1	261	18	1.3	4.9	4.5
21	3.2	7.1	e9.0	e4.4	5.1	5.1	3.7	175	33	5.9	3.9	4.0
22	4.4	7.9	e9.3	e4.3	5.2	5.6	25	32	22	23	4.1	4.1
23	5.9	7.4	e9.5	e4.2	5.0	5.4	5.0	13	11	5.6	4.1	4.0
24	6.8	6.7	e8.0	e3.9	5.1	5.4	3.8	63	15	5.2	5.0	4.5
25	7.5	6.1	e8.9	e4.0	5.0	5.7	3.5	30	35	6.2	4.3	4.5
26	7.7	6.2	e8.9	e4.0	4.9	5.8	3.6	11	34	5.4	3.9	4.5
27	7.7	5.0	e5.4	e4.0	4.9	5.8	3.5	39	133	5.4	4.3	4.5
28	7.2	5.9	e5.4	e4.0	4.7	8.1	3.4	133	146	4.5	2.3	4.6
29	7.1	7.7	e5.7	3.9	---	9.4	3.1	212	113	4.0	2.1	4.2
30	7.2	6.5	e5.5	3.5	---	8.5	2.9	355	92	3.4	2.3	4.1
31	13	---	e5.5	e3.5	---	7.4	---	161	---	2.1	4.4	---
TOTAL	124.6	212.7	280.0	135.3	121.9	179.6	150.8	3635.3	2962	803.8	284.7	129.4
MEAN	4.02	7.09	9.03	4.36	4.35	5.79	5.03	117	98.7	25.9	9.18	4.31
MAX	13	21	18	6.3	5.2	9.4	25	382	308	103	75	9.3
MIN	1.9	5.0	5.3	3.5	3.2	4.5	1.1	2.9	11	1.3	1.5	2.5
AC-FT	247	422	555	268	242	356	299	7210	5880	1590	565	257

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 - 2001, BY WATER YEAR (WY)

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	
MEAN	22.6	33.5	28.0	28.9	28.2	30.9	111	447	887	205	51.6	30.9											
MAX	162	179	114	139	156	159	633	2729	4430	1288	278	182											
(WY)	1998	1998	1998	1984	1984	1980	1980	1980	1983	1983	1997	1997											
MIN	3.55	4.45	3.99	3.39	3.76	4.38	3.45	8.66	85.8	5.94	4.27	3.61											
(WY)	1992	1991	1991	1995	1992	1991	1991	1982	1989	1987	1987	1988											

SUMMARY STATISTICS

FOR 2000 CALENDAR YEAR

FOR 2001 WATER YEAR

WATER YEARS 1980 - 2001

ANNUAL TOTAL	19577.8	9020.1		
ANNUAL MEAN	53.5	24.7		
HIGHEST ANNUAL MEAN			700	1983
LOWEST ANNUAL MEAN			19.4	1989
HIGHEST DAILY MEAN	528	Jun 10	382	May 19
LOWEST DAILY MEAN	1.9	Oct 18	1.1	Apr 9
ANNUAL SEVEN-DAY MINIMUM	2.1	Oct 12	2.1	Oct 12
MAXIMUM PEAK FLOW			521	May 30
MAXIMUM PEAK STAGE			5.57	May 30
ANNUAL RUNOFF (AC-FT)	38830	17890		
10 PERCENT EXCEEDS	139	74		297
50 PERCENT EXCEEDS	12	5.4		12
90 PERCENT EXCEEDS	5.0	2.8		4.0

e Estimated.

a From slope-area measurement of peak flow.

b From highwater marks.

06752280 CACHE LA POUVRE RIVER ABOVE BOX ELDER CREEK NEAR TIMNATH, CO--Continued

## WATER-QUALITY RECORDS

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

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

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)	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)	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 DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)
OCT													
10...	1230	2.1	1680	8.1	11.5	--	758	196	65.0	--	--	210	--
NOV													
14...	0900	6.2	1300	7.9	0	12.3	599	157	50.4	--	--	236	--
DEC													
04...	1250	5.4	1280	8.4	3.0	14.9	586	155	48.2	--	--	225	--
JAN													
03...	0930	7.3	1260	--	.5	12.3	640	174	50.0	57.7	.992	210	474
FEB													
07...	1040	4.7	1510	7.4	1.5	11.2	748	196	62.6	--	--	225	--
MAR													
05...	0935	4.8	1260	7.7	3.5	10.4	605	162	48.6	--	--	197	--
APR													
11...	1340	11	1310	8.0	6.5	12.9	628	162	54.1	--	--	182	--
MAY													
09...	1115	148	450	8.3	13.0	9.7	192	52.3	15.0	--	--	109	--
JUN													
20...	0815	11	611	7.7	15.0	--	268	71.0	22.1	--	--	91	--
JUL													
23...	1315	4.5	1080	8.3	23.5	8.2	510	131	44.0	45.4	.876	144	442
AUG													
24...	0720	4.3	1220	8.1	18.0	--	549	139	49.0	--	--	154	--
SEP													
17...	1135	4.0	1440	7.9	15.5	7.1	684	175	60.0	--	--	196	--
OCT													
10...	--	--	--	--	.016	.726	.046	<.060	<.018	--	--	--	--
NOV													
14...	--	--	--	--	.018	2.20	.057	.128	.095	--	--	--	--
DEC													
04...	--	--	--	--	.023	2.08	E.027	.209	.198	--	--	--	--
JAN													
03...	23.3	.8	9.9	964	.019	1.58	.062	E.054	.055	<1	<2.0	<.14	1.4
FEB													
07...	--	--	--	--	.043	1.98	.134	.061	.050	--	--	--	--
MAR													
05...	--	--	--	--	.009	.837	.058	<.060	.023	--	--	--	--
APR													
11...	--	--	--	--	.017	1.14	.071	.111	.091	--	--	--	--
MAY													
09...	--	--	--	--	<.006	.423	<.041	<.060	E.014	--	--	--	--
JUN													
20...	--	--	--	--	.013	.427	.077	E.039	.032	--	--	--	--
JUL													
23...	12.4	.6	10.2	852	.010	.745	<.040	E.122	.109	2	<2.0	<.10	E.4
AUG													
24...	--	--	--	--	.028	.816	.059	E.040	.048	--	--	--	--
SEP													
17...	--	--	--	--	.017	.950	.060	E.034	.024	--	--	--	--

PLATTE RIVER BASIN

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06752280 CACHE LA POUFRE RIVER ABOVE BOX ELDER CREEK NEAR TIMNATH, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	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)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	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)
OCT										
10...	3.5	--	10	--	--	--	--	--	<.2	--
NOV										
14...	3.0	--	<10	--	--	--	--	--	<.2	--
DEC										
04...	2.9	--	M	--	--	--	--	--	<.2	--
JAN										
03...	2.6	--	M	<1.00	50	<.23	<2.40	4.9	<.2	5
FEB										
07...	3.7	--	10	--	--	--	--	--	<.2	--
MAR										
05...	2.7	270	40	--	--	--	--	--	<.2	--
APR										
11...	3.7	230	40	--	--	--	--	--	<.2	--
MAY										
09...	1.2	490	20	--	--	--	--	--	<.2	--
JUN										
20...	1.9	300	30	--	--	--	--	--	<.2	--
JUL										
23...	2.4	260	M	<1.00	79	<.01	<2.00	3.1	<.2	1
AUG										
24...	4.4	330	10	--	--	--	--	--	<.2	--
SEP										
17...	5.2	250	10	--	--	--	--	--	<.3	--

E Estimated laboratory analysis value.  
M Presence of material verified but not quantified.

06752280 CACHE LA POUFRE RIVER ABOVE BOXELDER CREEK NEAR TIMNATH, CO--Continued

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPERATURE (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	ACETO-CHLOR, WATER, FLTRD REC (UG/L) (49260)	ALA-CHLOR, WATER, DISS, REC (UG/L) (46342)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	METHYL AZIN-PHOS WAT FLT (UG/L) (82686)	BEN-FLUR-ALIN WAT FLD (UG/L) (82673)	BUTYL-ATE, WATER, DISS, REC (UG/L) (04028)	
MAR 05...	1200	4.8	3.5	10.4	7.7	1260	<.004	<.002	E.013	E.005	<.050	<.010	<.002	
JUN 26...	1020	37	19.2	9.9	8.1	343	<.004	<.002	<.006	<.007	<.050	<.010	<.002	
DATE	TIME	CAR-BARYL WATER FLTRD 0.7 U GF, REC (82680)	CARBO-FURAN WATER FLTRD 0.7 U GF, REC (82674)	CHLOR-PYRIFOS DIS-SOLVED (UG/L) (38933)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (82682)	P,P' DDE DISSOLV (34653)	DI-AZINON, DISS, SOLVED (UG/L) (39572)	DI-ELDRIN DIS-SOLVED (UG/L) (39381)	2,6-DI-ETHYL ANILINE WAT FLT 0.7 U GF, REC (82660)	DISUL-FOTON WATER FLTRD 0.7 U GF, REC (82677)	EPIC WATER FLTRD 0.7 U GF, REC (82668)	ETHAL-ALIN WAT FLT 0.7 U GF, REC (82663)	ETHO-PROP WATER FLTRD 0.7 U GF, REC (82672)
MAR 05...		<.041	<.020	<.005	<.018	<.003	<.003	<.005	<.005	<.002	<.021	<.002	<.009	<.005
JUN 26...		<.041	<.020	<.005	<.018	<.003	<.003	<.005	<.005	<.002	<.021	<.002	<.009	<.005
DATE	TIME	FONOFOFOS WATER DISS REC (UG/L) (04095)	ALPHA BHC DIS-SOLVED (UG/L) (34253)	LINDANE DIS-SOLVED (UG/L) (39341)	LIN-URON WATER FLTRD 0.7 U GF, REC (82666)	MALA-THION, DIS-SOLVED (UG/L) (39532)	METHYL PARA-THION WAT FLT 0.7 U GF, REC (82667)	METO-LACHLOR WATER DISSOLV (UG/L) (39415)	METRI-SENCOB WAT FLT 0.7 U GF, REC (82630)	MOL-INATE WATER FLTRD 0.7 U GF, REC (82671)	NAPPROP-AMIDE WATER FLTRD 0.7 U GF, REC (82684)	PARA-THION, DIS-SOLVED (UG/L) (39542)	PEB-ULATE WATER FLTRD 0.7 U GF, REC (82669)	PENDI-METH-ALIN WAT FLT 0.7 U GF, REC (82683)
MAR 05...		<.003	<.005	<.004	<.035	<.027	<.006	<.013	<.006	<.002	<.007	<.007	<.002	<.010
JUN 26...		<.003	<.005	<.004	<.035	<.027	<.006	<.013	<.006	<.002	<.007	<.007	<.002	<.010
DATE	TIME	PER-METHRIN CIS WAT FLT 0.7 U GF, REC (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (82664)	PRO-METON, WATER, DISS, REC (UG/L) (04037)	PRON-AMIDE WATER FLTRD 0.7 U GF, REC (82676)	PROPA-CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO-PANIL WATER FLTRD 0.7 U GF, REC (82679)	PRO-PARGITE WATER FLTRD 0.7 U GF, REC (82685)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU-THIURON WATER FLTRD 0.7 U GF, REC (82670)	TER-BACIL WATER FLTRD 0.7 U GF, REC (82665)	TER-BUFOS WATER FLTRD 0.7 U GF, REC (82675)	THIO-BENCARB WAT FLT 0.7 U GF, REC (82681)	TRIAL-LATE WATER FLTRD 0.7 U GF, REC (82678)
MAR 05...		<.006	<.011	.049	<.004	<.010	<.011	<.023	<.011	.040	<.034	<.017	<.005	<.002
JUN 26...		<.006	<.011	E.008	<.004	<.010	<.011	<.023	<.011	<.016	<.034	<.017	<.005	<.002
DATE	TIME	DI-BROMO-METHANE WATER WHOLE RECOVER (UG/L) (30217)	BROMO-DI-CHLORO-METHANE (UG/L) (32101)	CARBON TETRA-RIDE TOTAL (UG/L) (32102)	1,2-DI-CHLORO-ETHANE TOTAL (UG/L) (32103)	BROMO-FORM TOTAL (UG/L) (32104)	CHLORO-DI-BROMO-METHANE TOTAL (UG/L) (32105)	CHLORO-FORM TOTAL (UG/L) (32106)	TOLUENE (UG/L) (34010)	BENZENE TOTAL (UG/L) (34030)	ACRYLO-NITRILE (UG/L) (34215)	CHLORO-BENZENE TOTAL (UG/L) (34301)	CHLORO-ETHANE TOTAL (UG/L) (34311)	
MAR 05...	1159	<.05	<.05	<.06	<.1	<.06	<.2	<.02	E.02	E.01	<1	<.03	<.1	
JUN 26...	1019	<.05	<.05	<.06	<.1	<.06	<.2	E.01	E.05	<.04	<1	<.03	<.1	
DATE	TIME	TRI-FLUR-ALIN WAT FLT 0.7 U GF, REC (82661)	CARBON, ORGANIC DIS-SOLVED (MG/L) (00681)	CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L) (00689)	DATE	TRI-FLUR-ALIN WAT FLT 0.7 U GF, REC (82661)	CARBON, ORGANIC DIS-SOLVED (MG/L) (00681)	CARBON, ORGANIC PARTIC-ULATE TOTAL (MG/L) (00689)						
MAR 05...		<.009	3.2	.9		<.009	3.2	.9						
JUN 26...		<.009	2.9	.7		<.009	2.9	.7						

E Estimated laboratory analysis value.

PLATTE RIVER BASIN

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06752280 CACHE LA POUFRE RIVER ABOVE BOXELDER CREEK NEAR TIMNATH, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	ETHYL-BENZENE TOTAL (UG/L) (34371)	ETHANE HEXA- CHLORO- WATER UNFLTRD RECOVER (UG/L) (34396)	METHYL- BROMIDE TOTAL (UG/L) (34413)	METHYL- CHLO- RIDE TOTAL (UG/L) (34418)	METHYL- CHLO- RIDE TOTAL (UG/L) (34423)	TETRA- CHLORO- ETHYL- ENE TOTAL (UG/L) (34475)	TRI- CHLORO- FLUORO- METHANE TOTAL (UG/L) (34488)	1,1-DI- CHLORO- ETHANE TOTAL (UG/L) (34496)	1,1,1- TRI- CHLORO- ETHANE TOTAL (UG/L) (34501)	1,1,2- TRI- CHLORO- ETHANE TOTAL (UG/L) (34511)	ETHANE, 1,1,2,2 TETRA- CHLORO- WAT UNF REC (UG/L) (34516)	BENZENE O-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34536)	
MAR 05...	<.03	<.2	<.3	<.2	<.2	M	<.09	<.04	<.04	<.03	<.06	<.09	<.03
JUN 26...	<.03	<.2	<.3	<.2	M	M	<.09	<.04	<.04	<.03	<.06	<.09	<.03
DATE	1,2-DI- CHLORO- PROPANE TOTAL (UG/L) (34541)	TRANS- 1,2-DI- CHLORO- ETHENE TOTAL (UG/L) (34546)	BENZENE 1,2,4- TRI- CHLORO- WAT UNF REC (UG/L) (34551)	BENZENE 1,3-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34566)	BENZENE 1,4-DI- CHLORO- WATER UNFLTRD REC (UG/L) (34571)	DI- CHLORO- DI- FLUORO- METHANE TOTAL (UG/L) (34668)	NAPHTH- ALENE TOTAL (UG/L) (34696)	TRANS- 1,3-DI- CHLORO- PROPENE TOTAL (UG/L) (34699)	CIS 1,3-DI- CHLORO- PROPENE TOTAL (UG/L) (34704)	VINYL CHLO- RIDE TOTAL (UG/L) (39175)	TRI- CHLORO- ETHYL- ENE TOTAL (UG/L) (39180)	HEXA- CHLORO- BUT- ADIENE TOTAL (UG/L) (39702)	METHYL ACRY- LATE WATER UNFLTRD RECOVER (UG/L) (49991)
MAR 05...	<.03	<.03	<.2	<.03	<.05	<.3	<.2	<.09	<.09	<.1	<.04	<.1	<.1
JUN 26...	<.03	<.03	<.2	<.03	<.05	<.3	<.2	<.09	<.09	<.1	<.04	<.1	<.1
DATE	1234- TETRA METHYL BENZENE UNFLTRD REC (UG/L) (49999)	ISO- DURENE WATER UNFLTRD RECOVER (UG/L) (50000)	BROMO- ETHENE WATER UNFLTRD RECOVER (UG/L) (50002)	ETHER TERT- BUTYL METHYL UNFLTRD RECOVER (UG/L) (50004)	ETHER TERT- PENTYL METHYL UNFLTRD RECOVER (UG/L) (50005)	2BUTENE TRANS-1 4-DI- CHLORO UNFLTRD RECOVER (UG/L) (73547)	METHAC- RYLATE ETHYL- WATER UNFLTRD RECOVER (UG/L) (73570)	CARBON DI- SULFIDE WHOLE TOTAL (UG/L) (77041)	CIS-1,2 -DI- CHLORO- ETHENE WATER WHOLE TOTAL (UG/L) (77093)	2-HEXA- NONE WATER WHOLE TOTAL (UG/L) (77103)	STYRENE WHOLE TOTAL (UG/L) (77128)	O- XYLENE WATER WHOLE TOTAL (UG/L) (77135)	1,1-DI CHLORO- PRO- PENE, WH TOTAL (UG/L) (77168)
MAR 05...	<.2	<.2	<.1	<.05	<.1	<.7	<.2	E.04	<.04	<.7	<.04	<.04	<.03
JUN 26...	<.2	<.2	<.1	<.05	<.1	<.7	<.2	E.02	<.04	<.7	<.04	<.04	<.03
DATE	2,2-DI CHLORO- PRO- PANE WAT, WH TOTAL (UG/L) (77170)	1,3-DI- CHLORO- PROPANE WAT, WH TOTAL (UG/L) (77173)	TOLUENE O-ETHYL WATER UNFLTRD RECOVER (UG/L) (77220)	BENZENE 123-TRI METHYL- WATER UNFLTRD RECOVER (UG/L) (77221)	BENZENE 124-TRI METHYL UNFLTRD RECOVER (UG/L) (77222)	ISO- PROPYL- BENZENE WHOLE TOTAL (UG/L) (77223)	BENZENE N-PROPY WATER UNFLTRD REC (UG/L) (77224)	BENZENE 135-TRI METHYL WATER UNFLTRD REC (UG/L) (77226)	O- CHLORO- TOLUENE WHOLE TOTAL (UG/L) (77275)	TOLUENE P-CHLOR WATER UNFLTRD REC (UG/L) (77277)	METHANE BROMO CHLORO- WAT UNFLTRD REC (UG/L) (77297)	BENZENE N-BUTYL WATER UNFLTRD REC (UG/L) (77342)	BENZENE SEC BUTYL- WATER UNFLTRD REC (UG/L) (77350)
MAR 05...	<.05	<.1	<.06	<.1	<.06	<.03	<.04	<.04	<.03	<.06	<.04	<.2	<.03
JUN 26...	<.05	<.1	<.06	<.1	<.06	<.03	<.04	<.04	<.03	<.06	<.04	<.2	<.03
DATE	BENZENE TERT- BUTYL- WATER UNFLTRD REC (UG/L) (77353)	P-ISO- PROPYLEN TOLUENE WATER WHOLE REC (UG/L) (77356)	METHYL IODIDE WATER UNFLTRD RECOVER (UG/L) (77424)	123-TRI CHLORO- PROPANE WHOLE TOTAL (UG/L) (77443)	ETHANE, 1112- TRI- TETRA- CHLORO- WAT UNF REC (UG/L) (77562)	1,2,3- TRI- CHLORO ETHANE BENZENE WAT, WH REC (UG/L) (77613)	1,2- DIBROMO ETHANE WATER WHOLE TOTAL (UG/L) (77651)	FREON- 113 WATER UNFLTRD REC (UG/L) (77652)	METHYL TERT- BUTYL ETHER WAT UNF REC (UG/L) (78032)	PROPENE 3- CHLORO- WATER UNFLTRD RECOVER (UG/L) (78109)	METHYL ISO- BUTYL KETONE WAT. WH. TOTAL (UG/L) (78133)	ACETONE WATER WHOLE TOTAL (UG/L) (81552)	BROMO- BENZENE WATER, WHOLE, TOTAL (UG/L) (81555)
MAR 05...	<.06	<.07	<.1	<.2	<.03	<.3	<.04	<.06	<.2	<.1	<.4	<.7	<.04
JUN 26...	<.06	<.07	<.1	<.2	<.03	<.3	<.04	<.06	<.2	<.1	<.4	<.7	<.04
DATE			ETHER ETHYL WATER UNFLTRD RECOVER (UG/L) (81576)	DI-ISO- PROPYL- ETHER, WATER UNFLTRD RECOVER (UG/L) (81577)	METH- ACRYLO- NITRILE WATER UNFLTRD RECOVER (UG/L) (81593)	METHYL- ETHYL- KETONE WHOLE TOTAL (UG/L) (81595)	METHAC- RYLATE METHYL WATER UNFLTRD RECOVER (UG/L) (81597)	FURAN, TETRA- HYDRO- WATER UNFLTRD RECOVER (UG/L) (81607)	DIBROMO CHLORO- PROPANE WATER WHOLE TOT. REC (UG/L) (82625)	META/ PARA- XYLENE WATER REC (UG/L) (85795)			
MAR 05...			<.2	<.1	<.6	<.2	<.3	<.2	<.2	<.06			
JUN 26...			<.2	<.1	<.6	<.2	<.3	<.2	<.2	<.06			

E Estimated laboratory analysis value.  
M Presence of material verified but not quantified.

## PLATTE RIVER BASIN

06752500 CACHE LA POUUDRE RIVER NEAR GREELEY, CO

## WATER-QUALITY RECORDS

LOCATION.--Lat 40°25'04", long 104°38'22", in NW<sup>1</sup>/<sub>4</sub> sec.11, T.5 N., R.65 W., Weld County, Hydrologic Unit 10190007, on right bank 25 ft downstream from highway bridge, 2.9 mi east of courthouse in Greeley, and 3.0 mi upstream from mouth.

DRAINAGE AREA.--1,877 mi<sup>2</sup>.

PERIOD OF RECORD.--November 1951 to September 1952, August 1954 to August 1956, December 1963 to September 1966, October 1967 to September 1968, October 1970 to September 1982, June to September 2001.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPERATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	SPECIFIC CONDUCTANCE (US/CM) (00095)	ACETO-CHLOR, WATER FLTRD REC (UG/L) (49260)	ALA-CHLOR, WATER, DISS, REC, (UG/L) (46342)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	METHYL AZIN- PHOS, WATER, DISS, GF, REC (UG/L) (39632)	BEN-FLUR-ALIN, WATER FLD (UG/L) (82686)	BUTYL-ATE, WATER, DISS, REC (UG/L) (82673)	(04028)	
JUN 21...	1400	187	22.5	9.6	8.1	1360	<.004	<.002	E.017	.044	<.050	<.010	<.002	
AUG 15...	0950	118	19.0	7.7	8.0	1460	<.004	<.002	E.039	.056	<.050	<.010	<.002	
DATE		CAR-BARYL WATER FLTRD 0.7 U (UG/L) (82680)	CARBO-FURAN WATER FLTRD 0.7 U (UG/L) (82674)	CHLOR-PYRIFOS DIS-SOLVED (UG/L) (38933)	CYANA-ZINE, WATER, DISS, (UG/L) (04041)	DCPA WATER FLTRD 0.7 U (UG/L) (82682)	DI-AZINON, DISS, (UG/L) (34653)	DI-ELDRIN, DISS, (UG/L) (39572)	DI-ANILINE WATER FLTRD 0.7 U (UG/L) (39381)	2,6-DI-ETHYL ANILINE WATER FLTRD 0.7 U (UG/L) (82660)	DISUL-FOTON WATER FLTRD 0.7 U (UG/L) (82677)	EPTC WATER FLTRD 0.7 U (UG/L) (82668)	ETHAL-FLUR-ALIN, WATER FLD (UG/L) (82663)	ETHO-PROP WATER FLTRD 0.7 U (UG/L) (82672)
JUN 21...		<.041	<.020	<.005	<.018	.016	.003	.047	.006	<.002	<.021	.011	<.009	<.005
AUG 15...		<.041	<.020	<.005	<.018	<.003	<.003	.009	<.005	<.002	<.021	<.002	<.009	<.005
DATE		FONOFOS WATER DISS REC (UG/L) (04095)	ALPHA BHC DIS-SOLVED (UG/L) (34253)	LINDANE DIS-SOLVED (UG/L) (39341)	LIN-URON WATER FLTRD 0.7 U (UG/L) (82666)	MALA-THION, DIS-SOLVED (UG/L) (39532)	METHYL PARA-THION, WATER FLTRD 0.7 U (UG/L) (82667)	METO-LACHLOR WATER DISSOLV (UG/L) (39415)	METRI-BUZIN WATER DISSOLV (UG/L) (82630)	MOL-INATE WATER FLTRD 0.7 U (UG/L) (82671)	NAPROP-AMIDE WATER FLTRD 0.7 U (UG/L) (82684)	PARA-THION, DIS-SOLVED (UG/L) (39542)	PEB-ULATE WATER FLTRD 0.7 U (UG/L) (82669)	PENDI-METH-ALIN, WATER FLTRD 0.7 U (UG/L) (82683)
JUN 21...		<.003	<.005	<.004	E.642	E.007	<.006	.616	<.006	<.002	<.007	<.007	<.002	.322
AUG 15...		<.003	<.005	<.004	<.035	<.027	<.006	.065	<.006	<.002	<.007	<.007	<.002	<.020
DATE		PER-METHRIN CIS WAT FLT 0.7 U (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U (UG/L) (82664)	PRO-METON, WATER, DISS, REC (UG/L) (04037)	PRON-AMIDE WATER FLTRD 0.7 U (UG/L) (82676)	PROPA-CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO-PANIL WATER FLTRD 0.7 U (UG/L) (82679)	PRO-PARGITE WATER FLTRD 0.7 U (UG/L) (82685)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU-THIURON WATER FLTRD 0.7 U (UG/L) (82670)	TER-BACIL WATER FLTRD 0.7 U (UG/L) (82665)	TER-BUFOS WATER FLTRD 0.7 U (UG/L) (82675)	THIO-BENCARB WATER FLTRD 0.7 U (UG/L) (82681)	TRIAL-LATE WATER FLTRD 0.7 U (UG/L) (82678)
JUN 21...		<.006	<.011	.038	<.004	<.010	<.011	<.023	<.011	<.016	<.034	<.017	<.005	<.002
AUG 15...		<.006	<.011	.050	<.004	<.010	<.011	<.023	<.011	E.009	<.034	<.017	<.005	<.002
DATE							TRI-FLUR-ALIN WAT FLT 0.7 U (UG/L) (82661)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTICULATE TOTAL (MG/L AS C) (00689)					
JUN 21...							.010	10	1.6					
AUG 15...							<.009	6.3	3.8					

E Estimated laboratory analysis value.

PLATTE RIVER BASIN

06753990 LONETREE CREEK NEAR GREELEY, CO

LOCATION.--Lat 40°26'33", long 104°35'18", in NE<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec.31, T.6 N., R.64 W., Weld County, Hydrologic Unit 10190008, on right bank 50 ft downstream from bridge on Weld County Road 62 1/2, 5.5 mi east of Greeley.

DRAINAGE AREA.--567 mi<sup>2</sup>.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 1993 to September 1995, April to September 2001.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 4,630 ft above sea level, from topographic map.

REMARKS.--Records poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 429 ft<sup>3</sup>/s, May 28, 1993 from indirect measurement of peak flow, gage height, 10.85 ft; minimum daily, 1.5 ft<sup>3</sup>/s, June 28, 1994.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period April to September, 370 ft<sup>3</sup>/s, July 11, gage height, 10.32 ft; minimum daily, 1.1 ft<sup>3</sup>/s, Aug. 5.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	2.3	33	4.6	2.4	1.3
2	---	---	---	---	---	---	---	2.5	31	4.6	1.7	1.3
3	---	---	---	---	---	---	---	3.6	33	6.4	1.9	1.2
4	---	---	---	---	---	---	---	4.0	42	8.6	1.5	1.3
5	---	---	---	---	---	---	---	8.1	33	8.4	1.1	1.7
6	---	---	---	---	---	---	---	7.5	25	7.9	1.4	1.8
7	---	---	---	---	---	---	---	5.5	13	6.6	1.9	1.7
8	---	---	---	---	---	---	---	4.8	15	66	1.3	3.1
9	---	---	---	---	---	---	---	4.1	20	20	e1.4	3.9
10	---	---	---	---	---	---	---	4.2	18	12	e1.5	2.5
11	---	---	---	---	---	---	---	4.1	8.1	e180	1.5	2.7
12	---	---	---	---	---	---	---	3.9	e3.0	e150	1.3	5.6
13	---	---	---	---	---	---	---	3.7	9.7	e90	1.4	5.8
14	---	---	---	---	---	---	---	3.6	42	e56	1.4	5.9
15	---	---	---	---	---	---	---	5.0	24	e34	1.3	11
16	---	---	---	---	---	---	---	21	11	e21	1.4	11
17	---	---	---	---	---	---	---	9.4	7.2	e13	1.6	8.6
18	---	---	---	---	---	---	---	7.6	6.0	e8.0	1.7	7.6
19	---	---	---	---	---	---	---	5.7	5.2	e4.9	1.7	5.7
20	---	---	---	---	---	---	---	6.5	6.3	2.9	1.7	5.4
21	---	---	---	---	---	---	---	38	5.8	1.7	1.9	5.1
22	---	---	---	---	---	---	---	18	5.7	1.6	1.9	4.8
23	---	---	---	---	---	---	---	6.9	4.8	1.4	2.2	4.8
24	---	---	---	---	---	---	---	6.4	4.4	1.4	2.2	4.7
25	---	---	---	---	---	---	---	5.5	5.0	2.1	1.8	4.7
26	---	---	---	---	---	---	2.4	3.9	5.5	2.8	1.7	4.6
27	---	---	---	---	---	---	2.2	3.1	5.1	2.7	1.7	4.4
28	---	---	---	---	---	---	2.2	4.9	4.2	3.1	1.6	4.3
29	---	---	---	---	---	---	2.1	15	4.4	2.1	1.4	4.1
30	---	---	---	---	---	---	2.4	34	5.0	1.8	1.4	4.1
31	---	---	---	---	---	---	---	45	---	2.0	1.3	---
TOTAL	---	---	---	---	---	---	---	297.8	435.4	727.6	50.2	134.7
MEAN	---	---	---	---	---	---	---	9.61	14.5	23.5	1.62	4.49
MAX	---	---	---	---	---	---	---	45	42	180	2.4	11
MIN	---	---	---	---	---	---	---	2.3	3.0	1.4	1.1	1.2
AC-FT	---	---	---	---	---	---	---	591	864	1440	100	267

e Estimated.

## PLATTE RIVER BASIN

06753990 LONETREE CREEK NEAR GREELEY, CO--Continued  
(National Water-Quality Assessment Program station)

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1993 to September 1995, February to September 2001.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

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)	BICAR-BONATE WATER DIS IT FIELD (MG/L) AS HCO3 (00453)	
FEB														
07...	1145	3.1	2370	8.0	.6	14.9	955	212	103	204	2.87	10.6	378	
MAR														
12...	1045	3.1	2300	8.5	7.5	18.3	934	200	106	203	2.89	9.48	337	
APR														
02...	0950	2.9	2540	8.3	11.3	18.0	966	215	104	221	3.09	10.8	309	
MAY														
07...	1040	5.4	3000	7.9	14.4	7.6	1080	221	129	261	3.46	79.4	515	
JUN														
12...	0940	2.5	1620	8.2	21.7	7.7	627	166	51.6	124	2.16	11.6	284	
JUL														
05...	1310	8.9	1390	8.2	25.7	7.7	488	117	47.8	89.4	1.76	7.08	238	
AUG														
09...	0955	1.4	1900	8.2	16.4	10.2	748	193	64.9	141	2.25	13.3	308	
SEP														
13...	1030	6.2	1360	8.6	17.7	10.7	519	116	55.4	94.6	1.81	7.05	179	
DATE		CAR-BONATE WATER DIS IT FIELD (MG/L) AS CO3 (00452)	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 DAY) (70302)	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)
FEB														
07...	--	314	976	65.3	1.1	20.4	2070	1830	17	2.8	.138	10.8	.970	
MAR														
12...	14	300	984	60.7	1.0	14.6	2030	1800	17	2.8	.086	9.65	.165	
APR														
02...	19	285	1110	67.6	1.0	13.3	2180	1950	17	3.0	.110	8.29	<.041	
MAY														
07...	--	422	1210	118	1.2	20.5	2590	2320	38	3.5	.517	3.44	4.65	
JUN														
12...	--	233	587	39.5	.9	28.3	1290	1150	8.8	1.8	.039	<.240	.097	
JUL														
05...	--	195	504	29.3	.7	12.9	1090	948	26	1.5	.074	5.19	E.038	
AUG														
09...	--	252	692	49.2	.8	29.4	1510	1390	5.7	2.1	.053	13.5	.044	
SEP														
13...	18	177	494	33.6	.9	13.4	1020	942	17	1.4	.077	4.69	<.040	
DATE		NITRO-GEN, ORGANIC DIS-SOLVED (MG/L) AS N (00607)	NITRO-GEN, AM-MONIA + ORGANIC (MG/L) AS N (00625)	NITRO-GEN, AM-MONIA + ORGANIC (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)	IRON, DIS-SOLVED (UG/L) AS FE (01046)	MANGA-NESE, DIS-SOLVED (UG/L) AS MN (01056)	CARBON, ORGANIC DIS-SOLVED (MG/L) AS C (00681)	CARBON, ORGANIC PARTI-CULATE TOTAL (MG/L) AS C (00689)	ACETO-CHLOR, WATER FLTRD REC (UG/L) (49260)	ALA-CHLOR, WATER, DISS, REC, (UG/L) (46342)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)
FEB														
07...	1.11	2.5	2.1	.243	.191	.164	<30	208	9.4	1.1	<.004	<.002	E.095	
MAR														
12...	.876	1.4	1.0	.159	.114	.117	<30	157	9.9	--	<.004	<.002	E.078	
APR														
02...	--	1.2	1.1	E.043	<.060	<.018	<30	165	9.8	.7	<.004	<.002	E.083	
MAY														
07...	7.70	16	12	2.78	1.48	1.04	310	1340	51	12	<.004	<.002	E.051	
JUN														
12...	.615	1.0	.71	.170	.132	.115	<10	154	6.3	1.0	<.004	<.002	E.055	
JUL														
05...	--	2.3	.65	.749	.138	.094	<10	22.8	5.7	12	<.004	<.002	E.013	
AUG														
09...	.837	1.1	.88	.100	E.055	.049	<10	14.9	5.8	.6	<.004	<.002	<.006	
SEP														
13...	--	1.3	.74	.249	.105	.021	<10	7.0	6.2	5.1	<.004	<.002	E.026	

PLATTE RIVER BASIN

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06753990 LONETREE CREEK NEAR GREELEY, CO--Continued  
(National Water-Quality Assessment Program station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	BEN- FLUR- ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	BUTYL- ATE, WATER, DISS, REC (UG/L) (04028)	CAR- BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBO- FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933)	CYANA- ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	P,P' DDE DISSOLV (UG/L) (34653)	DI- AZINON, DIS- SOLVED (UG/L) (39572)	DI- ELDRIN DIS- SOLVED (UG/L) (39381)	2,6-DI- ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)
DATE	DISUL- FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	ETHAL- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	ETHO- PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	FONOFOS WATER DISS REC (UG/L) (04095)	ALPHA BHC DIS- SOLVED (UG/L) (34253)	LINDANE DIS- SOLVED (UG/L) (39341)	LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA- THION, DIS- SOLVED (UG/L) (39532)	METHYL PARA- THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	METRI- BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)
DATE	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PARA- THION, DIS- SOLVED (UG/L) (39542)	PEB- ULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PER- METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	PRO- METON, WATER, DISS, REC (UG/L) (04037)	PRON- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	PROPA- CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO- PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)
FEB 07...	.089	<.050	<.010	<.002	E.124	<.020	<.005	<.018	E.001	<.003	<.005	<.005	<.002
MAR 12...	.080	<.050	<.010	<.002	<.041	<.020	<.005	<.018	<.003	<.003	<.005	<.005	<.002
APR 02...	.098	<.050	<.010	<.002	<.041	<.020	<.005	<.018	<.003	<.003	<.005	<.005	<.002
MAY 07...	.090	<.050	<.010	<.002	<.041	<.020	<.005	<.018	<.003	<.003	<.005	<.005	<.002
JUN 12...	.080	<.050	<.010	<.002	<.041	E.014	<.005	<.018	E.001	<.003	<.005	<.005	<.002
JUL 05...	.092	<.050	<.010	<.002	E.013	<.020	.015	<.018	E.003	<.003	<.005	.005	<.002
AUG 09...	.092	<.050	<.010	<.002	<.041	<.020	<.005	<.018	<.003	<.003	<.005	<.005	<.002
SEP 13...	.041	<.050	<.010	<.002	<.041	<.020	<.005	<.018	<.003	<.003	E.004	<.005	<.002
FEB 07...	<.021	.027	<.009	<.005	<.003	<.005	<.007	<.035	<.027	<.006	E.013	<.006	<.002
MAR 12...	<.021	.015	<.009	<.005	<.003	<.005	<.004	<.035	<.027	<.006	E.005	<.006	<.002
APR 02...	<.021	E.003	<.009	<.005	<.003	<.005	<.004	<.035	<.027	<.006	E.005	<.006	<.002
MAY 07...	<.021	.009	<.009	<.005	<.003	<.005	<.004	<.035	<.027	<.006	.028	<.006	<.002
JUN 12...	<.021	.009	<.009	<.005	<.003	<.005	<.004	<.035	<.027	<.006	.034	<.006	<.002
JUL 05...	<.021	.023	<.009	<.005	<.003	<.005	<.004	E.019	<.027	<.006	.635	<.006	<.002
AUG 09...	<.021	<.002	<.009	<.005	<.003	<.005	<.004	<.035	<.027	<.006	.026	<.006	<.002
SEP 13...	<.021	<.002	<.009	<.005	<.003	<.005	<.004	<.035	<.027	<.006	E.012	<.006	<.002
FEB 07...	<.007	<.007	<.002	<.010	<.006	<.011	.048	<.004	<.010	<.011	<.023	<.011	E.004
MAR 12...	<.007	<.007	<.002	<.010	<.006	<.011	.035	<.004	<.010	<.011	<.023	<.011	<.016
APR 02...	<.007	<.007	<.002	<.010	<.006	<.011	.038	<.004	<.010	<.011	<.023	<.011	<.016
MAY 07...	<.007	<.007	<.002	<.010	<.006	.011	.032	<.004	<.010	<.011	<.023	<.011	<.016
JUN 12...	<.007	<.007	<.002	.052	<.006	<.011	.032	<.004	<.010	<.011	<.023	<.011	E.003
JUL 05...	<.007	<.007	<.002	.104	<.006	E.002	.021	<.004	<.010	<.011	<.023	<.011	<.016
AUG 09...	<.007	<.007	<.002	.027	<.006	<.011	.056	<.004	<.010	<.011	.244	E.003	<.016
SEP 13...	<.007	<.007	<.002	<.010	<.006	<.011	.030	<.004	<.010	<.011	<.023	<.011	E.006

## PLATTE RIVER BASIN

06753990 LONETREE CREEK NEAR GREELEY, CO--Continued  
(National Water-Quality Assessment Program station)

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER- BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	TRIAL- LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)
FEB 07...	<.034	<.017	<.005	<.002	<.009
MAR 12...	<.034	<.017	<.005	<.002	<.009
APR 02...	<.034	<.017	<.005	<.002	<.009
MAY 07...	<.034	<.017	<.005	<.002	<.009
JUN 12...	<.034	<.017	<.005	<.002	<.009
JUL 05...	<.034	E.005	<.005	<.002	<.009
AUG 09...	<.034	<.017	<.005	<.002	<.009
SEP 13...	<.034	<.017	<.005	<.002	<.009

E Estimated laboratory analysis value.

## SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

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)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
FEB 07...	1145	3.1	62	.52	60
MAR 12...	1045	3.1	19	.16	86
APR 02...	0950	2.9	76	.58	76
MAY 07...	1040	5.4	115	1.7	43
JUN 12...	0940	2.5	18	.12	93
JUL 05...	1310	8.9	501	12	100
AUG 09...	0955	1.4	88	.33	21
SEP 13...	1030	6.2	33	.55	--

06754000 SOUTH PLATTE RIVER NEAR KERSEY, CO

LOCATION.--Lat 40°24'44", long 104°33'46", in NW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec.9, T.5 N., R.64W., Weld County, Hydrologic Unit 10190003, on downstream side of bridge on State Highway 37, 1.9 mi north of railroad in Kersey, and 2.5 mi downstream from Cache la Poudre River.

DRAINAGE AREA.--9,598 mi<sup>2</sup>.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1901 to December 1903, March 1905 to current year. Monthly discharge only for some periods, published in WSP 1310. Published as "at Kersey" 1901-03. Statistical summary computed for 1976 to current year.

REVISED RECORDS.--WSP 1310: 1902, 1906, 1935(M). WSP 1730: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 4,575.77 ft above sea level. See WSP 1710 or 1730 for history of changes prior to July 3, 1935.

REMARKS.--Records fair, except for estimated daily discharges, which are poor. Natural flow of stream affected by transmountain and transbasin diversions, storage reservoirs, power developments, ground-water withdrawals and diversions for irrigation of about 888,000 acres, and return flow from irrigated areas.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	814	746	637	566	713	767	744	432	950	138	224	280
2	782	736	616	546	711	736	770	513	852	140	255	304
3	737	700	620	631	713	720	721	739	853	139	542	315
4	720	691	608	680	726	708	637	1280	985	172	384	317
5	750	739	608	695	727	700	600	2690	1200	162	298	310
6	709	871	598	698	752	694	573	5000	1140	156	266	324
7	750	997	602	682	761	688	550	2990	995	238	264	358
8	750	874	639	679	732	669	547	2160	822	517	359	485
9	767	842	644	688	721	656	507	1760	864	1290	304	1240
10	819	814	642	690	715	657	387	1570	738	1670	465	1180
11	847	805	e620	696	706	694	493	1520	571	1650	540	934
12	805	802	e600	584	733	871	1230	1480	446	1480	498	724
13	794	782	607	520	765	872	e1390	1420	441	1540	395	615
14	760	762	607	510	868	788	1070	1270	920	2170	329	556
15	692	787	598	495	921	653	836	1150	1340	2090	306	560
16	642	774	572	525	952	577	756	1060	e780	1520	330	568
17	621	764	545	642	986	553	785	888	e540	1010	467	565
18	608	762	531	680	953	549	788	940	e320	631	418	563
19	588	771	545	710	941	539	682	926	e210	457	329	579
20	635	779	549	712	1010	514	577	881	238	385	301	569
21	705	779	533	715	1080	498	504	838	240	324	273	523
22	720	836	527	716	1060	587	635	1070	257	298	278	491
23	761	878	541	721	1020	672	1050	790	222	286	242	462
24	962	812	525	715	1000	720	1080	614	201	302	242	437
25	909	778	520	703	899	693	888	543	188	549	238	402
26	900	763	515	708	831	670	777	461	174	310	213	359
27	835	746	529	708	794	744	679	401	165	265	196	334
28	807	696	552	724	769	795	597	439	164	278	190	325
29	791	653	582	745	---	768	523	534	147	242	186	338
30	758	647	595	727	---	748	468	985	131	226	219	350
31	758	---	578	715	---	770	---	1120	---	226	253	---
TOTAL	23496	23386	17985	20526	23559	21270	21844	38464	17094	20861	9804	15367
MEAN	758	780	580	662	841	686	728	1241	570	673	316	512
MAX	962	997	644	745	1080	872	1390	5000	1340	2170	542	1240
MIN	588	647	515	495	706	498	387	401	131	138	186	280
AC-FT	46600	46390	35670	40710	46730	42190	43330	76290	33910	41380	19450	30480

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1976 - 2001, BY WATER YEAR (WY)

	894	953	863	845	858	929	1096	2486	3267	1040	844	809
MEAN	894	953	863	845	858	929	1096	2486	3267	1040	844	809
MAX	3388	2585	1337	1434	1641	1852	3894	13060	14520	5784	2783	2079
(WY)	1985	1985	1985	1984	1984	1983	1983	1980	1983	1983	1984	1984
MIN	415	488	568	503	540	473	144	251	113	183	304	259
(WY)	1978	1978	1982	1982	1978	1982	1982	1977	1977	1994	1981	1977

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1976 - 2001

ANNUAL TOTAL	248154	253656										
ANNUAL MEAN	678	695								a1240		
HIGHEST ANNUAL MEAN										3631		1983
LOWEST ANNUAL MEAN										456		1977
HIGHEST DAILY MEAN				2730	May 18	5000	May 6		b21500	May 31	1995	
LOWEST DAILY MEAN				130	Jul 9	131	Jun 30		c61	Apr 26	1982	
ANNUAL SEVEN-DAY MINIMUM				146	Jul 7	146	Jun 27		63	Apr 25	1982	
MAXIMUM PEAK FLOW						5820	May 6		d22900	May 31	1995	
MAXIMUM PEAK STAGE						8.00	May 6		f11.00	May 31	1995	
ANNUAL RUNOFF (AC-FT)	492200	503100							898300			
10 PERCENT EXCEEDS		1130				1010			2070			
50 PERCENT EXCEEDS		678				682			774			
90 PERCENT EXCEEDS		193				270			315			

e Estimated.

a Average discharge for 71 years (water years 1902-03, 1906-74), 777 ft<sup>3</sup>/s; 562900 acre-ft/yr, prior to completion of Chatfield Dam.

b Maximum daily discharge for period of record, 31000 ft<sup>3</sup>/s, Jun 7, 1921.

c Minimum daily discharge for period of record, 28 ft<sup>3</sup>/s, Apr 30, 1955.

d Maximum discharge and stage for period of record, 31500 ft<sup>3</sup>/s, May 8, 1973, gage height, 11.73 ft.

f Maximum gage height for statistical period, 11.50 ft, May 1, 1999.

## PLATTE RIVER BASIN

06754000 SOUTH PLATTE RIVER NEAR KERSEY, CO--Continued  
(National Water-Quality Assessment Program station)

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1993 to February 1996, May 1997 to current year.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

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)	BICAR- BONATE WATER DIS IT FIELD MG/L AS HCO3 (00453)	
OCT														
OCT	03...	0955	750	1250	8.1	15.2	7.3	416	97.2	41.9	112	2.39	7.35	226
NOV														
NOV	08...	0955	862	1210	7.9	5.2	10.0	399	94.1	39.7	120	2.62	7.24	221
NOV	30...	1040	637	1300	8.0	4.0	9.7	452	106	45.6	116	2.38	7.73	249
JAN														
JAN	04...	1020	656	1260	7.8	2.5	10.7	388	89.0	40.3	110	2.42	8.21	238
FEB														
FEB	05...	1050	701	1320	7.6	4.0	9.9	382	89.9	38.3	117	2.62	8.91	232
MAR														
MAR	15...	1105	629	1270	8.0	5.5	11.4	419	98.6	41.9	118	2.52	8.74	249
APR														
APR	05...	1100	605	1330	8.1	12.9	8.3	438	103	44.0	122	2.53	7.99	239
MAY														
MAY	07...	1440	2750	898	8.0	14.8	7.5	270	66.0	25.6	77.5	2.05	6.89	159
JUN														
JUN	12...	1340	446	1090	8.1	23.7	7.2	379	88.9	38.0	91.5	2.05	6.25	231
JUL														
JUL	05...	0945	173	1470	8.1	20.3	10.7	514	119	53.0	113	2.17	7.36	286
AUG														
AUG	09...	1430	291	1350	8.2	20.5	9.4	481	107	52.1	105	2.08	6.34	248
SEP														
SEP	13...	1330	601	1310	8.1	21.2	7.7	443	100	46.9	105	2.17	6.52	245
DATE		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 DAY) (70302)	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)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N) (00607)
OCT														
OCT	03...	185	330	68.9	1.1	11.4	850	809	1720	1.2	.045	5.84	.287	.550
NOV														
NOV	08...	181	311	71.4	1.0	11.5	820	793	1910	1.1	.048	5.93	.769	.553
NOV	30...	204	343	73.9	1.0	10.4	916	861	1580	1.2	.131	7.04	1.28	.757
JAN														
JAN	04...	197	326	79.0	1.1	11.2	858	819	1520	1.2	.348	7.20	2.21	.890
FEB														
FEB	05...	192	325	97.0	1.1	9.6	914	842	1730	1.2	.302	7.58	3.04	.988
MAR														
MAR	15...	204	327	90.9	1.0	9.4	908	857	1540	1.2	.097	7.71	1.01	.828
APR														
APR	05...	196	348	83.1	1.1	8.2	928	869	1520	1.3	.079	7.18	.202	1.06
MAY														
MAY	07...	130	236	53.2	.7	7.3	610	565	4530	.8	.033	2.85	.095	.624
JUN														
JUN	12...	189	296	52.6	1.0	11.1	750	722	903	1.0	.049	4.93	.165	.403
JUL														
JUL	05...	234	431	68.9	.9	11.5	1070	976	501	1.5	.164	6.38	1.38	.800
AUG														
AUG	09...	203	399	59.7	1.0	11.6	942	888	740	1.3	.087	5.41	.282	.482
SEP														
SEP	13...	201	374	66.0	1.1	11.4	896	857	1450	1.2	.064	5.49	.374	.646

06754000 SOUTH PLATTE RIVER NEAR KERSEY, CO--Continued  
(National Water-Quality Assessment Program station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	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 ORTH- DIS- SOLVED (MG/L AS P) (00671)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC- ULATE TOTAL (MG/L AS C) (00689)	ACETO- CHLOR, WATER FLTRD REC (UG/L) (49260)	ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342)	DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040)	ATRA- ZINE, WATER, DISS, REC (UG/L) (39632)
OCT 03...	1.2	.84	.756	.624	.601	<10	15.5	--	--	<.004	<.002	E.041	.047
NOV 08...	1.7	1.3	.722	.592	.550	M	16.4	4.8	1.9	<.004	<.002	E.048	.049
NOV 30...	2.3	2.0	.854	.714	.691	20	31.9	4.6	7.7	<.004	<.002	E.046	.046
JAN 04...	3.8	3.1	1.26	1.02	1.01	M	55.5	5.3	2.2	<.004	<.002	E.045	.040
FEB 05...	4.4	4.0	1.28	1.13	1.03	10	80.1	5.5	2.2	<.004	<.002	E.041	.035
MAR 15...	2.3	1.8	.986	.852	.777	20	90.1	5.1	1.6	<.004	<.002	E.044	.042
APR 05...	1.6	1.3	.888	.819	.709	M	27.2	4.8	1.3	<.004	<.002	E.029	.039
MAY 07...	2.1	.72	.886	.298	.260	M	12.8	5.9	>5.0	<.004	<.002	E.011	.037
JUN 12...	.80	.57	.601	.523	.490	<10	16.6	4.0	1.3	<.004	<.002	E.036	.049
JUL 05...	2.9	2.2	.952	.772	.663	<10	72.9	4.4	3.2	<.004	<.002	E.030	.096
AUG 09...	1.4	.76	.404	.282	.275	<10	30.5	4.4	1.5	<.004	<.002	<.006	.091
SEP 13...	1.4	1.0	.658	.540	.533	<10	13.6	4.6	1.9	<.004	<.002	E.035	.069
DATE	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	BEN- FLUR- ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	BUTYL- ATE, WATER, DISS, REC (UG/L) (04028)	CAR- BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBO- FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933)	CYANA- ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	P,P' DDE DISSOLV (UG/L) (34653)	DI- AZINON, DIS- SOLVED (UG/L) (39572)	DI- ELDRIN DIS- SOLVED (UG/L) (39381)	2,6-DI- ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	DISUL- FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)
OCT 03...	<.050	<.010	<.002	E.006	<.020	<.005	<.018	<.003	<.003	E.005	<.005	<.002	<.021
NOV 08...	<.050	<.010	<.002	E.018	<.020	<.005	<.018	<.003	<.003	.006	<.005	<.002	<.021
NOV 30...	<.050	<.010	<.002	E.015	<.020	<.005	<.018	<.003	<.003	.006	<.005	<.002	<.021
JAN 04...	<.050	<.010	<.002	E.007	<.020	<.005	<.018	<.003	<.003	.010	<.005	<.002	<.021
FEB 05...	<.050	<.010	<.002	<.125	<.020	<.005	<.018	E.001	<.003	.007	<.005	<.002	<.021
MAR 15...	<.050	<.010	<.002	E.022	<.050	<.005	<.018	<.003	<.003	.012	<.005	<.002	<.021
APR 05...	<.050	<.010	<.002	E.007	<.020	<.005	<.018	.041	<.003	.011	<.005	<.002	<.021
MAY 07...	<.050	<.010	<.002	E.024	<.020	<.005	<.018	E.003	<.003	.051	<.005	<.002	<.021
JUN 12...	<.050	<.010	<.002	E.003	<.020	<.005	<.018	.014	<.003	.010	<.005	<.002	<.021
JUL 05...	<.050	<.010	<.002	E.011	E.006	<.005	<.018	.012	<.003	E.004	.005	<.002	<.021
AUG 09...	<.050	<.010	<.002	E.008	<.020	<.005	<.018	E.003	<.003	.010	<.005	<.002	<.021
SEP 13...	<.050	<.010	<.002	E.003	<.020	<.005	<.018	<.003	<.003	.008	<.005	<.002	<.021

## PLATTE RIVER BASIN

06754000 SOUTH PLATTE RIVER NEAR KERSEY, CO--Continued  
(National Water-Quality Assessment Program station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	ETHAL- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	ETHO- PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	FONOFOS WATER DISS REC (UG/L) (04095)	ALPHA BHC DIS- SOLVED (UG/L) (34253)	LINDANE DIS- SOLVED (UG/L) (39341)	LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA- THION, DIS- SOLVED (UG/L) (39532)	METHYL PARA- THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	METRI- BUZIN WATER DISSOLV (UG/L) (82630)	MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)
OCT 03...	.007	<.009	<.005	<.003	<.005	<.004	<.035	<.027	<.006	E.011	<.006	<.002	<.007
NOV 08...	<.002	<.009	<.005	<.003	<.005	<.004	<.035	<.027	<.006	E.005	<.006	<.002	<.007
NOV 30...	<.002	<.009	<.005	<.003	<.005	<.004	<.035	<.027	<.006	E.006	<.006	<.002	<.007
JAN 04...	<.002	<.009	<.005	<.003	<.005	<.004	<.035	<.027	<.006	E.005	<.006	<.002	<.007
FEB 05...	<.025	<.009	<.005	<.003	<.005	<.010	<.035	<.027	<.006	E.007	<.006	<.002	<.007
MAR 15...	<.004	<.009	<.005	<.003	<.005	<.004	<.035	<.027	<.006	E.009	<.006	<.004	<.007
APR 05...	<.002	<.009	<.005	<.003	<.005	<.004	<.035	<.027	<.006	E.005	<.006	<.002	<.007
MAY 07...	E.004	<.009	<.005	<.003	<.005	<.004	<.035	<.027	<.006	E.010	<.006	<.002	<.007
JUN 12...	.005	<.009	<.005	<.003	<.005	<.004	<.035	<.027	<.006	.395	<.006	<.002	<.007
JUL 05...	.005	<.009	<.005	<.003	<.005	<.004	E.015	<.027	<.006	.165	<.006	<.002	<.007
AUG 09...	E.001	<.009	<.005	<.003	<.005	<.004	<.035	<.027	<.006	.053	<.006	<.002	<.007
SEP 13...	<.002	<.009	<.005	<.003	<.005	<.004	<.035	<.027	<.006	.015	<.006	<.002	<.007
DATE	PARA- THION, DIS- SOLVED (UG/L) (39542)	PEB- ULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PER- METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	PRO- METON, WATER, DISS, REC (UG/L) (04037)	PRON- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	PROPA- CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO- PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU- THURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)
OCT 03...	<.007	<.002	<.010	<.006	<.011	.040	<.004	<.010	<.011	<.023	E.006	.022	<.034
NOV 08...	<.007	<.002	<.010	<.006	<.011	.032	<.004	<.010	<.011	<.023	<.011	E.015	<.034
NOV 30...	<.007	<.002	<.010	<.006	<.011	.034	<.004	<.010	<.011	<.023	<.011	<.016	<.034
JAN 04...	<.007	<.002	<.010	<.006	<.011	.034	<.004	<.010	<.015	<.023	E.004	.023	<.034
FEB 05...	<.007	<.002	<.010	<.006	<.011	.037	<.004	<.010	<.011	<.023	<.011	<.030	<.034
MAR 15...	<.007	<.002	<.010	<.006	<.011	.040	<.004	<.010	<.011	<.023	<.011	.017	<.034
APR 05...	<.007	<.005	<.010	<.006	<.011	.029	<.004	<.010	<.011	<.023	E.003	.017	<.034
MAY 07...	<.007	<.002	.011	<.006	<.011	.022	<.004	<.010	<.011	<.023	<.011	.021	<.034
JUN 12...	<.007	<.002	.030	<.006	<.011	.028	<.004	<.010	<.011	<.023	<.011	E.009	<.034
JUL 05...	<.007	<.002	.112	<.006	<.011	.033	<.004	<.010	<.011	<.023	E.002	E.005	<.034
AUG 09...	<.007	<.002	.028	<.006	<.011	.055	<.004	<.010	<.011	E.016	E.005	E.017	<.034
SEP 13...	<.007	<.002	<.010	<.006	<.011	.036	<.004	<.010	<.011	<.030	<.011	E.012	<.034

PLATTE RIVER BASIN

06754000 SOUTH PLATTE RIVER NEAR KERSEY, CO--Continued  
(National Water-Quality Assessment Program station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TER- BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	TRIAL- LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	TER- BUTHYL- AZINE, WATER, DISS, REC (UG/L) (04022)
OCT					
03...	<.017	<.005	<.002	<.009	E.009
NOV					
08...	<.017	<.005	<.002	<.009	--
30...	<.017	<.005	<.002	<.009	--
JAN					
04...	<.017	<.005	<.002	<.009	E.013
FEB					
05...	<.017	<.005	<.002	<.009	--
MAR					
15...	<.017	<.005	<.002	<.009	--
APR					
05...	<.017	<.005	<.002	<.009	E.002
MAY					
07...	<.017	<.005	<.002	<.009	--
JUN					
12...	<.017	<.005	<.002	<.009	--
JUL					
05...	<.017	<.005	<.002	E.003	--
AUG					
09...	<.017	<.005	<.002	E.001	--
SEP					
13...	<.017	<.005	<.002	<.009	--

E Estimated laboratory analysis value.  
M Presence of material verified but not quantified.

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT					
03...	0955	750	39	79	90
NOV					
08...	0955	862	53	123	79
30...	1040	637	35	60	84
JAN					
04...	1020	656	50	89	83
FEB					
05...	1050	701	37	70	89
MAR					
15...	1105	629	27	46	82
APR					
05...	1100	605	25	41	90
MAY					
07...	1440	2750	452	3360	84
JUN					
12...	1340	446	40	48	76
JUL					
05...	0945	173	105	49	97
AUG					
09...	1430	291	39	31	94
SEP					
13...	1330	601	45	73	--

## PLATTE RIVER BASIN

06758500 SOUTH PLATTE RIVER NEAR WELDONA, CO

LOCATION.--Lat 40°19'19", long 103°55'17", in SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec.7, T.4 N., R.58 W., Morgan County, Hydrologic Unit 10190003, on left bank 500 ft (revised) downstream from bridge on State Highway 144, 2.8 mi southeast of Weldona, and 4.2 mi upstream from Bijou Creek.

DRAINAGE AREA.--13,245 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1952 to current year. Statistical summary computed for 1976 to current year.

REVISED RECORDS.--WSP 1710: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 4,307.80 ft above sea level. Prior to May 2, 1991, gage located 100 ft upstream, at same datum.

REMARKS.--No estimated daily discharges. Records fair. Natural flow of stream affected by transmountain and transbasin diversions, storage reservoirs, power developments, ground-water withdrawals, and diversions for irrigation, and return flow from irrigated areas.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	327	133	244	447	492	510	504	62	773	219	274	175
2	285	199	231	430	496	498	564	49	644	208	293	220
3	267	318	223	405	508	490	549	58	540	208	298	262
4	246	310	213	442	519	482	494	157	627	212	553	273
5	244	332	190	486	528	413	378	1090	806	232	472	251
6	237	356	189	493	535	389	343	3030	1220	241	376	214
7	239	367	193	493	553	380	273	4190	1120	274	358	254
8	260	390	211	494	543	313	203	2540	993	300	335	419
9	253	279	222	496	541	280	185	1860	847	497	405	552
10	252	227	234	496	598	272	193	1530	913	1220	430	929
11	251	202	222	598	604	263	268	1390	814	1420	538	915
12	254	177	275	775	613	263	257	1300	551	1080	614	695
13	250	166	429	623	643	413	963	1280	288	588	568	533
14	244	153	662	447	643	473	1120	1150	230	1100	516	432
15	240	139	696	409	552	424	883	926	645	1280	485	408
16	222	142	701	393	588	358	662	730	843	1020	483	422
17	204	119	688	392	603	320	495	629	411	580	493	461
18	128	109	681	474	616	301	391	557	217	267	593	453
19	108	106	703	500	599	279	344	639	126	134	579	412
20	54	106	598	514	555	282	230	662	98	195	502	395
21	41	111	614	509	613	282	150	661	127	362	311	371
22	92	110	559	511	685	268	147	758	131	282	390	331
23	111	112	524	526	710	151	219	1010	174	269	391	332
24	107	159	559	536	699	99	728	750	141	327	207	312
25	175	151	533	527	686	95	714	561	91	349	112	277
26	166	130	486	517	625	90	622	546	143	763	74	245
27	160	118	455	518	573	115	402	560	131	595	150	210
28	186	118	429	528	540	467	216	490	141	546	138	187
29	192	315	413	529	---	586	141	533	162	586	123	164
30	151	266	424	519	---	442	87	705	238	419	125	157
31	133	---	463	496	---	472	---	916	---	345	106	---
TOTAL	6079	5920	13264	15523	16460	10470	12725	31319	14185	16118	11292	11261
MEAN	196	197	428	501	588	338	424	1010	473	520	364	375
MAX	327	390	703	775	710	586	1120	4190	1220	1420	614	929
MIN	41	106	189	392	492	90	87	49	91	134	74	157
AC-FT	12060	11740	26310	30790	32650	20770	25240	62120	28140	31970	22400	22340

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1976 - 2001, BY WATER YEAR (WY)

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
MEAN	560	517	606	746	695	532	790	1825	2421	786	656	682														
MAX	3119	2298	1266	1443	1562	1494	3226	10130	12310	5121	2208	2118														
(WY)	1985	1985	1986	1984	1984	1983	1983	1980	1983	1995	1984	1984														
MIN	134	100	115	259	231	132	119	183	101	191	237	123														
(WY)	1977	1977	1995	1995	1978	1978	1982	1981	1977	1981	1981	1977														

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1976 - 2001
ANNUAL TOTAL	167653	164616	
ANNUAL MEAN	458	451	a901
HIGHEST ANNUAL MEAN			2995
LOWEST ANNUAL MEAN			231
HIGHEST DAILY MEAN	2050	4190	e,b16300
LOWEST DAILY MEAN	37	41	28
ANNUAL SEVEN-DAY MINIMUM	92	92	30
MAXIMUM PEAK FLOW		4790	c18400
MAXIMUM PEAK STAGE		6.13	10.42
ANNUAL RUNOFF (AC-FT)	332500	326500	652500
10 PERCENT EXCEEDS	975	753	1590
50 PERCENT EXCEEDS	334	402	483
90 PERCENT EXCEEDS	131	132	162

e Estimated.

a Average discharge for 22 years (water years 1953-74), 572 ft<sup>3</sup>/s; 414400 acre-ft/yr, prior to completion of Chatfield Dam.

b Maximum daily discharge for period of record, 20800 ft<sup>3</sup>/s, May 9, 1973.

c Maximum discharge and stage for period of record, 26800 ft<sup>3</sup>/s, May 8, 1973, gage height, 11.68 ft, from rating curve extended above 16000 ft<sup>3</sup>/s.

06758500 SOUTH PLATTE RIVER NEAR WELDONA, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1967 to September 1968, October 1971 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

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)	FECAL STREP, KF STRP MF, WATER (COL/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)	SODIUM AD-SORP-TION RATIO (00931)	
NOV 15...	0930	140	1550	8.4	1.0	12.0	88	170	549	133	52.1	136	2.53	
APR 04...	1110	533	1350	8.6	10.5	10.7	58	56	464	114	43.1	119	2.42	
SEP 06...	1235	226	1530	8.4	23.0	9.6	E20	--	550	131	53.9	139	2.58	
DATE		POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ANC UNFLTRD TIT 4.5 LAB SOLVED (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)
NOV 15...	7.45	249	482	69.9	1.0	16.0	1150	1050	1.6	434	<.001	.058	.003	
APR 04...	7.89	211	377	80.9	1.0	9.9	996	910	1.4	1430	.016	6.35	.041	
SEP 06...	7.49	240	484	77.0	1.1	12.1	1100	1070	1.5	674	.028	4.55	.043	
DATE		NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00665)	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)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	
NOV 15...	.99	.256	.200	<.007	42.8	<1.00	264	E.11	<.8	.86	3.7	<10	.08	
APR 04...	.93	.547	.457	.402	39.7	<1.00	274	E.11	<.8	.86	3.8	<10	.25	
SEP 06...	.77	.229	.146	.136	47.1	<1.00	298	<.10	<.8	.57	6.1	<10	.33	
DATE		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)	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)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)				
NOV 15...		38.5	69.1	5.8	2.80	5.2	<1.0	1490	2.0	4				
APR 04...		31.6	9.7	9.7	1.78	E2.0	<1.0	1220	2.9	10				
SEP 06...		39.5	9.7	6.4	<.06	2.9	<1.0	1480	2.8	4				

E Estimated laboratory analysis value.

PLATTE RIVER BASIN

06759910 SOUTH PLATTE RIVER AT COOPER BRIDGE, NEAR BALZAC, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 40°21'23", long 103°31'39", in SW<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec.33, T.5 N., R.55 W., Morgan County, Hydrologic Unit 10190012, on left bank 0.7 mi downstream from North Sterling Canal, 1.3 mi downstream from Beaver Creek, and 4.3 mi northeast of Snyder.

DRAINAGE AREA.--16,852 mi<sup>2</sup> (Area at downstream site used prior to October 1987).

PERIOD OF RECORD.--April 1993 to September 1995, June to September 2001.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	ACETO- CHLOR, WATER FLTRD REC (UG/L) (49260)	ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342)	DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040)	ATRA- ZINE, WATER, DISS, REC (UG/L) (39632)	METHYL AZIN- PHOS WAT FLT GF, REC (UG/L) (82686)	BEN- FLUR- ALIN WAT FLD GF, REC (UG/L) (82673)	BUTYL- ATE, WATER, DISS, REC (UG/L) (04028)	CAR- BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	
JUN 27...	1100	24.5	12.0	8.3	1800	<.004	<.002	E.015	.055	<.050	<.010	<.002	<.041	
AUG 16...	1500	24.2	9.7	8.8	1570	<.004	<.002	E.032	.052	<.050	<.010	<.002	<.041	
DATE		CARBO- FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933)	CYANA- ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	DI- AZINON, DIS- SOLVED (UG/L) (34653)	DI- ELDRIN DIS- SOLVED (UG/L) (39572)	2,6-DI- ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	DISUL- FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	ETHAL- FLUR- ALIN WAT FLT GF, REC (UG/L) (82663)	ETHO- PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	FONOFOS WATER DISS REC (UG/L) (04095)	
JUN 27...	<.020	<.005	<.018	.005	<.003	<.005	<.005	<.002	<.021	<.002	<.009	<.005	<.003	
AUG 16...	<.020	<.005	<.018	<.003	<.003	<.005	<.005	<.002	<.021	<.002	<.009	<.005	<.003	
DATE		ALPHA BHC DIS- SOLVED (UG/L) (34253)	LINDANE DIS- SOLVED (UG/L) (39341)	LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA- THION, DIS- SOLVED (UG/L) (39532)	METHYL PARA- THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	METO- LACHLOR WATER FLTRD 0.7 U GF, REC (UG/L) (39415)	METRI- BUZIN SENCOR WATER FLTRD 0.7 U GF, REC (UG/L) (82630)	MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PEB- ULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PER- CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	
JUN 27...	<.005	<.004	<.035	<.027	<.006	.022	<.006	<.002	<.007	<.007	<.002	<.010	<.006	
AUG 16...	<.005	<.004	<.035	<.027	<.006	.013	<.006	<.002	<.007	<.007	<.002	<.010	<.006	
DATE		PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	PRO- METON, WATER, DISS, REC (UG/L) (04037)	PRON- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	PROPA- CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO- PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER- BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	TRIAL- LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)
JUN 27...	<.011	.016	<.004	<.010	<.011	<.023	<.011	<.016	<.034	<.017	<.005	<.002	<.009	
AUG 16...	<.011	.025	<.004	<.010	<.011	<.023	<.011	E.009	<.034	<.017	<.005	<.002	<.009	
DATE						CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC- ULATE TOTAL (MG/L AS C) (00689)							
JUN 27...								3.6	.5					
AUG 16...								5.7	3.1					

E Estimated laboratory analysis value.



PLATTE RIVER BASIN

06764000 SOUTH PLATTE RIVER AT JULESBURG, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1945 to September 1995, June to September 2001.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	PH WATER FIELD (STAND- ARD UNITS) (00400)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	ACETO- CHLOR, WATER FLTRD REC (UG/L) (49260)	ALA- CHLOR, WATER, DISS, REC, (UG/L) (46342)	DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040)	METHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (39632)	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	BEN- FLUR- ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)	BUTYL- ATE, WATER, DISS, REC (UG/L) (04028)	CAR- BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	
JUN 19...	1130	18.3	12.8	8.5	1850	<.004	<.002	E.020	.135	<.050	<.010	<.002	<.041	
AUG 16...	1030	22.0	9.9	8.3	1950	<.004	<.002	E.079	.092	<.050	<.010	<.002	<.041	
DATE		CARBO- FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933)	CYANA- ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	P, P' DDE DISSOLV (UG/L) (34653)	DI- AZINON, DIS- SOLVED (UG/L) (39572)	DI- ELDRIN DIS- SOLVED (UG/L) (39381)	2,6-DI- ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	DISUL- FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	ETHAL- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	ETHO- PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	FONOFOS WATER DISS REC (UG/L) (04095)
JUN 19...	E.006	<.005	<.018	<.003	<.003	<.005	<.005	<.002	<.021	.017	<.009	<.005	<.003	
AUG 16...	<.020	<.005	<.018	<.003	<.003	<.005	<.005	<.002	<.021	<.002	<.009	<.005	<.003	
DATE		ALPHA BHC DIS- SOLVED (UG/L) (34253)	LINDANE DIS- SOLVED (UG/L) (39341)	LIN- URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA- THION, DIS- SOLVED (UG/L) (39532)	METHYL PARA- THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	METO- LACHLOR WATER FLTRD 0.7 U DISSOLV (UG/L) (39415)	METRI- BUZIN WATER FLTRD 0.7 U DISSOLV (UG/L) (82630)	MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PARA- THION, DIS- SOLVED (UG/L) (39542)	PEB- ULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PER- METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)
JUN 19...	<.005	<.004	<.035	<.027	<.006	.015	<.006	<.002	<.007	<.007	<.002	<.010	<.006	
AUG 16...	<.005	<.004	<.035	<.027	<.006	E.011	<.006	<.002	<.007	<.007	<.002	<.010	<.006	
DATE		PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	PRO- METON, WATER, DISS, REC (UG/L) (04037)	PRON- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	PROPA- CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO- PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO- PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER- BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	TRIAL- LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)
JUN 19...	<.011	.020	<.004	<.010	<.011	<.023	<.011	<.016	<.034	<.017	<.005	<.002	<.009	
AUG 16...	<.011	.015	<.004	<.010	<.011	<.023	<.011	E.006	<.034	<.017	<.005	<.002	<.009	
DATE								CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC PARTIC- ULATE TOTAL (MG/L AS C) (00689)					
JUN 19...								4.1	1.6					
AUG 16...								4.4	.6					

E Estimated laboratory analysis value.

07079300 EAST FORK ARKANSAS RIVER AT HIGHWAY 24 NEAR LEADVILLE, CO

LOCATION.--Lat 39°16'21", long 106°18'21", in NW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec.14, T.9 S., R.80 W., Lake County, Hydrologic Unit 11020001, on right bank 20 ft downstream from U.S. Highway 24, 0.4 mi downstream from Leadville Mine Drainage Tunnel, 1.5 mi northwest of Leadville, and 2.2 mi upstream from Tennessee Creek.

DRAINAGE AREA.--49.9 mi<sup>2</sup>.

PERIOD OF RECORD.--May 1990 to current year. Water-quality data available, May 1990 to September 1996.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 9,900 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 (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 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	16	e12	e10	e9.0	e9.0	10	37	274	93	45	29
2	20	16	e12	e10	e9.0	e9.0	10	45	333	86	43	27
3	19	15	e12	e10	e9.0	e9.0	9.8	35	315	80	42	26
4	19	15	e12	e9.5	e9.0	e9.0	10	31	254	79	47	25
5	20	15	e12	e9.5	e9.0	e9.0	10	30	199	74	44	24
6	20	e15	e12	e9.0	e9.0	e9.0	10	29	208	71	49	24
7	19	e15	e12	e9.0	e9.0	e9.0	9.7	30	250	70	90	26
8	19	e15	e12	e9.0	e9.0	e9.0	9.7	31	246	72	67	27
9	19	e14	e12	e9.0	e9.0	e9.0	9.8	35	219	90	72	27
10	18	e15	e12	e9.0	e9.0	e8.9	9.9	38	197	126	60	26
11	18	e15	e12	e9.0	e9.0	e8.7	10	45	196	106	54	24
12	17	e14	e12	e9.0	e9.0	e8.5	10	60	186	131	47	23
13	17	e14	e12	e9.0	e9.0	e8.3	10	79	165	134	45	22
14	17	e14	e12	e9.0	e9.0	e8.1	11	98	136	116	53	25
15	17	e14	e12	e9.0	e9.0	e8.0	11	122	121	109	49	24
16	16	e13	e12	e9.0	e9.0	e8.0	12	145	110	95	44	22
17	16	e13	e12	e9.0	e9.0	e7.9	13	147	105	83	40	24
18	16	e13	e12	e9.0	e9.0	e7.8	15	129	108	74	37	25
19	16	e13	e12	e9.0	e9.0	e8.0	15	137	112	68	35	23
20	16	e12	e12	e9.0	e9.0	e8.5	14	147	115	63	36	22
21	16	e12	e11	e8.8	e9.0	9.0	13	147	110	60	41	21
22	16	e12	e11	e8.3	e9.0	9.3	13	117	114	61	35	21
23	16	e12	e11	e8.0	e9.0	9.4	12	130	110	56	32	20
24	18	e12	e11	e8.5	e9.0	9.8	13	165	103	57	31	20
25	17	e12	e11	e9.0	e9.0	10	15	202	106	57	30	19
26	16	e12	e11	e9.0	e9.0	10	17	223	108	56	29	19
27	16	e12	e11	e9.0	e9.0	11	18	228	128	56	27	19
28	17	e12	e10	e9.0	e9.0	10	23	286	106	50	27	19
29	17	e12	e10	e9.0	---	9.8	25	284	105	45	27	19
30	16	e12	e10	e9.0	---	10	29	267	103	41	26	19
31	16	---	e10	e9.0	---	10	---	266	---	42	28	---
TOTAL	541	406	357	280.6	252.0	280.0	397.9	3765	4942	2401	1332	691
MEAN	17.5	13.5	11.5	9.05	9.00	9.03	13.3	121	165	77.5	43.0	23.0
MAX	21	16	12	10	9.0	11	29	286	333	134	90	29
MIN	16	12	10	8.0	9.0	7.8	9.7	29	103	41	26	19
AC-FT	1070	805	708	557	500	555	789	7470	9800	4760	2640	1370

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 2001, BY WATER YEAR (WY)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
MEAN	19.2	14.8	12.2	10.5	10.2	10.4	14.0	99.1	225	97.5	41.9	25.2
MAX	23.4	18.1	15.4	13.0	13.3	13.0	19.8	205	404	266	75.1	32.2
(WY)	2000	1996	1996	1996	1997	1997	1996	1996	1996	1995	1995	1995
MIN	15.1	10.8	10.1	9.05	7.10	8.74	10.5	38.4	133	42.2	23.5	19.3
(WY)	1995	1992	1992	2001	1993	1995	1993	1995	1998	1994	1994	1994

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	FOR 1999 CALENDAR YEAR	FOR 1998 CALENDAR YEAR	FOR 1997 CALENDAR YEAR
ANNUAL TOTAL	15701.6	15645.5	15701.6	15645.5	15701.6
ANNUAL MEAN	42.9	42.9	42.9	42.9	42.9
HIGHEST ANNUAL MEAN			49.2	73.0	1996
LOWEST ANNUAL MEAN			34.5	34.5	1994
HIGHEST DAILY MEAN	550	May 30	333	Jun 2	811
LOWEST DAILY MEAN	e9.5	Mar 1	e7.8	Mar 18	6.0
ANNUAL SEVEN-DAY MINIMUM	e9.8	Feb 25	e8.0	Mar 13	6.7
MAXIMUM PEAK FLOW			428	Jun 2	a1010
MAXIMUM PEAK STAGE			3.84	Jun 2	4.23
ANNUAL RUNOFF (AC-FT)	31140	31030	31140	31030	31140
10 PERCENT EXCEEDS	95	116	95	116	136
50 PERCENT EXCEEDS	17	16	17	16	18
90 PERCENT EXCEEDS	10	9.0	10	9.0	9.8

e Estimated.  
a From rating curve extended above 517 ft<sup>3</sup>/s.





ARKANSAS RIVER BASIN

07083000 HALFMOON CREEK NEAR MALTA, CO--Continued  
(Hydrologic Benchmark station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1966 to March 1996, May to September 2001.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: May 1967 to September 1982.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

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)	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)	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)
MAY 08...	1310	15	82	7.9	10.5	6.8	8.22	3.22	1.1	.55	33	4.6	.3
JUN 07...	1030	132	50	7.0	4.3	--	5.98	2.19	.7	.41	22	2.7	.2
JUL 05...	1500	61	61	7.7	11.6	8.0	7.30	2.51	.9	.47	26	4.0	.1
SEP 05...	1300	18	88	7.0	8.7	8.4	10.1	3.70	1.2	.58	40	5.4	.2

DATE	SILICA, DIS-SOLVED (MG/L) AS SIO2 (00955)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L) AS N (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L) AS N (00608)	NITRO-GEN, AMMONIA + 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)
MAY 08...	5.0	.104	.003	<.10	<.006	<.007	1.7
JUN 07...	3.5	.108	.005	E.05	<.006	<.007	1.4
JUL 05...	3.8	.074	<.002	--	--	--	.71
SEP 05...	5.0	.118	.002	<.10	<.006	<.007	.61

E Estimated laboratory analysis value.

MISCELLANEOUS FIELD MEASUREMENTS, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

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 04...	1215	14	84	7.2	MAY 02...	1330	33	64	1.6
NOV 01...	1400	10	95	.5	08...	1530	16	81	12.1
DEC 06...	1300	4.8	92	.2	24...	1430	84	56	8.0
JAN 04...	1130	4.5	95	.1	JUN 06...	1930	171	48	7.7
FEB 08...	1150	4.2	100	.1	07...	0940	134	50	3.8
MAR 08...	1030	3.2	94	.2	JUL 05...	1440	61	61	12.2
APR 05...	1305	5.3	97	1.8	AUG 02...	1200	30	75	11.3
					SEP 05...	1245	18	88	8.7

07086000 ARKANSAS RIVER AT GRANITE, CO

LOCATION.--Lat 39°02'34", long 106°15'55", in SE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec.31, T.11 S., R.79 W., Chaffee County, Hydrologic Unit 11020001, on right bank at Granite, 100 ft east of U.S. Highway 24, 100 ft downstream from county bridge, and 200 ft upstream from Cache Creek.

DRAINAGE AREA.--427 mi<sup>2</sup>.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April to October 1895, May to December 1897, August to September 1898, March to October 1899, April to May 1901 (gage heights and discharge measurements only in 1895, 1899, and 1901), April 1910 to current year. Monthly discharge only for some periods, published in WSP 1311.

REVISED RECORDS.--WSP 1117: Drainage area. WSP 1711: 1952, 1956(M).

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 8,914.86 ft above sea level, supplementary adjustment of 1960. Prior to Apr. 6, 1910, nonrecording gages near present site at different datums. Apr. 6, 1910 to Oct. 25, 1917, water-stage recorder or nonrecording gage at site 832 ft upstream, at different datum. Oct. 26, 1917 to Oct. 26, 1960, water-stage recorder at site 168 ft downstream, at present datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. Diversions upstream from station for irrigation of about 6,700 acres. Turquoise Lake and Twin Lakes Reservoir, on tributaries upstream from station, have a combined capacity of 269,700 acre-ft. Transmountain diversions from Colorado River basin to Arkansas River basin enter upstream from this 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 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	134	114	222	e204	e186	212	109	312	1320	725	401	163
2	155	121	e217	e207	e188	e205	130	347	1570	631	369	131
3	229	134	218	e208	191	e206	145	252	1610	567	351	126
4	218	129	215	e205	192	e203	158	216	1520	502	344	121
5	225	134	220	e200	192	e190	158	216	1390	498	346	134
6	190	122	224	201	199	168	140	219	1130	498	315	136
7	129	115	222	e199	204	155	120	229	985	508	401	146
8	125	126	223	e197	206	156	117	236	1020	491	284	149
9	125	125	224	e194	e202	161	107	253	1120	542	382	148
10	126	119	222	196	e200	161	123	268	1190	680	403	142
11	125	125	e221	e194	e198	159	139	303	1260	710	390	136
12	125	e113	e219	e193	202	159	133	357	1390	750	408	131
13	123	e110	e218	195	e200	159	133	436	1460	625	422	131
14	117	e111	e214	e193	e195	150	135	562	1410	565	417	145
15	114	e114	e212	e190	e196	e105	135	695	1240	566	327	138
16	113	e167	e210	e189	e192	e95	148	891	1010	540	211	130
17	114	e215	e208	e191	e195	104	166	990	914	465	194	151
18	112	216	e215	e189	e203	96	188	838	754	549	182	185
19	110	212	e213	e187	206	e95	185	826	683	456	173	140
20	111	215	e215	e188	204	104	178	847	692	412	177	133
21	108	214	e214	e185	208	120	150	871	691	414	201	130
22	108	221	e216	e187	203	125	146	806	820	414	183	124
23	113	221	214	189	e201	122	133	815	1060	405	172	119
24	135	217	e215	e187	e202	124	141	1050	1190	409	158	111
25	130	219	217	190	e201	127	170	1300	1220	406	150	112
26	120	208	208	190	e200	122	182	1440	1170	396	148	111
27	118	226	e205	e189	e205	121	201	1500	1140	386	140	110
28	127	226	211	e187	214	113	231	1550	830	366	172	109
29	126	225	e210	e189	---	108	245	1540	812	377	188	107
30	116	226	e208	e186	---	105	262	1380	768	403	184	107
31	119	---	209	e185	---	104	---	1180	---	415	192	---
TOTAL	4140	5040	6679	5984	5585	4334	4708	22725	33369	15671	8385	3957
MEAN	134	168	215	193	199	140	157	733	1112	506	270	132
MAX	229	226	224	208	214	212	262	1550	1610	750	422	185
MIN	108	110	205	185	186	95	107	216	683	366	140	107
AC-FT	8210	10000	13250	11870	11080	8600	9340	45080	66190	31080	16630	7850

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1910 - 2001, BY WATER YEAR (WY)

	1910	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
MEAN	156	130	109	108	114	130	238	699	1282	899	535	244																																																																																
MAX	356	337	448	419	526	500	667	1711	2146	2367	1239	546																																																																																
(WY)	1977	1983	1983	1983	1985	1985	1962	1984	1984	1983	1984	1961																																																																																
MIN	82.4	64.3	48.5	39.8	45.0	55.0	97.1	191	432	217	151	104																																																																																
(WY)	1932	1945	1977	1918	1919	1919	1933	1935	1934	1934	1934	1990																																																																																

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1910 - 2001
ANNUAL TOTAL	144666	120577	
ANNUAL MEAN	395	330	389
HIGHEST ANNUAL MEAN			687 1984
LOWEST ANNUAL MEAN			188 1934
HIGHEST DAILY MEAN	2270	May 31 1610	Jun 3 4990 Jun 30 1957
LOWEST DAILY MEAN	94	Apr 2 e95	Mar 16 11 Mar 15 1918
ANNUAL SEVEN-DAY MINIMUM	106	Mar 30 103	Mar 15 31 Jan 10 1918
MAXIMUM PEAK FLOW		1710	Jun 3 5360 Jun 28 1957
MAXIMUM PEAK STAGE		4.84	Jun 3 7.20 Jun 28 1957
ANNUAL RUNOFF (AC-FT)	286900	239200	281500
10 PERCENT EXCEEDS	1060	828	1040
50 PERCENT EXCEEDS	200	201	174
90 PERCENT EXCEEDS	125	117	75

e Estimated.

## WATER-QUALITY RECORDS

## PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1993 to current year.

WATER TEMPERATURE: October 1993 to current year.

INSTRUMENTATION.--Water-quality monitor with satellite telemetry.

REMARKS.--Records for daily specific conductance are good except for Dec. 11 to Mar. 19, which are fair. Records for daily water temperature are good. Daily data that are not published are either missing or of unacceptable quality. Reported values are representative of the stream based on cross-section comparisons made during the year.

## EXTREMES FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 249 microsiemens/cm, Jan. 16, 1996 and Oct. 1, 1997; minimum, 63 microsiemens/cm, June 10, 2000.

WATER TEMPERATURE: Maximum, 19.1°C, Aug. 3, 2001; minimum, 0.0°C, on many days.

## EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 204 microsiemens/cm, Oct. 26; minimum, 67 microsiemens/cm, May 26-28, June 24-25.

WATER TEMPERATURE: Maximum, 19.1°C, Aug. 3; minimum 0.0°C, on many days.

## SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	183	178	181	192	186	188	125	103	112	106	101	103
2	184	126	170	192	178	187	127	104	112	111	98	104
3	143	125	136	181	171	175	127	106	113	113	107	110
4	143	140	142	180	164	170	128	103	112	116	106	111
5	145	135	140	174	165	169	128	108	116	115	102	110
6	177	132	146	169	162	166	128	111	118	110	102	106
7	180	173	176	181	163	170	129	107	114	110	102	105
8	180	175	178	185	171	179	117	106	110	105	98	102
9	180	176	178	183	170	177	115	107	110	110	106	108
10	194	178	185	182	165	172	122	101	109	116	105	110
11	195	188	191	177	166	170	113	105	108	110	102	106
12	194	190	192	173	163	168	121	101	107	110	98	104
13	193	188	190	185	162	172	122	107	114	107	99	104
14	191	179	183	176	162	169	124	109	116	105	102	104
15	186	175	180	183	167	176	117	106	111	102	98	100
16	185	174	180	177	141	162	113	96	100	110	96	104
17	196	181	187	141	114	127	117	96	104	112	106	108
18	196	186	191	128	112	116	114	98	106	110	107	109
19	195	181	186	131	106	115	127	95	106	107	100	104
20	185	176	181	131	106	114	123	113	116	103	98	101
21	184	178	181	135	105	115	117	107	113	102	98	101
22	185	176	181	133	115	121	116	109	113	103	97	101
23	185	179	181	135	118	123	114	109	111	108	98	104
24	198	181	192	134	107	117	111	105	107	109	101	106
25	200	189	194	128	108	114	111	107	109	109	103	106
26	204	189	194	121	103	111	109	104	106	106	101	104
27	202	181	189	124	109	115	118	106	110	106	101	103
28	189	179	183	126	113	117	116	107	113	106	101	104
29	185	179	182	137	110	119	110	104	107	104	101	103
30	186	176	181	127	112	120	112	105	109	107	103	105
31	192	182	186	---	---	---	110	104	108	110	103	106
MONTH	204	125	179	192	103	147	129	95	110	116	96	105



## ARKANSAS RIVER BASIN

07086000 ARKANSAS RIVER AT GRANITE, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	13.4	6.2	9.8	3.0	.3	1.5	2.1	.0	.6	2.7	.0	.7
2	13.4	6.1	9.9	5.0	.4	2.4	2.8	.0	.8	2.2	.0	.5
3	13.3	8.7	10.7	5.5	1.3	3.1	3.2	.1	1.1	2.6	.0	.7
4	11.5	9.0	10.0	5.6	.3	3.1	3.2	.1	1.1	3.0	.0	.9
5	12.6	7.3	9.7	4.3	.4	2.5	3.4	.6	1.5	3.1	.0	1.0
6	11.1	6.5	8.7	2.6	.0	.8	2.6	.0	.8	3.0	.1	1.0
7	9.6	4.4	6.6	1.7	.0	.3	2.8	.6	1.2	2.6	.0	.8
8	10.1	4.7	6.9	2.9	.0	.8	2.3	.7	1.2	2.4	.0	.5
9	11.4	5.1	7.7	2.1	.0	.8	2.4	.5	1.1	2.0	.0	.7
10	9.6	4.3	7.1	1.7	.0	.7	2.4	.0	1.0	2.6	.2	1.0
11	9.0	4.3	6.8	2.8	.1	1.2	1.1	.0	.2	2.9	.0	.8
12	10.7	5.4	7.6	.9	.0	.1	1.4	.0	.4	2.4	.0	.8
13	9.1	4.0	6.1	.0	.0	.0	1.7	.0	.4	1.7	.1	.8
14	9.2	2.1	5.3	.0	.0	.0	2.1	.0	.7	2.2	.0	.7
15	8.2	1.4	4.9	.1	.0	.0	1.8	.0	.5	1.9	.0	.5
16	8.8	1.6	5.2	.4	.0	.0	.8	.0	.1	1.5	.0	.5
17	8.7	1.8	5.3	1.2	.0	.2	2.0	.0	.4	2.4	.0	.6
18	9.1	1.9	5.7	1.8	.0	.4	.5	.0	.1	2.4	.0	.6
19	8.3	2.2	5.5	3.0	.2	1.2	1.8	.0	.5	2.7	.0	.8
20	8.6	2.4	5.7	3.2	.5	1.5	1.8	.0	.7	2.0	.0	.8
21	7.0	2.0	4.9	3.4	.2	1.5	2.1	.0	.6	2.9	.0	.8
22	5.4	1.8	3.9	3.6	1.2	1.8	2.4	.2	.8	2.9	.0	1.0
23	7.7	3.6	5.3	3.5	1.0	1.8	2.4	.0	1.0	3.2	.2	1.3
24	8.0	4.0	5.6	3.5	.7	1.5	2.0	.0	.7	2.9	.0	.9
25	6.5	1.6	4.2	3.2	.6	1.4	1.8	.1	.8	2.9	.3	1.0
26	6.7	.9	4.0	2.6	.5	1.2	2.2	.0	.5	2.4	.0	.7
27	6.5	1.8	4.4	2.9	.7	1.6	2.2	.0	.6	1.5	.1	.7
28	6.5	3.3	4.9	2.3	.7	1.4	2.3	.1	.8	2.5	.0	.8
29	7.1	3.3	5.1	3.2	.3	1.3	2.2	.0	.6	2.2	.0	.5
30	6.7	1.6	4.1	2.8	.5	1.3	2.2	.0	.7	2.3	.0	.5
31	4.0	1.3	2.4	---	---	---	2.1	.0	.8	2.3	.0	.4
MONTH	13.4	.9	6.3	5.6	.0	1.2	3.4	.0	.7	3.2	.0	.8
	FEBRUARY			MARCH			APRIL			MAY		
1	2.2	.0	.5	3.3	.2	1.1	9.9	1.8	5.4	13.1	3.2	8.2
2	2.8	.0	.8	3.5	.2	.9	9.6	2.6	5.6	9.0	2.5	5.2
3	2.0	.4	1.1	3.1	.2	.9	8.9	1.4	5.2	3.5	.2	1.9
4	3.3	.5	1.3	4.2	.2	1.3	9.9	1.6	5.5	5.7	.3	2.6
5	3.6	.2	1.3	3.8	.2	1.3	7.4	1.5	4.5	8.7	.2	3.8
6	3.7	.1	1.5	3.6	.3	1.4	6.0	2.2	3.6	11.2	1.7	6.3
7	3.0	.8	1.4	3.4	.4	1.5	7.5	.3	3.7	12.8	2.9	7.7
8	1.7	.0	.8	5.0	.3	1.8	8.1	2.0	4.8	14.3	3.6	8.8
9	2.9	.0	.7	4.3	.1	1.6	9.4	.2	4.4	13.2	4.7	9.0
10	3.0	.0	.7	2.0	.1	.7	4.9	1.2	3.0	10.9	4.8	7.9
11	2.9	.0	.9	3.4	.0	.9	5.7	.2	2.6	13.9	4.3	8.9
12	3.5	.1	1.0	4.1	.0	1.0	6.2	.2	3.0	13.2	6.5	9.9
13	3.2	.1	.9	4.6	.0	1.3	8.8	.3	4.1	12.9	5.2	9.1
14	2.8	.1	1.1	2.0	.0	.3	8.5	.9	4.3	11.9	5.7	8.9
15	3.2	.1	.8	3.0	.0	.7	9.9	.7	5.0	12.5	5.6	9.2
16	3.2	.1	.8	1.5	.0	.4	10.6	1.6	5.8	11.1	6.2	8.8
17	3.8	.1	1.0	3.4	.0	1.0	11.5	2.0	6.5	9.3	6.7	7.9
18	3.2	.1	.9	2.7	.0	.8	11.6	2.1	6.9	11.8	6.3	9.1
19	4.0	.2	1.3	5.0	.0	1.4	11.6	3.7	7.3	11.0	7.9	9.3
20	4.0	.2	1.2	5.9	.0	2.0	7.1	2.8	4.5	11.5	6.5	8.8
21	3.3	.3	1.3	5.7	.0	1.8	5.5	1.1	3.6	9.5	4.7	7.2
22	2.7	.4	1.1	3.9	.7	2.1	5.3	.3	2.7	10.6	4.7	7.6
23	2.8	.1	1.0	7.1	1.2	3.4	8.4	.2	3.9	11.2	6.0	8.6
24	3.4	.1	.9	7.5	1.7	4.1	11.8	1.0	6.1	10.2	6.6	8.6
25	3.9	.1	1.1	7.0	1.5	3.9	12.8	2.6	7.6	10.3	6.8	8.7
26	2.7	.2	.9	6.4	1.5	3.7	13.7	3.3	8.3	9.9	7.4	8.8
27	3.2	.2	1.1	7.4	1.1	3.7	13.4	3.4	8.1	11.1	7.0	9.0
28	3.1	.2	.9	5.3	.1	2.6	10.5	3.4	7.0	10.8	8.0	9.3
29	---	---	---	6.6	.1	3.0	12.4	3.3	7.5	10.2	7.3	8.7
30	---	---	---	6.3	.2	3.2	12.7	3.4	8.0	11.8	7.7	9.7
31	---	---	---	8.3	.8	4.3	---	---	---	12.5	7.5	10.0
MONTH	4.0	.0	1.0	8.3	.0	1.9	13.7	.2	5.3	14.3	.2	8.0



## ARKANSAS RIVER BASIN

07087050 ARKANSAS RIVER BELOW GRANITE, CO

LOCATION.--Lat 38°59'42", long 106°13'11", in SW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec.22, T.12 S., R.79 W., Chaffee County, Hydrologic Unit 11020001, on right bank 500 ft east of U.S. Highway 24, 1.0 mi downstream from Pine Creek, and 4.8 mi southeast of Granite.

DRAINAGE AREA.--546 mi<sup>2</sup>.

PERIOD OF RECORD.--March 1999 to current year (seasonal records only).

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 8,620 ft above sea level, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are fair. Natural flow of stream affected by transmountain diversions (see elsewhere in this report), storage reservoirs, power development, 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.

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum discharge, 3,280 ft<sup>3</sup>/s, May 31, 2000, gage height, 8.06 ft; minimum daily, 115 ft<sup>3</sup>/s, Apr. 10-12, 1999.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum discharge, 2,370 ft<sup>3</sup>/s, June 3, gage height, 7.30 ft; minimum daily, 125 ft<sup>3</sup>/s, Apr. 1.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	125	364	1810	963	711	245
2	---	---	---	---	---	---	142	414	2170	849	682	205
3	---	---	---	---	---	---	156	309	2180	770	661	201
4	---	---	---	---	---	---	172	274	2000	684	645	235
5	---	---	---	---	---	---	180	275	1770	672	649	218
6	---	---	---	---	---	---	158	279	1500	667	622	203
7	---	---	---	---	---	---	140	308	1430	676	674	207
8	---	---	---	---	---	---	138	315	1470	665	491	222
9	---	---	---	---	---	---	131	335	1540	703	566	220
10	---	---	---	---	---	---	144	351	1580	847	593	206
11	---	---	---	---	---	---	158	401	1640	906	573	193
12	---	---	---	---	---	---	152	470	1790	939	596	187
13	---	---	---	---	---	---	152	645	1870	798	647	188
14	---	---	---	---	---	---	154	831	1740	733	661	204
15	---	---	---	---	---	---	155	1070	1550	737	607	197
16	---	---	---	---	---	---	167	1290	1290	727	427	190
17	---	---	---	---	---	---	186	1370	1180	658	356	214
18	---	---	---	---	---	---	211	1200	973	735	318	259
19	---	---	---	---	---	---	211	1150	917	722	289	204
20	---	---	---	---	---	---	204	1160	953	725	280	175
21	---	---	---	---	---	---	173	1200	946	724	341	181
22	---	---	---	---	---	---	172	1150	1060	723	338	184
23	---	---	---	---	---	---	175	1170	1320	708	323	182
24	---	---	---	---	---	---	187	1420	1440	710	283	173
25	---	---	---	---	---	---	203	1720	1450	712	265	166
26	---	---	---	---	---	---	221	e1900	1440	702	246	165
27	---	---	---	---	---	---	242	e2000	1430	690	217	164
28	---	---	---	---	---	---	277	e2150	1110	668	191	162
29	---	---	---	---	---	---	292	2130	1080	673	212	162
30	---	---	---	---	---	---	307	1860	1020	706	204	162
31	---	---	---	---	---	---	---	1580	---	726	232	---
TOTAL	---	---	---	---	---	---	5485	31091	43649	22918	13900	5874
MEAN	---	---	---	---	---	---	183	1003	1455	739	448	196
MAX	---	---	---	---	---	---	307	2150	2180	963	711	259
MIN	---	---	---	---	---	---	125	274	917	658	191	162
AC-FT	---	---	---	---	---	---	10880	61670	86580	45460	27570	11650

e Estimated.

07091200 ARKANSAS RIVER NEAR NATHROP, CO

LOCATION.--Lat 38°39'08", long 106°03'02", in SE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec.23, T.51 N., R.8 E., Chaffee County, Hydrologic Unit 11020001, on right bank 300 ft upstream from end of Chaffee County Road 194 in Browns Canyon, 3.7 mi downstream from Browns Creek, 6.7 mi south of Nathrop, and 9 mi north of Salida.

DRAINAGE AREA.--1,060 mi<sup>2</sup>.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1964 to September 1982. April 1989 to September 1993. October 1993 to current year (seasonal records only).

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 7,350 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 (see elsewhere in this report), storage reservoirs, power development, diversions for irrigation, and return flow from irrigated areas.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge (occurred during period of seasonal record), 5,540 ft<sup>3</sup>/s, July 14, 1995, gage height, 8.63 ft, from rating curve extended above 5,500 ft<sup>3</sup>/s; maximum gage height, 9.94 ft, Aug. 31, 1972 (backwater from unnamed tributary); minimum daily, 95 ft<sup>3</sup>/s, Feb. 25-27, 1977.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum discharge, 2,500 ft<sup>3</sup>/s, June 3, gage height, 6.68 ft; minimum daily, 215 ft<sup>3</sup>/s (estimated), April 9.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	249	383	1970	1070	807	408
2	---	---	---	---	---	---	250	458	2270	938	780	355
3	---	---	---	---	---	---	253	413	2370	877	743	345
4	---	---	---	---	---	---	257	353	2160	761	706	359
5	---	---	---	---	---	---	270	358	1990	738	697	367
6	---	---	---	---	---	---	262	361	1700	729	829	342
7	---	---	---	---	---	---	e235	408	1550	713	848	346
8	---	---	---	---	---	---	e220	415	1570	714	723	352
9	---	---	---	---	---	---	e215	423	1640	734	665	361
10	---	---	---	---	---	---	e225	428	1700	861	731	343
11	---	---	---	---	---	---	e235	477	1730	947	719	324
12	---	---	---	---	---	---	e230	545	1810	968	696	319
13	---	---	---	---	---	---	e233	676	1890	865	758	315
14	---	---	---	---	---	---	238	893	1800	777	804	325
15	---	---	---	---	---	---	238	1150	1680	760	813	324
16	---	---	---	---	---	---	244	1510	1370	778	670	310
17	---	---	---	---	---	---	256	1690	1220	660	556	313
18	---	---	---	---	---	---	269	1450	1050	724	511	364
19	---	---	---	---	---	---	273	1370	914	725	493	336
20	---	---	---	---	---	---	270	1360	975	717	485	305
21	---	---	---	---	---	---	254	1440	1000	736	485	293
22	---	---	---	---	---	---	251	1310	1030	736	483	298
23	---	---	---	---	---	---	248	1320	1340	733	469	294
24	---	---	---	---	---	---	256	1550	1460	748	435	289
25	---	---	---	---	---	---	259	1950	1550	748	410	281
26	---	---	---	---	---	---	272	2060	1450	758	401	274
27	---	---	---	---	---	---	280	2170	1660	745	371	268
28	---	---	---	---	---	---	309	2270	1210	727	364	268
29	---	---	---	---	---	---	324	2310	1160	700	362	274
30	---	---	---	---	---	---	340	2130	1120	733	349	269
31	---	---	---	---	---	---	---	1820	---	785	361	---
TOTAL	---	---	---	---	---	---	7715	35451	46339	24205	18524	9621
MEAN	---	---	---	---	---	---	257	1144	1545	781	598	321
MAX	---	---	---	---	---	---	340	2310	2370	1070	848	408
MIN	---	---	---	---	---	---	215	353	914	660	349	268
AC-FT	---	---	---	---	---	---	15300	70320	91910	48010	36740	19080

e Estimated.



ARKANSAS RIVER BASIN

07091200 ARKANSAS RIVER NEAR NATHROP, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	---	---	---	14.9	9.0	12.1
2	---	---	---	---	---	---	---	---	---	13.4	7.9	10.5
3	---	---	---	---	---	---	---	---	---	7.9	2.5	4.4
4	---	---	---	---	---	---	11.1	---	---	6.5	1.7	3.9
5	---	---	---	---	---	---	10.7	7.3	8.5	8.6	3.6	5.8
6	---	---	---	---	---	---	8.5	6.5	7.4	12.8	5.0	8.6
7	---	---	---	---	---	---	7.4	4.0	5.9	13.9	6.8	10.3
8	---	---	---	---	---	---	9.0	4.8	6.9	14.7	7.7	11.1
9	---	---	---	---	---	---	9.4	5.1	7.5	15.0	8.8	11.9
10	---	---	---	---	---	---	9.0	5.5	7.3	12.5	9.1	10.9
11	---	---	---	---	---	---	7.6	4.9	6.3	15.2	8.8	11.9
12	---	---	---	---	---	---	7.2	4.6	6.0	15.8	10.7	13.1
13	---	---	---	---	---	---	9.2	3.7	6.3	14.8	9.6	12.4
14	---	---	---	---	---	---	9.4	4.9	7.4	13.3	10.0	11.9
15	---	---	---	---	---	---	11.2	5.2	8.1	13.6	9.7	11.7
16	---	---	---	---	---	---	11.9	6.6	9.4	12.0	9.9	10.8
17	---	---	---	---	---	---	13.2	7.2	10.2	10.5	8.9	9.6
18	---	---	---	---	---	---	13.7	7.8	10.9	12.5	8.6	10.3
19	---	---	---	---	---	---	13.2	9.2	11.3	11.5	9.6	10.7
20	---	---	---	---	---	---	12.3	8.5	9.7	12.7	8.9	10.8
21	---	---	---	---	---	---	8.9	6.0	7.2	11.2	7.7	9.4
22	---	---	---	---	---	---	7.4	5.3	6.1	12.1	7.1	9.5
23	---	---	---	---	---	---	9.5	3.6	6.4	12.5	8.5	10.5
24	---	---	---	---	---	---	12.0	5.5	8.7	12.7	9.0	10.8
25	---	---	---	---	---	---	13.4	7.2	10.4	10.7	8.4	9.9
26	---	---	---	---	---	---	14.2	8.1	11.3	11.5	9.2	10.6
27	---	---	---	---	---	---	14.6	9.5	12.1	12.3	8.8	10.5
28	---	---	---	---	---	---	13.3	9.5	11.4	12.2	9.9	11.0
29	---	---	---	---	---	---	14.1	8.9	11.4	11.3	9.5	10.3
30	---	---	---	---	---	---	14.4	8.5	11.4	12.8	9.3	11.0
31	---	---	---	---	---	---	---	---	---	12.8	9.6	11.3
MONTH	---	---	---	---	---	---	---	---	---	15.8	1.7	10.2
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	13.6	9.8	11.7	17.0	14.3	15.6	19.4	15.4	17.2	16.2	11.3	13.7
2	13.5	10.0	11.9	17.4	13.6	15.5	19.5	15.7	17.4	17.1	11.5	14.3
3	13.4	10.7	12.1	18.2	14.0	16.0	19.5	15.4	17.4	16.4	11.2	13.9
4	13.0	10.2	11.7	17.7	13.7	15.8	19.8	15.4	17.5	16.4	11.8	14.4
5	13.3	9.6	11.6	18.8	14.3	16.3	19.6	15.6	17.5	15.5	11.7	13.8
6	14.5	10.1	12.3	19.6	14.4	16.9	18.7	15.4	17.1	16.1	11.7	13.9
7	13.8	11.5	12.8	20.0	15.3	17.5	19.6	15.7	17.6	14.1	10.5	12.4
8	14.0	11.4	12.8	18.8	15.5	17.1	18.8	14.9	16.9	12.6	9.5	11.0
9	14.6	11.3	13.1	18.9	15.0	16.8	16.6	14.1	15.2	13.6	8.0	10.8
10	15.3	11.4	13.3	18.5	14.2	16.3	17.0	14.2	15.4	14.6	8.5	11.6
11	15.3	11.7	13.6	17.1	14.6	16.0	18.6	13.6	15.9	15.3	9.5	12.3
12	14.4	11.5	13.2	17.1	14.5	15.9	17.6	14.3	15.9	14.7	9.8	12.5
13	13.3	10.3	11.7	16.8	14.3	15.7	18.6	14.8	16.5	15.6	10.4	13.0
14	11.8	8.5	10.0	17.5	14.3	15.7	16.7	15.1	15.9	15.9	11.3	13.6
15	13.6	8.9	11.3	17.0	13.1	15.1	17.6	13.6	15.4	15.9	11.0	13.4
16	14.5	10.6	12.7	17.7	13.6	15.6	16.5	13.3	15.1	14.4	11.7	13.2
17	15.6	11.5	13.7	16.2	13.7	15.0	18.0	12.9	15.2	13.9	11.3	12.7
18	16.2	11.8	14.1	17.7	13.2	15.4	17.9	12.3	15.1	14.3	10.1	12.2
19	17.1	13.4	15.1	17.5	14.0	15.9	17.3	12.9	15.2	14.5	9.1	11.9
20	16.6	12.6	14.4	17.1	13.8	15.6	15.9	13.3	14.7	15.1	9.7	12.4
21	17.7	13.4	15.3	17.9	14.4	15.9	17.6	12.3	14.8	14.9	10.0	12.5
22	15.9	13.7	14.9	18.1	14.2	16.1	15.9	13.0	14.6	14.0	10.5	12.5
23	15.1	12.3	13.9	17.5	14.8	16.0	17.5	11.6	14.3	14.7	10.0	12.4
24	15.9	12.5	14.2	17.3	14.9	15.8	17.5	12.2	14.9	15.0	10.0	12.7
25	16.6	12.9	14.7	17.8	13.9	15.9	16.4	13.4	15.1	15.0	10.1	12.7
26	17.5	13.5	15.4	17.3	14.9	16.1	17.9	11.4	14.7	14.4	10.0	12.4
27	16.5	13.3	15.0	17.7	14.1	16.0	18.1	13.0	15.6	14.7	10.1	12.6
28	17.4	12.8	15.1	19.3	14.3	16.5	16.6	13.3	15.1	14.4	9.9	12.3
29	17.0	14.2	15.6	19.2	14.6	17.0	15.8	11.7	13.9	13.1	11.0	12.1
30	18.2	13.8	15.8	18.3	14.8	16.7	15.5	10.9	13.3	13.8	9.3	11.7
31	---	---	---	18.5	15.4	16.9	14.8	12.0	13.4	---	---	---
MONTH	18.2	8.5	13.4	20.0	13.1	16.1	19.8	10.9	15.6	17.1	8.0	12.7

## ARKANSAS RIVER BASIN

07093700 ARKANSAS RIVER NEAR WELLSVILLE, CO

LOCATION.--Lat 38°30'10", long 105°56'21", in SW<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec.14, T.49 N., R.9 E., Chaffee County, Hydrologic Unit 11020001, on right bank 50 ft upstream from Chaffee-Fremont County line, 2.0 mi northwest of Wellsville, 2.8 mi downstream from South Arkansas River, and 3.5 mi southeast of Salida.

DRAINAGE AREA.--1,485 mi<sup>2</sup>.

PERIOD OF RECORD.--April 1961 to current year.

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 6,883.4 ft above sea level, (river-profile survey).

REMARKS.--Records good except for estimated daily discharges, which are poor. Natural flow of stream affected by transmountain diversions, storage reservoirs, power developments, diversions for irrigation of about 26,000 acres, and return flow from irrigated areas.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	313	351	442	404	e350	368	265	377	1970	1040	762	420
2	305	354	437	e390	e364	362	280	449	2270	928	754	390
3	344	366	442	e400	372	361	292	473	2390	876	729	372
4	359	368	440	e402	372	363	301	425	2170	758	714	377
5	370	367	438	401	375	366	323	452	2000	727	694	394
6	366	358	443	398	374	353	320	481	1730	713	793	374
7	325	342	441	396	376	336	289	524	1550	693	812	375
8	296	365	443	e370	393	329	264	533	1550	700	765	381
9	292	392	439	375	373	330	256	526	1620	697	654	390
10	293	392	433	387	e365	337	250	523	1670	794	732	377
11	291	408	437	388	370	336	263	567	1690	902	718	355
12	291	395	e430	380	369	322	268	633	1740	915	680	349
13	288	e380	e440	391	364	320	260	730	1840	864	737	341
14	286	e365	e434	e370	365	328	260	965	1770	764	775	351
15	284	372	428	374	363	298	259	1250	1690	743	809	351
16	287	e357	e408	e350	358	278	261	1660	1370	753	708	337
17	283	e388	413	e370	358	289	274	1850	1190	674	592	335
18	279	e444	419	e360	357	279	288	1710	1060	696	529	371
19	279	e436	e415	365	362	278	292	1620	877	714	491	369
20	280	454	426	379	367	292	290	1590	931	705	464	333
21	283	455	e412	383	362	300	275	1650	967	719	473	317
22	282	459	421	379	370	310	259	1460	955	718	498	316
23	307	461	426	392	365	312	252	1430	1240	716	488	312
24	366	451	420	e370	361	321	270	1590	1370	726	455	305
25	344	450	421	375	356	317	277	2010	1510	734	428	297
26	330	447	413	e370	359	312	292	2120	1370	737	429	288
27	328	444	e405	379	367	303	304	2250	1640	719	393	280
28	375	458	e410	e365	368	296	318	2360	1190	706	367	274
29	365	451	e400	e355	---	280	331	2370	1130	672	374	279
30	353	454	e408	361	---	275	346	2220	1080	693	369	273
31	354	---	e400	357	---	271	---	1890	---	735	377	---
TOTAL	9798	12184	13184	11736	10255	9822	8479	38688	45530	23531	18563	10283
MEAN	316	406	425	379	366	317	283	1248	1518	759	599	343
MAX	375	461	443	404	393	368	346	2370	2390	1040	812	420
MIN	279	342	400	350	350	271	250	377	877	672	367	273
AC-FT	19430	24170	26150	23280	20340	19480	16820	76740	90310	46670	36820	20400

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1961 - 2001, BY WATER YEAR (WY)

MEAN	413	424	383	357	352	341	394	1054	2115	1473	892	511
MAX	750	581	636	576	729	647	896	2344	3930	3521	1889	1031
(WY)	1985	1983	1983	1983	1985	1993	1962	1984	1980	1995	1984	1970
MIN	229	242	280	207	208	202	215	391	708	340	278	267
(WY)	1978	1978	1978	1977	1977	1978	1977	1977	1977	1977	1977	1977

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1961 - 2001
ANNUAL TOTAL	230022	212053	
ANNUAL MEAN	628	581	732
HIGHEST ANNUAL MEAN			a1135 1984
LOWEST ANNUAL MEAN			358 1977
HIGHEST DAILY MEAN	3150	May 31	2390 Jun 3 5980 Jun 12 1980
LOWEST DAILY MEAN	279	Oct 18	250 Apr 10 110 Jan 12 1963
ANNUAL SEVEN-DAY MINIMUM	282	Oct 16	259 Apr 9 147 Jan 11 1963
MAXIMUM PEAK FLOW			2520 Jun 3 6240 Jun 12 1980
MAXIMUM PEAK STAGE		6.18	Jun 3 b8.02 Jun 12 1980
ANNUAL RUNOFF (AC-FT)	456200	420600	530700
10 PERCENT EXCEEDS	1300	1300	1620
50 PERCENT EXCEEDS	412	387	451
90 PERCENT EXCEEDS	314	288	264

e Estimated.

a Highest annual mean, also occurred 1995 water year.

b Maximum gage height, 8.40 ft, Jun 23, 1995.

07093740 BADGER CREEK, UPPER STATION, NEAR HOWARD, CO

LOCATION.--Lat 38°39'32", long 105°48'48", in SE<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec.13, T.51 N., R.10 E., Fremont County, Hydrologic Unit 11020001, on left bank 0.1 mi downstream from County Road 2, 1.0 mi upstream from Steer Creek, 14.3 mi north of Howard, and 14.6 mi upstream from mouth.

DRAINAGE AREA.--106 mi<sup>2</sup>.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--December 1980 to September 1986, October 1986 to current year (seasonal records only). Records prior to October 1988 not equivalent because of seepage between sites.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 8,790 ft above sea level, from topographic map. Prior to Oct. 28, 1988, at site 0.2 mi downstream at different datum. Mar. 24, 1989 to June 30, 1994, at site 0.1 mi downstream at different datum. July 1, 1994 to Aug. 1, 1996, at site 60 ft upstream at datum 1.00 ft higher.

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

AVERAGE DISCHARGE.--5 years (water years 1981-86), 5.89 ft<sup>3</sup>/s; 4,270 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,360 ft<sup>3</sup>/s, Aug. 14, 1983, from slope-area measurement of peak flow, gage height, 8.22 ft, site and datum then in use; no flow, July 17-23, 1989.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum discharge, 212 ft<sup>3</sup>/s, Aug. 11, gage height, 3.70 ft, from rating curve extended above 6.9 ft<sup>3</sup>/s on basis of slope-area measurement of peak flow at gage height 3.76 ft; minimum daily, 0.09 ft<sup>3</sup>/s, June 27.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.51	---	---	---	---	---	e1.5	e.28	.56	.32	.16	.59
2	.48	---	---	---	---	---	e1.5	.33	.50	.27	.19	.52
3	.45	---	---	---	---	---	e1.4	e.20	.44	.24	.21	.47
4	.47	---	---	---	---	---	e1.4	e.25	.39	.18	.31	.42
5	.49	---	---	---	---	---	e1.3	e.30	.34	.16	.41	.41
6	e.50	---	---	---	---	---	e1.1	e1.5	.28	.14	.44	.42
7	e.50	---	---	---	---	---	e1.1	1.8	.22	.13	.82	.39
8	e.50	---	---	---	---	---	e1.1	2.5	.32	.13	.73	.42
9	e.50	---	---	---	---	---	e1.1	3.2	.32	2.8	14	.49
10	e.50	---	---	---	---	---	e1.0	7.1	.22	.75	3.0	.41
11	e.55	---	---	---	---	---	e.75	5.6	.18	.56	12	.42
12	.58	---	---	---	---	---	e1.1	3.8	.14	.50	28	.42
13	.55	---	---	---	---	---	e.80	2.9	.17	.98	1.5	.35
14	.62	---	---	---	---	---	e.75	2.2	.36	e.70	1.1	.37
15	.66	---	---	---	---	---	e.70	2.0	.27	e.50	1.1	.37
16	.57	---	---	---	---	---	e.80	1.8	.15	e.37	1.8	.34
17	.59	---	---	---	---	---	1.0	1.8	.12	.37	.94	.38
18	.57	---	---	---	---	---	1.0	2.2	.12	.36	.70	.40
19	.59	---	---	---	---	---	.88	1.8	.12	.30	.51	.38
20	.58	---	---	---	---	---	.84	2.5	.11	.26	.48	.35
21	.58	---	---	---	---	---	.61	2.1	.12	.18	4.1	.34
22	.59	---	---	---	---	---	.73	1.8	.13	.21	2.2	.33
23	.73	---	---	---	---	---	e.70	1.3	.15	.34	.55	.35
24	.83	---	---	---	---	---	e.70	.99	.13	.42	.47	.35
25	.72	---	---	---	---	---	.75	.87	.11	.48	.50	.36
26	.66	---	---	---	---	---	.72	.85	.11	.44	.57	.35
27	.64	---	---	---	---	---	.68	.78	.09	.44	.50	.35
28	.82	---	---	---	---	---	e.65	.70	.24	.33	.59	.34
29	.79	---	---	---	---	---	.64	.71	1.6	.23	.56	.37
30	.63	---	---	---	---	---	.61	.65	.52	.12	.56	.40
31	.63	---	---	---	---	---	---	.59	---	.10	.71	---
TOTAL	18.38	---	---	---	---	---	27.91	55.40	8.53	13.31	79.71	11.86
MEAN	.59	---	---	---	---	---	.93	1.79	.28	.43	2.57	.40
MAX	.83	---	---	---	---	---	1.5	7.1	1.6	2.8	28	.59
MIN	.45	---	---	---	---	---	.61	.20	.09	.10	.16	.33
AC-FT	36	---	---	---	---	---	55	110	17	26	158	24

e Estimated.

07093740 BADGER CREEK, UPPER STATION, NEAR HOWARD, CO--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--February 1981 to October 1988 at site 1,000 ft downstream, not equivalent because of seepage at site. March 1989 to current year.

## PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: March 1995 to current year (seasonal records only).

SUSPENDED-SEDIMENT DISCHARGE: June 1981 to current year (seasonal records only).

INSTRUMENTATION.--Pumping sediment sampler. Water temperature probe with satellite telemetry.

REMARKS.--Records for daily water temperature are good. Records for suspended sediment are fair except for estimated sediment discharges, which are poor. Daily water temperature data that are not published are either missing or of unacceptable quality. Reported daily water temperature values are representative of the stream based on cross-section comparisons made during the year.

## EXTREMES FOR PERIOD OF RECORD.--

WATER TEMPERATURE (seasonal only): Maximum, 30.7°C, July 28, 1995, July 18, 1998; minimum, 0.0°C, many days.

SEDIMENT CONCENTRATION (seasonal only): Maximum daily mean, 25,800 mg/L, Aug. 20, 1982; minimum daily mean, 0 mg/L, many days.

SUSPENDED-SEDIMENT DISCHARGE (seasonal only): Maximum daily, 15,600 tons, Aug. 14, 1983; minimum daily, 0.0 ton, many days.

## EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE (seasonal only): Maximum, 29.8°C, June 28; minimum, 0.0°C, Oct. 30.

SEDIMENT CONCENTRATION (seasonal only): Maximum daily mean, 4,420 mg/L, Aug. 12; minimum daily mean, 22 mg/L, Apr. 27.

SUSPENDED-SEDIMENT DISCHARGE (seasonal only): Maximum daily, 560 tons, Aug. 12; minimum daily, 0.01 ton, June 18.

## MISCELLANEOUS FIELD AND SUSPENDED-SEDIMENT DISCHARGE DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)
OCT						
02...	1415	.48	388	16.1	33	.04
MAR						
30...	1500	1.3	379	.4	239	.84
APR						
17...	1145	.76	339	9.5	132	.27
MAY						
01...	1845	.27	378	16.4	24	.02
09...	1230	3.0	464	13.2	203	1.6
31...	1345	.63	417	22.1	71	.12
JUN						
12...	1300	.13	395	22.6	40	.01
JUL						
06...	1300	.13	367	28.1	305	.11
16...	1530	.44	380	24.0	204	.24
30...	1300	.13	370	23.1	133	.05
AUG						
10...	0915	1.6	288	12.5	440	1.9
21...	1730	.52	389	21.1	141	.20
31...	1300	.76	382	13.9	136	.28
SEP						
24...	1100	.36	388	10.3	31	.03



ARKANSAS RIVER BASIN

07093740 BADGER CREEK, UPPER STATION, NEAR HOWARD, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	25.6	4.4	13.7	27.2	9.6	16.3	29.2	12.3	19.1	21.2	7.2	13.4
2	24.3	4.9	13.7	26.5	10.3	16.4	25.5	11.2	17.7	21.6	6.8	13.7
3	24.7	5.9	14.2	25.0	10.0	16.7	27.7	10.0	17.5	21.5	7.1	13.7
4	22.3	6.2	13.0	26.4	8.3	16.8	25.5	10.8	17.6	22.5	6.9	13.7
5	24.3	4.0	13.2	27.9	9.7	17.2	24.9	10.7	16.8	19.1	6.1	12.3
6	27.3	3.6	14.5	28.5	10.3	18.0	23.5	13.1	17.4	21.7	6.6	12.8
7	27.1	6.1	14.6	29.0	10.3	19.0	25.7	13.0	18.2	19.0	4.9	10.9
8	21.4	8.5	14.5	27.7	12.6	17.9	24.5	10.4	16.2	15.0	3.9	9.2
9	26.8	5.4	15.0	20.3	9.7	15.4	21.2	11.3	14.3	20.0	2.5	10.2
10	27.7	5.8	15.6	25.1	11.0	17.3	17.7	11.0	14.1	20.3	3.0	10.9
11	26.9	5.0	15.1	25.1	10.0	16.3	24.0	8.8	15.1	17.2	3.5	10.6
12	23.1	4.0	12.7	24.0	9.9	16.2	19.4	8.7	13.9	20.0	4.4	11.3
13	16.9	5.8	9.6	22.9	11.4	15.6	21.2	11.4	15.7	21.8	6.0	12.9
14	17.8	1.7	9.1	---	11.0	---	18.0	12.6	15.2	22.3	7.8	14.0
15	23.9	.6	11.4	---	---	---	20.3	11.4	14.8	20.3	8.6	13.6
16	25.8	2.5	13.8	---	---	---	18.8	10.1	14.4	18.6	9.0	13.4
17	26.1	4.5	14.3	18.8	7.6	12.9	19.6	9.4	14.2	17.4	8.3	12.1
18	26.8	4.6	14.8	26.8	7.1	15.4	22.9	8.4	15.0	18.7	6.2	11.5
19	26.5	9.2	15.9	26.3	7.7	15.5	21.0	9.3	15.0	20.2	4.2	11.3
20	25.4	6.5	15.4	25.5	8.4	16.2	18.5	10.9	14.3	19.7	4.2	10.9
21	25.8	8.6	15.7	24.1	9.9	16.2	21.7	8.3	14.1	18.9	4.7	11.3
22	22.8	9.6	14.6	29.3	9.0	17.5	18.9	8.5	13.5	15.5	5.4	10.6
23	23.7	4.9	13.6	24.7	11.3	16.9	22.2	8.1	14.6	20.7	4.2	11.1
24	26.5	5.9	15.0	23.3	12.0	15.9	24.5	8.1	15.6	20.7	4.2	11.2
25	25.6	7.8	16.2	26.3	8.9	16.1	19.3	10.3	13.9	19.0	3.9	10.7
26	23.7	9.2	15.6	22.3	11.8	15.9	24.5	6.8	14.6	20.0	3.9	11.1
27	27.4	9.0	16.6	23.2	9.6	15.7	23.2	8.2	14.6	20.8	4.3	11.5
28	29.8	6.8	16.0	27.9	7.6	16.4	21.0	9.3	13.8	16.8	4.2	10.2
29	28.3	8.8	15.7	28.0	7.7	16.7	19.2	7.0	12.5	15.1	5.9	10.3
30	27.1	9.3	16.8	25.7	8.6	16.4	16.1	6.6	11.4	15.1	4.4	8.9
31	---	---	---	28.0	12.0	17.8	14.6	7.6	11.4	---	---	---
MONTH	29.8	.6	14.3	---	---	---	29.2	6.6	15.0	22.5	2.5	11.6

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	.51	---	---	---	---	---	---	---	---
2	.48	---	---	---	---	---	---	---	---
3	.45	---	---	---	---	---	---	---	---
4	.47	---	---	---	---	---	---	---	---
5	.49	---	---	---	---	---	---	---	---
6	e.50	---	---	---	---	---	---	---	---
7	e.50	---	---	---	---	---	---	---	---
8	e.50	---	---	---	---	---	---	---	---
9	e.50	---	---	---	---	---	---	---	---
10	e.50	---	---	---	---	---	---	---	---
11	e.55	---	---	---	---	---	---	---	---
12	.58	---	---	---	---	---	---	---	---
13	.55	---	---	---	---	---	---	---	---
14	.62	---	---	---	---	---	---	---	---
15	.66	---	---	---	---	---	---	---	---
16	.57	---	---	---	---	---	---	---	---
17	.59	---	---	---	---	---	---	---	---
18	.57	---	---	---	---	---	---	---	---
19	.59	---	---	---	---	---	---	---	---
20	.58	---	---	---	---	---	---	---	---
21	.58	---	---	---	---	---	---	---	---
22	.59	---	---	---	---	---	---	---	---
23	.73	---	---	---	---	---	---	---	---
24	.83	---	---	---	---	---	---	---	---
25	.72	---	---	---	---	---	---	---	---
26	.66	---	---	---	---	---	---	---	---
27	.64	---	---	---	---	---	---	---	---
28	.82	---	---	---	---	---	---	---	---
29	.79	---	---	---	---	---	---	---	---
30	.63	---	---	---	---	---	---	---	---
31	.63	---	---	---	---	---	---	---	---
TOTAL	18.38	---	0	0	---	0	0	---	0

07093740 BADGER CREEK, UPPER STATION, NEAR HOWARD, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---
TOTAL	0	---	0	0	---	0	0	---	0

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	e1.5	---	e.98	e.28	---	e.02	.56	75	.11
2	e1.5	---	e1.2	.33	---	e.03	.50	---	e.08
3	e1.4	---	e1.1	e.20	---	e.02	.44	42	.05
4	e1.4	---	e1.3	e.25	---	e.02	.39	42	.04
5	e1.3	---	e1.3	e.30	---	e.06	.34	56	.05
6	e1.1	---	e.90	e1.5	---	e1.9	.28	54	.04
7	e1.1	---	e.47	1.8	---	e1.5	.22	---	e.03
8	e1.1	---	e.14	2.5	332	2.2	.32	37	.03
9	e1.1	---	e.29	3.2	278	2.4	.32	39	.03
10	e1.0	---	e.55	7.1	688	15	.22	71	.04
11	e.75	---	e.57	5.6	---	e11	.18	65	.03
12	e1.1	---	e.77	3.8	339	3.8	.14	49	.02
13	e.80	---	e.27	2.9	186	1.5	.17	80	.04
14	e.75	---	e.16	2.2	183	1.1	.36	---	e.08
15	e.70	---	e.21	2.0	125	.66	.27	69	.05
16	e.80	---	e.47	1.8	---	e.38	.15	61	.03
17	1.0	185	.53	1.8	78	.39	.12	53	.02
18	1.0	109	.30	2.2	95	.56	.12	40	.01
19	.88	---	e.22	1.8	67	.34	.12	---	e.02
20	.84	78	.18	2.5	165	1.1	.11	70	.02
21	.61	53	.09	2.1	---	e.85	.12	73	.02
22	.73	30	.06	1.8	88	.44	.13	103	.04
23	e.70	---	e.17	1.3	68	.24	.15	86	.03
24	e.70	---	e.19	.99	64	.17	.13	---	e.03
25	.75	72	.15	.87	60	.14	.11	80	.02
26	.72	40	.08	.85	---	e.13	.11	75	.02
27	.68	22	.04	.78	47	.10	.09	---	e.02
28	e.65	---	e.04	.70	46	.09	.24	97	.10
29	.64	---	e.04	.71	78	.15	1.6	---	e3.5
30	.61	23	.04	.65	107	.19	.52	259	.38
31	---	---	---	.59	82	.13	---	---	---
TOTAL	27.91	---	12.81	55.40	---	46.61	8.53	---	4.98

## ARKANSAS RIVER BASIN

07093740 BADGER CREEK, UPPER STATION, NEAR HOWARD, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MEAN	MEAN	SEDIMENT	MEAN	MEAN	SEDIMENT	MEAN	MEAN	SEDIMENT
	DISCHARGE (CFS)	CONCEN- TRATION (MG/L)	DISCHARGE (TONS/DAY)	DISCHARGE (CFS)	CONCEN- TRATION (MG/L)	DISCHARGE (TONS/DAY)	DISCHARGE (CFS)	CONCEN- TRATION (MG/L)	DISCHARGE (TONS/DAY)
	JULY			AUGUST			SEPTEMBER		
1	.32	167	.14	.16	---	e.07	.59	---	e.20
2	.27	242	.18	.19	123	.06	.52	143	.20
3	.24	254	.16	.21	84	.05	.47	143	.18
4	.18	---	e.11	.31	106	.09	.42	168	.19
5	.16	175	.08	.41	153	.17	.41	173	.19
6	.14	237	.08	.44	---	e.19	.42	---	e.19
7	.13	303	.10	.82	136	.30	.39	---	e.17
8	.13	---	e.11	.73	103	.20	.42	---	e.17
9	2.8	507	5.7	14	1700	266	.49	139	.18
10	.75	250	.50	3.0	628	11	.41	130	.14
11	.56	227	.34	12	1900	431	.42	---	e.13
12	.50	184	.25	28	4420	560	.42	---	e.12
13	.98	---	e1.9	1.5	980	4.3	.35	92	.09
14	e.70	---	e.48	1.1	402	1.3	.37	110	.11
15	e.50	---	e.17	1.1	228	.68	.37	130	.13
16	e.37	---	e.20	1.8	317	1.7	.34	---	e.11
17	.37	173	.17	.94	114	.29	.38	112	.12
18	.36	---	e.14	.70	97	.18	.40	135	.15
19	.30	120	.10	.51	105	.14	.38	124	.13
20	.26	107	.07	.48	126	.16	.35	---	e.10
21	.18	136	.06	4.1	1100	65	.34	---	e.09
22	.21	192	.11	2.2	623	11	.33	86	.08
23	.34	---	e.17	.55	251	.38	.35	83	.08
24	.42	135	.15	.47	124	.16	.35	52	.05
25	.48	97	.12	.50	58	.08	.36	103	.10
26	.44	107	.13	.57	97	.15	.35	---	e.13
27	.44	179	.21	.50	---	e.15	.35	134	.13
28	.33	---	e.14	.59	97	.16	.34	113	.10
29	.23	99	.06	.56	102	.15	.37	150	.15
30	.12	115	.03	.56	97	.14	.40	172	.19
31	.10	163	.04	.71	121	.23	---	---	---
TOTAL	13.31	---	12.20	79.71	---	1355.48	11.86	---	4.10

e Estimated.

07093775 BADGER CREEK, LOWER STATION, NEAR HOWARD, CO

LOCATION.--Lat 38°28'02", long 105°51'34", in SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec.27, T.49 N., R.10 E., Fremont County, Hydrologic Unit 11020001, on left bank 660 ft upstream from Denver and Rio Grande Railroad bridge, 960 ft upstream from mouth, and 1.9 mi northwest of Howard.

DRAINAGE AREA.--211 mi<sup>2</sup>.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--December 1980 to September 1996, October 1996 to current year (seasonal records only).

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 6,780 ft above sea level, from topographic map. Prior to May 19, 1983, at site 360 ft downstream at datum 5.07 ft lower.

REMARKS.--Records good except for estimated daily discharges, which are fair. 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, 2,900 ft<sup>3</sup>/s, July 8, 1996, from slope-area measurement of peak flow, gage height, 10.73 ft, from floodmarks; minimum daily, 0.56 ft<sup>3</sup>/s, Feb. 4, 1982.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum discharge, 83 ft<sup>3</sup>/s, Aug. 11, gage height, 4.78 ft; minimum daily, 3.8 ft<sup>3</sup>/s, July 30.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.3	---	---	---	---	---	6.0	7.1	11	5.0	4.0	5.2
2	4.2	---	---	---	---	---	6.0	7.7	11	4.9	3.9	4.9
3	4.3	---	---	---	---	---	6.2	9.3	11	4.9	4.0	4.7
4	4.5	---	---	---	---	---	6.2	7.3	10	4.7	4.1	4.5
5	4.5	---	---	---	---	---	6.2	9.8	9.8	4.5	3.9	4.5
6	4.6	---	---	---	---	---	6.7	11	9.5	4.4	4.1	4.6
7	4.8	---	---	---	---	---	6.7	11	9.0	4.4	4.0	4.6
8	4.9	---	---	---	---	---	6.8	10	9.1	4.5	4.2	4.9
9	4.9	---	---	---	---	---	6.9	11	8.6	5.6	4.5	5.0
10	4.8	---	---	---	---	---	6.8	13	7.5	5.4	8.3	4.7
11	4.7	---	---	---	---	---	7.2	14	e7.0	5.3	9.0	4.5
12	4.7	---	---	---	---	---	7.2	14	e6.6	5.1	11	4.5
13	4.6	---	---	---	---	---	7.3	13	7.0	5.1	6.9	4.4
14	4.7	---	---	---	---	---	7.4	13	7.5	5.9	6.2	4.6
15	4.7	---	---	---	---	---	7.5	12	7.1	5.3	6.1	4.5
16	4.8	---	---	---	---	---	7.8	12	6.6	4.9	6.2	4.5
17	4.7	---	---	---	---	---	8.1	13	6.2	4.6	6.0	4.4
18	4.8	---	---	---	---	---	8.8	13	5.8	4.6	5.4	4.4
19	4.8	---	---	---	---	---	8.7	12	5.6	4.6	4.9	4.3
20	4.8	---	---	---	---	---	8.9	13	5.6	4.5	4.9	4.1
21	4.8	---	---	---	---	---	8.8	12	5.5	4.4	4.9	4.1
22	5.0	---	---	---	---	---	9.0	12	5.7	4.3	6.0	4.1
23	5.2	---	---	---	---	---	8.3	12	5.6	4.4	5.0	4.2
24	5.2	---	---	---	---	---	8.7	11	5.5	4.6	4.6	4.1
25	5.1	---	---	---	---	---	8.6	11	5.3	4.5	4.6	4.0
26	5.0	---	---	---	---	---	8.4	11	5.1	4.4	4.6	4.0
27	5.0	---	---	---	---	---	8.2	11	5.1	4.3	4.4	3.9
28	5.5	---	---	---	---	---	8.1	11	5.3	4.2	4.3	3.9
29	5.2	---	---	---	---	---	8.1	11	5.9	4.0	4.7	4.0
30	5.1	---	---	---	---	---	7.5	10	5.5	3.8	5.0	4.1
31	5.1	---	---	---	---	---	---	11	---	4.0	5.1	---
TOTAL	149.3	---	---	---	---	---	227.1	349.2	216.0	145.1	164.8	132.2
MEAN	4.82	---	---	---	---	---	7.57	11.3	7.20	4.68	5.32	4.41
MAX	5.5	---	---	---	---	---	9.0	14	11	5.9	11	5.2
MIN	4.2	---	---	---	---	---	6.0	7.1	5.1	3.8	3.9	3.9
AC-FT	296	---	---	---	---	---	450	693	428	288	327	262

e Estimated.



07093775 BADGER CREEK, LOWER STATION, NEAR HOWARD, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	16.2	3.4	8.1	21.9	6.1	12.1
2	---	---	---	---	---	---	17.7	3.7	8.6	10.4	2.9	7.4
3	---	---	---	---	---	---	17.1	3.6	8.5	3.5	.4	2.2
4	---	---	---	---	---	---	17.1	3.8	8.8	9.0	.4	4.0
5	---	---	---	---	---	---	12.9	4.6	7.6	11.2	2.5	5.9
6	---	---	---	---	---	---	11.2	3.4	6.7	17.0	4.1	9.1
7	---	---	---	---	---	---	15.5	2.1	6.9	19.7	4.5	10.4
8	---	---	---	---	---	---	16.1	2.9	7.7	20.7	5.1	11.5
9	---	---	---	---	---	---	16.7	2.1	7.6	19.7	5.9	11.5
10	---	---	---	---	---	---	13.0	2.6	6.3	15.8	6.4	10.7
11	---	---	---	---	---	---	13.9	3.2	6.8	19.8	6.1	12.1
12	---	---	---	---	---	---	13.0	3.7	6.5	20.5	8.1	13.0
13	---	---	---	---	---	---	16.4	1.8	7.3	20.8	7.6	13.2
14	---	---	---	---	---	---	14.9	2.3	6.9	21.0	8.9	14.0
15	---	---	---	---	---	---	17.5	2.4	8.2	22.2	8.6	14.1
16	---	---	---	---	---	---	16.5	3.0	8.0	19.8	9.0	13.4
17	---	---	---	---	---	---	19.5	4.8	9.9	13.0	9.9	11.1
18	---	---	---	---	---	---	19.4	4.0	10.0	21.5	8.2	13.7
19	---	---	---	---	---	---	17.7	5.6	10.0	16.6	9.6	12.2
20	---	---	---	---	---	---	16.0	5.3	8.5	20.2	7.8	12.8
21	---	---	---	---	---	---	12.7	3.5	7.2	18.7	5.9	10.9
22	---	---	---	---	---	---	8.3	3.5	5.8	19.6	5.9	11.6
23	---	---	---	---	---	---	15.1	1.8	7.1	20.7	7.0	12.7
24	---	---	---	---	---	---	19.4	2.5	9.2	20.7	8.0	13.5
25	---	---	---	---	---	---	20.0	4.2	10.2	18.2	7.8	12.4
26	---	---	---	---	---	---	21.1	4.8	11.3	19.3	8.1	12.9
27	---	---	---	---	---	---	18.7	5.8	11.2	20.1	8.4	13.3
28	---	---	---	---	---	---	19.2	6.7	11.4	20.8	10.8	14.6
29	---	---	---	---	---	---	18.8	6.0	11.0	19.1	9.8	13.6
30	---	---	---	---	---	---	20.7	5.2	11.0	20.8	8.7	13.5
31	---	---	---	---	---	---	---	---	---	22.5	8.7	14.0
MONTH	---	---	---	---	---	---	21.1	1.8	8.5	22.5	.4	11.5
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	23.9	8.4	14.6	27.3	12.0	16.4	28.7	13.7	19.4	22.5	9.9	15.0
2	23.0	8.4	14.5	26.4	11.8	16.7	25.0	13.6	18.4	23.6	10.2	15.2
3	21.0	9.0	14.3	27.0	12.3	17.1	29.6	12.8	18.3	23.3	9.8	14.7
4	19.7	9.5	13.5	25.8	11.3	17.4	27.6	12.8	18.8	24.6	9.6	15.3
5	22.5	8.8	14.2	28.6	12.3	17.6	29.6	13.2	18.5	24.8	9.7	15.3
6	24.1	8.3	14.9	28.3	12.5	18.8	25.0	14.4	18.2	23.0	10.4	14.6
7	23.8	9.8	14.5	28.6	13.0	19.3	28.9	14.5	19.5	22.0	8.7	13.5
8	23.5	10.1	14.5	27.3	13.9	18.2	24.3	12.9	17.0	19.0	9.0	12.1
9	22.9	9.2	14.5	25.2	12.8	17.8	21.7	13.2	16.2	21.8	5.8	12.0
10	24.0	9.2	15.4	26.8	12.4	18.0	22.4	13.7	16.7	22.8	6.6	13.0
11	24.4	8.8	15.4	25.8	12.2	16.8	26.6	11.6	17.1	23.8	7.2	13.9
12	22.5	8.5	14.1	25.5	12.4	16.9	21.7	11.5	15.8	23.6	7.9	14.0
13	16.9	8.4	11.4	25.2	13.9	17.8	22.7	12.2	16.4	24.0	9.3	15.1
14	18.7	5.9	10.7	26.3	13.4	17.1	19.0	13.6	15.9	23.4	10.6	15.3
15	22.3	5.8	12.7	26.3	11.3	16.5	24.8	12.6	16.3	23.6	11.1	15.4
16	23.5	7.3	14.2	23.0	11.1	16.2	23.4	10.8	15.1	22.4	11.8	15.6
17	24.8	8.3	14.7	20.1	10.6	14.7	24.1	10.3	15.7	21.1	11.2	14.2
18	24.7	8.7	15.2	25.6	10.7	16.6	24.7	10.2	15.7	22.1	9.3	14.2
19	23.3	11.6	15.4	25.6	11.1	16.3	25.1	10.2	15.6	22.8	8.0	13.6
20	22.8	10.5	15.6	25.1	11.4	16.7	21.8	12.1	15.4	23.1	8.0	13.8
21	26.0	11.4	17.0	24.2	12.4	16.8	24.8	11.5	16.3	21.5	8.5	13.8
22	21.2	11.2	14.7	27.0	12.1	17.9	20.2	11.9	15.4	21.9	9.5	13.8
23	20.0	9.1	13.9	26.5	13.6	17.8	25.0	10.0	16.0	22.9	8.4	13.8
24	24.0	9.6	15.0	24.9	14.5	17.4	25.6	10.4	16.6	23.4	8.3	14.1
25	26.1	10.5	16.3	26.4	11.7	17.1	23.6	12.4	15.9	22.7	8.3	13.5
26	25.6	11.4	16.7	25.2	14.1	17.4	26.2	9.7	16.2	22.4	8.3	13.9
27	25.1	12.1	17.3	25.3	12.2	17.5	26.4	10.6	16.1	23.3	8.4	13.9
28	27.0	10.6	16.8	28.5	11.5	18.0	24.9	11.2	15.7	22.6	8.3	13.7
29	27.6	12.0	16.9	28.0	11.6	18.3	23.0	10.0	14.4	18.9	9.9	13.4
30	26.3	11.7	16.6	26.0	12.4	18.1	22.2	9.5	14.5	22.1	8.7	13.2
31	---	---	---	27.2	15.1	17.9	22.7	10.6	14.7	---	---	---
MONTH	27.6	5.8	14.9	28.6	10.6	17.3	29.6	9.5	16.5	24.8	5.8	14.1

## ARKANSAS RIVER BASIN

07094500 ARKANSAS RIVER AT PARKDALE, CO

LOCATION.--Lat 38°29'14", long 105°22'23", in NE<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec.18, T.18 S., R.71 W., Fremont County, Hydrologic Unit 11020001, on left bank at Parkdale, 100 ft upstream from Bumback Gulch, 300 ft upstream from bridge on U.S. Highway 50, and 0.9 mi upstream from Copper Gulch.

DRAINAGE AREA.--2,548 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1945 to September 1955, October 1964 to September 1994, April 1995 to current year (seasonal records only). Monthly discharge only for October 1945 to May 1946, published in WSP 1311.

REVISED RECORDS.--WSP 1117: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 5,720 ft above sea level, from topographic map. Prior to Oct. 1, 1964, at site 600 ft downstream at different datum.

REMARKS.--No estimated daily discharges. Records good. Natural flow of stream affected by transmountain diversions, 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.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge (occurred during period of seasonal record), 6,830 ft<sup>3</sup>/s, June 18, 1995, gage height, 8.82 ft, from rating curve extended above 6,050 ft<sup>3</sup>/s; maximum gage height, 9.13 ft, June 9, 1985; minimum daily, 199 ft<sup>3</sup>/s, Mar. 17, 1978.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum discharge, 2,980 ft<sup>3</sup>/s, June 3, gage height, 5.58 ft; minimum daily, 290 ft<sup>3</sup>/s, Apr. 24.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	317	387	2180	1210	866	452
2	---	---	---	---	---	---	316	439	2520	1130	880	477
3	---	---	---	---	---	---	332	570	2830	1030	857	425
4	---	---	---	---	---	---	343	561	2590	937	871	414
5	---	---	---	---	---	---	355	538	2320	851	835	431
6	---	---	---	---	---	---	379	578	2030	825	879	436
7	---	---	---	---	---	---	366	655	1790	806	942	416
8	---	---	---	---	---	---	316	698	1760	803	980	425
9	---	---	---	---	---	---	300	651	1830	820	819	437
10	---	---	---	---	---	---	291	643	1880	858	871	434
11	---	---	---	---	---	---	296	666	1900	1000	905	410
12	---	---	---	---	---	---	313	731	1910	1030	938	394
13	---	---	---	---	---	---	307	835	2030	1060	879	385
14	---	---	---	---	---	---	302	1070	2030	1020	904	387
15	---	---	---	---	---	---	297	1400	1900	887	983	394
16	---	---	---	---	---	---	294	1740	1630	876	917	385
17	---	---	---	---	---	---	302	1980	1420	835	761	373
18	---	---	---	---	---	---	315	2010	1300	771	666	382
19	---	---	---	---	---	---	320	1850	1080	827	603	432
20	---	---	---	---	---	---	320	1900	1080	820	564	387
21	---	---	---	---	---	---	322	1900	1120	825	547	363
22	---	---	---	---	---	---	300	1730	1130	831	586	355
23	---	---	---	---	---	---	301	1600	1300	831	573	352
24	---	---	---	---	---	---	290	1650	1490	837	545	346
25	---	---	---	---	---	---	314	2140	1600	859	505	338
26	---	---	---	---	---	---	314	2360	1570	856	493	328
27	---	---	---	---	---	---	329	2570	1700	846	471	319
28	---	---	---	---	---	---	341	2700	1510	827	440	308
29	---	---	---	---	---	---	356	2800	1330	789	412	305
30	---	---	---	---	---	---	367	2650	1280	783	432	314
31	---	---	---	---	---	---	---	2220	---	818	431	---
TOTAL	---	---	---	---	---	---	9615	44222	52040	27498	22355	11604
MEAN	---	---	---	---	---	---	320	1427	1735	887	721	387
MAX	---	---	---	---	---	---	379	2800	2830	1210	983	477
MIN	---	---	---	---	---	---	290	387	1080	771	412	305
AC-FT	---	---	---	---	---	---	19070	87710	103200	54540	44340	23020



## ARKANSAS RIVER BASIN

07094500 ARKANSAS RIVER AT PARKDALE, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	12.8	8.0	10.5	17.4	12.1	14.9
2	---	---	---	---	---	---	13.8	9.5	11.5	15.6	9.1	12.8
3	---	---	---	---	---	---	14.1	9.2	11.7	9.1	5.8	7.7
4	---	---	---	---	---	---	14.3	10.3	12.5	5.8	3.4	4.5
5	---	---	---	---	---	---	14.0	11.6	12.6	7.3	4.9	6.2
6	---	---	---	---	---	---	12.5	8.9	11.0	13.2	6.9	9.9
7	---	---	---	---	---	---	10.1	6.7	8.5	15.0	10.5	12.9
8	---	---	---	---	---	---	11.8	7.1	9.3	16.6	12.0	14.3
9	---	---	---	---	---	---	12.6	7.3	10.1	16.9	13.0	15.0
10	---	---	---	---	---	---	10.7	8.4	9.4	15.7	13.0	14.4
11	---	---	---	---	---	---	10.3	7.2	8.5	16.8	12.7	14.8
12	---	---	---	---	---	---	10.8	6.8	8.4	18.4	14.4	16.4
13	---	---	---	---	---	---	11.4	6.2	8.9	18.3	14.4	16.4
14	---	---	---	---	---	---	11.7	7.8	9.9	17.3	14.7	16.3
15	---	---	---	---	---	---	12.9	8.1	10.3	16.7	14.3	15.6
16	---	---	---	---	---	---	13.0	9.0	10.8	16.2	13.7	14.5
17	---	---	---	---	---	---	14.2	8.9	11.4	14.3	12.0	13.1
18	---	---	---	---	---	---	15.6	9.9	12.7	14.8	11.0	12.9
19	---	---	---	---	---	---	15.9	12.4	14.0	14.4	13.1	13.5
20	---	---	---	---	---	---	14.9	11.5	12.9	15.3	11.5	13.1
21	---	---	---	---	---	---	11.5	9.8	10.7	13.6	10.9	12.4
22	---	---	---	---	---	---	10.4	7.7	9.1	13.9	10.1	12.1
23	---	---	---	---	---	---	10.7	6.1	8.4	15.2	11.7	13.5
24	---	---	---	---	---	---	14.4	8.0	11.1	15.2	12.6	14.1
25	---	---	---	---	---	---	16.3	10.4	13.2	14.2	12.3	13.3
26	---	---	---	---	---	---	17.0	12.2	14.6	14.3	11.8	13.0
27	---	---	---	---	---	---	17.3	13.0	15.0	14.3	12.1	13.2
28	---	---	---	---	---	---	17.8	13.5	15.7	15.0	13.0	14.0
29	---	---	---	---	---	---	18.1	13.7	15.4	14.6	12.9	13.7
30	---	---	---	---	---	---	16.2	12.5	14.2	14.2	11.6	13.0
31	---	---	---	---	---	---	---	---	---	15.3	12.4	14.0
MONTH	---	---	---	---	---	---	18.1	6.1	11.4	18.4	3.4	13.1
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	16.2	12.8	14.7	19.9	17.1	18.7	22.0	18.0	20.0	18.1	15.9	17.1
2	16.3	13.5	15.0	20.3	17.1	18.6	23.5	19.1	21.0	18.6	15.5	17.2
3	15.8	13.1	14.5	20.2	17.6	19.0	22.9	18.4	20.6	19.6	15.6	17.5
4	15.8	13.7	14.7	21.0	17.3	19.2	23.2	18.7	20.9	19.9	16.5	18.3
5	16.0	12.9	14.6	21.4	18.1	19.9	23.5	19.3	21.2	19.2	16.2	17.8
6	16.8	13.4	15.2	22.9	18.1	20.2	22.6	19.3	20.8	19.5	16.4	17.9
7	17.3	14.4	16.0	23.7	19.3	21.5	23.2	19.0	21.0	18.1	14.9	16.5
8	16.5	14.3	15.4	23.2	20.3	21.7	22.7	19.3	21.0	15.9	12.9	14.4
9	16.4	13.7	15.2	20.8	18.9	19.9	20.7	18.2	19.3	16.2	11.6	14.0
10	17.6	14.5	16.0	21.8	18.5	19.8	19.6	17.7	18.7	16.8	12.1	14.7
11	17.7	14.6	16.2	22.2	18.0	19.9	21.4	17.2	19.1	17.4	13.2	15.4
12	17.6	14.6	15.9	20.8	18.0	19.5	20.1	17.6	19.0	17.8	14.1	16.0
13	16.4	13.4	14.5	20.8	18.1	19.4	20.2	17.8	18.9	18.1	14.4	16.4
14	13.8	11.6	12.6	21.3	17.9	19.4	19.9	18.0	18.8	19.1	15.8	17.5
15	15.3	10.9	13.1	20.7	17.2	18.7	18.9	16.9	17.9	18.7	16.3	17.6
16	17.3	12.9	15.1	21.4	16.9	19.1	18.7	16.6	17.8	18.9	16.6	17.7
17	18.0	14.7	16.4	19.8	17.0	17.8	18.3	16.1	17.4	18.7	16.4	17.4
18	18.5	14.9	17.0	20.9	16.5	18.7	20.3	16.3	18.2	16.9	14.3	15.4
19	18.2	16.1	17.1	19.7	17.2	18.6	20.5	16.8	18.7	17.4	14.0	15.7
20	18.7	15.9	17.3	21.3	17.4	19.3	19.5	17.5	18.3	17.6	13.7	15.7
21	19.6	16.3	18.0	20.5	18.0	19.3	20.2	16.3	18.1	18.1	14.4	16.2
22	18.9	17.5	18.1	21.6	18.0	19.7	19.9	17.2	18.6	16.7	14.7	15.8
23	17.9	15.3	16.8	21.5	18.7	20.0	19.1	16.2	17.8	17.4	13.9	15.7
24	18.7	15.2	17.0	21.0	18.8	19.7	20.8	16.5	18.7	17.3	13.7	15.6
25	18.9	16.0	17.4	21.2	17.6	19.3	21.2	17.5	18.9	17.5	13.6	15.6
26	18.5	16.5	17.7	21.7	18.4	19.6	20.3	15.9	18.2	17.3	14.1	15.8
27	19.8	17.0	18.3	21.9	18.3	19.8	20.6	16.5	18.6	18.1	14.3	16.2
28	19.4	16.2	17.9	22.1	17.7	19.9	20.7	17.4	18.6	17.2	14.0	15.6
29	20.0	17.4	18.6	23.3	18.2	20.7	20.1	16.4	18.0	17.0	14.6	15.5
30	19.4	17.2	18.4	22.4	19.1	20.7	19.0	15.6	17.3	16.9	13.2	15.0
31	---	---	---	23.1	18.9	20.4	18.5	15.8	17.1	---	---	---
MONTH	20.0	10.9	16.2	23.7	16.5	19.6	23.5	15.6	19.0	19.9	11.6	16.2

07096000 ARKANSAS RIVER AT CANON CITY, CO

LOCATION.--Lat 38°26'02", long 105°15'24", in SE<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec.31, T.18 S., R.70 W., Fremont County, Hydrologic Unit 11020002, on right bank 800 ft upstream from Sand Creek, 0.7 mi downstream from Grape Creek, and 0.7 mi upstream from First Street Bridge in Canon City.

DRAINAGE AREA.--3,117 mi<sup>2</sup>.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1888 to current year. Monthly discharge only for some periods, published in WSP 1311. Published as "near Canyon" 1900-1906.

REVISED RECORDS.--WSP 1117: Drainage area. WSP 1311: 1897-98.

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 5,342.13 ft above sea level. See WSP 1711 or 1731 for history of changes prior to Oct. 1, 1957. Oct. 1, 1957 to Nov. 15, 1962, water-stage recorder at present site at datum 1.49 ft higher.

REMARKS.--No estimated daily discharges. Records good. Diversions for irrigation of about 250 acres 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 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	244	307	475	430	385	433	322	268	2070	1020	676	321
2	233	304	453	432	386	424	317	298	2350	941	699	346
3	227	313	465	422	414	418	330	428	2610	844	657	290
4	284	325	466	433	424	419	334	429	2470	769	701	278
5	283	320	459	433	395	420	342	407	2230	678	656	300
6	296	326	470	433	400	431	392	439	1940	660	694	321
7	298	303	469	426	399	420	391	526	1690	642	766	307
8	250	300	465	415	417	409	354	554	1650	638	798	321
9	240	331	464	401	410	407	341	526	1710	659	649	338
10	237	344	466	412	402	411	300	501	1760	685	703	314
11	232	363	454	412	425	422	290	482	1770	805	733	289
12	226	362	445	408	394	398	296	540	1780	833	762	275
13	224	342	451	417	400	385	269	618	1890	881	695	264
14	224	391	465	396	401	402	252	819	1910	894	730	261
15	219	415	469	405	397	387	249	1140	1780	708	803	267
16	224	400	447	407	395	353	246	1530	1500	695	765	268
17	220	395	430	391	397	345	248	1840	1250	666	617	263
18	213	435	446	371	393	350	263	1900	1100	596	538	267
19	207	466	422	385	393	338	275	1760	892	641	499	308
20	206	499	438	415	402	348	281	1950	870	637	453	275
21	210	498	441	404	410	380	284	1920	896	637	433	252
22	213	488	452	409	417	393	254	1710	907	643	490	246
23	231	493	469	441	413	397	255	1540	1060	641	494	246
24	277	486	458	475	404	414	238	1560	1290	648	483	242
25	311	476	450	422	403	412	256	1980	1410	661	440	234
26	287	476	446	425	410	407	243	2210	1380	664	409	230
27	276	468	419	411	427	399	253	2410	1500	656	374	223
28	302	481	436	411	428	381	242	2500	1340	641	301	215
29	341	481	447	402	---	361	248	2600	1110	616	275	210
30	315	480	442	399	---	351	256	2520	1070	609	304	221
31	306	---	437	399	---	334	---	2140	---	634	321	---
TOTAL	7856	12068	14016	12842	11341	12149	8621	40045	47185	21942	17918	8192
MEAN	253	402	452	414	405	392	287	1292	1573	708	578	273
MAX	341	499	475	475	428	433	392	2600	2610	1020	803	346
MIN	206	300	419	371	385	334	238	268	870	596	275	210
AC-FT	15580	23940	27800	25470	22490	24100	17100	79430	93590	43520	35540	16250

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1889 - 2001, BY WATER YEAR (WY)

MEAN	373	379	371	349	345	354	425	1113	2285	1474	855	449
MAX	1195	620	623	609	781	711	1120	2667	4286	5541	2134	1411
(WY)	1912	1924	1983	1983	1985	1989	1942	1984	1980	1957	1957	1909
MIN	167	180	204	195	217	176	108	243	481	230	217	188
(WY)	1978	1940	1940	1979	1978	1904	1940	1977	1902	1902	1977	1931

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1889 - 2001

ANNUAL TOTAL	224760	214175	
ANNUAL MEAN	614	587	733
HIGHEST ANNUAL MEAN			1299
LOWEST ANNUAL MEAN			329
HIGHEST DAILY MEAN	2970	2610	9480
LOWEST DAILY MEAN	202	206	69
ANNUAL SEVEN-DAY MINIMUM	206	213	87
MAXIMUM PEAK FLOW		2710	a19000
MAXIMUM PEAK STAGE		8.29	b,c10.70
ANNUAL RUNOFF (AC-FT)	445800	424800	531200
10 PERCENT EXCEEDS	1220	1310	1710
50 PERCENT EXCEEDS	446	417	418
90 PERCENT EXCEEDS	253	252	241

a Site and datum then in use, from rating curve extended above 5000 ft<sup>3</sup>/s.

b From floodmark.

c Maximum gage height, 10.90 ft, Jun 18, 1995.

07096000 ARKANSAS RIVER AT CANON CITY, CO--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1993 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1993 to current year.

WATER TEMPERATURE: October 1993 to current year.

INSTRUMENTATION.--Water-quality monitor with satellite telemetry.

REMARKS.--Records for daily specific conductance are good. Records for daily water temperature are good. Daily data that are not published are either missing or of unacceptable quality. Reported values are representative of the stream based on cross-section comparisons made during the year.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 739 microsiemens/cm, Aug. 16, 2000; minimum, 94 microsiemens/cm, June 9, 1996.

WATER TEMPERATURE: Maximum, 23.7°C, July 7, 2001; minimum, 0.0°C, on many days.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 339 microsiemens/cm, Sept.1; minimum, 134 microsiemens/cm, June 28.

WATER TEMPERATURE: Maximum, 23.7°C, July 7; minimum, 0.0 °C, on many days.

## SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	313	306	310	307	301	304	236	231	234	240	232	237
2	313	302	308	305	298	302	235	230	233	237	230	234
3	311	306	309	307	302	304	235	233	234	241	234	237
4	312	295	305	304	300	303	235	231	233	239	230	235
5	295	273	284	302	296	300	234	229	231	237	233	236
6	279	274	277	299	293	296	234	230	232	238	234	236
7	278	274	276	299	287	293	235	230	232	237	229	234
8	288	277	281	302	290	294	237	231	234	242	235	240
9	305	288	297	304	290	295	237	231	234	242	238	240
10	314	305	310	295	281	288	236	228	232	242	234	239
11	315	308	312	289	281	284	238	227	230	241	234	238
12	318	309	313	285	276	281	242	226	236	245	237	242
13	315	310	313	283	271	275	235	225	230	242	237	240
14	318	313	316	281	276	279	239	228	232	243	238	240
15	320	315	318	281	262	273	237	229	233	248	239	244
16	325	318	322	286	275	280	243	235	239	246	237	240
17	323	316	319	289	280	284	244	236	239	240	233	237
18	320	316	318	290	272	281	248	243	246	239	232	236
19	322	316	319	276	260	266	246	240	243	247	234	240
20	322	316	319	264	254	259	246	236	241	249	240	243
21	324	319	322	255	242	250	247	243	245	243	238	240
22	325	319	322	243	237	239	244	238	242	247	237	241
23	323	316	320	241	235	238	242	236	239	237	229	233
24	320	313	317	238	235	236	242	235	238	230	223	226
25	318	309	313	239	235	237	242	236	238	227	222	225
26	315	308	312	240	237	238	246	238	242	226	223	225
27	314	310	312	238	237	237	244	236	241	231	223	225
28	315	310	313	240	236	238	241	234	238	232	227	230
29	314	305	310	237	231	234	237	230	233	230	222	226
30	312	307	309	237	231	235	240	236	237	225	221	223
31	309	303	306	---	---	---	241	235	237	227	221	224
MONTH	325	273	309	307	231	271	248	225	236	249	221	235

ARKANSAS RIVER BASIN

07096000 ARKANSAS RIVER AT CANON CITY, CO--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	230	224	227	255	236	243	315	308	311	286	274	278
2	231	226	229	258	241	247	316	311	314	274	249	265
3	229	221	225	262	238	247	322	311	314	262	243	250
4	227	221	224	263	241	250	313	306	310	243	226	232
5	225	220	222	261	239	248	309	301	306	252	227	242
6	230	223	227	255	242	248	315	299	306	---	---	---
7	233	226	229	260	247	253	301	294	297	---	---	---
8	231	221	225	270	256	261	306	297	301	---	---	---
9	---	---	---	277	266	271	314	305	311	301	293	296
10	---	---	---	277	271	274	318	310	315	304	295	299
11	228	221	223	274	265	270	322	313	318	298	291	294
12	231	223	227	272	267	269	320	312	316	296	289	293
13	233	222	228	277	271	273	312	309	311	290	281	284
14	233	224	229	281	274	277	310	304	308	284	277	281
15	231	227	229	280	271	275	309	299	305	282	272	275
16	232	222	227	283	271	277	305	299	302	286	260	279
17	238	228	233	288	280	284	303	296	299	260	234	248
18	240	227	234	291	283	287	304	294	299	252	232	237
19	237	229	232	300	288	294	306	294	299	260	252	257
20	235	230	232	303	298	300	300	293	297	281	253	267
21	237	232	234	308	301	304	297	292	294	277	232	252
22	239	234	236	313	301	306	301	295	298	233	215	222
23	237	232	234	306	294	300	310	298	303	215	198	206
24	241	234	236	298	293	296	317	310	313	199	185	192
25	268	239	246	300	296	298	321	310	316	185	156	169
26	266	237	247	305	297	301	310	302	305	156	151	153
27	259	237	243	302	295	299	305	292	297	161	145	151
28	251	234	242	306	300	303	296	289	292	149	140	143
29	---	---	---	304	294	301	292	283	287	147	142	145
30	---	---	---	308	295	303	295	281	287	150	146	149
31	---	---	---	311	306	309	---	---	---	160	150	156
MONTH	---	---	---	313	236	280	322	281	304	---	---	---
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	160	155	158	202	185	192	210	205	206	339	303	309
2	156	147	152	194	189	191	209	204	207	309	288	298
3	147	141	144	205	194	202	212	205	209	299	289	293
4	145	140	143	210	202	206	307	205	227	305	295	299
5	150	140	145	220	210	216	226	219	224	308	297	303
6	161	148	155	226	218	222	237	214	225	307	293	300
7	176	159	167	225	217	223	220	209	212	306	298	301
8	175	168	172	229	222	224	217	209	213	309	298	304
9	174	170	173	240	218	225	237	216	228	305	296	302
10	170	164	168	233	221	227	249	224	239	300	291	296
11	168	163	166	221	200	209	245	229	235	298	290	294
12	165	159	162	203	191	196	312	222	240	299	294	297
13	159	154	157	269	187	195	244	223	234	302	296	299
14	159	153	156	246	188	213	227	220	223	306	298	302
15	163	158	162	224	220	222	222	214	218	307	297	302
16	163	147	154	225	219	222	241	215	222	304	297	301
17	170	158	164	220	212	215	245	227	237	309	303	306
18	176	168	171	229	215	223	262	244	254	311	303	308
19	186	173	177	229	213	221	274	262	268	307	289	299
20	187	178	184	215	213	214	272	268	271	295	286	289
21	179	167	172	218	213	215	289	272	275	305	292	297
22	168	160	164	215	212	214	287	277	283	310	305	307
23	163	151	157	215	210	212	286	279	283	313	306	310
24	154	144	149	215	212	213	286	282	284	312	307	310
25	147	139	143	223	214	216	293	286	288	311	303	308
26	145	137	140	225	215	220	298	291	294	315	308	311
27	149	136	146	223	215	218	298	290	294	317	312	315
28	155	134	142	218	215	217	299	286	292	321	314	318
29	189	155	175	221	217	218	307	295	299	327	319	323
30	192	180	183	221	216	219	312	304	308	327	318	323
31	---	---	---	216	208	212	323	297	305	---	---	---
MONTH	192	134	160	269	185	214	323	204	252	339	286	304

## ARKANSAS RIVER BASIN

07096000 ARKANSAS RIVER AT CANON CITY, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	17.0	14.1	15.3	7.6	5.7	6.5	3.2	1.3	2.0	.1	.0	.1
2	16.4	13.4	14.8	6.3	5.1	5.6	1.4	.2	.7	.1	.0	.1
3	16.3	13.2	14.6	7.0	5.3	6.0	1.2	.1	.5	.1	.0	.1
4	15.7	13.9	14.6	6.7	5.1	6.0	1.4	.5	.8	.5	.0	.2
5	14.4	11.7	12.8	7.9	5.4	6.5	1.5	.2	.9	.6	.1	.2
6	11.9	8.9	10.7	5.4	3.6	4.7	1.8	.7	1.3	.8	.1	.3
7	9.0	7.5	8.5	3.8	2.3	3.1	1.9	1.1	1.6	.9	.0	.3
8	7.6	6.8	7.3	3.2	1.6	2.3	2.6	1.7	2.0	.6	.0	.1
9	10.7	7.3	8.8	3.4	1.5	2.5	2.8	1.5	2.2	.1	.1	.1
10	11.8	9.0	10.4	3.3	2.0	2.5	3.0	1.6	2.4	.3	.0	.1
11	12.8	9.7	11.4	2.5	1.6	2.1	1.6	.0	.5	.5	.0	.1
12	14.1	11.5	12.5	1.9	.8	1.5	.1	.1	.1	.2	.1	.1
13	12.2	9.8	11.1	1.1	.0	.3	.1	.1	.1	.6	.1	.2
14	11.2	8.8	9.8	.1	.0	.1	.1	.1	.1	.8	.0	.2
15	11.0	8.2	9.6	1.1	.0	.2	.4	.1	.1	.1	.0	.1
16	11.3	8.6	9.9	.6	.0	.1	.3	.1	.1	.1	.1	.1
17	11.4	8.6	10.0	.1	.0	.1	.6	.0	.2	.1	.0	.1
18	11.7	8.7	10.2	.1	.0	.1	.1	.1	.1	.1	.0	.1
19	11.2	8.7	10.0	.1	.0	.1	.1	.1	.1	.1	.0	.1
20	10.8	8.3	9.5	.5	.0	.1	.1	.1	.1	.1	.0	.1
21	10.4	8.2	9.4	.8	.0	.3	.1	.0	.1	.1	.0	.1
22	10.0	9.0	9.5	2.3	.6	1.7	.1	.0	.1	.1	.0	.1
23	10.0	9.3	9.6	2.9	2.0	2.5	.2	.1	.1	.2	.0	.1
24	11.1	9.1	10.1	2.5	1.2	1.7	.2	.0	.1	.1	.0	.1
25	10.7	9.1	9.7	1.9	.9	1.3	.1	.1	.1	.4	.0	.1
26	9.8	7.7	8.8	1.7	.7	1.2	.1	.1	.1	.3	.1	.1
27	9.6	7.6	8.6	2.2	1.2	1.7	.1	.1	.1	.1	.1	.1
28	10.2	8.9	9.5	3.1	1.8	2.4	.1	.1	.1	.1	.1	.1
29	10.3	9.0	9.5	2.5	1.5	1.9	.4	.0	.1	.2	.0	.1
30	9.7	8.0	8.8	3.4	1.5	2.6	.1	.0	.1	.5	.1	.1
31	9.2	6.9	7.9	---	---	---	.1	.0	.1	.4	.0	.1
MONTH	17.0	6.8	10.4	7.9	.0	2.3	3.2	.0	.5	.9	.0	.1
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	.1	.1	.1	5.2	1.9	3.5	13.0	7.9	10.2	17.8	12.3	15.0
2	.3	.0	.1	7.2	3.8	5.3	13.9	9.5	11.4	15.9	10.1	13.2
3	.5	.1	.2	6.0	3.6	4.8	13.9	8.8	11.4	10.1	7.0	8.1
4	.8	.1	.2	7.4	4.0	5.6	14.3	10.7	12.4	7.0	5.1	5.7
5	3.0	.1	1.4	7.3	4.7	6.1	14.2	11.7	12.7	7.5	5.1	6.4
6	4.4	3.0	3.6	7.8	5.6	6.7	12.5	8.7	11.2	---	---	---
7	5.0	3.4	4.3	7.7	6.4	6.9	11.1	6.9	8.8	---	---	---
8	4.6	.0	2.2	9.0	6.0	7.2	11.9	7.2	9.3	---	---	---
9	.1	.1	.1	9.2	6.2	7.6	12.9	7.6	10.1	16.9	14.2	15.3
10	.1	.0	.1	7.8	5.0	6.9	10.7	8.3	9.3	15.6	13.2	14.7
11	.8	.0	.3	5.0	3.9	4.2	10.5	7.2	8.5	16.8	13.0	14.9
12	2.1	.1	1.0	6.6	3.4	5.0	9.8	6.5	8.0	18.7	14.6	16.6
13	3.1	.8	2.0	8.9	4.7	6.5	12.1	6.6	9.1	18.2	15.2	16.8
14	3.1	2.3	2.6	8.7	4.9	6.9	12.4	8.1	10.0	17.7	15.5	16.7
15	3.4	1.7	2.5	7.2	3.5	4.9	13.3	8.3	10.5	17.2	14.7	16.1
16	2.9	1.3	2.1	5.8	3.3	4.5	12.1	8.9	10.4	16.5	14.3	15.1
17	3.6	1.2	2.5	4.3	3.4	3.9	13.8	9.0	11.2	14.3	12.7	13.5
18	3.8	2.4	3.0	5.9	2.8	4.5	15.1	10.2	12.7	15.5	11.2	13.4
19	4.7	2.6	3.6	8.7	3.9	6.2	16.6	12.2	14.2	15.0	13.5	14.1
20	5.4	3.7	4.7	10.4	6.4	8.4	14.5	11.7	12.8	16.6	11.7	14.0
21	6.0	4.5	5.2	12.6	7.8	10.0	12.0	9.9	10.9	14.6	11.2	12.9
22	6.1	4.3	5.3	11.5	9.3	10.3	10.3	8.0	9.3	14.4	10.4	12.6
23	7.0	5.1	5.9	10.9	8.1	9.4	11.6	6.5	8.9	15.7	11.9	13.9
24	6.0	4.3	5.1	8.6	7.0	7.9	14.6	7.9	11.0	15.8	13.2	14.5
25	5.5	3.1	4.1	7.4	7.0	7.2	16.6	10.3	13.3	14.5	12.9	13.7
26	5.3	3.7	4.3	7.6	7.2	7.3	17.9	12.2	14.9	14.6	12.1	13.4
27	3.9	1.4	2.5	10.4	7.1	8.4	17.2	13.1	15.2	14.7	12.4	13.7
28	2.4	1.1	1.7	9.9	7.8	8.5	18.6	14.0	16.0	15.4	13.3	14.5
29	---	---	---	9.3	6.6	7.6	18.0	14.5	16.1	15.2	13.2	14.2
30	---	---	---	10.7	6.2	8.2	16.8	13.5	14.9	14.2	12.3	13.4
31	---	---	---	11.8	7.2	9.2	---	---	---	15.9	12.5	14.5
MONTH	7.0	.0	2.5	12.6	1.9	6.8	18.6	6.5	11.5	---	---	---

ARKANSAS RIVER BASIN

07096000 ARKANSAS RIVER AT CANON CITY, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	16.7	13.5	15.2	21.0	17.4	19.3	21.9	19.0	20.5	18.9	16.3	17.5
2	16.9	13.9	15.6	20.7	17.7	19.3	22.9	19.9	21.4	19.4	16.0	17.3
3	16.2	13.7	15.1	21.2	18.3	19.8	23.0	19.8	21.2	19.3	15.9	17.6
4	16.7	14.2	15.3	21.1	18.0	19.7	22.5	19.8	21.3	20.4	16.8	18.4
5	16.6	13.8	15.1	22.5	18.9	20.5	22.9	20.7	21.7	19.7	16.3	18.0
6	17.5	14.0	15.9	22.9	18.9	20.8	22.6	19.9	21.3	19.9	16.6	18.1
7	18.2	15.0	16.7	23.7	20.0	21.8	22.6	20.1	21.4	18.3	15.5	16.8
8	16.9	14.8	16.1	23.5	21.2	22.0	22.7	20.1	21.3	15.9	13.1	14.5
9	16.9	14.3	15.8	21.3	19.6	20.5	21.3	18.9	20.1	16.0	11.8	13.8
10	18.2	14.7	16.5	22.3	18.9	20.3	20.6	17.9	19.2	16.5	12.6	14.7
11	18.5	15.2	16.9	22.1	18.7	20.3	21.4	17.8	19.6	17.3	13.7	15.4
12	17.4	15.0	16.3	21.4	18.7	20.3	20.9	18.6	19.7	17.8	14.3	16.0
13	16.4	13.9	14.8	21.6	18.8	20.2	20.9	18.5	19.6	17.8	15.0	16.6
14	13.9	12.0	13.0	21.7	18.3	20.1	20.8	18.6	19.6	19.3	16.3	17.7
15	15.8	11.2	13.5	21.2	17.9	19.4	19.5	17.4	18.5	19.8	17.2	18.2
16	17.4	13.4	15.5	21.4	17.8	19.6	19.7	17.2	18.3	19.5	17.3	18.0
17	18.6	15.4	17.0	20.0	17.7	18.5	19.0	17.0	18.0	18.9	16.9	17.8
18	19.3	15.7	17.6	21.0	17.0	18.9	20.4	16.6	18.5	17.2	14.9	16.1
19	18.5	16.7	17.6	20.2	18.0	19.1	21.0	17.3	19.2	17.7	13.8	15.7
20	19.1	15.9	17.7	21.7	18.1	19.9	20.0	18.2	19.1	17.7	14.1	15.9
21	20.0	16.8	18.5	21.8	18.8	20.1	20.7	17.1	18.7	18.4	14.5	16.4
22	20.1	17.9	18.7	21.2	18.7	20.1	20.5	17.5	19.0	17.4	15.0	16.2
23	18.2	15.9	17.3	21.6	19.4	20.5	20.0	16.5	18.3	17.8	14.2	15.7
24	19.0	15.9	17.5	21.9	19.5	20.4	21.0	16.8	18.9	17.5	14.0	15.7
25	19.0	16.7	18.0	21.7	18.4	19.9	20.5	17.7	19.1	17.7	14.1	15.8
26	18.9	17.1	18.1	21.7	19.2	20.2	20.5	15.9	18.3	17.8	14.3	16.0
27	20.1	17.3	18.7	21.3	19.1	20.2	20.9	16.8	18.8	18.7	14.5	16.3
28	19.8	17.0	18.5	22.0	18.5	20.2	20.8	17.1	18.6	17.7	14.4	16.1
29	20.1	18.0	19.2	22.7	19.0	20.8	20.4	16.3	18.2	17.3	14.9	16.0
30	19.8	17.7	19.0	22.2	20.1	21.1	19.6	16.2	17.7	17.1	14.0	15.4
31	---	---	---	22.7	19.7	21.0	19.4	16.0	17.4	---	---	---
MONTH	20.1	11.2	16.7	23.7	17.0	20.2	23.0	15.9	19.4	20.4	11.8	16.5

## 07096250 FOURMILE CREEK BELOW CRIPPLE CREEK NEAR VICTOR, CO

LOCATION.--Lat 38°39'52", long 105°13'37", in SW<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec.9, T.16 S., R.70 W., Teller County, Hydrologic Unit 11020002, on left bank 500 ft from Teller County Route 88, 0.2 mi downstream from Cripple Creek, and 5.5 mi southwest of Victor.

DRAINAGE AREA.--272 mi<sup>2</sup>.

PERIOD OF RECORD.--September 1992 to current year.

GAGE.--Water-stage recorder with satellite telemetry and crest-stage gage. Elevation of gage is 6,870 ft above sea level, from topographic map.

REMARKS.--No estimated daily discharges. Records fair except for Nov. 6 to Mar. 5, which are poor. Natural flow of stream affected by small diversions for irrigation, flows from Cripple Creek sewage treatment plant, and releases from Pisgah Lake. 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 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.2	8.9	2.9	4.4	5.4	5.3	10	11	16	15	9.1	27
2	6.1	7.8	2.8	4.0	5.3	6.2	10	7.2	12	16	14	24
3	5.5	8.1	3.2	3.9	5.3	5.4	9.9	9.6	11	21	33	20
4	5.3	7.5	2.8	4.0	5.1	5.2	9.8	12	10	22	19	15
5	5.1	7.7	2.9	4.2	5.1	5.0	11	16	12	22	58	15
6	5.1	6.1	2.9	4.0	4.7	5.2	13	19	13	23	50	16
7	5.0	6.1	3.0	4.0	4.4	5.9	13	27	17	31	51	16
8	4.6	6.4	3.4	4.9	4.2	6.1	11	28	31	33	40	21
9	4.2	6.4	3.3	3.7	5.0	6.4	12	23	24	35	36	22
10	4.1	5.4	3.2	3.6	5.2	6.0	13	22	23	36	35	19
11	3.7	6.7	3.1	3.5	4.9	6.4	16	24	19	35	38	17
12	3.4	5.3	3.4	3.6	4.8	6.7	19	26	17	39	45	12
13	3.5	5.1	3.8	3.2	5.3	6.7	19	29	18	45	35	9.6
14	3.2	5.1	4.0	4.0	4.7	6.3	19	26	21	49	30	7.6
15	3.0	5.7	4.1	3.8	5.7	6.5	18	25	16	46	40	7.4
16	3.8	4.7	4.1	3.7	7.6	8.1	19	23	13	41	38	7.7
17	4.2	4.4	4.0	4.7	6.4	6.8	20	30	12	39	36	9.1
18	5.1	4.6	3.9	5.7	4.5	7.3	22	20	11	39	33	9.2
19	5.7	4.9	4.0	5.6	4.5	7.9	19	23	10	34	26	8.8
20	5.9	5.0	3.6	5.8	4.7	8.3	14	25	11	35	23	8.0
21	5.9	5.0	4.0	7.7	4.8	11	13	22	11	28	22	5.7
22	6.3	4.9	4.1	6.4	5.4	11	15	21	11	33	23	5.0
23	7.4	4.6	3.9	5.8	5.6	11	16	20	12	39	23	4.9
24	8.1	4.0	3.9	5.7	5.0	11	13	18	12	23	32	4.7
25	7.4	4.1	3.7	5.5	6.5	11	15	18	11	26	31	3.4
26	7.3	3.8	3.8	5.5	5.4	11	13	17	9.7	51	30	2.4
27	7.7	3.7	3.8	5.4	6.8	11	12	17	10	23	27	6.5
28	9.5	3.8	3.2	6.0	5.7	9.8	10	15	11	22	28	9.4
29	10	3.3	3.4	5.8	---	9.1	10	15	12	13	29	11
30	9.7	3.6	3.8	5.5	---	9.6	10	16	12	11	29	10
31	9.1	---	3.8	5.5	---	10	---	17	---	9.7	31	---
TOTAL	181.1	162.7	109.8	149.1	148.0	243.2	424.7	621.8	428.7	934.7	994.1	354.4
MEAN	5.84	5.42	3.54	4.81	5.29	7.85	14.2	20.1	14.3	30.2	32.1	11.8
MAX	10	8.9	4.1	7.7	7.6	11	22	30	31	51	58	27
MIN	3.0	3.3	2.8	3.2	4.2	5.0	9.8	7.2	9.7	9.7	9.1	2.4
AC-FT	359	323	218	296	294	482	842	1230	850	1850	1970	703

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 2001, BY WATER YEAR (WY)

	1993	1994	1995	1996	1997	1998	1999	2000	2001			
MEAN	14.6	11.1	8.14	7.47	6.75	8.66	21.0	63.2	46.6	27.2	31.7	20.2
MAX	21.5	21.8	16.6	15.4	12.1	17.1	40.2	149	128	75.8	101	44.9
(WY)	2000	1995	1996	1996	2000	2000	1994	1994	1995	1995	1999	1998
MIN	5.84	5.42	3.54	4.55	3.79	3.56	9.75	12.3	11.8	11.2	4.95	5.19
(WY)	2001	2001	2001	1997	1995	1999	1997	1996	1996	1993	1993	1993

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1993 - 2001
ANNUAL TOTAL	6768.8	4752.3	
ANNUAL MEAN	18.5	13.0	22.3
HIGHEST ANNUAL MEAN			38.2
LOWEST ANNUAL MEAN			12.6
HIGHEST DAILY MEAN	102	May 9	373
LOWEST DAILY MEAN	2.8	Dec 2	2.4
ANNUAL SEVEN-DAY MINIMUM	2.9	Dec 1	2.9
MAXIMUM PEAK FLOW		a234	Aug 5
MAXIMUM PEAK STAGE		4.11	Aug 5
ANNUAL RUNOFF (AC-FT)	13430	9430	16170
10 PERCENT EXCEEDS	41	30	51
50 PERCENT EXCEEDS	12	9.1	12
90 PERCENT EXCEEDS	4.0	3.8	5.0

a From rating curve extended above 187 ft<sup>3</sup>/s.

07097000 ARKANSAS RIVER AT PORTLAND, CO

LOCATION.--Lat 38°23'18", long 105°00'56", in NE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec.20, T.19 S., R.68 W., Fremont County, Hydrologic Unit 11020002, on right bank at bridge on State Highway 120 at Portland, and 1 mi downstream from Hardscrabble Creek.

DRAINAGE AREA.--4,024 mi<sup>2</sup>.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1939 to September 1952, October 1974 to current year.

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 5,021.59 ft above sea level. Prior to Oct. 1, 1974, at site 400 ft downstream at datum 0.03 ft lower.

REMARKS.--Records good except for estimated daily discharges, which are poor. Natural flow of stream affected by transmountain diversions, storage reservoirs, power developments, diversions upstream from station for irrigation of about 60,000 acres and return flow from irrigated areas.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	230	327	441	395	371	391	296	335	2300	1130	743	353
2	224	361	423	394	e380	379	301	367	2580	1060	767	384
3	212	468	431	387	e387	365	294	555	2900	923	735	325
4	254	476	439	403	e395	372	302	621	2820	845	769	290
5	271	476	432	401	e400	385	300	589	2540	725	747	281
6	295	403	446	404	410	392	335	623	2230	697	831	323
7	303	329	438	396	396	377	341	667	1890	676	903	321
8	284	320	438	374	415	372	302	693	1850	663	893	328
9	251	343	440	351	414	363	280	625	1890	696	743	344
10	249	384	442	375	380	369	263	565	1940	734	784	327
11	245	409	426	379	399	379	261	498	1940	841	838	305
12	236	409	e411	371	377	360	271	567	1920	897	957	285
13	230	373	414	384	367	337	262	653	2030	1010	783	269
14	228	352	e428	374	372	354	218	840	2100	1110	798	265
15	236	361	430	360	366	351	217	1190	1950	835	863	268
16	244	342	410	e375	365	316	207	1550	1680	783	862	288
17	237	313	389	e390	364	304	208	1970	1380	767	706	285
18	235	367	e388	e395	360	313	220	2080	1230	654	606	281
19	230	410	e387	e410	357	297	221	2020	1020	730	547	310
20	235	439	393	455	361	296	222	2150	969	717	476	290
21	241	445	e396	455	372	331	293	2150	994	704	449	263
22	241	449	427	446	377	346	346	1930	1010	725	488	244
23	257	448	457	428	377	344	330	1680	1120	713	506	243
24	308	444	469	435	370	365	315	1660	1380	737	490	247
25	330	430	482	426	361	371	315	2070	1490	750	458	230
26	308	438	455	412	353	368	312	2400	1490	765	440	224
27	295	432	394	425	378	369	304	2630	1540	753	402	215
28	303	435	408	421	380	344	301	2740	1500	727	335	210
29	367	449	429	407	---	329	318	2880	1210	693	301	200
30	349	449	396	407	---	335	323	2840	1160	658	320	210
31	320	---	397	396	---	302	---	2480	---	687	338	---
TOTAL	8248	12081	13156	12431	10604	10876	8478	44618	52053	24405	19878	8408
MEAN	266	403	424	401	379	351	283	1439	1735	787	641	280
MAX	367	476	482	455	415	392	346	2880	2900	1130	957	384
MIN	212	313	387	351	353	296	207	335	969	654	301	200
AC-FT	16360	23960	26090	24660	21030	21570	16820	88500	103200	48410	39430	16680

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 2001, BY WATER YEAR (WY)

MEAN	393	421	380	362	354	369	501	1207	2499	1584	945	451
MAX	1083	748	693	626	774	683	1869	2680	4429	4472	2380	1008
(WY)	1985	1985	1983	1983	1985	1989	1942	1984	1980	1995	1984	1982
MIN	136	191	212	199	162	147	135	245	581	242	201	172
(WY)	1978	1978	1978	1979	1978	1978	1981	1977	1977	1977	1977	1977

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1939 - 2001

ANNUAL TOTAL	230543	225236	
ANNUAL MEAN	630	617	795
HIGHEST ANNUAL MEAN			1387
LOWEST ANNUAL MEAN			315
HIGHEST DAILY MEAN	3360	Jun 1	2900
LOWEST DAILY MEAN	191	Sep 18	200
ANNUAL SEVEN-DAY MINIMUM	200	Sep 15	216
MAXIMUM PEAK FLOW			3060
MAXIMUM PEAK STAGE			4.99
ANNUAL RUNOFF (AC-FT)	457300	446800	576200
10 PERCENT EXCEEDS	1240	1420	1880
50 PERCENT EXCEEDS	422	396	460
90 PERCENT EXCEEDS	269	262	228

e Estimated.

a From rating curve extended above 5300 ft<sup>3</sup>/s.

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--February 1977 to current year. October 1979 to October 1982 published records include observer once-daily water temperature and specific conductance measurements.

## PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1979 to current year.  
WATER TEMPERATURE: October 1979 to current year.

INSTRUMENTATION.--Water-quality monitor since November 1982, with satellite telemetry.

REMARKS.--Records for daily specific conductance are fair except for Nov. 16-19, Dec. 3, 11, 13, 16, 18-20, 22-24, 26-27, Dec. 30 to Jan. 3, Jan 8-12, 15, Feb. 2, 5, 9-12, and Sept. 4, 6-7, 12-13, 15-18, 20-21, which are poor. Records for daily water temperature are good except for Aug. 10, 12, and Sept. 23-28, which are poor. Daily data that are not published are either missing or of unacceptable quality. Reported values are representative of the stream based on cross-section comparisons made during the year. Reported values for specific conductance may not be representative of the stream during flash floods. Periodic water-quality data available, Feb. 1977 to Sept. 1995, under National Stream-Quality Accounting Network (NASQAN) for this site.

## EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 1,420 microsiemens/cm, Aug. 18, 2000; minimum, 111 microsiemens/cm, June 22, 1984.  
WATER TEMPERATURE: Maximum, 26.6°C, July 8, 2001, Aug. 27, 2000; minimum, 0.0°C, on many days.

## EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum daily, 1,260 microsiemens/cm, Aug. 21; minimum, 165 microsiemens/cm, June 4.  
WATER TEMPERATURE: Maximum, 26.6°C, July 8; minimum, 0.0°C, on many days.

## SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	558	541	548	515	464	486	396	374	386	437	384	398
2	584	544	568	493	446	470	405	363	383	428	382	397
3	587	564	571	466	432	445	425	375	394	439	378	391
4	575	502	540	457	438	447	416	370	392	412	388	397
5	535	510	520	454	436	444	408	372	390	397	386	393
6	518	478	498	496	451	472	406	362	386	415	371	390
7	498	473	484	498	482	490	397	383	389	397	380	388
8	525	475	495	493	468	481	395	380	386	418	385	397
9	579	494	542	496	456	480	404	362	383	435	379	396
10	585	527	552	469	453	460	400	359	386	421	387	399
11	576	530	547	466	437	451	386	373	378	435	374	400
12	571	543	555	459	433	445	---	---	---	440	385	398
13	567	522	545	468	432	450	381	345	364	412	383	397
14	579	538	553	484	434	454	461	364	386	412	378	394
15	569	510	533	475	446	458	384	364	370	422	382	398
16	582	509	535	467	418	447	390	370	379	417	366	393
17	556	521	537	497	443	459	409	370	387	444	383	402
18	566	525	545	472	425	454	409	365	382	445	391	413
19	571	546	557	462	410	433	394	381	390	434	394	406
20	565	539	552	426	381	402	401	369	389	412	373	395
21	565	528	549	420	366	395	---	---	---	405	373	391
22	568	531	548	410	379	392	502	362	396	407	378	391
23	571	540	555	402	379	386	407	378	386	402	365	385
24	567	498	527	405	368	385	411	374	382	388	368	376
25	532	476	500	409	384	392	388	368	379	401	366	381
26	522	481	497	429	385	407	391	368	383	411	379	397
27	518	472	493	428	398	411	453	373	405	405	384	391
28	541	483	507	414	374	400	410	378	394	402	379	389
29	488	439	466	405	373	385	415	383	392	404	378	389
30	495	456	475	397	370	385	419	384	390	405	366	392
31	504	458	483	---	---	---	431	379	392	408	381	395
MONTH	587	439	528	515	366	436	---	---	---	445	365	394

ARKANSAS RIVER BASIN

07097000 ARKANSAS RIVER AT PORTLAND, CO--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	411	380	398	427	399	409	504	403	475	500	452	481
2	406	378	388	431	403	415	504	442	479	493	440	468
3	---	---	---	432	401	421	508	464	489	545	405	449
4	---	---	---	438	402	423	507	454	487	480	406	443
5	391	362	374	434	393	421	490	457	474	546	453	495
6	424	363	388	437	392	417	478	436	458	535	423	461
7	428	398	416	417	406	413	457	434	449	444	401	426
8	432	393	411	444	390	411	477	441	455	462	408	422
9	404	380	394	435	405	422	492	453	471	447	412	428
10	421	392	409	467	411	438	521	455	490	451	428	440
11	422	389	407	459	433	446	531	469	505	467	437	445
12	421	392	406	464	427	442	509	482	496	440	412	419
13	420	398	406	471	439	453	528	461	493	412	373	388
14	418	396	407	475	422	450	551	502	525	375	312	345
15	418	382	404	470	427	447	587	441	523	312	261	289
16	410	379	396	468	446	458	570	486	522	264	210	243
17	411	390	401	503	464	484	560	502	534	512	201	241
18	413	385	398	499	459	482	560	347	518	236	208	218
19	437	402	418	504	463	487	540	404	490	692	208	255
20	420	379	410	512	484	493	538	445	507	287	237	253
21	413	386	403	487	435	470	710	398	502	249	221	238
22	416	387	406	472	438	453	726	475	562	237	220	229
23	412	390	405	455	417	439	602	500	539	251	221	241
24	414	396	407	439	404	427	525	461	512	245	228	238
25	424	395	409	441	417	427	559	487	523	229	195	214
26	420	402	411	458	426	440	531	459	504	197	185	191
27	416	397	408	452	420	440	511	432	475	191	175	186
28	425	382	407	469	424	453	485	436	464	184	172	178
29	---	---	---	491	450	461	539	467	501	178	168	173
30	---	---	---	573	470	506	508	465	487	184	169	176
31	---	---	---	481	446	472	---	---	---	198	175	188
MONTH	---	---	---	573	390	446	726	347	497	692	168	318
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	206	193	199	271	242	250	338	311	323	514	466	487
2	197	175	189	268	258	263	324	305	316	482	430	458
3	178	167	172	279	266	271	342	319	327	468	442	456
4	186	165	172	289	275	281	393	317	337	485	441	468
5	187	171	178	318	289	302	721	335	358	495	441	467
6	195	178	187	327	306	315	683	353	447	487	462	476
7	211	194	202	326	317	321	373	329	342	513	465	479
8	221	192	210	332	322	328	339	320	326	505	481	493
9	216	208	212	344	321	333	373	326	347	507	488	495
10	214	196	204	351	325	340	1200	359	446	501	475	492
11	205	193	198	344	296	317	565	347	377	490	466	480
12	200	188	193	296	280	290	656	347	432	510	470	496
13	189	180	184	759	278	338	441	386	402	508	468	478
14	187	179	183	591	326	386	405	365	381	---	---	---
15	199	186	191	394	350	360	427	354	369	495	457	469
16	209	186	197	354	335	342	378	352	364	566	494	522
17	225	206	218	341	331	336	408	358	389	564	483	528
18	242	224	231	369	338	358	377	346	359	536	493	508
19	273	239	253	362	345	350	408	336	377	535	483	512
20	727	273	291	346	339	342	431	403	415	507	470	487
21	596	276	302	350	339	344	1260	414	468	506	470	489
22	279	269	274	354	340	346	731	415	450	---	---	---
23	273	243	261	350	337	344	418	395	410	---	---	---
24	244	214	226	361	336	347	418	382	407	595	529	557
25	221	194	204	354	336	346	436	411	419	587	556	569
26	203	194	198	390	330	353	444	401	427	573	550	566
27	208	192	201	408	340	357	453	419	436	577	551	563
28	221	183	197	357	337	346	496	441	464	583	542	565
29	244	221	230	353	337	343	503	456	481	587	540	571
30	250	219	240	351	337	346	517	442	481	581	554	561
31	---	---	---	348	333	342	490	444	472	---	---	---
MONTH	727	165	213	759	242	330	1260	305	398	---	---	---

## ARKANSAS RIVER BASIN

07097000 ARKANSAS RIVER AT PORTLAND, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	19.9	14.5	17.2	10.2	6.8	8.4	5.0	2.0	3.3	1.0	.0	.3
2	19.8	14.0	17.0	8.5	6.1	7.5	3.6	.6	2.0	1.8	.0	.6
3	19.4	13.6	16.7	9.7	6.8	7.9	4.3	.0	2.0	3.3	.0	1.2
4	18.3	14.7	16.6	10.1	5.9	8.0	4.1	.2	2.0	4.7	.0	2.1
5	15.9	12.5	14.3	8.6	6.6	7.7	4.7	.2	2.4	4.5	.4	2.2
6	12.5	10.5	11.3	7.9	5.3	6.5	4.0	.6	2.3	4.8	1.0	2.7
7	10.7	9.1	9.9	7.2	4.4	5.6	3.9	1.5	2.8	3.6	.9	2.1
8	10.7	8.8	9.7	6.8	3.1	4.8	5.0	2.6	3.5	3.2	.0	1.2
9	14.0	8.5	11.2	6.4	2.2	4.3	5.6	1.7	3.5	1.5	.0	.4
10	15.6	9.2	12.5	5.5	2.3	3.8	3.4	2.2	3.0	3.1	.0	1.2
11	16.3	10.6	13.7	4.0	2.7	3.4	2.5	.0	1.4	3.5	.0	1.3
12	16.8	12.6	14.7	4.2	1.7	2.8	.2	.0	.0	3.2	.0	1.2
13	15.2	10.6	12.9	3.7	.4	2.0	.0	.0	.0	2.5	.7	1.5
14	14.5	9.4	12.0	3.4	.0	1.4	1.0	.0	.4	3.1	.0	1.2
15	13.9	8.5	11.4	4.1	.0	1.9	3.1	.3	1.4	1.9	.0	.6
16	14.7	9.6	12.2	3.3	.0	1.6	2.7	.0	1.2	.6	.0	.1
17	14.9	9.5	12.3	3.0	.0	1.1	4.2	.4	2.0	.0	.0	.0
18	15.2	9.8	12.5	2.4	.0	.9	1.4	.0	.4	.0	.0	.0
19	14.6	9.7	12.2	3.8	.0	1.6	.8	.0	.3	.0	.0	.0
20	14.3	9.5	12.0	3.5	.0	1.5	1.6	.0	.4	.0	.0	.0
21	14.2	9.0	11.7	4.6	.5	2.4	.1	.0	.0	.2	.0	.0
22	12.3	10.6	11.3	4.8	1.6	3.0	1.2	.0	.4	.6	.0	.2
23	12.7	10.7	11.5	5.4	2.4	3.6	2.5	.0	.9	2.7	.0	1.1
24	14.8	10.7	12.5	5.2	1.7	3.2	1.8	.0	.6	3.5	.0	1.3
25	14.0	10.1	11.9	4.7	1.2	2.8	.6	.1	.3	3.1	.4	1.5
26	13.0	8.5	10.9	4.7	1.0	2.7	1.4	.0	.4	3.2	.0	1.5
27	12.4	8.2	10.5	5.2	1.4	3.1	1.8	.0	.6	1.8	.7	1.2
28	12.0	10.4	11.2	5.3	1.2	3.1	3.0	.0	1.4	3.5	.3	1.5
29	13.6	10.5	11.8	4.7	1.3	2.9	2.9	.2	1.4	3.3	.0	1.4
30	12.8	8.9	10.7	5.8	1.0	3.3	2.0	.0	.7	4.1	.0	1.7
31	12.0	8.0	9.7	---	---	---	2.1	.0	.6	3.5	.0	1.6
MONTH	19.9	8.0	12.5	10.2	.0	3.8	5.6	.0	1.3	4.8	.0	1.1
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	2.7	.0	1.0	7.7	1.7	4.6	14.8	7.1	11.0	20.6	13.5	17.1
2	---	.0	---	9.4	3.8	6.3	16.4	8.9	12.6	17.5	10.9	13.8
3	---	---	---	8.6	3.7	6.0	16.6	9.3	12.9	10.9	8.4	9.6
4	---	---	---	9.9	4.2	6.8	16.1	10.4	13.2	8.8	7.5	8.2
5	6.2	---	---	9.8	4.4	7.1	15.9	11.1	13.5	8.8	6.5	7.5
6	6.1	2.3	4.2	9.9	6.1	8.0	14.3	10.1	12.1	14.6	7.2	10.7
7	8.1	4.2	5.9	9.8	7.0	8.3	14.1	6.8	10.4	17.9	11.0	14.1
8	5.4	.9	3.6	11.4	6.4	8.7	14.1	7.3	10.7	19.3	12.6	15.7
9	1.7	.0	.5	11.3	5.9	8.7	15.4	7.6	11.5	19.8	13.4	16.5
10	1.1	.0	.3	8.9	5.8	7.6	13.7	8.5	10.9	19.2	14.3	16.6
11	4.0	.0	1.5	7.4	4.2	5.6	11.7	6.8	9.1	19.9	13.6	16.6
12	4.8	.0	2.1	8.8	3.0	6.0	12.1	7.6	9.7	21.0	15.2	18.0
13	6.3	.4	3.3	11.4	4.6	7.9	14.3	6.1	10.2	21.6	15.8	18.4
14	3.9	2.0	2.8	10.8	5.8	7.9	14.3	7.9	11.2	21.3	16.0	18.3
15	6.1	.8	3.3	9.0	3.5	6.2	15.6	8.1	11.8	20.2	16.3	17.8
16	4.8	1.1	2.9	8.3	4.1	6.1	13.6	8.8	11.2	18.4	15.3	16.7
17	5.9	2.0	3.8	5.8	4.1	5.0	16.1	8.6	12.0	15.5	13.5	14.6
18	6.1	1.8	3.8	9.0	3.7	6.1	18.0	9.3	13.7	16.8	12.5	14.6
19	8.0	2.8	5.2	11.5	3.9	7.6	18.6	11.7	15.1	15.3	14.2	14.9
20	8.4	3.1	5.7	13.2	6.1	9.9	16.7	11.8	14.0	16.7	13.1	14.6
21	6.4	4.5	5.3	15.1	8.3	11.8	15.0	9.8	12.6	15.2	12.1	13.7
22	8.9	3.7	6.3	13.6	9.6	11.8	11.9	7.9	9.7	15.7	11.7	13.5
23	9.3	4.4	6.7	14.1	9.0	11.4	14.8	6.9	10.8	16.9	12.7	14.7
24	7.5	4.9	6.2	10.1	7.1	8.4	17.0	8.6	12.8	17.7	13.8	15.6
25	8.3	2.6	5.4	7.8	6.1	6.9	18.7	10.7	14.8	15.8	13.3	14.6
26	7.4	3.5	5.3	7.6	6.1	6.9	20.5	12.6	16.5	15.5	13.2	14.2
27	4.8	1.9	3.5	12.3	6.8	9.1	20.7	13.8	17.2	16.0	13.6	14.8
28	3.7	.7	2.0	10.9	8.0	9.3	20.6	13.8	17.1	16.3	14.1	15.1
29	---	---	---	10.8	6.9	8.8	22.1	14.6	18.0	15.9	14.4	15.3
30	---	---	---	12.0	6.6	9.3	19.7	13.8	17.0	15.0	13.5	14.2
31	---	---	---	13.4	7.6	10.3	---	---	---	17.2	13.9	15.3
MONTH	---	---	---	15.1	1.7	7.9	22.1	6.1	12.8	21.6	6.5	14.7

ARKANSAS RIVER BASIN

07097000 ARKANSAS RIVER AT PORTLAND, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	18.0	14.5	16.2	22.5	18.6	20.4	23.8	20.1	21.8	21.8	16.9	19.3
2	18.3	15.2	16.5	23.3	18.9	20.9	25.3	20.0	22.3	22.6	16.2	19.2
3	17.5	14.9	16.1	23.7	19.4	21.2	26.0	20.1	22.6	22.8	16.5	19.5
4	17.6	15.2	16.3	23.7	18.7	21.1	25.8	19.8	22.6	23.3	16.4	19.8
5	17.5	14.8	16.1	25.2	19.6	22.2	26.0	20.8	22.7	23.0	16.5	19.7
6	19.0	15.3	17.0	25.8	19.9	22.5	25.4	20.1	22.3	22.4	16.7	19.4
7	19.9	16.2	17.7	26.4	20.3	23.3	25.7	20.4	22.7	20.3	16.1	18.0
8	18.8	16.2	17.3	26.6	21.1	23.5	25.5	20.2	22.4	17.2	13.6	15.5
9	18.7	15.5	17.0	25.4	20.2	22.2	22.8	20.0	21.2	18.9	12.5	15.6
10	20.2	15.6	17.6	25.1	19.1	21.6	22.6	19.5	20.9	20.4	12.9	16.6
11	20.0	16.5	18.1	25.1	19.1	21.8	24.0	18.8	21.1	21.2	14.1	17.5
12	19.2	16.2	17.5	25.0	20.3	22.2	24.1	18.8	21.5	20.9	14.7	17.7
13	17.0	14.3	15.7	24.0	18.0	21.2	---	---	---	21.7	15.3	18.5
14	16.3	13.0	14.3	23.9	18.9	21.0	---	---	---	22.6	16.2	19.4
15	16.6	12.0	14.3	23.9	19.2	21.0	---	---	---	23.0	17.3	20.0
16	19.1	14.3	16.5	24.5	18.2	21.1	---	---	---	22.2	17.7	19.7
17	20.9	16.1	18.2	22.1	18.8	20.4	---	---	---	20.7	17.0	18.8
18	20.9	16.4	18.4	23.9	17.5	20.3	---	---	---	21.0	16.3	18.6
19	20.9	17.3	18.6	21.8	19.1	20.4	---	---	---	21.0	14.8	17.8
20	21.2	16.4	18.6	23.9	18.6	21.2	22.6	18.5	20.4	21.3	14.9	18.0
21	21.9	16.4	19.4	24.4	19.6	21.7	23.6	18.0	20.4	21.3	15.0	18.1
22	21.8	18.1	19.8	24.5	19.1	21.6	22.8	18.0	20.3	21.5	15.6	18.3
23	21.7	16.7	18.8	23.6	19.9	21.6	23.6	17.5	20.3	20.5	14.7	17.5
24	20.8	16.8	18.4	24.3	20.1	21.8	23.9	17.4	20.5	19.9	13.9	17.0
25	21.6	17.8	19.4	24.7	19.0	21.6	21.9	18.2	20.0	20.4	14.2	17.4
26	21.2	18.3	19.4	24.4	19.7	21.6	23.3	17.1	20.1	21.0	15.0	18.1
27	22.2	17.9	19.8	23.7	19.7	21.5	23.8	17.2	20.4	21.3	15.4	18.4
28	22.5	18.1	20.1	24.9	19.2	21.7	22.7	17.1	19.6	20.7	15.1	18.0
29	22.7	18.6	20.3	25.1	19.2	22.1	22.9	16.7	19.5	19.7	15.9	17.7
30	22.4	18.5	20.1	24.9	20.0	22.2	22.9	16.7	19.7	20.2	14.3	17.3
31	---	---	---	25.8	19.9	22.3	21.2	17.6	19.5	---	---	---
MONTH	22.7	12.0	17.8	26.6	17.5	21.6	---	---	---	23.3	12.5	18.2

## ARKANSAS RIVER BASIN

07099050 BEAVER CREEK ABOVE UPPER BEAVER CEMETERY NEAR PENROSE, CO

LOCATION.--Lat 38°33'42", long 105°01'17", in NW<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec.20, T.17 S., R.68 W., Fremont County, Hydrologic Unit 11020002, on left bank 40 ft upstream from bridge on Fremont County Road 132, 1 mi downstream from Banta Gulch, 1.3 mi northeast of Upper Beaver Cemetery, and 9.2 mi north of Penrose.

DRAINAGE AREA.--122 mi<sup>2</sup>.

PERIOD OF RECORD.--March 1991 to current year (seasonal records only). Water-quality data available, July 1991 to September 1994.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 6,020 ft above sea level, from topographic map.

REMARKS.--Records fair except for Mar. 1-5, 8-9, 12-20, May 15, 18-22, and estimated daily discharges, which are poor. Natural flow of stream affected by storage reservoirs and diversions for municipal use by the City of Colorado Springs. 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 (seasonal only).--Maximum discharge, 659 ft<sup>3</sup>/s, June 10, 1997, gage height, 5.57 ft, from rating curve extended above 602 ft<sup>3</sup>/s; maximum gage height, 6.70 ft, Sept. 4, 1991; minimum daily, 4.2 ft<sup>3</sup>/s, Mar. 25, 1996.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum discharge, 105 ft<sup>3</sup>/s, May 18, gage height, 3.74 ft; minimum daily, 5.5 ft<sup>3</sup>/s, Feb. 25, Mar. 18.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	15	---	---	---	6.9	10	23	61	14	18	30
2	12	14	---	---	---	6.7	16	28	64	15	21	31
3	11	14	---	---	---	6.3	24	25	58	14	24	28
4	11	12	---	---	---	6.9	30	23	54	15	28	24
5	11	12	---	---	---	6.5	33	31	43	21	32	21
6	11	10	---	---	---	6.9	32	36	41	23	32	19
7	11	e7.0	---	---	---	7.1	20	44	49	21	33	18
8	11	---	---	---	---	7.2	18	42	59	11	31	19
9	11	---	---	---	---	7.3	24	44	52	19	29	20
10	11	---	---	---	---	8.1	27	42	43	25	33	20
11	11	---	---	---	---	8.3	23	40	38	22	42	18
12	10	---	---	---	---	7.5	16	41	37	25	e39	17
13	10	---	---	---	---	7.1	15	42	32	30	37	15
14	10	---	---	---	---	7.1	17	44	36	45	37	14
15	10	---	---	---	---	6.4	20	54	28	41	43	14
16	10	---	---	---	---	6.5	26	51	23	30	44	14
17	10	---	---	---	---	6.6	33	71	20	25	39	14
18	10	---	---	---	---	5.5	44	80	19	21	37	14
19	10	---	---	---	---	6.0	46	71	17	19	34	14
20	10	---	---	---	---	6.5	40	73	18	17	32	13
21	10	---	---	---	---	8.0	31	62	22	15	30	12
22	10	---	---	---	---	9.6	29	65	23	14	30	11
23	11	---	---	---	6.7	11	22	69	31	14	30	11
24	15	---	---	---	6.0	12	23	64	30	23	28	10
25	14	---	---	---	5.5	16	23	66	25	30	27	10
26	13	---	---	---	5.7	e16	25	65	26	40	28	9.5
27	13	---	---	---	5.9	e14	25	61	22	40	28	8.8
28	13	---	---	---	5.8	13	24	56	20	33	27	8.6
29	14	---	---	---	---	11	26	59	15	29	26	8.8
30	14	---	---	---	---	11	25	58	15	24	25	9.6
31	14	---	---	---	---	9.8	---	63	---	20	25	---
TOTAL	354	---	---	---	---	268.8	767	1593	1021	735	969	476.3
MEAN	11.4	---	---	---	---	8.67	25.6	51.4	34.0	23.7	31.3	15.9
MAX	15	---	---	---	---	16	46	80	64	45	44	31
MIN	10	---	---	---	---	5.5	10	23	15	11	18	8.6
AC-FT	702	---	---	---	---	533	1520	3160	2030	1460	1920	945

e Estimated.

07099060 BEAVER CREEK ABOVE HIGHWAY 115 NEAR PENROSE, CO

LOCATION.--Lat 38°29'21", long 104°59'49", in NE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec.16, T.18 S., R.68 W., Fremont County, Hydrologic Unit 11020002, on left bank 300 ft downstream from Beaver Park Irrigation Company diversion dam, 1.8 mi upstream from State Highway 115, and 4.7 mi north of Penrose.

DRAINAGE AREA.--138 mi<sup>2</sup>.

PERIOD OF RECORD.--March 1991 to current year (seasonal records only).

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 5,659.08 ft above sea level.

REMARKS.--Records fair except for Oct. 1 to Nov. 6, Feb. 24 to May 10, May 23-24, estimated daily discharges, and discharges below 1.5 ft<sup>3</sup>/s, which are poor. Natural flow of stream affected by storage reservoirs, diversions for municipal use by Colorado Springs, 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.

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum discharge, 727 ft<sup>3</sup>/s, April 30, 1999, gage height, 6.92 ft, from rating curve extended above 422 ft<sup>3</sup>/s; no flow many days.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum discharge, 218 ft<sup>3</sup>/s, Aug. 5, gage height, 4.85 ft; no flow many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.01	.04	---	---	---	.04	.01	.18	11	.00	.00	.00
2	.01	.00	---	---	---	.04	.00	.04	14	.00	.00	.00
3	.01	.00	---	---	---	.05	.00	.04	8.8	.00	.00	.00
4	.01	.00	---	---	---	.05	.06	.04	4.3	.00	.00	.00
5	.00	.00	---	---	---	.05	.21	.02	.09	.00	16	.00
6	.00	.00	---	---	---	.13	.14	.05	.00	.00	6.0	.00
7	.00	e.00	---	---	---	.12	.19	.08	.57	.00	.10	.00
8	.00	---	---	---	---	.18	.16	.13	13	.00	.00	.00
9	.01	---	---	---	---	.13	.20	.29	4.5	.00	.02	.00
10	.02	---	---	---	---	.07	.15	.43	.13	.00	.00	.00
11	.02	---	---	---	---	.05	.12	e.50	.00	.00	12	.00
12	.00	---	---	---	---	.05	.15	e.70	.00	.00	10	.00
13	.00	---	---	---	---	.07	.17	e.90	.00	.00	2.1	.00
14	.00	---	---	---	---	.02	.19	e2.0	.00	10	.04	.00
15	.00	---	---	---	---	.01	.14	e6.0	.00	14	2.0	.00
16	.00	---	---	---	---	.00	.10	e7.0	.00	.00	6.1	.00
17	.00	---	---	---	---	.00	.13	e25	.00	.00	.80	.00
18	.00	---	---	---	---	.01	.24	e40	.00	.00	.02	.00
19	.00	---	---	---	---	.02	.18	e30	.00	.00	.01	.00
20	.00	---	---	---	---	.03	.15	e32	.00	.00	.00	.00
21	4.7	---	---	---	---	.05	.12	e24	.00	.00	.00	.00
22	8.6	---	---	---	---	.02	.08	e26	.00	.00	.00	.00
23	13	---	---	---	---	.02	.09	28	.00	.00	.00	.00
24	10	---	---	---	.02	.00	.13	28	.00	.00	.00	.00
25	7.9	---	---	---	.04	.00	.17	e24	.00	.00	.00	.00
26	7.3	---	---	---	.03	.00	.21	e20	.00	.00	.00	.00
27	8.0	---	---	---	.02	.00	.20	e18	.00	4.1	.00	.00
28	7.0	---	---	---	.02	.00	.13	e15	.00	.00	.00	.00
29	6.9	---	---	---	.00	.16	.16	e17	.00	.00	.00	.00
30	.47	---	---	---	.00	.16	.16	7.6	.00	.00	.00	.00
31	1.2	---	---	---	.00	.00	---	14	---	.00	.00	---
TOTAL	75.16	---	---	---	---	1.21	4.14	367.00	56.39	28.10	55.19	0.00
MEAN	2.42	---	---	---	---	.039	.14	11.8	1.88	.91	1.78	.000
MAX	13	---	---	---	---	.18	.24	40	14	14	16	.00
MIN	.00	---	---	---	---	.00	.00	.02	.00	.00	.00	.00
AC-FT	149	---	---	---	---	2.4	8.2	728	112	56	109	.00

e Estimated.



07099080 RED CREEK BELOW SULLIVAN PARK AT FORT CARSON, CO--Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
2	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
3	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
4	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
5	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
6	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
7	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
8	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
9	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
10	.00	---	---	---	---	---	.00	.00	.00	.00	.00	.00
11	.00	---	---	---	---	---	.00	.00	.00	.00	.00	.00
12	.00	---	---	---	---	---	.00	.00	.00	.00	.00	.00
13	.00	---	---	---	---	---	.00	.00	.00	e87	.00	.00
14	.00	---	---	---	---	---	.00	.00	.00	.00	.00	.00
15	.00	---	---	---	---	---	.00	.00	.00	.00	.00	.00
16	.00	---	---	---	---	---	.00	.00	.00	.00	.00	.00
17	.00	---	---	---	---	---	.00	.00	.00	.00	.00	.00
18	.00	---	---	---	---	---	.00	.00	.00	.00	.00	.00
19	.00	---	---	---	---	---	.00	.00	.00	.00	.00	.00
20	.00	---	---	---	---	---	.00	.00	.00	.00	.00	.00
21	.00	---	---	---	---	---	.00	.00	.00	.00	.00	.00
22	.00	---	---	---	---	.00	.00	.00	.00	.00	.00	.00
23	.00	---	---	---	---	.00	.00	.00	.00	.00	.00	.00
24	.00	---	---	---	---	.00	.00	.00	.00	.00	.00	.00
25	.00	---	---	---	---	.00	.00	.00	.00	.00	.00	.00
26	.00	---	---	---	---	.00	.00	.00	.00	.00	.00	.00
27	.00	---	---	---	---	.00	.00	.00	.00	.00	.00	.00
28	.00	---	---	---	---	.00	.00	.00	.00	.00	.00	.00
29	.00	---	---	---	---	.00	.00	.00	.00	.00	.00	.00
30	.00	---	---	---	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	---	---	---	.00	---	.00	---	.00	.00	---
TOTAL	0.00	---	---	---	---	---	0.00	0.00	0.00	87.00	0.00	0.00
MEAN	.000	---	---	---	---	---	.000	.000	.000	2.81	.000	.000
MAX	.00	---	---	---	---	---	.00	.00	.00	87	.00	.00
MIN	.00	---	---	---	---	---	.00	.00	.00	.00	.00	.00
AC-FT	.00	---	---	---	---	---	.00	.00	.00	173	.00	.00

e Estimated.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--July 2000 to current year (seasonal records only).

PERIOD OF DAILY RECORD.--

SUSPENDED SEDIMENT: July 2000 to current year (seasonal records only).

INSTRUMENTATION.--Pumping sediment sampler with satellite telemetry.

REMARKS.--Records for daily suspended sediment are poor.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SEDIMENT CONCENTRATIONS (seasonal only): None for period of record.

SUSPENDED-SEDIMENT DISCHARGE (seasonal only): Maximum daily, 8,130 tons (estimated), July 13, 2001; no flow most days.

EXTREMES FOR 2000 WATER YEAR.--

SEDIMENT CONCENTRATION (seasonal only): No flow during year.

SUSPENDED-SEDIMENT DISCHARGE (seasonal only): No flow during year.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATION (seasonal only): None for current year.

SUSPENDED-SEDIMENT DISCHARGE (seasonal only): Maximum daily, 8,130 tons (estimated), July 13; no flow most days.

--NO FLOW DURING 2000 WATER YEAR--

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MEAN	MEAN	SEDIMENT	MEAN	MEAN	SEDIMENT	MEAN	MEAN	SEDIMENT
	DISCHARGE	CONCEN-		DISCHARGE	CONCEN-		DISCHARGE	CONCEN-	
	(CFS)	TRATION	(TONS/DAY)	(CFS)	(MG/L)	(TONS/DAY)	(CFS)	(MG/L)	(TONS/DAY)
	OCTOBER			NOVEMBER			DECEMBER		
1	.00	---	---	.00	---	---	---	---	---
2	.00	---	---	.00	---	---	---	---	---
3	.00	---	---	.00	---	---	---	---	---
4	.00	---	---	.00	---	---	---	---	---
5	.00	---	---	.00	---	---	---	---	---
6	.00	---	---	.00	---	---	---	---	---
7	.00	---	---	.00	---	---	---	---	---
8	.00	---	---	.00	---	---	---	---	---
9	.00	---	---	.00	---	---	---	---	---
10	.00	---	---	---	---	---	---	---	---
11	.00	---	---	---	---	---	---	---	---
12	.00	---	---	---	---	---	---	---	---
13	.00	---	---	---	---	---	---	---	---
14	.00	---	---	---	---	---	---	---	---
15	.00	---	---	---	---	---	---	---	---
16	.00	---	---	---	---	---	---	---	---
17	.00	---	---	---	---	---	---	---	---
18	.00	---	---	---	---	---	---	---	---
19	.00	---	---	---	---	---	---	---	---
20	.00	---	---	---	---	---	---	---	---
21	.00	---	---	---	---	---	---	---	---
22	.00	---	---	---	---	---	---	---	---
23	.00	---	---	---	---	---	---	---	---
24	.00	---	---	---	---	---	---	---	---
25	.00	---	---	---	---	---	---	---	---
26	.00	---	---	---	---	---	---	---	---
27	.00	---	---	---	---	---	---	---	---
28	.00	---	---	---	---	---	---	---	---
29	.00	---	---	---	---	---	---	---	---
30	.00	---	---	---	---	---	---	---	---
31	.00	---	---	---	---	---	---	---	---
TOTAL	0.00	---	0	0.00	---	0	0	---	0

07099080 RED CREEK BELOW SULLIVAN PARK AT FORT CARSON, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
	JANUARY			FEBRUARY			MARCH		
1	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	.00	---	---
23	---	---	---	---	---	---	.00	---	---
24	---	---	---	---	---	---	.00	---	---
25	---	---	---	---	---	---	.00	---	---
26	---	---	---	---	---	---	.00	---	---
27	---	---	---	---	---	---	.00	---	---
28	---	---	---	---	---	---	.00	---	---
29	---	---	---	---	---	---	.00	---	---
30	---	---	---	---	---	---	.00	---	---
31	---	---	---	---	---	---	.00	---	---
TOTAL	0	---	0	0	---	0	0.00	---	0

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
	APRIL			MAY			JUNE		
1	.00	---	---	.00	---	---	.00	---	---
2	.00	---	---	.00	---	---	.00	---	---
3	.00	---	---	.00	---	---	.00	---	---
4	.00	---	---	.00	---	---	.00	---	---
5	.00	---	---	.00	---	---	.00	---	---
6	.00	---	---	.00	---	---	.00	---	---
7	.00	---	---	.00	---	---	.00	---	---
8	.00	---	---	.00	---	---	.00	---	---
9	.00	---	---	.00	---	---	.00	---	---
10	.00	---	---	.00	---	---	.00	---	---
11	.00	---	---	.00	---	---	.00	---	---
12	.00	---	---	.00	---	---	.00	---	---
13	.00	---	---	.00	---	---	.00	---	---
14	.00	---	---	.00	---	---	.00	---	---
15	.00	---	---	.00	---	---	.00	---	---
16	.00	---	---	.00	---	---	.00	---	---
17	.00	---	---	.00	---	---	.00	---	---
18	.00	---	---	.00	---	---	.00	---	---
19	.00	---	---	.00	---	---	.00	---	---
20	.00	---	---	.00	---	---	.00	---	---
21	.00	---	---	.00	---	---	.00	---	---
22	.00	---	---	.00	---	---	.00	---	---
23	.00	---	---	.00	---	---	.00	---	---
24	.00	---	---	.00	---	---	.00	---	---
25	.00	---	---	.00	---	---	.00	---	---
26	.00	---	---	.00	---	---	.00	---	---
27	.00	---	---	.00	---	---	.00	---	---
28	.00	---	---	.00	---	---	.00	---	---
29	.00	---	---	.00	---	---	.00	---	---
30	.00	---	---	.00	---	---	.00	---	---
31	---	---	---	.00	---	---	---	---	---
TOTAL	0.00	---	0	0.00	---	0	0.00	---	0

## ARKANSAS RIVER BASIN

07099080 RED CREEK BELOW SULLIVAN PARK AT FORT CARSON, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MEAN	MEAN	SEDIMENT	MEAN	MEAN	SEDIMENT	MEAN	MEAN	SEDIMENT
	DISCHARGE (CFS)	CONCEN- TRATION (MG/L)	DISCHARGE (TONS/DAY)	DISCHARGE (CFS)	CONCEN- TRATION (MG/L)	DISCHARGE (TONS/DAY)	DISCHARGE (CFS)	CONCEN- TRATION (MG/L)	DISCHARGE (TONS/DAY)
	JULY			AUGUST			SEPTEMBER		
1	.00	---	---	.00	---	---	.00	---	---
2	.00	---	---	.00	---	---	.00	---	---
3	.00	---	---	.00	---	---	.00	---	---
4	.00	---	---	.00	---	---	.00	---	---
5	.00	---	---	.00	---	---	.00	---	---
6	.00	---	---	.00	---	---	.00	---	---
7	.00	---	---	.00	---	---	.00	---	---
8	.00	---	---	.00	---	---	.00	---	---
9	.00	---	---	.00	---	---	.00	---	---
10	.00	---	---	.00	---	---	.00	---	---
11	.00	---	---	.00	---	---	.00	---	---
12	.00	---	---	.00	---	---	.00	---	---
13	e87	---	e8130	.00	---	---	.00	---	---
14	.00	---	---	.00	---	---	.00	---	---
15	.00	---	---	.00	---	---	.00	---	---
16	.00	---	---	.00	---	---	.00	---	---
17	.00	---	---	.00	---	---	.00	---	---
18	.00	---	---	.00	---	---	.00	---	---
19	.00	---	---	.00	---	---	.00	---	---
20	.00	---	---	.00	---	---	.00	---	---
21	.00	---	---	.00	---	---	.00	---	---
22	.00	---	---	.00	---	---	.00	---	---
23	.00	---	---	.00	---	---	.00	---	---
24	.00	---	---	.00	---	---	.00	---	---
25	.00	---	---	.00	---	---	.00	---	---
26	.00	---	---	.00	---	---	.00	---	---
27	.00	---	---	.00	---	---	.00	---	---
28	.00	---	---	.00	---	---	.00	---	---
29	.00	---	---	.00	---	---	.00	---	---
30	.00	---	---	.00	---	---	.00	---	---
31	.00	---	---	.00	---	---	.00	---	---
TOTAL	87.00	---	8130	0.00	---	0	0.00	---	0

e Estimated.

07099080 RED CREEK BELOW SULLIVAN PARK AT FORT CARSON, CO--Continued

PRECIPITATION RECORDS

PERIOD OF RECORD.--April 1999 to current year (seasonal records only).

GAGE.--Tipping-bucket rain gage with satellite telemetry. April 28, 1999 to July 25, 2000 at site 1.5 mi upstream.

REMARKS.--Records for 1999 and 2000 water years are poor. Records for 2001 water year are fair. Daily data that are not published are either missing or of unacceptable quality.

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum daily precipitation, 4.52 inches, Aug. 4, 1999.

EXTREMES FOR 1999 WATER YEAR (seasonal only).--Maximum daily precipitation, 4.52 inches, Aug. 4.

EXTREMES FOR 2000 WATER YEAR (seasonal only).--Maximum daily precipitation, 0.67 inch, Aug. 28.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum daily precipitation, 0.76 inch, Aug. 5.

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	---	---	---	---	---	---	---	.99	.00	.00	.13	.01
2	---	---	---	---	---	---	---	.01	.00	.00	.01	.00
3	---	---	---	---	---	---	---	.00	.00	.00	.78	.00
4	---	---	---	---	---	---	---	.00	.00	.00	4.52	.00
5	---	---	---	---	---	---	---	.00	.00	.00	.25	.00
6	---	---	---	---	---	---	---	.00	.00	.34	.64	.00
7	---	---	---	---	---	---	---	.00	.00	.00	.01	.00
8	---	---	---	---	---	---	---	.00	.00	.02	.00	.00
9	---	---	---	---	---	---	---	.00	.36	.00	.03	.00
10	---	---	---	---	---	---	---	.00	.01	.00	.17	.01
11	---	---	---	---	---	---	---	.00	.00	.13	.00	.23
12	---	---	---	---	---	---	---	.00	.01	.00	.00	.01
13	---	---	---	---	---	---	---	.00	.01	.00	.00	.00
14	---	---	---	---	---	---	---	.09	.04	.01	.02	.10
15	---	---	---	---	---	---	---	.00	.14	.00	.00	.13
16	---	---	---	---	---	---	---	.00	.23	.13	.00	.00
17	---	---	---	---	---	---	---	.00	.03	.87	.00	.03
18	---	---	---	---	---	---	---	.00	.00	.00	.00	.00
19	---	---	---	---	---	---	---	.00	.01	.08	.12	.09
20	---	---	---	---	---	---	---	.00	.00	.00	.00	.15
21	---	---	---	---	---	---	---	.00	.02	.00	.20	.00
22	---	---	---	---	---	---	---	.00	.00	.00	.01	.00
23	---	---	---	---	---	---	---	.00	.00	.02	.00	.00
24	---	---	---	---	---	---	---	.00	.32	.02	.00	.00
25	---	---	---	---	---	---	---	.82	.00	.00	.00	.00
26	---	---	---	---	---	---	---	.00	.00	.02	.00	.00
27	---	---	---	---	---	---	---	.61	.00	.00	.00	.00
28	---	---	---	---	---	---	1.34	.01	.00	.07	.01	.06
29	---	---	---	---	---	---	1.84	.26	.00	.00	.00	.00
30	---	---	---	---	---	---	2.23	.00	.00	.06	.00	.00
31	---	---	---	---	---	---	---	.00	---	.83	.00	---
TOTAL	---	---	---	---	---	---	---	2.79	1.18	2.60	6.90	0.82
MAX	---	---	---	---	---	---	---	.99	.36	.87	4.52	.23

## ARKANSAS RIVER BASIN

07099080 RED CREEK BELOW SULLIVAN PARK AT FORT CARSON, CO--Continued

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
2	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
3	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
4	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
5	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
6	.00	---	---	---	---	---	---	.00	.00	.00	.02	.00
7	.16	---	---	---	---	---	---	.00	.00	.00	.00	.00
8	.00	---	---	---	---	---	---	.02	.00	.00	.00	.00
9	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
10	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
11	.00	---	---	---	---	---	---	.00	.00	.00	.48	.00
12	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
13	.00	---	---	---	---	---	---	.00	.02	.04	.29	.00
14	.00	---	---	---	---	---	---	.00	.00	.00	.08	.00
15	.00	---	---	---	---	---	---	.00	.00	.00	.02	.00
16	.06	---	---	---	---	---	---	.00	.00	.00	.00	.00
17	.17	---	---	---	---	---	---	.00	.00	.01	.48	.00
18	.10	---	---	---	---	---	---	.00	.00	.00	.09	.00
19	.04	---	---	---	---	---	---	.00	.00	.00	.00	.00
20	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
21	.00	---	---	---	---	---	---	.00	.00	.00	.26	.00
22	.00	---	---	---	---	---	---	.00	.00	.00	.45	.00
23	.00	---	---	---	---	---	---	.00	.00	.00	.00	.35
24	.00	---	---	---	---	---	---	.00	.00	.00	.00	.22
25	.00	---	---	---	---	---	---	.00	.00	.00	.04	.01
26	.00	---	---	---	---	---	---	.01	.02	.00	.27	.00
27	.00	---	---	---	---	---	---	.00	.01	.09	.00	.00
28	.04	---	---	---	---	---	---	.00	.00	.01	.67	.00
29	.00	---	---	---	---	---	---	.01	.00	.00	.02	.00
30	---	---	---	---	---	---	---	.00	.00	.38	.00	.00
31	---	---	---	---	---	---	---	.00	---	.00	.00	---
TOTAL	---	---	---	---	---	---	---	0.04	0.05	0.53	3.17	0.58
MAX	---	---	---	---	---	---	---	.02	.02	.38	.67	.35

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	---	---	---	---	.00	.00	.00	.00	.06	.03
2	.00	.00	---	---	---	---	.00	.06	.00	.00	.00	.00
3	.00	.02	---	---	---	---	.00	.26	.00	.00	.00	.00
4	.00	.00	---	---	---	---	.00	.45	.19	.00	.06	.00
5	.02	.00	---	---	---	---	.00	.62	.00	.00	.76	.00
6	.03	.00	---	---	---	---	.00	.00	.00	.00	.01	.01
7	.02	.01	---	---	---	---	.00	.00	.00	.00	.00	.09
8	.00	.00	---	---	---	---	.00	.00	.02	.00	.00	.20
9	.00	e.00	---	---	---	---	.00	.00	.00	.11	.00	.00
10	.00	---	---	---	---	---	.18	.00	.00	.09	.02	.00
11	.00	---	---	---	---	---	.10	.00	.00	.01	.10	.00
12	.00	---	---	---	---	---	.11	.00	.00	.07	.17	.00
13	.00	---	---	---	---	---	.00	.00	.06	.60	.13	.04
14	.00	---	---	---	---	---	.00	.04	.00	.50	.04	.29
15	.00	---	---	---	---	---	.00	.00	.00	.00	.07	.52
16	.00	---	---	---	---	---	.00	.00	.00	.00	.00	.13
17	.00	---	---	---	---	---	.00	.57	.00	.00	.09	.00
18	.00	---	---	---	---	---	.00	.00	.00	.00	.00	.00
19	.00	---	---	---	---	---	.00	.04	.00	.00	.00	.00
20	.00	---	---	---	---	---	.00	.00	.40	.00	.01	.00
21	.00	---	---	---	---	e.00	.00	.24	.03	.05	.00	.00
22	.04	---	---	---	---	.00	.73	.00	.03	.13	.12	.00
23	.05	---	---	---	---	.00	.00	.00	.00	.02	.00	.00
24	.22	---	---	---	---	.00	.00	.00	.00	.11	.00	.00
25	.00	---	---	---	---	.00	.00	.00	.00	.00	.00	.00
26	.00	---	---	---	---	.02	.00	.00	.00	.27	.00	.00
27	.00	---	---	---	---	.00	.00	.00	.00	.00	.00	.00
28	.15	---	---	---	---	.02	.00	.00	.00	.00	.00	.00
29	.00	---	---	---	---	.12	.00	.00	.00	.00	.00	.00
30	.00	---	---	---	---	.31	.00	.11	.00	.00	.00	.00
31	.00	---	---	---	---	.00	---	.00	---	.00	.05	---
TOTAL	0.53	---	---	---	---	---	1.12	2.39	0.73	1.96	1.69	1.31
MAX	.22	---	---	---	---	---	.73	.62	.40	.60	.76	.52

e Estimated.

07099200 ARKANSAS RIVER NEAR PORTLAND, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 38°20'14", long 104°56'18", in NW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec.6, T.20 S., R.67 W., Fremont County, Hydrologic Unit 11020002, on left bank (revised) at Hobson Ranch, 1.4 mi downstream from Willow Creek, and 5.4 mi southeast of Portland.

DRAINAGE AREA.--4,280 mi<sup>2</sup>

PERIOD OF RECORD.--October 1964 to September 1979, May 1987 to August 1987, March 1999 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

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)	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 DIS- 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)
APR 19...	1100	226	617	8.7	14.3	11.4	.010	.043	.011	.098	.060	.046	3.1
JUN 13...	1400	E2110	196	8.3	16.7	8.3	.001	.079	.003	.113	.009	E.006	2.5
JUL 24...	1145	670	362	8.6	22.0	8.4	.004	.124	.004	.082	.017	.010	2.0
AUG 21...	1320	483	465	8.9	21.8	10.6	.001	.006	.007	.045	.021	.015	2.4

E Estimated laboratory analysis value.

ARKANSAS RIVER BASIN

07099215 TURKEY CREEK NEAR FOUNTAIN, CO

LOCATION.--Lat 38°36'42", long 104°53'39", in NW<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec.33, T.16 S., R.67 W., El Paso County, Hydrologic Unit 11020002, on Fort Carson Military Reservation, on left bank 100 ft downstream from State Highway 115 bridge, 0.7 mi downstream from Turkey Canyon, 0.8 mi upstream from Turkey Creek Ranch, and 9.4 mi southwest of Fountain.

DRAINAGE AREA.--13.0 mi<sup>2</sup>.

PERIOD OF RECORD.--May 1978 to September 1989, May 1995 to September 1998, April 1999 to current year (seasonal records only). Water-quality data available, May 1978 to September 1982.

REVISED RECORDS.--WDR CO-80-1: 1978-79 (M). WDR CO-96-1: 1980 (M), 1982-86 (M).

GAGE.--Water-stage recorder with satellite telemetry. Prior to June 14, 2001, at datum 1.00 ft higher. Elevation of gage is 6,420 ft above sea level, from topographic map.

REMARKS.--Records 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. Natural flow of stream affected by upstream diversions for irrigation and livestock.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 850 ft<sup>3</sup>/s, June 10, 1997, from slope-area measurement of peak flow, gage height, 6.56 ft, from floodmarks; no flow many days most years.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum discharge, 16.0 ft<sup>3</sup>/s, Sept. 17, gage height, 2.19 ft; no flow many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	---	---	---	---	---	.25	.23	.50	.00	.00	.00
2	.00	---	---	---	---	---	.29	.17	.43	.00	.00	.00
3	.00	---	---	---	---	---	.36	.16	.36	.00	.00	.00
4	.00	---	---	---	---	---	.44	.25	.39	.00	.00	.00
5	.00	---	---	---	---	---	.48	e.74	.35	.00	.00	.00
6	.00	---	---	---	---	---	.54	e.76	.32	.00	.00	.00
7	.00	---	---	---	---	---	.47	e.76	.28	.00	.00	.00
8	.00	---	---	---	---	---	.41	.79	.29	.00	.00	.00
9	.00	---	---	---	---	---	.39	.86	.34	.68	.00	.00
10	.00	---	---	---	---	---	.40	.86	.25	2.0	.00	.00
11	e.00	---	---	---	---	---	.44	.77	.23	.00	.00	.00
12	e.00	---	---	---	---	---	.42	.67	.16	.40	.00	.00
13	e.00	---	---	---	---	---	.46	.57	e.10	.28	.00	.00
14	e.00	---	---	---	---	.00	.48	.52	e.02	.36	.00	.00
15	e.00	---	---	---	---	.00	.47	.55	e.01	.42	.00	.00
16	e.00	---	---	---	---	.00	.48	.45	.00	.04	.00	.00
17	e.00	---	---	---	---	.00	.50	.67	.00	.00	.00	.96
18	e.00	---	---	---	---	.00	.59	.72	.00	.00	.00	.00
19	e.00	---	---	---	---	.02	.67	.71	.00	.00	.00	.00
20	e.00	---	---	---	---	.04	.76	.53	.00	.00	.00	.00
21	e.00	---	---	---	---	.09	.72	.59	.00	.00	.00	.00
22	e.00	---	---	---	---	.10	.69	.48	.00	.00	.00	.00
23	e.00	---	---	---	---	.11	.63	.41	.00	.00	.00	.00
24	e.00	---	---	---	---	.11	.62	.38	.00	.00	.00	.00
25	e.00	---	---	---	---	.12	.55	.36	.00	.00	.00	.00
26	e.00	---	---	---	---	.14	.38	.33	.00	.00	.00	.00
27	e.00	---	---	---	---	.16	.34	.31	.00	.00	.00	.00
28	e.00	---	---	---	---	.17	.34	.42	.00	.00	.00	.00
29	e.00	---	---	---	---	.18	.25	e.38	.00	.00	.00	.00
30	e.00	---	---	---	---	.20	.23	e.38	.00	.00	.00	.00
31	e.00	---	---	---	---	.23	---	.75	---	.00	.00	---
TOTAL	0.00	---	---	---	---	---	14.05	16.53	4.03	4.18	0.00	0.96
MEAN	.000	---	---	---	---	---	.47	.53	.13	.13	.000	.032
MAX	.00	---	---	---	---	---	.76	.86	.50	2.0	.00	.96
MIN	.00	---	---	---	---	---	.23	.16	.00	.00	.00	.00
AC-FT	.00	---	---	---	---	---	.28	.33	8.0	8.3	.00	1.9

e Estimated.

07099230 TURKEY CREEK ABOVE TELLER RESERVOIR, NEAR STONE CITY, CO

LOCATION.--Lat 38°27'54", long 104°49'33", in SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec.19, T.18 S., R.66 W., Pueblo County, Hydrologic Unit 11020002, on Fort Carson Military Reservation, on left bank 0.7 mi northwest of intersection of military roads 9 and 1, 2.2 mi upstream from Teller Reservoir Dam, and 2.2 mi northeast of Stone City.

DRAINAGE AREA.--62.3 mi<sup>2</sup>.

REVISED RECORDS.--WDR CO-89-1: Drainage area.

PERIOD OF RECORD.--May 1978 to current year. Water-quality data available, May 1978 to September 1981.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 5,520 ft above sea level, from topographic map. Prior to July 20, 1989, at site 0.6 mi downstream at different datum.

REMARKS.--Record fair except for estimated daily discharges, which are poor. Natural flow of stream affected by 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 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.17	.18	.19	.23	.24	.16	.10	.00	.00	.00
2	.00	.00	.17	.18	.19	.23	.21	.16	.10	.00	.00	.00
3	.00	.00	.17	.17	.20	.23	.17	.16	.09	.00	.00	.00
4	.00	.00	.17	.17	.19	.23	.19	.16	.09	.00	.00	.00
5	.00	.00	.18	.17	.19	.22	.18	.19	.09	.00	.00	.00
6	.00	.00	.18	.17	.19	.23	.18	.16	.08	.00	.00	.00
7	.00	.00	.18	.17	.20	.23	.18	.15	.07	.00	.00	.00
8	.00	.00	.18	.17	.20	.23	.18	.15	.07	.00	.00	.00
9	.00	.00	.18	.17	.20	.23	.18	.15	.06	.00	.00	.00
10	.00	.00	.18	.17	.20	.24	.19	.15	.05	.00	.00	.00
11	.00	.01	.18	.17	.20	.24	.21	.14	.04	.00	.00	.00
12	.00	.10	.18	.17	.20	.25	.24	.15	.02	.00	.00	.00
13	.00	.08	.18	.18	.20	.25	.24	.15	.00	.00	.00	.00
14	.00	.20	.18	.18	.20	.26	.21	.14	.00	.00	.00	.00
15	.00	e.25	.19	.18	.20	.26	.19	.14	.00	.00	.00	.00
16	.00	e.30	.18	.19	.20	.25	.19	.13	.00	.00	.00	.00
17	.00	e.40	.18	.18	.20	.25	.20	.15	.00	.00	.00	.00
18	.00	e.30	.18	.18	.20	.25	.20	.14	.00	.00	.00	.00
19	.00	e.25	.18	.19	.20	.25	.19	.13	.00	.00	.00	.00
20	.00	e.25	.18	.18	.21	.24	.18	.13	.00	.00	.00	.00
21	.00	e.25	.18	.18	.22	.23	.17	.13	.06	.00	.00	.00
22	.00	e.25	.18	.19	.22	.23	.18	.13	.00	.00	.00	.00
23	.00	e.25	.18	.19	.22	.24	.17	.12	.00	.00	.00	.00
24	.00	e.25	.18	.18	.23	.24	.17	.11	.00	.00	.00	.00
25	.00	e.25	.18	.18	.22	.23	.17	.11	.00	.00	.00	.00
26	.00	.26	.18	.18	.23	.24	.17	.11	.00	.00	.00	.00
27	.00	.24	.18	.18	.23	.23	.17	.11	.00	.00	.00	.00
28	.00	.23	.18	.18	.23	.24	.17	.11	.00	.00	.00	.00
29	.00	.21	.18	.18	---	.25	.17	.11	.00	.00	.00	.00
30	.00	.18	.18	.18	---	.25	.17	.11	.00	.00	.00	.00
31	.00	---	.18	.18	---	.24	---	.11	---	.00	.00	---
TOTAL	0.00	4.51	5.55	5.52	5.76	7.42	5.66	4.25	0.92	0.00	0.00	0.00
MEAN	.000	.15	.18	.18	.21	.24	.19	.14	.031	.000	.000	.000
MAX	.00	.40	.19	.19	.23	.26	.24	.19	.10	.00	.00	.00
MIN	.00	.00	.17	.17	.19	.22	.17	.11	.00	.00	.00	.00
AC-FT	.00	8.9	11	11	11	15	11	8.4	1.8	.00	.00	.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1978 - 2001, BY WATER YEAR (WY)

	2.67	1.88	.97	.76	.72	.73	2.64	17.0	10.2	2.85	6.74	1.50
MEAN	2.67	1.88	.97	.76	.72	.73	2.64	17.0	10.2	2.85	6.74	1.50
MAX	44.6	26.7	6.47	2.69	2.58	2.75	21.8	124	60.1	17.1	79.2	18.1
(WY)	1985	1985	1985	1985	1985	1985	1999	1999	1997	1985	1999	1982
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1979	1979	1979	1979	1979	1979	1979	1979	1989	1978	1990	1978

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1978 - 2001

ANNUAL TOTAL	365.85	39.59	
ANNUAL MEAN	1.00	.11	4.15
HIGHEST ANNUAL MEAN			21.2
LOWEST ANNUAL MEAN			.000
HIGHEST DAILY MEAN	2.8	Jan 1	.40
LOWEST DAILY MEAN	.00	Aug 16	.00
ANNUAL SEVEN-DAY MINIMUM	.00	Aug 16	.00
MAXIMUM PEAK FLOW			2.3
MAXIMUM PEAK STAGE			3.63
ANNUAL RUNOFF (AC-FT)	726	79	3010
10 PERCENT EXCEEDS	2.3	.23	5.7
50 PERCENT EXCEEDS	.49	.14	.46
90 PERCENT EXCEEDS	.00	.00	.00

- e Estimated.
- a No flow many days during most years.
- b From rating curve extended above 95 ft<sup>3</sup>/s on basis of slope-area measurements at gage heights 7.64 ft and 11.27 ft, site and datum then in use.
- c Maximum gage height, 11.88 ft, June 8, 1987, site and datum then in use.

## ARKANSAS RIVER BASIN

07099233 TELLER RESERVOIR NEAR STONE CITY, CO

LOCATION.--Lat 38°26'33", long 104°49'31", in SE<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec.31, T.18 S., R.66 W., Pueblo County, Hydrologic Unit 11020002, on Fort Carson Military Reservation, at left upstream end of dam on Turkey Creek, 1.4 mi upstream from Booth Gulch and 2.0 mi east of Stone City.

DRAINAGE AREA.--71.5 mi<sup>2</sup>.

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

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 5,453 ft above sea level, from topographic map.

REMARKS.--Records fair. Reservoir is formed by an earthfill dam completed around 1908. All figures represent total contents from area-capacity table based on 1980 survey and adjusted for sedimentation from observations of little or no contents in 1991-1994 water years. Total capacity, 2,590 acre-ft at elevation of about 92 ft. Capacity at spillway crest, 1,100 acre-ft at elevation of about 84 ft (since 1996). Capacity at uncontrolled tower outlet invert, 1,750 acre-ft at elevation of about 88 ft. Elevation of no contents, about 67.5 ft. Dead storage unknown. There is a controlled outlet from reservoir; however, considerable leakage occurs along dam margins. Reservoir is used by the Fort Carson Military Reservation for recreation and amphibious training.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 2,210 acre-ft, June 21, 1980, elevation, 90.15 ft, from capacity curve extended above 88 ft; no contents during 1979, 1991-1994 water years.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 281 acre-ft, Oct. 1, elevation, 75.20 ft; minimum contents, 25 acre-ft, Sept. 29-30, elevation, 68.32 ft.

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	280	233	207	193	187	182	185	166	145	89	46	35
2	278	231	206	193	185	184	185	163	144	86	45	34
3	274	230	205	190	185	182	185	161	143	84	44	34
4	271	228	205	190	186	182	185	161	142	81	44	34
5	271	229	204	190	187	181	185	164	142	79	46	33
6	269	227	204	190	187	181	182	161	141	76	48	32
7	266	227	204	190	187	182	181	158	140	74	48	32
8	265	226	204	189	187	182	180	154	138	71	47	33
9	263	225	204	189	187	182	178	154	138	69	47	32
10	261	222	203	189	187	183	179	154	137	67	46	31
11	260	223	203	188	187	185	178	153	135	66	46	31
12	256	223	203	188	186	182	178	153	134	65	45	30
13	254	220	202	187	186	182	177	152	132	63	45	30
14	252	219	202	186	186	182	176	151	129	62	44	30
15	251	219	201	186	186	180	176	150	125	59	44	30
16	250	218	202	187	185	181	174	150	121	57	43	30
17	248	215	201	186	186	181	175	152	119	56	42	30
18	247	215	200	187	186	181	176	152	116	55	41	29
19	246	216	198	186	185	181	176	151	111	55	41	29
20	244	215	199	186	185	180	174	151	115	54	40	29
21	242	214	197	186	185	180	174	152	120	53	39	28
22	242	214	196	186	185	180	176	151	118	53	39	28
23	241	211	196	186	185	180	176	150	114	52	38	27
24	241	213	196	185	185	180	176	150	111	52	38	27
25	240	213	196	185	184	180	176	149	108	51	37	27
26	239	210	195	185	182	180	174	148	104	51	37	26
27	238	207	195	187	182	180	173	148	101	50	36	26
28	238	206	195	187	182	181	171	147	98	49	36	26
29	237	208	194	187	---	184	169	146	95	47	35	25
30	235	208	193	187	---	184	169	146	92	47	35	25
31	234	---	193	187	---	184	---	145	---	47	35	---
MAX	280	233	207	193	187	185	185	166	145	89	48	35
MIN	234	206	193	185	182	180	169	145	92	47	35	25

07099235 TURKEY CREEK NEAR STONE CITY, CO

LOCATION.--Lat 38°25'56", long 104°49'58", in SE<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec.36, T.18 S., R.67 W., Pueblo County, Hydrologic Unit 11020002, on Fort Carson Military Reservation, on left bank at downstream end of culverts on military road 14 (revised), 1.1 mi downstream from Teller Reservoir Dam, and 2.0 mi southeast of Stone City.

DRAINAGE AREA.--71.5 mi<sup>2</sup>.

PERIOD OF RECORD.--May 1978 to November 1984, June 1987 to current year.

REVISED RECORDS.--WDR CO-80-1: 1979(M).

GAGE.--Water-stage recorder with satellite telemetry and crest-stage gage. Elevation of gage is 5,350 ft above sea level, from topographic map. Prior to June 12, 1987, at site 1.0 mi upstream at different datum. June 12, 1987 to Dec. 6, 1989, at site 0.6 mi upstream at different datum. Dec. 7, 1989 to Dec. 9, 1999, at site 0.9 mi upstream at different datum.

REMARKS.--No estimated daily discharges. Records poor. Natural flow of stream mostly regulated by Teller Reservoir (station 07099233) 1.1 mi upstream. Gage records seepage and releases 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 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.21	.40	.24	.16	.20	.17	.00	.20	.00	1.4	.98	.01
2	.21	.30	.24	.17	.20	.18	.00	.00	.00	1.4	.91	.00
3	.21	.28	.25	.17	.20	.17	.00	.02	.00	.90	.82	.00
4	.23	.21	.22	.17	.19	.19	.00	.12	.00	.64	.71	.00
5	.23	.22	.15	.17	.18	.29	.28	.26	.00	.17	.55	.00
6	.24	.23	.24	.15	.15	.20	.00	.23	.00	1.4	.60	.00
7	.25	.19	.22	.16	.22	.11	.04	.22	.00	1.7	.50	.00
8	.25	.23	.17	.15	.21	.17	.00	.21	.00	1.8	.56	.00
9	.25	.22	.20	.21	.20	.14	.19	.03	.00	1.9	.53	.00
10	.25	.23	.19	.11	.20	.11	.12	.01	.00	2.2	.63	.00
11	.25	.24	.38	.15	.20	.13	.07	.00	.00	2.4	.71	.00
12	.24	.19	.24	.16	.19	.41	.02	.00	.00	2.5	.80	.00
13	.25	.54	.24	.16	.21	.18	.05	.00	.00	2.4	.81	.00
14	.24	.25	.22	.16	.19	.23	.00	.00	.00	2.6	.79	.00
15	.25	.23	.20	.16	.26	.12	.00	.00	.00	2.5	.82	.00
16	.13	.20	.20	.17	.19	.20	.00	.03	.00	2.4	.79	.00
17	.08	.19	.21	.16	.09	.16	.00	.05	.00	2.3	.79	.00
18	.22	.21	.25	.23	.08	.08	.00	.10	.02	1.9	.77	.00
19	.00	.20	.24	.18	.13	.16	.00	.09	.06	1.8	.75	.00
20	.00	.32	.20	.18	.33	.13	.00	.09	.13	1.8	.67	.00
21	.02	.23	.24	.17	.10	.14	.00	.14	.40	1.6	.62	.00
22	.08	.25	.21	.18	.28	.15	.01	.12	.38	1.5	.52	.00
23	.46	.24	.19	.18	.20	.16	.00	.11	.56	1.5	.55	.00
24	.20	.25	.21	.18	.09	.14	.00	.11	.63	1.5	.31	.00
25	.21	.22	.19	.18	.12	.02	.00	.11	.74	1.3	.14	.00
26	.22	.19	.21	.17	.28	.14	.02	.11	.80	1.2	.14	.00
27	.07	.14	.23	.18	.23	.03	.11	.12	.86	1.2	.09	.00
28	.35	.18	.14	.19	.21	.05	.36	.13	1.1	1.0	.03	.00
29	.24	.21	.13	.23	---	.09	.41	.13	1.2	.95	.02	.00
30	.20	.23	.16	.20	---	.06	.44	.07	1.3	1.1	.00	.00
31	.23	---	.17	.20	---	.05	---	.00	---	1.0	.00	---
TOTAL	6.27	7.22	6.58	5.39	5.33	4.56	2.12	2.81	8.18	50.51	16.91	0.01
MEAN	.20	.24	.21	.17	.19	.15	.071	.091	.27	1.63	.55	.000
MAX	.46	.54	.38	.23	.33	.41	.44	.26	1.3	2.6	.98	.01
MIN	.00	.14	.13	.11	.08	.02	.00	.00	.00	.64	.00	.00
AC-FT	12	14	13	11	11	9.0	4.2	5.6	16	100	34	.02

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1978 - 2001, BY WATER YEAR (WY)

	1978	1979	2000	2001	1995	1996	1997	1998	1999	2000	2001	
MEAN	.37	.39	.84	.53	.47	.46	.43	1.38	2.35	1.13	.84	.60
MAX	1.64	1.57	10.8	5.23	3.69	3.54	2.75	8.37	20.3	9.78	4.43	3.03
(WY)	1983	1983	2000	2000	2000	2000	2000	1995	1995	1995	1995	1995
MIN	.010	.010	.010	.010	.010	.015	.015	.011	.010	.010	.010	.000
(WY)	1992	1992	1992	1979	1979	1992	1979	1979	1978	1991	1991	2001

SUMMARY STATISTICS

	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	FOR WATER YEARS 1978 - 2001
ANNUAL TOTAL	571.94	115.89	
ANNUAL MEAN	1.56	.32	.82
HIGHEST ANNUAL MEAN			3.93
LOWEST ANNUAL MEAN			.024
HIGHEST DAILY MEAN	6.6 Jan 1	2.6 Jul 14	70 May 31 1995
LOWEST DAILY MEAN	.00 Jul 15	.00 Oct 19	a.00 Sep 17 1989
ANNUAL SEVEN-DAY MINIMUM	.04 Jul 26	.00 Apr 14	.00 Apr 14 2001
MAXIMUM PEAK FLOW		7.7 Nov 13	b83 May 30 1995
MAXIMUM PEAK STAGE		4.18 Nov 13	c6.29 May 30 1995
ANNUAL RUNOFF (AC-FT)	1130	230	596
10 PERCENT EXCEEDS	4.4	.82	1.7
50 PERCENT EXCEEDS	.25	.19	.18
90 PERCENT EXCEEDS	.06	.00	.01

a Also occurred many days during 2000-2001.  
b From rating curve extended above 62 ft<sup>3</sup>/s.  
c Site and datum then in use.

07099238 TELLER RESERVOIR SPILLWAY NEAR STONE CITY, CO

LOCATION.--Lat 38°26'20", long 104°49'15", in NE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec.31, T.18 S., R.66 W., Pueblo County, Hydrologic Unit 11020002, on right bank at Fort Carson Military Reservation, 0.4 mi southeast of Teller Reservoir dam, and 1.2 mi southeast of Stone City.

DRAINAGE AREA.--71.5 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 2000 to September 2001.

GAGE.--Water-stage recorder with satellite telemetry and concrete control. Elevation of gage is 5,480 ft above sea level, from topographic map.

REMARKS.--Records poor. Records represent uncontrolled overflow from Teller Reservoir and local storm runoff. There was no overflow from Teller Reservoir during the year. Published flows represent local storm runoff, including May 5, June 20-21, July 11, 14, and Aug. 5.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 19 ft<sup>3</sup>/s, June 21, 2001, gage height, 3.86 ft, from rating curve based on open-channel flow computations; no flow most days.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period October to September, 19 ft<sup>3</sup>/s, June 21, gage height, 3.86 ft, from rating curve based on open-channel flow computations; no flow most days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	---	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	---	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
4	---	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
5	---	.00	.00	.00	.00	.00	.00	.16	.00	.00	.30	.00
6	---	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
7	---	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
8	---	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
9	---	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
10	---	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
11	---	.00	.00	.00	.00	.00	.00	.00	.00	.33	.00	.00
12	---	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
13	---	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	---	.00	.00	.00	.00	.00	.00	.00	.00	.14	.00	.00
15	---	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
16	---	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
17	---	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
18	---	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
19	---	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
20	e.00	.00	.00	.00	.00	.00	e.00	.00	.38	.00	.00	.00
21	.00	.00	.00	.00	.00	.00	e.00	.00	.71	.00	.00	.00
22	.00	.00	.00	.00	.00	.00	e.00	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	.00	.00	e.00	.00	.00	.00	.00	.00
24	.00	.00	.00	.00	.00	.00	e.00	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	.00	.00	e.00	.00	.00	.00	.00	.00
26	.00	.00	.00	.00	.00	.00	e.00	.00	.00	.00	.00	.00
27	.00	.00	.00	.00	.00	.00	e.00	.00	.00	.00	.00	.00
28	.00	.00	.00	.00	.00	.00	e.00	.00	.00	.00	.00	.00
29	.00	.00	.00	.00	---	.00	e.00	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	---	.00	e.00	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	---	0.00	0.00	0.00	0.00	0.00	0.00	0.16	1.09	0.47	0.30	0.00
MEAN	---	.000	.000	.000	.000	.000	.000	.005	.036	.015	.010	.000
MAX	---	.00	.00	.00	.00	.00	.00	.16	.71	.33	.30	.00
MIN	---	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	---	.00	.00	.00	.00	.00	.00	.3	2.2	.9	.6	.00

e Estimated.

07099238 TELLER RESERVOIR SPILLWAY NEAR STONE CITY, CO--Continued

PRECIPITATION RECORDS

PERIOD OF RECORD.--May to September 2001 (seasonal records only).

GAGE.--Tipping-bucket rain gage with satellite telemetry.

REMARKS.--Records good. Daily data that are not published are either missing or of unacceptable quality.

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum daily precipitation, 1.38 inches, June 20, 2001.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum daily precipitation during period May to September, 1.38 inches, June 20.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	.00	.00	.00	.01
2	---	---	---	---	---	---	---	---	.00	.00	.01	.00
3	---	---	---	---	---	---	---	---	.00	.00	.00	.00
4	---	---	---	---	---	---	---	---	.16	.00	.00	.00
5	---	---	---	---	---	---	---	---	.00	.00	.69	.01
6	---	---	---	---	---	---	---	---	.00	.00	.04	.00
7	---	---	---	---	---	---	---	---	.00	.00	.00	.17
8	---	---	---	---	---	---	---	---	.00	.00	.00	.20
9	---	---	---	---	---	---	---	---	.00	.20	.10	.00
10	---	---	---	---	---	---	---	---	.02	.13	.04	.00
11	---	---	---	---	---	---	---	---	.00	.67	.03	.00
12	---	---	---	---	---	---	---	---	.00	.15	.01	.00
13	---	---	---	---	---	---	---	---	.12	.32	.29	.14
14	---	---	---	---	---	---	---	---	.00	.30	.09	.18
15	---	---	---	---	---	---	---	---	.00	.00	.02	.05
16	---	---	---	---	---	---	---	---	.00	.00	.02	.24
17	---	---	---	---	---	---	---	e.00	.00	.00	.03	.02
18	---	---	---	---	---	---	---	.00	.00	.00	.00	.00
19	---	---	---	---	---	---	---	.01	.00	.00	.00	.00
20	---	---	---	---	---	---	---	.26	1.38	.00	.00	.00
21	---	---	---	---	---	---	---	.22	.04	.00	.02	.00
22	---	---	---	---	---	---	---	.00	.11	.09	.05	.00
23	---	---	---	---	---	---	---	.00	.00	.08	.00	.00
24	---	---	---	---	---	---	---	.00	.01	.10	.00	.00
25	---	---	---	---	---	---	---	.01	.00	.00	.00	.00
26	---	---	---	---	---	---	---	.02	.00	.10	.00	.00
27	---	---	---	---	---	---	---	.00	.00	.00	.00	.00
28	---	---	---	---	---	---	---	.00	.00	.00	.00	.00
29	---	---	---	---	---	---	---	.00	.00	.00	.00	.00
30	---	---	---	---	---	---	---	.12	.00	.00	.00	.00
31	---	---	---	---	---	---	---	.00	---	.00	.40	---
TOTAL	---	---	---	---	---	---	---	---	1.84	2.14	1.84	1.02
MAX	---	---	---	---	---	---	---	---	1.38	.67	.69	.24

e Estimated.

ARKANSAS RIVER BASIN

07099350 PUEBLO RESERVOIR NEAR PUEBLO, CO

LOCATION.--Lat 38°16'15", long 104°43'30", in NE<sup>1</sup>/<sub>4</sub> sec.36, T.20 S., R.66 W., Pueblo County, Hydrologic Unit 11020002, at dam on Arkansas River, 7 mi west of Pueblo.

DRAINAGE AREA.--4,669 mi<sup>2</sup>.

RESERVOIR ELEVATIONS AND CONTENTS RECORDS

PERIOD OF RECORD.--January 1974 to current year.

GAGE.--Water-stage recorder. Datum of gage is 4,898.70 ft above sea level, (levels by U.S. Bureau of Reclamation); gage readings at 2400 have been reduced to elevations above sea level.

REMARKS.--Reservoir is formed by concrete and earthfill dam. Storage began Jan. 9, 1974; dam completed in August 1975. Capacity, 357,700 acre-ft at elevation 4,898.70 ft, crest of spillway. Dead storage, 3,730 acre-ft, below elevation 4,764.00 ft, invert of river outlet. Reservoir is terminal reservoir of the Fryingpan-Arkansas project and is used to provide flood control, municipal and industrial supplies, and to fulfill irrigation requirements in the Arkansas River valley. Figures given are total contents.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 295,480 acre-ft, Feb. 12, 1985, elevation, 4,886.94 ft; minimum since appreciable storage was attained, 22,680 acre-ft, Nov. 13, 1974, elevation, 4,790.50 ft.

EXTREMES (AT 2400) FOR CURRENT YEAR.--Maximum contents, 225,830 acre-ft, Mar. 21-22, elevation, 4,873.38 ft; minimum contents, 96,640 acre-ft, Sept. 30, elevation, 4,834.08 ft.

MONTH END ELEVATION AND CONTENTS, AT 2400, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30. . . . .	4,856.06	160,890	-
Oct. 31. . . . .	4,855.97	160,590	-300
Nov. 30. . . . .	4,858.61	169,580	+8,990
Dec. 31. . . . .	4,864.23	189,790	+20,210
CAL YR 2000. . . . .	-	-	-62,530
Jan. 31. . . . .	4,868.66	206,750	+16,960
Feb. 28. . . . .	4,872.04	220,300	+13,550
Mar. 31. . . . .	4,873.02	224,340	+4,040
Apr. 30. . . . .	4,866.96	200,130	-24,210
May 31. . . . .	4,861.75	180,690	-19,440
June 30. . . . .	4,857.18	164,670	-16,020
July 31. . . . .	4,848.18	135,840	-28,830
Aug. 31. . . . .	4,836.00	101,590	-34,250
Sept. 30. . . . .	4,834.08	96,640	-4,950
WTR YR 2001. . . . .	-	-	-64,250

PUEBLO RESERVOIR NEAR PUEBLO, CO--Continued

WATER-QUALITY RECORDS

REMARKS.--Samples and field measurements were collected at a number of transects located along the length of the reservoir.

381754104504000 PUEBLO RESERVOIR SITE 2B

LOCATION.--Lat 38°17'54", long 104°50'40", in SW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub>, sec.24, T.20 S., R.67 W., Pueblo County, Hydrologic Unit 11020002, at approximate center of transect approximately 1.1 mi downstream from Rush Creek, 1.1 mi upstream from Turkey Creek, and 7.8 mi upstream from Pueblo Dam.

PERIOD OF RECORD.--June 1988 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	SAM- PLING DEPTH (FEET) (00003)	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) (M) (00078)	OXYGEN, DIS- SOLVED (MG/L) (00300)
APR							
18...	1459	--	--	--	--	.80	--
18...	1500	.10	610	8.8	13.4	--	9.3
18...	1501	3.00	606	8.8	12.9	--	9.6
18...	1502	6.00	601	8.8	12.5	--	9.9
18...	1503	9.00	595	8.7	11.9	--	10.0
18...	1504	12.0	590	8.7	11.3	--	9.5
18...	1505	13.0	589	8.6	11.2	--	9.4
MAY							
24...	1254	--	--	--	--	.30	--
24...	1255	.10	265	7.8	15.8	--	7.4
24...	1256	3.00	265	7.8	15.8	--	7.3
24...	1257	6.00	263	7.8	15.3	--	7.4
24...	1258	8.00	263	7.8	15.2	--	7.4
JUN							
15...	1339	--	--	--	--	2.00	--
15...	1340	.10	214	8.1	15.5	--	8.3
15...	1341	3.00	214	8.1	15.2	--	8.2
15...	1342	5.00	213	8.0	14.2	--	8.1

## ARKANSAS RIVER BASIN

PUEBLO RESERVOIR NEAR PUEBLO, CO--Continued

## WATER-QUALITY RECORDS

381725104494400 PUEBLO RESERVOIR SITE 3B

LOCATION.--Lat 38°17'25", long 104°49'44", in SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>, sec.19, T.20 S., R.66 W., Pueblo County, Hydrologic Unit 11020002, at approximate center of transect approximately 100 ft downstream from Turkey Creek, and 6.7 mi upstream from Pueblo Dam.

PERIOD OF RECORD.--June 1988 to current year.

REMARKS.--Chlorophyll samples were composited from samples collected at the surface, at the transparency depth (secchi disk), and at twice the transparency depth.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	SAM- PLING DEPTH (FEET) (00003)	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) (M) (00078)	OXYGEN, DIS- SOLVED (MG/L) (00300)						
APR													
18...	1350	--	--	--	--	.90	--						
18...	1351	.10	569	8.7	12.4	--	10.6						
18...	1405	3.00	568	8.7	11.8	--	10.6						
18...	1352	6.00	565	8.7	11.2	--	10.7						
18...	1353	9.00	563	8.7	10.8	--	10.5						
18...	1354	12.0	563	8.7	10.7	--	10.3						
18...	1355	15.0	552	8.7	10.4	--	9.8						
18...	1356	18.0	547	8.6	10.2	--	9.7						
18...	1357	21.0	539	8.6	10.0	--	9.4						
18...	1358	24.0	537	8.5	9.7	--	9.0						
18...	1359	27.0	545	8.4	9.7	--	8.2						
18...	1400	28.0	556	8.4	9.7	--	8.0						
MAY													
24...	1229	--	--	--	--	.50	--						
24...	1230	.10	282	8.2	19.1	--	8.2						
24...	1231	3.00	283	8.2	18.9	--	7.9						
24...	1232	6.00	285	7.9	17.9	--	7.0						
24...	1233	9.00	275	7.9	17.3	--	7.0						
24...	1234	12.0	273	7.9	16.3	--	7.0						
24...	1235	15.0	265	7.8	14.3	--	7.4						
24...	1236	18.0	265	7.8	14.4	--	7.3						
24...	1237	21.0	265	7.8	14.4	--	7.2						
JUN													
15...	1244	--	--	--	--	.50	--						
15...	1245	.10	240	8.1	19.8	--	6.9						
15...	1246	3.00	235	8.1	18.4	--	7.1						
15...	1247	6.00	222	8.1	16.0	--	7.1						
15...	1248	9.00	211	8.1	15.3	--	7.3						
15...	1249	12.0	212	8.0	12.9	--	7.8						
15...	1250	15.0	212	8.0	12.6	--	7.8						
15...	1251	18.0	212	8.0	12.5	--	7.7						
15...	1255	19.5	212	8.0	12.5	--	7.7						
JUL													
25...	1209	--	--	--	--	.30	--						
25...	1210	.10	392	8.4	25.0	--	8.1						
25...	1211	3.00	398	7.8	22.0	--	5.9						
25...	1212	6.00	387	7.7	20.7	--	5.6						
25...	1215	7.00	381	7.7	20.3	--	5.0						
DATE	TIME	SAM- PLING DEPTH (FEET) (00003)	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) (M) (00078)	OXYGEN, DIS- SOLVED (MG/L) (00300)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)
APR													
18...	1400	28.0	556	8.4	9.7	--	8.0	.066	.176	.005	E.005	<.007	.045
18...	1405	3.00	568	8.7	11.8	--	10.6	.009	.005	.001	E.004	<.007	.035
18...	1410	--	--	--	--	.90	--	--	--	--	--	--	--
JUN													
15...	1240	--	--	--	--	.50	--	--	--	--	--	--	--
15...	1245	.10	240	8.1	19.8	--	6.9	.038	.117	.003	.011	.007	.049
15...	1255	19.5	212	8.0	12.5	--	7.7	.021	.087	.001	.010	E.006	.053
JUL													
25...	1205	--	--	--	--	.30	--	--	--	--	--	--	--
25...	1210	.10	392	8.4	25.0	--	8.1	.022	.154	.007	.007	<.007	.066
25...	1215	7.00	381	7.7	20.3	--	5.0	.178	.218	.008	.012	E.006	.187

PUEBLO RESERVOIR NEAR PUEBLO, CO--Continued

381725104494400 PUEBLO RESERVOIR SITE 3B--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)	PHEO- PHYTIN A, PHYTO- PHYTON (UG/L) (62360)	CHLOR-A PHYTO- PLANK- TON CHROMO FLUOROM (UG/L) (70953)
APR			
18...	3.2	--	--
18...	2.6	--	--
18...	--	7.0	3.7
JUN			
15...	--	1.0	2.6
15...	2.3	--	--
15...	--	--	--
JUL			
25...	--	4.3	14.4
25...	2.6	--	--
25...	2.5	--	--

E Estimated laboratory analysis value.

## ARKANSAS RIVER BASIN

PUEBLO RESERVOIR NEAR PUEBLO, CO--Continued

## WATER-QUALITY RECORDS

381647104475300 PUEBLO RESERVOIR SITE 4B

LOCATION.--Lat 38°16'47", long 104°47'53", in NW<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub>, sec.29, T.20 S., R.66 W., Pueblo County, Hydrologic Unit 11020002, at approximate center of transect approximately 1.3 mi upstream from Peck Creek, 2.2 mi downstream from Turkey Creek, and 4.5 mi upstream from Pueblo Dam.

PERIOD OF RECORD.--June 1988 to current year.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	SAM- PLING DEPTH (FEET) (00003)	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) (M) (00078)	OXYGEN, DIS- SOLVED (MG/L) (00300)
APR							
18...	1309	--	--	--	--	3.00	--
18...	1310	.10	523	8.4	10.3	--	9.6
18...	1311	6.00	522	8.4	10.1	--	9.6
18...	1312	12.0	520	8.4	9.5	--	9.6
18...	1313	18.0	520	8.4	9.3	--	9.5
18...	1314	24.0	518	8.3	9.2	--	9.3
18...	1315	30.0	519	8.3	9.1	--	9.2
18...	1316	36.0	520	8.3	9.0	--	9.2
18...	1317	42.0	519	8.3	8.9	--	9.1
18...	1318	48.0	520	8.2	8.7	--	8.6
18...	1319	54.0	524	8.2	8.7	--	7.9
MAY							
24...	1159	--	--	--	--	1.80	--
24...	1200	.10	397	8.2	18.7	--	8.1
24...	1201	6.00	422	8.3	17.7	--	8.2
24...	1202	12.0	427	8.2	17.5	--	7.8
24...	1203	18.0	376	8.0	16.6	--	7.1
24...	1204	24.0	328	7.8	14.9	--	6.7
24...	1205	30.0	436	7.9	14.4	--	6.8
24...	1206	36.0	384	7.9	13.9	--	6.6
24...	1207	42.0	363	7.8	13.5	--	6.4
24...	1208	47.0	387	7.7	13.1	--	5.8
JUN							
15...	1209	--	--	--	--	2.50	--
15...	1210	.10	326	8.1	20.1	--	6.7
15...	1211	6.00	325	8.1	18.9	--	6.6
15...	1212	12.0	304	8.1	18.3	--	6.5
15...	1213	18.0	300	8.1	18.2	--	6.4
15...	1214	24.0	306	8.1	18.2	--	6.4
15...	1215	30.0	272	8.0	17.8	--	6.3
15...	1216	34.0	218	8.0	15.4	--	6.4
JUL							
25...	1129	--	--	--	--	1.20	--
25...	1130	.10	365	8.4	24.7	--	7.3
25...	1131	6.00	360	8.5	24.1	--	7.4
25...	1132	12.0	360	8.4	23.8	--	7.0
25...	1133	18.0	362	8.3	23.7	--	6.7
25...	1134	24.0	363	8.3	23.7	--	6.5
25...	1135	30.0	367	8.3	23.6	--	6.4
25...	1136	32.0	329	7.6	23.6	--	3.3
AUG							
23...	1054	--	--	--	--	.76	--
23...	1055	.10	415	8.1	22.4	--	6.5
23...	1056	6.00	415	8.1	22.2	--	6.2
23...	1057	12.0	415	8.0	22.1	--	5.9
23...	1058	18.0	426	8.0	22.0	--	5.6
23...	1059	23.0	534	7.9	21.2	--	4.8

PUEBLO RESERVOIR NEAR PUEBLO, CO--Continued

WATER-QUALITY RECORDS

381559104465500 PUEBLO RESERVOIR SITE 5C

LOCATION.--Lat 38°15'59", long 104°46'55", in SW<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub>, sec.33, T.20 S., R.66 W., Pueblo County, Hydrologic Unit 11020002, at approximate center of transect approximately 0.1 mi upstream from Peck Creek, 1.2 mi upstream from Rock Creek, and 3.2 mi upstream from Pueblo Dam.

PERIOD OF RECORD.--June 1988 to current year.

REMARKS.--Chlorophyll samples were composited from samples collected at the surface, at the transparency depth (secchi disk), and at twice the transparency depth.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	SAM- PLING DEPTH (FEET) (00003)	SPE- CIFIC DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	TRANS- PAR- ENCY (SECCHI DISK) (M) (00078)	OXYGEN, DIS- SOLVED (MG/L) (00300)
APR						4.60	--
18...	1219	--	--	--	--		
18...	1221	.10	517	8.3	10.5	--	9.1
18...	1225	3.00	516	8.3	9.6	--	9.2
18...	1222	6.00	516	8.3	9.3	--	9.2
18...	1223	9.00	516	8.3	9.3	--	9.2
18...	1224	12.0	516	8.4	9.1	--	9.2
18...	1226	15.0	517	8.4	9.0	--	9.2
18...	1227	18.0	517	8.4	9.0	--	9.2
18...	1228	21.0	517	8.4	9.0	--	9.2
18...	1229	24.0	517	8.4	9.0	--	9.2
18...	1230	27.0	517	8.4	8.9	--	9.2
18...	1231	30.0	517	8.4	8.9	--	9.2
18...	1232	33.0	517	8.4	8.9	--	9.1
18...	1233	36.0	517	8.4	8.9	--	9.1
18...	1234	39.0	517	8.4	8.9	--	9.1
18...	1235	42.0	517	8.4	8.9	--	9.1
18...	1236	45.0	517	8.4	8.9	--	9.1
18...	1237	48.0	517	8.4	8.8	--	9.0
18...	1238	51.0	517	8.4	8.8	--	9.0
18...	1239	54.0	517	8.4	8.7	--	9.0
18...	1220	57.0	518	8.3	8.4	--	8.5
18...	1240	60.0	517	8.2	8.2	--	8.4
18...	1241	63.0	517	8.2	8.1	--	8.4
18...	1242	66.0	515	8.2	7.7	--	8.4
18...	1243	68.0	515	8.2	7.7	--	8.4
MAY						3.70	--
24...	1114	--	--	--	--		
24...	1115	.10	487	8.3	17.8	--	8.2
24...	1116	3.00	486	8.3	17.8	--	8.1
24...	1117	6.00	489	8.3	17.7	--	8.1
24...	1118	9.00	481	8.3	17.2	--	8.2
24...	1119	12.0	478	8.3	17.1	--	8.1
24...	1120	15.0	479	8.3	17.0	--	8.0
24...	1121	18.0	495	8.3	16.9	--	8.1
24...	1122	21.0	440	8.1	16.1	--	7.4
24...	1123	24.0	360	7.9	15.0	--	6.7
24...	1124	27.0	356	7.8	14.6	--	6.6
24...	1125	30.0	358	7.8	14.4	--	6.6
24...	1126	33.0	429	7.9	14.0	--	6.7
24...	1127	36.0	419	7.9	13.5	--	6.6
24...	1128	39.0	410	7.8	13.3	--	6.4
24...	1129	42.0	468	7.9	13.1	--	6.4
24...	1130	45.0	476	7.9	12.8	--	6.4
24...	1131	48.0	528	8.1	12.6	--	7.4
24...	1132	51.0	509	8.0	12.3	--	6.9
24...	1133	54.0	514	7.9	11.9	--	6.7
24...	1134	57.0	527	8.0	11.7	--	7.2
24...	1135	60.0	520	7.9	11.4	--	6.2
JUN						1.50	--
15...	1109	--	--	--	--		
15...	1110	.10	367	8.2	19.7	--	7.0
15...	1111	3.00	367	8.2	19.1	--	6.8
15...	1112	6.00	366	8.2	18.8	--	6.8
15...	1113	9.00	366	8.2	18.8	--	6.7
15...	1114	12.0	365	8.2	18.7	--	6.7
15...	1115	15.0	365	8.2	18.7	--	6.6
15...	1116	18.0	364	8.2	18.7	--	6.6
15...	1117	21.0	359	8.2	18.6	--	6.6
15...	1118	24.0	354	8.2	18.6	--	6.6
15...	1119	27.0	349	8.2	18.6	--	6.6
15...	1120	30.0	344	8.2	18.5	--	6.6
15...	1121	33.0	343	8.2	18.5	--	6.6
15...	1122	36.0	342	8.2	18.5	--	6.6
15...	1123	39.0	335	8.2	18.4	--	6.4
15...	1124	42.0	332	8.1	18.1	--	6.0
15...	1125	45.0	332	8.1	17.8	--	6.0
15...	1126	48.0	329	8.0	17.5	--	5.8
15...	1127	51.0	327	8.0	17.0	--	5.6
15...	1128	54.0	342	8.0	16.9	--	5.4
15...	1129	57.0	327	7.9	16.7	--	5.3
15...	1130	59.0	350	7.9	16.7	--	4.9

ARKANSAS RIVER BASIN

PUEBLO RESERVOIR NEAR PUEBLO, CO--Continued

381559104465500 PUEBLO RESERVOIR SITE 5C--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	SAM-PLING DEPTH (FEET) (00003)	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) (M) (00078)	OXYGEN, DIS-SOLVED (MG/L) (00300)
JUL							
25...	1039	--	--	--	--	1.20	--
25...	1050	.10	359	8.4	24.7	--	7.1
25...	1040	3.00	359	8.4	24.3	--	7.1
25...	1041	6.00	359	8.4	24.0	--	7.0
25...	1043	9.00	358	8.4	24.0	--	6.9
25...	1045	12.0	359	8.4	23.9	--	6.8
25...	1047	15.0	359	8.4	23.8	--	6.7
25...	1049	18.0	358	8.4	23.7	--	6.6
25...	1051	21.0	360	8.3	23.6	--	6.2
25...	1053	24.0	364	8.2	23.4	--	5.7
25...	1055	27.0	374	7.9	23.3	--	4.5
25...	1056	30.0	377	7.8	23.2	--	4.0
25...	1058	33.0	379	7.7	23.0	--	3.5
25...	1059	36.0	388	7.6	22.6	--	2.7
25...	1101	39.0	387	7.6	22.5	--	2.4
25...	1102	42.0	388	7.6	22.4	--	2.2
25...	1104	45.0	391	7.5	22.1	--	1.1
25...	1105	48.0	395	7.5	21.6	--	.3
AUG							
23...	1009	--	--	--	--	1.07	--
23...	1010	.10	401	8.0	22.8	--	6.2
23...	1011	3.00	401	8.0	22.8	--	6.1
23...	1012	6.00	401	8.0	22.5	--	5.8
23...	1013	9.00	401	8.0	22.5	--	5.7
23...	1014	12.0	401	8.0	22.5	--	5.7
23...	1015	15.0	401	8.0	22.5	--	5.7
23...	1016	18.0	401	7.9	22.5	--	5.5
23...	1017	21.0	401	7.9	22.5	--	5.6
23...	1018	24.0	401	7.9	22.5	--	5.6
23...	1019	27.0	401	7.9	22.4	--	5.6
23...	1020	30.0	404	7.9	22.4	--	5.3
23...	1021	33.0	418	7.8	22.2	--	4.8
23...	1022	36.0	444	7.8	21.8	--	4.2
23...	1025	38.0	447	7.7	21.8	--	3.6

DATE	TIME	SAM-PLING DEPTH (FEET) (00003)	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)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)
APR													
18...	1215	--	--	--	--	--	--	--	--	--	--	--	--
18...	1220	57.0	518	8.3	8.4	8.5	.040	.223	.005	E.003	<.007	.009	2.5
18...	1225	3.00	516	8.3	9.6	9.2	.040	.228	.004	<.006	<.007	.005	2.0
JUN													
15...	1105	--	--	--	--	--	--	--	--	--	--	--	--
15...	1110	.10	367	8.2	19.7	7.0	.054	.202	.006	E.005	<.007	.015	2.5
15...	1130	59.0	350	7.9	16.7	4.9	.066	.178	.011	.011	.007	.044	2.4
JUL													
25...	1035	--	--	--	--	--	--	--	--	--	--	--	--
25...	1050	.10	359	8.4	24.7	7.1	.008	.081	.009	E.004	<.007	.012	2.3
25...	1105	48.0	395	7.5	21.6	.3	.057	.234	.014	.007	<.007	.063	2.8
AUG													
23...	1005	--	--	--	--	--	--	--	--	--	--	--	--
23...	1010	.10	401	8.0	22.8	6.2	.009	.158	.003	<.006	<.007	.012	2.0
23...	1025	38.0	447	7.7	21.8	3.6	.052	.142	.005	E.006	<.007	.023	2.3

PUEBLO RESERVOIR NEAR PUEBLO, CO--Continued

381559104465500 PUEBLO RESERVOIR SITE 5C--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	PHEO-PHYTIN A, PHYTON (UG/L) (62360)	CHLOR-A PHYTO-PLANK-TON CHROMO FLUOROM (UG/L) (70953)	ALUM-INUM, DIS-SOLVED (UG/L) AS AL) (01106)	ALUM-INUM, RECOV-ERABLE (UG/L) AS AL) (01105)	ARSENIC DIS-SOLVED (UG/L) AS AS) (01000)	ARSENIC TOTAL (UG/L) AS AS) (01002)	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)	LEAD, DIS-SOLVED (UG/L) AS PB) (01049)
APR													
18...	3.3	3.2	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN													
15...	2.3	2.5	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
25...	3.4	5.2	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--	--
AUG													
23...	3.2	8.5	--	--	--	--	--	--	--	--	--	--	--
23...	--	--	<15	108	<2.0	M	<.10	<.10	E1.1	E1.1	<10	120	<1.00
23...	--	--	<15	305	E1.1	E1	<.10	E.10	E.8	1.5	<10	390	<1.00

DATE	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)	ZINC, DIS-SOLVED (UG/L) AS ZN) (01090)	ZINC, TOTAL RECOV-ERABLE (UG/L) AS ZN) (01092)
APR					
18...	--	--	--	--	--
18...	--	--	--	--	--
18...	--	--	--	--	--
JUN					
15...	--	--	--	--	--
15...	--	--	--	--	--
15...	--	--	--	--	--
JUL					
25...	--	--	--	--	--
25...	--	--	--	--	--
25...	--	--	--	--	--
AUG					
23...	--	--	--	--	--
23...	M	<3.0	41	<20	<31
23...	1	22.3	62	<20	<31

E Estimated laboratory analysis value.  
M Presence of material verified but not quantified.

## ARKANSAS RIVER BASIN

PUEBLO RESERVOIR NEAR PUEBLO, CO--Continued

## WATER-QUALITY RECORDS

381548104453300 PUEBLO RESERVOIR SITE 6C

LOCATION.--Lat 38°15'48", long 104°45'33", in NE<sup>1</sup>/<sub>4</sub> SE<sup>1</sup>/<sub>4</sub>, sec.34, T.20 S., R.66 W., Pueblo County, Hydrologic Unit 11020002, at approximate center of transect approximately 0.2 mi downstream from Rock Creek, 1.2 mi downstream from Peck Creek, and 2.0 mi upstream from Pueblo Dam.

PERIOD OF RECORD.--June 1988 to current year.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	SAM- PLING DEPTH (FEET) (00003)	SPE- CIFIC DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	TRANS- PAR- ENCY (SECCHI DISK) (M) (00078)	OXYGEN, DIS- SOLVED (MG/L) (00300)
APR							
18...	1144	--	--	--	--	6.00	--
18...	1145	.10	518	8.3	10.2	--	9.2
18...	1146	6.00	517	8.3	9.4	--	9.2
18...	1147	12.0	515	8.3	9.0	--	9.2
18...	1148	18.0	515	8.3	8.5	--	9.0
18...	1149	24.0	515	8.3	8.5	--	9.0
18...	1150	30.0	515	8.3	8.4	--	9.0
18...	1151	36.0	514	8.3	8.4	--	9.0
18...	1152	42.0	514	8.3	8.4	--	9.0
18...	1153	48.0	514	8.3	8.4	--	9.0
18...	1154	54.0	514	8.3	8.3	--	9.0
18...	1155	60.0	514	8.3	8.0	--	9.0
18...	1156	66.0	513	8.3	7.9	--	8.9
18...	1157	72.0	513	8.3	7.8	--	8.9
18...	1158	78.0	513	8.3	7.8	--	8.9
18...	1159	84.0	513	8.2	7.7	--	8.9
18...	1200	90.0	513	8.2	7.5	--	8.7
18...	1201	92.0	513	8.2	7.5	--	8.7
MAY							
25...	0959	--	--	--	--	5.50	--
25...	1000	.10	516	8.4	17.8	--	8.2
25...	1001	6.00	513	8.4	16.8	--	8.3
25...	1002	12.0	505	8.4	16.4	--	8.4
25...	1003	18.0	496	8.3	16.1	--	8.1
25...	1004	24.0	450	8.0	15.2	--	6.9
25...	1005	30.0	489	8.1	14.7	--	7.1
25...	1006	36.0	466	8.0	13.9	--	6.8
25...	1007	42.0	472	7.9	13.2	--	6.6
25...	1008	48.0	486	7.9	12.9	--	6.7
25...	1009	54.0	526	8.1	12.6	--	7.6
25...	1010	60.0	536	8.1	11.9	--	7.5
25...	1011	66.0	531	8.0	11.3	--	7.4
25...	1012	72.0	532	8.0	11.0	--	7.2
25...	1013	78.0	533	8.0	10.7	--	7.0
25...	1014	80.0	534	8.0	10.3	--	6.8
JUN							
15...	1020	--	--	--	--	3.00	--
15...	1021	.10	353	8.3	19.2	--	7.2
15...	1022	6.00	352	8.3	18.9	--	7.1
15...	1023	12.0	353	8.3	18.8	--	7.0
15...	1025	18.0	354	8.3	18.8	--	6.9
15...	1026	24.0	367	8.2	18.8	--	6.8
15...	1027	30.0	367	8.2	18.7	--	6.8
15...	1028	36.0	369	8.2	18.6	--	6.7
15...	1029	42.0	371	8.2	18.5	--	6.6
15...	1030	48.0	367	8.2	18.3	--	6.5
15...	1031	54.0	367	8.1	17.8	--	6.2
15...	1032	60.0	374	7.9	16.4	--	5.3
15...	1033	66.0	372	7.9	16.1	--	5.0
15...	1034	72.0	381	7.8	15.6	--	4.6
15...	1035	78.0	422	7.8	14.4	--	4.3
15...	1036	81.0	435	7.8	14.0	--	4.0
JUL							
25...	0919	--	--	--	--	2.60	--
25...	0920	.10	354	8.4	24.0	--	7.0
25...	0921	6.00	354	8.4	23.8	--	6.9
25...	0922	12.0	354	8.4	23.6	--	6.7
25...	0923	18.0	355	8.4	23.6	--	6.6
25...	0924	24.0	355	8.4	23.6	--	6.5
25...	0925	30.0	358	8.2	23.4	--	5.4
25...	0926	36.0	376	7.6	22.5	--	2.8
25...	0927	42.0	384	7.6	22.0	--	1.9
25...	0928	48.0	384	7.6	21.8	--	1.8
25...	0929	54.0	381	7.6	21.5	--	1.7
25...	0930	60.0	387	7.5	21.4	--	1.3
25...	0931	66.0	395	7.5	20.5	--	.5
25...	0932	68.5	395	7.5	20.1	--	.4

PUEBLO RESERVOIR NEAR PUEBLO, CO--Continued

381548104453300 PUEBLO RESERVOIR SITE 6C--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	SAM- PLING DEPTH (FEET) (00003)	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) (M) (00078)	OXYGEN, DIS- SOLVED (MG/L) (00300)
AUG							
23...	0934	--	--	--	--	1.83	--
23...	0935	.10	397	8.0	22.9	--	6.1
23...	0936	6.00	397	8.0	22.9	--	6.0
23...	0937	12.0	397	7.9	22.8	--	5.7
23...	0938	18.0	397	8.0	22.8	--	5.9
23...	0940	24.0	397	8.0	22.8	--	5.8
23...	0941	30.0	397	7.9	22.8	--	5.5
23...	0942	36.0	397	7.9	22.8	--	5.3
23...	0943	42.0	397	7.8	22.7	--	5.2
23...	0944	48.0	403	7.8	22.5	--	4.7
23...	0945	54.0	408	7.7	22.4	--	4.3
23...	0946	59.0	410	7.7	22.3	--	3.8

## ARKANSAS RIVER BASIN

## PUEBLO RESERVOIR NEAR PUEBLO, CO--Continued

## WATER-QUALITY RECORDS

381602104435200 PUEBLO RESERVOIR SITE 7B

LOCATION.--Lat 38°16'02", long 104°43'52", in SE<sup>1</sup>/<sub>4</sub> NW<sup>1</sup>/<sub>4</sub>, sec.36, T.20 S., R.66 W., Pueblo County, Hydrologic Unit 11020002, at approximate center of transect approximately 0.3 mi downstream from Boggs Creek and 0.4 mi upstream from Pueblo Dam.

PERIOD OF RECORD.--June 1988 to current year.

REMARKS.--Chlorophyll samples were composited from samples collected at the surface, at the transparency depth (secchi disk), and at twice the transparency depth.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	SAM- PLING DEPTH (FEET) (00003)	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) (M) (00078)	OXYGEN, DIS- SOLVED (MG/L) (00300)
APR							
18...	0959	--	--	--	--	7.00	--
18...	1000	.10	513	8.0	8.7	--	9.3
18...	1001	3.00	514	8.0	8.7	--	9.2
18...	1105	6.00	513	8.1	8.6	--	9.3
18...	1002	9.00	513	8.1	8.5	--	9.2
18...	1003	12.0	513	8.1	8.5	--	9.2
18...	1004	15.0	513	8.1	8.5	--	9.2
18...	1005	18.0	513	8.1	8.5	--	9.2
18...	1006	21.0	513	8.1	8.5	--	9.1
18...	1007	24.0	513	8.2	8.4	--	9.1
18...	1008	27.0	513	8.2	8.4	--	9.1
18...	1009	30.0	513	8.2	8.4	--	9.1
18...	1011	33.0	513	8.2	8.3	--	9.1
18...	1012	36.0	513	8.2	8.3	--	9.1
18...	1013	39.0	513	8.2	8.3	--	9.1
18...	1014	42.0	514	8.2	8.1	--	9.1
18...	1015	45.0	513	8.2	8.1	--	9.1
18...	1016	48.0	513	8.2	8.0	--	9.1
18...	1017	51.0	513	8.2	8.0	--	9.0
18...	1018	54.0	513	8.2	7.9	--	9.0
18...	1019	57.0	513	8.2	7.9	--	9.0
18...	1020	60.0	512	8.2	7.8	--	9.0
18...	1021	63.0	512	8.2	7.8	--	9.0
18...	1022	66.0	512	8.2	7.8	--	9.0
18...	1023	69.0	512	8.2	7.8	--	9.0
18...	1024	72.0	512	8.2	7.8	--	9.0
18...	1025	75.0	512	8.2	7.7	--	9.0
18...	1026	78.0	512	8.2	7.7	--	9.0
18...	1027	81.0	512	8.2	7.7	--	9.0
18...	1028	84.0	512	8.2	7.7	--	9.0
18...	1029	87.0	512	8.2	7.7	--	9.0
18...	1030	90.0	512	8.2	7.7	--	8.9
18...	1031	93.0	512	8.2	7.7	--	8.9
18...	1032	96.0	512	8.2	7.7	--	8.9
18...	1033	99.0	512	8.2	7.7	--	8.9
18...	1034	102	512	8.2	7.7	--	8.9
18...	1010	105	512	8.2	7.7	--	8.9
18...	1035	108	512	8.2	7.7	--	8.9
18...	1036	111	512	8.2	7.7	--	8.8
18...	1037	113	512	8.2	7.6	--	8.7
MAY							
24...	0849	--	--	--	--	5.90	--
24...	0850	.10	524	8.3	16.6	--	8.3
24...	0851	3.00	524	8.3	16.5	--	8.3
24...	0852	6.00	524	8.3	16.1	--	8.4
24...	0853	9.00	525	8.3	15.8	--	8.5
24...	0854	12.0	523	8.3	15.8	--	8.5
24...	0855	15.0	525	8.3	15.7	--	8.5
24...	0856	18.0	525	8.3	15.6	--	8.4
24...	0857	21.0	527	8.3	15.4	--	8.2
24...	0858	24.0	528	8.3	15.2	--	8.2
24...	0859	27.0	528	8.2	15.2	--	8.0
24...	0900	30.0	533	8.2	14.7	--	7.8
24...	0901	33.0	536	8.2	14.3	--	7.6
24...	0902	36.0	536	8.2	14.1	--	7.7
24...	0903	39.0	532	8.1	13.8	--	7.6
24...	0904	42.0	531	8.1	13.7	--	7.5
24...	0905	45.0	536	8.1	13.5	--	7.7
24...	0906	48.0	536	8.1	13.3	--	7.7
24...	0907	51.0	536	8.1	12.9	--	7.6
24...	0908	54.0	536	8.1	12.7	--	7.6
24...	0909	57.0	536	8.1	12.5	--	7.6
24...	0910	60.0	535	8.1	12.2	--	7.7
24...	0911	63.0	534	8.1	12.1	--	7.6
24...	0912	66.0	533	8.1	11.9	--	7.6
24...	0913	69.0	533	8.0	11.7	--	7.6
24...	0914	72.0	533	8.0	11.4	--	7.6
24...	0915	75.0	533	8.0	11.0	--	7.5
24...	0916	78.0	533	8.0	10.8	--	7.5
24...	0917	81.0	533	8.0	10.6	--	7.4
24...	0918	84.0	533	8.0	10.5	--	7.4
24...	0919	87.0	532	8.0	10.4	--	7.4
24...	0920	90.0	532	8.0	10.3	--	7.3
24...	0921	93.0	532	8.0	10.2	--	7.4
24...	0922	96.0	531	8.0	10.2	--	7.4
24...	0923	99.0	531	7.9	10.0	--	7.3
24...	0924	102	531	7.9	9.9	--	7.1
24...	0925	105	531	7.9	9.9	--	6.8
24...	0926	106	531	7.9	9.8	--	6.6

PUEBLO RESERVOIR NEAR PUEBLO, CO--Continued

381602104435200 PUEBLO RESERVOIR SITE 7B--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	SAM- PLING DEPTH (FEET) (00003)	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) (M) (00078)	OXYGEN, DIS- SOLVED (MG/L) (00300)
JUN							
15...	0809	--	--	--	--	1.80	--
15...	0810	.10	367	8.2	19.1	--	7.1
15...	0811	3.00	367	8.2	19.0	--	7.1
15...	0812	6.00	367	8.2	18.9	--	7.1
15...	0813	9.00	367	8.2	18.9	--	7.1
15...	0814	12.0	367	8.2	18.9	--	7.0
15...	0815	15.0	367	8.2	18.9	--	7.0
15...	0816	18.0	367	8.2	18.9	--	7.0
15...	0817	21.0	367	8.2	18.9	--	7.0
15...	0818	24.0	367	8.2	18.9	--	7.0
15...	0819	27.0	367	8.2	18.8	--	6.9
15...	0820	30.0	367	8.2	18.8	--	6.9
15...	0821	33.0	367	8.2	18.8	--	6.9
15...	0822	36.0	367	8.2	18.8	--	6.9
15...	0823	39.0	367	8.2	18.8	--	6.9
15...	0824	42.0	367	8.2	18.8	--	6.9
15...	0825	45.0	367	8.2	18.8	--	6.9
15...	0826	48.0	367	8.2	18.7	--	6.9
15...	0827	51.0	367	8.2	18.7	--	6.9
15...	0828	54.0	385	8.1	17.8	--	6.4
15...	0829	57.0	386	8.1	17.7	--	6.3
15...	0830	60.0	390	8.1	17.5	--	6.2
15...	0831	63.0	394	8.1	17.1	--	6.0
15...	0832	66.0	410	8.0	15.8	--	5.5
15...	0833	69.0	432	7.9	14.8	--	5.1
15...	0834	72.0	434	7.8	14.5	--	5.0
15...	0835	75.0	434	7.8	14.5	--	5.0
15...	0836	78.0	436	7.8	14.5	--	4.9
15...	0837	81.0	439	7.8	14.4	--	4.9
15...	0838	84.0	454	7.8	14.0	--	4.9
15...	0839	87.0	464	7.8	13.7	--	4.8
15...	0840	90.0	482	7.8	13.1	--	4.6
15...	0841	93.0	499	7.8	12.5	--	4.6
15...	0842	96.0	506	7.8	12.2	--	4.5
15...	0843	99.0	513	7.8	12.0	--	4.5
15...	0844	102	516	7.8	11.9	--	4.4
15...	0845	104	520	7.8	11.6	--	4.1
JUL							
25...	0834	--	--	--	--	2.10	--
25...	0835	.10	356	8.1	23.3	--	6.2
25...	0845	1.00	357	8.1	23.3	--	6.2
25...	0836	3.00	356	8.1	23.3	--	6.2
25...	0837	6.00	356	8.1	23.3	--	6.2
25...	0838	9.00	356	8.1	23.3	--	6.1
25...	0839	12.0	356	8.2	23.3	--	6.1
25...	0841	15.0	356	8.2	23.3	--	6.1
25...	0842	18.0	356	8.2	23.3	--	6.1
25...	0843	21.0	356	8.2	23.3	--	6.1
25...	0844	24.0	357	8.2	23.3	--	6.0
25...	0846	27.0	357	8.2	23.3	--	6.0
25...	0847	30.0	357	8.2	23.2	--	6.0
25...	0848	33.0	357	8.2	23.2	--	6.0
25...	0849	36.0	357	8.2	23.2	--	6.0
25...	0850	39.0	365	7.8	22.8	--	4.4
25...	0851	42.0	371	7.6	22.5	--	3.2
25...	0852	45.0	374	7.6	22.3	--	2.6
25...	0853	48.0	379	7.5	22.0	--	2.1
25...	0854	51.0	379	7.5	21.7	--	1.9
25...	0855	54.0	380	7.5	21.5	--	1.8
25...	0856	57.0	379	7.5	21.4	--	1.8
25...	0857	60.0	377	7.5	21.1	--	1.8
25...	0858	63.0	377	7.5	20.7	--	1.6
25...	0859	66.0	378	7.5	20.3	--	1.4
25...	0901	69.0	382	7.5	19.9	--	1.3
25...	0902	72.0	383	7.5	19.7	--	1.3
25...	0903	75.0	383	7.5	19.3	--	1.3
25...	0904	78.0	388	7.5	18.6	--	1.1
25...	0905	81.0	388	7.5	18.5	--	1.1
25...	0906	84.0	394	7.5	18.1	--	.7
25...	0900	85.0	394	7.5	18.1	--	.7
25...	0907	87.0	394	7.5	18.0	--	.7
25...	0908	90.0	395	7.5	17.8	--	.6
25...	0909	93.0	395	7.5	17.5	--	.5

ARKANSAS RIVER BASIN

PUEBLO RESERVOIR NEAR PUEBLO, CO--Continued

381602104435200 PUEBLO RESERVOIR SITE 7B--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	SAM-PLING DEPTH (FEET) (00003)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	PH TRANS-PAR-ENCY (SECCHI DISK) (M) (00078)	OXYGEN, DIS-SOLVED (MG/L) (00300)						
DATE	TIME	SAM-PLING DEPTH (FEET) (00003)	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)	NITRO-GEN, AMMONIA (MG/L) (AS N) (00608)	NITRO-GEN, NO2+NO3 (MG/L) (AS N) (00631)	NITRO-GEN, NITRITE (MG/L) (AS N) (00613)	PHOS-PHORUS (MG/L) (AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L) (AS P) (00671)	PHOS-PHORUS TOTAL (MG/L) (AS P) (00665)	CARBON, ORGANIC DIS-SOLVED (MG/L) (AS C) (00681)
AUG													
23...	0819	--	--	--	--	2.30	--	--	--	--	--	--	--
23...	0820	.10	396	7.9	23.0	--	6.4	--	--	--	--	--	--
23...	0821	3.00	396	7.9	23.0	--	6.4	--	--	--	--	--	--
23...	0822	6.00	396	7.9	23.0	--	6.4	--	--	--	--	--	--
23...	0823	9.00	396	7.9	23.0	--	6.4	--	--	--	--	--	--
23...	0824	12.0	396	7.9	23.0	--	6.4	--	--	--	--	--	--
23...	0825	15.0	397	7.9	23.0	--	6.3	--	--	--	--	--	--
23...	0826	18.0	397	7.9	23.0	--	6.3	--	--	--	--	--	--
23...	0827	21.0	397	7.9	23.0	--	6.3	--	--	--	--	--	--
23...	0828	24.0	397	7.9	23.0	--	6.3	--	--	--	--	--	--
23...	0829	27.0	397	7.9	23.0	--	6.3	--	--	--	--	--	--
23...	0830	30.0	397	8.0	23.0	--	6.4	--	--	--	--	--	--
23...	0831	33.0	397	8.0	23.0	--	6.4	--	--	--	--	--	--
23...	0832	36.0	398	7.9	23.0	--	6.1	--	--	--	--	--	--
23...	0833	39.0	405	7.7	22.8	--	4.4	--	--	--	--	--	--
23...	0834	42.0	405	7.6	22.7	--	4.1	--	--	--	--	--	--
23...	0835	45.0	409	7.6	22.6	--	3.7	--	--	--	--	--	--
23...	0836	48.0	409	7.5	22.5	--	3.2	--	--	--	--	--	--
23...	0837	51.0	405	7.5	22.4	--	2.9	--	--	--	--	--	--
23...	0838	54.0	405	7.5	22.3	--	2.7	--	--	--	--	--	--
23...	0839	57.0	405	7.5	22.3	--	2.6	--	--	--	--	--	--
23...	0840	60.0	406	7.4	22.1	--	2.3	--	--	--	--	--	--
23...	0841	63.0	408	7.4	22.0	--	1.9	--	--	--	--	--	--
23...	0842	66.0	408	7.4	21.9	--	1.6	--	--	--	--	--	--
23...	0843	69.0	409	7.4	21.8	--	1.3	--	--	--	--	--	--
23...	0844	72.0	410	7.4	21.7	--	.9	--	--	--	--	--	--
23...	0846	75.0	410	7.4	21.5	--	.7	--	--	--	--	--	--
23...	0847	78.0	411	7.4	21.2	--	.1	--	--	--	--	--	--
23...	0848	81.0	411	7.4	20.9	--	.1	--	--	--	--	--	--
23...	0849	83.0	414	7.4	20.4	--	0	--	--	--	--	--	--
APR													
18...	1010	105	512	8.2	7.7	8.9	.043	.254	.005	E.004	<.007	.007	2.0
18...	1100	--	--	--	--	--	--	--	--	--	--	--	--
18...	1105	6.00	513	8.1	8.6	9.3	.040	.245	.005	<.006	<.007	.005	1.9
JUN													
15...	0805	--	--	--	--	--	--	--	--	--	--	--	--
15...	0810	.10	367	8.2	19.1	7.1	.054	.202	.006	E.005	<.007	.018	2.4
15...	0820	30.0	367	8.2	18.8	6.9	.053	.204	.006	E.005	<.007	.022	2.4
JUL													
25...	0840	--	--	--	--	--	--	--	--	--	--	--	--
25...	0845	1.00	357	8.1	23.3	6.2	.011	.124	.007	<.006	<.007	.009	2.4
25...	0900	85.0	394	7.5	18.1	.7	.016	.301	.001	.011	.007	.037	2.6
AUG													
23...	0815	--	--	--	--	--	--	--	--	--	--	--	--
23...	0820	.10	396	7.9	23.0	6.4	.012	.179	.002	E.004	<.007	.009	2.1
23...	0845	75.0	410	7.4	21.5	.7	.045	.286	.006	.010	<.007	.026	2.8
APR													
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
18...	E.8	E1.4	--	--	--	--	--	--	--	--	--	--	--
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUN													
15...	1.4	2.8	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--	--	--	--	--
JUL													
25...	1.6	3.1	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	<15	33	E1.3	<2	E.07	<.10	1.4	1.5	<10	40	<1.00
25...	--	--	<15	462	E1.3	E1	.34	<.10	E1.1	1.2	M	470	<1.00
AUG													
23...	2.1	2.8	--	--	--	--	--	--	--	--	--	--	--
23...	--	--	<15	36	<2.0	3	<.10	<.10	E1.0	<1.0	<10	20	<1.00
23...	--	--	E10	207	<2.0	E1	<.10	<.10	<1.0	E.7	<10	240	<1.00

PUEBLO RESERVOIR NEAR PUEBLO, CO--Continued

381602104435200 PUEBLO RESERVOIR SITE 7B--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	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)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)
APR					
18...	--	--	--	--	--
18...	--	--	--	--	--
18...	--	--	--	--	--
JUN					
15...	--	--	--	--	--
15...	--	--	--	--	--
15...	--	--	--	--	--
JUL					
25...	--	--	--	--	--
25...	<1	<3.0	4	<20	<31
25...	M	15.4	109	<20	<31
AUG					
23...	--	--	--	--	--
23...	<1	<3.0	7	<20	<31
23...	M	E3.2	99	<20	<31

E Estimated laboratory analysis value.  
M Presence of material verified but not quantified.

## ARKANSAS RIVER BASIN

07099400 ARKANSAS RIVER ABOVE PUEBLO, CO

LOCATION.--Lat 38°16'18", long 104°43'03", in NE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec.36, T.20 S., R.66 W., Pueblo County, Hydrologic Unit 11020002, on left bank 200 ft downstream from northeast corner of Arkansas River bridge, 0.4 mi downstream from Pueblo Dam, and 7 mi west of Pueblo.

DRAINAGE AREA.--4,670 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1965 to current year. Statistical summary computed for 1975 to current year.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 4,740 ft above sea level, from topographic map. Prior to Mar. 23, 1967, at site 730 ft upstream at datum 1.23 ft higher. May 24, 1974 to Feb. 24, 1975, at site 1,500 ft downstream, at different datum. Since Feb. 25, 1975, at or within 50 ft of present location at present datum.

REMARKS.--Records good except for estimated daily discharges, which are fair. Natural flow of stream affected by transmountain diversions, storage reservoirs, power developments, diversions upstream from station for irrigation of about 88,000 acres and return flow from irrigated areas. Flow completely regulated by Pueblo Reservoir (station 07099350) since Jan. 9, 1974.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	147	264	98	100	111	205	299	575	1860	1430	1120	266
2	136	222	98	100	111	206	299	399	1890	1330	1140	242
3	128	281	98	100	111	206	299	481	2240	1150	987	226
4	117	387	98	100	111	207	430	481	2370	1020	830	216
5	97	398	97	100	112	206	451	501	2370	939	739	216
6	112	358	97	100	112	207	417	510	2250	841	774	215
7	126	249	97	100	110	207	433	556	1750	771	1070	216
8	151	199	98	100	110	207	428	621	1410	753	1310	216
9	200	199	98	101	109	198	469	613	1410	805	1440	224
10	205	200	98	100	110	174	494	614	1510	900	1460	229
11	188	240	98	100	110	174	487	538	1640	981	1410	229
12	187	282	98	100	109	151	486	490	1700	1080	1320	211
13	143	292	98	100	109	114	405	492	1680	1270	1240	199
14	126	252	98	100	110	104	361	603	1740	1850	1030	199
15	132	143	98	106	110	104	417	1050	1730	2150	868	227
16	132	99	99	106	110	104	461	1670	1370	1430	893	252
17	133	99	99	106	110	101	489	2160	1240	1020	935	252
18	133	99	98	106	110	132	457	2510	1110	1090	884	237
19	133	99	98	106	110	165	435	2780	992	1010	830	200
20	147	100	99	106	110	175	433	2780	1060	1040	680	182
21	171	100	99	106	110	187	472	2350	1360	1010	583	182
22	180	100	98	108	110	215	589	1990	1300	987	728	183
23	168	100	99	108	110	362	668	2620	1260	941	932	186
24	172	100	99	108	110	772	706	1950	1550	790	1010	187
25	213	101	100	108	110	418	706	1950	1710	737	1010	182
26	222	101	99	108	110	222	703	2410	1800	712	952	e134
27	222	98	100	109	110	211	672	2580	1820	773	759	e98
28	223	98	100	111	163	222	648	2650	1900	887	599	e98
29	284	98	100	111	---	222	676	2730	1720	884	614	e98
30	316	98	100	110	---	222	669	2820	1490	930	613	e98
31	315	---	100	111	---	272	---	2500	---	1040	445	---
TOTAL	5359	5456	3054	3235	3138	6672	14959	46974	49232	32551	29205	5900
MEAN	173	182	98.5	104	112	215	499	1515	1641	1050	942	197
MAX	316	398	100	111	163	772	706	2820	2370	2150	1460	266
MIN	97	98	97	100	109	101	299	399	992	712	445	98
AC-FT	10630	10820	6060	6420	6220	13230	29670	93170	97650	64560	57930	11700

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 2001, BY WATER YEAR (WY)

	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
MEAN	354	258	160	175	211	323	602	1192	2380	1651	1051	458															
MAX	1103	505	553	558	837	718	1389	2564	4219	4110	2716	1040															
(WY)	1985	1985	1987	1985	1985	1985	1985	1984	1980	1995	1984	1982															
MIN	121	77.0	58.8	55.6	55.9	81.1	125	374	645	428	200	118															
(WY)	1979	1979	1980	1980	1979	1978	1978	1978	1977	1977	1977	1977															

## SUMMARY STATISTICS

	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	FOR 1975 - 2001 WATER YEARS
ANNUAL TOTAL	220248	205735	
ANNUAL MEAN	602	564	a736
HIGHEST ANNUAL MEAN			1227
LOWEST ANNUAL MEAN			265
HIGHEST DAILY MEAN	2910	2820	b5910
LOWEST DAILY MEAN	82	97	c47
ANNUAL SEVEN-DAY MINIMUM	83	98	49
MAXIMUM PEAK FLOW		2850	d10100
MAXIMUM PEAK STAGE		4.89	f9.40
ANNUAL RUNOFF (AC-FT)	436900	408100	533500
10 PERCENT EXCEEDS	1310	1530	1830
50 PERCENT EXCEEDS	379	222	396
90 PERCENT EXCEEDS	98	99	92

e Estimated.

a Average discharge for 8 years (water years 1966-73), 643 ft<sup>3</sup>/s; 465900 acre-ft/yr, prior to completion of Pueblo Dam.

b Also the maximum daily discharge for period of record.

c Minimum daily discharge for period of record, 28 ft<sup>3</sup>/s, May 11, 1967.

d Present site and datum, from rating curve extended above 1600 ft<sup>3</sup>/s, on basis of slope-area measurement of peak flow.

f From floodmarks.

07099400 ARKANSAS RIVER ABOVE PUEBLO, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1965 to September 1970, 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 with satellite telemetry.

REMARKS.--Records for daily specific conductance are good. Records for daily water temperature are good. Daily data not published are either missing or of unacceptable quality. Reported values are representative of the stream based on cross-section comparisons made during the year. Specific conductance data may not be representative of the river at the site during periods of transient hydrologic conditions caused by abrupt flow changes from Pueblo Reservoir. Instantaneous discharge and selected water-quality data collected as part of a basin-wide water-quality assessment of the lower Arkansas River basin in Colorado are published elsewhere in this report.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 814 microsiemens/cm, Nov. 14, 1990; minimum, 223 microsiemens/cm, July 13, 1986.  
 WATER TEMPERATURE: Maximum, 23.1°C, Aug. 13, 15, 17, 1994; minimum, 1.1°C, Jan. 30, 1995.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 583 microsiemens/cm, Mar. 25; minimum, 361 microsiemens/cm, June 29-30, July 2.  
 WATER TEMPERATURE: Maximum, 22.8°C, Aug. 12; minimum, 1.6°C, Jan. 26, 31.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	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 SOLVED (MG/L) AS P (00665)	PHOS-PHORUS DIS-SOLVED (MG/L) AS P (00666)	PHOS-PHORUS ORTHO, SOLVED (MG/L) AS P (00671)	CARBON, ORGANIC DIS-SOLVED (MG/L) AS C (00681)
APR 19...	1330	430	510	--	9.4	9.1	.005	.239	.037	.007	E.003	<.007	2.1
JUN 13...	1130	1570	444	8.3	15.0	9.9	.015	.289	.074	.022	.011	.007	2.7
JUL 24...	1330	773	376	8.2	20.0	8.7	.001	.311	.006	.019	.007	<.007	2.5
AUG 21...	1520	583	402	8.2	22.5	8.5	.008	.259	.042	.016	E.003	<.007	2.1

E Estimated laboratory analysis value.

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	490	481	485	491	481	487	526	517	520	529	519	523
2	494	483	489	491	486	489	529	519	523	530	520	524
3	496	482	491	490	480	485	529	520	525	526	517	522
4	534	479	494	493	483	488	529	519	524	524	516	519
5	520	488	502	499	491	494	538	519	527	523	516	519
6	507	473	484	509	493	499	528	520	524	524	517	520
7	485	472	477	511	493	501	538	522	530	525	517	520
8	480	462	471	501	495	499	537	522	529	526	518	522
9	482	472	477	502	496	499	538	524	530	526	518	522
10	488	479	483	501	496	499	535	522	529	530	522	526
11	490	483	486	501	493	498	531	520	525	527	518	523
12	488	482	486	503	494	498	535	520	527	531	519	525
13	521	483	502	504	496	499	533	523	528	531	521	526
14	510	490	497	507	496	500	532	527	530	523	516	520
15	497	486	492	548	500	522	537	526	532	529	515	521
16	497	484	489	535	515	523	533	522	527	529	516	521
17	492	480	487	524	512	519	535	524	529	529	516	522
18	491	482	488	524	515	519	535	522	528	524	516	519
19	502	487	494	529	515	521	536	524	530	523	516	520
20	501	487	494	535	520	527	533	523	528	524	518	521
21	500	485	492	531	519	524	532	522	526	523	516	519
22	494	481	487	530	522	526	532	519	525	523	518	521
23	488	480	484	531	521	526	523	516	519	523	519	521
24	488	478	483	538	521	527	524	515	520	523	519	521
25	482	476	479	539	518	528	523	514	518	524	520	522
26	481	478	480	534	523	528	524	514	518	523	516	519
27	487	479	481	534	521	527	524	514	519	527	518	522
28	494	485	488	532	518	526	523	516	519	528	523	525
29	499	479	490	532	523	526	521	515	518	529	523	526
30	504	488	498	529	520	523	523	515	519	527	522	525
31	502	482	493	---	---	---	526	516	520	525	519	522
MONTH	534	462	488	548	480	511	538	514	525	531	515	522

## ARKANSAS RIVER BASIN

07099400 ARKANSAS RIVER ABOVE PUEBLO, CO--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	526	520	522	515	510	513	539	523	528	553	527	533
2	527	520	523	518	512	515	547	526	532	545	525	535
3	530	522	526	520	513	517	541	523	532	529	525	527
4	530	523	527	521	514	517	531	509	521	533	527	530
5	531	521	525	519	514	517	531	520	525	531	527	529
6	526	520	523	524	517	520	527	522	524	532	528	530
7	529	521	525	527	519	522	524	521	523	531	525	529
8	524	520	522	530	520	525	526	521	523	532	528	530
9	524	519	522	528	520	524	525	517	522	532	529	531
10	526	520	523	529	523	525	523	519	521	532	528	530
11	530	522	525	526	522	524	522	519	521	538	530	534
12	530	524	527	551	520	533	522	520	521	536	533	535
13	543	528	534	558	535	545	538	520	526	536	532	534
14	542	530	534	550	538	543	530	520	523	537	527	532
15	541	534	537	542	537	539	525	522	524	532	526	529
16	538	534	536	543	535	540	526	518	522	530	524	527
17	542	536	539	542	533	536	524	520	522	528	523	525
18	541	537	539	538	516	524	526	520	523	528	526	527
19	548	531	539	519	515	517	526	522	524	529	527	528
20	541	530	535	518	516	517	529	524	526	532	528	529
21	542	535	538	521	515	517	528	522	525	537	531	533
22	543	536	539	530	517	523	527	519	524	536	532	534
23	543	537	540	536	507	525	525	522	524	536	532	533
24	542	529	536	512	505	507	525	523	524	547	534	536
25	535	528	531	583	512	547	528	523	525	537	534	535
26	534	529	531	563	535	548	528	524	526	536	533	534
27	535	529	532	568	534	545	544	525	529	535	532	534
28	534	509	522	553	532	539	531	525	528	535	533	534
29	---	---	---	552	521	535	530	526	527	535	533	534
30	---	---	---	550	525	532	530	525	528	535	531	533
31	---	---	---	547	514	531	---	---	---	534	530	532
MONTH	548	509	530	583	505	528	547	509	525	553	523	531
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	534	527	530	373	367	370	399	396	397	444	428	432
2	531	520	524	374	361	367	400	396	398	435	428	431
3	528	522	525	374	366	370	405	398	401	436	428	432
4	522	514	517	373	365	370	403	400	401	436	431	433
5	520	507	512	374	369	371	406	397	403	443	432	437
6	511	501	506	373	369	371	408	397	401	440	433	436
7	514	502	508	373	367	370	403	401	402	441	436	438
8	508	490	503	374	366	368	403	397	401	447	437	441
9	511	489	497	370	363	366	405	397	402	444	438	440
10	499	482	487	369	363	366	404	399	402	457	438	447
11	485	469	475	369	364	367	405	394	398	466	455	461
12	479	457	467	367	363	366	403	393	397	476	462	468
13	476	432	462	366	363	365	409	399	403	472	461	465
14	467	430	451	369	362	365	410	401	407	468	451	458
15	456	426	438	376	362	371	413	405	410	467	452	461
16	443	429	435	386	373	379	415	407	412	463	457	460
17	437	417	427	384	377	380	414	411	412	463	458	460
18	437	407	421	384	369	380	413	405	408	464	457	461
19	437	403	416	384	377	381	420	413	415	464	458	461
20	415	401	409	385	382	383	427	415	420	464	456	460
21	410	387	396	385	382	383	---	---	---	461	454	458
22	397	375	387	388	382	384	---	---	---	461	456	458
23	387	370	380	393	383	387	---	---	---	461	454	458
24	389	371	378	393	387	390	415	411	413	463	457	460
25	383	370	375	395	390	392	---	---	---	468	458	462
26	378	363	370	395	391	393	---	---	---	473	463	468
27	378	365	370	396	391	393	430	418	423	529	469	493
28	372	362	367	395	391	393	431	417	424	514	487	497
29	372	361	367	397	393	395	---	---	---	511	484	499
30	377	361	368	398	394	397	427	418	420	513	493	501
31	---	---	---	400	395	397	438	421	430	---	---	---
MONTH	534	361	442	400	361	378	---	---	---	529	428	458

ARKANSAS RIVER BASIN

07099400 ARKANSAS RIVER ABOVE PUEBLO, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	18.8	17.8	18.2	14.6	13.9	14.1	7.7	6.7	7.0	4.0	2.8	3.2
2	18.9	17.7	18.2	14.2	13.7	13.9	7.5	6.5	6.8	3.8	2.7	3.2
3	19.0	17.7	18.2	14.1	13.6	13.8	7.6	6.3	6.7	3.8	2.7	3.1
4	19.0	17.8	18.2	13.9	13.2	13.5	7.3	6.3	6.6	3.8	2.6	3.1
5	18.1	17.4	17.8	13.5	12.8	13.1	7.4	6.1	6.5	3.8	2.7	3.1
6	17.6	17.3	17.4	13.2	12.5	12.8	7.1	6.1	6.4	3.8	2.6	3.1
7	17.9	17.1	17.3	13.0	12.3	12.6	7.1	6.2	6.5	3.8	2.8	3.2
8	17.4	16.9	17.1	12.8	11.9	12.3	7.0	6.0	6.4	3.7	2.5	3.0
9	17.3	16.3	16.8	12.5	11.4	11.9	7.1	5.9	6.4	3.4	2.4	2.8
10	16.9	16.0	16.3	11.8	11.4	11.5	6.1	5.7	5.9	3.9	2.6	3.1
11	16.7	15.8	16.1	11.5	11.0	11.3	6.2	5.3	5.6	3.6	2.5	2.9
12	16.6	15.6	16.0	11.4	10.9	11.1	6.1	5.2	5.5	3.7	2.5	2.9
13	16.5	15.4	15.9	11.2	10.5	10.8	5.7	4.9	5.3	3.4	2.5	3.1
14	16.4	15.3	15.7	11.0	10.1	10.4	6.0	5.0	5.3	3.4	2.4	2.7
15	16.5	15.3	15.8	10.6	9.5	10.0	5.8	4.9	5.3	3.3	2.3	2.7
16	16.6	15.4	15.8	10.4	9.3	9.7	5.6	4.6	5.0	3.0	2.4	2.6
17	16.5	15.4	15.8	10.2	9.0	9.4	5.8	4.4	4.9	3.5	2.2	2.7
18	16.5	15.4	15.8	9.9	8.8	9.1	5.1	4.2	4.5	3.2	2.0	2.5
19	16.3	15.2	15.6	9.6	8.4	8.9	5.2	4.1	4.5	3.4	2.2	2.6
20	16.2	15.3	15.6	9.1	8.2	8.4	4.8	4.0	4.4	3.2	1.7	2.7
21	16.0	15.1	15.5	9.2	7.9	8.3	4.7	3.9	4.1	3.4	1.7	2.5
22	15.6	15.1	15.3	8.6	7.6	8.0	4.9	3.7	4.1	3.5	2.2	2.8
23	15.6	15.1	15.2	8.3	7.4	7.7	4.8	3.8	4.1	3.6	2.6	2.9
24	15.8	15.0	15.3	8.3	7.0	7.5	4.3	3.6	3.9	3.5	2.4	2.8
25	15.6	14.9	15.1	8.4	6.9	7.4	3.9	3.7	3.8	3.3	1.9	2.7
26	15.5	14.7	15.0	8.0	7.0	7.3	4.1	3.3	3.6	2.8	1.6	2.0
27	15.3	14.6	14.9	8.1	7.1	7.4	4.3	3.2	3.7	2.2	2.0	2.1
28	15.0	14.6	14.8	8.0	7.0	7.3	4.3	3.6	3.8	3.1	2.1	2.4
29	15.1	14.5	14.7	7.8	6.8	7.1	4.3	3.3	3.7	3.2	1.9	2.4
30	15.0	14.3	14.6	8.0	6.8	7.2	4.1	3.0	3.4	3.2	1.8	2.2
31	14.9	14.2	14.4	---	---	---	3.9	2.9	3.3	2.8	1.6	2.1
MONTH	19.0	14.2	16.1	14.6	6.8	10.1	7.7	2.9	5.1	4.0	1.6	2.7
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	3.0	1.7	2.2	3.8	2.8	3.2	6.0	5.0	5.4	9.4	8.6	8.9
2	3.3	1.9	2.4	3.9	2.8	3.2	6.1	5.1	5.5	8.7	8.5	8.6
3	3.2	2.0	2.4	3.8	2.8	3.3	6.1	5.1	5.5	8.8	8.5	8.6
4	3.2	2.0	2.4	4.1	3.1	3.5	5.7	5.1	5.3	8.9	8.6	8.7
5	3.5	2.1	2.5	4.0	3.0	3.4	6.1	5.2	5.5	8.8	8.6	8.7
6	2.6	2.0	2.4	4.0	3.3	3.6	7.7	5.3	6.5	9.7	8.6	9.0
7	3.6	2.3	2.7	3.9	3.4	3.6	7.9	6.8	7.4	9.7	8.7	9.1
8	2.5	2.0	2.3	4.5	3.5	3.9	7.6	6.5	7.1	9.8	8.8	9.2
9	2.9	1.9	2.2	4.6	3.5	3.9	7.7	6.8	7.2	9.6	8.8	9.1
10	3.1	1.9	2.4	4.1	3.8	3.9	7.7	6.6	6.9	9.7	8.8	9.1
11	3.4	2.0	2.5	4.1	3.8	3.9	7.4	6.6	7.0	9.7	8.8	9.1
12	3.3	2.0	2.5	4.9	3.5	4.0	7.7	7.1	7.3	10.1	9.0	9.4
13	3.5	2.2	2.6	5.5	3.7	4.3	8.2	7.0	7.5	10.0	8.9	9.3
14	2.6	2.3	2.4	5.6	3.8	4.4	8.2	7.3	7.7	10.0	8.9	9.2
15	3.5	2.2	2.6	5.3	3.7	4.3	8.4	7.5	7.9	9.6	9.0	9.2
16	2.7	2.2	2.4	5.0	3.9	4.3	8.0	7.4	7.6	9.7	9.0	9.3
17	3.5	2.4	2.7	4.4	4.0	4.1	8.0	7.4	7.6	9.5	9.1	9.3
18	3.5	2.3	2.7	5.1	4.0	4.3	8.4	7.5	7.8	9.6	9.1	9.3
19	3.9	2.5	2.9	5.2	4.0	4.4	9.4	7.6	8.3	9.4	9.2	9.3
20	3.8	2.3	2.9	5.3	4.0	4.5	9.8	8.4	9.0	9.8	8.9	9.4
21	3.4	2.5	2.7	5.4	4.3	4.6	9.2	8.6	8.8	11.5	9.8	10.5
22	4.0	2.6	3.0	5.0	4.2	4.6	8.9	8.4	8.6	11.1	10.3	10.8
23	3.9	2.7	3.1	5.5	4.3	4.7	9.1	8.5	8.7	11.1	10.4	10.8
24	4.1	2.7	3.1	4.6	4.3	4.4	9.1	8.5	8.7	11.4	10.6	10.9
25	4.0	2.6	3.1	4.7	4.4	4.5	9.1	8.5	8.8	11.3	10.6	11.0
26	3.9	2.8	3.2	4.8	4.5	4.6	9.2	8.6	8.8	11.3	10.6	11.1
27	3.1	2.7	2.9	5.4	4.5	4.7	9.7	8.6	8.9	11.8	10.8	11.5
28	3.3	2.7	2.9	5.4	4.5	4.7	9.4	8.6	8.9	12.1	11.1	11.8
29	---	---	---	5.4	4.5	4.8	9.4	8.6	8.9	12.8	11.0	11.9
30	---	---	---	5.8	4.6	5.1	9.3	8.6	8.9	12.9	11.6	12.3
31	---	---	---	6.1	5.0	5.4	---	---	---	12.8	12.0	12.4
MONTH	4.1	1.7	2.6	6.1	2.8	4.2	9.8	5.0	7.6	12.9	8.5	9.9

## ARKANSAS RIVER BASIN

07099400 ARKANSAS RIVER ABOVE PUEBLO, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN									
1	13.0	12.2	12.5	17.3	16.8	17.0	21.2	20.4	20.8	22.5	21.4	21.8
2	13.0	12.2	12.7	17.6	16.7	17.2	21.2	20.7	20.9	22.5	21.4	21.8
3	13.1	12.5	12.7	18.1	16.8	17.4	21.2	20.6	20.9	22.5	21.4	21.7
4	13.4	12.6	13.1	17.9	17.2	17.5	21.4	20.8	21.0	22.3	21.3	21.7
5	13.5	12.5	13.2	18.1	17.3	17.5	21.5	20.8	21.1	22.2	21.2	21.6
6	13.6	13.1	13.4	18.0	17.4	17.6	21.6	20.8	21.2	22.3	21.1	21.5
7	13.7	12.8	13.4	18.5	17.4	17.8	21.8	21.3	21.5	21.9	21.1	21.4
8	14.0	13.2	13.5	18.8	17.3	18.0	22.2	21.5	21.9	21.3	20.7	20.9
9	14.0	12.9	13.5	18.3	17.7	18.0	22.1	21.6	21.9	21.4	20.3	20.7
10	14.1	13.3	13.8	18.4	17.6	18.1	22.4	22.1	22.2	21.0	19.9	20.4
11	14.4	13.7	14.1	18.6	17.6	18.2	22.5	22.0	22.3	20.7	19.6	20.0
12	14.5	13.6	14.1	18.5	18.0	18.3	22.8	22.0	22.4	20.5	19.5	19.8
13	15.4	13.7	14.3	18.6	18.0	18.3	22.6	22.0	22.3	20.5	19.5	19.9
14	15.2	14.0	14.7	19.3	17.9	18.5	22.6	21.9	22.3	20.6	19.6	20.0
15	15.3	14.4	14.9	19.2	18.7	19.0	22.7	21.9	22.2	20.5	19.6	20.0
16	15.3	14.7	15.0	19.4	18.7	19.0	22.6	21.9	22.2	20.5	19.7	20.0
17	15.4	14.7	15.1	19.2	18.5	18.9	22.6	22.0	22.2	20.5	19.7	19.9
18	15.7	14.4	15.0	19.5	18.7	19.0	22.6	22.0	22.2	20.5	19.6	19.9
19	16.0	14.4	15.2	19.4	18.9	19.1	22.6	21.8	22.1	20.5	19.5	19.9
20	15.6	15.0	15.3	19.5	19.0	19.2	22.6	21.7	22.1	20.6	19.4	19.8
21	15.8	15.0	15.5	19.8	19.1	19.3	---	---	---	20.5	19.5	19.8
22	16.1	15.3	15.7	19.9	19.0	19.5	---	---	---	20.5	19.5	19.8
23	16.2	15.6	15.9	20.0	19.1	19.6	---	---	---	20.4	19.4	19.8
24	16.6	15.8	16.2	20.0	19.1	19.6	22.7	22.0	22.3	20.3	19.3	19.6
25	16.7	15.9	16.2	20.1	19.3	19.8	---	---	---	20.2	19.2	19.5
26	17.0	16.1	16.5	20.2	19.5	19.9	---	---	---	20.3	19.1	19.5
27	17.2	16.2	16.6	20.4	19.4	20.0	22.4	21.7	22.0	20.8	19.0	19.5
28	17.2	16.5	16.9	20.5	19.8	20.2	22.4	21.8	22.0	20.7	18.7	19.4
29	17.3	16.8	17.0	20.7	20.0	20.3	22.4	21.8	22.0	20.4	18.9	19.3
30	17.3	16.7	17.0	20.8	20.0	20.4	22.3	21.7	22.1	20.6	18.6	19.3
31	---	---	---	21.0	20.1	20.6	22.4	21.6	21.9	---	---	---
MONTH	17.3	12.2	14.8	21.0	16.7	18.8	---	---	---	22.5	18.6	20.3

382624104472400 POND 46.212 NEAR TELLER RESERVOIR AT FORT CARSON, CO

LOCATION.--Lat 38°26'24", long 104°47'24", in NE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec.33, T.18 S., R.66 W., Pueblo County, Hydrologic Unit 11020002, on Fort Carson Military Reservation, 2.2 mi east of Teller Reservoir dam, and 3.2 mi southeast of Stone City.

DRAINAGE AREA.--0.35 mi<sup>2</sup> (from Agricultural Research Service).

RESERVOIR ELEVATIONS AND CONTENTS RECORDS

PERIOD OF RECORD.--April 1999 to current year.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 5,580 ft above sea level, from topographic map.

REMARKS.--Records for 1999 water year are good. Records for 2000 water year are fair except for estimated midnight contents, which are poor. Records for 2001 water year are good. Reservoir is formed by an earthfill dam. Reservoir area-capacity table from 1997 survey by the Agricultural Research Service. Total capacity, 7.26 acre-ft at elevation 15.28 ft. Elevation of high crest of spillway, about 15.28 ft.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 0.29 acre-ft, Aug. 28, 2000, elevation, 4.80 ft; no contents most of the time.

EXTREMES FOR 1999 WATER YEAR.--No contents during period April to September.

EXTREMES FOR 2000 WATER YEAR.--Maximum contents, 0.29 acre-ft, Aug. 28, elevation, 4.80 ft; no contents most of the time.

EXTREMES FOR CURRENT WATER YEAR.--No contents during the year.

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999  
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	.00	.00	.00	.00	.00
2	---	---	---	---	---	---	---	.00	.00	.00	.00	.00
3	---	---	---	---	---	---	---	.00	.00	.00	.00	.00
4	---	---	---	---	---	---	---	.00	.00	.00	.00	.00
5	---	---	---	---	---	---	---	.00	.00	.00	.00	.00
6	---	---	---	---	---	---	---	.00	.00	.00	.00	.00
7	---	---	---	---	---	---	---	.00	.00	.00	.00	.00
8	---	---	---	---	---	---	---	.00	.00	.00	.00	.00
9	---	---	---	---	---	---	---	.00	.00	.00	.00	.00
10	---	---	---	---	---	---	---	.00	.00	.00	.00	.00
11	---	---	---	---	---	---	---	.00	.00	.00	.00	.00
12	---	---	---	---	---	---	---	.00	.00	.00	.00	.00
13	---	---	---	---	---	---	---	.00	.00	.00	.00	.00
14	---	---	---	---	---	---	---	.00	.00	.00	.00	.00
15	---	---	---	---	---	---	---	.00	.00	.00	.00	.00
16	---	---	---	---	---	---	---	.00	.00	.00	.00	.00
17	---	---	---	---	---	---	---	.00	.00	.00	.00	.00
18	---	---	---	---	---	---	---	.00	.00	.00	.00	.00
19	---	---	---	---	---	---	---	.00	.00	.00	.00	.00
20	---	---	---	---	---	---	---	.00	.00	.00	.00	.00
21	---	---	---	---	---	---	---	.00	.00	.00	.00	.00
22	---	---	---	---	---	---	---	.00	.00	.00	.00	.00
23	---	---	---	---	---	---	---	.00	.00	.00	.00	.00
24	---	---	---	---	---	---	---	.00	.00	.00	.00	.00
25	---	---	---	---	---	---	---	.00	.00	.00	.00	.00
26	---	---	---	---	---	---	---	.00	.00	.00	.00	.00
27	---	---	---	---	---	---	---	.00	.00	.00	.00	.00
28	---	---	---	---	---	---	---	e.00	.00	.00	.00	.00
29	---	---	---	---	---	---	---	.00	.00	.00	.00	.00
30	---	---	---	---	---	---	---	.00	.00	.00	.00	.00
31	---	---	---	---	---	---	---	.00	---	.00	.00	---
MAX	---	---	---	---	---	---	---	.00	.00	.00	.00	.00
MIN	---	---	---	---	---	---	---	.00	.00	.00	.00	.00

e Estimated.



382624104472400 POND 46.212 NEAR TELLER RESERVOIR AT FORT CARSON, CO--Continued

PRECIPITATION RECORDS

PERIOD OF RECORD.--April 1999 to current year.

GAGE.--Tipping-bucket rain gage with satellite telemetry.

REMARKS.--Records for 1999 to 2001 water years are fair. Daily data that are not published are either missing or of unacceptable quality.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily precipitation, 1.94 inches, Apr. 30, 1999.

EXTREMES FOR 1999 WATER YEAR.--Maximum daily precipitation during period April to September, 1.94 inches, Apr. 30.

EXTREMES FOR 2000 WATER YEAR.--Maximum daily precipitation, 1.63 inches, July 17.

EXTREMES FOR CURRENT YEAR.--Maximum daily precipitaion, 0.89 inch, May 5.

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	---	---	---	---	---	---	---	1.05	.00	.00	.65	.00
2	---	---	---	---	---	---	---	.00	.00	.00	.14	.00
3	---	---	---	---	---	---	---	.00	.00	.00	.00	.00
4	---	---	---	---	---	---	---	.00	.00	.00	.22	.00
5	---	---	---	---	---	---	---	.00	.00	.00	.01	.00
6	---	---	---	---	---	---	---	.00	.00	.36	.00	.00
7	---	---	---	---	---	---	---	.00	.00	.00	.00	.00
8	---	---	---	---	---	---	---	.00	.00	.02	.00	.00
9	---	---	---	---	---	---	---	.00	.05	.00	.03	.01
10	---	---	---	---	---	---	---	.00	.00	.00	.03	.00
11	---	---	---	---	---	---	---	.00	.02	.09	.00	.06
12	---	---	---	---	---	---	---	.00	.24	.00	.00	.00
13	---	---	---	---	---	---	---	.00	.00	.00	.00	.00
14	---	---	---	---	---	---	---	.00	.04	.00	.00	.00
15	---	---	---	---	---	---	---	.00	.06	.01	.00	.12
16	---	---	---	---	---	---	---	.00	.11	.29	.00	.01
17	---	---	---	---	---	---	---	.00	.04	.18	.23	.01
18	---	---	---	---	---	---	---	.00	.00	.00	.00	.00
19	---	---	---	---	---	---	---	.00	.00	.06	.02	.00
20	---	---	---	---	---	---	---	.00	.00	.00	.02	.00
21	---	---	---	---	---	---	---	.00	.01	.00	.00	.00
22	---	---	---	---	---	---	---	.08	.00	.00	.00	.00
23	---	---	---	---	---	---	---	.00	.01	.00	.00	.00
24	---	---	---	---	---	---	---	.00	.21	.00	.00	.00
25	---	---	---	---	---	---	---	.52	.01	.03	.00	.00
26	---	---	---	---	---	---	---	.00	.00	.17	.00	.00
27	---	---	---	---	---	---	---	.50	.00	.00	.00	.00
28	---	---	---	---	---	---	e.10	.01	.00	.00	.07	.02
29	---	---	---	---	---	---	1.65	.03	.00	.00	.01	.00
30	---	---	---	---	---	---	1.94	.00	.00	.01	.00	.00
31	---	---	---	---	---	---	---	.00	---	.00	.00	---
TOTAL	---	---	---	---	---	---	---	2.19	0.80	1.22	1.43	0.23
MAX	---	---	---	---	---	---	---	1.05	.24	.36	.65	.12

e Estimated.

## ARKANSAS RIVER BASIN

382624104472400 POND 46.212 NEAR TELLER RESERVOIR AT FORT CARSON, CO--Continued

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
2	.00	---	---	---	---	---	---	.00	.00	.04	.00	.00
3	.00	---	---	---	---	---	---	.00	.01	.01	.00	.00
4	.00	---	---	---	---	---	---	.00	.00	.00	.00	.13
5	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
6	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
7	.11	---	---	---	---	---	---	.00	.00	.00	.00	.00
8	.01	---	---	---	---	---	---	.35	.00	.00	.00	.04
9	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
10	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
11	.00	---	---	---	---	---	---	.00	.03	.00	.19	.00
12	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
13	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
14	.00	---	---	---	---	---	e.00	.00	.00	.00	.00	.00
15	.00	---	---	---	---	---	.00	.00	.00	.00	.08	.00
16	.02	---	---	---	---	---	.03	.00	.00	.33	.00	.00
17	.17	---	---	---	---	---	.00	.00	.01	1.63	.17	.00
18	.23	---	---	---	---	---	.00	.01	.00	.00	.04	.00
19	.02	---	---	---	---	---	.00	.00	.06	.00	.00	.00
20	.00	---	---	---	---	---	.00	.01	.13	.00	.29	.00
21	.00	---	---	---	---	---	.00	.00	.00	.00	.04	.05
22	.00	---	---	---	---	---	.01	.00	.00	.03	.01	.01
23	.00	---	---	---	---	---	.04	.00	.00	.00	.00	.37
24	.00	---	---	---	---	---	.00	.04	.00	.00	.00	.25
25	.00	---	---	---	---	---	.00	.04	.21	.00	.01	.00
26	.00	---	---	---	---	---	.00	.00	.40	.00	.20	.00
27	.00	---	---	---	---	---	.00	.00	.01	.00	.00	.00
28	e.00	---	---	---	---	---	.02	.00	.00	.00	1.59	.00
29	---	---	---	---	---	---	.00	.00	.00	.00	.01	.00
30	---	---	---	---	---	---	.20	.00	.00	.00	.00	.00
31	---	---	---	---	---	---	---	.00	---	.00	.01	---
TOTAL	---	---	---	---	---	---	---	0.45	0.86	2.04	2.64	0.85
MAX	---	---	---	---	---	---	---	.35	.40	1.63	1.59	.37

e Estimated.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	.00	.01	.00	.00	.00	.00	.00	.09	.00	.00	.01	.00
3	.00	.01	.00	.00	.00	.00	.00	.22	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.00	.00	.40	.30	.00	.01	.00
5	.07	.00	.00	.00	.00	.00	.00	.89	.00	.00	.34	.06
6	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00	.04	.00
7	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.11
8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.10
9	.00	.00	.00	.00	.03	.00	.00	.00	.00	.10	.03	.00
10	.00	.00	.00	.00	.01	.05	.16	.00	.00	.11	.02	.00
11	.00	.00	.00	.00	.01	.14	.05	.00	.00	.42	.02	.00
12	.00	.01	.00	.00	.00	.00	.00	.00	.00	.05	.00	.00
13	.00	.00	.06	.01	.00	.00	.00	.00	.07	.24	.05	.27
14	.00	.00	.07	.00	.00	.00	.00	.00	.00	.20	.05	.36
15	.00	.00	.00	.00	.03	.00	.00	.00	.00	.00	.02	.08
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.13	.26
17	.00	.00	.00	.02	.00	.00	.00	.52	.00	.00	.01	.01
18	.00	.00	.00	.01	.00	.09	.00	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.00	.00	.03	.00	.00	.00	.00
20	.00	.00	.00	.00	.00	.00	.00	.07	.74	.00	.00	.00
21	.00	.00	.00	.00	.01	.00	.00	.10	.04	.00	.02	.00
22	.05	.00	.00	.00	.01	.00	.04	.00	.10	.07	.12	.00
23	.06	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
24	.15	.00	.00	.00	.00	.02	.00	.00	.00	.04	.00	.00
25	.00	.00	.00	.00	.00	.02	.00	.00	.00	.00	.00	.00
26	.00	.00	.10	.00	.00	.02	.00	.01	.00	.05	.00	.00
27	.00	.00	.00	.00	.00	.05	.00	.00	.00	.00	.00	.00
28	.24	.00	.00	.03	.06	.02	.00	.00	.00	.00	.00	.00
29	.06	.00	.00	.01	---	.26	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	---	.17	.00	.17	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.01	.14	---
TOTAL	0.69	0.03	0.23	0.08	0.16	0.84	0.25	2.50	1.25	1.29	1.01	1.25
MAX	.24	.01	.10	.03	.06	.26	.16	.89	.74	.42	.34	.36

WTR YR 2001 TOTAL 9.58 MAX .89

07099969 ARKANSAS RIVER AT ST. CHARLES MESA DIVERSION AT PUEBLO, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 38°15'13", long 104°36'20", in SW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec.6, T.21 S., R.64 W., Pueblo County, Hydrologic Unit 11020002, on right bank 10 ft upstream from intake of Saint Charles Mesa Water Association, 150 ft downstream from Santa Fe Avenue bridge, and 1.1 mi upstream from Fountain Creek.

DRAINAGE AREA.--4,778 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1988 to current year. Prior to October 1989, published as Arkansas River at Moffat Street at Pueblo (07099970).

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1988 to current year.

INSTRUMENTATION.--Water-quality monitor with satellite telemetry.

REMARKS.--Records fair except for Jan. 29-31, which are poor. Daily data that are not published are either missing or of unacceptable quality. Specific conductance data is not representative of the stream cross section at the site but is more representative of flow entering the diversion. Specific conductance data representative of the cross section at the site have been published as Arkansas River at Moffat Street at Pueblo (07099970) since the 1991 water year.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 1,980 microsiemens/cm, Nov. 24, 1988; minimum, 225 microsiemens/cm, Aug. 25, 1995.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 881 microsiemens/cm, Sept. 29; minimum, 326 microsiemens/cm, July 14.

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	733	688	712	604	586	596	719	713	717	710	681	694
2	747	706	726	624	595	617	724	715	719	713	682	699
3	782	705	750	628	596	616	728	719	723	704	684	695
4	750	711	736	598	579	592	736	726	731	692	683	687
5	815	724	791	600	581	593	739	730	733	699	685	692
6	797	732	779	611	590	601	740	730	735	691	675	685
7	732	671	698	623	600	613	744	737	740	697	670	684
8	705	658	690	636	602	615	765	739	757	701	669	685
9	688	659	670	626	602	616	745	727	737	696	685	690
10	676	647	663	616	608	614	748	723	737	695	678	687
11	687	662	677	625	609	619	744	715	729	691	677	683
12	687	648	672	622	612	618	729	715	723	687	674	681
13	709	641	663	624	608	616	736	724	728	721	684	703
14	734	674	707	623	608	614	745	727	736	713	689	699
15	700	650	676	631	623	626	754	711	736	700	646	672
16	692	648	669	653	628	642	757	727	746	657	630	649
17	674	638	659	668	653	661	740	727	733	659	651	656
18	682	634	658	681	667	674	735	703	725	680	644	656
19	689	649	668	690	678	684	714	697	706	694	650	668
20	681	641	662	700	687	693	731	700	719	694	665	675
21	641	618	634	712	697	703	700	691	696	693	670	680
22	630	601	613	722	711	716	709	689	698	706	668	681
23	628	592	609	730	719	724	712	685	705	706	670	684
24	631	561	599	735	727	730	700	684	692	696	665	684
25	629	602	618	738	729	734	702	678	693	700	670	689
26	610	597	603	740	734	737	704	677	694	706	684	696
27	610	601	605	747	736	741	729	700	713	695	660	682
28	626	466	578	746	739	743	728	683	714	688	661	679
29	624	441	551	743	735	739	702	676	690	714	668	681
30	611	602	605	745	719	739	703	676	691	694	645	680
31	613	596	607	---	---	---	703	679	691	720	647	685
MONTH	815	441	663	747	579	661	765	676	719	721	630	683

## ARKANSAS RIVER BASIN

07099969 ARKANSAS RIVER AT ST. CHARLES MESA DIVERSION AT PUEBLO, CO--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	690	673	681	619	592	603	652	639	644	619	591	601
2	703	682	692	607	597	602	652	639	644	650	619	644
3	717	699	707	604	592	599	651	637	643	649	586	620
4	710	694	703	607	592	601	644	619	635	610	586	598
5	727	702	713	606	593	601	619	611	615	614	437	528
6	719	711	716	607	592	602	622	610	614	648	606	640
7	744	719	727	607	602	604	621	605	611	653	629	643
8	726	696	714	644	606	621	616	605	613	629	619	624
9	708	691	699	645	627	636	625	606	614	645	619	628
10	717	704	711	639	634	636	616	525	601	655	619	636
11	729	709	717	643	633	638	605	475	571	649	637	641
12	721	703	710	654	635	644	612	600	606	663	646	654
13	712	698	704	670	646	657	634	602	611	665	644	657
14	714	706	711	686	668	676	641	624	634	662	631	653
15	713	693	705	689	668	679	631	608	616	631	585	613
16	710	693	700	695	680	687	616	604	611	585	504	564
17	704	680	694	690	686	688	616	601	608	552	522	542
18	708	685	698	702	668	689	614	606	611	551	522	544
19	714	686	701	677	661	667	627	614	620	547	546	546
20	718	687	704	666	651	657	626	602	616	549	544	547
21	709	681	698	661	645	651	626	608	616	563	544	553
22	711	688	703	646	625	635	615	562	590	579	562	568
23	711	679	695	631	617	624	599	578	591	578	550	556
24	700	680	692	618	562	580	592	580	586	580	557	565
25	704	672	686	572	561	565	594	583	589	578	571	576
26	707	659	683	598	572	586	595	585	591	571	555	562
27	684	663	676	615	598	607	599	584	592	557	553	555
28	676	619	659	625	613	619	610	591	602	556	552	554
29	---	---	---	632	497	609	606	586	596	554	549	552
30	---	---	---	596	496	539	601	587	595	552	536	546
31	---	---	---	647	596	633	---	---	---	558	543	550
MONTH	744	619	700	702	496	627	652	475	610	665	437	589
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	566	556	561	444	432	438	482	466	476	656	595	626
2	565	549	559	457	439	447	474	466	471	685	622	661
3	553	548	551	471	444	456	496	470	478	682	638	662
4	552	519	545	469	456	463	502	490	496	704	637	672
5	536	512	528	474	459	466	---	---	---	702	644	674
6	533	525	529	481	469	474	495	486	489	690	643	666
7	560	530	540	486	472	478	490	463	478	686	576	646
8	561	555	558	486	473	477	471	450	461	682	614	660
9	557	547	552	536	417	479	455	446	451	680	639	666
10	552	530	542	475	413	459	455	448	452	695	642	674
11	533	511	522	472	438	463	455	441	449	698	662	681
12	516	501	509	465	446	459	459	444	452	704	676	689
13	514	497	506	453	361	425	494	450	463	722	677	699
14	504	478	486	442	326	415	491	441	469	711	500	676
15	494	474	485	410	403	406	502	474	488	717	607	686
16	513	471	488	488	406	434	492	465	482	680	639	664
17	514	486	498	492	470	485	483	471	478	676	610	653
18	513	497	505	482	469	473	484	464	475	667	633	652
19	515	496	506	485	471	478	495	477	484	702	663	684
20	522	494	511	484	476	480	528	487	501	710	674	691
21	512	348	468	493	473	480	536	495	520	705	685	693
22	471	390	453	492	476	482	574	487	521	700	668	685
23	466	454	460	492	478	484	496	469	483	710	676	693
24	456	420	438	602	487	507	480	463	473	696	674	686
25	427	413	419	591	507	529	479	471	476	699	673	683
26	424	409	415	519	389	496	490	475	480	748	674	718
27	419	402	410	556	500	513	530	480	497	795	661	741
28	417	401	409	548	494	507	558	523	534	870	686	775
29	433	402	413	503	489	498	530	509	520	881	790	836
30	449	425	434	503	488	495	527	504	516	867	727	810
31	---	---	---	494	475	487	595	465	529	---	---	---
MONTH	566	348	493	602	326	472	---	---	---	881	500	690

07099970 ARKANSAS RIVER AT MOFFAT STREET AT PUEBLO, CO

LOCATION.--Lat 38°15'13", long 104°36'20", in SW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec.6, T.21 S., R.64 W., Pueblo County, Hydrologic Unit 11020002, on right bank 10 ft upstream from intake of Saint Charles Mesa Water District (revised), 150 ft downstream from Santa Fe Avenue bridge, and 1.1 mi upstream from Fountain Creek.

DRAINAGE AREA.--4,778 mi<sup>2</sup>.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1988 to current year.

REVISED RECORDS: WDR CO-90-1: 1989(M).

GAGE.--Water-stage recorder with satellite telemetry and concrete control. Elevation of gage is 4,653 ft above sea level, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are fair. Records do not include diversion for municipal supply of Saint Charles Mesa Water District. Natural flow of stream affected by storage reservoirs, power developments, transbasin and transmountain diversions, and diversions for irrigation and municipal use. Flow almost completely regulated by Pueblo Reservoir (station 07099350) since Jan. 9, 1974.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	94	299	84	76	76	215	319	580	1750	1230	974	239
2	73	230	76	75	73	216	312	414	1780	1150	1010	183
3	67	270	77	79	77	222	324	533	2140	996	894	163
4	72	424	74	78	78	226	413	532	2350	880	758	144
5	47	442	74	76	75	229	481	618	2400	825	e705	153
6	71	405	69	80	74	231	442	549	2290	746	713	160
7	106	280	64	79	78	240	467	560	1790	695	941	192
8	108	189	63	77	e76	230	457	619	1400	666	1140	203
9	155	192	69	78	e72	225	473	597	1390	709	1270	200
10	209	185	69	82	e80	192	510	600	1500	813	1290	180
11	170	227	67	78	86	198	512	556	1640	856	1270	175
12	157	283	70	72	83	163	511	500	1720	915	1180	160
13	122	287	79	56	82	108	450	496	1710	1130	1110	145
14	79	252	74	59	86	87	381	553	1770	1670	955	156
15	92	140	68	103	88	79	449	898	1750	1880	813	191
16	96	71	65	147	85	83	477	1520	1340	1320	822	229
17	100	71	68	e80	91	87	513	2000	1170	865	840	224
18	103	75	71	e64	87	112	476	2320	995	926	810	223
19	99	76	74	e75	85	149	431	2670	881	875	762	155
20	115	72	74	e86	85	155	444	2660	909	885	640	125
21	148	72	78	e98	90	170	480	2260	1250	878	541	129
22	171	76	75	e90	87	218	585	1790	1180	854	653	145
23	161	74	76	76	96	307	638	2480	1140	829	819	137
24	163	76	77	71	97	776	679	1830	1340	727	891	146
25	189	75	77	71	94	491	653	1760	1490	690	908	143
26	199	74	77	69	98	223	656	2210	1570	691	864	80
27	223	72	79	78	98	212	636	2420	1590	714	710	51
28	249	73	77	77	144	224	620	2480	1630	814	563	22
29	321	69	78	71	---	259	636	2570	1520	801	580	33
30	348	83	78	69	---	239	628	2700	1290	816	579	34
31	340	---	78	75	---	279	---	2430	---	892	467	---
TOTAL	4647	5214	2279	2445	2421	6845	15053	44705	46675	28738	26472	4520
MEAN	150	174	73.5	78.9	86.5	221	502	1442	1556	927	854	151
MAX	348	442	84	147	144	776	679	2700	2400	1880	1290	239
MIN	47	69	63	56	72	79	312	414	881	666	467	22
AC-FT	9220	10340	4520	4850	4800	13580	29860	88670	92580	57000	52510	8970

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 2001, BY WATER YEAR (WY)

MEAN	251	220	115	107	142	323	590	1157	2229	1529	961	361
MAX	431	491	330	355	312	623	1031	1716	4111	4290	1616	699
(WY)	1996	1998	1998	2000	1996	1997	1998	1996	1997	1995	1995	1995
MIN	125	87.9	16.1	16.7	64.2	159	217	491	970	927	545	113
(WY)	1990	1989	1990	1989	1995	1990	1991	1989	1989	2001	1990	1996

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1989 - 2001

ANNUAL TOTAL	208075	190014	
ANNUAL MEAN	569	521	667
HIGHEST ANNUAL MEAN			1107
LOWEST ANNUAL MEAN			444
HIGHEST DAILY MEAN	2870	2700	6030
LOWEST DAILY MEAN	29	22	3.6
ANNUAL SEVEN-DAY MINIMUM	33	67	8.2
MAXIMUM PEAK FLOW		3100	a10400
MAXIMUM PEAK STAGE		11.30	14.18
ANNUAL RUNOFF (AC-FT)	412700	376900	483400
10 PERCENT EXCEEDS	1200	1440	1680
50 PERCENT EXCEEDS	382	224	354
90 PERCENT EXCEEDS	72	73	60

e Estimated.

a From rating curve extended above 5190 ft<sup>3</sup>/s on basis of slope-conveyance and area-velocity studies.

07099970 ARKANSAS RIVER AT MOFFAT STREET AT PUEBLO, CO--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1988 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1988 to current year.

WATER TEMPERATURE: October 1988 to current year.

INSTRUMENTATION.--Water-quality monitor with satellite telemetry.

REMARKS.--Records for daily specific conductance are fair except for Jan. 29-31 and Aug. 4, 6, which are poor. Records for daily water temperature are good. Daily data not published are either during periods of estimated daily discharge, or are missing for the day. Specific conductance data computed by using discharge-related coefficients, the discharge record at the site, and the daily mean specific conductance from Arkansas River at St. Charles Mesa Diversion at Pueblo (07099969). Prior to October 1989, published specific conductance data was not representative of the cross section at the site. Reported values for water temperature are representative of the stream based on cross-section comparison made during the year. Instantaneous discharge and selected water-quality data collected as part of a basin wide water-quality assessment of the lower Arkansas River basin in Colorado are published elsewhere in this report.

EXTREMES FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily mean, 1,490 microsiemens/cm, Oct. 17, 1996; minimum daily mean, 252 microsiemens/cm, June 29, 1993.

WATER TEMPERATURE: Maximum, 26.3°C, Aug. 31, 1990; minimum, 0.0°C, many days.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum daily mean, 825 microsiemens/cm, Sept. 29; minimum daily mean, 376 microsiemens/cm, June 28.

WATER TEMPERATURE: Maximum, 25.7°C, Aug. 19; minimum, 0.0°C, many days.

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	653	520	662	645	688	533	588	532	518	394	421	582
2	677	544	668	649	700	532	589	580	517	399	417	624
3	702	540	671	643	713	528	586	551	516	403	420	630
4	687	508	679	636	708	530	573	532	515	406	433	643
5	760	507	682	642	721	530	550	466	499	407	---	643
6	728	516	686	634	723	530	552	568	497	414	429	634
7	635	536	694	634	733	531	547	570	495	419	420	609
8	628	546	711	636	716	547	549	550	503	420	412	619
9	599	546	689	639	698	561	550	555	497	420	406	626
10	587	544	689	635	710	564	536	562	491	401	408	638
11	603	544	683	633	719	565	509	568	475	405	405	645
12	600	539	675	635	713	574	540	583	465	403	405	656
13	604	537	674	665	684	620	548	586	462	379	413	668
14	655	544	684	659	655	657	574	579	445	381	413	644
15	620	566	688	616	649	661	553	542	444	378	426	647
16	612	597	700	581	646	668	546	515	438	390	420	617
17	601	616	685	588	638	669	542	507	443	424	417	608
18	599	626	677	588	643	666	546	515	446	416	414	608
19	611	635	657	599	647	637	558	523	443	419	422	652
20	599	646	669	605	650	627	553	524	449	421	442	665
21	568	655	645	610	642	617	551	522	421	421	463	666
22	546	665	649	616	648	593	522	526	406	422	459	655
23	543	673	655	635	636	575	521	529	411	423	424	664
24	534	678	642	638	634	506	514	524	396	444	415	656
25	548	682	643	642	629	509	518	533	383	465	418	654
26	534	685	643	650	625	543	519	530	380	436	420	699
27	534	690	661	632	619	565	522	527	377	450	436	727
28	508	691	663	630	594	573	531	527	376	442	474	769
29	479	690	640	682	---	561	525	527	377	434	462	825
30	524	683	640	690	---	499	524	523	391	432	458	800
31	526	---	640	691	---	582	---	522	---	427	477	---
MEAN	600	598	669	635	671	576	545	539	449	416	---	659
MAX	760	691	711	691	733	669	589	586	518	465	---	825
MIN	479	507	640	581	594	499	509	466	376	378	---	582

ARKANSAS RIVER BASIN

07099970 ARKANSAS RIVER AT MOFFAT STREET AT PUEBLO, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	21.3	16.2	18.8	13.9	10.7	12.4	6.8	4.4	5.6	3.8	.9	2.4
2	21.4	15.8	18.6	12.9	10.5	11.9	6.1	3.2	4.7	4.1	1.1	2.6
3	21.1	16.0	18.5	13.6	11.0	12.3	6.5	2.8	4.7	4.6	1.2	2.9
4	19.4	16.6	18.1	14.4	10.9	12.6	6.5	3.4	5.0	5.1	1.5	3.4
5	17.8	13.7	15.8	13.3	10.8	12.0	7.0	3.5	5.2	4.9	1.9	3.5
6	13.7	11.6	12.2	12.6	10.3	11.2	6.6	3.6	5.2	5.2	2.1	3.7
7	13.9	11.7	12.7	12.0	9.5	10.7	7.3	3.9	5.5	5.0	2.7	3.7
8	14.0	12.4	13.3	11.6	8.7	10.2	6.9	5.1	5.8	3.9	.6	2.4
9	17.6	13.1	15.2	11.3	8.0	9.9	7.5	4.1	5.7	3.0	.3	1.8
10	17.7	12.9	15.6	10.1	7.7	8.7	6.0	3.0	4.4	4.4	.9	2.6
11	18.6	13.5	16.3	9.3	8.0	8.8	3.4	1.3	2.2	4.0	1.0	2.7
12	18.1	14.3	16.3	9.5	7.3	8.3	3.5	.7	1.9	3.9	.5	2.4
13	17.7	13.0	15.4	9.8	7.2	8.6	3.1	.8	1.9	3.6	2.2	2.8
14	16.6	12.3	14.6	9.9	6.6	8.3	4.7	1.1	2.9	4.0	.8	2.3
15	16.4	12.0	14.3	8.8	6.6	7.8	5.3	3.0	4.1	2.8	.1	1.7
16	17.3	13.0	15.2	7.7	4.8	6.3	4.2	1.7	3.0	2.6	.4	1.4
17	17.4	12.7	15.2	7.7	4.3	5.9	5.7	1.6	3.2	2.2	.0	.9
18	17.4	12.9	15.3	7.7	4.2	6.0	3.4	1.3	2.3	2.7	.0	1.0
19	16.6	12.4	14.9	8.3	4.7	6.4	4.0	.6	2.5	2.8	.0	.9
20	16.5	12.7	14.8	7.9	4.5	6.2	4.2	2.4	3.4	1.8	.0	.8
21	15.8	11.9	14.3	8.5	4.5	6.5	3.0	.5	1.9	3.5	.5	1.9
22	15.1	13.4	14.1	8.3	6.1	7.0	4.5	.8	2.7	4.0	.0	2.0
23	14.8	13.0	13.8	7.8	5.6	6.6	4.5	1.8	3.2	4.4	1.8	3.0
24	17.0	13.2	14.9	7.7	4.1	6.0	3.5	1.4	2.5	4.0	.4	2.3
25	16.1	12.5	14.5	7.6	4.6	6.0	2.4	1.6	1.9	4.3	1.8	2.8
26	15.9	11.9	14.1	6.8	4.1	5.5	3.9	1.0	2.3	3.8	.8	2.3
27	15.7	11.9	14.0	7.7	4.6	6.1	4.4	.6	2.4	2.9	.6	1.7
28	15.1	13.5	14.1	7.3	4.3	5.8	5.2	2.8	3.9	2.9	.2	1.3
29	16.2	12.3	14.3	6.8	3.7	5.3	4.6	2.9	3.8	4.2	.8	2.2
30	15.4	12.2	13.8	7.2	3.8	5.5	3.5	1.1	2.4	4.9	1.0	2.7
31	14.4	11.8	13.1	---	---	---	3.9	1.3	2.6	4.0	.7	2.3
MONTH	21.4	11.6	15.0	14.4	3.7	8.2	7.5	.5	3.5	5.2	.0	2.3
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	2.9	.0	1.4	7.8	1.7	4.6	11.5	4.5	7.7	15.0	8.9	11.6
2	4.7	.4	2.4	7.4	2.7	5.1	12.0	5.3	8.5	11.6	8.7	9.5
3	6.2	2.4	4.0	6.3	1.8	4.4	12.0	5.2	8.4	9.9	8.5	9.1
4	4.9	1.3	3.3	7.8	3.0	5.4	9.5	6.1	7.8	9.8	8.6	9.1
5	6.2	1.6	4.0	6.2	2.2	4.4	10.7	5.5	7.7	9.7	8.4	9.1
6	4.8	2.5	3.3	7.2	3.3	5.3	10.7	5.7	7.8	14.8	8.8	11.2
7	7.1	2.5	4.5	6.2	3.5	4.9	12.8	5.7	8.7	14.9	9.4	11.6
8	4.7	.4	2.4	8.7	3.6	5.9	12.5	6.4	9.0	15.4	9.2	11.8
9	2.0	.0	.7	8.6	3.0	6.0	12.6	6.3	9.0	15.1	9.2	11.7
10	2.8	.0	1.2	6.8	3.6	4.7	10.8	6.3	8.3	14.6	9.0	11.4
11	5.0	.2	2.6	4.8	2.7	3.7	9.8	6.2	7.7	14.2	9.0	11.2
12	5.6	1.3	3.5	7.6	2.3	4.9	11.5	6.7	8.6	16.3	9.5	12.5
13	6.1	1.5	3.9	9.8	3.4	6.7	12.7	6.0	9.0	16.6	9.5	12.6
14	4.7	1.7	2.6	9.2	4.5	6.9	13.3	6.5	9.6	15.3	9.6	12.1
15	5.8	1.1	3.1	8.3	2.6	5.6	13.3	6.9	9.7	14.4	9.6	11.4
16	3.9	1.4	2.1	7.7	3.7	5.8	10.7	6.9	8.7	13.4	9.4	10.9
17	5.3	1.5	3.0	5.8	3.8	4.3	12.1	7.0	8.9	11.0	9.6	10.2
18	5.5	2.0	3.8	8.4	3.4	5.8	13.3	6.8	9.6	12.0	9.5	10.5
19	7.5	2.5	4.9	10.0	3.8	7.0	13.7	7.9	10.5	10.7	9.5	9.9
20	7.2	2.6	5.1	10.7	3.5	7.4	13.0	8.7	10.5	11.9	8.8	10.2
21	5.7	2.8	3.9	11.2	4.8	8.2	12.9	8.2	10.4	13.2	8.7	11.2
22	6.6	2.0	4.1	9.1	4.9	7.2	9.8	7.8	8.8	13.9	10.0	11.6
23	7.0	3.4	5.2	10.0	4.8	7.3	13.5	7.6	10.0	13.3	10.5	11.6
24	7.0	3.2	5.1	6.1	4.2	4.7	13.7	7.9	10.3	14.2	10.7	12.2
25	7.2	1.7	4.6	5.4	4.1	4.7	14.1	8.2	10.7	14.0	10.6	12.0
26	6.7	2.9	4.9	6.0	4.0	4.9	14.4	8.6	11.0	13.5	10.8	11.9
27	4.8	1.7	2.9	9.0	4.5	6.5	14.6	8.7	11.2	13.7	11.4	12.4
28	3.9	.8	2.4	8.0	4.9	6.4	14.9	8.8	11.4	13.9	11.2	12.5
29	---	---	---	8.6	4.1	6.5	14.6	9.0	11.3	13.9	11.9	12.7
30	---	---	---	10.8	4.8	7.8	14.3	9.1	11.2	15.0	11.5	12.9
31	---	---	---	9.9	5.2	7.3	---	---	---	14.8	12.7	13.5
MONTH	7.5	.0	3.4	11.2	1.7	5.8	14.9	4.5	9.4	16.6	8.4	11.4

## ARKANSAS RIVER BASIN

07099970 ARKANSAS RIVER AT MOFFAT STREET AT PUEBLO, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	15.9	12.3	13.7	20.3	16.7	18.0	23.8	20.1	21.5	24.8	19.2	21.9
2	16.1	12.3	13.8	20.9	16.8	18.5	24.2	20.2	21.6	24.2	18.9	21.7
3	15.2	12.8	13.7	21.6	17.1	18.7	24.7	20.3	21.9	24.2	19.0	21.8
4	15.6	13.2	14.1	21.9	16.7	18.9	25.1	20.1	22.4	24.4	18.8	21.8
5	15.8	12.9	14.2	22.1	17.1	19.1	---	---	---	24.4	18.5	21.6
6	16.2	13.7	14.6	22.4	17.0	19.2	24.5	21.4	22.3	24.7	18.8	21.7
7	15.7	13.4	14.2	23.1	17.3	19.5	24.7	20.3	22.1	22.1	17.7	19.9
8	17.5	13.1	14.7	23.3	17.4	19.8	24.7	20.7	22.3	20.1	16.1	17.7
9	17.6	13.3	14.8	23.0	17.5	19.7	22.7	20.9	21.6	22.1	15.9	18.9
10	17.5	13.4	15.1	22.6	17.5	19.5	24.4	21.3	22.3	22.7	15.9	19.6
11	17.5	13.7	15.3	22.7	17.6	19.6	25.0	21.5	22.8	23.2	16.7	20.1
12	17.1	13.7	15.0	22.6	17.9	19.6	25.1	21.2	22.7	22.4	16.7	19.7
13	16.8	13.5	14.6	21.2	18.2	19.7	24.7	21.3	22.6	23.2	17.0	20.1
14	17.2	13.7	15.2	21.3	17.8	19.3	25.1	21.4	22.6	23.8	18.2	21.0
15	17.9	13.8	15.5	21.3	18.4	19.6	23.9	21.2	22.1	23.1	18.6	20.8
16	19.0	14.4	16.2	23.2	18.6	20.3	25.1	20.4	22.1	23.0	18.3	20.5
17	19.0	14.4	16.3	20.8	17.9	19.3	24.6	20.6	22.2	21.8	18.1	20.1
18	19.1	14.3	16.2	22.4	18.3	20.0	25.5	20.6	22.6	22.4	17.6	19.9
19	18.5	14.6	16.1	21.0	18.3	19.5	25.7	20.4	22.6	22.5	17.0	19.8
20	19.3	14.8	16.5	22.8	18.4	20.2	24.8	20.8	22.5	22.2	16.7	19.6
21	18.1	15.0	16.3	23.0	18.9	20.5	25.2	20.2	22.3	22.5	16.8	19.8
22	19.0	15.3	16.7	23.6	18.8	20.7	25.1	20.2	22.2	21.8	17.2	19.6
23	19.6	15.3	17.0	22.7	19.1	20.5	24.9	20.4	22.3	21.6	16.8	19.2
24	19.4	15.5	17.0	23.3	19.0	20.7	25.2	20.7	22.5	21.2	16.1	18.8
25	19.4	15.9	17.4	24.2	18.7	20.9	22.2	21.0	21.5	21.7	16.1	19.1
26	19.1	16.1	17.3	23.8	19.0	20.8	24.9	20.3	22.1	22.6	16.7	19.7
27	19.9	16.2	17.7	23.9	19.2	21.0	25.0	20.3	22.2	22.9	17.0	20.0
28	19.4	16.4	17.7	23.9	19.1	21.1	24.8	19.6	21.6	22.8	16.5	19.7
29	20.1	16.8	18.0	24.5	19.2	21.3	25.0	20.0	21.9	22.1	17.2	19.4
30	20.1	16.7	17.9	24.1	19.2	21.2	24.8	19.9	21.9	22.7	16.2	19.4
31	---	---	---	24.0	20.0	21.4	24.2	20.3	21.6	---	---	---
MONTH	20.1	12.3	15.8	24.5	16.7	19.9	---	---	---	24.8	15.9	20.1

07099990 FOUNTAIN CREEK AT GREEN MOUNTAIN FALLS, CO

LOCATION.--Lat 38°56'20", long 105°00'55", in NW<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec.8, T.13 S., R.68 W., El Paso County, Hydrologic Unit 11020003, on left bank at upstream side of bridge on Green Mountain Falls Road at Green Mountain Falls, 0.2 mi south of U.S. Highway 24, 0.4 mi upstream from North Catamount Creek, and 1.3 mi downstream from Crystola Creek.

DRAINAGE AREA.--16.6 mi<sup>2</sup>.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April to September 2001. Site was part of a hydrologic study, water-quality data available, May 1986 to September 1989, published as "Fountain Creek above Green Mountain Falls" (station 385620105005401).

GAGE.--Water-stage recorder with satellite telemetry and crest-stage gage. Elevation of gage is 7,740 ft above sea level, from topographic map.

REMARKS.--No estimated daily discharges. Records poor. Natural flow of stream affected by several small storage reservoirs and small 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.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 183 ft<sup>3</sup>/s, July 13, 2001, gage height, 6.43 ft, from rating curve extended above 4.4 ft<sup>3</sup>/s on basis of slope-conveyance study; minimum daily, 0.68 ft<sup>3</sup>/s, Sept. 25, 2001.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period April to September, 183 ft<sup>3</sup>/s, July 13, gage height, 6.43 ft, from rating curve extended above 4.4 ft<sup>3</sup>/s on basis of slope-conveyance study; minimum daily, 0.68 ft<sup>3</sup>/s, Sept. 25.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	1.1	2.6	2.6	1.1	1.4	1.2
2	---	---	---	---	---	---	1.7	2.8	2.4	1.1	2.0	1.3
3	---	---	---	---	---	---	2.2	2.6	2.4	1.0	2.0	.97
4	---	---	---	---	---	---	2.1	2.2	2.3	1.0	2.0	.87
5	---	---	---	---	---	---	2.1	2.5	2.1	1.0	2.0	1.0
6	---	---	---	---	---	---	2.1	2.7	2.0	1.0	1.9	.90
7	---	---	---	---	---	---	1.8	3.4	2.2	1.0	1.2	.79
8	---	---	---	---	---	---	2.0	5.1	2.6	2.1	1.3	1.1
9	---	---	---	---	---	---	2.0	6.3	2.4	.80	1.2	1.1
10	---	---	---	---	---	---	2.2	5.2	2.0	.76	1.1	1.1
11	---	---	---	---	---	---	2.9	3.4	1.8	.75	1.3	.81
12	---	---	---	---	---	---	2.2	2.6	1.7	.84	1.3	.79
13	---	---	---	---	---	---	2.4	2.3	1.7	8.1	1.2	.87
14	---	---	---	---	---	---	3.0	2.1	1.8	3.7	4.8	.87
15	---	---	---	---	---	---	2.8	2.2	1.7	2.2	1.4	.94
16	---	---	---	---	---	---	4.0	2.8	1.5	1.2	1.3	.89
17	---	---	---	---	---	---	3.6	3.0	1.4	1.1	1.2	.83
18	---	---	---	---	---	---	3.3	3.8	1.3	1.2	1.1	.87
19	---	---	---	---	---	---	3.2	3.2	1.3	1.2	1.2	.85
20	---	---	---	---	---	---	3.4	2.9	1.3	1.1	1.2	.79
21	---	---	---	---	---	---	3.0	2.6	1.2	1.1	1.1	.76
22	---	---	---	---	---	---	3.0	2.6	1.2	1.1	.92	.77
23	---	---	---	---	---	---	2.9	2.9	1.2	2.0	.85	.73
24	---	---	---	---	---	---	3.2	3.0	1.1	3.1	.70	.71
25	---	---	---	---	---	---	2.9	3.0	1.1	2.2	.71	.68
26	---	---	---	---	---	---	2.7	3.2	1.1	1.9	.69	.77
27	---	---	---	---	---	---	2.6	2.9	1.1	1.6	.73	.76
28	---	---	---	---	---	---	2.4	2.9	1.1	1.3	.77	.77
29	---	---	---	---	---	---	2.4	3.0	1.1	1.1	.70	.86
30	---	---	---	---	---	---	2.3	2.9	1.0	1.0	.76	.87
31	---	---	---	---	---	---	---	2.7	---	.99	.90	---
TOTAL	---	---	---	---	---	---	77.5	95.4	49.7	49.64	40.93	26.52
MEAN	---	---	---	---	---	---	2.58	3.08	1.66	1.60	1.32	.88
MAX	---	---	---	---	---	---	4.0	6.3	2.6	8.1	4.8	1.3
MIN	---	---	---	---	---	---	1.1	2.1	1.0	.75	.69	.68
AC-FT	---	---	---	---	---	---	154	189	99	98	81	53

07099990 FOUNTAIN CREEK AT GREEN MOUNTAIN FALLS, CO--Continued

## PRECIPITATION RECORDS

PERIOD OF RECORD.--April to September 2001 (seasonal records only).

GAGE.--Tipping-bucket rain gage with satellite telemetry.

REMARKS.--Records good except for estimated daily precipitation, which is poor. Daily data that are not published are either missing or of unacceptable quality.

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum daily precipitation, 1.22 inches, Aug. 1, 2001.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum daily precipitation during period April to September, 1.22 inches, Aug. 1.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	.00	.00	.00	.21	1.22	.10
2	---	---	---	---	---	---	.00	.01	.00	.01	.23	.00
3	---	---	---	---	---	---	.00	.00	.00	.01	.01	.00
4	---	---	---	---	---	---	.00	.20	.06	.01	.40	.00
5	---	---	---	---	---	---	.00	.74	.00	.00	.02	.25
6	---	---	---	---	---	---	.12	.68	.00	.00	.03	.17
7	---	---	---	---	---	---	.00	.00	.23	.00	.00	.16
8	---	---	---	---	---	---	.00	.00	.03	.02	.11	.35
9	---	---	---	---	---	---	.00	.00	.14	.33	.23	.02
10	---	---	---	---	---	---	e.04	.00	.00	.01	.05	.00
11	---	---	---	---	---	---	e.33	.00	.00	.05	.01	.00
12	---	---	---	---	---	---	e.35	.00	.00	.46	.04	.00
13	---	---	---	---	---	---	e.07	.00	.54	.29	.05	.00
14	---	---	---	---	---	---	.00	.01	.00	.04	.66	.02
15	---	---	---	---	---	---	.00	.00	.00	.01	.25	.50
16	---	---	---	---	---	---	.00	.02	.00	.00	.48	.03
17	---	---	---	---	---	---	.00	.82	.00	.00	.01	.12
18	---	---	---	---	---	---	.00	.00	.00	.00	.00	.01
19	---	---	---	---	---	---	.00	.32	.00	.00	.00	.00
20	---	---	---	---	---	---	.08	.01	.00	.00	.01	.00
21	---	---	---	---	---	---	.00	.17	.02	.20	.00	.00
22	---	---	---	---	---	---	.04	.00	.18	.00	.07	.00
23	---	---	---	---	---	---	.22	.00	.03	.86	.00	.00
24	---	---	---	---	---	---	.00	.00	.06	.12	.00	.00
25	---	---	---	---	---	---	.00	.00	.02	.46	.00	.00
26	---	---	---	---	---	---	.00	.04	.05	.19	.00	.00
27	---	---	---	---	---	---	.00	.00	.00	.06	.00	.00
28	---	---	---	---	---	---	.00	.00	.01	.00	.05	.00
29	---	---	---	---	---	---	.00	.19	.00	.00	.00	.13
30	---	---	---	---	---	---	.00	.02	.01	.00	.05	.00
31	---	---	---	---	---	---	---	.00	---	.00	.64	---
TOTAL	---	---	---	---	---	---	1.25	3.23	1.38	3.34	4.62	1.86
MAX	---	---	---	---	---	---	.35	.82	.54	.86	1.22	.50

e Estimated.



WATER-QUALITY RECORDS

PERIOD OF RECORD.--December 1974 to current year.

PERIOD OF DAILY RECORD.--

SUSPENDED SEDIMENT: August 1995 to September 1997 (seasonal peaks only), April 1998 to current year (seasonal record only).

INSTRUMENTATION.--Pumping sediment sampler with satellite telemetry.

REMARKS.--Daily suspended-sediment records are poor.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SEDIMENT CONCENTRATION (seasonal only): Maximum daily mean, 8,090 mg/L, June 6, 1997; minimum daily mean, 2 mg/L, Apr. 15, 1999, Oct. 17, 2000, Sept. 25, 2001.

SUSPENDED-SEDIMENT DISCHARGE (seasonal only): Maximum daily, 41,800 tons, June 6, 1997; minimum daily, 0.03 ton, Sept. 25, 2001.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATION (seasonal only): Maximum daily mean, 3,420 mg/L, July 14; minimum daily mean, 2 mg/L, Oct. 17, Sept. 25.

SUSPENDED-SEDIMENT DISCHARGE (seasonal only): Maximum daily, 460 tons, July 13; minimum daily, 0.03 ton, Sept. 25.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

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, UM-MF (COLS./100 ML) (31625)	E COLI, MTEC MF (COL/100 ML) (31633)	CALCIUM DIS-SOLVED (MG/L) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L) (00925)	SULFATE DIS-SOLVED (MG/L) (00945)	FLUO-RIDE, DIS-SOLVED (MG/L) (00950)
OCT 25...	1100	10	337	7.7	7.4	9.9	<1.0	E380	250	39.4	7.83	15.0	2.7
NOV 29...	1230	9.7	385	8.4	2.0	11.4	<1.0	22	E4	43.7	9.06	17.0	2.8
FEB 28...	1230	4.3	477	8.5	.8	12.0	<1.0	98	E17	54.7	11.7	22.0	2.8
APR 04...	1215	11	389	8.4	9.1	9.7	<1.0	E15	E8	42.6	8.43	20.0	2.7
JUN 27...	1245	13	291	8.2	15.4	7.8	1.1	E420	280	35.9	5.84	13.0	2.6
AUG 08...	1245	12	283	8.2	16.8	7.6	<1.0	590	380	30.3	6.02	11.0	2.5

DATE	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 ORTHO, DIS-SOLVED (MG/L AS P) (00671)	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	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)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)
OCT 25...	.667	<.041	<.060	<.018	<1	<1.0	41	37	<.10	<.07	<1	<1.0	.9
NOV 29...	.977	<.041	<.060	<.018	<1	<1.0	42	42	<.10	<.07	<1	<1.0	1.3
FEB 28...	1.11	<.002	<.060	<.018	<1	<1.0	62	63	<.10	<.07	2	1.0	1.9
APR 04...	.779	.007	<.060	<.018	<1	<1.0	40	42	<.10	<.07	<1	1.3	1.8
JUN 27...	.495	.007	<.060	<.020	<1	<1.0	44	25	<.10	<.07	<1	<2.4	1.0
AUG 08...	.577	<.002	E.046	<.020	<1	<1.0	19	30	<.10	<.07	<1	<1.0	1.2

DATE	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)	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)	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)
OCT 25...	1.6	190	40	<1	<.15	34	26.0	<.14	<.23	<2	<1.50	.6	.6
NOV 29...	.8	140	20	<1	<.15	38	32.0	<.14	<.23	<2	<1.50	.7	.7
FEB 28...	1.6	--	20	<1	<.15	43	36.0	<.14	<.23	2	1.60	1.0	.9
APR 04...	1.4	--	10	<1	<.15	42	35.0	<.01	<.01	<2	1.40	.6	.7
JUN 27...	<.6	360	20	1	<.15	53	19.0	.01	0	<2	<1.50	.8	<.5
AUG 08...	<.6	460	20	1	<.15	49	18.0	<.01	<.01	<2	<1.50	.8	.9



07103700 FOUNTAIN CREEK NEAR COLORADO SPRINGS, CO--Continued

WATER-QUALITY DATA DURING STORMWATER-RUNOFF SAMPLING, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	1,2,5,6-DIBENZ-ANTHRA-CENE TOTAL (UG/L) (34556)	FLUOR-ANTHENE TOTAL (UG/L) (34376)	FLUOR-ENE TOTAL (UG/L) (34381)	INDENO (1,2,3-CD) TOTAL (UG/L) (34403)	NAPHTH-ALENE TOTAL (UG/L) (34696)	PHENAN-THRENE TOTAL (UG/L) (34461)	PYRENE TOTAL (UG/L) (34469)	BENZENE NITRO-WATER UNFLTRD RECOVER (UG/L) (34447)	2,6-DI-ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	ACETO-CHLOR, WATER FLTRD REC (UG/L) (49260)	ALA-CHLOR, WATER, DISS, REC (UG/L) (46342)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)
AUG 31...	M	M	M	M	E.1	M	M	<2	<.002	<.004	<.002	.025	<.050
31...	M	M	M	M	M	M	M	<2	<.002	<.004	<.002	.017	<.050
DATE	BEN-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82673)	BUTYL-ATE, WATER, DISS, REC (UG/L) (04028)	CAR-BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBO-FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	CHLOR-PYRIFOS DIS- SOLVED (UG/L) (38933)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040)	DI- AZINON, DIS- SOLVED (UG/L) (39572)	DI- ELDRIN DIS- SOLVED (UG/L) (39381)	DISUL-FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	ETHAL- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)
AUG 31...	<.010	<.002	E.087	<.020	<.005	<.018	<.003	<.006	.615	<.005	<.021	<.002	<.009
31...	<.010	<.002	E.185	<.020	<.005	<.018	<.003	<.006	.114	<.005	<.021	<.002	<.009
DATE	ETHO-PROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	FONOFOS WATER DISS REC (UG/L) (04095)	LINDANE DIS- SOLVED (UG/L) (39341)	LIN-URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA-THION, DIS- SOLVED (UG/L) (39532)	METO-LACHLOR WATER DISSOLV (UG/L) (39415)	METRI-BUZIN WATER DISSOLV (UG/L) (82630)	MOL-INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	PARA-THION, DIS- SOLVED (UG/L) (39542)	METHYL PARA- THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	PEB-ULATE WATER FLTRD 0.7 U GF, REC (UG/L) (82669)	PENDI-METH-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)
AUG 31...	<.005	<.003	<.004	<.035	E.013	<.013	<.006	<.002	<.007	<.007	<.006	<.002	<.010
31...	<.005	<.003	<.004	<.035	<.027	<.013	<.006	<.002	<.007	<.007	<.006	<.002	<.010
DATE	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	PRO-METON, WATER, DISS, REC (UG/L) (04037)	PROPA-CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO-PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO-PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	PRON-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU-THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER-BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER-BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	THIO-BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	TRIAL-LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)
AUG 31...	<.011	E.011	<.010	<.011	<.023	<.004	<.011	<.016	<.034	<.017	<.005	<.002	<.009
31...	<.011	E.010	<.010	<.011	<.023	<.004	<.011	<.016	<.034	<.017	<.005	<.002	<.009
DATE			PER-METHRIN CIS ALPHA BHC DIS- SOLVED (UG/L) (34253)	WAT FLT 0.7 U GF, REC (UG/L) (82687)	P,P' DDE DISSOLV (UG/L) (34653)								
AUG 31...			<.005	<.006	<.003								
31...			<.005	<.006	<.003								

E Estimated laboratory analysis value.  
M Presence of material verified but not quantified.

07103700 FOUNTAIN CREEK NEAR COLORADO SPRINGS, CO--Continued

MISCELLANEOUS FIELD AND SUSPENDED-SEDIMENT DISCHARGE DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
OCT 04...	1450	9.5	363	12.0	--	--
NOV 01...	0945	11	337	5.0	4	.12
DEC 06...	1400	9.7	480	2.0	4	.10
JAN 05...	1100	7.7	427	1.5	3	.06
FEB 12...	1030	5.7	451	1.0	3	.05
MAR 14...	1505	7.7	440	5.5	--	--
MAR 30...	1345	8.5	447	7.0	13	.30
APR 20...	1215	14	349	11.0	8	.30
MAY 08...	1200	19	320	10.0	19	.97
MAY 22...	1415	13	362	11.5	8	.28
JUN 05...	1200	12	349	12.0	9	.29
JUN 22...	0945	15	287	12.5	12	.49
JUL 23...	1245	6.0	432	16.5	13	.21
AUG 02...	1230	19	228	16.5	415	21
AUG 17...	1425	17	245	15.0	--	--
AUG 22...	1130	6.6	413	15.0	12	.21
AUG 29...	0950	5.0	503	13.5	--	--
SEP 06...	1200	4.8	511	14.5	13	.17
SEP 20...	1300	6.0	441	13.5	6	.10

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
	OCTOBER			NOVEMBER			DECEMBER		
1	9.7	8	.21	11	---	---	9.0	---	---
2	9.7	6	.15	11	---	---	7.0	---	---
3	9.7	7	.18	11	---	---	8.9	---	---
4	9.8	---	e.19	12	---	---	9.4	---	---
5	10	5	.15	13	---	---	9.7	---	---
6	11	4	.12	9.9	---	---	9.3	---	---
7	11	4	.12	9.6	---	---	8.8	---	---
8	11	3	.07	9.8	---	---	8.8	---	---
9	11	---	e.07	10	---	---	8.8	---	---
10	12	3	.11	11	---	---	8.8	---	---
11	11	5	.14	12	---	---	7.4	---	---
12	11	5	.15	10	---	---	4.9	---	---
13	9.6	6	.16	7.8	---	---	8.2	---	---
14	9.6	---	e.16	8.4	---	---	9.4	---	---
15	10	4	.13	11	---	---	9.3	---	---
16	10	---	e.08	10	---	---	8.7	---	---
17	10	2	.06	9.4	---	---	9.6	---	---
18	9.7	3	.08	10	---	---	7.1	---	---
19	9.3	---	e.12	11	---	---	8.4	---	---
20	9.5	7	.19	10	---	---	8.7	---	---
21	9.9	11	.30	12	---	---	5.4	---	---
22	13	22	.82	12	---	---	9.2	---	---
23	12	16	.51	11	---	---	8.6	---	---
24	14	---	e.77	11	---	---	8.1	---	---
25	11	5	.14	11	---	---	8.7	---	---
26	11	9	.28	11	---	---	8.2	---	---
27	11	---	e.27	11	---	---	8.3	---	---
28	12	9	.28	11	---	---	8.2	---	---
29	14	---	e.27	11	---	---	7.9	---	---
30	12	5	.17	10	---	---	7.6	---	---
31	11	4	.12	---	---	---	8.5	---	---
TOTAL	335.5	---	6.57	318.9	---	0	258.9	---	0

## ARKANSAS RIVER BASIN

07103700 FOUNTAIN CREEK NEAR COLORADO SPRINGS, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
	JANUARY			FEBRUARY			MARCH		
1	7.2	---	---	7.4	---	---	e7.7	---	---
2	7.5	---	---	8.8	---	---	7.7	---	---
3	8.0	---	---	8.4	---	---	7.5	---	---
4	8.0	---	---	8.3	---	---	7.7	---	---
5	7.7	---	---	8.4	---	---	7.7	---	---
6	7.7	---	---	7.8	---	---	7.6	---	---
7	7.7	---	---	8.0	---	---	7.7	---	---
8	6.4	---	---	7.4	---	---	7.7	---	---
9	6.2	---	---	6.4	---	---	7.2	---	---
10	8.9	---	---	8.2	---	---	8.5	---	---
11	8.2	---	---	8.2	---	---	8.6	---	---
12	7.8	---	---	7.7	---	---	7.4	---	---
13	8.5	---	---	8.0	---	---	7.9	---	---
14	7.3	---	---	8.2	---	---	7.9	---	---
15	5.6	---	---	8.0	---	---	7.3	---	---
16	7.9	---	---	8.4	---	---	7.8	---	---
17	7.2	---	---	8.5	---	---	8.9	---	---
18	8.9	---	---	8.4	---	---	9.0	---	---
19	8.1	---	---	8.5	---	---	8.8	---	---
20	9.7	---	---	8.3	---	---	9.0	---	---
21	8.6	---	---	7.8	---	---	9.4	---	---
22	8.6	---	---	7.7	---	---	9.7	---	---
23	8.6	---	---	7.7	---	---	9.7	---	---
24	8.1	---	---	7.7	---	---	10	---	---
25	8.6	---	---	7.4	---	---	9.9	---	---
26	8.2	---	---	7.3	---	---	9.7	---	---
27	8.5	---	---	7.7	---	---	9.6	---	---
28	8.6	---	---	6.9	---	---	9.5	---	---
29	8.9	---	---	---	---	---	8.5	---	---
30	8.4	---	---	---	---	---	8.8	---	---
31	7.6	---	---	---	---	---	8.5	---	---
TOTAL	247.2	---	0	221.5	---	0	262.9	---	0
DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
	APRIL			MAY			JUNE		
1	8.3	9	.19	15	15	.62	12	8	.25
2	8.7	6	.15	15	11	.43	12	11	.38
3	10	---	e.23	16	---	e.67	13	---	e.48
4	11	5	.15	16	21	1.0	13	13	.47
5	11	8	.24	20	102	6.2	e12	---	e.42
6	11	7	.21	18	38	2.0	e11	---	e.62
7	11	5	.14	19	37	2.0	e12	---	e1.2
8	9.8	---	e.12	20	34	1.9	e13	---	e1.1
9	9.9	5	.13	22	56	3.3	e13	---	e.63
10	11	15	.57	21	41	2.4	e12	---	e.36
11	12	50	1.7	16	---	e.72	e12	---	e.29
12	12	25	.85	16	15	.62	e11	---	e.27
13	11	---	e.14	14	15	.59	e13	---	e.49
14	12	6	.18	14	13	.49	e14	---	e.60
15	12	6	.20	14	13	.48	e12	---	e.32
16	12	5	.16	12	---	e.42	e11	---	e.27
17	12	3	.09	19	87	5.7	e11	---	e.33
18	12	---	e.16	19	62	3.4	e11	---	e.33
19	14	7	.27	18	47	2.4	e11	---	e.30
20	13	8	.26	16	38	1.6	e11	---	e.30
21	11	6	.18	14	---	e.64	e12	---	e.32
22	11	8	.24	13	9	.33	e13	---	e.35
23	11	---	e.29	12	8	.28	14	8	.31
24	11	8	.24	12	---	e.33	13	12	.42
25	11	7	.21	13	13	.44	13	---	e2.7
26	14	8	.30	13	13	.47	13	20	.69
27	14	6	.22	14	11	.43	13	8	.26
28	14	---	e.34	14	12	.44	12	7	.23
29	15	12	.49	14	---	e1.3	12	7	.23
30	16	14	.58	12	12	.41	12	---	e.38
31	---	---	---	12	9	.29	---	---	---
TOTAL	351.7	---	9.23	483	---	42.30	367	---	15.30

07103700 FOUNTAIN CREEK NEAR COLORADO SPRINGS, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	JULY			AUGUST			SEPTEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	12	14	.46	9.8	181	22	9.3	60	1.7
2	12	10	.32	26	1600	178	7.3	14	.28
3	12	11	.36	14	206	7.7	5.5	---	e.17
4	12	7	.23	18	321	27	4.6	8	.10
5	12	---	e.17	15	210	9.4	4.8	5	.07
6	11	---	e.18	13	74	2.8	5.1	12	.17
7	11	---	e.19	12	25	.82	5.8	8	.13
8	11	7	.20	12	18	.57	7.6	---	e.26
9	12	---	e.79	12	---	e.75	8.3	---	e.20
10	11	---	e.26	13	23	.79	6.9	8	.15
11	10	20	.56	13	16	.55	4.3	7	.08
12	12	146	5.0	13	28	1.2	4.2	---	e.08
13	25	2310	460	14	91	5.0	3.9	---	e.07
14	18	3420	269	18	---	e98	5.6	430	27
15	14	---	e7.3	21	2490	174	5.5	31	.45
16	e11	---	e2.9	20	582	49	7.4	94	2.0
17	e10	---	e1.5	17	109	5.1	6.8	64	1.4
18	e10	---	e.84	10	47	1.3	6.8	---	e.57
19	e11	---	e.65	8.8	---	e.72	6.4	16	.27
20	e10	---	e.62	11	32	1.0	5.6	8	.12
21	e10	---	e.59	7.3	16	.32	5.4	---	e.15
22	e10	---	e.43	6.5	10	.18	4.9	---	e.12
23	e11	---	e3.4	7.5	17	.36	4.6	---	e.08
24	12	115	3.7	6.8	---	e.31	5.6	---	e.06
25	9.4	---	e.60	5.9	9	.14	4.3	2	.03
26	16	231	10	5.6	4	.05	4.0	---	e.04
27	11	41	1.3	5.2	---	e.16	4.0	---	e.06
28	9.9	21	.56	4.5	---	e.07	4.1	---	e.08
29	9.0	33	.77	4.6	---	e.05	3.9	8	.08
30	8.0	---	e.42	4.0	---	e.05	3.8	---	e.06
31	6.9	14	.28	20	1680	264	---	---	---
TOTAL	360.2	---	773.58	368.5	---	851.39	166.3	---	36.03

e Estimated.

## ARKANSAS RIVER BASIN

07103703 CAMP CREEK AT GARDEN OF THE GODS, CO

LOCATION.--Lat 38°52'37", long 104°52'20", in SE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec.34, T.13 S., R.67 W., El Paso County, Hydrologic Unit 11020003, on left bank, 80 ft downstream from county road bridge at east entrance to Garden of the Gods Park, and 1.9 mi upstream from mouth.

DRAINAGE AREA.--9.45 mi<sup>2</sup>.

PERIOD OF RECORD.--April 1992 to current year.

GAGE.--Water-stage recorder with satellite telemetry and crest-stage gage. Elevation of gage is 6,310 ft above sea level, from topographic map.

REMARKS.--No estimated daily discharges. Records fair. 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 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.06	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	.00	.00	.01	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.00	.00	.04	.00	.00	.04	.00
5	.00	.00	.00	.00	.00	.00	.00	.05	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01
7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02
9	.00	.00	.00	.00	.00	.00	.00	.00	.01	.02	.00	.00
10	.00	.00	.00	.00	.00	.01	.02	.00	.00	.00	.00	.00
11	.00	.00	.00	.00	.00	.01	.01	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	.00	.01	.00	.00	.02	.01	.00
13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.04	.01	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.01
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02
16	.00	.00	.00	.00	.00	.00	.00	.01	.00	.00	.01	.00
17	.00	.00	.00	.00	.00	.00	.00	.04	.00	.00	.00	.03
18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.00	.00	.01	.00	.00	.00	.00
20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
22	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	.00	.01	.00	.00	.00	.01	.00	.00
24	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	.00	.00	.00	.00	.01	.00	.00	.00
26	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
29	.00	.00	.00	.00	---	.02	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.18	---
TOTAL	0.02	0.00	0.00	0.00	0.00	0.05	0.04	0.16	0.02	0.09	0.32	0.09
MEAN	.001	.000	.000	.000	.000	.002	.001	.005	.001	.003	.010	.003
MAX	.01	.00	.00	.00	.00	.02	.02	.05	.01	.04	.18	.03
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.04	.00	.00	.00	.00	.1	.08	.3	.04	.2	.6	.2

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 2001, BY WATER YEAR (WY)

MEAN	.014	.001	.000	.002	.000	.082	2.49	10.9	6.12	.80	.69	.12
MAX	.12	.003	.001	.015	.000	.38	15.7	45.5	27.7	6.78	5.66	.76
(WY)	1995	1999	1993	1995	1998	1996	1999	1999	1997	1995	1999	1994
MIN	.000	.000	.000	.000	.000	.000	.000	.004	.000	.000	.000	.000
(WY)	1993	1993	1994	1993	1993	1994	1994	2000	2000	1993	1993	1993

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1992 - 2001
ANNUAL TOTAL	0.55	0.79	
ANNUAL MEAN	.002	.002	1.92
HIGHEST ANNUAL MEAN			6.48
LOWEST ANNUAL MEAN			.002
HIGHEST DAILY MEAN	.12 May 8	.18 Aug 31	240 Apr 29 1999
LOWEST DAILY MEAN	.00 Jan 1	.00 Oct 1	a.00 Aug 15 1992
ANNUAL SEVEN-DAY MINIMUM	.00 Jan 1	.00 Oct 1	.00 Aug 15 1992
MAXIMUM PEAK FLOW		9.1 Aug 31	b430 Apr 29 1999
MAXIMUM PEAK STAGE		2.92 Aug 31	c5.40 Apr 29 1999
ANNUAL RUNOFF (AC-FT)	1.1	1.6	1390
10 PERCENT EXCEEDS	.00	.00	1.8
50 PERCENT EXCEEDS	.00	.00	.00
90 PERCENT EXCEEDS	.00	.00	.00

- a No flow most of the time most years.  
b From rating curve extended above 327 ft<sup>3</sup>/s.  
c From floodmarks.

07103707 FOUNTAIN CREEK AT 8th STREET AT COLORADO SPRINGS, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 38°49'46", long 104°50'21", in NW<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec.13, T.14 S., R.67 W., El Paso County, Hydrologic Unit 11020003, 270 ft downstream from 8th Street and 0.4 mi upstream from Monument Creek.

DRAINAGE AREA.--119 mi<sup>2</sup>.

PERIOD OF RECORD.--February 1981 to September 1982. March 1998 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER 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)	E COLI, MTEC MF (COL/100 ML) (31633)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)
OCT 25...	1200	8.4	561	7.8	9.5	9.4	<1.0	E840	E650	53.5	16.7	110	2.7
NOV 29...	1400	8.8	587	8.4	3.3	10.8	<1.0	51	E6	56.4	17.1	110	2.7
FEB 28...	1345	2.1	1070	8.3	2.5	11.5	<1.0	25	E10	94.7	36.6	296	2.8
APR 04...	1330	4.2	989	8.3	15.0	8.0	1.1	E560	--	84.7	31.6	273	2.8
JUN 27...	1400	1.6	968	8.1	22.0	6.5	1.8	E1800	E880	102	31.5	258	2.6
AUG 08...	1400	1.7	1130	8.0	25.2	6.2	<1.0	980	480	96.4	37.5	380	2.6

DATE	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	PHOS-PHORUS TOTAL SOLVED (MG/L AS P) (00665)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	ARSENIC TOTAL SOLVED (UG/L AS AS) (01002)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM WATER UNFLTRD TOTAL SOLVED (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)
OCT 25...	.954	<.041	<.060	<.018	1	1.0	70	72	<.10	<.07	1	<1.0	3.7
NOV 29...	1.35	<.041	<.060	<.018	1	<1.0	70	69	<.10	<.07	<1	<1.0	1.6
FEB 28...	1.96	.012	<.060	<.018	2	1.8	125	128	.18	.08	<1	<1.0	3.9
APR 04...	1.41	.055	.131	<.018	5	2.4	129	127	.20	<.07	3	2.5	9.0
JUN 27...	.902	.044	E.044	E.010	5	3.7	142	132	.12	<.07	<1	<1.0	2.4
AUG 08...	1.16	.062	E.044	E.017	10	3.4	131	132	.40	.34	1	<1.0	4.4

DATE	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)	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)	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)
OCT 25...	1.8	200	20	1	<.15	94	84.0	<.14	<.23	2	1.79	3.9	3.5
NOV 29...	1.7	110	10	<1	<.15	92	86.0	<.14	<.23	2	1.78	3.8	4.0
FEB 28...	2.4	--	10	1	<.15	546	538	<.14	<.23	4	3.60	12.0	11.6
APR 04...	2.5	--	--	6	.51	530	455	<.01	<.01	6	3.90	10.0	10.1
JUN 27...	1.7	490	<10	3	.29	374	332	.01	M	5	4.10	7.6	7.2
AUG 08...	2.2	610	10	13	<.15	611	59.0	.02	<.01	4	4.90	8.9	9.2

## ARKANSAS RIVER BASIN

07103707 FOUNTAIN CREEK AT 8th STREET AT COLORADO SPRINGS, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	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)	CYANIDE TOTAL (MG/L AS CN) (00720)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)
OCT 25...	<.20	<.2	24	9	<.01	5	.11
NOV 29...	<.20	<.2	16	16	<.01	4	.09
FEB 28...	<.20	<.2	140	134	<.01	8	.05
APR 04...	<.20	<.2	116	57	<.01	280	3.2
JUN 27...	<.20	<.2	57	43	<.01	16	.07
AUG 08...	<.20	<.2	38	24	.01	--	--

E Estimated laboratory analysis value.

M Presence of material verified but not quantified.

07103780 MONUMENT CREEK ABOVE NORTH GATE BOULEVARD AT U.S. AIR FORCE ACADEMY, CO

LOCATION.--Lat 39°01'52", long 104°50'52", in SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec.1, T.12 S., R.67 W., El Paso County, Hydrologic Unit 11020003, on right bank, at U.S. Air Force Academy, 50 ft upstream from Denver and Rio Grande Western Railroad bridge, 0.8 mi upstream from North Gate Boulevard, and 1.5 mi downstream from Beaver Creek.

DRAINAGE AREA.--81.7 mi<sup>2</sup>.

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 6,640 ft above sea level, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Natural flow of stream affected by storage and diversions upstream from station for municipal supply of Monument and Palmer Lake.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.5	4.4	e6.5	e7.5	e6.8	9.6	10	17	18	9.7	4.0	4.0
2	3.6	4.0	e6.4	e7.5	e6.5	7.5	5.5	16	19	5.2	8.5	3.3
3	3.3	3.7	e6.0	e7.0	e6.8	6.1	5.9	18	16	2.4	9.0	3.0
4	2.9	3.8	e6.5	e7.1	e7.0	5.7	9.4	19	9.7	1.9	4.4	2.9
5	3.0	4.1	e6.5	e7.0	e6.8	5.6	20	38	8.7	1.6	5.8	2.8
6	3.3	4.2	e6.0	e7.5	e6.6	7.3	19	40	8.9	1.8	8.1	3.3
7	3.8	4.2	e6.0	e7.5	e6.4	9.7	17	36	11	1.6	4.4	5.0
8	3.7	3.9	e6.5	e7.6	e6.4	11	10	40	11	1.6	4.4	4.6
9	3.7	3.9	e6.5	e7.5	e6.4	9.8	10	46	12	3.4	6.9	4.4
10	3.5	3.6	e6.5	e7.5	e6.4	8.0	15	42	11	8.4	6.1	3.5
11	3.3	6.4	e6.0	e7.0	e6.4	7.7	21	41	11	4.1	5.4	2.5
12	3.1	7.1	e6.0	e6.7	e6.4	e6.8	18	39	8.7	4.1	3.9	2.2
13	3.1	e6.5	e6.5	e7.0	e6.4	5.8	21	38	6.6	9.6	3.6	2.6
14	3.2	e7.0	e6.6	e6.0	e6.4	7.2	18	36	6.6	10	4.1	3.4
15	3.5	e6.5	e6.5	e6.5	e5.8	5.8	21	35	3.6	5.8	5.7	3.1
16	3.7	e6.5	e7.0	e6.7	e5.4	3.9	23	33	2.4	5.8	6.6	3.6
17	3.4	e6.0	e7.0	e6.4	e5.1	4.2	22	36	2.0	7.7	4.1	5.7
18	3.2	e5.5	e7.5	e7.0	e5.0	5.8	23	43	3.4	6.5	3.8	4.6
19	2.7	e5.5	e7.5	e7.0	e6.0	11	28	36	6.6	3.3	3.7	3.3
20	2.5	e5.5	e7.5	e7.8	e7.5	9.8	28	29	7.1	2.1	4.0	2.9
21	2.6	e6.0	e7.5	e7.6	e6.8	e6.0	29	32	6.7	2.9	4.1	3.0
22	3.4	e6.0	e7.5	e8.1	e6.0	3.7	32	33	5.6	2.6	3.8	2.4
23	4.3	e6.0	e7.5	e8.0	e5.4	5.7	22	25	4.3	3.3	3.1	2.5
24	4.3	e6.0	e7.0	e8.0	e5.0	8.8	19	20	3.7	4.1	2.4	3.1
25	4.0	e6.5	e6.2	e7.5	e4.0	7.7	18	17	3.7	5.6	2.3	2.4
26	3.9	e6.5	e6.5	e7.5	e5.4	7.7	19	22	3.0	11	2.4	1.7
27	3.8	e6.5	e6.5	e7.5	e5.9	7.7	23	19	2.7	9.3	1.7	1.2
28	4.2	e6.5	e7.0	e7.5	e7.3	8.2	20	11	1.4	6.1	2.2	1.3
29	5.3	e6.0	e7.0	e7.4	---	9.8	13	13	4.9	5.2	2.5	1.3
30	4.6	e6.0	e7.5	e7.2	---	15	17	19	10	4.3	3.1	1.3
31	4.4	---	e7.5	e7.0	---	15	---	18	---	3.4	4.9	---
TOTAL	110.8	164.3	209.2	225.1	172.3	243.6	556.8	907	229.3	154.4	139.0	90.9
MEAN	3.57	5.48	6.75	7.26	6.15	7.86	18.6	29.3	7.64	4.98	4.48	3.03
MAX	5.3	7.1	7.5	8.1	7.5	15	32	46	19	11	9.0	5.7
MIN	2.5	3.6	6.0	6.0	4.0	3.7	5.5	11	1.4	1.6	1.7	1.2
AC-FT	220	326	415	446	342	483	1100	1800	455	306	276	180

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1985 - 2001, BY WATER YEAR (WY)

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
MEAN	5.40	6.42	5.53	5.12	5.48	9.01	28.1	51.6	24.5	9.50	8.86	5.38					
MAX	11.4	13.0	9.91	10.1	10.8	21.1	75.5	210	77.8	30.6	36.7	15.7					
(WY)	2000	1998	2000	2000	2000	1998	1999	1999	1999	1995	1999	1997					
MIN	.95	1.63	1.54	1.08	1.81	2.38	7.04	6.57	4.49	1.04	.90	1.16					
(WY)	1990	1990	1990	1990	1990	1991	1989	1989	1989	1989	1989	1989					

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1985 - 2001

ANNUAL TOTAL	4348.6	3202.7		
ANNUAL MEAN	11.9	8.77	13.3	
HIGHEST ANNUAL MEAN			39.6	1999
LOWEST ANNUAL MEAN			3.82	1989
HIGHEST DAILY MEAN	48	Apr 19	46	May 9
LOWEST DAILY MEAN	2.2	Sep 16	1.2	Sep 27
ANNUAL SEVEN-DAY MINIMUM	2.3	Sep 13	1.8	Sep 24
MAXIMUM PEAK FLOW			a84	May 5
MAXIMUM PEAK STAGE			7.58	May 5
ANNUAL RUNOFF (AC-FT)	8630	6350	9660	
10 PERCENT EXCEEDS	29	19	30	
50 PERCENT EXCEEDS	7.5	6.4	6.2	
90 PERCENT EXCEEDS	3.6	2.9	2.1	

e Estimated.

a From rating curve extended above 52 ft<sup>3</sup>/s on basis of slope-area measurement of peak flow.

b From slope-area measurement of peak flow.

c From floodmarks.

ARKANSAS RIVER BASIN

07103780 MONUMENT CREEK ABOVE NORTH GATE BOULEVARD AT U.S. AIR FORCE ACADEMY, CO--Continued

WATER-QUALITY RECORDS

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

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, UM-MF (COLS./100 ML) (31625)	E COLI, MTEC MF WATER (COL/100 ML) (31633)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)
OCT 25...	0815	3.7	403	7.6	6.3	10.7	<1.0	E27	E950	35.1	5.88	34.5	1.3
NOV 29...	0845	6.8	382	8.1	.1	11.7	1.0	21	12	33.5	6.59	32.5	1.3
FEB 28...	0930	11	370	8.2	.1	11.4	8.3	220	E80	30.1	7.31	27.0	1.3
APR 04...	0915	5.4	383	8.7	9.6	11.3	2.4	E9	--	29.4	11.0	28.7	1.2
JUN 27...	0945	2.5	398	8.4	20.6	8.3	1.5	100	83	34.1	8.80	29.1	1.4
AUG 08...	1015	5.0	463	8.4	20.9	9.2	1.6	120	54	35.9	11.2	36.1	1.2

DATE	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P) (00665)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P) (00671)	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BORON, TOTAL, RECOV-ERABLE (UG/L AS B) (01022)	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)	COPPER, TOTAL, RECOV-ERABLE (UG/L AS CU) (01042)
OCT 25...	.864	<.041	1.52	1.33	<2	<2.0	154	164	<.11	.04	<1	E.5	2.5
NOV 29...	1.49	.227	1.09	.977	<2	<2.0	147	145	<.11	.05	<1	<.8	2.6
FEB 28...	1.95	.251	1.45	1.00	E1	<2.0	138	144	E.06	.06	<1	<.8	8.1
APR 04...	1.16	.150	1.42	1.19	<2	<2.0	136	134	E.09	.04	<1	<.8	6.7
JUN 27...	.675	.031	.714	.546	E1	<2.0	128	134	<.10	.04	<1	E.6	2.8
AUG 08...	1.57	.011	1.55	1.26	E2	2.3	219	213	<.10	E.03	<1	<.8	4.2

DATE	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)	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)	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)
OCT 25...	2.4	340	40	<1	.26	47	41.4	<.14	<.23	2	2.04	<2.6	<2.4
NOV 29...	2.8	320	40	<1	.20	73	60.2	<.14	<.23	E1	1.10	<2.6	<2.4
FEB 28...	4.9	1340	30	2	.30	320	178	<.14	<.23	E1	1.11	<2.6	<2.4
APR 04...	4.1	330	60	M	.54	96	76.1	<.01	<.01	E2	.94	<2.6	<2.4
JUN 27...	2.5	470	50	<1	.15	104	80.1	<.01	<.01	E1	.83	<3.0	<2.0
AUG 08...	3.5	570	40	M	.13	78	53.9	<.00163	<.001766	2	1.00	<3.0	<2.0

DATE	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)	CYANIDE TOTAL (MG/L AS CN) (00720)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
OCT 25...	<.43	<1.0	<31	10	<.01	9	.09
NOV 29...	<.43	<1.0	E21	12	<.01	3	.06
FEB 28...	<.43	<1.0	32	14	<.01	96	3.0
APR 04...	<.43	<1.0	E19	13	<.01	11	.16
JUN 27...	<.40	<1.0	E17	9	<.01	5	.03
AUG 08...	<.40	<1.0	E26	14	<.01	13	.17

E Estimated laboratory analysis value.  
M Presence of material verified but not quantified.

07103780 MONUMENT CREEK ABOVE NORTH GATE BOULEVARD AT U.S. AIR FORCE ACADEMY, CO--Continued

MISCELLANEOUS FIELD MEASUREMENTS, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

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 02...	1705	3.3	442	18.6	MAY 29...	1120	9.6	317	16.6
DEC 06...	1125	6.7	444	.1	JUN 19...	1155	6.7	284	19.7
JAN 26...	1020	7.9	462	.1	JUL 11...	1205	4.4	362	24.5
MAR 01...	1325	9.7	332	4.4	AUG 13...	1340	3.2	351	26.8
APR 18...	1355	24	247	13.9	SEP 14...	1210	3.4	456	21.3

## ARKANSAS RIVER BASIN

07103780 MONUMENT CREEK ABOVE NORTH GATE BOULEVARD, AT U.S. AIR FORCE ACADEMY, CO--Continued

## PRECIPITATION RECORDS

PERIOD OF RECORD.--April 2000 to current year (seasonal records only).

GAGE.--Tipping-bucket rain gage with satellite telemetry.

REMARKS.--Records good. Daily data that are not published are either missing or of unacceptable quality.

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum daily precipitation, 1.56 inches, May 8, 2000.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum daily precipitation, 0.91 inch, May 5, 17.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	---	---	---	---	---	.00	.00	.00	.00	.47	.01
2	.00	---	---	---	---	---	.00	.02	.00	.01	.53	.02
3	.00	---	---	---	---	---	.00	.08	.00	.00	.01	.00
4	.00	---	---	---	---	---	.09	.31	.08	.00	.15	.00
5	.06	---	---	---	---	---	.00	.91	.01	.06	.89	.11
6	.06	---	---	---	---	---	.04	.00	.00	.00	.03	.02
7	.02	---	---	---	---	---	.00	.00	.07	.00	.00	.31
8	.00	---	---	---	---	---	.00	.00	.01	.00	.03	.12
9	.00	---	---	---	---	---	.00	.00	.01	.83	.03	.01
10	.00	---	---	---	---	---	.03	.05	.00	.07	.02	.00
11	.00	---	---	---	---	---	.15	.00	.00	.04	.01	.00
12	.00	---	---	---	---	---	.13	.00	.00	.06	.00	.00
13	.00	---	---	---	---	---	.00	.00	.40	.87	.01	.12
14	.00	---	---	---	---	---	.00	.00	.01	.06	.12	.01
15	.00	---	---	---	---	---	.00	.00	.00	.01	.06	.07
16	.00	---	---	---	---	---	.00	.00	.00	.00	.36	.07
17	.00	---	---	---	---	---	.01	.91	.00	.00	.00	.76
18	.00	---	---	---	---	---	.00	.00	.00	.00	.00	.00
19	.00	---	---	---	---	---	.00	.58	.00	.00	.00	.01
20	.00	---	---	---	---	---	.00	.01	.01	.00	.00	.00
21	.00	---	---	---	---	---	.00	.00	.00	.00	.41	.00
22	.25	---	---	---	---	---	.00	.00	.15	.00	.03	.00
23	.06	---	---	---	---	---	.00	.00	.00	.09	.00	.00
24	.09	---	---	---	---	---	.00	.00	.00	.08	.00	.00
25	.00	---	---	---	---	---	.00	.00	.00	.63	.00	.00
26	.00	---	---	---	---	---	.00	.07	.00	.77	.00	.00
27	.00	---	---	---	---	---	.00	.00	.00	.00	.00	.00
28	.11	---	---	---	---	---	.01	.00	.00	.00	.00	.00
29	.11	---	---	---	---	---	.00	.02	.07	.00	.00	.00
30	.01	---	---	---	---	---	.00	.00	.00	.00	.15	.00
31	.21	---	---	---	---	---	---	.00	---	.13	.14	---
TOTAL	0.98	---	---	---	---	---	0.46	2.96	0.82	3.71	3.45	1.64
MAX	.25	---	---	---	---	---	.15	.91	.40	.87	.89	.76

07103785 DEADMANS CREEK ABOVE DEADMANS LAKE AT U.S. AIR FORCE ACADEMY, CO

LOCATION.--Lat 39°01'27", long 104°54'03", in NE<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec.9, T.12 S., R.67 W., El Paso County, Hydrologic Unit 11020003, on left bank 100 ft upstream from Deadmans Lake, 1.2 mi northwest of the Air Force Academy Chapel, 3.7 mi west of Interstate-25, and 5.0 mi southwest of Monument.

DRAINAGE AREA.--1.55 mi<sup>2</sup>.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 2000 to current year.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 7,220 ft above sea level, from topographic map.

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 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.08	.12	.15	e.09	e.14	.11	.26	.30	.27	.04	.01	.04
2	.08	.12	e.14	e.09	e.14	.11	.32	.30	.26	.04	.06	.02
3	.08	.12	e.13	e.09	e.14	.11	.36	.29	.24	.03	.04	.02
4	.09	.12	e.13	e.09	e.14	.11	.41	.28	.27	.02	.02	.03
5	.09	.14	e.14	e.10	.13	.12	.43	.36	.30	.02	.07	.02
6	.09	.12	.14	e.10	.16	.12	.39	.48	.24	.02	.08	.01
7	.10	.11	.11	e.10	.16	.12	.36	.61	.22	.02	.04	.03
8	.11	.11	.10	e.10	.12	.12	.35	.89	.24	.02	.03	.04
9	.12	.12	.10	e.10	.13	.13	.33	1.1	.20	.02	.04	.04
10	.10	.11	.09	e.11	.15	.14	.31	1.1	.17	.11	.05	.03
11	.10	.12	e.11	e.11	.13	.14	.47	1.0	.14	.05	.05	.02
12	.09	.13	e.11	e.11	.08	.14	.31	.91	.13	.04	.02	.03
13	.09	.14	e.11	e.11	.08	.15	.31	.77	.15	.13	.02	.03
14	.09	e.14	e.11	e.12	.07	.16	.34	.68	.17	.24	.02	.02
15	.09	e.14	e.11	e.12	.07	.15	.39	.59	.14	.10	.03	.03
16	.09	e.14	e.11	e.12	.08	.13	.39	.53	.12	.07	.04	.04
17	.09	e.13	e.11	e.12	.08	.13	.44	.67	.11	.05	.04	.06
18	.09	e.13	e.10	e.13	.08	.14	.55	.69	.09	.04	.02	.05
19	.09	.13	e.10	e.13	.07	.15	.58	.61	.10	.04	.01	.03
20	.10	.11	e.10	e.13	.07	.16	.53	.56	.10	.04	.01	.02
21	.10	.10	e.10	e.14	.07	.19	.45	.52	.10	.04	.01	.02
22	.12	.10	e.10	e.14	.07	.20	.41	.46	.09	.03	.02	.02
23	.13	.08	e.10	e.14	.08	.20	.36	.42	.09	.03	.02	.02
24	.14	.10	e.09	e.14	.08	.20	.35	.40	.08	.05	.01	.02
25	.12	.09	e.09	e.14	.09	.21	.34	.40	.07	.03	.01	.02
26	.11	.12	.09	e.14	.09	.23	.32	.38	.07	.06	.01	.02
27	.11	.11	e.09	e.14	.10	.23	.31	.36	.07	.05	.01	.02
28	.12	.13	.08	e.14	.11	.22	.31	.35	.06	.02	.01	.02
29	.15	e.14	e.08	e.14	---	.22	.32	.34	.05	.02	.01	.02
30	.12	.14	e.08	e.14	---	.23	.31	.32	.04	.02	.01	.03
31	.12	---	e.09	e.14	---	.22	---	.29	---	.01	.03	---
TOTAL	3.20	3.61	3.29	3.71	2.91	4.99	11.31	16.96	4.38	1.50	0.85	0.82
MEAN	.10	.12	.11	.12	.10	.16	.38	.55	.15	.048	.027	.027
MAX	.15	.14	.15	.14	.16	.23	.58	1.1	.30	.24	.08	.06
MIN	.08	.08	.08	.09	.07	.11	.26	.28	.04	.01	.01	.01
AC-FT	6.3	7.2	6.5	7.4	5.8	9.9	22	34	8.7	3.0	1.7	1.6

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	.10	.12	.11	.12	.10	.16	.70	.56	.15	.049	.034	.049
MAX	.10	.12	.11	.12	.10	.16	1.02	.58	.16	.050	.040	.072
(WY)	2001	2001	2001	2001	2001	2001	2000	2000	2000	2000	2000	2000
MIN	.10	.12	.11	.12	.10	.16	.38	.55	.15	.048	.027	.027
(WY)	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001	2001

SUMMARY STATISTICS

FOR 2001 WATER YEAR

WATER YEARS 2000 - 2001

ANNUAL TOTAL	57.53											
ANNUAL MEAN	.16								.16			
HIGHEST ANNUAL MEAN									.16			2001
LOWEST ANNUAL MEAN									.16			2001
HIGHEST DAILY MEAN					1.1	May 9			1.3	Apr 14		2000
LOWEST DAILY MEAN					.01	Jul 31			a.00	Aug 2		2000
ANNUAL SEVEN-DAY MINIMUM					.01	Aug 24			.00	Aug 8		2000
MAXIMUM PEAK FLOW					b1.3	May 9			b1.5	Apr 9		2000
MAXIMUM PEAK STAGE					4.02	May 9			4.05	Apr 9		2000
ANNUAL RUNOFF (AC-FT)	114								114			
10 PERCENT EXCEEDS					.36				.57			
50 PERCENT EXCEEDS					.11				.11			
90 PERCENT EXCEEDS					.02				.02			

e Estimated.

a No flow many days during 2000 water year.

b From rating curve extended above 0.90 ft<sup>3</sup>/s.

## ARKANSAS RIVER BASIN

07103785 DEADMANS CREEK ABOVE DEADMANS LAKE AT U. S. AIR FORCE ACADEMY, CO--Continued

## PRECIPITATION RECORDS

PERIOD OF RECORD.--April 2000 to current year (seasonal records only).

GAGE.--Tipping-bucket rain gage with satellite telemetry. Elevation of gage is 7,220 ft above sea level, from topographic map.

REMARKS.--Records good. Daily data that are not published are either missing or of unacceptable quality.

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum daily precipitation, 1.66 inches, May 8, 2000.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum daily precipitation, 1.55 inches, July 13.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	---	---	---	---	---	.00	.00	.00	.02	.32	.04
2	.00	---	---	---	---	---	.00	.04	.00	.01	.39	.01
3	.00	---	---	---	---	---	.00	.01	.00	.00	.00	.00
4	.00	---	---	---	---	---	.00	.20	.16	.00	.09	.00
5	.07	---	---	---	---	---	.00	1.48	.09	.01	.17	.11
6	.03	---	---	---	---	---	.13	.22	.01	.00	.01	.04
7	.00	---	---	---	---	---	.02	.00	.14	.00	.00	.36
8	.02	---	---	---	---	---	.00	.00	.03	.01	.02	.12
9	.02	---	---	---	---	---	.00	.00	.00	.98	.10	.01
10	.00	---	---	---	---	---	.02	.09	.00	.07	.04	.00
11	.00	---	---	---	---	---	.20	.00	.00	.11	.00	.00
12	.00	---	---	---	---	---	.24	.00	.00	.09	.00	.00
13	.00	---	---	---	---	---	.01	.00	.57	1.55	.00	.14
14	.00	---	---	---	---	---	.00	.00	.01	.08	.19	.01
15	.00	---	---	---	---	---	.00	.00	.00	.00	.09	.03
16	.00	---	---	---	---	---	.00	.00	.00	.00	.31	.11
17	.00	---	---	---	---	---	.00	.83	.00	.00	.00	.71
18	.00	---	---	---	---	---	.00	.00	.00	.00	.00	.01
19	.00	---	---	---	---	---	.00	.42	.00	.00	.00	.00
20	.00	---	---	---	---	---	.03	.00	.00	.00	.00	.00
21	.00	---	---	---	---	---	.00	.02	.00	.05	.12	.00
22	.42	---	---	---	---	---	.00	.00	.23	.00	.08	.00
23	.08	---	---	---	---	---	.00	.00	.00	.13	.01	.00
24	.08	---	---	---	---	---	.00	.00	.01	.01	.00	.00
25	.01	---	---	---	---	---	.00	.00	.00	.22	.00	.00
26	.00	---	---	---	---	---	.00	.03	.06	.27	.00	.00
27	.00	---	---	---	---	---	.00	.00	.00	.00	.00	.00
28	.14	---	---	---	---	---	.01	.00	.00	.00	.00	.00
29	.17	---	---	---	---	---	.00	.04	.01	.00	.00	.00
30	.00	---	---	---	---	---	.00	.00	.00	.00	.00	.00
31	.14	---	---	---	---	---	---	.01	---	.09	.48	---
TOTAL	1.18	---	---	---	---	---	0.66	3.39	1.32	3.70	2.42	1.70
MAX	.42	---	---	---	---	---	.24	1.48	.57	1.55	.48	.71

07103790 MONUMENT CREEK BELOW SEWAGE TREATMENT PLANT AT U.S. AIR FORCE ACADEMY, CO

LOCATION.--Lat 38°58'53", long 104°49'50", in NW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec.30, T.12 S., R.66 W., El Paso County, Hydrologic Unit 11020003, on right bank at U.S. Air Force Academy 100 ft upstream from Sante Fe Recreation Trail footbridge, 1.0 mi west of Interstate 25, 1.2 mi southeast of Falcon Stadium, and 1.5 mi northwest of the south entrance to the U. S. Air Force Academy.

DRAINAGE AREA.--122 mi<sup>2</sup>.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 2000 to current year (seasonal records only).

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 6,420 ft above sea level, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, and those above 50 ft<sup>3</sup>/s, which are poor. Natural flow of stream affected by storage reservoirs, diversions for municipal use and sewage discharge. 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 (seasonal only).--Maximum discharge, 85 ft<sup>3</sup>/s, May 5, 2001, gage height, 4.25 ft, from rating curve extended above 44 ft<sup>3</sup>/s; minimum daily, 2.8 ft<sup>3</sup>/s, Aug. 13 and Sept. 27, 2001.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum discharge, 85 ft<sup>3</sup>/s, May 5, gage height, 4.25 ft, from rating curve extended above 44 ft<sup>3</sup>/s; minimum daily, 2.8 ft<sup>3</sup>/s, Aug. 13 and Sept. 27.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.0	e7.0	---	---	---	---	9.4	17	22	12	7.2	6.2
2	6.1	e7.0	---	---	---	---	5.1	16	24	9.0	10	5.1
3	5.8	e7.5	---	---	---	---	5.9	20	23	5.5	11	4.8
4	5.2	e7.5	---	---	---	---	7.9	21	16	4.1	5.6	4.7
5	4.9	e8.0	---	---	---	---	19	40	16	3.7	14	4.6
6	5.7	e8.0	---	---	---	---	19	46	14	3.9	8.0	4.9
7	5.8	e8.0	---	---	---	---	14	35	19	3.5	3.9	6.7
8	6.1	e8.5	---	---	---	---	9.3	37	18	e3.5	3.8	6.7
9	6.3	e8.5	---	---	---	---	8.6	41	18	e5.5	5.3	6.7
10	5.4	e8.0	---	---	---	---	15	39	15	e11	4.6	5.9
11	4.9	e8.5	---	---	---	---	21	37	14	5.9	3.8	5.2
12	4.3	e9.0	---	---	---	---	17	35	12	5.0	3.1	4.7
13	5.4	e9.0	---	---	---	---	23	37	11	12	2.8	4.5
14	5.6	e9.0	---	---	---	---	19	34	12	18	3.3	5.3
15	6.6	e8.5	---	---	---	---	23	35	9.1	10	5.4	5.1
16	6.5	e8.5	---	---	---	---	25	33	6.6	8.8	8.2	5.8
17	6.0	e8.0	---	---	---	---	23	35	5.3	10	6.2	6.9
18	e6.0	e8.0	---	---	---	---	25	44	5.2	9.5	5.3	7.0
19	e5.5	e8.0	---	---	---	---	29	40	8.9	7.0	5.1	5.3
20	e5.5	e8.0	---	---	---	---	28	30	9.7	5.7	5.0	4.6
21	e6.0	e8.5	---	---	---	---	28	31	9.5	6.2	5.5	4.7
22	e6.5	e8.5	---	---	---	---	31	30	7.6	6.0	5.7	4.3
23	e7.5	e8.5	---	---	---	---	22	25	7.4	6.4	5.3	4.2
24	e7.5	e8.0	---	---	---	---	18	21	5.5	7.2	4.3	4.4
25	e7.0	e8.0	---	---	---	---	17	17	5.6	9.4	3.9	3.8
26	e7.0	e8.5	---	---	---	---	18	21	5.2	14	3.8	3.5
27	e7.0	e9.0	---	---	---	---	23	20	5.0	18	3.2	2.8
28	e7.5	e10	---	---	---	---	e18	13	4.1	10	3.3	2.9
29	e8.0	e9.5	---	---	---	---	12	13	5.7	9.2	3.4	3.0
30	e7.5	e10	---	---	---	---	17	16	12	8.5	4.4	2.9
31	e7.0	---	---	---	---	---	---	19	---	7.4	7.2	---
TOTAL	192.1	251.0	---	---	---	---	550.2	898	346.4	255.9	171.6	147.2
MEAN	6.20	8.37	---	---	---	---	18.3	29.0	11.5	8.25	5.54	4.91
MAX	8.0	10	---	---	---	---	31	46	24	18	14	7.0
MIN	4.3	7.0	---	---	---	---	5.1	13	4.1	3.5	2.8	2.8
AC-FT	381	498	---	---	---	---	1090	1780	687	508	340	292

e Estimated.

## ARKANSAS RIVER BASIN

07103790 MONUMENT CREEK BELOW SEWAGE TREATMENT PLANT, AT U.S. AIR FORCE ACADEMY, CO--Continued

## PRECIPITATION RECORDS

PERIOD OF RECORD.--April 2000 to current year (seasonal records only).

GAGE.--Tipping-bucket rain gage with satellite telemetry.

REMARKS.--Records good. Daily data that are not published are either missing or of unacceptable quality.

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum daily precipitation, 1.62 inches, May 8, 2000.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum daily precipitation, 1.04 inches, May 5, but may have been more during period of missing record.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	---	---	---	---	.01	.00	.00	.00	.18	.03
2	.00	.00	---	---	---	---	.00	.04	.00	.00	.27	.01
3	.00	---	---	---	---	---	.00	.17	.00	.00	.01	.00
4	.00	---	---	---	---	---	.00	.57	.11	.00	.42	.00
5	.08	---	---	---	---	---	.00	1.04	.00	.00	.10	.10
6	.07	---	---	---	---	---	.01	.00	.00	.00	.02	.01
7	.01	---	---	---	---	---	.00	.00	.31	e.00	.00	.44
8	.00	---	---	---	---	---	.00	.00	.05	---	.00	.09
9	.00	---	---	---	---	---	.00	.00	.09	---	.01	.01
10	.01	---	---	---	---	---	.11	.02	.00	---	.02	.00
11	e.00	---	---	---	---	---	.28	.00	.00	.07	.01	.00
12	e.00	---	---	---	---	---	.11	.00	.00	.09	.34	.00
13	e.00	---	---	---	---	---	.00	.00	.45	.63	.11	.00
14	.00	---	---	---	---	---	.00	.01	.00	.43	.24	.00
15	.00	---	---	---	---	---	.00	.01	.00	.01	.02	.28
16	.00	---	---	---	---	---	.00	.02	.00	.00	.12	.03
17	.00	---	---	---	---	---	.00	.81	.00	.00	.00	.16
18	.00	---	---	---	---	---	.00	.00	.00	.00	.00	.01
19	.00	---	---	---	---	---	.00	.55	.00	.00	.00	.00
20	.00	---	---	---	---	---	.00	.00	.00	.00	.00	.00
21	.00	---	---	---	---	---	.00	.01	.00	.01	.10	.00
22	.37	---	---	---	---	---	.00	.00	.03	.01	.03	.00
23	.05	---	---	---	---	---	.00	.00	.00	.10	.00	.00
24	.08	---	---	---	---	---	.00	.00	.01	.06	.00	.01
25	.00	---	---	---	---	---	.00	.00	.01	.24	.00	.00
26	.00	---	---	---	---	---	.00	.03	.00	.37	.00	.00
27	.00	---	---	---	---	---	.00	.01	.00	.01	.00	.00
28	.11	---	---	---	---	---	.00	.08	.00	.00	.00	.00
29	.08	---	---	---	---	---	.00	.00	.10	.00	.01	.00
30	.00	---	---	---	---	---	.00	.01	.00	.00	.46	.00
31	.01	---	---	---	---	---	---	.00	---	.01	.25	---
TOTAL	0.87	---	---	---	---	---	0.52	3.38	1.16	---	2.72	1.18
MAX	.37	---	---	---	---	---	.28	1.04	.45	---	.46	.44

e Estimated.

07103797 WEST MONUMENT CREEK BELOW RAMPART RESERVOIR, CO

LOCATION.--Lat 38°58'30", long 104°57'18", in NE<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec.26, T.12 S., R.68 W., El Paso County, Hydrologic Unit 11020003, on right bank 0.1 mi below Wildcat Gulch, and 0.5 mi below Rampart Reservoir.

DRAINAGE AREA.--7.29 mi<sup>2</sup>.

PERIOD OF RECORD.--November 1993 to current year.

GAGE.--Water-stage recorder and satellite telemetry. Elevation of gage is 8,710 ft above sea level, from topographic map.

REMARKS.--No estimated daily discharges. Records good. Natural flow of stream affected by storage reservoir and transmountain 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.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.1	3.6	4.3	4.3	4.1	3.8	5.1	8.3	8.3	11	8.9	3.0
2	4.1	3.6	4.3	4.3	4.1	3.8	5.3	8.4	7.9	11	9.1	2.8
3	4.1	3.6	4.4	4.3	4.1	4.0	5.2	8.5	6.1	11	9.0	2.7
4	3.9	3.6	4.5	4.3	4.1	4.1	4.9	8.5	5.8	11	9.0	2.7
5	3.6	3.6	4.5	4.3	4.1	4.2	4.8	8.5	5.2	11	6.5	2.7
6	3.6	3.5	4.5	4.3	4.1	4.2	5.1	8.7	6.5	11	5.2	2.7
7	3.6	3.5	4.6	4.5	4.2	4.4	6.1	8.9	8.6	14	4.6	2.9
8	3.6	3.5	4.6	4.5	4.1	4.4	6.1	6.8	11	14	3.9	3.0
9	3.6	3.6	4.7	4.5	4.1	4.4	6.1	5.8	12	12	4.1	2.9
10	3.5	3.4	4.7	4.5	4.1	4.3	5.8	5.6	13	11	3.8	2.8
11	3.5	3.1	4.5	4.5	4.2	4.3	5.5	5.4	13	11	3.8	2.8
12	3.4	3.1	4.3	4.3	4.1	4.4	5.5	5.3	12	7.4	3.8	2.8
13	3.3	3.1	4.3	4.3	4.2	4.5	5.3	5.3	12	6.4	3.8	3.1
14	3.3	3.1	4.3	4.3	4.2	4.6	5.2	5.2	12	4.9	4.0	3.2
15	3.3	3.5	4.2	4.3	4.0	4.7	5.5	5.1	12	4.6	4.0	3.1
16	3.3	3.8	4.2	4.3	3.9	4.7	5.2	5.1	12	4.5	3.3	3.1
17	3.3	3.9	4.2	4.2	3.9	4.7	4.8	5.5	11	4.5	2.9	3.0
18	3.3	3.9	4.1	4.1	4.0	4.7	4.6	5.4	11	4.4	2.8	2.9
19	3.3	3.9	4.3	4.1	4.0	4.7	5.0	5.9	10	4.3	2.7	2.9
20	3.3	4.0	4.3	4.1	3.8	4.7	5.4	6.5	10	4.2	2.7	2.8
21	3.3	4.1	4.3	4.1	3.8	4.4	6.6	6.9	10	4.2	2.7	2.8
22	3.3	4.1	4.3	4.1	3.9	4.5	7.5	6.5	10	4.1	2.7	2.8
23	3.3	4.1	4.3	4.1	3.8	4.5	7.8	5.9	10	3.9	2.7	2.7
24	3.4	4.0	4.1	4.1	3.7	4.7	8.0	5.5	10	4.6	2.7	2.7
25	3.3	4.1	4.1	4.1	3.8	4.8	8.1	5.7	10	7.1	2.8	2.8
26	3.3	4.1	4.1	4.1	3.8	4.8	8.4	5.7	10	9.3	2.8	3.0
27	3.3	4.1	4.1	4.1	3.6	4.7	8.3	6.1	10	9.3	2.8	3.1
28	3.2	4.1	4.2	4.1	3.7	4.7	8.4	6.8	10	9.2	2.8	3.1
29	3.2	4.3	4.3	4.1	---	4.9	8.2	7.4	10	9.2	2.6	3.1
30	3.3	4.3	4.3	4.1	---	4.8	8.3	7.9	11	9.1	2.6	3.1
31	3.6	---	4.3	4.1	---	4.8	---	8.2	---	9.0	2.9	---
TOTAL	107.5	112.2	134.2	131.4	111.5	139.2	186.1	205.3	300.4	252.2	128.0	87.1
MEAN	3.47	3.74	4.33	4.24	3.98	4.49	6.20	6.62	10.0	8.14	4.13	2.90
MAX	4.1	4.3	4.7	4.5	4.2	4.9	8.4	8.9	13	14	9.1	3.2
MIN	3.2	3.1	4.1	4.1	3.6	3.8	4.6	5.1	5.2	3.9	2.6	2.7
AC-FT	213	223	266	261	221	276	369	407	596	500	254	173

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 2001, BY WATER YEAR (WY)

	1994	1995	1996	1997	1998	1999	2000	2001
MEAN	4.75	5.48	6.19	5.95	6.10	5.89	6.27	7.67
MAX	10.1	10.6	9.68	9.36	8.75	10.7	10.5	17.5
(WY)	1995	1995	1994	1996	1996	1994	1996	1996
MIN	3.47	3.48	3.82	3.69	3.91	4.18	3.74	3.44
(WY)	2001	1998	1998	1999	1999	2000	2000	1998

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1994 - 2001

ANNUAL TOTAL	1596.2	1895.1	
ANNUAL MEAN	4.36	5.19	6.01
HIGHEST ANNUAL MEAN			10.0
LOWEST ANNUAL MEAN			4.13
HIGHEST DAILY MEAN	7.2	Feb 10	14 Jul 7
LOWEST DAILY MEAN	3.0	Sep 12	2.6 Aug 29
ANNUAL SEVEN-DAY MINIMUM	3.0	Sep 10	2.7 Aug 18
MAXIMUM PEAK FLOW			28 Jul 7
MAXIMUM PEAK STAGE			5.19 Jul 7
ANNUAL RUNOFF (AC-FT)	3170	3760	4350
10 PERCENT EXCEEDS	6.7	9.2	11
50 PERCENT EXCEEDS	4.0	4.3	5.1
90 PERCENT EXCEEDS	3.3	3.0	3.6

a From rating curve extended above 30 ft<sup>3</sup>/s.

## ARKANSAS RIVER BASIN

07103800 WEST MONUMENT CREEK AT U.S. AIR FORCE ACADEMY, CO

LOCATION.--Lat 38°58'14", long 104°54'08", in SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec.28, T.12 S., R.67 W., El Paso County, Hydrologic Unit 11020003, on left bank 500 ft upstream from diversion to city of Colorado Springs water-treatment plant, 2.7 mi south of U.S. Air Force Academy chapel, and 4.4 mi upstream from mouth.

DRAINAGE AREA.--14.9 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WDR CO-99-1:1997 (M).

GAGE.--Water-stage recorder with satellite telemetry and concrete control. Elevation of gage is 7,180 ft above sea level, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. Natural flow of stream affected by trans-mountain diversions from Colorado River basin, storage reservoirs, and operation of water-supply system. 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 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.67	.43	e.50	2.3	e.75	.71	.83	.99	.98	.42	.58	.64
2	1.3	.44	e.50	2.4	.76	.71	.90	.98	.92	.42	.78	.52
3	2.5	5.0	e.52	2.5	.66	e.70	.95	.97	.91	.40	.65	.48
4	4.5	3.2	.54	2.5	.61	.67	1.0	.97	.90	.38	6.9	.47
5	4.4	3.7	.55	2.5	.64	.70	1.0	1.3	.85	.39	6.9	.47
6	4.3	4.8	.55	2.6	.62	.73	1.0	1.6	.80	.36	3.0	.47
7	4.4	4.8	.55	2.6	.65	.73	.94	2.0	.80	.35	.70	.47
8	4.5	4.7	.90	2.5	.62	.73	.91	2.3	.79	.35	.58	.50
9	4.4	4.9	1.7	2.6	.65	.74	.89	2.4	.75	.36	.64	.49
10	4.3	4.9	1.7	2.6	.67	.71	.92	2.2	.71	.39	.67	.47
11	4.4	5.0	e1.5	2.5	.66	.71	.89	2.0	.66	.35	.61	.43
12	4.5	4.9	e1.5	2.5	.69	e.72	.88	1.9	.64	.47	.61	1.3
13	4.5	4.8	e1.4	2.6	.71	.72	.91	1.8	.70	7.9	.61	2.4
14	4.5	4.8	1.3	2.4	.73	.73	1.1	1.7	.77	5.2	.90	1.4
15	4.5	4.9	.62	e2.5	.73	.72	1.1	1.6	.64	4.8	.91	.43
16	4.5	4.9	.64	2.8	.70	e.72	1.1	1.6	.61	4.6	.77	.43
17	4.5	4.9	.59	2.5	.73	e.72	1.1	1.9	.58	5.4	.70	.44
18	4.4	4.9	e.59	2.6	.73	e.72	1.1	1.9	.57	5.6	.64	.45
19	3.1	5.0	e.59	2.6	.74	e.75	1.2	1.7	.54	.69	.58	.42
20	1.2	5.1	.59	2.6	e1.5	.79	1.2	1.6	.55	.55	.58	.38
21	.57	5.1	e1.0	2.6	e1.0	.89	1.1	1.5	.52	.49	.56	.38
22	.48	5.6	e1.5	2.6	.74	.89	1.1	1.4	.53	.52	.58	.38
23	.48	5.7	1.6	2.6	.71	.89	1.0	1.4	.52	.54	.63	.42
24	.53	5.6	1.9	2.6	.71	.89	.98	1.8	.49	.53	.57	.42
25	.45	5.6	2.2	2.6	.72	.87	.98	1.3	.47	.51	.55	.41
26	.42	5.6	2.1	2.6	.67	.82	1.0	1.2	.47	.68	.53	.42
27	.40	5.5	2.1	2.1	.73	.77	1.0	1.2	.47	.65	.51	.41
28	.44	5.5	2.1	.83	e.72	.75	1.0	1.2	.44	.51	.51	.41
29	.49	3.6	2.1	.80	---	.74	1.0	1.1	.42	.48	.49	.41
30	.44	.70	2.1	.74	---	.78	.99	1.1	.42	.46	.49	.41
31	.44	---	2.1	e.75	---	.77	---	1.0	---	.50	.54	---
TOTAL	80.51	134.57	38.13	71.52	20.55	23.49	30.07	47.61	19.42	45.25	34.27	17.13
MEAN	2.60	4.49	1.23	2.31	.73	.76	1.00	1.54	.65	1.46	1.11	.57
MAX	4.5	5.7	2.2	2.8	1.5	.89	1.2	2.4	.98	7.9	6.9	2.4
MIN	.40	.43	.50	.74	.61	.67	.83	.97	.42	.35	.49	.38
AC-FT	160	267	76	142	41	47	60	94	39	90	68	34

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 2001, BY WATER YEAR (WY)

MEAN	1.92	1.37	.97	.76	.50	.56	2.16	7.15	4.57	2.35	2.73	1.74
MAX	11.7	7.74	8.62	8.78	4.21	2.46	12.4	41.2	30.6	23.3	23.8	20.3
(WY)	1972	1971	1971	1971	1999	1971	1971	1999	1997	1970	1970	1970
MIN	.000	.000	.000	.000	.000	.001	.11	.20	.031	.017	.000	.000
(WY)	1993	1993	1994	1993	1976	1991	1989	1976	1976	1993	1993	1993

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1970 - 2001
ANNUAL TOTAL	620.32	562.52	
ANNUAL MEAN	1.69	1.54	2.00
HIGHEST ANNUAL MEAN			13.4
LOWEST ANNUAL MEAN			.10
HIGHEST DAILY MEAN	9.4	7.9	e116
LOWEST DAILY MEAN	.40	.35	a.00
ANNUAL SEVEN-DAY MINIMUM	.41	.36	.00
MAXIMUM PEAK FLOW		16	b132
MAXIMUM PEAK STAGE		1.83	c3.41
ANNUAL RUNOFF (AC-FT)	1230	1120	1450
10 PERCENT EXCEEDS	4.5	4.5	5.0
50 PERCENT EXCEEDS	.94	.80	.57
90 PERCENT EXCEEDS	.48	.44	.07

e Estimated.

a No flow many days during 1976, 1991-92.

b From rating curve extended above 105 ft<sup>3</sup>/s.

c From floodmarks, maximum gage height, 3.88 ft, Dec. 22, 1983, backwater from ice.

07103800 WEST MONUMENT CREEK AT U.S. AIR FORCE ACADEMY, CO--Continued

PRECIPITATION RECORDS

PERIOD OF RECORD.--May 2000 to current year (seasonal records only).

GAGE.--Tipping-bucket rain gage with satellite telemetry.

REMARKS.--Records good. Daily data that are not published are either missing or of unacceptable quality.

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum daily precipitation, 1.34 inches, May 5, 2001.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum daily precipitation, 1.34 inches, May 5.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	---	---	---	---	---	.00	.00	.00	.03	.80	.02
2	.00	---	---	---	---	---	.00	.04	.00	.02	.19	.00
3	.00	---	---	---	---	---	.00	.01	.00	.00	.00	.00
4	.00	---	---	---	---	---	.00	.23	.17	.00	.11	.00
5	.10	---	---	---	---	---	.00	1.34	.01	.06	.14	.08
6	.00	---	---	---	---	---	.12	.36	.00	.00	.01	.08
7	.00	---	---	---	---	---	.00	.00	.16	.00	.00	.15
8	.05	---	---	---	---	---	.00	.00	.02	.00	.02	.29
9	.02	---	---	---	---	---	.00	.00	.18	.45	.08	.00
10	.00	---	---	---	---	---	.04	.00	.01	.02	.06	.00
11	.00	---	---	---	---	---	.19	.00	.00	.02	.00	.00
12	.00	---	---	---	---	---	.14	.00	.00	.18	.36	.00
13	.00	---	---	---	---	---	.03	.00	.52	1.06	.08	.00
14	.00	---	---	---	---	---	.00	.01	.00	.29	.75	.00
15	.00	---	---	---	---	---	.00	.00	.00	.00	.04	.19
16	.00	---	---	---	---	---	.00	.04	.00	.00	.09	.06
17	.00	---	---	---	---	---	.00	.83	.00	.00	.00	.28
18	.00	---	---	---	---	---	.00	.01	.00	.03	.00	.00
19	.00	---	---	---	---	---	.00	.27	.00	.00	.00	.01
20	.00	---	---	---	---	---	.03	.01	.00	.00	.05	.00
21	.00	---	---	---	---	---	.00	.10	.00	.04	.00	.00
22	.30	---	---	---	---	---	.06	.00	.10	.00	.10	.00
23	.06	---	---	---	---	---	.00	.00	.00	.20	.02	.00
24	.13	---	---	---	---	---	.00	.00	.00	.02	.00	.00
25	.00	---	---	---	---	---	.00	.00	.00	.28	.00	.00
26	.00	---	---	---	---	---	.00	.03	.01	.54	.00	.00
27	.00	---	---	---	---	---	.01	.00	.00	.00	.00	.00
28	.16	---	---	---	---	---	.00	.00	.00	.00	.00	.00
29	.14	---	---	---	---	---	.00	.05	.01	.00	.00	.02
30	.00	---	---	---	---	---	.00	.00	.00	.00	.00	.00
31	.16	---	---	---	---	---	---	.00	---	.00	.38	---
TOTAL	1.12	---	---	---	---	---	0.62	3.33	1.19	3.24	3.28	1.18
MAX	.30	---	---	---	---	---	.19	1.34	.52	1.06	.80	.29

## ARKANSAS RIVER BASIN

07103930 WEST MONUMENT CREEK AT MOUTH, AT U.S. AIR FORCE ACADEMY CO

LOCATION.--Lat 38°57'32", long 104°50'08", in NW<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec.36, T.12 S., R.67 W., El Paso County, Hydrologic Unit 11020003, on left bank 75 ft downstream from Union Pacific railroad bridge at U. S. Air Force Academy, 0.2 mi north of Ice Lake, and 2.0 mi west of Interstate 25..

DRAINAGE AREA.--23.5 mi<sup>2</sup>.

PERIOD OF RECORD.--March 2000 to current year.

GAGE.--Water-stage recorder and satellite telemetry. Elevation of gage is 6,380 ft above sea level, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Natural flow of stream affected by storage reservoir and transmountain 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.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.0	1.3	1.5	1.5	.73	1.0	.96	1.4	1.8	.06	.85	.63
2	.97	1.3	1.1	1.5	.71	1.0	.92	1.2	1.7	.04	1.0	.52
3	1.5	5.4	.98	.97	.69	.99	.92	1.6	1.7	.03	.92	.46
4	2.2	5.4	.93	.85	.65	1.0	1.3	1.7	1.8	.02	4.0	.45
5	2.9	5.9	1.1	.72	.68	1.0	1.6	1.9	1.6	.02	7.4	.46
6	4.5	8.6	1.0	.69	.78	1.0	1.7	2.2	1.3	.01	4.1	.48
7	5.9	10	1.0	.91	.83	1.0	1.4	1.8	.95	.01	1.3	.53
8	6.0	12	.86	1.5	.70	.86	1.2	3.1	.87	.00	.89	.58
9	6.8	13	.81	1.8	.71	.81	1.2	5.2	.80	.00	.66	.59
10	7.0	12	.92	1.9	.78	.95	1.2	5.0	.93	.00	.73	.54
11	6.8	12	1.2	2.0	.70	.78	1.4	4.6	1.0	.00	.57	.50
12	7.0	10	1.1	2.2	.75	.81	1.6	3.8	.98	.01	.56	.50
13	6.9	e9.6	1.7	2.1	.77	.83	1.8	4.2	1.0	4.1	.51	1.2
14	6.8	e9.2	1.9	1.8	.73	.79	2.0	3.8	.82	6.8	.49	1.2
15	6.8	8.7	1.1	1.2	.74	.74	2.1	2.7	.68	5.4	.93	.80
16	6.9	e8.7	.95	.98	.83	.82	2.3	3.4	.59	5.0	.93	.77
17	7.0	e8.7	.88	1.6	.96	.91	2.2	4.5	.51	5.3	.89	.71
18	7.1	e8.7	.81	3.4	.79	.82	2.2	5.3	.53	9.5	.78	.70
19	5.8	e8.9	.71	3.4	.81	.79	1.7	5.1	.54	2.2	.70	.57
20	1.7	e9.2	.68	3.3	3.8	.98	1.7	3.6	.48	1.3	.66	.52
21	2.3	9.4	.62	1.9	2.1	1.0	1.6	2.6	.48	1.3	.69	.49
22	1.9	9.4	.66	1.2	1.3	1.1	1.5	2.2	.39	1.1	.66	.47
23	1.6	e9.4	.62	2.0	1.1	1.1	1.7	2.7	.32	1.0	.67	.47
24	1.6	9.5	.59	1.6	.94	.96	1.4	2.8	.21	1.0	.61	.47
25	1.5	9.2	.60	.96	.87	.87	1.4	2.5	.13	.98	.59	.45
26	1.4	8.9	.60	.87	.82	1.1	1.3	2.4	.08	1.1	.58	.43
27	1.3	9.0	.62	.81	.82	1.2	1.3	2.3	.07	1.1	.53	.40
28	1.3	8.5	.70	.78	.86	1.0	1.2	2.2	.14	.94	.50	.37
29	1.3	6.5	.63	.74	---	1.0	1.2	2.1	.08	.83	.50	.39
30	1.3	2.2	.69	.83	---	1.0	1.2	2.1	.06	.73	.48	.42
31	1.3	---	1.4	.81	---	.97	---	2.0	---	.59	.51	---
TOTAL	118.37	250.6	28.96	46.82	26.95	29.18	45.20	92.0	22.54	50.47	35.19	17.07
MEAN	3.82	8.35	.93	1.51	.96	.94	1.51	2.97	.75	1.63	1.14	.57
MAX	7.1	13	1.9	3.4	3.8	1.2	2.3	5.3	1.8	9.5	7.4	1.2
MIN	.97	1.3	.59	.69	.65	.74	.92	1.2	.06	.00	.48	.37
AC-FT	235	497	57	93	53	58	90	182	45	100	70	34

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000 - 2001, BY WATER YEAR (WY)

MEAN	3.82	8.35	.93	1.51	.96	.94	4.44	2.98	1.09	1.16	.73	.62
MAX	3.82	8.35	.93	1.51	.96	.94	7.38	2.99	1.44	1.63	1.14	.68
(WY)	2001	2001	2001	2001	2001	2001	2000	2000	2000	2001	2001	2000
MIN	3.82	8.35	.93	1.51	.96	.94	1.51	2.97	.75	.69	.33	.57
(WY)	2001	2001	2001	2001	2001	2001	2001	2001	2001	2000	2000	2001

## SUMMARY STATISTICS

## FOR 2001 WATER YEAR

## WATER YEARS 2000 - 2001

ANNUAL TOTAL	763.35		
ANNUAL MEAN	2.09	2.09	
HIGHEST ANNUAL MEAN		2.09	2001
LOWEST ANNUAL MEAN		2.09	2001
HIGHEST DAILY MEAN	13	Nov 9	16
LOWEST DAILY MEAN	.00	Jul 8	a.00
ANNUAL SEVEN-DAY MINIMUM	.00	Jul 6	.00
MAXIMUM PEAK FLOW	b20	Feb 20	b20
MAXIMUM PEAK STAGE	4.46	Feb 20	c4.46
ANNUAL RUNOFF (AC-FT)	1510		1520
10 PERCENT EXCEEDS	6.6		6.8
50 PERCENT EXCEEDS	1.0		1.0
90 PERCENT EXCEEDS	.48		.41

e Estimated.

a Also occurred July 9-11, 2001

b From rating curve extended above 10 ft<sup>3</sup>/s.

c Maximum gage height, 4.66 ft, Apr 14, 2000.

07103940 MONUMENT CREEK AT SOUTH BOUNDARY AT U.S. AIR FORCE ACADEMY, CO

LOCATION.--Lat 38°57'15", long 104°50'00", in NE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec.1, T.13 S., R.67 W., El Paso County, Hydrologic Unit 11020003, on the U. S. Air Force Academy, on left bank at the south boundary, 400 feet downstream from the Sante Fe Recreation Trail footbridge, 0.2 mi south of Ice Lake, and 1.5 mi west of Interstate 25.

DRAINAGE AREA.--150 mi<sup>2</sup>.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 2000 to current year.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 6,350 ft above sea level, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. Natural flow of stream affected by storage and diversions above the station for the municipal supply of Monument and discharge from the sewage treatment facility upstream of the site. 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 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.8	8.6	e11	e13	e11	15	16	27	24	14	5.5	7.6
2	7.8	8.2	e11	e13	e10	14	11	24	25	11	8.4	5.9
3	8.2	11	e12	e13	e10	14	12	24	24	8.1	13	5.6
4	8.6	11	e11	e14	e10	14	16	21	17	7.1	9.2	5.3
5	9.0	11	e11	e14	e10	13	27	42	17	6.9	19	5.3
6	11	13	e10	e12	e10	14	26	60	15	6.9	17	5.5
7	13	13	e10	e13	e10	17	21	48	19	7.0	7.5	8.0
8	12	14	e8.0	e14	e10	17	14	50	18	7.0	6.0	7.9
9	13	14	e8.5	e12	e10	16	12	58	17	8.9	6.8	8.2
10	12	13	e9.2	e11	e10	16	20	55	16	16	6.2	7.1
11	12	13	e10	e12	e10	16	25	54	14	8.8	7.5	6.1
12	12	e13	e10	e12	e9.8	13	21	52	13	8.3	9.2	5.5
13	11	e12	e9.5	e11	e9.6	14	27	51	12	19	7.2	6.6
14	11	e12	e10	e11	13	14	23	48	13	29	8.2	7.5
15	12	e12	e10	e13	14	12	26	46	9.9	19	10	6.6
16	12	e12	e10	e13	16	11	28	44	8.2	16	12	7.4
17	11	e12	e10	e12	18	12	26	48	7.5	17	9.3	8.0
18	11	e12	e11	e12	13	12	27	59	7.4	18	7.7	9.3
19	9.8	e12	e11	e11	13	17	32	55	11	11	7.0	7.0
20	7.9	e11	e11	e10	13	17	31	42	11	8.2	6.5	6.2
21	7.8	11	e11	e10	12	14	31	43	11	8.3	7.0	6.1
22	8.1	11	e11	e10	12	11	35	44	9.2	8.0	7.5	5.7
23	8.6	11	e11	e11	13	12	25	38	9.1	8.0	7.2	5.3
24	8.9	10	e11	e11	12	16	21	31	7.9	8.8	5.6	5.7
25	8.0	10	e11	e11	13	15	20	24	8.0	9.9	5.2	5.4
26	8.0	11	e11	e10	13	15	20	30	7.6	14	5.1	5.1
27	8.4	11	e11	e10	16	15	26	28	7.0	19	4.5	4.5
28	8.4	12	e11	e10	15	15	24	18	6.5	9.4	4.4	4.6
29	9.3	11	e12	e10	---	17	15	18	7.0	7.7	4.7	4.8
30	9.1	e11	e12	e11	---	21	23	25	13	6.6	5.4	4.9
31	8.7	---	e12	e12	---	21	---	24	---	5.2	8.6	---
TOTAL	305.4	346.8	328.2	362	336.4	460	681	1231	385.3	352.1	248.4	188.7
MEAN	9.85	11.6	10.6	11.7	12.0	14.8	22.7	39.7	12.8	11.4	8.01	6.29
MAX	13	14	12	14	18	21	35	60	25	29	19	9.3
MIN	7.8	8.2	8.0	10	9.6	11	11	18	6.5	5.2	4.4	4.5
AC-FT	606	688	651	718	667	912	1350	2440	764	698	493	374

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000 - 2001, BY WATER YEAR (WY)

	2000	2001	2001	2001	2001	2001	2000	2001	2000	2001	2000	2001
MEAN	9.85	11.6	10.6	11.7	12.0	14.8	37.2	37.9	13.0	10.2	8.78	7.33
MAX	9.85	11.6	10.6	11.7	12.0	14.8	51.7	39.7	13.2	11.4	9.55	8.37
(WY)	2001	2001	2001	2001	2001	2001	2000	2001	2000	2001	2000	2000
MIN	9.85	11.6	10.6	11.7	12.0	14.8	22.7	36.1	12.8	8.96	8.01	6.29
(WY)	2001	2001	2001	2001	2001	2001	2001	2001	2001	2000	2001	2001

SUMMARY STATISTICS

FOR 2001 WATER YEAR

WATER YEARS 2000 - 2001

ANNUAL TOTAL	5225.3		
ANNUAL MEAN	14.3	14.3	
HIGHEST ANNUAL MEAN		14.3	2001
LOWEST ANNUAL MEAN		14.3	2001
HIGHEST DAILY MEAN	60	May 6	66
LOWEST DAILY MEAN	4.4	Aug 28	4.4
ANNUAL SEVEN-DAY MINIMUM	5.0	Aug 24	5.0
MAXIMUM PEAK FLOW	a95	May 5	a100
MAXIMUM PEAK STAGE	4.43	May 5	4.47
ANNUAL RUNOFF (AC-FT)	10360		10370
10 PERCENT EXCEEDS	25		42
50 PERCENT EXCEEDS	11		12
90 PERCENT EXCEEDS	6.9		6.9

e Estimated.

a From rating curve extended above 58 ft<sup>3</sup>/s.

## ARKANSAS RIVER BASIN

07103940 MONUMENT CREEK AT SOUTH BOUNDARY AT U.S. AIR FORCE ACADEMY, CO--Continued

## PRECIPITATION RECORDS

PERIOD OF RECORD.--April 2000 to current year (seasonal records only).

GAGE.--Tipping-bucket rain gage with satellite telemetry.

REMARKS.--Records good. Daily data that are not published are either missing or of unacceptable quality.

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum daily precipitation, 1.83 inches, May 8, 2000.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum daily precipitation, 1.53 inches, July 13.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	---	---	---	---	---	.00	.00	.00	.00	.25	.01
2	.00	---	---	---	---	---	.00	.00	.00	.00	.34	.00
3	.00	---	---	---	---	---	.00	.07	.00	.00	.01	.00
4	.00	---	---	---	---	---	.00	.42	.15	.00	.05	.00
5	.10	---	---	---	---	---	.00	.80	.01	.00	.32	.21
6	.08	---	---	---	---	---	.01	.00	.00	.00	.01	.04
7	.03	---	---	---	---	---	.00	.00	.14	.00	.00	.05
8	.01	---	---	---	---	---	.00	.00	.01	.00	.00	.00
9	.00	---	---	---	---	---	.00	.00	.02	.12	.01	.00
10	.01	---	---	---	---	---	.17	.00	.00	.00	.02	.00
11	.00	---	---	---	---	---	.08	.00	.00	.01	.00	.00
12	.00	---	---	---	---	---	.11	.00	.00	.10	.10	.00
13	.00	---	---	---	---	---	.00	.00	.35	1.53	.03	.00
14	.00	---	---	---	---	---	.01	.00	.00	.38	.00	.00
15	.00	---	---	---	---	---	.00	.00	.00	.14	.00	.31
16	.00	---	---	---	---	---	.00	.01	.00	.00	.00	.02
17	.00	---	---	---	---	---	.01	.66	.00	.00	.00	.21
18	.00	---	---	---	---	---	.00	.00	.00	.00	.00	.00
19	.00	---	---	---	---	---	.00	.54	.00	.00	.00	.00
20	.00	---	---	---	---	---	.00	.01	.02	.00	.00	.00
21	.00	---	---	---	---	---	.00	.00	.00	.00	.00	.01
22	.36	---	---	---	---	---	.00	.00	.03	.00	.00	.00
23	.04	---	---	---	---	---	.00	.00	.00	.01	.00	.00
24	.10	---	---	---	---	---	.00	.00	.04	.01	.00	.00
25	.00	---	---	---	---	---	.00	.00	.02	.19	.00	.00
26	.00	---	---	---	---	---	.00	.03	.00	.40	.00	.00
27	.00	---	---	---	---	---	.00	.00	.00	.01	.00	.00
28	.11	---	---	---	---	---	.00	.02	.00	.00	.00	.00
29	.03	---	---	---	---	---	.00	.01	.04	.00	.00	.00
30	.01	---	---	---	---	---	.00	.00	.02	.00	.00	.00
31	.01	---	---	---	---	---	---	.00	---	.03	.28	---
TOTAL	0.89	---	---	---	---	---	0.39	2.57	0.85	2.93	1.42	0.86
MAX	.36	---	---	---	---	---	.17	.80	.35	1.53	.34	.31

07103960 KETTLE CREEK ABOVE U. S. AIR FORCE ACADEMY, CO

LOCATION.--Lat 38°58'34", long 104°47'55", in NW<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec.29, T.12 S., R.66 W., El Paso County, Hydrologic Unit 11020003, on right bank 70 ft downstream from Highway 83, 0.5 mi upstream from Kettle Creek dam, 0.6 mi east of Interstate 25, and 2.7 mi upstream from mouth.

DRAINAGE AREA.--16.0 mi<sup>2</sup>.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 2000 to current year (seasonal records only).

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 6,620 ft above sea level, from topographic map.

REMARKS.--Records fair except for estimated daily discharges and those above 3.2 ft<sup>3</sup>/s, which are poor. Natural flow of stream affected by runoff from industrial and residential areas of northeast Colorado Springs. 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 (seasonal only).--Maximum discharge, 37.0 ft<sup>3</sup>/s, July 17, 2000, gage height, 4.40 ft, from rating curve extended above 3.2 ft<sup>3</sup>/s; minimum daily discharge, 0.09 ft<sup>3</sup>/s (estimated), Aug. 15, 2000.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum discharge, 35.0 ft<sup>3</sup>/s, June 7, gage height, 4.37 ft, from rating curve extended above 3.2 ft<sup>3</sup>/s; minimum daily discharge, 0.16 ft<sup>3</sup>/s, July 8.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e.34	.41	---	---	---	---	2.1	e1.1	1.1	.47	.38	1.9
2	e.32	.43	---	---	---	---	2.0	e1.1	.97	.44	.83	1.3
3	e.28	.50	---	---	---	---	1.9	e1.2	1.1	.43	1.5	.71
4	.24	.55	---	---	---	---	1.7	1.1	1.2	.36	1.6	.31
5	.22	.58	---	---	---	---	2.0	1.0	1.2	.32	1.5	.29
6	.29	.43	---	---	---	---	2.3	1.3	1.3	.22	1.7	.29
7	.28	.35	---	---	---	---	1.8	1.9	3.2	.18	1.7	.35
8	.30	.42	---	---	---	---	1.2	1.9	3.9	.16	1.6	.29
9	e.28	.39	---	---	---	---	.99	1.7	3.0	1.2	1.9	.50
10	.26	.35	---	---	---	---	1.1	1.5	1.8	.90	1.8	.41
11	e.27	.37	---	---	---	---	2.0	1.5	2.3	.86	1.2	.27
12	.27	.45	---	---	---	---	1.8	1.4	1.8	.68	1.2	.26
13	.23	.48	---	---	---	---	1.3	1.2	1.4	.65	1.1	.31
14	.27	.47	---	---	---	---	1.3	1.2	1.0	1.3	1.4	.24
15	.30	.51	---	---	---	---	1.3	.88	1.0	.99	1.4	.28
16	.33	.46	---	---	---	---	1.2	.67	1.3	1.2	1.7	.26
17	.37	.43	---	---	---	---	1.1	.80	1.1	1.1	1.4	.54
18	.37	.42	---	---	---	---	1.2	1.1	.92	.59	1.0	.99
19	.39	.41	---	---	---	---	1.4	2.4	.84	.48	1.0	.73
20	.43	.47	---	---	---	---	1.1	2.0	.87	.39	1.0	.41
21	.46	.52	---	---	---	---	1.0	3.1	.91	.59	1.1	.42
22	.55	.63	---	---	---	---	.96	3.2	.82	.57	.94	.41
23	.52	.60	---	---	---	---	e1.0	3.1	.92	.67	1.1	.42
24	.67	.60	---	---	---	---	e1.0	2.6	.83	.56	1.1	.44
25	.43	.61	---	---	---	---	e1.0	1.7	.84	.92	1.3	.37
26	.28	.59	---	---	---	---	e1.0	1.7	.77	1.6	1.7	.38
27	.30	.61	---	---	---	---	e1.0	2.7	.63	1.0	1.5	.37
28	.35	.59	---	---	---	---	e1.0	2.9	.54	1.0	1.7	.34
29	.37	.57	---	---	---	---	e1.1	2.8	.52	.78	1.8	.36
30	.36	e.61	---	---	---	---	e1.1	2.3	.45	.54	2.4	.37
31	.38	---	---	---	---	---	---	1.3	---	.29	1.8	---
TOTAL	10.71	14.81	---	---	---	---	40.95	54.35	38.53	21.44	43.35	14.52
MEAN	.35	.49	---	---	---	---	1.37	1.75	1.28	.69	1.40	.48
MAX	.67	.63	---	---	---	---	2.3	3.2	3.9	1.6	2.4	1.9
MIN	.22	.35	---	---	---	---	.96	.67	.45	.16	.38	.24
AC-FT	21	29	---	---	---	---	81	108	76	43	86	29

e Estimated.

## ARKANSAS RIVER BASIN

07103960 KETTLE CREEK ABOVE U.S. AIR FORCE ACADEMY, CO--Continued

## PRECIPITATION RECORDS

PERIOD OF RECORD.--April 2000 to current year (seasonal records only).

GAGE.--Tipping-bucket rain gage with satellite telemetry.

REMARKS.--Records good. Daily data that are not published are either missing or of unacceptable quality.

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum daily precipitation, 1.88 inches, May 8, 2000.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum daily precipitation, 1.02 inches, July 9.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	---	---	---	---	---	.00	.00	.00	.00	.13	.00
2	.00	---	---	---	---	---	.00	.05	.00	.00	.38	.02
3	.00	---	---	---	---	---	.00	.14	.00	.00	.10	.00
4	.00	---	---	---	---	---	.00	.48	.04	.00	.06	.00
5	.08	---	---	---	---	---	.00	.94	.01	.00	.03	.11
6	.05	---	---	---	---	---	.00	.00	.00	.00	.02	.14
7	.01	---	---	---	---	---	.00	.00	.33	.00	.00	.38
8	.00	---	---	---	---	---	.00	.00	.00	.00	.00	.08
9	.00	---	---	---	---	---	.00	.00	.03	1.02	.02	.01
10	.00	---	---	---	---	---	.05	.05	.00	.04	.02	.00
11	.00	---	---	---	---	---	.23	.00	.00	.01	.00	.00
12	.00	---	---	---	---	---	.13	.00	.00	.16	.22	.00
13	.00	---	---	---	---	---	.00	.00	.36	.60	.08	.00
14	.00	---	---	---	---	---	.00	.00	.00	.94	.42	.00
15	.00	---	---	---	---	---	.00	.00	.00	.01	.05	.22
16	.00	---	---	---	---	---	.00	.01	.00	.00	.09	.01
17	.00	---	---	---	---	---	.00	.92	.00	.00	.00	.14
18	.00	---	---	---	---	---	.00	.00	.00	.00	.00	.00
19	.00	---	---	---	---	---	.00	.57	.00	.00	.00	.00
20	.00	---	---	---	---	---	.00	.01	.00	.00	.00	.00
21	.00	---	---	---	---	---	.00	.00	.00	.00	.35	.00
22	.40	---	---	---	---	---	.00	.00	.01	.00	.02	.00
23	.03	---	---	---	---	---	.00	.00	.00	.12	.00	.00
24	.07	---	---	---	---	---	.00	.00	.04	.02	.00	.00
25	.00	---	---	---	---	---	.00	.00	.00	.23	.01	.00
26	.00	---	---	---	---	---	.00	.11	.00	.64	.00	.00
27	.00	---	---	---	---	---	.00	.00	.00	.00	.00	.00
28	.15	---	---	---	---	---	.00	.07	.00	.00	.00	.00
29	.08	---	---	---	---	---	.00	.01	.08	.00	.06	.00
30	.00	---	---	---	---	---	.00	.00	.00	.00	.45	.00
31	.02	---	---	---	---	---	---	.00	---	.06	.33	---
TOTAL	0.89	---	---	---	---	---	0.41	3.36	0.90	3.85	2.84	1.11
MAX	.40	---	---	---	---	---	.23	.94	.36	1.02	.45	.38

07103970 MONUMENT CREEK ABOVE WOODMEN ROAD, AT COLORADO SPRINGS, CO

LOCATION.--Lat 38°56'02", long 104°49'00", in SW<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec.7, T.13 S., R.66 W., El Paso County, Hydrologic Unit 11020003, on right bank 0.1 mi upstream from Woodmen Road, 0.2 mi west of Interstate 25, and 0.5 mi upstream from Cottonwood Creek.

DRAINAGE AREA.--181 mi<sup>2</sup>.

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder with satellite telemetry and concrete control. Elevation of gage is 6,270 ft above sea level, from topographic map.

REMARKS.--Records good except for flows above 700 ft<sup>3</sup>/s and estimated daily discharges, which are poor. Natural flow of stream affected by storage reservoirs, diversions for irrigation and municipal use, and return flows from irrigated areas and sewage-treatment plants.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	13	e26	e20	e17	16	25	33	28	13	12	11
2	12	13	e25	e21	20	15	21	34	28	12	36	9.7
3	12	14	e25	e22	17	15	21	42	27	11	20	9.7
4	12	14	e25	23	16	14	23	45	23	9.7	16	9.7
5	13	15	e25	21	17	14	32	76	22	9.5	23	13
6	14	16	e25	19	17	15	34	65	20	9.5	20	12
7	14	16	21	19	18	18	32	54	29	9.9	14	17
8	14	17	19	21	16	18	28	56	24	9.6	13	14
9	14	18	20	21	e16	18	26	62	21	59	14	12
10	14	17	20	24	e17	21	35	59	19	31	17	12
11	14	18	e20	22	e20	20	52	57	19	25	17	11
12	14	e19	e19	24	17	20	41	54	18	23	21	10
13	14	e20	e19	21	17	20	40	53	20	99	14	11
14	14	e22	e21	e21	15	20	37	51	16	91	18	12
15	14	e23	e23	19	15	19	38	50	14	37	15	14
16	14	e22	e22	19	14	18	39	49	13	25	15	12
17	14	e21	e23	e19	15	20	38	68	12	22	14	12
18	14	e20	e21	e20	14	20	38	58	12	23	13	13
19	13	e20	e23	e21	14	22	39	90	13	18	13	11
20	12	e22	e22	e21	15	23	39	55	14	16	13	11
21	12	e22	e20	e21	14	22	40	50	14	16	14	11
22	17	21	e24	e21	14	19	42	49	13	16	13	11
23	13	22	e23	21	14	20	37	44	14	18	12	10
24	15	23	e23	19	14	25	33	38	13	17	11	11
25	13	21	e21	18	14	24	32	33	13	33	11	10
26	13	e22	e20	20	14	26	32	39	12	43	10	10
27	13	22	e23	18	18	26	36	36	11	23	9.6	10
28	13	24	21	16	16	26	37	29	11	15	9.2	10
29	14	e26	23	17	---	29	29	28	11	14	11	11
30	13	e25	e22	17	---	32	33	31	15	13	14	10
31	13	---	21	18	---	28	---	30	---	12	19	---
TOTAL	416	588	685	624	445	643	1029	1518	519	773.2	471.8	341.1
MEAN	13.4	19.6	22.1	20.1	15.9	20.7	34.3	49.0	17.3	24.9	15.2	11.4
MAX	17	26	26	24	20	32	52	90	29	99	36	17
MIN	11	13	19	16	14	14	21	28	11	9.5	9.2	9.7
AC-FT	825	1170	1360	1240	883	1280	2040	3010	1030	1530	936	677

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2001, BY WATER YEAR (WY)

	1997	1998	1999	2000	2001
MEAN	21.1	21.0	17.7	17.6	17.5
MAX	30.3	30.1	22.1	23.2	22.1
(WY)	2000	1998	2001	2000	1998
MIN	12.8	13.9	12.1	13.2	11.4
(WY)	1999	1997	1997	1998	1997

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1997 - 2001

ANNUAL TOTAL	8894.0	8053.1	
ANNUAL MEAN	24.3	22.1	39.8
HIGHEST ANNUAL MEAN			80.2
LOWEST ANNUAL MEAN			22.1
HIGHEST DAILY MEAN	130	May 8	2000
LOWEST DAILY MEAN	9.1	Sep 15	8.7
ANNUAL SEVEN-DAY MINIMUM	9.5	Sep 13	9.0
MAXIMUM PEAK FLOW			a1770
MAXIMUM PEAK STAGE			b8.46
ANNUAL RUNOFF (AC-FT)	17640	15970	28810
10 PERCENT EXCEEDS	49	38	73
50 PERCENT EXCEEDS	21	19	20
90 PERCENT EXCEEDS	12	12	12

e Estimated.  
a From rating curve extended above 636 ft<sup>3</sup>/s.  
b From floodmark.

07103970 MONUMENT CREEK ABOVE WOODMEN ROAD AT COLORADO SPRINGS, CO--Continued

## WATER-QUALITY RECORDS

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

PERIOD OF DAILY RECORD.--

SUSPENDED SEDIMENT: May to September 1997 (seasonal peaks only), April 1998 to current year (seasonal records only).

INSTRUMENTATION.--Pumping sediment sampler with satellite telemetry.

REMARKS.--Daily suspended-sediment records are fair.

EXTREMES FOR PERIOD OF RECORD.--

SEDIMENT CONCENTRATION (seasonal only): Maximum daily mean, 3,580 mg/L, Aug. 19, 1998; minimum daily mean, 2 mg/L, June 9, 2000.

SUSPENDED-SEDIMENT DISCHARGE (seasonal only): Maximum daily, 49,100 tons (estimated), Apr. 30, 1999; minimum daily, 0.08 ton, June 9, 2000.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATION (seasonal only): Maximum daily mean, 1,780 mg/L, June 8; minimum daily mean, 8 mg/L, Sept. 23, 27-28.

SUSPENDED-SEDIMENT DISCHARGE (seasonal only): Maximum daily, 1,890 tons, July 13; minimum daily, 0.21 ton, Sept. 25, 27-28 (some estimated).

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

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, UM-MF (COLS./100 ML) (31625)	E COLI, MTEC MF (COL/100 ML) (31633)	CALCIUM DIS-SOLVED (MG/L) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L) (00925)	SULFATE DIS-SOLVED (MG/L) (00945)	FLUO-RIDE, DIS-SOLVED (MG/L) (00950)	
OCT 25...	0930	13	424	7.7	6.6	9.7	<1.0	65	62	50.1	7.63	56.0	1.1	
NOV 29...	1030	22	317	8.2	.5	11.7	<1.0	E7	<1	37.6	6.02	40.0	1.4	
FEB 28...	1100	16	432	8.2	.7	11.5	3.2	E22	<2	46.5	7.92	50.0	1.1	
APR 04...	1030	21	392	8.3	10.1	9.1	<1.0	25	--	41.4	8.11	57.0	1.2	
JUN 27...	1100	11	385	8.6	20.5	7.8	<1.0	130	78	51.4	7.34	48.0	.9	
AUG 08...	1130	14	415	8.3	22.8	6.9	<1.0	120	E80	47.5	8.28	50.0	.9	
DATE		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-ORTHODIS-SOLVED (MG/L AS P) (00671)	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	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)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)
OCT 25...	1.46	<.041	.263	.204	1	1.2	83	78	<.10	<.07	<1	1.4	1.7	
NOV 29...	1.33	.076	<.060	.168	1	<1.0	51	53	<.10	<.07	<1	<1.0	2.6	
FEB 28...	1.49	.189	.616	.241	3	<1.0	73	78	.24	<.07	2	1.5	14.6	
APR 04...	1.17	.024	.550	.361	1	1.2	71	72	<.10	<.07	<1	1.0	4.6	
JUN 27...	.875	.009	.206	.161	1	1.4	64	57	<.10	<.07	<1	<1.0	2.0	
AUG 08...	1.24	.007	.289	.209	2	1.4	54	60	<.10	<.07	1	<1.0	2.3	
DATE		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)	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)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SELE-NIUM, TOTAL RECOV-ERABLE (UG/L AS SE) (01147)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)
OCT 25...	1.9	240	20	<1	<.15	44	37.0	<.14	<.23	3	2.51	2.3	2.0	
NOV 29...	1.4	710	20	<1	<.15	72	43.0	<.14	<.23	2	1.61	1.8	1.4	
FEB 28...	1.7	--	20	9	.16	318	137	<.14	<.23	4	2.40	2.7	1.8	
APR 04...	2.6	--	20	2	<.15	89	34.0	<.01	<.01	3	2.30	1.7	2.1	
JUN 27...	1.9	230	40	<1	<.15	34	25.0	M	<.01	2	2.40	2.4	2.3	
AUG 08...	1.2	470	20	<1	<.15	38	17.0	<.01	<.01	3	2.90	2.3	2.1	



07103970 MONUMENT CREEK ABOVE WOODMEN ROAD AT COLORADO SPRINGS, CO--Continued

WATER-QUALITY DATA DURING STORMWATER-RUNOFF SAMPLING, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	1,2,5,6 -DIBENZ -ANTHRA				INDENO (1,2,3- CD)			NAPHTH- ALENE		PHENAN- THRENE		2,6-DI- ETHYL ANILINE		ACETO- CHLOR-	ALA- CHLOR,	ATRA- ZINE,								
	CHRY- SENE TOTAL (UG/L) (34320)	FLUOR- ANTHENE TOTAL (UG/L) (34556)	FLUOR- ENE TOTAL (UG/L) (34381)	FLUOR- ENE TOTAL (UG/L) (34403)	PYRENE TOTAL (UG/L) (34696)	ALENE TOTAL (UG/L) (34461)	THRENE TOTAL (UG/L) (34469)	PYRENE TOTAL (UG/L) (34447)	BENZENE NITRO- WATER UNFLTRD (UG/L) (82660)	ETHYL ANILINE WAT FLT 0.7 U FLTRD (UG/L) (49260)	ACETO- CHLOR- WATER FLTRD (UG/L) (46342)	ALA- CHLOR, WATER, DISS, REC, (UG/L) (39632)	ATRA- ZINE, WATER, DISS, REC (UG/L)											
JUL																								
09...	M	M	M	M	M	<2.0	M	M	--	<.002	<.004	<.002	.012											
12...	E2	M	3	M	E1	E.1	E1	2	<2	<.002	<.004	<.002	E.005											
26...	M	M	E1	M	M	<2.0	M	E1	<2	<.002	<.004	<.002	<.007											
DATE	METHYL AZIN- PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)		BEN- FLUR- ALIN WAT FLD 0.7 U GF, REC (UG/L) (82673)		BUTYL- ATE, WATER, DISS, REC (UG/L) (04028)		CAR- BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)		CARBO- FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)		CHLOR- PYRIFOS DIS- SOLVED (UG/L) (38933)		CYANA- ZINE, WATER, DISS, REC (UG/L) (04041)		DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)		DEETHYL ATRA- ZINE, WATER, DISS, REC (UG/L) (04040)		DISUL- FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)		EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)			
	JUL																							
09...	<.050	<.010	<.002	E.285	<.020	<.005	<.018	E.001	<.006	.536	<.005	<.021	<.002											
12...	<.050	<.010	<.002	E.298	<.020	<.005	<.018	<.003	<.006	.141	<.005	<.021	<.002											
26...	<.050	<.010	<.002	E.474	<.020	<.005	<.018	<.003	<.006	.221	<.005	<.021	<.002											
DATE	ETHAL- FLUR- ALIN WAT FLT 0.7 U GF, REC (82663)		ETHO- PROP WATER FLTRD 0.7 U GF, REC (82672)		FONOFOFOS WATER DISS REC (UG/L) (04095)		LIN- URON WATER FLTRD 0.7 U GF, REC (82666)		MALA- THION, DIS- SOLVED (UG/L) (39532)		METO- LACHLOR WATER DISSOLV (UG/L) (39415)		METRI- BUZIN WATER FLTRD 0.7 U GF, REC (82630)		MOL- INATE WATER FLTRD 0.7 U GF, REC (82671)		NAPPROP- AMIDE WATER FLTRD 0.7 U GF, REC (82684)		METHYL PARA- THION WAT FLT 0.7 U GF, REC (82667)		PEB- ULATE WATER FLTRD 0.7 U GF, REC (82669)			
	JUL																							
09...	<.009	<.005	<.003	<.004	<.035	.096	<.013	<.006	<.002	<.007	<.007	<.006	<.002											
12...	<.009	<.005	<.003	<.004	<.035	.065	<.013	<.006	<.002	<.007	<.007	<.006	<.002											
26...	<.009	<.005	<.003	<.004	<.035	E.023	<.013	<.006	<.002	<.007	<.007	<.006	<.002											
DATE	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (82683)		PHORATE WATER FLTRD 0.7 U GF, REC (82664)		PRO- METON, WATER, DISS, REC (UG/L) (04037)		PRO- CHLOR, WATER, FLTRD 0.7 U GF, REC (82679)		PRO- PANIL WATER FLTRD 0.7 U GF, REC (82685)		PRO- PARGITE WATER FLTRD 0.7 U GF, REC (82676)		PRON- AMIDE WATER FLTRD 0.7 U GF, REC (04035)		TEBU- THIURON WATER FLTRD 0.7 U GF, REC (82670)		TER- BACIL WATER FLTRD 0.7 U GF, REC (82665)		TER- BUFOS WATER FLTRD 0.7 U GF, REC (82675)		THIO- BENCARB WATER FLTRD 0.7 U GF, REC (82681)		TRIAL- LATE WATER FLTRD 0.7 U GF, REC (82678)	
	JUL																							
09...	<.010	<.011	E.005	<.010	<.011	<.023	<.004	<.011	<.016	<.034	<.017	<.005	<.002											
12...	<.010	<.011	.022	<.010	<.011	<.023	<.004	<.011	<.016	<.034	<.017	<.005	<.002											
26...	<.010	<.011	.024	<.010	<.011	<.023	<.004	<.011	<.016	<.034	<.017	<.005	<.002											
DATE	TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (82661)		ALPHA BHC DIS- SOLVED (UG/L) (34253)		PER- METHRIN CIS WAT FLT 0.7 U GF, REC (82687)		P,P' DDE DISSOLV (UG/L) (34653)		SEDI- MENT, DIS- CHARGE, SUS- PENDE (MG/L) (80154)		SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)													
	JUL																							
09...		E.006	<.005	<.006	<.003	3240	1160																	
12...		<.009	<.005	<.006	<.003	479	47																	
26...		<.009	<.005	<.006	<.003	2370	825																	

E Estimated laboratory analysis value.  
M Presence of material verified but not quantified.

07103970 MONUMENT CREEK ABOVE WOODMEN ROAD AT COLORADO SPRINGS, CO--Continued

MISCELLANEOUS FIELD AND SUSPENDED-SEDIMENT DISCHARGE DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
OCT						
02...	1430	12	386	19.5	9	.29
NOV						
02...	1145	13	428	5.2	11	.39
DEC						
06...	1450	26	--	.8	--	--
18...	1315	24	418	.2	53	3.4
JAN						
10...	1300	23	369	.9	100	6.2
FEB						
20...	1215	14	438	6.3	--	--
MAR						
21...	1240	20	394	13.0	--	--
30...	1145	34	311	8.9	351	32
APR						
13...	1225	42	332	9.7	--	--
20...	1045	39	299	11.5	346	36
MAY						
09...	0945	64	249	10.2	425	73
21...	1245	46	277	15.6	219	27
JUN						
06...	1430	19	338	25.4	30	1.5
JUL						
10...	1415	21	388	28.2	171	9.7
17...	1130	23	378	19.6	74	4.6
AUG						
01...	1145	12	430	23.4	21	.68
16...	1355	14	430	22.5	--	--
22...	1030	13	425	19.0	20	.70
29...	1235	9.4	426	21.5	--	--
SEP						
06...	1000	13	432	16.2	20	.70
20...	1100	11	454	15.4	8	.24

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
	OCTOBER			NOVEMBER			DECEMBER		
1	11	---	e.25	13	---	---	e26	---	---
2	12	9	.27	13	---	---	e25	---	---
3	12	10	.32	14	---	---	e25	---	---
4	12	19	.61	14	---	---	e25	---	---
5	13	18	.62	15	---	---	e25	---	---
6	14	---	e1.1	16	---	---	e25	---	---
7	14	41	1.5	16	---	---	21	---	---
8	14	---	e1.2	17	---	---	19	---	---
9	14	27	1.0	18	---	---	20	---	---
10	14	30	1.2	17	---	---	20	---	---
11	14	---	e.90	18	---	---	e20	---	---
12	14	19	.71	e19	---	---	e19	---	---
13	14	19	.71	e20	---	---	e19	---	---
14	14	20	.73	e22	---	---	e21	---	---
15	14	18	.70	e23	---	---	e23	---	---
16	14	---	e.69	e22	---	---	e22	---	---
17	14	19	.73	e21	---	---	e23	---	---
18	14	20	.75	e20	---	---	e21	---	---
19	13	16	.58	e20	---	---	e23	---	---
20	12	11	.37	e22	---	---	e22	---	---
21	12	---	e.23	e22	---	---	e20	---	---
22	17	24	1.4	21	---	---	e24	---	---
23	13	18	.62	22	---	---	e23	---	---
24	15	16	.73	23	---	---	e23	---	---
25	13	10	.34	21	---	---	e21	---	---
26	13	---	e.34	e22	---	---	e20	---	---
27	13	10	.35	22	---	---	e23	---	---
28	13	13	.49	24	---	---	21	---	---
29	14	23	.92	e26	---	---	23	---	---
30	13	16	.55	e25	---	---	e22	---	---
31	13	---	e.48	---	---	---	21	---	---
TOTAL	416	---	21.39	588	---	0	685	---	0

## ARKANSAS RIVER BASIN

07103970 MONUMENT CREEK ABOVE WOODMEN ROAD AT COLORADO SPRINGS, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	e20	---	---	e17	---	---	16	---	---
2	e21	---	---	20	---	---	15	---	---
3	e22	---	---	17	---	---	15	---	---
4	23	---	---	16	---	---	14	---	---
5	21	---	---	17	---	---	14	---	---
6	19	---	---	17	---	---	15	---	---
7	19	---	---	18	---	---	18	---	---
8	21	---	---	16	---	---	18	---	---
9	21	---	---	e16	---	---	18	---	---
10	24	---	---	e17	---	---	21	---	---
11	22	---	---	e20	---	---	20	---	---
12	24	---	---	17	---	---	20	---	---
13	21	---	---	17	---	---	20	---	---
14	e21	---	---	15	---	---	20	---	---
15	19	---	---	15	---	---	19	---	---
16	19	---	---	14	---	---	18	---	---
17	e19	---	---	15	---	---	20	---	---
18	e20	---	---	14	---	---	20	---	---
19	e21	---	---	14	---	---	22	---	---
20	e21	---	---	15	---	---	23	---	---
21	e21	---	---	14	---	---	22	---	---
22	e21	---	---	14	---	---	19	---	---
23	21	---	---	14	---	---	20	---	---
24	19	---	---	14	---	---	25	---	---
25	18	---	---	14	---	---	24	---	---
26	20	---	---	14	---	---	26	---	---
27	18	---	---	18	---	---	26	---	---
28	16	---	---	16	---	---	26	---	---
29	17	---	---	---	---	---	29	---	---
30	17	---	---	---	---	---	32	---	---
31	18	---	---	---	---	---	28	---	---
TOTAL	624	---	0	445	---	0	643	---	0

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	25	---	e16	33	---	e17	28	96	7.4
2	21	---	e9.7	34	---	e18	28	89	6.8
3	21	---	e10	42	---	e31	27	---	e5.6
4	23	196	12	45	---	e35	23	48	3.0
5	32	---	e22	76	---	e139	22	46	2.7
6	34	309	28	65	---	e61	20	35	1.9
7	32	195	17	54	---	e39	29	858	112
8	28	107	8.1	56	---	e47	24	1780	130
9	26	---	e5.8	62	---	e66	21	519	30
10	35	227	22	59	---	e54	19	154	8.1
11	52	1050	180	57	---	e51	19	101	5.1
12	41	737	80	54	---	e41	18	73	3.6
13	40	506	55	53	---	e38	20	---	e11
14	37	---	e36	51	---	e34	16	87	3.9
15	38	301	31	50	---	e33	14	56	2.1
16	39	262	27	49	---	e29	13	38	1.3
17	38	219	22	68	---	e86	12	35	1.1
18	38	198	20	58	---	e39	12	---	e1.3
19	39	---	e28	90	---	e212	13	51	1.8
20	39	354	38	55	---	e50	14	48	1.7
21	40	363	40	50	251	34	14	41	1.6
22	42	345	39	49	298	39	13	40	1.4
23	37	270	27	44	261	31	14	---	e1.3
24	33	---	e19	38	---	e21	13	31	1.1
25	32	---	e17	33	158	14	13	---	e1.0
26	32	---	e18	39	707	89	12	23	.78
27	36	---	e25	36	667	66	11	11	.33
28	37	---	e25	29	292	23	11	---	e.47
29	29	---	e12	28	---	e11	11	27	.81
30	33	---	e16	31	148	12	15	190	12
31	---	---	---	30	141	11	---	---	---
TOTAL	1029	---	905.6	1518	---	1471	519	---	361.19

07103970 MONUMENT CREEK ABOVE WOODMEN ROAD AT COLORADO SPRINGS, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	JULY			AUGUST			SEPTEMBER		
	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	13	79	2.8	12	35	1.1	11	40	1.3
2	12	41	1.4	36	508	113	9.7	28	.73
3	11	---	e.70	20	333	22	9.7	---	e.73
4	9.7	18	.46	16	169	16	9.7	---	e.73
5	9.5	13	.32	23	307	27	13	81	4.0
6	9.5	12	.31	20	203	12	12	40	1.4
7	9.9	20	.62	14	---	e2.2	17	103	7.2
8	9.6	---	e.41	13	39	1.4	14	40	1.6
9	59	709	461	14	36	1.4	12	29	.94
10	31	367	48	17	145	18	12	24	.76
11	25	536	81	17	245	18	11	---	e.58
12	23	518	41	21	178	30	10	18	.50
13	99	1180	1890	14	---	e2.1	11	14	.41
14	91	---	e457	18	78	4.7	12	22	.84
15	37	---	e60	15	51	2.1	14	---	e3.2
16	25	---	e9.4	15	41	1.7	12	---	e1.6
17	22	63	3.8	14	---	e1.2	12	42	1.7
18	23	---	e5.1	13	25	.91	13	66	2.4
19	18	53	2.7	13	25	.90	11	32	.94
20	16	40	1.8	13	24	.82	11	9	.26
21	16	37	1.6	14	28	1.1	11	---	e.34
22	16	29	1.3	13	20	.72	11	13	.37
23	18	---	e1.8	12	17	.56	10	8	.23
24	17	38	1.8	11	18	.54	11	---	e.22
25	33	340	66	11	13	.38	10	---	e.21
26	43	654	169	10	14	.38	10	---	e.22
27	23	691	52	9.6	---	e.37	10	8	.21
28	15	---	e7.7	9.2	13	.32	10	8	.21
29	14	59	2.2	11	32	1.6	11	11	.32
30	13	48	1.7	14	141	11	10	9	.24
31	12	38	1.2	19	218	20	---	---	---
TOTAL	773.2	---	3374.12	471.8	---	313.50	341.1	---	34.39

e Estimated.

## ARKANSAS RIVER BASIN

07103977 COTTONWOOD CREEK AT COWPOKE ROAD AT COLORADO SPRINGS, CO

LOCATION.--Lat 38°57'04", long 104°42'47", in SE<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec.6, T.13 S., R.65 W., El Paso County, Hydrologic Unit 11020003, on left bank on downstream side of bridge on Cowpoke Road in Colorado Springs, 1.0 mi upstream from Woodmen Road, and 5.3 mi east of Interstate 25.

DRAINAGE AREA.--5.93 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1998 to current year (seasonal records only).

GAGE.--Water-stage recorder with satellite telemetry and artificial control. Elevation of gage is 6,875 ft above sea level, from topographic map.

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

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum discharge, 230 ft<sup>3</sup>/s, June 23, 1999, from rating curve extended above 42 ft<sup>3</sup>/s, on basis of velocity-area study, gage height, 6.25 ft, from floodmarks; minimum daily, 0.03 ft<sup>3</sup>/s, on many days in 1998 and 2000 water years.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum discharge, 54.0 ft<sup>3</sup>/s, June 7, gage height, 4.80 ft; minimum daily, 0.04 ft<sup>3</sup>/s (estimated), many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e.05	---	---	---	---	---	.16	.39	.28	e.08	.11	e.07
2	e.05	---	---	---	---	---	.12	.51	.26	e.06	.51	e.07
3	e.05	---	---	---	---	---	.09	.40	.18	e.06	.12	e.08
4	e.05	---	---	---	---	---	e.06	.35	.16	e.06	.13	e.08
5	e.05	---	---	---	---	---	e.05	1.1	.14	e.06	.12	e.08
6	e.07	---	---	---	---	---	.05	.60	.10	e.06	.12	e.08
7	e.07	---	---	---	---	---	.06	.38	3.0	e.04	.13	e.06
8	e.06	---	---	---	---	---	.06	.40	.32	e.05	.12	e.06
9	e.06	---	---	---	---	---	.06	.40	e.20	e.05	.09	e.06
10	e.06	---	---	---	---	---	.07	.36	e.25	e.06	.12	e.04
11	e.06	---	---	---	---	---	.08	.36	.44	e.13	.16	e.04
12	e.06	---	---	---	---	---	e5.0	.40	.63	e.12	.06	e.04
13	e.06	---	---	---	---	---	e1.5	.39	.54	.20	.07	e.04
14	e.06	---	---	---	---	---	.10	.36	.33	e.10	.07	e.04
15	e.06	---	---	---	---	---	.11	.30	e.30	e.08	.07	e.04
16	e.08	---	---	---	---	---	.11	.40	e.28	e.06	.08	e.04
17	e.08	---	---	---	---	---	.12	1.0	e.26	e.06	.06	e.04
18	e.07	---	---	---	---	---	.14	.33	e.24	e.04	e.06	e.04
19	e.06	---	---	---	---	---	.15	.82	e.24	e.04	e.06	e.04
20	e.06	---	---	---	---	---	e.16	.45	e.26	e.04	e.06	e.04
21	e.06	---	---	---	---	---	e.18	.38	e.24	e.04	e.06	e.04
22	e.10	---	---	---	---	---	e.20	.12	.23	e.04	e.06	e.04
23	e.08	---	---	---	---	---	e.22	.12	e.20	e.04	e.06	e.04
24	e.08	---	---	---	---	---	.23	.12	e.16	e.04	e.06	e.04
25	e.07	---	---	---	---	---	.21	.14	e.12	1.5	e.06	e.04
26	e.07	---	---	---	---	---	.22	.39	e.10	1.7	e.06	e.05
27	e.07	---	---	---	---	---	.24	.20	e.10	.49	e.06	e.05
28	e.07	---	---	---	---	---	.25	.23	e.10	.29	e.06	e.06
29	e.08	---	---	---	---	---	.28	.23	e.10	.24	e.06	e.06
30	e.08	---	---	---	---	---	.38	.25	e.08	.20	e.06	e.06
31	e.09	---	---	---	---	---	---	.31	---	.14	e.07	---
TOTAL	2.07	---	---	---	---	---	10.66	12.19	9.84	6.17	2.99	1.56
MEAN	.067	---	---	---	---	---	.36	.39	.33	.20	.096	.052
MAX	.10	---	---	---	---	---	5.0	1.1	3.0	1.7	.51	.08
MIN	.05	---	---	---	---	---	.05	.12	.08	.04	.06	.04
AC-FT	4.1	---	---	---	---	---	21	24	20	12	5.9	3.1

e Estimated.

07103977 COTTONWOOD CREEK AT COWPOKE ROAD AT COLORADO SPRINGS, CO--Continued

WATER-QUALITY RECORDS

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

PERIOD OF DAILY RECORD.--

SUSPENDED SEDIMENT: April 1998 to current year (seasonal records only).

INSTRUMENTATION.--Pumping sediment sampler with satellite telemetry.

REMARKS.--Records for daily suspended sediment are poor.

EXTREMES FOR PERIOD OF RECORD.--

SEDIMENT CONCENTRATION (seasonal only): Maximum daily mean, 6,760 mg/L, May 25, 1999; minimum daily mean, 7 mg/L, June 13, 2000.

SUSPENDED-SEDIMENT DISCHARGE (seasonal only): Maximum daily, 2,510 tons (estimated), Apr. 30, 1999; minimum daily, 0.00 ton (most estimated), many days in 2000.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATION (seasonal only): Maximum daily mean, 2,610 mg/L, July 17; minimum daily mean, 120 mg/L, Oct. 2.

SUSPENDED-SEDIMENT DISCHARGE (seasonal only): Maximum daily, 562 tons (estimated), Apr. 12; minimum daily, 0.02 ton (most estimated), many days.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

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 (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	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-ORTHO, DIS-SOLVED (MG/L) AS P) (00671)
OCT 26...	0800	.07	428	7.6	1.9	10.6	E80	88	E.024	<.041	E.056	<.018
APR 05...	1245	.05	445	7.7	18.2	7.1	E18	--	E.028	.038	.065	<.018
JUN 28...	1015	.09	444	8.1	25.9	6.3	E2900	1500	E.031	.013	E.056	<.020

E Estimated laboratory analysis value.

## ARKANSAS RIVER BASIN

07103977 COTTONWOOD CREEK AT COWPOKE ROAD AT COLORADO SPRINGS, CO--Continued

MISCELLANEOUS FIELD AND SUSPENDED-SEDIMENT DISCHARGE DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	SEDI- MENT, SUS- PENDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)
OCT						
02...	1345	.05	444	23.0	114	.02
12...	0915	.06	443	7.0	255	.04
17...	1030	.08	442	10.0	157	.03
26...	0800	.07	428	1.9	235	.04
NOV						
01...	1300	.09	433	9.7	153	.04
DEC						
05...	0930	.05	422	.1	380	.05
JAN						
03...	1235	.02	423	.1	454	.02
FEB						
13...	0930	.10	435	.1	431	.12
MAR						
06...	1020	.16	441	4.2	2570	1.1
30...	1230	.29	446	11.8	2360	1.8
APR						
05...	1245	.05	445	18.2	323	.04
12...	1344	4.4	361	.1	8330	99
12...	1345	4.4	361	.1	7660	91
24...	1000	.31	446	9.0	1480	1.2
MAY						
03...	1130	.31	436	7.0	1080	.90
08...	0800	.40	423	7.1	1160	1.3
15...	1215	.35	428	24.1	453	.43
18...	1515	.45	420	26.1	856	1.0
31...	0945	.28	430	17.5	244	.18
JUN						
06...	1300	.06	436	27.7	164	.03
08...	1015	.45	375	21.9	1160	1.4
14...	1145	.24	433	19.6	304	.20
22...	1015	.24	428	22.9	333	.22
28...	0915	.09	434	21.4	234	.06
28...	1015	.09	444	25.9	--	--
JUL						
05...	1215	.03	450	29.4	110	.01
12...	1245	.10	460	30.5	245	.07
19...	1500	.03	436	23.2	232	.02
27...	1100	.57	352	24.5	1120	1.7
AUG						
02...	1045	.12	428	25.6	325	.11
16...	1130	.08	409	27.0	145	.03
22...	1045	.06	378	24.3	322	.05
29...	1200	.05	447	25.1	163	.02
SEP						
05...	1045	.08	440	20.7	244	.05
12...	1130	.04	438	21.0	181	.02
20...	1030	.04	437	16.8	249	.03
26...	1030	.05	435	15.4	217	.03

07103977 COTTONWOOD CREEK AT COWPOKE ROAD AT COLORADO SPRINGS, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	e.05	---	e.02	---	---	---	---	---	---
2	e.05	120	.02	---	---	---	---	---	---
3	e.05	---	e.02	---	---	---	---	---	---
4	e.05	---	e.02	---	---	---	---	---	---
5	e.05	---	e.02	---	---	---	---	---	---
6	e.07	---	e.03	---	---	---	---	---	---
7	e.07	---	e.03	---	---	---	---	---	---
8	e.06	---	e.03	---	---	---	---	---	---
9	e.06	---	e.03	---	---	---	---	---	---
10	e.06	---	e.03	---	---	---	---	---	---
11	e.06	---	e.04	---	---	---	---	---	---
12	e.06	250	.04	---	---	---	---	---	---
13	e.06	---	e.04	---	---	---	---	---	---
14	e.06	---	e.03	---	---	---	---	---	---
15	e.06	---	e.03	---	---	---	---	---	---
16	e.08	---	e.04	---	---	---	---	---	---
17	e.08	160	.03	---	---	---	---	---	---
18	e.07	---	e.03	---	---	---	---	---	---
19	e.06	---	e.02	---	---	---	---	---	---
20	e.06	---	e.02	---	---	---	---	---	---
21	e.06	---	e.02	---	---	---	---	---	---
22	e.10	---	e.08	---	---	---	---	---	---
23	e.08	---	e.07	---	---	---	---	---	---
24	e.08	---	e.06	---	---	---	---	---	---
25	e.07	---	e.05	---	---	---	---	---	---
26	e.07	230	.04	---	---	---	---	---	---
27	e.07	---	e.04	---	---	---	---	---	---
28	e.07	---	e.04	---	---	---	---	---	---
29	e.08	---	e.04	---	---	---	---	---	---
30	e.08	---	e.04	---	---	---	---	---	---
31	e.09	---	e.04	---	---	---	---	---	---
TOTAL	2.07	---	1.09	0	---	0	0	---	0

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---
TOTAL	0	---	0	0	---	0	0	---	0

## ARKANSAS RIVER BASIN

07103977 COTTONWOOD CREEK AT COWPOKE ROAD AT COLORADO SPRINGS, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	.16	---	e.73	.39	---	e1.2	.28	---	e.17
2	.12	---	e.44	.51	---	e1.5	.26	---	e.15
3	.09	---	e.25	.40	1080	1.2	.18	---	e.10
4	e.06	---	e.12	.35	---	e.99	.16	---	e.08
5	e.05	---	e.06	1.1	---	e4.3	.14	---	e.07
6	.05	---	e.05	.60	---	e2.1	.10	165	.04
7	.06	---	e.05	.38	---	e1.3	3.0	---	e273
8	.06	---	e.05	.40	1140	1.2	.32	1150	1.0
9	.06	---	e.06	.40	---	e1.1	e.20	---	e.55
10	.07	---	e.06	.36	---	e.92	e.25	---	e.27
11	.08	---	e.07	.36	---	e.83	.44	---	e.89
12	e5.0	---	e562	.40	---	e.82	.63	---	e.99
13	e1.5	---	e54	.39	---	e.69	.54	---	e.49
14	.10	---	e.45	.36	---	e.53	.33	---	e.28
15	.11	---	e.48	.30	463	.38	e.30	---	e.25
16	.11	---	e.46	.40	---	e.46	e.28	---	e.24
17	.12	---	e.54	1.0	---	e2.8	e.26	---	e.22
18	.14	---	e.58	.33	847	.75	e.24	---	e.21
19	.15	---	e.63	.82	---	e6.2	e.24	---	e.21
20	e.16	---	e.65	.45	---	e1.3	e.26	---	e.23
21	e.18	---	e.73	.38	---	e.72	e.24	---	e.21
22	e.20	---	e.81	.12	---	e.21	.23	330	.20
23	e.22	---	e.89	.12	---	e.21	e.20	---	e.17
24	.23	1470	.90	.12	---	e.20	e.16	---	e.13
25	.21	---	e.83	.14	---	e.21	e.12	---	e.09
26	.22	---	e.84	.39	---	e2.3	e.10	---	e.07
27	.24	---	e.89	.20	---	e.21	e.10	---	e.07
28	.25	---	e.87	.23	---	e.23	e.10	---	e.06
29	.28	---	e.93	.23	---	e.20	e.10	---	e.06
30	.38	---	e1.2	.25	---	e.19	e.08	---	e.04
31	---	---	---	.31	245	.20	---	---	---
TOTAL	10.66	---	630.62	12.19	---	35.45	9.84	---	280.54
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	e.08	---	e.04	.11	---	e.14	e.07	---	e.04
2	e.06	---	e.03	.51	2490	27	e.07	---	e.04
3	e.06	---	e.02	.12	---	e.18	e.08	---	e.05
4	e.06	---	e.02	.13	---	e.11	e.08	---	e.05
5	e.06	---	e.02	.12	---	e.08	e.08	---	e.05
6	e.06	---	e.02	.12	---	e.12	e.08	---	e.05
7	e.04	---	e.02	.13	---	e.10	e.06	---	e.04
8	e.05	---	e.02	.12	---	e.07	e.06	---	e.04
9	e.05	---	e.02	.09	---	e.05	e.06	---	e.03
10	e.06	---	e.03	.12	---	e.08	e.04	---	e.02
11	e.13	---	e.08	.16	---	e.17	e.04	---	e.02
12	e.12	---	e.08	.06	---	e.05	e.04	---	e.02
13	.20	1430	15	.07	---	e.05	e.04	---	e.02
14	e.10	---	e.07	.07	---	e.04	e.04	---	e.02
15	e.08	---	e.05	.07	---	e.04	e.04	---	e.02
16	e.06	---	e.04	.08	194	.04	e.04	---	e.02
17	e.06	---	e.04	.06	---	e.05	e.04	---	e.02
18	e.04	---	e.02	e.06	---	e.05	e.04	---	e.02
19	e.04	---	e.02	e.06	---	e.05	e.04	---	e.03
20	e.04	---	e.02	e.06	---	e.05	e.04	---	e.03
21	e.04	---	e.02	e.06	---	e.05	e.04	---	e.03
22	e.04	---	e.02	e.06	---	e.05	e.04	---	e.02
23	e.04	---	e.02	e.06	---	e.05	e.04	---	e.02
24	e.04	---	e.02	e.06	---	e.04	e.04	---	e.02
25	1.5	2610	139	e.06	---	e.04	e.04	---	e.02
26	1.7	---	e87	e.06	---	e.04	e.05	---	e.03
27	.49	1140	1.6	e.06	---	e.03	e.05	---	e.03
28	.29	---	e.76	e.06	---	e.03	e.06	---	e.03
29	.24	---	e.55	e.06	---	e.03	e.06	---	e.03
30	.20	---	e.40	e.06	---	e.03	e.06	---	e.03
31	.14	---	e.22	e.07	---	e.04	---	---	---
TOTAL	6.17	---	245.27	2.99	---	28.95	1.56	---	0.89

e Estimated.

07103980 COTTONWOOD CREEK AT WOODMEN ROAD NEAR COLORADO SPRINGS, CO

LOCATION.--Lat 38°56'22", long 104°44'26", in NE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec.11, T.13 S., R.66 W., El Paso County, Hydrologic Unit 11020003, on left bank, 250 ft downstream from Woodmen Road, 4.0 mi east of Interstate 25, 5.0 mi upstream from mouth, and 8.2 mi northeast of courthouse in Colorado Springs.

DRAINAGE AREA.--10.3 mi<sup>2</sup>.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1992 to current year.

REVISED RECORDS.--WDR CO-93-1: Drainage area. WDR CO-96-1: 1995 (M)

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 6,680 ft above sea level, from topographic map. Prior to Apr. 13, 1999, at site 150 ft upstream at datum 10 ft higher with artificial control and crest-stage gage.

REMARKS.--Records fair except for estimated daily discharges and discharges above 40 ft<sup>3</sup>/s, which are poor. Natural flow of stream affected by runoff from industrial and residential areas of northeast Colorado Springs.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.95	.97	.82	.69	1.2	.98	.98	.82	1.4	2.9	2.0	3.5
2	.94	.89	.83	.75	.85	1.1	.90	1.1	1.4	2.7	6.4	2.7
3	.91	.89	.87	.76	.83	1.1	.88	3.7	1.5	1.5	2.4	1.9
4	.85	.73	.59	.80	.55	.96	.92	4.4	1.7	.98	4.3	1.3
5	.87	.78	.85	.72	.86	1.1	.86	13	1.7	1.3	2.2	1.3
6	1.1	.73	1.1	.80	.68	1.1	.88	4.9	1.3	1.2	1.7	.99
7	1.0	.85	1.2	.75	.90	1.1	.80	1.7	11	1.0	1.2	1.9
8	.83	.88	.89	.66	.83	1.1	.78	1.2	2.2	.96	.96	1.6
9	.85	.93	1.2	.68	2.9	1.1	1.1	1.1	2.3	9.7	1.1	.86
10	.80	.96	.77	.70	.91	2.0	1.7	.97	2.5	1.1	1.8	.83
11	.85	1.0	.76	.71	.67	1.7	5.9	.78	2.2	.84	1.7	.78
12	.72	1.2	.79	.78	.68	1.7	8.2	.81	1.9	.49	3.3	.74
13	.58	1.3	.85	.59	.76	1.3	4.5	.81	2.9	8.5	2.1	.70
14	.69	1.4	.87	.67	.56	.93	3.5	.73	2.2	4.2	2.5	1.7
15	.77	1.3	.82	.55	.83	.84	3.1	.76	2.0	.85	2.0	1.7
16	.92	1.2	.64	.55	.50	1.1	2.2	.74	2.2	.52	1.8	1.1
17	.91	1.4	.76	1.2	.63	1.6	1.8	7.1	2.2	.51	1.5	.93
18	.71	1.3	.63	.55	.73	1.3	2.7	1.5	2.3	.59	1.8	.76
19	.57	1.5	.76	1.4	.84	.98	2.6	4.5	2.2	.76	2.0	1.1
20	.59	1.4	.58	.69	.98	1.0	1.6	.97	3.1	.75	2.0	1.2
21	.48	1.3	.52	.56	.85	.99	1.2	1.3	3.6	.81	1.5	1.1
22	2.0	1.2	.60	.57	1.1	.96	1.3	1.1	4.3	1.2	1.4	.86
23	.87	1.4	.68	.54	1.2	1.1	1.0	1.1	3.3	1.1	2.1	.92
24	1.3	1.3	.66	.63	1.1	1.1	.72	1.1	4.4	2.2	1.7	1.1
25	.81	1.2	.76	.55	e1.0	.99	.74	.96	3.4	19	1.4	.85
26	.81	1.4	1.0	.42	e1.0	.99	.72	3.4	4.0	17	1.5	.86
27	.88	1.3	1.2	.42	e.90	.95	.84	1.7	4.1	.75	1.3	.89
28	1.1	1.2	.91	.42	.89	.97	.86	1.8	3.4	.70	1.2	.98
29	1.3	.85	.83	.46	---	1.3	.79	1.6	3.1	.49	2.6	.86
30	.99	.84	.82	.48	---	2.3	.87	1.4	3.3	1.7	4.0	1.1
31	.95	---	.79	.96	---	1.1	---	1.3	---	2.4	4.9	---
TOTAL	27.90	33.60	25.35	21.01	25.73	36.84	54.94	68.35	87.1	88.70	68.36	37.11
MEAN	.90	1.12	.82	.68	.92	1.19	1.83	2.20	2.90	2.86	2.21	1.24
MAX	2.0	1.5	1.2	1.4	2.9	2.3	8.2	13	11	19	6.4	3.5
MIN	.48	.73	.52	.42	.50	.84	.72	.73	1.3	.49	.96	.70
AC-FT	55	67	50	42	51	73	109	136	173	176	136	74

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 2001, BY WATER YEAR (WY)

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001		
MEAN	1.30	1.16	.82	.69	.79	1.26	2.07	3.58	3.25	2.42	2.65	1.39
MAX	2.59	3.20	1.71	1.36	1.26	3.34	6.42	13.6	8.85	5.07	6.36	2.82
(WY)	1995	1998	2000	1998	1998	1998	1999	1999	1995	1999	1999	1995
MIN	.35	.47	.33	.33	.42	.49	.50	.64	.49	.24	.66	.47
(WY)	1993	1993	1993	1994	1994	1995	1996	1993	1994	1994	1993	1992

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1992 - 2001

ANNUAL TOTAL	508.39	574.99		
ANNUAL MEAN	1.39	1.58		1.84
HIGHEST ANNUAL MEAN				3.63
LOWEST ANNUAL MEAN				.65
HIGHEST DAILY MEAN	15	May 8	19	Jul 25
LOWEST DAILY MEAN	.48	Oct 21	.42	Jan 26
ANNUAL SEVEN-DAY MINIMUM	.63	Dec 18	.48	Jan 24
MAXIMUM PEAK FLOW			b306	Jul 26
MAXIMUM PEAK STAGE			6.62	Jul 26
ANNUAL RUNOFF (AC-FT)	1010		1140	1330
10 PERCENT EXCEEDS	2.0		2.9	3.4
50 PERCENT EXCEEDS	1.2		1.0	.89
90 PERCENT EXCEEDS	.82		.67	.36

e Estimated.

a Also occurred Jan 23, Feb 3 (estimated), 1996.

b From rating curve extended above 36 ft<sup>3</sup>/s on basis of velocity-area study.

c From rating curve extended above 1.1 ft<sup>3</sup>/s on basis of slope-area measurement of peak flow at gage height 4.45 ft, site and datum then in use.

d From floodmarks, site and datum then in use. Maximum gage height 7.84 ft, May 25, 1999.

## ARKANSAS RIVER BASIN

07103980 COTTONWOOD CREEK AT WOODMEN ROAD NEAR COLORADO SPRINGS, CO--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1998 to current year (seasonal peaks only).

MISCELLANEOUS FIELD AND SUSPENDED-SEDIMENT DISCHARGE DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	SEDI- MENT, SUS- PENDEED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDEED (T/DAY) (80155)
OCT						
03...	1235	1.0	680	18.0	--	--
12...	1310	.92	669	15.5	--	--
NOV						
21...	1335	1.2	669	6.3	--	--
DEC						
18...	1050	.61	768	2.1	--	--
FEB						
01...	1015	.54	760	1.8	--	--
16...	0935	.50	753	1.1	--	--
MAR						
14...	1300	1.1	630	9.0	--	--
APR						
12...	1220	14	341	7.1	3510	133
25...	0855	.83	649	7.3	--	--
MAY						
09...	1150	1.2	638	19.7	--	--
21...	1500	1.4	613	17.7	--	--
JUN						
08...	1215	2.5	410	22.3	--	--
JUL						
03...	1230	.97	626	25.3	--	--
AUG						
02...	1200	1.4	330	25.5	--	--
07...	1230	1.3	630	25.5	--	--
29...	1630	7.8	390	18.9	1770	37
SEP						
05...	1305	.80	662	22.8	--	--

07103985 COTTONWOOD CREEK TRIBUTARY ABOVE RANGEWOOD DRIVE AT COLORADO SPRINGS, CO

LOCATION.--Lat 38°55'45", long 104°44'48", in SE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec.11, T.13S., R.66W., El Paso County, Hydrologic Unit 11020003, on right bank 400 ft upstream from Dublin Road, 0.2 mi upstream from Rangewood Drive, 0.5 mi upstream from mouth, and 3.2 mi east of Interstate 25.

DRAINAGE AREA.--2.81 mi<sup>2</sup>.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1998 to current year (seasonal records only).

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 6,630 ft above sea level, from topographic map.

REMARKS.--Records fair except for estimated daily discharges and those above 50 ft<sup>3</sup>/s which are poor. Natural flow of stream affected by runoff from industrial and residential areas of northeast Colorado Springs.

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum discharge, 2,960 ft<sup>3</sup>/s, July 13, 2001, gage height, 8.76 ft, from rating curve extended above 65 ft<sup>3</sup>/s on basis of slope-area measurement of peak flow at gage height 8.75 feet; minimum daily, 0.18 ft<sup>3</sup>/s, April 18, 1999.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum discharge, 2,960 ft<sup>3</sup>/s, July 13, gage height, 8.76 ft, from rating curve extended above 65 ft<sup>3</sup>/s on basis of slope-area measurement of peak flow at gage height 8.75 feet; minimum daily, 0.25 ft<sup>3</sup>/s, Apr. 1.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.1	---	---	---	---	---	.25	e.54	1.0	1.1	1.7	1.4
2	1.1	---	---	---	---	---	.31	e1.1	1.1	1.1	12	1.4
3	1.0	---	---	---	---	---	.37	2.5	1.1	1.1	3.1	1.4
4	1.1	---	---	---	---	---	.45	2.4	1.1	1.1	1.9	1.4
5	1.1	---	---	---	---	---	.48	7.4	1.1	1.2	1.1	1.6
6	1.3	---	---	---	---	---	.54	1.8	1.1	1.2	1.1	1.4
7	1.0	---	---	---	---	---	.59	1.8	78	1.1	1.3	2.7
8	1.1	---	---	---	---	---	.66	.97	2.9	1.1	1.4	2.2
9	1.0	---	---	---	---	---	.66	.76	2.5	70	1.6	1.3
10	1.1	---	---	---	---	---	2.1	.55	1.3	3.9	1.9	1.3
11	1.1	---	---	---	---	---	8.2	.52	1.3	1.6	2.0	1.3
12	1.1	---	---	---	---	---	2.5	.69	1.4	2.3	3.8	1.2
13	1.2	---	---	---	---	---	1.0	.86	1.8	71	2.0	1.2
14	1.2	---	---	---	---	---	.77	.85	1.3	3.0	2.5	1.2
15	1.1	---	---	---	---	---	.71	.87	1.2	3.0	1.4	2.6
16	1.0	---	---	---	---	---	.74	.91	1.2	2.1	1.4	1.5
17	.92	---	---	---	---	---	.85	9.6	1.2	1.7	1.7	1.5
18	.85	---	---	---	---	---	.91	1.8	1.2	1.5	1.9	1.3
19	.87	---	---	---	---	---	.81	12	1.2	1.4	1.9	1.3
20	.83	---	---	---	---	---	.76	4.1	4.3	1.4	1.8	1.2
21	.83	---	---	---	---	---	.76	2.6	1.4	1.5	1.5	1.2
22	3.4	---	---	---	---	---	.77	1.6	1.7	1.4	1.4	1.2
23	1.0	---	---	---	---	---	.79	1.3	1.3	1.6	1.3	1.2
24	2.2	---	---	---	---	---	.76	1.3	1.4	1.5	1.2	1.3
25	.86	---	---	---	---	---	.77	1.6	1.4	49	1.2	1.2
26	1.1	---	---	---	---	---	.64	2.8	1.5	48	1.2	1.2
27	.64	---	---	---	---	---	e.60	.69	1.3	2.6	1.2	1.2
28	1.3	---	---	---	---	---	e.58	.84	1.2	1.7	1.3	1.2
29	1.3	---	---	---	---	---	e.55	.87	1.6	1.5	3.6	1.2
30	.98	---	---	---	---	---	e.55	1.0	3.7	1.6	1.4	1.2
31	.97	---	---	---	---	---	---	1.1	---	1.7	2.8	---
TOTAL	35.65	---	---	---	---	---	30.43	67.72	123.8	284.0	65.6	42.5
MEAN	1.15	---	---	---	---	---	1.01	2.18	4.13	9.16	2.12	1.42
MAX	3.4	---	---	---	---	---	8.2	12	78	71	12	2.7
MIN	.64	---	---	---	---	---	.25	.52	1.0	1.1	1.1	1.2
AC-FT	71	---	---	---	---	---	60	134	246	563	130	84

e Estimated.

WATER-QUALITY RECORDS

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

PERIOD OF DAILY RECORD.--

SUSPENDED SEDIMENT: April 1998 to current year (seasonal records only).

INSTRUMENTATION.--Pumping sediment sampler with satellite telemetry.

REMARKS.--Daily suspended-sediment records are fair.

EXTREMES FOR PERIOD OF RECORD.--

SEDIMENT CONCENTRATION (seasonal only): Maximum daily mean, 8,990 mg/L, Apr. 30, 1999; minimum daily mean, 2 mg/L, Apr. 12, 1999 and Apr. 20, 2000.

SUSPENDED-SEDIMENT DISCHARGE (seasonal only): Maximum daily, 1,250 tons, June 7, 2001; minimum daily, 0.00 ton, many days in 1999 and 2000 (some estimated).

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATION (seasonal only): Maximum daily mean, 4,970 mg/L, June 8; minimum daily mean, 8 mg/L, Sept. 29.

SUSPENDED-SEDIMENT DISCHARGE (seasonal only): Maximum daily, 1,250 tons, June 7; minimum daily, 0.02 ton (estimated), Sept. 30.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

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) 100 ML (00300)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	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- ORTHO, DIS- SOLVED (MG/L) AS P (00671)
OCT												
26...	0900	.63	1170	8.3	7.8	8.9	E15	E20	6.55	<.041	.213	.037
APR												
05...	1115	.49	1170	8.3	13.4	8.6	E8	--	5.26	.056	<.060	E.016
JUN												
28...	1115	1.2	1060	8.3	21.1	7.6	310	170	5.50	.071	.065	.034
AUG												
09...	1130	1.6	1160	8.2	18.5	7.5	E2000	E1400	6.44	.073	.075	.030

E Estimated laboratory analysis value.

07103985 COTTONWOOD CREEK TRIBUTARY ABOVE RANGEWOOD DRIVE AT COLORADO SPRINGS, CO--Continued

MISCELLANEOUS FIELD AND SUSPENDED-SEDIMENT DISCHARGE DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	SEDI- MENT, SUS- PENDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)
OCT						
01...	1130	1.0	1160	16.0	--	--
04...	1130	1.1	1160	16.0	238	.71
NOV						
01...	1115	1.1	1190	11.3	808	2.4
DEC						
05...	1015	.63	1200	5.6	175	.30
JAN						
03...	1130	.54	1200	5.7	49	.07
FEB						
13...	1030	.46	1190	5.1	105	.13
MAR						
06...	0930	.52	1170	6.5	9	.01
30...	1130	1.7	686	11.1	1350	6.2
APR						
12...	1100	6.0	509	4.9	1700	28
25...	1300	.63	1080	18.7	--	--
25...	1530	.46	1070	18.7	25	.03
MAY						
04...	1200	2.5	676	5.7	1220	8.2
09...	1615	.77	1120	15.5	--	--
13...	1030	.46	1190	5.1	--	--
15...	1500	.88	1040	22.8	105	.25
18...	1245	1.6	1060	21.3	149	.64
21...	1700	2.5	1170	16.2	110	.74
23...	1100	1.2	1090	16.9	187	.61
31...	1215	1.1	1090	20.5	564	1.7
JUN						
06...	1115	1.1	924	20.2	67	.20
08...	1630	2.1	801	17.3	3990	23
14...	1330	1.2	1070	16.1	360	1.2
22...	1245	1.2	1100	22.6	24	.08
25...	1345	1.3	1050	21.2	28	.10
28...	1145	1.2	1040	20.4	82	.27
JUL						
05...	1500	1.1	1080	25.6	48	.14
11...	1115	1.4	1090	20.7	77	.29
11...	1130	1.5	1090	20.7	478	1.9
12...	1515	3.9	355	23.5	1290	14
18...	1500	1.4	1180	21.8	431	1.6
18...	1530	1.4	1180	21.8	431	1.6
27...	1330	2.5	912	22.0	1330	9.0
AUG						
02...	1415	1.6	1070	23.6	52	.22
16...	1330	1.3	1020	19.6	27	.09
16...	1425	1.3	1020	19.6	--	--
22...	1330	1.2	1050	20.7	27	.09
29...	1415	1.3	1090	22.3	46	.16
SEP						
05...	1430	1.4	1140	21.5	121	.46
12...	1300	1.2	1130	20.3	40	.13
20...	1300	1.2	1140	20.3	42	.14
26...	1200	1.2	1130	18.3	14	.05

ARKANSAS RIVER BASIN

07103985 COTTONWOOD CREEK TRIBUTARY ABOVE RANGEWOOD DRIVE AT COLORADO SPRINGS, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	1.1	---	e.85	---	---	---	---	---	---
2	1.1	---	e.74	---	---	---	---	---	---
3	1.0	243	.67	---	---	---	---	---	---
4	1.1	232	.69	---	---	---	---	---	---
5	1.1	201	.58	---	---	---	---	---	---
6	1.3	---	e.85	---	---	---	---	---	---
7	1.0	---	e.85	---	---	---	---	---	---
8	1.1	336	.96	---	---	---	---	---	---
9	1.0	---	e.87	---	---	---	---	---	---
10	1.1	---	e.85	---	---	---	---	---	---
11	1.1	261	.78	---	---	---	---	---	---
12	1.1	---	e.76	---	---	---	---	---	---
13	1.2	---	e.76	---	---	---	---	---	---
14	1.2	---	e.72	---	---	---	---	---	---
15	1.1	223	.65	---	---	---	---	---	---
16	1.0	270	.79	---	---	---	---	---	---
17	.92	---	e.65	---	---	---	---	---	---
18	.85	---	e.57	---	---	---	---	---	---
19	.87	235	.55	---	---	---	---	---	---
20	.83	---	e.51	---	---	---	---	---	---
21	.83	219	.49	---	---	---	---	---	---
22	3.4	1070	23	---	---	---	---	---	---
23	1.0	---	e.84	---	---	---	---	---	---
24	2.2	993	7.8	---	---	---	---	---	---
25	.86	---	e1.0	---	---	---	---	---	---
26	1.1	250	.79	---	---	---	---	---	---
27	.64	---	e.45	---	---	---	---	---	---
28	1.3	403	2.0	---	---	---	---	---	---
29	1.3	306	1.5	---	---	---	---	---	---
30	.98	164	.44	---	---	---	---	---	---
31	.97	---	e.43	---	---	---	---	---	---
TOTAL	35.65	---	53.39	0	---	0	0	---	0

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---
TOTAL	0	---	0	0	---	0	0	---	0

07103985 COTTONWOOD CREEK TRIBUTARY ABOVE RANGEWOOD DRIVE AT COLORADO SPRINGS, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	.25	---	e.04	e.54	---	e.03	1.0	328	.91
2	.31	---	e.04	e1.1	---	e.32	1.1	226	.69
3	.37	---	e.05	2.5	485	5.8	1.1	253	.73
4	.45	---	e.06	2.4	312	3.8	1.1	256	.78
5	.48	52	.07	7.4	985	31	1.1	---	e.70
6	.54	69	.10	1.8	470	9.8	1.1	116	.33
7	.59	---	e.12	1.8	1140	15	78	2830	1250
8	.66	76	.14	.97	---	e.28	2.9	4970	43
9	.66	---	e.14	.76	---	e.22	2.5	3700	31
10	2.1	603	8.0	.55	---	e.16	1.3	---	e8.1
11	8.2	1500	52	.52	---	e.15	1.3	---	e5.7
12	2.5	649	6.7	.69	---	e.20	1.4	3000	11
13	1.0	362	1.2	.86	---	e.25	1.8	1200	5.5
14	.77	233	.50	.85	---	e.24	1.3	523	1.8
15	.71	---	e.55	.87	106	.25	1.2	---	e1.4
16	.74	---	e.62	.91	---	e.27	1.2	391	1.3
17	.85	305	.70	9.6	1950	165	1.2	442	1.5
18	.91	---	e.66	1.8	191	1.0	1.2	483	1.6
19	.81	---	e.52	12	2670	300	1.2	365	1.2
20	.76	---	e.41	4.1	---	e4.7	4.3	712	39
21	.76	---	e.34	2.6	138	.97	1.4	247	1.6
22	.77	---	e.28	1.6	145	.64	1.7	137	1.8
23	.79	---	e.21	1.3	174	.61	1.3	---	e.09
24	.76	---	e.13	1.3	129	.44	1.4	---	e.11
25	.77	32	.07	1.6	140	.60	1.4	39	.14
26	.64	---	e.04	2.8	1310	31	1.5	87	.45
27	e.60	---	e.03	.69	1240	2.3	1.3	72	.25
28	e.58	---	e.03	.84	---	e2.4	1.2	116	.37
29	e.55	---	e.03	.87	---	e2.1	1.6	687	3.9
30	e.55	---	e.03	1.0	---	e2.0	3.7	2000	38
31	---	---	---	1.1	549	1.6	---	---	---
TOTAL	30.43	---	73.81	67.72	---	583.13	123.8	---	1452.95

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	1.1	955	2.9	1.7	---	e.22	1.4	223	.87
2	1.1	638	1.9	12	2420	397	1.4	---	e.76
3	1.1	340	1.0	3.1	2880	38	1.4	---	e.66
4	1.1	156	.48	1.9	3350	19	1.4	---	e.58
5	1.2	60	.19	1.1	3230	9.6	1.6	199	.99
6	1.2	33	.10	1.1	---	e6.7	1.4	252	.93
7	1.1	31	.09	1.3	---	e4.2	2.7	609	6.1
8	1.1	51	.15	1.4	382	1.5	2.2	977	6.9
9	70	2280	705	1.6	88	.37	1.3	615	2.1
10	3.9	374	13	1.9	94	.57	1.3	---	e1.4
11	1.6	405	1.9	2.0	---	e1.0	1.3	---	e1.0
12	2.3	1050	6.7	3.8	932	16	1.2	111	.37
13	71	---	e632	2.0	1520	9.1	1.2	44	.14
14	3.0	---	e7.8	2.5	2650	18	1.2	30	.09
15	3.0	---	e4.9	1.4	673	2.6	2.6	317	2.7
16	2.1	---	e.63	1.4	76	.28	1.5	1160	4.7
17	1.7	---	e.25	1.7	30	.14	1.5	578	2.3
18	1.5	183	.71	1.9	22	.11	1.3	298	1.1
19	1.4	367	1.4	1.9	29	.15	1.3	141	.49
20	1.4	---	e1.3	1.8	28	.13	1.2	47	.16
21	1.5	---	e1.3	1.5	---	e.11	1.2	14	.05
22	1.4	---	e1.2	1.4	49	.18	1.2	---	e.07
23	1.6	---	e1.3	1.3	170	.59	1.2	28	.09
24	1.5	---	e1.2	1.2	---	e.45	1.3	---	e.08
25	49	---	e1200	1.2	96	.31	1.2	---	e.06
26	48	---	e819	1.2	---	e.17	1.2	14	.05
27	2.6	1420	10	1.2	43	.14	1.2	11	.03
28	1.7	---	e4.8	1.3	65	.22	1.2	10	.03
29	1.5	---	e3.1	3.6	335	25	1.2	8	.03
30	1.6	---	e1.9	1.4	---	e1.2	1.2	---	e.02
31	1.7	142	.65	2.8	---	e9.5	---	---	---
TOTAL	284.0	---	3426.85	65.6	---	562.54	42.5	---	34.85

e Estimated.

07103985 COTTONWOOD CREEK TRIBUTARY ABOVE RANGEWOOD DRIVE AT COLORADO SPRINGS, CO--Continued

## PRECIPITATION RECORDS

PERIOD OF RECORD.--April to September 2001 (seasonal records only).

GAGE.--Tipping-bucket rain gage with satellite telemetry.

REMARKS.--Records good. Daily data that are not published are either missing or of unacceptable quality.

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum daily precipitation, 2.43 inches, July 9, 2001.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum daily precipitation, 2.43 inches, July 9.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	.00	.00	.00	.01	.00	.01
2	---	---	---	---	---	---	.00	.03	.00	.00	.90	.00
3	---	---	---	---	---	---	.00	.16	.00	.00	.18	.00
4	---	---	---	---	---	---	.00	.48	.07	.00	.41	.00
5	---	---	---	---	---	---	.00	1.04	.03	.00	.00	.08
6	---	---	---	---	---	---	.00	.13	.00	.00	.00	.00
7	---	---	---	---	---	---	.00	.05	1.33	.00	.00	.40
8	---	---	---	---	---	---	.00	.01	.00	.00	.00	.25
9	---	---	---	---	---	---	.00	.00	.19	2.43	.01	.01
10	---	---	---	---	---	---	.09	.01	.00	.02	.11	.00
11	---	---	---	---	---	---	.28	.01	.00	.07	.00	.00
12	---	---	---	---	---	---	.16	.00	.00	.32	.20	.00
13	---	---	---	---	---	---	.00	.00	.27	1.81	.11	.00
14	---	---	---	---	---	---	.00	.02	.00	.01	.34	.00
15	---	---	---	---	---	---	.00	.00	.00	.13	.01	.29
16	---	---	---	---	---	---	.00	.02	.00	.00	.02	.02
17	---	---	---	---	---	---	.01	.70	.00	.00	.00	.10
18	---	---	---	---	---	---	.00	.01	.00	.00	.00	.01
19	---	---	---	---	---	---	.00	.89	.00	.00	.00	.00
20	---	---	---	---	---	---	.00	.01	.28	.01	.00	.00
21	---	---	---	---	---	---	.00	.00	.00	.02	.05	.00
22	---	---	---	---	---	---	.00	.00	.10	.00	.02	.00
23	---	---	---	---	---	---	.00	.00	.02	.07	.00	.00
24	---	---	---	---	---	---	.00	.00	.05	.08	.00	.00
25	---	---	---	---	---	---	.00	.02	.01	1.77	.00	.00
26	---	---	---	---	---	---	.00	.17	.10	.88	.00	.00
27	---	---	---	---	---	---	.00	.00	.00	.00	.00	.00
28	---	---	---	---	---	---	.00	.05	.00	.00	.00	.00
29	---	---	---	---	---	---	.00	.00	.09	.00	.33	.00
30	---	---	---	---	---	---	.00	.00	.12	.00	.08	.00
31	---	---	---	---	---	---	---	.00	---	.00	.47	---
TOTAL	---	---	---	---	---	---	0.54	3.81	2.66	7.63	3.24	1.17
MAX	---	---	---	---	---	---	.28	1.04	1.33	2.43	.90	.40

07103990 COTTONWOOD CREEK AT MOUTH AT PIKEVIEW, CO

LOCATION.--Lat 38°55'41", long 104°48'35", in SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec.8, T.13 S., R.67 W., El Paso County, Hydrologic Unit 11020003, on left bank 20 ft upstream from Vincent Drive bridge, 0.3 mi south of Woodmen Road, and 0.3 mi upstream from mouth.

DRAINAGE AREA.--18.7 mi<sup>2</sup>.

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder with satellite telemetry and crest-stage gage. Elevation of gage is 6,265 ft above sea level, from topographic map.

REMARKS.--Records fair except for estimated daily discharges and those above 900 ft<sup>3</sup>/s, which are poor. Natural flow of stream affected by runoff from industrial and residential areas of northeast Colorado Springs.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.5	6.3	5.5	5.7	e6.8	4.1	3.9	3.7	6.4	7.3	7.3	7.6
2	4.7	6.2	5.5	5.8	e7.0	4.2	3.8	4.3	6.4	7.3	71	8.2
3	4.8	8.0	5.6	5.8	e7.2	3.8	3.9	18	5.9	7.3	12	8.1
4	6.2	5.8	5.2	5.7	e6.6	3.9	3.8	18	7.1	7.1	22	8.1
5	7.7	6.0	5.5	5.8	e7.4	3.8	3.8	71	7.0	6.4	14	9.3
6	16	5.8	5.9	5.6	e6.0	4.0	3.6	7.2	5.4	7.1	8.7	8.0
7	6.5	5.9	5.5	5.7	e7.0	4.0	3.6	8.4	e110	6.4	9.1	17
8	6.4	5.7	5.7	e5.6	e5.8	3.6	3.6	4.9	e50	6.2	9.2	13
9	6.5	5.7	5.7	e5.5	e5.4	3.9	3.6	4.9	14	e160	9.2	8.4
10	6.5	5.6	5.7	e5.4	e6.2	15	13	5.2	8.3	e55	10	9.1
11	6.5	5.7	5.1	e5.6	e6.4	12	50	5.7	7.2	e30	10	9.0
12	6.2	e6.0	e5.7	e5.8	6.0	10	31	6.4	6.7	e38	19	9.2
13	6.1	e6.0	e5.5	5.7	5.9	5.6	5.0	6.1	14	e170	9.2	9.2
14	6.3	e5.8	e5.4	5.6	5.6	3.7	3.7	6.3	7.6	e30	15	10
15	6.4	e5.6	e5.3	e6.0	5.6	3.6	3.9	6.5	7.4	e20	8.4	20
16	6.5	e5.4	5.3	5.7	5.5	3.7	3.9	7.0	7.7	e7.0	8.2	9.0
17	6.5	e5.4	5.6	5.7	5.4	12	3.9	51	8.0	e7.3	8.2	8.5
18	6.6	e5.6	5.1	e5.6	5.1	6.1	3.9	7.3	8.0	8.3	8.3	8.0
19	6.2	e5.6	5.2	e5.5	5.0	3.8	3.8	48	8.1	7.3	8.2	8.2
20	5.7	5.6	5.0	e5.7	4.9	3.8	3.9	7.3	11	7.3	8.2	8.2
21	5.7	5.4	5.2	5.8	4.9	3.9	3.7	7.3	13	7.3	8.1	8.3
22	23	5.7	5.3	5.7	4.9	4.0	4.1	7.3	9.8	7.3	8.2	8.2
23	5.9	5.7	5.5	5.5	4.9	4.8	3.8	7.3	7.0	8.8	8.2	8.1
24	11	5.6	5.4	5.3	4.2	8.4	3.7	8.1	7.2	7.4	7.8	8.0
25	5.7	5.8	5.5	5.7	4.3	4.1	3.8	7.4	7.0	75	7.3	8.2
26	5.7	5.5	5.3	5.8	4.4	4.1	3.8	19	7.3	74	7.3	8.2
27	5.7	5.7	5.6	e6.1	6.0	4.1	4.0	6.5	7.1	7.6	7.3	8.2
28	8.2	5.5	5.7	e6.4	4.3	4.0	3.8	11	7.3	7.3	7.3	7.9
29	8.9	5.6	5.4	e6.0	---	10	3.7	6.7	9.5	7.3	14	7.3
30	5.9	5.3	5.9	e6.0	---	14	3.7	9.9	15	7.4	9.0	7.3
31	6.4	---	5.7	e6.0	---	3.8	---	8.4	---	7.3	35	---
TOTAL	225.9	173.5	169.5	177.8	158.7	179.8	197.7	396.1	396.4	812.0	394.7	275.8
MEAN	7.29	5.78	5.47	5.74	5.67	5.80	6.59	12.8	13.2	26.2	12.7	9.19
MAX	23	8.0	5.9	6.4	7.4	15	50	71	110	170	71	20
MIN	4.7	5.3	5.0	5.3	4.2	3.6	3.6	3.7	5.4	6.2	7.3	7.3
AC-FT	448	344	336	353	315	357	392	786	786	1610	783	547

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1986 - 2001, BY WATER YEAR (WY)

	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
MEAN	5.75	5.12	4.45	4.32	4.55	5.52	7.08	9.84	10.0	9.94	9.74	6.52				
MAX	9.59	9.18	7.90	7.60	7.56	11.1	33.3	40.7	26.4	26.2	27.7	13.9				
(WY)	1995	1998	1998	2000	2000	1992	1999	1999	1995	2001	1999	1999				
MIN	1.93	2.90	1.92	2.30	2.28	2.57	3.31	2.71	3.05	2.34	5.41	2.67				
(WY)	1987	1987	1992	1987	1990	1999	1989	1986	1990	1992	1993	1986				

SUMMARY STATISTICS

	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1986 - 2001
ANNUAL TOTAL	3251.1	3557.9	
ANNUAL MEAN	8.88	9.75	7.09
HIGHEST ANNUAL MEAN			15.7
LOWEST ANNUAL MEAN			4.01
HIGHEST DAILY MEAN	126	May 8	500
LOWEST DAILY MEAN	4.1	May 7	.01
ANNUAL SEVEN-DAY MINIMUM	5.0	Apr 17	.12
MAXIMUM PEAK FLOW		a,b2710	Jul 9
MAXIMUM PEAK STAGE		a,c9.53	Jul 9
ANNUAL RUNOFF (AC-FT)	6450	7060	5130
10 PERCENT EXCEEDS	12	13	10
50 PERCENT EXCEEDS	6.8	6.2	4.7
90 PERCENT EXCEEDS	5.3	3.9	2.4

e Estimated.

a Also occurred July 13, 2001.

b From rating curve extended above 900 ft<sup>3</sup>/s, on basis of critical-depth measurement of peak flow at gage height 9.02 ft.

c From flood marks.

WATER-QUALITY RECORDS

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

PERIOD OF DAILY RECORD.--

SUSPENDED SEDIMENT: April 1998 to current year (seasonal records only).

INSTRUMENTATION.--Pumping sediment sampler with satellite telemetry.

REMARKS.--Daily suspended-sediment records are fair.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SEDIMENT CONCENTRATION (seasonal only): Maximum daily mean, 7,870 mg/L, May 25, 1999; minimum daily mean, 97 mg/L, Sept. 30, 2001.

SUSPENDED-SEDIMENT DISCHARGE (seasonal only): Maximum daily, 13,500 tons (estimated), April 30, 1999; minimum daily, 1.2 tons (estimated), March 31, 1999.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATION (seasonal only): Maximum daily mean, 6,260 mg/L, May 17; minimum daily mean, 97 mg/L, Sept. 30.

SUSPENDED-SEDIMENT DISCHARGE (seasonal only): Maximum daily, 4,320 tons (estimated), July 9; minimum daily, 1.9 tons (estimated), Sept. 30.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

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, MTEC MF WATER (COL/ 100 ML) (31633)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L) (00608)	PHOS-PHORUS TOTAL (MG/L) (00665)	PHOS-ORTHO, DIS-SOLVED (MG/L) (00671)
OCT 26...	0945	5.2	744	8.5	6.3	9.9	110	110	5.42	<.041	.131	.028
APR 05...	1015	4.1	700	8.4	11.0	8.6	150	--	5.14	.029	.314	<.018
JUN 28...	1145	7.6	707	8.6	24.8	6.7	400	150	4.10	.033	.115	.042
AUG 09...	1330	9.2	764	8.5	19.1	7.2	1400	--	4.74	.027	.143	.029

MISCELLANEOUS FIELD AND SUSPENDED-SEDIMENT DISCHARGE DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-SOLVED (T/DAY) (80155)
OCT 04...	0830	6.1	771	10.5	496	8.2
NOV 01...	0815	6.4	750	6.5	394	6.8
01...	0945	6.6	--	6.5	768	14
DEC 05...	1130	5.7	684	1.0	2950	45
18...	1215	6.6	734	.5	--	--
JAN 03...	1025	6.5	726	.5	979	17
FEB 01...	1040	9.3	829	0	--	--
13...	1145	9.2	543	5.5	2450	61
MAR 06...	1130	3.6	689	11.0	898	8.7
30...	0930	4.2	470	7.5	1100	12
APR 05...	1000	4.2	691	11.0	798	9.0
MAY 02...	1315	3.6	683	8.0	892	8.7
18...	1700	7.3	656	22.5	722	14
23...	1000	7.3	731	17.0	524	10
JUN 06...	1015	5.7	704	21.0	294	4.5
08...	1500	9.2	590	22.5	1150	29
22...	1200	7.3	710	26.5	403	7.9
26...	1105	7.1	710	25.0	--	--
JUL 12...	1415	269	107	23.5	2380	1730
13...	1515	7.3	651	20.5	309	6.1
19...	1245	7.3	763	20.5	278	5.5
31...	1115	7.3	780	24.5	625	12
AUG 09...	1330	9.2	764	19.1	633	16
22...	0945	8.2	753	18.0	563	12
29...	1115	7.3	747	21.5	513	10
SEP 07...	0945	25	372	11.5	1430	97
11...	1040	9.0	759	16.5	--	--
20...	1000	8.2	757	15.0	376	8.3

07103990 COTTONWOOD CREEK AT MOUTH AT PIKEVIEW, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	5.5	---	e8.0	6.3	---	---	5.5	---	---
2	4.7	---	e6.6	6.2	---	---	5.5	---	---
3	4.8	---	e6.7	8.0	---	---	5.6	---	---
4	6.2	499	8.8	5.8	---	---	5.2	---	---
5	7.7	---	e10	6.0	---	---	5.5	---	---
6	16	---	e21	5.8	---	---	5.9	---	---
7	6.5	---	e5.3	5.9	---	---	5.5	---	---
8	6.4	299	4.7	5.7	---	---	5.7	---	---
9	6.5	---	e5.8	5.7	---	---	5.7	---	---
10	6.5	---	e5.4	5.6	---	---	5.7	---	---
11	6.5	---	e5.5	5.7	---	---	5.1	---	---
12	6.2	---	e5.6	e6.0	---	---	e5.7	---	---
13	6.1	---	e5.2	e6.0	---	---	e5.5	---	---
14	6.3	---	e5.8	e5.8	---	---	e5.4	---	---
15	6.4	---	e6.4	e5.6	---	---	e5.3	---	---
16	6.5	---	e7.5	e5.4	---	---	5.3	---	---
17	6.5	---	e8.3	e5.4	---	---	5.6	---	---
18	6.6	483	8.9	e5.6	---	---	5.1	---	---
19	6.2	---	e6.3	e5.6	---	---	5.2	---	---
20	5.7	381	5.3	5.6	---	---	5.0	---	---
21	5.7	404	5.5	5.4	---	---	5.2	---	---
22	23	1620	178	5.7	---	---	5.3	---	---
23	5.9	---	e6.2	5.7	---	---	5.5	---	---
24	11	---	e36	5.6	---	---	5.4	---	---
25	5.7	---	e5.3	5.8	---	---	5.5	---	---
26	5.7	321	4.3	5.5	---	---	5.3	---	---
27	5.7	---	e4.7	5.7	---	---	5.6	---	---
28	8.2	---	e12	5.5	---	---	5.7	---	---
29	8.9	---	e14	5.6	---	---	5.4	---	---
30	5.9	---	e6.8	5.3	---	---	5.9	---	---
31	6.4	---	e8.3	---	---	---	5.7	---	---
TOTAL	225.9	---	428.2	173.5	---	0	169.5	---	0

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	5.7	---	---	e6.8	---	---	4.1	---	---
2	5.8	---	---	e7.0	---	---	4.2	---	---
3	5.8	---	---	e7.2	---	---	3.8	---	---
4	5.7	---	---	e6.6	---	---	3.9	---	---
5	5.8	---	---	e7.4	---	---	3.8	---	---
6	5.6	---	---	e6.0	---	---	4.0	---	---
7	5.7	---	---	e7.0	---	---	4.0	---	---
8	e5.6	---	---	e5.8	---	---	3.6	---	---
9	e5.5	---	---	e5.4	---	---	3.9	---	---
10	e5.4	---	---	e6.2	---	---	15	---	---
11	e5.6	---	---	e6.4	---	---	12	---	---
12	e5.8	---	---	6.0	---	---	10	---	---
13	5.7	---	---	5.9	---	---	5.6	---	---
14	5.6	---	---	5.6	---	---	3.7	---	---
15	e6.0	---	---	5.6	---	---	3.6	---	---
16	5.7	---	---	5.5	---	---	3.7	---	---
17	5.7	---	---	5.4	---	---	12	---	---
18	e5.6	---	---	5.1	---	---	6.1	---	---
19	e5.5	---	---	5.0	---	---	3.8	---	---
20	e5.7	---	---	4.9	---	---	3.8	---	---
21	5.8	---	---	4.9	---	---	3.9	---	---
22	5.7	---	---	4.9	---	---	4.0	---	---
23	5.5	---	---	4.9	---	---	4.8	---	---
24	5.3	---	---	4.2	---	---	8.4	---	---
25	5.7	---	---	4.3	---	---	4.1	---	---
26	5.8	---	---	4.4	---	---	4.1	---	---
27	e6.1	---	---	6.0	---	---	4.1	---	---
28	e6.4	---	---	4.3	---	---	4.0	---	---
29	e6.0	---	---	---	---	---	10	---	---
30	e6.0	---	---	---	---	---	14	---	---
31	e6.0	---	---	---	---	---	3.8	---	---
TOTAL	177.8	---	0	158.7	---	0	179.8	---	0

## ARKANSAS RIVER BASIN

07103990 COTTONWOOD CREEK AT MOUTH AT PIKEVIEW, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	3.9	551	5.8	3.7	---	e8.6	6.4	---	e15
2	3.8	---	e4.0	4.3	917	13	6.4	801	14
3	3.9	357	3.7	18	1310	112	5.9	524	8.3
4	3.8	427	4.4	18	1360	162	7.1	963	18
5	3.8	765	7.9	71	4930	1250	7.0	683	14
6	3.6	598	5.8	7.2	733	18	5.4	318	4.6
7	3.6	---	e4.2	8.4	---	e54	e110	---	e129
8	3.6	440	4.2	4.9	1100	15	e50	---	e129
9	3.6	594	5.8	4.9	---	e14	14	1200	77
10	13	---	e130	5.2	---	e14	8.3	1420	32
11	50	4940	1330	5.7	---	e15	7.2	827	16
12	31	---	e311	6.4	---	e17	6.7	525	9.6
13	5.0	---	e16	6.1	---	e15	14	793	61
14	3.7	---	e11	6.3	---	e15	7.6	---	e13
15	3.9	---	e12	6.5	869	15	7.4	---	e13
16	3.9	1100	11	7.0	1210	23	7.7	573	12
17	3.9	---	e11	51	6260	1620	8.0	339	7.3
18	3.9	---	e11	7.3	2630	52	8.0	439	9.5
19	3.8	1010	11	48	3120	1000	8.1	---	e9.0
20	3.9	746	7.8	7.3	3400	67	11	448	46
21	3.7	607	6.1	7.3	1730	34	13	1270	82
22	4.1	---	e6.8	7.3	---	e13	9.8	659	30
23	3.8	---	e7.0	7.3	531	11	7.0	---	e17
24	3.7	752	7.5	8.1	493	11	7.2	---	e17
25	3.8	---	e7.9	7.4	459	9.1	7.0	---	e16
26	3.8	---	e8.2	19	2050	250	7.3	---	e16
27	4.0	---	e8.6	6.5	---	e29	7.1	---	e14
28	3.8	---	e8.4	11	1320	57	7.3	---	e14
29	3.7	---	e8.4	6.7	1140	21	9.5	---	e26
30	3.7	---	e8.6	9.9	868	25	15	---	e114
31	---	---	---	8.4	703	16	---	---	---
TOTAL	197.7	---	1985.1	396.1	---	4975.7	396.4	---	983.3
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	7.3	---	e9.1	7.3	869	17	7.6	---	e7.0
2	7.3	---	e8.5	71	---	e1580	8.2	---	e7.1
3	7.3	---	e7.7	12	---	e43	8.1	---	e6.9
4	7.1	---	e6.8	22	---	e179	8.1	305	6.7
5	6.4	---	e5.5	14	---	e43	9.3	---	e9.9
6	7.1	---	e5.3	8.7	---	e12	8.0	---	e12
7	6.4	187	3.4	9.1	---	e12	17	1280	87
8	6.2	154	2.5	9.2	492	12	13	1060	53
9	e160	---	e4320	9.2	613	15	8.4	---	e13
10	e55	---	e23	10	685	21	9.1	585	14
11	e30	---	e12	10	687	21	9.0	---	e13
12	e38	---	e76	19	---	e108	9.2	461	11
13	e170	---	e3670	9.2	---	e21	9.2	544	13
14	e30	---	e25	15	---	e70	10	468	14
15	e20	---	e16	8.4	---	e18	20	---	e98
16	e7.0	---	e5.8	8.2	---	e17	9.0	---	e9.5
17	e7.3	---	e6.3	8.2	---	e17	8.5	---	e8.9
18	8.3	---	e9.0	8.3	768	17	8.0	---	e8.3
19	7.3	290	5.7	8.2	720	16	8.2	---	e8.4
20	7.3	402	8.0	8.2	596	13	8.2	378	8.4
21	7.3	558	11	8.1	573	13	8.3	---	e8.7
22	7.3	494	9.8	8.2	594	13	8.2	382	8.5
23	8.8	---	e15	8.2	668	15	8.1	370	8.1
24	7.4	---	e6.9	7.8	632	13	8.0	470	10
25	75	---	e1830	7.3	611	12	8.2	342	7.6
26	74	---	e1860	7.3	545	11	8.2	---	e4.4
27	7.6	---	e17	7.3	---	e12	8.2	143	3.2
28	7.3	---	e16	7.3	662	13	7.9	142	3.0
29	7.3	---	e14	14	738	80	7.3	117	2.3
30	7.4	---	e13	9.0	---	e14	7.3	97	1.9
31	7.3	681	13	35	---	e169	---	---	---
TOTAL	812.0	---	12031.3	394.7	---	2617	275.8	---	466.8

e Estimated.



## ARKANSAS RIVER BASIN

07104050 NORTH ROCKRIMMON CREEK ABOVE DELMONICO DRIVE AT COLORADO SPRINGS, CO

## WATER-QUALITY RECORDS

LOCATION.--Lat 38°54'56", long 104°49'35", in SW<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec.18, T.13 S., R.66 W., El Paso County, Hydrologic Unit 11020003, 0.1 mi upstream from Delmonico Drive, 0.2 mi west of Interstate 25, 0.3 mi upstream from mouth, and 2.0 mi downstream from Woodmen Road. Elevation of site is 6,220 feet above sea level, from topographic map.

DRAINAGE AREA.--1.82 mi<sup>2</sup>.

PERIOD OF RECORD.--April 1998 to current year (seasonal peaks only).

REMARKS.--Annual maximum discharge data are published in the "Maximum Discharge at Crest-Stage Partial-Record Stations" section of this report.

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NO WATER-QUALITY DATA AVAILABLE FOR WATER YEAR 2001.

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07104905 MONUMENT CREEK AT BIJOU STREET, AT COLORADO SPRINGS, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 38°50'14", long 104°49'44", in NW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec.18, T.14 S., R.66 W., El Paso County, Hydrologic Unit 11020003, at bridge on Bijou Street in Colorado Springs.

DRAINAGE AREA.--235 mi<sup>2</sup>

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCTANCE (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)	E COLI, MTEC MF (COL/100 ML) (31633)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)
OCT 24...	1315	34	588	8.1	12.5	8.6	3.1	E1500	E1600	73.3	12.8	120	.9
NOV 28...	1345	34	646	8.5	4.4	10.4	<1.0	84	E10	81.8	13.4	130	1.2
FEB 27...	1200	39	689	8.4	1.9	11.0	1.1	E870	E20	78.7	14.4	140	1.0
APR 03...	1300	24	627	8.6	15.9	8.5	<1.0	48	--	72.9	13.8	140	1.2
JUN 26...	1215	18	720	8.5	28.0	7.2	<1.0	370	260	97.7	15.0	180	1.0
AUG 07...	1230	26	633	8.3	27.3	6.4	<1.0	1000	E400	75.7	12.6	130	.9

DATE	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 ORTHO, DIS-SOLVED (MG/L AS P) (00671)	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	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)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)
OCT 24...	2.25	<.041	.209	.061	2	1.2	63	61	.18	<.07	3	2.6	6.1
NOV 28...	3.73	E.037	.381	.114	2	1.2	57	60	.24	<.07	3	<1.0	8.0
FEB 27...	3.17	.037	.437	.215	2	1.1	87	86	.26	<.07	3	1.3	7.7
APR 03...	2.63	.011	.344	.210	2	1.4	73	72	.16	<.07	1	1.9	5.8
JUN 26...	2.62	.021	.162	.074	2	1.6	70	61	.17	<.07	1	4.1	3.7
AUG 07...	1.75	.013	.915	.196	2	1.6	51	58	.16	<.07	2	<1.0	5.5

DATE	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)	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)	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)
OCT 24...	2.9	2980	20	5	.16	99	15.0	<.14	<.23	6	3.53	7.1	6.5
NOV 28...	2.4	5090	<10	7	<.15	176	3.0	<.14	<.23	7	3.49	10.2	9.7
FEB 27...	2.9	--	<10	6	.15	109	6.0	<.14	<.23	6	3.70	8.6	7.6
APR 03...	2.4	--	<10	4	<.15	67	<1.0	<.01	<.01	4	3.70	7.7	8.4
JUN 26...	1.9	1580	<10	2	<.15	56	4.0	<.01	<.01	5	3.90	10.6	10.2
AUG 07...	1.5	13700	<10	4	<.15	85	3.0	.07	<.01	5	4.20	7.8	7.7

## ARKANSAS RIVER BASIN

07104905 MONUMENT CREEK AT BIJOU STREET, AT COLORADO SPRINGS, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	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)	CYANIDE TOTAL (MG/L AS CN) (00720)	SEDI- MENT, SUS- PENDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)
OCT 24...	<.20	<.2	22	4	<.01	167	15
NOV 28...	<.20	<.2	32	3	<.01	349	32
FEB 27...	<.20	<.2	27	6	<.01	319	34
APR 03...	<.20	<.2	19	6	<.01	166	11
JUN 26...	<.20	<.2	11	<3	<.01	108	5.2
AUG 07...	<.20	<.2	19	<3	<.01	147	10

E Estimated laboratory analysis value.

07105000 BEAR CREEK NEAR COLORADO SPRINGS, CO

LOCATION.--Lat 38°49'21", long 104°53'17", in NE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec.21, T.14 S., R.67 W., El Paso County, Hydrologic Unit 11020003, on left bank 30 ft east of 26th Street, 0.1 mi west of Colorado Springs, 0.6 mi southwest of Bear Creek Nature Center, and 3.4 mi upstream from mouth.

DRAINAGE AREA.--6.89 mi<sup>2</sup>.

PERIOD OF RECORD.--May 1992 to current year.

GAGE.--Water-stage recorder with satellite telemetry and crest-stage gage. Elevation of gage is 6,520 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 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.3	1.4	1.3	1.1	1.2	1.3	1.7	1.6	1.5	.92	.80	1.3
2	1.3	1.4	1.3	1.1	1.3	1.3	1.9	1.7	1.4	1.0	1.1	.95
3	1.3	1.4	1.3	1.1	1.2	1.2	2.0	1.8	1.4	.99	1.1	.87
4	1.3	1.4	1.3	1.1	1.2	1.3	2.0	1.9	1.4	.97	1.0	.82
5	1.4	1.4	1.4	1.1	1.3	1.3	2.0	2.0	1.4	.94	1.1	.76
6	1.5	1.3	1.3	1.1	1.2	1.3	2.0	2.3	1.3	.90	.96	.80
7	1.5	1.3	1.4	1.1	1.3	1.4	1.8	2.5	1.5	.83	.83	.87
8	1.5	1.4	1.3	1.1	1.3	1.4	1.8	2.6	1.5	.74	.66	1.1
9	1.5	1.4	1.3	1.1	e1.3	1.4	1.7	2.6	1.3	.78	.62	1.1
10	1.5	1.3	1.3	1.1	1.3	1.4	1.8	2.5	1.3	.88	.64	.96
11	1.4	1.3	1.2	1.1	1.2	1.3	1.7	2.4	1.3	.80	.64	.84
12	1.4	1.3	1.2	1.2	1.3	1.3	1.8	2.4	1.2	1.0	.76	.75
13	1.4	1.2	1.3	1.2	1.4	1.5	1.8	2.3	1.1	1.2	1.1	.73
14	1.4	1.4	1.2	1.2	1.3	1.5	1.9	2.3	1.2	1.2	1.2	.76
15	1.3	1.3	1.2	1.2	1.4	1.3	1.9	2.3	1.2	1.1	1.6	.78
16	1.3	1.3	1.2	1.2	1.3	1.4	1.9	2.1	1.1	e.90	1.8	.72
17	1.3	1.3	1.3	e1.2	1.2	1.4	1.9	2.3	1.1	.80	1.4	.70
18	1.3	1.3	1.2	1.1	1.2	1.4	1.9	2.3	1.1	.79	1.2	.71
19	1.3	1.3	1.3	1.1	1.3	1.4	1.9	2.1	1.1	.77	1.1	.65
20	1.2	1.3	1.2	1.1	1.4	1.5	2.0	2.0	1.1	.76	1.1	.60
21	1.3	1.4	1.1	1.1	1.3	1.7	1.9	2.0	1.1	.85	1.0	.60
22	1.4	1.4	1.2	1.1	1.4	1.7	1.8	1.9	1.1	.93	1.1	.69
23	1.4	1.3	1.1	1.1	1.4	1.7	1.8	1.8	1.1	.86	1.1	.65
24	1.6	1.3	1.1	1.1	1.3	1.7	1.8	1.8	1.0	.90	.98	.63
25	1.4	1.3	1.1	1.1	1.3	1.7	1.7	1.8	1.0	.96	.90	.61
26	1.4	1.3	1.1	1.1	1.3	1.6	1.7	1.7	1.0	1.0	.91	.61
27	1.4	1.3	1.1	1.1	1.4	1.6	1.7	1.7	.99	.92	.84	.54
28	1.5	1.3	1.1	1.2	1.2	1.7	1.6	1.7	.97	.91	.78	.56
29	1.6	1.3	1.1	1.2	---	1.7	1.6	1.7	.94	.80	.77	.60
30	1.4	1.4	1.1	1.2	---	1.7	1.7	1.6	.92	.75	.78	.64
31	1.4	---	1.1	1.2	---	1.7	---	1.6	---	.76	1.6	---
TOTAL	43.2	40.0	37.7	35.1	36.2	45.8	54.7	63.3	35.62	27.91	31.47	22.90
MEAN	1.39	1.33	1.22	1.13	1.29	1.48	1.82	2.04	1.19	.90	1.02	.76
MAX	1.6	1.4	1.4	1.2	1.4	1.7	2.0	2.6	1.5	1.2	1.8	1.3
MIN	1.2	1.2	1.1	1.1	1.2	1.2	1.6	1.6	.92	.74	.62	.54
AC-FT	86	79	75	70	72	91	108	126	71	55	62	45

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 2001, BY WATER YEAR (WY)

	2000	2000	2000	2000	2000	2000	1999	1999	1997	1995	1999	1997
MEAN	2.03	1.72	1.50	1.35	1.32	1.49	2.80	8.33	5.66	3.02	3.14	2.16
MAX	3.16	2.41	2.12	1.87	1.80	2.15	6.13	22.0	17.0	7.55	6.77	4.39
(WY)	2000	2000	2000	2000	2000	2000	1999	1999	1997	1995	1999	1997
MIN	.37	.14	.17	.30	.36	.52	.31	.87	.47	.30	.55	.30
(WY)	1993	1993	1993	1993	1993	1993	1993	1993	1993	1993	1993	1992

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1992 - 2001
ANNUAL TOTAL	705.5	473.90	
ANNUAL MEAN	1.93	1.30	2.98
HIGHEST ANNUAL MEAN			5.30
LOWEST ANNUAL MEAN			.41
HIGHEST DAILY MEAN	4.4	Apr 6	89
LOWEST DAILY MEAN	1.1	Aug 2	.02
ANNUAL SEVEN-DAY MINIMUM	1.1	Dec 23	.05
MAXIMUM PEAK FLOW		6.3	Aug 31
MAXIMUM PEAK STAGE		1.36	Aug 31
ANNUAL RUNOFF (AC-FT)	1400	940	2160
10 PERCENT EXCEEDS	3.4	1.8	5.6
50 PERCENT EXCEEDS	1.7	1.3	1.8
90 PERCENT EXCEEDS	1.2	.80	.51

e Estimated.  
a From rating curve extended above 122 ft<sup>3</sup>/s.  
b From floodmarks.

ARKANSAS RIVER BASIN

07105490 CHEYENNE CREEK AT EVANS AVENUE AT COLORADO SPRINGS, CO

LOCATION.--Lat 38°47'26", Long 104°51'49", in SW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec.35, T.14 S., R.67 W., El Paso County, Hydrologic Unit 11020003, on right bank 23 ft upstream from Evans Avenue, 30 ft downstream from the confluence of North and South Cheyenne Creeks, and 3.1 mi upstream from the mouth.

DRAINAGE AREA.--21.7 mi<sup>2</sup>.

PERIOD OF RECORD.--April 1992 to current year.

REVISED RECORDS.--WDR CO-93-1: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 6,280 ft above sea level, from topographic map. Prior to June 13, 2000, at datum 1.00 ft higher.

REMARKS.--Records good except for estimated daily discharges, which are poor. Natural flow of stream affected by several small reservoirs and 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.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.81	2.6	1.0	e.73	e.80	.53	.75	1.3	2.2	.69	.59	.82
2	.79	2.5	.88	e.73	e.80	.51	.84	1.2	1.7	.74	.64	.77
3	.78	2.4	.88	e.73	e.80	.52	1.1	1.2	1.9	.68	.62	.73
4	.78	2.1	.88	e.73	e.83	.49	1.0	1.3	3.1	.60	.58	.64
5	.85	2.1	.88	e.64	e.86	.52	2.5	1.7	2.9	.59	.74	.69
6	.92	2.1	.90	e.69	e.90	.61	3.2	2.1	1.8	.59	.79	.69
7	.87	1.1	.85	e.69	e.94	.78	3.7	3.2	1.9	.57	.65	.65
8	.85	1.1	.72	e.68	e.98	.66	3.1	2.9	1.6	.54	.57	.70
9	1.0	1.1	.75	e.66	e1.0	.64	1.7	3.9	2.0	.56	.56	.65
10	.90	.89	.73	e.64	e1.0	.71	.99	4.2	1.7	.59	.64	.63
11	1.2	.84	.73	e.60	e1.0	.67	.98	3.2	1.5	.60	.64	.57
12	1.2	.92	.82	e.57	e1.1	.87	1.0	3.4	1.2	.58	.64	.52
13	.95	.94	.81	e.58	e1.2	.93	1.0	6.8	1.0	.68	.69	.49
14	.91	.92	.76	e.62	e1.4	.79	1.3	8.4	1.0	.85	.70	.52
15	.87	.95	.69	e.66	e1.7	.66	1.6	6.0	.95	1.0	.82	.52
16	1.3	.95	.69	e.70	e1.8	.69	1.6	4.4	.90	.57	.83	.54
17	1.6	.95	.71	e.75	e1.8	.69	1.4	5.9	.82	.54	.80	.57
18	1.7	.90	.75	e.79	e1.8	.69	1.4	7.1	.82	.50	.84	.54
19	2.0	.82	.69	e.80	e1.8	.69	1.4	5.4	.78	.50	.77	.52
20	2.0	.82	.73	e.80	e1.8	.70	1.5	6.1	.80	.49	.70	.49
21	2.2	.88	.59	e.80	e1.6	.69	1.3	7.2	.91	.49	.70	.51
22	2.3	1.0	.62	e.80	1.4	.69	1.3	6.3	.85	.49	.74	.55
23	1.6	1.1	.73	e.80	1.4	.71	1.5	5.3	.78	.49	.77	.68
24	2.1	1.2	e.73	e.80	1.4	.93	1.4	3.4	.75	.49	.69	.67
25	2.4	1.2	e.73	e.80	1.4	.88	1.2	1.4	.75	.51	.69	.59
26	2.7	1.7	e.73	e.80	1.3	.88	1.2	1.3	.75	.56	.69	.59
27	2.9	2.4	e.73	e.80	1.0	.86	1.1	1.3	.75	.54	.69	.59
28	3.4	1.9	e.73	e.80	.57	.84	1.1	1.6	.73	.54	.69	.55
29	3.4	1.1	e.73	e.80	---	.82	1.1	1.7	.69	.60	.67	.54
30	2.1	1.0	e.73	e.80	---	.82	1.2	5.6	.70	.62	.66	.54
31	2.0	---	e.73	e.80	---	.80	---	4.9	---	.59	.82	---
TOTAL	49.38	40.48	23.63	22.59	34.38	22.27	44.46	119.7	38.23	18.38	21.62	18.06
MEAN	1.59	1.35	.76	.73	1.23	.72	1.48	3.86	1.27	.59	.70	.60
MAX	3.4	2.6	1.0	.80	1.8	.93	3.7	8.4	3.1	1.0	.84	.82
MIN	.78	.82	.59	.57	.57	.49	.75	1.2	.69	.49	.56	.49
AC-FT	98	80	47	45	68	44	88	237	76	36	43	36

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 2001, BY WATER YEAR (WY)

MEAN	4.28	3.70	2.86	2.68	2.50	2.96	10.3	36.7	27.9	8.79	13.0	5.12
MAX	7.31	5.56	5.15	4.54	5.20	7.34	25.5	86.4	93.1	30.5	39.7	11.2
(WY)	1997	1998	1998	1996	1998	1998	1999	1994	1995	1995	1999	1997
MIN	.73	.84	.46	.73	.51	.53	.88	2.63	1.18	.59	.70	.60
(WY)	1993	1993	1993	2001	2000	1993	1993	1996	2000	2001	2001	2001

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1992 - 2001

ANNUAL TOTAL	795.37	453.18	
ANNUAL MEAN	2.17	1.24	10.6
HIGHEST ANNUAL MEAN			21.8
LOWEST ANNUAL MEAN			1.24
HIGHEST DAILY MEAN	20	May 10	453
LOWEST DAILY MEAN	.37	Feb 13	.10
ANNUAL SEVEN-DAY MINIMUM	.41	Feb 11	.23
MAXIMUM PEAK FLOW		21	a595
MAXIMUM PEAK STAGE		1.80	b3.51
ANNUAL RUNOFF (AC-FT)	1580	899	7660
10 PERCENT EXCEEDS	6.0	2.2	25
50 PERCENT EXCEEDS	.95	.82	3.7
90 PERCENT EXCEEDS	.58	.57	.71

e Estimated.  
a From rating curve extended above 437 ft<sup>3</sup>/s.  
b Datum then in use.

07105500 FOUNTAIN CREEK AT COLORADO SPRINGS, CO

LOCATION.--Lat 38°48'59", long 104°49'20", in NE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec.19, T.14 S., R.66 W., El Paso County, Hydrologic Unit 11020003, on left bank 31 ft upstream from Nevada Avenue bridge in Colorado Springs, 100 ft downstream from Cheyenne Creek, and 1.3 mi downstream from Monument Creek.

DRAINAGE AREA.--392 mi<sup>2</sup>.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1921 to September 1924, January 1976 to current year. Monthly discharge only for some periods, published in WSP 1311. Statistical summary computed for 1976 to current year.

GAGE.--Water-stage recorder with satellite telemetry and crest-stage gage. Elevation of gage is 5,900 ft above sea level, from topographic map.

REMARKS.--Records fair except for estimated daily discharges and those above 1000 ft<sup>3</sup>/s, which are poor. Natural flow of stream affected by storage reservoirs, power developments, ground-water withdrawals, diversions for irrigation and municipal use, return flow from irrigated areas, and discharges from sewage-treatment plants.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	34	35	35	34	39	46	45	47	31	29	120
2	29	36	35	38	47	35	40	46	40	26	242	61
3	29	44	39	38	47	33	39	109	42	18	107	42
4	33	41	35	38	41	34	41	133	44	17	53	31
5	31	44	35	37	46	31	52	306	36	16	233	36
6	54	40	39	39	38	32	57	133	29	12	91	39
7	44	42	46	37	41	34	53	101	301	16	38	66
8	44	42	49	36	36	34	44	86	100	22	28	93
9	44	44	44	42	27	34	39	90	80	464	30	36
10	38	40	e44	49	44	65	75	87	56	271	33	32
11	36	43	e39	41	49	61	191	81	43	74	44	27
12	34	43	e37	42	45	53	102	75	39	126	83	26
13	34	37	e41	45	44	51	69	75	51	498	49	26
14	32	35	41	44	38	46	60	74	50	295	129	33
15	34	41	40	40	41	38	59	70	27	117	72	89
16	35	37	34	56	30	35	61	68	20	55	61	82
17	33	36	e37	44	36	56	60	245	18	39	42	52
18	33	38	29	49	32	51	59	119	18	38	29	48
19	34	48	31	39	33	43	58	287	26	31	28	30
20	31	44	37	39	32	43	56	105	29	27	29	26
21	34	39	e30	47	36	41	62	82	46	30	28	28
22	66	45	e36	41	35	39	62	78	29	32	33	28
23	43	42	32	40	36	36	58	67	31	36	27	26
24	59	45	30	41	36	53	49	56	21	41	24	22
25	42	45	e30	45	34	41	47	45	24	227	23	23
26	40	48	34	34	34	44	46	59	21	353	23	25
27	40	45	32	36	43	45	52	52	23	98	23	24
28	46	44	34	37	36	46	54	41	20	40	23	22
29	51	42	32	40	---	44	40	52	22	33	39	22
30	41	38	36	35	---	74	45	56	40	33	39	22
31	38	---	36	35	---	51	---	52	---	31	724	---
TOTAL	1210	1242	1129	1259	1071	1362	1776	2975	1373	3147	2456	1237
MEAN	39.0	41.4	36.4	40.6	38.2	43.9	59.2	96.0	45.8	102	79.2	41.2
MAX	66	48	49	56	49	74	191	306	301	498	724	120
MIN	28	34	29	34	27	31	39	41	18	12	23	22
AC-FT	2400	2460	2240	2500	2120	2700	3520	5900	2720	6240	4870	2450

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1976 - 2001, BY WATER YEAR (WY)

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
MEAN	47.7	41.7	33.7	31.0	29.0	40.5	93.5	204	132	80.0	90.9	48.3														
MAX	212	143	81.3	68.1	57.8	92.6	486	944	555	268	341	116														
(WY)	1985	1985	1985	2000	2000	1998	1999	1999	1997	1995	1999	1999														
MIN	10.6	11.4	11.8	5.12	6.27	11.4	14.8	23.5	16.3	12.9	20.9	7.98														
(WY)	1978	1979	1979	1979	1979	1976	1978	1976	1976	1976	1993	1978														

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1976 - 2001
ANNUAL TOTAL	22592	20237	
ANNUAL MEAN	61.7	55.4	74.8
HIGHEST ANNUAL MEAN			228
LOWEST ANNUAL MEAN			23.2
HIGHEST DAILY MEAN	421	May 8	7510
LOWEST DAILY MEAN	22	Sep 17	2.0
ANNUAL SEVEN-DAY MINIMUM	24	Sep 14	3.3
MAXIMUM PEAK FLOW			6040
MAXIMUM PEAK STAGE		7.64	Jul 9
ANNUAL RUNOFF (AC-FT)	44810	40140	54160
10 PERCENT EXCEEDS	122	82	152
50 PERCENT EXCEEDS	49	40	37
90 PERCENT EXCEEDS	31	27	15

e Estimated.  
a From slope-area measurement of peak flow.  
b From floodmark.

WATER-QUALITY RECORDS

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

PERIOD OF DAILY RECORD.--

SUSPENDED SEDIMENT: August 1995 to September 1997 (seasonal peaks only), April 1998 to current year (seasonal records only).

INSTRUMENTATION.--Pumping sediment sampler with satellite telemetry.

REMARKS.--Daily suspended-sediment records are fair.

EXTREMES FOR PERIOD OF RECORD.--

SEDIMENT CONCENTRATION (seasonal only): Maximum daily mean, 8,640 mg/L, Apr. 29, 1999; minimum daily mean, 12 mg/L, Sept. 8, 1998.

SUSPENDED-SEDIMENT DISCHARGE (seasonal only): Maximum daily, 275,000 tons (estimated), Apr. 30, 1999; minimum daily, 0.55 ton, July 6, 2001.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATION (seasonal only): Maximum daily mean, 3,570 mg/L, Aug. 31; minimum daily mean, 17 mg/L, July 6.

SUSPENDED-SEDIMENT DISCHARGE (seasonal only): Maximum daily, 18,400 tons, Aug. 31; minimum daily, 0.55 ton (estimated), July 6.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

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, UM-MF (COLS./100 ML) (31625)	E COLI, MTEC MF (COL/100 ML) (31633)	CALCIUM DIS-SOLVED (MG/L) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L) (00925)	SULFATE DIS-SOLVED (MG/L) (00945)	FLUO-RIDE, DIS-SOLVED (MG/L) (00950)
OCT 24...	1200	55	550	7.9	10.8	8.7	3.7	E18000	E9300	62.8	13.0	110	1.3
NOV 28...	1230	43	641	8.4	4.5	10.4	<1.0	110	E11	73.0	16.3	130	1.9
FEB 27...	1100	36	896	8.2	2.5	11.2	2.6	180	10	78.8	19.1	160	1.7
APR 03...	1145	41	701	8.5	11.4	9.5	<1.0	64	--	76.3	17.4	150	1.6
JUN 26...	1100	22	787	8.3	23.8	7.9	<1.0	E700	320	98.1	18.6	190	1.3
AUG 07...	1100	44	653	8.1	22.1	7.0	<1.0	1100	E800	74.0	15.0	130	1.2

DATE	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 ORTHO, DIS-SOLVED (MG/L AS P) (00671)	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	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)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)
OCT 24...	1.79	<.041	.227	.040	3	1.1	68	68	.23	<.07	3	2.7	7.1
NOV 28...	2.58	<.041	.194	.075	2	1.0	75	77	.21	<.07	2	<1.0	5.1
FEB 27...	3.00	.025	.273	.128	2	1.2	95	92	.29	<.07	4	1.6	8.3
APR 03...	2.41	.013	.275	.161	2	1.4	91	88	.13	<.07	1	2.2	6.3
JUN 26...	2.38	.024	.134	.063	2	1.9	100	84	.16	<.07	1	<1.0	3.2
AUG 07...	1.94	.014	.222	.086	4	2.2	67	71	.24	.09	2	<1.0	6.9

DATE	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)	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)	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)
OCT 24...	2.8	3570	40	7	.19	136	28.0	<.14	<.23	6	3.13	6.1	5.2
NOV 28...	2.0	2720	10	4	<.15	109	23.0	<.14	<.23	5	2.93	7.1	6.1
FEB 27...	3.2	--	<10	6	<.15	115	49.0	<.14	<.23	6	3.60	9.0	8.2
APR 03...	2.5	--	<10	4	<.15	107	45.0	<.01	<.01	4	3.80	7.9	7.8
JUN 26...	1.9	1190	<10	3	<.15	80	34.0	.01	.000	5	4.30	9.7	9.6
AUG 07...	1.9	2940	<10	13	<.15	135	37.0	.02	<.01	6	4.40	6.3	6.0

07105500 FOUNTAIN CREEK AT COLORADO SPRINGS, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	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)	CYANIDE TOTAL (MG/L AS CN) (00720)	SEDI- MENT, SUS- PENDED (MG/L T/DAY) (80154)	SEDI- MENT, CHARGE, PENDED (80155)
OCT 24...	<.20	<.2	32	4	<.01	366	54
NOV 28...	<.20	<.2	25	4	<.01	219	25
FEB 27...	<.20	<.2	41	13	<.01	146	14
APR 03...	<.20	<.2	27	8	<.01	156	17
JUN 26...	<.20	<.2	13	<3	<.01	66	3.9
AUG 07...	<.20	<.2	28	13	<.01	228	27

E Estimated laboratory analysis value.

WATER-QUALITY DATA DURING 24-HOUR SAMPLING, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

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)	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 ORTHO, DIS- SOLVED (MG/L AS P) (00671)
JAN 23...	0500	37	876	--	.5	12.0	1.1	3.63	.024	.148	.101
JAN 23...	1100	37	849	8.2	1.2	11.7	<1.0	3.44	.022	.168	.094
JAN 23...	1700	44	775	8.2	.5	11.8	1.2	3.44	.022	.220	.109
JAN 24...	0000	38	818	8.2	.3	12.0	<1.0	3.79	.019	.153	.115
JAN 24...	0530	33	832	8.2	.1	11.7	<1.0	4.05	.015	.137	.124

WATER-QUALITY DATA DURING STORMWATER-RUNOFF SAMPLING, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

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)	E COLI, MTEC MF WATER (COL/ 100 ML) (31633)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)
JUL 09...	2200	830	200	8.0	17.8	7.5	7.3	--	--	21.9	3.03	34.0	<.5
JUL 12...	1700	299	484	8.3	24.3	6.5	>8.9	55000	32000	54.0	8.88	96.0	.7
JUL 26...	1915	2960	185	8.2	20.4	6.4	11	--	--	22.2	2.60	28.0	.3

DATE	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 ORTHO, DIS- SOLVED (MG/L AS P) (00671)	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BORON, TOTAL RECOV- ERABLE (UG/L AS B) (01022)	BORON, DIS- SOLVED (UG/L AS B) (01020)	CADMIUM WATER UNFLTRD (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)
JUL 09...	.835	.173	3.44	.042	12	1.3	42	30	2.30	<.10	21	<1.0	79.4
JUL 12...	1.64	.014	2.71	.056	12	1.7	60	34	2.30	.07	19	<1.0	61.3
JUL 26...	.818	.018	8.24	.022	18	<1.0	26	<10	5.40	<.07	52	<1.0	218

DATE	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)	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)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SELE- NIUM, TOTAL RECOV- ERABLE (UG/L AS SE) (01147)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)
JUL 09...	2.0	51700	40	123	<1.00	2090	8.0	.17	.01	44	2.20	9.6	1.9
JUL 12...	2.0	39000	<10	94	<.15	1390	1.0	.10	<.01	38	3.90	10.5	5.5
JUL 26...	1.8	122000	70	277	.28	6330	4.0	.29	<.01	--	<1.60	16.8	2.0

07105500 FOUNTAIN CREEK AT COLORADO SPRINGS, CO--Continued

WATER-QUALITY DATA DURING STORMWATER-RUNOFF SAMPLING, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	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)	CYANIDE TOTAL (MG/L AS CN) (00720)	ACE-NAPHTH-YLENE TOTAL (UG/L) (34200)	ACE-NAPHTH-ENE TOTAL (UG/L) (34205)	ANTHRA-CENE TOTAL (UG/L) (34220)	BENZO-[A]-ANTHRA-CENE WAT UNF (UG/L) (34526)	BENZO B AN-THENE TOTAL (UG/L) (34230)	BENZO-A-PYRENE TOTAL (UG/L) (34247)	BENZO [GHI]-PERY-LENE TOTAL (UG/L) (34521)	BENZO K FLUOR-AN-THENE TOTAL (UG/L) (34242)
JUL 09...	.36	<.2	384	16	<.01	<2	M	M	M	M	M	M	M
JUL 12...	.23	<.2	345	4	--	M	M	M	M	E2	E1	M	M
JUL 26...	.70	<.2	940	<3	<.01	M	M	M	E1	E2	E1	M	M
DATE	CHRY-SENE TOTAL (UG/L) (34320)	1,2,5,6-DIBENZ-ANTHRA-CENE TOTAL (UG/L) (34556)	FLUOR-ANTHENE TOTAL (UG/L) (34376)	FLUOR-ENE TOTAL (UG/L) (34381)	INDENO (1,2,3-CD) PYRENE TOTAL (UG/L) (34403)	NAPHTH-ALENE TOTAL (UG/L) (34696)	PHENAN-THRENE TOTAL (UG/L) (34461)	PYRENE TOTAL (UG/L) (34469)	BENZENE NITRO-WATER UNFLTRD RECOVER (UG/L) (34447)	2,6-DI-ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	ACETO-CHLOR, WATER FLTRD REC (UG/L) (49260)	ALA-CHLOR, WATER, DISS, REC (UG/L) (46342)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)
JUL 09...	M	M	M	M	M	<2.0	M	M	--	<.002	<.004	<.002	.019
JUL 12...	E1	M	E2	M	E1	E.1	M	E2	<2	<.002	<.004	<.002	E.004
JUL 26...	E2	M	3	M	M	E.1	E2	3	<2	<.002	<.004	<.002	E.003
DATE	METHYL-AZIN-PHOS WAT FLT 0.7 U GF, REC (UG/L) (82686)	BEN-FLUR-ALIN WATER WAT FLD 0.7 U GF, REC (UG/L) (82673)	BUTYL-ATE, WATER, DISS, REC (UG/L) (04028)	CAR-BARYL WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBO-FURAN WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	CHLOR-PYRIFOS SOLVED (UG/L) (38933)	CYANA-ZINE, WATER, REC (UG/L) (04041)	DCPA WATER FLTRD 0.7 U GF, REC (UG/L) (82682)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	DI-AZINON, DIS-SOLVED (UG/L) (39572)	DI-ELDRIN, DIS-SOLVED (UG/L) (39381)	DISUL-FOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)
JUL 09...	<.050	<.010	<.002	E.581	<.020	<.005	<.018	E.001	<.006	.766	<.005	<.021	<.002
JUL 12...	<.050	<.010	<.002	E.162	<.020	<.005	<.018	E.003	<.006	.222	<.005	<.021	<.002
JUL 26...	<.050	<.010	<.002	E.364	<.020	<.005	<.018	<.003	<.006	.143	<.005	<.021	<.002
DATE	ETHAL-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82663)	ETHO-PROP WATER WAT FLD 0.7 U GF, REC (UG/L) (82672)	FONOFOS WATER DISS, REC (UG/L) (04095)	LINDANE DIS-SOLVED (UG/L) (39341)	LIN-URON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALA-THION, DIS-SOLVED (UG/L) (39532)	METO-LACHLOR WATER DISSOLV (UG/L) (39415)	METRI-BUZIN WATER DISSOLV (UG/L) (82630)	MOL-INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP-AMIDE WATER WAT FLD 0.7 U GF, REC (UG/L) (82684)	PARA-THION, DIS-SOLVED (UG/L) (39542)	METHYL-PARA-THION WAT FLT 0.7 U GF, REC (UG/L) (82667)	PEB-ULATE WATER FLTRD 0.7 U GF, REC (UG/L) (82669)
JUL 09...	<.009	<.005	<.003	<.004	<.035	.070	<.013	<.006	<.002	<.007	<.007	<.006	<.002
JUL 12...	<.009	<.005	<.003	<.004	<.035	E.012	<.013	<.006	<.002	<.007	<.007	<.006	<.002
JUL 26...	<.009	<.005	<.003	<.004	<.035	E.020	<.013	<.006	<.002	<.007	<.007	<.006	<.002
DATE	PENDI-METH-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PHORATE WATER WAT FLD 0.7 U GF, REC (UG/L) (82664)	PRO-METON, WATER, DISS, REC (UG/L) (04037)	PROPA-CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO-PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO-PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	PRON-AMIDE WATER WAT FLD 0.7 U GF, REC (UG/L) (82676)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU-THIURON WATER WAT FLD 0.7 U GF, REC (UG/L) (82670)	TER-BACIL WATER WAT FLD 0.7 U GF, REC (UG/L) (82665)	TER-BUFOS WATER WAT FLD 0.7 U GF, REC (UG/L) (82675)	THIO-BENCARB WATER WAT FLD 0.7 U GF, REC (UG/L) (82681)	TRIAL-LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)
JUL 09...	<.010	<.011	.023	<.010	<.011	<.023	<.004	<.011	<.016	<.034	<.017	<.005	<.002
JUL 12...	<.010	<.011	.021	<.010	<.011	<.023	<.004	<.011	<.016	<.034	<.017	<.005	<.002
JUL 26...	<.010	<.011	.052	<.010	<.011	<.023	<.004	<.011	<.016	<.034	<.017	<.005	<.002
DATE			TRI-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	ALPHA BHC DIS-SOLVED (UG/L) (34253)	PER-METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	P,P' DDE DISSOLV (UG/L) (34653)	SEDI-MENT, DIS-SIEVE, CHARGE, SUS-% FINER THAN .062 MM (T/DAY) (80154)	SEDI-MENT, DIS-SIEVE, CHARGE, SUS-% FINER THAN .062 MM (T/DAY) (80155)	SED. SUSP. DIAM. (T/DAY) (70331)				
JUL 09...			E.007	<.005	<.006	<.003	7150	16000	72				
JUL 12...			<.009	<.005	<.006	<.003	--	--	--				
JUL 26...			<.009	<.005	<.006	<.003	--	--	--				

E Estimated laboratory analysis value.  
M Presence of material verified but not quantified.

07105500 FOUNTAIN CREEK AT COLORADO SPRINGS, CO--Continued

MISCELLANEOUS FIELD AND SUSPENDED-SEDIMENT DISCHARGE DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	SEDI-MENT, SUS-PENDE D (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDE D (T/DAY) (80155)
OCT						
04...	1000	34	776	12.0	132	12
25...	1410	42	708	12.5	--	--
NOV						
02...	1145	32	817	7.0	114	9.8
14...	1300	24	916	3.0	--	--
DEC						
19...	1200	30	880	.6	269	22
JAN						
04...	1300	39	718	3.0	386	41
22...	1425	42	912	1.0	--	--
FEB						
12...	1400	41	818	3.5	--	--
MAR						
06...	1420	31	765	8.5	--	--
30...	1435	61	568	11.0	376	62
APR						
06...	1135	63	588	9.0	--	--
16...	1545	60	591	11.0	--	--
MAY						
07...	1515	86	512	19.0	347	81
21...	1530	75	508	17.5	190	38
JUN						
05...	1235	41	640	19.5	--	--
13...	1200	35	710	19.5	158	15
JUL						
03...	1355	20	788	28.0	--	--
10...	1535	73	555	27.0	299	59
18...	1230	39	691	22.5	204	21
26...	1400	59	526	24.9	212	34
AUG						
01...	1440	30	783	25.5	--	--
31...	1230	30	687	20.5	--	--
SEP						
05...	1500	30	851	23.0	92	7.5
17...	1250	34	753	19.5	--	--

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
	OCTOBER			NOVEMBER			DECEMBER		
1	28	104	7.8	34	---	---	35	---	---
2	29	---	e14	36	---	---	35	---	---
3	29	136	11	44	---	---	39	---	---
4	33	128	12	41	---	---	35	---	---
5	31	168	14	44	---	---	35	---	---
6	54	288	42	40	---	---	39	---	---
7	44	---	e28	42	---	---	46	---	---
8	44	229	27	42	---	---	49	---	---
9	44	269	32	44	---	---	44	---	---
10	38	389	40	40	---	---	e44	---	---
11	36	308	30	43	---	---	e39	---	---
12	34	---	e22	43	---	---	e37	---	---
13	34	196	18	37	---	---	e41	---	---
14	32	164	14	35	---	---	41	---	---
15	34	191	18	41	---	---	40	---	---
16	35	167	15	37	---	---	34	---	---
17	33	---	e21	36	---	---	e37	---	---
18	33	188	17	38	---	---	29	---	---
19	34	157	14	48	---	---	31	---	---
20	31	93	7.6	44	---	---	37	---	---
21	34	82	7.5	39	---	---	e30	---	---
22	66	1490	341	45	---	---	e36	---	---
23	43	274	33	42	---	---	32	---	---
24	59	481	93	45	---	---	30	---	---
25	42	115	13	45	---	---	e30	---	---
26	40	95	10	48	---	---	34	---	---
27	40	---	e10	45	---	---	32	---	---
28	46	105	13	44	---	---	34	---	---
29	51	147	20	42	---	---	32	---	---
30	41	178	19	38	---	---	36	---	---
31	38	196	20	---	---	---	36	---	---
TOTAL	1210	---	983.9	1242	---	0	1129	---	0

## ARKANSAS RIVER BASIN

07105500 FOUNTAIN CREEK AT COLORADO SPRINGS, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	35	---	---	34	---	---	39	---	---
2	38	---	---	47	---	---	35	---	---
3	38	---	---	47	---	---	33	---	---
4	38	---	---	41	---	---	34	---	---
5	37	---	---	46	---	---	31	---	---
6	39	---	---	38	---	---	32	---	---
7	37	---	---	41	---	---	34	---	---
8	36	---	---	36	---	---	34	---	---
9	42	---	---	27	---	---	34	---	---
10	49	---	---	44	---	---	65	---	---
11	41	---	---	49	---	---	61	---	---
12	42	---	---	45	---	---	53	---	---
13	45	---	---	44	---	---	51	---	---
14	44	---	---	38	---	---	46	---	---
15	40	---	---	41	---	---	38	---	---
16	56	---	---	30	---	---	35	---	---
17	44	---	---	36	---	---	56	---	---
18	49	---	---	32	---	---	51	---	---
19	39	---	---	33	---	---	43	---	---
20	39	---	---	32	---	---	43	---	---
21	47	---	---	36	---	---	41	---	---
22	41	---	---	35	---	---	39	---	---
23	40	---	---	36	---	---	36	---	---
24	41	---	---	36	---	---	53	---	---
25	45	---	---	34	---	---	41	---	---
26	34	---	---	34	---	---	44	---	---
27	36	---	---	43	---	---	45	---	---
28	37	---	---	36	---	---	46	---	---
29	40	---	---	---	---	---	44	---	---
30	35	---	---	---	---	---	74	---	---
31	35	---	---	---	---	---	51	---	---
TOTAL	1259	---	0	1071	---	0	1362	---	0
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	46	---	e23	45	---	e13	47	319	42
2	40	173	19	46	---	e14	40	159	17
3	39	161	17	109	1100	390	42	104	12
4	41	144	16	133	---	e393	44	---	e13
5	52	169	24	306	1300	1220	36	---	e11
6	57	---	e33	133	---	e228	29	---	e8.9
7	53	254	36	101	442	127	301	1860	5290
8	44	261	31	86	353	81	100	1480	486
9	39	272	28	90	415	101	80	836	204
10	75	617	202	87	286	68	56	---	e135
11	191	2490	1600	81	---	e48	43	411	48
12	102	1240	349	75	---	e43	39	289	31
13	69	613	115	75	---	e43	51	305	72
14	60	375	61	74	---	e41	50	401	67
15	59	235	38	70	200	38	27	---	e9.0
16	61	---	e32	68	---	e31	20	---	e6.3
17	60	192	31	245	2950	4220	18	---	e5.5
18	59	182	29	119	1250	430	18	---	e5.0
19	58	181	28	287	2760	4610	26	97	6.9
20	56	187	28	105	1020	320	29	---	e8.0
21	62	---	e32	82	247	54	46	521	107
22	62	171	28	78	273	58	29	123	9.4
23	58	115	18	67	190	34	31	88	7.4
24	49	99	13	56	153	23	21	84	4.7
25	47	110	14	45	---	e18	24	---	e4.5
26	46	---	e11	59	---	e55	21	68	3.9
27	52	96	13	52	223	31	23	85	5.2
28	54	---	e24	41	226	25	20	50	2.7
29	40	113	12	52	437	63	22	126	9.0
30	45	---	e12	56	344	53	40	---	e44
31	---	---	---	52	---	e34	---	---	---
TOTAL	1776	---	2917	2975	---	12907	1373	---	6675.4

07105500 FOUNTAIN CREEK AT COLORADO SPRINGS, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	31	287	25	29	269	21	120	1030	385
2	26	173	13	242	1910	4370	61	605	101
3	18	58	2.9	107	764	365	42	---	e57
4	17	46	2.2	53	335	70	31	---	e32
5	16	---	e1.4	233	2170	3710	36	364	39
6	12	17	.55	91	595	208	39	---	e72
7	16	28	1.3	38	225	23	66	1070	269
8	22	95	5.1	28	167	13	93	876	308
9	464	2420	10900	30	138	11	36	328	32
10	271	1600	2550	33	154	14	32	189	17
11	74	316	131	44	205	32	27	---	e11
12	126	1170	778	83	928	707	26	210	15
13	498	2310	16200	49	449	72	26	274	19
14	295	---	e1920	129	999	659	33	177	16
15	117	---	e221	72	848	187	89	681	719
16	55	---	e66	61	---	e106	82	887	275
17	39	219	23	42	---	e28	52	590	102
18	38	181	19	29	137	11	48	176	28
19	31	131	11	28	164	12	30	75	6.1
20	27	111	8.0	29	141	11	26	76	5.4
21	30	138	11	28	220	17	28	---	e7.4
22	32	115	10	33	---	e29	28	130	9.7
23	36	---	e34	27	142	10	26	140	9.7
24	41	464	52	24	111	7.2	22	139	8.4
25	227	1370	3150	23	---	e7.4	23	117	7.1
26	353	2480	7020	23	133	8.3	25	---	e7.4
27	98	1100	406	23	---	e7.8	24	123	8.1
28	40	---	e32	23	114	6.9	22	119	7.1
29	33	---	e27	39	---	e67	22	88	5.2
30	33	302	27	39	---	e50	22	78	4.6
31	31	---	e24	724	3570	18400	---	---	---
TOTAL	3147	---	43671.45	2456	---	29240.6	1237	---	2583.2

e Estimated.

## ARKANSAS RIVER BASIN

07105530 FOUNTAIN CREEK BELOW JANITELL ROAD BELOW COLORADO SPRINGS, CO

LOCATION.--Lat 38°48'11", long 104°47'43", in NE<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec.29, T.14 S., R.66 W., El Paso County, Hydrologic Unit 11020003, on left bank at downstream side of bridge on Janitell Road below Colorado Springs.

DRAINAGE AREA.--413 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 5,840 ft above sea level, from topographic map. Prior to July 10, 1990, at site 500 ft upstream, at datum 2.00 ft higher. July 10, 1990 to May 27, 1999 on right bank at upstream side of bridge on Janitell Road at same datum.

REMARKS.--Records fair except for estimated daily discharges and those above 1,000 ft<sup>3</sup>/s, which are poor. Natural flow of stream affected by storage reservoirs, power developments, ground-water withdrawals, diversions for irrigation and municipal use, return flow from irrigated areas, and flows from sewage treatment plants.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	88	92	69	68	101	109	128	119	74	74	82	158
2	88	92	67	73	114	101	126	124	66	70	232	97
3	89	99	72	77	118	94	125	204	68	59	157	90
4	92	97	67	79	111	95	128	236	73	57	109	84
5	91	99	68	80	122	93	134	420	62	58	299	91
6	115	91	70	83	122	93	138	200	53	54	155	97
7	104	85	73	82	121	100	130	172	334	57	99	136
8	104	88	68	80	123	104	122	155	115	62	88	184
9	112	91	72	80	116	104	110	155	95	542	91	124
10	112	86	71	102	125	127	151	156	76	252	94	120
11	110	89	64	104	129	123	277	151	60	90	100	109
12	109	90	63	105	125	115	172	149	55	149	128	78
13	108	87	68	107	120	114	137	151	67	519	131	52
14	96	80	72	108	116	111	129	155	69	257	197	59
15	91	75	69	107	118	107	130	151	47	150	143	127
16	90	67	62	109	112	107	131	149	43	114	124	135
17	88	66	66	106	114	123	128	352	48	90	107	103
18	92	68	61	112	111	121	131	189	57	84	93	100
19	94	72	61	112	113	116	129	368	67	80	94	76
20	92	70	68	113	110	115	127	181	83	75	94	63
21	98	70	61	107	112	115	131	161	101	77	89	79
22	129	73	70	115	112	117	135	147	78	82	97	85
23	106	71	72	123	111	114	133	121	78	84	91	87
24	121	71	69	123	111	128	124	105	69	91	81	72
25	101	73	69	127	110	120	123	86	72	223	79	71
26	99	74	69	122	109	121	124	91	68	358	81	69
27	97	76	69	121	114	123	128	86	67	141	81	68
28	107	79	72	121	108	125	134	82	66	91	83	65
29	115	76	69	127	---	124	123	86	66	86	99	60
30	100	71	68	113	---	147	123	87	79	85	119	e67
31	94	---	73	105	---	130	---	81	---	84	1030	---
TOTAL	3132	2418	2112	3191	3228	3536	4061	5070	2356	4295	4547	2806
MEAN	101	80.6	68.1	103	115	114	135	164	78.5	139	147	93.5
MAX	129	99	73	127	129	147	277	420	334	542	1030	184
MIN	88	66	61	68	101	93	110	81	43	54	79	52
AC-FT	6210	4800	4190	6330	6400	7010	8050	10060	4670	8520	9020	5570

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 2001, BY WATER YEAR (WY)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
MEAN	109	101	81.0	85.4	96.3	108	180	301	241	150	175	116
MAX	179	150	140	122	139	161	658	1022	693	319	467	200
(WY)	2000	2000	1998	1998	2000	1998	1999	1999	1997	1995	1999	1999
MIN	47.3	48.6	39.5	46.2	56.4	76.4	86.1	78.6	69.4	70.1	74.2	59.7
(WY)	1993	1990	1990	1990	1990	1991	1993	1993	1990	1993	1993	1992

## SUMMARY STATISTICS

## FOR 2000 CALENDAR YEAR

## FOR 2001 WATER YEAR

## WATER YEARS 1990 - 2001

ANNUAL TOTAL	42498	40752		
ANNUAL MEAN	116	112	151	
HIGHEST ANNUAL MEAN			312	1999
LOWEST ANNUAL MEAN			76.0	1993
HIGHEST DAILY MEAN	449	May 8	1030	Aug 31
LOWEST DAILY MEAN	61	Dec 18	43	Jun 16
ANNUAL SEVEN-DAY MINIMUM	64	Dec 15	55	Jun 12
MAXIMUM PEAK FLOW			6710	Jul 9
MAXIMUM PEAK STAGE			7.78	Jul 9
ANNUAL RUNOFF (AC-FT)	84290	80830	109400	
10 PERCENT EXCEEDS	163	149	235	
50 PERCENT EXCEEDS	105	100	101	
90 PERCENT EXCEEDS	72	67	57	

e Estimated.

a From rating curve extended above 13,200 ft<sup>3</sup>/s.

b Maximum gage height, 11.11 ft, Sep.2, 1994.

07105530 FOUNTAIN CREEK BELOW JANITELL ROAD, BELOW COLORADO SPRINGS, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1975 to June 1976, May 1979 to September 1979, December 1979 to current year.

PERIOD OF DAILY RECORD.--

DISSOLVED OXYGEN: October 1990 to January 1998.  
 pH: October 1990 to January 1998  
 SPECIFIC CONDUCTANCE: October 1990 to January 1998  
 WATER TEMPERATURE: October 1990 to January 1998

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

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, UM-MF (COLS./100 ML) (31625)	E COLI, MTEC MF (COL/100 ML) (31633)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)
OCT 24...	1030	132	593	7.8	13.8	8.1	5.2	4400	--	49.7	13.9	130	1.4
NOV 28...	1045	87	716	8.0	10.4	9.7	7.7	180	--	53.4	17.8	160	1.9
FEB 27...	0945	120	742	7.7	9.2	9.2	7.2	60	28	51.5	17.7	160	1.0
APR 03...	1045	139	736	7.8	13.8	9.1	5.9	170	--	53.8	18.0	180	2.4
JUN 26...	0945	88	748	7.9	20.5	7.9	3.2	340	230	57.4	17.1	180	1.6
AUG 07...	0945	125	699	7.8	21.2	7.3	2.9	1400	E960	52.6	16.4	170	1.4

DATE	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 ORTHO, DIS-SOLVED (MG/L AS P) (00671)	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	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)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)
OCT 24...	2.31	.045	.335	.093	2	1.1	194	183	.27	<.07	3	2.7	8.0
NOV 28...	3.04	1.36	.310	.076	2	1.7	239	228	<.10	<.07	1	<1.0	6.9
FEB 27...	3.37	.419	1.41	1.01	3	3.0	252	264	.18	<.07	2	1.3	8.6
APR 03...	2.93	.086	.450	.191	2	1.7	240	249	<.10	<.07	1	2.5	6.1
JUN 26...	2.83	.090	.242	.076	2	1.2	266	279	<.10	<.07	<1	3.9	4.1
AUG 07...	2.37	.037	.233	.060	4	1.6	201	219	<.19	.07	3	<1.0	6.3

DATE	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)	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)	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)
OCT 24...	3.4	3220	40	6	.34	169	59.0	<.14	<.23	7	4.40	5.6	5.1
NOV 28...	3.9	540	30	1	.32	90	70.0	<.14	<.23	8	7.92	5.7	5.4
FEB 27...	5.1	--	50	2	.43	76	58.0	<.14	<.23	5	4.50	6.8	6.2
APR 03...	4.1	--	110	1	.47	70	57.0	<.01	<.01	4	4.40	6.0	6.4
JUN 26...	2.6	520	30	2	.34	75	55.0	<.01	<.01	4	3.70	6.8	6.5
AUG 07...	1.8	2050	20	12	.30	106	43.0	<.01	<.01	6	5.00	4.9	5.2

ARKANSAS RIVER BASIN

07105530 FOUNTAIN CREEK BELOW JANITELL ROAD, BELOW COLORADO SPRINGS, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	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)	CYANIDE TOTAL (MG/L AS CN) (00720)	SEDI- MENT, SUS- PENDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)
OCT 24...	<.20	<.2	63	31	<.01	204	73
NOV 28...	.24	<.2	53	45	<.01	33	7.8
FEB 27...	.27	<.2	61	53	<.01	51	17
APR 03...	<.20	<.2	50	44	<.01	38	14
JUN 26...	<.20	<.2	46	44	<.01	30	7.1
AUG 07...	<.20	<.2	54	34	<.01	231	78

E Estimated laboratory analysis value.

WATER-QUALITY DATA DURING 24-HOUR SAMPLING, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

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)	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 ORTHO, DIS- SOLVED (MG/L AS P) (00671)
JAN 23...	0630	101	905	7.6	4.7	10.2	7.2	3.83	1.13	.919	.777
JAN 23...	1200	129	812	7.8	8.5	9.4	6.2	3.44	.432	.710	.448
JAN 23...	1830	124	801	7.8	6.6	9.6	>10	4.39	1.78	.848	.619
JAN 24...	0130	112	814	7.7	6.6	9.4	9.5	4.33	1.47	.891	.628
JAN 24...	0630	95	838	7.9	5.5	9.8	5.2	4.53	.675	.635	.487

MISCELLANEOUS FIELD MEASUREMENTS, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

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 04...	0915	105	743	17.5	MAY 07...	1340	175	672	17.0
OCT 25...	1305	112	694	16.5	MAY 21...	1430	161	736	17.0
NOV 14...	1155	88	727	13.0	JUN 05...	1110	79	739	18.5
JAN 04...	1155	85	718	9.0	JUN 13...	1050	82	1010	18.0
JAN 22...	1305	127	775	10.0	JUL 03...	1245	74	835	24.0
FEB 12...	1255	131	752	10.0	JUL 11...	1315	88	790	24.5
MAR 06...	1300	101	817	13.0	JUL 18...	1155	101	789	22.0
APR 06...	1020	153	729	12.0	AUG 01...	1330	91	826	24.5
APR 16...	1435	135	741	13.5	AUG 31...	1140	115	740	22.0
					SEP 05...	1405	104	890	22.5
					SEP 17...	1120	100	803	20.5

07105530 FOUNTAIN CREEK BELOW JANITELL ROAD, BELOW COLORADO SPRINGS CO--Continued

PRECIPITATION RECORDS

PERIOD OF RECORD.--April to September 2001 (seasonal records only).

GAGE.--Tipping-bucket rain gage with satellite telemetry.

REMARKS.--Records good. Daily data that are not published are either missing or of unacceptable quality.

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum daily precipitation, 0.80 inch, Aug. 31, 2001.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum daily precipitation, 0.80 inch, Aug 31.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	.00	.00	.01	.00	.04
2	---	---	---	---	---	---	---	.08	.00	.00	.02	.00
3	---	---	---	---	---	---	---	.51	.00	.00	.13	.00
4	---	---	---	---	---	---	---	.66	.10	.00	.01	.00
5	---	---	---	---	---	---	---	.64	.00	.00	.33	.00
6	---	---	---	---	---	---	.00	.00	.00	.00	.03	.04
7	---	---	---	---	---	---	.00	.00	.45	.00	.00	.09
8	---	---	---	---	---	---	.00	.00	.00	.02	.00	.53
9	---	---	---	---	---	---	.00	.00	.01	.48	.00	.01
10	---	---	---	---	---	---	.33	.01	.00	.00	.03	.00
11	---	---	---	---	---	---	.17	.00	.00	.13	.00	.00
12	---	---	---	---	---	---	.08	.00	.00	.06	.01	.00
13	---	---	---	---	---	---	.00	.00	.15	.34	.25	.00
14	---	---	---	---	---	---	.00	.11	.00	.02	.47	.00
15	---	---	---	---	---	---	.00	.00	.00	.00	.38	.34
16	---	---	---	---	---	---	.00	.04	.00	.00	.27	.03
17	---	---	---	---	---	---	.00	.58	.00	.00	.01	.25
18	---	---	---	---	---	---	.00	.00	.00	.00	.00	.00
19	---	---	---	---	---	---	.00	.31	.00	.00	.00	.00
20	---	---	---	---	---	---	.00	.02	.52	.00	.00	.00
21	---	---	---	---	---	---	.00	.01	.00	.00	.01	.30
22	---	---	---	---	---	---	.00	.00	.07	.00	.06	.00
23	---	---	---	---	---	---	.00	.00	.00	.05	.00	.00
24	---	---	---	---	---	---	.00	.00	.01	.07	.00	.00
25	---	---	---	---	---	---	.00	.00	.00	.36	.01	.00
26	---	---	---	---	---	---	.00	.00	.01	.01	.00	.00
27	---	---	---	---	---	---	.00	.00	.00	.02	.00	.00
28	---	---	---	---	---	---	.00	.17	.00	.00	.00	.00
29	---	---	---	---	---	---	.00	.01	.00	.00	.04	.00
30	---	---	---	---	---	---	.00	.21	.00	.00	.07	.00
31	---	---	---	---	---	---	---	.00	---	.00	.80	---
TOTAL	---	---	---	---	---	---	---	3.36	1.32	1.57	2.93	1.63
MAX	---	---	---	---	---	---	---	.66	.52	.48	.80	.53

ARKANSAS RIVER BASIN

07105800 FOUNTAIN CREEK AT SECURITY, CO

LOCATION.--Lat 38°43'46", long 104°44'00", in NE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec.24, T.15 S., R.66 W., El Paso County, Hydrologic Unit 11020003, on left bank on upstream side of Carson Road Bridge, 0.9 mi southwest of South Security School, 3.5 mi northeast of Fountain, and 5.5 mi upstream from Jimmy Camp Creek.

DRAINAGE AREA.--495 mi<sup>2</sup>.

WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WDR CO-85-1: 1984 (M).

GAGE.--Water-stage recorder with satellite telemetry and crest-stage gage. Elevation of gage is 5,640 ft above sea level, from topographic map. Prior to Oct.26, 1966, at site 60 ft upstream on right bank at datum 5.00 ft higher. Oct. 26, 1996 to July 18, 1972, at present site at datum 5.00 ft higher. July 19, 1972 to Feb. 20, 1980, at site 980 ft downstream on right bank at datum 1.00 ft lower. Feb. 21, 1980 to June 30, 1986, at present site at datum 5.00 ft higher. July 1, 1986 to Feb. 6, 1995, at present site at datum 2.00 ft higher. Feb. 7, 1995 to Nov. 29, 1995, at present site at datum 1.00 ft higher.

REMARKS.--Records fair except for estimated daily discharges and those above 1,500 ft<sup>3</sup>/s, which are poor. Natural flow of stream affected by storage reservoirs, power developments, ground-water withdrawals, diversions for municipal use and for irrigation, return flows from irrigated acreage, flows from sewage treatment plants, and transbasin and transmountain diversions.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	86	131	86	131	125	138	134	110	93	103	98	355
2	90	131	81	135	146	131	128	114	87	94	205	160
3	99	141	88	132	149	130	122	217	92	81	202	124
4	111	136	81	136	129	130	122	216	113	78	172	106
5	111	139	80	138	144	124	132	759	103	75	304	105
6	156	128	81	140	132	123	142	371	91	72	169	112
7	135	125	90	136	137	126	139	234	e522	74	114	138
8	140	127	90	130	130	123	131	169	e297	79	95	228
9	151	128	94	127	112	124	125	165	126	e973	93	122
10	151	124	95	142	139	187	169	178	96	e757	99	110
11	147	125	87	128	144	184	350	180	72	122	108	96
12	148	129	87	129	142	144	215	179	70	165	119	87
13	148	125	93	129	141	127	173	177	80	535	181	84
14	129	116	100	123	133	116	143	181	104	332	251	92
15	123	104	99	119	135	106	140	179	71	140	226	170
16	125	96	87	124	129	106	150	176	67	108	160	184
17	121	96	97	117	137	141	157	462	71	98	124	121
18	125	98	90	124	136	128	160	231	87	97	96	105
19	126	103	91	119	141	118	157	426	106	90	90	83
20	121	101	104	120	137	124	156	214	130	90	90	72
21	128	101	93	125	142	122	159	189	310	100	88	108
22	192	103	106	128	142	124	152	186	128	99	100	85
23	126	103	110	129	142	120	150	170	114	103	104	86
24	146	97	105	129	140	151	137	159	94	119	97	80
25	116	100	107	132	134	131	131	127	94	285	91	78
26	122	98	109	124	135	137	126	126	89	452	90	79
27	127	100	116	127	148	138	123	125	86	192	89	80
28	141	100	131	127	134	144	126	110	84	132	96	80
29	144	96	138	136	---	134	116	135	86	107	117	81
30	116	89	134	125	---	189	114	197	99	100	171	84
31	119	---	142	128	---	137	---	100	---	98	1380	---
TOTAL	4020	3390	3092	3989	3835	4157	4479	6562	3662	5950	5419	3495
MEAN	130	113	99.7	129	137	134	149	212	122	192	175	116
MAX	192	141	142	142	149	189	350	759	522	973	1380	355
MIN	86	89	80	117	112	106	114	100	67	72	88	72
AC-FT	7970	6720	6130	7910	7610	8250	8880	13020	7260	11800	10750	6930

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 2001, BY WATER YEAR (WY)

	1965	1965	1976	1976	1972	1965	1978	1966	1968	1972	1974	1968
MEAN	83.4	74.7	64.7	69.0	75.8	86.9	125	217	191	124	138	87.7
MAX	317	198	168	146	156	195	738	1131	886	381	561	231
(WY)	1985	2000	2000	1998	2000	2000	1999	1999	1997	1995	1999	1999
MIN	12.6	15.1	17.8	11.9	14.1	21.3	23.7	24.7	17.8	30.1	23.5	13.1
(WY)	1965	1965	1976	1976	1972	1965	1978	1966	1968	1972	1974	1968

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1965 - 2001

ANNUAL TOTAL	53166	52050		
ANNUAL MEAN	145	143		
HIGHEST ANNUAL MEAN			112	
LOWEST ANNUAL MEAN			355	1999
HIGHEST DAILY MEAN	614	Aug 29	1380	Aug 31
LOWEST DAILY MEAN	73	Sep 27	67	Jun 16
ANNUAL SEVEN-DAY MINIMUM	82	Sep 26	76	Jun 11
MAXIMUM PEAK FLOW			6420	Jul 9
MAXIMUM PEAK STAGE			b6.48	Jul 9
ANNUAL RUNOFF (AC-FT)	105500	103200		
10 PERCENT EXCEEDS	206	184		
50 PERCENT EXCEEDS	131	125		
90 PERCENT EXCEEDS	93	87		

e Estimated.  
a From slope-area measurement of peak flow. Flood of May 30, 1935, may have been larger.  
b From floodmarks.  
c From floodmarks, site and datum then in use.

07105800 FOUNTAIN CREEK AT SECURITY, CO--Continued

WATER-QUALITY RECORDS

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

PERIOD OF DAILY RECORD.--

- SPECIFIC CONDUCTANCE: October 1990 to January 1998.
- WATER TEMPERATURE: October 1990 to January 1998.
- pH: October 1990 to January 1998.
- DISSOLVED OXYGEN: October 1990 to January 1998.
- SUSPENDED SEDIMENT: April 1998 to current year (seasonal records only).

INSTRUMENTATION.--Pumping sediment sampler with satellite telemetry.

REMARKS.--Daily suspended-sediment records are fair.

EXTREMES FOR PERIOD OF RECORD.--

- SEDIMENT CONCENTRATION (seasonal only): Maximum daily mean, 7,410 mg/L, June 24, 1999; minimum daily mean, 28 mg/L, June 7, 2000.
- SUSPENDED-SEDIMENT DISCHARGE (seasonal only): Maximum daily, 400,000 tons (estimated), Apr. 30, 1999; minimum daily, 7.6 tons (estimated), June 6, 2000.

EXTREMES FOR CURRENT YEAR.--

- SEDIMENT CONCENTRATION (seasonal only): Maximum daily mean, 3,910 mg/L, July 13; minimum daily mean, 61 mg/L, Apr. 3.
- SUSPENDED-SEDIMENT DISCHARGE (seasonal only): Maximum daily, 55,400 tons (estimated), Aug. 31; minimum daily, 12 tons, July 6.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

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, CHEM-ICAL, 5 DAY (MG/L) (00310)	COLI-FORM, FECAL, UM-MF (COLS./100 ML) (31625)	E COLI, MTEC MF WATER (COL/100 ML) (31633)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	
OCT 24...	0900	180	708	8.0	11.1	8.4	9.8	E19000	E17000	61.6	18.5	170	1.3	
NOV 28...	0915	76	863	8.4	4.6	10.3	7.4	E310	E25	70.4	22.4	200	1.7	
FEB 26...	1345	154	766	8.3	12.0	9.1	9.1	100	60	55.5	17.9	170	1.9	
APR 03...	0930	97	842	8.3	10.1	9.2	5.6	460	--	67.1	21.6	210	2.0	
JUN 25...	1345	110	823	8.4	25.8	6.6	4.0	550	190	71.0	20.6	200	1.4	
AUG 06...	1400	188	639	8.1	25.2	6.5	4.2	E3100	E800	52.8	14.1	150	1.1	
DATE		NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00665)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BORON, TOTAL RECOV-ERABLE (UG/L AS B) (01022)	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)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)
OCT 24...	3.02	E.039	.716	.264	4	1.6	145	143	.35	<.07	3	<1.0	10.5	
NOV 28...	3.90	1.34	.451	.310	2	1.7	198	194	<.10	<.07	1	<1.0	7.1	
FEB 26...	3.90	.303	1.69	1.26	2	1.5	270	270	.18	.07	3	2.6	12.2	
APR 03...	3.72	.258	.661	.472	2	1.9	197	205	<.10	<.07	1	2.5	6.2	
JUN 25...	3.25	.127	.486	.212	3	1.7	254	237	.24	.09	2	4.1	8.1	
AUG 06...	2.27	.539	.813	.349	7	2.6	167	170	.53	.15	5	<1.0	13.5	
DATE		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)	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)	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)
OCT 24...	3.8	5480	40	12	.33	264	36.0	<.14	<.23	7	4.50	5.8	7.1	
NOV 28...	4.0	900	20	2	.29	72	38.0	<.14	<.23	6	5.82	7.7	7.4	
FEB 26...	5.9	--	30	3	.42	92	42.0	<.14	<.23	6	4.50	6.6	5.6	
APR 03...	3.6	--	40	1	.35	70	46.0	<.01	<.01	6	5.90	7.6	8.2	
JUN 25...	3.7	2650	<10	4	.28	109	11.0	.01	M	7	4.90	8.1	7.1	
AUG 06...	2.8	7040	10	30	.24	243	6.0	<.01	<.01	10	5.40	4.8	4.6	

ARKANSAS RIVER BASIN

07105800 FOUNTAIN CREEK AT SECURITY, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	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)	CYANIDE TOTAL (MG/L AS CN) (00720)	SEDIMENT, SUS-PENDED (MG/L) (80154)	SEDIMENT, CHARGE, PENDED (T/DAY) (80155)
OCT 24...	<.20	<.2	68	16	<.01	450	219
NOV 28...	<.20	<.2	32	25	<.01	45	9.2
FEB 26...	<.20	<.2	57	43	<.01	120	50
APR 03...	<.20	<.2	36	29	<.01	51	13
JUN 25...	<.20	<.2	44	27	<.01	154	46
AUG 06...	.22	<.2	89	21	<.01	463	235

E Estimated laboratory analysis value.  
M Presence of material verified but not quantified.

WATER-QUALITY DATA DURING 24-HOUR SAMPLING, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

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 (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) (00310)	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 ORTHO, DIS-SOLVED (MG/L AS P) (00671)
JAN 23...	0930	95	953	8.2	4.5	10.4	6.8	4.49	.723	.975	.787
23...	1430	136	877	8.2	8.2	9.5	7.8	4.28	.457	.903	.615
23...	2130	136	867	8.2	5.3	9.6	10	4.97	1.16	.873	.593
24...	0400	112	854	8.1	4.1	9.8	9.5	4.96	.935	.796	.531
24...	0930	84	897	8.2	3.7	10.8	5.4	4.91	.520	.760	.591

WATER-QUALITY DATA DURING STORMWATER-RUNOFF SAMPLING, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

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 (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 WATER (COLS./100 ML) (31625)	E COLI, MTEC MF (COL/100 ML) (31633)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)
JUL 09...	2300	E1800	271	8.1	18.8	6.9	13	--	--	26.9	5.68	60.0	<.5
12...	1930	256	660	8.1	21.6	6.6	6.6	45000	20000	51.1	13.6	150	1.0
26...	2145	1120	239	8.2	19.7	7.1	11	25000	16000	22.2	2.60	41.0	.4

DATE	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 ORTHO, DIS-SOLVED (MG/L AS P) (00671)	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BORON, TOTAL RECOVERABLE (UG/L AS B) (01022)	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM WATER UNFLTRD (UG/L AS CD) (01027)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)
JUL 09...	1.20	.186	6.35	.021	22	1.7	70	39	4.30	.24	39	<1.0	128
12...	2.96	.139	1.65	.171	9	2.0	158	154	1.20	.13	12	<1.0	35.7
26...	1.05	.022	8.19	.036	20	1.1	42	<10	5.00	.08	58	<1.0	190

DATE	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)	MANGA-NESE, TOTAL RECOVERABLE (UG/L AS MN) (01055)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOVERABLE (UG/L AS HG) (71900)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	NICKEL, TOTAL RECOVERABLE (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)
JUL 09...	4.2	84400	--	231	4.10	4040	100	.21	M	93	3.30	13.8	2.2
12...	2.8	28200	20	46	<1.00	865	1.0	.07	.000	23	4.90	7.8	5.2
26...	1.6	118000	70	264	.31	6	4.0	.29	<.01	114	1.70	16.9	2.2

07105800 FOUNTAIN CREEK AT SECURITY, CO--Continued

WATER-QUALITY DATA DURING STORMWATER-RUNOFF SAMPLING, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	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)	CYANIDE TOTAL (MG/L AS CN) (00720)	ACE-NAPHTH-YLENE TOTAL (UG/L) (34200)	ACE-NAPHTH-ENE TOTAL (UG/L) (34205)	ANTHRA-CENE TOTAL (UG/L) (34220)	BENZO-[A]-ANTHRA-CENE WAT UNF (UG/L) (34526)	BENZO B AN-THENE TOTAL (UG/L) (34230)	BENZO-A-PYRENE TOTAL (UG/L) (34247)	BENZO [GHI]-PERY-LENE TOTAL (UG/L) (34521)	BENZO K FLUOR-AN-THENE TOTAL (UG/L) (34242)
JUL 09...	.65	<.2	698	26	<.01	M	M	M	M	M	M	M	M
JUL 12...	.22	<.2	192	21	--	<2	M	M	M	M	M	M	M
JUL 26...	.70	<.2	872	<3	<.01	M	M	M	M	E2	E1	M	M
DATE	CHRY-SENE TOTAL (UG/L) (34320)	1,2,5,6-DIBENZ-ANTHRA-CENE TOTAL (UG/L) (34556)	FLUOR-ANTHENE TOTAL (UG/L) (34376)	FLUOR-ENE TOTAL (UG/L) (34381)	INDENO (1,2,3-CD) PYRENE TOTAL (UG/L) (34403)	NAPHTH-ALENE TOTAL (UG/L) (34696)	PHENAN-THRENE TOTAL (UG/L) (34461)	PYRENE TOTAL (UG/L) (34469)	BENZENE NITRO-WATER UNFLTRD RECOVER (UG/L) (34447)	2,6-DI-ETHYL ANILINE WAT FLT (UG/L) (82660)	ACETO-CHLOR, WATER FLTRD REC (UG/L) (49260)	ALA-CHLOR, WATER, DISS, REC (UG/L) (46342)	ATRA-ZINE, WATER, DISS, REC (UG/L) (39632)
JUL 09...	M	M	M	M	M	E.1	M	M	--	<.002	<.004	<.002	.015
JUL 12...	M	M	M	M	M	M	M	M	<2	<.002	<.004	<.002	E.005
JUL 26...	E1	M	E2	M	M	E.1	E2	E2	<2	<.002	<.004	<.002	E.001
DATE	METHYL AZIN-PHOS WAT FLT (UG/L) (82686)	BEN-FLUR-ALIN WAT FLD (UG/L) (82673)	BUTYL-ATE, WATER, DISS, REC (UG/L) (04028)	CAR-BARYL WATER FLTRD (UG/L) (82680)	CARBO-FURAN WATER FLTRD (UG/L) (82674)	CHLOR-PYRIFOS SOLVED (UG/L) (38933)	CYANA-ZINE, WATER, DISS, REC (UG/L) (04041)	DCPA WATER FLTRD (UG/L) (82682)	DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) (04040)	DI-AZINON, DIS-SOLVED (UG/L) (39572)	DI-ELDRIN, DIS-SOLVED (UG/L) (39381)	DISUL-FOTON WATER FLTRD (UG/L) (82677)	EPTC WATER FLTRD (UG/L) (82668)
JUL 09...	<.050	<.010	<.002	E.495	<.020	<.005	<.018	E.001	<.006	.344	<.005	<.021	<.002
JUL 12...	<.050	<.010	<.002	E.096	<.020	<.005	<.018	<.003	<.006	.139	<.005	<.021	<.002
JUL 26...	<.050	<.010	<.002	E.332	<.020	<.005	<.018	<.003	<.006	.187	<.005	<.021	<.002
DATE	ETHAL-FLUR-ALIN WAT FLT (UG/L) (82663)	ETHO-PROP WATER FLTRD (UG/L) (82672)	FONOFOS WATER, DISS, REC (UG/L) (04095)	LINDANE DIS-SOLVED (UG/L) (39341)	LIN-URON WATER FLTRD (UG/L) (82666)	MALA-THION, DIS-SOLVED (UG/L) (39532)	METO-LACHLOR WATER DISSOLV (UG/L) (39415)	METRI-BUZIN WATER DISSOLV (UG/L) (82630)	MOL-INATE WATER FLTRD (UG/L) (82671)	NAPROP-AMIDE WATER FLTRD (UG/L) (82684)	PARA-THION, DIS-SOLVED (UG/L) (39542)	METHYL PARA-THION WAT FLT (UG/L) (82667)	PEB-ULATE WATER FLTRD (UG/L) (82669)
JUL 09...	<.009	<.005	<.003	<.004	<.035	.049	<.013	<.006	<.002	<.007	<.007	<.006	<.002
JUL 12...	<.009	<.005	<.003	<.004	<.035	E.007	<.013	<.006	<.002	<.007	<.007	<.006	<.002
JUL 26...	<.009	<.005	<.003	<.004	<.035	E.017	<.013	<.006	<.002	<.007	<.007	<.006	<.002
DATE	PENDI-METH-ALIN WAT FLT (UG/L) (82683)	PHORATE WATER FLTRD (UG/L) (82664)	PRO-METON, WATER, DISS, REC (UG/L) (04037)	PROPA-CHLOR, WATER, DISS, REC (UG/L) (04024)	PRO-PANIL WATER FLTRD (UG/L) (82679)	PRO-PARGITE WATER FLTRD (UG/L) (82685)	PRON-AMIDE WATER FLTRD (UG/L) (82676)	SI-MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU-THIURON WATER FLTRD (UG/L) (82670)	TER-BACIL WATER FLTRD (UG/L) (82665)	TER-BUFOS WATER FLTRD (UG/L) (82675)	THIO-BENCARB WATER FLTRD (UG/L) (82681)	TRIAL-LATE WATER FLTRD (UG/L) (82678)
JUL 09...	<.010	<.011	.025	<.010	<.011	<.023	<.004	<.011	<.016	<.034	<.017	<.005	<.002
JUL 12...	<.010	<.011	.019	<.010	<.011	<.023	<.004	<.011	<.016	<.034	<.017	<.005	<.002
JUL 26...	<.010	<.011	.043	<.010	<.011	<.023	<.004	<.011	<.016	<.034	<.017	<.005	<.002
DATE	TRI-FLUR-ALIN WAT FLT (UG/L) (82661)	ALPHA BHC DIS-SOLVED (UG/L) (34253)	PER-METHRIN CIS WAT FLT (UG/L) (82687)	P,P' DDE DISSOLV (UG/L) (34653)	SEDI-MENT, DIS-SUS-PENDE (MG/L) (80154)	SEDI-MENT, DIS-SUS-PENDE (T/DAY) (80155)							
JUL 09...		E.008	<.005	<.006	<.003	9680	--						
JUL 12...		<.009	<.005	<.006	<.003	3960	2740						
JUL 26...		<.009	<.005	<.006	<.003	16000	48400						

E Estimated laboratory analysis value.  
M Presence of material verified but not quantified.

## ARKANSAS RIVER BASIN

07105800 FOUNTAIN CREEK AT SECURITY, CO--Continued

MISCELLANEOUS FIELD AND SUSPENDED-SEDIMENT DISCHARGE DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)
OCT						
03...	1225	117	902	20.5	96	30
25...	1150	133	819	14.0	--	--
NOV						
02...	1045	104	896	11.0	65	18
14...	1025	84	912	5.0	--	--
DEC						
07...	1240	110	965	9.0	--	--
19...	1115	58	954	4.0	30	4.7
JAN						
05...	1245	146	836	8.5	244	96
22...	1135	103	889	7.0	--	--
FEB						
12...	1135	123	897	6.5	--	--
MAR						
06...	1155	130	867	12.0	--	--
22...	1355	144	807	14.0	--	--
30...	1330	190	698	12.5	428	220
APR						
05...	1210	167	789	15.5	--	--
16...	1330	185	716	13.5	--	--
27...	1245	160	725	17.0	152	66
MAY						
07...	1230	229	639	19.0	637	394
14...	1045	162	650	19.5	--	--
18...	1300	265	606	20.0	668	478
21...	1245	218	657	16.5	--	--
JUN						
05...	1345	105	778	22.5	--	--
08...	1130	184	610	19.0	1350	671
08...	1330	166	659	21.0	--	--
JUL						
05...	1440	97	813	29.0	--	--
10...	1330	212	555	25.5	628	359
18...	1015	82	825	20.0	81	18
25...	1050	88	820	22.0	--	--
26...	1215	184	619	24.0	695	345
AUG						
01...	1225	92	865	26.5	--	--
27...	1340	102	835	25.5	--	--
SEP						
04...	1415	123	803	25.5	110	37

07105800 FOUNTAIN CREEK AT SECURITY, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
	OCTOBER			NOVEMBER			DECEMBER		
1	86	99	23	131	---	---	86	---	---
2	90	---	e26	131	---	---	81	---	---
3	99	93	24	141	---	---	88	---	---
4	111	75	24	136	---	---	81	---	---
5	111	107	32	139	---	---	80	---	---
6	156	121	51	128	---	---	81	---	---
7	135	---	e46	125	---	---	90	---	---
8	140	126	48	127	---	---	90	---	---
9	151	140	58	128	---	---	94	---	---
10	151	225	93	124	---	---	95	---	---
11	147	267	106	125	---	---	87	---	---
12	148	---	e110	129	---	---	87	---	---
13	148	266	106	125	---	---	93	---	---
14	129	267	93	116	---	---	100	---	---
15	123	397	133	104	---	---	99	---	---
16	125	409	138	96	---	---	87	---	---
17	121	---	e123	96	---	---	97	---	---
18	125	347	117	98	---	---	90	---	---
19	126	352	121	103	---	---	91	---	---
20	121	579	190	101	---	---	104	---	---
21	128	841	293	101	---	---	93	---	---
22	192	1790	1100	103	---	---	106	---	---
23	126	518	185	103	---	---	110	---	---
24	146	434	174	97	---	---	105	---	---
25	116	174	53	100	---	---	107	---	---
26	122	104	35	98	---	---	109	---	---
27	127	---	e33	100	---	---	116	---	---
28	141	123	48	100	---	---	131	---	---
29	144	161	66	96	---	---	138	---	---
30	116	95	29	89	---	---	134	---	---
31	119	63	20	---	---	---	142	---	---
TOTAL	4020	---	3698	3390	---	0	3092	---	0

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
	JANUARY			FEBRUARY			MARCH		
1	131	---	---	125	---	---	138	---	---
2	135	---	---	146	---	---	131	---	---
3	132	---	---	149	---	---	130	---	---
4	136	---	---	129	---	---	130	---	---
5	138	---	---	144	---	---	124	---	---
6	140	---	---	132	---	---	123	---	---
7	136	---	---	137	---	---	126	---	---
8	130	---	---	130	---	---	123	---	---
9	127	---	---	112	---	---	124	---	---
10	142	---	---	139	---	---	187	---	---
11	128	---	---	144	---	---	184	---	---
12	129	---	---	142	---	---	144	---	---
13	129	---	---	141	---	---	127	---	---
14	123	---	---	133	---	---	116	---	---
15	119	---	---	135	---	---	106	---	---
16	124	---	---	129	---	---	106	---	---
17	117	---	---	137	---	---	141	---	---
18	124	---	---	136	---	---	128	---	---
19	119	---	---	141	---	---	118	---	---
20	120	---	---	137	---	---	124	---	---
21	125	---	---	142	---	---	122	---	---
22	128	---	---	142	---	---	124	---	---
23	129	---	---	142	---	---	120	---	---
24	129	---	---	140	---	---	151	---	---
25	132	---	---	134	---	---	131	---	---
26	124	---	---	135	---	---	137	---	---
27	127	---	---	148	---	---	138	---	---
28	127	---	---	134	---	---	144	---	---
29	136	---	---	---	---	---	134	---	---
30	125	---	---	---	---	---	189	---	---
31	128	---	---	---	---	---	137	---	---
TOTAL	3989	---	0	3835	---	0	4157	---	0

## ARKANSAS RIVER BASIN

07105800 FOUNTAIN CREEK AT SECURITY, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	134	---	e38	110	---	e45	93	251	62
2	128	78	27	114	---	e47	87	---	e26
3	122	61	20	217	---	e353	92	69	17
4	122	---	e32	216	---	e723	113	90	29
5	132	138	49	759	2530	5790	103	174	48
6	142	---	e94	371	---	e1300	91	98	23
7	139	318	119	234	675	443	e522	---	e15800
8	131	311	110	169	---	e242	e297	---	e3520
9	125	---	e105	165	---	e188	126	547	185
10	169	493	319	178	---	e151	96	---	e133
11	350	1340	1360	180	---	e100	72	---	e103
12	215	---	e315	179	147	71	70	---	e102
13	173	---	e179	177	156	75	80	---	e120
14	143	---	e121	181	170	83	104	552	155
15	140	---	e95	179	126	61	71	555	108
16	150	---	e76	176	---	e53	67	802	145
17	157	154	65	462	1820	4280	71	---	e214
18	160	---	e66	231	782	486	87	1150	267
19	157	---	e65	426	1920	3740	106	900	255
20	156	---	e65	214	---	e300	130	741	283
21	159	---	e66	189	320	163	310	1050	3880
22	152	---	e63	186	300	150	128	208	73
23	150	---	e62	170	---	e97	114	220	68
24	137	---	e56	159	149	64	94	149	38
25	131	---	e54	127	---	e51	94	164	41
26	126	---	e52	126	---	e63	89	100	24
27	123	152	50	125	---	e51	86	---	e20
28	126	---	e52	110	204	94	84	92	21
29	116	---	e48	135	620	330	86	113	27
30	114	---	e47	197	1300	1770	99	185	51
31	---	---	---	100	599	168	---	---	---
TOTAL	4479	---	3870	6562	---	21532	3662	---	25838

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	103	294	82	98	---	e50	355	---	e2400
2	94	---	e60	205	1090	2060	160	---	e212
3	81	143	31	202	2140	1460	124	---	e46
4	78	101	21	172	822	394	106	107	31
5	75	67	13	304	1930	3620	105	---	e31
6	72	63	12	169	708	367	112	217	65
7	74	---	e17	114	188	58	138	496	201
8	79	109	23	95	186	48	228	570	516
9	e973	---	e31000	93	130	32	122	163	55
10	e757	---	e4180	99	104	28	110	---	e29
11	122	288	93	108	---	e28	96	86	22
12	165	---	e319	119	287	161	87	98	23
13	535	3910	23000	181	844	923	84	89	20
14	332	3800	4320	251	1170	1040	92	133	34
15	140	1720	664	226	1180	958	170	388	416
16	108	861	264	160	---	e172	184	831	781
17	98	---	e96	124	237	80	121	374	177
18	97	107	29	96	233	60	105	351	111
19	90	78	19	90	182	44	83	156	35
20	90	147	36	90	131	32	72	---	e18
21	100	501	140	88	---	e24	108	304	254
22	99	---	e100	100	109	30	85	452	105
23	103	179	50	104	153	43	86	175	39
24	119	179	58	97	91	24	80	90	19
25	285	2040	7570	91	63	16	78	---	e15
26	452	3650	12800	90	---	e15	79	72	15
27	192	3780	2090	89	---	e15	80	99	22
28	132	917	328	96	65	17	80	82	18
29	107	432	124	117	69	22	81	65	14
30	100	421	113	171	---	e456	84	---	e13
31	98	319	84	1380	---	e55400	---	---	---
TOTAL	5950	---	87736	5419	---	67677	3495	---	5737

e Estimated.

07105900 JIMMY CAMP CREEK AT FOUNTAIN, CO

LOCATION.--Lat 38°41'04", long 104°41'17", in NW<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec.5, T.16 S., R.65 W., El Paso County, Hydrologic Unit 11020003, on right bank 110 ft downstream of bridge on county road (revised), 0.2 mi east of Fountain, and 1.5 mi upstream from mouth.

DRAINAGE AREA.--65.6 mi<sup>2</sup>.

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

GAGE.--Water-stage recorder with satellite telemetry and crest-stage gage. Elevation of gage is 5,530 ft above sea level, from topographic map. At site 110 ft upstream, on downstream side of bridge Jan. 1976 to Sept. 3, 1986, at datum 4.0 ft higher, and Sept. 4, 1986 to Aug. 13, 1991, at present datum.

REMARKS.--Records fair except for estimated daily discharges and those above 40 ft<sup>3</sup>/s, 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.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 17, 1965, reached an estimated discharge of 124,000 ft<sup>3</sup>/s, gage height, unknown.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.2	2.0	2.3	2.1	e2.2	1.8	1.9	2.3	2.7	1.1	2.7	2.1
2	2.1	2.1	2.4	2.1	2.3	1.7	1.9	2.4	2.7	1.1	2.4	1.8
3	2.1	2.2	2.4	2.0	2.3	1.7	2.0	2.4	2.7	1.1	2.2	1.8
4	2.4	2.2	2.3	1.8	2.3	1.8	2.1	2.4	2.9	1.0	2.1	1.6
5	2.3	2.2	2.2	1.7	2.4	1.7	2.0	3.3	2.7	.99	1.9	1.5
6	2.6	2.1	2.0	1.7	2.1	1.8	2.0	2.5	2.7	.93	1.7	1.5
7	2.6	2.1	1.8	1.7	2.2	1.8	2.0	2.5	3.0	.92	1.6	1.6
8	2.6	2.3	1.8	1.8	2.0	1.8	2.0	2.5	19	.94	1.6	2.0
9	2.6	2.4	1.7	2.0	2.0	1.9	2.1	2.5	4.0	1.3	1.6	1.9
10	2.6	2.4	1.7	2.0	e2.4	2.0	3.1	2.5	3.4	1.2	1.4	1.8
11	2.4	2.4	e2.0	1.8	2.6	1.9	2.2	2.5	2.8	1.1	1.6	1.7
12	2.4	2.5	2.2	1.8	2.6	1.8	2.2	2.5	2.5	1.2	1.9	1.6
13	2.5	2.3	e2.1	1.7	e2.5	1.8	2.2	2.5	2.1	4.0	2.4	1.5
14	2.6	2.4	e2.0	1.6	e2.5	1.8	2.2	2.5	2.0	3.8	3.8	1.4
15	2.6	2.5	e2.0	1.6	2.4	1.9	2.2	2.6	1.9	1.4	3.9	1.5
16	2.4	2.6	e2.0	1.6	2.3	1.9	2.2	2.5	1.9	1.5	3.9	1.6
17	2.4	2.7	e2.0	e1.5	2.3	2.0	2.2	2.9	1.7	1.5	3.4	2.2
18	2.4	2.8	1.9	e1.7	2.2	1.9	3.0	2.5	1.5	1.4	3.0	2.6
19	2.3	2.7	1.8	e2.0	2.1	1.9	2.3	2.5	1.5	1.4	2.5	2.9
20	2.2	2.9	1.9	e2.2	1.9	1.8	2.2	2.5	1.9	1.4	2.3	2.6
21	2.2	2.6	2.1	2.4	1.7	1.9	2.2	2.5	4.8	1.3	2.7	2.2
22	2.3	2.6	2.0	e2.3	1.7	2.0	2.3	2.5	1.9	1.3	2.7	2.0
23	2.3	2.5	2.1	e2.3	1.6	2.0	2.3	2.6	1.7	1.8	2.6	1.9
24	2.5	2.6	2.1	e2.4	1.6	2.0	2.3	2.6	1.6	1.6	2.7	1.9
25	2.3	2.7	2.2	e2.5	1.6	2.0	2.3	2.5	1.6	1.6	3.1	1.9
26	2.3	2.7	2.4	e2.5	1.6	2.1	3.0	2.6	1.6	7.6	2.5	1.7
27	2.3	2.6	2.4	e2.5	1.7	2.1	2.3	2.6	1.4	3.5	2.1	1.6
28	2.6	2.6	2.4	e2.4	1.7	2.1	2.3	2.6	1.3	2.5	1.9	1.7
29	2.2	2.5	2.5	2.5	---	2.1	2.3	2.9	1.2	2.5	1.7	1.9
30	2.0	2.5	2.5	2.3	---	1.9	2.3	3.7	1.1	2.7	1.6	1.8
31	2.0	---	2.3	2.2	---	1.9	---	2.8	---	2.7	1.9	---
TOTAL	73.3	73.7	65.5	62.7	58.8	58.8	67.6	80.7	83.8	58.38	73.4	55.8
MEAN	2.36	2.46	2.11	2.02	2.10	1.90	2.25	2.60	2.79	1.88	2.37	1.86
MAX	2.6	2.9	2.5	2.5	2.6	2.1	3.1	3.7	19	7.6	3.9	2.9
MIN	2.0	2.0	1.7	1.5	1.6	1.7	1.9	2.3	1.1	.92	1.4	1.4
AC-FT	145	146	130	124	117	117	134	160	166	116	146	111

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1976 - 2001, BY WATER YEAR (WY)

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
MEAN	2.10	2.27	1.80	1.70	1.63	1.75	2.07	2.64	3.65	3.73	4.65	1.84				
MAX	3.55	6.49	3.17	2.74	2.39	3.54	9.33	10.1	27.8	27.9	13.4	5.12				
(WY)	1985	1982	1995	1986	1977	1980	1999	1995	1995	1985	1984	1994				
MIN	1.20	1.58	.87	1.01	.79	1.05	.56	.91	.98	.96	.84	.68				
(WY)	1979	1984	1988	1988	1990	1990	1986	1989	1989	1993	1990	1990				

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1976 - 2001

ANNUAL TOTAL	780.3	812.48		
ANNUAL MEAN	2.13	2.23	2.49	
HIGHEST ANNUAL MEAN			5.12	1995
LOWEST ANNUAL MEAN			1.20	1990
HIGHEST DAILY MEAN	17	Aug 29	19	Jun 8
LOWEST DAILY MEAN	1.3	Jul 10	.92	Jul 7
ANNUAL SEVEN-DAY MINIMUM	1.4	Jul 6	1.0	Jul 2
MAXIMUM PEAK FLOW			108	Jun 8
MAXIMUM PEAK STAGE			5.55	Jun 8
ANNUAL RUNOFF (AC-FT)	1550	1610	1800	
10 PERCENT EXCEEDS	2.7	2.7	2.9	
50 PERCENT EXCEEDS	1.9	2.2	1.8	
90 PERCENT EXCEEDS	1.6	1.6	.99	

e Estimated.  
a From contracted-opening measurement of peak flow.  
b From floodmarks.



07106000 FOUNTAIN CREEK NEAR FOUNTAIN, CO

LOCATION.--Lat 38°36'06", long 104°40'11", in SW<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec.4, T.17 S., R.65 W., El Paso County, Hydrologic Unit 11020003, on right bank 50 ft upstream from Old Pueblo Road bridge, 100 ft downstream from Denver & Rio Grande Railroad bridge, 0.9 mi downstream from Little Fountain Creek, and 5.6 mi south of Fountain.

DRAINAGE AREA.--681 mi<sup>2</sup>.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--September 1938 to February 1940 (monthly records only), March 1940 to September 1954; July 1985 to current year.

GAGE.--Water-stage recorder with satellite telemetry and crest-stage gage. Elevation of gage is 5,355 ft above sea level, from topographic map. Sept. 18, 1938 to Mar. 1, 1940, nonrecording gage, at site 50 ft downstream, at different datum. Mar. 2, 1940 to Sept. 30, 1954, at site 200 ft upstream, at different datum. July 2, 1985 to Sept. 2, 1987, at site 500 ft upstream, at different datum. Sept. 3, 1987 to Mar. 12, 1990, at site 1,100 ft upstream at different datum.

REMARKS.--No estimated daily discharges. Records fair except for those above 1,000 ft<sup>3</sup>/s, which are poor. Natural flow of stream affected by storage reservoirs, power developments, diversions for irrigation and municipal use, return flows from irrigation, and sewage effluent discharges.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known, 14.4 ft, at different datum, May 30, 1935, discharge undetermined. Floods of May 1935 and June 1965 probably exceeded flood of May 1940.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	66	157	138	159	137	165	144	111	138	180	86	335
2	73	157	130	162	153	171	147	99	111	130	110	116
3	69	176	137	157	191	165	134	208	92	98	353	108
4	79	167	130	161	175	150	150	186	95	84	160	108
5	90	177	117	174	172	153	150	909	144	84	298	102
6	133	176	117	185	168	162	164	368	106	77	296	118
7	131	168	128	182	148	171	151	232	575	54	118	158
8	119	175	130	175	160	177	138	178	364	64	77	284
9	122	177	139	173	123	172	135	181	118	446	60	133
10	130	175	138	190	141	233	138	221	145	662	71	119
11	118	173	134	176	176	162	346	194	100	93	80	104
12	116	178	123	161	180	159	245	176	99	197	69	95
13	107	176	121	166	166	175	184	154	92	494	180	84
14	104	165	122	159	139	186	177	160	152	687	320	99
15	90	148	130	164	145	183	190	159	90	179	303	116
16	107	128	121	173	147	186	170	128	88	150	180	258
17	95	123	115	155	153	224	177	562	91	101	172	209
18	97	123	115	159	154	207	177	370	100	87	103	164
19	93	133	106	158	158	182	176	484	104	70	85	121
20	88	140	121	151	157	166	172	273	114	61	86	107
21	94	146	113	159	160	166	149	194	476	49	83	112
22	167	151	108	166	163	160	161	162	157	58	97	190
23	172	149	125	170	159	149	158	163	169	78	104	136
24	210	148	119	148	170	176	124	165	123	138	91	124
25	154	153	116	159	164	145	118	115	104	230	89	110
26	143	152	117	148	174	141	101	75	88	588	89	110
27	141	158	130	155	189	139	111	100	91	402	87	101
28	170	154	139	144	173	155	121	79	88	125	85	93
29	217	149	167	156	---	136	122	190	91	96	90	76
30	166	138	154	148	---	198	117	342	133	83	177	83
31	156	---	163	142	---	142	---	307	---	73	1080	---
TOTAL	3817	4690	3963	5035	4495	5256	4747	7245	4438	5918	5279	4073
MEAN	123	156	128	162	161	170	158	234	148	191	170	136
MAX	217	178	167	190	191	233	346	909	575	687	1080	335
MIN	66	123	106	142	123	136	101	75	88	49	60	76
AC-FT	7570	9300	7860	9990	8920	10430	9420	14370	8800	11740	10470	8080

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 2001, BY WATER YEAR (WY)

	MEAN	MAX	MIN	(WY)	MEAN	MAX	MIN	(WY)	MEAN	MAX	MIN	(WY)
1939	72.0	266	3.70	1954	87.0	253	10.0	1940	73.2	231	5.14	1953
1940	74.7	214	6.99	1952	78.3	201	6.07	1941	88.1	224	6.39	1941
1941	133	787	4.30	1954	238	1602	9.78	1950	133	787	4.30	1954
1942	179	1080	4.50	1953	238	1602	9.78	1950	179	1080	4.50	1953
1943	116	432	3.47	1952	116	432	3.47	1952	116	432	3.47	1952
1944	147	713	3.15	1954	147	713	3.15	1954	147	713	3.15	1954
1945	72.4	242	1.31	1939	72.4	242	1.31	1939	72.4	242	1.31	1939

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1939 - 2001
ANNUAL TOTAL	62344	58956	
ANNUAL MEAN	170	162	113
HIGHEST ANNUAL MEAN			430
LOWEST ANNUAL MEAN			10.3
HIGHEST DAILY MEAN	1170	1080	13200
LOWEST DAILY MEAN	58	49	a.00
ANNUAL SEVEN-DAY MINIMUM	70	72	.27
MAXIMUM PEAK FLOW		6460	b22100
MAXIMUM PEAK STAGE		7.65	c9.19
ANNUAL RUNOFF (AC-FT)	123700	116900	81930
10 PERCENT EXCEEDS	237	208	230
50 PERCENT EXCEEDS	160	148	65
90 PERCENT EXCEEDS	86	88	7.5

a Also occurred Sep 30, 1939.  
b From contracted-opening and slope-area measurement of peak flow.  
c At different datum, maximum gage height, 12.06 ft, Apr 30, 1999.

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1987 to current year.

PERIOD OF DAILY RECORD.--

DISSOLVED OXYGEN: November 1987 to current year.  
 pH: November 1987 to current year.  
 SPECIFIC CONDUCTANCE: November 1987 to current year.  
 WATER TEMPERATURE: November 1987 to current year.

INSTRUMENTATION.--Water-quality monitor with satellite telemetry.

REMARKS.-- Records for daily dissolved oxygen are poor. Records for daily pH are fair except for Apr. 17-24 and July 2-9, which are poor. Records for daily specific conductance are fair. Records for daily water temperature are good except for Apr. 7-24, which are poor. Daily data that are not published are either missing or of unacceptable quality. Reported values are representative of the stream based on cross-section comparisons made during the year. Daily median pH records are available from the district office.

EXTREMES FOR PERIOD OF RECORD.--

DISSOLVED OXYGEN: Maximum, 12.9 mg/L, Mar. 15, 2000; minimum, 3.7 mg/L, July 9, 1993.  
 pH: Maximum, 8.7 units, Dec. 9-10, 1999; minimum, 6.5 units, Oct. 26, 28-29, 31, 1995.  
 SPECIFIC CONDUCTANCE: Maximum, 1,660 microsiemens/cm, Aug. 27-28, 1996; minimum, 141 microsiemens/cm, Aug. 8, 1991.  
 WATER TEMPERATURE: Maximum, 31.8°C, July 9, 1990; minimum, 0.0°C, on many days.

EXTREMES FOR CURRENT YEAR.--

DISSOLVED OXYGEN: Maximum, 12.4 mg/L, Jan. 8-9, Feb. 28; minimum, 4.5 mg/L, July 16.  
 pH: Maximum, 8.4 units, on many days; minimum, 7.6 units, May 5-6.  
 SPECIFIC CONDUCTANCE: Maximum, 1,420 microsiemens/cm, Jan. 30; minimum, 270 microsiemens/cm, Aug. 31.  
 WATER TEMPERATURE: Maximum, 31.7° C, July 7; minimum, 0.0° C, on many days.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

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, E COLI, MTEC MF (COLS./100 ML) (31625)	E COLI, MTEC MF (COL/100 ML) (31633)	CALCIUM DIS-SOLVED (MG/L) AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L) AS MG) (00925)	SULFATE DIS-SOLVED (MG/L) AS SO4) (00945)	FLUO-RIDE, DIS-SOLVED (MG/L) AS F) (00950)
OCT	23...	114	1030	8.2	13.2	7.9	1.8	3100	2800	84.7	28.3	280	1.6
NOV	27...	126	1020	8.3	8.7	9.0	3.8	E40	E8	84.4	28.0	270	1.6
FEB	26...	139	960	8.2	10.2	9.0	4.8	E23	E11	74.6	25.1	250	1.8
APR	02...	114	935	8.2	16.4	7.8	3.2	40	<10	72.7	24.6	250	1.7
JUN	25...	73	1040	8.2	26.5	6.2	<1.0	220	E60	95.7	27.6	290	1.5
AUG	06...	237	693	8.1	24.0	6.5	3.2	>2400	2000	59.8	16.3	190	1.0

DATE	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 ORTHO, DIS-SOLVED (MG/L) AS P) (00671)	ARSENIC TOTAL (UG/L) AS AS) (01002)	ARSENIC DIS-SOLVED (UG/L) AS AS) (01000)	BORON, TOTAL RECOV-ERABLE (UG/L) AS B) (01022)	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)	COPPER, TOTAL RECOV-ERABLE (UG/L) AS CU) (01042)
OCT	3.68	E.022	.570	.392	3	2.1	217	214	.16	.08	<1	<1.0	5.5
NOV	4.19	.674	.457	.327	2	1.7	214	219	.14	.08	2	<1.0	6.8
FEB	5.16	.144	1.46	1.06	3	1.9	234	232	.21	.08	3	3.0	10.9
APR	4.31	.063	1.03	.860	2	2.0	230	225	.16	<.07	1	2.6	7.3
JUN	3.57	.020	.326	.240	3	2.0	245	235	.23	.15	2	5.4	5.6
AUG	2.39	.018	.268	.115	15	4.0	121	121	.87	.17	9	<1.0	23.7

07106000 FOUNTAIN CREEK NEAR FOUNTAIN, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	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)	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)	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)
OCT 23...	3.9	1560	<10	2	.18	73	11.0	<.14	<.23	7	5.90	8.4	8.3
NOV 27...	4.2	1100	<10	2	.28	60	11.0	<.14	<.23	6	5.13	8.3	7.5
FEB 26...	4.7	--	10	2	.36	71	17.0	<.14	<.23	6	5.20	8.0	7.2
APR 02...	4.1	--	20	2	.26	56	4.5	<.01	<.01	6	5.70	7.2	7.5
JUN 25...	3.3	1500	10	2	.25	56	4.0	.01	0	8	6.40	8.4	7.6
AUG 06...	2.4	2650	<10	87	.17	424	14.0	<.01	<.01	16	5.90	6.4	5.4

DATE	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)	CYANIDE TOTAL (MG/L AS CN) (00720)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)
OCT 23...	<.20	<.2	23	11	<.01	97	30
NOV 27...	<.20	<.2	24	18	<.01	65	22
FEB 26...	<.20	<.2	37	30	<.01	100	38
APR 02...	<.20	<.2	34	23	<.01	153	47
JUN 25...	<.20	<.2	25	21	<.01	248	49
AUG 06...	.60	<.2	141	9	<.01	836	535

E Estimated laboratory analysis value.

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	8.0	6.5	7.3	9.5	8.0	8.8	11.6	8.8	10.2	12.1	9.5	10.8
2	8.2	6.6	7.4	9.7	8.5	9.2	11.7	9.0	10.5	12.2	9.0	10.8
3	8.2	6.6	7.5	9.4	8.2	9.0	11.7	8.2	10.0	12.1	8.5	10.5
4	8.1	7.0	7.5	10.0	7.8	8.9	11.4	8.7	10.2	11.8	8.0	10.0
5	8.7	7.5	8.0	9.6	8.1	8.8	11.5	8.6	10.3	11.6	8.9	10.2
6	9.4	8.7	9.1	10.2	8.9	9.6	11.8	8.9	10.4	11.7	8.7	10.3
7	9.4	8.5	9.0	10.8	8.5	9.8	10.9	8.2	9.7	11.3	9.2	10.5
8	9.2	8.5	8.9	10.9	8.4	9.8	10.7	9.4	9.9	12.4	9.2	10.9
9	8.9	6.9	8.1	11.0	8.4	9.8	10.8	8.1	9.6	12.4	9.7	11.0
10	8.9	6.9	7.9	11.1	9.5	10.3	11.2	9.5	10.4	12.1	9.0	10.6
11	8.5	6.7	7.6	11.3	9.9	10.5	11.7	10.1	10.6	12.1	9.1	10.6
12	8.1	6.8	7.5	11.7	8.9	10.6	11.5	10.3	10.6	12.2	9.1	10.6
13	8.7	7.0	7.9	12.1	9.1	10.6	11.6	10.1	10.7	11.5	10.3	10.8
14	9.1	7.1	8.1	12.3	8.9	10.6	11.6	9.5	10.5	12.1	9.3	10.8
15	9.0	7.0	8.0	11.2	8.9	10.2	11.4	8.8	10.3	12.2	9.6	10.9
16	8.7	7.0	7.8	11.6	8.9	10.5	11.6	9.7	10.7	12.0	10.1	11.3
17	8.7	6.9	7.8	12.0	9.0	10.5	11.4	8.6	10.2	12.1	10.2	11.1
18	8.7	6.8	7.8	12.0	8.8	10.4	11.7	9.7	10.7	12.0	9.8	10.9
19	8.8	6.9	7.8	11.8	8.5	10.3	11.6	9.1	10.3	12.2	9.8	10.9
20	8.6	7.0	7.8	11.7	8.6	10.3	11.5	10.3	10.9	11.9	10.0	10.8
21	8.9	7.1	7.9	11.1	8.4	9.8	11.9	10.2	10.9	12.0	9.1	10.6
22	8.6	6.9	7.6	10.1	8.3	9.4	11.6	9.0	10.2	11.8	8.5	10.1
23	8.7	7.8	8.2	10.2	8.5	9.5	11.8	9.3	10.7	10.8	8.8	10.0
24	8.6	7.3	8.0	11.2	8.1	9.7	11.8	9.6	10.8	11.7	8.8	10.3
25	9.2	7.1	8.2	11.1	8.3	9.8	11.9	11.1	11.6	10.9	8.8	10.1
26	9.3	7.3	8.3	11.0	8.3	9.8	12.2	9.9	11.0	11.6	9.1	10.3
27	9.3	7.5	8.4	10.4	8.1	9.5	11.9	8.9	10.3	11.6	10.2	10.9
28	8.3	7.8	8.1	10.9	8.3	9.7	11.0	9.2	10.1	11.4	9.3	10.5
29	8.2	7.1	7.8	11.5	8.5	10.0	11.3	9.5	10.5	11.2	8.4	10.1
30	8.9	7.2	8.1	11.1	8.1	9.7	12.1	9.1	10.7	11.1	8.3	10.0
31	9.1	7.5	8.4	---	---	---	11.5	9.1	10.5	11.6	8.7	10.2
MONTH	9.4	6.5	8.0	12.3	7.8	9.8	12.2	8.1	10.5	12.4	8.0	10.6

## ARKANSAS RIVER BASIN

07106000 FOUNTAIN CREEK NEAR FOUNTAIN, CO--Continued

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	11.6	8.7	10.2	11.4	7.9	9.6	11.2	7.5	9.3	8.9	6.6	7.7
2	11.5	8.3	9.8	10.5	7.8	9.2	9.8	7.2	8.5	10.4	7.8	9.2
3	10.6	8.3	9.6	12.0	8.0	9.4	10.1	7.2	8.6	11.0	9.1	10.1
4	11.1	8.4	9.7	9.8	7.7	8.8	9.1	6.9	8.0	10.1	6.5	8.9
5	11.0	7.3	9.1	10.4	6.5	8.7	8.8	7.1	8.0	---	---	---
6	10.3	8.7	9.5	9.7	7.3	8.7	9.8	8.5	9.1	8.6	7.1	7.8
7	10.0	7.3	8.9	9.2	7.1	8.3	10.9	7.7	9.3	9.4	7.0	8.3
8	11.2	9.3	10.3	9.6	6.8	8.5	10.3	7.6	9.0	9.4	5.9	7.9
9	11.7	9.2	10.6	9.9	5.3	8.3	10.5	7.4	8.9	9.2	6.6	7.9
10	11.7	8.4	10.0	9.7	7.4	8.7	10.5	7.8	9.2	9.1	7.1	8.0
11	11.3	8.0	9.8	10.6	7.6	9.1	11.2	8.8	9.9	9.0	6.7	7.9
12	11.4	7.9	9.8	---	---	---	11.1	8.2	9.8	8.7	6.4	7.5
13	11.3	7.7	9.5	---	---	---	11.0	7.2	9.2	8.6	6.3	7.5
14	10.9	9.2	10.4	10.2	7.6	8.7	10.5	7.7	9.0	8.5	6.9	7.4
15	11.1	8.4	10.0	12.2	8.2	9.9	10.4	7.6	9.0	---	---	---
16	11.5	8.7	9.8	10.9	8.4	9.6	10.4	8.3	9.4	---	---	---
17	---	---	---	10.5	9.5	10.1	10.6	7.8	9.4	---	---	---
18	10.7	8.3	9.5	10.5	7.3	9.2	10.2	7.0	8.5	8.1	6.5	7.5
19	10.3	6.7	8.4	11.9	6.9	9.6	9.0	7.1	8.1	7.9	7.3	7.6
20	10.8	8.1	9.2	11.3	8.0	9.6	9.0	7.4	8.3	9.6	6.4	7.7
21	---	---	---	10.4	7.9	9.1	9.7	7.2	8.6	9.9	7.1	8.5
22	9.5	8.0	8.8	10.3	8.2	9.3	10.3	9.0	9.8	9.5	6.5	7.9
23	9.9	7.8	9.0	10.2	8.3	9.4	11.2	7.3	8.9	8.8	6.2	7.5
24	10.1	7.8	9.2	11.3	10.0	10.7	10.5	6.4	8.4	8.7	6.3	7.5
25	11.3	8.1	9.7	11.4	10.6	11.1	---	---	---	8.9	6.3	7.6
26	10.5	8.2	9.6	11.6	10.9	11.2	9.5	6.9	8.1	8.3	6.5	7.4
27	11.9	9.8	10.7	11.1	8.7	10.1	9.3	7.1	8.1	8.3	6.3	7.4
28	12.4	9.5	11.0	10.8	9.3	10.1	9.3	6.7	7.9	8.2	6.0	7.1
29	---	---	---	11.5	8.7	10.1	8.9	6.6	7.7	7.8	6.4	7.2
30	---	---	---	10.6	8.3	9.5	8.9	6.8	7.8	9.2	6.6	7.8
31	---	---	---	10.9	8.8	10.0	---	---	---	9.6	5.9	7.9
MONTH	---	---	---	---	---	---	---	---	---	---	---	---
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	8.2	5.0	6.7	7.7	4.8	6.0	7.3	5.8	6.7	7.4	6.6	6.9
2	7.5	4.8	6.3	7.0	4.7	5.9	7.5	6.1	6.8	---	---	---
3	7.0	5.1	6.3	7.1	5.1	6.2	7.1	5.4	6.3	---	---	---
4	7.5	6.0	6.7	7.6	4.7	6.2	7.1	5.4	6.3	---	---	---
5	7.5	5.6	6.6	8.3	5.0	6.2	7.1	5.3	6.3	7.7	6.0	6.8
6	7.2	5.4	6.3	7.7	4.9	6.2	6.9	5.7	6.3	7.5	6.0	6.8
7	7.1	5.2	6.4	8.7	5.3	6.6	7.1	5.4	6.3	7.7	6.4	7.1
8	---	---	---	8.0	5.4	6.5	7.3	5.3	6.4	8.5	7.1	7.8
9	---	---	---	7.6	4.9	6.6	7.5	5.8	6.8	8.7	6.3	7.5
10	---	---	---	---	---	---	7.6	6.1	7.0	8.4	6.3	7.4
11	---	---	---	---	---	---	7.7	6.0	6.9	8.2	5.7	7.2
12	---	---	---	7.6	4.9	6.4	7.8	6.0	7.0	8.2	5.8	7.2
13	---	---	---	9.2	5.1	7.1	7.5	5.6	6.8	8.1	6.2	7.2
14	---	---	---	---	---	---	7.2	5.6	6.6	7.7	6.0	6.9
15	---	---	---	8.5	5.4	7.0	7.5	6.1	6.9	7.8	6.1	7.0
16	8.4	5.5	7.0	8.8	4.5	6.6	7.9	5.4	7.0	7.5	6.2	7.0
17	8.2	5.6	6.9	6.1	5.2	5.7	7.7	5.2	6.8	8.2	6.1	7.3
18	8.2	5.7	7.0	6.6	5.4	6.0	7.9	5.7	6.9	8.0	6.4	7.3
19	7.8	5.9	6.9	7.0	6.2	6.6	7.9	5.9	6.9	8.2	6.2	7.2
20	7.9	5.7	6.8	7.6	5.7	6.9	7.5	6.1	6.9	8.2	6.1	7.2
21	9.2	5.5	7.3	7.7	5.8	6.9	7.8	6.0	6.9	8.2	6.2	7.3
22	7.4	5.6	6.7	7.9	6.1	7.0	7.5	6.0	7.0	7.9	5.9	7.1
23	8.2	5.6	6.8	9.2	6.5	7.8	8.0	6.1	7.0	8.3	5.8	7.3
24	7.5	5.7	6.6	9.2	7.4	8.5	7.9	6.0	7.0	8.5	6.0	7.3
25	7.3	5.7	6.5	9.3	6.7	8.1	7.8	7.1	7.4	8.4	6.2	7.3
26	7.2	5.8	6.6	9.0	6.4	8.0	8.4	6.2	7.3	8.3	6.0	7.2
27	7.6	5.7	6.6	8.8	4.7	7.4	8.1	6.2	7.2	8.2	6.3	7.2
28	7.5	5.9	6.5	8.7	5.8	7.4	8.2	6.2	7.3	8.1	6.3	7.3
29	7.1	5.6	6.6	8.2	5.5	7.0	8.2	6.2	7.3	7.8	6.7	7.3
30	7.3	4.8	6.1	7.9	5.6	6.8	7.7	6.0	6.9	8.3	6.5	7.4
31	---	---	---	7.5	5.7	6.7	7.8	5.4	6.8	---	---	---
MONTH	---	---	---	---	---	---	8.4	5.2	6.8	---	---	---

07106000 FOUNTAIN CREEK NEAR FOUNTAIN, CO--Continued

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	8.2	8.1	8.2	8.0	7.9	7.9	8.3	8.2	8.2	8.2	8.2	8.2
2	8.3	8.2	8.2	8.0	7.9	8.0	8.3	8.2	8.2	8.2	8.2	8.2
3	8.3	8.2	8.2	8.0	7.9	8.0	8.3	8.2	8.2	8.2	8.1	8.2
4	8.3	8.2	8.2	8.0	7.9	8.0	8.3	8.2	8.2	8.3	8.2	8.2
5	8.3	8.2	8.2	8.0	8.0	8.0	8.3	8.2	8.3	8.3	8.2	8.2
6	8.2	8.2	8.2	8.0	8.0	8.0	8.3	8.2	8.2	8.3	8.2	8.2
7	8.2	8.1	8.2	8.1	8.0	8.0	8.3	8.2	8.2	8.3	8.2	8.2
8	8.2	8.2	8.2	8.1	8.0	8.0	8.3	8.2	8.2	8.2	8.2	8.2
9	8.3	8.2	8.2	8.1	8.0	8.1	8.3	8.2	8.2	8.3	8.2	8.3
10	8.3	8.2	8.2	8.2	8.1	8.1	8.3	8.2	8.2	8.3	8.2	8.3
11	8.3	8.2	8.2	8.2	8.1	8.1	8.3	8.2	8.2	8.3	8.2	8.3
12	8.3	8.2	8.2	8.2	8.1	8.1	8.3	8.1	8.2	8.4	8.2	8.3
13	8.3	8.2	8.2	8.2	8.1	8.1	8.3	8.1	8.2	8.3	8.3	8.3
14	8.3	8.2	8.2	8.2	8.1	8.1	8.3	8.1	8.2	8.3	8.3	8.3
15	8.3	8.2	8.2	8.2	8.1	8.1	8.3	8.2	8.3	8.4	8.2	8.3
16	8.3	8.2	8.2	8.2	8.1	8.2	8.3	8.2	8.2	8.4	8.3	8.3
17	8.3	8.2	8.2	8.2	8.2	8.2	8.3	8.1	8.2	8.4	8.2	8.3
18	8.3	8.2	8.2	8.2	8.1	8.2	8.3	8.0	8.2	8.4	8.2	8.3
19	8.3	8.1	8.2	8.2	8.2	8.2	8.3	8.1	8.2	8.3	8.2	8.2
20	8.3	8.1	8.2	8.2	8.2	8.2	8.3	8.3	8.3	8.2	8.1	8.2
21	8.3	8.1	8.2	8.2	8.2	8.2	8.3	8.2	8.3	8.2	8.1	8.2
22	8.1	7.9	8.0	8.3	8.2	8.2	8.3	8.2	8.3	8.2	8.1	8.1
23	8.1	8.0	8.0	8.3	8.2	8.2	8.3	8.3	8.3	8.2	8.1	8.1
24	8.1	8.1	8.1	8.2	8.2	8.2	8.3	8.3	8.3	8.2	8.1	8.1
25	8.2	8.1	8.1	8.2	8.2	8.2	8.3	8.3	8.3	8.2	8.1	8.2
26	8.2	8.1	8.2	8.2	8.2	8.2	8.3	8.2	8.3	8.2	8.1	8.2
27	8.2	7.8	8.0	8.2	8.2	8.2	8.3	8.2	8.3	8.2	8.1	8.1
28	7.9	7.8	7.9	8.2	8.2	8.2	8.3	8.2	8.3	8.2	8.1	8.2
29	7.9	7.8	7.9	8.2	8.2	8.2	8.3	8.2	8.3	8.2	8.1	8.1
30	8.0	7.8	7.9	8.3	8.2	8.2	8.3	8.2	8.3	8.2	8.1	8.1
31	8.0	7.9	7.9	---	---	---	8.2	8.2	8.2	8.2	8.1	8.1
MONTH	8.3	7.8	8.1	8.3	7.9	8.1	8.3	8.0	8.2	8.4	8.1	8.2
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	8.2	8.1	8.2	8.3	8.2	8.2	8.1	8.0	8.1	8.2	8.0	8.0
2	8.2	8.1	8.2	8.3	8.1	8.2	8.1	8.0	8.1	8.1	8.0	8.0
3	8.2	8.1	8.1	---	---	---	8.2	8.0	8.1	8.0	7.7	7.8
4	8.1	8.1	8.1	---	---	---	8.1	7.9	8.0	8.0	7.7	7.8
5	8.1	8.0	8.1	---	---	---	8.1	7.9	8.0	8.0	7.6	7.5
6	8.1	8.1	8.1	8.2	8.0	8.1	8.2	8.0	8.1	8.1	7.6	7.7
7	8.1	8.1	8.1	8.2	8.0	8.1	8.2	8.0	8.1	8.1	8.1	8.0
8	8.2	8.1	8.1	8.2	8.0	8.2	8.2	8.0	8.1	8.1	8.0	8.0
9	8.2	8.1	8.2	8.2	7.9	8.2	8.3	8.0	8.1	8.1	8.0	8.0
10	8.2	8.0	8.1	8.2	7.9	8.1	8.2	8.1	8.1	8.1	8.0	8.0
11	8.2	8.1	8.1	8.3	7.9	8.0	8.1	7.8	7.9	8.2	8.0	8.0
12	8.2	8.0	8.1	---	---	---	8.1	7.9	8.0	8.2	8.1	8.0
13	8.2	8.1	8.2	---	---	---	8.1	8.0	8.1	8.2	8.1	8.0
14	8.2	8.1	8.1	8.3	7.9	8.1	8.3	8.1	8.2	---	---	---
15	8.2	8.0	8.1	8.3	8.2	8.2	8.3	8.1	8.2	---	---	---
16	8.1	8.0	8.1	8.2	8.1	8.1	8.3	8.1	8.2	8.1	7.9	8.0
17	8.1	8.0	8.1	8.2	8.1	8.1	8.3	8.2	8.2	---	---	---
18	8.1	8.0	8.0	8.1	8.0	8.1	8.3	8.1	8.2	8.1	7.9	8.0
19	8.1	8.0	8.0	8.1	8.0	8.0	8.2	8.1	8.1	8.1	7.8	8.0
20	8.1	7.9	8.0	8.1	8.0	8.1	8.2	8.1	8.1	8.1	7.8	8.0
21	8.1	8.0	8.0	8.2	8.0	8.1	8.2	8.1	8.0	8.1	8.0	8.0
22	8.3	8.0	8.1	8.2	8.1	8.1	8.2	7.9	8.0	8.1	8.0	8.1
23	8.3	8.2	8.2	8.2	8.1	8.1	8.1	7.9	7.9	8.1	8.0	8.1
24	8.3	8.2	8.2	8.1	8.1	8.1	8.2	7.9	7.9	8.1	8.0	8.1
25	8.3	8.1	8.2	8.1	8.0	8.1	8.2	7.9	8.1	8.2	8.0	8.1
26	8.3	8.1	8.2	8.1	8.0	8.1	8.2	8.0	8.0	8.1	8.0	8.1
27	8.3	8.2	8.2	8.1	8.0	8.0	8.2	8.0	8.0	8.2	8.1	8.1
28	8.2	8.1	8.2	8.1	8.0	8.0	8.3	8.0	8.0	8.2	8.1	8.1
29	---	---	---	8.1	8.0	8.1	8.2	8.0	8.0	8.1	7.9	8.0
30	---	---	---	8.0	8.0	8.0	8.2	8.0	8.0	8.1	7.9	8.1
31	---	---	---	8.1	8.0	8.0	---	---	---	8.1	7.9	8.0
MONTH	8.3	7.9	8.1	---	---	---	8.3	7.8	8.1	---	---	---

## ARKANSAS RIVER BASIN

07106000 FOUNTAIN CREEK NEAR FOUNTAIN, CO--Continued

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

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	7.9	7.9	8.2	8.1	8.1	8.0	7.9	8.0
2	8.2	8.1	8.1	8.3	7.9	7.9	8.2	8.0	8.1	---	---	---
3	8.2	8.1	8.1	8.0	7.8	7.7	8.0	7.8	7.9	---	---	---
4	8.3	8.1	8.2	8.1	7.8	7.7	8.1	7.9	8.0	8.1	8.0	8.0
5	8.3	8.1	8.1	8.1	7.8	7.8	8.0	7.8	8.0	8.1	8.0	8.0
6	8.3	8.1	8.2	8.1	7.8	7.8	8.0	7.7	7.9	8.1	8.0	8.0
7	8.2	8.1	8.2	8.1	7.8	7.8	8.1	8.0	8.0	8.1	8.0	8.1
8	---	---	---	8.1	7.8	7.8	8.1	8.1	8.1	8.0	7.9	8.0
9	---	---	---	8.2	7.8	7.9	8.1	8.1	8.1	8.1	8.0	8.0
10	---	---	---	---	---	---	8.2	8.1	8.1	8.2	8.0	8.1
11	---	---	---	---	---	---	8.2	8.1	8.1	8.2	8.1	8.1
12	---	---	---	8.1	7.8	8.0	8.2	8.1	8.1	8.2	8.1	8.1
13	---	---	---	8.3	7.8	8.0	8.1	7.9	8.0	8.2	8.1	8.2
14	---	---	---	---	---	---	8.0	7.8	7.9	8.1	8.0	8.1
15	8.2	8.0	8.1	8.1	7.9	8.0	8.0	7.8	7.9	8.2	8.0	8.1
16	8.2	8.1	8.1	8.2	7.8	7.9	8.1	7.9	8.0	8.0	7.9	8.0
17	8.2	8.0	8.1	8.0	7.7	7.8	8.0	7.9	8.0	8.1	7.9	8.0
18	8.3	8.0	8.1	8.1	7.8	8.0	8.0	7.9	7.9	8.1	8.0	8.0
19	8.3	8.0	8.1	8.2	8.0	8.1	8.0	7.9	8.0	8.2	8.1	8.1
20	8.2	8.0	8.1	8.4	8.0	8.2	8.1	8.0	8.0	8.2	8.1	8.1
21	8.2	7.9	8.1	8.4	8.3	8.3	8.1	8.0	8.0	8.2	8.1	8.1
22	8.1	8.0	8.1	8.3	8.2	8.2	8.0	7.8	7.9	8.2	8.0	8.1
23	8.1	8.0	8.0	8.2	7.9	8.1	8.0	7.9	7.9	8.2	8.1	8.1
24	8.0	7.9	8.0	8.1	7.9	8.0	8.2	7.9	8.0	8.2	8.1	8.1
25	8.1	7.9	8.0	8.0	7.8	8.0	8.1	8.0	8.1	8.2	8.1	8.1
26	8.1	7.9	8.0	8.0	7.7	7.9	8.2	8.0	8.1	8.3	8.1	8.2
27	8.1	7.9	8.0	8.1	7.8	8.0	8.3	8.1	8.2	8.3	8.1	8.2
28	8.1	7.9	8.0	8.1	8.0	8.0	8.4	8.1	8.2	8.3	8.2	8.2
29	8.2	7.8	8.0	8.1	8.0	8.0	8.4	8.2	8.3	8.2	8.2	8.2
30	8.3	7.8	8.0	8.2	8.0	8.1	8.3	8.1	8.2	8.2	8.1	8.2
31	---	---	---	8.2	8.1	8.1	8.2	7.9	8.1	---	---	---
MONTH	---	---	---	---	---	---	8.4	7.7	8.0	---	---	---

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	1190	1070	1130	1040	978	1000	1080	999	1030	984	875	930
2	1210	1050	1120	1060	984	1020	1100	1000	1050	957	860	901
3	1190	1090	1130	1020	946	984	1100	986	1030	1000	872	925
4	1180	1080	1120	1010	946	972	1130	980	1040	981	863	915
5	1150	1060	1100	995	936	968	1100	993	1050	1010	901	956
6	1080	992	1040	997	938	961	1110	998	1060	1020	943	973
7	1090	1010	1040	1010	958	978	1130	1030	1080	1010	928	971
8	1090	1000	1050	1020	955	982	1120	1050	1080	1020	920	965
9	1100	974	1030	1010	947	972	1140	1030	1090	1040	952	990
10	1080	984	1020	1000	947	967	1120	1030	1080	1020	949	983
11	1100	1010	1040	1000	939	970	---	---	---	1030	940	975
12	1110	1030	1050	1000	941	972	---	---	---	1040	943	979
13	1120	1000	1040	1050	980	1010	---	---	---	1030	950	987
14	1120	1010	1060	1050	966	1010	1150	1060	1090	1030	935	978
15	1150	1050	1100	1090	989	1030	1170	1080	1120	1030	929	967
16	1130	1050	1070	1090	1000	1040	---	---	---	1010	934	961
17	1140	1060	1090	1100	968	1030	---	---	---	1050	954	991
18	1150	1060	1100	1070	986	1030	---	---	---	1100	1010	1030
19	1140	1040	1080	1110	987	1040	1140	1060	1090	1130	1020	1070
20	1140	1030	1070	1080	997	1030	1120	1020	1070	1120	1020	1070
21	1110	998	1050	1090	991	1030	---	---	---	1090	976	1040
22	1080	813	979	1110	999	1040	1140	1020	1080	1100	992	1040
23	1060	819	950	1080	994	1040	1100	1010	1040	1100	1030	1070
24	990	888	951	1070	996	1030	1110	1010	1050	1100	1020	1050
25	1040	932	983	1070	994	1030	1070	1010	1040	1080	1000	1040
26	1070	995	1020	1080	975	1030	---	---	---	1100	1010	1040
27	1050	987	1010	1070	981	1010	---	---	---	1040	960	1010
28	1040	949	1000	1060	984	1010	1100	930	1050	1060	969	1010
29	988	902	951	1050	967	1010	987	908	951	1120	981	1050
30	1030	934	979	1090	977	1030	1030	867	937	1420	1060	1260
31	1040	937	1000	---	---	---	1000	897	953	1250	1070	1170
MONTH	1210	813	1040	1110	936	1010	---	---	---	1420	860	1010

ARKANSAS RIVER BASIN

07106000 FOUNTAIN CREEK NEAR FOUNTAIN, CO--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	1170	1030	1100	997	921	965	965	898	923	1060	966	1000
2	1100	1020	1060	983	924	963	974	899	932	1040	857	981
3	1100	1020	1070	---	---	---	1010	930	959	894	679	771
4	1080	994	1050	---	---	---	975	918	950	845	772	806
5	1080	991	1030	---	---	---	973	893	938	800	602	699
6	1020	943	986	---	---	---	950	874	902	813	708	778
7	1040	937	981	1040	982	1000	942	877	899	830	716	774
8	1010	951	975	1000	923	953	949	857	901	880	803	843
9	1040	963	986	988	896	937	947	833	902	898	827	856
10	1090	983	1020	969	873	918	995	894	930	864	817	836
11	1140	829	1050	1040	845	894	909	435	759	892	824	849
12	1050	817	959	1080	960	1000	831	658	761	910	831	856
13	1040	943	983	1040	967	994	871	814	842	911	823	870
14	1020	948	971	1010	882	939	914	820	872	---	---	---
15	1020	926	962	985	896	935	922	833	888	---	---	---
16	1020	946	973	992	923	947	914	833	871	961	850	897
17	1020	924	964	1160	925	975	920	858	883	937	900	926
18	1000	923	950	1070	996	1020	938	873	894	806	703	735
19	1040	933	972	1040	942	1010	931	881	899	860	426	738
20	1020	936	968	1010	894	948	943	872	903	814	474	700
21	985	928	951	967	888	918	921	873	895	868	814	834
22	974	916	940	974	890	931	896	856	882	900	844	862
23	978	901	934	981	914	940	901	840	873	948	856	896
24	967	894	932	945	891	916	994	887	909	987	885	931
25	959	894	925	937	875	907	962	893	923	1040	922	977
26	958	878	906	937	880	904	982	912	937	1030	977	1010
27	1080	889	925	961	815	918	990	867	940	1030	955	986
28	1080	951	1040	956	815	905	1010	913	953	1080	974	1030
29	---	---	---	946	861	905	1040	941	977	1030	846	961
30	---	---	---	971	814	869	1040	921	983	1080	569	918
31	---	---	---	925	864	897	---	---	---	1020	690	891
MONTH	1170	817	984	---	---	---	1040	435	903	---	---	---
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	1120	1020	1060	925	808	867	1100	1030	1060	---	---	---
2	1150	1050	1090	970	850	898	1040	912	989	---	---	---
3	1140	1060	1100	976	876	921	976	409	677	---	---	---
4	1060	986	1040	1010	915	956	903	735	827	1030	950	1000
5	1080	889	989	1010	908	953	893	355	761	1050	941	990
6	1090	1020	1060	1040	904	949	820	405	668	1040	961	995
7	1060	499	987	1040	851	974	890	785	837	1020	792	968
8	---	---	---	908	813	853	1010	875	942	983	544	799
9	---	---	---	950	413	800	1080	963	1020	940	650	839
10	---	---	---	---	---	---	1090	1000	1030	1010	906	956
11	---	---	---	---	---	---	1090	963	1020	1030	894	973
12	---	---	---	1040	724	890	1120	970	1050	1040	888	979
13	---	---	---	903	402	700	1000	737	886	1060	932	1030
14	---	---	---	826	316	588	949	554	799	1100	1000	1040
15	---	---	---	876	695	810	870	541	724	1040	760	942
16	1160	1060	1100	910	788	863	940	675	855	848	541	699
17	1160	1080	1110	---	---	---	1000	843	915	998	554	839
18	1140	1060	1090	---	---	---	993	865	922	937	714	851
19	1140	1030	1070	1070	1030	1060	1090	874	949	1060	843	980
20	1110	941	1050	1110	1010	1060	1050	932	981	927	843	886
21	990	559	772	1120	1050	1090	1070	951	999	1030	887	936
22	1030	827	909	1120	1030	1080	1080	918	995	1040	756	949
23	890	828	853	1100	765	1000	1140	947	1030	1060	977	1010
24	938	829	876	999	778	930	1150	1030	1070	1090	980	1030
25	949	852	894	1060	528	945	1120	1020	1070	1100	1000	1050
26	980	857	919	850	371	639	1150	950	1040	1100	1030	1050
27	992	910	943	882	351	653	1070	918	993	1100	1030	1050
28	1020	923	965	1070	881	990	1130	942	1050	1100	1010	1050
29	1040	957	999	1130	1010	1070	1130	988	1040	1060	932	1000
30	986	847	943	1130	1020	1050	1020	863	933	1080	977	1020
31	---	---	---	1130	1020	1070	938	270	674	---	---	---
MONTH	---	---	---	---	---	---	1150	270	929	---	---	---

## ARKANSAS RIVER BASIN

07106000 FOUNTAIN CREEK NEAR FOUNTAIN, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	22.4	12.4	16.5	13.0	6.9	9.3	7.6	.9	3.8	5.7	.1	2.8
2	21.3	12.1	16.2	11.0	6.6	8.4	7.1	.0	2.8	7.2	.4	3.3
3	22.2	12.2	16.0	12.1	7.4	8.9	8.9	.0	3.8	8.0	.4	3.8
4	20.7	13.4	16.2	13.2	5.8	9.2	7.8	1.2	3.8	9.3	1.3	4.8
5	15.0	10.6	13.2	11.4	6.1	8.5	8.3	1.2	3.8	9.0	1.9	5.0
6	10.7	8.7	9.6	9.3	4.9	6.5	7.4	.1	3.4	9.1	2.0	5.1
7	10.9	8.0	9.2	10.5	3.7	6.4	9.2	1.9	4.9	7.8	2.6	4.5
8	10.6	8.0	9.1	10.7	3.9	6.4	5.7	2.2	4.3	7.5	.0	3.2
9	17.7	8.7	12.2	10.6	3.3	6.4	9.3	2.0	5.0	6.3	.0	2.7
10	17.9	8.4	12.7	7.3	3.2	5.0	4.6	1.0	2.9	8.4	1.0	4.2
11	18.8	9.4	13.7	5.8	2.6	4.2	3.7	.0	.7	8.1	.9	4.1
12	18.5	10.9	13.7	8.6	1.9	4.4	3.1	.0	.6	7.9	.4	3.9
13	17.6	9.0	12.5	8.1	1.2	4.1	2.4	.0	.4	4.4	1.8	3.0
14	17.2	7.9	11.8	8.2	.4	3.9	5.4	.0	1.9	6.5	.0	2.9
15	17.1	7.9	11.9	7.3	2.0	4.1	6.8	.4	3.2	5.1	.0	2.4
16	18.3	9.0	13.0	7.7	1.1	3.6	5.1	.0	1.6	5.0	.0	2.2
17	18.8	9.0	13.1	7.1	.0	3.1	7.5	.0	2.6	4.8	.0	1.2
18	18.5	9.2	13.1	7.5	.0	3.1	5.0	.0	1.4	5.7	.0	1.7
19	18.5	8.6	13.0	8.3	.4	3.8	6.2	.0	2.3	5.7	.0	1.7
20	17.7	9.4	12.7	8.0	.4	3.7	3.6	.0	1.8	4.9	.0	1.9
21	17.1	8.2	12.1	9.1	1.5	4.7	4.0	.0	1.0	7.1	.0	2.9
22	13.2	9.7	11.8	8.7	3.8	5.4	6.8	.0	2.6	8.2	.0	3.7
23	14.4	9.7	11.4	8.1	3.2	5.1	6.5	.3	2.9	7.8	2.4	4.3
24	16.6	10.8	12.8	9.3	1.3	4.6	5.3	.0	2.2	8.0	.2	3.7
25	16.9	8.6	12.1	8.3	1.5	4.2	2.1	.6	1.2	7.5	2.2	4.0
26	16.6	8.1	11.7	8.0	1.4	4.0	5.4	.0	1.6	6.9	.2	3.5
27	15.7	8.2	11.5	8.7	2.8	4.9	7.6	.0	3.1	3.6	.6	2.0
28	13.7	11.1	12.1	8.6	1.9	4.5	7.1	2.3	4.5	5.8	.6	2.7
29	16.6	10.6	12.8	7.9	.8	3.8	6.4	2.0	3.8	7.6	.7	3.4
30	16.2	8.8	11.7	9.0	1.3	4.6	6.7	.2	3.0	8.4	1.0	3.8
31	14.5	8.0	10.6	---	---	---	7.0	1.7	3.7	7.3	.0	2.9
MONTH	22.4	7.9	12.6	13.2	.0	5.3	9.3	.0	2.7	9.3	.0	3.3
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	7.0	.0	2.3	12.3	2.5	6.9	18.1	4.9	11.0	22.8	10.5	16.2
2	8.9	.0	3.8	12.3	4.2	7.5	18.8	7.6	12.6	14.0	6.6	10.3
3	8.8	2.2	4.9	9.7	1.0	6.3	19.4	7.5	13.0	8.5	6.1	7.2
4	8.3	1.5	4.6	10.8	4.3	7.7	17.3	10.2	13.2	9.2	7.0	7.8
5	10.9	1.5	5.9	12.6	3.9	8.0	18.2	9.7	13.2	10.0	7.2	8.3
6	5.7	2.7	4.3	12.6	5.8	9.1	13.3	8.0	10.5	18.7	8.2	12.4
7	10.8	3.1	6.2	11.8	6.5	9.1	17.5	6.0	10.7	20.7	10.1	14.3
8	5.1	.0	2.7	13.6	5.8	9.2	17.1	6.9	11.3	22.3	9.7	15.5
9	6.1	.0	1.7	15.0	5.0	9.6	18.7	6.4	11.9	22.9	10.3	15.5
10	8.0	.0	3.0	8.6	4.4	6.6	16.7	6.7	10.5	19.8	10.9	15.0
11	9.4	.7	4.5	6.5	1.0	3.6	11.4	4.7	8.0	22.9	10.7	16.0
12	9.5	1.1	4.7	13.0	4.0	7.5	14.4	5.7	9.3	24.4	12.3	17.9
13	10.9	1.4	5.7	14.0	4.4	8.3	18.1	6.0	11.2	25.0	12.1	18.2
14	5.3	2.4	3.3	12.8	4.8	7.7	16.9	6.6	11.4	---	---	---
15	10.4	1.7	5.2	11.1	1.1	5.9	17.5	6.6	11.5	---	---	---
16	4.2	1.4	2.8	10.0	3.2	6.3	14.6	6.7	10.1	---	---	---
17	10.1	2.5	5.3	5.8	3.9	4.7	15.6	6.5	10.0	---	---	---
18	8.9	2.7	5.4	13.8	3.6	7.6	20.3	6.6	12.8	---	---	---
19	12.3	3.2	6.9	15.4	3.6	9.0	19.4	9.7	13.8	16.8	14.5	15.6
20	11.8	2.8	6.9	16.8	5.2	10.7	16.7	9.3	12.5	23.4	8.9	15.8
21	7.2	4.1	5.4	16.7	7.7	11.8	18.4	7.5	11.9	20.1	8.2	13.4
22	11.1	2.8	6.7	15.5	7.7	11.0	9.7	6.0	7.4	23.9	9.0	15.8
23	12.0	5.0	7.7	14.9	7.9	10.8	16.9	4.5	10.4	24.9	11.3	17.0
24	12.6	4.6	7.1	8.8	5.6	7.0	19.9	6.4	12.6	24.2	11.6	17.1
25	11.2	2.2	6.2	7.6	5.0	6.1	21.1	8.4	13.8	23.6	11.0	16.9
26	11.4	4.0	6.8	7.1	4.8	5.9	22.4	9.4	15.5	23.5	12.4	17.2
27	6.7	2.0	4.2	13.9	5.8	8.7	20.6	10.2	15.2	24.8	12.8	17.8
28	7.1	.6	3.6	10.9	6.6	8.1	22.7	9.9	15.9	24.1	13.1	17.9
29	---	---	---	13.1	4.9	8.4	23.2	10.7	16.3	22.0	14.3	16.8
30	---	---	---	13.4	6.6	9.7	22.4	10.7	16.0	22.5	9.7	14.9
31	---	---	---	13.0	6.2	8.6	---	---	---	23.0	8.8	15.4
MONTH	12.6	.0	4.9	16.8	1.0	8.0	23.2	4.5	12.1	---	---	---

07106000 FOUNTAIN CREEK NEAR FOUNTAIN, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	26.5	12.7	19.0	27.9	17.8	21.4	30.2	17.9	22.5	---	---	---
2	25.7	13.5	19.3	29.5	17.2	22.7	28.8	17.5	22.1	---	---	---
3	25.3	14.5	18.7	29.6	18.0	22.3	30.4	18.3	23.1	---	---	---
4	24.7	14.8	18.6	29.1	16.2	22.3	29.8	18.0	23.0	---	---	---
5	25.0	14.3	18.7	30.0	18.0	23.6	30.3	18.2	23.1	25.3	15.0	19.6
6	26.8	15.9	20.4	31.3	17.9	23.7	28.4	18.7	22.3	24.8	15.3	18.9
7	27.8	15.3	19.6	31.7	18.3	24.0	30.1	18.3	23.2	22.6	13.9	17.2
8	---	---	---	31.1	18.4	23.5	29.6	16.9	22.2	17.7	10.9	13.6
9	---	---	---	31.2	18.0	23.0	25.4	16.2	20.2	21.6	10.0	15.1
10	---	---	---	---	---	---	26.7	16.7	20.7	23.0	11.0	16.5
11	---	---	---	---	---	---	29.5	16.9	22.2	24.5	12.6	17.6
12	---	---	---	30.3	18.7	22.8	28.7	16.7	21.2	23.7	13.1	17.7
13	---	---	---	28.5	18.7	21.6	28.5	17.3	21.7	23.7	13.3	17.8
14	---	---	---	22.0	18.4	20.3	28.0	18.2	21.6	25.6	14.7	19.0
15	---	---	---	28.2	17.0	21.9	24.2	16.9	19.5	24.4	14.9	18.9
16	26.2	12.6	18.9	27.5	17.0	21.7	25.4	14.9	19.0	22.9	15.9	18.2
17	26.2	13.4	19.5	---	---	---	25.0	15.1	19.5	24.2	14.2	17.2
18	26.5	13.6	19.6	---	---	---	28.2	14.8	20.8	22.8	14.2	17.7
19	24.6	15.2	19.1	---	---	---	28.9	15.4	21.0	24.3	13.3	18.1
20	25.5	14.8	19.5	29.1	16.4	21.6	26.0	17.0	20.7	24.1	13.2	17.9
21	24.2	11.5	18.1	29.8	17.8	22.0	27.5	16.1	21.0	24.4	13.4	18.1
22	27.1	15.3	19.4	29.1	17.4	22.5	28.1	17.1	20.9	21.7	14.1	17.7
23	28.3	14.3	20.4	26.2	18.3	21.3	28.1	15.3	21.1	23.1	13.1	17.5
24	28.0	15.1	21.1	29.1	18.3	22.0	28.7	15.6	21.5	22.9	12.3	17.1
25	28.7	16.3	21.7	29.7	16.8	21.9	21.1	16.2	18.4	24.0	12.4	17.4
26	28.1	17.3	21.6	26.6	17.2	20.9	27.1	13.7	19.7	24.6	12.9	18.1
27	29.7	16.4	22.4	28.0	17.8	21.7	27.0	14.8	20.3	24.7	13.5	18.4
28	28.9	17.2	22.5	28.6	16.3	21.9	27.6	14.3	19.0	23.4	13.4	17.8
29	28.0	17.2	22.1	29.8	16.7	22.4	26.9	14.1	19.2	21.9	14.7	17.3
30	28.4	16.9	22.2	29.6	17.0	22.6	27.3	14.7	19.8	23.4	13.0	17.4
31	---	---	---	29.3	18.0	22.8	26.5	13.9	19.0	---	---	---
MONTH	---	---	---	---	---	---	30.4	13.7	21.0	---	---	---

ARKANSAS RIVER BASIN

07106300 FOUNTAIN CREEK NEAR PINON, CO

LOCATION.--Lat 38°26'23", long 104°35'35", in NW<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec.31, T.18 S., R.64 W., Pueblo County, Hydrologic Unit 11020003, on right bank, 0.5 mi below Pinon Road bridge, 0.9 mi northeast of Pinon, and 2.7 mi upstream from Steele Hollow Creek.

DRAINAGE AREA.--849 mi<sup>2</sup>.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1973 to current year. Low-flow records may not be equivalent prior to October 1995, as a result of varying underflow (diversion system) entering between the sites.

REVISED RECORDS.--WDR CO-80-1: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 4,990 ft above sea level, from topographic map. Apr. 10, 1973 to Apr. 22, 1976, non-recording gage, and Apr. 23, 1976 to Sept. 30, 1995, water-stage recorder, at site 0.5 mi upstream at different datum. Oct. 1, 1995 to present at various locations within 70 ft downstream from underflow mouth (see district office for location history).

REMARKS.--Records fair except for estimated daily discharges and those above 1,000 ft<sup>3</sup>/s, which are poor. Natural flow of stream affected by storage reservoirs, power developments, transbasin and transmountain diversions for municipal use, diversions upstream from station for municipal use and for irrigation, and return flow from irrigated areas.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	59	154	116	145	148	171	166	82	133	59	54	815
2	57	159	111	146	153	172	163	76	89	55	55	150
3	58	170	119	150	187	158	159	119	64	49	163	113
4	62	170	121	150	189	163	159	155	58	45	138	89
5	62	170	115	153	171	167	154	518	75	43	118	58
6	70	171	115	154	186	165	165	479	83	35	250	56
7	92	163	119	157	168	164	165	250	56	33	137	58
8	87	160	113	152	174	171	165	180	454	29	78	102
9	89	164	112	150	147	166	161	131	170	29	52	155
10	98	164	110	152	144	170	155	122	135	578	44	103
11	88	161	109	161	184	251	254	110	90	124	39	84
12	83	167	97	150	183	231	324	100	64	73	41	69
13	82	168	104	152	170	200	221	98	56	102	58	60
14	83	164	117	148	169	177	182	97	66	674	128	66
15	72	157	127	155	159	159	168	100	55	210	185	66
16	69	147	125	163	166	155	161	85	42	129	160	158
17	67	138	126	143	157	156	161	109	e37	89	106	123
18	69	133	123	148	164	204	159	470	36	67	74	172
19	71	137	118	153	163	189	148	231	37	47	58	115
20	72	139	118	147	166	162	140	414	41	42	48	101
21	72	138	123	152	163	155	116	196	193	39	39	80
22	79	137	116	161	165	152	118	155	105	40	39	124
23	153	131	115	167	165	151	123	138	76	38	42	121
24	146	125	109	154	164	164	111	101	64	64	41	104
25	141	132	106	164	165	169	98	76	58	80	42	104
26	116	132	106	158	165	161	89	57	53	274	41	95
27	119	135	108	158	165	160	87	51	51	421	39	99
28	153	127	114	163	179	169	86	52	51	161	37	86
29	196	125	134	165	---	164	85	74	53	102	37	74
30	173	120	136	167	---	212	83	70	53	75	47	71
31	151	---	143	153	---	179	---	270	---	62	177	---
TOTAL	2989	4458	3625	4791	4679	5387	4526	5166	2598	3868	2567	3671
MEAN	96.4	149	117	155	167	174	151	167	86.6	125	82.8	122
MAX	196	171	143	167	189	251	324	518	454	674	250	815
MIN	57	120	97	143	144	151	83	51	36	29	37	56
AC-FT	5930	8840	7190	9500	9280	10690	8980	10250	5150	7670	5090	7280

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1973 - 2001, BY WATER YEAR (WY)

	85.0	105	94.5	103	109	117	141	292	196	111	157	78.7
MEAN	85.0	105	94.5	103	109	117	141	292	196	111	157	78.7
MAX	457	289	201	174	180	229	664	1599	1083	365	794	241
(WY)	1985	1985	2000	1996	2000	1998	1999	1999	1997	1985	1999	1999
MIN	.81	5.77	30.0	19.0	35.2	20.0	3.36	.96	8.39	4.34	3.87	.000
(WY)	1976	1979	1977	1979	1978	1978	1975	1975	1978	1976	1974	1975

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1973 - 2001
ANNUAL TOTAL	52681	48325	
ANNUAL MEAN	144	132	132
HIGHEST ANNUAL MEAN			438
LOWEST ANNUAL MEAN			29.4
HIGHEST DAILY MEAN	1270	815	11000
LOWEST DAILY MEAN	33	29	.00
ANNUAL SEVEN-DAY MINIMUM	43	38	.00
MAXIMUM PEAK FLOW		2400	a19100
MAXIMUM PEAK STAGE		4.35	b9.80
ANNUAL RUNOFF (AC-FT)	104500	95850	95620
10 PERCENT EXCEEDS	226	179	244
50 PERCENT EXCEEDS	132	129	88
90 PERCENT EXCEEDS	52	53	5.0

e Estimated.  
a From rating curve extended above 9,590 ft<sup>3</sup>/s.  
b From floodmark.

07106300 FOUNTAIN CREEK NEAR PINON, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--July 1976 to December 1983, December 1990 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER 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, UM-MF (COLS./100 ML) (31625)	E COLI, MTEC MF WATER (COL/100 ML) (31633)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)
OCT 23...	1145	140	1010	8.3	10.9	8.8	7.8	E14000	9200	85.5	27.4	270	1.7
NOV 27...	1130	134	1050	8.4	6.2	10.3	3.7	E110	E30	89.4	28.5	280	1.9
FEB 26...	1100	166	1010	8.4	6.5	10.4	5.2	140	E15	80.5	26.4	260	1.9
APR 02...	1115	159	989	8.3	13.4	8.5	4.3	140	<10	79.2	25.2	280	1.8
JUN 25...	1115	68	1090	8.4	23.5	6.7	<1.0	620	350	103	28.4	310	1.7
AUG 06...	1115	285	714	8.1	21.5	7.2	6.5	>12000	--	67.2	18.0	230	1.1

DATE	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	PHOS-PHORUS, PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BORON, TOTAL, RECOV-ERABLE (UG/L AS B) (01022)	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)	COPPER, TOTAL, RECOV-ERABLE (UG/L AS CU) (01042)
OCT 23...	2.85	<.041	1.04	.255	4	2.5	210	198	.51	.12	5	3.9	12.0
NOV 27...	3.61	.230	.648	.306	4	2.0	212	213	.28	.13	3	<1.0	13.7
FEB 26...	4.28	.007	1.11	.631	4	2.0	238	230	.29	.10	5	3.3	16.0
APR 02...	3.61	.011	.859	.431	4	2.2	218	209	.27	.13	3	2.9	15.9
JUN 25...	2.35	.025	.448	.185	4	2.4	242	232	.38	.14	3	3.1	12.0
AUG 06...	1.73	.011	2.64	.070	53	3.5	128	122	3.20	.13	26	<1.0	81.1

DATE	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)	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)	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)
OCT 23...	4.2	8580	130	15	.32	412	10.0	<.14	<.23	10	6.11	--	7.9
NOV 27...	3.5	3790	<10	6	.19	180	6.0	<.14	<.23	8	5.62	9.0	7.8
FEB 26...	4.6	--	50	6	.37	168	4.0	<.14	<.23	9	5.60	9.0	7.5
APR 02...	4.0	--	80	7	.34	175	6.8	<.01	<.01	8	5.90	8.3	8.0
JUN 25...	3.1	5500	360	8	.40	190	10.0	.01	<1.00	11	6.50	9.1	7.3
AUG 06...	2.3	54100	<10	537	<.15	1650	2.0	.31	<.01	41	5.60	8.5	4.3

DATE	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)	CYANIDE TOTAL (MG/L AS CN) (00720)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
OCT 23...	.29	<.2	68	12	<.01	674	255
NOV 27...	<.20	<.2	36	12	<.01	337	122
FEB 26...	<.20	<.2	47	22	<.01	416	186
APR 02...	<.20	<.2	48	19	<.01	508	218
JUN 25...	<.20	<.2	44	10	<.01	109	20
AUG 06...	3.40	<.2	559	7	.01	3290	2530

E Estimated laboratory analysis value.

## ARKANSAS RIVER BASIN

07106300 FOUNTAIN CREEK NEAR PINON, CO--Continued

## MISCELLANEOUS FIELD MEASUREMENTS, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

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				
03...	1100	63	1140	16.0	08...	1045	196	942	16.0
19...	1140	74	1160	13.0	14...	1335	117	990	25.0
NOV					18...	1455	328	742	24.3
02...	1420	166	1090	11.1	21...	1430	177	884	21.1
21...	1135	148	1070	5.7	30...	1300	74	1070	23.6
DEC					JUN				
07...	1505	127	1100	8.7	06...	1025	88	1090	20.9
19...	1320	119	1100	2.3	12...	1255	71	1080	26.1
JAN					18...	0855	37	1140	14.7
02...	1420	166	1010	5.8	JUL				
30...	1115	205	1100	1.7	02...	1440	58	1090	28.9
FEB					09...	1445	28	1140	26.5
13...	1125	195	1040	5.7	10...	1350	613	515	25.5
MAR					17...	1050	90	986	22.6
06...	1030	182	1050	8.5	25...	1215	101	1050	26.8
13...	1430	208	1050	15.0	AUG				
APR					06...	1430	270	741	25.7
02...	1445	170	1010	19.0	23...	1510	49	999	32.2
13...	1400	219	928	16.2	30...	1020	52	1150	19.1
27...	1045	88	1040	16.1	SEP				
					05...	1135	64	1060	22.6
					20...	1505	98	1070	24.4

07106300 FOUNTAIN CREEK NEAR PINON, CO--Continued

PRECIPITATION RECORDS

PERIOD OF RECORD.--April to September 2001 (seasonal records only).

GAGE.--Tipping-bucket rain gage with satellite telemetry.

REMARKS.--Records good. Daily data that are not published are either missing or of unacceptable quality.

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum daily precipitation, 1.38 inches, May 5, 2001.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum daily precipitation, 1.38 inches, May 5.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	.00	.00	.04	.00	.00
2	---	---	---	---	---	---	---	.10	.00	.00	.09	.00
3	---	---	---	---	---	---	---	.49	.00	.00	.00	.00
4	---	---	---	---	---	---	.00	.37	.07	.00	.00	.00
5	---	---	---	---	---	---	.00	1.38	.01	.00	.68	.19
6	---	---	---	---	---	---	.00	.00	.00	.00	.03	.03
7	---	---	---	---	---	---	.00	.00	.02	.00	.00	.11
8	---	---	---	---	---	---	.01	.00	.00	.00	.00	.16
9	---	---	---	---	---	---	.00	.00	.00	.17	.00	.00
10	---	---	---	---	---	---	.65	.00	.00	.17	.01	.00
11	---	---	---	---	---	---	.30	.00	.00	.18	.01	.00
12	---	---	---	---	---	---	.00	.00	.00	.02	.00	.00
13	---	---	---	---	---	---	.00	.00	.01	.69	.05	.01
14	---	---	---	---	---	---	.00	.02	.00	.14	.14	.14
15	---	---	---	---	---	---	.00	.01	.00	.00	.59	.17
16	---	---	---	---	---	---	.00	.29	.00	.00	.00	.41
17	---	---	---	---	---	---	.00	.73	.00	.00	.00	.01
18	---	---	---	---	---	---	.00	.00	.00	.00	.00	.00
19	---	---	---	---	---	---	.00	.01	.00	.00	.00	.00
20	---	---	---	---	---	---	.00	.30	1.03	.00	.00	.00
21	---	---	---	---	---	---	.00	.02	.01	.00	.21	.00
22	---	---	---	---	---	---	.01	.00	.00	.13	.07	.00
23	---	---	---	---	---	---	.00	.00	.00	.01	.00	.03
24	---	---	---	---	---	---	.00	.00	.00	.16	.00	.00
25	---	---	---	---	---	---	.00	.00	.02	.00	.00	.00
26	---	---	---	---	---	---	.00	.00	.02	.03	.00	.00
27	---	---	---	---	---	---	.00	.00	.00	.00	.00	.00
28	---	---	---	---	---	---	.00	.00	.00	.00	.00	.00
29	---	---	---	---	---	---	.00	.05	.01	.00	.00	.00
30	---	---	---	---	---	---	.00	.29	.00	.00	.00	.00
31	---	---	---	---	---	---	---	.01	---	.01	.00	---
TOTAL	---	---	---	---	---	---	---	4.07	1.20	1.75	1.88	1.26
MAX	---	---	---	---	---	---	---	1.38	1.03	.69	.68	.41

ARKANSAS RIVER BASIN

07106500 FOUNTAIN CREEK AT PUEBLO, CO

LOCATION.--Lat 38°17'16", long 104°36'02", in SE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec.19, T.20 S., R.64 W., Pueblo County, Hydrologic Unit 11020003, on left bank at upstream side of bridge on U.S. Highway 50 at Pueblo and 2.6 mi upstream from mouth.

DRAINAGE AREA.--926 mi<sup>2</sup>.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1922 to September 1925, October 1940 to September 1965, February 1971 to current year. Monthly discharge only for some periods, published in WSP 1311.

REVISED RECORDS.--WDR CO-79-1: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry and crest-stage gage. Elevation of gage is 4,705 ft above sea level, from topographic map. See WSP 1711 or 1731 for history of changes prior to Oct. 1, 1940, and WSP 1921 for changes Oct. 2, 1940 to Sept. 30, 1965. Feb. 1, 1971 to Sept. 30, 1976, water-stage recorder at site 1.4 mi upstream at datum 4,725.30 ft above sea level (unadjusted).

REMARKS.--Records fair except for estimated daily discharges and those above 1,000 ft<sup>3</sup>/s, which are poor. Natural flow of stream affected by storage reservoirs, power developments, transbasin and transmountain diversions for municipal use, diversions upstream from station for municipal use and for irrigation, and return flow from irrigated areas.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 4, 1921, reached a discharge of 34,000 ft<sup>3</sup>/s, on basis of slope-area measurement of peak flow. Flood of May 30, 1935, reached a discharge of 35,000 ft<sup>3</sup>/s, on basis of slope-area measurement of peak flow.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	58	157	126	154	165	171	162	79	183	51	60	796
2	57	168	123	152	176	171	158	80	84	57	62	133
3	55	182	119	159	195	172	145	126	64	47	137	87
4	55	184	126	157	200	174	160	251	83	41	130	69
5	61	189	122	159	187	178	158	779	111	33	114	66
6	71	191	120	157	192	157	153	776	99	23	255	70
7	101	178	126	158	180	166	163	281	94	21	165	75
8	91	180	126	158	193	162	155	251	415	14	83	101
9	80	182	126	155	183	162	150	183	210	16	50	166
10	81	185	127	157	179	167	157	173	157	494	41	111
11	91	180	131	162	206	283	234	166	106	133	41	86
12	100	183	120	159	190	274	300	145	85	85	42	71
13	94	189	129	162	188	226	239	129	58	124	54	56
14	87	181	152	156	186	216	182	127	61	800	109	68
15	80	179	144	159	179	199	130	136	57	250	159	71
16	78	164	138	165	177	207	124	135	34	145	154	129
17	81	147	131	156	176	212	126	167	34	90	99	151
18	74	140	132	e160	179	259	123	479	30	56	64	176
19	79	143	129	e165	171	238	118	156	31	45	44	124
20	83	146	131	e165	178	211	104	400	36	40	33	97
21	83	140	119	e170	173	211	105	165	354	38	32	91
22	74	140	122	180	174	208	96	154	169	48	31	106
23	131	138	136	188	174	213	115	128	82	47	31	121
24	146	133	139	175	170	224	103	92	58	78	24	121
25	164	130	141	182	167	233	88	79	63	84	26	90
26	122	131	139	179	178	229	73	56	56	198	28	86
27	116	129	125	186	173	224	86	55	47	363	34	80
28	152	131	143	174	193	225	80	61	59	125	31	70
29	202	131	151	183	---	238	90	73	53	76	27	61
30	176	128	154	181	---	268	84	80	51	59	32	59
31	157	---	156	174	---	207	---	295	---	58	55	---
TOTAL	3080	4779	4103	5147	5082	6485	4161	6257	3024	3739	2247	3588
MEAN	99.4	159	132	166	182	209	139	202	101	121	72.5	120
MAX	202	191	156	188	206	283	300	779	415	800	255	796
MIN	55	128	119	152	165	157	73	55	30	14	24	56
AC-FT	6110	9480	8140	10210	10080	12860	8250	12410	6000	7420	4460	7120

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1922 - 2001, BY WATER YEAR (WY)

	MEAN	58.1	72.4	68.2	70.4	75.9	74.8	95.5	201	147	85.6	131	52.0
MAX	513	303	225	193	190	260	677	1504	1104	429	852	242	
(WY)	1985	1985	2000	2000	2000	2000	1999	1999	1997	1995	1999	1999	
MIN	.61	.90	1.10	1.90	1.40	1.00	1.10	.28	.71	.96	.71	.37	
(WY)	1963	1955	1955	1954	1954	1954	1954	1950	1963	1964	1960	1978	

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1922 - 2001	
ANNUAL TOTAL	55079		51692			
ANNUAL MEAN	150		142		96.3	
HIGHEST ANNUAL MEAN					440	
LOWEST ANNUAL MEAN					4.42	
HIGHEST DAILY MEAN	850	Aug 29	800	Jul 14	11400	Apr 30 1999
LOWEST DAILY MEAN	24	Jun 25	14	Jul 8	a.00	May 12 1923
ANNUAL SEVEN-DAY MINIMUM	40	Jun 10	28	Jul 3	.00	Sep 9 1945
MAXIMUM PEAK FLOW			1950	Sep 1	b47000	Jun 17 1965
MAXIMUM PEAK STAGE			5.01	Sep 1	c19.00	Jun 17 1965
ANNUAL RUNOFF (AC-FT)	109200		102500		69780	
10 PERCENT EXCEEDS	249		210		198	
50 PERCENT EXCEEDS	140		135		40	
90 PERCENT EXCEEDS	52		52		1.1	

e Estimated.  
a No flow at times many years.  
b From contracted-opening measurement of peak flow.  
c Site and datum then in use, from floodmarks.

07106500 FOUNTAIN CREEK AT PUEBLO, CO--Continued

WATER-QUALITY RECORDS

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

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: December 1985 to current year.

WATER TEMPERATURE: December 1985 to current year.

SUSPENDED SEDIMENT: May to September 2001 (seasonal records only).

INSTRUMENTATION.--Water-quality monitor and pumping sediment sampler with satellite telemetry.

REMARKS.--Records for daily specific conductance are fair. Records for daily water temperature are fair except for Aug. 15-24 and Sept. 5-19, which are poor. Records for daily suspended sediment are fair. Daily data that are not published are either missing or of unacceptable quality. Reported values for daily specific conductance and water temperature are representative of the stream based on cross-section comparisons made during the year. Instantaneous discharge and selected water-quality data collected as part of a basin-wide water-quality assessment of the lower Arkansas River basin in Colorado are published elsewhere in this report.

EXTREMES FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 3,460 microsiemens/cm, July 7, 1989; minimum, 162 microsiemens/cm, June 7, 1997.

WATER TEMPERATURE: Maximum, 33.1°C, July 17, 1991; minimum, 0.0°C, on many days.

SEDIMENT CONCENTRATION (seasonal only): Maximum daily mean, 8,160 mg/L, July 10, 2001; minimum daily mean, 59 mg/L, Aug. 27, 2001.

SUSPENDED-SEDIMENT DISCHARGE (seasonal only): Maximum daily, 21,200 tons, Sept. 1, 2001; minimum daily, 1.7 tons (estimated), July 8, 2001.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 2,400 microsiemens/cm, July 10; minimum, 438 microsiemens/cm, July 14.

WATER TEMPERATURE: Maximum, 32.5°C, July 7, 9, 12, 22; minimum, 0.0°C, on many days.

SEDIMENT CONCENTRATION (seasonal only): Maximum daily mean for period May to September, 8,160 mg/L, July 10; minimum daily mean, 59 mg/L, Aug. 27.

SUSPENDED-SEDIMENT DISCHARGE (seasonal only): Maximum daily for period May to September, 21,200 tons, Sept. 1; minimum daily, 1.7 tons (estimated), July 8.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

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, UM-MF (COLS./100 ML) (31625)	E COLI, MTEC MF (COL/100 ML) (31633)	CALCIUM DIS-SOLVED (MG/L) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L) (00925)	SULFATE DIS-SOLVED (MG/L) (00945)	FLUO-RIDE, DIS-SOLVED (MG/L) (00950)	
OCT														
23...	1015	153	1170	8.3	10.0	9.2	3.4	E40000	16000	95.4	36.4	340	1.9	
NOV														
27...	1000	138	1200	8.3	3.5	10.7	1.6	E20	E30	98.5	36.9	360	2.0	
FEB														
26...	0930	193	1140	8.5	3.9	10.9	3.4	E86	E30	91.9	33.9	320	2.0	
APR														
02...	0945	158	1120	8.4	9.1	9.5	2.8	96	E10	89.7	32.4	350	1.9	
JUN														
25...	0930	62	1320	8.4	20.5	7.2	<1.0	460	420	116	43.6	400	1.9	
AUG														
06...	0915	386	962	8.2	20.5	7.4	>8.9	41000	--	78.3	25.9	280	1.5	
DATE		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 ORTHO, DIS-SOLVED (MG/L) AS P) (00671)	ARSENIC TOTAL (UG/L) AS AS) (01002)	ARSENIC DIS-SOLVED (UG/L) AS AS) (01000)	BORON, TOTAL RECOV-ERABLE (UG/L) AS B) (01022)	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)	COPPER, TOTAL RECOV-ERABLE (UG/L) AS CU) (01042)
OCT														
23...	2.91	<.041	2.47	.257	14	2.9	229	214	1.32	.09	16	3.0	39.9	
NOV														
27...	3.29	.162	.521	.241	4	2.3	214	208	.29	.13	2	<1.0	11.5	
FEB														
26...	4.27	.008	.939	.468	5	2.4	218	217	.42	.12	5	1.8	20.2	
APR														
02...	3.80	.016	.797	.349	5	2.7	204	213	.36	.09	4	2.4	17.8	
JUN														
25...	2.53	.025	.354	.120	5	2.8	249	239	.39	.10	3	2.7	10.5	
AUG														
06...	2.09	.016	9.98	.145	30	2.6	199	173	6.40	.19	67	<1.0	175	

ARKANSAS RIVER BASIN

07106500 FOUNTAIN CREEK AT PUEBLO, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	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)	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)	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)
OCT 23...	3.2	25000	<10	43	<.15	1280	2.0	.14	<.23	32	6.31	21.0	17.7
NOV 27...	3.5	3430	20	5	<.15	152	6.0	<.14	<.23	8	6.01	20.3	18.5
FEB 26...	4.0	--	<10	8	.22	218	2.0	<.14	<.23	11	6.00	17.4	15.2
APR 02...	3.6	--	<10	8	<.15	209	2.1	.02	<.01	10	6.10	17.9	18.2
JUN 25...	2.8	4190	--	6	<.15	126	4.0	<.01	<.01	12	8.10	31.4	30.4
AUG 06...	2.2	129000	<10	277	.17	608	1.0	.24	<.01	126	6.60	25.4	10.4

DATE	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)	CYANIDE TOTAL (MG/L AS CN) (00720)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)
OCT 23...	.89	<.2	173	6	<.01	1730	715
NOV 27...	<.20	<.2	26	7	<.01	271	101
FEB 26...	<.20	<.2	46	17	<.01	457	238
APR 02...	<.20	<.2	45	17	<.01	504	215
JUN 25...	<.20	<.2	28	<3	<.01	203	34
AUG 06...	1.20	<.2	967	8	<.01	13300	13900

E Estimated laboratory analysis value.

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	1330	1290	1320	1200	1160	1180	1180	1160	1170	1160	1090	1120
2	1380	1310	1350	1180	1160	1170	1200	1140	1170	1150	1100	1130
3	1400	1360	1370	1190	1150	1170	1220	1140	1180	1180	1110	1140
4	1400	1360	1380	1170	1130	1140	1220	1170	1190	1160	1090	1130
5	1410	1340	1380	1150	1110	1130	1210	1180	1200	1140	1110	1130
6	1380	1320	1350	1130	1100	1110	1220	1180	1200	1130	1120	1130
7	1360	1280	1310	1130	1110	1120	1230	1180	1200	1140	1110	1120
8	1320	1280	1310	1140	1120	1120	1230	1200	1210	1150	1100	1110
9	1310	1290	1300	1140	1110	1130	1220	1200	1210	1170	1100	1120
10	1330	1290	1310	1150	1100	1120	1210	1170	1190	1140	1070	1120
11	1330	1290	1310	1130	1100	1110	1220	1140	1190	1130	1090	1100
12	1360	1280	1330	1130	1100	1110	1260	1130	1210	1150	1090	1110
13	1280	1260	1270	1130	1100	1120	1280	1130	1210	1130	1100	1110
14	1260	1230	1250	1150	1100	1120	1270	1110	1190	1160	1090	1110
15	1270	1230	1250	1150	1100	1130	1180	1130	1160	1160	1070	1110
16	1290	1260	1270	1160	1140	1150	1210	1120	1170	1100	1030	1070
17	1300	1270	1290	1180	1150	1160	1230	1130	1170	1160	1060	1110
18	1320	1290	1310	1180	1150	1170	1220	1130	1170	1190	1060	1120
19	1320	1310	1320	1210	1160	1170	1220	1150	1190	1170	1050	1110
20	1340	1300	1320	1200	1160	1170	1230	1200	1220	1190	1090	1130
21	1330	1300	1310	1210	1130	1180	1290	1160	1220	1150	1110	1130
22	1310	1240	1280	1210	1180	1190	1290	1170	1220	1200	1090	1130
23	1280	1140	1190	1200	1170	1180	1240	1170	1190	1140	1090	1130
24	1270	1160	1210	1190	1170	1180	1230	1150	1180	1150	1090	1130
25	1170	1120	1140	1200	1170	1180	1200	1140	1170	1140	1120	1130
26	1200	1150	1180	1180	1150	1170	1200	1120	1160	1140	1110	1130
27	1220	1180	1200	1190	1150	1170	1250	1140	1190	1150	1060	1110
28	1350	1190	1240	1200	1140	1160	1190	1160	1180	1120	1070	1100
29	1200	1140	1170	1190	1140	1160	1190	1130	1150	1190	1090	1120
30	1190	1140	1160	1170	1140	1160	1170	1120	1140	1270	1100	1160
31	1180	1140	1170	---	---	---	1150	1120	1130	1260	1170	1210
MONTH	1410	1120	1280	1210	1100	1150	1290	1110	1180	1270	1030	1120

ARKANSAS RIVER BASIN

07106500 FOUNTAIN CREEK AT PUEBLO, CO--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	1260	1150	1200	1140	1120	1130	1120	1090	1100	1260	1150	1180
2	1240	1150	1180	1130	1110	1120	1120	1100	1120	1220	1160	1180
3	1180	1130	1160	1130	1100	1120	1140	1110	1120	1560	1140	1250
4	1180	1130	1150	1140	1120	1120	1140	1120	1130	1140	939	977
5	1190	1130	1160	1130	1090	1110	1140	1120	1130	996	693	858
6	1180	1130	1160	1130	1110	1120	1140	1100	1110	931	748	804
7	1170	1150	1160	1130	1100	1120	1110	1070	1090	1020	931	984
8	1160	1120	1140	1130	1100	1110	1100	1070	1080	1060	998	1030
9	1220	1120	1170	1140	1100	1110	1120	1070	1090	1090	1040	1070
10	1240	1120	1170	1130	1080	1100	1830	952	1130	1090	1060	1080
11	1210	1010	1150	1120	1030	1070	1280	948	1080	1130	1070	1090
12	1220	1150	1170	1140	1020	1080	956	847	905	1160	1080	1110
13	1160	1130	1140	1130	1070	1100	1020	929	978	1140	1090	1110
14	1150	1110	1130	1160	1100	1120	1050	966	1030	1170	1090	1120
15	1150	1120	1140	1120	1090	1110	1060	1020	1040	1130	1090	1100
16	1140	1110	1130	1140	1120	1120	1050	1020	1040	2020	1040	1160
17	1190	1120	1150	1140	1100	1120	1040	1010	1030	1530	889	1140
18	1150	1110	1130	1160	1080	1120	1050	1020	1040	972	679	805
19	1170	1120	1140	1160	1120	1140	1080	1040	1060	1010	918	971
20	1140	1110	1130	1150	1130	1140	1080	1060	1070	1020	657	807
21	1150	1120	1130	1150	1130	1140	1100	1070	1090	1040	888	980
22	1130	1120	1120	1150	1130	1140	1260	1060	1120	1030	988	1010
23	1140	1120	1130	1150	1140	1150	1110	1060	1080	1050	1020	1030
24	1140	1120	1130	1160	1120	1140	1110	1070	1090	1100	1040	1070
25	1130	1110	1120	1140	1100	1120	1130	1110	1120	1160	1080	1120
26	1140	1100	1120	1150	1110	1120	1190	1120	1150	1190	1130	1160
27	1110	1080	1100	1160	1120	1140	1190	1160	1170	1240	1180	1210
28	1140	1040	1100	1190	1110	1140	1190	1160	1180	1220	1170	1200
29	---	---	---	1860	993	1180	1190	1170	1180	1270	1140	1210
30	---	---	---	1400	1090	1140	1200	1160	1180	1210	1140	1180
31	---	---	---	1110	1050	1080	---	---	---	1200	835	973
MONTH	1260	1010	1140	1860	993	1120	1830	847	1090	2020	657	1060
DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	1110	970	1060	1420	1300	1360	1560	1380	1410	1230	575	768
2	1170	1100	1130	1370	1300	1330	1480	1390	1430	1050	791	952
3	1280	1130	1190	1390	1360	1370	1400	886	1190	1160	1050	1120
4	1280	1040	1260	1430	1370	1410	1170	1000	1120	1240	1160	1190
5	2210	1120	1400	1530	1380	1460	1770	923	1190	1320	1240	1300
6	1250	1220	1240	1590	1460	1530	1550	723	961	1360	1310	1330
7	1260	1230	1240	1650	1580	1600	1170	776	1050	1800	1290	1410
8	1240	627	862	1680	1640	1660	1270	1170	1220	1330	1230	1270
9	1080	847	991	1750	1100	1690	1350	1270	1320	1260	974	1110
10	1120	1080	1110	2400	547	1050	1410	1330	1370	1230	1140	1190
11	1220	1110	1160	1230	855	1030	1390	1330	1350	1330	1220	1250
12	1260	1220	1240	1310	1170	1250	1410	1290	1350	1380	1240	1290
13	1290	1250	1280	1450	717	1160	1420	1180	1320	1480	1270	1350
14	1310	1210	1280	1300	438	806	1480	981	1200	1810	1240	1390
15	1300	1210	1250	981	828	929	1180	846	1060	1680	1340	1480
16	1370	1300	1340	1090	981	1050	1130	992	1060	1420	1100	1310
17	1480	1320	1400	1240	1080	1170	1180	1120	1160	1200	1130	1160
18	1480	1420	1440	1310	1220	1270	1260	1150	1210	---	---	---
19	1470	1420	1440	1360	1310	1340	1360	1260	1300	1180	1150	1160
20	1470	1080	1420	1410	1350	1380	1450	1330	1410	1210	1180	1200
21	1490	870	1120	1450	1400	1410	1510	1430	1480	1240	1210	1220
22	1460	912	1130	1520	1400	1460	1590	1450	1510	1250	1090	1180
23	1270	1220	1240	1460	1400	1420	1530	1420	1470	1190	1150	1180
24	1270	1230	1260	1730	972	1390	1530	1430	1490	1200	1170	1180
25	1310	1260	1290	1540	756	1330	1570	1430	1490	1220	1190	1200
26	1350	1280	1320	1360	687	1040	1530	1420	1460	1230	1210	1220
27	1360	1320	1330	1070	583	803	1560	1460	1500	1230	1210	1220
28	1610	977	1400	1170	922	1060	2300	1230	1600	1250	1220	1240
29	1500	1360	1420	1290	1170	1230	1850	1510	1600	1270	1230	1260
30	1420	1350	1380	1340	1290	1320	1600	1340	1490	1300	1270	1280
31	---	---	---	1410	1320	1370	1440	1150	1310	---	---	---
MONTH	2210	627	1250	2400	438	1280	2300	723	1330	---	---	---

## ARKANSAS RIVER BASIN

07106500 FOUNTAIN CREEK AT PUEBLO, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	23.0	12.8	17.3	13.0	7.1	9.5	6.8	1.5	3.9	3.9	.0	1.2
2	23.6	11.9	17.0	11.2	6.6	8.5	6.0	1.2	3.6	4.5	.0	1.5
3	22.3	12.7	16.9	12.1	7.1	8.9	6.9	1.9	4.2	5.4	.0	1.9
4	19.5	14.5	17.1	12.7	4.9	8.8	7.2	1.7	4.2	7.0	.0	2.9
5	17.5	11.9	14.3	9.9	6.1	8.1	8.6	1.7	4.7	7.1	.0	3.1
6	11.9	8.3	10.2	9.4	4.4	6.4	7.0	1.6	4.1	7.2	.0	3.4
7	10.5	8.0	9.3	9.5	3.4	6.2	7.0	2.1	4.5	6.4	1.2	3.2
8	10.5	7.9	9.2	10.1	3.7	6.3	6.5	1.7	3.8	4.8	.0	1.5
9	13.5	8.7	10.9	9.6	2.9	5.9	8.2	.7	3.9	2.9	.0	.9
10	13.4	10.1	11.6	5.3	2.3	4.1	3.4	.0	1.6	6.2	.0	2.2
11	15.2	11.8	13.2	5.6	1.6	4.1	.3	.0	.0	5.5	.0	2.0
12	19.4	10.6	14.0	6.0	.8	3.2	.3	.0	.0	5.4	.0	2.0
13	18.5	8.4	12.7	6.6	.7	3.4	.0	.0	.0	3.5	.1	1.7
14	16.8	6.8	11.5	6.7	.7	3.3	1.0	.0	.2	3.7	.0	1.1
15	17.2	7.0	11.7	7.5	1.3	4.1	4.6	.0	1.7	3.0	.0	.9
16	18.4	8.8	13.0	6.6	.8	3.1	2.7	.0	.6	1.9	.0	.5
17	19.2	8.7	13.2	6.1	.9	2.9	6.1	.0	1.7	.0	.0	.0
18	19.2	8.4	13.1	6.1	.9	3.2	2.6	.0	.5	.4	.0	.0
19	17.7	7.8	12.5	7.8	1.2	3.9	3.2	.0	1.0	.6	.0	.0
20	18.0	8.4	12.5	7.3	1.1	3.8	3.8	.0	1.2	.1	.0	.0
21	16.8	7.0	11.6	7.6	1.1	4.3	.8	.0	.1	3.6	.0	.9
22	13.4	10.1	11.6	8.0	2.6	4.4	4.8	.0	1.5	3.8	.0	1.4
23	12.7	9.7	11.2	7.8	2.1	4.4	4.3	.0	1.4	6.2	.0	2.6
24	17.3	10.9	13.6	7.2	.5	3.8	2.4	.0	.5	5.7	.0	2.0
25	16.8	8.7	12.7	7.7	1.6	4.1	.0	.0	.0	5.7	.0	2.0
26	16.2	7.8	11.8	6.9	1.3	3.6	2.4	.0	.5	4.7	.0	1.8
27	15.9	7.8	12.2	8.1	1.3	4.3	3.9	.0	1.2	1.9	.1	.7
28	13.6	12.1	12.7	8.0	1.7	4.7	6.1	.2	2.9	3.1	.1	1.1
29	17.4	11.2	13.7	7.0	1.2	3.9	5.0	.3	2.6	5.3	.1	1.7
30	15.1	9.5	12.1	8.7	1.0	4.4	3.7	.0	1.2	5.9	.2	2.1
31	13.2	7.7	10.4	---	---	---	4.4	.0	1.4	5.5	.2	1.9
MONTH	23.6	6.8	12.7	13.0	.5	5.0	8.6	.0	1.9	7.2	.0	1.6
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	3.4	.3	1.1	10.0	.5	5.2	17.4	5.3	11.1	22.9	12.2	16.1
2	6.3	.3	2.5	11.3	2.5	6.7	19.0	7.8	12.9	14.9	9.5	10.9
3	7.8	1.3	4.1	9.0	1.5	5.7	19.5	8.1	13.2	11.1	7.7	9.3
4	7.3	.4	3.7	12.5	2.9	7.3	17.6	10.4	13.4	9.4	6.7	7.8
5	9.2	.5	4.6	9.7	2.5	6.3	19.0	9.8	13.5	8.2	7.1	7.7
6	4.5	1.6	3.1	11.9	4.2	7.9	15.3	7.6	11.0	18.1	7.1	11.7
7	9.9	1.9	5.3	10.6	4.7	7.6	18.0	4.4	10.5	20.1	10.0	14.6
8	4.5	.0	1.8	14.3	5.1	9.1	18.2	6.7	11.4	22.9	10.6	16.3
9	1.8	.0	.5	14.0	4.1	9.0	18.5	5.9	11.5	22.5	11.0	16.4
10	3.9	.0	1.0	8.6	3.5	6.4	16.1	6.5	10.6	21.7	11.5	16.2
11	6.9	.0	2.6	6.3	2.5	4.2	10.8	4.8	8.1	20.7	11.0	15.2
12	7.9	.2	3.7	11.6	1.3	6.2	14.7	6.6	10.0	24.8	12.9	17.2
13	9.3	.0	4.6	14.0	4.1	8.7	16.5	6.3	11.0	24.7	12.2	18.2
14	4.8	1.1	2.2	12.7	3.7	7.5	18.2	6.2	11.5	21.3	13.8	17.3
15	7.9	.0	3.5	11.1	1.3	5.9	17.5	6.6	11.9	24.7	13.4	18.6
16	3.0	.2	1.4	10.4	2.6	6.0	14.7	6.9	10.6	24.6	14.4	19.0
17	6.5	.4	2.7	4.9	2.5	3.6	16.6	6.4	10.7	18.4	10.4	16.5
18	8.1	1.0	4.1	10.8	2.3	6.3	19.8	6.9	12.8	23.8	13.4	18.0
19	10.8	1.6	5.6	14.0	2.8	8.2	19.5	9.9	14.3	19.5	14.9	17.1
20	10.5	1.3	5.9	16.8	3.9	10.0	16.4	9.8	12.8	22.6	9.7	16.4
21	5.8	2.7	4.1	18.2	6.8	12.0	17.4	6.5	11.9	21.2	8.0	13.9
22	9.8	.6	5.1	14.3	8.0	11.1	10.4	6.2	8.0	24.2	10.0	16.8
23	11.2	3.5	6.7	17.2	7.8	11.4	17.0	3.3	10.0	24.4	12.4	17.6
24	11.7	3.2	6.5	9.1	4.8	6.5	20.3	6.0	12.7	24.2	13.2	18.5
25	10.4	.6	5.3	7.1	3.9	5.5	21.9	7.6	14.2	25.3	12.3	18.4
26	10.0	2.3	5.6	7.9	4.2	6.0	23.4	9.6	15.7	26.3	14.6	19.6
27	4.6	.7	2.5	13.6	5.1	8.7	23.9	9.9	16.2	25.2	14.9	19.6
28	4.3	.0	1.9	12.7	6.8	9.1	23.8	10.0	16.3	25.3	14.9	19.5
29	---	---	---	13.5	4.6	8.6	23.7	10.7	16.5	23.6	15.4	18.7
30	---	---	---	16.5	6.3	10.6	18.0	11.1	14.8	23.6	13.5	17.6
31	---	---	---	14.3	6.7	9.6	---	---	---	24.2	13.7	18.5
MONTH	11.7	.0	3.6	18.2	.5	7.6	23.9	3.3	12.3	26.3	6.7	16.1

ARKANSAS RIVER BASIN

07106500 FOUNTAIN CREEK AT PUEBLO, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
JUNE			JULY			AUGUST			SEPTEMBER			
1	26.6	14.3	19.9	30.9	17.3	22.8	29.8	19.2	23.4	21.9	15.2	19.0
2	26.4	14.3	20.0	30.7	17.9	23.9	32.4	18.2	23.6	25.3	15.6	20.8
3	25.2	15.3	19.6	---	---	---	29.2	18.3	23.5	26.5	15.8	20.6
4	26.3	15.2	19.8	---	---	---	30.6	19.6	24.1	26.0	15.3	20.0
5	27.3	15.4	20.4	---	---	---	30.6	19.1	23.9	26.5	14.9	19.9
6	28.3	16.8	21.2	---	---	---	25.1	19.5	22.4	27.7	15.9	20.3
7	24.2	16.5	19.3	32.5	18.9	24.7	31.7	19.0	24.1	24.1	15.2	18.5
8	23.3	14.9	18.7	31.1	18.6	24.1	31.3	17.4	23.6	18.1	12.4	14.9
9	26.5	14.7	20.0	32.5	18.4	24.2	25.4	17.6	21.1	20.4	11.1	15.8
10	27.2	14.7	21.0	27.0	18.5	22.0	30.4	17.5	22.5	23.1	13.6	18.3
11	29.2	15.7	21.8	31.3	18.3	23.8	31.4	17.7	23.5	24.2	14.1	19.4
12	27.3	15.0	20.0	32.5	19.3	24.5	31.4	18.0	23.3	23.8	17.9	20.4
13	24.4	13.0	16.6	28.2	19.8	23.4	31.5	18.3	23.7	24.2	18.1	21.0
14	24.1	11.4	16.9	27.1	18.9	22.1	27.7	19.1	22.7	25.1	19.8	22.2
15	26.8	10.4	18.1	27.8	18.3	22.4	23.9	18.5	20.8	24.5	21.4	22.8
16	29.1	12.4	19.8	30.3	19.7	23.8	27.8	15.9	20.4	24.4	21.8	23.1
17	25.1	16.6	20.3	24.8	17.9	21.6	26.4	15.9	21.0	23.5	16.5	21.8
18	27.5	15.3	20.6	28.8	17.3	22.8	29.9	17.4	23.2	20.8	14.4	16.8
19	24.3	16.4	19.4	26.5	17.7	21.8	31.8	16.9	23.2	24.6	14.3	18.6
20	27.5	15.5	20.7	30.4	17.6	23.5	29.9	19.4	23.6	24.2	13.3	18.3
21	23.6	14.7	19.1	32.1	19.7	24.0	30.6	18.7	23.7	24.3	13.7	18.4
22	27.5	16.6	21.0	32.5	19.1	24.3	31.0	19.1	23.6	22.5	14.8	18.3
23	29.3	15.5	21.9	29.4	20.4	23.4	31.5	18.6	24.4	23.1	13.5	17.7
24	30.4	16.3	22.6	30.6	20.2	23.8	29.7	19.3	23.8	22.8	12.3	17.3
25	30.8	17.2	23.1	30.9	19.0	23.6	22.0	17.4	19.3	23.4	12.4	17.5
26	30.2	18.1	22.7	27.3	19.0	22.1	28.8	14.2	20.9	24.7	13.1	18.5
27	31.3	16.7	23.3	27.1	19.2	22.0	28.5	15.7	21.1	25.2	13.6	18.9
28	30.2	17.9	22.8	29.3	17.8	22.9	28.4	14.5	19.7	23.9	13.7	18.3
29	31.1	17.2	23.3	30.7	17.6	23.4	27.9	14.5	20.4	23.3	14.8	18.2
30	30.1	17.4	22.8	31.4	17.4	23.6	28.3	15.4	21.1	25.0	13.7	18.8
31	---	---	---	31.9	19.0	24.1	27.7	17.8	20.7	---	---	---
MONTH	31.3	10.4	20.6	---	---	---	32.4	14.2	22.5	27.7	11.1	19.1

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	TEMPER- ATURE WATER (DEG C) (00010)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
MAY						
30...	1515	85	21.0	172	39	--
31...	1045	431	16.5	5430	6320	--
JUN						
08...	1000	741	17.0	13300	26600	--
JUL						
10...	1510	723	26.5	9520	18600	93
17...	0915	107	19.0	299	86	--
26...	0945	375	19.5	15300	15500	--
27...	0945	577	20.0	17300	27000	--
AUG						
24...	1400	26	29.5	55	3.9	--
SEP						
05...	0915	64	17.5	96	17	--

## ARKANSAS RIVER BASIN

07106500 FOUNTAIN CREEK AT PUEBLO, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MEAN	MEAN	SEDIMENT	MEAN	MEAN	SEDIMENT	MEAN	MEAN	SEDIMENT
	DISCHARGE (CFS)	CONCEN- TRATION (MG/L)	DISCHARGE (TONS/DAY)	DISCHARGE (CFS)	CONCEN- TRATION (MG/L)	DISCHARGE (TONS/DAY)	DISCHARGE (CFS)	CONCEN- TRATION (MG/L)	DISCHARGE (TONS/DAY)
	OCTOBER			NOVEMBER			DECEMBER		
1	58	---	---	157	---	---	126	---	---
2	57	---	---	168	---	---	123	---	---
3	55	---	---	182	---	---	119	---	---
4	55	---	---	184	---	---	126	---	---
5	61	---	---	189	---	---	122	---	---
6	71	---	---	191	---	---	120	---	---
7	101	---	---	178	---	---	126	---	---
8	91	---	---	180	---	---	126	---	---
9	80	---	---	182	---	---	126	---	---
10	81	---	---	185	---	---	127	---	---
11	91	---	---	180	---	---	131	---	---
12	100	---	---	183	---	---	120	---	---
13	94	---	---	189	---	---	129	---	---
14	87	---	---	181	---	---	152	---	---
15	80	---	---	179	---	---	144	---	---
16	78	---	---	164	---	---	138	---	---
17	81	---	---	147	---	---	131	---	---
18	74	---	---	140	---	---	132	---	---
19	79	---	---	143	---	---	129	---	---
20	83	---	---	146	---	---	131	---	---
21	83	---	---	140	---	---	119	---	---
22	74	---	---	140	---	---	122	---	---
23	131	---	---	138	---	---	136	---	---
24	146	---	---	133	---	---	139	---	---
25	164	---	---	130	---	---	141	---	---
26	122	---	---	131	---	---	139	---	---
27	116	---	---	129	---	---	125	---	---
28	152	---	---	131	---	---	143	---	---
29	202	---	---	131	---	---	151	---	---
30	176	---	---	128	---	---	154	---	---
31	157	---	---	---	---	---	156	---	---
TOTAL	3080	---	0	4779	---	0	4103	---	0
	MEAN	MEAN	SEDIMENT	MEAN	MEAN	SEDIMENT	MEAN	MEAN	SEDIMENT
	DISCHARGE (CFS)	CONCEN- TRATION (MG/L)	DISCHARGE (TONS/DAY)	DISCHARGE (CFS)	CONCEN- TRATION (MG/L)	DISCHARGE (TONS/DAY)	DISCHARGE (CFS)	CONCEN- TRATION (MG/L)	DISCHARGE (TONS/DAY)
	JANUARY			FEBRUARY			MARCH		
1	154	---	---	165	---	---	171	---	---
2	152	---	---	176	---	---	171	---	---
3	159	---	---	195	---	---	172	---	---
4	157	---	---	200	---	---	174	---	---
5	159	---	---	187	---	---	178	---	---
6	157	---	---	192	---	---	157	---	---
7	158	---	---	180	---	---	166	---	---
8	158	---	---	193	---	---	162	---	---
9	155	---	---	183	---	---	162	---	---
10	157	---	---	179	---	---	167	---	---
11	162	---	---	206	---	---	283	---	---
12	159	---	---	190	---	---	274	---	---
13	162	---	---	188	---	---	226	---	---
14	156	---	---	186	---	---	216	---	---
15	159	---	---	179	---	---	199	---	---
16	165	---	---	177	---	---	207	---	---
17	156	---	---	176	---	---	212	---	---
18	e160	---	---	179	---	---	259	---	---
19	e165	---	---	171	---	---	238	---	---
20	e165	---	---	178	---	---	211	---	---
21	e170	---	---	173	---	---	211	---	---
22	180	---	---	174	---	---	208	---	---
23	188	---	---	174	---	---	213	---	---
24	175	---	---	170	---	---	224	---	---
25	182	---	---	167	---	---	233	---	---
26	179	---	---	178	---	---	229	---	---
27	186	---	---	173	---	---	224	---	---
28	174	---	---	193	---	---	225	---	---
29	183	---	---	---	---	---	238	---	---
30	181	---	---	---	---	---	268	---	---
31	174	---	---	---	---	---	207	---	---
TOTAL	5147	---	0	5082	---	0	6485	---	0

ARKANSAS RIVER BASIN

07106500 FOUNTAIN CREEK AT PUEBLO, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	162	---	---	79	---	---	183	1010	536
2	158	---	---	80	---	---	84	194	47
3	145	---	---	126	---	---	64	---	e18
4	160	---	---	251	---	---	83	120	27
5	158	---	---	779	---	---	111	169	51
6	153	---	---	776	---	---	99	156	42
7	163	---	---	281	---	---	94	130	33
8	155	---	---	251	---	---	415	6690	11600
9	150	---	---	183	---	---	210	1690	983
10	157	---	---	173	---	---	157	726	307
11	234	---	---	166	---	---	106	---	e161
12	300	---	---	145	---	---	85	---	e100
13	239	---	---	129	---	---	58	---	e47
14	182	---	---	127	---	---	61	203	33
15	130	---	---	136	---	---	57	191	28
16	124	---	---	135	---	---	34	315	29
17	126	---	---	167	---	---	34	190	17
18	123	---	---	479	---	---	30	---	e7.8
19	118	---	---	156	---	---	31	95	7.9
20	104	---	---	400	---	---	36	125	16
21	105	---	---	165	---	---	354	7030	10400
22	96	---	---	154	---	---	169	1350	673
23	115	---	---	128	---	---	82	---	e108
24	103	---	---	92	---	---	58	---	e52
25	88	---	---	79	---	---	63	203	35
26	73	---	---	56	---	---	56	164	25
27	86	---	---	55	---	---	47	127	16
28	80	---	---	61	---	---	59	---	e63
29	90	---	---	73	---	---	53	182	26
30	84	---	---	80	---	---	51	150	21
31	---	---	---	295	3430	3530	---	---	---
TOTAL	4161	---	0	6257	---	3530	3024	---	25509.7

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	51	154	21	60	110	18	796	5890	21200
2	57	185	29	62	---	e28	133	289	107
3	47	---	e22	137	2020	1180	87	158	38
4	41	121	13	130	1030	370	69	---	e23
5	33	86	7.8	114	---	e296	66	101	18
6	23	---	e5.1	255	4180	3490	70	119	22
7	21	---	e3.6	165	1180	570	75	184	37
8	14	---	e1.7	83	407	98	101	355	97
9	16	---	e2.7	50	170	23	166	---	e523
10	494	8160	15800	41	---	e15	111	605	182
11	133	1110	425	41	128	14	86	220	51
12	85	445	105	42	80	9.0	71	194	37
13	124	---	e298	54	98	16	56	145	22
14	800	6280	20000	109	908	360	68	---	e36
15	250	1690	1150	159	1660	884	71	209	41
16	145	1000	404	154	1500	666	129	789	391
17	90	324	82	99	656	178	151	704	291
18	56	173	26	64	379	67	176	1360	706
19	45	120	15	44	184	23	124	570	201
20	40	95	10	33	---	e9.0	97	205	54
21	38	100	10	32	81	7.0	91	177	44
22	48	180	23	31	93	7.8	106	511	164
23	47	---	e43	31	105	8.6	121	611	199
24	78	668	170	24	63	4.2	121	---	e123
25	84	669	152	26	---	e6.9	90	195	48
26	198	5230	4260	28	110	8.2	86	182	43
27	363	7800	11300	34	59	5.3	80	208	45
28	125	---	e306	31	96	9.4	70	145	28
29	76	399	83	27	284	21	61	---	e17
30	59	188	30	32	---	e44	59	87	14
31	58	131	21	55	677	101	---	---	---
TOTAL	3739	---	54818.9	2247	---	8537.4	3588	---	24802

e Estimated.

ARKANSAS RIVER BASIN

07107900 GREENHORN CREEK NEAR RYE, CO

LOCATION.--Lat 37°55'14", long 104°57'21", in SW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec.36, T.24 S., R.68 W., Pueblo County, Hydrologic Unit 11020002, on right bank 20 ft upstream from road bridge in Rye Mountain Park and 1.4 mi west of Post Office in Rye.

DRAINAGE AREA.--9.56 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1973 to September 1979, October 1998 to September 2001 (discontinued).

GAGE.--Water-stage recorder with satellite telemetry. October 1973 to September 1979, at site 5 ft downstream at different datum. Elevation of gage is 7,220 ft above sea level, from topographic map.

REMARKS.--Records fair except for Nov. 6 to Mar. 20, estimated daily discharges, and those above 35 ft<sup>3</sup>/s, 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 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.0	1.6	1.5	1.2	1.1	1.3	2.1	12	5.7	e1.7	1.8	2.1
2	1.9	1.7	1.6	1.2	1.2	1.2	2.4	9.9	5.3	e1.7	1.7	2.1
3	1.9	1.8	1.6	1.2	1.1	1.3	2.6	5.1	5.1	e1.6	1.5	1.8
4	2.2	1.8	1.5	1.3	1.1	1.3	2.6	3.2	4.9	e1.6	1.6	1.6
5	2.2	1.8	1.5	1.3	1.1	1.3	2.7	3.0	e4.9	1.6	1.7	1.8
6	2.2	1.6	1.6	1.3	1.1	1.3	2.8	3.2	e4.8	1.6	1.9	1.8
7	2.1	1.8	1.6	1.2	1.1	1.3	2.3	3.0	e4.4	1.4	1.9	1.8
8	2.1	1.8	1.5	1.2	1.1	1.3	2.2	3.5	e4.2	1.4	1.8	1.9
9	2.1	1.7	1.5	1.2	e1.0	1.3	2.1	7.7	e4.0	e1.4	5.5	1.9
10	2.1	1.7	1.5	1.2	e1.1	1.4	1.8	9.0	e3.7	e1.4	7.9	1.5
11	2.1	1.7	1.4	1.2	1.1	1.5	1.5	7.0	e3.5	e1.6	5.9	1.4
12	2.1	1.7	e1.2	1.2	1.1	1.6	1.5	7.1	e3.3	e1.6	3.4	1.4
13	2.0	1.7	e1.3	1.2	1.1	1.5	1.4	6.1	e3.5	e1.4	3.0	1.3
14	2.0	1.8	e1.4	1.1	1.1	1.5	1.5	5.2	e3.1	e1.4	2.8	1.5
15	2.0	1.7	1.4	1.2	1.1	1.5	1.6	5.6	e3.0	1.5	2.8	1.5
16	2.1	1.6	1.4	e1.1	1.1	1.8	1.7	6.7	e2.9	1.4	2.7	1.4
17	2.0	1.7	1.4	e1.0	1.1	1.5	2.4	10	e2.8	1.3	2.7	1.3
18	2.0	1.7	1.3	e1.1	1.1	1.6	3.2	11	e2.7	1.4	2.4	1.2
19	2.0	1.7	e1.2	e1.1	1.1	1.5	4.3	9.7	e2.6	1.5	2.2	1.2
20	2.0	1.6	1.3	e1.2	1.1	1.5	5.1	13	e2.5	1.5	2.3	1.1
21	2.0	1.6	e1.2	1.2	1.1	1.7	4.0	10	e2.6	1.7	2.4	1.1
22	2.2	1.6	e1.2	1.2	1.2	1.8	3.6	8.5	e2.3	1.9	2.4	1.0
23	2.4	1.6	1.4	1.2	1.2	1.8	3.1	7.8	e2.2	1.6	2.1	1.0
24	2.6	1.6	1.5	1.2	1.1	1.8	2.9	7.6	e2.2	1.7	2.0	1.0
25	2.0	1.6	1.4	1.1	1.3	1.8	3.6	7.3	e2.0	1.6	2.0	1.0
26	1.8	1.6	1.5	1.1	1.2	1.9	4.9	7.3	e2.0	1.6	2.0	1.1
27	1.8	1.6	1.4	1.1	1.2	1.8	6.0	8.1	e1.9	1.8	1.8	1.0
28	2.4	1.6	1.4	1.1	1.5	1.8	6.4	8.0	e1.9	1.7	2.0	1.1
29	2.2	1.6	1.2	1.1	---	1.8	9.2	7.6	e1.8	1.6	2.0	1.1
30	1.9	1.6	1.2	1.1	---	2.0	10	6.9	e1.8	1.6	2.0	1.1
31	1.8	---	1.2	1.1	---	2.0	---	6.6	---	1.6	2.1	---
TOTAL	64.2	50.2	43.3	36.2	31.8	48.7	101.5	226.7	97.6	48.4	80.3	42.1
MEAN	2.07	1.67	1.40	1.17	1.14	1.57	3.38	7.31	3.25	1.56	2.59	1.40
MAX	2.6	1.8	1.6	1.3	1.5	2.0	10	13	5.7	1.9	7.9	2.1
MIN	1.8	1.6	1.2	1.0	1.0	1.2	1.4	3.0	1.8	1.3	1.5	1.0
AC-FT	127	100	86	72	63	97	201	450	194	96	159	84

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1974 - 2001, BY WATER YEAR (WY)

	1974	1975	1976	1977	1978	1979	2000	2001	2002	2003	2004	2005
MEAN	3.15	2.42	1.79	1.73	1.82	2.32	4.70	11.4	9.31	5.36	3.91	2.44
MAX	7.09	4.06	2.68	2.79	3.08	3.59	7.41	23.5	22.3	18.6	6.96	4.19
(WY)	1977	1977	2000	2000	1977	1974	2000	1999	1975	1975	1999	1976
MIN	1.37	.88	1.04	1.17	1.14	1.57	3.38	4.75	2.54	1.10	1.17	.90
(WY)	1979	1979	1974	2001	2001	2001	2001	1978	1978	1978	1978	1978

SUMMARY STATISTICS

	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1974 - 2001
ANNUAL TOTAL	1460.1	871.0	
ANNUAL MEAN	3.99	2.39	4.21
HIGHEST ANNUAL MEAN			6.44
LOWEST ANNUAL MEAN			2.05
HIGHEST DAILY MEAN	26	May 11	69
LOWEST DAILY MEAN	1.2	Dec 12	a.60
ANNUAL SEVEN-DAY MINIMUM	1.3	Dec 16	.63
MAXIMUM PEAK FLOW		22	May 1
MAXIMUM PEAK STAGE		4.89	May 1
ANNUAL RUNOFF (AC-FT)	2900	1730	3050
10 PERCENT EXCEEDS	8.0	5.1	8.6
50 PERCENT EXCEEDS	2.6	1.7	2.5
90 PERCENT EXCEEDS	1.6	1.1	1.2

e Estimated.

a Also occurred Nov 14-16, 1978.

b From slope-area measurement of peak flow.

c Site and datum then in use; maximum gage height, 5.63 ft, Apr 29, 1999.

07108100 GRANEROS CREEK NEAR RYE, CO

LOCATION.--Lat 37°54'47", long 104°55'31", in SE<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec.31, T.24 S., R.67 W., Pueblo County, Hydrologic Unit 11020003, on right bank at downstream side of culvert on Greenhorn Road and 0.7 mile southeast of Rye.

DRAINAGE AREA.--4.32 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1998 to September 2001 (discontinued).

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 6,770 ft above sea level, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Natural flow of stream may be affected by 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.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.02	.15	e.25	e.24	e.21	.23	.60	.84	.33	.12	.23	.00
2	.03	.16	e.25	e.24	e.22	.25	.66	1.1	.28	.11	.26	.00
3	.03	.18	e.24	e.24	e.23	.26	.73	.59	.24	.10	.24	.00
4	.00	.21	e.24	e.25	e.24	.28	.77	.50	.24	.10	.19	.00
5	.01	.21	e.24	e.25	e.25	.27	.78	.71	.27	.09	.16	.00
6	.03	.25	e.24	e.24	e.23	.28	.94	.55	.35	.09	.15	.00
7	.04	.23	e.24	e.23	e.24	.29	.76	.59	.22	.09	.11	.00
8	.05	.25	e.24	e.23	e.23	.29	.57	.61	.20	.09	.03	.00
9	.05	e.27	e.23	e.22	e.22	.29	.41	.74	.18	.09	.00	.00
10	.08	e.26	e.23	e.22	e.22	.31	.39	.92	.18	.09	.04	.00
11	.08	e.26	e.22	e.22	e.23	.31	.39	.89	.17	.09	.09	.00
12	.07	e.25	e.20	e.22	e.24	.31	.39	.67	.27	.09	.09	.00
13	.06	e.26	e.21	e.22	e.24	.32	.37	.64	.40	.10	.10	.00
14	.06	e.26	e.22	e.22	e.25	.32	.35	.57	.52	.11	.10	.00
15	.06	e.25	e.22	e.22	e.25	.31	.33	.57	.43	.11	.11	.00
16	.07	e.25	e.22	e.20	e.23	.31	.33	.90	.35	.10	.12	.00
17	.06	e.25	e.23	e.18	e.25	.30	.33	1.3	.31	.09	.12	.00
18	.06	e.25	e.22	e.18	e.26	.30	.33	1.3	.28	.09	.13	.00
19	.06	e.25	e.22	e.20	e.28	.30	.35	1.6	.30	.09	.12	.00
20	.07	e.25	e.22	e.22	e.27	.30	.38	3.6	.22	.08	.12	.00
21	.06	e.25	e.22	e.22	e.26	.35	.38	2.8	.31	.09	.11	.00
22	.05	e.24	e.22	e.22	e.26	.41	.40	2.5	.21	.10	.09	.00
23	.06	e.24	e.22	e.22	e.27	.44	.39	1.8	.18	.32	.07	.00
24	.14	e.24	e.22	e.22	.25	.45	.38	1.2	.17	.46	.06	.00
25	.08	e.24	e.21	e.22	.24	.40	.37	.88	.16	.37	.02	.00
26	.06	e.24	e.21	e.22	.23	.44	.35	.75	.15	.50	.00	.00
27	.06	e.25	e.21	e.22	.23	.46	.34	.85	.14	.61	.00	.00
28	.11	e.25	e.22	e.21	.23	.46	.46	1.2	.13	.47	.00	.00
29	.21	e.25	e.23	e.21	---	.43	.79	1.4	.12	.34	.00	.00
30	.11	e.25	e.24	e.21	---	.53	.91	1.3	.12	.28	.00	.00
31	.11	---	e.24	e.21	---	.60	---	.89	---	.25	.00	---
TOTAL	2.04	7.15	7.02	6.82	6.76	10.80	14.93	34.76	7.43	5.71	2.86	0.00
MEAN	.066	.24	.23	.22	.24	.35	.50	1.12	.25	.18	.092	.000
MAX	.21	.27	.25	.25	.28	.60	.94	3.6	.52	.61	.26	.00
MIN	.00	.15	.20	.18	.21	.23	.33	.50	.12	.08	.00	.00
AC-FT	4.0	14	14	14	13	21	30	69	15	11	5.7	.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 - 2001, BY WATER YEAR (WY)

	1998	1999	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001
MEAN	.37	.54	.39	.37	.36	.59	2.46	6.95	3.81	.56	.81	.070
MAX	.76	.83	.48	.46	.43	.98	3.55	14.5	8.92	1.35	2.32	.21
(WY)	2000	2000	2000	2000	1999	2000	1999	1999	1999	1999	1999	1999
MIN	.066	.24	.23	.22	.24	.35	.50	1.12	.25	.13	.007	.000
(WY)	2001	2001	2001	2001	2001	2001	2001	2001	2001	2000	2000	2001

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1998 - 2001

ANNUAL TOTAL	406.77	106.28	
ANNUAL MEAN	1.11	.29	1.44
HIGHEST ANNUAL MEAN			2.80
LOWEST ANNUAL MEAN			.29
HIGHEST DAILY MEAN	7.0	May 4	3.6
LOWEST DAILY MEAN	.00	Jul 12	.00
ANNUAL SEVEN-DAY MINIMUM	.00	Jul 30	.00
MAXIMUM PEAK FLOW			4.6
MAXIMUM PEAK STAGE			1.24
ANNUAL RUNOFF (AC-FT)	807	211	1050
10 PERCENT EXCEEDS	4.3	.59	4.0
50 PERCENT EXCEEDS	.34	.23	.43
90 PERCENT EXCEEDS	.00	.00	.03

e Estimated.  
a No flow many days during 2000-2001.  
b From rating curve extended above 19 ft<sup>3</sup>/s.

ARKANSAS RIVER BASIN

07108900 ST. CHARLES RIVER AT VINELAND, CO

LOCATION.--Lat 38°14'44", long 104°29'09", in NE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec.6, T.21 S., R.63 W., Pueblo County, Hydrologic Unit 11020002, on left bank at left downstream end of downstream bridge on U.S. Highway 50 Business (revised), 1.6 mi west of Vineland, and 3.0 mi upstream from mouth.

DRAINAGE AREA.--474 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1978 to current year. Records for March 1968 to September 1974 at site 2.6 mi upstream at different datum published as "St. Charles River near Vineland," (station 07108800) are not equivalent because of tributary inflow.

GAGE.--Water-stage recorder with satellite telemetry and crest-stage gage. Datum of gage is 4,581.58 ft above sea level, (Colorado Division of Highways benchmark).

REMARKS.--Records good except for estimated daily discharges, and those above 1,000 ft<sup>3</sup>/s, which are poor. Natural flow of stream affected by diversions for irrigation and industrial uses, and return flow from land irrigated by Bessemer Ditch. 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 discharge since at least 1901, 56,000 ft<sup>3</sup>/s, at site 5.0 mi upstream, date and gage height unknown.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.2	11	10	8.0	e8.5	9.9	8.0	6.4	28	6.0	7.9	10
2	6.5	11	10	7.4	e8.8	9.4	6.4	6.2	21	7.2	7.3	8.7
3	6.8	12	9.6	7.2	9.1	9.6	6.1	9.8	20	6.8	7.1	8.2
4	7.5	12	9.4	9.6	10	9.2	5.4	16	22	7.2	8.9	8.1
5	7.3	11	9.9	8.6	10	9.6	6.3	38	16	6.6	9.0	6.7
6	8.2	10	10	7.6	11	9.6	6.7	31	12	6.8	180	7.5
7	9.7	9.8	10	e8.0	11	7.9	5.9	16	12	6.4	29	18
8	11	9.9	10	e8.5	10	7.3	6.3	13	12	5.6	21	18
9	12	11	10	e9.0	e8.6	7.1	5.4	12	11	5.6	16	13
10	10	13	10	e9.5	e9.4	7.5	6.2	24	8.4	8.6	15	13
11	9.9	15	e9.5	e9.2	10	8.4	9.7	33	7.2	7.0	15	11
12	11	13	e9.0	9.1	8.7	9.9	7.2	24	7.0	6.4	14	12
13	12	13	e9.0	10	11	11	6.8	14	8.7	127	12	10
14	12	14	e9.0	9.8	12	12	5.5	12	9.7	776	11	9.3
15	9.8	14	e10	e9.0	11	26	5.6	12	8.1	378	12	9.3
16	10	12	11	e8.0	11	74	5.7	12	7.2	54	12	9.5
17	9.6	10	15	e7.5	11	76	6.5	18	7.0	23	9.9	12
18	9.4	9.3	14	e8.0	10	64	6.3	37	6.7	19	10	97
19	10	7.8	13	e8.2	8.9	11	5.4	31	6.2	15	9.8	15
20	10	8.7	8.6	e8.5	9.6	8.8	5.8	32	5.9	13	9.6	11
21	10	8.8	e8.6	e9.0	11	7.5	7.2	33	212	14	9.3	10
22	7.9	8.8	e9.0	e8.7	11	7.3	9.2	31	46	14	9.0	9.0
23	8.7	8.7	7.9	8.5	11	7.0	9.3	26	22	12	9.5	8.4
24	9.7	9.3	8.4	9.1	10	6.7	8.1	20	14	11	9.5	7.9
25	9.9	8.7	8.4	9.3	11	7.0	8.5	27	11	13	118	7.1
26	8.6	9.0	8.5	8.8	9.0	7.1	7.4	27	7.1	13	28	6.4
27	8.9	9.1	e9.0	e9.0	10	8.0	7.3	26	6.7	11	13	7.7
28	15	9.1	8.8	e8.5	10	9.0	6.4	26	6.5	13	11	8.3
29	20	9.4	8.7	e8.6	---	8.4	6.5	28	5.6	9.3	9.2	8.0
30	19	9.9	7.9	8.6	---	11	5.9	31	5.4	7.8	9.6	7.4
31	13	---	7.7	8.9	---	8.6	---	46	---	8.1	12	---
TOTAL	320.6	318.3	299.9	267.7	282.6	475.8	203.0	718.4	572.4	1611.4	654.6	387.5
MEAN	10.3	10.6	9.67	8.64	10.1	15.3	6.77	23.2	19.1	52.0	21.1	12.9
MAX	20	15	15	10	12	76	9.7	46	212	776	180	97
MIN	6.5	7.8	7.7	7.2	8.5	6.7	5.4	6.2	5.4	5.6	7.1	6.4
AC-FT	636	631	595	531	561	944	403	1420	1140	3200	1300	769

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1979 - 2001, BY WATER YEAR (WY)

MEAN	14.8	16.4	13.2	13.0	13.6	22.0	70.9	163	81.6	37.0	46.4	19.7
MAX	39.5	32.3	24.3	22.6	25.1	127	306	484	358	108	207	120
(WY)	1983	1999	1998	1998	1998	1998	1987	1980	1983	1995	1982	1982
MIN	3.50	5.59	6.81	6.75	7.68	6.71	5.02	6.06	8.79	7.60	10.2	6.36
(WY)	1979	1979	1981	1981	1995	1995	1981	1991	1990	1981	1989	1980

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1979 - 2001	
ANNUAL TOTAL	10142.4		6112.2			
ANNUAL MEAN	27.7		16.7		42.8	
HIGHEST ANNUAL MEAN					88.4	
LOWEST ANNUAL MEAN					9.52	
HIGHEST DAILY MEAN	315	Aug 18	776	Jul 14	3150	Apr 30 1999
LOWEST DAILY MEAN	5.4	Sep 20	5.4	Apr 4	.25	Apr 25 1979
ANNUAL SEVEN-DAY MINIMUM	5.8	Sep 15	5.8	Apr 14	2.7	Apr 25 1981
MAXIMUM PEAK FLOW			4190	Jul 14	a7560	Aug 11 1982
MAXIMUM PEAK STAGE			12.52	Jul 14	b12.70	Aug 11 1982
ANNUAL RUNOFF (AC-FT)	20120		12120		31020	
10 PERCENT EXCEEDS	69		22		97	
50 PERCENT EXCEEDS	15		9.6		14	
90 PERCENT EXCEEDS	8.3		6.7		6.8	

e Estimated.  
a From rating curve extended above 1750 ft<sup>3</sup>/s.  
b Maximum gage height, 13.68 ft, Apr 30, 1999.

07109500 ARKANSAS RIVER NEAR AVONDALE, CO

LOCATION.--Lat 38°14'53", long 104°23'55", in NE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec.1, T.21 S., R.63 W., Pueblo County, Hydrologic Unit 11020002, on right bank 15 ft downstream from bridge on Sixmile Road, 0.3 mi upstream from Sixmile Creek, and 2.6 mi west of Avondale.

DRAINAGE AREA.--6,327 mi<sup>2</sup>.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1939 to September 1951, February 1965 to current year. Statistical summary computed for 1975 to current year, subsequent to partial regulation by Pueblo Reservoir.

REVISED RECORDS.--WSP 1087: 1942. WSP 1311: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 4,509.53 ft above sea level. Prior to Feb. 1, 1965, at site 550 ft downstream at datum 1.37 ft higher. Feb. 1, 1965 to Sept. 30, 1991, at datum 1.00 ft lower.

REMARKS.--Records good except for estimated daily discharges, which are fair. Natural flow of stream affected by transmountain diversions, storage reservoirs, power developments, ground-water withdrawals, diversions for irrigation and municipal use, and return flow from irrigated areas. Flow partly regulated by Pueblo Reservoir (station 07099350) since Jan. 9, 1974.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	284	588	340	362	364	466	580	788	2080	1490	1150	1050
2	265	520	327	355	359	466	553	606	1780	1420	1190	651
3	247	505	315	365	371	465	559	706	2030	1280	1170	477
4	259	645	312	363	394	463	584	863	2270	1110	997	393
5	248	676	311	365	380	456	740	1150	2360	1040	937	362
6	258	668	303	369	381	461	673	1290	2260	933	1230	349
7	310	590	299	368	384	448	693	942	1860	885	1170	380
8	327	487	299	363	368	453	688	923	1670	825	1320	425
9	367	479	308	360	e360	445	664	850	1610	818	1420	485
10	417	481	309	359	356	407	712	825	1600	1270	1460	468
11	418	496	308	370	369	460	831	807	1720	1360	1460	433
12	394	560	311	370	379	482	884	723	1820	1180	1370	408
13	371	576	319	378	379	414	792	683	1800	1540	1270	375
14	307	579	334	370	379	372	611	685	1820	2880	1210	365
15	310	493	330	377	369	373	638	927	1870	2840	1110	417
16	311	377	325	397	362	434	659	1490	1590	1910	1080	448
17	326	350	319	e370	361	441	733	2140	1360	1080	1060	522
18	322	343	319	e360	352	465	735	2630	1180	1100	1020	660
19	319	338	325	e360	348	462	672	2940	1050	998	939	516
20	324	342	313	358	353	461	662	3160	1010	991	846	415
21	351	346	323	364	360	449	683	2900	1860	1010	678	360
22	380	351	331	371	359	465	775	2190	1610	968	731	361
23	429	354	334	375	365	500	898	2600	1440	961	941	365
24	462	345	345	373	368	917	939	2250	1490	858	1080	354
25	500	344	338	370	364	924	897	1880	1710	905	1210	356
26	507	351	339	367	359	514	877	2230	1750	937	1140	302
27	499	338	340	371	366	486	848	2540	1830	1150	953	265
28	554	341	344	383	380	485	797	2610	1840	1160	719	227
29	659	336	348	369	---	498	802	2690	1860	985	740	229
30	655	335	361	370	---	608	796	2840	1560	955	701	226
31	620	---	363	369	---	559	---	2900	---	1030	699	---
TOTAL	12000	13534	10092	11421	10289	15299	21975	52758	51690	37869	33001	12644
MEAN	387	451	326	368	367	494	732	1702	1723	1222	1065	421
MAX	659	676	363	397	394	924	939	3160	2360	2880	1460	1050
MIN	247	335	299	355	348	372	553	606	1010	818	678	226
AC-FT	23800	26840	20020	22650	20410	30350	43590	104600	102500	75110	65460	25080

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 2001, BY WATER YEAR (WY)

	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
MEAN	532	479	363	384	422	549	878	1665	2699	1881	1350	637															
MAX	1631	985	718	770	1103	994	1884	4170	4971	4432	3210	1511															
(WY)	1985	1985	1987	1985	1985	1985	1987	1980	1997	1995	1984	1982															
MIN	187	170	197	190	223	219	220	517	638	562	423	200															
(WY)	1979	1979	1979	1979	1979	1978	1978	1977	1977	1977	1977	1977															

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1975 - 2001

ANNUAL TOTAL	303813	282572	
ANNUAL MEAN	830	774	a989
HIGHEST ANNUAL MEAN			1626
LOWEST ANNUAL MEAN			411
HIGHEST DAILY MEAN	3110	Jun 3	12300
LOWEST DAILY MEAN	203	Sep 19	b90
ANNUAL SEVEN-DAY MINIMUM	213	Sep 16	118
MAXIMUM PEAK FLOW			c20900
MAXIMUM PEAK STAGE		5.43	d1.60
ANNUAL RUNOFF (AC-FT)	602600	560500	716400
10 PERCENT EXCEEDS	1460	1690	2260
50 PERCENT EXCEEDS	640	496	606
90 PERCENT EXCEEDS	319	327	277

- e Estimated.
- a Average discharge for 20 years (water years 1940-51, 1966-73), 867 ft<sup>3</sup>/s; 628100 acre-ft/yr, prior to completion of Pueblo Dam.
- b Minimum daily discharge for period of record, 50 ft<sup>3</sup>/s, Apr 2, 1940.
- c From rating curve extended above 11,500 ft<sup>3</sup>/s on basis of velocity-area study. Maximum discharge and stage for period of record, about 50000 ft<sup>3</sup>/s, June 18, 1965, gage height, 9.77 ft, datum then in use, from rating curve extended above 6700 ft<sup>3</sup>/s, on basis of records for station near Pueblo and indirect measurements of peak flow on Fountain Creek at Pueblo, Chico Creek near North Avondale, and Arkansas River near Avondale.
- d From floodmark.

ARKANSAS RIVER BASIN

07109500 ARKANSAS RIVER NEAR AVONDALE, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April to October 1976, April 1979 to September 1980, December 1985 to current year.

PERIOD OF DAILY RECORD.--

DISSOLVED OXYGEN: July 1979 to September 1989, August 1988 to current year.  
 pH: July 1979 to September 1980, September 1988 to current year.  
 SPECIFIC CONDUCTANCE: July 1979 to September 1980, December 1985 to current year.  
 WATER TEMPERATURE: July 1979 to September 1980, December 1985 to current year.

INSTRUMENTATION.--Water-quality monitor with satellite telemetry.

REMARKS.--Records for daily dissolved oxygen are poor. Records for daily pH are fair. Records for daily specific conductance are good except for Dec. 16, Jan. 16-22, May 16, 23, June 15, 19, Sept. 5, 10-11, which are fair. Records for daily water temperature are good. Daily data that are not published are either missing or of unacceptable quality. Reported values are representative of the stream based on cross-section comparisons made during the year. Daily median pH records are available from the district office. Water-quality data prior to December 1985 are published in other reports. Instantaneous discharge and selected water-quality data collected as part of a basin-wide water-quality assessment of the lower Arkansas River basin in Colorado are published elsewhere in this report.

EXTREMES FOR PERIOD OF RECORD.--

DISSOLVED OXYGEN: Maximum, 14.0 mg/L, Feb. 16, 1996; minimum, 2.6 mg/L, July 14, 1992.  
 pH: Maximum, 9.1 units, Dec. 3, 1989; minimum, 7.2 units, several days in 1992, 1995-96.  
 SPECIFIC CONDUCTANCE: Maximum, 1,430 microsiemens/cm, Sept. 18, 2001; minimum, 246 microsiemens/cm, June 16, 1980.  
 WATER TEMPERATURE: Maximum, 31.5°C, Aug. 6, 1980; minimum, 0.0°C, on many days.

EXTREMES FOR CURRENT YEAR.--

DISSOLVED OXYGEN: Maximum, 12.4 mg/L, Feb. 1, 28; minimum, 3.8 mg/L, Aug. 6.  
 pH: Maximum, 8.6 units, Jan. 8, Sept. 29-30; minimum, 7.6 units, Oct. 1-3, 21.  
 SPECIFIC CONDUCTANCE: Maximum, 1,430 microsiemens/cm, Sept. 18; minimum, 471 microsiemens/cm, June 29.  
 WATER TEMPERATURE: Maximum, 27.9° C, Aug. 4; minimum, 0.0° C, on many days.

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	9.7	6.7	8.1	10.6	8.5	9.4	11.5	8.9	9.9	11.6	10.1	10.9
2	9.9	6.7	8.1	10.2	8.4	9.4	11.5	9.1	10.2	11.8	9.7	10.8
3	10.0	6.7	8.1	9.9	8.7	9.2	11.5	8.6	10.2	11.7	9.6	10.7
4	9.5	6.7	7.8	10.4	8.2	9.2	11.4	8.6	9.9	10.9	9.0	10.2
5	9.6	6.8	8.0	10.7	8.7	9.6	11.1	8.4	9.7	10.8	8.8	9.8
6	10.2	7.9	8.9	11.5	9.9	10.7	11.7	8.7	9.8	10.6	8.7	9.7
7	10.4	8.4	9.3	10.7	7.9	8.9	10.9	8.4	9.6	10.6	9.0	9.7
8	10.6	8.3	9.1	9.6	8.3	8.9	10.8	8.5	9.3	11.3	9.3	10.3
9	10.1	8.0	8.9	9.7	8.5	9.2	10.8	7.9	9.2	11.7	9.7	10.5
10	10.1	7.5	8.7	10.1	8.8	9.4	10.7	8.0	9.5	11.3	9.1	10.3
11	9.6	7.5	8.3	10.3	8.9	9.5	11.9	9.7	10.7	11.3	9.0	10.1
12	9.7	7.5	8.2	11.0	9.7	10.3	11.5	9.7	10.3	11.4	8.9	10.1
13	10.3	7.7	8.8	11.3	9.7	10.3	11.3	9.5	10.2	10.2	9.1	9.6
14	10.4	8.0	9.1	11.4	9.7	10.4	11.6	9.0	10.1	11.6	9.4	10.3
15	10.5	7.9	9.2	10.8	9.5	10.1	10.7	8.9	10.0	11.5	9.6	10.5
16	10.6	7.8	8.9	11.1	9.3	10.2	11.3	9.3	10.2	11.8	10.1	10.9
17	10.0	7.6	8.7	11.2	9.6	10.5	11.2	9.1	10.1	11.8	9.8	10.4
18	10.1	6.9	8.5	11.3	9.4	10.5	11.0	9.5	10.3	11.3	9.7	10.2
19	10.5	7.0	8.4	11.3	9.1	10.2	11.7	9.5	10.2	11.4	9.4	10.1
20	11.7	7.4	8.8	11.2	9.3	10.4	10.9	9.5	10.1	10.9	9.4	10.1
21	11.1	7.4	9.0	11.5	9.5	10.6	12.2	9.5	10.5	11.1	9.6	10.3
22	11.0	7.4	9.0	12.0	9.9	10.8	11.3	8.8	9.9	11.1	9.5	10.2
23	10.8	7.7	8.8	12.0	10.2	11.0	10.6	9.1	9.9	10.4	9.2	9.9
24	9.4	7.1	8.2	---	---	---	11.1	9.6	10.5	11.2	9.3	10.2
25	9.6	7.3	8.3	---	---	---	11.4	9.9	10.7	10.8	9.1	9.8
26	9.9	7.4	8.5	---	---	---	11.6	10.2	10.8	10.8	9.3	10.1
27	10.1	7.6	8.6	11.8	8.8	10.4	11.5	9.5	10.3	10.9	9.5	10.0
28	9.0	7.7	8.3	11.5	8.8	10.0	10.5	8.8	9.8	11.3	9.7	10.5
29	8.5	7.5	8.1	11.8	8.9	10.3	11.1	9.0	10.1	10.9	9.3	10.2
30	9.7	7.7	8.5	11.4	8.6	9.9	11.3	9.8	10.6	11.1	9.2	10.2
31	10.4	8.1	9.3	---	---	---	11.3	9.9	10.6	11.7	9.6	10.7
MONTH	11.7	6.7	8.6	---	---	---	12.2	7.9	10.1	11.8	8.7	10.2

ARKANSAS RIVER BASIN

07109500 ARKANSAS RIVER NEAR AVONDALE, CO--Continued

OXYGEN DISSOLVED (MG/L), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	12.4	10.4	11.1	11.4	8.7	10.2	9.6	7.6	8.7	9.4	6.5	7.7
2	12.2	9.0	10.6	10.6	8.4	9.5	9.3	7.4	8.2	8.8	6.5	7.7
3	10.8	8.4	9.8	10.6	8.8	9.6	9.1	7.2	8.0	9.1	7.6	8.3
4	11.2	9.0	10.1	11.0	8.6	9.8	8.9	7.4	8.0	8.9	7.9	8.4
5	11.1	8.3	9.8	11.2	9.1	10.0	9.1	7.2	8.0	8.3	7.6	8.0
6	10.5	8.7	9.5	10.6	8.7	9.6	9.0	7.3	8.1	8.4	7.0	7.8
7	10.0	7.9	9.0	10.8	9.0	9.8	9.7	7.3	8.4	8.4	7.1	7.5
8	10.7	8.2	9.5	10.2	7.9	9.1	9.7	7.4	8.4	8.4	6.9	7.6
9	11.8	10.2	10.7	10.4	7.8	9.0	10.0	7.5	8.6	8.1	6.7	7.3
10	11.5	9.7	10.3	9.5	7.9	8.7	10.0	7.5	8.6	8.0	6.7	7.2
11	11.6	9.2	10.2	11.0	9.4	10.0	9.8	8.1	8.9	8.2	6.8	7.4
12	10.4	8.0	9.4	---	---	---	9.5	8.0	8.6	8.0	6.5	7.3
13	10.6	8.5	9.9	9.5	7.4	8.8	9.6	7.7	8.6	8.3	6.4	7.3
14	11.4	9.0	10.5	9.4	7.8	8.6	9.0	7.2	8.0	8.2	6.5	7.2
15	11.2	8.9	10.2	9.8	7.6	8.8	9.5	7.5	8.4	8.2	6.5	7.2
16	11.8	9.4	10.8	10.1	8.2	9.1	9.7	7.7	8.7	8.1	6.9	7.5
17	11.4	9.0	10.5	10.1	8.6	9.4	9.7	7.8	8.7	8.2	7.0	7.9
18	11.2	8.7	10.0	10.0	8.1	9.2	9.8	7.4	8.6	8.3	7.5	8.0
19	11.0	8.1	9.7	10.0	7.7	8.9	9.3	7.4	8.1	8.4	8.0	8.3
20	11.1	8.4	9.6	9.7	7.4	8.6	9.1	7.5	8.2	8.5	7.6	8.1
21	11.2	8.6	10.0	8.9	7.1	8.1	9.6	7.4	8.3	8.8	7.8	8.4
22	11.1	8.1	9.8	9.2	7.3	8.1	10.1	7.5	8.8	8.8	7.6	8.2
23	10.4	7.9	9.1	9.3	7.7	8.4	10.1	7.6	9.0	8.7	7.8	8.4
24	10.3	7.7	8.8	10.3	7.9	9.4	9.9	7.7	8.5	9.1	7.6	8.5
25	11.1	8.3	9.6	10.7	8.0	9.7	9.6	7.4	8.5	9.0	7.8	8.4
26	11.2	8.5	9.6	10.4	9.0	9.7	9.3	7.3	8.3	8.8	8.1	8.5
27	11.6	8.7	10.2	9.6	7.8	8.9	9.5	7.0	8.2	8.7	8.0	8.4
28	12.4	10.1	11.2	9.6	8.1	8.7	9.3	6.8	7.8	8.8	8.0	8.4
29	---	---	---	9.5	8.1	8.8	9.6	6.8	8.0	8.7	8.2	8.5
30	---	---	---	9.0	7.5	8.3	9.7	6.8	8.1	8.9	8.2	8.5
31	---	---	---	9.3	8.0	8.6	---	---	---	8.7	7.8	8.3
MONTH	12.4	7.7	10.0	---	---	---	10.1	6.8	8.4	9.4	6.4	7.9
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	8.5	7.4	8.0	7.5	6.3	6.9	6.9	5.8	6.3	6.3	5.3	5.7
2	8.5	7.3	7.9	7.5	6.1	6.8	6.9	5.8	6.3	6.4	4.9	5.8
3	8.4	7.6	8.1	7.3	6.1	6.6	7.0	5.4	6.3	6.2	4.7	5.5
4	8.3	7.7	8.0	7.2	5.7	6.5	6.7	5.4	6.1	6.6	4.7	5.9
5	8.4	7.6	8.0	7.4	5.7	6.5	6.9	5.5	6.1	7.0	5.5	6.1
6	8.3	7.6	8.0	7.3	5.5	6.4	6.1	3.8	5.5	7.0	5.5	6.1
7	8.4	7.6	8.0	7.2	5.4	6.2	6.6	5.4	6.1	7.5	5.5	6.2
8	8.3	7.1	7.7	7.2	5.4	6.2	6.8	5.8	6.3	7.5	5.7	6.6
9	8.1	7.2	7.7	7.2	5.4	6.2	6.8	6.0	6.4	7.7	6.0	6.8
10	8.2	7.1	7.7	6.8	4.5	5.4	6.8	6.0	6.4	7.2	5.6	6.5
11	8.2	7.2	7.7	6.8	5.3	6.1	6.8	5.9	6.4	7.5	5.8	6.7
12	8.1	6.8	7.4	6.9	5.8	6.4	6.9	5.9	6.4	7.6	6.7	7.1
13	7.8	7.0	7.3	6.6	5.8	6.2	6.8	5.7	6.2	8.4	6.5	7.6
14	7.9	6.9	7.4	6.8	4.0	6.2	6.8	5.7	6.1	7.8	6.1	7.0
15	7.9	7.0	7.5	6.9	6.0	6.5	7.0	5.7	6.2	7.3	6.2	6.8
16	---	---	---	7.0	5.5	6.5	7.0	5.8	6.3	7.2	5.9	6.6
17	---	---	---	6.8	5.7	6.3	7.0	5.8	6.4	6.6	5.8	6.2
18	---	---	---	7.0	5.8	6.4	7.1	5.6	6.4	6.8	5.2	6.3
19	7.9	6.7	7.5	6.8	5.9	6.4	7.0	5.3	6.2	7.1	6.2	6.6
20	7.7	6.3	7.1	7.0	5.8	6.4	7.0	5.5	6.2	7.8	6.5	7.1
21	7.1	4.8	6.4	7.0	5.7	6.3	7.4	4.9	6.0	7.9	6.5	7.2
22	---	---	---	6.9	5.7	6.3	6.4	4.9	5.3	7.7	6.5	7.2
23	---	---	---	7.1	5.7	6.3	7.8	5.9	6.8	8.2	6.8	7.5
24	---	---	---	7.3	6.0	6.6	7.7	6.0	6.7	8.6	6.4	7.7
25	7.4	6.7	7.1	7.2	5.7	6.4	7.0	6.0	6.4	8.3	6.0	7.1
26	7.6	6.8	7.2	7.0	5.6	6.2	6.6	5.7	6.2	8.3	5.5	6.9
27	7.7	6.6	7.2	6.7	5.4	6.0	7.1	5.7	6.2	8.7	5.5	6.9
28	7.6	6.6	7.1	6.6	5.6	6.1	7.4	5.9	6.5	8.4	5.6	6.9
29	7.6	6.6	7.0	6.9	5.6	6.2	7.3	5.9	6.5	9.0	5.6	7.1
30	7.5	6.4	7.0	6.9	5.7	6.3	7.5	5.8	6.5	9.6	5.9	7.4
31	---	---	---	6.9	5.7	6.3	7.4	5.8	6.4	---	---	---
MONTH	---	---	---	7.5	4.0	6.3	7.8	3.8	6.3	9.6	4.7	6.7

## ARKANSAS RIVER BASIN

07109500 ARKANSAS RIVER NEAR AVONDALE, CO--Continued

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	8.1	7.6	7.8	8.2	8.0	8.1	8.4	7.9	8.1	8.3	8.0	8.1
2	8.2	7.6	7.8	8.1	7.9	8.0	8.2	7.9	8.1	8.4	8.1	8.2
3	8.2	7.6	7.8	8.1	7.9	8.0	8.3	7.9	8.0	8.4	8.1	8.3
4	8.3	7.7	7.9	8.1	7.9	7.9	8.3	7.9	8.1	8.3	8.1	8.2
5	8.2	7.7	7.9	8.1	7.9	7.9	8.1	7.9	8.0	8.4	8.0	8.2
6	8.2	7.7	7.9	8.2	7.9	8.0	8.4	7.9	8.1	8.3	8.0	8.1
7	8.2	7.8	8.0	8.2	7.9	8.0	8.4	8.0	8.2	8.5	8.0	8.3
8	8.1	7.8	7.9	8.2	8.0	8.1	8.5	8.0	8.2	8.6	8.2	8.3
9	8.1	7.8	8.0	8.1	7.9	8.0	8.4	7.9	8.1	8.3	8.1	8.2
10	8.1	7.9	8.0	8.2	8.0	8.0	8.3	8.0	8.1	8.4	8.1	8.2
11	8.3	7.9	8.1	8.2	8.0	8.0	8.4	8.0	8.2	8.3	8.1	8.2
12	8.3	8.0	8.1	8.3	8.1	8.1	8.2	8.0	8.1	8.4	8.1	8.2
13	8.2	7.9	8.0	8.3	8.1	8.2	8.2	8.0	8.1	8.2	8.0	8.1
14	8.2	7.8	8.0	8.2	7.9	8.1	8.2	7.9	8.0	8.3	8.0	8.1
15	8.3	7.8	8.0	8.3	8.0	8.1	8.4	8.0	8.1	8.4	8.1	8.2
16	8.2	7.8	8.0	8.2	8.0	8.1	8.3	8.0	8.1	8.4	8.1	8.2
17	8.2	7.7	7.9	8.2	8.0	8.1	8.2	7.9	8.1	8.3	8.1	8.2
18	8.3	7.7	7.9	8.3	8.1	8.2	8.2	8.0	8.1	8.3	8.1	8.2
19	8.3	7.8	7.9	8.4	8.1	8.2	8.3	7.9	8.1	8.4	8.1	8.2
20	8.3	7.7	7.9	8.4	8.1	8.2	8.4	8.0	8.2	8.3	8.0	8.2
21	8.4	7.6	7.9	8.3	8.0	8.1	8.3	8.0	8.2	8.4	8.1	8.2
22	8.3	7.7	7.9	8.3	7.9	8.1	8.3	8.0	8.1	8.2	8.0	8.1
23	8.2	7.7	7.9	8.3	8.0	8.1	8.2	8.0	8.1	8.3	8.0	8.2
24	8.2	7.9	8.0	8.3	7.8	8.1	8.3	8.0	8.1	8.4	8.1	8.2
25	8.2	7.9	8.0	8.3	7.8	8.0	8.2	8.0	8.1	8.3	8.0	8.1
26	8.1	7.8	7.9	8.3	7.8	8.0	8.4	8.0	8.1	8.3	8.0	8.2
27	8.0	7.7	7.9	8.4	7.9	8.1	8.2	7.9	8.1	8.2	7.9	8.0
28	8.0	7.7	7.9	8.3	8.0	8.1	8.2	7.9	8.1	8.4	7.9	8.2
29	8.0	7.9	7.9	8.3	7.9	8.1	8.4	7.9	8.1	8.4	8.1	8.2
30	8.2	8.0	8.1	8.3	7.9	8.0	8.2	7.9	8.0	8.3	8.0	8.2
31	8.2	8.0	8.1	---	---	---	8.3	8.0	8.1	8.4	8.1	8.2
MONTH	8.4	7.6	7.9	8.4	7.8	8.1	8.5	7.9	8.1	8.6	7.9	8.2
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	8.4	8.1	8.3	8.1	7.8	7.9	8.1	7.9	8.0	8.4	8.0	8.2
2	8.3	8.0	8.1	8.2	7.8	8.0	8.1	7.9	8.0	8.2	8.0	8.1
3	8.3	7.9	8.0	8.1	7.9	8.0	8.3	7.8	8.0	8.1	7.9	8.0
4	8.5	8.1	8.3	8.2	7.9	8.0	8.2	7.9	8.1	8.1	7.9	8.0
5	8.5	8.2	8.3	8.1	7.9	8.0	8.2	7.9	8.0	8.1	7.8	8.0
6	8.5	8.2	8.3	8.1	7.8	7.9	8.3	8.0	8.1	8.2	7.9	8.0
7	8.5	8.1	8.3	8.1	7.8	7.9	8.3	8.0	8.2	8.3	8.1	8.2
8	8.2	8.0	8.1	8.2	7.8	7.9	8.5	8.1	8.3	8.4	8.1	8.2
9	8.4	8.1	8.2	8.2	7.8	8.0	8.5	8.2	8.3	8.4	8.1	8.2
10	8.2	8.0	8.1	8.1	7.7	7.9	8.4	8.0	8.2	8.4	8.1	8.2
11	8.2	8.0	8.1	8.1	7.7	7.9	8.4	8.1	8.2	8.3	8.1	8.2
12	8.2	8.0	8.1	8.0	7.8	7.9	8.3	8.1	8.2	8.3	8.1	8.2
13	8.2	7.8	8.0	8.1	7.8	7.9	8.3	8.1	8.2	8.3	8.1	8.2
14	8.1	7.9	7.9	8.0	7.8	7.9	8.3	7.9	8.1	8.3	8.1	8.2
15	8.3	7.8	8.0	8.1	7.8	7.9	8.3	8.1	8.2	8.4	8.1	8.2
16	8.4	8.1	8.2	8.1	7.8	8.0	8.3	8.1	8.2	8.4	8.1	8.2
17	8.4	8.1	8.2	8.1	7.8	7.9	8.3	8.1	8.2	---	---	---
18	8.4	8.2	8.2	8.1	7.8	8.0	8.2	8.0	8.1	---	---	---
19	8.4	8.1	8.2	8.2	8.0	8.0	8.2	7.9	8.1	---	---	---
20	8.3	8.0	8.1	8.1	7.9	8.0	8.1	8.0	8.1	---	---	---
21	8.3	8.1	8.1	8.2	7.9	8.0	8.2	7.9	8.0	---	---	---
22	8.2	8.0	8.1	8.1	7.8	7.9	8.2	7.9	8.0	---	---	---
23	8.2	7.9	8.0	8.2	7.8	8.0	8.2	7.9	8.1	8.2	8.0	8.1
24	8.1	7.8	7.9	8.1	7.8	7.9	8.1	7.9	8.1	8.2	8.0	8.1
25	8.2	7.8	8.0	8.1	7.9	8.0	8.2	7.9	8.1	8.2	8.1	8.1
26	8.2	7.8	8.0	8.2	8.0	8.1	8.1	7.9	8.0	8.2	7.9	8.1
27	8.1	7.8	7.9	8.2	7.9	8.0	8.3	7.9	8.1	8.2	8.1	8.1
28	8.1	7.8	8.0	8.2	7.9	8.0	8.3	7.9	8.1	8.2	8.0	8.1
29	---	---	---	8.2	7.9	8.0	8.3	8.0	8.2	8.3	8.1	8.2
30	---	---	---	8.1	7.9	8.0	8.3	8.0	8.2	8.3	8.1	8.2
31	---	---	---	8.1	7.9	8.0	---	---	---	8.2	8.1	8.1
MONTH	8.5	7.8	8.1	8.2	7.7	8.0	8.5	7.8	8.1	---	---	---

ARKANSAS RIVER BASIN

07109500 ARKANSAS RIVER NEAR AVONDALE, CO--Continued

PH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	8.2	8.1	8.2	8.1	7.9	8.0	8.4	8.2	8.3	7.9	7.8	7.8
2	8.2	8.1	8.2	8.2	8.0	8.1	8.4	8.2	8.3	8.0	7.9	7.9
3	8.3	8.1	8.2	8.2	8.0	8.1	8.5	8.2	8.3	8.1	7.9	8.0
4	8.3	8.1	8.2	8.2	8.0	8.1	8.5	8.2	8.4	8.2	8.0	8.1
5	8.3	8.1	8.2	8.3	8.0	8.1	8.5	8.3	8.4	8.1	7.9	8.1
6	8.3	8.1	8.2	8.3	8.0	8.1	8.5	7.9	8.2	8.2	7.9	8.0
7	8.2	8.1	8.2	8.3	8.0	8.1	8.4	8.2	8.3	8.2	7.9	8.0
8	8.2	8.0	8.1	8.3	8.0	8.1	8.5	8.1	8.3	8.1	7.9	8.0
9	8.2	8.1	8.2	8.3	8.0	8.1	8.4	8.2	8.3	8.1	8.0	8.0
10	8.2	8.0	8.2	8.2	7.8	8.0	8.4	8.2	8.3	8.2	8.0	8.1
11	8.3	8.1	8.2	8.1	7.8	8.0	8.4	8.2	8.3	8.2	7.9	8.0
12	8.3	8.1	8.2	8.2	8.0	8.1	8.5	8.1	8.3	8.2	7.9	8.1
13	8.3	8.2	8.2	8.1	7.9	8.0	8.5	8.1	8.3	8.3	7.9	8.1
14	8.3	8.2	8.2	8.0	7.8	8.0	8.4	8.1	8.2	8.4	8.0	8.1
15	8.3	8.1	8.2	8.1	7.8	8.0	8.3	8.0	8.1	8.4	7.9	8.1
16	---	---	---	8.1	8.0	8.1	---	---	---	8.4	8.1	8.2
17	---	---	---	8.1	8.0	8.1	---	---	---	8.3	8.1	8.2
18	---	---	---	8.1	8.0	8.0	---	---	---	8.2	7.7	7.9
19	8.3	8.2	8.3	8.1	8.0	8.1	---	---	---	8.1	7.9	8.0
20	8.4	8.2	8.3	8.2	8.0	8.1	---	---	---	8.2	7.9	8.0
21	8.3	8.0	8.1	8.2	8.1	8.2	8.1	8.0	8.0	8.3	8.0	8.1
22	---	---	---	8.3	8.1	8.2	8.1	7.9	8.0	8.2	8.0	8.1
23	---	---	---	8.3	8.1	8.2	8.2	7.9	8.1	8.3	8.0	8.1
24	---	---	---	8.3	8.1	8.2	8.2	7.9	8.1	8.3	8.0	8.1
25	---	---	---	8.3	8.0	8.2	8.2	7.8	7.9	8.3	8.0	8.1
26	8.1	7.9	8.0	8.3	8.1	8.2	8.1	7.8	8.0	8.5	8.0	8.1
27	8.1	7.9	8.0	8.2	8.0	8.1	8.1	7.9	8.0	8.5	8.0	8.2
28	8.1	7.9	8.0	8.3	8.1	8.2	8.1	7.9	8.0	8.5	8.1	8.2
29	8.0	7.9	8.0	8.4	8.2	8.3	8.1	7.9	8.0	8.6	8.2	8.3
30	8.0	7.9	7.9	8.4	8.2	8.3	8.1	7.9	8.0	8.6	8.1	8.3
31	---	---	---	8.4	8.2	8.3	8.2	7.9	8.0	---	---	---
MONTH	---	---	---	8.4	7.8	8.1	---	---	---	8.6	7.7	8.1

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	1020	973	994	914	861	883	1060	1030	1050	1020	1000	1010
2	1040	982	1010	927	902	914	1080	1040	1060	1020	1000	1010
3	1040	1010	1030	938	889	921	1080	1030	1050	1020	1000	1010
4	1030	990	1010	889	812	830	1080	1030	1060	1030	1010	1020
5	1070	1020	1040	812	789	799	1070	1030	1050	1040	1020	1030
6	1070	1020	1040	821	797	804	1080	1040	1060	1050	1020	1030
7	1060	977	1020	888	819	846	1090	1050	1070	1050	1030	1040
8	1030	990	1010	940	888	918	1090	1050	1080	1040	1020	1030
9	1020	943	966	927	896	914	1090	1060	1070	1030	999	1020
10	948	879	906	915	885	902	1090	1040	1060	1010	986	999
11	953	879	915	908	862	892	1080	1040	1050	1010	987	999
12	951	916	937	863	829	843	1070	1040	1060	999	971	987
13	990	909	940	844	826	835	1060	1010	1040	1010	972	983
14	1040	990	1020	843	820	832	1060	1010	1030	1000	972	987
15	1030	979	1000	951	841	884	1070	1030	1040	995	957	974
16	1020	989	1010	1000	951	981	1080	1050	1070	957	903	927
17	1020	969	994	1010	984	996	1080	1040	1060	979	913	941
18	1010	981	994	1020	991	1000	1060	1010	1040	992	954	972
19	1020	990	1010	1030	999	1010	1050	1020	1030	1010	960	985
20	1020	976	1000	1040	1010	1030	1060	1020	1040	1040	987	1010
21	1000	947	973	1060	1030	1040	1060	1010	1030	1020	981	1010
22	975	921	945	1060	1020	1050	1060	1010	1030	1050	978	1010
23	976	925	950	1070	1020	1040	1060	1020	1040	1030	1000	1010
24	1020	920	974	1060	1030	1050	1060	1020	1040	1000	976	993
25	999	945	964	1070	1040	1050	1050	1020	1030	1010	975	994
26	945	907	929	1060	1030	1040	1060	1020	1030	1010	982	998
27	933	899	915	1090	1020	1050	1070	1030	1050	1010	970	993
28	964	869	917	1090	1040	1060	1080	1040	1060	1010	969	985
29	949	832	899	1070	1040	1060	1080	1040	1050	1030	992	1010
30	899	842	869	1070	1040	1060	1050	1020	1030	1060	1020	1040
31	910	839	880	---	---	---	1030	1000	1010	1070	1030	1050
MONTH	1070	832	970	1090	789	951	1090	1000	1050	1070	903	1000

## ARKANSAS RIVER BASIN

07109500 ARKANSAS RIVER NEAR AVONDALE, CO--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	1050	1010	1040	1020	935	961	869	845	858	728	706	715
2	1040	1010	1030	957	912	935	867	843	857	803	705	777
3	1040	1010	1030	935	903	921	850	829	842	803	728	757
4	1040	1020	1030	935	901	917	846	757	826	785	743	765
5	1040	1010	1030	934	904	918	777	739	756	779	713	753
6	1050	1020	1030	925	903	916	796	771	783	777	733	758
7	1040	1020	1030	922	899	912	798	763	782	821	775	802
8	1050	1020	1030	916	888	906	796	765	779	803	772	783
9	1040	1000	1020	915	887	904	797	762	780	792	774	781
10	1040	1000	1020	944	892	923	771	750	761	805	769	784
11	1060	1000	1030	959	910	934	808	686	768	804	761	783
12	1060	1030	1050	1000	920	945	801	747	771	820	792	802
13	1080	1030	1050	1030	984	1000	802	747	768	815	782	798
14	1070	1040	1050	1030	990	1010	839	800	819	812	759	792
15	1070	1040	1060	1170	999	1020	821	732	779	759	664	725
16	1070	1040	1060	1170	907	942	784	749	770	664	625	644
17	1070	1040	1060	929	893	908	769	749	757	---	---	---
18	1070	1030	1050	923	884	897	784	750	760	---	---	---
19	1060	1030	1050	963	914	932	806	783	795	---	---	---
20	1060	1030	1050	959	936	947	806	775	791	---	---	---
21	1050	1020	1040	958	930	941	794	765	782	---	---	---
22	1040	1010	1030	948	907	924	780	723	758	---	---	---
23	1050	1020	1040	907	874	892	737	715	727	643	610	622
24	1060	1020	1040	902	678	734	726	700	711	712	621	649
25	1070	1020	1040	847	674	711	720	698	708	672	622	656
26	1060	1030	1040	883	847	869	720	702	709	631	603	621
27	1040	1010	1030	909	857	871	723	702	712	612	601	608
28	1030	1010	1020	921	886	905	730	706	719	608	590	604
29	---	---	---	925	890	908	721	698	710	606	583	601
30	---	---	---	919	811	892	719	700	710	612	589	604
31	---	---	---	928	868	904	---	---	---	641	594	618
MONTH	1080	1000	1040	1170	674	913	869	686	768	---	---	---
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	655	634	646	522	500	512	569	553	561	932	616	720
2	648	615	637	531	508	520	565	545	559	867	705	800
3	615	607	610	539	518	529	671	562	583	910	856	870
4	610	568	597	557	533	546	645	549	604	---	---	---
5	625	578	597	556	532	543	564	498	539	916	885	898
6	609	574	587	569	551	560	1120	509	697	922	887	902
7	638	595	608	581	554	569	648	576	618	1160	874	915
8	727	606	643	578	556	570	585	554	574	---	---	---
9	653	626	637	574	498	546	554	535	544	---	---	---
10	647	621	631	724	500	544	542	533	539	939	899	910
11	622	590	606	600	510	577	543	528	536	955	902	927
12	595	575	584	572	537	561	547	527	537	952	908	927
13	587	562	576	818	525	595	554	540	545	961	923	941
14	580	549	566	1050	490	700	645	546	583	964	918	937
15	578	560	566	836	512	614	686	607	645	966	847	928
16	---	---	---	644	516	552	685	626	652	953	875	894
17	---	---	---	645	596	632	636	614	626	953	869	890
18	---	---	---	598	583	590	630	609	620	1430	893	993
19	586	567	573	598	581	589	632	605	617	961	891	929
20	589	566	582	587	570	578	666	589	610	997	949	973
21	798	516	639	582	561	570	671	646	658	1000	956	982
22	---	---	---	582	566	574	653	573	632	1000	947	967
23	---	---	---	594	567	580	597	554	585	1000	943	962
24	---	---	---	628	578	605	565	552	557	979	907	940
25	---	---	---	798	619	672	937	506	577	939	893	919
26	513	486	500	861	621	692	673	571	586	1000	927	957
27	494	482	488	733	570	637	619	575	590	1040	998	1010
28	543	477	490	692	620	639	678	619	650	1090	1040	1060
29	511	471	490	621	600	610	682	632	649	1090	1040	1070
30	524	494	508	609	577	594	655	629	641	1090	1020	1050
31	---	---	---	590	557	578	763	629	673	---	---	---
MONTH	---	---	---	1050	490	586	1120	498	600	---	---	---

07109500 ARKANSAS RIVER NEAR AVONDALE, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	22.5	14.9	18.8	12.3	8.8	10.6	5.9	2.7	4.5	3.6	.2	2.0
2	22.4	15.0	18.7	11.3	8.6	10.0	5.0	1.5	3.4	4.1	.4	2.3
3	22.7	14.7	18.7	12.1	9.2	10.6	5.7	1.1	3.5	4.6	.4	2.6
4	19.8	16.4	18.2	12.5	8.9	10.9	5.8	1.9	4.0	5.7	1.2	3.5
5	17.8	13.3	15.6	11.7	9.3	10.7	6.1	2.0	4.2	5.8	1.8	3.9
6	13.3	10.3	11.3	10.3	7.6	9.0	6.0	2.3	4.4	6.0	2.1	4.2
7	12.8	9.4	11.0	10.0	6.9	8.5	6.6	2.6	4.6	6.1	3.2	4.4
8	12.2	10.0	11.2	9.9	6.6	8.1	6.6	4.5	5.3	4.4	.8	2.8
9	16.5	10.3	13.2	9.4	5.7	7.6	7.4	3.3	5.4	3.0	.0	1.7
10	17.1	10.8	14.0	7.3	5.7	6.2	5.7	2.3	3.7	4.8	.2	2.6
11	18.2	12.3	15.3	6.7	5.0	6.1	2.4	.0	1.2	4.5	.5	2.8
12	18.6	13.7	16.1	6.1	3.7	5.0	.5	.0	.2	4.5	.4	2.7
13	18.0	12.0	14.8	7.0	3.6	5.3	.3	.0	.1	3.5	2.3	2.9
14	16.9	10.7	13.9	6.9	3.3	5.2	2.6	.0	1.0	4.0	.1	2.2
15	16.7	10.4	13.6	7.0	4.0	5.5	4.9	1.1	3.0	3.2	.0	1.7
16	17.6	11.9	14.6	6.1	2.5	4.4	3.3	.5	2.1	2.2	.0	1.0
17	17.9	11.5	14.7	5.5	1.8	3.8	4.8	.0	2.3	.6	.0	.1
18	18.0	11.8	14.8	6.0	1.9	4.1	3.4	.2	1.8	.5	.0	.1
19	17.0	11.0	14.2	6.6	2.2	4.5	3.3	.0	1.5	.7	.0	.1
20	17.0	11.7	14.3	6.4	2.2	4.4	4.1	1.4	2.7	.6	.0	.1
21	15.6	10.5	13.3	7.0	2.3	4.8	1.8	.0	.8	3.1	.0	1.2
22	14.0	12.2	13.3	7.2	4.3	5.6	4.2	.0	1.9	3.6	.0	1.6
23	13.7	11.7	12.6	7.0	4.0	5.5	4.2	.8	2.7	4.7	1.4	2.9
24	16.5	12.3	14.1	6.9	2.5	4.9	2.7	.5	1.8	4.5	.3	2.5
25	16.0	11.7	13.8	6.9	3.2	5.0	1.7	.9	1.1	4.9	1.6	3.0
26	15.5	10.8	13.2	6.0	2.4	4.3	3.3	.2	1.6	4.4	.7	2.7
27	15.3	10.8	13.2	7.0	3.2	5.0	3.4	.0	1.6	3.2	.8	2.1
28	14.1	13.0	13.4	6.6	2.9	4.8	5.4	1.9	3.7	3.6	.2	1.8
29	15.9	12.2	14.0	5.9	2.2	4.2	5.0	2.6	3.9	4.7	1.0	2.6
30	14.8	11.4	13.1	6.4	2.3	4.4	3.6	.7	2.3	5.4	.8	3.1
31	13.5	10.6	11.9	---	---	---	4.1	.9	2.4	5.0	.8	3.0
MONTH	22.7	9.4	14.3	12.5	1.8	6.3	7.4	.0	2.7	6.1	.0	2.3
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	3.2	.0	1.5	8.6	2.1	5.4	14.2	7.2	10.6	18.7	10.9	14.9
2	5.0	.0	2.4	10.2	5.1	7.5	15.5	9.1	12.2	16.0	9.8	11.7
3	7.2	2.5	4.7	8.2	4.2	6.4	15.7	9.3	12.4	9.9	8.6	9.3
4	6.6	2.3	4.5	10.8	5.1	7.8	14.5	10.8	12.2	9.4	8.3	8.9
5	7.7	2.1	5.0	8.8	4.9	7.0	14.2	8.8	11.4	9.1	8.6	8.8
6	5.9	3.7	4.4	10.4	5.9	8.1	12.0	9.3	10.7	14.8	8.3	11.3
7	8.7	3.8	6.0	9.0	6.3	7.7	13.8	6.7	10.2	17.1	11.1	14.0
8	6.1	.8	3.3	11.9	6.3	8.9	14.5	8.6	11.7	18.4	11.5	15.0
9	2.2	.0	.8	12.2	6.2	9.2	15.1	8.2	11.6	18.8	11.9	15.5
10	2.8	.0	1.1	9.4	5.2	7.5	12.7	8.5	10.7	18.1	12.0	15.2
11	6.0	.0	2.9	5.3	4.0	4.7	10.9	6.8	8.9	16.2	11.8	14.1
12	7.1	1.7	4.4	9.4	3.0	6.1	12.4	7.5	9.9	20.2	12.8	16.4
13	7.9	2.3	5.2	12.5	4.9	8.6	13.7	7.6	10.7	20.8	13.4	17.1
14	5.9	2.8	3.5	11.7	6.2	8.8	15.0	8.8	11.8	21.1	14.0	17.4
15	7.1	1.9	4.3	9.9	4.2	7.1	14.8	8.7	11.8	20.1	12.9	16.5
16	4.7	2.3	2.9	9.2	4.6	6.8	12.6	9.3	10.5	17.4	11.3	14.4
17	6.2	1.9	3.9	6.5	4.5	5.0	12.9	7.8	10.2	13.9	11.4	12.2
18	7.5	2.9	5.1	10.0	4.1	7.0	15.2	8.6	11.8	---	---	---
19	9.8	3.7	6.7	12.7	5.5	9.0	16.5	10.8	13.5	13.2	11.2	11.9
20	9.5	4.1	7.0	14.2	6.5	10.4	14.7	11.0	12.7	15.6	10.4	12.4
21	7.2	4.6	5.3	15.8	8.8	12.1	15.7	9.1	12.3	15.9	8.8	12.2
22	8.0	3.3	5.7	13.0	9.4	11.3	12.4	8.3	9.5	17.1	10.1	13.4
23	9.5	5.3	7.3	13.8	8.8	11.0	14.6	6.9	10.6	16.0	11.0	13.5
24	9.9	5.5	7.6	10.0	5.2	6.7	15.9	8.6	12.3	18.4	11.2	14.2
25	9.9	3.7	6.9	6.0	4.5	5.3	16.9	9.4	13.2	17.1	11.1	14.1
26	9.0	4.9	6.8	7.6	5.2	6.3	17.9	10.6	14.2	16.6	11.5	13.9
27	6.5	2.5	4.1	11.1	6.0	8.3	17.6	10.9	14.4	16.8	11.9	14.1
28	4.7	1.2	3.0	10.4	7.8	8.9	17.7	11.3	14.7	16.6	11.7	14.1
29	---	---	---	11.4	6.8	9.0	18.0	11.2	14.9	15.6	12.6	14.2
30	---	---	---	14.3	7.5	10.6	17.4	11.2	14.5	15.7	11.9	14.0
31	---	---	---	11.8	8.2	9.9	---	---	---	17.9	12.9	15.2
MONTH	9.9	.0	4.5	15.8	2.1	8.0	18.0	6.7	11.9	---	---	---

## ARKANSAS RIVER BASIN

07109500 ARKANSAS RIVER NEAR AVONDALE, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	19.3	13.3	16.1	23.5	17.2	20.2	26.4	20.5	23.3	22.0	18.7	20.4
2	19.8	13.1	16.2	23.8	17.6	20.7	26.2	20.3	23.2	23.9	18.8	21.5
3	18.3	13.2	15.5	24.3	18.1	21.1	27.2	20.4	23.7	25.2	19.0	22.1
4	18.2	13.8	15.7	25.3	17.5	21.3	27.9	20.7	24.2	25.5	18.4	21.8
5	18.5	13.8	15.9	25.3	18.6	22.0	27.0	21.3	24.1	25.8	18.0	21.8
6	19.5	14.4	16.6	25.9	18.5	22.2	26.0	19.0	22.9	26.4	18.6	22.1
7	18.1	14.2	16.1	26.9	19.1	22.7	27.2	20.9	23.9	22.5	17.5	19.9
8	19.5	14.1	16.8	26.9	19.1	22.8	27.2	20.3	23.6	19.3	15.1	16.5
9	20.2	14.3	17.3	26.7	19.2	22.9	23.9	20.2	22.0	20.7	13.6	17.1
10	21.2	14.4	17.8	24.9	18.9	22.0	25.7	20.4	22.8	23.0	14.5	18.6
11	21.5	14.8	18.0	25.9	19.0	22.3	26.8	20.7	23.5	24.4	15.9	20.0
12	19.9	14.7	17.3	26.0	19.2	22.5	26.8	20.7	23.6	23.7	16.4	19.9
13	18.3	14.1	16.0	24.3	19.3	21.6	26.1	20.8	23.4	24.3	16.3	20.2
14	19.3	13.3	16.0	23.3	17.4	20.6	26.2	21.3	23.4	25.4	18.3	21.6
15	19.1	13.3	16.6	23.9	18.7	21.2	23.3	21.1	22.2	24.5	18.9	21.4
16	---	---	---	25.5	18.8	21.9	24.7	19.6	22.2	24.4	18.8	21.3
17	---	---	---	23.4	19.0	21.3	25.2	19.5	22.4	22.2	18.6	20.4
18	---	---	---	25.1	19.0	21.9	26.4	19.7	23.0	22.3	16.5	19.5
19	20.1	---	---	23.6	19.1	21.4	27.1	19.8	23.4	23.6	17.0	20.2
20	22.0	15.4	18.6	25.9	18.9	22.3	25.9	20.7	23.3	23.5	16.4	19.9
21	20.0	15.2	17.8	25.6	19.8	22.5	26.2	20.4	23.1	23.9	16.3	19.9
22	---	---	---	26.5	19.5	22.8	26.4	20.5	23.3	22.8	16.9	19.8
23	---	---	---	24.4	20.2	22.4	26.5	19.8	23.1	22.5	16.2	19.2
24	---	---	---	25.7	19.9	22.5	26.6	20.1	23.3	22.1	15.1	18.6
25	---	---	---	26.3	19.5	22.6	23.9	17.4	20.5	22.4	15.1	18.8
26	22.3	17.1	19.6	24.3	20.0	22.3	25.5	18.6	21.8	23.6	15.6	19.6
27	23.2	16.8	19.8	24.5	20.3	22.4	25.8	19.6	22.7	24.1	15.9	20.0
28	21.9	17.2	19.6	26.5	19.7	23.0	25.4	19.1	22.0	22.9	15.7	19.4
29	22.4	17.3	19.9	27.0	19.8	23.4	25.6	18.7	22.0	22.6	16.2	19.2
30	22.9	17.4	20.1	27.1	20.0	23.4	25.8	19.0	22.4	23.3	15.7	19.5
31	---	---	---	27.6	20.6	23.8	24.1	20.3	22.0	---	---	---
MONTH	---	---	---	27.6	17.2	22.1	27.9	17.4	22.9	26.4	13.6	20.0

07116500 HUERFANO RIVER NEAR BOONE, CO

LOCATION.--Lat 38°13'30", long 104°15'37", in NE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec.18, T.21 S., R.61 W., Pueblo County, Hydrologic Unit 11020006, at right upstream end of bridge on U.S. Highway 50, 0.8 mi upstream from mouth, and 1.6 mi south of Boone.

DRAINAGE AREA.--1,875 mi<sup>2</sup>.

PERIOD OF RECORD.--January 1922 to September 1925 (monthly and annual discharge only, published in WSP 1311 as "near Nepesta"), October 1979 to current year.

GAGE.--Water-stage recorder with satellite telemetry and crest-stage gages. Datum of gage is 4,443.75 ft above sea level. Jan. 1922 to Sept. 1925, at different datum.

REMARKS.--Records fair except for estimated daily discharges and discharges above 350 ft<sup>3</sup>/s, which are poor. Natural flow of stream affected by diversions for irrigation and return flow from irrigated areas. Several measurements of water temperature and specific conductance were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report. Instantaneous discharge and selected water-quality data collected as part of a basin-wide water-quality assessment of the lower Arkansas River basin in Colorado are published elsewhere in this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.36	9.1	5.8	e4.2	e3.7	e5.2	9.1	3.7	22	.00	.00	.61
2	.31	7.8	5.4	e4.5	e4.5	5.4	7.5	3.8	19	.00	.00	.00
3	.36	9.1	5.7	4.6	e6.5	5.8	9.9	5.0	19	.00	.00	.00
4	.60	11	6.1	4.5	7.6	5.7	10	7.2	16	.00	.00	.00
5	.78	11	5.4	3.6	9.4	5.3	7.5	20	21	.00	.00	.00
6	1.0	18	4.8	3.6	8.2	5.0	6.9	21	17	.00	.00	.00
7	1.1	19	4.8	2.9	8.2	4.9	7.9	6.4	16	.00	.00	.00
8	1.3	13	3.9	3.6	e7.0	4.6	13	8.2	12	.00	.00	.00
9	1.3	14	4.0	e4.8	e6.0	4.2	12	14	12	.00	.00	.00
10	1.4	11	e4.0	e4.5	e6.8	4.5	10	14	11	.00	.00	.00
11	1.5	e10	e3.5	4.2	e7.6	4.9	16	14	7.3	.00	.00	.00
12	1.3	e9.0	e3.5	4.6	e8.3	4.6	23	14	5.2	.00	.00	.00
13	1.3	e9.2	e3.8	3.4	9.1	4.3	8.0	13	4.9	.22	.00	.00
14	1.4	e9.5	e4.5	e3.5	8.1	4.6	6.8	13	4.7	50	.00	.00
15	1.6	e10	e5.0	e3.4	6.7	4.9	6.7	10	4.0	23	.00	.00
16	1.8	8.9	e5.4	e3.2	6.6	4.8	6.8	8.7	3.7	.42	.00	.00
17	1.9	8.9	e6.0	e2.7	6.3	4.4	6.4	16	3.6	.10	.00	.00
18	2.0	8.1	6.0	e2.8	6.7	4.9	6.4	35	3.3	.04	.00	.00
19	1.9	8.3	e5.8	e3.0	6.4	6.6	6.3	29	3.2	.02	.00	.00
20	2.0	7.5	4.7	e3.5	6.0	49	5.6	33	2.8	.01	.00	.00
21	2.0	8.5	e4.5	e3.9	5.6	39	6.2	35	3.0	.00	.00	.00
22	2.2	5.9	e5.4	e4.2	5.5	30	7.1	34	3.7	.00	.00	.00
23	2.6	5.4	e4.5	e4.5	5.4	22	13	20	1.4	.00	.00	.00
24	2.9	5.5	e3.7	e4.9	5.9	18	10	19	.52	.00	.00	.00
25	2.9	5.4	e3.5	e5.2	6.0	16	9.5	20	.44	.00	44	.00
26	2.9	6.2	e3.5	5.1	5.3	16	6.3	22	.22	.00	249	.00
27	3.2	4.5	e3.6	4.8	e5.0	18	5.3	20	.13	.00	10	.00
28	3.9	5.1	e3.7	e4.5	e5.0	13	4.2	20	.03	.00	4.3	.00
29	5.8	5.4	4.0	4.6	---	10	3.7	23	.00	.00	2.7	.00
30	4.6	6.5	e4.0	4.2	---	11	3.7	22	.00	.00	1.8	.00
31	5.8	---	e4.0	3.9	---	11	---	33	---	.00	1.2	---
TOTAL	64.01	270.8	142.5	124.9	183.4	347.6	254.8	557.0	217.14	73.81	313.00	0.61
MEAN	2.06	9.03	4.60	4.03	6.55	11.2	8.49	18.0	7.24	2.38	10.1	.020
MAX	5.8	19	6.1	5.2	9.4	49	23	35	22	50	249	.61
MIN	.31	4.5	3.5	2.7	3.7	4.2	3.7	3.7	.00	.00	.00	.00
AC-FT	127	537	283	248	364	689	505	1100	431	146	621	1.2

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 - 2001, BY WATER YEAR (WY)

	MEAN	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
MEAN	10.6	17.0	16.2	21.4	24.7	22.2	34.1	157	100	25.4	29.4	6.36											
MAX	46.7	46.0	40.2	65.1	65.2	129	224	1113	667	226	254	26.5											
(WY)	1985	1986	1998	1984	1998	1984	1998	1987	1983	1995	1981	1995											
MIN	.000	.000	.000	.000	.13	2.12	.47	.53	.16	.000	.28	.000											
(WY)	1990	1990	1990	1990	1990	1990	1990	1992	1981	1989	2000	1980											

SUMMARY STATISTICS

	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1980 - 2001
ANNUAL TOTAL	8508.95	2549.57	
ANNUAL MEAN	23.2	6.99	38.8
HIGHEST ANNUAL MEAN			153
LOWEST ANNUAL MEAN			5.09
HIGHEST DAILY MEAN	389	249	2900
LOWEST DAILY MEAN	.00	.00	a.00
ANNUAL SEVEN-DAY MINIMUM	.00	.00	.00
MAXIMUM PEAK FLOW		1260	b8030
MAXIMUM PEAK STAGE		10.09	c10.90
ANNUAL RUNOFF (AC-FT)	16880	5060	28120
10 PERCENT EXCEEDS	48	16	63
50 PERCENT EXCEEDS	6.7	4.5	8.0
90 PERCENT EXCEEDS	.00	.00	.00

e Estimated.

a No flow many days most years.

b From rating curve extended above 1130 ft<sup>3</sup>/s. Maximum discharge for period of record, 19400 ft<sup>3</sup>/s, Aug 1, 1923, gage height, 9.4 ft, datum then in use, from slope-area measurement of peak flow.

c From flood marks. Maximum gage height for statistical period, 11.75 ft, Jul 19, 1995.



07119700 ARKANSAS RIVER AT CATLIN DAM NEAR FOWLER, CO

LOCATION.--Lat 38°07'15", long 103°54'49", in NE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec.20, T.22 S., R.58 W., Otero County, Hydrologic Unit 11020005, on right bank at Catlin Canal flume gage, 2.2 mi downstream from diversion dam for Catlin Canal, 2.3 mi downstream from Apishapa River, and 6.0 mi east of Fowler.

DRAINAGE AREA.--10,901 mi<sup>2</sup>, of which 54 mi<sup>2</sup> is probably noncontributing.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1964 to current year. Statistical summary computed for 1975 to current year.

GAGE.--Water-stage recorders with satellite telemetry on river and on Catlin Canal and Parshall flume on canal. Datum of river gage is 4,245.92 ft above sea level. Datum of canal gage is 4,257.87 ft above sea level. Prior to May 13, 1971, river gage at site 2.2 mi upstream at datum 24.08 ft higher, and canal gage at site 1.7 mi upstream at datum 3.26 ft higher.

REMARKS.--Records fair, except for estimated daily discharges, which are poor. Discharge computed by combining discharge of river below canal with that of Catlin Canal. Natural flow of stream affected by transmountain diversions, storage reservoirs, ground-water withdrawals, diversions for irrigation, and return flow from irrigated areas. Flow partly regulated by Pueblo Reservoir (station 07099350) since Jan. 9, 1974.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	249	444	398	497	149	144	473	456	1700	1140	655	513
2	234	417	432	493	164	232	391	443	1370	1060	705	805
3	210	381	431	480	163	258	360	367	1290	971	735	444
4	186	367	429	482	162	266	369	434	1290	832	773	331
5	200	464	427	477	182	257	379	690	1510	710	555	279
6	e192	e458	424	474	190	254	515	1110	1490	744	490	251
7	e217	e448	421	483	185	263	506	926	1340	598	678	231
8	244	e437	430	474	200	251	509	733	1030	467	656	257
9	e250	e432	427	296	172	239	518	766	931	309	800	285
10	e269	430	419	249	161	263	540	691	808	288	966	306
11	308	430	407	248	193	262	662	678	749	711	1110	297
12	305	446	e450	248	205	292	701	674	932	650	1030	268
13	293	502	e445	244	186	318	693	581	1140	697	1040	245
14	e288	515	439	232	182	280	628	535	1150	1570	957	224
15	e255	635	490	225	176	339	512	528	1140	2510	874	264
16	236	555	466	189	163	373	505	854	1100	1820	812	265
17	224	475	456	e200	162	415	518	1760	1010	951	811	273
18	229	449	462	147	161	376	583	1940	863	633	775	345
19	e224	436	449	e370	159	270	566	1920	632	724	708	403
20	218	426	486	e420	148	349	493	1980	516	580	623	305
21	e220	420	453	e380	149	395	487	2060	534	771	552	259
22	235	e410	465	e340	149	406	498	1580	1320	806	462	228
23	262	e405	509	e310	144	385	584	1250	995	748	415	222
24	285	e400	495	286	139	407	674	2270	846	723	451	241
25	318	417	487	259	137	755	589	1810	854	621	557	223
26	e325	428	534	236	128	732	521	1580	1050	688	906	217
27	e319	427	478	224	123	458	511	1950	1170	777	672	202
28	329	420	523	191	130	423	492	1700	1160	958	476	185
29	543	425	517	186	---	419	443	1640	1240	835	308	162
30	588	412	512	175	---	448	445	1740	1350	714	350	146
31	486	---	518	169	---	532	---	1830	---	543	367	---
TOTAL	8741	13311	14279	9684	4562	11061	15665	37476	32510	26149	21269	8676
MEAN	282	444	461	312	163	357	522	1209	1084	844	686	289
MAX	588	635	534	497	205	755	701	2270	1700	2510	1110	805
MIN	186	367	398	147	123	144	360	367	516	288	308	146
AC-FT	17340	26400	28320	19210	9050	21940	31070	74330	64480	51870	42190	17210

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 2001, BY WATER YEAR (WY)

	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
MEAN	417	450	398	431	400	425	624	1324	2114	1390	1028	452															
MAX	1234	925	804	854	1249	912	1526	3901	4420	4108	2384	1209															
(WY)	1985	1985	2000	1985	1985	1998	1987	1999	1995	1995	1984	1982															
MIN	91.0	152	133	175	163	175	86.6	212	432	286	526	84.5															
(WY)	1979	1979	1991	1990	2001	1978	1978	1981	1977	1977	1978	1977															

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1975 - 2001
ANNUAL TOTAL	246360	203383	
ANNUAL MEAN	673	557	a789
HIGHEST ANNUAL MEAN			1327
LOWEST ANNUAL MEAN			351
HIGHEST DAILY MEAN	1930	Jun 3	2510 Jul 15
LOWEST DAILY MEAN	140	Sep 21	123 Feb 27
ANNUAL SEVEN-DAY MINIMUM	166	Sep 17	135 Feb 23
MAXIMUM PEAK FLOW		d3080	Jul 15
MAXIMUM PEAK STAGE		g5.27	Jul 15
ANNUAL RUNOFF (AC-FT)	488700	403400	571800
10 PERCENT EXCEEDS	1120	1100	1680
50 PERCENT EXCEEDS	630	448	470
90 PERCENT EXCEEDS	266	192	206

- e Estimated.
- a Average discharge for 9 years (water years 1965-73), 636 ft<sup>3</sup>/s, 460800 acre-ft/yr, prior to completion of Pueblo Dam.
- b Maximum daily discharge for period of record, 43200 ft<sup>3</sup>/s, Jun 18, 1965.
- c Also occurred Sep 12, 1974.
- d Maximum combined instantaneous discharge.
- f Maximum discharge and stage for period of record, 43200 ft<sup>3</sup>/s, Jun 18, 1965, gage height, 7.95 ft, site and datum then in use, from rating curve extended above 13000 ft<sup>3</sup>/s, on basis of flow-over-dam computation of peak flow.
- g Gage height at Arkansas River gage.

ARKANSAS RIVER BASIN

07119700 ARKANSAS RIVER AT CATLIN DAM NEAR FOWLER, CO--Continued

WATER-QUALITY RECORDS

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

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: May 1990 to current year.  
 WATER TEMPERATURE: May 1990 to current year.

INSTRUMENTATION.--Water-quality monitor with satellite telemetry.

REMARKS.--Records for daily specific conductance are fair. Records for daily water temperature are good. Daily data that are not published are either missing or of unacceptable quality. Reported specific conductance values are representative of the stream based on cross-section comparisons made during the year. Instantaneous discharge and selected water-quality data collected as part of a basin-wide water-quality assessment of the lower Arkansas River basin in Colorado are published elsewhere in this report.

EXTREMES FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 1,800 microsiemens/cm, Apr. 27, 1991; minimum, 244 microsiemens/cm, May 25, 1993.  
 WATER TEMPERATURE: Maximum, 31.4°C, July 8, 2001; minimum, 0.0°C, on many days.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 1,750 microsiemens/cm, Feb. 9; minimum, 533 microsiemens/cm, July 15.  
 WATER TEMPERATURE: Maximum, 31.4°C, July 8; minimum, 0.0°C, on many days.

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	1530	1440	1490	1180	1140	1150	1360	1330	1340	1360	1320	1340
2	1500	1440	1480	1170	1130	1150	1350	1320	1340	1340	1320	1330
3	1530	1450	1480	1210	1160	1200	1360	1330	1340	1340	1320	1330
4	1590	1450	1500	1240	1210	1230	1350	1330	1350	1360	1300	1320
5	1490	1450	1470	1220	1100	1150	1390	1340	1360	1320	1300	1310
6	1530	1440	1480	1120	1070	1100	1390	1360	1370	1340	1310	1320
7	1580	1500	1530	1130	1080	1100	1380	1370	1370	1360	1290	1310
8	1570	1390	1440	1180	1120	1150	1370	1360	1360	1340	1300	1320
9	1400	1380	1390	1260	1180	1220	1390	1360	1370	1520	1320	1430
10	1400	1320	1370	1270	1240	1260	1390	1360	1380	1520	1470	1490
11	1340	1230	1290	1260	1240	1250	1440	1380	1420	1510	1470	1490
12	1290	1230	1250	1280	1230	1250	1490	1400	1450	1510	1460	1490
13	1290	1250	1270	1450	1150	1220	1460	1420	1440	1500	1450	1480
14	1300	1250	1270	1260	1140	1190	1470	1400	1440	1520	1460	1490
15	1350	1300	1330	1280	1180	1230	1400	1300	1340	1510	1450	1480
16	1300	1240	1270	1250	1220	1230	1380	1320	1360	1570	1470	1500
17	1250	1200	1230	1380	1250	1310	1410	1380	1390	1560	1460	1500
18	1210	1150	1190	1350	1340	1340	1410	1360	1380	1670	1530	1620
19	1210	1110	1170	1360	1340	1350	1440	1360	1410	1680	1500	1610
20	1270	1200	1220	1350	1330	1340	1360	1350	1350	1520	1400	1460
21	1220	1160	1200	1350	1320	1340	1430	1360	1400	1430	1380	1410
22	1160	1070	1130	1340	1320	1320	1430	1360	1390	1440	1360	1410
23	1090	1040	1060	---	---	---	1360	1330	1340	1370	1320	1350
24	1040	1010	1030	1370	1340	1350	1370	1340	1360	1430	1360	1400
25	1060	1020	1040	1360	1340	1350	1380	1350	1370	1410	1380	1400
26	1070	1020	1050	1370	1340	1350	1370	1310	1340	1460	1390	1430
27	1160	1010	1070	1360	1330	1340	1390	1320	1360	1510	1400	1440
28	1160	1110	1140	1360	1340	1350	1330	1310	1320	1560	1460	1520
29	1150	1030	1100	1390	1340	1350	1340	1330	1340	1510	1460	1490
30	1300	1150	1210	1360	1330	1340	1370	1330	1350	1560	1490	1520
31	1220	1140	1180	---	---	---	1340	1320	1330	1590	1510	1540
MONTH	1590	1010	1270	---	---	---	1490	1300	1370	1680	1290	1440



## ARKANSAS RIVER BASIN

07119700 ARKANSAS RIVER AT CATLIN DAM NEAR FOWLER, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
OCTOBER			NOVEMBER			DECEMBER			JANUARY			
1	21.7	14.1	18.0	10.5	6.3	8.3	5.2	.8	2.7	2.3	.0	.8
2	21.4	14.2	17.9	10.1	6.6	8.3	3.5	.0	1.5	4.1	.0	1.7
3	23.0	13.8	17.8	10.7	7.1	8.8	3.9	.0	1.5	3.8	.0	1.6
4	20.4	15.2	17.6	12.1	6.8	9.3	4.6	.0	2.0	5.1	.0	2.4
5	17.3	11.8	14.8	11.5	7.8	9.4	5.4	.2	2.7	5.5	.7	2.9
6	11.8	7.5	9.0	7.8	5.7	6.7	5.1	.7	2.9	5.3	1.2	3.0
7	11.2	6.9	8.8	7.5	4.4	5.9	4.7	.9	2.7	6.4	2.4	3.7
8	11.2	7.9	9.6	8.1	4.0	5.8	7.1	3.0	4.5	3.9	.0	1.7
9	15.6	7.8	11.3	8.1	3.4	5.5	6.5	1.9	4.1	2.9	.0	1.0
10	16.7	8.8	12.5	5.2	3.5	3.9	4.3	.0	2.0	5.2	.0	1.9
11	18.9	11.0	14.6	4.2	2.2	3.4	.1	.0	.0	5.5	.0	2.2
12	17.6	13.0	15.2	4.2	.0	2.0	.0	.0	.0	5.0	.0	2.0
13	18.2	11.8	14.6	4.6	.3	2.1	.0	.0	.0	3.1	.8	2.3
14	16.8	9.9	13.2	4.4	.0	2.2	.0	.0	.0	3.9	.0	1.2
15	15.2	9.6	11.7	5.3	2.2	3.7	.4	.0	.1	2.8	.0	.8
16	18.2	11.4	14.1	4.6	1.2	2.8	1.3	.0	.3	.6	.0	.0
17	18.1	10.7	14.1	4.1	.4	2.0	2.8	.0	1.0	.6	.0	.1
18	18.1	10.8	14.1	4.4	.0	2.0	2.0	.0	.6	1.5	.0	.3
19	17.1	9.9	13.3	5.6	.3	2.7	.7	.0	.2	.0	.0	.0
20	17.0	10.3	13.3	5.6	.6	2.9	3.3	.0	1.3	.0	.0	.0
21	15.7	9.3	12.4	6.0	.7	3.2	.3	.0	.0	.0	.0	.0
22	15.5	10.0	12.9	5.9	3.0	4.6	2.1	.0	.8	.0	.0	.0
23	13.4	11.5	12.3	---	---	---	3.4	.0	1.4	2.1	.0	.6
24	17.2	11.7	13.9	6.3	1.3	3.2	1.2	.0	.3	3.7	.0	1.1
25	16.1	10.4	13.1	6.3	1.8	3.7	.0	.0	.0	4.0	.0	1.2
26	15.3	9.4	12.2	5.3	1.0	2.9	1.7	.0	.4	4.6	.0	1.5
27	15.7	9.4	12.4	6.3	1.9	3.7	1.6	.0	.5	.6	.0	.1
28	13.3	12.2	12.9	6.0	1.6	3.5	4.3	.3	2.2	2.3	.0	.7
29	15.2	11.0	12.8	4.9	.6	2.6	5.3	2.2	3.4	4.7	.0	1.6
30	13.8	10.7	12.1	5.7	.9	3.0	3.1	.0	1.5	6.4	.0	2.4
31	13.0	8.4	10.8	---	---	---	3.7	.1	1.6	6.3	.0	2.5
MONTH	23.0	6.9	13.3	---	---	---	7.1	.0	1.4	6.4	.0	1.3
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	3.9	.0	1.0	12.8	.2	5.8	16.3	7.8	11.6	24.4	15.0	19.3
2	5.0	.0	1.6	12.3	3.3	7.3	17.9	9.8	13.6	18.3	10.2	13.9
3	7.9	.7	3.7	10.9	3.4	7.0	19.3	12.2	15.2	10.2	8.2	9.0
4	8.7	1.2	4.3	13.7	4.9	8.7	17.0	12.9	14.8	8.9	8.2	8.6
5	10.2	.9	5.1	11.7	4.8	8.1	19.6	11.5	14.7	8.7	7.7	8.2
6	6.4	4.0	4.7	13.8	6.5	9.8	14.4	9.9	12.6	15.2	7.9	11.2
7	11.4	3.3	6.3	11.6	6.7	9.1	15.2	7.4	11.0	18.1	12.6	14.9
8	4.9	.0	2.0	15.1	6.3	10.2	15.4	9.3	12.1	21.6	14.2	17.7
9	3.7	.0	.7	14.2	6.5	10.6	16.8	8.9	12.6	22.9	16.0	19.3
10	5.6	.0	1.4	11.1	5.8	8.8	15.9	10.5	12.9	22.0	16.4	19.2
11	7.6	.0	2.6	5.8	3.9	4.8	11.3	5.8	7.5	19.3	15.5	17.3
12	8.5	.0	3.5	9.5	2.1	5.9	12.8	7.4	10.0	22.9	15.2	18.9
13	10.2	2.4	5.6	12.6	5.4	9.1	15.4	8.8	11.8	25.2	16.9	20.7
14	5.6	1.1	2.6	13.3	6.5	9.3	17.2	9.3	13.0	26.3	17.6	21.6
15	9.0	.3	3.8	9.4	---	---	17.3	10.1	13.5	25.8	18.1	21.9
16	3.5	.8	1.7	10.0	3.6	6.4	12.8	8.6	10.4	24.8	19.0	21.7
17	7.9	.4	3.2	5.4	3.7	4.5	14.0	7.8	10.3	20.1	15.5	17.9
18	10.0	2.1	5.4	10.6	3.3	6.6	17.6	9.5	13.3	18.4	13.9	16.0
19	13.2	3.0	7.4	14.0	5.5	9.4	18.2	13.4	15.5	17.5	14.4	16.1
20	12.8	3.4	7.5	16.0	6.8	11.6	16.3	11.7	13.6	18.7	13.1	15.4
21	5.7	2.5	4.1	16.3	10.3	13.1	16.9	9.7	13.1	16.3	12.2	14.3
22	9.4	1.8	4.9	14.6	10.3	12.6	14.1	8.7	12.4	19.2	12.3	15.6
23	11.8	4.3	7.5	15.1	9.9	12.1	15.3	6.2	10.6	21.3	15.3	18.2
24	9.8	4.1	6.5	10.1	5.2	7.3	17.8	10.4	14.0	19.1	14.9	17.2
25	12.4	1.5	6.3	5.6	4.8	5.1	20.6	12.4	16.4	19.9	14.4	17.2
26	11.7	4.0	7.0	6.1	4.2	5.1	22.5	14.2	18.1	20.0	16.1	18.3
27	5.2	.4	2.9	10.7	5.0	7.4	23.4	15.2	18.8	20.1	16.1	18.1
28	4.7	.0	1.7	11.3	7.7	9.1	21.8	14.9	17.8	19.4	16.2	17.9
29	---	---	---	13.0	7.2	9.9	23.0	13.5	17.7	20.1	16.1	18.1
30	---	---	---	15.3	8.8	11.7	22.3	13.8	18.0	18.8	15.6	17.3
31	---	---	---	12.5	8.7	10.4	---	---	---	20.7	15.0	17.8
MONTH	13.2	.0	4.1	16.3	---	---	23.4	5.8	13.6	26.3	7.7	16.7





ARKANSAS RIVER BASIN

07123000 ARKANSAS RIVER AT LA JUNTA, CO

LOCATION.--Lat 37°59'26", long 103°31'55", in SE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec.2, T.24 S., R.55 W., Otero County, Hydrologic Unit 11020005, on right bank at upstream side of bridge on State Highway 109 in La Junta, and 450 ft upstream from King Arroyo.

DRAINAGE AREA.--12,210 mi<sup>2</sup>, of which 115 mi<sup>2</sup> is probably noncontributing.

PERIOD OF RECORD.--May to August 1889, September 1893 to December 1895 (gage heights, discharge measurements, and flood data only), April to October 1903, June to November 1908 (gage heights and discharge measurements only), April 1912 to current year. Monthly discharge only for some periods, published in WSP 1311. Published as "near La Junta" in 1903. Statistical summary computed for 1975 to current year.

REVISED RECORDS.--WSP 1341: Drainage area. WSP 1731: 1922.

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 4,039.60 ft above sea level. See WSP 1711 or 1731 for history of changes prior to June 13, 1940. June 13, 1940 to June 6, 1967, water-stage recorder at site 300 ft upstream at present datum.

REMARKS.-- No estimated daily discharges. Records fair. Natural flow of stream affected by transmountain diversions, storage reservoirs, power developments, ground-water withdrawals and diversions for irrigation of about 400,000 acres, and return flow from irrigated areas. Flow partly regulated by Pueblo Reservoir (station 07099350) since Jan. 9, 1974. Instantaneous discharge and selected water-quality data collected as part of a basin-wide water-quality assessment of the lower Arkansas River basin in Colorado are published elsewhere in this report.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	77	73	92	96	96	82	32	46	602	326	74	81
2	99	73	90	95	96	78	30	35	415	321	131	190
3	87	62	90	92	103	88	27	39	270	325	159	452
4	62	54	97	97	93	92	25	66	383	292	159	180
5	41	59	94	97	92	93	28	93	515	218	159	107
6	46	61	87	97	93	93	31	50	559	149	111	75
7	57	54	87	96	96	95	39	64	498	137	97	71
8	61	51	82	95	98	93	28	40	910	71	197	55
9	67	50	77	91	87	84	25	44	571	58	149	51
10	78	56	70	95	90	87	27	46	335	40	280	61
11	87	63	57	90	101	89	77	60	96	38	461	67
12	84	67	62	91	93	83	37	62	65	199	526	69
13	71	71	181	101	83	95	40	66	212	183	564	46
14	47	102	255	100	78	103	46	64	267	317	481	44
15	42	295	222	100	79	67	47	57	129	1190	434	45
16	37	233	185	106	77	42	41	75	60	1250	363	50
17	36	212	126	95	83	170	35	403	59	301	415	70
18	43	206	111	87	83	278	28	563	79	246	419	83
19	45	204	103	108	84	150	24	475	48	354	369	114
20	40	212	181	94	83	66	25	546	38	346	321	143
21	41	181	135	125	81	69	27	626	55	260	276	107
22	37	176	121	107	84	57	27	498	231	258	142	76
23	41	184	117	119	81	52	31	255	297	199	60	54
24	71	178	112	108	79	50	108	537	298	161	45	49
25	99	167	116	108	79	39	159	1070	290	125	45	53
26	100	161	117	109	80	49	156	573	316	155	87	52
27	116	163	106	114	78	37	103	664	373	158	450	47
28	121	120	117	112	78	45	69	766	445	86	347	67
29	179	103	114	116	---	44	58	663	349	66	257	86
30	211	98	101	105	---	45	44	735	400	59	117	80
31	135	---	103	105	---	38	---	665	---	50	113	---
TOTAL	2358	3789	3608	3151	2428	2553	1474	9946	9165	7938	7808	2725
MEAN	76.1	126	116	102	86.7	82.4	49.1	321	306	256	252	90.8
MAX	211	295	255	125	103	278	159	1070	910	1250	564	452
MIN	36	50	57	87	77	37	24	35	38	38	45	44
AC-FT	4680	7520	7160	6250	4820	5060	2920	19730	18180	15750	15490	5410

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 2001, BY WATER YEAR (WY)

	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
MEAN	169	128	122	166	157	113	139	907	531	334	124																
MAX	1189	545	335	569	620	517	821	3375	4307	3634	1345	464															
(WY)	1985	1987	1987	1998	1985	1998	1998	1999	1995	1995	1984	1982															
MIN	8.82	4.21	13.5	9.50	6.37	19.6	6.67	21.9	103	71.6	66.2	9.59															
(WY)	1978	1979	1976	1976	1976	1978	1978	1981	1988	2000	1987	1977															

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1975 - 2001
ANNUAL TOTAL	33627	56943	
ANNUAL MEAN	91.9	156	a291
HIGHEST ANNUAL MEAN			832
LOWEST ANNUAL MEAN			78.6
HIGHEST DAILY MEAN	937	Jun 4	1250 Jul 16
LOWEST DAILY MEAN	26	Jan 15	24 Apr 19
ANNUAL SEVEN-DAY MINIMUM	30	Jan 9	28 Apr 17
MAXIMUM PEAK FLOW			2260 Jul 16
MAXIMUM PEAK STAGE			9.16 Jul 16
ANNUAL RUNOFF (AC-FT)	66700	112900	d,e,f30000
10 PERCENT EXCEEDS	183	371	d,g15.55
50 PERCENT EXCEEDS	61	93	210700
90 PERCENT EXCEEDS	37	42	614
			102
			24

- e Estimated.
- a Average discharge for 61 years (water years 1913-73), 244 ft<sup>3</sup>/s; 176800 acre-ft/yr, prior to completion of Pueblo Dam.
- b Maximum daily discharge for period of record, 61100 ft<sup>3</sup>/s, Jun 4, 1921.
- c Minimum daily discharge for period of record, no flow, Jan 20-22 and Mar 20-22, 1915.
- d Maximum discharge and stage for period of record, 200000 ft<sup>3</sup>/s, Jun 4, 1921, gage height, 18.40 ft, site and datum
- e then in use, from rating curve extended above 15000 ft<sup>3</sup>/s, on basis of slope-area measurement of peak flow.
- f Peak discharge (estimated) includes an estimated 7600 ft<sup>3</sup>/s overflow that bypassed the main channel.
- g Gage height reflects the discharge flowing in the main channel.

ARKANSAS RIVER BASIN

07124000 ARKANSAS RIVER AT LAS ANIMAS, CO

LOCATION.--Lat 38°04'51", long 103°13'09", in SE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec.3, T.23 S., R.52 W., Bent County, Hydrologic Unit 11020009, on right bank at upstream side of bridge on U.S. Highway 50, 1.1 mi north of courthouse in Las Animas, and 4.2 mi upstream from Purgatoire River.

DRAINAGE AREA.--14,417 mi<sup>2</sup>, of which 441 mi<sup>2</sup> are probably noncontributing.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May to November 1898 (gage heights only), August to November 1909 (gage heights and discharge measurements only), May 1939 to current year. Statistical summary computed for 1975 to current year, subsequent to partial regulation by Pueblo Reservoir.

REVISED RECORDS.--WSP 1341: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 3,883.97 ft above sea level. May 13 to Nov. 12, 1898, and Aug. 1 to Nov. 10, 1909, nonrecording gages near present site at different datums. May 23, 1939, to Apr. 27, 1967, water-stage recorder at site 0.4 mi downstream at datum 9.00 ft lower.

REMARKS.--Records good except for Feb. 5 to Sept. 18, and estimated daily discharges, which are poor. Natural flow of stream affected by transmountain diversions, storage reservoirs, power developments, ground-water withdrawals, diversions for irrigation, and return flow from irrigated areas. Flow partly regulated by Pueblo Reservoir (station 07099350) since Jan. 9, 1974.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	86	118	207	152	e146	132	33	38	635	350	88	124
2	89	86	198	149	e145	134	35	36	587	290	89	114
3	96	72	189	147	e143	133	31	36	407	311	102	210
4	96	64	184	148	e141	137	27	e38	328	314	118	284
5	84	55	179	147	e139	140	27	72	454	279	118	169
6	69	54	176	146	e137	139	26	92	547	200	114	129
7	73	53	177	144	135	140	26	84	524	153	105	98
8	81	51	177	141	139	139	26	82	909	135	120	88
9	86	51	176	139	127	139	26	64	841	89	159	76
10	96	52	174	140	105	134	28	58	611	73	189	65
11	105	54	159	137	142	137	33	57	333	61	314	65
12	111	52	146	134	147	136	48	55	195	53	471	68
13	110	52	160	136	139	134	35	59	165	159	479	66
14	104	52	243	132	138	140	34	78	267	228	420	53
15	89	117	279	131	134	129	33	95	253	616	390	58
16	81	256	276	125	132	78	32	82	173	1620	355	55
17	74	241	215	119	130	64	32	189	124	513	376	54
18	69	227	205	91	133	151	33	467	108	214	412	72
19	64	229	185	117	133	199	32	532	110	282	407	73
20	62	230	209	119	133	106	31	529	92	325	359	83
21	60	238	205	150	130	65	34	614	e90	268	301	104
22	60	240	176	151	131	46	39	675	e109	230	260	84
23	61	250	196	164	134	49	39	445	227	214	191	62
24	70	253	194	156	134	46	34	262	277	214	155	49
25	83	255	170	e147	131	39	63	1010	286	178	145	44
26	102	262	168	e150	132	35	95	854	287	152	145	42
27	108	266	171	e150	131	41	96	585	314	267	157	39
28	123	260	175	e147	129	40	74	821	395	185	371	35
29	156	226	175	e147	---	32	60	634	398	130	225	38
30	188	215	160	e147	---	33	50	730	333	110	178	50
31	195	---	153	e146	---	36	---	681	---	96	128	---
TOTAL	2931	4631	5857	4349	3770	3103	1212	10054	10379	8309	7441	2551
MEAN	94.5	154	189	140	135	100	40.4	324	346	268	240	85.0
MAX	195	266	279	164	147	199	96	1010	909	1620	479	284
MIN	60	51	146	91	105	32	26	36	90	53	88	35
AC-FT	5810	9190	11620	8630	7480	6150	2400	19940	20590	16480	14760	5060

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 2001, BY WATER YEAR (WY)

	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	
MEAN	162	151	144	189	197	124	130	602	896	494	314	113												
MAX	1092	810	398	641	761	422	877	4043	4263	3339	1343	373												
(WY)	1985	1998	1998	1998	1985	1998	1987	1999	1995	1995	1999	1984												
MIN	5.13	6.05	8.40	8.45	18.5	9.44	10.8	14.1	36.4	30.5	55.2	9.12												
(WY)	1978	1975	1978	1978	1978	1975	1978	1981	1988	1981	1987	1977												

ANNUAL TOTAL				43626			64587																	
ANNUAL MEAN				119			177			a293														
HIGHEST ANNUAL MEAN										841														1995
LOWEST ANNUAL MEAN										84.1														1976
HIGHEST DAILY MEAN				757	Jun 4		1620	Jul 16		b22600	May 3	1999												
LOWEST DAILY MEAN				39	Jul 12		26	Apr 6		c3.0	Nov 30	1974												
ANNUAL SEVEN-DAY MINIMUM				41	Jul 7		27	Apr 4		4.1	Sep 26	1977												
MAXIMUM PEAK FLOW							2200	Jul 16		d32900	May 2	1999												
MAXIMUM PEAK STAGE							8.25	Jul 16		f14.02	May 2	1999												
ANNUAL RUNOFF (AC-FT)				86530			128100			212500														
10 PERCENT EXCEEDS				240			357			580														
50 PERCENT EXCEEDS				86			135			119														
90 PERCENT EXCEEDS				52			41			17														

- e Estimated.
- a Average discharge for 34 years (water years 1940-73), 203 ft<sup>3</sup>/s; 147100 acre-ft/yr, prior to completion of Pueblo Dam.
- b Maximum daily discharge for period of record, 25800 ft<sup>3</sup>/s, May 20, 1955.
- c Minimum daily discharge for period of record, 0.9 ft<sup>3</sup>/s, Jul 31, Aug 1 and 3, 1964.
- d From rating curve extended above 21,600 ft<sup>3</sup>/s, maximum discharge and stage for period of record, 44000 ft<sup>3</sup>/s, May 20, 1955, gage height, 15.03 ft, site and datum then in use, from current-meter measurement and slope-area measurement of over-flow channel.
- f From floodmark.

07124000 ARKANSAS RIVER AT LAS ANIMAS, CO--Continued

WATER-QUALITY RECORDS

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 with satellite telemetry.

REMARKS.--Records for daily specific conductance are fair except for Nov. 28-29, Dec. 3, and Jan. 18 to Sept. 30, which are poor.

Records for daily water temperature are poor. Daily data that are not published are either missing or of unacceptable quality. Reported values are representative of the stream based on cross-section comparisons made during the year. Instantaneous discharge and selected water-quality data collected as part of a basin-wide water-quality assessment of the lower Arkansas River basin in Colorado are published elsewhere in this report.

EXTREMES FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 7,950 microsiemens/cm, Jan. 22, 1986; minimum, 310 microsiemens/cm, July 21, 1990.

WATER TEMPERATURE: Maximum, 34.7°C, July 21, 1998; minimum, 0.0°C, on many days.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 3,590 microsiemens/cm, Apr. 6; minimum, 884 microsiemens/cm, July 16.

WATER TEMPERATURE: Maximum, 33.6°C, Aug. 6; minimum, 0.0°C, on many days.

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	2540	2380	2460	2560	1870	2270	2430	2370	2410	2580	2490	2530
2	2460	2360	2410	2760	2560	2640	2450	2410	2430	2580	2540	2550
3	2440	2370	2410	2770	2640	2700	2480	2410	2440	2560	2510	2530
4	2410	2350	2390	2940	2770	2840	2490	2420	2450	2570	2520	2540
5	2730	2380	2560	2950	2890	2920	2500	2430	2460	2540	2490	2520
6	2790	2730	2760	2960	2830	2890	2470	2410	2440	2550	2520	2530
7	2750	2620	2690	2920	2780	2860	2480	2440	2460	2560	2520	2540
8	2620	2540	2560	2950	2860	2910	2480	2450	2460	2580	2510	2540
9	2550	2500	2530	2920	2840	2870	2480	2450	2460	2580	2510	2540
10	2500	2350	2420	2870	2780	2810	2480	2440	2460	2570	2510	2540
11	2350	2300	2330	2800	2670	2720	2660	2440	2520	2580	2540	2550
12	2310	2250	2280	2820	2740	2780	2680	2490	2560	2600	2560	2570
13	2320	2260	2290	2850	2730	2790	2620	2410	2540	2600	2570	2580
14	2550	2290	2420	2810	2720	2760	2430	1840	2180	2620	2540	2570
15	2630	2510	2560	2740	1670	2290	1950	1840	1930	2610	2560	2580
16	2650	2600	2620	1900	1640	1770	1990	1790	1910	2570	2450	2500
17	2760	2640	2700	1990	1900	1950	2200	1960	2070	2620	2450	2540
18	2930	2730	2850	2040	1970	2010	2350	2200	2250	2920	2540	2720
19	3020	2900	2940	2070	2010	2050	2420	2300	2350	2860	2500	2680
20	3010	2950	2990	2100	2060	2090	2420	2280	2350	---	---	---
21	3050	2840	2990	2120	1960	2060	2280	2080	2160	---	---	---
22	3010	2830	2950	2110	2020	2060	2350	2210	2280	---	---	---
23	3050	2820	2970	2040	1930	2010	2360	2270	2320	2450	2350	2400
24	2910	2860	2890	2110	1940	2060	2420	2280	2330	2510	2410	2470
25	2930	2440	2710	2120	2100	2110	2520	2420	2460	---	---	---
26	2440	2310	2360	2120	2100	2110	2500	2420	2460	2550	2530	2540
27	2340	2290	2310	2120	2100	2110	2490	2370	2430	2530	2440	2490
28	2320	2090	2200	2110	2070	2080	2420	2310	2370	2480	2420	2460
29	2120	1940	2040	2370	2260	2310	2420	2310	2370	2520	2460	2480
30	2030	1890	1990	2410	2360	2390	2450	2390	2410	2510	2450	2480
31	1980	1860	1920	---	---	---	2560	2440	2510	2540	2500	2520
MONTH	3050	1860	2530	2960	1640	2410	2680	1790	2360	---	---	---

## ARKANSAS RIVER BASIN

07124000 ARKANSAS RIVER AT LAS ANIMAS, CO--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN									
1	2550	2490	2520	2540	2500	2520	3280	3180	3250	3170	2990	3090
2	---	---	---	2540	2510	2520	3320	3240	3280	---	---	---
3	---	---	---	2570	2540	2550	3370	3250	3320	---	---	---
4	---	---	---	2610	2500	2550	3440	3310	3390	---	---	---
5	---	---	---	2550	2510	2530	3540	3330	3460	2890	1880	2340
6	---	---	---	2510	2470	2490	3590	3520	3560	2420	1770	2040
7	---	---	---	2500	2460	2480	3550	3450	3520	2540	2290	2430
8	2610	2520	2570	2640	2460	2530	3530	3420	3480	2290	2150	2240
9	2820	2390	2620	2590	2540	2560	3420	3360	3400	---	---	---
10	2900	2550	2740	2600	2490	2560	3420	3330	3380	---	---	---
11	2650	2330	2530	2500	2480	2490	3400	2870	3140	---	---	---
12	2520	2350	2460	2510	2480	2500	3420	2390	2730	---	---	---
13	2550	2500	2530	2540	2490	2520	3130	2890	3060	---	---	---
14	2560	2520	2540	2630	2370	2480	3130	2990	3050	---	---	---
15	2580	2540	2560	2900	2360	2470	3100	3020	3060	---	---	---
16	2580	2550	2570	2930	2630	2790	3150	3070	3090	---	---	---
17	2590	2550	2570	---	---	---	3240	3140	3190	---	---	---
18	2590	2550	2570	---	---	---	3250	3200	3230	---	---	---
19	2560	2520	2540	---	---	---	3290	3230	3260	---	---	---
20	2530	2510	2520	---	---	---	3290	3190	3240	---	---	---
21	2510	2490	2500	2790	2490	2680	3230	3050	3130	---	---	---
22	2520	2500	2510	2810	2690	2750	3370	3070	3270	---	---	---
23	2520	2490	2500	2820	2720	2760	3410	3360	3380	1330	1160	1220
24	2540	2490	2520	2800	2720	2760	3420	3360	3390	1670	1330	1520
25	2550	2510	2530	2770	2660	2720	3390	1970	2610	1680	918	1110
26	2590	2530	2540	2920	2740	2840	1970	1790	1870	1040	937	988
27	2530	2510	2520	2870	2740	2800	2070	1790	1900	1140	1040	1100
28	2530	2500	2510	3020	2870	2960	2620	2070	2300	1100	985	1030
29	---	---	---	3130	2790	2930	2930	2600	2720	1160	1030	1110
30	---	---	---	3120	2900	3000	3050	2810	2920	1100	1010	1070
31	---	---	---	3270	3000	3090	---	---	---	1160	985	1090
MONTH	---	---	---	---	---	---	3590	1790	3090	---	---	---
DAY	MAX	MIN	MEAN									
1	1060	957	995	1210	1140	1170	2600	2430	2500	2350	2100	2170
2	977	891	930	1340	1210	1270	2770	2080	2550	2470	2340	2410
3	1040	959	997	1330	1250	1280	2320	2000	2190	2340	1330	1830
4	1130	1020	1080	1310	1260	1290	2040	1940	1970	1540	1310	1390
5	1300	947	1090	1390	1300	1370	2040	1910	1960	2050	1530	1820
6	1240	1110	1190	1720	1390	1560	2040	1940	1980	2380	2050	2210
7	1220	1110	1160	1740	1670	1720	2350	2040	2190	2550	2380	2460
8	1300	1090	1160	2000	1650	1780	2520	1760	2290	2580	2380	2470
9	1300	1140	1200	2470	2000	2220	1990	1650	1790	2700	2470	2540
10	1490	1300	1420	2570	2260	2440	2040	1600	1800	2850	2580	2790
11	1900	1460	1690	2820	2480	2660	1600	1320	1440	2760	2670	2700
12	2120	1900	1990	2920	2790	2840	1320	1150	1250	2720	2470	2620
13	2340	1900	2190	---	---	---	1270	1070	1180	2700	2470	2570
14	1900	1570	1750	1520	1380	1440	1210	1140	1170	2970	2700	2860
15	1860	1570	1700	1410	931	1260	1230	1180	1200	2940	2140	2680
16	2470	1860	2120	1070	884	955	1320	1200	1260	---	---	---
17	2600	2470	2550	1140	907	1060	1340	1300	1320	---	---	---
18	2680	2550	2610	---	---	---	1380	1330	1350	---	---	---
19	2610	2280	2460	---	---	---	1420	1350	1380	---	---	---
20	2780	2490	2690	---	---	---	1500	1420	1460	---	---	---
21	2890	2730	2810	---	---	---	1650	1500	1570	---	---	---
22	---	---	---	---	---	---	1800	1630	1710	---	---	---
23	---	---	---	---	---	---	2310	1800	2090	---	---	---
24	---	---	---	---	---	---	2520	2310	2450	---	---	---
25	---	---	---	---	---	---	2570	2500	2550	---	---	---
26	1490	1460	1470	---	---	---	2610	2430	2560	---	---	---
27	1500	1260	1380	2140	1360	1650	2430	2140	2330	---	---	---
28	1260	1130	1210	1990	1620	1830	2140	1060	1200	---	---	---
29	1170	1130	1140	2240	1970	2090	1440	1220	1350	---	---	---
30	1260	1160	1210	2260	2220	2240	1790	1440	1600	---	---	---
31	---	---	---	2430	2250	2340	2150	1790	1990	---	---	---
MONTH	---	---	---	---	---	---	2770	1060	1790	---	---	---

ARKANSAS RIVER BASIN

07124000 ARKANSAS RIVER AT LAS ANIMAS, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	23.6	13.8	18.4	13.3	7.2	10.0	5.9	1.4	3.4	3.5	.0	1.3
2	23.5	13.6	17.9	12.4	7.2	9.2	4.2	.3	2.0	5.0	.3	2.3
3	24.2	13.4	18.0	13.4	7.2	9.9	4.3	.0	1.8	5.4	.0	2.3
4	19.4	14.4	16.6	15.6	7.7	11.0	4.6	.0	2.1	6.4	.5	3.2
5	16.0	10.6	14.0	13.4	7.2	9.9	5.2	.5	2.8	6.5	1.0	3.5
6	10.6	8.1	9.0	11.1	5.6	7.6	5.1	.9	3.0	6.2	1.3	3.5
7	14.6	7.1	10.2	10.9	3.9	6.8	4.4	1.1	2.8	6.3	2.4	3.8
8	12.7	7.9	9.9	11.9	3.9	7.3	6.2	3.0	4.2	5.4	.0	2.3
9	17.5	6.4	11.1	12.0	3.2	6.5	7.0	2.2	4.5	4.0	.0	1.7
10	18.1	8.3	12.7	5.8	3.5	4.7	4.6	.1	2.0	6.5	1.5	3.7
11	20.1	10.3	14.7	5.8	3.0	4.9	1.4	.0	.2	6.6	.8	3.5
12	18.7	13.6	15.7	8.5	1.6	4.5	2.1	.0	.4	6.3	.1	3.1
13	19.9	12.0	15.4	9.3	1.5	4.6	1.9	.0	.4	3.5	1.1	2.6
14	18.9	9.8	13.9	9.3	1.2	4.7	.6	.0	.1	4.5	.0	1.6
15	16.0	9.4	12.5	8.1	2.0	4.3	2.3	.0	.5	2.8	.0	.9
16	18.6	10.3	13.6	4.4	1.1	2.4	1.6	.0	.3	.9	.0	.0
17	20.1	9.7	14.2	3.9	.0	1.7	2.8	.0	.9	2.6	.0	.5
18	20.4	9.9	14.5	4.0	.0	1.8	2.2	.0	.5	3.6	.0	1.0
19	18.6	9.5	13.8	4.7	.0	2.1	2.7	.0	.8	2.4	.0	.5
20	19.1	9.8	13.8	4.8	.4	2.4	1.5	.0	.4	---	---	---
21	18.4	8.5	13.1	5.2	.6	2.7	1.7	.0	.4	---	---	---
22	19.3	12.5	14.6	6.0	2.8	4.1	3.3	.0	1.0	---	---	---
23	14.0	11.7	12.6	6.3	2.8	4.3	3.0	.0	.8	4.5	.0	---
24	19.5	12.2	14.7	6.1	1.7	3.8	1.0	.0	.2	4.5	.0	1.6
25	18.5	9.8	13.8	6.0	1.7	3.6	.3	.0	.1	---	.2	---
26	17.5	9.3	13.1	4.8	1.1	2.8	2.5	.0	.7	---	.5	---
27	17.1	9.9	13.2	5.9	1.5	3.5	3.2	.0	.9	2.7	.0	1.5
28	14.4	13.0	13.6	---	1.8	---	4.0	.0	1.4	3.4	.0	1.4
29	17.0	11.9	14.0	5.4	---	---	4.6	.0	2.0	---	.0	---
30	15.7	11.0	13.1	6.1	1.3	3.5	3.7	.0	1.8	---	---	---
31	15.2	9.5	12.0	---	---	---	4.7	1.2	2.5	---	1.4	---
MONTH	24.2	6.4	13.8	---	---	---	7.0	.0	1.4	---	---	---
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	.0	---	11.0	.7	5.4	21.4	4.9	11.9	28.2	11.0	18.8
2	---	---	---	11.8	3.3	7.2	21.5	7.2	13.3	17.3	10.1	12.7
3	---	---	---	12.2	4.0	7.7	22.2	10.4	14.8	10.3	8.7	9.6
4	---	---	---	13.8	5.0	9.0	19.5	10.5	13.9	---	---	---
5	---	---	---	12.4	4.9	8.6	23.9	10.3	15.3	11.1	7.9	9.2
6	---	---	---	13.8	7.3	10.1	20.2	7.8	12.4	20.9	7.7	13.6
7	---	---	---	12.5	6.6	9.6	22.4	5.0	12.2	22.0	10.1	15.0
8	5.9	.0	2.5	15.3	7.0	10.8	22.6	7.0	13.1	---	12.3	---
9	5.6	.0	1.2	15.5	6.6	11.0	21.8	6.5	12.9	---	---	---
10	5.1	.0	1.4	11.2	4.3	8.2	21.8	7.0	12.9	---	---	---
11	6.5	.0	2.1	7.4	3.6	5.3	14.1	4.8	9.1	---	---	---
12	7.5	.1	3.5	12.0	2.5	6.8	17.7	5.8	10.5	---	---	---
13	7.9	3.7	5.4	15.1	5.0	9.7	21.8	5.9	12.5	---	---	---
14	5.1	1.3	2.7	15.1	6.7	9.7	23.4	6.6	13.8	---	---	---
15	8.0	1.1	3.9	10.9	3.3	6.7	22.0	7.8	13.7	---	---	---
16	3.8	.6	1.8	---	3.3	---	10.6	7.2	8.6	---	---	---
17	5.8	.6	2.6	---	---	---	18.0	7.2	10.7	---	---	---
18	9.2	2.1	5.1	---	---	---	24.9	5.5	14.0	---	---	---
19	11.9	3.6	7.4	---	---	---	21.7	10.0	14.6	---	---	---
20	9.7	4.4	6.9	---	---	---	19.4	9.4	12.9	---	---	---
21	5.4	3.1	4.2	19.1	8.5	12.9	21.4	6.6	13.3	---	---	---
22	8.9	2.1	5.2	17.5	8.3	12.6	20.3	5.8	12.8	---	---	---
23	10.9	4.9	7.5	19.2	---	---	22.1	4.1	11.8	22.7	16.4	19.2
24	8.0	4.6	6.4	8.8	4.5	6.5	24.8	7.1	15.0	23.5	16.3	19.5
25	10.9	2.3	6.2	6.5	4.0	4.9	24.8	9.2	16.7	20.4	16.6	18.6
26	10.6	4.6	7.0	9.0	3.6	5.8	24.7	13.3	18.3	22.2	17.4	19.5
27	5.3	.6	2.9	13.6	5.1	8.6	25.1	14.1	18.9	23.6	18.3	20.6
28	3.8	.0	1.5	14.2	6.6	9.7	24.4	14.0	18.5	22.3	18.9	20.5
29	---	---	---	17.9	6.2	10.7	24.5	12.2	17.6	23.8	18.9	20.7
30	---	---	---	20.2	6.5	11.9	25.2	11.4	17.8	22.4	18.5	20.1
31	---	---	---	16.1	7.3	10.1	---	---	---	23.5	17.9	20.3
MONTH	---	---	---	---	---	---	25.2	4.1	13.8	---	---	---

## ARKANSAS RIVER BASIN

07124000 ARKANSAS RIVER AT LAS ANIMAS, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN									
1	25.3	19.6	22.1	28.3	22.5	25.1	32.3	20.6	25.6	29.0	17.7	22.6
2	25.5	19.7	22.4	28.7	21.0	24.5	31.7	20.2	25.4	28.5	17.6	22.0
3	23.3	20.2	21.6	29.5	22.0	25.4	32.3	21.2	26.2	26.5	18.3	22.1
4	23.2	17.5	19.8	29.8	22.6	25.9	32.3	22.6	26.6	25.7	19.6	22.3
5	24.7	18.1	21.0	30.3	22.6	26.0	33.0	21.2	26.4	25.8	18.6	21.6
6	25.9	19.8	22.3	31.5	22.4	26.3	33.6	23.0	27.4	26.7	17.2	21.2
7	26.6	20.8	23.0	31.8	21.4	26.0	31.0	21.9	26.0	22.4	14.9	18.1
8	24.6	19.5	21.8	32.6	22.0	26.8	31.6	19.1	24.9	16.3	12.5	14.1
9	26.3	21.1	23.2	33.4	21.0	26.5	25.6	20.2	23.0	23.9	9.8	15.9
10	27.2	20.4	23.4	32.9	19.6	25.5	26.1	19.1	22.0	26.4	11.5	18.0
11	29.2	21.3	24.8	33.4	19.0	25.0	28.4	21.1	24.3	27.2	13.5	19.6
12	26.7	19.5	22.8	32.3	18.4	24.3	28.1	22.6	25.0	26.6	13.4	19.5
13	25.7	16.3	20.4	29.8	---	---	26.3	23.0	24.5	27.5	15.0	20.4
14	23.2	14.9	18.7	30.1	---	---	27.4	22.6	24.3	29.4	16.8	21.6
15	25.7	15.9	20.4	28.9	23.0	25.7	25.7	21.8	23.3	26.4	17.2	20.6
16	28.4	16.7	21.9	27.0	24.0	25.4	26.9	20.0	22.8	---	---	---
17	28.5	16.7	21.7	25.8	23.1	24.7	26.8	19.9	23.0	---	---	---
18	29.0	16.0	21.8	---	---	---	27.5	20.7	23.8	25.3	---	---
19	24.6	15.5	19.5	---	---	---	27.9	20.8	24.0	26.5	15.1	19.9
20	27.9	15.8	20.4	---	---	---	26.3	21.6	23.4	25.3	15.3	19.7
21	27.4	16.7	22.0	---	---	---	27.5	20.0	23.5	25.3	15.7	19.5
22	---	---	---	---	---	---	28.6	21.0	24.0	24.2	15.7	19.0
23	---	---	---	---	---	---	28.8	19.3	23.6	24.0	14.1	18.2
24	---	---	---	---	---	---	31.0	18.4	23.9	23.3	11.4	16.5
25	---	---	---	---	---	---	22.4	17.8	20.7	23.7	11.2	16.5
26	26.8	---	---	---	---	---	28.8	15.1	21.1	26.1	12.0	18.0
27	27.0	20.0	23.4	27.5	20.0	23.4	28.7	17.0	22.1	26.3	13.1	18.9
28	27.9	22.3	24.9	30.7	21.6	25.7	25.1	19.6	22.1	24.8	13.0	18.0
29	28.8	22.6	25.3	32.0	21.6	26.2	25.0	19.3	21.9	22.5	12.4	17.1
30	28.8	22.7	25.4	31.0	21.3	25.7	26.9	19.1	22.5	23.8	14.5	18.6
31	---	---	---	31.0	21.7	25.1	27.7	19.4	22.5	---	---	---
MONTH	---	---	---	---	---	---	33.6	15.1	23.9	---	---	---

07124200 PURGATOIRE RIVER AT MADRID, CO

LOCATION.--Lat 37°07'46", long 104°38'22", in SW<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec.35, T.33 S., R.65 W., Las Animas County, Hydrologic Unit 11020010, on left bank 70 ft downstream from county road bridge, 0.3 mi northeast of Madrid, 1.0 mi downstream from Burro Canyon, and 9 mi west of Trinidad.

DRAINAGE AREA.--505 mi<sup>2</sup>.

PERIOD OF RECORD.--March 1972 to current year. Water-quality data available, October 1978 to September 1981.

GAGE.--Water-stage recorder with satellite telemetry and crest-stage gage. Datum of gage is 6,261.61 ft above sea level (U.S. Army Corps of Engineers bench mark).

REMARKS.--Records good except those above 400 ft<sup>3</sup>/s and estimated daily discharges, which are poor. Natural flow of stream affected by diversions for irrigation and 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.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	21	e16	e17	e18	16	23	33	162	69	36	36
2	12	19	e16	e17	e18	15	24	36	156	66	34	33
3	11	20	e16	e17	e18	14	26	44	147	69	41	34
4	11	20	e16	e17	e19	16	26	46	138	57	45	31
5	16	19	e15	e16	e19	15	26	50	122	50	41	35
6	16	19	e15	e16	e20	15	25	43	111	48	41	29
7	16	19	e15	e16	e20	16	26	38	114	56	47	26
8	17	20	e16	e15	e20	21	24	36	118	59	44	27
9	17	20	e16	e15	e21	20	22	35	124	68	58	29
10	16	20	e17	e15	e21	22	22	37	124	68	159	27
11	16	e20	e17	e14	e20	24	22	43	126	64	130	24
12	15	e19	e17	e13	e19	22	21	48	124	61	98	22
13	16	e19	e17	e14	e19	21	23	52	112	69	92	21
14	15	e18	e17	e15	e18	22	21	67	102	81	71	24
15	15	e18	e17	e15	e18	19	21	82	91	62	68	26
16	15	e18	e16	e15	18	19	21	102	78	60	76	24
17	15	e17	e15	e15	17	20	23	255	72	48	75	22
18	15	e17	e15	e16	16	19	24	170	69	50	63	21
19	15	e17	e15	e16	17	20	24	169	69	46	58	20
20	15	e17	e15	e16	15	20	26	188	80	46	54	20
21	15	e17	e16	e16	15	21	26	162	83	44	50	19
22	17	e17	e15	e17	15	23	25	135	98	45	49	20
23	40	e17	e15	e17	16	24	27	113	89	43	48	20
24	63	e18	e16	e17	15	25	25	109	89	49	47	19
25	29	e18	e17	e18	14	26	25	107	89	45	44	19
26	22	e17	e18	e18	15	27	24	101	88	49	47	19
27	19	e17	e18	e18	16	30	25	111	85	49	40	18
28	96	e16	e18	e19	17	29	25	126	77	47	39	18
29	58	e16	e18	e19	---	26	29	154	79	43	39	18
30	29	e16	e18	e19	---	26	32	172	74	39	37	18
31	24	---	e17	e19	---	24	---	165	---	38	36	---
TOTAL	709	546	505	507	494	657	733	3029	3090	1688	1807	719
MEAN	22.9	18.2	16.3	16.4	17.6	21.2	24.4	97.7	103	54.5	58.3	24.0
MAX	96	21	18	19	21	30	32	255	162	81	159	36
MIN	11	16	15	13	14	14	21	33	69	38	34	18
AC-FT	1410	1080	1000	1010	980	1300	1450	6010	6130	3350	3580	1430

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1972 - 2001, BY WATER YEAR (WY)

MEAN	30.7	25.3	21.4	19.0	19.6	21.0	47.2	147	198	126	113	54.8
MAX	78.5	39.2	40.3	36.6	37.2	55.9	204	547	589	313	342	232
(WY)	1983	1999	1984	1984	1983	1987	1987	1999	1983	1983	1981	1981
MIN	9.89	12.7	8.47	7.60	5.80	9.72	12.4	26.6	34.8	18.6	18.9	11.0
(WY)	1973	1977	1977	1973	1977	1979	1981	1981	1972	1972	1972	1978

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1972 - 2001

ANNUAL TOTAL	14475	14484	
ANNUAL MEAN	39.5	39.7	70.4
HIGHEST ANNUAL MEAN			145
LOWEST ANNUAL MEAN			21.6
HIGHEST DAILY MEAN	147	May 9	1640
LOWEST DAILY MEAN	11	Oct 3	3.0
ANNUAL SEVEN-DAY MINIMUM	12	Sep 28	3.0
MAXIMUM PEAK FLOW		a989	b14300
MAXIMUM PEAK STAGE		5.09	c12.80
ANNUAL RUNOFF (AC-FT)	28710	28730	51030
10 PERCENT EXCEEDS	91	91	176
50 PERCENT EXCEEDS	26	22	30
90 PERCENT EXCEEDS	15	15	14

e Estimated.  
a From rating curve extended above 832 ft<sup>3</sup>/s on basis of timed-drift measurement and slope-area measurements of peak flow at gage heights 5.90, 6.10, and 10.90 ft.  
b From timed-drift measurement of peak flow.  
c From floodmarks.

## ARKANSAS RIVER BASIN

07124400 TRINIDAD LAKE NEAR TRINIDAD, CO

LOCATION.--Lat 37°08'28", long 104°33'05", in NE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec.27, T.33 S., R.64 W., Las Animas County, Hydrologic Unit 11020010, in valve house near center of dam on Purgatoire River and 3.2 mi southwest of courthouse in Trinidad.

DRAINAGE AREA.--672 mi<sup>2</sup>.

PERIOD OF RECORD.--August 1977 to current year.

REVISED RECORDS.--WDR CO-78-1: 1977(M). WDR CO-83-1: 1981-82 (contents). WDR CO-89-1: 1988 (contents).

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 6,073.64 ft above sea level (levels by U.S. Army Corps of Engineers).

REMARKS.--Records good. Reservoir is formed by a rock and earthfill dam completed in 1977. Storage began Aug. 19, 1977. All figures represent total contents from area-capacity table effective Nov. 1, 1999, and based on a 1999 resurvey by the U.S. Army Corp of Engineers. Total capacity at top of parapet wall, 180,000 acre-ft at elevation 6,284.00 ft. Maximum pool, 167,700 acre-ft at elevation 6,279.30 ft. Top of flood control storage, 123,200 acre-ft at elevation 6,260.00 ft. Capacity at high crest of spillway, 119,100 acre-ft at elevation 6,258.00 ft. Capacity at notch crest of spillway, 91,300 acre-ft at elevation 6,243.00 ft. Top of irrigation storage, 71,000 acre-ft at elevation 6,230.00 ft. Recreation pool, 14,895 acre-ft at elevation 6,171.86 ft. Elevation of no contents, 6,115.00 ft. No dead storage. Reservoir is used for flood control, recreation, storage for irrigation, and sediment retention.

COOPERATION.--Capacity tables provided by U.S. Army Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 72,800 acre-ft, Aug. 8, 1999, elevation, 6,230.35 ft; no contents prior to Aug. 19, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 35,500 acre-ft, May 7, elevation, 6,199.61 ft; minimum contents, 14,200 acre-ft, Sept. 30, elevation, 6,170.46 ft.

Capacity table (elevation, in feet, and contents, in acre-feet, effective Nov. 1, 1999)

6,150.0	5,656	6,180.0	19,900	6,210.0	45,760
6,155.0	7,324	6,185.0	23,430	6,215.0	51,470
6,160.0	9,224	6,190.0	27,240	6,220.0	57,580
6,165.0	11,450	6,195.0	31,390	6,225.0	64,110
6,170.0	13,910	6,200.0	35,800	6,230.0	71,020
6,175.0	16,700	6,205.0	40,610	6,235.0	78,420

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29000	28700	29600	30500	31500	32500	34100	35100	33200	26600	19000	16600
2	28800	28800	29700	30500	31500	32500	34100	35100	e33100	26300	18900	16600
3	28700	28800	29700	30600	31500	32500	34200	35200	e33000	26000	18900	16600
4	28500	28800	29700	30600	31600	32600	34300	35300	32900	25700	18800	16500
5	28300	28900	29800	30600	31600	32600	34300	35400	32700	25400	18700	16600
6	28200	28900	29800	30700	31600	32600	34400	35400	32500	25000	18700	16500
7	28000	28900	29800	30700	31700	32700	34400	35400	32300	e24700	18600	16500
8	27900	29000	29900	30700	31800	32700	34500	35400	32100	e24500	18500	16400
9	27800	29000	29900	30700	31800	32800	34500	35400	31900	24200	18400	16400
10	27700	29000	29900	30800	31800	32900	34600	35300	31800	23900	18700	16300
11	27600	29100	29900	30800	31900	32900	34600	35200	31600	23600	18800	16000
12	27500	29100	30000	30800	31900	33000	34600	35100	31400	23300	18700	15700
13	27400	29100	30000	30900	31900	33000	34700	35100	31200	23000	18400	15400
14	27400	29100	30000	30900	32000	33100	34700	35000	30900	22700	18100	15100
15	27400	29200	30000	30900	32000	33100	34700	34800	30700	e22400	17900	15000
16	27500	29200	30100	31000	32000	33100	34800	34700	30400	22100	17700	14900
17	27500	29200	30100	31000	32100	33200	34800	35000	30100	21800	17600	14800
18	27500	29300	30100	31000	32100	33200	34900	34900	29800	21400	17500	14600
19	27500	29300	30100	31000	32100	33300	34900	34900	e29500	21000	17400	14600
20	27500	29300	30100	31100	32200	33300	34900	34800	29200	20700	17300	14500
21	27600	29300	30200	31100	32200	33400	35000	34700	29000	20500	17300	14500
22	27600	29400	30200	31100	32200	33400	35000	34500	28800	20300	17200	14500
23	27800	29400	30200	31200	32300	33500	35000	34300	28500	20200	17100	14500
24	27900	29500	30200	31200	32300	33500	35100	34100	28300	20000	17000	14500
25	28000	29500	30300	31200	32300	33600	35100	33900	28000	19900	16900	14400
26	28000	29500	30300	31200	32400	33700	35100	33700	27800	19700	16800	14400
27	28100	29500	30300	31300	32400	33700	35100	33500	27500	19600	16700	14300
28	28400	29600	30400	31300	32400	33800	35100	33400	27300	19500	16700	14300
29	28600	29600	30400	31400	---	33900	35000	33300	27100	19300	16700	14200
30	28600	29600	30400	31400	---	34000	35100	33300	26900	19200	16700	14200
31	28700	---	30500	31400	---	34000	---	33300	---	19100	16700	---
MAX	29000	29600	30500	31400	32400	34000	35100	35400	33200	26600	19000	16600
MIN	27400	28700	29600	30500	31500	32500	34100	33300	26900	19100	16700	14200

e Estimated.

07124410 PURGATOIRE RIVER BELOW TRINIDAD LAKE, CO

LOCATION.--Lat 37°08'38", long 104°32'50", in NE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec.27, T.33 S., R.64 W., Las Animas County, Hydrologic Unit 11020010, on left bank of flip bucket outlet 500 ft downstream from base of dam, 0.8 mi upstream from Santa Fe Railroad bridge, and 3.0 mi southwest of courthouse in Trinidad.

DRAINAGE AREA.--672 mi<sup>2</sup>.

PERIOD OF RECORD.--December 1976 to current year. Water-quality data available, March 1977 to September 1984.

GAGE.--Water-stage recorder with satellite telemetry and concrete control. Datum of gage is 6,073.64 ft above sea level (levels by U.S. Army, Corps of Engineers). Auxillary gage is a water-stage recorder in a shelter about 1,000 ft downstream.

REMARKS.--No estimated daily discharges. Records good except for those below 0.5 ft<sup>3</sup>/s, which are fair. Natural flow of stream affected by diversions upstream from station for irrigation. Flow completely regulated by Trinidad Lake (station 07124400) immediately upstream since Aug. 19, 1977. 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 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	69	.08	.94	.68	.40	.00	.02	27	195	192	74	44
2	69	.08	.87	.68	.14	.00	.01	27	197	200	73	44
3	69	.31	.87	.68	.04	.00	.01	27	197	206	73	44
4	92	.42	.87	.68	.04	.00	.00	28	198	206	73	35
5	89	.38	.87	.68	.03	.00	.00	23	206	208	73	29
6	78	.38	.87	.68	.03	.00	.00	20	208	212	73	35
7	78	.38	.87	.68	.03	.00	.00	38	208	212	73	43
8	78	.41	.87	.65	.03	.00	.00	55	208	212	90	46
9	78	.44	.87	.58	.03	.00	.00	59	208	212	98	46
10	63	.44	.85	.58	.03	.00	.00	78	208	212	98	62
11	54	.44	.77	.58	.03	.00	.00	89	213	211	98	152
12	54	.44	.78	.58	.03	.00	.00	92	215	210	98	178
13	36	.42	.78	.59	.03	.00	.00	94	213	212	224	176
14	14	.39	.77	.58	.02	.00	.00	129	212	213	212	162
15	.77	.38	.77	.58	.02	.00	.00	146	215	212	163	85
16	.69	.38	.77	.58	.02	.01	.00	193	216	211	163	85
17	.68	.38	.77	.58	.02	.01	.00	219	215	214	163	85
18	.63	.38	.77	.58	.02	.01	.00	215	215	219	112	80
19	.58	.38	.77	.58	.02	.00	4.7	213	215	217	88	62
20	.58	.38	.77	.58	.27	.71	7.4	213	218	214	88	40
21	.62	.38	.77	.58	.00	.17	2.7	212	221	128	88	23
22	.68	.38	.77	.58	.00	.08	.47	226	221	127	88	21
23	.64	.38	.77	.58	.00	.07	10	225	221	126	88	21
24	.58	.38	.77	.58	.00	.06	16	218	220	124	88	21
25	.58	.38	.77	.58	.01	.06	16	202	220	124	81	38
26	.50	.39	.77	.58	.00	.06	25	193	221	120	77	44
27	.28	.38	.77	.58	.00	.05	30	195	207	118	77	46
28	.28	.80	.71	.58	.01	.04	30	195	200	118	76	47
29	.27	.99	.68	.58	---	.04	31	195	200	116	44	47
30	.25	.99	.68	.58	---	.04	29	195	196	88	45	47
31	.17	---	.68	.58	---	.02	---	195	---	74	45	---
TOTAL	929.78	12.74	24.61	18.76	1.30	1.43	202.31	4236	6307	5468	3004	1888
MEAN	30.0	.42	.79	.61	.046	.046	6.74	137	210	176	96.9	62.9
MAX	92	.99	.94	.68	.40	.71	31	226	221	219	224	178
MIN	.17	.08	.68	.58	.00	.00	.00	20	195	74	44	21
AC-FT	1840	25	49	37	2.6	2.8	401	8400	12510	10850	5960	3740

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1977 - 2001, BY WATER YEAR (WY)

	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
MEAN	24.2	5.61	2.43	2.69	2.93	3.01	31.9	167	206	178	152	115													
MAX	96.0	25.9	11.9	14.7	13.1	17.8	106	375	614	306	310	283													
(WY)	1984	1984	1979	1977	1977	1977	2000	1994	1983	1983	1999	1984													
MIN	.35	.015	.001	.012	.046	.007	.073	25.5	51.5	40.5	36.1	5.15													
(WY)	1989	1982	1995	1985	2001	1982	1984	1980	1977	1977	1977	1987													

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1977 - 2001
ANNUAL TOTAL	31759.17	22093.93	
ANNUAL MEAN	86.8	60.5	76.7
HIGHEST ANNUAL MEAN			146
LOWEST ANNUAL MEAN			42.8
HIGHEST DAILY MEAN	284 Jun 22	226 May 22	917 Sep 11 1981
LOWEST DAILY MEAN	.08 Nov 1	.00 Feb 21	a.00 Aug 20 1977
ANNUAL SEVEN-DAY MINIMUM	.20 Oct 27	.00 Mar 1	.00 Nov 18 1979
MAXIMUM PEAK FLOW		293 Aug 13	b963 Sep 10 1981
MAXIMUM PEAK STAGE		6.42 Aug 13	7.89 Sep 10 1981
ANNUAL RUNOFF (AC-FT)	62990	43820	55560
10 PERCENT EXCEEDS	209	212	242
50 PERCENT EXCEEDS	68	.87	12
90 PERCENT EXCEEDS	.38	.00	.04

a No flow at times most years.  
b From rating curve extended above 919 ft<sup>3</sup>/s.

ARKANSAS RIVER BASIN

07126140 VAN BREMER ARROYO NEAR TYRONE, CO

LOCATION.--Lat 37°23'58", long 104°06'55", in SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>, sec.27, T.30 S., R.60 W., Las Animas County, Hydrologic Unit 11020010, on Pinon Canyon Army Maneuver Site on left bank 200 ft downstream from military road at gas line crossing near Brown Sheep Camp, 6 mi southeast of Tyrone, and 11 mi upstream from mouth.

DRAINAGE AREA.--132 mi<sup>2</sup>, of which 11.8 mi<sup>2</sup> is noncontributing (revised).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1985 to September 1998, October 1998 to current year (seasonal records only). Water-quality data available, May 1985 to April 1998.

GAGE.--Water-stage recorder with satellite telemetry, crest-stage gages, and artificial control. Elevation of gage is 5,310 ft above sea level, from topographic map.

REMARKS.--Records good for discharges 0.30 to 50 ft<sup>3</sup>/s, fair for discharges 0.08 to 0.29 ft<sup>3</sup>/s, and poor for discharges less than 0.08 ft<sup>3</sup>/s, discharges greater than 50 ft<sup>3</sup>/s, and estimated daily discharges. Natural flow of stream affected by return flows from irrigation and storage in a small channel reservoir upstream. 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, 511 ft<sup>3</sup>/s, Aug. 23, 1986, from flow through culvert computation, gage height, 10.02 ft; maximum gage height, 11.64 ft, Aug. 3, 1998; no flow many days most years (some estimated).

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum discharge, 10 ft<sup>3</sup>/s, Oct. 10, gage height, 5.16 ft; no flow many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.3	---	---	---	---	---	---	.06	.01	.00	.00	.00
2	6.1	---	---	---	---	---	---	.05	.01	.00	.00	.00
3	6.9	---	---	---	---	---	---	.06	.01	.00	.00	.00
4	6.8	---	---	---	---	---	---	.04	.01	.00	.00	.00
5	7.1	---	---	---	---	---	---	.06	.00	.00	.00	.00
6	7.0	---	---	---	---	---	---	.03	.00	.00	.00	.00
7	6.8	---	---	---	---	---	---	.02	.00	.00	.00	.00
8	8.1	---	---	---	---	---	---	.01	.00	.00	.00	.00
9	8.8	---	---	---	---	---	---	.01	.00	.00	.00	.00
10	9.7	---	---	---	---	---	---	.01	.00	.00	.00	.00
11	9.2	---	---	---	---	---	---	.01	.00	.00	.00	.00
12	8.0	---	---	---	---	---	---	.01	.00	.00	.00	.00
13	7.5	---	---	---	---	---	e.01	.01	.00	.00	.00	.00
14	6.7	---	---	---	---	---	.01	.01	.00	.00	.00	.00
15	6.2	---	---	---	---	---	.01	.01	.00	.00	.00	.01
16	4.8	---	---	---	---	---	.01	.01	.00	.00	.00	.00
17	3.9	---	---	---	---	---	.01	.02	.00	.00	.00	.00
18	3.6	---	---	---	---	---	.01	.02	.00	.00	.00	.00
19	3.6	---	---	---	---	---	.01	.01	.00	.00	.00	.00
20	2.3	---	---	---	---	---	.01	.03	.00	.00	.00	.00
21	2.8	---	---	---	---	---	.02	.01	.45	.00	.00	.00
22	1.5	---	---	---	---	---	.05	.01	.19	.00	.00	.00
23	2.1	---	---	---	---	---	.05	.00	.00	.00	.00	.00
24	3.4	---	---	---	---	---	.04	.00	.00	.00	.00	.00
25	2.3	---	---	---	---	---	.05	.00	.00	.00	.00	.00
26	1.0	---	---	---	---	---	.04	.00	.00	.00	.00	.00
27	.55	---	---	---	---	---	.05	.00	.00	.00	.00	.00
28	.47	---	---	---	---	---	.05	.10	.00	.00	.00	.00
29	6.9	---	---	---	---	---	.04	.17	.00	.00	.00	.00
30	e7.2	---	---	---	---	---	.06	.02	.00	.00	.00	.00
31	---	---	---	---	---	---	---	.01	---	.00	.00	---
TOTAL	---	---	---	---	---	---	---	0.81	0.68	0.00	0.00	0.01
MEAN	---	---	---	---	---	---	---	.026	.023	.000	.000	.000
MAX	---	---	---	---	---	---	---	.17	.45	.00	.00	.01
MIN	---	---	---	---	---	---	---	.00	.00	.00	.00	.00
AC-FT	---	---	---	---	---	---	---	1.6	1.3	.00	.00	.02

e Estimated.

07126140 VAN BREMER ARROYO NEAR TYRONE, CO--Continued

PRECIPITATION RECORDS

PERIOD OF RECORD.--June 1993 to current year (seasonal records only).

GAGE.--Tipping-bucket rain gage with satellite telemetry.

REMARKS.--Records good. Daily data that are not published are either missing or of unacceptable quality.

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum daily precipitation, 3.00 inches, Sept. 9, 1995.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum daily precipitation, 1.44 inches, June 21.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
2	.00	---	---	---	---	---	---	.01	.00	.00	.10	.01
3	.00	---	---	---	---	---	---	.06	.00	.18	.00	.00
4	.47	---	---	---	---	---	---	.44	.00	.00	.00	.00
5	.00	---	---	---	---	---	---	.46	.00	.00	.43	.00
6	.08	---	---	---	---	---	---	.00	.00	.00	.00	.00
7	.01	---	---	---	---	---	---	.00	.01	.00	.00	.29
8	.00	---	---	---	---	---	---	.00	.00	.12	.00	.00
9	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
10	.00	---	---	---	---	---	---	.03	.00	.00	.16	.00
11	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
12	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
13	.00	---	---	---	---	---	e.00	.00	.00	.24	.00	.00
14	.00	---	---	---	---	---	.00	.00	.00	.02	.04	.00
15	.00	---	---	---	---	---	.00	.00	.00	.01	.00	.81
16	.00	---	---	---	---	---	.00	.18	.00	.00	.34	.00
17	.00	---	---	---	---	---	.00	.31	.00	.00	.00	.11
18	.00	---	---	---	---	---	.00	.00	.00	.00	.00	.01
19	.00	---	---	---	---	---	.00	.20	.00	.00	.00	.00
20	.00	---	---	---	---	---	.00	.13	.35	.00	.00	.00
21	.00	---	---	---	---	---	.00	.02	1.44	.13	.00	.00
22	.41	---	---	---	---	---	.04	.00	.00	.00	.00	.00
23	.42	---	---	---	---	---	.00	.00	.00	.00	.00	.00
24	.19	---	---	---	---	---	.00	.00	.00	.04	.00	.00
25	.00	---	---	---	---	---	.00	.00	.00	.00	.40	.00
26	.00	---	---	---	---	---	.00	.00	.00	.00	.00	.00
27	.00	---	---	---	---	---	.00	.01	.00	.00	.00	.00
28	.83	---	---	---	---	---	.00	1.08	.00	.00	.00	.00
29	.79	---	---	---	---	---	.00	.00	.00	.00	.01	.00
30	e.00	---	---	---	---	---	.00	.09	.01	.18	.00	.00
31	---	---	---	---	---	---	---	.00	---	.15	.00	---
TOTAL	---	---	---	---	---	---	---	3.02	1.81	1.07	1.48	1.23
MAX	---	---	---	---	---	---	---	1.08	1.44	.24	.43	.81

e Estimated.



07126200 VAN BREMER ARROYO NEAR MODEL, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--January 1983 to April 1998, May 1999 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: January 1983 to April 1998.

WATER TEMPERATURE: January 1983 to April 1998.

SUSPENDED SEDIMENT: May 1999 to current year (seasonal peaks only).

INSTRUMENTATION.--Pumping sediment sampler with satellite telemetry.

REMARKS.--Records for daily suspended sediment are poor.

EXTREMES FOR PERIOD OF RECORD.--

SEDIMENT CONCENTRATION (seasonal peaks only): Maximum daily mean, 1,720 mg/L, Aug. 5, 1999; minimum daily mean, 132 mg/L, June 12, 1999.

SUSPENDED-SEDIMENT DISCHARGE (seasonal peaks only): Maximum daily, 4,000 tons (estimated), Aug. 3, 1999; minimum daily, 0.04 ton, (estimated), Aug. 15, 1999, and July 18, Aug. 25, 2000.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATION (seasonal peaks only): None for current year.

SUSPENDED-SEDIMENT DISCHARGE (seasonal peaks only): Maximum daily, 17 tons (estimated), Oct. 30; minimum daily, 0.15 ton (estimated), Nov. 5.

MISCELLANEOUS FIELD AND SUSPENDED-SEDIMENT DISCHARGE DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	TEMPER-ATURE WATER (DEG C) (00010)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
OCT						
31...	1635	4.7	1390	11.5	--	--
DEC						
13...	1230	.12	2230	5.1	--	--
FEB						
14...	1600	.18	2020	7.4	--	--
APR						
12...	1730	.10	2170	15.5	--	--
JUN						
05...	1430	.08	1970	23.2	6	.00
JUL						
11...	0830	.05	1850	19.9	6	.00
AUG						
08...	1245	.06	1840	24.8	3	.00
SEP						
06...	1030	.07	1950	19.7	5	.00

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	.16	---	---	3.2	---	e4.6	.20	---	---
2	2.5	---	---	1.9	---	e2.0	.18	---	---
3	3.3	---	---	.99	---	e.70	.18	---	---
4	4.1	---	---	.66	---	e.36	.18	---	---
5	4.1	---	---	.53	---	e.15	.19	---	---
6	4.4	---	---	.48	---	---	.18	---	---
7	4.5	---	---	.43	---	---	.17	---	---
8	4.4	---	---	.35	---	---	.17	---	---
9	5.7	---	---	.35	---	---	.17	---	---
10	6.3	---	---	.35	---	---	.17	---	---
11	6.9	---	---	.35	---	---	.14	---	---
12	6.2	---	---	.32	---	---	.13	---	---
13	5.3	---	---	.29	---	---	.13	---	---
14	5.0	---	---	.28	---	---	.12	---	---
15	4.5	---	---	.30	---	---	.13	---	---
16	4.3	---	---	.29	---	---	.12	---	---
17	3.2	---	---	.27	---	---	.12	---	---
18	2.6	---	---	.27	---	---	.11	---	---
19	2.1	---	---	.26	---	---	.09	---	---
20	2.1	---	---	.27	---	---	.11	---	---
21	1.9	---	---	.27	---	---	.11	---	---
22	1.3	---	---	.25	---	---	.12	---	---
23	1.9	---	---	.24	---	---	.13	---	---
24	1.7	---	---	.24	---	---	.13	---	---
25	1.9	---	---	.24	---	---	.11	---	---
26	2.0	---	---	.24	---	---	.12	---	---
27	1.2	---	---	.22	---	---	.12	---	---
28	.94	---	---	.23	---	---	.12	---	---
29	6.2	---	e15	.21	---	---	.12	---	---
30	7.0	---	e17	.23	---	---	.11	---	---
31	5.2	---	e10	---	---	---	.11	---	---
TOTAL	112.90	---	42	14.51	---	7.81	4.29	---	0

## ARKANSAS RIVER BASIN

07126200 VAN BREMER ARROYO NEAR MODEL, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
	JANUARY			FEBRUARY			MARCH		
1	.10	---	---	.14	---	---	.15	---	---
2	.10	---	---	.15	---	---	.13	---	---
3	.10	---	---	.16	---	---	.12	---	---
4	.11	---	---	.15	---	---	.12	---	---
5	.11	---	---	.16	---	---	.12	---	---
6	.13	---	---	.17	---	---	.12	---	---
7	.13	---	---	.19	---	---	.13	---	---
8	.13	---	---	.18	---	---	.29	---	---
9	.12	---	---	.18	---	---	.17	---	---
10	.13	---	---	.17	---	---	.18	---	---
11	.13	---	---	.20	---	---	.29	---	---
12	.13	---	---	.19	---	---	.22	---	---
13	.14	---	---	.18	---	---	.17	---	---
14	.13	---	---	.17	---	---	.17	---	---
15	.12	---	---	.17	---	---	.13	---	---
16	.14	---	---	.17	---	---	.12	---	---
17	.13	---	---	.17	---	---	.13	---	---
18	.11	---	---	.17	---	---	.14	---	---
19	.11	---	---	.17	---	---	.13	---	---
20	.11	---	---	.16	---	---	.12	---	---
21	.13	---	---	.16	---	---	.12	---	---
22	.15	---	---	.16	---	---	.14	---	---
23	.16	---	---	.16	---	---	.15	---	---
24	.15	---	---	.13	---	---	.13	---	---
25	.16	---	---	.12	---	---	.14	---	---
26	.15	---	---	.12	---	---	.15	---	---
27	.16	---	---	.13	---	---	.14	---	---
28	.15	---	---	.13	---	---	.15	---	---
29	.15	---	---	---	---	---	.15	---	---
30	.15	---	---	---	---	---	.16	---	---
31	.15	---	---	---	---	---	.14	---	---
TOTAL	4.07	---	0	4.51	---	0	4.72	---	0
DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
	APRIL			MAY			JUNE		
1	.14	---	---	.05	---	---	.07	---	---
2	.12	---	---	.05	---	---	.08	---	---
3	.10	---	---	.07	---	---	.07	---	---
4	.11	---	---	.14	---	---	.07	---	---
5	.11	---	---	.30	---	---	.07	---	---
6	.10	---	---	.20	---	---	.07	---	---
7	.09	---	---	.14	---	---	.07	---	---
8	.09	---	---	.12	---	---	.08	---	---
9	.08	---	---	.12	---	---	.08	---	---
10	.08	---	---	.11	---	---	.07	---	---
11	.10	---	---	.11	---	---	.06	---	---
12	.10	---	---	.11	---	---	.06	---	---
13	.10	---	---	.10	---	---	.06	---	---
14	.09	---	---	.10	---	---	.06	---	---
15	.09	---	---	.10	---	---	.06	---	---
16	.08	---	---	.10	---	---	.06	---	---
17	.09	---	---	.13	---	---	.06	---	---
18	.10	---	---	.14	---	---	.06	---	---
19	.07	---	---	.14	---	---	.06	---	---
20	.07	---	---	.19	---	---	.07	---	---
21	.07	---	---	.12	---	---	.14	---	---
22	.07	---	---	.12	---	---	.16	---	---
23	.09	---	---	.09	---	---	.10	---	---
24	.08	---	---	.08	---	---	.09	---	---
25	.08	---	---	.08	---	---	.08	---	---
26	.06	---	---	.08	---	---	.07	---	---
27	.06	---	---	.08	---	---	.07	---	---
28	.06	---	---	.09	---	---	.07	---	---
29	.06	---	---	.09	---	---	.06	---	---
30	.05	---	---	.08	---	---	.31	---	---
31	---	---	---	.09	---	---	---	---	---
TOTAL	2.59	---	0	3.52	---	0	2.49	---	0

07126200 VAN BREMER ARROYO NEAR MODEL, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MEAN	MEAN	SEDIMENT	MEAN	MEAN	SEDIMENT	MEAN	MEAN	SEDIMENT
	DISCHARGE (CFS)	CONCEN- TRATION (MG/L)	DISCHARGE (TONS/DAY)	DISCHARGE (CFS)	CONCEN- TRATION (MG/L)	DISCHARGE (TONS/DAY)	DISCHARGE (CFS)	CONCEN- TRATION (MG/L)	DISCHARGE (TONS/DAY)
	JULY			AUGUST			SEPTEMBER		
1	.24	---	---	.05	---	---	.10	---	---
2	.10	---	---	.05	---	---	.10	---	---
3	.19	---	---	.05	---	---	.08	---	---
4	.32	---	---	.05	---	---	.07	---	---
5	.09	---	---	.05	---	---	.06	---	---
6	.07	---	---	.05	---	---	.06	---	---
7	.06	---	---	.06	---	---	.11	---	---
8	.06	---	---	.06	---	---	.12	---	---
9	.05	---	---	.07	---	---	.11	---	---
10	.05	---	---	.08	---	---	.10	---	---
11	.06	---	---	.10	---	---	.09	---	---
12	.06	---	---	.09	---	---	.09	---	---
13	.07	---	---	.09	---	---	.08	---	---
14	.12	---	---	.11	---	---	.08	---	---
15	.11	---	---	.10	---	---	.14	---	---
16	.10	---	---	.10	---	---	.20	---	---
17	.08	---	---	.11	---	---	.12	---	---
18	.08	---	---	.09	---	---	.12	---	---
19	.08	---	---	.07	---	---	.10	---	---
20	.09	---	---	.05	---	---	.11	---	---
21	.09	---	---	.05	---	---	.10	---	---
22	.08	---	---	.05	---	---	.10	---	---
23	.08	---	---	.10	---	---	.10	---	---
24	.10	---	---	.10	---	---	.10	---	---
25	.08	---	---	.11	---	---	.11	---	---
26	.07	---	---	.14	---	---	.12	---	---
27	.06	---	---	.10	---	---	.12	---	---
28	.07	---	---	.10	---	---	.12	---	---
29	.06	---	---	.10	---	---	.12	---	---
30	.05	---	---	.10	---	---	.08	---	---
31	.05	---	---	.10	---	---	---	---	---
TOTAL	2.87	---	0	2.53	---	0	3.11	---	0

e Estimated.

## ARKANSAS RIVER BASIN

07126200 VAN BREMER ARROYO NEAR MODEL, CO--Continued

## PRECIPITATION RECORDS

PERIOD OF RECORD.--June 1993 to current year (seasonal records only).

GAGE.--Tipping-bucket rain gage with satellite telemetry.

REMARKS.--Records good. Daily data that are not published are either missing or of unacceptable quality.

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum daily precipitation, 2.67 inches, May 25, 1996.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum daily precipitation, 0.94 inch, June 30.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	---	---	---	---	---	---	.00	.00	.14	.00	.00
2	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
3	.00	---	---	---	---	---	---	.05	.00	.65	.00	.00
4	.00	---	---	---	---	---	---	.50	.00	.00	.00	.00
5	.00	---	---	---	---	---	---	.44	.00	.00	.00	.00
6	.10	---	---	---	---	---	---	.00	.00	.00	.00	.00
7	.02	---	---	---	---	---	---	.00	.05	.00	.00	.23
8	.00	---	---	---	---	---	---	.00	.00	.00	.00	.02
9	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
10	.00	---	---	---	---	---	---	.00	.00	.00	.13	.00
11	.00	---	---	---	---	---	---	.00	.00	.02	.01	.00
12	.00	---	---	---	---	---	e.00	.00	.00	.00	.00	.00
13	.00	---	---	---	---	---	.00	.00	.00	.22	.23	.00
14	.00	---	---	---	---	---	.00	.00	.00	.20	.12	.00
15	.00	---	---	---	---	---	.00	.00	.00	.10	.00	.40
16	.00	---	---	---	---	---	.00	.01	.00	.00	.13	.00
17	.00	---	---	---	---	---	.00	.30	.00	.00	.13	.03
18	.00	---	---	---	---	---	.00	.00	.00	.00	.00	.00
19	.00	---	---	---	---	---	.00	.30	.00	.00	.00	.00
20	.00	---	---	---	---	---	.00	.17	.14	.00	.00	.00
21	.00	---	---	---	---	---	.00	.02	.42	.00	.00	.00
22	.13	---	---	---	---	---	.04	.00	.00	.00	.00	.00
23	.50	---	---	---	---	---	.00	.00	.00	.10	.00	.00
24	.23	---	---	---	---	---	.00	.00	.00	.01	.00	.00
25	.00	---	---	---	---	---	.00	.00	.00	.00	.10	.00
26	.00	---	---	---	---	---	.00	.00	.00	.00	.00	.00
27	.00	---	---	---	---	---	.00	.01	.00	.00	.00	.00
28	.82	---	---	---	---	---	.00	.08	.00	.00	.08	.00
29	.86	---	---	---	---	---	.00	.00	.03	.00	.00	.00
30	.00	---	---	---	---	---	.00	.03	.94	.00	.00	.00
31	e.00	---	---	---	---	---	---	.00	---	.09	.00	---
TOTAL	2.66	---	---	---	---	---	---	1.91	1.58	1.53	0.93	0.68
MAX	.86	---	---	---	---	---	---	.50	.94	.65	.23	.40

e Estimated.

07126300 PURGATOIRE RIVER NEAR THATCHER, CO

LOCATION.--Lat 37°21'23", long 103°53'59", in NW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec.10, T.31 S., R.58 W., Las Animas County, Hydrologic Unit 11020010, on right bank 250 ft downstream from county road bridge at gas line crossing, 1.2 mi downstream from Van Bremer Arroyo, and 18 mi southeast of Thatcher.

DRAINAGE AREA.--1,791 mi<sup>2</sup>, of which 11.8 mi<sup>2</sup> is noncontributing (revised).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1966 to current year. Statistical summary computed for 1976 to current year, subsequent to completion of Trinidad Reservoir. Water-quality data available, December 1982 to April 1998.

REVISED RECORDS.--WDR CO-84-1: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry and crest-stage gages. Elevation of gage is 4,790 ft above sea level, from topographic map.

REMARKS.--Records good except for estimated daily discharges and discharges above 2,000 ft<sup>3</sup>/s, which are poor. Natural flow of stream affected by diversions for irrigation. Peak flows regulated to some extent by Trinidad Lake near Trinidad (station 07124400) 52 mi upstream since January 1975. 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.--Floods of July 22, 1954 and May 19, 1955, reached stages of 26.7 and 25.2 ft, respectively, from floodmarks, discharges unknown. Flood of June 18, 1965, reached a stage of 23.5 ft, from floodmarks, discharge, 47,700 ft<sup>3</sup>/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	e50	34	29	e34	27	21	11	15	55	11	11
2	18	e44	33	30	e33	27	20	8.1	15	31	11	9.6
3	19	e41	31	29	32	26	19	6.0	13	9.7	12	7.6
4	20	e39	32	30	33	26	18	7.9	10	9.3	14	6.3
5	21	e40	e32	31	33	25	18	12	10	7.4	17	4.3
6	23	e39	e32	32	34	23	15	18	8.0	3.9	11	3.3
7	27	e38	e32	e33	34	22	11	19	7.0	2.0	7.8	2.5
8	28	e38	e32	e34	34	27	11	15	6.6	1.6	6.4	2.5
9	30	e37	e33	e34	33	33	13	9.2	7.9	.98	5.0	2.6
10	31	e36	e33	32	e33	35	12	6.0	11	14	4.3	2.4
11	31	e36	33	e32	33	39	13	6.4	9.7	7.7	9.1	4.2
12	30	e36	27	e32	35	45	13	6.4	7.8	4.4	33	5.4
13	27	e35	32	e32	e35	48	14	6.2	6.7	17	28	5.1
14	25	e35	31	e31	35	43	13	5.8	5.7	609	28	4.4
15	27	e34	32	e31	35	38	12	5.3	4.9	214	102	5.1
16	33	34	e32	31	32	35	11	5.0	4.6	54	28	15
17	32	33	e31	e27	30	33	10	5.6	4.0	25	19	381
18	30	33	e30	25	30	33	10	447	3.1	15	40	196
19	29	33	e30	23	29	33	11	85	1.9	54	29	57
20	29	34	29	28	29	32	9.3	236	1.8	77	17	40
21	26	34	e28	31	29	30	7.9	87	2.3	82	12	36
22	26	34	27	31	29	29	7.9	56	7.8	50	8.8	20
23	34	35	28	32	29	30	11	50	18	33	7.5	16
24	57	35	30	32	29	82	11	57	16	28	10	15
25	62	33	30	32	30	56	9.4	39	13	33	98	16
26	41	33	29	32	29	37	9.5	35	11	37	41	13
27	35	33	27	e32	29	36	8.3	24	7.5	24	17	11
28	34	34	29	e32	28	28	7.3	19	17	20	16	9.0
29	233	33	e30	e33	---	26	5.5	17	19	19	81	7.8
30	140	33	31	e34	---	24	11	12	15	14	46	7.6
31	e65	---	32	e34	---	21	---	17	---	11	17	---
TOTAL	1280	1082	952	961	888	1049	363.1	1333.9	280.3	1562.98	786.9	916.7
MEAN	41.3	36.1	30.7	31.0	31.7	33.8	12.1	43.0	9.34	50.4	25.4	30.6
MAX	233	50	34	34	35	82	21	447	19	609	102	381
MIN	17	33	27	23	28	21	5.5	5.0	1.8	.98	4.3	2.4
AC-FT	2540	2150	1890	1910	1760	2080	720	2650	556	3100	1560	1820

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1976 - 2001, BY WATER YEAR (WY)

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
MEAN	34.7	32.8	29.3	28.5	30.3	37.6	86.9	135	94.7	87.3	139	58.1														
MAX	84.0	66.4	44.3	43.2	53.3	143	467	592	764	547	910	302														
(WY)	1986	1999	1987	1988	1987	1998	1983	1987	1983	1981	1981	1981														
MIN	.73	3.71	12.1	10.6	11.5	5.97	1.38	6.22	6.69	8.80	9.10	.64														
(WY)	1979	1979	1979	1978	1976	1977	1978	1991	1976	1989	1976	1978														

SUMMARY STATISTICS

	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1976 - 2001
ANNUAL TOTAL	16218.4	11455.88	
ANNUAL MEAN	44.3	31.4	a66.4
HIGHEST ANNUAL MEAN			181
LOWEST ANNUAL MEAN			12.3
HIGHEST DAILY MEAN	577	Apr 6	10000 Jul 3 1981
LOWEST DAILY MEAN	3.5	Aug 14	b.00 Jun 28 1976
ANNUAL SEVEN-DAY MINIMUM	6.2	Aug 10	3.1 Sep 5 .00 Jun 28 1976
MAXIMUM PEAK FLOW		c2380	Jul 14 d42400 Jul 3 1981
MAXIMUM PEAK STAGE		7.75	Jul 14 22.00 Jul 3 1981
ANNUAL RUNOFF (AC-FT)	32170	22720	48090
10 PERCENT EXCEEDS	82	41	109
50 PERCENT EXCEEDS	31	28	30
90 PERCENT EXCEEDS	13	6.4	6.8

e Estimated.

a Average discharge for 10 years (water years 1967-76), 37.9 ft<sup>3</sup>/s, 27,460 acre-ft/yr, prior to completion of Trinidad Dam.

b No flow at times during 1966, 1971-73, 1976, 1990.

c From rating curve extended above 2,020 ft<sup>3</sup>/s on basis of slope-area measurement of peak flow at gage height 12.25 ft.

d From rating curve extended above 2,020 ft<sup>3</sup>/s on basis of slope-area measurements of peak flow at gage heights 12.25 ft and 23.50 ft.

## ARKANSAS RIVER BASIN

07126300 PURGATOIRE RIVER NEAR THATCHER, CO--Continued

## PRECIPITATION RECORDS

PERIOD OF RECORD.--April 1999 to current year (seasonal records only).

GAGE.--Tipping-bucket rain gage with satellite telemetry.

REMARKS.--Records good. Daily data that are not published are either missing or of unacceptable quality.

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum daily precipitation, 2.79 inches, Aug. 21, 2000.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum daily precipitaion, 1.58 inches, July 1.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	---	---	---	---	---	---	.00	.00	1.58	.00	.00
2	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
3	.00	---	---	---	---	---	---	.04	.00	.20	.00	.00
4	.00	---	---	---	---	---	---	.62	.00	.00	.00	.00
5	.00	---	---	---	---	---	---	.35	.00	.00	.00	.00
6	.04	---	---	---	---	---	---	.00	.00	.00	.00	.00
7	.01	---	---	---	---	---	---	.00	.24	.00	.00	.08
8	.00	---	---	---	---	---	---	.00	.00	.00	.00	.02
9	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
10	.00	---	---	---	---	---	---	.00	.00	.00	.12	.00
11	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
12	.00	---	---	---	---	---	e.00	.00	.00	.00	.00	.00
13	.00	---	---	---	---	---	.00	.00	.00	.38	.76	.00
14	.00	---	---	---	---	---	.00	.00	.00	.21	.13	.00
15	.00	---	---	---	---	---	.00	.00	.00	.03	.00	.27
16	.00	---	---	---	---	---	.00	.03	.00	.00	.12	.00
17	.00	---	---	---	---	---	.00	.13	.00	.00	.00	.02
18	.00	---	---	---	---	---	.00	.00	.00	.00	.00	.00
19	.00	---	---	---	---	---	.00	.36	.00	.00	.00	.00
20	.00	---	---	---	---	---	.00	.16	.10	.00	.00	.00
21	.00	---	---	---	---	---	.00	.04	.41	.00	.00	.00
22	.12	---	---	---	---	---	.03	.00	.00	.00	.00	.00
23	.49	---	---	---	---	---	.00	.00	.00	.37	.00	.00
24	.26	---	---	---	---	---	.00	.00	.00	.00	.00	.00
25	.00	---	---	---	---	---	.00	.00	.00	.00	.07	.00
26	.00	---	---	---	---	---	.00	.00	.00	.06	.00	.00
27	.00	---	---	---	---	---	.00	.00	.00	.00	.00	.00
28	.71	---	---	---	---	---	.00	.16	.00	.00	.01	.00
29	.92	---	---	---	---	---	.00	.00	.00	.00	.00	.00
30	.00	---	---	---	---	---	.00	.23	.00	.00	.00	.00
31	e.00	---	---	---	---	---	---	.00	---	.01	.00	---
TOTAL	2.55	---	---	---	---	---	---	2.12	0.75	2.84	1.21	0.39
MAX	.92	---	---	---	---	---	---	.62	.41	1.58	.76	.27

e Estimated.

07126325 TAYLOR ARROYO BELOW ROCK CROSSING NEAR THATCHER, CO

LOCATION (REVISED).--Lat 37°25'27", long 103°55'11", in SE<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec.17, T.30 S., R.58 W., Las Animas County, Hydrologic Unit 11020010, on Pinon Canyon Maneuver Site, on left bank 2.0 mi downstream from Rock Crossing, 5 mi upstream from mouth, and 13.5 mi southeast of Thatcher.

DRAINAGE AREA.--48.4 mi<sup>2</sup>.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 1983 to September 1998, October 1998 to current year (seasonal records only).

GAGE.--Water-stage recorder with satellite telemetry, concrete control, and crest-stage gages. Elevation of gage is 4,982 ft above sea level, from topographic map.

REMARKS.--Records fair except for estimated daily discharges and those above 40 ft<sup>3</sup>/s, which are poor. Natural flow of stream may be affected by small, in-channel erosion-control reservoirs.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,090 ft<sup>3</sup>/s, Sept. 30, 1998, gage height, 13.71 ft, from slope-area measurement of peak flow; no flow most days.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum discharge, 3.6 ft<sup>3</sup>/s, Oct. 29, gage height, 4.29 ft; no flow most days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	e.01	---	---	---	---	---	.00	.00	.00	.00	.00
2	.00	e.00	---	---	---	---	---	.00	.00	.00	.00	.00
3	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
4	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
5	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
6	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
7	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
8	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
9	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
10	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
11	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
12	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
13	.00	---	---	---	---	---	e.00	.00	.00	.00	.00	.00
14	.00	---	---	---	---	---	.00	.00	.00	.00	.00	.00
15	.00	---	---	---	---	---	.00	.00	.00	.00	.00	.00
16	.00	---	---	---	---	---	.00	.00	.00	.00	.00	.00
17	.00	---	---	---	---	---	.00	.00	.00	.00	.00	.00
18	.00	---	---	---	---	---	.00	.00	.00	.00	.00	.00
19	.00	---	---	---	---	---	.00	.00	.00	.00	.00	.00
20	.00	---	---	---	---	---	.00	.00	.00	.00	.00	.00
21	.00	---	---	---	---	---	.00	.00	.00	.00	.00	.00
22	.00	---	---	---	---	---	.00	.00	.00	.00	.00	.00
23	.00	---	---	---	---	---	.00	.00	.00	.00	.00	.00
24	.00	---	---	---	---	---	.00	.00	.00	.00	.00	.00
25	.00	---	---	---	---	---	.00	.00	.00	.00	.00	.00
26	.00	---	---	---	---	---	.00	.00	.00	.00	.00	.00
27	.00	---	---	---	---	---	.00	.00	.00	.00	.00	.00
28	.00	---	---	---	---	---	.00	.00	.00	.00	.00	.00
29	.45	---	---	---	---	---	.00	.00	.00	.00	.00	.00
30	e.67	---	---	---	---	---	.00	.00	.00	.00	.00	.00
31	e.03	---	---	---	---	---	---	.00	---	.00	.00	---
TOTAL	1.15	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00
MEAN	.037	---	---	---	---	---	---	.000	.000	.000	.000	.000
MAX	.67	---	---	---	---	---	---	.00	.00	.00	.00	.00
MIN	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
AC-FT	2.3	---	---	---	---	---	---	.00	.00	.00	.00	.00

e Estimated.

WATER-QUALITY RECORDS

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

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: March 1983 to April 1998.

WATER TEMPERATURE: March 1983 to April 1998.

SUSPENDED SEDIMENT: March 1983 to October 1998. May 1999 to current year (seasonal records only).

INSTRUMENTATION.--Pumping sediment sampler with satellite telemetry.

REMARKS.--Records for daily suspended sediment are poor. Daily mean suspended-sediment concentrations published for days of partial flow might not reflect concentrations during the flow event.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SEDIMENT CONCENTRATIONS: Maximum daily mean, 15,300 mg/L, Aug. 22, 1984; no flow most of the time.

SUSPENDED SEDIMENT DISCHARGE: Maximum daily, 12,700 tons (estimated), Sept. 30, 1998; minimum, 0.0 ton, many days; no flow most days.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATION (seasonal only): Maximum daily mean, 926 mg/L, Aug. 21; minimum daily mean, 319 mg/L, Aug. 23.

SUSPENDED-SEDIMENT DISCHARGE (seasonal only): Maximum daily, 0.90 ton (estimated), Oct. 30; minimum daily, 0.0 ton (estimated), Nov. 1; no flow most days.

MISCELLANEOUS FIELD AND SUSPENDED-SEDIMENT DISCHARGE DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	SEDI- MENT, SUS- PENDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)
OCT 30...	1300	.34	233	13.1	164	.15

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
	OCTOBER			NOVEMBER			DECEMBER		
1	.00	---	---	e.01	---	e.00	---	---	---
2	.00	---	---	e.00	---	---	---	---	---
3	.00	---	---	---	---	---	---	---	---
4	.00	---	---	---	---	---	---	---	---
5	.00	---	---	---	---	---	---	---	---
6	.00	---	---	---	---	---	---	---	---
7	.00	---	---	---	---	---	---	---	---
8	.00	---	---	---	---	---	---	---	---
9	.00	---	---	---	---	---	---	---	---
10	.00	---	---	---	---	---	---	---	---
11	.00	---	---	---	---	---	---	---	---
12	.00	---	---	---	---	---	---	---	---
13	.00	---	---	---	---	---	---	---	---
14	.00	---	---	---	---	---	---	---	---
15	.00	---	---	---	---	---	---	---	---
16	.00	---	---	---	---	---	---	---	---
17	.00	---	---	---	---	---	---	---	---
18	.00	---	---	---	---	---	---	---	---
19	.00	---	---	---	---	---	---	---	---
20	.00	---	---	---	---	---	---	---	---
21	.00	---	---	---	---	---	---	---	---
22	.00	---	---	---	---	---	---	---	---
23	.00	---	---	---	---	---	---	---	---
24	.00	---	---	---	---	---	---	---	---
25	.00	---	---	---	---	---	---	---	---
26	.00	---	---	---	---	---	---	---	---
27	.00	---	---	---	---	---	---	---	---
28	.00	---	---	---	---	---	---	---	---
29	.45	---	e.50	---	---	---	---	---	---
30	e.67	---	e.90	---	---	---	---	---	---
31	e.03	---	e.01	---	---	---	---	---	---
TOTAL	1.15	---	1.41	0.01	---	0.00	0	---	0

07126325 TAYLOR ARROYO BELOW ROCK CROSSING NEAR THATCHER, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
	JANUARY			FEBRUARY			MARCH		
1	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---
TOTAL	0	---	0	0	---	0	0	---	0

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
	APRIL			MAY			JUNE		
1	---	---	---	.00	---	---	.00	---	---
2	---	---	---	.00	---	---	.00	---	---
3	---	---	---	.00	---	---	.00	---	---
4	---	---	---	.00	---	---	.00	---	---
5	---	---	---	.00	---	---	.00	---	---
6	---	---	---	.00	---	---	.00	---	---
7	---	---	---	.00	---	---	.00	---	---
8	---	---	---	.00	---	---	.00	---	---
9	---	---	---	.00	---	---	.00	---	---
10	---	---	---	.00	---	---	.00	---	---
11	---	---	---	.00	---	---	.00	---	---
12	---	---	---	.00	---	---	.00	---	---
13	e.00	---	---	.00	---	---	.00	---	---
14	.00	---	---	.00	---	---	.00	---	---
15	.00	---	---	.00	---	---	.00	---	---
16	.00	---	---	.00	---	---	.00	---	---
17	.00	---	---	.00	---	---	.00	---	---
18	.00	---	---	.00	---	---	.00	---	---
19	.00	---	---	.00	---	---	.00	---	---
20	.00	---	---	.00	---	---	.00	---	---
21	.00	---	---	.00	---	---	.00	---	---
22	.00	---	---	.00	---	---	.00	---	---
23	.00	---	---	.00	---	---	.00	---	---
24	.00	---	---	.00	---	---	.00	---	---
25	.00	---	---	.00	---	---	.00	---	---
26	.00	---	---	.00	---	---	.00	---	---
27	.00	---	---	.00	---	---	.00	---	---
28	.00	---	---	.00	---	---	.00	---	---
29	.00	---	---	.00	---	---	.00	---	---
30	.00	---	---	.00	---	---	.00	---	---
31	---	---	---	.00	---	---	---	---	---
TOTAL	0.00	---	0	0.00	---	0	0.00	---	0

## ARKANSAS RIVER BASIN

07126325 TAYLOR ARROYO BELOW ROCK CROSSING NEAR THATCHER, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MEAN	MEAN	SEDIMENT	MEAN	MEAN	SEDIMENT	MEAN	MEAN	SEDIMENT
	DISCHARGE (CFS)	CONCEN- TRATION (MG/L)	DISCHARGE (TONS/DAY)	DISCHARGE (CFS)	CONCEN- TRATION (MG/L)	DISCHARGE (TONS/DAY)	DISCHARGE (CFS)	CONCEN- TRATION (MG/L)	DISCHARGE (TONS/DAY)
	JULY			AUGUST			SEPTEMBER		
1	.00	---	---	.00	---	---	.00	---	---
2	.00	---	---	.00	---	---	.00	---	---
3	.00	---	---	.00	---	---	.00	---	---
4	.00	---	---	.00	---	---	.00	---	---
5	.00	---	---	.00	---	---	.00	---	---
6	.00	---	---	.00	---	---	.00	---	---
7	.00	---	---	.00	---	---	.00	---	---
8	.00	---	---	.00	---	---	.00	---	---
9	.00	---	---	.00	---	---	.00	---	---
10	.00	---	---	.00	---	---	.00	---	---
11	.00	---	---	.00	---	---	.00	---	---
12	.00	---	---	.00	---	---	.00	---	---
13	.00	---	---	.00	---	---	.00	---	---
14	.00	---	---	.00	---	---	.00	---	---
15	.00	---	---	.00	---	---	.00	---	---
16	.00	---	---	.00	---	---	.00	---	---
17	.00	---	---	.00	---	---	.00	---	---
18	.00	---	---	.00	---	---	.00	---	---
19	.00	---	---	.00	---	---	.00	---	---
20	.00	---	---	.00	---	---	.00	---	---
21	.00	---	---	.00	---	---	.00	---	---
22	.00	---	---	.00	---	---	.00	---	---
23	.00	---	---	.00	---	---	.00	---	---
24	.00	---	---	.00	---	---	.00	---	---
25	.00	---	---	.00	---	---	.00	---	---
26	.00	---	---	.00	---	---	.00	---	---
27	.00	---	---	.00	---	---	.00	---	---
28	.00	---	---	.00	---	---	.00	---	---
29	.00	---	---	.00	---	---	.00	---	---
30	.00	---	---	.00	---	---	.00	---	---
31	.00	---	---	.00	---	---	.00	---	---
TOTAL	0.00	---	0	0.00	---	0	0.00	---	0

e Estimated.

07126325 TAYLOR ARROYO BELOW ROCK CROSSING NEAR THATCHER, CO--Continued

PRECIPITATION RECORDS

PERIOD OF RECORD.--May 1999 to current year (seasonal records only).

GAGE.--Tipping-bucket rain gage with satellite telemetry.

REMARKS.--Records good. Daily data that are not published are either missing or of unacceptable quality.

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum daily precipitation, 3.23 inches, Aug. 21, 2000.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum daily precipitaion, 0.80 inch, Sept. 15.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	---	---	---	---	---	---	.00	.00	.06	.00	.00
2	.00	---	---	---	---	---	---	.00	.00	.00	.02	.00
3	.00	---	---	---	---	---	---	.07	.00	.31	.00	.00
4	.01	---	---	---	---	---	---	.45	.00	.00	.00	.00
5	.00	---	---	---	---	---	---	.46	.00	.00	.00	.00
6	.13	---	---	---	---	---	---	.00	.00	.00	.00	.00
7	.01	---	---	---	---	---	---	.00	.04	.00	.00	.15
8	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
9	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
10	.00	---	---	---	---	---	---	.00	.00	.00	.04	.00
11	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
12	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
13	.00	---	---	---	---	---	e.00	.00	.00	.20	.01	.00
14	.00	---	---	---	---	---	.00	.00	.00	.19	.15	.02
15	.00	---	---	---	---	---	.00	.00	.00	.02	.00	.80
16	.00	---	---	---	---	---	.00	.00	.00	.00	.28	.00
17	.00	---	---	---	---	---	.00	.33	.02	.00	.00	.01
18	.00	---	---	---	---	---	.00	.00	.00	.00	.00	.00
19	.00	---	---	---	---	---	.00	.14	.00	.00	.00	.00
20	.00	---	---	---	---	---	.00	.13	.13	.00	.00	.00
21	.00	---	---	---	---	---	.00	.03	.10	.00	.04	.00
22	.07	---	---	---	---	---	.02	.00	.00	.00	.05	.00
23	.38	---	---	---	---	---	.00	.00	.00	.09	.00	.00
24	.28	---	---	---	---	---	.00	.00	.00	.02	.00	.00
25	.00	---	---	---	---	---	.00	.00	.00	.00	.07	.00
26	.00	---	---	---	---	---	.00	.00	.00	.00	.00	.00
27	.00	---	---	---	---	---	.01	.00	.00	.00	.00	.00
28	.71	---	---	---	---	---	.00	.50	.00	.00	.03	.00
29	.79	---	---	---	---	---	.01	.00	.07	.00	.00	.00
30	e.00	---	---	---	---	---	.00	.24	.00	.00	.00	.00
31	---	---	---	---	---	---	---	.00	---	.00	.00	---
TOTAL	---	---	---	---	---	---	---	2.35	0.36	0.89	0.69	0.98
MAX	---	---	---	---	---	---	---	.50	.13	.31	.28	.80

e Estimated.

ARKANSAS RIVER BASIN

07126390 LOCKWOOD CANYON CREEK NEAR THATCHER, CO

LOCATION.--Lat 37°29'34", long 103°49'39", in SW<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec.30, T.29 S., R.57 W., Las Animas County, Hydrologic Unit 11020010, on Pinon Canyon Maneuver Site, on left bank 0.8 mi downstream from Sharp Ranch, 5.3 mi upstream from mouth, and 16 mi southeast of Thatcher.

DRAINAGE AREA.--49.2 mi<sup>2</sup>.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1983 to September 1992, October 1992 to May 1999 (annual maximum only), May 1999 to current year (seasonal records only). Records Prior to May 14, 1999, may not be equivalent because of difference in drainage area.

REVISED RECORDS.--WDR CO-97-1: 1987(M). WDR CO-00-1: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry and crest-stage gages. April 1983 to May 2, 1989, at site 0.4 mile upstream at different datum. May 3, 1989 to May 13, 1999, at site 0.2 mile upstream at different datum. Elevation of gage is 4,785 ft above sea level, from topographic map.

REMARKS.--Records good. Natural flow of stream may be affected by small, in-channel erosion-control reservoirs.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,110 ft<sup>3</sup>/s, May 22, 1987, from slope-area measurement of peak flow, gage height, 10.39 ft, site and datum then in use; no flow most days.

EXTREMES FOR CURRENT YEAR (seasonal only).--No flow during the year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	e.00	---	---	---	---	---	.00	.00	.00	.00	.00
2	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
3	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
4	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
5	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
6	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
7	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
8	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
9	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
10	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
11	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
12	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
13	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
14	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
15	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
16	.00	---	---	---	---	---	e.00	.00	.00	.00	.00	.00
17	.00	---	---	---	---	---	.00	.00	.00	.00	.00	.00
18	.00	---	---	---	---	---	.00	.00	.00	.00	.00	.00
19	.00	---	---	---	---	---	.00	.00	.00	.00	.00	.00
20	.00	---	---	---	---	---	.00	.00	.00	.00	.00	.00
21	.00	---	---	---	---	---	.00	.00	.00	.00	.00	.00
22	.00	---	---	---	---	---	.00	.00	.00	.00	.00	.00
23	.00	---	---	---	---	---	.00	.00	.00	.00	.00	.00
24	.00	---	---	---	---	---	.00	.00	.00	.00	.00	.00
25	.00	---	---	---	---	---	.00	.00	.00	.00	.00	.00
26	.00	---	---	---	---	---	.00	.00	.00	.00	.00	.00
27	.00	---	---	---	---	---	.00	.00	.00	.00	.00	.00
28	.00	---	---	---	---	---	.00	.00	.00	.00	.00	.00
29	.00	---	---	---	---	---	.00	.00	.00	.00	.00	.00
30	.00	---	---	---	---	---	.00	.00	.00	.00	.00	.00
31	.00	---	---	---	---	---	---	.00	---	.00	.00	---
TOTAL	0.00	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00
MEAN	.000	---	---	---	---	---	---	.000	.000	.000	.000	.000
MAX	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
MIN	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
AC-FT	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00

e Estimated.

07126390 LOCKWOOD CANYON CREEK NEAR THATCHER, CO--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--May 1989 to September 1992. May 1999 to current year.

## PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: May 1989 to September 1992.

WATER TEMPERATURE: May 1989 to September 1992.

SUSPENDED SEDIMENT: May 1999 to current year (seasonal records only).

INSTRUMENTATION.--June 1989 to September 1992, water-quality monitor at site 0.4 mi upstream. Pumping sediment sampler with satellite telemetry.

REMARKS.--Records for daily suspended sediment are good. Daily mean suspended-sediment concentrations published for days of partial flow might not reflect concentrations during the flow event.

## EXTREMES FOR PERIOD OF RECORD.--

SEDIMENT CONCENTRATION (seasonal only): Maximum daily mean, 827 mg/L, June 13, 1999; minimum daily, 6 mg/L, Aug. 7, 1999.

SUSPENDED SEDIMENT DISCHARGE (seasonal only): Maximum daily, 66 tons, June 13, 1999; minimum daily, 0.0 ton, many days, no flow most days.

## EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATION (seasonal only): No flow for current year.

SUSPENDED-SEDIMENT DISCHARGE (seasonal only): No flow for current year.

\*\*\*\*\*

--NO FLOW DURING CURRENT WATER YEAR--

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07126390 LOCKWOOD CANYON CREEK NEAR THATCHER, CO--Continued

## PRECIPITATION RECORDS

PERIOD OF RECORD.--May 1999 to current year (seasonal records only).

GAGE.--Tipping-bucket rain gage with satellite telemetry.

REMARKS.--Records good. Daily data that are not published are either missing or of unacceptable quality.

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum daily precipitation, 1.71 inches, Aug. 10, 2001.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum daily precipitation, 1.71 inches, Aug. 10.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	e.00	---	---	---	---	---	.00	.00	.01	.00	.00
2	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
3	.00	---	---	---	---	---	---	.08	.00	.66	.00	.00
4	.10	---	---	---	---	---	---	.53	.00	.00	.00	.00
5	.02	---	---	---	---	---	---	.46	.00	.00	.00	.00
6	.10	---	---	---	---	---	---	.00	.00	.00	.00	.00
7	.01	---	---	---	---	---	---	.00	.12	.00	.00	.12
8	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
9	.00	---	---	---	---	---	---	.00	.01	.00	.00	.00
10	.00	---	---	---	---	---	---	.00	.00	.00	1.71	.00
11	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
12	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
13	.00	---	---	---	---	---	---	.00	.00	.06	.23	.00
14	.00	---	---	---	---	---	---	.00	.00	.30	.01	.00
15	.00	---	---	---	---	---	---	.00	.00	.00	.00	.16
16	.00	---	---	---	---	---	e.00	.00	.00	.00	.05	.00
17	.00	---	---	---	---	---	.00	.32	.02	.00	.00	.00
18	.00	---	---	---	---	---	.00	.00	.00	.00	.00	.01
19	.00	---	---	---	---	---	.00	.10	.00	.00	.00	.00
20	.00	---	---	---	---	---	.00	.39	.07	.00	.00	.00
21	.00	---	---	---	---	---	.00	.03	.18	.62	.00	.01
22	.00	---	---	---	---	---	.00	.00	.00	.00	.03	.00
23	.34	---	---	---	---	---	.00	.00	.00	.15	.00	.00
24	.27	---	---	---	---	---	.00	.00	.00	.01	.00	.00
25	.00	---	---	---	---	---	.00	.00	.54	.00	.23	.00
26	.00	---	---	---	---	---	.00	.00	.00	.04	.00	.00
27	.00	---	---	---	---	---	.00	.00	.00	.00	.00	.00
28	.81	---	---	---	---	---	.00	.49	.00	.00	.01	.00
29	.59	---	---	---	---	---	.01	.01	.15	.00	.00	.00
30	.00	---	---	---	---	---	.00	.04	.00	.00	.00	.00
31	.00	---	---	---	---	---	---	.00	---	.05	.00	---
TOTAL	2.24	---	---	---	---	---	---	2.45	1.09	1.90	2.27	0.30
MAX	.81	---	---	---	---	---	---	.53	.54	.66	1.71	.16

e Estimated.

07126415 RED ROCK CANYON CREEK AT MOUTH NEAR THATCHER, CO

LOCATION.--Lat 37°30'55", long 103°43'30", Las Animas County, Hydrologic Unit 11020010, on left bank 200 ft downstream from Welsh Canyon Creek, 0.3 mi upstream from mouth, and 21 mi east of Thatcher.

DRAINAGE AREA.--48.8 mi<sup>2</sup>.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1983 to September 1990, October 1990 to April 2000 (annual maximum only), April 2000 to current year (seasonal records only).

GAGE.--Water-stage recorder with satellite telemetry and crest-stage gages. Elevation of gage is 4,510 ft above sea level, from topographic map.

REMARKS.--Records good. Natural flow of stream may be affected by small, in-channel erosion-control reservoirs.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,530 ft<sup>3</sup>/s, May 22, 1987, from rating curve extended above 0.29 ft<sup>3</sup>/s on basis of slope-area measurements of peak flow at gage heights 7.54, 8.40, and 10.02 ft, gage height, 10.09 ft, from floodmarks; no flow most days.

EXTREMES FOR CURRENT YEAR (seasonal only).--No flow during the year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	e.00	---	---	---	---	---	.00	.00	.00	.00	.00
2	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
3	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
4	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
5	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
6	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
7	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
8	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
9	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
10	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
11	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
12	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
13	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
14	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
15	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
16	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
17	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
18	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
19	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
20	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
21	.00	---	---	---	---	---	e.00	.00	.00	.00	.00	.00
22	.00	---	---	---	---	---	.00	.00	.00	.00	.00	.00
23	.00	---	---	---	---	---	.00	.00	.00	.00	.00	.00
24	.00	---	---	---	---	---	.00	.00	.00	.00	.00	.00
25	.00	---	---	---	---	---	.00	.00	.00	.00	.00	.00
26	.00	---	---	---	---	---	.00	.00	.00	.00	.00	.00
27	.00	---	---	---	---	---	.00	.00	.00	.00	.00	.00
28	.00	---	---	---	---	---	.00	.00	.00	.00	.00	.00
29	.00	---	---	---	---	---	.00	.00	.00	.00	.00	.00
30	.00	---	---	---	---	---	.00	.00	.00	.00	.00	.00
31	.00	---	---	---	---	---	---	.00	---	.00	.00	---
TOTAL	0.00	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00
MEAN	.000	---	---	---	---	---	---	.000	.000	.000	.000	.000
MAX	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
MIN	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
AC-FT	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00

e Estimated.

07126415 RED ROCK CANYON CREEK AT MOUTH NEAR THATCHER, CO--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--May 1983 to September 1990, June 2000 to current year.

## PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: May 1983 to September 1990.

WATER TEMPERATURE: May 1983 to September 1990.

SUSPENDED SEDIMENT: June 2000 to current year (seasonal records only).

INSTRUMENTATION.--Pumping sediment sampler with satellite telemetry.

REMARKS.--Records for suspended sediment are good.

## EXTREMES FOR PERIOD OF RECORD--

SEDIMENT CONCENTRATION (seasonal only): No flow for period of record.

SUSPENDED SEDIMENT DISCHARGE (seasonal only): No flow for period of record.

## EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATION (seasonal only): No flow for current year.

SUSPENDED SEDIMENT DISCHARGE (seasonal only): No flow for current year.

\*\*\*\*\*

--NO FLOW DURING CURRENT WATER YEAR--

\*\*\*\*\*

07126415 RED ROCK CANYON CREEK AT MOUTH NEAR THATCHER, CO--Continued

PRECIPITATION RECORDS

PERIOD OF RECORD.--April 2000 to current year (seasonal records only).

GAGE.--Tipping-bucket rain gage with satellite telemetry.

REMARKS.--Records good. Daily data that are not published are either missing or of unacceptable quality.

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum daily precipitation, 1.16 inches, Oct. 28, 2000.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum daily precipitation, 1.16 inches, Oct. 28.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	e.00	---	---	---	---	---	.00	.00	.57	.00	.00
2	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
3	.00	---	---	---	---	---	---	.04	.00	.02	.00	.00
4	.00	---	---	---	---	---	---	.73	.00	.00	.00	.00
5	.03	---	---	---	---	---	---	.49	.00	.00	.00	.00
6	.07	---	---	---	---	---	---	.01	.00	.00	.00	.00
7	.01	---	---	---	---	---	---	.00	.04	.00	.00	.20
8	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
9	.00	---	---	---	---	---	---	.00	.05	.00	.00	.00
10	.00	---	---	---	---	---	---	.00	.00	.00	.67	.00
11	.00	---	---	---	---	---	---	.00	.00	.24	.01	.00
12	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
13	.00	---	---	---	---	---	---	.00	.00	.10	.65	.00
14	.00	---	---	---	---	---	---	.00	.00	.27	.01	.00
15	.00	---	---	---	---	---	---	.00	.00	.00	.00	.06
16	.00	---	---	---	---	---	---	.00	.00	.00	.38	.00
17	.00	---	---	---	---	---	---	.37	.13	.00	.00	.01
18	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
19	.00	---	---	---	---	---	---	.30	.00	.06	.00	.00
20	.00	---	---	---	---	---	---	.04	.07	.00	.00	.00
21	.00	---	---	---	---	---	e.00	.03	.39	1.03	.00	.12
22	.03	---	---	---	---	---	.02	.00	.02	.00	.00	.00
23	.36	---	---	---	---	---	.00	.00	.00	.22	.00	.00
24	.29	---	---	---	---	---	.00	.00	.00	.00	.00	.00
25	.00	---	---	---	---	---	.00	.00	.00	.70	.04	.00
26	.00	---	---	---	---	---	.00	.00	.00	.03	.00	.00
27	.00	---	---	---	---	---	.00	.00	.00	.00	.00	.00
28	1.16	---	---	---	---	---	.00	.13	.00	.00	.01	.00
29	.41	---	---	---	---	---	.00	.40	.05	.00	.00	.00
30	.00	---	---	---	---	---	.00	.01	.00	.00	.00	.00
31	.00	---	---	---	---	---	---	.00	---	.09	.00	---
TOTAL	2.36	---	---	---	---	---	---	2.55	0.75	3.33	1.77	0.39
MAX	1.16	---	---	---	---	---	---	.73	.39	1.03	.67	.20

e Estimated.

ARKANSAS RIVER BASIN

07126480 BENT CANYON CREEK AT MOUTH NEAR TIMPAS, CO

LOCATION.--Lat 37°35'21", long 103°38'52", in SE<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec.23, T.28 S., R.65 W., Las Animas County, Hydrologic Unit 11020010, on left bank 0.5 mi upstream from mouth, 0.6 mi southwest of Rourke Ranch house, 0.9 mi upstream from Iron Canyon, and 17 mi southeast of Timpas.

DRAINAGE AREA.--56.2 mi<sup>2</sup>.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1983 to September 1990, October 1990 to May 2000 (annual maximum), June 2000 to current year (seasonal records only).

REVISED RECORDS.--WDR CO-84-1: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry and crest-stage gages. Elevation of gage is 4,402 ft above sea level, from topographic map.

REMARKS.--Records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,640 ft<sup>3</sup>/s, Aug. 21, 1984, from slope-area measurement of peak flow, gage height, 12.56 feet, from floodmark; no flow most days.

EXTREMES FOR CURRENT YEAR (seasonal only).--No flow during the year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	---	---	---	---	---	.00	.00	.00	.00	.00
2	.00	.00	---	---	---	---	---	.00	.00	.00	.00	.00
3	.00	e.00	---	---	---	---	---	.00	.00	.00	.00	.00
4	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
5	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
6	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
7	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
8	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
9	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
10	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
11	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
12	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
13	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
14	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
15	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
16	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
17	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
18	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
19	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
20	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
21	.00	---	---	---	---	---	e.00	.00	.00	.00	.00	.00
22	.00	---	---	---	---	---	.00	.00	.00	.00	.00	.00
23	.00	---	---	---	---	---	.00	.00	.00	.00	.00	.00
24	.00	---	---	---	---	---	.00	.00	.00	.00	.00	.00
25	.00	---	---	---	---	---	.00	.00	.00	.00	.00	.00
26	.00	---	---	---	---	---	.00	.00	.00	.00	.00	.00
27	.00	---	---	---	---	---	.00	.00	.00	.00	.00	.00
28	.00	---	---	---	---	---	.00	.00	.00	.00	.00	.00
29	.00	---	---	---	---	---	.00	.00	.00	.00	.00	.00
30	.00	---	---	---	---	---	.00	.00	.00	.00	.00	.00
31	.00	---	---	---	---	---	---	.00	---	.00	.00	---
TOTAL	0.00	---	---	---	---	---	---	0.00	0.00	0.00	0.00	0.00
MEAN	.000	---	---	---	---	---	---	.000	.000	.000	.000	.000
MAX	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
MIN	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
AC-FT	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00

e Estimated.

07126480 BENT CANYON CREEK AT MOUTH NEAR TIMPAS, CO--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--May 1983 to September 1990, June 2000 to current year.

## PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: July 1983 to September 1990.

WATER TEMPERATURE: July 1983 to September 1990.

SUSPENDED SEDIMENT: May 1983 to September 1990, June 2000 to current year (seasonal records only).

INSTRUMENTATION.--Pumping sediment sampler with satellite telemetry.

REMARKS.--Records for suspended sediment are good. Daily mean sediment concentrations published for days of partial flow might not reflect concentrations during the flow event.

## EXTREMES FOR PERIOD OF DAILY RECORD.--

SEDIMENT CONCENTRATION: Maximum daily mean, 48,700 mg/L, July 15, 1984; minimum daily mean, 78 mg/L, July 2, 1986.

SUSPENDED-SEDIMENT DISCHARGE: Maximum daily, 21,100 tons, Aug. 22, 1984; minimum daily, 0.02 ton (estimated), July 14, 1989, Aug. 16, 1990; no flow most days.

## EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATION (seasonal only): No flow during year.

SUSPENDED-SEDIMENT DISCHARGE (seasonal only): No flow during year.

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--NO FLOW DURING CURRENT WATER YEAR--

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07126480 BENT CANYON CREEK AT MOUTH NEAR TIMPAS, CO--Continued

## PRECIPITATION RECORDS

PERIOD OF RECORD.--June 2000 to current year (seasonal records only).

GAGE.--Tipping-bucket rain gage with satellite telemetry.

REMARKS.--Records good except for Apr. 21 to Sept. 5, which are fair, and Oct. 1 to Nov. 3, and estimated daily precipitation, which are poor. Daily data that are not published are either missing or of unacceptable quality.

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum daily precipitation, 2.28 inches, July 11, 2000.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum daily precipitation, 1.45 inches, Oct. 28.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	---	---	---	---	---	.00	.00	.10	.00	.00
2	.00	.00	---	---	---	---	---	.00	.00	.00	.00	.00
3	.00	e.00	---	---	---	---	---	.05	.00	.06	.00	.00
4	.38	---	---	---	---	---	---	.69	.00	.00	.00	.00
5	.03	---	---	---	---	---	---	.36	.00	.00	.00	.00
6	.02	---	---	---	---	---	---	.00	.00	.00	.00	.00
7	.03	---	---	---	---	---	---	.00	.03	.00	.00	.19
8	.00	---	---	---	---	---	---	.00	.00	.00	.00	.02
9	.00	---	---	---	---	---	---	.00	.09	.00	.00	.00
10	.00	---	---	---	---	---	---	.01	.00	.00	.09	.00
11	.00	---	---	---	---	---	---	.00	.00	.01	.00	.00
12	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
13	.00	---	---	---	---	---	---	.00	.00	.03	.06	.00
14	.00	---	---	---	---	---	---	.00	.00	.20	.02	.12
15	.00	---	---	---	---	---	---	.00	.00	.00	.05	.02
16	.00	---	---	---	---	---	---	.10	.00	.00	.68	.00
17	.00	---	---	---	---	---	---	.51	.06	.00	.00	.03
18	.11	---	---	---	---	---	---	.00	.00	.00	.00	.00
19	.00	---	---	---	---	---	---	.05	.00	.01	.00	.00
20	.00	---	---	---	---	---	---	.31	.03	.00	.00	.00
21	.00	---	---	---	---	---	e.00	.04	.09	.01	.00	.06
22	.18	---	---	---	---	---	.01	.00	.00	.00	.00	.00
23	.33	---	---	---	---	---	.00	.00	.00	.21	.00	.00
24	.07	---	---	---	---	---	.00	.00	.00	.12	.00	.00
25	.00	---	---	---	---	---	.00	.00	.00	.01	.09	.00
26	.00	---	---	---	---	---	.00	.00	.00	.18	.00	.00
27	.00	---	---	---	---	---	.00	.00	.00	.04	.00	.00
28	1.45	---	---	---	---	---	.00	.09	.00	.00	.94	.00
29	.40	---	---	---	---	---	.00	.06	.00	.00	.00	.00
30	.00	---	---	---	---	---	.00	.00	.00	.00	.00	.00
31	.00	---	---	---	---	---	---	.00	---	.02	.00	---
TOTAL	3.00	---	---	---	---	---	---	2.27	0.30	1.00	1.93	0.44
MAX	1.45	---	---	---	---	---	---	.69	.09	.21	.94	.19

e Estimated.

07126485 PURGATOIRE RIVER AT ROCK CROSSING NEAR TIMPAS, CO

LOCATION.--Lat 37°37'06", long 103°35'35" in NE<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec. 10, T.28 S., R.55 W., Las Animas County, Hydrologic Unit 11020010, on right bank at Rock Crossing, 2.1 mi upstream from Minnie Canyon, 2.4 mi downstream from Beaty Canyon, and 17 mi southeast of Timpas.

DRAINAGE AREA.--2,635 mi<sup>2</sup>, of which 11.8 mi<sup>2</sup> is noncontributing (revised).

WATER-DISCHARGE RECORDS

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

REVISED RECORD.--WDR CO-87-1: 1984-86 (M).

GAGE.--Water-stage recorder with satellite telemetry, and crest-stage gages. Elevation of gage is 4,350 ft above sea level, from topographic map. June 1, 1983 to July 17, 1985, at site 500 ft downstream at same datum.

REMARKS.--Records good except for discharges above 2,500 ft<sup>3</sup>/s, which are fair, and estimated daily discharges, which are poor. Natural flow of stream affected by diversions for irrigation. Peak flows are regulated to some extent by Trinidad Lake (station 07124400) 92 mi upstream.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	63	27	e31	e32	31	28	9.7	14	14	12	20
2	22	48	27	e31	31	28	26	10	15	147	9.6	13
3	23	43	27	e31	e31	28	25	15	14	35	7.8	9.0
4	25	40	27	e31	e31	27	24	16	14	58	7.7	7.0
5	26	42	27	e32	e30	27	23	16	12	14	8.0	5.8
6	27	41	28	e32	e31	27	22	15	10	8.1	8.7	4.4
7	27	40	28	e32	e32	26	22	17	9.4	6.4	11	3.6
8	29	39	28	31	e31	25	18	23	9.2	4.8	8.2	3.2
9	31	38	30	32	e31	26	16	21	7.8	3.0	6.0	2.7
10	32	37	30	e32	e31	31	15	18	6.8	1.8	4.9	2.0
11	33	37	33	e31	31	37	21	15	4.9	1.1	23	1.3
12	33	36	32	e31	31	37	18	11	5.7	.72	8.6	.91
13	33	35	31	e31	e33	41	17	9.3	8.2	1.7	30	.60
14	32	35	e32	e30	e34	45	17	9.2	7.1	233	90	.44
15	31	34	e32	e31	e35	42	18	8.8	5.8	390	30	.64
16	31	34	e33	e30	e36	38	17	8.5	4.9	161	91	.43
17	34	33	e33	e28	36	35	16	9.6	3.9	52	34	.21
18	35	32	e32	e26	34	33	16	210	3.2	27	17	392
19	34	31	e32	e25	33	31	14	194	2.9	18	25	132
20	34	31	e32	e27	33	31	13	187	2.4	42	27	56
21	34	31	e31	e28	32	31	14	171	2.6	81	18	39
22	34	30	e31	e30	32	30	13	91	2.2	102	12	36
23	33	30	e31	e31	32	28	12	62	1.8	45	9.8	24
24	37	30	e30	32	32	28	11	53	1.2	38	7.4	18
25	53	30	e30	e33	31	81	14	61	3.8	41	5.9	16
26	54	29	e30	e32	31	64	15	42	11	214	79	15
27	44	28	e29	e32	31	43	13	36	9.2	67	37	15
28	42	28	e29	e33	30	45	12	28	7.7	25	15	12
29	78	28	e30	e32	---	37	12	23	6.8	18	14	11
30	236	27	e30	e32	---	34	11	21	9.4	16	57	9.3
31	101	---	e31	33	---	31	---	17	---	14	41	---
TOTAL	1337	1060	933	953	898	1098	513	1428.1	216.9	1879.62	755.6	850.53
MEAN	43.1	35.3	30.1	30.7	32.1	35.4	17.1	46.1	7.23	60.6	24.4	28.4
MAX	236	63	33	33	36	81	28	210	15	390	91	392
MIN	19	27	27	25	30	25	11	8.5	1.2	.72	4.9	.21
AC-FT	2650	2100	1850	1890	1780	2180	1020	2830	430	3730	1500	1690

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1983 - 2001, BY WATER YEAR (WY)

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
MEAN	43.1	40.9	34.5	32.6	35.1	46.1	90.2	133	102	77.7	122	44.3							
MAX	89.1	68.3	43.4	41.4	56.0	139	330	585	836	186	468	98.6							
(WY)	1999	1999	1998	1984	1988	1998	1993	1987	1983	1992	1999	1993							
MIN	13.0	20.5	15.6	17.4	22.7	19.7	16.8	5.81	7.23	11.2	24.4	12.5							
(WY)	1990	1990	1991	1991	1991	1991	1989	1991	2001	1989	2001	1990							

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1983 - 2001

ANNUAL TOTAL	17897.6	11922.75	
ANNUAL MEAN	48.9	32.7	63.3
HIGHEST ANNUAL MEAN			123
LOWEST ANNUAL MEAN			29.6
HIGHEST DAILY MEAN	1040	Aug 22	392
LOWEST DAILY MEAN	3.4	Aug 17	.21
ANNUAL SEVEN-DAY MINIMUM	5.1	Aug 12	.65
MAXIMUM PEAK FLOW			1460
MAXIMUM PEAK STAGE			10.67
ANNUAL RUNOFF (AC-FT)	35500	23650	45880
10 PERCENT EXCEEDS	85	45	119
50 PERCENT EXCEEDS	33	30	35
90 PERCENT EXCEEDS	16	6.6	14

e Estimated.  
a Also occurred Jul 1-9, 1990.  
b From slope-area measurement of peak flow.  
c From floodmarks.

07126485 PURGATOIRE RIVER AT ROCK CROSSING NEAR TIMPAS, CO--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1982 to September 1992, June 1997 to current year.

## PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: July 1983 to September 1992.

WATER TEMPERATURE: July 1983 to September 1992.

SUSPENDED SEDIMENT: August 1983 to September 1992, June 1997 to current year (seasonal peaks only).

INSTRUMENTATION.--Pumping sediment sampler with satellite telemetry.

REMARKS.--Records for daily sediment are poor. Daily sediment records are published for days when instantaneous discharge exceeds 100 ft<sup>3</sup>/s. Daily maximum and minimum specific conductance and daily mean water temperature data for July 1983 to September 1992 are available in the district office.

## EXTREMES FOR PERIOD OF RECORD.--

SEDIMENT CONCENTRATIONS: Maximum daily, 54,900 mg/L, Aug. 16, 1986; minimum daily, 5 mg/L, Mar. 22, 1988, and Feb. 10, 1989.

SUSPENDED-SEDIMENT DISCHARGE: Maximum daily (occurred during period of seasonal record), 287,000 tons (estimated),

May 2, 1999; minimum daily, 0.0 ton (estimated), several days during 1989 and 1990.

## EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATIONS (seasonal peaks only): Maximum daily mean, 26,300 mg/L, May 19; minimum daily mean, 99 mg/L, Aug. 13.

SUSPENDED-SEDIMENT DISCHARGE (seasonal peaks only): Maximum daily, 23,900 tons, Sept.18; minimum daily, 22 tons (estimated), July 14.

## MISCELLANEOUS FIELD AND SUSPENDED-SEDIMENT DISCHARGE DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	SEDI- MENT, SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)
NOV						
03...	1150	44	2310	9.9	784	93
DEC						
15...	1115	37	3290	1.0	--	--
FEB						
16...	1345	38	3260	4.9	--	--
MAR						
22...	1230	30	3380	13.7	--	--
APR						
19...	1730	14	3400	18.5	--	--
MAY						
24...	1500	51	1990	22.0	724	100
24...	1530	51	--	--	635	87
JUN						
06...	1430	10	2240	28.1	42	1.2
JUL						
13...	1030	.50	1670	25.6	16	.02
AUG						
10...	1700	4.6	2160	27.7	17	.21
SEP						
05...	1045	5.8	2210	23.4	44	.69

07126485 PURGATOIRE RIVER AT ROCK CROSSING NEAR TIMPAS, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	19	---	---	63	---	---	27	---	---
2	22	---	---	48	---	---	27	---	---
3	23	---	---	43	---	---	27	---	---
4	25	---	---	40	---	---	27	---	---
5	26	---	---	42	---	---	27	---	---
6	27	---	---	41	---	---	28	---	---
7	27	---	---	40	---	---	28	---	---
8	29	---	---	39	---	---	28	---	---
9	31	---	---	38	---	---	30	---	---
10	32	---	---	37	---	---	30	---	---
11	33	---	---	37	---	---	33	---	---
12	33	---	---	36	---	---	32	---	---
13	33	---	---	35	---	---	31	---	---
14	32	---	---	35	---	---	e32	---	---
15	31	---	---	34	---	---	e32	---	---
16	31	---	---	34	---	---	e33	---	---
17	34	---	---	33	---	---	e33	---	---
18	35	---	---	32	---	---	e32	---	---
19	34	---	---	31	---	---	e32	---	---
20	34	---	---	31	---	---	e32	---	---
21	34	---	---	31	---	---	e31	---	---
22	34	---	---	30	---	---	e31	---	---
23	33	---	---	30	---	---	e31	---	---
24	37	---	---	30	---	---	e30	---	---
25	53	---	---	30	---	---	e30	---	---
26	54	---	---	29	---	---	e30	---	---
27	44	---	---	28	---	---	e29	---	---
28	42	---	---	28	---	---	e29	---	---
29	78	---	e700	28	---	---	e30	---	---
30	236	3200	2100	27	---	---	e30	---	---
31	101	---	e1300	---	---	---	e31	---	---
TOTAL	1337	---	4100	1060	---	0	933	---	0

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	e31	---	---	e32	---	---	31	---	---
2	e31	---	---	31	---	---	28	---	---
3	e31	---	---	e31	---	---	28	---	---
4	e31	---	---	e31	---	---	27	---	---
5	e32	---	---	e30	---	---	27	---	---
6	e32	---	---	e31	---	---	27	---	---
7	e32	---	---	e32	---	---	26	---	---
8	31	---	---	e31	---	---	25	---	---
9	32	---	---	e31	---	---	26	---	---
10	e32	---	---	e31	---	---	31	---	---
11	e31	---	---	31	---	---	37	---	---
12	e31	---	---	31	---	---	37	---	---
13	e31	---	---	e33	---	---	41	---	---
14	e30	---	---	e34	---	---	45	---	---
15	e31	---	---	e35	---	---	42	---	---
16	e30	---	---	e36	---	---	38	---	---
17	e28	---	---	36	---	---	35	---	---
18	e26	---	---	34	---	---	33	---	---
19	e25	---	---	33	---	---	31	---	---
20	e27	---	---	33	---	---	31	---	---
21	e28	---	---	32	---	---	31	---	---
22	e30	---	---	32	---	---	30	---	---
23	e31	---	---	32	---	---	28	---	---
24	32	---	---	32	---	---	28	---	---
25	e33	---	---	31	---	---	81	---	---
26	e32	---	---	31	---	---	64	---	---
27	e32	---	---	31	---	---	43	---	---
28	e33	---	---	30	---	---	45	---	---
29	e32	---	---	---	---	---	37	---	---
30	e32	---	---	---	---	---	34	---	---
31	33	---	---	---	---	---	31	---	---
TOTAL	953	---	0	898	---	0	1098	---	0

## ARKANSAS RIVER BASIN

07126485 PURGATOIRE RIVER AT ROCK CROSSING NEAR TIMPAS, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	28	---	---	9.7	---	---	14	---	---
2	26	---	---	10	---	---	15	---	---
3	25	---	---	15	---	---	14	---	---
4	24	---	---	16	---	---	14	---	---
5	23	---	---	16	---	---	12	---	---
6	22	---	---	15	---	---	10	---	---
7	22	---	---	17	---	---	9.4	---	---
8	18	---	---	23	---	---	9.2	---	---
9	16	---	---	21	---	---	7.8	---	---
10	15	---	---	18	---	---	6.8	---	---
11	21	---	---	15	---	---	4.9	---	---
12	18	---	---	11	---	---	5.7	---	---
13	17	---	---	9.3	---	---	8.2	---	---
14	17	---	---	9.2	---	---	7.1	---	---
15	18	---	---	8.8	---	---	5.8	---	---
16	17	---	---	8.5	---	---	4.9	---	---
17	16	---	---	9.6	---	---	3.9	---	---
18	16	---	---	210	3700	4100	3.2	---	---
19	14	---	---	194	26300	13700	2.9	---	---
20	13	---	---	187	15500	9000	2.4	---	---
21	14	---	---	171	---	e3500	2.6	---	---
22	13	---	---	91	---	e960	2.2	---	---
23	12	---	---	62	---	---	1.8	---	---
24	11	---	---	53	---	---	1.2	---	---
25	14	---	---	61	---	---	3.8	---	---
26	15	---	---	42	---	---	11	---	---
27	13	---	---	36	---	---	9.2	---	---
28	12	---	---	28	---	---	7.7	---	---
29	12	---	---	23	---	---	6.8	---	---
30	11	---	---	21	---	---	9.4	---	---
31	---	---	---	17	---	---	---	---	---
TOTAL	513	---	0	1428.1	---	31260	216.9	---	0
DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
1	14	---	e22	12	---	---	20	---	---
2	147	2130	1280	9.6	---	---	13	---	---
3	35	---	---	7.8	---	---	9.0	---	---
4	58	---	e410	7.7	---	---	7.0	---	---
5	14	---	---	8.0	---	---	5.8	---	---
6	8.1	---	---	8.7	---	---	4.4	---	---
7	6.4	---	---	11	---	---	3.6	---	---
8	4.8	---	---	8.2	---	---	3.2	---	---
9	3.0	---	---	6.0	---	---	2.7	---	---
10	1.8	---	---	4.9	---	---	2.0	---	---
11	1.1	---	---	23	---	---	1.3	---	---
12	.72	---	---	8.6	---	---	.91	---	---
13	1.7	---	---	30	99	92	.60	---	---
14	233	2710	8850	90	1350	496	.44	---	---
15	390	16400	17400	30	---	---	.64	---	---
16	161	---	e2600	91	---	e960	.43	---	---
17	52	---	---	34	---	---	.21	---	---
18	27	---	---	17	---	---	392	19400	23900
19	18	---	---	25	---	---	132	---	e1700
20	42	---	---	27	---	---	56	---	---
21	81	---	---	18	---	---	39	---	---
22	102	---	e1300	12	---	---	36	---	---
23	45	---	---	9.8	---	---	24	---	---
24	38	---	---	7.4	---	---	18	---	---
25	41	269	176	5.9	---	---	16	---	---
26	214	3400	3890	79	773	288	15	---	---
27	67	2710	749	37	---	---	15	---	---
28	25	---	---	15	---	---	12	---	---
29	18	---	---	14	---	---	11	---	---
30	16	---	---	57	---	---	9.3	---	---
31	14	---	---	41	---	---	---	---	---
TOTAL	1879.62	---	36677	755.6	---	1836	850.53	---	25600

e Estimated.

07126485 PURGATOIRE RIVER AT ROCK CROSSING NEAR TIMPAS, CO--Continued

PRECIPITATION RECORDS

PERIOD OF RECORD.--April 1999 to current year (seasonal records only).

GAGE.--Tipping-bucket rain gage with satellite telemetry.

REMARKS.--Records good. Daily data that are not published are either missing or of unacceptable quality.

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum daily precipitation, 2.11 inches, Oct. 4, 2000.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum daily precipitation, 2.11 inches, Oct. 4.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	---	---	---	---	---	.00	.00	.00	.00	.00
2	.00	.00	---	---	---	---	---	.00	.00	.00	.01	.12
3	.00	e.00	---	---	---	---	---	.08	.00	.20	.00	.00
4	2.11	---	---	---	---	---	---	1.39	.00	.00	.00	.00
5	.02	---	---	---	---	---	---	.65	.00	.00	.00	.00
6	.02	---	---	---	---	---	---	.00	.00	.00	.00	.00
7	.00	---	---	---	---	---	---	.00	.16	.00	.00	.19
8	.00	---	---	---	---	---	---	.00	.00	.00	.00	.01
9	.00	---	---	---	---	---	---	.00	.08	.00	.00	.00
10	.00	---	---	---	---	---	---	.03	.00	.00	.31	.00
11	.00	---	---	---	---	---	---	.00	.00	.33	.00	.00
12	.00	---	---	---	---	---	---	.00	.00	.66	.00	.00
13	.00	---	---	---	---	---	---	.00	.00	.11	.00	.00
14	.00	---	---	---	---	---	---	.00	.00	.43	.03	.54
15	.00	---	---	---	---	---	---	.00	.00	.00	.00	.13
16	.00	---	---	---	---	---	---	.27	.00	.00	.17	.01
17	.00	---	---	---	---	---	---	.65	.03	.00	.00	.01
18	.00	---	---	---	---	---	---	e.00	.00	.00	.00	.01
19	.00	---	---	---	---	---	---	.00	.24	.00	.01	.00
20	.00	---	---	---	---	---	---	.00	.14	.07	.00	.00
21	.00	---	---	---	---	---	---	.00	.06	.21	.04	.00
22	.15	---	---	---	---	---	---	.00	.00	.00	.01	.00
23	.40	---	---	---	---	---	---	.00	.00	.00	1.58	.00
24	.23	---	---	---	---	---	---	.00	.00	.40	.00	.00
25	.00	---	---	---	---	---	---	.00	.00	.13	.01	.08
26	.00	---	---	---	---	---	---	.00	.00	.00	1.50	.00
27	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
28	1.02	---	---	---	---	---	---	.00	.04	.00	.00	.13
29	.64	---	---	---	---	---	---	.01	.10	.00	.00	.00
30	.00	---	---	---	---	---	---	.00	.00	.00	.01	.00
31	.00	---	---	---	---	---	---	.00	.00	---	.03	.00
TOTAL	4.59	---	---	---	---	---	---	3.65	0.68	5.31	0.74	1.02
MAX	2.11	---	---	---	---	---	---	1.39	.21	1.58	.31	.54

e Estimated.

ARKANSAS RIVER BASIN

07128500 PURGATOIRE RIVER NEAR LAS ANIMAS, CO

LOCATION.--Lat 38°02'02", long 103°12'00", in NE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec.23, T.23 S., R.52 W., Bent County, Hydrologic Unit 11020010, on right bank at downstream side of bridge on State Highway 101, 2.3 mi southeast of courthouse in Las Animas, and 4.5 mi upstream from mouth.

DRAINAGE AREA.--3,318 mi<sup>2</sup>, of which 11.8 mi<sup>2</sup> is noncontributing (revised).

PERIOD OF RECORD.--May to September 1889, July to October 1909 (gage heights and discharge measurements only), January 1922 to September 1931, July 1948 to current year. Monthly discharge only for some periods, published in WSP 1311. Published as Purgatoire Creek at Las Animas in 1889 and as Purgatory River near Las Animas in 1909. Statistical summary computed for 1978 to current year, subsequent to completion of Trinidad Reservoir. Water-quality data available, December 1985 to September 1996.

REVISED RECORDS.--WSP 1241: 1927(M); WDR CO-84-1: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry and crest-stage gage. Datum of gage is 3,878.04 ft above sea level. See WSP 1731 for history of changes prior to Oct. 1, 1955. Oct. 1, 1955 to July 11, 1966, at datum 3.00 ft higher. Supplementary water-stage recorder at site 1.6 mi downstream at different datum July 12 to Nov. 17, 1966. Nov. 18, 1966 to May 4, 1982, at datum 3.1 ft lower.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Natural flow of stream regulated to some extent since January 1975 by Trinidad Lake near Trinidad (station 07124400) and affected by diversions for irrigation. Instantaneous discharge and selected water-quality data collected as part of a basin-wide water-quality assessment of the lower Arkansas River basin in Colorado are published elsewhere in this report.

EXTREMES OUTSIDE PERIOD OF RECORD.--Greatest flood since at least 1860 occurred Oct. 1, 1904, discharge not determined.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.9	92	34	23	35	32	34	4.4	31	2.9	29	20
2	1.4	59	34	28	34	31	32	4.5	24	2.2	23	22
3	1.4	42	32	29	36	31	28	3.8	25	2.1	19	16
4	1.4	32	35	33	33	29	21	6.1	22	9.4	15	10
5	1.5	37	36	33	36	28	20	14	22	32	16	7.1
6	1.6	36	37	39	37	28	17	20	12	28	7.5	5.1
7	8.6	34	36	38	36	27	34	15	17	12	5.3	4.1
8	14	32	36	33	38	24	15	15	57	7.9	4.2	3.7
9	16	29	35	31	31	22	14	14	14	4.3	3.8	3.2
10	17	32	34	33	28	21	11	13	12	2.9	3.3	2.8
11	21	32	22	34	37	20	19	20	7.8	2.6	3.3	2.5
12	21	34	27	41	44	18	46	21	7.3	2.2	3.1	2.4
13	22	46	32	34	37	32	20	20	5.3	2.8	4.1	2.3
14	22	49	29	30	33	23	17	8.7	29	62	7.0	2.1
15	21	50	34	30	38	31	14	12	8.1	94	17	2.2
16	22	37	30	18	39	63	16	9.3	5.3	206	26	3.7
17	22	33	28	21	38	60	14	11	3.9	105	35	6.1
18	21	33	28	30	37	61	12	10	4.1	45	38	6.3
19	22	30	24	40	36	59	12	80	3.2	21	22	159
20	23	33	34	30	34	54	9.7	182	3.2	12	14	106
21	23	31	20	34	33	44	12	167	3.3	7.7	9.3	65
22	22	31	25	32	32	43	9.7	155	2.6	21	13	38
23	26	32	27	32	32	41	8.4	97	2.5	53	14	31
24	30	33	26	29	32	36	8.9	76	2.2	54	8.9	30
25	27	34	26	35	32	33	12	62	1.9	46	7.8	24
26	27	35	23	40	32	33	6.8	58	1.5	150	8.3	18
27	38	38	24	44	30	64	4.4	57	1.6	1030	4.1	14
28	35	37	e25	29	30	52	3.9	49	2.7	134	12	11
29	40	33	e25	43	---	43	3.6	49	2.7	66	19	9.0
30	49	33	24	43	---	42	3.6	46	7.0	45	14	9.1
31	154	---	26	40	---	39	---	41	---	35	9.4	---
TOTAL	752.8	1139	908	1029	970	1164	479.0	1340.8	341.2	2298.0	415.4	635.7
MEAN	24.3	38.0	29.3	33.2	34.6	37.5	16.0	43.3	11.4	74.1	13.4	21.2
MAX	154	92	37	44	44	64	46	182	57	1030	38	159
MIN	1.4	29	20	18	28	18	3.6	3.8	1.5	2.1	3.1	2.1
AC-FT	1490	2260	1800	2040	1920	2310	950	2660	677	4560	824	1260

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1978 - 2001, BY WATER YEAR (WY)

	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
MEAN	38.8	39.2	30.8	32.8	33.0	43.9	83.9	138	103	75.0	132	47.2												
MAX	125	88.4	57.5	57.4	61.9	169	418	614	724	263	761	224												
(WY)	1999	1999	1998	1998	1998	1998	1983	1987	1983	1981	1981	1981												
MIN	1.58	1.90	2.38	4.72	5.65	5.26	3.53	5.41	8.76	7.67	3.76	3.14												
(WY)	1978	1979	1979	1979	1979	1978	1978	1991	1990	1994	1980	1978												

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1978 - 2001

ANNUAL TOTAL	16791.2	11472.9		
ANNUAL MEAN	45.9	31.4	a66.7	
HIGHEST ANNUAL MEAN			166	1983
LOWEST ANNUAL MEAN			22.7	1989
HIGHEST DAILY MEAN	627	Jul 18	1030	Jul 27
LOWEST DAILY MEAN	1.4	Oct 2	1.4	Oct 2
ANNUAL SEVEN-DAY MINIMUM	1.5	Sep 30	2.1	Jun 22
MAXIMUM PEAK FLOW			1900	Jul 27
MAXIMUM PEAK STAGE			8.58	Jul 27
ANNUAL RUNOFF (AC-FT)	33310	22760	48310	Jul 5 1981
10 PERCENT EXCEEDS	89	49	124	Jul 5 1981
50 PERCENT EXCEEDS	34	27	31	
90 PERCENT EXCEEDS	4.5	3.7	4.7	

- e Estimated.
- a Average discharge for 37 years (water years 1923-31, 1949-76), 116 ft<sup>3</sup>/s; 84040 acre-ft/yr, prior to completion of Trinidad Reservoir.
- b Maximum daily discharge for period of record, 46300 ft<sup>3</sup>/s, May 20, 1955.
- c No flow at times in 1924-25, 1927, 1949, and 1974.
- d From rating curve extended above 4,460 ft<sup>3</sup>/s; maximum discharge and stage for period of record, 70000 ft<sup>3</sup>/s, May 20, 1955, gage height, 15.00 ft, from rating curve extended above 38000 ft<sup>3</sup>/s, at different datum.
- f Maximum gage height for statistical period, 12.00 ft, May 3, 1999.

07130000 JOHN MARTIN RESERVOIR AT CADDOA, CO

LOCATION.--Lat 38°04'05", long 102°56'13", in NE<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec.8, T.23 S., R.49 W., Bent County, Hydrologic Unit 11020009, in north parapet of dam on Arkansas River at Caddoa, 3.2 mi southeast of Hasty, and 58 mi upstream from Colorado-Kansas State line.

DRAINAGE AREA.--18,915 mi<sup>2</sup>, of which 785 mi<sup>2</sup> is probably noncontributing.

PERIOD OF RECORD.--January 1943 to current year. Month-end contents only prior to November 1943, published in WSP 1311.

GAGE.--Water-stage recorder with satellite telemetry for elevations above 3,784 ft (48 acre-feet) and nonrecording gage read once daily for those below. Datum of gage is 3,760.00 ft above sea level (levels by U.S. Army Corps of Engineers); gage readings have been reduced to elevations above sea level.

REMARKS.--Records fair except for estimated midnight contents, which are poor. Reservoir is formed by concrete and earthfill dam. Storage began while dam was under construction prior to 1943; record of contents began Jan. 1, 1943; dam completed October 1948. All figures represent total contents from area-capacity table effective Nov. 1, 1999, and based on a 1999 resurvey by the U.S. Army Corp of Engineers. Total capacity at top of dam, 793,400 acre-ft at elevation 3,880.00 ft. Maximum flood control storage at top of spillway gates, 603,500 acre-ft at elevation 3,870.00 ft. Maximum recreation and conservation storage, 344,000 acre-ft at elevation 3,851.87 ft. Capacity at spillway crest, 222,400 acre-ft at elevation 3,840.00 ft. Elevation of no contents, 3,780.00 ft. No dead storage. Reservoir is used for flood control, storage for irrigation, recreation, and in the administration of terms of the Arkansas River Compact between the states of Colorado and Kansas.

COOPERATION.--Capacity tables provided by U.S. Army Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 451,000 acre-ft, May 10, 1999, elevation, 3,860.57 ft; no contents at times many years.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 174,000 acre-ft, Apr. 13-20, 22, maximum elevation, 3,834.15 ft, Apr. 18-19; minimum contents, 53,300 acre-ft, Sept. 30, elevation, 3,811.98 ft.

Capacity table (elevation, in feet, and contents, in acre-feet, effective Nov. 1, 1999)

3,785.0	235	3,820.0	86,400
3,790.0	2,410	3,830.0	144,000
3,795.0	8,300	3,840.0	222,000
3,800.0	17,800	3,850.0	323,000
3,810.0	46,200	3,860.0	448,000

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY OBSERVATION AT 2400 HOURS

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	121000	112000	124000	138000	151000	162000	172000	166000	159000	146000	99300	72400
2	120000	113000	125000	138000	151000	163000	172000	164000	160000	144000	97400	71800
3	119000	113000	125000	139000	152000	163000	173000	163000	160000	142000	95400	71300
4	118000	113000	126000	139000	152000	163000	173000	162000	161000	140000	e93800	71000
5	117000	114000	126000	140000	153000	164000	173000	162000	161000	138000	e92000	70800
6	116000	114000	127000	140000	153000	164000	173000	160000	162000	136000	e90300	70000
7	115000	114000	127000	140000	154000	164000	173000	160000	164000	134000	88600	69400
8	114000	114000	128000	141000	154000	165000	173000	159000	168000	132000	86800	68800
9	113000	114000	128000	141000	155000	165000	173000	158000	171000	130000	85000	68100
10	112000	114000	128000	142000	155000	166000	173000	157000	172000	128000	83400	67500
11	112000	115000	129000	142000	155000	166000	173000	156000	173000	126000	82000	67000
12	112000	115000	129000	142000	156000	166000	173000	156000	173000	123000	80900	66400
13	112000	115000	129000	143000	156000	166000	174000	155000	173000	122000	80000	65800
14	112000	115000	130000	143000	157000	167000	174000	154000	173000	121000	79600	64900
15	112000	116000	130000	144000	157000	167000	174000	153000	173000	120000	78900	63700
16	112000	116000	131000	144000	157000	167000	174000	152000	172000	120000	78500	62700
17	112000	117000	132000	145000	158000	168000	174000	153000	171000	120000	78500	61900
18	112000	118000	132000	145000	158000	168000	174000	152000	170000	118000	78400	60800
19	112000	118000	132000	145000	159000	169000	174000	152000	168000	116000	78200	59700
20	112000	118000	133000	146000	159000	169000	174000	152000	167000	115000	78100	59100
21	111000	119000	133000	146000	159000	170000	173000	152000	166000	113000	78000	58800
22	111000	120000	134000	146000	160000	170000	174000	153000	164000	111000	77700	58100
23	111000	120000	134000	147000	160000	170000	173000	154000	162000	110000	77200	57400
24	112000	121000	134000	147000	161000	170000	172000	154000	160000	108000	76500	56800
25	111000	121000	135000	148000	161000	171000	172000	154000	158000	107000	75900	56200
26	111000	122000	135000	148000	161000	171000	171000	155000	156000	106000	75200	55600
27	111000	122000	136000	149000	162000	171000	170000	155000	154000	106000	74400	55000
28	112000	123000	136000	149000	162000	172000	169000	156000	152000	105000	73900	54500
29	112000	124000	137000	150000	---	172000	168000	157000	150000	104000	73700	53800
30	112000	124000	137000	150000	---	172000	167000	157000	148000	103000	73300	53300
31	112000	---	138000	151000	---	172000	---	158000	---	101000	72800	---
MAX	121000	124000	138000	151000	162000	172000	174000	166000	173000	146000	99300	72400
MIN	111000	112000	124000	138000	151000	162000	167000	152000	148000	101000	72800	53300

e Estimated.



07130500 ARKANSAS RIVER BELOW JOHN MARTIN RESERVOIR, CO--Continued

WATER-QUALITY RECORDS

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 with satellite telemetry.

REMARKS.--Records for daily specific conductance are fair except for Nov. 21, 29, Dec. 9, 11, Mar. 8, and Apr. 20 to Sept. 20, which are poor. Records for daily water temperature are good. Daily data that are not published are either missing or of unacceptable quality. Reported values are representative of the stream based on cross-section comparisons made during the year.

EXTREMES FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 3,540 microsiemens/cm, Feb. 26, 1986; minimum, 1,060 microsiemens/cm, on several days in 1995.

WATER TEMPERATURE: Maximum, 28.1°C, June 11, 2001; minimum, 0.0°C, on many days.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 2,580 microsiemens/cm, June 9; minimum, 1,670 microsiemens/cm, Sept. 14.

WATER TEMPERATURE: Maximum, 28.1°C, June 11; minimum, 0.8°C, Jan. 16.

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	2320	2300	2310	---	---	---	2390	2340	2360	2390	2340	2370
2	2330	2300	2310	---	---	---	2380	2340	2350	2380	2330	2360
3	2320	2280	2310	---	---	---	2390	2320	2350	2390	2330	2360
4	2310	2280	2300	---	---	---	2380	2340	2360	2380	2320	2350
5	2300	2290	2290	---	---	---	2390	2340	2360	2380	2310	2350
6	---	---	---	---	---	---	2380	2340	2360	2390	2330	2370
7	---	---	---	---	---	---	2380	2330	2360	2380	2300	2350
8	---	---	---	2360	2350	2350	2380	2330	2360	2400	2360	2380
9	---	---	---	2360	2320	2350	2380	2320	2370	2400	2310	2380
10	---	---	---	2370	2340	2350	---	---	---	2390	2370	2380
11	2290	2280	2280	2360	2340	2350	2390	2340	2360	2390	2350	2380
12	2290	2270	2280	2360	2340	2350	2400	2350	2380	2400	2380	2390
13	2290	2270	2280	---	---	---	2390	2350	2370	2400	2360	2380
14	2290	2280	2280	2360	2340	2350	2400	2340	2380	2390	2360	2380
15	2280	2270	2280	2360	2340	2350	2390	2290	2360	2410	2360	2390
16	2290	2270	2280	2360	2350	2360	2380	2290	2350	2390	2340	2360
17	2290	2220	2270	2360	2340	2350	2400	2320	2370	2370	2330	2350
18	2300	2280	2290	2370	2340	2360	2380	2330	2350	2370	2310	2350
19	2300	2280	2290	2370	2340	2360	2390	2350	2370	2380	2360	2370
20	2290	2270	2280	2370	2340	2360	2370	2330	2340	2400	2360	2370
21	2280	2270	2270	2370	2340	2360	2410	2360	2380	2370	2260	2340
22	2290	2270	2280	---	---	---	2400	2360	2380	2400	2290	2370
23	2290	2280	2280	---	---	---	2380	2330	2360	2360	2300	2340
24	2300	2280	2290	---	---	---	2380	2330	2360	2380	2270	2340
25	2300	2260	2290	---	---	---	2390	2310	2360	2380	2310	2360
26	2310	2260	2290	---	---	---	2380	2350	2360	2380	2330	2350
27	2300	2280	2290	---	---	---	2390	2330	2360	2370	2340	2350
28	2300	2280	2290	---	---	---	2360	2310	2340	2360	2320	2340
29	2320	2280	2300	2380	2350	2350	2350	2300	2330	2370	2320	2340
30	2320	2280	2300	2400	2310	2360	2370	2320	2350	2370	2300	2350
31	2300	2250	2280	---	---	---	2380	2330	2350	2370	2300	2340
MONTH	---	---	---	---	---	---	---	---	---	2410	2260	2360

## ARKANSAS RIVER BASIN

07130500 ARKANSAS RIVER BELOW JOHN MARTIN RESERVOIR, CO--Continued

SPECIFIC CONDUCTANCE (MICROSIEMENS/CM AT 25 DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN									
1	2400	2320	2360	---	---	---	2460	2420	2440	2510	2480	2490
2	2410	2340	2380	---	---	---	2460	2440	2450	2500	2460	2480
3	2380	2270	2330	---	---	---	2470	2450	2460	2470	2290	2390
4	2370	2220	2310	---	---	---	2470	2450	2460	2460	2260	2330
5	2370	2250	2320	---	---	---	2470	2410	2450	2390	2230	2300
6	2350	2260	2300	---	---	---	2470	2400	2430	2420	2320	2370
7	2390	2280	2340	---	---	---	2480	2460	2470	2360	2200	2270
8	2370	2330	2350	2460	2430	2450	2470	2450	2460	2340	2230	2280
9	2400	2320	2340	2450	2420	2440	2460	2440	2450	2410	2180	2260
10	2400	2340	2370	2430	2400	2420	2450	2420	2440	2390	2260	2310
11	2390	2310	2350	2410	2390	2400	2420	2410	2410	2340	2260	2300
12	2380	2290	2340	2430	2400	2420	2420	2400	2410	2410	2160	2250
13	2350	2290	2330	2430	2400	2410	2400	2370	2390	2380	2260	2340
14	2400	2340	2360	2430	2390	2400	2410	2370	2390	2400	2310	2360
15	2410	2340	2380	2420	2400	2410	2450	2390	2410	2450	2220	2340
16	2400	2380	2390	2430	2400	2420	2450	2440	2440	2400	2310	2360
17	2400	2370	2390	2420	2370	2400	2450	2430	2440	2510	2260	2370
18	2420	2360	2390	2440	2400	2420	2480	2430	2450	2510	2410	2470
19	2420	2380	2400	2440	2400	2410	2520	2470	2480	2460	2230	2330
20	2420	2390	2400	2440	2400	2410	2480	2440	2460	2390	2200	2320
21	2420	2390	2400	2420	2390	2400	2440	2390	2420	2430	2250	2330
22	2440	2380	2410	2410	2390	2400	2390	2350	2370	2520	2290	2380
23	2430	2400	2420	2390	2380	2390	2510	2350	2400	2530	2490	2510
24	2430	2410	2420	2390	2380	2390	2500	2400	2460	2560	2450	2510
25	2450	2400	2420	2400	2380	2390	2510	2380	2450	2470	2360	2410
26	2430	2410	2420	2400	2380	2390	2510	2440	2480	2510	2330	2410
27	---	---	---	2410	2400	2400	2510	2420	2450	2500	2290	2380
28	---	---	---	2420	2390	2400	2510	2380	2460	2480	2300	2390
29	---	---	---	2410	2390	2400	2460	2370	2420	2500	2280	2400
30	---	---	---	2420	2390	2400	2510	2370	2450	2490	2250	2350
31	---	---	---	2450	2410	2420	---	---	---	2480	2280	2410
MONTH	---	---	---	---	---	---	2520	2350	2440	2560	2160	2370
DAY	MAX	MIN	MEAN									
1	2460	2410	2440	2320	2300	2310	2230	2210	2220	2030	1880	1970
2	2550	2440	2510	2330	2300	2320	2230	2200	2220	2120	1990	2070
3	2490	2440	2460	2350	2290	2320	2220	2190	2210	2190	2010	2070
4	2490	2420	2450	2310	2220	2270	2220	2070	2130	2120	2000	2070
5	2530	2470	2510	2320	2200	2280	2160	2000	2090	2140	2010	2060
6	2530	2520	2530	2310	2280	2290	2240	2020	2130	2080	1970	2020
7	2530	2450	2510	2310	2260	2290	2240	2080	2170	2050	1840	1940
8	2550	2500	2510	2320	2260	2290	2190	2090	2160	2040	1860	1940
9	2580	2530	2550	2300	2230	2270	2180	2120	2150	2050	1840	1920
10	2580	2480	2550	2280	2210	2260	2180	2050	2140	2010	1880	1950
11	2540	2480	2510	2310	2250	2270	2180	2090	2140	2020	1820	1920
12	2550	2500	2520	2310	2250	2280	2160	2010	2060	1950	1730	1840
13	2500	2470	2490	2280	2210	2260	2140	1960	2060	1940	1710	1820
14	2480	2450	2460	2270	2160	2230	2190	2040	2130	2030	1670	1840
15	2460	2450	2450	2250	2160	2210	2250	2110	2180	2080	1900	2000
16	2450	2440	2450	2250	2140	2170	2180	2040	2100	2070	1900	2000
17	2440	2430	2440	2260	2150	2190	2120	2030	2080	2130	1980	2040
18	2440	2410	2420	2210	2150	2180	2070	2000	2030	2160	2040	2110
19	2430	2390	2410	2280	2140	2210	2120	2050	2080	2150	1980	2080
20	2410	2380	2400	2330	2180	2250	2130	2040	2090	2170	2000	2120
21	2390	2290	2360	2250	2140	2200	2130	2070	2090	2160	2130	2150
22	2370	2350	2360	2260	2130	2210	2170	2060	2110	2160	2130	2150
23	2370	2360	2360	2260	2200	2220	2140	2030	2090	2160	2130	2140
24	2400	2330	2370	2270	2200	2230	2070	1910	2000	2150	2120	2140
25	2360	2330	2350	2280	2220	2260	2070	1920	2010	2160	2120	2130
26	2350	2310	2340	2310	2220	2270	2030	1910	1970	2170	2110	2130
27	2350	2340	2350	---	---	---	2120	1920	2020	2170	2100	2130
28	2350	2340	2340	---	---	---	2120	2010	2080	2140	2080	2110
29	2350	2330	2340	---	---	---	2120	2040	2080	2140	2080	2110
30	2340	2310	2320	---	---	---	2110	1900	2010	2150	2090	2120
31	---	---	---	2230	2140	2210	2040	1880	1950	---	---	---
MONTH	2580	2290	2440	---	---	---	2250	1880	2100	2190	1670	2040

07130500 ARKANSAS RIVER BELOW JOHN MARTIN RESERVOIR, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	17.0	16.4	16.6	---	---	---	5.8	3.3	4.4	3.4	2.2	2.8
2	17.0	16.5	16.7	---	---	---	4.0	2.3	3.3	3.8	2.1	2.8
3	17.3	16.6	16.9	---	---	---	4.9	1.7	3.3	4.2	2.3	3.3
4	17.3	17.1	17.2	---	---	---	5.3	2.2	3.5	4.6	1.8	3.1
5	17.2	16.9	17.1	---	---	---	5.5	2.3	3.9	4.5	1.9	3.5
6	---	---	---	---	---	---	5.0	2.3	3.7	4.7	3.4	4.0
7	---	---	---	---	---	---	4.5	2.5	3.6	5.3	2.7	3.9
8	---	---	---	9.9	6.1	7.8	5.1	2.9	4.1	5.2	1.9	3.4
9	---	---	---	9.3	5.7	7.2	---	2.8	---	4.4	2.7	3.4
10	---	---	---	6.5	5.8	6.0	---	---	---	5.9	3.1	4.1
11	14.8	14.4	14.5	6.6	4.6	6.0	2.4	.9	1.6	4.8	2.1	3.6
12	15.2	14.3	14.7	6.3	3.7	4.8	2.7	1.4	2.0	5.2	2.4	3.8
13	15.3	14.2	14.7	---	---	---	2.9	1.7	2.2	4.5	2.7	3.5
14	15.1	13.7	14.3	6.6	3.5	5.0	3.0	1.7	2.3	4.3	1.3	2.6
15	14.8	13.7	14.2	6.7	3.8	5.3	3.2	2.1	2.7	3.8	2.1	2.9
16	14.9	13.9	14.2	6.6	3.6	4.9	3.5	2.0	2.5	2.8	.8	1.8
17	14.9	13.6	14.1	5.7	3.2	4.6	3.4	2.0	2.5	3.0	.9	2.0
18	14.8	13.7	14.1	5.8	2.9	4.2	3.0	.9	1.8	2.8	1.8	2.4
19	14.6	13.7	14.1	6.6	2.6	4.4	2.9	1.1	1.9	2.4	1.1	1.8
20	14.5	13.7	14.0	6.4	2.9	4.4	2.8	1.3	1.9	2.5	1.3	1.8
21	14.5	13.5	13.9	---	2.6	---	2.6	1.1	1.7	2.3	1.4	1.8
22	14.4	13.8	14.0	---	---	---	2.8	1.3	2.0	2.4	1.0	1.7
23	14.0	13.7	13.8	---	---	---	3.0	1.0	1.9	2.4	1.2	1.6
24	14.6	13.6	13.9	---	---	---	3.6	1.1	2.3	2.5	.9	1.7
25	14.4	13.4	13.8	---	---	---	2.7	1.7	2.2	2.8	1.4	1.9
26	14.3	13.4	13.8	---	---	---	3.1	1.7	2.2	3.9	2.1	2.8
27	14.2	13.5	13.8	---	---	---	2.6	1.5	2.0	3.9	1.8	2.7
28	14.0	13.7	13.8	---	---	---	3.1	1.9	2.4	3.2	1.9	2.3
29	14.3	13.6	13.8	5.7	---	---	3.7	2.3	2.8	3.3	2.1	2.6
30	14.1	13.5	13.7	5.9	3.0	4.3	3.2	1.8	2.5	4.0	2.0	2.8
31	14.2	13.2	13.6	---	---	---	3.7	2.2	2.9	3.6	2.2	2.9
MONTH	---	---	---	---	---	---	---	---	---	5.9	.8	2.8
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	3.6	2.2	2.9	---	---	---	15.4	7.5	10.6	13.3	12.7	12.9
2	3.1	1.6	2.4	---	---	---	12.0	9.1	10.3	13.1	12.6	12.8
3	3.9	1.9	2.6	---	---	---	11.8	9.1	10.1	13.2	13.0	13.1
4	4.9	2.1	3.6	---	---	---	12.4	9.3	10.4	13.2	12.9	13.1
5	4.7	2.6	3.4	---	---	---	13.1	9.5	10.7	13.2	12.9	13.1
6	4.4	2.4	3.7	---	---	---	11.8	8.8	9.7	13.2	12.7	12.9
7	8.1	3.3	5.1	---	---	---	12.3	8.2	9.9	12.9	12.5	12.7
8	5.9	1.8	3.8	13.6	---	---	12.5	8.9	10.4	13.3	12.5	12.8
9	3.3	1.2	2.1	13.7	7.3	10.4	12.0	9.1	10.3	13.2	12.6	12.8
10	4.1	1.8	2.6	10.7	6.6	8.4	11.1	9.2	10.0	13.4	12.7	13.0
11	3.8	1.7	2.6	7.3	5.7	6.5	10.0	8.2	8.9	13.3	12.7	12.9
12	5.5	1.5	3.3	11.4	5.6	7.9	10.8	8.1	9.2	13.5	12.7	13.1
13	5.2	2.7	4.1	12.9	6.1	9.2	12.0	8.6	9.9	13.5	12.8	13.1
14	4.8	2.9	3.6	11.0	6.9	8.6	13.0	9.1	10.6	13.5	12.7	13.1
15	6.6	1.7	3.9	9.3	5.3	6.9	12.7	9.4	10.8	13.5	12.8	13.1
16	4.9	2.5	3.3	9.4	5.1	6.7	10.4	9.3	9.7	13.8	12.8	13.3
17	4.0	1.8	3.0	5.9	4.5	5.2	11.5	9.1	9.8	14.0	13.2	13.5
18	6.6	2.2	4.3	11.2	5.1	7.4	13.0	8.8	10.5	14.0	13.3	13.6
19	8.2	3.3	5.4	12.3	5.2	7.6	12.2	9.9	10.9	14.3	13.3	13.8
20	6.2	3.9	5.1	14.7	5.7	9.0	12.3	10.6	11.2	16.4	13.8	14.5
21	4.8	3.4	4.0	13.8	7.8	10.3	12.6	10.4	11.4	17.0	16.2	16.6
22	7.0	3.0	4.8	12.7	8.6	10.6	12.5	9.8	11.4	17.5	16.1	16.7
23	9.2	5.3	7.1	14.3	8.9	11.2	11.3	9.7	10.5	17.2	16.2	16.7
24	7.8	5.6	6.4	10.6	6.9	8.4	11.5	10.5	10.9	17.3	16.3	16.7
25	9.2	4.1	6.4	7.3	6.5	6.8	11.5	10.8	11.0	17.3	16.4	16.7
26	7.5	4.9	6.4	7.4	5.7	6.4	11.5	10.7	11.0	17.4	16.5	16.8
27	---	4.2	---	9.3	6.2	7.5	11.5	10.7	11.0	17.3	16.5	16.8
28	---	---	---	9.3	7.1	7.9	12.7	11.0	12.0	17.4	16.5	16.9
29	---	---	---	9.2	6.7	7.8	13.2	12.5	12.7	17.7	16.7	17.1
30	---	---	---	13.4	6.8	9.2	13.4	12.8	13.2	17.6	16.8	17.1
31	---	---	---	12.5	8.0	9.5	---	---	---	17.9	16.6	17.1
MONTH	---	---	---	---	---	---	15.4	7.5	10.6	17.9	12.5	14.5

## ARKANSAS RIVER BASIN

07130500 ARKANSAS RIVER BELOW JOHN MARTIN RESERVOIR, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	18.0	16.7	17.2	21.3	20.8	21.0	25.9	25.1	25.5	22.8	22.0	22.3
2	18.2	16.7	17.4	22.0	20.8	21.4	25.7	25.0	25.3	22.8	22.0	22.3
3	17.8	16.9	17.3	22.4	21.3	21.9	25.5	25.1	25.2	22.9	22.1	22.4
4	18.0	16.9	17.3	22.3	21.7	21.9	25.5	24.9	25.2	22.9	22.2	22.4
5	18.8	17.0	17.8	22.3	21.7	22.1	25.2	24.6	25.0	22.7	22.0	22.3
6	18.7	17.5	17.9	22.5	21.9	22.2	25.1	24.6	24.8	22.8	21.9	22.2
7	18.5	17.5	17.8	22.5	21.9	22.2	25.1	24.6	24.8	22.7	21.9	22.1
8	21.0	17.6	19.1	23.0	22.1	22.4	25.1	24.7	24.8	21.9	20.9	21.4
9	25.7	18.8	21.7	23.8	22.4	23.0	25.1	24.7	24.9	21.1	20.3	20.8
10	27.4	19.2	22.7	23.1	22.7	22.9	24.9	24.4	24.7	20.8	19.7	20.2
11	28.1	20.3	23.9	23.2	22.8	23.0	24.7	24.3	24.4	20.3	19.4	19.8
12	23.6	18.3	20.3	24.2	23.1	23.5	24.5	24.2	24.3	20.4	19.2	19.7
13	19.7	18.2	18.9	24.2	23.2	23.9	24.5	24.1	24.2	20.3	19.5	19.8
14	20.5	19.0	19.7	24.5	23.9	24.2	24.4	23.8	24.1	20.4	19.5	19.8
15	20.7	19.6	20.0	24.9	23.9	24.3	24.6	24.0	24.3	20.0	19.5	19.7
16	20.6	19.5	19.9	25.2	24.4	24.8	24.4	23.6	23.9	20.0	19.6	19.7
17	20.4	19.4	19.8	24.7	24.4	24.6	24.1	23.3	23.6	20.0	19.8	19.8
18	20.3	19.4	19.9	25.0	24.4	24.7	24.2	23.2	23.6	20.3	19.7	19.9
19	20.5	19.7	20.1	25.0	24.5	24.7	24.1	23.2	23.5	20.2	19.7	19.9
20	20.3	19.9	20.1	25.1	24.7	24.9	24.0	23.1	23.5	20.9	19.7	20.2
21	20.6	20.0	20.2	25.3	24.7	24.9	24.4	23.3	23.8	20.5	19.7	19.9
22	20.8	20.1	20.3	25.3	24.9	25.1	24.4	23.4	23.8	20.4	19.6	19.9
23	20.7	20.3	20.5	25.7	24.9	25.2	24.4	23.5	23.9	20.3	19.5	19.8
24	20.6	20.2	20.4	25.4	24.9	25.1	24.4	23.6	23.9	19.8	19.0	19.4
25	20.9	20.2	20.5	25.7	25.0	25.3	23.7	23.3	23.6	19.3	18.4	18.9
26	20.8	20.2	20.5	25.5	25.0	25.2	23.8	23.1	23.3	18.9	18.2	18.5
27	20.9	20.2	20.6	25.4	25.0	25.2	23.5	22.8	23.1	19.0	18.1	18.4
28	20.8	20.5	20.6	25.6	25.0	25.3	23.3	22.6	22.9	19.0	18.1	18.4
29	20.8	20.4	20.6	25.7	25.1	25.3	23.2	22.5	22.7	18.7	18.0	18.3
30	21.2	20.5	20.9	25.5	25.1	25.2	23.3	22.4	22.8	18.9	18.0	18.3
31	---	---	---	25.7	25.2	25.4	22.9	22.2	22.4	---	---	---
MONTH	28.1	16.7	19.8	25.7	20.8	23.9	25.9	22.2	24.1	22.9	18.0	20.2

07133000 ARKANSAS RIVER AT LAMAR, CO

LOCATION.--Lat 38°06'21", long 102°37'05", in NE<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec.30, T.22 S., R.46 W., Prowers County, Hydrologic Unit 11020009, on left bank at left upstream end of upstream bridge on U.S. Highways 50 and 287, 1.3 mi north of courthouse in Lamar.

DRAINAGE AREA.--19,780 mi<sup>2</sup>, of which 950 mi<sup>2</sup> is probably noncontributing.

PERIOD OF RECORD.--Streamflow records, May 1913 to September 1955, April 1959 to current year. Monthly discharge only for some periods, published in WSP 1311. Statistical summary computed for 1949 to current year, subsequent to completion of John Martin Reservoir. Water-quality data available, November 1963 to September 1965, September 1969 to August 1972.

REVISED RECORDS.--WSP 1341: 1921(M), 1945-46(M), drainage area; WDR CO-86-1: 1985.

GAGE.--Water-stage recorder with satellite telemetry and crest stage gage. Elevation of gage is 3,597.39 ft above sea level. See WSP 1731 for history of changes prior to Apr. 4, 1959. Apr. 4, 1959 to Mar. 26, 1968, at site 450 ft upstream at datum 2.42 ft higher. Mar. 27, 1968 to Nov. 17, 1982, at site 450 ft downstream at datum 4.00 ft lower. Nov. 18, 1982 to Mar. 17, 1987, at site 75 ft downstream at same datum.

REMARKS.--Records fair except for discharges greater than 550 ft<sup>3</sup>/s, which are poor. Flow regulated by John Martin Reservoir (station 07130000) 21 mi upstream since Oct. 1948. Natural flow of stream affected by transmountain diversions, storage reservoirs, power developments, ground-water withdrawals, 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 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	357	44	46	34	30	32	13	27	18	582	552	16
2	358	57	45	34	30	31	13	38	35	586	574	15
3	361	43	45	35	30	31	13	45	42	548	585	15
4	358	34	44	35	29	30	13	68	30	546	566	14
5	356	33	44	34	30	25	13	79	15	538	560	14
6	363	31	42	34	31	20	13	86	22	539	566	13
7	349	31	41	32	32	19	13	79	18	540	574	13
8	342	30	44	31	33	18	12	28	1270	532	565	13
9	326	29	44	31	31	17	12	19	113	527	559	14
10	232	28	43	30	33	17	12	20	27	535	562	13
11	219	28	44	30	33	18	12	17	21	530	528	12
12	107	28	45	30	32	20	20	16	17	530	526	11
13	47	28	42	30	33	22	16	15	15	566	493	11
14	58	28	42	30	33	19	14	15	18	1150	305	10
15	44	29	41	30	32	22	15	14	17	287	207	261
16	43	30	40	32	32	26	14	14	19	446	193	331
17	42	27	41	33	33	29	e10	24	19	528	32	343
18	41	27	38	37	32	28	10	20	18	510	28	303
19	40	27	35	34	29	18	12	220	300	457	24	232
20	38	26	34	31	31	17	15	346	453	463	22	206
21	37	25	38	32	33	16	21	560	405	471	19	26
22	36	34	36	31	33	16	20	174	60	468	19	18
23	38	53	36	31	34	15	19	35	503	459	24	18
24	44	52	36	30	34	15	19	23	549	474	24	17
25	36	54	33	30	32	15	50	19	559	489	23	17
26	41	52	37	31	31	15	29	18	614	522	21	18
27	49	51	39	31	31	14	20	18	664	558	19	17
28	67	50	37	32	31	14	19	18	644	498	18	18
29	79	48	34	31	---	13	19	32	624	472	16	17
30	54	48	33	31	---	13	22	64	586	483	16	17
31	43	---	34	30	---	13	---	30	---	507	16	---
TOTAL	4605	1105	1233	987	888	618	503	2181	7695	16341	8236	2043
MEAN	149	36.8	39.8	31.8	31.7	19.9	16.8	70.4	256	527	266	68.1
MAX	363	57	46	37	34	32	50	560	1270	1150	585	343
MIN	36	25	33	30	29	13	10	14	15	287	16	10
AC-FT	9130	2190	2450	1960	1760	1230	998	4330	15260	32410	16340	4050

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1949 - 2001, BY WATER YEAR (WY)

	MEAN	MAX	(WY)	MIN	(WY)
MEAN	38.8	21.8	30.5	41.0	42.2
MAX	233	117	350	796	507
(WY)	1949	1998	1998	1998	1966
MIN	.84	1.81	.56	.47	.73
(WY)	1978	1978	1978	1978	1965

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1949 - 2001

ANNUAL TOTAL	74274	46435	
ANNUAL MEAN	203	127	a126
HIGHEST ANNUAL MEAN			537
LOWEST ANNUAL MEAN			27.0
HIGHEST DAILY MEAN	1160	Jun 12	1270 Jun 8 b25000
LOWEST DAILY MEAN	12	Sep 26	10 Apr 17 c.00
ANNUAL SEVEN-DAY MINIMUM	14	Sep 20	12 Sep 8 .21
MAXIMUM PEAK FLOW			2290 Jun 8 d73800
MAXIMUM PEAK STAGE			10.63 Jun 8 f16.48
ANNUAL RUNOFF (AC-FT)	147300	92100	91000
10 PERCENT EXCEEDS	648	526	425
50 PERCENT EXCEEDS	58	32	25
90 PERCENT EXCEEDS	30	15	4.2

e Estimated.

a Average discharge for 30 years (water years 1914-43), 298 ft<sup>3</sup>/s, 215,900 acre-ft/yr, prior to and during construction of John Martin Dam.

b Maximum daily discharge for period of record, 87,300 ft<sup>3</sup>/s, Jun 6, 1921.

c Minimum daily discharge for period of record, no flow at times in 1913-15.

d From current-meter and timed-drift measurement of peak flow, maximum discharge and stage for period of record, 130,000 ft<sup>3</sup>/s, (determined by Colorado State Engineer) Jun 5, 1921, from rating curve extended above 10,000 ft<sup>3</sup>/s, gage height, 14.55 ft, datum then in use.

f From floodmarks, site and datum then in use.



07134180 ARKANSAS RIVER NEAR GRANADA, CO

LOCATION.--Lat 38°05'44", long 102°18'37", in SE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec.36, T.22 S., R.44 W., Prowers County, Hydrologic Unit 11020009, on left bank at upstream side of end of bridge on U.S. Highway 385, 1.2 mi downstream from headgate of Buffalo Canal, and 2.3 mi north of Granada.

DRAINAGE AREA.--23,707 mi<sup>2</sup>, of which 1,648 mi<sup>2</sup> is probably noncontributing (revised).

PERIOD OF RECORD.--January 1899 to December 1901, gage heights only at different site and datum, August to October 1903, at different datum, December 1980 to current year.

GAGE.--Water-stage recorder with satellite telemetry and crest-stage gage. Elevation of gage is 3,480 ft above sea level, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. Flow regulated by John Martin Reservoir (station 07130000) 38 mi upstream since October 1948. Natural flow of stream affected by transmountain diversions, storage reservoirs, power developments, ground-water withdrawals, 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 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	287	82	139	132	125	125	108	18	113	629	590	71
2	291	82	137	133	124	135	107	18	100	624	601	71
3	306	79	136	132	128	127	115	20	100	608	591	71
4	317	74	138	138	132	123	118	34	102	591	584	71
5	330	73	146	137	133	122	110	72	94	578	564	71
6	336	59	143	138	135	118	105	84	88	572	563	70
7	332	44	143	137	138	112	99	86	87	562	570	69
8	323	44	142	132	141	109	94	81	518	558	557	70
9	321	44	145	132	130	104	92	55	673	547	550	70
10	275	44	146	137	119	103	91	47	208	547	555	65
11	228	44	140	135	134	105	88	47	129	545	534	58
12	204	44	129	131	137	109	94	46	93	539	525	54
13	128	44	143	134	143	110	104	44	48	565	520	52
14	106	44	149	130	139	107	94	44	35	751	426	51
15	67	63	152	128	135	101	80	44	29	834	302	59
16	64	89	150	138	132	105	72	44	28	475	277	184
17	77	89	146	123	127	112	64	69	27	554	234	244
18	74	91	142	111	126	120	59	71	27	602	160	262
19	75	105	140	130	133	122	47	141	62	542	135	233
20	54	108	138	132	127	112	e36	493	260	526	129	222
21	46	108	136	132	127	106	e35	593	409	539	125	182
22	57	109	135	129	127	104	e33	527	236	552	120	118
23	59	117	138	130	128	103	e33	268	195	545	119	96
24	62	129	138	131	133	100	e30	156	466	554	119	93
25	61	133	132	131	132	101	e28	128	517	557	124	85
26	61	134	127	135	127	118	e27	114	569	570	124	83
27	62	137	133	136	124	117	26	106	639	653	126	78
28	78	138	143	135	122	121	23	100	670	646	118	77
29	113	138	141	134	---	117	22	109	660	608	93	75
30	116	140	136	136	---	120	18	176	647	566	89	73
31	90	---	136	127	---	111	---	134	---	541	79	---
TOTAL	5000	2629	4339	4096	3658	3499	2052	3969	7829	18080	10203	3078
MEAN	161	87.6	140	132	131	113	68.4	128	261	583	329	103
MAX	336	140	152	138	143	135	118	593	673	834	601	262
MIN	46	44	127	111	119	100	18	18	27	475	79	51
AC-FT	9920	5210	8610	8120	7260	6940	4070	7870	15530	35860	20240	6110

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1981 - 2001, BY WATER YEAR (WY)

	MEAN	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	89.0	105	132	146	137	131	204	334	433	489	289	120
MAX	184	306	479	886	495	608	1138	2470	2196	2144	775	430
(WY)	1984	1998	1998	1998	1998	1998	1987	1999	1987	1995	1999	1984
MIN	4.15	9.68	35.4	39.8	55.9	22.7	5.68	4.51	9.39	130	4.39	4.13
(WY)	1993	1982	1982	1994	1982	1994	1992	1992	1981	1990	1990	1990

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1981 - 2001

ANNUAL TOTAL	97169	68432										
ANNUAL MEAN	265	187								225		
HIGHEST ANNUAL MEAN										597		1987
LOWEST ANNUAL MEAN										59.3		1992
HIGHEST DAILY MEAN	966	Jul 18				834	Jul 15			4070	May 5	1999
LOWEST DAILY MEAN	41	Sep 17				18	Apr 30			2.7	Aug 17	1990
ANNUAL SEVEN-DAY MINIMUM	44	Nov 7				21	Apr 27			3.0	Aug 14	1990
MAXIMUM PEAK FLOW						1320	Jul 15			a4610	May 5	1999
MAXIMUM PEAK STAGE						9.31	Jul 15			b12.28	May 5	1999
ANNUAL RUNOFF (AC-FT)	192700	135700								162700		
10 PERCENT EXCEEDS	678	553								530		
50 PERCENT EXCEEDS	162	127								107		
90 PERCENT EXCEEDS	72	47								8.1		

e Estimated.  
a From rating curve extended above 3,470 ft<sup>3</sup>/s.  
b Maximum gage height, 12.38 ft, May 27, 1996.

## ARKANSAS RIVER BASIN

07134990 WILD HORSE CREEK ABOVE HOLLY, CO

LOCATION.--Lat 38°03'24", long 102°08'16", in NE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec. 16, T.23 S., R.42 W., Prowers County, Hydrologic Unit 11020009, on left bank 1,000 ft downstream from County Road No. 34, 0.7 mi northwest of Holly, and 0.7 mi upstream from mouth.

DRAINAGE AREA.--270 mi<sup>2</sup>, approximately, of which about 60 mi<sup>2</sup> is probably noncontributing (revised).

PERIOD OF RECORD.--June 1995 to current year (seasonal records only).

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 3,405 ft above sea level, from topographic map. Prior to Apr. 29, 1997, at site 1,050 ft upstream at datum 3.00 ft higher.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Natural flow of stream affected by diversions above station 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.

EXTREMES FOR PERIOD OF RECORD (seasonal only).--Maximum discharge, 1,270 ft<sup>3</sup>/s, May 26, 1996, from slope-area measurement of peak flow, gage height, 6.90 ft, from floodmark, site and datum then in use; maximum gage height, 8.63 ft, Aug. 7, 1997, from floodmark; minimum daily, 3.1 ft<sup>3</sup>/s, Sept. 19, 1995.

EXTREMES FOR CURRENT YEAR (seasonal only).--Maximum discharge, 306 ft<sup>3</sup>/s, June 8, gage height, 6.80 ft, from rating curve extended above 195 ft<sup>3</sup>/s on basis of slope-area measurement of peak flow; minimum daily, 5.3 ft<sup>3</sup>/s, Aug. 29.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31	87	---	---	---	---	11	8.2	84	7.6	15	6.8
2	47	96	---	---	---	---	12	8.2	80	8.0	13	9.5
3	48	92	---	---	---	---	17	10	48	9.1	13	9.6
4	48	87	---	---	---	---	16	17	39	9.9	11	7.7
5	48	84	---	---	---	---	15	23	77	8.1	9.9	5.9
6	49	78	---	---	---	---	13	17	100	6.8	10	6.5
7	51	68	---	---	---	---	9.6	18	101	6.2	10	6.3
8	53	67	---	---	---	---	11	15	171	6.7	7.7	6.4
9	64	65	---	---	---	---	14	10	49	7.7	7.6	6.5
10	58	65	---	---	---	---	13	9.5	40	6.8	9.6	7.1
11	55	70	---	---	---	---	14	11	31	7.3	9.3	6.5
12	50	78	---	---	---	---	14	11	21	7.6	8.3	6.7
13	49	91	---	---	---	---	16	14	20	8.1	14	9.0
14	47	89	---	---	---	---	15	12	18	53	14	6.3
15	52	e90	---	---	---	---	31	18	17	30	16	6.7
16	62	---	---	---	---	---	25	17	16	20	12	13
17	47	---	---	---	---	---	17	26	15	38	15	30
18	38	---	---	---	---	---	16	28	13	38	8.8	33
19	19	---	---	---	---	---	12	47	13	22	7.5	26
20	23	---	---	---	---	---	13	78	13	11	11	26
21	31	---	---	---	---	---	12	70	15	13	7.3	19
22	20	---	---	---	---	---	11	66	12	17	7.1	9.0
23	18	---	---	---	---	---	11	29	11	25	6.8	8.4
24	22	---	---	---	---	---	10	30	10	24	6.2	8.9
25	30	---	---	---	---	---	9.0	31	10	14	6.7	10
26	58	---	---	---	---	---	9.4	54	9.5	22	7.1	9.8
27	85	---	---	---	---	---	9.7	102	9.0	53	8.2	11
28	147	---	---	---	---	---	8.6	54	8.5	35	6.5	11
29	137	---	---	---	---	---	8.0	69	7.9	27	5.3	12
30	94	---	---	---	---	---	8.4	86	7.0	18	5.5	12
31	76	---	---	---	---	---	---	82	---	16	5.9	---
TOTAL	1657	---	---	---	---	---	401.7	1070.9	1065.9	575.9	295.3	346.6
MEAN	53.5	---	---	---	---	---	13.4	34.5	35.5	18.6	9.53	11.6
MAX	147	---	---	---	---	---	31	102	171	53	16	33
MIN	18	---	---	---	---	---	8.0	8.2	7.0	6.2	5.3	5.9
AC-FT	3290	---	---	---	---	---	797	2120	2110	1140	586	687

e Estimated.

07137000 FRONTIER DITCH NEAR COOLIDGE, KS

LOCATION.--Lat 38°02'18", long 102°02'19", in SW<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec.21, T.23 S., R.43 W., Hamilton County, Hydrologic Unit 11030001, on left bank 0.3 mi east of Colorado-Kansas State line, 0.5 mi downstream from Holly drain diversion, 1.5 mi west of Coolidge, and 2.3 mi downstream from diversion of the Arkansas River.

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

REVISED RECORDS.--WSP 1731: 1951.

GAGE.--Water-stage recorders and Parshall flume. Datum of gage is 3,343.14 ft above sea level.

REMARKS.--Records good except those for estimated daily discharges, which are fair. This ditch diverts water from the Arkansas River in Colorado for use in Kansas. These records and records for the Arkansas River near Coolidge represent total flow of the Arkansas River at the Colorado-Kansas State line. Satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 84 ft<sup>3</sup>/s, Aug. 1, 1975; no flow many days each year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	.00	.00	.00	.00	.00	.00	.00	.00	38	33	27
2	28	.00	.00	.00	.00	.00	.00	.00	.00	38	34	24
3	28	.00	.00	.00	.00	.00	.00	.00	.00	39	36	21
4	28	.00	.00	.00	.00	.00	.00	.00	.00	39	37	17
5	28	.00	.00	.00	.00	.00	.00	.00	12	36	38	15
6	28	.00	.00	.00	.00	.00	.00	.00	32	34	40	15
7	27	.00	.00	.00	.00	.00	.00	.00	31	34	47	16
8	27	.00	.00	.00	.00	.00	.00	.00	20	34	53	18
9	24	.00	.00	.00	.00	.00	.00	.00	26	34	49	20
10	27	.00	.00	.00	.00	.00	.00	.00	28	34	45	20
11	27	.00	.00	.00	.00	.00	.00	14	22	35	.45	19
12	27	.00	.00	.00	.00	.00	.00	34	15	35	.17	16
13	27	.00	.00	.00	.00	.00	.00	38	14	34	.00	14
14	27	.00	.00	.00	.00	.00	.00	e34	28	15	8.5	14
15	27	.00	.00	.00	.00	.00	.00	e28	28	.59	34	14
16	27	.00	.00	.00	.00	.00	.00	e28	27	.39	33	21
17	27	.00	.00	.00	.00	.00	.00	e28	26	.17	33	34
18	27	.00	.00	.00	.00	.00	.00	e27	23	.68	34	34
19	27	.00	.00	.00	.00	.00	.00	e14	21	9.0	34	32
20	27	.00	.00	.00	.00	.00	.00	e1.5	23	33	34	31
21	27	.00	.00	.00	.00	.00	.00	e.26	27	33	33	31
22	27	.00	.00	.00	.00	.00	.00	e.00	27	34	33	31
23	27	.00	.00	.00	.00	.00	.00	e.00	26	34	33	30
24	27	.00	.00	.00	.00	.00	.00	.00	27	34	33	30
25	27	.00	.00	.00	.00	.00	.00	.00	26	34	32	29
26	27	.00	.00	.00	.00	.00	.00	.00	26	34	32	29
27	27	.00	.00	.00	.00	.00	.00	.00	31	23	32	25
28	19	.00	.00	.00	.00	.00	.00	.00	37	33	32	24
29	.05	.00	.00	.00	---	.00	.00	.00	39	33	31	23
30	.00	.00	.00	.00	---	.00	.00	.00	39	33	31	22
31	.00	---	.00	.00	---	.00	---	.00	---	33	29	---
MEAN	24.2	.000	.000	.000	.000	.000	.000	7.96	22.7	28.4	31.4	23.2
MAX	28	.00	.00	.00	.00	.00	.00	38	39	39	53	34
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.17	.00	14
AC-FT	1490	.00	.00	.00	.00	.00	.00	489	1350	1750	1930	1380

CAL YR 2000 TOTAL 5460.45 MEAN 14.9 MAX 48 MIN .00 AC-FT 10830  
WTR YR 2001 TOTAL 4229.76 MEAN 11.6 MAX 53 MIN .00 AC-FT 8390

e Estimated.

## ARKANSAS RIVER BASIN

07137500 ARKANSAS RIVER NEAR COOLIDGE, KS

LOCATION.--Lat 38°01'34", long 102°00'41", in NW<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec.26, T.23 S., R.43 W., Hamilton County, Hydrologic Unit 11030001, on right bank at downstream side of county highway bridge, 1.0 mi south of Coolidge, 1.9 mi downstream from Colorado-Kansas State line, and at mile 1,099.3 .

DRAINAGE AREA.--25,410 mi<sup>2</sup>, of which 1,708 mi<sup>2</sup> is probably noncontributing.

PERIOD OF RECORD.--May to October 1903, March to May 1921, October 1950 to current year. Monthly discharge only for some periods, published in WSP 1311. Water-quality data available, 1964 to 1968, 1970 to 1973, and 1975 to 1995.

REVISED RECORDS.--WSP 1341: 1903, drainage area.

GAGE.--Water-stage recorder. Datum of gage is 3,330.84 ft above sea level. May 5 to Oct. 31, 1903, nonrecording gage, and Mar. 1 to May 31, 1921, water-stage recorder at present site at different datum. Oct. 1, 1950, to Mar. 31, 1966, water-stage recorder at site 0.3 mi upstream at datum 3.00 ft higher.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Combined flow of river and Frontier Ditch (station 07137000) represents entire flow that enters Kansas. Flow regulated since Oct. 1948 by John Martin Reservoir (station 07130000). Natural flow of stream affected by transmountain diversions, storage reservoirs, power developments, ground-water withdrawals and diversions for irrigation of about 500,000 acres, and return flow from irrigated areas. Satellite telemeter at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	291	269	209	174	177	186	180	120	415	611	519	119
2	326	301	209	168	181	186	177	121	379	609	540	124
3	357	304	207	167	185	187	175	124	346	593	550	123
4	368	250	203	168	184	182	177	147	344	583	552	113
5	391	231	206	175	186	180	179	179	317	565	539	109
6	418	223	208	177	186	180	171	207	341	556	530	101
7	447	202	211	175	191	181	168	208	318	553	517	103
8	454	224	208	172	e190	178	162	200	617	550	515	99
9	466	225	210	165	e190	175	162	174	1070	550	519	98
10	450	217	209	166	191	174	160	152	552	542	553	100
11	388	228	205	168	191	177	166	139	372	566	607	102
12	334	223	205	173	200	178	160	119	281	567	605	96
13	289	232	e199	181	203	176	170	119	221	577	592	93
14	228	225	e196	177	206	176	172	117	179	909	567	89
15	200	231	195	173	200	172	173	109	198	1170	433	90
16	204	215	199	e162	195	165	171	101	200	634	366	106
17	169	207	199	e162	189	169	153	116	173	602	358	180
18	157	201	194	165	187	178	150	149	162	650	292	220
19	148	198	192	166	191	177	142	211	150	596	256	250
20	150	205	194	176	193	175	143	829	190	526	243	229
21	153	207	188	179	188	175	145	703	312	532	226	220
22	143	207	186	177	188	171	144	785	364	543	210	168
23	145	208	181	174	189	169	140	499	243	550	178	137
24	161	212	179	174	195	167	132	338	329	547	154	128
25	158	213	186	177	190	167	130	307	451	556	150	126
26	158	212	172	181	187	178	148	313	483	565	164	129
27	169	213	175	184	191	184	170	364	526	692	152	113
28	322	215	180	187	189	185	133	351	605	663	148	110
29	496	211	183	184	---	184	128	350	622	611	151	111
30	330	209	180	185	---	181	123	431	632	565	140	108
31	297	---	177	181	---	182	---	436	---	529	123	---
MEAN	283	224	195	174	190	177	157	275	380	608	369	130
MAX	496	304	211	187	206	187	180	829	1070	1170	607	250
MIN	143	198	172	162	177	165	123	101	150	526	123	89
AC-FT	17390	13330	11990	10700	10580	10900	9330	16900	22600	37410	22710	7720

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 2001, BY WATER YEAR (WY)

MEAN	136	124	129	136	142	137	220	329	499	368	341	185
MAX	332	424	534	972	602	658	1221	2478	8221	2255	1979	1079
(WY)	1998	1998	1998	1998	1966	1998	1987	1999	1965	1995	1965	1965
MIN	1.97	1.53	3.94	3.14	5.52	5.63	9.43	6.61	4.20	3.59	1.94	.90
(WY)	1979	1979	1979	1979	1978	1978	1979	1963	1954	1974	1964	1960

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1951 - 2001
ANNUAL MEAN	370	265	229
HIGHEST ANNUAL MEAN			1012
LOWEST ANNUAL MEAN			19.8
HIGHEST DAILY MEAN	1250	Jul 18	101000
LOWEST DAILY MEAN	114	Sep 23	.00
ANNUAL SEVEN-DAY MINIMUM	120	Sep 18	.00
MAXIMUM PEAK FLOW			1520
MAXIMUM PEAK STAGE		6.29	Jul 15
ANNUAL RUNOFF (AC-FT)	268600	191500	166000
10 PERCENT EXCEEDS	748	552	466
50 PERCENT EXCEEDS	294	190	132
90 PERCENT EXCEEDS	178	131	10

e Estimated.







## RIO GRANDE BASIN

## CLOSED BASIN IN SAN LUIS VALLEY, CO

08227000 SAGUACHE CREEK NEAR SAGUACHE, CO

LOCATION.--Lat 38°09'48", long 106°17'24", in SE<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec.10, T.45 N., R.6 E., Saguache County, Hydrologic Unit 13010004, on left bank 0.2 mi downstream from Middle Creek and 10 mi northwest of Saguache.

DRAINAGE AREA.--595 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1910 to September 1912, June 1914 to current year. Monthly discharge only for some periods, published in WSP 1312.

REVISED RECORDS.--WSP 1242: 1948-49. WSP 1312: 1912, 1934(M), 1942(M). WSP 1923: 1951.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is about 8,030 ft above sea level, from topographic map. Prior to Apr. 9, 1934, at sites 0.8 mi downstream at different datums. Apr. 10, 1934 to Nov. 20, 1966, at present site at datum 1.00 ft higher.

REMARKS.--Records good except for estimated daily discharges, which are poor. Natural flow of stream affected by transmountain diversions from Colorado River basin to drainage area above station through Tarbell ditch (see elsewhere in this report), and diversions above station for irrigation.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30	34	e27	e21	e16	28	43	140	222	95	85	58
2	29	26	e26	e21	e16	28	65	164	221	96	115	52
3	28	31	e26	e22	e19	27	80	171	219	98	133	50
4	29	35	e26	e22	e24	29	95	179	202	94	103	46
5	32	34	e26	e22	e23	29	108	173	189	81	100	44
6	30	25	e28	e22	e23	31	104	136	175	81	88	47
7	28	15	e27	e20	e27	30	59	127	184	77	86	44
8	30	21	e27	e19	e27	32	51	132	195	77	77	43
9	34	29	e27	e21	e25	35	45	149	183	78	81	42
10	36	25	e26	e23	e23	35	47	165	181	74	81	42
11	36	29	e25	e21	e24	33	44	183	168	75	85	40
12	34	16	e25	e20	e23	33	42	201	157	77	74	40
13	36	e18	e24	e22	e24	31	40	219	158	99	66	38
14	34	e17	e24	e19	e24	32	45	236	165	94	74	40
15	33	e20	e25	e17	25	30	47	261	149	96	92	39
16	33	e19	e25	e16	25	29	55	283	125	84	83	36
17	34	e19	e23	e14	25	30	74	339	117	68	70	36
18	34	e21	e23	e17	25	31	103	371	113	66	61	38
19	35	e23	e22	e19	e25	33	146	347	107	63	60	39
20	36	e26	e24	e20	e26	37	127	344	110	69	59	36
21	36	e24	e22	e22	26	49	85	326	105	71	57	35
22	33	e29	e22	e20	27	59	77	302	103	72	61	35
23	33	e28	e22	e22	e30	66	69	269	102	70	69	35
24	42	e27	e22	e21	e29	82	61	256	101	72	63	33
25	38	e28	e23	e22	28	86	72	260	113	84	56	31
26	34	e26	e22	e20	26	85	103	264	116	82	53	34
27	32	e28	e21	e22	26	68	116	274	115	82	50	35
28	43	e29	e22	e23	26	50	128	279	102	71	50	35
29	42	e28	e21	e20	---	47	122	283	95	68	52	34
30	37	e27	e20	e18	---	41	125	255	95	58	53	34
31	35	---	e21	e16	---	39	---	227	---	73	57	---
TOTAL	1056	757	744	624	687	1295	2378	7315	4387	2445	2294	1191
MEAN	34.1	25.2	24.0	20.1	24.5	41.8	79.3	236	146	78.9	74.0	39.7
MAX	43	35	28	23	30	86	146	371	222	99	133	58
MIN	28	15	20	14	16	27	40	127	95	58	50	31
AC-FT	2090	1500	1480	1240	1360	2570	4720	14510	8700	4850	4550	2360

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1910 - 2001, BY WATER YEAR (WY)

MEAN	44.4	35.7	26.0	23.4	26.6	38.7	68.6	157	174	93.9	73.5	51.2
MAX	108	60.1	40.0	40.3	41.4	70.0	257	437	474	299	198	194
(WY)	1912	1930	1928	1986	1986	1924	1924	1924	1957	1957	1929	1929
MIN	20.6	16.4	13.9	12.2	13.4	21.5	34.2	34.8	19.4	20.5	23.3	15.0
(WY)	1979	1978	1978	1978	1966	1964	1978	1981	1963	1940	1940	1956

## SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR (a) WATER YEARS 1910 - 2001

ANNUAL TOTAL	16710	25173	
ANNUAL MEAN	45.7	69.0	67.7
HIGHEST ANNUAL MEAN			122
LOWEST ANNUAL MEAN			28.0
HIGHEST DAILY MEAN	181	May 9	371
LOWEST DAILY MEAN	15	Nov 7	e14
ANNUAL SEVEN-DAY MINIMUM	19	Nov 12	e17
MAXIMUM PEAK FLOW			386
MAXIMUM PEAK STAGE		3.47	May 18
ANNUAL RUNOFF (AC-FT)	33140	49930	49060
10 PERCENT EXCEEDS	96	165	148
50 PERCENT EXCEEDS	34	38	41
90 PERCENT EXCEEDS	25	22	21

e Estimated.

a Water year 1983-1990 data were published by Colorado Division of Water Resources.

b Present datum, from rating curve extended above 1090 ft<sup>3</sup>/s.

CLOSED BASIN IN SAN LUIS VALLEY, CO

08227000 SAGUACHE CREEK NEAR SAGUACHE, CO  
(National Water-Quality Assessment Program station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1993 to August 1995, April to September 2001.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	OXYGEN, DIS-SOLVED (MG/L) (00300)	PH WATER WHOLE FIELD (STANDARD UNITS) (00400)	SPECIFIC CONDUCTANCE (US/CM) (00095)	TEMPERATURE WATER (DEG C) (00010)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNESIUM, DIS-SOLVED (MG/L AS MG) (00925)	POTASSIUM, DIS-SOLVED (MG/L AS K) (00935)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	ALKALINITY WAT DIS TOT IT (MG/L AS CACO3) (39086)	BICARBONATE WATER DIS IT (MG/L AS HCO3) (00453)	CHLORIDE, DIS-SOLVED (MG/L AS CL) (00940)	
APR 19...	1140	176	9.7	7.2	113	8.3	12.1	1.84	2.57	5.0	46	56	1.6	
JUN 06...	1240	175	7.6	7.6	100	14.0	13.0	2.10	1.49	4.0	46	56	.6	
JUL 03...	1310	96	8.6	7.6	92	17.8	12.6	1.86	1.42	4.1	47	57	.9	
AUG 01...	1210	88	7.4	7.2	105	17.7	13.0	1.96	1.88	4.3	59	72	1.2	
30...	1220	47	7.6	7.4	112	15.4	14.3	2.05	1.66	5.1	48	58	1.0	
SEP 25...	1230	33	7.7	7.7	144	13.8	16.8	2.57	2.10	5.3	60	72	1.1	
DATE		FLUORIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	NITROGEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITROGEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	PHOSPHORUS, PHOSPHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOSPHORUS, ORTHO, DIS-SOLVED (MG/L AS P) (00671)	PHOSPHORUS, TOTAL (MG/L AS P) (00665)	IRON, DIS-SOLVED (UG/L AS FE) (01046)
APR 19...	.2	18.9	5.7	100	E.035	.48	4.3	E.044	<.006	.061	.033	1.49	120	
JUN 06...	E.1	25.6	2.9	92	<.040	.20	.50	<.050	<.006	.061	.045	.190	50	
JUL 03...	E.1	25.1	2.8	86	E.025	.21	.52	E.035	E.005	.082	.047	.119	40	
AUG 01...	E.1	26.5	2.7	89	<.040	.16	.42	E.044	.009	.087	.078	.176	70	
30...	E.1	28.1	3.3	93	<.040	.11	.20	<.050	<.006	.081	.068	.112	80	
SEP 25...	.2	30.1	3.7	108	<.040	.19	.19	<.050	<.006	.088	.061	.112	90	
DATE		MANGANESE, DIS-SOLVED (UG/L AS MN) (01056)	2,6-DIETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) (82660)	ACETOCHLOR, WATER FLTRD REC (UG/L) (49260)	ALACHLOR, WATER DISS, REC (UG/L) (46342)	ALPHA BHC, DIS-SOLVED (UG/L) (34253)	ATRAZINE, WATER, DISS, REC (UG/L) (39632)	BENFLURALIN, WAT FLD 0.7 U GF, REC (UG/L) (82673)	BUTYLATE, WATER, DISS, REC (UG/L) (04028)	CARBARYL, WATER FLTRD 0.7 U GF, REC (UG/L) (82680)	CARBURAN, WATER FLTRD 0.7 U GF, REC (UG/L) (82674)	CHLOROPYRIFOS, DIS-SOLVED (UG/L) (38933)	CYANAZINE, WATER, DISS, REC (UG/L) (04041)	DCPA, WATER FLTRD 0.7 U GF, REC (UG/L) (82682)
APR 19...	95.7	<.002	<.004	<.002	<.005	<.007	<.010	<.002	<.041	<.020	<.005	<.018	<.003	
JUN 06...	15.2	<.002	<.004	<.002	<.005	<.007	<.010	<.002	<.041	<.020	<.005	<.018	<.003	
JUL 03...	7.0	<.002	<.004	<.002	<.005	<.007	<.010	<.002	<.041	<.020	E.004	<.018	<.003	
AUG 01...	6.7	<.002	<.004	<.002	<.005	<.007	<.010	<.002	<.041	<.020	<.005	<.018	<.003	
30...	6.4	<.002	<.004	<.002	<.005	<.007	<.010	<.002	<.041	<.020	<.005	<.018	<.003	
SEP 25...	12.3	<.002	<.004	<.002	<.005	<.007	<.010	<.002	<.041	<.020	<.005	<.018	<.003	
DATE		DEETHYL ATRAZINE, WATER, DISS, REC (UG/L) (04040)	DI-AZINON, DIS-SOLVED (UG/L) (39572)	DI-ELDRIN, DIS-SOLVED (UG/L) (39381)	DISULFOTON WATER FLTRD 0.7 U GF, REC (UG/L) (82677)	EPTC WATER FLTRD 0.7 U GF, REC (UG/L) (82668)	ETHALFLURALIN, WAT FLT 0.7 U GF, REC (UG/L) (82663)	ETHOPROP WATER FLTRD 0.7 U GF, REC (UG/L) (82672)	FONOFOS WATER REC (UG/L) (04095)	LINDANE DIS-SOLVED (UG/L) (39341)	LINURON WATER FLTRD 0.7 U GF, REC (UG/L) (82666)	MALATHION, DIS-SOLVED (UG/L) (39532)	METHYL AZINPHOS, WAT FLT 0.7 U GF, REC (UG/L) (82686)	METHYL PARATHION, WAT FLT 0.7 U GF, REC (UG/L) (82667)
APR 19...	<.006	<.005	<.005	<.021	<.002	<.009	<.005	<.003	<.004	<.035	<.027	<.050	<.006	
JUN 06...	<.006	<.005	<.005	<.021	<.002	<.009	<.005	<.003	<.004	<.035	<.027	<.050	<.006	
JUL 03...	<.006	<.005	<.005	<.021	<.002	<.009	<.005	<.003	<.004	<.035	<.027	<.050	<.006	
AUG 01...	<.006	<.005	<.005	<.021	<.002	<.009	<.005	<.003	<.004	<.035	<.027	<.050	<.006	
30...	<.006	<.005	<.005	<.021	<.002	<.009	<.005	<.003	<.004	<.035	<.027	<.050	<.006	
SEP 25...	<.006	<.005	<.005	<.021	<.002	<.009	<.005	<.003	<.004	<.035	<.027	<.050	<.006	

## CLOSED BASIN IN SAN LUIS VALLEY, CO--Continued

08227000 SAGUACHE CREEK NEAR SAGUACHE, CO--Continued  
(National Water-Quality Assessment Program station)

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	METO- LACHLOR WATER DISSOLV (UG/L) (39415)	METRI- BUZIN SENCOR WATER DISSOLV (UG/L) (82630)	MOL- INATE WATER FLTRD 0.7 U GF, REC (UG/L) (82671)	NAPROP- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82684)	P,P' DDE DISSOLV (UG/L) (34653)	PARA- THION, DIS- SOLVED (UG/L) (39542)	PEB- ULATE WATER FILTRD 0.7 U GF, REC (UG/L) (82669)	PENDI- METH- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82683)	PER- CIS WAT FLT 0.7 U GF, REC (UG/L) (82687)	PHORATE WATER FLTRD 0.7 U GF, REC (UG/L) (82664)	PRO- METON, WATER, FLTRD DISS, REC (UG/L) (04037)	PRON- AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) (82676)	PROPA- CHLOR, WATER, DISS, REC (UG/L) (04024)
APR 19...	<.013	<.006	<.002	<.007	<.003	<.007	<.002	<.010	<.006	<.011	<.015	<.004	<.010
JUN 06...	<.013	<.006	<.002	<.007	<.003	<.007	<.002	<.010	<.006	<.011	<.015	<.004	<.010
JUL 03...	<.013	<.006	<.002	<.007	<.003	<.007	<.002	<.010	<.006	<.011	<.015	<.004	<.010
AUG 01...	<.013	<.006	<.002	<.007	<.003	<.007	<.002	<.010	<.006	<.011	<.015	<.004	<.010
SEP 30...	<.013	<.006	<.002	<.007	<.003	<.007	<.002	<.010	<.006	<.011	<.015	<.004	<.010
SEP 25...	<.013	<.006	<.002	<.007	<.003	<.007	<.002	<.010	<.006	<.011	<.015	<.004	<.010
DATE	PRO- PANIL WATER FLTRD 0.7 U GF, REC (UG/L) (82679)	PRO- PARGITE WATER FLTRD 0.7 U GF, REC (UG/L) (82685)	SI- MAZINE, WATER, DISS, REC (UG/L) (04035)	TEBU- THIURON WATER FLTRD 0.7 U GF, REC (UG/L) (82670)	TER- BACIL WATER FLTRD 0.7 U GF, REC (UG/L) (82665)	TER- BUFOS WATER FLTRD 0.7 U GF, REC (UG/L) (82675)	THIO- BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) (82681)	TRIAL- LATE WATER FLTRD 0.7 U GF, REC (UG/L) (82678)	TRI- FLUR- ALIN WAT FLT 0.7 U GF, REC (UG/L) (82661)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)		
APR 19...	<.011	<.060	<.011	<.016	<.034	<.017	<.005	<.002	<.009	--	--		
JUN 06...	<.011	<.023	<.011	<.016	<.034	<.017	<.005	<.002	<.009	105	50		
JUL 03...	<.011	<.023	<.011	<.016	<.034	<.017	<.005	<.002	<.009	156	41		
AUG 01...	<.011	<.023	<.011	<.016	<.034	<.017	<.005	<.002	<.009	90	21		
SEP 30...	<.011	<.023	<.011	<.016	<.034	<.017	<.005	<.002	<.009	14	1.8		
SEP 25...	<.011	<.023	<.011	<.016	<.034	<.017	<.005	<.002	<.009	2	.22		

E Estimated laboratory analysis value.

CLOSED BASIN IN SAN LUIS VALLEY

08231000 LA GARITA CREEK NEAR LA GARITA, CO

LOCATION.--Lat 37°48'48", long 106°19'04", in NW<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec.9, T.41 N., R.6 E., Saquache County, Hydrologic Unit 13010004, on right bank 4.5 mi downstream from Little La Garita Creek and 4.5 mi southwest of La Garita.

DRAINAGE AREA.--61 mi<sup>2</sup>, approximately.

PERIOD OF RECORD.--April 1919 to September 1981. October 1998 to current year. No winter records prior to water year 1948 except water years 1926, 1941, and 1945-46. Monthly discharge only for some periods, published in WSP 1312.

REVISED RECORDS.--WSP 1312: 1946(M).

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 8,030 ft, from topographical map. Apr. 1, 1919 to June 23, 1927, nonrecording gages, and June 24, 1927 to Nov. 13, 1935, water-stage recorder, at sites within 0.2 mi downstream at different datums. Nov. 14, 1935 to Nov. 16, 1966, water-stage recorder at present site at datum 1.00 ft higher.

REMARKS.--Records good except for estimated daily discharges, which are poor. Diversions upstream from station for irrigation.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.7	3.5	e5.0	e3.2	e3.3	e3.6	e27	74	52	18	14	8.7
2	4.1	4.3	e5.0	e3.2	e3.5	e3.6	e30	90	50	17	15	7.9
3	3.8	4.9	e5.2	e3.4	e3.8	e3.7	e34	82	49	16	28	7.2
4	3.9	5.2	e5.2	e3.6	e3.8	e3.9	e38	68	49	15	26	7.0
5	4.4	5.4	e5.4	e3.6	e3.6	e4.1	e23	50	48	14	23	6.9
6	4.2	e3.8	e5.4	e3.6	e3.6	e4.4	23	45	46	13	19	7.9
7	4.1	e3.6	e5.2	e3.2	e3.9	e4.4	15	51	49	12	16	6.8
8	4.6	e2.8	e5.2	e2.8	e3.8	e4.4	14	56	50	11	15	6.4
9	5.1	e3.8	e5.2	e3.0	e3.3	e4.4	13	70	49	12	15	5.6
10	5.1	e4.6	e4.8	e3.4	e3.1	e4.4	14	e88	46	13	19	5.6
11	4.9	e4.6	e4.4	e3.1	e3.4	e4.1	12	105	43	13	18	5.5
12	5.0	e4.4	e4.4	e3.1	e3.4	e4.3	12	e134	37	12	15	5.4
13	4.9	e4.4	e4.2	e3.2	e3.6	e4.5	10	140	35	14	14	5.5
14	4.3	e4.6	e4.2	e2.9	e3.6	e4.3	11	144	37	15	14	6.1
15	4.3	e4.8	e4.6	e2.7	e3.4	e4.1	13	127	35	24	14	5.9
16	4.2	e4.6	e4.6	e2.7	e3.4	e4.3	19	146	28	16	14	5.9
17	4.1	e4.6	e4.0	e2.3	e3.4	e4.3	30	135	25	12	11	6.3
18	4.0	e4.8	e3.9	e2.5	e4.0	e4.3	35	130	23	10	10	7.1
19	4.1	e5.0	e3.6	e2.7	e4.0	e5.0	45	131	21	9.8	9.5	6.8
20	4.1	e5.2	e4.0	e2.8	e3.9	e6.0	e41	154	21	10	9.3	6.3
21	4.0	e5.0	e3.9	e2.9	e4.0	e7.0	23	146	22	10	9.5	6.1
22	4.2	e5.2	e3.8	e3.0	e4.0	e8.0	22	115	20	11	10	6.0
23	5.5	e5.4	e3.7	e3.3	e4.0	e9.0	16	94	18	13	10	6.1
24	6.7	e5.2	e3.7	e3.1	e3.9	e10	19	89	19	13	8.7	5.9
25	5.0	e5.0	e3.8	e3.3	e3.7	e12	e31	90	39	21	8.1	5.8
26	4.9	e5.0	e3.6	e3.1	e3.9	e13	43	80	27	16	8.0	5.9
27	5.5	e5.2	e3.7	e3.4	e3.9	e14	40	74	22	13	7.3	5.8
28	6.8	e5.4	e3.8	e3.4	e3.9	e15	38	74	19	11	7.9	5.6
29	6.1	e5.0	e3.4	e3.4	---	e18	39	70	17	9.5	8.1	5.6
30	5.3	e5.2	e3.4	e3.1	---	e19	e54	61	18	8.9	7.6	5.8
31	6.0	---	e3.6	e3.2	---	e23	---	55	---	12	9.3	---
TOTAL	147.9	140.5	133.9	96.2	103.1	234.1	784	2968	1014	415.2	413.3	189.4
MEAN	4.77	4.68	4.32	3.10	3.68	7.55	26.1	95.7	33.8	13.4	13.3	6.31
MAX	6.8	5.4	5.4	3.6	4.0	23	54	154	52	24	28	8.7
MIN	3.8	2.8	3.4	2.3	3.1	3.6	10	45	17	8.9	7.3	5.4
AC-FT	293	279	266	191	204	464	1560	5890	2010	824	820	376

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1919 - 2001, BY WATER YEAR (WY)

MEAN	7.01	5.25	3.94	3.36	4.08	5.81	17.2	47.2	31.2	14.9	15.7	8.77
MAX	42.6	18.5	8.72	6.60	8.00	9.94	126	211	126	65.3	70.2	52.4
(WY)	1924	1970	1970	1966	1962	1972	1924	1924	1921	1921	1929	1923
MIN	1.46	1.80	.70	.50	.50	1.50	6.08	4.80	2.96	2.30	2.07	.85
(WY)	1957	1941	1964	1964	1964	1964	1978	1967	1963	1963	1940	1956

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR (a)WATER YEARS 1919 - 2001

ANNUAL TOTAL	2812.8	6639.6		
ANNUAL MEAN	7.69	18.2	12.7	
HIGHEST ANNUAL MEAN			30.8	1941
LOWEST ANNUAL MEAN			4.12	1951
HIGHEST DAILY MEAN	33	Apr 28	398	May 16 1941
LOWEST DAILY MEAN	2.3	Aug 10	e2.3	Jan 17 Sep 28 1956
ANNUAL SEVEN-DAY MINIMUM	2.9	Aug 6	e2.7	Jan 14 Sep 27 1956
MAXIMUM PEAK FLOW			186	May 15 Jul 9 1957
MAXIMUM PEAK STAGE			3.20	May 15 Jul 9 1957
ANNUAL RUNOFF (AC-FT)	5580	13170	9230	
10 PERCENT EXCEEDS	15	49	37	
50 PERCENT EXCEEDS	5.6	6.0	6.6	
90 PERCENT EXCEEDS	3.7	3.4	3.0	

e Estimated.

a Water year 1982 to 1998 data were published by Colorado Division of Water Resources.

b From rating curve extended above 140 ft<sup>3</sup>/s.

c At present datum.

## RIO GRANDE BASIN

## CLOSED BASIN IN SAN LUIS VALLEY, CO

372833105455800 CLOSED BASIN PROJECT CANAL NEAR ALAMOSA, CO

LOCATION.--Lat 37°28'33", long 105°45'58", in SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec. 3, T.37 N., R.11 E., Alamosa County, Hydrologic Unit 13010002, on right bank of Closed Basin Project Canal, 400 ft north of State Highway 160, and 5.5 mi east of Alamosa.

DRAINAGE AREA.--Indeterminate.

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

GAGE.--Water-stage recorders with satellite telemetry, and 12 ft Parshall flume. Elevation of gage is 7531.15 ft (levels by U.S. Bureau of Reclamation).

REMARKS.--Records good except for estimated daily discharges, which are fair. The Closed Basin Project Canal delivers water from the Closed Basin in the San Luis Valley to the Rio Grande just downstream from Alamosa. Shallow (unconfined) aquifer water is pumped into the canal by a system of pumps.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.8	26	28	29	33	32	23	28	30	32	12	26
2	8.0	27	28	28	33	32	23	27	30	33	10	27
3	8.6	25	26	28	33	31	23	26	29	33	11	26
4	8.9	23	23	28	33	30	23	29	28	32	14	25
5	8.5	21	24	28	33	29	21	29	30	31	15	23
6	8.6	25	24	28	33	30	20	29	31	31	16	23
7	8.7	27	23	28	33	31	21	29	31	31	15	22
8	7.9	22	23	28	33	31	20	27	30	31	14	22
9	8.1	24	24	30	32	30	21	26	29	33	12	23
10	7.8	23	23	31	32	31	20	26	31	32	13	24
11	7.4	27	24	32	31	31	23	26	31	30	16	24
12	7.4	28	26	32	31	30	27	26	29	30	16	25
13	7.3	27	25	32	32	30	29	25	25	26	16	25
14	7.1	27	23	32	33	29	26	23	26	24	17	25
15	7.3	27	25	32	33	30	28	28	25	22	21	22
16	7.8	24	25	31	33	26	29	31	26	21	21	23
17	7.9	25	25	31	34	25	20	32	26	21	21	24
18	7.0	25	24	32	33	26	20	31	28	20	23	24
19	11	21	27	33	32	26	24	30	31	20	23	23
20	15	22	27	33	32	27	23	31	32	14	22	22
21	11	21	28	34	34	27	23	30	34	14	25	22
22	11	22	28	34	33	27	24	26	34	21	25	22
23	11	22	28	33	32	26	26	25	36	21	23	22
24	9.8	22	28	32	32	26	26	26	36	20	22	23
25	13	25	28	31	32	26	28	27	33	20	24	23
26	e18	24	28	32	32	26	30	29	30	20	22	21
27	23	21	28	32	31	23	29	27	28	19	22	22
28	22	23	28	31	32	25	26	27	30	18	22	23
29	15	24	28	32	---	27	26	29	32	17	24	22
30	20	24	29	32	---	26	27	31	32	19	25	22
31	25	---	29	32	---	24	---	30	---	15	25	---
TOTAL	346.9	724	807	961	910	870	729	866	903	751	587	700
MEAN	11.2	24.1	26.0	31.0	32.5	28.1	24.3	27.9	30.1	24.2	18.9	23.3
MAX	25	28	29	34	34	32	30	32	36	33	25	27
MIN	7.0	21	23	28	31	23	20	23	25	14	10	21
AC-FT	688	1440	1600	1910	1800	1730	1450	1720	1790	1490	1160	1390

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2001, BY WATER YEAR (WY)

	1999	2000	2001	1999	2000	2001	1999	2000	2001	1999	2000	2001
MEAN	24.6	24.4	30.7	36.0	35.0	30.8	30.1	29.5	27.4	25.9	20.0	23.0
MAX	35.0	31.6	35.7	42.4	38.1	32.5	34.7	34.3	32.9	35.1	28.1	33.0
(WY)	2000	1999	1999	1999	1999	1999	1999	1999	1999	1999	1999	1999
MIN	11.2	17.6	26.0	31.0	32.5	28.1	24.3	26.3	19.3	18.3	13.0	12.7
(WY)	2001	2000	2001	2001	2001	2001	2001	2000	2000	2000	2000	2000

## SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1999 - 2001

ANNUAL TOTAL	8615.5	9154.9	
ANNUAL MEAN	23.5	25.1	28.1
HIGHEST ANNUAL MEAN			33.8
LOWEST ANNUAL MEAN			25.1
HIGHEST DAILY MEAN	37	Jan 28	e63
LOWEST DAILY MEAN	6.0	Sep 25	6.0
ANNUAL SEVEN-DAY MINIMUM	6.7	Sep 20	7.4
MAXIMUM PEAK FLOW			36
MAXIMUM PEAK STAGE			.87
ANNUAL RUNOFF (AC-FT)	17090	18160	20350
10 PERCENT EXCEEDS	35	32	37
50 PERCENT EXCEEDS	24	26	29
90 PERCENT EXCEEDS	11	15	16

e Estimated.

a Maximum gage height, 1.86 ft, Jan 27, 1990, due to submergence of flume.



RIO GRANDE BASIN

08245000 CONEJOS RIVER BELOW PLATORO RESERVOIR, CO

LOCATION.--Lat 37°21'18", long 106°32'37", Conejos County, Hydrologic Unit 13010005, on left bank 1,100 ft downstream from valvehouse for Platoro Reservoir and 0.7 mi northwest of Platoro.

DRAINAGE AREA.--40 mi<sup>2</sup>, approximately.

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

GAGE.--Water-stage recorder with satellite telemetry, and concrete control. Datum of gage is 9,866.60 ft above sea level, (levels by U.S. Bureau of Reclamation).

REMARKS.--Records good except for estimated daily discharges, which are fair. No diversion upstream from station. Flow completely regulated by Platoro Reservoir (station 08244500).

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

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Oct. 5, 1911, is the greatest since at least 1854, from information by local residents.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	16	e7.0	e7.0	e7.3	e7.6	e8.0	235	331	254	94	87
2	9.2	16	e7.0	e7.0	e7.3	e7.6	e8.0	284	425	279	108	75
3	9.9	17	e7.0	e7.0	e7.3	e7.7	e8.0	305	480	242	114	70
4	9.4	22	e7.0	e7.0	e7.3	e7.7	e8.0	198	577	232	98	77
5	7.6	23	e7.0	e7.0	e7.4	e7.7	e8.0	98	417	265	86	106
6	9.5	17	e7.0	e7.0	e7.4	e7.7	e8.0	79	302	278	97	118
7	11	e13	e7.0	e7.0	e7.4	e7.7	e8.0	65	437	279	81	99
8	11	e13	e7.0	e7.0	e7.4	e7.7	e8.1	88	455	263	56	60
9	15	e14	e7.0	e7.0	e7.4	e7.7	e8.1	177	486	267	71	54
10	25	e14	e7.0	e7.1	e7.4	e7.7	e8.1	240	553	283	94	66
11	43	e12	e7.0	e7.1	e7.4	e7.7	e8.1	203	436	283	105	70
12	54	e12	e7.0	e7.1	e7.4	e7.8	e8.1	217	277	255	172	64
13	54	e12	e7.0	e7.1	e7.5	e7.8	e8.1	400	203	202	189	57
14	53	e8.7	e7.0	e7.1	e7.5	e7.8	e8.1	426	201	207	174	58
15	53	e7.0	e7.0	e7.1	e7.5	e7.8	e8.1	298	234	223	185	59
16	46	e7.0	e7.0	e7.1	e7.5	e7.8	e8.1	190	126	145	196	51
17	33	e7.0	e7.0	e7.1	e7.5	e7.8	e25	85	162	90	162	48
18	28	e7.0	e7.0	e7.2	e7.5	e7.8	52	46	249	85	82	48
19	41	e7.0	e7.0	e7.2	e7.5	e7.8	73	47	319	106	43	51
20	49	e7.0	e7.0	e7.2	e7.5	e7.8	62	48	327	117	98	62
21	27	e7.0	e7.0	e7.2	e7.5	e7.9	47	48	282	102	148	67
22	18	e7.0	e7.0	e7.2	e7.6	e7.9	46	49	354	110	127	66
23	25	e7.0	e7.0	e7.2	e7.6	e7.9	46	178	366	121	111	75
24	52	e7.0	e7.0	e7.2	e7.6	e7.9	53	464	320	130	114	80
25	66	e7.0	e7.0	e7.2	e7.6	e7.9	61	481	341	123	80	80
26	42	e7.0	e7.0	e7.2	e7.6	e7.9	59	326	411	102	76	66
27	23	e7.0	e7.0	e7.3	e7.6	e7.9	76	303	415	85	97	63
28	41	e7.0	e7.0	e7.3	e7.6	e7.9	145	369	355	59	135	67
29	50	e7.0	e7.0	e7.3	---	e7.9	172	520	262	45	166	41
30	50	e7.0	e7.0	e7.3	---	e8.0	181	531	225	64	143	40
31	28	---	e7.0	e7.3	---	e8.0	---	353	---	84	106	---
TOTAL	995.6	321.7	217.0	221.1	209.1	241.8	1226.9	7351	10328	5380	3608	2025
MEAN	32.1	10.7	7.00	7.13	7.47	7.80	40.9	237	344	174	116	67.5
MAX	66	23	7.0	7.3	7.6	8.0	181	531	577	283	196	118
MIN	7.6	7.0	7.0	7.0	7.3	7.6	8.0	46	126	45	43	40
AC-FT	1970	638	430	439	415	480	2430	14580	20490	10670	7160	4020

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1952 - 2001, BY WATER YEAR (WY)

	MEAN	MAX	(WY)	MIN	(WY)
MEAN	41.1	60.5	10.7	11.1	11.8
MAX	158	406	50.0	50.0	102
(WY)	1958	1966	1986	1986	1983
MIN	1.92	2.00	2.00	3.20	3.00
(WY)	1957	1957	1957	1991	1957

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1952 - 2001

ANNUAL TOTAL	24012.5	32125.2	
ANNUAL MEAN	65.6	88.0	93.3
HIGHEST ANNUAL MEAN			137
LOWEST ANNUAL MEAN			44.3
HIGHEST DAILY MEAN	594	May 25	577
LOWEST DAILY MEAN	6.7	Sep 17	e7.0
ANNUAL SEVEN-DAY MINIMUM	7.0	Nov 15	e7.0
MAXIMUM PEAK FLOW			646
MAXIMUM PEAK STAGE			3.12
ANNUAL RUNOFF (AC-FT)	47630	63720	67560
10 PERCENT EXCEEDS	178	280	316
50 PERCENT EXCEEDS	22	28	17
90 PERCENT EXCEEDS	7.0	7.0	6.2

e Estimated.  
a Also occurred Oct 17-20, 1955.  
b Maximum gage height, 4.29 ft, Jun 15, 1958.

08246500 CONEJOS RIVER NEAR MOGOTE, CO

LOCATION.--Lat 37°03'14", long 106°11'13", in SE<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec.34, T.33 N., R.7 E., Conejos County, Hydrologic Unit 13010005, on left bank 75 ft downstream from bridge on State Highway 174, 0.4 mi downstream from Fox Creek, 5.3 mi west of Mogote, and 10 mi west of Antonito.

DRAINAGE AREA.--282 mi<sup>2</sup>.

PERIOD OF RECORD.--April 1903 to October 1905, October 1911 to current year. Monthly discharge only for some periods, published in WSP 1312. Records for March 1900 at site 5.5 mi upstream and May 1905 to September 1911 (some missing periods most years) at site 3.2 mi upstream not equivalent to present site due to inflow.

REVISED RECORDS.--WSP 898: 1911(M). WSP 1312: 1903-5, 1913. See also PERIOD OF RECORD.

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 8,273.69 ft above sea level, Colorado State Highway datum. Apr. 17, 1903 to Oct. 31, 1905, nonrecording gage 400 ft downstream, at different datum. Oct. 5, 1911 to early 1915, nonrecording gage, and from early 1915 to Oct. 1, 1988, water-stage recorder at site 100 ft upstream, at datum 2.15 ft lower. Since Oct. 1, 1988, at present site and datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. Diversions for irrigation of about 500 acres of hay meadows upstream from station. Some regulation by Platoro Reservoir (station 08244500).

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	54	94	e54	e40	e40	e40	124	912	1360	485	164	194
2	48	79	e50	e40	e41	e41	164	1090	1550	544	178	161
3	45	78	e50	e40	e43	e42	185	1100	1500	493	185	146
4	45	75	e50	e41	e43	e42	192	900	1560	433	183	131
5	56	79	e50	e43	e44	43	213	605	1400	433	158	139
6	51	71	e48	e43	e45	46	176	469	1080	442	152	160
7	48	66	e47	e43	e47	50	135	457	1170	432	163	159
8	49	59	e50	e41	e45	47	133	466	1390	423	146	139
9	53	61	e47	e41	e42	48	116	665	1400	425	153	106
10	54	68	e45	e42	e41	51	125	902	1410	435	170	104
11	79	69	e42	e41	e44	47	110	1090	1290	437	221	111
12	125	55	e40	e41	e44	49	104	1180	1010	414	208	111
13	131	40	e39	e40	e45	46	94	1370	808	377	258	104
14	114	41	e42	e40	e41	51	98	1700	688	371	301	117
15	108	72	e40	e39	e39	e47	112	1790	658	376	270	113
16	106	64	e36	e39	e41	52	141	1820	549	334	339	106
17	97	e60	e40	e39	e42	53	192	1730	459	237	299	96
18	87	e60	e35	e39	e44	54	284	1680	547	202	241	95
19	82	e62	e37	e40	e44	55	403	1570	616	192	169	92
20	87	e62	e39	e40	e43	60	417	1370	653	216	140	92
21	95	e62	e37	e40	e44	76	313	1390	610	209	196	101
22	80	e66	e40	e41	e44	98	267	1180	610	224	211	104
23	77	e62	e39	e42	e46	107	228	1150	676	217	190	104
24	105	e56	e40	e42	e42	116	231	1470	611	226	179	111
25	122	e56	e40	e43	e43	113	291	1780	591	221	171	112
26	125	e56	e38	e40	e43	129	399	1690	632	203	135	112
27	103	e60	e40	e42	e44	123	488	1540	683	186	137	97
28	119	e60	e42	e42	e42	116	568	1690	625	179	163	98
29	136	e60	e39	e41	---	110	702	1700	550	142	196	100
30	125	e62	e39	e40	---	100	765	1680	485	122	208	80
31	120	---	e40	e40	---	106	---	1490	---	148	189	---
TOTAL	2726	1915	1315	1265	1206	2158	7770	39626	27171	9778	6073	3495
MEAN	87.9	63.8	42.4	40.8	43.1	69.6	259	1278	906	315	196	116
MAX	136	94	54	43	47	129	765	1820	1560	544	339	194
MIN	45	40	35	39	39	40	94	457	459	122	135	80
AC-FT	5410	3800	2610	2510	2390	4280	15410	78600	53890	19390	12050	6930

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1903 - 2001, BY WATER YEAR (WY)

MEAN	117	94.4	51.5	47.8	51.7	80.0	315	1099	1284	477	209	131
MAX	515	467	116	116	159	153	800	2053	3163	1502	626	484
(WY)	1905	1966	1987	1986	1983	1989	1936	1937	1920	1957	1952	1927
MIN	34.7	29.9	26.9	22.7	30.0	41.0	138	358	118	69.2	44.2	26.8
(WY)	1957	1931	1977	1918	1904	1904	1970	1977	1934	1904	1972	1956

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1903 - 2001
ANNUAL TOTAL	62274	104498	
ANNUAL MEAN	170	286	328
HIGHEST ANNUAL MEAN			592
LOWEST ANNUAL MEAN			109
HIGHEST DAILY MEAN	1330	May 25	4490
LOWEST DAILY MEAN	e32	Jan 4	10
ANNUAL SEVEN-DAY MINIMUM	e35	Jan 2	17
MAXIMUM PEAK FLOW		2000	a9000
MAXIMUM PEAK STAGE		5.27	b8.50
ANNUAL RUNOFF (AC-FT)	123500	207300	237800
10 PERCENT EXCEEDS	459	906	1040
50 PERCENT EXCEEDS	78	106	98
90 PERCENT EXCEEDS	40	40	42

e Estimated.  
a Present site and datum, from rating curve extended above 3100 ft<sup>3</sup>/s.  
b From floodmarks.



08248000 LOS PINOS RIVER NEAR ORTIZ, CO

LOCATION.--Lat 36°58'56", long 106°04'23", on line between secs.26, and 27, T.32 N., R.8 E., Rio Arriba County, New Mexico, Hydrologic Unit 13010005, on left bank 0.9 mi south of Colorado-New Mexico State line, 2.1 mi southwest of Ortiz, and 2.9 mi upstream from mouth.

DRAINAGE AREA.--167 mi<sup>2</sup>.

PERIOD OF RECORD.--January 1915 to December 1920, October 1924 to current year. Monthly discharge only for some periods, published in WSP 1312.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 8,040 ft above sea level, from topographic map. Prior to Apr. 15, 1955, at site 350 ft upstream at datum 2.52 ft higher.

REMARKS.--Records good except for estimated daily discharges, which are poor. Diversions upstream from station for irrigation.

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

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Oct. 5, 1911, is the greatest since at least 1854, from information by local residents.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.9	21	e27	e12	e13	e16	67	743	401	47	23	19
2	9.7	21	e28	e12	e14	e18	82	855	390	58	24	17
3	9.6	21	e25	e13	e15	e19	107	729	372	48	25	16
4	10	20	e25	e14	e15	e20	132	530	333	39	24	15
5	14	23	e25	e14	e15	e24	142	407	290	35	21	14
6	14	12	e22	e15	e15	e27	116	346	259	32	25	11
7	12	e12	e23	e14	e16	e34	67	354	250	29	21	10
8	12	e12	e23	e13	e15	e36	73	403	255	28	24	9.4
9	11	e16	e20	e13	e14	e35	74	527	247	34	29	10
10	12	e20	e17	e14	e13	e35	77	655	229	32	22	10
11	17	e18	e15	e13	e14	e34	63	785	203	30	36	11
12	35	e17	e14	e12	e14	e36	58	849	182	30	26	11
13	37	e16	e12	e12	e14	e35	57	876	162	29	22	12
14	22	e18	e14	e12	e13	e36	59	963	154	33	29	12
15	18	e20	e13	e12	e13	e35	64	1010	131	32	32	14
16	17	e19	e10	e11	e14	e36	87	981	111	28	30	13
17	16	e19	e13	e11	e15	e38	134	939	100	25	29	11
18	15	e22	e12	e11	e16	e37	198	898	94	23	28	11
19	16	e25	e12	e12	e16	e36	257	828	89	22	24	12
20	16	e27	e13	e13	e16	e38	273	844	83	22	21	11
21	15	e28	e13	e13	e16	e40	232	762	79	23	20	10
22	15	e28	e14	e14	e16	e40	192	625	77	28	19	11
23	18	e25	e14	e14	e17	e39	151	581	74	26	21	11
24	30	e25	e13	e14	e15	45	149	572	70	25	19	11
25	28	e27	e14	e15	e15	50	193	552	63	23	17	9.8
26	24	e26	e12	e14	e15	58	291	557	61	21	16	10
27	22	e28	e11	e15	e16	59	389	536	58	24	15	11
28	33	e29	e13	e14	e15	57	464	540	52	26	14	11
29	38	e30	e12	e14	---	55	583	502	49	25	16	11
30	30	e29	e13	e13	---	55	666	423	45	20	15	12
31	27	---	e12	e13	---	60	---	410	---	20	17	---
TOTAL	603.2	654	504	406	415	1183	5497	20582	4963	917	704	357.2
MEAN	19.5	21.8	16.3	13.1	14.8	38.2	183	664	165	29.6	22.7	11.9
MAX	38	30	28	15	17	60	666	1010	401	58	36	19
MIN	9.6	12	10	11	13	16	57	346	45	20	14	9.4
AC-FT	1200	1300	1000	805	823	2350	10900	40820	9840	1820	1400	709

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1915 - 2001, BY WATER YEAR (WY)

	MEAN	27.4	21.9	16.3	14.6	17.1	34.5	224	612	329	73.0	35.4	24.7
MAX	109	70.1	34.4	26.0	30.0	84.7	610	1341	1022	258	112	101	
(WY)	1987	1987	1987	1987	1962	1971	1936	1952	1957	1957	1929	1927	
MIN	10.1	11.1	5.00	5.00	7.50	13.9	65.9	96.8	25.2	13.2	11.9	7.53	
(WY)	1957	1957	1918	1918	1964	1977	1968	1977	1977	1934	1977	1956	

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1915 - 2001

ANNUAL TOTAL	16330.5	36785.4	
ANNUAL MEAN	44.6	101	120
HIGHEST ANNUAL MEAN			230
LOWEST ANNUAL MEAN			28.7
HIGHEST DAILY MEAN	369	Apr 28	2410
LOWEST DAILY MEAN	5.7	Sep 20	4.0
ANNUAL SEVEN-DAY MINIMUM	6.3	Sep 15	4.4
MAXIMUM PEAK FLOW			1300
MAXIMUM PEAK STAGE			5.60
ANNUAL RUNOFF (AC-FT)	32390	72960	86640
10 PERCENT EXCEEDS	144	361	382
50 PERCENT EXCEEDS	17	23	25
90 PERCENT EXCEEDS	11	12	12

- e Estimated.
- a Minimum observed, 4.0 ft<sup>3</sup>/s, Dec 17, 1945 (discharge measurement); minimum daily discharge for period of record, also occurred Dec 12-14, 17, 22, 30-31, 1989, and Jan 4-6, 1990, but may have been less during periods of no gage-height record.
- b Site and datum then in use, from rating curve extended above 1600 ft<sup>3</sup>/s.
- c Maximum gage height, 6.19 ft, May 22, 1993, present site and datum.



08250000 CULEBRA CREEK AT SAN LUIS, CO

LOCATION.--Lat 37°11'01", long 105°25'31", Costilla County, Hydrologic Unit 13010002, on left bank at bridge 1 mi south of San Luis, and 1 mi upstream from the Rito Seco.

DRAINAGE AREA.--220 mi<sup>2</sup>.

PERIOD OF RECORD.--April 1927 to September 1982. October 1998 to current year. Monthly discharge only for some periods, published in WSP 1312. Records for January 1910 to December 1911, published as Culebra River at San Luis in WSP 288 and 308, have been found to be unreliable and should not be used.

REVISED RECORDS.--WSP 1312: 1940. See also PERIOD OF RECORD.

GAGE.--Water-stage recorder with concrete control. Elevation of gage is 8,000 ft above sea level, from topographic map. Prior to May 23, 1931, water-stage recorder at present site at different datum.

REMARKS.--No estimated daily discharges. Records good. Diversions upstream from station for irrigation. Flow regulated by Sanchez Reservoir, capacity 103,000 acre-ft, on Ventero Creek.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	64	21	18	15	14	19	17	17	110	81	64	112
2	17	21	17	15	14	19	16	17	112	82	72	93
3	16	22	18	17	15	19	15	18	128	94	67	84
4	18	22	17	15	16	19	16	20	125	127	56	91
5	18	22	17	16	17	19	15	31	123	118	57	88
6	17	21	18	16	18	20	20	43	121	119	65	62
7	17	20	17	16	19	21	20	30	98	72	59	34
8	18	20	18	16	18	25	18	22	72	94	30	51
9	18	19	19	15	18	23	16	20	57	123	30	49
10	18	20	18	16	18	22	15	20	48	125	27	50
11	18	21	18	16	18	20	19	19	53	119	24	55
12	19	19	18	17	18	20	21	17	78	117	25	61
13	18	18	18	17	19	21	17	20	93	120	46	60
14	18	17	17	15	20	20	16	44	106	97	82	61
15	18	18	17	14	19	18	15	63	97	72	86	55
16	19	17	16	16	18	18	14	78	98	64	89	47
17	19	16	17	14	19	18	15	74	98	62	71	41
18	19	16	15	14	20	19	18	60	92	63	46	34
19	21	16	15	16	20	19	15	61	95	63	26	20
20	20	16	14	15	20	20	15	63	134	63	50	18
21	19	16	15	14	20	21	14	62	140	63	79	29
22	18	18	15	14	20	19	16	62	106	62	79	50
23	21	18	15	15	21	19	22	62	104	53	79	50
24	22	17	15	15	19	20	24	68	113	53	75	49
25	21	16	15	14	19	20	20	74	122	51	73	49
26	20	16	16	14	19	19	17	75	129	37	72	55
27	20	17	15	15	20	18	17	78	143	31	73	66
28	30	17	16	15	20	18	18	98	143	26	86	68
29	34	18	16	15	---	18	16	105	144	25	103	73
30	25	19	16	16	---	17	16	104	109	23	106	74
31	22	---	16	15	---	16	---	110	---	24	111	---
TOTAL	662	554	512	473	516	604	513	1635	3191	2323	2008	1729
MEAN	21.4	18.5	16.5	15.3	18.4	19.5	17.1	52.7	106	74.9	64.8	57.6
MAX	64	22	19	17	21	25	24	110	144	127	111	112
MIN	16	16	14	14	14	16	14	17	48	23	24	18
AC-FT	1310	1100	1020	938	1020	1200	1020	3240	6330	4610	3980	3430

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1927 - 2001, BY WATER YEAR (WY)

	MEAN	MAX	(WY)	MIN	(WY)
MEAN	22.4	21.6	18.7	18.2	18.7
MAX	36.7	51.4	39.1	32.2	32.6
(WY)	1942	1958	1958	1942	1942
MIN	6.00	6.63	6.64	7.03	6.70
(WY)	1951	1951	1951	1951	1951

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR (a) WATER YEARS 1927 - 2001

ANNUAL TOTAL	17811	14720		
ANNUAL MEAN	48.7	40.3	45.8	
HIGHEST ANNUAL MEAN			92.7	1942
LOWEST ANNUAL MEAN			18.2	1951
HIGHEST DAILY MEAN	145	May 20	144	Jun 29
LOWEST DAILY MEAN	14	Dec 20	14	Dec 20
ANNUAL SEVEN-DAY MINIMUM	15	Dec 18	14	Jan 20
MAXIMUM PEAK FLOW			156	Jun 20
MAXIMUM PEAK STAGE			1.85	Jun 20
ANNUAL RUNOFF (AC-FT)	35330	29200	33170	5.09
10 PERCENT EXCEEDS	112	98	117	
50 PERCENT EXCEEDS	27	20	25	
90 PERCENT EXCEEDS	17	15	11	

a Water year 1983 to 1998 data were published by Colorado Division of Water Resources.  
b From rating curve extended above 300 ft<sup>3</sup>/s.



08251500 RIO GRANDE NEAR LOBATOS, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--September 1969 to current year. September 1969 to September 1993 under the National Stream-Quality Accounting Network (NASQAN). April 1993 to September 1996 under the Rio Grande National Water-Quality Assessment Program.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1975 to September 1981.  
 WATER TEMPERATURE: October 1975 to September 1981.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS TOTAL (MG/L AS CAC03) (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)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	
OCT	10...	32	406	8.8	12.3	9.8	95.4	26.7	7.00	53.5	5.42	43.8	13.6	
FEB	20...	270	200	8.5	.2	11.3	64.9	19.8	3.75	15.4	3.69	21.2	4.7	
MAY	10...	768	225	8.3	15.6	8.3	67.1	20.4	3.88	18.5	3.82	36.4	5.1	
JUN	11...	1910	152	7.8	20.5	6.8	48.8	14.7	2.93	10.5	2.70	20.3	2.2	
JUL	18...	370	162	8.6	19.2	8.3	53.5	16.0	3.26	12.3	2.91	12.4	2.6	
AUG	30...	82	318	8.7	15.8	7.2	97.0	28.9	6.02	29.2	5.44	37.6	7.1	
DATE		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 AS N) (00613)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00625)	NITRO-GEN, AMMONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00623)	PHOS-PHORUS, TOTAL DIS-SOLVED (MG/L AS P) (00665)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P) (00671)	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	ANTI-MONY, DIS-SOLVED (UG/L AS SB) (01095)	
OCT	10...	.7	17.3	263	<.006	<.047	<.041	.57	.28	.083	.012	E.009	1	.10
FEB	20...	.3	26.5	141	.017	.529	<.041	.27	.11	.084	.039	.037	16	.15
MAY	10...	.3	24.4	172	.006	.052	<.041	.74	.44	.197	.067	.051	163	.12
JUN	11...	E.1	19.4	113	E.003	<.050	<.040	.53	.26	.166	.068	.054	48	.13
JUL	18...	.2	24.1	116	E.004	<.050	<.040	.47	.17	.150	.058	.044	26	.18
AUG	30...	.4	24.5	207	<.006	<.050	<.040	.46	.26	.165	E.092	E.077	--	--
DATE		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)	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)
OCT	10...	4.0	38.4	<.06	E.02	<.8	.45	1.5	M	E.08	18.9	5.1	1.11	<2.4
FEB	20...	E1.6	20.8	<.06	.06	<.8	.10	.8	40	.13	16.6	1.5	<.06	<2.4
MAY	10...	2.1	27.9	<.06	<.04	<.8	.17	1.3	200	.49	19.1	1.9	.13	<2.4
JUN	11...	E1.1	20.6	<.06	<.04	<.8	.12	1.2	130	.48	22.3	.6	.21	<2.0
JUL	18...	2.1	17.3	<.06	<.04	<.8	.12	.8	100	.49	15.4	1.1	<.06	<2.0
AUG	30...	--	--	--	--	--	--	--	30	--	6.1	--	--	--

## RIO GRANDE BASIN

08251500 RIO GRANDE NEAR LOBATOS, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	SILVER,	ZINC,	URANIUM
	DIS-	DIS-	DIS-
	SOLVED	SOLVED	SOLVED
	(UG/L	(UG/L	(UG/L
	AS AG)	AS ZN)	AS U)
	(01075)	(01090)	(22703)
OCT			
10...	<1.0	1	2.43
FEB			
20...	<1.0	2	.99
MAY			
10...	<1.0	1	.83
JUN			
11...	<1.0	2	.22
JUL			
18...	<1.0	1	.56
AUG			
30...	--	--	--

E Estimated laboratory analysis value.

M Presence of material verified but not quantified.

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

09010000 Grand River Ditch  
09012000 Eureka Ditch  
09013000 Alva B. Adams Tunnel  
09021500 Berthoud Pass Ditch  
09022500 Moffat Water Tunnel  
09046000 Boreas Pass Ditch  
09047300 Vidler Tunnel  
09050590 Harold D. Roberts Tunnel

## TO ARKANSAS RIVER BASIN

09042000 Hoosier Pass Tunnel  
09061500 Columbine Ditch  
09062500 Wurtz Ditch  
09063700 Homestake Tunnel  
09073000 Twin Lakes Tunnel  
09077160 Charles H. Boustead Tunnel  
09077500 Busk-Ivanhoe Tunnel  
09115000 Larkspur Ditch

## TO RIO GRANDE RIVER BASIN

09118200 Tarbell Ditch  
09121000 Tabor Ditch  
09341000 Treasure Pass Ditch  
09347000 Don LaFont Ditches 1 & 2  
09348000 Williams Creek Squaw Pass  
Ditch  
09351000 Pine River-Weminuche Pass  
Ditch  
09351500 Weminuche Pass

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	Date	Water year 2001 maximum		Period of record maximum		
				Gage height (ft)	Dis- charge (ft <sup>3</sup> /s)	Date	Gage height (ft)	Dis- charge (ft <sup>3</sup> /s)
PLATTE RIVER BASIN								
Lee Gulch at Littleton, CO (06709740)	Lat 39°35'47", long 105°00'57", in SW <sup>1</sup> / <sub>4</sub> SW <sup>1</sup> / <sub>4</sub> sec.21, T.5 S., R.68W., Arapahoe County, on right bank 30 ft upstream from culvert under Prince St. and 0.6 mi upstream from mouth in Littleton. Drainage area not determined.	1980-2001	7-08-01	11.13	108	a1983	16.00	444
Dutch Creek at Platte Canyon Drive, near Littleton, CO (06709910)	Lat 39°36'01", long 105°02'28", in NW <sup>1</sup> / <sub>4</sub> SE <sup>1</sup> / <sub>4</sub> sec.19, T.5 S., R.69 W., Arapahoe County, on left bank 150 ft down-stream from bridge on Platte Canyon Road. Drainage area not determined.	1985-2001	7-08-01	11.02	not determined	6-01-91	11.51	1,090
Weaver Creek near Lakewood, CO (06711305)	Lat 39°38'13", long 105°07'47", in NE <sup>1</sup> / <sub>4</sub> SE <sup>1</sup> / <sub>4</sub> sec.8, T.5 S., R.69 W., Jefferson County, 500 ft upstream from Simms St., and 700 ft south of West Quincy Ave. Drainage area not determined.	1982-2001	7-08-01	11.01	57	a1985	13.93	1,010
Little Dry Creek near Arapahoe Road, CO (06711515)	Lat 39°35'38", long 104°54'23", in NE <sup>1</sup> / <sub>4</sub> NE <sup>1</sup> / <sub>4</sub> sec.29, T.5 S., R.67 W., Arapahoe County, on right bank, 800 ft downstream from Quebec St. (formerly published as Inflow to Holly Reservoir, 1985-86). Drainage area not determined.	1985-2001	7-08-01	9.84	577	a1985	10.52	800
Willow Creek at Dry Creek Road, near Englewood, CO (06711535)	Lat 39°34'49", long 104°54'42", in NW <sup>1</sup> / <sub>4</sub> NE <sup>1</sup> / <sub>4</sub> sec.32, T.5 S., R.67 W., Arapahoe County, on left bank, upstream wingwall of bridge on Dry Creek Road over Willow Creek. Drainage area not determined.	1985-2001	8-1-01	11.94	1040	a1985	14.28	3,470
Little Dry Creek above Englewood, CO (06711555)	Lat 39°38'57", long 104°58'42", in SE <sup>1</sup> / <sub>4</sub> NE <sup>1</sup> / <sub>4</sub> sec.3, T.5 S., R.68 W., Arapahoe County, on right bank 250 ft downstream from bridge on Clarkson St., and 800 ft south of Hampton Ave., in Cherry Hills Village. Drainage area not determined. Prior to April 2, 1992, gage was located at a site 300 ft upstream from the present location.	1982-2001	5-5-01	7.86	548	a1983	15.64	1,060

## MAXIMUM DISCHARGE AT CREST-STAGE PARTIAL-RECORD STATIONS--Continued

Station name and number	Location and drainage area	Period of record	Date	Water year 2001 maximum		Period of record maximum		
				Gage height (ft)	Dis- charge (ft <sup>3</sup> /s)	Date	Gage height (ft)	Dis- charge (ft <sup>3</sup> /s)
PLATTE RIVER BASIN--Continued								
Harvard Gulch at Colorado Blvd., at Denver, CO (06711570)	Lat 39°40'08", long 104°56'32", in SE <sup>1</sup> / <sub>4</sub> SE <sup>1</sup> / <sub>4</sub> sec.25, T.4 S., R.67 W., Denver County, on left bank, 100 ft upstream from S. Jackson St., and 400 ft north of E. Yale Ave. Drainage area not determined.	1979-2001	7-8-01	13.98	1,100	7-8-01	13.98	1,100
Harvard Gulch below University Blvd. at Denver, CO (06711572)	Lat 39°40'10", long 104°57'33", in SE <sup>1</sup> / <sub>4</sub> SE <sup>1</sup> / <sub>4</sub> sec.26, T.4 S., R.68 W., Denver County, 200 ft, downstream from University Blvd., and 600 ft north of East Yale Ave., in Denver. REVISED RECORDS.--WDR-CO-92-1: 1989-91. Drainage area not determined.	1979-2001	7-8-01	15.50	1,600	7-8-01	15.50	1,600
Harvard Gulch at Harvard Park at Denver, CO (06711575)	Lat 39°40'21", long 104°58'35", in NW <sup>1</sup> / <sub>4</sub> SW <sup>1</sup> / <sub>4</sub> sec.26, T.4 S., R.68 W., Denver County, on left bank, 200 ft north of E. Harvard Ave. and 300 ft west of S. Ogden St., directly north of Porter Hospital. Drainage area not determined.	1979-2001	7-8-01	17.44	not determined	7-12-96	16.25	1,100
Sanderson Gulch tributary at Lakewood, CO (06711600)	Lat 39°41'19", long 105°04'54", in NE <sup>1</sup> / <sub>4</sub> NW <sup>1</sup> / <sub>4</sub> sec.23, T.4 S., R.68 W., Jefferson County, 300 ft upstream from S. Wadsworth Blvd., 300 ft south of W. Florida Ave. in Lakewood. Drainage area is 0.38 mi <sup>2</sup> .	1969-2001	8-1-01	12.89	70	6-06-77	4.91	422
Weir Gulch upstream from 1st Avenue, at Denver, CO (06711618)	Lat 39°43'03", long 105°02'30", in NW <sup>1</sup> / <sub>4</sub> SE <sup>1</sup> / <sub>4</sub> sec.7, T.4 S., R.68 W., Denver County, 250 ft upstream from 1st Ave., in Denver. Drainage area not determined.	1985-2001	7-8-01	10.14	130	8-01-91	11.91	523
Dry Gulch at Denver, CO (06711770)	Lat 39°44'03", long 105°02'20", in SW <sup>1</sup> / <sub>4</sub> NE <sup>1</sup> / <sub>4</sub> sec.6, T.4 S., R.68 W., Denver County, 800 ft upstream from confluence with Lakewood Gulch, north of West 10th Ave., at Perry St., in Denver. Drainage area not determined.	1980-2001	7-8-01	11.93	151	a1981	16.00	445
Lakewood Gulch at Denver, CO (06711780)	Lat 39°44'06", long 105°01'54", in SW <sup>1</sup> / <sub>4</sub> NW <sup>1</sup> / <sub>4</sub> sec.5, T.4 S., R.68 W., Denver County, 2,000 ft downstream from confluence with Dry Gulch, near intersection of Knox Ct., and West 12th Ave., in Denver. Drainage area not determined.	1980-2001	7-8-01	14.64	1,110	8-19-98	14.80	1,180
Sloans Lake, south Tributary at Denver, CO (06711820)	Lat 39°44'44", long 105°03'28", in NW <sup>1</sup> / <sub>4</sub> SE <sup>1</sup> / <sub>4</sub> sec.36, T.3 S., R.69 W., Jefferson County, 50 ft south of 18th Ave., at Depew St. REVISED RECORDS.--WDR CO-90-1: 1985-89. Drainage area not determined.	1985-2001	7-8-01	5.17	85	6-01-91	14.00	451
Westerly Creek at Aurora, CO (06714260)	Lat 39°44'43", long 104°52'48", in NW <sup>1</sup> / <sub>4</sub> SW <sup>1</sup> / <sub>4</sub> sec.34, T.3 S., R.67 W., Adams County, 50 ft upstream from footbridge. 800 ft upstream from Montview Blvd., and 100 ft east of Boston St., in Aurora. REVISED RECORDS.--WDR CO-90-1: 1983-85, 1987-88. Drainage area not determined.	1982-2001	7-8-01	13.31	857	a1983	14.45	1,530

## DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

## MAXIMUM DISCHARGE AT CREST-STAGE PARTIAL-RECORD STATIONS--Continued

Station name and number	Location and drainage area	Period of record	Water year 2001 maximum			Period of record maximum		
			Date	Gage height (ft)	Dis- charge (ft <sup>3</sup> /s)	Date	Gage height (ft)	Dis- charge (ft <sup>3</sup> /s)
PLATTE RIVER BASIN--Continued								
Lena Gulch at Lakewood, CO (06719560)	Lat 39°44'27", long 105°08'49", in SE <sup>1</sup> / <sub>4</sub> SE <sup>1</sup> / <sub>4</sub> sec.31, T.3 S., R.69 W., Jefferson County, on right bank 200 ft north of West 15th Drive at Arbutus. Prior to July 6, 1988, at site approx. 500 ft downstream (formerly published as Lena Gulch at Alkire at Golden, CO, 1986-87). Drainage area is approximately 9.0 mi <sup>2</sup> .	1974-79 1986-2001	7-8-01	12.43	267	7-20-75	14.41	641
Little Dry Creek at Westminster, CO (06719840)	Lat 39°49'34", long 105°02'25", in NW <sup>1</sup> / <sub>4</sub> NE <sup>1</sup> / <sub>4</sub> sec.6, T.3 S., R.68 W., Adams County, 400 ft downstream from 72nd Ave. in Westminster. REVISED RECORDS.--WDR CO-89-1: 1986. Drainage area not determined.	1982-2001	8-1-01	11.88	547	6-01-91	13.09	1,280
ARKANSAS RIVER BASIN								
North Rockrimmon Creek above Delmonico Dr. at Colorado Springs, CO (07104050)	Lat 38°54'56", long 104°49'35", in SW <sup>1</sup> / <sub>4</sub> NE <sup>1</sup> / <sub>4</sub> sec.18, T.13 S., R.66 W., El Paso County, on both banks, 0.2 mi west of Interstate 25, 0.3 mi upstream from mouth, and 2.0 mi downstream from Woodmen Road. Drainage area 1.82 mi <sup>2</sup> .	1998-2001	7-24-01	6.46	745	7-24-01	6.46	745
Big Arroyo near Thatcher, CO (07120620)	Lat 37°33'17", long 104°01'16"(revised), in NW <sup>1</sup> / <sub>4</sub> NW <sup>1</sup> / <sub>4</sub> sec.4, T.29 S., R.59 W., Las Animas County, on left bank 2.4 mi from U.S. Route 350, 3.2 mi upstream from mouth, and 4.8 mi east of Thatcher. REVISED RECORDS.--WDR CO-97-1:1987(M). Drainage area is 15.5 mi <sup>2</sup> .	1983-90b 1991-2001	no peaks during year			8-11-97	5.78	1,780
Big Sandy Creek above Amity Canal Diversion, near Kornman, CO (07134000)	Lat 38°12'52", long 102°28'45", in NE <sup>1</sup> / <sub>4</sub> NW <sup>1</sup> / <sub>4</sub> sec.21, T.21 S., R.45 W., Prowers County, on left bank 106 ft upstream from Amity Canal Diversion 7.0 mi upstream from mouth, and 9.0 mi northeast of Kornman. Drainage area is 3,426 mi <sup>2</sup> .	1941-46b 1996-2001	no peaks during year			5-04-99	14.00	3,580
Two Butte Creek near Holly, CO (07135000)	Lat 38°01'40", long 102°08'19", in SE <sup>1</sup> / <sub>4</sub> SE <sup>1</sup> / <sub>4</sub> sec.21,T.23 S., R.42 W., Prowers County, on left bank 200 ft downstream from road DD, approximately 1 mi upstream from mouth, and 2.9 mi southwest of Holly. Drainage area is 817 mi <sup>2</sup> .	1942-46bc 1995-99b 2000-2001	a5-01-01	unknown	e5	5-02-44	4.77c	1,800

a-Month or day of occurrence is unknown or not exact.

b-Previously operated as a continuous-record gaging station.

c-At different datum.

e-Estimated.

## SPECIAL STUDY AND MISCELLANEOUS SITES

Discharge measurements in the following table were made at a miscellaneous site. 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 MEASUREMENTS MADE AT SPECIAL STUDY AND MISCELLANEOUS SITES DURING WATER YEAR 2001.

## ARKANSAS RIVER BASIN

Station no	Station name	Location and drainage area	Date	Discharge (ft <sup>3</sup> /s)
07079195	East Fork Arkansas River at Highway 91 near Leadville, CO	Lat 39°17'09", long 106°16'45", in NW <sup>1</sup> / <sub>4</sub> NE <sup>1</sup> / <sub>4</sub> , Sec.12, T.9 S., R.80 W. Lake County, Hydrologic Unit 11020001, on right bank, 20 ft. upstream of State Highway 91, 1.6 mi north of Leadville.  Drainage area is 35.0 mi <sup>2</sup> .	10-04-00	16
			11-01-00	13
			12-06-00	11
			1-03-01	8.1
			2-07-01	7.7
			3-07-01	6.1
			4-04-01	9.9
			5-02-01	41
			5-24-01	123
			6-06-01	155
			7-05-01	62
			8-01-01	37
			9-05-01	21

## PRECIPITATION DATA AT SITES ON FORT CARSON MILITARY RESERVATION

A network of meteorological stations is operated on the Fort Carson Military Reservation to provide precipitation data for land-condition trend analysis, long-term climatic analysis, storm-runoff modeling, and operations management during military training exercises. Other meteorological data are available upon request.

382731104473701 MPRC METEOROLOGICAL STATION AT FORT CARSON, CO

LOCATION.--Lat 38°27'31", long 104°47'37", in NE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec.29, T.18 S., R.66 W., Pueblo County, Hydrologic Unit 11020002, on Fort Carson Military Reservation, 0.1 mi northeast of Military Route 1, 2.1 mi northeast of Teller Reservoir, and 16 mi southwest of Fountain.

## PRECIPITATION RECORDS

PERIOD OF RECORD.--March 1999 to current year.

GAGE.--Tipping-bucket rain gage with radio telemetry and electronic data logger. Elevation of gage is 5,800 ft above sea level, from topographic map.

REMARKS.--Records fair except for Nov. 1 to Feb. 28, which are poor. Daily data that are not published are either missing or of unacceptable quality.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily precipitation, 1.17 inches, July 17, 2000.

EXTREMES FOR CURRENT YEAR.--Maximum daily precipitation, 0.70 inch, May 5, but may have been higher during periods of missing record.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	.00	.00	---	---	.02	.00	.00	.00	.00	.00	.00
2	---	.00	.00	---	---	.00	.00	.09	.00	.00	.00	.00
3	---	.01	.00	---	---	.00	.00	.29	.00	.00	.00	.00
4	---	.00	.00	---	---	.00	.00	.34	.09	.00	.05	.00
5	---	.01	.00	---	---	.00	.00	.70	.00	.00	.43	.00
6	---	.00	.00	---	---	.00	.00	.00	.00	.00	.04	.01
7	---	.00	.00	---	---	.00	.00	.00	.00	.00	.00	.09
8	---	.00	.00	---	---	.00	.00	.00	.00	.00	.00	.11
9	---	.00	.00	---	---	.00	.00	.00	.00	.14	.04	.00
10	---	.00	.00	---	---	.06	.13	.00	.00	.09	.01	.00
11	---	.00	e.00	---	---	.05	.05	.00	.00	.26	.01	.00
12	---	.00	---	---	e.00	.10	.02	.00	.00	.04	.00	.00
13	---	.00	---	---	.00	.00	.00	.00	.07	.20	.04	.06
14	---	.00	---	---	.01	.00	.00	.00	.00	.18	.02	.33
15	---	.00	---	---	.04	.00	.00	.00	.00	.00	.02	.03
16	---	.00	---	---	.00	.00	.00	.01	.00	.00	.03	.19
17	---	.00	---	---	.01	.00	.00	.51	.00	.00	.02	.03
18	---	.01	---	---	.00	.08	.00	.00	.00	.00	.00	.00
19	e.00	.00	---	---	.00	.00	.00	.01	.00	.00	.00	.00
20	.00	.00	---	---	.00	.00	.00	.02	.55	.00	.00	.00
21	.00	.00	---	---	.01	.00	.00	.18	.04	.00	.02	.00
22	.04	.00	---	---	.00	.00	.06	.00	.03	.14	.05	.00
23	.06	.00	---	---	.00	.00	.00	.00	.00	.00	.00	.00
24	.13	.00	---	---	.00	.01	.00	.00	.00	.02	.00	.00
25	.00	.00	---	---	.00	.02	.00	.00	.00	.00	.00	.00
26	.00	.00	---	---	.00	.03	.00	.01	.00	.06	.00	.00
27	.00	.00	---	---	.00	.05	.00	.00	.00	.00	.00	.00
28	.18	.00	---	---	.03	.02	.00	.00	.00	.00	.00	.00
29	.04	.00	---	---	---	.24	.00	.01	.00	.00	.00	.00
30	.00	.00	---	---	---	.26	.00	.20	.00	.00	.00	.00
31	.00	---	---	---	---	.00	---	.00	---	.00	.07	---
TOTAL	---	0.03	---	---	---	0.94	0.26	2.37	0.78	1.13	0.85	0.85
MAX	---	.01	---	---	---	.26	.13	.70	.55	.26	.43	.33

e Estimated.

PRECIPITATION DATA AT SITES ON FORT CARSON MILITARY RESERVATION--Continued

384339104461201 RANGE ONE METEOROLOGICAL STATION AT FORT CARSON, CO

LOCATION.--Lat 38°43'39", long 104°46'12", in NE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec.22, T.15 S., R.66 W., El Paso County, Hydrologic Unit 11020003, on Fort Carson Military Reservation, 0.1 mi southeast of intersection of Military Route 5 and Specker Ave., 1.5 mi southwest of Interstate 25, and 7.9 mi south of Colorado Springs.

PRECIPITATION RECORDS

PERIOD OF RECORD.--March 1999 to current year.

GAGE.--Tipping-bucket rain gage with radio telemetry and electronic data logger. Elevation of gage is 5,760 ft above sea level, from topographic map.

REMARKS.--Records good except for Nov. 1 to Feb. 28, which are poor. Daily data that are not published are either missing or of unacceptable quality.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily precipitation, 1.51 inches, May 30, 2001.

EXTREMES FOR CURRENT YEAR.--Maximum daily precipitation, 1.51 inches, May 30, but may have been greater during period of missing record.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	---	.00	.00	.00	.02	.00	.00	.00	.00	.00	.00
2	.00	---	.00	.00	.00	.00	.00	.05	.00	.05	.00	.00
3	.00	---	.00	.00	.00	.00	.00	.24	.01	.00	.00	.00
4	.01	---	.00	.00	.00	.00	.00	.34	.14	.00	.36	.00
5	.06	---	.00	.00	.00	.00	.00	.83	.00	.00	.08	.00
6	.06	---	.00	.00	.00	.00	.00	.00	.00	.00	.02	.00
7	.01	---	.00	.00	.00	.00	.00	.00	.11	.00	.00	.04
8	.00	---	.00	.00	.00	.00	.00	.00	.14	.04	.00	.40
9	.00	---	.00	.00	.01	.00	.00	.00	.05	.29	.00	.00
10	.00	---	.00	.00	.00	.20	.29	.01	.00	.03	.01	.00
11	.00	---	.00	.00	.00	.02	.00	.00	.00	.04	.00	.00
12	.00	---	.01	.00	.00	.11	.08	.00	.00	.12	.00	.00
13	.00	---	.00	.00	.00	.00	.00	.00	.13	1.25	.30	.01
14	.00	---	.01	.00	.00	.00	.00	.03	.00	.03	.11	.01
15	.00	---	.00	.00	.00	.00	.00	.00	.00	.02	.03	.00
16	.00	---	.00	.01	.00	.00	.00	.02	.00	.00	.14	.00
17	.00	---	.00	.24	.00	.00	.00	.42	.00	.00	.00	.23
18	.00	---	.00	.01	.00	.20	.00	.00	.00	.00	.00	.00
19	e.00	e.00	.00	.02	.00	.00	.00	.24	.00	.00	.00	.00
20	---	.00	.00	.01	.00	.00	.00	.00	.74	.01	.00	.00
21	---	.00	.00	.00	.00	.00	.00	.00	.00	.12	.00	.01
22	---	.00	.00	.00	.00	.00	.00	.00	.01	.00	.13	.01
23	---	.00	.00	.00	.00	.11	.00	.00	.00	.24	.00	.00
24	---	.00	.00	.00	.00	.01	.00	.00	.00	.13	.00	.00
25	---	.00	.00	.00	.00	.00	.00	.00	.00	.22	.00	.00
26	---	.00	.02	.00	.00	.01	.00	.00	.01	.00	.00	.00
27	---	.00	.00	.00	.01	.12	.00	.00	.00	.00	.00	.00
28	---	.00	.00	.03	.06	.00	.00	.25	.00	.00	.00	.00
29	---	.00	.00	.07	---	.17	.00	.03	.05	.00	.00	.00
30	---	.00	.00	.01	---	.00	.00	1.51	.00	.00	.00	.00
31	---	---	.00	.00	---	.00	---	.01	---	.00	.15	---
TOTAL	---	---	0.04	0.40	0.08	0.97	0.37	3.98	1.39	2.59	1.33	0.71
MAX	---	---	.02	.24	.06	.20	.29	1.51	.74	1.25	.36	.40

e Estimated.

## ARKANSAS RIVER BASIN

## PRECIPITATION DATA AT SITES ON FORT CARSON MILITARY RESERVATION--Continued

384053104492001 ROD AND GUN METEOROLOGICAL STATION AT FORT CARSON, CO

LOCATION.--Lat 38°40'53", long 104°49'20", in SE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec.6, T.16 S., R.66 W., El Paso County, Hydrologic Unit 11020003, on Fort Carson Military Reservation, 0.4 mi north of Military Route 4, 1.2 mi east of State Highway 115, and 9.1 mi south of Colorado Springs.

## PRECIPITATION RECORDS

PERIOD OF RECORD.--March 1999 to current year.

GAGE.--Tipping-bucket rain gage with radio telemetry and electronic data logger. Elevation of gage is 6,120 ft above sea level, from topographic map.

REMARKS.--Records good except for Mar.1 to Sept. 30, which are fair, and Nov. 1 to Feb. 28, which are poor. Daily data that are not published are either missing or of unacceptable quality.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily precipitation, 2.97 inches, Aug. 4, 1999.

EXTREMES FOR CURRENT YEAR.--Maximum daily precipitation, 0.58 inch, May 5, but may have been higher during periods of missing record.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.05	.00	.00	.00	.00	.00	.01
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	.00	.04	.00	.00	.00	.00	.00	.02	.00	e.00	e.00	.00
4	.01	.00	.00	.00	.00	.00	.00	.22	.35	---	---	.00
5	.07	.02	.00	.00	.00	.00	.00	.58	.00	---	---	.00
6	.02	.00	.00	.00	.00	.00	.00	.00	.00	---	---	.00
7	.03	.04	.00	.00	.00	.00	.00	.00	.06	---	---	.01
8	.00	.00	.00	.00	.00	.00	.00	.00	.09	---	---	.35
9	.00	.00	.00	.00	.00	.00	.00	.00	.01	---	---	.00
10	.00	.00	.00	.00	.04	.10	.14	.01	.00	---	---	.00
11	.00	.00	.00	.00	.00	.00	.00	.00	.00	---	---	.00
12	.00	.00	.00	.00	.00	.15	.08	.00	.00	---	---	.00
13	.00	.01	.00	.00	.00	.00	.00	.00	.08	---	---	.08
14	.00	.00	.03	.00	.00	.00	.00	.06	.00	---	e.04	.01
15	.00	.00	.00	.00	.02	.00	.00	.00	.00	---	.01	.04
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	---	.19	.22
17	.00	.00	.00	.22	.00	.00	.00	.44	.00	---	.04	.23
18	.00	.00	.00	.00	.00	.15	.00	.00	.00	---	.00	.00
19	.00	.00	.00	.01	.00	.00	.00	.55	.00	e.00	.00	.00
20	.00	.00	.00	.00	.00	.00	.00	.00	.32	.00	.00	.00
21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02	.03	.00
22	.17	.00	.00	.00	.00	.02	.00	.00	.00	.00	e.01	.00
23	.05	.00	.00	.00	.00	.06	.00	.00	.00	.03	---	.00
24	.14	.00	.00	.00	.00	.01	.00	.00	.00	.15	---	.00
25	.00	.00	.00	.00	.00	.01	.00	.00	.00	.11	---	.00
26	.00	.00	.08	.00	.00	.02	.00	.01	.00	.00	---	.00
27	.01	.00	.00	.00	.00	.02	.00	.00	.00	.00	---	.00
28	.30	.00	.00	.03	.02	.00	.00	.42	.05	.00	---	.00
29	.00	.00	.00	.10	---	.14	.00	.00	.09	.00	---	.02
30	.00	.00	.00	.01	---	.00	.00	.43	.00	.00	e.00	.00
31	.00	---	.00	.01	---	.00	---	.02	---	.00	.13	---
TOTAL	0.80	0.11	0.11	0.38	0.08	0.73	0.22	2.76	1.05	---	---	0.97
MAX	.30	.04	.08	.22	.04	.15	.14	.58	.35	---	---	.35

e Estimated.

PRECIPITATION DATA AT SITES ON FORT CARSON MILITARY RESERVATION--Continued

383159104540701 SULLIVAN PARK METEOROLOGICAL STATION AT FORT CARSON, CO

LOCATION.--Lat 38°31'59", long 104°54'07", in NW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec.33, T.17 S., R.67 W., El Paso County, Hydrologic Unit 11020002, on Fort Carson Military Reservation, 0.4 mi east of Military Route 11, 1.0 mi north of Military Route 8, 1.1 mi northeast of Camp Red Devil, and 9 mi northeast of Penrose.

PRECIPITATION RECORDS

PERIOD OF RECORD.--March 1999 to current year.

GAGE.--Tipping-bucket rain gage with radio telemetry and electronic data logger. Elevation of gage is 6,010 ft above sea level, from topographic map.

REMARKS.- Records good except for Nov. 1 to Feb. 28, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily precipitation, 2.92 inches, Aug. 4, 1999.

EXTREMES FOR CURRENT YEAR.--Maximum daily precipitation, 1.85 inches, July 13.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02
2	.00	.00	.00	.00	.00	.00	.00	.04	.00	.00	.00	.00
3	.00	.04	.00	.00	.00	.00	.00	.32	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.01	.00	.46	.01	.00	.14	.00
5	.04	.03	.00	.00	.00	.00	.00	.69	.01	.00	.31	.00
6	.03	.00	.00	.00	.00	.00	.00	.00	.00	.00	.04	.06
7	.02	.02	.00	.00	.00	.00	.00	.00	.03	.00	.00	.04
8	.00	.00	.00	.00	.00	.00	.00	.00	.04	.00	.00	.25
9	.00	.00	.00	.00	.06	.00	.00	.00	.00	.05	.00	.00
10	.00	.00	.00	.00	.02	.06	.17	.00	.00	.07	.06	.00
11	.00	.01	.02	.00	.00	.06	.03	.00	.00	.01	.01	.00
12	.00	.00	.02	.00	.00	.10	.20	.00	.00	.01	.18	.00
13	.00	.00	.00	.00	.00	.00	.00	.00	.07	1.85	.05	.05
14	.00	.01	.00	.00	.00	.00	.00	.04	.00	.19	.01	.34
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.45	.26
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02	.07
17	.00	.00	.00	.01	.00	.00	.00	.48	.00	.00	.00	.01
18	.00	.00	.00	.02	.00	.07	.00	.01	.00	.02	.00	.00
19	.00	.00	.00	.00	.00	.00	.00	.03	.00	.00	.00	.00
20	.00	.00	.00	.00	.00	.00	.00	.01	.47	.00	.00	.00
21	.00	.00	.00	.00	.01	.00	.00	.27	.11	.01	.00	.00
22	.04	.00	.00	.00	.00	.00	.30	.00	.05	.01	.05	.00
23	.05	.00	.00	.00	.00	.00	.01	.00	.00	.01	.00	.00
24	.20	.00	.00	.00	.00	.01	.00	.00	.00	.14	.00	.00
25	.00	.00	.00	.00	.00	.02	.00	.01	.00	.05	.00	.00
26	.00	.00	.03	.00	.00	.02	.00	.01	.00	.19	.00	.00
27	.01	.00	.00	.00	.00	.01	.00	.00	.00	.00	.00	.00
28	.13	.00	.00	.08	.02	.00	.00	.00	.00	.00	.00	.00
29	.00	.00	.00	.06	---	.08	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	---	.33	.00	.09	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.04	---
TOTAL	0.52	0.11	0.07	0.17	0.11	0.77	0.71	2.46	0.79	2.61	1.36	1.10
MAX	.20	.04	.03	.08	.06	.33	.30	.69	.47	1.85	.45	.34

WTR YR 2001 TOTAL 10.78 MAX 1.85

## ARKANSAS RIVER BASIN

## PRECIPITATION DATA AT SITES ON FORT CARSON MILITARY RESERVATION--Continued

383109104431301 YOUNG HOLLOW METEOROLOGICAL STATION AT FORT CARSON, CO

LOCATION.--Lat 38°31'09", long 104°43'13", in NE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec.1, T.18 S., R.66 W., Pueblo County, Hydrologic Unit 11020003, on Fort Carson Military Reservation, 1.1 mi east of Military Route 1, 4.8 mi west of Interstate 25, and 5.5 mi south of Fountain.

## PRECIPITATION RECORDS

PERIOD OF RECORD.--March 1999 to current year.

GAGE.--Tipping-bucket rain gage with radio telemetry and electronic data logger. Elevation of gage is 5,350 ft above sea level, from topographic map.

REMARKS.--Records good except for Nov. 1 to Feb. 28, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily precipitation, 1.19 inches, June 20, 2001.

EXTREMES FOR CURRENT YEAR.--Maximum daily precipitation, 1.19 inches, June 20.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.02	.00	.00	.00	.09	.00	.00
2	.00	.00	.00	.00	.00	.00	.00	.13	.00	.00	.00	.00
3	.00	.01	.00	.00	.00	.00	.00	.22	.00	.14	.00	.00
4	.00	.01	.00	.00	.00	.00	.00	.28	.10	.00	.03	.00
5	.07	.04	.00	.00	.00	.00	.00	.82	.00	.00	.24	.10
6	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00	.09	.04
7	.00	.02	.00	.00	.00	.00	.00	.00	.03	.00	.00	.15
8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.11
9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.21	.00	.01
10	.00	.00	.00	.00	.02	.10	.37	.00	.00	.11	.01	.00
11	.00	.00	.00	.00	.01	.06	.05	.00	.00	.45	.00	.00
12	.00	.04	.00	.00	.00	.10	.12	.00	.00	.06	.00	.00
13	.00	.00	.00	.00	.00	.00	.00	.00	.07	.20	.16	.03
14	.00	.00	.02	.00	.01	.00	.00	.00	.00	.24	.03	.01
15	.00	.00	.00	.00	.08	.00	.00	.00	.00	.00	.08	.01
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.17
17	.00	.00	.00	.08	.00	.00	.00	.51	.00	.00	.01	.04
18	.00	.01	.00	.00	.00	.08	.00	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.00	.00	.13	.00	.00	.00	.00
20	.00	.00	.00	.00	.00	.00	.00	.01	1.19	.00	.00	.00
21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
22	.04	.00	.00	.00	.01	.00	.00	.00	.00	.00	.05	.00
23	.05	.00	.00	.00	.00	.00	.00	.00	.00	.01	.00	.00
24	.13	.00	.00	.00	.00	.00	.00	.00	.00	.04	.00	.00
25	.00	.00	.00	.00	.00	.01	.00	.00	.00	.00	.02	.00
26	.00	.00	.09	.00	.00	.01	.00	.05	.00	.10	.00	.00
27	.00	.00	.01	.01	.00	.02	.00	.00	.00	.00	.00	.00
28	.34	.00	.00	.06	.03	.01	.00	.00	.04	.00	.00	.00
29	.02	.00	.00	.22	---	.57	.00	.09	.03	.00	.00	.00
30	.00	.00	.00	.01	---	.06	.00	.05	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.01	---	.00	.06	---
TOTAL	0.66	0.13	0.12	0.38	0.16	1.04	0.54	2.30	1.46	1.65	0.78	0.67
MAX	.34	.04	.09	.22	.08	.57	.37	.82	1.19	.45	.24	.17

WTR YR 2001 TOTAL 9.89 MAX 1.19

PRECIPITATION DATA AT SITES ON PINON CANYON MANEUVER SITE

A network of meteorological stations is operated on the Pinon Canyon Maneuver Site to provide precipitation data for land-condition trend analysis, long-term climatic analysis, storm-runoff modeling, and operations management during military training exercises. Other meteorological data are available upon request.

373232103555201 BEAR SPRINGS METEOROLOGICAL STATION NEAR HOUGHTON, CO

LOCATION.--Lat 37°32'32", long 103°55'55", in SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec.5, T.29 S., R.58 W., Las Animas County, Hydrologic Unit 11020010, on Pinon Canyon Maneuver Site approximately 100 ft north of Military Supply Road 1, 5.8 mi east of Pipeline Road, 6.7 mi southeast of Houghton, and 37 mi southwest of La Junta.

PRECIPITATION RECORDS

PERIOD OF RECORD.--October 1993 to October 1998, March 1999 to current year. Site was part of a hydrologic study 1985-92, data published elsewhere.

GAGE.--Tipping-bucket rain gage with radio telemetry and electronic data logger. Elevation of gage is 5,200 ft above sea level, from topographic map.

REMARKS.--Records good except for Nov. 1 to Feb. 28, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily precipitation, 2.82 inches, May 3, 1987.

EXTREMES FOR CURRENT YEAR.--Maximum daily precipitation, 1.04 inches, Aug. 10.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	.00	.04	.00	.00
2	.00	.00	.00	.00	.00	.00	.00	.01	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	.00	.00	.06	.00	.29	.00	.00
4	.09	.00	.00	.00	.00	.00	.00	.38	.00	.00	.00	.00
5	.03	.02	.00	.00	.00	.00	.00	.54	.00	.00	.00	.00
6	.08	.02	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	.02	.00	.00	.07	.00	.00	.08
8	.00	.00	.00	.00	.00	.03	.00	.00	.00	.04	.00	.01
9	.00	.00	.00	.00	.03	.00	.00	.00	.09	.00	.00	.00
10	.00	.00	.00	.00	.03	.01	.01	.00	.00	.00	1.04	.00
11	.00	.00	.00	.00	.00	.07	.28	.00	.00	.00	.01	.00
12	.00	.00	.00	.00	.00	.01	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.01	.00	.00	.00	.00	.00	.07	.00	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02	.09	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.03	.00	.13
16	.00	.00	.00	.01	.00	.00	.00	.05	.00	.00	.09	.03
17	.00	.00	.00	.08	.00	.00	.00	.41	.00	.00	.00	.02
18	.00	.00	.00	.00	.00	.01	.00	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.00	.00	.09	.00	.00	.00	.00
20	.00	.00	.00	.00	.00	.00	.00	.13	.09	.00	.00	.00
21	.00	.00	.00	.00	.00	.00	.00	.01	.09	.25	.00	.06
22	.03	.00	.00	.00	.00	.01	.01	.00	.00	.78	.01	.00
23	.18	.00	.00	.00	.00	.00	.00	.00	.00	.03	.00	.00
24	.25	.00	.00	.01	.01	.00	.00	.00	.00	.01	.00	.00
25	.00	.00	.00	.00	.00	.02	.00	.00	.02	.00	.05	.00
26	.00	.00	.00	.00	.00	.13	.00	.00	.00	.02	.00	.00
27	.00	.00	.10	.00	.00	.03	.00	.00	.00	.00	.00	.00
28	.71	.00	.00	.02	.05	.01	.06	.08	.00	.00	.01	.00
29	.67	.00	.00	.00	---	.01	.00	.00	.08	.00	.00	.00
30	.00	.00	.00	.01	---	.00	.00	.05	.00	.04	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.03	.00	---
TOTAL	2.04	0.04	0.12	0.14	0.12	0.36	0.36	1.81	0.44	1.65	1.30	0.33
MAX	.71	.02	.10	.08	.05	.13	.28	.54	.09	.78	1.04	.13

WTR YR 2001 TOTAL 8.71 MAX 1.04

## ARKANSAS RIVER BASIN

## PRECIPITATION DATA AT SITES ON PINON CANYON MANEUVER SITE--Continued

372319104073301 BROWN SHEEP CAMP METEOROLOGICAL STATION NEAR TYRONE, CO

LOCATION.--Lat 37°23'19", long 104°07'33", in SW<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec.33, T.30 S., R.60 W., Las Animas County, Hydrologic Unit 11020010, on Pinon Canyon Maneuver Site approximately 50 ft west of Military Supply Road, 0.9 mi southwest of Brown Sheep Camp, 6.4 mi southeast of Tyrone, and 23 mi northeast of Trinidad.

## PRECIPITATION RECORDS

PERIOD OF RECORD.--March 1999 to current year.

GAGE.--Tipping-bucket rain gage with radio telemetry and electronic data logger. Elevation of gage is 5,390 ft above sea level, from topographic map.

REMARKS.--Records good except for Nov. 1 to Feb. 28 and estimated daily precipitation, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily precipitation, 1.44 inches, July 17, 1999.

EXTREMES FOR CURRENT YEAR.--Maximum daily precipitation, 1.36 inches (estimated), June 21, based on comparison with nearby stations using method based on National Weather Service River Forecast System Forecast Procedures.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	.00	e.00	.00	.00
2	.00	.00	.00	.00	.00	.00	.00	.01	.00	e.00	.04	.01
3	.00	.00	.00	.00	.00	.00	.00	.04	.00	e.17	.00	.00
4	.28	.00	.00	.00	.00	.00	.00	.31	.00	e.00	.00	.00
5	.01	.00	.00	.00	.00	.00	.00	.39	.00	e.00	.48	.00
6	.04	.00	.01	.00	.00	.00	.02	.00	.00	e.00	.00	.00
7	.00	.00	.00	.00	.00	.09	.00	.00	.02	e.00	.01	.25
8	.00	.00	.00	.00	.00	.13	.00	.00	e.00	e.11	.00	.00
9	.00	.00	.00	.00	.03	.00	.00	.00	e.00	e.00	.00	.00
10	.00	.00	.00	.00	.02	.01	.01	.01	e.00	e.00	.11	.00
11	.00	.00	.00	.00	.00	.19	.05	.00	e.00	e.00	.01	.00
12	.00	.00	.01	.00	.00	.00	.01	.00	e.00	e.01	.00	.00
13	.00	.00	.00	.02	.01	.00	.00	.00	e.00	e.23	.00	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	e.00	e.02	.03	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	e.00	e.01	.00	.47
16	.00	.00	.00	.00	.00	.00	.00	.01	e.00	e.00	.15	.00
17	.00	.00	.00	.09	.00	.00	.00	.27	e.00	e.00	.00	.27
18	.00	.00	.00	.00	.00	.03	e.00	.00	e.00	e.00	.00	.00
19	.00	.00	.00	.00	.00	.00	e.00	.20	e.00	e.00	.00	.00
20	.00	.00	.00	.00	.00	.00	e.00	.09	e.32	e.00	.00	.00
21	.00	.00	.00	.00	.00	.02	e.00	.02	e1.36	e.12	.00	.00
22	.37	.00	.00	.00	.00	.02	e.04	.00	e.00	e.00	.00	.00
23	.34	.00	.00	.00	.00	.00	e.00	.00	e.00	e.01	.00	.00
24	.14	.00	.00	.01	.00	.00	e.00	.00	e.00	e.04	.00	.00
25	.00	.00	.00	.00	.00	.01	e.00	.00	e.00	e.00	.42	.00
26	.00	.00	.00	.00	.00	.01	e.00	.00	e.00	.00	.00	.00
27	.00	.00	.17	.00	.00	.01	e.00	.00	e.00	.02	.00	.00
28	.76	.00	.00	.03	.06	.00	.00	.68	e.01	.00	.00	.00
29	.39	.00	.00	.00	---	.01	.00	.00	e.00	.00	.00	.00
30	.00	.00	.00	.00	---	.00	.00	.04	e.02	.09	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.16	.00	---
TOTAL	2.33	0.00	0.19	0.15	0.12	0.53	0.13	2.07	1.73	0.99	1.25	1.00
MAX	.76	.00	.17	.09	.06	.19	.05	.68	1.36	.23	.48	.47

WTR YR 2001 TOTAL 10.49 MAX 1.36

e Estimated.

PRECIPITATION DATA AT SITES ON PINON CANYON MANEUVER SITE--Continued

373004104032001 BURSON WELL METEOROLOGICAL STATION NEAR THATCHER, CO

LOCATION.--Lat 37°30'04", long 104°03'20", in SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec.19, T.29 S., R.59 W., Las Animas County, Hydrologic Unit 11020010, on Pinon Canyon Maneuver Site 0.3 mi south of Military Supply Road 1, 4.2 mi southeast of Thatcher, and 33 mi northeast of Trinidad.

PRECIPITATION RECORDS

PERIOD OF RECORD.--March 1999 to current year.

GAGE.--Tipping-bucket rain gage with radio telemetry and electronic data logger. Elevation of gage is 5,630 ft above sea level, from topographic map.

REMARKS.--Records good except for Oct. 1-31 and Mar. 1 to Apr. 17, which are fair, and Nov. 1 to Feb. 28, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily precipitation, 1.29 inches, July 20, 1999.

EXTREMES FOR CURRENT YEAR.--Maximum daily precipitation, 1.11 inches, Sept. 15.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	e.00	.00	.00	.00	.00	.00	.00	.02	.00	.00	.13	.00
3	e.00	.00	.00	.00	.00	.00	.00	.09	.00	.67	.00	.00
4	.08	.00	.00	.00	.00	.00	.00	.43	.00	.00	.00	.00
5	.03	.00	.00	.00	.00	.00	.00	.68	.00	.00	.00	.00
6	.08	.02	.00	.00	.00	.00	.02	.00	.00	.00	.00	.00
7	.01	.00	.00	.00	.00	.02	.00	.00	.00	.00	.00	.27
8	.00	.00	.00	.00	.00	.05	.00	.00	.17	.00	.00	.03
9	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00	.00	.00
10	.00	.00	.00	.00	.06	.00	.01	.00	.00	.00	.80	.00
11	.00	.00	.00	.00	.00	.10	.10	.00	.00	.07	.00	.00
12	.00	.00	.03	.00	.00	.00	.00	.00	.00	.01	.00	.00
13	.00	.00	.00	.03	.02	.00	.00	.00	.00	.10	.00	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.07	.00	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	1.11
16	.00	.00	.00	.00	.00	.00	.00	.03	.00	.00	.35	.11
17	.00	.00	.00	.13	.00	.00	.00	.48	.01	.00	.00	.04
18	.00	.00	.00	.00	.00	.06	.00	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.00	.00	.11	.00	.00	.00	.00
20	.00	.00	.00	.00	.00	.00	.00	.12	.03	.00	.00	.00
21	.00	.00	.00	.00	.00	.00	.00	.01	.12	.05	.00	.00
22	.12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
23	.30	.00	.00	.00	.00	.00	.00	.00	.00	.10	.00	.00
24	.21	.00	.00	.00	.00	.00	.00	.00	.00	.08	.00	.00
25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.04	.00
26	.00	.00	.01	.00	.00	.14	.00	.00	.00	.00	.00	.00
27	.00	.00	.07	.00	.00	.22	.00	.00	.00	.00	.00	.00
28	.91	.00	.00	.00	.06	.00	.07	.12	.00	.00	.00	.00
29	.78	.00	.00	.02	---	.03	.00	.00	.04	.00	.00	.00
30	.00	.00	.00	.00	---	.00	.00	.27	.18	.07	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	2.52	0.02	0.11	0.18	0.14	0.62	0.20	2.36	0.60	1.22	1.32	1.56
MAX	.91	.02	.07	.13	.06	.22	.10	.68	.18	.67	.80	1.11

WTR YR 2001 TOTAL 10.85 MAX 1.11

e Estimated.

ARKANSAS RIVER BASIN

PRECIPITATION DATA AT SITES ON PINON CANYON MANEUVER SITE--Continued

372959104092201 CANTONMENT METEOROLOGICAL STATION NEAR CEMETARY AT SIMPSON, CO

LOCATION.--Lat 37°29'59", long 104°09'35", in SW<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec.19, T.29 S., R.60 W., Las Animas County, Hydrologic Unit 11020010, on Pinon Canyon Maneuver Site approximately 200 ft north of Military Supply Road 1, 250 ft west of Simpson Cemetery, 0.4 mi east of Highway 350, and 32 mi northeast of Trinidad.

PRECIPITATION RECORDS

PERIOD OF RECORD.--July 1993 to October 1998, March 1999 to current year.

GAGE.--Tipping-bucket rain gage with radio telemetry and electronic data logger. Elevation of gage is 5,630 ft above sea level, from topographic map. Prior to Mar. 25, 1999 at site 780 ft east.

REMARKS.--Records good except for Nov. 1 to Feb. 28, and estimated daily precipitation, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily precipitation, 1.44 inches, Apr. 26, 1998.

EXTREMES FOR CURRENT YEAR.--Maximum daily precipitation, 0.85 inch, Oct. 29.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	e.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	.00	.00	e.01	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	.00	.00	e.06	.00	.30	.00	.00
4	.06	.00	.00	.00	.00	.00	.00	e.38	.00	.00	.00	.00
5	.08	.01	.00	.00	.00	.00	.00	e.52	.00	.00	.00	.00
6	.06	.02	.01	.00	.00	.00	.05	e.01	.00	.00	.00	.00
7	.02	.00	.00	.00	.00	.01	.00	e.00	.00	.00	.00	.03
8	.00	.00	.00	.00	.00	.05	.00	e.00	.11	.02	.00	.01
9	.00	.00	.00	.00	.00	.00	.00	e.00	.05	.00	.00	.00
10	.00	.00	.00	.00	.06	.00	.01	e.03	.00	.00	.72	.00
11	.00	.00	.00	.00	.00	.12	.08	e.00	.00	.05	.01	.00
12	.00	.00	.02	.00	.00	.01	.00	e.00	.00	.01	.00	.00
13	.00	.00	.00	.07	.01	.00	.00	e.00	.02	.12	.00	.00
14	.00	.00	.00	.00	.00	.00	.00	e.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.00	.00	e.00	.00	.00	.00	.67
16	.00	.00	.00	.01	.00	.00	.00	e.08	.00	.00	.14	.00
17	.00	.00	.00	.10	.00	.00	e.00	e.35	.00	.00	.00	.03
18	.00	.00	.00	.00	.00	.03	e.00	e.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.00	e.00	e.15	.00	.00	.00	.00
20	.00	.00	.00	.00	.00	.00	e.00	e.14	.05	.00	.00	.00
21	.00	.00	.00	.00	.00	.00	e.00	.02	.07	.03	.00	.00
22	.55	.00	.00	.00	.00	.00	e.01	.00	.00	.00	.00	.00
23	.25	.00	.00	.00	.00	.00	e.00	.00	.00	.02	.00	.00
24	.12	.00	.00	.01	.00	.00	e.00	.00	.00	.29	.00	.00
25	.00	.00	.00	.00	.00	.00	e.00	.00	.00	.00	.05	.00
26	.00	.00	.04	.00	.00	.11	e.00	.00	.00	.25	.00	.00
27	.00	.00	.14	.00	.00	.05	e.00	.00	.00	.01	.00	.00
28	.81	.00	.00	.02	.04	.01	e.04	.12	.03	.00	.00	.00
29	.85	.00	.00	.01	---	.00	e.00	.02	.00	.00	.00	.00
30	.00	.00	.00	.00	---	.00	e.00	.20	.29	.11	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.27	.00	---
TOTAL	2.80	0.03	0.21	0.22	0.11	0.39	0.19	2.09	0.62	1.48	0.92	0.74
MAX	.85	.02	.14	.10	.06	.12	.08	.52	.29	.30	.72	.67

WTR YR 2001 TOTAL 9.80 MAX .85

e Estimated.

PRECIPITATION DATA AT SITES ON PINON CANYON MANEUVER SITE--Continued

372532104093001 CANTONMENT WINDMILL METEOROLOGICAL STATION NEAR TYRONE, CO

LOCATION (REVISED)--Lat 37°25'32", long 104°09'30", in SW<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec.18, T.30 S., R.60 W., Las Animas County, Hydrologic Unit 11020010, on Pinon Canyon Maneuver Site 0.2 mi south of Military Supply Road 2, 3.5 mi southeast of Tyrone, and 25 mi northeast of Trinidad.

PRECIPITATION RECORDS

PERIOD OF RECORD.--March 1999 to current year.

GAGE.--Tipping-bucket rain gage with radio telemetry and electronic data logger. Elevation of gage is 5,460 ft above sea level, from topographic map.

REMARKS.--Records good except for Oct. 1 to Feb. 12 and estimated daily precipitation, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily precipitation, 1.35 inches, July 17, 1999.

EXTREMES FOR CURRENT YEAR.--Maximum daily precipitation, 0.95 inch, June 21.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	e.00	.00	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	e.00	.00	.01	.00	.00	.01	.01
3	e.00	.00	.00	.00	.00	e.00	.00	.04	.00	.04	.00	.00
4	e.31	.00	.00	.00	.00	e.00	.00	.34	.00	.00	.00	.00
5	e.02	.01	.00	.00	.00	e.00	.00	.39	.00	.00	.08	.00
6	e.06	.00	.00	.00	.00	e.00	.02	.01	.00	.00	.00	.00
7	e.01	.00	.00	.00	.00	e.06	.00	.00	.01	.00	.00	.15
8	e.00	.00	.00	.00	.00	e.10	.00	.00	.01	.08	.00	.00
9	e.00	.00	.00	.00	.02	e.00	.00	.00	.00	.00	.00	.00
10	e.00	.00	.00	.00	.00	.00	.01	.05	.00	.00	.14	.00
11	e.00	.00	.00	.00	.00	.10	.04	.00	.00	.01	.00	.00
12	e.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.00	.00
13	e.00	.00	.00	.00	e.01	.00	.00	.00	.00	.16	.02	.00
14	e.00	.00	.00	.00	e.00	.00	.00	.00	.00	.01	.02	.00
15	.00	.00	.00	.00	e.00	.01	.00	.00	.00	.02	.00	.38
16	.00	.00	.00	.00	e.00	.00	.00	.12	.00	.00	.23	.00
17	.00	.00	.00	.06	e.00	.00	.00	.23	.00	.00	.00	.01
18	.00	.00	.00	.00	e.00	.04	.00	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	e.00	.00	.00	.18	.00	.00	.00	.00
20	.00	.00	.00	.00	e.00	.00	.00	.10	.07	.00	.00	.00
21	.00	.00	.00	.00	e.00	.00	.00	.00	.95	.00	.00	.00
22	.54	.00	.00	.00	e.00	.00	.01	.00	.00	.00	.00	.00
23	.29	.00	.00	.00	e.00	.00	.00	.00	.00	.09	.00	.00
24	.13	.00	.00	.00	e.00	.00	.00	.00	.00	.05	.00	.00
25	.00	.00	.00	.00	e.00	.00	.00	.00	.00	.00	.15	.00
26	.00	.00	.02	.00	e.00	.07	.00	.00	.00	.05	.00	.00
27	.00	.00	.12	.00	e.00	.01	.00	.00	.00	.00	.00	.00
28	.74	.00	.00	.06	e.06	.00	.02	.39	.16	.00	.00	.00
29	.40	.00	.00	.00	---	.01	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	---	.00	.00	.04	.10	.15	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	2.50	0.01	0.14	0.12	0.09	0.40	0.10	1.90	1.30	0.67	0.65	0.55
MAX	.74	.01	.12	.06	.06	.10	.04	.39	.95	.16	.23	.38

WTR YR 2001 TOTAL 8.43 MAX .95

e Estimated.

## ARKANSAS RIVER BASIN

## PRECIPITATION DATA AT SITES ON PINON CANYON MANEUVER SITE--Continued

372721103595601 CIG PIPELINE SOUTH METEOROLOGICAL STATION NEAR SIMPSON, CO

LOCATION.--Lat 37°27'21", long 103°59'56", in SE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec.3, T.30 S., R.59 W., Las Animas County, Hydrologic Unit 11020010, on Pinon Canyon Maneuver Site approximately 100 ft south of gas pipeline, 0.8 mi southwest of Taylor Arroyo, 3.4 mi northwest of Rock Crossing, 10 mi southeast of Simpson, and 36 mi northeast of Trinidad.

## PRECIPITATION RECORDS

PERIOD OF RECORD.--October 1992 to September 1998, published as Taylor Arroyo Rain Gage at Pipeline near Simpson. October 1998, March 1999 to current year. Site was part of a hydrologic study July 1983 to September 1992, data published elsewhere.

GAGE.--Tipping-bucket rain gage with radio telemetry and electronic data logger. Elevation of gage is 5,220 ft above sea level, from topographic map.

REMARKS.--Records good except for Nov. 4 to Feb. 28 and estimated daily precipitation, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily precipitation, 4.59 inches, July 27, 1998.

EXTREMES FOR CURRENT YEAR.--Maximum daily precipitation, 0.81 inch (estimated), Oct. 28, based on comparison with nearby stations using method based on National Weather Service River Forecast System Forecast Procedures.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	e.00	.00	.00	.00	.00	.00	.00	.00	.07	.00	.00
2	e.00	e.00	.00	.00	.00	.00	.00	.01	.00	.00	.00	.00
3	e.00	e.00	.00	.00	.00	.00	.00	.02	.00	.12	.00	.00
4	e.05	.00	.00	.00	.00	.00	.00	.27	.00	.00	.00	.00
5	e.02	.03	.00	.00	.00	.00	.00	.41	.00	.00	.00	.00
6	e.06	.00	.00	.00	.00	.00	.01	.00	.00	.00	.00	.00
7	e.00	.00	.00	.00	.00	.03	.00	.00	.15	.00	.00	.19
8	e.00	.00	.00	.00	.00	.13	.00	.00	.01	.00	.00	.00
9	e.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
10	e.00	.00	.00	.00	.03	.01	.01	.00	.00	.00	.07	.00
11	e.00	.00	.00	.00	.00	.13	.14	.00	.00	.00	.01	.00
12	e.00	.00	.01	.00	.00	.00	.00	.00	.00	.01	.00	.00
13	e.00	.00	.00	.01	.00	.00	.00	.00	.00	.02	.02	.00
14	e.00	.00	.00	.00	.00	.00	.00	.00	.00	.15	.02	.00
15	e.00	.00	.00	.00	.00	.00	.00	.00	.00	.03	.00	.45
16	e.00	.00	.00	.01	.00	.00	.00	.01	.00	.00	.12	.00
17	e.00	.00	.00	.02	.00	.00	.00	.22	.00	.00	.00	.01
18	e.00	.00	.00	.01	.00	.02	.00	.00	.00	.00	.00	.00
19	e.00	.00	.00	.00	.00	.00	.00	.09	.00	.00	.00	.00
20	e.00	.00	.00	.00	.00	.00	.00	.10	.07	.01	.00	.00
21	e.00	.00	.00	.00	.00	.00	.00	.02	.06	.13	.00	.00
22	e.16	.00	.00	.00	.00	.02	.01	.00	.00	.00	.06	.00
23	e.30	.00	.00	.00	.00	.01	.00	.00	.00	.01	.00	.00
24	e.20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
25	e.00	.00	.00	.01	.00	.01	.00	.00	.00	.00	.02	.00
26	e.00	.00	.00	.00	.00	.10	.00	.00	.00	.03	.00	.00
27	e.00	.00	.12	.00	.00	.18	.00	.00	.00	.00	.00	.00
28	e.81	.00	.00	.03	.08	.01	.00	.41	.00	.00	.06	.00
29	e.66	.00	.00	.00	---	.00	.00	.00	.01	.00	.00	.00
30	e.00	.00	.00	.00	---	.00	.00	.12	.28	.24	.00	.00
31	e.00	---	.00	.00	---	.00	---	.00	---	.04	.00	---
TOTAL	2.26	0.03	0.13	0.09	0.11	0.65	0.17	1.68	0.58	0.86	0.38	0.65
MAX	.81	.03	.12	.03	.08	.18	.14	.41	.28	.24	.12	.45

WTR YR 2001 TOTAL 7.59 MAX .81

e Estimated.

PRECIPITATION DATA AT SITES ON PINON CANYON MANEUVER SITE--Continued

372249103573302 GUTIERREZ WINDMILL METEOROLOGICAL STATION NEAR MODEL, CO

LOCATION.--Lat 37°22'49", long 103°57'33", in SW<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec.36, T.30 S., R.59 W., Las Animas County, Hydrologic Unit 11020010, on Pinon Canyon Maneuver Site 0.9 mi south of Military Supply Road 2, 16 mi east of Model, and 33 mi northeast of Trinidad.

PRECIPITATION RECORDS

PERIOD OF RECORD.--March 1999 to current year.

GAGE.--Tipping-bucket rain gage with radio telemetry and electronic data logger. Elevation of gage is 5,130 ft above sea level, from topographic map.

REMARKS.--Records fair except for Oct. 1 to Feb. 28 and estimated daily precipitation, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily precipitation, 1.43 inches, Aug. 21, 2000.

EXTREMES FOR CURRENT YEAR.--Maximum daily precipitation, 0.69 inch, Oct. 28.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.01	.00	.00	.00	.06	.00	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	.01	.00	.00	.00	.00	.00	.00	.03	.00	.42	.00	.00
4	.00	.00	.00	.00	.00	.00	.00	.39	.00	.00	.00	.00
5	.01	.01	.00	.00	.00	.00	.00	.44	.00	.00	.00	.00
6	.05	.00	.01	.00	.00	.00	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	.21	.00	.00	.04	.00	.00	.09
8	.00	.00	.00	.00	.00	.17	.00	.00	.00	.00	.00	.02
9	.00	.00	.00	.00	.06	.00	.00	.00	.00	.00	.00	.00
10	.00	.00	.00	.00	.00	.04	.01	.00	.00	.00	.06	.00
11	.00	.00	.00	.00	.00	.10	.09	.00	.00	.00	.00	.00
12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.00	.00
13	.00	.00	.00	.03	.00	.00	.00	.00	.00	.15	.01	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.18	.12	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.00	.18
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.15	.00
17	.00	.00	.00	.04	.00	.00	e.00	.37	.00	.00	.01	.02
18	.00	.00	.00	.00	.00	.00	e.00	.00	.00	.00	.00	.01
19	.00	.00	.00	.00	.00	.00	e.00	.21	.00	.00	.00	.00
20	.00	.00	.00	.00	.00	.00	e.00	.15	.10	.00	.00	.00
21	.00	.00	.00	.00	.00	.00	e.00	.01	.53	.00	.00	.00
22	.08	.00	.00	.00	.00	.07	e.01	.00	.00	.00	.00	.00
23	.34	.00	.00	.00	.00	.00	e.00	.00	.00	.04	.00	.00
24	.19	.00	.00	.00	.00	.00	e.00	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	.00	.03	e.00	.00	.00	.00	.04	.00
26	.00	.00	.00	.00	.00	.01	e.00	.00	.00	.00	.00	.00
27	.00	.00	.13	.00	.00	.04	e.00	.00	.00	.00	.00	.00
28	.69	.00	.00	.03	.07	.01	.00	.41	.00	.00	.10	.00
29	.61	.00	.00	.00	---	.06	.00	.00	.04	.00	.00	.00
30	.00	.00	.00	.00	---	.00	.00	.04	.25	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.01	.00	---
TOTAL	1.98	0.01	0.14	0.10	0.13	0.75	0.11	2.05	0.96	0.88	0.49	0.32
MAX	.69	.01	.13	.04	.07	.21	.09	.44	.53	.42	.15	.18

WTR YR 2001 TOTAL 7.92 MAX .69

e Estimated.

## ARKANSAS RIVER BASIN

## PRECIPITATION DATA AT SITES ON PINON CANYON MANEUVER SITE--Continued

372701103514501 MINCIC METEOROLOGICAL STATION NEAR HOUGHTON, CO

LOCATION.--Lat 37°27'01", long 103°51'45", in NE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec.11, T.30 S., R.58 W., Las Animas County, Hydrologic Unit 11020010, on Pinon Canyon Maneuver Site approximately 0.1 mi west of Military Supply Road 4A, 0.7 mi south of Military Supply Road 4, 14 mi southeast of Houghton, and 40 mi northeast of Trinidad.

## PRECIPITATION RECORDS

PERIOD OF RECORD.--March 1999 to current year.

GAGE.--Tipping-bucket rain gage with radio telemetry and electronic data logger. Elevation of gage is 5,078 ft above sea level, from topographic map.

REMARKS.--Records good except for Dec. 10 to Feb. 28 and estimated daily precipitation, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily precipitation, 1.08 inches, Aug. 3, 1999.

EXTREMES FOR CURRENT YEAR.--Maximum daily precipitation, 0.84 inch, Oct. 28 (estimated), based on comparison with nearby stations using method based on National Weather Service River Forecast System Forecast Procedures.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	e.00	e.00	.00	.00	.01	.00	.00	.00	.00	.00	.00
2	e.00	e.00	e.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	e.00	e.00	e.00	.00	.00	.00	.00	.05	.00	.56	.00	.00
4	e.28	e.00	e.00	.00	.00	.00	.00	.42	.00	.00	.00	.00
5	e.01	e.03	e.00	.00	.00	.00	.00	.34	.00	.00	.00	.00
6	e.07	e.01	e.02	.00	.00	.00	.00	.00	.00	.00	.00	.00
7	e.01	e.00	e.00	.00	.00	.07	.00	.00	.13	.00	.00	.11
8	e.00	e.00	e.00	.00	.00	.13	.00	.00	.00	.00	.00	.00
9	e.00	e.00	e.00	.00	.08	.00	.00	.00	.00	.00	.00	.00
10	e.00	e.00	.00	.00	.00	.02	.01	.00	.00	.00	.32	.00
11	e.00	e.00	.00	.00	.00	.09	.19	.00	.00	.00	.00	.00
12	e.00	e.00	.00	.00	.00	.00	.00	.00	.00	.01	.00	.00
13	e.00	e.00	.00	.02	.00	.00	.00	.00	.00	.09	.04	.00
14	e.00	e.00	.00	.00	.00	.00	.00	.00	.00	.13	.04	.00
15	e.00	e.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.23
16	e.00	e.00	.00	.00	.00	.00	.00	.02	.00	.00	.04	.00
17	e.00	e.00	.00	.06	.00	.00	.00	.24	.00	.00	.00	.01
18	e.00	e.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
19	e.00	e.00	.00	.00	.00	.00	.00	.08	.00	.01	.00	.00
20	e.00	e.00	.00	.00	.00	.00	.00	.28	.06	.00	.00	.00
21	e.00	e.00	.00	.00	.00	.00	.00	.02	.07	.00	.01	.00
22	e.00	e.00	.00	.00	.00	.02	.00	.00	.00	.00	.00	.00
23	e.04	e.00	.00	.00	.00	.01	.00	.00	.00	.21	.00	.00
24	e.34	e.00	.00	.00	.01	.00	.00	.00	.00	.00	.00	.00
25	e.26	e.00	.00	.00	.00	.02	.00	.00	.00	.00	.25	.00
26	e.00	e.00	.00	.00	.00	.05	.00	.00	.00	.00	.00	.00
27	e.00	e.00	.13	.00	.00	.13	.00	.00	.00	.11	.00	.00
28	e.84	e.00	.00	.02	.07	.01	.00	.04	.00	.00	.00	.00
29	e.63	e.00	.00	.01	---	.01	.00	.01	.03	.00	.00	.00
30	e.00	e.00	.00	.00	---	.00	.00	.03	.00	.00	.00	.00
31	e.00	---	.00	.00	---	.00	---	.00	---	.00	.02	---
TOTAL	2.48	0.04	0.15	0.11	0.16	0.57	0.20	1.53	0.29	1.12	0.72	0.35
MAX	.84	.03	.13	.06	.08	.13	.19	.42	.13	.56	.32	.23

WTR YR 2001 TOTAL 7.72 MAX .84

e Estimated.

PRECIPITATION DATA AT SITES ON PINON CANYON MANEUVER SITE--Continued

373706103410701 ROURKE METEOROLOGICAL STATION NEAR HIGBEE, CO

LOCATION.--Lat 37°37'06", long 103°41'07", in SE<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec.9, T.28 S., R.56 W., Las Animas County, Hydrologic Unit 11020010, on Pinon Canyon Maneuver Site 0.8 mi south of Military Supply Road 1A, 3.1 mi northwest of Rourke Ranch, 16 mi southwest of Higbee, and 26 mi south of La Junta.

PRECIPITATION RECORDS

PERIOD OF RECORD.--March 1999 to current year.

GAGE.--Tipping-bucket rain gage with radio telemetry and electronic data logger. Elevation of gage is 4,700 ft above sea level, from topographic map.

REMARKS.--Records good except for Nov. 1 to Dec. 13, Feb. 17-28, and estimated daily precipitation, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily precipitation, 2.05 inches, July 11, 2000.

EXTREMES FOR CURRENT YEAR.--Maximum daily precipitation, 1.18 inches, Oct. 28.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	e.00	e.00	.02	.00	.00	.00	.12	.00	.00
2	.00	.00	.00	e.00	e.00	.00	.00	.01	.00	.00	.00	.00
3	.00	.00	.00	e.00	e.00	.00	.00	.06	.00	.00	.00	.00
4	.18	.00	.00	e.00	e.00	.00	.00	.55	.00	.00	.00	.00
5	.05	.02	.01	e.00	e.00	.00	.00	.46	.00	.00	.00	.00
6	.03	.00	.07	e.00	e.00	.00	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	e.00	e.00	.01	.00	.00	.01	.00	.00	.20
8	.00	.00	.00	e.00	e.00	.01	.00	.00	.00	.00	.00	.00
9	.00	.00	.00	e.00	e.06	.00	.00	.00	.11	.00	.00	.00
10	.00	.00	.00	e.00	e.02	.02	.01	.00	.00	.00	.19	.00
11	.00	.00	.00	e.00	e.00	.06	.53	.00	.00	.01	.01	.00
12	.00	.00	.00	e.00	e.00	.01	.00	.00	.00	e.07	.00	.00
13	.00	.00	.00	e.03	e.01	.00	.00	.00	.00	e.04	.01	.00
14	.00	.00	e.00	e.00	e.00	.00	.00	.00	.00	e.27	.13	.00
15	.00	.00	e.00	e.00	e.00	.00	.00	.00	.00	e.00	.01	.03
16	.00	.00	e.00	e.00	e.00	.00	.00	.33	.00	e.00	.19	.01
17	.00	.00	e.00	e.05	.00	.00	.00	.48	.00	.00	.00	.02
18	.00	.00	e.00	e.02	.00	.00	.00	.00	.00	.00	.00	.01
19	.00	.00	e.00	e.00	.00	.00	.00	.06	.00	.00	.00	.00
20	.00	.00	e.00	e.00	.00	.00	e.00	.17	.02	.00	.00	.00
21	.00	.00	e.00	e.00	.00	.00	e.00	.04	.07	.00	.00	.00
22	.28	.00	e.00	e.00	.00	.00	e.01	.00	.00	.00	.00	.00
23	.29	.00	e.00	e.00	.00	.01	e.00	.00	.00	.11	.00	.00
24	.20	.00	e.00	e.00	.02	.01	e.00	.00	.00	.00	.00	.00
25	.00	.00	e.00	e.00	.00	.03	e.00	.00	.00	.02	.13	.00
26	.00	.00	e.00	e.00	.00	.12	e.00	.00	.00	.14	.00	.00
27	.00	.00	e.12	e.00	.00	.00	e.00	.00	.00	.00	.00	.00
28	1.18	.00	e.00	e.01	.01	.00	.00	.08	.00	.00	.53	.00
29	.15	.00	e.00	e.00	---	.12	.00	.11	.01	.00	.00	.00
30	.00	.00	e.00	e.01	---	.00	.00	.00	.00	.09	.00	.00
31	.00	---	e.00	e.00	---	.00	---	.00	---	.01	.00	---
TOTAL	2.36	0.02	0.20	0.12	0.12	0.42	0.55	2.35	0.22	0.88	1.20	0.27
MAX	1.18	.02	.12	.05	.06	.12	.53	.55	.11	.27	.53	.20

WTR YR 2001 TOTAL 8.71 MAX 1.18

e Estimated.

## ARKANSAS RIVER BASIN

## PRECIPITATION DATA AT SITES ON PINON CANYON MANEUVER SITE--Continued

372329104020501 ROUTE TWO WINDMILL METEOROLOGICAL STATION NEAR TYRONE, CO

LOCATION.--Lat 37°23'29", long 104°02'05", in NW<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec.32, T.30 S., R.59 W., Las Animas County, Hydrologic Unit 11020010, on Pinon Canyon Maneuver Site 0.3 mi south of Military Supply Road 2, 4.6 mi east of Brown Sheep Camp, 10 mi southeast of Tyrone, and 30 mi northeast of Trinidad.

## PRECIPITATION RECORDS

PERIOD OF RECORD.--March 1999 to current year.

GAGE.--Tipping-bucket rain gage with radio telemetry and electronic data logger. Elevation of gage is 5,255 ft above sea level, from topographic map.

REMARKS.--Records good except for Nov. 1 to Feb. 28, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily precipitation, 1.44 inches, July 31, 1999.

EXTREMES FOR CURRENT YEAR.--Maximum daily precipitation, 0.82 inch, Oct. 28.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	.00	.03	.00	.00
2	.00	.00	.00	.00	.00	.00	.00	.01	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	.00	.00	.03	.00	.25	.00	.00
4	.02	.00	.00	.00	.00	.00	.00	.34	.00	.00	.00	.00
5	.01	.00	.00	.00	.00	.00	.00	.33	.00	.00	.14	.00
6	.03	.00	.02	.00	.00	.00	.02	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	.10	.00	.00	.07	.00	.00	.14
8	.00	.00	.00	.00	.00	.14	.00	.00	.00	.00	.01	.00
9	.00	.00	.00	.00	.06	.00	.00	.00	.00	.00	.01	.00
10	.00	.00	.00	.00	.00	.01	.01	.00	.00	.00	.09	.00
11	.00	.00	.00	.00	.00	.21	.08	.00	.00	.00	.00	.00
12	.00	.00	.01	.00	.00	.00	.00	.00	.00	.39	.00	.00
13	.00	.00	.00	.03	.00	.00	.00	.00	.00	.21	.03	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.11	.05	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.26
16	.00	.00	.00	.00	.00	.00	.00	.01	.00	.00	.13	.00
17	.00	.00	.00	.03	.00	.00	.00	.14	.00	.00	.00	.07
18	.00	.00	.00	.00	.00	.02	.00	.00	.00	.00	.00	.00
19	.00	.00	.00	.01	.00	.00	.00	.18	.00	.00	.00	.00
20	.00	.00	.00	.00	.00	.00	.00	.13	.27	.00	.00	.00
21	.00	.00	.00	.00	.00	.00	.00	.01	.20	.00	.00	.00
22	.23	.00	.00	.00	.00	.02	.01	.00	.00	.00	.06	.00
23	.36	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
24	.21	.00	.00	.00	.00	.00	.00	.00	.00	.01	.00	.00
25	.00	.00	.00	.00	.00	.02	.00	.00	.00	.00	.09	.00
26	.00	.00	.00	.00	.00	.01	.00	.00	.00	.01	.00	.00
27	.00	.00	.14	.00	.00	.01	.00	.00	.00	.00	.00	.00
28	.82	.00	.00	.04	.09	.01	.00	.37	.00	.00	.18	.00
29	.51	.00	.00	.01	---	.01	.01	.00	.01	.00	.00	.00
30	.00	.00	.00	.00	---	.00	.00	.08	.14	.03	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.07	.00	---
TOTAL	2.19	0.00	0.17	0.12	0.15	0.56	0.13	1.63	0.69	1.11	0.79	0.47
MAX	.82	.00	.14	.04	.09	.21	.08	.37	.27	.39	.18	.26

WTR YR 2001 TOTAL 8.01 MAX .82

PRECIPITATION DATA AT SITES ON PINON CANYON MANEUVER SITE--Continued

373823103465601 UPPER BENT CANYON METEOROLOGICAL STATION NEAR DELHI, CO

LOCATION.--Lat 37°38'20", long 103°46'55", in SW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec.3, T.28 S., R.57 W., Las Animas County, Hydrologic Unit 11020010, on Pinon Canyon Manuever Site approximately 80 ft north of Military Supply Road 1A, 1.2 mi above Stage Canyon, 6.7 mi west of Rourke Road, 12.9 mi east of Delhi, and 27 mi south of La Junta.

PRECIPITATION RECORDS

PERIOD OF RECORD.--October 1993 to September 1998, published as Bent Canyon Rain Gage above Stage Canyon near Delhi. October 1998, March 1999 to current year. Site was part of a hydrologic study 1983-92, data published elsewhere.

GAGE.--Tipping-bucket rain gage with radio telemetry and electronic data logger. Elevation of gage is 4,860 ft above sea level, from topographic map.

REMARKS.--Records good except for Nov. 1 to Feb. 29, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily precipitation, 2.55 inches, May 3, 1987.

EXTREMES FOR CURRENT YEAR.--Maximum daily precipitation, 1.49 inches, Aug. 10.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.01	.00	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	.00	.00	.07	.00	.00	.00	.00
4	.06	.00	.00	.00	.00	.00	.00	.65	.00	.00	.00	.00
5	.05	.08	.01	.00	.00	.00	.00	.57	.00	.00	.00	.00
6	.03	.00	.08	.00	.00	.00	.00	.00	.00	.00	.00	.00
7	.01	.00	.00	.00	.00	.01	.00	.00	.10	.00	.00	.21
8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	.05	.00	.00	.00	.18	.00	.00	.00
10	.00	.00	.00	.00	.04	.02	.01	.00	.00	.00	1.49	.00
11	.00	.00	.00	.00	.00	.11	.47	.00	.00	.05	.01	.00
12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.05	.00	.00	.00	.00	.00	.06	.00	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.29	.07	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.03	.00	.10
16	.00	.00	.00	.00	.00	.00	.00	.46	.00	.00	.00	.03
17	.00	.00	.00	.00	.00	.00	.00	.40	.00	.00	.00	.04
18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.00	.00	.30	.00	.00	.00	.00
20	.00	.00	.00	.01	.00	.00	.02	.05	.05	.00	.00	.00
21	.00	.00	.00	.00	.00	.00	.00	.05	.12	.00	.00	.00
22	.03	.00	.00	.00	.00	.01	.00	.00	.00	.00	.00	.00
23	.18	.00	.00	.00	.00	.01	.00	.00	.00	.06	.00	.00
24	.17	.00	.00	.00	.02	.00	.00	.00	.00	.01	.00	.00
25	.00	.00	.00	.00	.00	.02	.00	.00	.00	.00	.13	.00
26	.00	.00	.00	.00	.00	.15	.00	.00	.00	.02	.00	.00
27	.00	.00	.08	.00	.00	.00	.00	.00	.00	.00	.00	.00
28	1.03	.00	.00	.03	.01	.00	.00	.00	.02	.00	.22	.00
29	.17	.00	.00	.00	---	.09	.00	.22	.02	.00	.00	.00
30	.00	.00	.00	.00	---	.00	.00	.00	.00	.06	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.03	.00	---
TOTAL	1.73	0.08	0.17	0.09	0.12	0.43	0.50	2.77	0.49	0.61	1.92	0.38
MAX	1.03	.08	.08	.05	.05	.15	.47	.65	.18	.29	1.49	.21

WTR YR 2001 TOTAL 9.29 MAX 1.49

ARKANSAS RIVER BASIN

PRECIPITATION DATA AT SITES ON PINON CANYON MANEUVER SITE--Continued

373315103493101 UPPER RED ROCK CANYON METEOROLOGICAL STATION NEAR HOUGHTON, CO

LOCATION.--Lat 37°33'12", long 103°49'30", in NE<sup>1</sup>/<sub>4</sub> NE<sup>1</sup>/<sub>4</sub> sec.6, T.29 S., R.57 W., Las Animas County, Hydrologic Unit 11020010, on Pinon Canyon Maneuver Site approximately 100 ft west of unnumbered Military Supply Road, 0.4 mi south of Military Supply Road 1, 12.2 mi southeast of Houghton, and 33 mi southwest of La Junta.

PRECIPITATION RECORDS

PERIOD OF RECORD.--October 1992 to September 1998, published as Red Rock Canyon Rain Gage at Red Rock Road. October 1998, March 1999 to current year. Site was part of a hydrologic study 1983-92, data published elsewhere.

GAGE.--Tipping-bucket rain gage with radio telemetry and electronic data logger. Elevation of gage is 4,860 ft above sea level, from topographic map.

REMARKS.--Records good except for Nov. 1 to Feb. 28 and estimated daily precipitation, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily precipitation, 2.75 inches, July 1, 1993.

EXTREMES FOR CURRENT YEAR.--Maximum daily precipitation, 1.20 inches, May 20.

PRECIPITATION, TOTAL, INCHES, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
2	.00	.00	.00	.00	.00	.00	.00	.01	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	.00	.00	.06	.00	.00	.00	.00
4	.97	.00	.00	.00	.00	.00	.00	.49	.00	.00	.00	.00
5	.01	.07	.00	.00	.00	.00	.00	.49	.00	.00	.00	.00
6	e.03	.01	.05	.00	.00	.00	.00	.00	.00	.00	.00	.00
7	e.01	.00	.00	.00	.00	.03	.00	.00	.14	.00	.00	.12
8	.00	.00	.00	.00	.00	.03	.00	.00	.00	.01	.00	.00
9	.00	.00	.00	.00	.06	.00	.00	.00	.02	.00	.00	.00
10	.00	.00	.00	.00	.01	.01	.02	.06	.00	.01	.38	.00
11	.00	.00	.00	.00	.00	.11	.63	.04	.00	.00	.00	.00
12	.00	.00	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00
13	.00	.00	.00	.01	.01	.00	.00	.00	.00	.01	.01	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.47	.01	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.06
16	.00	.00	.00	.00	.00	.00	.00	.04	.00	.00	.22	.02
17	.00	.00	.00	.10	.00	.00	.00	.58	.00	.00	.00	.02
18	.00	.00	.00	.03	.00	.00	.00	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.00	.00	.12	.00	.00	.00	.00
20	.00	.00	.00	.00	.00	.00	.00	1.20	.05	.00	.00	.00
21	.00	.00	.00	.00	.00	.00	.00	.01	.08	.88	.00	.03
22	.00	.00	.00	.00	.00	.02	.00	.00	.00	.17	.00	.00
23	.22	.00	.00	.00	.00	.01	.00	.00	.00	.06	.00	.00
24	.27	.00	.00	.00	.04	.00	.00	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	.00	.04	.00	.00	.36	.00	.03	.00
26	.00	.00	.00	.00	.00	.12	.00	.00	.00	.00	.00	.00
27	.00	.00	.15	.00	.00	.01	.00	.00	.00	.00	.00	.00
28	1.12	.00	.00	.00	.05	.00	.02	.12	.00	.00	.24	.00
29	.29	.00	.00	.00	---	.04	.00	.01	.24	.00	.00	.00
30	.00	.00	.00	.01	---	.00	.00	.02	.00	.26	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.34	.00	---
TOTAL	2.92	0.08	0.22	0.15	0.17	0.42	0.67	3.25	0.89	2.20	0.89	0.25
MAX	1.12	.07	.15	.10	.06	.12	.63	1.20	.36	.88	.38	.12

WTR YR 2001 TOTAL 12.11 MAX 1.20

e Estimated.

SUPPLEMENTAL WATER-QUALITY DATA FOR GAGING STATIONS

MISCELLANEOUS STATION ANALYSES, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

06614800 MICHIGAN RIVER NEAR CAMERON PASS, CO (LAT 40 29 46N LONG 105 51 52W)

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 03...	1545	2.2	60	5.5	MAY 16...	1410	6.2	38	.5
NOV 07...	1355	.56	63	4.0	JUN 20...	1736	9.2	36	6.0
JAN 11...	1440	.29	59	1.0	JUL 12...	1048	3.4	43	10.5
MAR 14...	1315	.25	55	1.0	AUG 02...	1205	1.2	49	9.5
APR 18...	1211	.39	57	1.5	SEP 20...	0935	2.0	60	3.5

06693800 MOSQUITO CREEK NEAR ALMA, CO (LAT 39 16 12N LONG 106 03 02W)

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 10...	1145	9.4	244	5.8	MAY 10...	0835	19	235	1.3
NOV 09...	1300	8.2	271	.1	15...	1030	72	134	3.1
JAN 05...	1415	3.5	313	.1	29...	1120	78	123	4.8
MAR 01...	1445	3.8	318	.1	JUN 20...	0915	59	121	5.5
APR 20...	1415	5.9	258	.3	JUL 10...	1055	86	112	8.7
					AUG 03...	1150	25	184	12.9
					SEP 04...	1115	12	237	9.6

06701970 SPRING CREEK ABOVE MOUTH NEAR SOUTH PLATTE, CO (LAT 39 23 37N LONG 105 11 01W)

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 10...	1130	1.3	218	12.0	JUL 18...	1030	.70	218	20.0
MAR 30...	1030	.99	202	7.5	AUG 02...	1030	.74	219	19.5
APR 30...	1310	.90	204	11.5	30...	1120	.65	216	18.5
JUN 22...	1010	.94	206	19.0					

06706400 NORTH FORK SOUTH PLATTE RIVER ABOVE ELK CREEK AT PINE, CO (LAT 39 24 27N LONG 105 19 07W)

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 03...	1340	59	194	12.5	JUN 11...	1530	665	197	12.5
APR 03...	1145	205	261	5.5	SEP 12...	1330	256	218	10.5
MAY 21...	1435	211	78	9.0					

## SUPPLEMENTAL WATER-QUALITY DATA FOR GAGING STATIONS

MISCELLANEOUS STATION ANALYSES, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001--Continued

06706800 BUFFALO CREEK AT MOUTH AT BUFFALO CREEK, CO (LAT 39 23 27N LONG 105 16 15W)									
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 10...	1410	4.0	154	13.0	JUL 18...	1305	2.2	173	22.0
MAR 29...	1250	4.4	142	6.5	AUG 02...	1330	5.0	130	22.0
MAY 02...	1515	7.7	110	7.0	30...	1350	3.1	152	17.5
JUN 22...	1255	5.3	124	21.5					
06708800 EAST PLUM CREEK BELOW HASKINS GULCH NEAR CASTLE ROCK, CO (LAT 39 25 28N LONG 104 54 27W)									
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 05...	1315	5.4	456	11.5	APR 13...	1055	17	357	9.1
NOV 09...	1145	7.4	250	8.7	MAY 24...	1125	25	259	17.9
DEC 15...	1110	6.2	455	.1	JUN 19...	1034	6.8	382	20.4
JAN 10...	1105	8.3	426	.3	JUL 17...	1037	4.0	442	20.0
FEB 22...	1040	6.4	425	6.5	AUG 23...	1030	1.9	524	20.1
MAR 22...	1040	7.1	412	11.7	SEP 05...	1030	.96	538	21.0
06709000 PLUM CREEK NEAR SEDALIA, CO (LAT 39 26 18N LONG 104 58 57W)									
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 05...	1058	12	434	11.0	APR 13...	1305	35	374	14.3
NOV 14...	1425	22	454	4.1	MAY 24...	1310	62	64	20.7
DEC 15...	1305	21	428	.1	JUN 19...	1227	16	359	24.4
JAN 10...	1307	20	460	6.4	JUL 13...	1145	6.5	486	27.0
FEB 22...	1305	20	455	11.2	AUG 23...	1155	4.0	551	23.4
MAR 22...	1303	18	447	16.7	SEP 05...	1152	2.1	558	24.2

SUPPLEMENTAL WATER-QUALITY DATA FOR GAGING STATIONS

MISCELLANEOUS STATION ANALYSES, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001--Continued

06709530 PLUM CREEK AT TITAN RD NEAR LOUVIERS, CO (LAT 39 30 27N LONG 105 01 23W)

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 05...	1505	8.6	456	11.5	APR 13...	1558	35	402	13.8
NOV 21...	1637	17	446	1.3	MAY 24...	1515	60	258	19.9
DEC 19...	1058	7.2	483	.1	JUN 19...	1423	12	368	19.9
JAN 10...	1605	18	436	.4	JUN 29...	1150	3.3	397	22.0
FEB 22...	1500	16	448	4.9	JUL 06...	1040	.42	430	23.5
MAR 22...	1515	16	451	11.6	JUL 13...	1007	1.1	439	21.7
					JUL 17...	1232	4.2	439	20.6
					JUL 27...	0804	.54	463	19.8

06710247 SOUTH PLATTE RIVER BELOW UNION AVE, AT ENGLEWOOD, CO (LAT 39 37 58N LONG 105 00 54W)

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 17...	0940	27	855	9.5	MAY 15...	1312	162	479	17.0
NOV 14...	0945	26	925	1.5	JUN 01...	1130	214	460	18.0
DEC 11...	1305	10	934	1.0	JUL 17...	1450	61	597	24.0
JAN 24...	1350	73	608	6.5	AUG 30...	1455	58	505	22.5
MAR 02...	1625	85	563	10.0	SEP 14...	1057	67	585	18.5
MAR 19...	1230	64	594	10.5					
APR 09...	1223	41	770	14.0					

06710385 BEAR CREEK ABOVE EVERGREEN, CO (LAT 39 37 58N LONG 105 19 59W)

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 18...	1136	16	65	4.8	MAY 22...	1028	50	63	6.3
NOV 27...	1240	12	71	.2	JUN 11...	1435	40	51	15.2
JAN 18...	1130	6.8	78	.00	JUL 30...	1450	32	53	18.9
MAR 22...	1023	16	86	.6	AUG 23...	1330	41	58	14.3
APR 02...	1650	14	68	6.8	SEP 25...	1425	22	55	12.1
APR 30...	1027	45	64	5.7					

## SUPPLEMENTAL WATER-QUALITY DATA FOR GAGING STATIONS

MISCELLANEOUS STATION ANALYSES, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001--Continued

06710605 BEAR CREEK ABOVE BEAR CREEK LAKE NEAR MORRISON, CO (LAT 39 39 08N LONG 105 10 23W)									
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 18...	1005	9.2	220	6.0	MAY 22...	1415	50	173	12.8
JAN 18...	1347	14	375	.0	JUN 11...	1600	20	152	18.3
MAR 12...	1510	5.3	423	5.5	AUG 23...	1116	28	146	15.0
MAR 22...	1233	7.6	319	8.8	SEP 25...	1025	5.5	200	12.0
APR 30...	1210	41	197	10.3					
06710995 TURKEY CREEK AT MOUTH OF CANYON, NEAR MORRISON, CO (LAT 39 37 13N LONG 105 11 41W)									
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 18...	1410	.04	678	7.1	NOV 15...	1025	.04	796	.2
06712000 CHERRY CREEK NEAR FRANKTOWN, CO (LAT 39 21 21N LONG 104 45 46W)									
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 02...	1135	5.5	230	13.0	APR 27...	1206	14	238	13.5
NOV 02...	1505	7.9	227	5.5	MAY 23...	1400	18	252	18.0
DEC 14...	1205	7.8	245	.5	JUN 27...	1125	2.9	224	21.0
JAN 22...	1309	8.2	228	.5	AUG 31...	1040	1.7	197	15.0
FEB 21...	1132	13	204	2.0	SEP 27...	1445	2.0	213	18.5
MAR 20...	1058	14	225	4.5					
393109104464500 CHERRY CREEK NEAR PARKER, CO (LAT 39 31 09N LONG 104 46 45W)									
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 02...	1352	5.6	712	20.0	APR 27...	1431	19	479	17.5
NOV 21...	1427	14	550	6.5	MAY 23...	1530	23	432	21.0
DEC 14...	1426	6.2	519	5.5	JUN 27...	1400	3.3	540	18.0
JAN 22...	1443	10	625	8.0	AUG 24...	1128	2.0	527	16.5
FEB 21...	1344	19	425	8.0	SEP 27...	1225	1.6	565	16.5
MAR 20...	1312	17	480	9.5					

SUPPLEMENTAL WATER-QUALITY DATA FOR GAGING STATIONS

MISCELLANEOUS STATION ANALYSES, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001--Continued

06713000 CHERRY CREEK BELOW CHERRY CREEK LAKE, CO (LAT 39 39 12N LONG 104 51 41W)									
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 02...	1536	18	759	16.0	MAR 23...	1023	19	860	7.5
NOV 17...	0955	20	782	2.0	APR 25...	1030	50	857	11.0
DEC 15...	1105	15	855	3.0	JUL 16...	1527	17	771	25.0
JAN 19...	1125	20	883	4.0	AUG 24...	1343	3.3	776	24.0
FEB 22...	1258	35	896	4.0	SEP 27...	1015	.09	844	16.0

06713300 CHERRY CREEK AT GLENDALE, CO (LAT 39 42 22N LONG 104 56 13W)									
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 06...	1133	26	979	10.5	APR 12...	1600	116	626	11.5
NOV 17...	1154	24	1000	4.0	25...	1319	62	933	15.5
DEC 13...	1328	26	1070	2.5	JUL 02...	1015	11	1280	21.0
JAN 19...	1315	25	1130	4.5	AUG 24...	1310	17	1110	24.0
FEB 21...	1543	22	1110	8.5	SEP 27...	1140	8.9	1380	18.0
MAR 23...	1135	25	1060	12.5					

06714215 SOUTH PLATTE RIVER AT 64TH AVE. COMMERCE CITY, CO (LAT 39 48 44N LONG 104 57 28W)									
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 13...	1140	7.6	1730	16.0	APR 18...	1010	65	1150	12.4
NOV 14...	1615	7.5	2080	10.1	JUN 04...	1200	126	861	14.9
JAN 10...	1315	17	1540	7.0	JUL 10...	0930	217	1620	13.0
FEB 16...	1150	242	1280	2.1	AUG 20...	1110	23	998	22.1
MAR 05...	1015	82	947	7.3	SEP 18...	1210	8.0	1890	15.5

06714800 LEAVENWORTH CREEK AT MOUTH NEAR GEORGETOWN, CO (LAT 39 41 14N LONG 105 41 59W)									
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 10...	1155	4.7	122	3.0	JUN 07...	0955	51	52	5.0
NOV 13...	1020	4.4	140	.00	JUL 05...	1235	31	62	9.5
APR 16...	1205	2.3	146	2.0	AUG 13...	1140	19	86	8.5
26...	1200	4.2	132	3.0	SEP 05...	1235	13	89	7.0
MAY 25...	1010	31	65	2.5					

## SUPPLEMENTAL WATER-QUALITY DATA FOR GAGING STATIONS

MISCELLANEOUS STATION ANALYSES, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001--Continued

394308105413800 CLEAR CREEK ABOVE GEORGETOWN LAKE NEAR GEORGETOWN, CO (LAT 39 43 08N LONG 105 41 38W)

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 10...	1320	32	162	6.0	MAY 25...	0905	183	104	3.0
NOV 21...	0925	24	171	.5	JUL 31...	0845	111	110	10.5
MAR 08...	1045	16	185	1.5	SEP 05...	1050	64	128	8.5
APR 19...	1020	35	348	4.5					

394359105411900 CLEAR CREEK BELOW GEORGETOWN LAKE NEAR GEORGETOWN, CO (LAT 39 43 59N LONG 105 41 19W)

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 10...	1015	30	166	1.5	APR 19...	1125	49	275	3.5
NOV 21...	1100	23	185	2.0	MAY 29...	0845	234	104	5.5
DEC 15...	1040	20	177	1.5	JUN 26...	1035	220	104	10.0
JAN 08...	1200	15	176	3.0	JUL 31...	1000	103	110	13.0
FEB 23...	1015	16	181	1.0	SEP 19...	1050	59	138	9.5
MAR 08...	1205	19	186	4.5					

06715000 CLEAR CREEK ABOVE WEST FORK CLEAR CREEK NEAR EMPIRE, CO (LAT 39 45 07N LONG 105 39 41W)

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 11...	1140	40	170	3.5	MAY 25...	0745	198	119	7.0
NOV 20...	1235	26	235	.00	JUL 05...	0930	186	136	12.5
MAR 08...	0930	18	201	2.5	AUG 13...	0940	93	130	12.5
APR 16...	1050	19	278	3.5	SEP 05...	0840	58	140	11.5

06716100 WEST FORK CLEAR CREEK ABOVE MOUTH NEAR EMPIRE, CO (LAT 39 45 32N LONG 105 39 34W)

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 11...	1320	30	295	2.0	APR 16...	1315	18	414	6.0
NOV 13...	1125	30	248	.00	MAY 29...	1100	334	123	6.0
DEC 15...	1310	29	354	.00	JUL 31...	1100	87	130	12.0
JAN 08...	1315	9.6	369	.00	AUG 27...	1040	46	225	9.5
FEB 23...	1200	19	402	2.0	SEP 25...	0910	32	267	6.5
MAR 08...	1310	17	413	2.0					

SUPPLEMENTAL WATER-QUALITY DATA FOR GAGING STATIONS

MISCELLANEOUS STATION ANALYSES, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001--Continued

06716500 CLEAR CREEK NEAR LAWSON, CO (LAT 39 45 57N LONG 105 37 32W)

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 11...	1025	73	223	3.0	APR 19...	1245	67	315	7.5
NOV 20...	1110	50	273	.00	JUN 01...	1130	494	110	7.5
DEC 15...	1210	39	264	.00	JUL 09...	0900	384	102	11.0
JAN 08...	1040	23	286	.00	AUG 27...	0840	116	177	10.5
FEB 05...	1135	34	300	.5	SEP 19...	0820	105	193	7.0
MAR 13...	1040	32	298	1.0					

06717400 CHICAGO CREEK BELOW DEVILS CANYON NEAR IDAHO SPRINGS, CO (LAT 39 42 58N LONG 105 34 15W)

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 13...	1155	1.3	94	2.5	JUN 07...	1150	30	53	10.0
NOV 13...	1300	.30	93	.00	JUL 12...	1035	32	73	11.5
APR 17...	1310	9.3	89	1.5	AUG 24...	0900	21	60	9.0
MAY 25...	1245	35	50	7.5	SEP 17...	0905	14	83	7.5

06718300 CLEAR CREEK ABOVE JOHNSON GULCH NEAR IDAHO SPRINGS, CO (LAT 39 44 47N LONG 105 26 08W)

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 13...	1015	106	220	5.0	APR 17...	0955	56	340	4.0
JAN 10...	1130	68	372	.00	JUN 01...	1020	575	104	7.5
FEB 22...	1235	49	309	1.5	AUG 27...	1150	160	166	12.5
MAR 07...	1210	37	319	3.0	SEP 25...	1040	141	180	8.5

06718550 NORTH CLEAR CREEK ABOVE MOUTH NEAR BLACKHAWK, CO (LAT 39 44 56N LONG 105 23 57W)

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 05...	1250	5.1	631	3.0	APR 17...	1135	8.7	532	6.0
NOV 13...	1415	3.6	195	.00	MAY 25...	1410	50	140	9.0
DEC 15...	1400	2.4	678	.00	JUN 07...	1335	48	133	14.5
JAN 08...	1425	3.0	652	.5	JUL 09...	1100	18	227	15.0
FEB 23...	1315	3.2	722	.5	AUG 24...	1035	10	411	14.0
MAR 07...	1330	3.5	703	8.0	SEP 17...	1205	4.8	525	11.5

## SUPPLEMENTAL WATER-QUALITY DATA FOR GAGING STATIONS

MISCELLANEOUS STATION ANALYSES, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001--Continued

06719505 CLEAR CREEK AT GOLDEN, CO (LAT 39 45 11N LONG 105 14 05W)

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 06...	1250	139	241	5.5	MAY 01...	0925	201	328	9.0
DEC 04...	1050	68	344	.00	JUN 12...	0820	677	101	9.5
JAN 04...	1045	63	340	.00	JUL 12...	0850	423	200	12.0
FEB 02...	1400	60	237	.00	AUG 10...	1110	167	168	14.0
FEB 22...	1020	44	352	1.0	SEP 06...	0950	131	207	13.0
APR 05...	1050	73	355	7.5					

06720820 BIG DRY CREEK AT WESTMINSTER, CO (LAT 39 54 20N LONG 105 02 04W)

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 27...	1130	2.2	1540	9.5	MAY 31...	1120	10	1010	17.5
NOV 24...	1050	6.4	1450	1.5	JUN 26...	1121	15	547	18.5
JAN 04...	1056	1.6	2020	2.5	JUL 26...	0930	3.0	1510	19.5
FEB 23...	1105	3.0	1900	2.5	AUG 31...	1030	47	344	16.5
MAR 23...	1237	2.6	1720	11.5	SEP 28...	1320	2.9	1460	18.5
APR 20...	0804	2.6	1690	11.0					

06720990 BIG DRY CREEK AT MOUTH NEAR FORT LUPTON, CO (LAT 40 04 09N LONG 104 49 52W)

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 10...	0815	62	1180	10.0	APR 24...	1045	70	1030	10.8
NOV 14...	1126	34	1380	2.0	MAY 15...	1045	29	1210	15.8
DEC 04...	1030	30	1350	2.2	JUN 27...	1010	38	748	20.6
JAN 02...	0910	29	1350	.0	JUL 25...	1405	45	1040	25.0
FEB 06...	1303	49	1400	7.5	AUG 31...	0845	52	1030	18.5
MAR 08...	0926	23	1490	7.3	SEP 28...	1038	23	1140	17.1

SUPPLEMENTAL WATER-QUALITY DATA FOR GAGING STATIONS

MISCELLANEOUS STATION ANALYSES, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001--Continued

06725450 ST. VRAIN CREEK BELOW LONGMONT, CO (LAT 40 09 29N LONG 105 00 53W)

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 12...	1134	54	1320	14.0	MAY 21...	1050	122	918	11.2
DEC 14...	1050	34	1370	.5	JUN 06...	1045	132	810	10.0
JAN 09...	1105	45	1370	.4	JUL 10...	1125	173	1300	20.0
MAR 01...	1100	41	1460	7.1	AUG 01...	0850	151	1270	20.5
APR 18...	1250	43	1460	12.3	SEP 04...	0935	86	1030	13.0

06730200 BOULDER CREEK AT NORTH 75TH STREET NEAR BOULDER, CO (LAT 40 03 06N LONG 105 10 42W)

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 12...	1050	52	830	7.5	MAY 01...	1130	73	708	16.5
NOV 01...	1235	52	623	13.0	MAY 21...	1320	--	622	15.5
DEC 14...	1355	43	668	8.5	JUN 06...	1415	193	520	14.0
JAN 09...	1415	39	714	8.0	JUL 02...	1210	207	850	19.5
JAN 12...	1015	68	718	14.0	AUG 02...	0940	225	452	12.5
FEB 13...	1005	38	772	11.5	SEP 04...	1105	157	440	21.5
MAR 06...	1450	33	724	15.0					

06730400 COAL CREEK NEAR LOUISVILLE, CO (LAT 39 58 34N LONG 105 07 00W)

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 12...	1320	2.7	1060	9.5	MAY 01...	1345	2.6	1020	11.0
NOV 01...	1405	2.5	1120	11.5	MAY 21...	1230	5.8	636	12.5
DEC 14...	1200	1.4	1130	2.5	JUN 06...	1210	6.8	670	11.5
JAN 09...	1240	1.2	1180	2.0	JUN 14...	0950	23	282	10.0
FEB 13...	1110	1.4	1250	2.0	JUL 02...	0955	3.6	2800	21.0
MAR 06...	1235	.51	1230	10.0	AUG 02...	1200	3.2	672	21.0
APR 12...	1215	4.8	1010	9.0	SEP 04...	1310	2.6	960	18.5

## SUPPLEMENTAL WATER-QUALITY DATA FOR GAGING STATIONS

MISCELLANEOUS STATION ANALYSES, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001--Continued

06730500 BOULDER CREEK AT MOUTH, NEAR LONGMONT, CO (LAT 40 09 08N LONG 105 00 52W)

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 12...	1012	29	748	12.0	MAY 21...	0925	110	522	10.5
DEC 14...	0955	83	668	.00	JUN 06...	0915	65	420	9.0
JAN 09...	1000	59	702	.5	JUL 10...	1240	34	1060	19.0
MAR 01...	1020	51	766	4.0	AUG 01...	1005	11	910	21.0
APR 06...	1015	48	818	7.3	SEP 04...	0835	8.4	1040	18.3
APR 18...	1145	46	1720	11.6					

06746095 JOE WRIGHT CREEK ABOVE JOE WRIGHT RESERVOIR, CO (LAT 40 32 24N LONG 105 52 56W)

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 03...	1356	7.6	53	7.5	APR 19...	0924	1.4	90	.00
NOV 08...	1020	.55	69	.00	JUN 20...	1530	24	43	11.5
JAN 12...	0955	.97	67	.00	JUL 11...	1515	16	47	13.0
MAR 14...	1648	.74	80	.00	AUG 02...	1505	6.2	55	11.5

06746110 JOE WRIGHT CREEK BELOW JOE WRIGHT RESERVOIR, CO (LAT 40 33 43N LONG 105 52 09W)

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 03...	1235	3.0	41	7.0	MAY 17...	1602	11	49	2.0
NOV 08...	1217	2.6	44	1.0	JUN 20...	1400	32	42	6.5
JAN 12...	1235	2.1	53	1.5	JUL 11...	1345	13	42	8.0
MAR 15...	0945	2.7	53	1.5	AUG 01...	1522	2.4	40	8.5
APR 19...	0957	3.2	61	2.5	SEP 20...	1200	61	47	9.5

06751150 NORTH FORK CACHE LA POUDE RIVER BELOW HALLIGAN RESERVOIR NEAR VIRGINIA DALE, CO (LAT 40 52 42N LONG 105 20 15W)

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 11...	1445	4.9	146	10.0	JUN 18...	1420	88	92	14.5
NOV 20...	1325	3.2	156	4.0	JUL 11...	0904	88	104	18.0
MAR 07...	1550	92	159	4.0	AUG 27...	1440	69	90	18.0
APR 25...	1650	64	131	7.5	SEP 24...	1100	56	124	15.0

SUPPLEMENTAL WATER-QUALITY DATA FOR GAGING STATIONS

MISCELLANEOUS STATION ANALYSES, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001--Continued

06751490 NORTH FORK CACHE LA POUFRE R. AT LIVERMORE, CO (LAT 40 47 15N LONG 105 15 06W)

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 11...	1330	9.3	343	11.0	JUN 18...	1628	19	346	20.5
NOV 21...	1330	8.7	365	.5	JUL 10...	1450	11	407	25.5
MAR 07...	1327	6.5	382	9.5	AUG 27...	1302	5.1	450	22.0
APR 04...	1048	9.7	332	10.0	SEP 24...	0945	3.7	479	11.0

07079195 EAST FORK ARKANSAS RIVER AT HIGHWAY 91 NEAR LEADVILLE, CO (LAT 39 17 09N LONG 106 16 45W)

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 04...	0915	16	181	5.4	MAY 02...	1515	41	179	3.6
NOV 01...	1200	13	182	2.4	NOV 24...	1245	123	118	6.1
DEC 06...	1515	11	190	.00	JUN 06...	1425	155	109	9.7
JAN 03...	1205	8.1	201	.00	JUL 05...	1750	62	128	13.3
FEB 07...	1610	7.7	196	.1	AUG 01...	1350	37	148	12.2
MAR 07...	1215	6.1	201	1.3	SEP 05...	1525	21	169	11.2
APR 04...	1735	9.9	190	5.6					

07079300 EAST FORK ARKANSAS RIVER AT US HWY 24, NEAR LEADVILLE, CO (LAT 39 16 21N LONG 106 18 21W)

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 04...	1015	19	270	6.2	MAY 02...	1600	44	236	4.5
NOV 01...	1235	16	284	4.2	NOV 24...	1330	139	145	7.5
DEC 06...	1630	15	291	1.1	JUN 06...	1315	186	129	8.6
JAN 03...	1430	10	339	2.6	JUL 05...	1840	70	159	13.2
FEB 07...	1710	8.9	364	2.4	AUG 01...	1430	44	177	14.0
MAR 07...	1330	9.0	380	4.7	SEP 05...	1615	24	242	12.3
APR 04...	1840	11	300	8.0					

## SUPPLEMENTAL WATER-QUALITY DATA FOR GAGING STATIONS

MISCELLANEOUS STATION ANALYSES, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001--Continued

## 07081200 ARKANSAS RIVER NEAR LEADVILLE, CO (LAT 39 15 26N LONG 106 20 35W)

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 04...	1110	29	216	7.3	APR 05...	0830	19	200	1.2
NOV 01...	1005	27	223	1.4	MAY 03...	0850	73	148	.2
DEC 07...	0910	16	246	.7	JUN 06...	1600	289	125	9.9
JAN 03...	1600	17	280	.6	JUN 27...	1500	201	99	14.6
FEB 08...	1540	16	260	.8	AUG 02...	1440	56	157	15.7
MAR 07...	1545	15	258	2.1	SEP 05...	1725	35	202	12.8

## 07087050 ARKANSAS RIVER BELOW GRANITE, CO (LAT 38 59 42N LONG 106 13 11W)

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 03...	1330	270	131	12.0	JUN 06...	1030	1560	80	10.0
APR 04...	1530	153	155	8.0	JUN 27...	1730	1150	84	14.8
MAY 08...	1745	287	153	12.0	AUG 02...	1015	694	109	15.6
MAY 24...	1020	1290	92	7.9	SEP 06...	1120	210	155	12.1

## 07091200 ARKANSAS RIVER NEAR NATHROP, CO (LAT 38 39 08N LONG 106 03 02W)

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 03...	1000	365	167	11.3	JUN 07...	1500	1570	95	13.8
MAR 14...	1800	267	157	3.1	JUN 27...	1230	1750	88	14.9
APR 04...	1230	270	173	7.7	JUL 19...	1145	745	120	15.7
APR 13...	1400	233	164	6.0	AUG 21...	1600	469	165	17.0
MAY 02...	0950	509	144	10.0	SEP 06...	1230	342	177	13.1
MAY 23...	1800	1280	102	12.3					

## 07093775 BADGER CREEK, LOWER STATION, NEAR HOWARD, CO (LAT 38 28 02N LONG 105 51 34W)

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 09...	1000	3.8	1110	4.2	JUN 12...	1700	6.6	1020	19.4
MAR 14...	1400	4.6	1130	10.1	JUL 06...	1120	4.8	1080	21.5
APR 17...	1500	8.5	994	19.5	AUG 03...	1500	3.6	1030	27.5
MAY 31...	1130	11	950	17.8	AUG 29...	1500	5.0	1100	18.8

SUPPLEMENTAL WATER-QUALITY DATA FOR GAGING STATIONS

MISCELLANEOUS STATION ANALYSES, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001--Continued

07094500 ARKANSAS RIVER AT PARKDALE, CO (LAT 38 29 14N LONG 105 22 23W )

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 02...	1700	328	288	16.0	JUN 13...	1230	2050	135	13.9
MAR 13...	1620	361	251	8.5	JUN 25...	1400	1650	139	17.7
APR 03...	1330	345	292	13.4	JUL 30...	1120	792	217	20.2
APR 25...	1630	316	287	15.5	AUG 27...	1215	486	277	19.2
MAY 23...	1315	1620	169	13.8					

07096250 FOURMILE CREEK BELOW CRIPPLE CREEK NEAR VICTOR, CO (LAT 38 39 52N LONG 105 13 37W )

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 20...	1025	5.9	448	6.5	APR 19...	1055	21	366	11.0
DEC 05...	1210	4.8	410	.5	MAY 15...	0925	26	358	11.5
JAN 04...	1110	4.8	466	.2	JUN 07...	1050	14	370	18.0
FEB 13...	1125	5.5	406	.1	JUL 24...	1025	22	361	18.5
MAR 09...	1020	10	402	3.5					

07099050 BEAVER CREEK ABOVE UPPER BEAVER CEMETERY NEAR PENROSE, CO (LAT 38 33 42N LONG 105 01 17W)

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 11...	0955	11	89	8.0	MAY 09...	0950	46	88	8.5
MAR 06...	0925	6.9	104	3.0	MAY 22...	0955	75	106	9.0
APR 04...	1055	31	90	6.1	JUL 26...	0945	36	83	16.8

07099060 BEAVER CREEK ABOVE HIGHWAY 115 NEAR PENROSE, CO (LAT 38 29 21N LONG 104 59 49W)

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 24...	0910	14	167	10.0	JUN 08...	0910	12	97	15.2
MAR 06...	1135	.02	260	10.0	AUG 06...	0920	16	197	18.2
MAY 22...	1205	26	205	11.2					

## SUPPLEMENTAL WATER-QUALITY DATA FOR GAGING STATIONS

MISCELLANEOUS STATION ANALYSES, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001--Continued

## 07099215 TURKEY CREEK NEAR FOUNTAIN, CO (LAT 38 36 42N LONG 104 53 39W)

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)
APR 03...	1340	.30	301	12.5	JUN 02...	1105	.36	363	16.0
MAY 10...	1025	.83	237	11.0					

## 07099230 TURKEY CREEK ABOVE TELLER RESERVOIR NEAR STONE CITY, CO (LAT 38 27 54N LONG 104 49 33W)

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)
MAR 21...	1125	.24	1160	13.5	MAY 16...	1035	.14	1260	16.0
APR 10...	1145	.20	1260	11.0					

## 07099235 TURKEY CREEK NEAR STONE CITY, CO (LAT 38 26 22N LONG 104 49 34W)

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 12...	1335	.24	1230	15.0	MAR 15...	1210	.14	1340	8.5
DEC 04...	1420	.24	1280	5.0	APR 10...	1335	.15	1310	14.0

## 07099990 FOUNTAIN CREEK AT GREEN MOUNTAIN FALLS, CO (LAT 38 56 20N LONG 105 00 55W)

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)
MAR 28...	1500	1.8	483	6.0	JUL 23...	1025	1.1	654	14.0
APR 17...	1330	2.9	382	11.5	AUG 02...	1130	1.6	575	17.5
MAY 08...	1525	4.4	330	13.5	17...	1240	1.5	568	15.5
22...	1315	3.0	377	12.5	SEP 06...	1355	.93	669	17.0
JUN 26...	1400	1.1	576	18.5					

SUPPLEMENTAL WATER-QUALITY DATA FOR GAGING STATIONS

MISCELLANEOUS STATION ANALYSES, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001--Continued

07103785 DEADMANS CR ABV DEADMANS LAKE AT USAF ACADEMY, CO (LAT 39 01 27N LONG 104 54 03W )

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 25...	1430	.12	127	8.3	JUN 20...	1100	.11	113	11.3
DEC 06...	1210	.16	113	.2	JUL 17...	1105	.06	125	13.3
JAN 26...	1050	.14	117	.1	AUG 13...	1235	.02	117	15.9
MAR 01...	1210	.11	103	1.3	SEP 14...	1310	.01	168	12.9
APR 18...	1515	.52	87	8.5	17...	1505	.13	92	9.7
MAY 31...	1120	.30	95	11.1					

07103790 MONUMENT CR BEL SEWAGE TR PLANT AT USAF ACADEMY, CO (LAT 38 58 53N LONGITUDE 104 49 50W )

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 03...	1105	5.8	388	13.2	JUN 19...	1405	9.1	319	24.1
13...	0940	5.4	350	7.1	JUL 17...	1355	9.4	369	21.7
DEC 05...	1345	15	409	.9	AUG 15...	1405	6.3	372	21.8
APR 19...	1155	37	292	12.7	SEP 14...	1400	5.3	389	20.1
MAY 18...	1415	44	210	20.9					

07103797 WEST MONUMENT CREEK BELOW RAMPART RESERVOIR, CO (LAT 38 58 30N LONG 104 57 18W)

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 03...	1550	3.9	70	12.6	APR 06...	1030	1.8	86	4.3
12...	0820	3.4	72	10.2	17...	1150	4.5	73	5.4
NOV 14...	1300	3.1	72	6.0	MAY 22...	1100	6.4	68	6.2
DEC 05...	1130	4.7	65	3.8	JUN 11...	1400	12	63	6.5
JAN 11...	1400	4.5	66	2.8	21...	1215	10	64	6.7
FEB 13...	1100	4.2	66	3.1	JUL 18...	1145	4.4	70	7.9
MAR 20...	1330	4.9	68	3.7	AUG 14...	1240	3.8	62	8.8
					SEP 12...	1245	3.1	64	11.4

## SUPPLEMENTAL WATER-QUALITY DATA FOR GAGING STATIONS

MISCELLANEOUS STATION ANALYSES, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001--Continued

07103800 WEST MONUMENT CREEK AT AIR FORCE ACADEMY, CO (LAT 38 58 14N LONG 104 54 08W)

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 03...	0920	1.7	92	10.1	MAY 31...	1330	1.1	94	11.0
NOV 03...	0910	6.8	83	4.1	JUN 20...	1200	.56	104	12.1
DEC 05...	1150	.53	90	.5	JUL 17...	1220	4.3	74	10.4
JAN 24...	1425	2.6	73	.8	AUG 13...	1150	.62	99	14.1
MAR 02...	1125	.69	93	.5	SEP 17...	1310	.38	100	11.8
APR 19...	1330	1.1	92	7.6					

07103930 WEST MONUMENT CR AT MOUTH AT USAF ACADEMY, CO (LAT 38 57 32N LONG 104 50 08W)

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 03...	1055	1.8	199	11.6	MAY 29...	1410	2.0	168	12.5
NOV 02...	1325	1.3	189	6.6	JUN 26...	1250	.08	215	17.9
DEC 05...	1300	1.5	155	1.2	JUL 19...	1050	2.4	175	14.7
JAN 24...	1325	1.4	146	.8	AUG 06...	1340	4.8	124	17.1
MAR 02...	1220	1.1	188	4.0	SEP 15...	1450	.87	188	18.3
APR 19...	1450	1.7	185	14.2	SEP 14...	1510	1.3	155	18.2

07103940 MONUMENT CR AT SOUTH BOUNDARY USAF ACADEMY, CO (LAT 38 57 15N LONG 104 50 00W)

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 02...	1635	7.7	311	18.8	JUN 20...	1350	12	317	21.2
DEC 05...	1020	9.0	359	.3	JUL 10...	1320	15	373	26.6
JAN 24...	1235	11	342	.3	JUL 27...	1330	15	305	24.7
MAR 01...	1500	17	309	6.1	AUG 17...	1325	8.9	346	23.5
MAY 01...	1215	25	259	16.9	SEP 17...	1415	7.7	334	19.2
29...	1250	18	290	16.4					

MISCELLANEOUS STATION ANALYSES, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001--Continued

07103960 KETTLE CREEK ABOVE USAF ACADEMY, CO (LAT 38 58 34N LONG 104 47 55W)

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					JUN				
03...	1325	.28	565	19.5	06...	1135	1.1	420	23.0
NOV					08...	1040	5.0	296	16.8
14...	1350	.47	577	.2	13...	1220	1.3	372	21.4
30...	1325	.63	467	.3	19...	1045	.99	414	17.3
MAR					JUL				
30...	1330	2.1	394	11.2	11...	1335	.64	411	28.1
APR					19...	1345	.39	388	20.5
18...	1155	1.2	416	13.7	31...	1357	.16	492	27.7
MAY					AUG				
03...	1250	1.2	440	6.6	14...	1505	1.5	226	21.0
21...	1145	3.1	340	13.7	SEP				
					12...	1100	.33	497	15.3
					25...	1105	.30	515	14.6

07104000 MONUMENT CREEK AT PIKEVIEW, CO (LAT 38 55 04N LONG 104 49 05W)

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					MAY				
14...	1505	46	438	.5	03...	1445	53	375	7.0
DEC					18...	1225	80	307	18.5
18...	1420	26	528	.00	23...	1220	53	337	18.0
FEB					JUN				
01...	1250	26	738	.00	06...	1355	26	432	26.0
16...	1030	12	647	.00	22...	1400	21	481	26.0
22...	1330	21	501	8.5	JUL				
MAR					03...	1425	15	518	25.5
14...	1200	23	499	10.5	19...	1225	24	501	20.5
22...	1445	20	478	11.0	AUG				
APR					01...	1505	21	583	24.0
12...	1500	88	395	13.0	10...	1445	24	542	22.5
					SEP				
					07...	1255	55	362	17.5

07105000 BEAR CREEK NEAR COLORADO SPRINGS, CO (LAT 38 49 21N LONG 104 53 17W)

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					JUN				
01...	1315	1.5	90	5.8	05...	1355	1.4	95	11.7
DEC					JUL				
05...	1325	1.4	86	1.9	11...	1345	.89	102	15.0
JAN					AUG				
04...	1500	1.2	86	1.4	07...	1415	.90	103	17.1
APR					SEP				
09...	1150	1.7	95	4.8	06...	1412	.86	108	15.0
MAY									
09...	1430	2.6	91	8.6					

## SUPPLEMENTAL WATER-QUALITY DATA FOR GAGING STATIONS

MISCELLANEOUS STATION ANALYSES, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001--Continued

## 07105490 CHEYENNE CREEK AT EVANS AVE AT COLORADO SPRINGS, CO (LAT 38 47 26N LONG 104 51 49W)

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 01...	1440	2.8	101	6.9	JUN 05...	1145	2.3	120	11.8
DEC 05...	1450	.88	124	3.8	JUL 12...	1540	.54	130	16.9
JAN 04...	1230	.73	163	3.1	AUG 07...	1645	.57	125	19.6
APR 06...	1255	2.8	99	6.3	SEP 06...	1535	.70	135	17.5
MAY 09...	1205	2.8	139	11.6					

## 07105900 JIMMY CAMP CREEK AT FOUNTAIN, CO (LAT 38 41 04N LONG 104 41 17W)

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)
DEC 06...	1300	2.0	2880	10.0	JUN 04...	1420	2.7	2860	21.5
19...	1420	1.8	2840	9.5	13...	1250	2.2	2590	18.5
JAN 10...	1025	2.0	2860	6.0	25...	1120	1.7	2910	20.5
MAR 09...	1245	2.0	2920	16.5	JUL 10...	1105	1.3	2910	21.0
APR 03...	1230	2.0	2900	18.0	AUG 01...	1200	2.7	2190	23.0
MAY 01...	1310	2.2	2790	22.0	24...	1325	2.8	2070	23.0
					SEP 10...	1200	1.8	2580	17.0

## 07105945 ROCK CREEK ABOVE FORT CARSON RESERVATION, CO (LAT 38 42 26N LONG 104 50 47W)

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 10...	1255	.29	197	7.5	APR 16...	1055	.78	171	5.5
DEC 08...	1025	.27	187	1.0	MAY 10...	1105	2.1	166	9.5
FEB 16...	1020	.30	167	.00	31...	0955	1.5	157	10.5
MAR 13...	1110	.35	180	2.0	AUG 06...	1135	.46	198	18.5

## 07107900 GREENHORN CREEK NEAR RYE, CO (LAT 37 55 14N LONG 104 57 21W)

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 12...	1140	2.1	95	8.0	MAY 24...	1310	7.4	96	9.0
DEC 08...	1155	1.5	89	1.0	JUL 05...	1140	1.6	83	17.0
FEB 15...	0950	1.1	79	.00	AUG 10...	0940	6.4	67	12.0
APR 10...	1100	1.8	76	4.5	SEP 17...	1005	1.2	81	11.5

SUPPLEMENTAL WATER-QUALITY DATA FOR GAGING STATIONS

MISCELLANEOUS STATION ANALYSES, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001--Continued

07108100 GRANEROS CREEK NEAR RYE, CO (LAT 37 54 47N LONG 104 55 31W)

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 12...	1345	.07	261	14.0	APR 10...	1140	.40	212	9.2
DEC 22...	1155	.22	243	4.2	MAY 24...	1145	1.2	204	11.5
FEB 15...	1125	.25	286	3.7					
FEB 23...	1450	.27	278	5.8					

07108900 ST. CHARLES RIVER AT VINELAND, CO (LAT 38 14 44N LONG 104 29 09W)

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 04...	0925	7.5	2390	15.0	MAY 07...	1055	17	2050	14.8
NOV 08...	1210	10	2050	9.0	JUN 06...	1020	12	1950	20.3
DEC 06...	1520	9.8	2310	6.6	JUL 05...	0905	7.4	2200	20.5
JAN 10...	1540	9.5	2340	6.0	JUL 17...	1315	22	1910	23.7
FEB 06...	1045	10	2220	4.1	AUG 06...	1330	58	1070	21.0
MAR 06...	1440	8.6	2230	14.0	SEP 07...	1230	9.2	2290	18.2
MAR 22...	1150	7.2	2390	14.3	SEP 20...	0845	12	2010	14.0
APR 03...	1505	6.6	2340	21.2					

07119500 APISHAPA RIVER NEAR FOWLER, CO (LAT 38 05 28N LONG 103 58 52W)

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 03...	1315	5.2	2780	17.5	APR 03...	1130	8.7	1540	14.5
NOV 07...	1245	14	1750	8.3	MAY 01...	1220	3.9	2540	18.5
DEC 05...	1330	4.2	2910	7.9	JUN 05...	1325	18	1250	21.4
JAN 09...	1020	3.2	2970	3.3	JUL 03...	1510	6.1	2120	25.5
FEB 05...	1130	3.6	3020	6.8	AUG 02...	1220	3.9	2840	22.8
MAR 06...	1010	2.7	3000	9.8	SEP 06...	1315	13	1630	23.0

## SUPPLEMENTAL WATER-QUALITY DATA FOR GAGING STATIONS

MISCELLANEOUS STATION ANALYSES, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001--Continued

## 07121500 TIMPAS CREEK AT MOUTH NEAR SWINK, CO (LAT 38 00 11N LONG 103 39 20W)

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 03...	1045	38	2250	15.8	APR 05...	1115	31	2030	13.7
NOV 07...	1035	114	1570	5.8	MAY 08...	1055	112	1430	15.3
NOV 14...	1045	147	1670	2.0	JUN 05...	1540	96	1350	23.3
DEC 05...	1120	21	2990	7.3	JUL 03...	1210	49	1900	23.0
JAN 09...	1220	16	3010	6.3	AUG 07...	1050	50	1910	21.5
FEB 05...	1330	16	3040	10.2	SEP 06...	0955	44	2260	16.5
MAR 06...	1335	19	2760	14.6					

## 07124200 PURGATOIRE RIVER AT MADRID, CO (LAT 37 07 46N LONG 104 38 20W)

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 03...	1245	11	575	19.2	JUN 04...	1420	151	267	19.5
DEC 14...	1420	31	691	.4	DEC 14...	1900	100	297	18.7
FEB 13...	1530	32	607	.6	JUL 09...	1705	65	335	24.5
MAR 21...	1020	20	650	10.1	AUG 06...	1215	39	360	24.0
APR 23...	1250	30	515	14.2	SEP 11...	1000	24	452	13.3
MAY 24...	1200	114	276	17.0					

## 07124410 PURGATOIRE RIVER BELOW TRINIDAD LAKE, CO (LAT 37 08 37N LONG 104 32 49W)

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 03...	1500	70	484	16.1	JUN 04...	1620	197	530	13.2
DEC 14...	1215	.78	507	4.3	JUL 09...	1905	213	471	17.5
FEB 13...	1315	.02	581	8.3	AUG 06...	1530	72	470	19.8
APR 23...	1620	16	545	9.4	SEP 11...	1250	191	426	17.4
MAY 24...	1030	224	538	12.1					

## 07126140 VAN BREMER ARROYO NEAR TYRONE, CO (LAT 37 23 58N LONG 104 06 55W)

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)
APR 13...	1145	.01	15500	10.5	--	--	--	--	--

MISCELLANEOUS STATION ANALYSES, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001--Continued

07126300 PURGATOIRE RIVER NEAR THATCHER, CO. AT 37 21 30N LONG 103 53 44W)

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 31...	1240	65	2110	11.4	JUN 05...	1210	10	3100	22.5
DEC 13...	1435	40	3400	.3	JUL 11...	1605	6.8	2090	29.4
FEB 14...	1425	35	3250	4.5	AUG 08...	1000	6.5	2650	23.8
APR 12...	1130	13	3270	10.7	SEP 06...	1245	2.9	2310	23.4

07133000 ARKANSAS RIVER AT LAMAR, CO (LAT 38 06 21N LONG 102 37 05W)

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 05...	1015	357	1160	15.0	MAY 23...	1800	28	3450	22.0
NOV 14...	1530	28	3510	12.0	JUN 22...	1015	450	2460	18.5
DEC 12...	1315	45	3790	1.5	JUL 11...	1005	527	2430	23.0
JAN 18...	1310	36	3980	1.0	AUG 21...	1900	18	3360	25.0
MAR 01...	1540	33	4100	14.5	SEP 20...	1415	243	2300	22.5
APR 18...	1910	10	3870	20.0					
27...	1250	22	3270	20.5					

07134100 BIG SANDY CREEK NEAR LAMAR, CO (LAT 38 06 51N LONG 102 29 00W)

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 04...	1835	14	1840	17.0	MAY 23...	1620	26	4230	22.5
NOV 15...	0955	16	4060	5.5	JUN 19...	1900	8.6	4140	21.5
DEC 13...	1105	48	4340	1.0	JUL 25...	1140	19	3820	23.5
FEB 20...	1440	40	4130	6.5	AUG 22...	1045	11	3830	21.5
MAR 21...	1050	35	4210	12.0	SEP 20...	1020	11	3820	16.5
APR 18...	1115	26	4290	11.0					

## SUPPLEMENTAL WATER-QUALITY DATA FOR GAGING STATIONS

MISCELLANEOUS STATION ANALYSES, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001--Continued

07134180 ARKANSAS RIVER NEAR GRANADA, CO (LAT 38 05 44N LONG 102 18 37W)

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 05...	1345	334	1240	14.5	APR 18...	1300	60	4170	16.0
NOV 15...	1230	45	3950	9.5	MAY 23...	1450	222	3240	22.0
DEC 13...	1325	145	4000	3.0	JUN 20...	1900	322	2650	22.0
JAN 02...	1410	127	4020	5.5	JUL 11...	1400	542	2550	28.0
FEB 28...	1625	123	4000	3.5	AUG 22...	1220	122	3630	25.0
MAR 21...	1255	109	4090	16.0	SEP 19...	1820	220	2570	23.5

07134990 WILD HORSE CREEK ABOVE HOLLY, CO (LAT 38 03 24N LONG 102 08 16W)

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 10...	1550	58	3360	13.5	JUN 20...	1615	14	3400	23.0
NOV 15...	1425	87	4020	7.5	JUL 24...	1730	22	3300	27.0
MAR 27...	1645	11	3800	7.5	AUG 22...	1450	7.2	3790	24.0
APR 18...	1520	14	3980	17.5	SEP 19...	1620	25	3390	21.5
MAY 23...	1205	29	3170	19.5					

BIG THOMPSON PROJECT

The primary objective of this sampling program is to establish a baseline water-quality network. The sites in this program make up a large portion of the Colorado/Big Thompson Water Diversion project and constitute a cooperative effort between the USGS, The Big Thompson Watershed Forum, North Front Range Water Quality Planning Association, US Bureau of Reclamation, State Engineer, water managers, and Colorado State University.

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<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> 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 2000 TO SEPTEMBER 2001

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)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L) (00625)	PHOS-PHORUS TOTAL (MG/L) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L) (00671)
OCT												
04...	0845	98	43	8.4	11.0	7.5	<.005	<.002	.21	.010	<.006	.001
25...	0830	469	35	7.9	8.5	7.9	<.005	<.002	.15	.009	<.006	<.007
NOV												
08...	1115	207	39	7.0	6.0	8.0	.035	<.002	.24	.015	E.003	<.007
DEC												
12...	0945	553	46	7.7	3.5	8.7	.027	<.002	.18	.008	<.006	<.007
JAN												
09...	0900	533	49	7.8	1.0	11.4	.022	.003	.17	.008	<.006	E.004
FEB												
13...	0845	527	51	8.0	1.5	8.7	.030	.006	<.08	.009	E.003	<.007
MAR												
13...	0845	502	53	7.5	2.5	11.3	.024	<.002	.19	.011	<.006	<.007
APR												
17...	0910	16	48	7.3	4.5	10.7	<.005	.003	.24	.009	<.006	<.007
MAY												
04...	1245	14	45	8.1	5.5	11.6	.037	.005	.20	.006	<.006	<.007
22...	0830	461	37	7.7	6.0	11.1	.028	<.002	.19	.008	<.006	<.007
JUN												
12...	0840	400	25	7.7	10.5	9.3	.024	.003	.11	.007	<.006	<.007
26...	0930	546	34	7.5	16.0	8.1	<.005	.005	.21	.009	E.005	<.007
JUL												
17...	0850	504	40	7.5	17.0	7.7	.005	<.002	.22	.012	<.006	<.007
31...	0845	555	45	8.1	18.0	7.5	.006	.004	.24	.008	<.006	<.007
AUG												
14...	0835	408	44	7.6	16.5	7.4	.008	.006	.18	.008	<.006	<.007
SEP												
11...	0850	540	47	7.1	13.0	7.6	.014	.027	.33	.038	.010	E.005

E Estimated laboratory analysis value.

DATE	TUR-BID-ITY (NTU) (00076)	UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624)	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)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	ALKA-LINITY WAT DIS TOT FET (MG/L AS CACO3) (00421)	BICAR-BONATE WAT.DIS FET LAB HCO3 (29805)	CAR-BONATE WAT.DIS FET LAB CO3 (29808)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)
OCT													
04...	<.2	.091	16	5.00	.970	1.5	<10.0	<1.0	18	22	<5.0	40	3.0
25...	<.2	.063	15	4.50	.880	1.3	<10.0	<1.0	15	18	<5.0	32	4.0
NOV													
08...	<.2	.093	15	4.60	.870	2.2	<10.0	<1.0	12	15	<5.0	46	3.0
DEC													
12...	.4	.070	20	5.90	1.20	1.8	<10.0	<1.0	21	25	<5.0	40	3.0
JAN													
09...	.4	.071	21	6.40	1.20	1.9	<10.0	<1.0	21	25	<5.0	22	4.0
FEB													
13...	.2	.073	21	6.60	1.20	1.9	3.0	1.6	28	34	<5.0	32	3.0
MAR													
13...	.3	.068	23	7.00	1.30	2.3	2.0	<.5	22	27	<5.0	36	3.0
APR													
17...	.2	.068	18	5.40	1.00	1.9	2.0	.5	24	29	<5.0	38	3.0
MAY													
04...	.4	.073	19	5.90	1.10	2.0	2.1	<.5	22	27	<5.0	12	2.0
22...	.6	--	14	4.20	.860	1.4	3.1	<.5	16	19	<5.0	18	4.0
JUN													
12...	.4	--	10	2.90	.560	1.0	2.5	<.5	8	10	<5.0	60	3.0
26...	1.0	--	14	4.20	.840	1.3	2.2	<.5	13	16	<5.0	40	3.0
JUL													
17...	1.5	--	17	5.10	1.00	1.3	2.2	<.5	18	22	<5.0	50	3.0
31...	1.5	--	19	5.80	1.10	1.9	2.7	<.5	22	27	<5.0	44	3.0
AUG													
14...	1.0	--	18	5.50	1.00	1.7	2.6	<.5	22	27	<3.0	46	3.2
SEP													
11...	1.0	--	20	6.20	1.10	2.0	2.7	<.5	24	24	<3.0	48	2.7

## GRAND LAKE OUTLET BASIN

## BIG THOMPSON PROJECT--Continued

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

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	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)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)
OCT								
04...	<1.0	<1.0	<10	<1.00	<5.0	<.10	<5.00	.1
25...	<1.0	<1.0	<10	<1.00	<5.0	<.10	<5.00	<.1
NOV								
08...	<1.0	<1.0	10	<1.00	<5.0	<.10	<5.00	<.1
DEC								
12...	<1.0	<1.0	10	<1.00	<5.0	<.10	<5.00	<.1
JAN								
09...	<1.0	<1.0	10	<1.00	<5.0	.20	<5.00	<.1
FEB								
13...	<1.0	<1.0	20	<1.00	<5.0	<.10	<5.00	<.1
MAR								
13...	<1.0	<1.0	<50	<1.00	<5.0	<.10	<5.00	<.1
APR								
17...	<1.0	<1.0	<40	<1.00	<5.0	<.10	<5.00	<.1
MAY								
04...	<1.0	3.0	<40	<1.00	<5.0	<.10	<5.00	<.1
22...	<1.0	<1.0	<100	<1.00	<5.0	<.10	<5.00	<.1
JUN								
12...	<5.0	<2.0	<100	<1.00	<5.0	<.10	<5.00	<.1
26...	<5.0	<2.0	<100	<1.00	<5.0	<.10	<5.00	<.1
JUL								
17...	<5.0	<2.0	<100	<1.00	<5.0	<.10	<5.00	<.1
31...	<5.0	<2.0	<100	<1.00	<5.0	<.10	<5.00	<.1
AUG								
14...	<5.0	<2.0	<100	<1.00	<3.0	<.10	<3.00	<.1
SEP								
11...	<5.0	<2.0	<100	<1.00	<3.0	<.10	<3.00	<.1

DATE	BENZENE TOTAL (UG/L) (34030)	ETHYL- BENZENE TOTAL (UG/L) (34371)	META/ PARA- XYLENE WATER UNFLTRD REC (UG/L) (85795)	O- XYLENE WATER WHOLE TOTAL (UG/L) (77135)	TOLUENE TOTAL (UG/L) (34010)
OCT					
04...	<.40	<.40	<.40	<.40	<.40
25...	<.40	<.40	<.40	<.40	<.40
NOV					
08...	<.40	<.40	<.40	<.40	<.40
DEC					
12...	<.40	<.40	<.40	<.40	<.40
JAN					
09...	<.40	<.40	<.40	<.40	<.40
FEB					
13...	<.40	<.40	<.40	<.40	<.40
MAR					
13...	<.40	<.40	<.40	<.40	<.40
APR					
17...	<.40	<.40	<.40	<.40	<.40
MAY					
04...	<.40	<.40	<.40	<.40	<.40
22...	<.40	<.40	<.40	<.40	<.40
JUN					
12...	<.40	<.40	.50	<.40	.70
26...	<.40	<.40	<.40	<.40	.40
JUL					
17...	<.40	<.40	<.40	<.40	<.40
31...	--	--	--	--	--
AUG					
14...	<.40	--	<.40	<.40	<.40
SEP					
11...	<.40	--	<.40	<.40	<.40

BIG THOMPSON PROJECT--Continued

06734900 OLYMPUS TUNNEL AT LAKE ESTES, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 40°22'30", long 105°29'13", in SE<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec.29, T.5 N., R.72 W., Larimer County, Hydrologic Unit 10190006, at tunnel entrance at south end of Olympus Dam on Lake Estes, 1.9 mi east of Estes Park.

PERIOD OF RECORD.--September 1970 to present.

REMARKS.--Field data collected prior to 1974 water year available in district office. Records of discharge are estimated values.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

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 (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	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)
OCT 25...	1345	227	39	7.7	8.5	8.5	.026	.012	.22	.018	<.006	<.007
NOV 07...	1250	7.6	40	7.8	4.0	9.8	.040	.004	.22	.017	.007	<.007
DEC 13...	0920	547	43	7.9	2.0	11.3	.046	.008	.20	.012	E.005	<.007
JAN 09...	1400	540	50	7.0	2.0	11.3	.025	.016	.19	.010	E.004	E.006
FEB 12...	1345	492	50	7.5	1.0	10.4	.031	.016	E.07	.013	E.005	<.007
MAR 12...	1400	446	57	7.9	2.5	11.1	.029	.005	.15	.013	E.004	<.007
APR 16...	1345	24	55	7.5	5.0	10.8	<.005	.002	<.08	<.004	<.006	<.007
MAY 01...	0940	52	49	8.3	8.5	8.9	.009	.004	.48	.030	.006	<.007
MAY 21...	1405	549	30	7.9	7.5	12.4	.059	.003	.23	.014	E.004	<.007
JUN 12...	1025	551	23	7.6	12.0	10.5	.058	.007	.14	.012	E.005	<.007
JUN 25...	1400	7.6	29	7.7	14.5	10.0	.029	.014	.25	.015	E.003	<.007
JUL 17...	1000	407	37	7.2	16.5	9.1	.027	.008	.20	.013	E.003	<.007
JUL 30...	1350	510	42	7.4	17.5	6.4	.024	.046	.28	.013	E.004	<.007
AUG 13...	1345	503	38	7.6	16.5	7.2	.052	.033	.29	.018	E.003	<.007
SEP 10...	1335	504	44	8.2	13.0	8.7	.014	.005	.23	.018	<.006	<.007

E Estimated laboratory analysis value.

DATE	TUR-BID-ITY (NTU) (00076)	UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624)	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)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	ALKA-LINITY WAT DIS TOT LAB (MG/L AS CACO3) (00421)	BICAR-BONATE WAT.DIS LAB (HCO3) (29805)	CAR-BONATE WAT.DIS LAB (CO3) (29808)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)
OCT 25...	<.2	.059	15	4.40	.960	1.4	<10.0	<1.0	15	18	<5.0	26	3.0
NOV 07...	<.2	.077	16	4.70	1.00	2.0	<10.0	<1.0	17	21	<5.0	46	3.0
DEC 13...	<.2	.076	19	5.60	1.10	1.9	<10.0	<1.0	21	25	<5.0	44	3.0
JAN 09...	.4	.070	21	6.40	1.20	2.0	<10.0	<1.0	20	24	<5.0	22	3.0
FEB 12...	.3	.073	21	6.50	1.20	2.0	2.0	<.5	24	29	<5.0	44	3.0
MAR 12...	.5	.070	23	7.00	1.30	2.4	2.0	<.5	26	31	<5.0	42	3.0
APR 16...	<.2	.069	19	5.60	1.20	2.4	2.0	1.4	24	29	<5.0	42	3.0
MAY 01...	2.5	.123	18	5.20	1.20	2.8	3.0	2.0	20	24	<5.0	44	4.0
MAY 21...	1.5	--	11	3.20	.770	1.4	1.9	.6	10	12	<5.0	26	5.0
JUN 12...	.8	--	8	2.40	.530	1.0	2.4	<.5	5	6.0	<5.0	48	3.0
JUN 25...	1.0	--	12	3.50	.740	1.3	2.0	<.5	11	13	<5.0	28	3.0
JUL 17...	1.5	--	15	4.40	.890	1.2	2.0	<.5	16	19	<5.0	46	3.0
JUL 30...	1.5	--	16	4.90	.960	1.9	2.5	.8	14	17	<5.0	40	3.0
AUG 13...	1.0	--	15	4.60	.900	1.7	2.4	.7	14	17	<3.0	36	3.2
SEP 10...	1.5	--	20	6.00	1.10	1.9	3.8	1.3	24	29	<3.0	44	2.5

## PLATTE RIVER BASIN

## BIG THOMPSON PROJECT--Continued

06734900 OLYMPUS TUNNEL AT LAKE ESTES, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	ARSENIC	COPPER,	IRON,	LEAD,	MANGA-	MERCURY	NICKEL,	SILVER,
	DIS- SOLVED (UG/L AS AS) (01000)	DIS- SOLVED (UG/L AS CU) (01040)	DIS- SOLVED (UG/L AS FE) (01046)	DIS- SOLVED (UG/L AS PB) (01049)	NESE, DIS- SOLVED (UG/L AS MN) (01056)	DIS- SOLVED (UG/L AS HG) (71890)	DIS- SOLVED (UG/L AS NI) (01065)	DIS- SOLVED (UG/L AS AG) (01075)
OCT								
25...	<1.0	<1.0	30	<1.00	<5.0	<.10	<5.00	<.1
NOV								
07...	<1.0	<1.0	40	<1.00	<5.0	<.10	<5.00	<.1
DEC								
13...	<1.0	<1.0	20	<1.00	<5.0	<.10	<5.00	<.1
JAN								
09...	<1.0	<1.0	10	<1.00	<5.0	<.10	<5.00	<.1
FEB								
12...	<1.0	<1.0	20	<1.00	<5.0	<.10	<5.00	<.1
MAR								
12...	<1.0	<1.0	<50	<1.00	<5.0	<.10	<5.00	<.1
APR								
16...	<1.0	<1.0	<70	<1.00	<5.0	<.10	<5.00	<.1
MAY								
01...	<1.0	<1.0	140	<1.00	6.0	<.10	<5.00	<.1
21...	<1.0	<1.0	<100	<1.00	6.0	<.10	<5.00	<.1
JUN								
12...	<5.0	<2.0	<100	<1.00	<5.0	<.10	<5.00	<.1
25...	<5.0	<2.0	<100	<1.00	<5.0	<.10	<5.00	<.1
JUL								
17...	<5.0	<2.0	<100	<1.00	<5.0	<.10	<5.00	<.1
30...	<5.0	<2.0	<100	<1.00	<5.0	<.10	<5.00	<.1
AUG								
13...	<5.0	<2.0	<100	<1.00	<3.0	<.10	<3.00	<.1
SEP								
10...	<5.0	<2.0	<100	<1.00	<3.0	<.10	<3.00	<.1

DATE	BENZENE	ETHYL-	META/ PARA-	O-	TOLUENE
	TOTAL (UG/L) (34030)	BENZENE TOTAL (UG/L) (34371)	XYLENE WATER UNFLTRD REC (UG/L) (85795)	XYLENE WATER WHOLE TOTAL (UG/L) (77135)	TOTAL (UG/L) (34010)
OCT					
25...	<.40	<.40	<.40	<.40	<.40
NOV					
07...	<.40	<.40	<.40	<.40	<.40
DEC					
13...	<.40	<.40	<.40	<.40	<.40
JAN					
09...	<.40	<.40	<.40	<.40	<.40
FEB					
12...	<.40	<.40	<.40	<.40	<.40
MAR					
12...	<.40	<.40	<.40	<.40	<.40
APR					
16...	<.40	<.40	<.40	<.40	<.40
MAY					
01...	<.40	<.40	<.40	<.40	<.40
21...	<.40	<.40	<.40	<.40	<.40
JUN					
12...	<.40	<.40	<.40	<.40	<.40
25...	<.40	<.40	<.40	<.40	<.40
JUL					
17...	<.40	<.40	<.40	<.40	<.40
30...	--	--	--	--	--
AUG					
13...	<.40	--	<.40	<.40	<.40
SEP					
10...	<.40	--	<.40	<.40	<.40

BIG THOMPSON PROJECT--Continued

402227105134700 HANSEN CANAL BELOW FLATIRON RESERVOIR NEAR LOVELAND, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 40°22'27", long 105°13'47", in NW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec.27, T.5 N., R.70 W., Larimer County, Hydrologic Unit 10190006, at siphon entrance at north end of Flatiron Reservoir, 10 mi southwest of Loveland.

PERIOD OF RECORD.--August 2000 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

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)	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)
OCT												
24...	1410	221	53	7.4	10.5	9.2	<.005	.002	.28	.027	E.003	<.007
NOV												
06...	1415	11	39	7.3	6.0	9.5	.010	.003	.23	.015	E.003	<.007
DEC												
11...	1330	143	40	8.3	2.0	12.2	.055	<.002	.18	.012	.007	<.007
JAN												
08...	1245	172	50	7.1	2.5	14.1	.031	.003	.19	.013	E.004	E.004
FEB												
14...	1045	182	54	7.5	1.5	11.5	.031	<.002	.19	.013	E.005	<.007
MAR												
15...	0845	482	54	7.4	2.0	13.5	.023	.002	.17	.018	E.004	<.007
APR												
19...	0910	35	59	7.4	10.5	--	<.005	<.002	.26	.017	E.003	<.007
MAY												
03...	1020	160	55	7.8	9.0	12.0	.007	.008	.30	.025	E.004	<.007
24...	1010	260	33	7.7	9.0	12.2	.061	<.002	.21	.014	E.004	<.007
JUN												
15...	0850	258	25	7.5	12.0	9.7	.056	.006	.16	.015	E.004	<.007
28...	1250	537	31	7.5	16.5	10.1	.036	.008	.22	.016	E.004	<.007
JUL												
19...	1125	529	39	7.8	18.0	7.7	.026	.010	.22	.013	E.005	<.007
AUG												
02...	1020	375	44	7.7	19.0	7.4	.030	.039	.32	.014	<.006	<.007
16...	1145	252	42	7.7	17.5	8.5	.050	.020	.22	.018	E.004	<.007
SEP												
13...	1100	741	45	8.1	16.0	9.3	.017	.007	.22	.015	E.003	<.007

E Estimated laboratory analysis value.

DATE	TUR-BID-ITY (NTU) (00076)	UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624)	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)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	ALKA-LINITY WAT DIS TOT FET LAB (MG/L AS CACO3) (00421)	BICAR-BONATE WAT.DIS FET LAB (MG/L AS HCO3) (29805)	CAR-BONATE WAT.DIS FET LAB (MG/L AS CO3) (29808)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)
OCT													
24...	<.2	.050	20	6.20	1.20	1.7	<10.0	1.0	24	29	<5.0	42	3.0
NOV													
06...	<.2	.085	16	5.00	.970	1.7	<10.0	<1.0	21	26	<5.0	48	3.0
DEC													
11...	.6	.076	18	5.30	1.10	1.8	<10.0	1.0	20	24	<5.0	38	3.0
JAN													
08...	.6	.075	20	6.20	1.20	2.0	<10.0	<1.0	22	27	<5.0	24	3.0
FEB													
14...	.4	.076	21	6.60	1.20	2.0	2.0	<.5	24	29	<5.0	44	3.0
MAR													
15...	.7	.079	23	6.90	1.30	2.2	2.0	<.5	24	29	<5.0	36	3.0
APR													
19...	2.0	.054	20	5.90	1.20	2.4	2.0	1.0	28	34	<5.0	34	3.0
MAY													
03...	2.0	.066	22	6.60	1.40	2.9	3.0	1.6	26	31	<5.0	24	3.0
24...	2.0	--	12	3.40	.810	1.5	3.3	.9	16	19	<5.0	34	5.0
JUN													
15...	2.0	--	9	2.80	.590	1.2	1.8	<.5	8	10	<5.0	46	3.0
28...	3.5	--	11	3.40	.690	1.3	1.9	<.5	10	12	<5.0	32	3.0
JUL													
19...	2.0	--	14	4.30	.860	1.5	2.0	<.5	18	22	<5.0	26	3.0
AUG													
02...	1.5	--	17	5.20	1.00	2.0	2.6	.7	16	19	<5.0	60	2.0
16...	1.5	--	18	5.50	1.00	1.9	2.5	.6	14	17	<3.0	46	2.4
SEP													
13...	1.5	--	18	5.40	1.10	2.0	2.7	<.5	26	32	<3.0	34	3.0

## PLATTE RIVER BASIN

## BIG THOMPSON PROJECT--Continued

402227105134700 HANSEN CANAL BELOW FLATIRON RESERVOIR NEAR LOVELAND, CO--Continued

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	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)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)
OCT								
24...	<1.0	<1.0	20	<1.00	<5.0	<.10	<5.00	<.1
NOV								
06...	<1.0	<1.0	20	<1.00	1.0	<.10	<5.00	<.1
DEC								
11...	<1.0	1.0	20	<1.00	<5.0	<.10	<5.00	<.1
JAN								
08...	<1.0	--	10	<1.00	--	<.10	<5.00	<.1
FEB								
14...	<1.0	<1.0	20	<1.00	<5.0	<.10	<5.00	<.1
MAR								
15...	<1.0	<1.0	<50	<1.00	<5.0	<.10	<5.00	<.1
APR								
19...	<1.0	2.0	<40	<1.00	<5.0	<.10	<5.00	<.1
MAY								
03...	<1.0	1.0	40	<1.00	<5.0	<.10	<5.00	<.1
24...	<1.0	<1.0	<100	<1.00	9.0	<.10	<5.00	<.1
JUN								
15...	<5.0	<2.0	<100	<1.00	6.0	<.10	<5.00	<.1
28...	<5.0	12.0	<100	<1.00	<5.0	<.10	<5.00	<.1
JUL								
19...	<5.0	9.0	<100	<1.00	<5.0	<.10	<5.00	<.1
AUG								
02...	<5.0	<2.0	<100	<1.00	<5.0	<.10	<5.00	<.1
16...	<5.0	3.4	<100	<1.00	<3.0	<.10	<3.00	<.1
SEP								
13...	<5.0	<2.0	<100	<1.00	<3.0	<.10	<3.00	<.1

DATE	BENZENE TOTAL (UG/L) (34030)	ETHYL- BENZENE TOTAL (UG/L) (34371)	META/ PARA- XYLENE WATER UNFLTRD REC (UG/L) (85795)	O- XYLENE WATER WHOLE TOTAL (UG/L) (77135)	TOLUENE TOTAL (UG/L) (34010)
OCT					
24...	<.40	<.40	<.40	<.40	<.40
NOV					
06...	<.40	<.40	<.40	<.40	<.40
DEC					
11...	<.40	<.40	<.40	<.40	<.40
JAN					
08...	<.40	<.40	<.40	<.40	<.40
FEB					
14...	<.40	<.40	<.40	<.40	<.40
MAR					
15...	<.40	<.40	<.40	<.40	<.40
APR					
19...	<.40	<.40	<.40	<.40	<.40
MAY					
03...	<.40	<.40	<.40	<.40	<.40
24...	<.40	<.40	<.40	<.40	<.40
JUN					
15...	<.40	<.40	<.40	<.40	<.40
28...	<.40	<.40	<.40	<.40	<.40
JUL					
19...	<.40	<.40	<.40	<.40	<.40
AUG					
02...	<.40	.50	<.40	<.40	<.40
16...	<.40	--	<.40	<.40	<.40
SEP					
13...	<.40	--	<.40	<.40	<.40

BIG THOMPSON PROJECT--Continued

402524105133300 HANSEN CANAL BELOW TRIFURCATION NEAR LOVELAND, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 40°25'24", long 105°13'33", in SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec.3, T.5 N., R.70 W., Larimer County, Hydrologic Unit 10190006, at gage 1.1 mi from Hwy 34, 8.6 mi west of Loveland.

PERIOD OF RECORD.--August 2000 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

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)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L) (00625)	PHOS-PHORUS TOTAL (MG/L) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L) (00671)
OCT												
24...	1300	12	52	7.4	10.5	8.9	.047	<.002	.10	.009	<.006	<.007
NOV												
06...	1300	15	39	7.4	5.0	10.2	.006	<.002	.21	.015	.006	<.007
DEC												
11...	1200	148	40	7.1	2.0	11.5	.053	<.002	.17	.013	.007	<.007
JAN												
08...	1110	166	50	7.4	2.5	14.5	.029	.005	.19	.012	E.004	E.004
FEB												
14...	1230	183	56	7.4	1.5	11.6	.028	.006	.21	.014	E.005	<.007
MAR												
15...	1030	510	54	7.5	4.0	14.0	<.005	<.002	<.08	<.004	<.006	<.007
APR												
19...	1030	31	59	7.8	10.0	11.7	<.005	.002	.26	.018	E.003	<.007
MAY												
03...	1200	48	56	8.3	9.0	11.4	<.005	.005	.32	.026	E.003	<.007
24...	1120	90	37	7.8	10.0	10.5	.065	.007	.27	.020	.007	<.007
JUN												
15...	1015	274	26	7.9	11.0	9.7	.064	.010	.15	.017	.007	<.007
29...	0830	487	30	7.3	15.5	8.9	.054	.008	.26	.020	.007	<.007
JUL												
19...	1310	509	39	7.6	18.5	8.2	.044	.019	.23	.016	.008	<.007
AUG												
02...	1235	84	50	7.7	19.5	8.5	.057	.044	.29	.018	.007	E.004
16...	1325	53	40	7.7	18.0	8.3	.050	.034	.25	.018	E.004	<.007
SEP												
13...	1200	514	45	8.0	14.5	8.7	.021	.006	.23	.018	E.005	<.007

E Estimated laboratory analysis value.

DATE	TUR-BID-ITY (NTU) (00076)	UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624)	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)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	ALKA-LINITY WAT DIS TOT FET LAB CACO3 (MG/L) (00421)	BICAR-BONATE WAT.DIS FET LAB HCO3 (MG/L) (29805)	CAR-BONATE WAT.DIS FET LAB CO3 (MG/L) (29808)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)
OCT													
24...	.2	.050	21	6.30	1.20	1.7	<10.0	1.0	20	24	<5.0	46	3.0
NOV													
06...	<.2	.079	16	4.90	.950	1.7	<10.0	<1.0	20	24	<5.0	40	3.0
DEC													
11...	.6	.077	18	5.30	1.10	1.8	<10.0	<1.0	20	24	<5.0	38	3.0
JAN													
08...	.5	.076	20	6.20	1.20	2.0	<10.0	<1.0	22	27	<5.0	22	3.0
FEB													
14...	.4	.075	21	6.50	1.20	2.0	2.0	<.5	24	29	<5.0	40	3.0
MAR													
15...	.8	.087	22	6.80	1.30	2.2	2.0	<.5	26	31	<5.0	38	3.0
APR													
19...	2.0	.057	20	5.90	1.20	2.4	2.0	1.1	26	31	<5.0	38	3.0
MAY													
03...	2.5	.064	22	6.60	1.40	2.9	3.0	1.6	24	29	<5.0	20	3.0
24...	1.5	--	13	3.60	.880	1.9	3.7	1.1	14	17	<5.0	36	5.0
JUN													
15...	1.5	--	10	2.80	.620	1.4	1.8	<.5	8	10	<5.0	48	3.0
29...	3.8	--	11	3.30	.690	1.4	1.8	<.5	12	15	<5.0	16	3.0
JUL													
19...	1.5	--	15	4.40	.860	1.6	2.1	.5	16	19	<5.0	22	3.0
AUG													
02...	1.5	--	17	5.20	1.00	2.0	2.7	.9	18	22	<5.0	62	2.0
16...	1.5	--	17	5.30	1.00	1.9	2.5	.7	18	22	<3.0	46	3.0
SEP													
13...	1.5	--	18	5.40	1.10	2.1	2.7	<.5	20	24	<3.0	32	2.6

## PLATTE RIVER BASIN

## BIG THOMPSON PROJECT--Continued

402524105133300 HANSEN CANAL BELOW TRIFURCATION NEAR LOVELAND, CO--Continued

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	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)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)
OCT								
24...	<1.0	<1.0	20	<1.00	<5.0	<.10	<5.00	<.1
NOV								
06...	<1.0	<1.0	20	<1.00	<5.0	<.10	<5.00	<.1
DEC								
11...	<1.0	1.0	20	<1.00	<5.0	<.10	<5.00	<.1
JAN								
08...	<1.0	<1.0	10	<1.00	<5.0	<.10	<5.00	<.1
FEB								
14...	<1.0	--	20	<1.00	<5.0	<.10	<5.00	<.1
MAR								
15...	<1.0	<1.0	<50	<1.00	<5.0	<.10	<5.00	<.1
APR								
19...	<1.0	2.0	<30	<1.00	<5.0	<.10	<5.00	<.1
MAY								
03...	<1.0	3.0	<60	<1.00	<5.0	<.10	<5.00	<.1
24...	<1.0	1.0	<100	<1.00	5.0	<.10	<5.00	<.1
JUN								
15...	<5.0	<2.0	<100	<1.00	<5.0	<.10	<5.00	<.1
29...	<5.0	4.0	<100	<1.00	<5.0	<.10	<5.00	<.1
JUL								
19...	<5.0	9.0	<100	<1.00	<5.0	<.10	<5.00	<.1
AUG								
02...	<5.0	<2.0	<100	<1.00	<5.0	<.10	<5.00	<.1
16...	<5.0	2.6	<100	<1.00	<3.0	<.10	<3.00	<.1
SEP								
13...	<5.0	<2.0	<100	<1.00	<3.0	<.10	<3.00	<.1

DATE	BENZENE TOTAL (UG/L) (34030)	ETHYL- BENZENE TOTAL (UG/L) (34371)	META/ PARA- XYLENE WATER UNFLTRD REC (UG/L) (85795)	O- XYLENE WATER WHOLE TOTAL (UG/L) (77135)	TOLUENE TOTAL (UG/L) (34010)
OCT					
24...	<.40	<.40	<.40	<.40	<.40
NOV					
06...	<.40	<.40	<.40	<.40	<.40
DEC					
11...	<.40	<.40	<.40	<.40	<.40
JAN					
08...	<.40	<.40	<.40	<.40	<.40
FEB					
14...	<.40	<.40	<.40	<.40	--
MAR					
15...	<.40	<.40	<.40	<.40	<.40
APR					
19...	<.40	<.40	<.40	<.40	<.40
MAY					
03...	<.40	<.40	<.40	<.40	<.40
24...	<.40	<.40	<.40	<.40	<.40
JUN					
15...	<.40	<.40	<.40	<.40	<.40
29...	<.40	<.40	<.40	<.40	<.40
JUL					
19...	<.40	<.40	<.40	<.40	<.40
AUG					
02...	<.40	<.40	<.40	<.40	<.40
16...	<.40	--	<.40	<.40	<.40
SEP					
13...	<.40	--	<.40	<.40	<.40

BIG THOMPSON PROJECT--Continued

403020105114700 HANSEN CANAL ABOVE TUNNEL NO 5 NEAR LOVELAND, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 40°30'20", long 105°11'47", in NW<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec.11, T.6 N., R.70 W., Larimer County, Hydrologic Unit 10190006, at 2.25 mi west of Horsetooth Reservoir (south inlet), 4.8 mi west of Ft. Collins.

PERIOD OF RECORD.--August 2000 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

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)	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)
OCT												
24...	1110	29	53	7.8	10.0	9.0	<.005	<.002	.26	.025	<.006	<.007
NOV												
06...	1115	2.2	40	8.1	4.5	11.2	.005	<.002	.20	.011	<.006	<.007
DEC												
11...	0945	142	40	8.5	0	--	.054	<.002	.16	.011	E.004	<.007
JAN												
08...	0915	140	50	7.7	1.0	13.7	.031	<.002	.20	.010	E.005	<.007
FEB												
14...	1405	177	53	7.4	1.5	11.8	.028	<.002	.18	.014	E.005	<.007
MAR												
15...	1220	513	54	7.4	3.0	13.8	.022	.009	.17	.013	E.003	<.007
APR												
19...	1145	36	60	7.8	12.5	10.9	<.005	.003	.32	.018	E.005	<.007
MAY												
03...	1315	37	58	8.2	8.5	11.2	.005	.002	.27	.024	E.005	<.007
24...	1250	66	38	7.4	11.0	10.8	.058	<.002	.23	.018	.008	<.007
JUN												
15...	1125	255	26	7.6	11.5	9.5	.076	.012	.17	.015	.008	<.007
29...	0935	474	30	7.6	16.0	11.0	.056	.019	.21	.020	.008	<.007
JUL												
20...	0855	463	38	7.6	17.5	8.5	.045	.020	.23	.019	.009	<.007
AUG												
03...	1012	82	45	7.7	18.5	7.5	.055	.045	.26	.020	E.005	<.007
17...	1030	22	44	7.8	17.5	8.4	.065	.042	.33	.024	.009	E.006
SEP												
13...	1305	425	45	7.9	14.5	9.3	.020	.005	.22	.018	<.006	<.007

E Estimated laboratory analysis value.

DATE	TUR-BID-ITY (NTU) (00076)	UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624)	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)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	ALKA-LINITY WAT DIS TOT FET LAB (MG/L AS CACO3) (00421)	BICAR-BONATE WAT.DIS FET LAB HCO3 (MG/L) (29805)	CAR-BONATE WAT.DIS FET LAB CO3 (MG/L) (29808)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)
OCT													
24...	<.2	.051	21	6.30	1.20	1.7	<10.0	1.0	20	24	<5.0	44	3.0
NOV													
06...	<.2	.081	16	4.90	.950	1.7	<10.0	<1.0	20	24	<5.0	44	3.0
DEC													
11...	.7	.076	18	5.30	1.10	1.8	<10.0	1.0	19	23	<5.0	38	3.0
JAN													
08...	.7	.072	21	6.30	1.20	2.0	<10.0	<1.0	22	27	<5.0	30	4.0
FEB													
14...	.4	.075	21	6.50	1.20	2.0	2.0	<.5	22	27	<5.0	40	3.0
MAR													
15...	.8	.083	23	6.90	1.30	2.2	2.0	<.5	26	31	<5.0	34	3.0
APR													
19...	1.5	.056	20	6.00	1.20	2.3	2.0	1.1	28	34	<5.0	38	3.0
MAY													
03...	2.0	.065	22	6.60	1.40	2.8	2.6	1.6	26	31	<5.0	20	3.0
24...	1.5	--	13	3.70	.890	1.9	3.5	1.1	16	19	<5.0	34	5.0
JUN													
15...	1.5	--	10	2.90	.630	1.4	1.8	<.5	5	6.0	<5.0	44	3.0
29...	3.4	--	11	3.30	.680	1.4	1.9	<.5	15	18	<5.0	18	3.0
JUL													
20...	1.5	--	15	4.40	.870	1.6	2.1	.5	20	24	<5.0	26	3.0
AUG													
03...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	2.0	--	16	5.00	.940	2.2	2.5	.7	20	24	<3.0	36	2.4
SEP													
13...	1.5	--	18	5.40	1.10	2.0	2.7	<.5	24	29	<3.0	36	2.5

## PLATTE RIVER BASIN

## BIG THOMPSON PROJECT--Continued

403020105114700 HANSEN CANAL ABOVE TUNNEL NO 5 NEAR LOVELAND, CO--Continued

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	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)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)
OCT								
24...	<1.0	<1.0	10	<1.00	<5.0	<.10	<5.00	<.1
NOV								
06...	<1.0	1.0	20	<1.00	<5.0	<.10	<5.00	.2
DEC								
11...	<1.0	1.0	20	<1.00	<5.0	<.10	<5.00	<.1
JAN								
08...	<1.0	<1.0	10	<1.00	<5.0	.10	<5.00	<.1
FEB								
14...	<1.0	--	20	<1.00	<5.0	<.10	<5.00	<.1
MAR								
15...	<1.0	1.0	<50	<1.00	<5.0	<.10	<5.00	<.1
APR								
19...	<1.0	8.0	<40	<1.00	<5.0	<.10	<5.00	<.1
MAY								
03...	<1.0	<1.0	<60	<1.00	<5.0	<.10	<5.00	<.1
24...	<1.0	1.0	<100	<1.00	<5.0	<.10	<5.00	<.1
JUN								
15...	<5.0	<2.0	<100	<1.00	<5.0	<.10	<5.00	<.1
29...	<5.0	5.0	<100	<1.00	<5.0	<.10	<5.00	<.1
JUL								
20...	<5.0	7.0	<100	<1.00	<5.0	<.10	<5.00	<.1
AUG								
03...	--	--	--	--	--	--	--	--
17...	<5.0	5.1	<100	<1.00	<3.0	<.10	<3.00	<.1
SEP								
13...	<5.0	<2.0	<100	<1.00	<3.0	<.10	<3.00	<.1

DATE	BENZENE TOTAL (UG/L) (34030)	ETHYL- BENZENE TOTAL (UG/L) (34371)	META/ PARA- XYLENE WATER UNFLTRD REC (UG/L) (85795)	O- XYLENE WATER WHOLE TOTAL (UG/L) (77135)	TOLUENE TOTAL (UG/L) (34010)
OCT					
24...	<.40	--	--	--	<.40
NOV					
06...	<.40	--	--	--	<.40
DEC					
11...	<.40	<.40	<.40	<.40	<.40
JAN					
08...	<.40	<.40	<.40	<.40	<.40
FEB					
14...	<.40	<.40	<.40	<.40	<.40
MAR					
15...	<.40	<.40	<.40	<.40	<.40
APR					
19...	<.40	<.40	.80	<.40	<.40
MAY					
03...	<.40	<.40	.70	<.40	<.40
24...	<.40	<.40	<.40	<.40	<.40
JUN					
15...	<.40	<.40	<.40	<.40	<.40
29...	<.40	<.40	<.40	<.40	<.40
JUL					
20...	<.40	<.40	<.40	<.40	<.40
AUG					
03...	<.40	.60	<.40	<.40	<.40
17...	<.40	--	<.40	<.40	<.40
SEP					
13...	<.40	--	<.40	<.40	<.40

BIG THOMPSON PROJECT--Continued

403814105111800 HANSEN CANAL ABOVE GREELEY FILTRATION PLANT NEAR LAPORTE, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 40°38'14", long 105°11'18", in SW<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec.23, T.8 N., R.70 W., Larimer County, Hydrologic Unit 10190006, 9.4 mi north of Fort Collins.

PERIOD OF RECORD.--August 2000 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

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)	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)
OCT												
03...	0845	94	79	8.2	15.0	8.5	.107	.003	.22	.027	.006	.006
24...	0850	336	83	8.1	12.0	8.9	.131	<.002	.19	.032	.006	E.004
NOV												
06...	0845	72	91	8.2	7.5	10.1	.141	.012	.25	.045	.008	.008
APR												
19...	1320	21	69	7.8	9.0	11.9	.060	.013	.21	.010	E.003	E.005
MAY												
04...	1005	18	68	7.1	6.5	15.1	.048	.013	.20	.009	E.003	<.007
25...	0940	19	72	8.0	8.5	11.1	.051	.011	.23	.009	<.006	<.007
JUN												
14...	1300	91	70	8.2	13.0	11.0	.155	.003	.15	--	--	--
28...	1050	468	68	8.1	14.5	11.3	.111	.002	.20	.017	E.004	<.007
JUL												
20...	1030	324	51	7.8	18.5	9.4	.088	.024	.16	.019	.009	E.005
AUG												
03...	0840	292	49	7.7	20.0	8.8	.086	.022	.20	.016	E.004	<.007
17...	0855	127	62	7.7	21.0	9.2	.085	.017	.29	.032	E.003	E.004
SEP												
14...	0850	105	74	7.8	15.5	8.6	.006	<.002	.20	.009	<.006	<.007

E Estimated laboratory analysis value.

DATE	TUR-BID-ITY (NTU) (00076)	UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624)	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)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	ALKA-LINITY WAT DIS TOT FET LAB (MG/L AS CACO3) (00421)	BICAR-BONATE WAT.DIS FET LAB (MG/L) (29805)	CAR-BONATE WAT.DIS FET LAB (MG/L) (29808)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)
OCT													
03...	<.2	.072	32	10.0	1.80	2.4	<10.0	1.0	33	40	<5.0	60	4.0
24...	<.2	.062	33	10.0	1.90	2.2	<10.0	1.0	33	40	<5.0	60	3.0
NOV													
06...	<.2	.070	39	12.0	2.30	2.9	<10.0	<1.0	41	50	<5.0	76	3.0
APR													
19...	2.5	.054	24	7.20	1.40	2.1	4.0	.6	34	41	<5.0	44	2.0
MAY													
04...	2.5	.059	29	9.00	1.70	2.3	4.5	.8	28	34	<5.0	18	2.0
25...	4.0	--	30	9.00	1.80	2.7	6.0	.6	32	39	<5.0	60	3.0
JUN													
14...	4.0	--	29	9.00	1.70	2.4	5.4	.5	28	34	<5.0	52	3.0
28...	5.4	--	27	8.40	1.50	2.3	4.1	.6	26	31	<5.0	56	3.0
JUL													
20...	7.0	--	20	6.20	1.10	1.8	3.3	.7	22	27	<5.0	32	3.0
AUG													
03...	--	--	--	--	--	--	--	--	--	--	--	--	--
17...	20	--	25	7.70	1.30	2.5	4.2	.8	26	32	<3.0	40	2.7
SEP													
14...	8.0	--	30	9.40	1.60	3.4	6.6	1.4	38	46	<3.0	58	2.5

## PLATTE RIVER BASIN

## BIG THOMPSON PROJECT--Continued

403814105111800 HANSEN CANAL ABOVE GREELEY FILTRATION PLANT NEAR LAPORTE, CO--Continued

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	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)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)
OCT								
03...	<1.0	2.0	<10	<1.00	<5.0	<.10	<5.00	<.1
24...	<1.0	2.0	<10	<1.00	<5.0	<.10	<5.00	<.1
NOV								
06...	<1.0	2.0	10	<1.00	--	<.10	<5.00	<.1
APR								
19...	<1.0	3.0	<30	<1.00	<5.0	<.10	<5.00	<.1
MAY								
04...	<1.0	<1.0	<40	<1.00	<5.0	<.10	<5.00	<.1
25...	<1.0	3.0	<100	<1.00	<5.0	<.10	<5.00	<.1
JUN								
14...	<5.0	3.0	<100	<1.00	<5.0	<.10	<5.00	<.1
28...	<5.0	3.0	<100	<1.00	<5.0	<.10	<5.00	<.1
JUL								
20...	<5.0	3.0	<100	3.00	<5.0	<.10	<5.00	<.1
AUG								
03...	--	--	--	--	--	--	--	--
17...	<5.0	2.4	<100	<1.00	<3.0	<.10	<3.00	<.1
SEP								
14...	<5.0	<2.0	<100	<1.00	<3.0	<.10	<3.00	<.1

DATE	BENZENE TOTAL (UG/L) (34030)	ETHYL- BENZENE TOTAL (UG/L) (34371)	META/ PARA- XYLENE WATER UNFLTRD REC (UG/L) (85795)	O- XYLENE WATER WHOLE TOTAL (UG/L) (77135)	TOLUENE TOTAL (UG/L) (34010)
OCT					
03...	<.40	<.40	<.40	<.40	<.40
24...	<.40	<.40	<.40	<.40	<.40
NOV					
06...	<.40	<.40	<.40	<.40	<.40
APR					
19...	<.40	<.40	<.40	<.40	<.40
MAY					
04...	<.40	<.40	<.40	<.40	<.40
25...	<.40	<.40	<.40	<.40	<.40
JUN					
14...	<.40	<.40	<.40	<.40	<.40
28...	<.40	<.40	<.40	<.40	<.40
JUL					
20...	<.40	.40	<.40	<.40	<.40
AUG					
03...	<.40	<.40	<.40	<.40	<.40
17...	<.40	--	<.40	<.40	<.40
SEP					
14...	<.40	--	<.40	<.40	<.40

BIG THOMPSON PROJECT--Continued

06736000 NORTH FORK BIG THOMPSON RIVER AT DRAKE, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 40°25'59", long 105°20'18", (unsurveyed), Larimer County, Hydrologic Unit 10190006, on right bank 400 ft upstream from mouth and 300 ft upstream from Hwy 34 bridge at Drake.

DRAINAGE AREA.--85.1 mi<sup>2</sup>.

PERIOD OF RECORD.--August 2000 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	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)
OCT												
05...	1205	17	29	7.6	7.5	9.4	.056	.007	.13	.008	E.003	.003
26...	1300	12	31	7.5	6.5	9.8	<.005	<.002	.31	.031	<.006	<.007
NOV												
08...	0945	11	35	7.3	0	11.4	.082	<.002	.12	.004	<.006	<.007
DEC												
14...	1005	6.4	37	7.9	0	12.9	.171	<.002	.11	.005	E.003	<.007
JAN												
10...	1130	4.7	43	7.3	0	12.1	.173	.004	.10	.008	E.005	E.006
FEB												
13...	1145	4.7	43	7.8	.5	11.7	.206	.007	<.08	.009	.009	<.007
MAR												
13...	1120	7.0	46	7.4	4.5	12.1	.132	.005	.14	.014	E.005	<.007
APR												
17...	1205	5.3	54	7.5	8.0	10.3	.020	.002	.17	.008	E.003	<.007
MAY												
01...	1230	28	45	7.6	10.5	8.5	.011	.002	.27	.021	.006	<.007
22...	1140	79	32	7.5	6.5	10.7	.028	<.002	.20	.017	E.004	<.007
JUN												
12...	1335	80	24	7.8	13.5	8.9	.033	<.002	.14	.011	E.005	<.007
26...	1230	66	24	7.8	16.0	9.8	.069	<.002	.22	.014	E.005	<.007
JUL												
17...	1250	35	27	7.1	14.5	8.6	.057	.006	.14	.010	E.005	<.007
31...	1155	20	28	7.7	19.0	7.5	.056	.005	.15	.011	.006	<.007
AUG												
14...	1240	23	33	7.8	15.5	8.1	.062	.003	.19	.012	E.004	<.007
SEP												
11...	1230	14	32	7.5	12.5	8.8	.065	<.002	E.08	.008	E.005	<.007

E Estimated laboratory analysis value.

DATE	TUR-BID-ITY (NTU) (00076)	UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624)	HARD-NESS TOTAL (MG/L 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)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	ALKA-LINITY WAT DIS TOT LAB CACO3 (MG/L) (00421)	BICAR-BONATE WAT.DIS FET LAB HCO3 (MG/L) (29805)	CAR-BONATE WAT.DIS FET LAB CO3 (MG/L) (29808)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)
OCT													
05...	<.2	.100	10	3.00	.700	2.1	<10.0	<1.0	14	17	<5.0	38	2.0
26...	.2	.032	11	3.10	.680	2.3	<10.0	<1.0	13	16	<5.0	38	2.0
NOV													
08...	<.2	.053	12	3.40	.810	2.6	<10.0	<1.0	15	18	<5.0	42	2.0
DEC													
14...	<.2	.038	13	3.80	.950	3.0	<10.0	<1.0	17	21	<5.0	<10	1.0
JAN													
10...	.2	.070	14	3.90	.970	3.1	<10.0	<1.0	17	21	<5.0	34	2.0
FEB													
13...	.3	.041	14	4.10	.990	3.2	2.0	.7	16	19	<5.0	36	1.0
MAR													
13...	.4	.047	16	4.40	1.10	3.6	3.0	1.1	18	22	<5.0	38	2.0
APR													
17...	<.2	.057	16	4.40	1.10	3.5	24.0	15.0	20	24	<5.0	38	2.0
MAY													
01...	2.0	.184	15	4.30	1.10	3.2	4.0	1.5	18	22	<5.0	54	6.0
22...	2.0	--	10	2.90	.760	2.3	4.0	1.0	12	15	<5.0	32	5.0
JUN													
12...	.7	--	8	2.20	.490	1.6	2.6	<.5	7	8.0	<5.0	40	3.0
26...	1.0	--	8	2.40	.490	1.7	1.6	<.5	7	8.0	<5.0	26	2.0
JUL													
17...	1.0	--	9	2.60	.580	1.5	1.4	<.5	10	12	<5.0	36	2.0
31...	.5	--	9	2.70	.560	2.0	1.8	<.5	8	10	<5.0	34	2.0
AUG													
14...	1.5	--	11	3.10	.690	2.2	2.1	.9	12	15	<3.0	30	2.2
SEP													
11...	.6	--	11	3.20	.730	2.6	2.1	.5	18	22	<3.0	42	1.7

## PLATTE RIVER BASIN

## BIG THOMPSON PROJECT--Continued

06736000 NORTH FORK BIG THOMPSON RIVER AT DRAKE, CO--Continued

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	ARSENIC	COPPER,	IRON,	LEAD,	MANGA-	MERCURY	NICKEL,	SILVER,
	DIS- SOLVED (UG/L AS AS) (01000)	DIS- SOLVED (UG/L AS CU) (01040)	DIS- SOLVED (UG/L AS FE) (01046)	DIS- SOLVED (UG/L AS PB) (01049)	NESE, DIS- SOLVED (UG/L AS MN) (01056)	DIS- SOLVED (UG/L AS HG) (71890)	DIS- SOLVED (UG/L AS NI) (01065)	DIS- SOLVED (UG/L AS AG) (01075)
OCT								
05...	<1.0	<1.0	60	<1.00	<5.0	<.10	<5.00	<.1
26...	<1.0	<1.0	40	<1.00	<5.0	<.10	<5.00	<.1
NOV								
08...	<1.0	<1.0	50	<1.00	5.0	<.10	<5.00	<.1
DEC								
14...	<1.0	<1.0	50	<1.00	4.0	<.10	<5.00	<.1
JAN								
10...	<1.0	<1.0	50	<1.00	<5.0	<.10	<5.00	<.1
FEB								
13...	<1.0	<1.0	50	<1.00	<5.0	<.10	<5.00	<.1
MAR								
13...	<1.0	<1.0	<60	<1.00	<5.0	<.10	<5.00	<.1
APR								
17...	<1.0	<1.0	<70	<1.00	<5.0	<.10	<5.00	<.1
MAY								
01...	<1.0	<1.0	100	<1.00	7.0	<.10	<5.00	<.1
22...	<1.0	<1.0	<100	<1.00	<5.0	<.10	<5.00	<.1
JUN								
12...	<5.0	<2.0	<100	<1.00	<5.0	<.10	<5.00	<.1
26...	<5.0	<2.0	<100	<1.00	<5.0	<.10	<5.00	<.1
JUL								
17...	<5.0	<2.0	<100	<1.00	<5.0	<.10	<5.00	<.1
31...	<5.0	<2.0	<100	<1.00	<5.0	<.10	<5.00	<.1
AUG								
14...	<5.0	<2.0	<100	<1.00	<3.0	<.10	<3.00	<.1
SEP								
11...	<5.0	<2.0	<100	<1.00	3.6	<.10	<3.00	<.1

DATE	BENZENE	ETHYL-	META/ PARA-	O-	TOLUENE
	TOTAL (UG/L) (34030)	BENZENE TOTAL (UG/L) (34371)	WATER UNFLTRD REC (UG/L) (85795)	WATER WHOLE TOTAL (UG/L) (77135)	
OCT					
05...	<.40	<.40	<.40	<.40	<.40
26...	<.40	<.40	<.40	<.40	<.40
NOV					
08...	<.40	<.40	<.40	<.40	<.40
DEC					
14...	<.40	<.40	<.40	<.40	<.40
JAN					
10...	<.40	<.40	<.40	<.40	<.40
FEB					
13...	<.40	<.40	<.40	<.40	<.40
MAR					
13...	<.40	<.40	<.40	<.40	<.40
APR					
17...	<.40	<.40	<.40	<.40	<.40
MAY					
01...	<.40	<.40	<.40	<.40	<.40
22...	<.40	<.40	<.40	<.40	<.40
JUN					
12...	<.40	<.40	<.40	<.40	<.40
26...	<.40	<.40	<.40	<.40	<.40
JUL					
17...	<.40	<.40	<.40	<.40	<.40
31...	--	--	--	--	--
AUG					
14...	<.40	--	<.40	<.40	<.40
SEP					
11...	<.40	--	<.40	<.40	<.40

BIG THOMPSON PROJECT--Continued

06733000 BIG THOMPSON RIVER AT ESTES PARK, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 40°22'42", long 105°30'48", in NW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec.30, T.5 N., R.72 W., Larimer County, Hydrologic Unit 10190006, on right bank in Estes Park, 600 ft downstream from bridge on State Hwy 7, 0.3 mi northwest of Estes power Plant, in Estes Park.

DRAINAGE AREA.--137 mi<sup>2</sup>.

PERIOD OF RECORD.--August 2000 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

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)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L) (00625)	PHOS-PHORUS TOTAL (MG/L) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L) (00671)
OCT												
04...	1000	66	25	7.9	7.5	8.7	.159	.003	.12	.007	<.006	.002
25...	1020	33	31	7.4	3.5	9.5	.128	.002	.10	.009	<.006	<.007
NOV												
07...	0845	6.7	47	8.2	.5	10.7	.131	<.002	.11	.004	<.006	<.007
DEC												
12...	1110	13	50	7.0	0	11.4	.216	.002	.09	.005	.004	.007
JAN												
09...	1020	8.6	54	7.1	0	13.1	.219	<.002	.11	.006	E.005	E.004
FEB												
12...	0920	10	54	7.8	0	13.3	.205	<.002	<.08	.008	E.004	<.007
MAR												
12...	0910	9.0	61	7.8	1.0	11.1	.190	.005	.11	.007	E.004	<.007
APR												
16...	0910	14	54	7.6	3.0	11.2	--	--	--	--	--	--
30...	0910	145	25	7.8	4.0	10.3	.122	.005	.34	.028	.007	<.007
MAY												
21...	0900	300	21	7.4	1.5	11.2	.088	.002	.20	.018	E.004	<.007
JUN												
11...	0900	396	16	7.7	7.5	9.5	.102	<.002	.12	.009	E.004	<.007
25...	0900	312	14	7.7	11.0	8.9	.100	.003	.17	.013	E.004	<.007
JUL												
16...	0945	156	17	7.1	11.0	9.0	.083	.007	.12	.008	<.006	<.007
30...	0850	80	21	7.3	12.5	8.0	.075	<.002	.12	.006	E.003	<.007
AUG												
13...	0900	120	20	7.5	12.5	8.4	.153	.003	.14	.009	<.006	<.007
SEP												
10...	0855	64	25	7.2	6.5	9.4	.102	<.002	.11	.008	E.003	<.007

E Estimated laboratory analysis value.

DATE	TUR-BID-ITY (NTU) (00076)	UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624)	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)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	ALKA-LINITY WAT DIS TOT FET (MG/L AS CACO3) (00421)	BICAR-BONATE WAT.DIS FET LAB HCO3 (MG/L) (29805)	CAR-BONATE WAT.DIS FET LAB CO3 (MG/L) (29808)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	CARBON, TOTAL (MG/L AS C) (00680)
OCT													
04...	<.2	.065	9	2.40	.670	1.3	<10.0	1.0	<5	<5.0	<5.0	28	2.0
25...	<.2	.063	11	3.00	.900	1.8	<10.0	2.0	11	13	<5.0	32	2.0
NOV													
07...	<.2	.071	17	4.60	1.30	3.0	<10.0	3.0	19	23	<5.0	52	2.0
DEC													
12...	.7	.051	18	4.80	1.40	3.2	<10.0	2.0	19	23	<5.0	46	2.0
JAN													
09...	.6	.049	19	5.10	1.50	3.5	<10.0	2.0	20	24	<5.0	32	2.0
FEB													
12...	.7	.047	19	5.30	1.50	3.5	2.0	2.0	18	22	<5.0	62	1.0
MAR													
12...	<.2	.063	21	5.80	1.70	4.1	3.0	2.6	24	29	<5.0	44	2.0
APR													
16...	.2	.096	15	4.10	1.20	3.1	3.0	2.6	20	24	<5.0	38	2.0
30...	.3	.230	10	2.80	.750	1.6	2.0	1.2	10	12	<5.0	52	7.0
MAY													
21...	2.5	--	7	2.00	.580	1.2	2.0	<.5	6	7.0	<5.0	22	5.0
JUN													
11...	1.0	--	6	1.60	.430	.8	2.3	<.5	<5	<5.0	<5.0	22	3.0
25...	2.0	--	6	1.70	.420	.9	1.4	<.5	6	7.0	<5.0	20	2.0
JUL													
16...	1.0	--	6	1.80	.470	.7	1.1	<.5	6	7.0	<5.0	20	1.0
30...	1.0	--	8	2.30	.570	1.5	1.7	.7	9	11	<5.0	24	1.0
AUG													
13...	1.0	--	7	2.00	.490	1.1	1.8	.6	6	7.3	<3.0	28	4.2
SEP													
10...	1.5	--	10	2.70	.690	1.8	3.2	1.5	10	12	<3.0	34	1.7

## PLATTE RIVER BASIN

## BIG THOMPSON PROJECT--Continued

06733000 BIG THOMPSON RIVER AT ESTES PARK, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	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)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)
OCT								
04...	<1.0	<1.0	110	<1.00	<5.0	<.10	<5.00	<.1
25...	<1.0	<1.0	130	<1.00	5.0	<.10	<5.00	<.1
NOV								
07...	<1.0	<1.0	170	<1.00	16.0	<.10	<5.00	<.1
DEC								
12...	<1.0	<1.0	100	<1.00	7.0	<.10	<5.00	<.1
JAN								
09...	<1.0	<1.0	100	<1.00	8.0	<.10	<5.00	<.1
FEB								
12...	<1.0	<1.0	80	<1.00	7.0	<.10	<5.00	<.1
MAR								
12...	<1.0	<1.0	150	<1.00	11.0	<.10	<5.00	<.1
APR								
16...	<1.0	<1.0	240	<1.00	9.0	<.10	<5.00	<.1
30...	<1.0	1.0	180	<1.00	7.0	<.10	<5.00	<.1
MAY								
21...	<1.0	1.0	100	<1.00	5.0	<.10	<5.00	<.1
JUN								
11...	<5.0	<2.0	100	<1.00	<5.0	<.10	<5.00	<.1
25...	<5.0	<2.0	<100	<1.00	<5.0	<.10	<5.00	<.1
JUL								
16...	<5.0	<2.0	<100	<1.00	<5.0	<.10	<5.00	<.1
30...	<5.0	<2.0	<100	<1.00	<5.0	<.10	<5.00	<.1
AUG								
13...	<5.0	<2.0	<100	<1.00	3.2	<.10	<3.00	<.1
SEP								
10...	<5.0	<2.0	110	<1.00	4.4	<.10	<3.00	<.1

DATE	BENZENE TOTAL (UG/L) (34030)	ETHYL- BENZENE TOTAL (UG/L) (34371)	META/ PARA- XYLENE WATER UNFLTRD REC (UG/L) (85795)	O- XYLENE WATER WHOLE TOTAL (UG/L) (77135)	TOLUENE TOTAL (UG/L) (34010)
OCT					
04...	<.40	<.40	<.40	<.40	<.40
25...	<.40	<.40	<.40	<.40	<.40
NOV					
07...	<.40	<.40	<.40	<.40	<.40
DEC					
12...	<.40	<.40	<.40	<.40	<.40
JAN					
09...	<.40	<.40	<.40	<.40	<.40
FEB					
12...	<.40	<.40	<.40	<.40	<.40
MAR					
12...	<.40	<.40	<.40	<.40	<.40
APR					
16...	<.40	<.40	<.40	<.40	<.40
30...	<.40	<.40	<.40	<.40	<.40
MAY					
21...	<.40	<.40	<.40	<.40	<.40
JUN					
11...	<.40	<.40	<.40	<.40	<.40
25...	<.40	<.40	<.40	<.40	<.40
JUL					
16...	<.40	<.40	<.40	<.40	<.40
30...	--	--	--	--	--
AUG					
13...	<.40	--	<.40	<.40	<.40
SEP					
10...	<.40	--	<.40	<.40	<.40

BIG THOMPSON PROJECT--Continued

402245105302300 BIG THOMPSON RIVER BELOW SANITATION OUTFLOW ABOVE LAKE ESTES, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 40°22'45", long 105°30'23", in NW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec.30, T.5 N., R.72 W., Larimer County, Hydrologic Unit 10190006, on right bank, 225 ft upstream from pedestrian bridge on Lake Estes Trail, downstream from Estes Park Sanitation District Outflow, adjacent to Lake Estes, in Estes Park.

DRAINAGE AREA.--138 mi<sup>2</sup>.

PERIOD OF RECORD.--August 2000 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

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)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L) (00625)	PHOS-PHORUS TOTAL (MG/L) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L) (00671)
OCT												
04...	1110	66	31	7.9	9.0	10.1	.169	.098	.27	.018	.009	.007
25...	1120	33	39	7.2	4.5	10.0	.245	.098	.22	.045	.027	.023
NOV												
07...	1010	6.7	70	8.2	1.0	11.5	.535	.340	.55	.056	.040	.035
DEC												
12...	1230	13	60	7.3	0	12.0	.330	.266	.53	.088	.074	.068
JAN												
09...	1120	8.6	69	7.3	.5	13.3	.233	.611	.82	.177	.140	.127
FEB												
12...	1045	10	75	7.3	0	13.5	.209	.676	.84	.164	.139	.136
MAR												
12...	1045	9.0	76	7.3	1.5	12.5	.178	.527	.81	.156	.122	.109
APR												
16...	1010	14	62	7.3	3.0	11.7	.103	.263	.57	.100	.077	.071
30...	1115	145	26	7.8	5.0	11.3	.131	.041	.38	.038	.015	E.006
MAY												
21...	1025	300	21	7.7	2.0	13.9	.093	<.002	.23	.020	E.005	<.007
JUN												
11...	1000	396	17	7.9	8.0	9.8	.101	.016	.13	.022	.014	.008
25...	1010	312	16	7.8	11.5	8.8	.100	.032	.16	.017	E.004	<.007
JUL												
16...	1050	156	20	7.8	12.5	8.8	.113	.003	.11	.010	E.003	<.007
30...	1000	80	28	7.3	13.5	8.5	.099	.111	.27	.019	.011	E.006
AUG												
13...	1000	120	24	7.6	12.5	8.3	.154	.054	.23	.022	.013	.010
SEP												
10...	0955	64	31	7.6	7.0	10.1	.110	.135	.29	.035	.025	.020

E Estimated laboratory analysis value.

DATE	TUR-BID-ITY (NTU) (00076)	UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624)	HARD-NESS TOTAL (MG/L 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)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	ALKA-LINITY WAT DIS TOT LAB (MG/L AS CACO3) (00421)	BICAR-BONATE WAT.DIS FET LAB (MG/L) (29805)	CAR-BONATE WAT.DIS FET LAB CO3 (MG/L) (29808)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)
OCT													
04...	<.2	.104	9	2.60	.690	1.9	<10.0	2.0	12	15	<5.0	30	2.0
25...	<.2	.061	12	3.30	.930	2.5	<10.0	2.0	9	11	<5.0	38	2.0
NOV													
07...	<.2	.071	19	5.20	1.40	5.9	<10.0	5.0	13	16	<5.0	62	3.0
DEC													
12...	.9	.055	19	5.00	1.50	4.5	<10.0	3.0	22	27	<5.0	54	2.0
JAN													
09...	.9	.052	20	5.40	1.60	5.4	<10.0	4.0	24	29	<5.0	40	3.0
FEB													
12...	.9	.054	21	5.60	1.60	5.8	3.0	4.3	26	31	<5.0	54	2.0
MAR													
12...	<.2	.074	22	5.90	1.70	6.1	3.0	4.5	24	29	<5.0	52	2.0
APR													
16...	.4	.104	16	4.30	1.30	4.2	3.0	3.7	24	29	<5.0	46	3.0
30...	.2	.235	10	2.90	.780	1.9	2.0	1.4	10	12	<5.0	40	7.0
MAY													
21...	2.5	--	8	2.00	.600	1.2	1.7	.5	8	10	<5.0	24	5.0
JUN													
11...	1.0	--	6	1.60	.420	.9	2.3	<.5	<5	<5.0	<5.0	22	3.0
25...	1.5	--	6	1.80	.430	1.1	1.4	<.5	6	7.0	<5.0	18	2.0
JUL													
16...	1.0	--	7	1.90	.480	1.0	1.2	.7	6	7.0	<5.0	22	2.0
30...	1.0	--	8	2.40	.590	2.0	1.9	1.3	8	10	<5.0	30	2.0
AUG													
13...	1.0	--	7	2.10	.520	1.6	2.0	1.0	6	7.3	<3.0	26	2.4
SEP													
10...	1.5	--	10	2.90	.720	2.2	3.4	1.9	18	22	<3.0	34	1.6

## PLATTE RIVER BASIN

## BIG THOMPSON PROJECT--Continued

402245105302300 BIG THOMPSON RIVER BELOW SANITATION OUTFLOW ABOVE LAKE ESTES, CO--Continued

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	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)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)
OCT								
04...	<1.0	<1.0	100	<1.00	<5.0	<.10	<5.00	<.1
25...	<1.0	<1.0	120	<1.00	<5.0	<.10	<5.00	<.1
NOV								
07...	<1.0	<1.0	140	<1.00	12.0	<.10	<5.00	<.1
DEC								
12...	<1.0	<1.0	110	<1.00	6.0	<.10	<5.00	<.1
JAN								
09...	<1.0	1.0	100	<1.00	7.0	<.10	<5.00	<.1
FEB								
12...	<1.0	1.0	70	<1.00	7.0	<.10	<5.00	<.1
MAR								
12...	<1.0	1.0	160	<1.00	9.0	<.10	<5.00	<.1
APR								
16...	<1.0	1.0	260	<1.00	8.0	<.10	<5.00	<.1
30...	<1.0	<1.0	140	<1.00	<5.0	<.10	<5.00	<.1
MAY								
21...	<1.0	1.0	100	<1.00	6.0	<.10	<5.00	<.1
JUN								
11...	<5.0	<2.0	<200	<1.00	<5.0	<.10	<5.00	<.1
25...	<5.0	<2.0	<100	<1.00	<5.0	<.10	<5.00	<.1
JUL								
16...	<5.0	<2.0	<100	<1.00	<5.0	<.10	<5.00	<.1
30...	<5.0	<2.0	<100	<1.00	<5.0	<.10	<5.00	<.1
AUG								
13...	<5.0	<2.0	<100	<1.00	3.2	<.10	<3.00	<.1
SEP								
10...	<5.0	<2.0	100	<1.00	4.3	<.10	<3.00	<.1

DATE	BENZENE TOTAL (UG/L) (34030)	ETHYL- BENZENE TOTAL (UG/L) (34371)	META/ PARA- XYLENE WATER UNFLTRD REC (UG/L) (85795)	O- XYLENE WATER WHOLE TOTAL (UG/L) (77135)	TOLUENE TOTAL (UG/L) (34010)
OCT					
04...	<.40	<.40	<.40	<.40	<.40
25...	<.40	<.40	<.40	<.40	<.40
NOV					
07...	<.40	<.40	<.40	<.40	<.40
DEC					
12...	<.40	<.40	<.40	<.40	<.40
JAN					
09...	<.40	<.40	<.40	<.40	<.40
FEB					
12...	<.40	<.40	<.40	<.40	<.40
MAR					
12...	<.40	<.40	<.40	<.40	<.40
APR					
16...	<.40	<.40	<.40	<.40	<.40
30...	<.40	<.40	<.40	<.40	<.40
MAY					
21...	<.40	<.40	<.40	<.40	<.40
JUN					
11...	<.40	<.40	<.40	<.40	<.40
25...	<.40	<.40	<.40	<.40	<.40
JUL					
16...	<.40	<.40	<.40	<.40	<.40
30...	--	--	--	--	--
AUG					
13...	<.40	--	<.40	<.40	<.40
SEP					
10...	<.40	--	<.40	<.40	<.40

BIG THOMPSON PROJECT--Continued

06735500 BIG THOMPSON RIVER NEAR ESTES PARK, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 40°22'35", long 105°29'07", in NW<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec.29, T.5 N., R.72 W., Larimer County, Hydrologic Unit 10190006, on right bank, 100 ft upstream from Dry Gulch, 600 ft downstream from Olympus Dam, in Estes Park.

DRAINAGE AREA.--155 mi<sup>2</sup>.

PERIOD OF RECORD.--August 2000 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER FIELD (STAND-ARD) (UNITS) (00400)	TEMPER-ATURE (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	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)
OCT												
04...	1230	161	39	7.5	10.5	8.3	.110	.090	.33	.043	.012	.007
25...	1315	334	37	7.3	8.5	9.7	.023	.014	.21	.018	<.006	<.007
NOV												
07...	1200	34	41	7.8	4.0	9.8	.039	.010	.22	.026	.007	E.005
DEC												
12...	1400	26	44	7.4	1.5	10.6	.046	.007	.21	.055	.004	.007
JAN												
09...	1325	26	50	7.1	2.0	11.0	.025	.015	.17	.013	.006	E.006
FEB												
12...	1145	31	51	7.3	1.5	11.0	.029	.019	.09	.014	E.005	<.007
MAR												
12...	1140	30	54	7.3	2.5	11.6	.023	.010	.14	.013	E.004	<.007
APR												
16...	1100	31	56	7.3	5.5	10.2	<.005	.003	.32	.030	.006	<.007
30...	1240	140	53	7.9	9.5	9.9	.008	.007	.41	.032	.009	<.007
MAY												
21...	1130	236	30	7.9	7.5	9.1	.060	.005	.29	.016	E.003	<.007
JUN												
11...	1105	192	23	8.0	11.5	8.9	.069	.006	.16	.011	E.004	<.007
25...	1115	263	29	7.9	15.0	8.6	.030	.015	.20	.013	E.004	<.007
JUL												
16...	1145	200	38	7.4	17.5	8.1	.024	.010	.20	.011	<.006	<.007
30...	1100	99	43	7.8	18.5	7.6	.020	.019	.24	.010	<.006	<.007
AUG												
13...	1050	126	41	7.6	17.5	8.2	.035	.015	.25	.016	E.003	<.007
SEP												
10...	1100	134	45	7.8	13.0	8.8	.012	.004	.23	.015	E.003	<.007

E Estimated laboratory analysis value.

DATE	TUR-BID-ITY (NTU) (00076)	UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624)	HARD-NESS TOTAL (MG/L 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)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	ALKA-LINITY WAT DIS TOT LAB CACO3 (MG/L) (00421)	BICAR-BONATE WAT.DIS FET LAB HCO3 (MG/L) (29805)	CAR-BONATE WAT.DIS FET LAB CO3 (MG/L) (29808)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)
OCT													
04...	.2	.090	15	4.40	1.00	1.8	<10.0	2.0	17	21	<5.0	50	3.0
25...	<.2	.080	15	4.50	.920	1.4	<10.0	<1.0	15	18	<5.0	38	3.0
NOV													
07...	<.2	.079	16	4.60	1.00	2.0	<10.0	1.0	27	33	<5.0	42	3.0
DEC													
12...	.6	.074	18	5.50	1.10	1.9	<10.0	<1.0	21	25	<5.0	36	3.0
JAN													
09...	.4	.066	21	6.40	1.20	2.0	<10.0	<1.0	22	27	<5.0	30	4.0
FEB													
12...	.4	.076	21	6.50	1.20	2.1	2.0	<.5	24	29	<5.0	56	3.0
MAR													
12...	.4	.073	23	7.00	1.30	2.3	2.0	<.5	26	31	<5.0	36	3.0
APR													
16...	.3	.079	19	5.60	1.20	2.4	2.0	1.5	22	27	<5.0	38	3.0
30...	.2	.108	20	5.70	1.30	3.0	3.0	2.1	20	24	<5.0	52	4.0
MAY													
21...	2.5	--	11	3.20	.750	1.4	1.9	.5	12	15	<5.0	18	5.0
JUN													
11...	1.0	--	8	2.40	.530	1.1	2.5	<.5	8	10	<5.0	26	3.0
25...	1.0	--	12	3.50	.730	1.3	2.0	<.5	9	11	<5.0	36	3.0
JUL													
16...	1.5	--	15	4.40	.900	1.3	2.1	<.5	14	17	<5.0	38	3.0
30...	1.0	--	17	5.30	1.00	1.9	2.6	.7	18	22	<5.0	38	3.0
AUG													
13...	1.0	--	16	5.00	.960	1.7	2.6	.6	18	22	<3.0	42	3.0
SEP													
10...	1.5	--	20	6.10	1.10	1.9	3.7	1.3	24	29	<3.0	40	2.7

PLATTE RIVER BASIN

BIG THOMPSON PROJECT--Continued

06735500 BIG THOMPSON RIVER NEAR ESTES PARK, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	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)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)
OCT								
04...	<1.0	<1.0	160	<1.00	13.0	<.10	<5.00	<.1
25...	<1.0	<1.0	20	<1.00	<5.0	<.10	<5.00	<.1
NOV								
07...	<1.0	<1.0	50	<1.00	2.0	<.10	<5.00	<.1
DEC								
12...	<1.0	<1.0	30	<1.00	5.0	<.10	<5.00	<.1
JAN								
09...	<1.0	<1.0	20	<1.00	<5.0	<.10	<5.00	<.1
FEB								
12...	<1.0	<1.0	30	<1.00	<5.0	<.10	<5.00	<.1
MAR								
12...	<1.0	<1.0	<50	<1.00	<5.0	<.10	<5.00	<.1
APR								
16...	<1.0	<1.0	60	<1.00	<5.0	<.10	<5.00	<.1
30...	<1.0	<1.0	130	<1.00	<5.0	<.10	<5.00	<.1
MAY								
21...	<1.0	<1.0	<100	<1.00	7.0	<.10	<5.00	<.1
JUN								
11...	<5.0	<2.0	<200	<1.00	<5.0	<.10	<5.00	<.1
25...	<5.0	<2.0	<100	<1.00	<5.0	<.10	<5.00	<.1
JUL								
16...	<5.0	<2.0	<100	<1.00	<5.0	<.10	<5.00	<.1
30...	<5.0	<2.0	<100	<1.00	<5.0	<.10	<5.00	<.1
AUG								
13...	<5.0	<2.0	<100	<1.00	<3.0	<.10	<3.00	<.1
SEP								
10...	<5.0	<2.0	<100	<1.00	<3.0	<.10	<3.00	<.1

DATE	BENZENE TOTAL (UG/L) (34030)	ETHYL- BENZENE TOTAL (UG/L) (34371)	META/ PARA- XYLENE WATER UNFLTRD REC (UG/L) (85795)	O- XYLENE WATER WHOLE TOTAL (UG/L) (77135)	TOLUENE TOTAL (UG/L) (34010)
OCT					
04...	<.40	<.40	<.40	<.40	<.40
25...	<.40	<.40	<.40	<.40	<.40
NOV					
07...	<.40	<.40	<.40	<.40	<.40
DEC					
12...	<.40	<.40	<.40	<.40	<.40
JAN					
09...	<.40	<.40	<.40	<.40	<.40
FEB					
12...	<.40	<.40	<.40	<.40	<.40
MAR					
12...	<.40	<.40	<.40	<.40	<.40
APR					
16...	<.40	<.40	<.40	<.40	<.40
30...	<.40	<.40	<.40	<.40	<.40
MAY					
21...	<.40	<.40	<.40	<.40	<.40
JUN					
11...	<.40	<.40	<.40	<.40	<.40
25...	<.40	<.40	<.40	<.40	<.40
JUL					
16...	<.40	<.40	<.40	<.40	<.40
30...	--	--	--	--	--
AUG					
13...	<.40	--	<.40	<.40	<.40
SEP					
10...	<.40	--	<.40	<.40	<.40

BIG THOMPSON PROJECT--Continued

402249105282000 BIG THOMPSON RIVER AT WHISPERING PINES NEAR ESTES PARK, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 40°22'49", long 105°28'00", in SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec.21, T.5 N., R.72 W., Larimer County, Hydrologic Unit 10190006, on right bank, immediately downstream of staff gage connected to the Hwy 34 bridge supports, at Whispering Pines.

DRAINAGE AREA.--164 mi<sup>2</sup>.

PERIOD OF RECORD.--August 2000 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER FIELD (STAND-ARD) (UNITS) (00400)	TEMPER-ATURE (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	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)
OCT												
05...	0850	148	45	8.0	10.0	8.3	.158	.077	.30	.061	.033	.027
26...	0900	130	41	8.2	7.5	8.7	.075	.010	.21	.057	.033	.029
NOV												
08...	1300	31	49	8.3	.5	11.4	.129	.005	.27	.088	.068	.061
DEC												
13...	1120	22	53	8.4	1.0	12.4	.275	.059	.36	.113	.096	.085
JAN												
10...	0900	25	66	8.1	0	11.4	.374	.208	.39	.137	.126	.118
FEB												
12...	1240	28	60	8.3	2.0	11.7	.245	.174	.27	.118	.093	.090
MAR												
12...	1300	28	64	9.1	4.5	13.0	.234	.136	.42	.071	.053	.042
APR												
16...	1200	29	66	9.0	5.0	12.1	.146	.005	.42	.118	.081	.071
30...	1340	144	57	8.0	10.5	8.5	.037	.008	.44	.055	.018	.009
MAY												
21...	1250	274	31	7.9	7.5	10.8	.130	<.002	.22	.028	.015	.009
JUN												
11...	1300	202	27	7.6	13.0	8.5	.079	.011	.22	.034	E.005	<.007
25...	1245	295	30	7.7	15.5	9.0	.057	.014	.24	.032	.019	.011
JUL												
16...	1305	199	41	7.7	18.5	7.2	.111	.008	.22	.043	.031	.023
30...	1225	94	47	8.1	19.5	7.2	.147	.044	.32	.046	.036	.029
AUG												
13...	1145	127	46	7.9	18.5	7.2	.143	.013	.31	.048	.037	.031
SEP												
10...	1215	134	48	8.8	14.0	8.5	.059	.022	.27	.054	.038	.034

E Estimated laboratory analysis value.

DATE	TUR-BID-ITY (NTU) (00076)	UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624)	HARD-NESS TOTAL (MG/L 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)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	ALKA-LINITY WAT DIS TOT LAB CACO3 (MG/L) (00421)	BICAR-BONATE WAT.DIS FET LAB HCO3 (MG/L) (29805)	CAR-BONATE WAT.DIS FET LAB CO3 (MG/L) (29808)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)
OCT													
05...	.2	.071	15	4.50	1.00	2.4	--	2.0	14	17	<5.0	50	3.0
26...	<.2	.063	15	4.70	.910	2.0	<10.0	1.0	18	22	<5.0	42	3.0
NOV													
08...	<.2	.080	17	4.80	1.10	3.4	<10.0	2.0	12	15	<5.0	50	3.0
DEC													
13...	.2	.078	19	5.80	1.20	3.6	<10.0	2.0	23	28	<5.0	46	3.0
JAN													
10...	.4	.080	22	6.80	1.30	3.5	<10.0	2.0	23	28	<5.0	46	3.0
FEB													
12...	.4	.078	22	6.60	1.30	3.3	2.0	1.5	22	27	<5.0	50	3.0
MAR													
12...	.6	.077	23	7.00	1.40	3.7	3.0	1.7	24	29	<5.0	44	3.0
APR													
16...	.2	.079	19	5.60	1.20	3.8	3.0	3.0	24	29	<5.0	46	3.0
30...	.2	.103	20	5.80	1.30	3.3	3.0	2.5	22	27	<5.0	46	4.0
MAY													
21...	2.0	--	11	3.30	.780	1.6	2.0	.8	14	17	<5.0	22	5.0
JUN-													
11...	.9	--	9	2.60	.560	1.5	2.6	.6	<5	<5.0	<5.0	20	3.0
25...	1.0	--	12	3.60	.750	1.6	2.1	.5	11	13	<5.0	34	3.0
JUL													
16...	1.0	--	15	4.50	.940	1.8	2.3	.9	14	17	<5.0	52	3.0
30...	1.0	--	17	5.30	1.00	2.6	2.9	1.1	17	21	<5.0	44	3.0
AUG													
13...	1.0	--	17	5.10	1.00	2.5	2.9	1.2	22	27	<3.0	42	3.3
SEP													
10...	.9	--	20	6.00	1.10	2.3	3.9	1.6	<5	<6.1	<3.0	46	2.8

## PLATTE RIVER BASIN

## BIG THOMPSON PROJECT--Continued

402249105282000 BIG THOMPSON RIVER AT WHISPERING PINES NEAR ESTES PARK, CO--Continued

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	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)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)
OCT								
05...	<1.0	<1.0	180	<1.00	9.0	<.10	<5.00	<.1
26...	<1.0	<1.0	20	<1.00	<5.0	<.10	<5.00	<.1
NOV								
08...	<1.0	<1.0	50	<1.00	<5.0	<.10	<5.00	<.1
DEC								
13...	<1.0	<1.0	20	<1.00	<5.0	<.10	<5.00	<.1
JAN								
10...	<1.0	<1.0	30	<1.00	5.0	<.10	<5.00	<.1
FEB								
12...	<1.0	<1.0	20	<1.00	<5.0	<.10	<5.00	<.1
MAR								
12...	<1.0	<1.0	<50	<1.00	<5.0	<.10	<5.00	<.1
APR								
16...	<1.0	<1.0	60	<1.00	<5.0	<.10	<5.00	<.1
30...	<1.0	1.0	<150	<1.00	7.0	<.10	<5.00	<.1
MAY								
21...	<1.0	<1.0	<100	<1.00	6.0	<.10	<5.00	<.1
JUN								
11...	<5.0	<2.0	<100	<1.00	<5.0	<.10	<5.00	<.1
25...	<5.0	<2.0	<100	<1.00	<5.0	<.10	<5.00	<.1
JUL								
16...	<5.0	<2.0	<100	<1.00	<5.0	<.10	<5.00	<.1
30...	<5.0	<2.0	<100	<1.00	<5.0	<.10	<5.00	<.1
AUG								
13...	<5.0	<2.0	<100	<1.00	<3.0	<.10	<3.00	<.1
SEP								
10...	<5.0	<2.0	<100	<1.00	<3.0	<.10	<3.00	<.1

DATE	BENZENE TOTAL (UG/L) (34030)	ETHYL- BENZENE TOTAL (UG/L) (34371)	META/ PARA- XYLENE WATER UNFLTRD REC (UG/L) (85795)	O- XYLENE WATER WHOLE TOTAL (UG/L) (77135)	TOLUENE TOTAL (UG/L) (34010)
OCT					
05...	<.40	<.40	<.40	<.40	<.40
26...	<.40	<.40	<.40	<.40	<.40
NOV					
08...	<.40	<.40	<.40	<.40	<.40
DEC					
13...	<.40	<.40	<.40	<.40	<.40
JAN					
10...	<.40	<.40	<.40	<.40	<.40
FEB					
12...	<.40	<.40	<.40	<.40	<.40
MAR--					
12...	<.40	<.40	<.40	<.40	<.40
APR					
16...	<.40	<.40	<.40	<.40	<.40
30...	<.40	<.40	<.40	<.40	<.40
MAY					
21...	<.40	<.40	<.40	<.40	<.40
JUN					
11...	<.40	<.40	<.40	<.40	<.40
25...	<.40	<.40	<.40	<.40	<.40
JUL					
16...	<.40	<.40	<.40	<.40	<.40
30...	--	--	--	--	--
AUG					
13...	<.40	--	<.40	<.40	<.40
SEP					
10...	<.40	--	<.40	<.40	<.40

BIG THOMPSON PROJECT--Continued

402554105202100 BIG THOMPSON RIVER ABOVE NORTH FORK BIG THOMPSON RIVER AT DRAKE, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 40°25'54", long 105°20'21", (unsurveyed), Larimer County, Hydrologic Unit 10190006, approximately 100 ft upstream of unnamed bridge on dead end road off Hwy 34, 400 ft upstream of inflow of North Fork Big Thompson River, in Drake.

DRAINAGE AREA.--191 mi<sup>2</sup>.

PERIOD OF RECORD.--August 2000 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD TEMPER-ATURE (DEG C) (00400)	OXYGEN, DIS-SOLVED (MG/L) (00300)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L) (00625)	PHOS-PHORUS TOTAL (MG/L) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L) (00671)
OCT											
05...	1030	158	43	7.7	9.0	9.0	.175	.017	.26	.045	.019
26...	1115	124	40	7.4	6.5	10.1	.051	<.002	.19	.036	.016
NOV											
08...	0830	34	54	7.9	0	11.7	.035	.003	.21	.027	.017
DEC											
13...	1400	25	53	7.7	0	12.5	.225	<.002	.19	--	--
JAN											
10...	1030	26	67	7.3	0	13.3	.405	.102	.33	.150	.142
FEB											
13...	1030	25	63	7.8	.5	11.6	.390	.091	.18	.051	.038
MAR											
13...	1015	27	71	7.6	1.5	12.8	.261	.011	.22	.023	.015
APR											
17...	1100	31	78	7.4	5.0	12.1	.031	.007	.45	.067	.029
MAY											
01...	1110	99	63	8.2	10.5	9.1	.039	.005	.53	.070	.015
22...	0955	201	37	8.0	7.5	10.4	.128	<.002	.34	.038	.017
JUN											
12...	1225	226	28	7.9	15.0	8.6	.054	.003	.16	.027	.016
26...	1115	253	31	7.8	16.5	8.7	.013	.003	.24	.029	.014
JUL											
17...	1120	122	42	7.8	16.0	8.0	.139	.002	.21	.041	.028
31...	1030	86	51	7.9	18.0	7.7	.405	.008	.32	.057	.049
AUG											
14...	1052	76	47	7.7	17.0	7.7	.209	.007	.22	.050	.037
SEP											
11...	1040	117	50	7.6	11.0	9.0	.113	<.002	.21	.037	.024

E Estimated laboratory analysis value.

DATE	TUR-BID-ITY (NTU) (00076)	UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624)	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)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	ALKA-LINITY WAT DIS TOT FET (MG/L AS CACO3) (00421)	BICAR-BONATE WAT.DIS FET LAB HCO3 (MG/L) (29805)	CAR-BONATE WAT.DIS FET LAB CO3 (MG/L) (29808)	SOLIDS, RESIDUE AT 180 DEG. C (MG/L) (70300)	CARBON, DIS-TOTAL (MG/L AS C) (00680)
OCT													
05...	.2	.061	15	4.40	1.00	2.4	<10.0	2.0	14	17	<5.0	62	3.0
26...	.2	.061	16	4.70	.940	2.1	<10.0	1.0	17	21	<5.0	40	3.0
NOV													
08...	<.2	.071	19	5.60	1.20	3.5	<10.0	2.0	20	24	<5.0	46	3.0
DEC													
13...	.2	.068	19	5.80	1.20	3.4	<10.0	2.0	20	24	<5.0	12	3.0
JAN													
10...	.3	.073	22	6.50	1.30	3.8	<10.0	2.0	22	27	<5.0	26	3.0
FEB													
13...	.4	.071	24	7.20	1.40	3.6	3.0	1.7	24	29	<5.0	48	3.0
MAR													
13...	.4	.074	27	8.00	1.60	4.2	3.0	1.9	28	34	<5.0	40	3.0
APR													
17...	.2	.069	23	6.80	1.50	4.4	4.0	4.0	32	39	<5.0	50	3.0
MAY													
01...	3.5	.109	21	6.20	1.40	4.0	4.0	3.7	22	27	<5.0	54	4.0
22...	2.0	--	13	3.80	.880	2.2	3.7	1.8	12	15	<5.0	22	5.0
JUN													
12...	.8	--	9	2.80	.570	1.5	2.7	.7	6	7.0	<5.0	44	3.0
26...	1.0	--	11	3.40	.700	1.7	2.1	.7	10	12	<5.0	36	3.0
JUL													
17...	1.0	--	16	4.80	.970	1.8	2.3	1.0	16	19	<5.0	52	3.0
31...	.5	--	18	5.50	1.10	3.0	3.1	1.5	16	19	<5.0	46	3.0
AUG													
14...	1.5	--	17	5.20	1.00	2.6	2.9	1.4	14	17	<3.0	38	2.3
SEP													
11...	1.0	--	19	5.90	1.10	2.6	2.9	1.0	22	27	<3.0	44	2.6

## PLATTE RIVER BASIN

## BIG THOMPSON PROJECT--Continued

402554105202100 BIG THOMPSON RIVER ABOVE NORTH FORK BIG THOMPSON RIVER AT DRAKE, CO--Continued

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	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)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)
OCT								
05...	<1.0	<1.0	150	<1.00	<5.0	<.10	<5.00	<.1
26...	<1.0	<1.0	20	<1.00	<5.0	<.10	<5.00	<.1
NOV								
08...	<1.0	<1.0	30	<1.00	<5.0	<.10	<5.00	<.1
DEC								
13...	<1.0	<1.0	20	<1.00	1.0	<.10	<5.00	<.1
JAN								
10...	<1.0	<1.0	20	<1.00	<5.0	<.10	<5.00	<.1
FEB								
13...	<1.0	<1.0	20	<1.00	<5.0	<.10	<5.00	<.1
MAR								
13...	<1.0	<1.0	<50	<1.00	<5.0	.10	<5.00	<.1
APR								
17...	<1.0	<1.0	<70	<1.00	8.0	<.10	<5.00	<.1
MAY								
01...	<1.0	1.0	120	<1.00	<5.0	<.10	<5.00	<.1
22...	<1.0	1.0	<100	<1.00	<5.0	<.10	<5.00	<.1
JUN								
12...	<5.0	<2.0	<100	<1.00	<5.0	<.10	<5.00	<.1
26...	<5.0	<2.0	<100	<1.00	<5.0	<.10	<5.00	<.1
JUL								
17...	<5.0	<2.0	<100	<1.00	<5.0	<.10	<5.00	<.1
31...	<5.0	<2.0	<100	<1.00	<5.0	<.10	<5.00	<.1
AUG								
14...	<5.0	<2.0	<100	<1.00	<3.0	<.10	<3.00	<.1
SEP								
11...	<5.0	<2.0	<100	<1.00	<3.0	<.10	<3.00	<.1

DATE	BENZENE TOTAL (UG/L) (34030)	ETHYL- BENZENE TOTAL (UG/L) (34371)	META/ PARA- XYLENE WATER UNFLTRD REC (UG/L) (85795)	O- XYLENE WATER WHOLE TOTAL (UG/L) (77135)	TOLUENE TOTAL (UG/L) (34010)
OCT					
05...	<.40	<.40	<.40	<.40	<.40
26...	<.40	<.40	<.40	<.40	<.40
NOV					
08...	<.40	<.40	<.40	<.40	<.40
DEC					
13...	<.40	<.40	<.40	<.40	<.40
JAN					
10...	<.40	<.40	<.40	<.40	<.40
FEB					
13...	<.40	<.40	<.40	<.40	<.40
MAR					
13...	<.40	<.40	<.40	<.40	<.40
APR					
17...	<.40	<.40	<.40	<.40	<.40
MAY					
01...	<.40	<.40	<.40	<.40	<.40
22...	<.40	<.40	<.40	<.40	<.40
JUN					
12...	<.40	<.40	<.40	<.40	<.40
26...	<.40	<.40	<.40	<.40	<.40
JUL					
17...	<.40	<.40	<.40	<.40	<.40
31...	--	--	--	--	--
AUG					
14...	<.40	--	<.40	<.40	<.40
SEP					
11...	<.40	--	<.40	<.40	<.40

BIG THOMPSON PROJECT--Continued

06736700 BIG THOMPSON RIVER ABOVE DILLIE TUNNEL NEAR DRAKE, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 40°24'54", long 105°15'01", in SE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec.8, T.5 N., R.70 W., Larimer County, Hydrologic Unit 10190006, approximately 250 ft upstream of Hwy 34 bridge, approximately 1 mi downstream of inflow of Cedar Creek, 1 mi east of Cedar Cove.

DRAINAGE AREA.--305 mi<sup>2</sup>.

PERIOD OF RECORD.--August 2000 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT- (US/CM) (00095)	PH WATER WHOLE FIELD TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L) (00608)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L) (00625)	PHOS- PHORUS TOTAL (MG/L) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L) (00671)	
OCT												
05...	1315	186	44	7.8	9.0	9.3	.175	.005	.23	.044	.021	.017
27...	1020	153	40	8.0	6.0	10.4	.036	<.002	.19	.034	.018	.013
NOV												
09...	0900	46	48	8.2	0	12.1	.015	.002	.17	.018	.013	.008
DEC												
14...	1130	44	54	7.5	0	13.5	.332	.002	.18	.037	.034	.025
JAN												
10...	1305	52	69	7.2	0	13.4	.467	.136	.37	.116	.102	.092
FEB												
13...	1250	34	58	7.5	1.0	11.8	.304	.028	.12	.061	.047	.041
MAR												
13...	1250	46	61	7.1	4.5	11.7	.185	.007	.39	.052	.020	.011
APR												
17...	1305	42	78	7.2	9.0	10.8	.046	.005	.37	.049	.027	.016
MAY												
01...	1330	151	64	8.2	13.5	8.6	.045	.007	.52	.071	.014	E.004
22...	1310	287	38	8.0	8.5	12.5	.098	.005	.29	.031	.014	.008
JUN												
13...	0915	460	27	7.5	14.5	9.4	.073	.002	.21	.029	.011	E.005
26...	1315	351	32	7.9	18.0	8.6	.013	.005	.25	.029	.015	E.004
JUL												
17...	1350	150	41	7.7	17.0	8.5	.145	.004	.21	.038	.027	.018
31...	1315	112	46	7.6	20.0	7.5	.316	.007	.24	.050	.040	.034
AUG												
15...	0830	152	46	7.8	16.0	8.0	.233	.006	.18	.048	.037	.031
SEP												
11...	1335	145	50	7.9	13.0	9.0	.105	<.002	.19	.037	.025	.018

E Estimated laboratory analysis value.

DATE	TUR- BID- ITY (NTU) (00076)	UV ABSORB- ANCE 254 NM, WTR FLT (UNITS /CM) (50624)	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, SOLVED (MG/L AS NA) (00930)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	ALKA- LINITY WAT DIS TOT FET LAB (MG/L AS CACO3) (00421)	BICAR- BONATE WAT.DIS LAB HCO3 (MG/L) (29805)	CAR- BONATE WAT.DIS LAB CO3 (MG/L) (29808)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)
OCT													
05...	.2	.061	15	4.40	1.00	2.4	<10.0	2.0	16	19	<5.0	68	3.0
27...	<.2	.059	15	4.60	.960	2.0	<10.0	1.0	20	24	<5.0	38	3.0
NOV													
09...	<.2	.070	17	4.90	1.10	3.3	<10.0	2.0	19	23	<5.0	46	3.0
DEC													
14...	<.2	.060	20	5.90	1.30	3.7	<10.0	2.0	21	25	<5.0	<10	3.0
JAN													
10...	.6	.043	22	6.60	1.40	4.0	<10.0	2.0	22	27	<5.0	50	3.0
FEB													
13...	.4	.068	20	6.10	1.20	3.4	2.0	1.7	20	24	<5.0	52	3.0
MAR													
13...	2.0	.071	22	6.60	1.40	3.9	3.0	2.1	26	31	<5.0	40	3.0
APR													
17...	<.2	.069	23	6.70	1.50	4.4	5.0	4.0	28	34	<5.0	50	3.0
MAY													
01...	3.5	.126	22	6.40	1.50	3.8	4.0	3.2	22	27	<5.0	54	5.0
22...	2.5	--	13	3.80	.930	2.3	4.0	1.6	14	17	<5.0	34	5.0
JUN													
13...	3.0	--	10	2.90	.610	1.6	2.7	.6	8	10	<5.0	26	2.0
26...	1.0	--	11	3.30	.680	1.7	2.0	.6	9	11	<5.0	34	3.0
JUL													
17...	1.5	--	15	4.40	.910	1.9	2.2	.9	15	18	<5.0	52	3.0
31...	.6	--	17	5.00	1.00	2.8	2.9	1.4	17	21	<5.0	44	3.0
AUG													
15...	.8	--	18	5.50	1.10	2.9	2.8	1.4	20	24	<3.0	46	2.5
SEP													
11...	1.0	--	19	5.70	1.10	2.7	2.8	.9	22	27	<3.0	48	2.7

## PLATTE RIVER BASIN

## BIG THOMPSON PROJECT--Continued

06736700 BIG THOMPSON RIVER ABOVE DILLIE TUNNEL NEAR DRAKE, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	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)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)
OCT								
05...	<1.0	<1.0	130	<1.00	<5.0	<.10	<5.00	<.1
27...	<1.0	<1.0	30	<1.00	<5.0	<.10	<5.00	<.1
NOV								
09...	<1.0	<1.0	40	<1.00	<5.0	<.10	<5.00	<.1
DEC								
14...	<1.0	<1.0	20	<1.00	3.0	<.10	<5.00	<.1
JAN								
10...	<1.0	<1.0	20	<1.00	<5.0	<.10	<5.00	<.1
FEB								
13...	<1.0	<1.0	20	<1.00	<5.0	<.10	<5.00	<.1
MAR								
13...	<1.0	<1.0	<50	<1.00	6.0	<.10	<5.00	<.1
APR								
17...	<1.0	<1.0	<80	<1.00	5.0	<.10	<5.00	<.1
MAY								
01...	<1.0	1.0	90	<1.00	<5.0	<.10	<5.00	<.1
22...	<1.0	1.0	<100	<1.00	<5.0	<.10	<5.00	<.1
JUN								
13...	<5.0	<2.0	<100	<1.00	<5.0	<.10	<5.00	<.1
26...	<5.0	<2.0	<100	<1.00	<5.0	<.10	<5.00	<.1
JUL								
17...	<5.0	<2.0	<100	<1.00	<5.0	<.10	<5.00	<.1
31...	<5.0	<2.0	<100	<1.00	<5.0	<.10	<5.00	<.1
AUG								
15...	<5.0	<2.0	<100	<1.00	<3.0	<.10	<3.00	<.1
SEP								
11...	<5.0	<2.0	<100	<1.00	<3.0	<.10	<3.00	<.1

DATE	BENZENE TOTAL (UG/L) (34030)	ETHYL- BENZENE TOTAL (UG/L) (34371)	META/ PARA- XYLENE WATER UNFLTRD REC (UG/L) (85795)	O- XYLENE WATER WHOLE TOTAL (UG/L) (77135)	TOLUENE TOTAL (UG/L) (34010)
OCT					
05...	<.40	<.40	<.40	<.40	<.40
27...	<.40	<.40	<.40	<.40	<.40
NOV					
09...	<.40	<.40	<.40	<.40	<.40
DEC					
14...	<.40	<.40	<.40	<.40	<.40
JAN					
10...	<.40	<.40	<.40	<.40	<.40
FEB					
13...	<.40	<.40	<.40	<.40	<.40
MAR					
13...	<.40	<.40	<.40	<.40	<.40
APR					
17...	<.40	<.40	<.40	<.40	<.40
MAY					
01...	<.40	<.40	<.40	<.40	<.40
22...	<.40	<.40	<.40	<.40	<.40
JUN					
13...	<.40	<.40	<.40	<.40	<.40
26...	<.40	<.40	<.40	<.40	<.40
JUL					
17...	<.40	<.40	<.40	<.40	<.40
31...	--	--	--	--	--
AUG					
15...	<.40	--	<.40	<.40	<.40
SEP					
11...	<.40	--	<.40	<.40	<.40

BIG THOMPSON PROJECT--Continued

402518105131300 BIG THOMPSON RIVER BELOW BIG THOMPSON POWER PLANT NEAR LOVELAND, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 40°25'18", long 105°13'13", in SW<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec.3, T.5 N., R.70 W., Larimer County, Hydrologic Unit 10190006, approximately 280 ft downstream of bridge, approximately 1.7 mi from Hwy 34, approximately 880 ft downstream of Big Thompson Hydroelectric Power Plant.

DRAINAGE AREA.--306 mi<sup>2</sup>.

PERIOD OF RECORD.--March to September 2001.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

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)	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)
MAR												
13...	1415	48	64	7.3	5.0	13.5	.181	.007	.29	.048	.021	.012
APR												
17...	1420	35	79	7.5	10.0	11.2	.083	.010	.34	.047	.026	.018
MAY												
02...	0900	206	61	7.9	8.0	12.3	.067	.003	.43	.055	.011	<.007
23...	0930	345	35	7.5	8.0	11.1	.054	.002	.29	.037	.007	<.007
JUN												
13...	1110	501	27	7.5	12.0	9.0	.061	.002	.18	.021	.008	<.007
27...	0900	324	29	7.5	15.5	9.5	.045	.006	.23	.021	.006	<.007
JUL												
18...	0900	162	39	7.4	16.5	7.9	.068	.015	.24	.022	.011	E.004
AUG												
01...	0850	338	42	7.7	18.0	8.2	.065	.026	.29	.023	.008	E.005
15...	1035	267	42	8.0	17.5	8.4	.093	.017	.23	.026	.013	.010
SEP												
12...	0900	199	46	7.2	12.5	8.1	.029	.003	.18	.013	E.005	<.007

E Estimated laboratory analysis value.

PLATTE RIVER BASIN

BIG THOMPSON PROJECT--Continued

402518105131300 BIG THOMPSON RIVER BELOW BIG THOMPSON POWER PLANT NEAR LOVELAND, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TUR- BID- ITY (NTU) (00076)	UV	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)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	ALKA-	BICAR-	CAR-	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)
		ABSORB- ANCE 254 NM, WTR FLT (UNITS /CM) (50624)							LINITY WAT DIS TOT FET LAB MG/L AS CACO3 (00421)	BONATE WAT.DIS FET LAB HCO3 (MG/L) (29805)	BONATE WAT.DIS FET LAB CO3 (MG/L) (29808)		
MAR 13...	2.0	.075	22	6.70	1.40	4.2	3.0	2.9	24	29	<5.0	40	3.0
APR 17...	<.2	.068	23	6.80	1.50	4.6	5.0	4.5	28	34	<5.0	50	3.0
MAY 02...	--	--	--	--	--	--	--	--	--	--	--	--	--
MAY 23...	2.0	--	13	3.60	.880	1.9	3.7	1.2	14	17	<5.0	36	5.0
JUN 13...	3.0	--	10	2.80	.610	1.4	2.6	<.5	10	12	<5.0	26	2.0
JUN 27...	1.5	--	12	3.50	.740	1.4	1.9	.6	12	15	<5.0	12	3.0
JUL 18...	1.5	--	15	4.50	.890	1.4	2.1	.6	10	12	<5.0	44	3.0
AUG 01...	1.0	--	17	5.30	1.00	2.1	2.3	1.0	17	21	<5.0	58	2.0
AUG 15...	1.0	--	18	5.40	1.00	2.1	2.6	.9	16	20	<3.0	42	2.6
SEP 12...	1.5	--	19	5.90	1.10	2.0	2.7	.5	22	27	<3.0	48	2.5

DATE	ARSENIC	COPPER,	IRON,	LEAD,	MANGA-	MERCURY	NICKEL,	SILVER,
	DIS- SOLVED (UG/L AS AS) (01000)	DIS- SOLVED (UG/L AS CU) (01040)	DIS- SOLVED (UG/L AS FE) (01046)	DIS- SOLVED (UG/L AS PB) (01049)	NESE, DIS- SOLVED (UG/L AS MN) (01056)	DIS- SOLVED (UG/L AS HG) (71890)	DIS- SOLVED (UG/L AS NI) (01065)	DIS- SOLVED (UG/L AS AG) (01075)
MAR 13...	<1.0	<1.0	<50	<1.00	<5.0	<.10	<5.00	<.1
APR 17...	<1.0	<1.0	50	<1.00	<5.0	<.10	<5.00	<.1
MAY 02...	--	--	--	--	--	--	--	--
MAY 23...	<1.0	<1.0	<100	<1.00	6.0	<.10	<5.00	<.1
JUN 13...	<5.0	<2.0	<100	<1.00	<5.0	<.10	<5.00	<.1
JUN 27...	<5.0	<2.0	<100	<1.00	<5.0	<.10	<5.00	<.1
JUL 18...	<5.0	2.0	<100	<1.00	<5.0	<.10	<5.00	<.1
AUG 01...	<5.0	<2.0	<100	<1.00	<5.0	<.10	<5.00	<.1
AUG 15...	<5.0	<2.0	<100	<1.00	<3.0	<.10	<3.00	<.1
SEP 12...	<5.0	<2.0	<100	<1.00	<3.0	<.10	<3.00	<.1

DATE	BENZENE	ETHYL-	META/ PARA-	O-	TOLUENE
	TOTAL (UG/L) (34030)	BENZENE TOTAL (UG/L) (34371)	XYLENE WATER UNFLTRD REC (UG/L) (85795)	XYLENE WATER WHOLE TOTAL (UG/L) (77135)	TOTAL (UG/L) (34010)
MAR 13...	<.40	<.40	<.40	<.40	<.40
APR 17...	<.40	<.40	<.40	<.40	<.40
MAY 02...	<.40	<.40	<.40	<.40	<.40
MAY 23...	<.40	<.40	<.40	<.40	<.40
JUN 13...	<.40	<.40	<.40	<.40	<.40
JUN 27...	<.40	<.40	<.40	<.40	<.40
JUL 18...	<.40	<.40	<.40	<.40	<.40
AUG 01...	<.40	<.40	<.40	<.40	<.40
AUG 15...	<.40	--	<.40	<.40	<.40
SEP 12...	<.40	--	<.40	<.40	<.40

BIG THOMPSON PROJECT--Continued

402533105124300 BIG THOMPSON RIVER BELOW SULZER GULCH NEAR LOVELAND, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 40°25'33", long 105°12'43", in NE<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec.3, T.5 N., R.70 W., Larimer County, Hydrologic Unit 10190006, approximately 230 ft downstream of bridge upstream of dam and Loveland Water Treatment Plant intake, approximately 1.2 mi from Hwy 34, and approximately 8.3 mi west of Loveland.

DRAINAGE AREA.--309 mi<sup>2</sup>.

PERIOD OF RECORD.--August 2000 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT- PER ANCE (US/CM) (00095)	PH WATER WHOLE FIELD TEMPER- ATURE WATER (DEG C) (00400)	OXYGEN, DIS- SOLVED (MG/L) (00300)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L) (00608)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L) (00625)	PHOS- PHORUS TOTAL (MG/L) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L) (00671)	
OCT												
05...	1425	167	46	7.9	9.0	9.3	.179	.008	.22	.044	.020	.016
27...	1230	348	40	7.9	8.5	10.0	.027	<.002	.23	.026	.008	E.004
NOV												
09...	1145	38	50	7.2	1.5	11.7	.014	<.002	.14	.019	.013	.007
DEC												
14...	1330	42	58	7.5	.00	13.8	.308	<.002	.25	.040	.034	.025
JAN												
08...	1410	27	66	7.1	.5	14.2	.489	.098	.30	.045	.038	.035
FEB												
13...	1415	31	63	7.7	.5	12.4	.353	.029	.22	.051	.039	.033
MAR												
14...	0900	34	68	7.6	2.0	12.9	.186	.007	.18	.023	.015	E.005
APR												
18...	0915	40	88	7.6	7.5	12.2	.078	.008	.42	.047	.026	.017
MAY												
02...	1035	228	61	8.2	9.0	10.8	.071	.004	.52	.059	.011	<.007
23...	1050	364	36	7.9	9.5	10.8	--	--	--	--	--	--
JUN												
13...	1310	381	27	7.6	12.5	9.1	.063	.002	.14	.021	.009	<.007
27...	1105	339	29	7.7	16.5	9.1	.039	.005	.25	.025	.009	<.007
JUL												
18...	1015	156	40	7.8	18.0	8.1	.069	.017	.22	.021	.013	.008
AUG												
01...	1055	359	43	7.9	19.0	7.6	.065	.028	.29	.019	.009	E.006
15...	1220	281	42	7.8	18.5	7.8	.091	.020	.23	.024	.012	.010
SEP												
12...	1040	222	48	7.7	13.0	8.9	.031	.008	.20	.019	.009	<.007

E Estimated laboratory analysis value.

DATE	TUR-BID-ITY (NTU) (00076)	UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624)	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)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	ALKA- LINITY WAT DIS TOT FET CACO3 (MG/L AS) (00421)	BICAR- BONATE WAT.DIS FET LAB HCO3 (MG/L) (29805)	CAR- BONATE WAT.DIS FET LAB CO3 (MG/L) (29808)	SOLIDS, RESIDUE AT 180 DEG. C (MG/L) (70300)	CARBON, TOTAL (MG/L AS C) (00680)
OCT													
05...	<.2	.057	15	4.50	1.00	2.4	<10.0	2.0	16	19	<5.0	74	3.0
27...	<.2	.059	16	4.90	1.00	1.8	<10.0	1.0	11	13	<5.0	38	3.0
NOV													
09...	.2	.067	17	5.10	1.10	3.4	<10.0	2.0	18	22	<5.0	50	3.0
DEC													
14...	<.2	.061	22	6.40	1.40	3.8	<10.0	2.0	23	28	<5.0	18	3.0
JAN													
08...	.4	.065	23	6.80	1.40	4.0	<10.0	2.0	24	29	<5.0	34	4.0
FEB													
13...	.5	.067	22	6.50	1.30	3.6	3.0	1.9	24	29	<5.0	42	3.0
MAR													
14...	<.2	.079	25	7.40	1.50	4.6	3.0	2.6	24	29	<5.0	46	3.0
APR													
18...	1.0	.025	25	7.40	1.70	4.8	4.0	4.5	38	36	5.0	52	3.0
MAY													
02...	--	--	--	--	--	--	--	--	--	--	--	--	--
23...	2.0	--	13	3.70	.890	1.9	3.7	1.2	12	15	<5.0	34	5.0
JUN													
13...	3.0	--	10	2.90	.620	1.4	2.6	.5	10	12	<5.0	24	2.0
27...	1.5	--	12	3.50	.710	1.4	1.9	.6	12	15	<5.0	10	--
JUL													
18...	1.5	--	15	4.50	.920	1.4	2.1	.7	12	15	<5.0	48	3.0
AUG													
01...	1.0	--	--	--	1.00	2.1	2.5	.7	16	19	<5.0	60	2.0
15...	1.0	--	18	5.40	1.00	2.2	2.6	.9	20	24	<3.0	38	2.8
SEP													
12...	1.5	--	20	6.00	1.10	2.0	2.8	.5	22	27	<3.0	48	2.6

## PLATTE RIVER BASIN

## BIG THOMPSON PROJECT--Continued

402533105124300 BIG THOMPSON RIVER BELOW SULZER GULCH NEAR LOVELAND, CO--Continued

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	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)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)
OCT								
05...	<1.0	<1.0	120	<1.00	<5.0	<.10	<5.00	<.1
27...	<1.0	<1.0	30	<1.00	<5.0	<.10	<5.00	<.1
NOV								
09...	<1.0	<1.0	50	<1.00	<5.0	<.10	<5.00	<.1
DEC								
14...	<1.0	<1.0	30	<1.00	4.0	<.10	<5.00	<.1
JAN								
08...	<1.0	<1.0	30	<1.00	<5.0	.10	<5.00	<.1
FEB								
13...	<1.0	<1.0	20	<1.00	<5.0	<.10	<5.00	<.1
MAR								
14...	<1.0	<1.0	<50	<1.00	5.0	<.10	<5.00	<.1
APR								
18...	<1.0	<1.0	<70	<1.00	7.0	<.10	<5.00	<.1
MAY								
02...	--	--	--	--	--	--	--	--
23...	<1.0	1.0	<100	<1.00	7.0	<.10	<5.00	<.1
JUN								
13...	<5.0	4.0	<100	<1.00	<5.0	<.10	<5.00	<.1
27...	<5.0	7.0	<100	<1.00	<5.0	<.10	<5.00	<.1
JUL								
18...	<5.0	<2.0	<100	<1.00	<5.0	<.10	<5.00	<.1
AUG								
01...	<5.0	<2.0	<100	<1.00	<5.0	<.10	<5.00	<.1
15...	<5.0	<2.0	<100	<1.00	<3.0	<.10	<3.00	<.1
SEP								
12...	<5.0	--	<100	<1.00	4.4	<.10	<3.00	<.1

DATE	BENZENE TOTAL (UG/L) (34030)	ETHYL- BENZENE TOTAL (UG/L) (34371)	META/ PARA- XYLENE WATER UNFLTRD REC (UG/L) (85795)	O- XYLENE WATER WHOLE TOTAL (UG/L) (77135)	TOLUENE TOTAL (UG/L) (34010)
OCT					
05...	<.40	<.40	<.40	<.40	<.40
27...	<.40	<.40	<.40	<.40	<.40
NOV					
09...	<.40	<.40	<.40	<.40	<.40
DEC					
14...	<.40	<.40	<.40	<.40	<.40
JAN					
08...	<.40	<.40	<.40	<.40	<.40
FEB					
13...	<.40	<.40	<.40	<.40	<.40
MAR					
14...	<.40	<.40	<.40	<.40	<.40
APR					
18...	<.40	<.40	<.40	<.40	<.40
MAY					
02...	<.40	<.40	<.40	<.40	<.40
23...	<.40	<.40	<.40	<.40	<.40
JUN					
13...	<.40	<.40	<.40	<.40	<.40
27...	<.40	<.40	<.40	<.40	<.40
JUL					
18...	<.40	<.40	<.40	<.40	<.40
AUG					
01...	<.40	.50	<.40	<.40	<.40
15...	<.40	--	<.40	<.40	<.40
SEP					
12...	<.40	--	<.40	<.40	<.40

BIG THOMPSON PROJECT--Continued

06741510 BIG THOMPSON RIVER AT LOVELAND, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 40°22'43", long 105°03'38", in SE<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec.24, T.5 N., R.69 W., Larimer County, Hydrologic Unit 10190006, on right bank 690 ft downstream from county road bridge C-13, 1.7 mi south of sugar refinery in Loveland, and 1.9 mi downstream from Farmers Ditch diversion.

DRAINAGE AREA.--535 mi<sup>2</sup>.

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

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)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L) (00625)	PHOS-PHORUS TOTAL (MG/L) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L) (00671)
MAR												
14...	1115	8.6	1180	7.8	6.0	12.8	.222	.012	.24	.012	E.004	<.007
APR												
18...	1110	2.3	1540	7.8	12.0	11.3	.182	.052	.42	.016	.006	E.004
MAY												
02...	1245	6.1	1020	8.1	9.5	8.2	.307	.095	.60	.043	.017	<.007
23...	1235	44	261	8.5	13.5	10.8	<.005	.002	.22	.021	<.006	<.007
JUN												
13...	1445	100	182	8.2	13.0	8.6	.131	.032	.40	.043	.019	<.007
27...	1230	62	192	8.2	19.0	8.7	.084	.006	.30	.032	.009	<.007
JUL												
18...	1215	37	1000	8.4	23.0	9.4	.053	.022	.43	.042	E.006	<.007
AUG												
01...	1250	112	622	8.2	21.0	7.3	.092	.018	.91	.115	E.006	<.007
15...	1340	73	277	8.4	19.5	7.3	.058	.007	.37	.041	E.004	E.004
SEP												
12...	1255	29	352	8.6	16.5	10.6	.031	.009	.31	.039	.006	<.007

E Estimated laboratory analysis value.

DATE	TUR-BID-ITY (NTU) (00076)	UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624)	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)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	ALKA-LINITY WAT DIS TOT LAB (MG/L AS CACO3) (00421)	BICAR-BONATE WAT.DIS LAB (MG/L) (29805)	CAR-BONATE WAT.DIS LAB CO3 (MG/L) (29808)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)
MAR													
14...	.2	.062	580	150	50.0	43.0	510	15.0	150	180	<5.0	880	3.0
APR													
18...	2.0	.067	620	140	67.0	88.0	700	29.0	220	270	<5.0	1200	3.0
MAY													
02...	--	--	--	--	--	--	--	--	--	--	--	--	--
23...	6.5	--	94	23.0	9.00	12.0	81.0	3.7	50	60	<5.0	180	5.0
JUN													
13...	6.5	--	68	17.0	6.10	7.3	50.0	1.9	28	34	<5.0	120	3.0
27...	3.5	--	76	20.0	6.40	8.0	55.0	2.1	32	39	<5.0	120	3.0
JUL													
18...	15	--	430	88.0	51.0	53.0	430	7.0	100	120	<5.0	740	4.0
AUG													
01...	50	--	260	60.0	27.0	26.0	210	4.3	89	110	<5.0	490	3.0
15...	20	--	120	32.0	9.00	10.0	67.0	2.9	56	68	<3.0	180	3.0
SEP													
12...	20	--	140	35.0	12.0	14.0	91.0	3.1	66	76	<3.0	230	2.8

## PLATTE RIVER BASIN

## BIG THOMPSON PROJECT--Continued

06741510 BIG THOMPSON RIVER AT LOVELAND, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	ARSENIC	COPPER,	IRON,	LEAD,	MANGA-	MERCURY	NICKEL,	SILVER,
	DIS- SOLVED (UG/L AS AS) (01000)	DIS- SOLVED (UG/L AS CU) (01040)	DIS- SOLVED (UG/L AS FE) (01046)	DIS- SOLVED (UG/L AS PB) (01049)	NESE, DIS- SOLVED (UG/L AS MN) (01056)	DIS- SOLVED (UG/L AS HG) (71890)	DIS- SOLVED (UG/L AS NI) (01065)	DIS- SOLVED (UG/L AS AG) (01075)
MAR 14...	<1.0	<1.0	170	<1.00	49.0	<.10	6.00	<.1
APR 18...	<1.0	2.0	230	<1.00	66.0	<.10	7.00	<.1
MAY 02	--	--	--	--	--	--	--	--
MAY 23...	<1.0	<1.0	<100	<1.00	16.0	<.10	<5.00	<.1
JUN 13...	<5.0	<2.0	<100	<1.00	17.0	<.10	<5.00	<.1
JUN 27...	<5.0	<2.0	<100	<1.00	12.0	<.10	<5.00	<.1
JUL 18...	<5.0	<2.0	<100	<1.00	21.0	<.10	<5.00	<.1
AUG 01...	<5.0	<2.0	<100	<1.00	13.0	<.10	<5.00	<.1
AUG 15...	<5.0	<2.0	<100	<1.00	6.9	<.10	<3.00	<.1
SEP 12...	<5.0	<2.0	<100	<1.00	9.0	<.10	<3.00	<.1

DATE	BENZENE	ETHYL-	META/ PARA- XYLENE WATER UNFLTRD REC	O- XYLENE WATER TOTAL	TOLUENE TOTAL
	TOTAL (UG/L) (34030)	TOTAL (UG/L) (34371)	(UG/L) (85795)	(UG/L) (77135)	(UG/L) (34010)
MAR 14...	<.40	<.40	<.40	<.40	<.40
APR 18...	<.40	<.40	<.40	<.40	<.40
MAY 02...	<.40	<.40	<.40	<.40	<.40
MAY 23...	<.40	<.40	<.40	<.40	<.40
JUN 13...	<.40	<.40	<.40	<.40	<.40
JUN 27...	<.40	<.40	<.40	<.40	<.40
JUL 18...	<.40	<.40	<.40	<.40	<.40
AUG 01...	<.40	<.40	<.40	<.40	<.40
AUG 15...	<.40	--	<.40	<.40	<.40
SEP 12...	<.40	--	<.40	<.40	<.40

BIG THOMPSON PROJECT--Continued

06741520 BIG THOMPSON RIVER BELOW LOVELAND, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 40°23'00", long 105°01'45", in NW<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec.20, T.5 N., R.68 W., Larimer County, Hydrologic Unit 10190006, at county road 9E bridge, about 0.3 mi upstream from outlet ditch and 2.0 mi southeast of Loveland.

DRAINAGE AREA.--543 mi<sup>2</sup>.

PERIOD OF RECORD.--June 1979 to December 1992, and March to September 2001.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

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)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L) (00625)	PHOS-PHORUS TOTAL (MG/L) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L) (00671)
MAR												
14...	1245	21	1050	7.7	8.0	13.8	7.80	1.73	4.0	2.15	2.13	1.92
APR												
18...	1300	14	1130	8.6	17.0	16.5	11.7	.035	1.7	2.29	--	2.01
MAY												
02...	1350	18	1140	8.2	9.5	12.1	10.0	.112	1.9	1.86	1.77	1.63
23...	1330	62	509	8.1	18.0	9.4	.069	<.002	.24	.023	.007	<.007
JUN												
14...	0850	94	362	8.1	12.0	10.1	1.23	.034	.35	.233	.193	.204
27...	1320	69	419	8.6	21.0	10.4	3.61	.026	.54	.693	.703	.639
JUL												
18...	1325	58	975	8.8	24.5	13.2	3.76	.022	.68	.711	.623	.630
AUG												
01...	1345	94	713	8.3	22.0	8.0	2.03	.032	.74	.485	.357	.342
16...	0840	124	298	7.9	17.5	7.2	1.02	.012	.54	.281	.173	.165
SEP												
13...	0815	29	637	7.6	16.0	6.8	3.61	.029	.49	.711	.655	.660

DATE	TUR-BID-ITY (NTU) (00076)	UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624)	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)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	ALKA-LINITY WAT DIS TOT FET LAB (MG/L AS CACO3) (00421)	BICAR-BONATE WAT,DIS FET LAB (MG/L) (29805)	CAR-BONATE WAT,DIS FET LAB (MG/L) (29808)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)
MAR													
14...	.3	.110	400	95.0	39.0	67.0	330	32.0	130	160	<5.0	730	8.0
APR													
18...	2.0	.115	330	70.0	39.0	89.0	390	41.0	120	130	7.0	800	8.0
MAY													
02...	--	--	--	--	--	--	--	--	--	--	--	--	--
23...	15	--	160	36.0	18.0	35.0	160	13.0	64	77	<5.0	350	6.0
JUN													
14...	2.5	--	130	29.0	13.0	24.0	110	5.6	46	56	<5.0	240	3.0
27...	3.0	--	140	33.0	14.0	29.0	99.0	11.0	50	60	<5.0	280	4.0
JUL													
18...	7.0	--	390	81.0	45.0	60.0	360	13.0	110	120	7.0	730	5.0
AUG													
01...	40	--	290	65.0	30.0	37.0	240	8.7	98	120	<5.0	550	4.0
16...	29	--	120	32.0	9.60	13.0	70.0	4.0	58	71	<3.0	210	2.7
SEP													
13...	8.0	--	230	53.0	24.0	42.0	180	12.0	96	120	<3.0	420	3.6

## PLATTE RIVER BASIN

## BIG THOMPSON PROJECT--Continued

06741520 BIG THOMPSON RIVER BELOW LOVELAND, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	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)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)
MAR 14...	<1.0	3.0	120	<1.00	53.0	<.10	6.00	<.1
APR 18...	<1.0	3.0	130	<1.00	40.0	<.10	5.00	<.1
MAY 02...	--	--	--	--	--	--	--	--
MAY 23...	<1.0	1.0	<100	<1.00	24.0	<.10	<5.00	<.1
JUN 14...	<5.0	<2.0	<100	<1.00	22.0	<.10	<5.00	<.1
JUN 27...	<5.0	<2.0	<100	<1.00	13.0	<.10	<5.00	<.1
JUL 18...	<5.0	2.0	<100	<1.00	11.0	<.10	<5.00	<.1
AUG 01...	<5.0	<2.0	<100	<1.00	24.0	<.10	<5.00	<.1
AUG 16...	<5.0	<2.0	<100	<1.00	10.0	<.10	<3.00	<.1
SEP 13...	<5.0	<2.0	<100	<1.00	29.0	<.10	<3.00	<.1

DATE	BENZENE TOTAL (UG/L) (34030)	ETHYL- BENZENE TOTAL (UG/L) (34371)	META/ PARA- XYLENE WATER UNFLTRD REC (UG/L) (85795)	O- XYLENE WATER WHOLE TOTAL (UG/L) (77135)	TOLUENE TOTAL (UG/L) (34010)
MAR 14...	<.40	<.40	<.40	<.40	.42
APR 18...	<.40	<.40	<.40	<.40	.50
MAY 02...	<.40	<.40	<.40	<.40	.50
MAY 23...	<.40	<.40	<.40	<.40	<.40
JUN 14...	<.40	<.40	<.40	<.40	<.40
JUN 27...	<.40	<.40	<.40	<.40	<.40
JUL 18...	<.40	<.40	<.40	<.40	<.40
AUG 01...	<.40	<.40	<.40	<.40	<.40
AUG 16...	<.40	--	<.40	<.40	<.40
SEP 13...	<.40	--	<.40	<.40	<.40

BIG THOMPSON PROJECT--Continued

06741530 BIG THOMPSON RIVER AT I-25 NEAR LOVELAND, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 40°23'51", long 104°59'32", in NW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec.15, T.5 N., R.68 W., Larimer County, Hydrologic Unit 10190006, at bridge on big Thompson River on north bound lane of service road, east of interstate Highway 25 (I-25), 1.5 mi downstream from Hillsboro Ditch, and 4.5 mi east of Loveland.

DRAINAGE AREA.--571 mi<sup>2</sup>.

PERIOD OF RECORD.--April 1987 to December 1992, and March to September 2001.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT- PER (US/CM) (00095)	PH WATER WHOLE FIELD (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L) (00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L) (00625)	PHOS-PHORUS TOTAL (MG/L) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L) (00671)
MAR												
14...	1400	18	1160	8.0	7.5	13.9	5.83	2.43	3.9	1.76	1.64	1.45
APR												
18...	1400	17	1150	8.7	17.0	15.3	9.88	.078	1.6	2.21	2.00	1.84
MAY												
03...	0830	24	1190	7.9	7.5	7.2	9.22	.254	1.6	1.66	1.58	1.45
24...	0820	19	695	8.1	12.5	7.5	3.75	.086	.68	.634	.592	.634
JUN												
14...	1030	20	522	8.8	13.0	12.6	1.26	.012	.30	.245	.213	.221
28...	0900	18	552	8.1	19.5	7.5	1.67	.010	.42	.354	.361	.299
JUL												
19...	0845	12	940	7.9	20.0	5.5	2.30	.035	.52	.387	.324	.326
AUG												
02...	0845	15	765	7.8	20.0	5.4	2.32	.071	.68	.412	.335	.317
16...	0945	72	393	8.1	18.0	7.2	.772	.027	.63	.267	.127	.116
SEP												
13...	0915	6.1	859	7.8	16.0	6.6	3.31	.038	.46	.568	.493	.490

DATE	TUR-BID-ITY (NTU) (00076)	UV ABSORB-ANCE 254 NM, WTR FLT (UNITS /CM) (50624)	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)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	ALKA-LINITY WAT DIS TOT FET LAB (MG/L AS CACO3) (00421)	BICAR-BONATE WAT.DIS FET LAB HCO3 (29805)	CAR-BONATE WAT.DIS FET LAB CO3 (29808)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)
MAR													
14...	.2	.101	470	110	47.0	73.0	400	28.0	160	190	<5.0	850	7.0
APR													
18...	2.0	.105	370	78.0	43.0	83.0	400	36.0	150	160	12	820	7.0
MAY													
03...	4.0	.125	430	88.0	51.0	100	450	34.0	130	160	<5.0	820	7.0
24...	4.0	--	240	52.0	27.0	46.0	220	13.0	98	120	<5.0	470	5.0
JUN													
14...	2.0	--	200	44.0	21.0	33.0	160	7.0	70	85	<5.0	330	3.0
28...	4.5	--	210	50.0	20.0	32.0	150	8.2	90	110	<5.0	380	5.0
JUL													
19...	4.5	--	360	81.0	39.0	47.0	340	12.0	140	170	<5.0	660	4.0
AUG													
02...	16	--	300	70.0	30.0	41.0	240	13.0	130	160	<5.0	600	4.0
16...	30	--	160	41.0	14.0	19.0	100	4.6	78	95	<3.0	260	3.0
SEP													
13...	8.0	--	320	72.0	35.0	51.0	260	13.0	150	180	<3.0	600	3.8

## PLATTE RIVER BASIN

## BIG THOMPSON PROJECT--Continued

06741530 BIG THOMPSON RIVER AT I-25 NEAR LOVELAND, CO--Continued

## WATER-QUALITY RECORDS

DATE	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	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)	MERCURY DIS- SOLVED (UG/L AS HG) (71890)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)
MAR 14...	<1.0	2.0	110	<1.00	73.0	<.10	5.00	<.1
APR 18...	<1.0	3.0	140	<1.00	54.0	<.10	5.00	<.1
MAY 03...	<1.0	1.0	<210	<1.00	<5.0	<.10	<5.00	<.1
24...	<1.0	1.0	<200	<1.00	47.0	<.10	<5.00	<.1
JUN 14...	<5.0	2.0	<100	<1.00	13.0	<.10	<5.00	<.1
28...	<5.0	2.0	<100	<1.00	36.0	<.10	<5.00	<.1
JUL 19...	<5.0	<2.0	<100	<1.00	50.0	<.10	<5.00	<.1
AUG 02...	<5.0	<2.0	<100	<1.00	48.0	<.10	<5.00	<.1
16...	<5.0	<2.0	<100	<1.00	14.0	<.10	<3.00	<.1
SEP 13...	<5.0	<2.0	<100	<1.00	42.0	<.10	3.90	<.1

DATE	BENZENE TOTAL (UG/L) (34030)	ETHYL- BENZENE TOTAL (UG/L) (34371)	META/ PARA- XYLENE WATER UNFLTRD REC (UG/L) (85795)	O- XYLENE WATER WHOLE TOTAL (UG/L) (77135)	TOLUENE TOTAL (UG/L) (34010)
MAR 14...	<.40	<.40	<.40	<.40	<.40
APR 18...	<.40	<.40	<.40	<.40	<.40
MAY 03...	<.40	<.40	<.40	<.40	.40
24...	<.40	<.40	<.40	<.40	<.40
JUN 14...	<.40	<.40	<.40	<.40	<.40
28...	<.40	<.40	<.40	<.40	<.40
JUL 19...	<.40	<.40	<.40	<.40	<.40
AUG 02...	<.40	<.40	<.40	<.40	<.40
16...	<.40	--	<.40	<.40	<.40
SEP 13...	<.40	--	<.40	<.40	<.40

DISCHARGES AND SELECTED WATER-QUALITY DATA AT SITES ON THE LOWER ARKANSAS RIVER

Water-quality data and discharges collected beginning July 1998 at selected sites between Pueblo Reservoir and Las Animas, Colorado. These data will be used to: 1) provide water-quality data to evaluate spatial, temporal, and flow-related changes and trends throughout the lower Arkansas River basin between Pueblo and Las Animas; 2) to complement and help corroborate the reliability of data being collected by other data-collection programs and; 3) determine source areas for selenium and evaluate potential pathways of selenium through the aquatic ecosystem.

07099400 ARKANSAS RIVER ABOVE PUEBLO, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 38°16'18", long 104°43'03", in NE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec.36, T.20 S., R.66 W., Pueblo County, Hydrologic Unit 11020002, on left bank 200 feet downstream from northeast corner of Arkansas River bridge, 0.4 mile downstream from Pueblo Dam, and 7.0 miles west of Pueblo.

DRAINAGE AREA.--4,670 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1965 to September 1970, December 1985 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

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 (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	SULFATE DIS-SOLVED (MG/L) AS SO4 (00945)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L) AS N (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L) AS N (00608)	PHOS-PHORUS DIS-SOLVED (MG/L) AS P (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L) AS P (00671)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L) AS MN (01055)	MANGA-NESE, DIS-SOLVED (UG/L) AS MN (01056)
OCT 30...	0730	307	478	8.2	14.5	8.4	151	.153	.054	<.041	<.006	71	38.0
MAR 05...	0715	207	502	8.3	3.5	11.3	126	.270	.054	<.025	.017	<4	<4.0
APR 23...	0900	630	510	8.3	8.8	9.7	132	.236	.043	<.025	.018	11	8.0

DATE	SELE-NIUM, TOTAL (UG/L) AS SE (01147)	SELE-NIUM, DIS-SOLVED (UG/L) AS SE (01145)	CARBON INRGSED BEDMAT PERCENT (30241)	CARBON ORG.SED BEDMAT PERCENT (30243)	SELE-NIUM BOT MAT <63U WS FIELD (UG/G) (34950)
OCT 30...	3.8	3.1	.14	.27	.8
MAR 05...	5.2	<3.9	--	--	--
APR 23...	7.2	5.9	--	--	--

381628104381700 WILDHORSE CREEK AT THE MOUTH AT PUEBLO, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 38°16'28", long 104°38'17", in SE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec.26, T.20 S., R.65 W., Pueblo County, Hydrologic Unit 11020002, 20 feet downstream from Union Pacific Railroad, 0.3 mi upstream from the Arkansas River, and 1.5 mi west of courthouse in Pueblo.

PERIOD OF RECORD.--July 1998 to April 2001 (discontinued).

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

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 (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	SULFATE DIS-SOLVED (MG/L) AS SO4 (00945)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L) AS N (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L) AS N (00608)	PHOS-PHORUS DIS-SOLVED (MG/L) AS P (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L) AS P (00671)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L) AS MN (01055)	MANGA-NESE, DIS-SOLVED (UG/L) AS MN (01056)
OCT 30...	1000	1.8	3690	8.2	10.0	8.9	1560	28.3	.058	1.45	1.44	--	--
OCT 30...	1815	E1.8	3740	8.1	11.8	8.1	--	--	--	--	--	50	50.0
MAR 05...	0935	1.8	3790	8.4	4.3	13.8	1570	34.0	.350	1.34	1.46	54	46.0
APR 23...	1040	1.3	3880	8.4	10.7	13.3	1710	32.1	.043	1.33	1.30	34	36.0

ARKANSAS RIVER BASIN

DISCHARGES AND SELECTED WATER-QUALITY DATA AT SITES ON THE LOWER ARKANSAS RIVER--Continued

381628104381700 WILDHORSE CREEK AT THE MOUTH AT PUEBLO, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	SELE- NIUM, TOTAL (UG/L AS SE) (01147)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	CARBON INRGSED BEDMAT PERCENT (30241)	CARBON ORG.SED BEDMAT PERCENT (30243)	SELE- NIUM BOT MAT <63U WS FIELD (UG/G) (34950)
OCT 30...	--	--	4.1	.64	7.6
30...	563	550	--	--	--
MAR 05...	482	450	--	--	--
APR 23...	610	560	--	--	--

E Estimated laboratory analysis value.

07099970 ARKANSAS RIVER AT MOFFAT STREET AT PUEBLO, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 38°15'13", long 104°36'02", in SW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec.6, T.21 S., R.64 W., Pueblo County, Hydrologic Unit 11020002, on right bank 10 feet upstream from intake of Saint Charles Mesa Water Association, 150 ft downstream from Santa Fe Avenue bridge, and 1.1 mi upstream from Fountain Creek.

DRAINAGE AREA.--4,778 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1988 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

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)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	NITRO- GEN, NO2+NO3 SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	MANGA- NESE, TOTAL RECOV- ERABLE AS MN) (01055)	MANGA- NESE, DIS- SOLVED AS MN) (01056)
OCT 30...	1045	350	554	8.5	12.7	9.4	166	.464	<.032	<.041	<.006	40	9.0
MAR 05...	1045	226	593	8.4	3.5	12.4	169	.675	.032	<.025	.020	17	4.0
APR 23...	1120	613	545	8.7	9.5	10.7	142	.330	.018	<.025	.020	18	7.0

DATE	SELE- NIUM, TOTAL (UG/L AS SE) (01147)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	CARBON INRGSED BEDMAT PERCENT (30241)	CARBON ORG.SED BEDMAT PERCENT (30243)	SELE- NIUM BOT MAT <63U WS FIELD (UG/G) (34950)
OCT 30...	8.1	6.8	.68	.56	2.4
MAR 05...	11.0	9.6	--	--	--
APR 23...	7.9	7.2	--	--	--

DISCHARGES AND SELECTED WATER-QUALITY DATA AT SITES ON THE LOWER ARKANSAS RIVER--Continued

07106500 FOUNTAIN CREEK AT PUEBLO, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 38°17'16", long 104°36'02", in SE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec.19, T.20 S., R.64 W., Pueblo County, Hydrologic Unit 11020003, on left bank at upstream side of bridge on U.S. Highway 50 at Pueblo, and 2.6 mi upstream from mouth.

DRAINAGE AREA.--926 mi<sup>2</sup>.

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

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 (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	SULFATE DIS-SOLVED (MG/L) AS SO4 (00945)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L) AS N (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L) AS N (00608)	PHOS-PHORUS DIS-SOLVED (MG/L) AS P (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L) AS P (00671)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L) AS MN (01055)	MANGA-NESE, DIS-SOLVED (UG/L) AS MN (01056)
OCT 30...	1100	187	1160	8.4	11.6	9.1	332	2.60	.035	.240	.197	302	<6.0
MAR 05...	1015	181	1180	8.4	5.4	10.8	301	4.00	.038	.557	.531	248	<4.0
APR 23...	1120	141	1080	8.4	9.8	9.7	304	2.97	.048	.272	.268	289	6.0

DATE	SELE-NIUM, TOTAL (UG/L) AS SE (01147)	SELE-NIUM, DIS-SOLVED (UG/L) AS SE (01145)	CARBON INRGSED BEDMAT PERCENT (30241)	CARBON ORG.SED BEDMAT PERCENT (30243)	SELE-NIUM BOT MAT <63U WS FIELD (UG/G) (34950)
OCT 30...	11.8	10.6	.10	.15	.4
MAR 05...	17.2	15.0	--	--	--
APR 23...	13.7	12.2	--	--	--

381515104351900 FOUNTAIN CREEK AT MOUTH AT PUEBLO, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 38°15'15", long 104°35'19", in SE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec.6, T.21 S., R.64 W., Pueblo County, Hydrologic Unit 11020002, 60 feet downstream from Arkansas River Trail walk bridge, 650 ft upstream from the mouth, and 1.8 mi southeast of courthouse in Pueblo.

PERIOD OF RECORD.--October 1997 to August 1998, March 2000 to April 2001 (discontinued).

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

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 (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	SULFATE DIS-SOLVED (MG/L) AS SO4 (00945)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L) AS N (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L) AS N (00608)	PHOS-PHORUS DIS-SOLVED (MG/L) AS P (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L) AS P (00671)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L) AS MN (01055)	MANGA-NESE, DIS-SOLVED (UG/L) AS MN (01056)
OCT 30...	1125	E190	1180	8.4	12.4	9.1	341	2.57	<.032	.203	.192	387	<6.0
MAR 05...	1105	E185	1200	8.5	6.4	10.7	318	4.08	.018	.531	.520	212	<4.0
APR 23...	1140	E140	1110	8.4	13.2	9.0	308	3.59	.021	.272	.255	306	10.0

DATE	SELE-NIUM, TOTAL (UG/L) AS SE (01147)	SELE-NIUM, DIS-SOLVED (UG/L) AS SE (01145)
OCT 30...	15.3	14.1
MAR 05...	13.4	13.7
APR 23...	14.4	12.6

E Estimated laboratory analysis value.

ARKANSAS RIVER BASIN

DISCHARGES AND SELECTED WATER-QUALITY DATA AT SITES ON THE LOWER ARKANSAS RIVER--Continued

381534104333201 ARKANSAS RIVER AT SITE 10-A NEAR PUEBLO, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 38°15'34", long 104°33'32", in SW<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec.33, T.20 S., R.64 W., Pueblo County, Hydrologic Unit 11020002, 0.9 mi downstream from the Pueblo Wastewater Treatment Plant outfall, 1.8 mi downstream from Fountain Creek, and 3.0 mi southeast of courthouse in Pueblo.

PERIOD OF RECORD.--October 1997 to April 2001 (discontinued).

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD TEMPER-ATURE (STAND-ARD UNITS) (DEG C) (00400)	OXYGEN, DIS-SOLVED (MG/L) (00300)	SULFATE DIS-SOLVED (MG/L) AS SO4 (00945)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L) AS N (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L) AS N (00608)	PHOS-PHORUS DIS-SOLVED (MG/L) AS P (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L) AS P (00671)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L) AS MN (01055)	MANGA-NESE, DIS-SOLVED (UG/L) AS MN (01056)	
OCT 30...	1215	545	819	8.4	13.8	9.2	237	1.36	.669	.160	.149	141	<6.0
MAR 05...	1155	458	885	8.2	5.6	11.4	232	2.05	1.01	.349	.339	81	<4.0
APR 23...	1225	766	668	8.4	11.9	9.7	184	.540	.398	.117	.109	99	7.0

DATE	SELE-NIUM, TOTAL (UG/L) AS SE (01147)	SELE-NIUM, DIS-SOLVED (UG/L) AS SE (01145)	CARBON INRGSED BEDMAT PERCENT (30241)	CARBON ORG. SED BEDMAT PERCENT (30243)	SELE-NIUM BOT MAT <63U WS FIELD (UG/G) (34950)
OCT 30...	11.4	11.1	.13	.19	.5
MAR 05...	13.9	11.2	--	--	--
APR 23...	9.2	7.9	--	--	--

381530104333200 CF&I STEEL CORPORATION OUTFALL NEAR PUEBLO, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 38°15'30", long 104°33'46", in NW<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec.4, T.21 S., R.64 W., Pueblo County, Hydrologic Unit 11020002, 200 feet upstream from the mouth, 0.9 mi northeast of Pueblo Wastewater Treatment Plant outfall, and 3.0 mi southeast of courthouse in Pueblo.

PERIOD OF RECORD.--March 2000 to April 2001 (discontinued).

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD TEMPER-ATURE (STAND-ARD UNITS) (DEG C) (00400)	OXYGEN, DIS-SOLVED (MG/L) (00300)	SULFATE DIS-SOLVED (MG/L) AS SO4 (00945)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L) AS N (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L) AS N (00608)	PHOS-PHORUS DIS-SOLVED (MG/L) AS P (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L) AS P (00671)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L) AS MN (01055)	MANGA-NESE, DIS-SOLVED (UG/L) AS MN (01056)	
OCT 30...	1245	60	756	8.2	14.2	7.6	250	.488	<.041	<.041	<.006	131	80.0
MAR 05...	1125	58	673	8.2	8.5	9.3	201	.513	.083	<.025	.020	69	42.0
APR 23...	1210	73	693	8.1	13.3	7.2	206	.397	.064	<.025	.021	107	62.0

DATE	SELE-NIUM, TOTAL (UG/L) AS SE (01147)	SELE-NIUM, DIS-SOLVED (UG/L) AS SE (01145)	CARBON INRGSED BEDMAT PERCENT (30241)	CARBON ORG. SED BEDMAT PERCENT (30243)	SELE-NIUM BOT MAT <63U WS FIELD (UG/G) (34950)
OCT 30...	12.2	10.6	.04	.05	.2
MAR 05...	11.8	10.8	--	--	--
APR 23...	10.8	10.6	--	--	--

DISCHARGES AND SELECTED WATER-QUALITY DATA AT SITES ON THE LOWER ARKANSAS RIVER--Continued

381530104294600 ARKANSAS RIVER AT BAXTER ROAD NEAR BAXTER, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 38°15'30", long 104°29'46", in NW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec.6, T.21 S., R.63 W., Pueblo County, Hydrologic Unit 11020002, at the upstream side of bridge on State Highway 233, 1.2 mi south of Baxter, and 2.6 mi upstream from the St. Charles River.

PERIOD OF RECORD.--July 1998 to April 2001 (discontinued).

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD TEMPER-ATURE (STAND-ARD UNITS) (00400)	OXYGEN, DIS-SOLVED (DEG C) (00010)	SULFATE DIS-SOLVED (MG/L) AS SO4 (00945)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L) AS N (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L) AS N (00608)	PHOS-PHORUS DIS-SOLVED (MG/L) AS P (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L) AS P (00671)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L) AS MN (01055)	MANGA-NESE, DIS-SOLVED (UG/L) AS MN (01056)	
OCT 30...	1415	536	831	8.3	15.4	8.3	230	1.24	.236	.160	.133	148	6.0
MAR 05...	1340	411	885	8.2	8.6	9.8	250	2.16	.465	.280	.268	90	<4.0
APR 23...	1350	891	709	8.0	13.5	9.0	190	.990	.216	.115	.103	67	11.0

DATE	SELE-NIUM, TOTAL (UG/L) AS SE (01147)	SELE-NIUM, DIS-SOLVED (UG/L) AS SE (01145)	CARBON INRGSED BEDMAT PERCENT (30241)	CARBON ORG, SED BEDMAT PERCENT (30243)	SELE-NIUM, BOT MAT <63U WS FIELD (UG/G) (34950)
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OCT 30...	11.0	10.7	.11	.14	.4
MAR 05...	10.3	9.5	--	--	--
APR 23...	8.8	8.4	--	--	--

07109000 ST. CHARLES RIVER AT MOUTH NEAR PUEBLO, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 38°15'42", long 104°28'03", in SW <sup>1</sup>/<sub>4</sub>SE <sup>1</sup>/<sub>4</sub> sec.32, T.20 S., R.63 W., Pueblo County, Hydrologic Unit 11020002, 0.1 mi west of State Highway 231 bridge over the Arkansas River, 1.4 mi north of Vineland, 3.0 mi downstream from U.S. Highway 50 bridge, and 8.2 mi east of courthouse in Pueblo.

DRAINAGE AREA.--475 mi<sup>2</sup>.

PERIOD OF RECORD.--July 1998 to April 2001 (discontinued).

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD TEMPER-ATURE (STAND-ARD UNITS) (00400)	OXYGEN, DIS-SOLVED (DEG C) (00010)	SULFATE DIS-SOLVED (MG/L) AS SO4 (00945)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L) AS N (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L) AS N (00608)	PHOS-PHORUS DIS-SOLVED (MG/L) AS P (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L) AS P (00671)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L) AS MN (01055)	MANGA-NESE, DIS-SOLVED (UG/L) AS MN (01056)	
OCT 30...	1540	17	2080	8.2	15.2	9.6	1120	1.97	.060	<.041	<.006	124	108
MAR 05...	1440	9.8	2290	8.4	11.1	13.7	1190	.868	.047	.028	.025	144	132
APR 23...	1500	8.1	2280	8.2	18.2	10.6	1090	.905	.036	<.025	.009	117	103

DATE	SELE-NIUM, TOTAL (UG/L) AS SE (01147)	SELE-NIUM, DIS-SOLVED (UG/L) AS SE (01145)	CARBON INRGSED BEDMAT PERCENT (30241)	CARBON ORG, SED BEDMAT PERCENT (30243)	SELE-NIUM, BOT MAT <63U WS FIELD (UG/G) (34950)
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OCT 30...	40.6	39.8	.97	.19	.7
MAR 05...	26.3	19.9	--	--	--
APR 23...	18.7	17.5	--	--	--

## DISCHARGES AND SELECTED WATER-QUALITY DATA AT SITES ON THE LOWER ARKANSAS RIVER--Continued

07109500 ARKANSAS RIVER NEAR AVONDALE, CO

## WATER-QUALITY RECORDS

LOCATION.--Lat 38°14'53", long 104°23'55", in NE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec.1, T.21 S., R.63 W., Pueblo County, Hydrologic Unit 11020002, on right bank 15 feet downstream from bridge on Sixmile Road, 0.3 mi upstream from Sixmile Creek, and 2.6 mi west of Avondale.

DRAINAGE AREA.--6,327 mi<sup>2</sup>.

PERIOD OF RECORD.--April to October 1976, April 1979 to September 1980, December 1985 to current year.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD TEMPER-ATURE (STAND-ARD) (DEG C) (00400)	TEMPER-ATURE (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	SULFATE DIS-SOLVED (MG/L) AS SO4 (00945)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L) AS N (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L) AS N (00608)	PHOS-PHORUS DIS-SOLVED (MG/L) AS P (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L) AS P (00671)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L) AS MN (01055)	MANGA-NESE, DIS-SOLVED (UG/L) AS MN (01056)
OCT 30...	1715	661	890	8.2	14.7	8.4	238	1.66	.082	.131	.106	181	<6.0
MAR 05...	1615	462	921	8.3	8.8	10.1	269	2.22	.102	.226	.215	129	4.0
APR 23...	1640	892	726	8.2	14.1	8.9	209	1.20	.058	.100	.099	94	11.0

DATE	SELE-NIUM, TOTAL (UG/L) AS SE (01147)	SELE-NIUM, DIS-SOLVED (UG/L) AS SE (01145)	CARBON INRGSED BEDMAT PERCENT (30241)	CARBON ORG.SED BEDMAT PERCENT (30243)	SELE-NIUM, BOT MAT <63U WS FIELD (UG/G) (34950)
OCT 30...	10.8	9.4	.73	.44	1.0
MAR 05...	12.0	11.0	--	--	--
APR 23...	9.9	6.1	--	--	--

07110000 SIXMILE CREEK AT MOUTH NEAR AVONDALE, CO

## WATER-QUALITY RECORDS

LOCATION.--Lat 38°14'47", long 104°23'36", in SE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec.1, T.21 S., R.63 W., Pueblo County, Hydrologic Unit 11020002, on left bank at upstream end of bridge on U.S. Highway 50 Business, 0.3 mi upstream from mouth, 2.6 mi west of Avondale, and 3.5 mi east of Vineland.

DRAINAGE AREA.--45.0 mi<sup>2</sup>.

PERIOD OF RECORD.--July 1998 to April 2001 (discontinued).

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH WATER WHOLE FIELD TEMPER-ATURE (STAND-ARD) (DEG C) (00400)	TEMPER-ATURE (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	SULFATE DIS-SOLVED (MG/L) AS SO4 (00945)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L) AS N (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L) AS N (00608)	PHOS-PHORUS DIS-SOLVED (MG/L) AS P (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L) AS P (00671)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L) AS MN (01055)	MANGA-NESE, DIS-SOLVED (UG/L) AS MN (01056)
OCT 30...	1730	14	1970	8.0	13.8	7.9	828	4.20	.046	.056	.017	40	12.0
MAR 05...	1620	6.3	2360	8.2	11.3	9.9	1100	12.1	.021	.032	.023	29	14.0
APR 23...	1655	9.8	1930	8.3	16.1	9.3	860	8.82	.023	.029	.029	52	17.0

DATE	SELE-NIUM, TOTAL (UG/L) AS SE (01147)	SELE-NIUM, DIS-SOLVED (UG/L) AS SE (01145)	CARBON INRGSED BEDMAT PERCENT (30241)	CARBON ORG.SED BEDMAT PERCENT (30243)	SELE-NIUM, BOT MAT <63U WS FIELD (UG/G) (34950)
OCT 30...	9.7	9.5	.64	.19	1.3
MAR 05...	18.2	10	--	--	--
APR 23...	11.8	11.7	--	--	--

DISCHARGES AND SELECTED WATER-QUALITY DATA AT SITES ON THE LOWER ARKANSAS RIVER--Continued

07116500 HUERFANO RIVER NEAR BOONE, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 38°13'30", long 103°15'37", in NE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec.18, T.21 S., R.61 W., Pueblo County, Hydrologic Unit 11020006, at right upstream end of bridge on U.S. Highway 50, 0.8 mi upstream from mouth, and 1.6 mi south of Boone.

DRAINAGE AREA.--1,875 mi<sup>2</sup>.

PERIOD OF RECORD.--July 1998 to April 2001 (discontinued).

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

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)	SULFATE DIS-SOLVED (MG/L) AS SO4 (00945)	NITRO-GEN, DIS-SOLVED (MG/L) AS N (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L) AS N (00608)	PHOS-PHORUS DIS-SOLVED (MG/L) AS P (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L) AS P (00671)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L) AS MN (01055)	MANGA-NESE, DIS-SOLVED (UG/L) AS MN (01056)
OCT 30...	1515	4.7	4900	8.2	18.4	8.0	3560	.378	.039	<.041	<.006	88	<6.0
MAR 05...	1720	5.0	4630	8.3	11.5	9.6	3310	1.41	.021	<.025	.022	40	5.0
APR 23...	1800	22	1390	8.2	16.8	7.5	582	.385	.017	<.025	.009	322	12.0

DATE	SELE-NIUM, DIS-SOLVED (UG/L) AS SE (01147)	SELE-NIUM, DIS-SOLVED (UG/L) AS SE (01145)	CARBON INRGSED BEDMAT PERCENT (30241)	CARBON ORG.SED BEDMAT PERCENT (30243)	SELE-NIUM BOT MAT <63U WS FIELD (UG/G) (34950)
OCT 30...		25.4	25.4	.18	.03
MAR 05...		48.2	47.3	--	--
APR 23...		15.0	12.0	--	--

MISCELLANEOUS FIELD MEASUREMENTS, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

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 04...	1100	.61	4940	16.0	MAR 06...	1310	5.1	4540	16.8
NOV 07...	1455	20	1600	10.1	MAR 21...	0930	40	1360	8.7
DEC 05...	1530	4.1	4880	7.4	APR 03...	1335	11	2440	22.8
JAN 09...	1520	5.3	4550	1.6	MAY 01...	0920	3.7	4600	15.5
FEB 05...	1600	8.2	3860	11.5	JUN 05...	1140	22	1440	23.1
					MAR 27...	0830	.38	4690	19.2
					AUG 28...	0930	4.7	3210	16.7

07117600 CHICOSA CREEK NEAR FOWLER, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 38°08'57", long 104°04'47", in SE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec.11, T.22 S., R.60 W., Pueblo County, Hydrologic Unit 11020005, at U.S. Highway 50 bridge, 0.6 mi upstream from mouth, and 3.0 mi west of Fowler.

DRAINAGE AREA.--109 mi<sup>2</sup>.

PERIOD OF RECORD.--July 1998 to April 2001 (discontinued).

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

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)	SULFATE DIS-SOLVED (MG/L) AS SO4 (00945)	NITRO-GEN, DIS-SOLVED (MG/L) AS N (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L) AS N (00608)	PHOS-PHORUS DIS-SOLVED (MG/L) AS P (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L) AS P (00671)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L) AS MN (01055)	MANGA-NESE, DIS-SOLVED (UG/L) AS MN (01056)
OCT 31...	0930	15	1380	8.1	10.4	8.7	575	2.12	.106	.065	.056	1140	363
MAR 06...	0715	2.0	2240	8.1	6.9	10.0	1070	5.17	.019	.039	.025	249	232
APR 24...	0855	3.2	2030	8.0	8.0	10.1	853	3.32	.026	.083	.058	256	238

## ARKANSAS RIVER BASIN

## DISCHARGES AND SELECTED WATER-QUALITY DATA AT SITES ON THE LOWER ARKANSAS RIVER--Continued

## 07117600 CHICOSA CREEK NEAR FOWLER, CO--Continued

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	SELE- NIUM, TOTAL (UG/L AS SE) (01147)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	CARBON INRGSED BEDMAT PERCENT (30241)	CARBON ORG.SED BEDMAT PERCENT (30243)	SELE- NIUM BOT MAT <63U WS FIELD (UG/G) (34950)
OCT 31...	15.4	13.4	.50	.35	1.1
MAR 06...	15.8	19.0	--	--	--
APR 24...	23.1	21.8	--	--	--

## 380715103564701 APISHAPA RIVER AT HIGHWAY 50 NEAR FOWLER, CO

## WATER-QUALITY RECORDS

LOCATION.--Lat 38°07'15", long 103°56'47", in SW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec.19, T.22 S., R.58 W., Otero County, Hydrologic Unit 11020007, at upstream side of bridge on U.S. Highway 50, 0.8 mi upstream from mouth, and 4.1 mi east of Fowler.

PERIOD OF RECORD.--July 1998 to April 2001 (discontinued).

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

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)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)
OCT 31...	1515	35	1600	8.0	13.7	8.6	737	2.70	.077	.043	.026	216	38.0
MAR 06...	1545	6.9	2350	8.2	14.3	13.3	1190	3.80	.044	.047	.020	118	105
APR 24...	1240	10	2120	8.2	16.4	8.3	916	2.48	.031	<.025	.013	156	150

DATE	SELE- NIUM, TOTAL (UG/L AS SE) (01147)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	CARBON INRGSED BEDMAT PERCENT (30241)	CARBON ORG.SED BEDMAT PERCENT (30243)	SELE- NIUM BOT MAT <63U WS FIELD (UG/G) (34950)
OCT 31...	19.0	18.5	.74	.04	.7
MAR 06...	45.0	27.5	--	--	--
APR 24...	30.3	29.0	--	--	--

## 07119700 ARKANSAS RIVER AT CATLIN DAM NEAR FOWLER, CO

## WATER-QUALITY RECORDS

LOCATION.--Lat 38°07'33", long 103°54'41", in NW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec.21, T.22 S., R.58 W., Otero County, Hydrologic Unit 11020005, on right bank 2.2 mi downstream from Catlin diversion dam, 2.3 mi downstream from Apishapa River, and 6.0 mi east of Fowler.

DRAINAGE AREA.--10,901 mi<sup>2</sup>, of which 54 mi<sup>2</sup> is probably noncontributing.

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

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

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)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)
OCT 31...	1630	355	1040	8.4	13.2	9.0	276	1.69	<.032	.111	.072	199	<6.0
MAR 06...	1715	248	1180	8.4	13.1	8.8	449	2.75	.021	.109	.128	143	<4.0
APR 24...	1350	430	865	8.4	16.8	--	268	1.33	.025	.108	.088	148	20.0

DISCHARGES AND SELECTED WATER-QUALITY DATA AT SITES ON THE LOWER ARKANSAS RIVER--Continued

07119700 ARKANSAS RIVER AT CATLIN DAM NEAR FOWLER, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	SELE- NIUM, TOTAL (UG/L AS SE) (01147)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	CARBON INRGSED BEDMAT PERCENT (30241)	CARBON ORG.SED BEDMAT PERCENT (30243)	SELE- NIUM BOT MAT <63U WS FIELD (UG/G) (34950)
OCT 31...	13.7	12.2	.09	.03	.2
MAR 06...	16.9	15.1	--	--	--
APR 24...	14.0	13.4	--	--	--

380111103382101 TIMPAS CREEK AT HIGHWAY 50 AT SWINK, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 38°01'16", long 103°38'21", in SE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec.26, T.23 S., R.56 W., Otero County, Hydrologic Unit 11020005, at bridge on U. S. Highway 50, 0.1 mi upstream from mouth, 0.6 mi west of Swink, and 4.5 mi east of Rocky Ford.

PERIOD OF RECORD.--July 1998 to April 2001 (discontinued).

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

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)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)
NOV 01...	1005	87	2090	8.0	9.2	9.4	--	4.46	.034	.065	.041	264	19.0
MAR 07...	1215	23	2600	8.1	11.0	11.3	1280	5.96	.018	<.025	.012	53	46.0
APR 25...	0820	76	1850	8.0	10.5	8.7	869	4.90	.073	.129	.096	394	49.0

DATE	SELE- NIUM, TOTAL (UG/L AS SE) (01147)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	CARBON INRGSED BEDMAT PERCENT (30241)	CARBON ORG.SED BEDMAT PERCENT (30243)	SELE- NIUM BOT MAT <63U WS FIELD (UG/G) (34950)
NOV 01...	18.1	16.0	2.7	.43	.8
MAR 07...	27.5	26.7	--	--	--
APR 25...	17.9	16.5	--	--	--

375955103351201 CROOKED ARROYO AT HIGHWAY 50 NEAR LA JUNTA, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 37°59'55", long 103°35'12", in SW<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec.32, T.23 S., R.55 W., Otero County, Hydrologic Unit 11020005, at bridge on U. S. Highway 50, 0.8 mi upstream from mouth, 1.6 mi northwest of La Junta, and 2.4 mi northeast of Swink.

PERIOD OF RECORD.--July 1998 to April 2001 (discontinued).

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

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)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)
NOV 01...	1300	29	1470	8.1	10.7	9.4	604	2.24	.047	.079	.045	585	51.0
MAR 07...	1520	5.4	2550	8.3	11.1	11.7	1440	3.28	.022	.038	.019	85	59.0
APR 25...	1110	37	1350	8.0	13.2	8.0	655	2.36	.158	.108	.081	505	77.0

## ARKANSAS RIVER BASIN

## DISCHARGES AND SELECTED WATER-QUALITY DATA AT SITES ON THE LOWER ARKANSAS RIVER--Continued

375955103351201 CROOKED ARROYO AT HIGHWAY 50 NEAR LA JUNTA, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	SELE- NIUM, TOTAL (UG/L AS SE) (01147)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	CARBON INRGSED BEDMAT PERCENT (30241)	CARBON ORG.SED BEDMAT PERCENT (30243)	SELE- NIUM BOT MAT <63U WS FIELD (UG/G) (34950)
NOV 01...	12.6	12.1	1.4	.35	.9
MAR 07...	21.6	14.3	--	--	--
APR 25...	12.9	11.0	--	--	--

07123000 ARKANSAS RIVER AT LA JUNTA, CO

## WATER-QUALITY RECORDS

LOCATION.--Lat 37°59'26", long 103°31'55", in SE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec.2, T.24 S., R.55 W., Otero County, Hydrologic Unit 11020005, on right bank at upstream side of bridge on State Highway 109 in La Junta, 450 feet upstream from King Arroyo.

DRAINAGE AREA.--12,210 mi<sup>2</sup>, of which 115 mi<sup>2</sup> is probably noncontributing.

PERIOD OF RECORD.--July 1998 to April 2001 (discontinued).

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- PER ANCE SECOND (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	SULFATE DIS- SOLVED (MG/L) AS SO4 (00945)	NITRO- GEN, DIS- SOLVED (MG/L) AS N (00631)	NITRO- GEN, DIS- SOLVED (MG/L) AS N (00608)	PHOS- PHORUS DIS- SOLVED (MG/L) AS P (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L) AS P (00671)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L) AS MN (01055)	MANGA- NESE, DIS- SOLVED (UG/L) AS MN (01056)
NOV 01...	1530	79	1680	8.2	14.0	9.1	678	3.35	<.032	.092	.036	335	14.0
MAR 07...	1815	94	2210	8.4	11.2	9.3	1060	3.96	.023	<.025	.015	32	<4.0
APR 25...	1350	175	1370	8.3	19.5	8.2	686	2.60	.030	.049	.032	290	24.0

DATE	SELE- NIUM, TOTAL (UG/L AS SE) (01147)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	CARBON INRGSED BEDMAT PERCENT (30241)	CARBON ORG.SED BEDMAT PERCENT (30243)	SELE- NIUM BOT MAT <63U WS FIELD (UG/G) (34950)
NOV 01...	14.2	13.9	.22	.11	.3
MAR 07...	14.2	19.0	--	--	--
APR 25...	15.2	11.1	--	--	--

380421103193101 HORSE CREEK AT MOUTH NEAR LAS ANIMAS, CO

## WATER-QUALITY RECORDS

LOCATION.--Lat 38°04'36" (revised), long 103°20'18", in NE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec.3, T.23 S., R.53 W., Otero County, Hydrologic Unit 11020008,

1.0 mi upstream from mouth, 1.3 mi downstream from State Highway 194, and 6.3 mi northwest of Las Animas.

PERIOD OF RECORD.--July 1998 to April 2001 (discontinued).

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- PER ANCE SECOND (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	SULFATE DIS- SOLVED (MG/L) AS SO4 (00945)	NITRO- GEN, DIS- SOLVED (MG/L) AS N (00631)	NITRO- GEN, DIS- SOLVED (MG/L) AS N (00608)	PHOS- PHORUS DIS- SOLVED (MG/L) AS P (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L) AS P (00671)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L) AS MN (01055)	MANGA- NESE, DIS- SOLVED (UG/L) AS MN (01056)
NOV 02...	0915	9.5	3690	8.3	7.9	11.6	1360	1.31	.046	.052	.011	236	174
MAR 08...	1315	8.1	3820	8.3	15.4	9.9	2060	.774	.022	<.025	.010	153	106
APR 26...	0915	5.7	4020	8.2	12.5	9.0	2110	.480	.032	<.025	<.004	284	248

DISCHARGES AND SELECTED WATER-QUALITY DATA AT SITES ON THE LOWER ARKANSAS RIVER--Continued

380421103193101 HORSE CREEK AT MOUTH NEAR LAS ANIMAS, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	SELE- NIUM, TOTAL (UG/L AS SE) (01147)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	CARBON INRGSED BEDMAT PERCENT (30241)	CARBON ORG.SED BEDMAT PERCENT (30243)	SELE- NIUM BOT MAT <63U WS FIELD (UG/G) (34950)
NOV 02...	11.6	13.7	.20	.13	.6
MAR 08...	16.2	15.6	--	--	--
APR 26...	12.0	10.7	--	--	--

380506103183801 ADOBE CREEK AT HIGHWAY 194 NEAR LAS ANIMAS, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 38°05'06", long 103°18'38", in NE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec.2, T.23 S., R.53 W., Bent County, Hydrologic Unit 11020009, at bridge on State Highway 194, 1.6 mi southwest of Cornelia, 1.7 mi upstream from mouth, and 5 mi west of Las Animas.

PERIOD OF RECORD.--July 1998 to April 2001 (discontinued).

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

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)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)
NOV 02...	1145	9.3	2430	8.4	9.8	10.7	1120	.983	.068	.049	.008	191	75.0
MAR 08...	1605	3.9	2580	8.2	12.5	10.0	1160	.774	.070	<.025	.008	527	229
APR 26...	1150	3.8	2590	8.2	20.0	8.8	1270	.525	.070	<.025	<.004	347	134

DATE	SELE- NIUM, TOTAL (UG/L AS SE) (01147)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	CARBON INRGSED BEDMAT PERCENT (30241)	CARBON ORG.SED BEDMAT PERCENT (30243)	SELE- NIUM BOT MAT <63U WS FIELD (UG/G) (34950)
NOV 02...	6.4	5.2	.73	.24	1.6
MAR 08...	11.8	11.3	--	--	--
APR 26...	8.6	7.5	--	--	--

07124000 ARKANSAS RIVER AT LAS ANIMAS, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 38°04'51", long 103°13'09", in SE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec.3, T.23 S., R.52 W., Bent County, Hydrologic Unit 11020009, on right bank at upstream side of bridge on U.S. Highway 50, 1.1 mi north of courthouse in Las Animas, and 4.2 mi upstream from mouth of Purgatoire River.

DRAINAGE AREA.--14,417 mi<sup>2</sup>, of which 441 mi<sup>2</sup> is contributing.

PERIOD OF RECORD.--December 1985 to April 2001 (discontinued).

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

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)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)
NOV 02...	1430	83	2540	8.2	12.0	9.4	1160	2.57	<.032	<.041	.031	191	22.0
MAR 08...	1915	138	2560	8.3	13.3	8.7	1310	2.98	.026	.028	.020	92	7.0
APR 26...	1450	107	1890	8.2	24.0	7.7	890	1.85	.029	.041	.009	341	24.0

ARKANSAS RIVER BASIN

DISCHARGES AND SELECTED WATER-QUALITY DATA AT SITES ON THE LOWER ARKANSAS RIVER--Continued

07124000 ARKANSAS RIVER AT LAS ANIMAS, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	SELE- NIUM, TOTAL (UG/L AS SE) (01147)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	CARBON INRGSED BEDMAT PERCENT (30241)	CARBON ORG.SED BEDMAT PERCENT (30243)	SELE- NIUM BOT MAT <63U WS FIELD (UG/G) (34950)
NOV 02...	13.4	12.1	.24	.03	.3
MAR 08...	11.7	11.4	--	--	--
APR 26...	13.3	12.7	--	--	--

07128500 PURGATOIRE RIVER NEAR LAS ANIMAS, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 38°02'02", long 103°12'00", in NE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec.23, T.23 S., R.52 W., Bent County, Hydrologic Unit 11020010, on right bank at downstream side of bridge on State Highway 101, 2.3 mi southeast of courthouse in Las Animas, and 4.5 mi upstream from the mouth.

DRAINAGE AREA.--3,318 mi<sup>2</sup>.

PERIOD OF RECORD.--July 1998 to April 2001 (discontinued).

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

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)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)
NOV 02...	1640	54	2900	8.3	10.2	9.8	1430	.212	<.032	.084	.023	123	44.0
MAR 08...	2155	24	3600	8.3	11.4	8.4	2020	.039	.016	<.025	.012	125	91.0
APR 26...	1745	5.7	4020	8.1	23.9	11.0	2180	.043	.037	<.025	.004	199	171

DATE	SELE- NIUM, TOTAL (UG/L AS SE) (01147)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	CARBON INRGSED BEDMAT PERCENT (30241)	CARBON ORG.SED BEDMAT PERCENT (30243)	SELE- NIUM BOT MAT <63U WS FIELD (UG/G) (34950)
NOV 02...	3.9	3.8	.62	.26	.4
MAR 08...	<3.9	<3.9	--	--	--
APR 26...	<3.9	<3.9	--	--	--

MISCELLANEOUS FIELD MEASUREMENTS, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

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 03...	1730	1.3	3270	23.5	MAY 15...	1305	12	4300	26.5
04...	1005	1.4	3300	15.5	JUN 12...	1645	8.3	2430	27.0
NOV 21...	1300	37	3490	3.5	JUL 26...	1250	32	1640	28.0
DEC 19...	1400	36	3550	.5	AUG 21...	1630	8.4	1600	30.5
JAN 17...	1440	35	3550	.1	SEP 19...	1230	280	2770	21.5
FEB 22...	1350	32	3440	7.5					
APR 03...	1545	27	3480	20.5					

## GROUND-WATER LEVELS

525

## PROWERS COUNTY

380009102350300. SC02304633DBC Lamar Drought Well

LOCATION.--Lat 38°00'09", long 102°35'03", in SW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec.33, T.23 S., R.46 W., Prowers County, Hydrologic Unit 11020009, 0.7 mi south of county road CC, 1.6 mi east of U.S. Highway 385, and 6.2 mi south of Lamar.

AQUIFER.--Valley-fill deposits.

WELL CHARACTERISTICS.--Drilled, observation well, diameter 16 in., depth 69 ft.

INSTRUMENTATION.--Water-level recorder with satellite telemetry.

DATUM.--Elevation of land-surface datum is 3,731 ft above sea level, from topographic map. Measuring point: top of 1 in. PVC pipe above well casing, 4.80 ft above land-surface datum.

REMARKS.--Daily records for 2000 and 2001 water years are good. Daily data that are not published are either missing or of unacceptable quality.

PERIOD OF RECORD.--Daily record from April 2000 to current year. Intermittent measurements made prior to April 2000 not previously published.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 41.40 ft below land-surface datum, Feb. 27, 1973, from manual measurement; lowest, 56.66 ft, Sep. 29-30, 2001.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MEAN VALUES

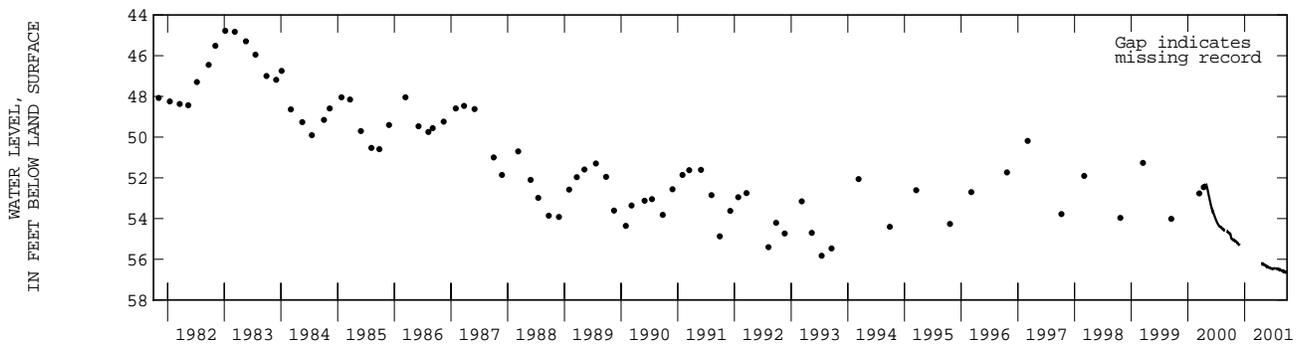
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	52.43	53.50	54.10	54.43	---
2	---	---	---	---	---	---	---	52.46	53.52	54.12	54.44	---
3	---	---	---	---	---	---	---	52.49	53.53	54.13	54.44	---
4	---	---	---	---	---	---	---	52.52	53.56	54.15	54.44	---
5	---	---	---	---	---	---	---	52.55	53.58	54.17	54.45	---
6	---	---	---	---	---	---	---	52.58	53.61	54.18	54.48	54.60
7	---	---	---	---	---	---	---	52.61	53.59	54.20	54.49	54.60
8	---	---	---	---	---	---	---	52.65	53.61	54.22	54.50	54.62
9	---	---	---	---	---	---	---	52.70	53.62	54.23	54.50	54.62
10	---	---	---	---	---	---	---	52.73	53.66	54.25	54.51	54.63
11	---	---	---	---	---	---	---	52.76	53.68	54.26	54.51	54.65
12	---	---	---	---	---	---	52.46	52.81	53.71	54.27	54.52	54.66
13	---	---	---	---	---	---	52.44	52.85	53.74	54.29	54.53	54.67
14	---	---	---	---	---	---	52.42	52.88	53.75	54.30	54.53	54.67
15	---	---	---	---	---	---	52.43	52.91	53.77	54.31	54.53	54.68
16	---	---	---	---	---	---	52.43	52.94	53.80	54.33	54.54	54.68
17	---	---	---	---	---	---	52.42	52.97	53.82	54.34	54.55	54.69
18	---	---	---	---	---	---	52.41	53.01	53.84	54.35	54.54	54.69
19	---	---	---	---	---	---	52.41	53.06	53.86	54.36	54.55	54.69
20	---	---	---	---	---	---	52.41	53.09	53.88	54.37	54.56	54.70
21	---	---	---	---	---	---	52.40	53.12	53.90	54.38	54.57	54.70
22	---	---	---	---	---	---	52.37	53.15	53.92	54.38	54.58	54.71
23	---	---	---	---	---	---	52.38	53.18	53.94	54.39	54.58	54.71
24	---	---	---	---	---	---	52.38	53.22	53.96	54.40	54.59	54.71
25	---	---	---	---	---	---	52.38	53.25	53.99	54.40	54.59	54.72
26	---	---	---	---	---	---	52.38	53.30	54.00	54.40	---	54.72
27	---	---	---	---	---	---	52.38	53.33	54.02	54.40	---	54.73
28	---	---	---	---	---	---	52.38	53.35	54.04	54.41	---	54.74
29	---	---	---	---	---	---	52.37	53.40	54.06	54.41	---	54.76
30	---	---	---	---	---	---	52.40	53.42	54.09	54.42	---	54.76
31	---	---	---	---	---	---	---	53.46	---	54.43	---	---
MEAN	---	---	---	---	---	---	---	52.94	53.78	54.30	---	---
MAX	---	---	---	---	---	---	---	53.46	54.09	54.43	---	---
MIN	---	---	---	---	---	---	---	52.43	53.50	54.10	---	---

GROUND-WATER LEVELS

PROWERS COUNTY--Continued

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	54.78	55.10	---	---	---	---	---	56.23	56.39	56.46	56.47	56.57
2	54.82	55.11	---	---	---	---	---	56.26	56.39	56.46	56.48	56.58
3	54.87	55.11	---	---	---	---	---	56.26	56.39	56.46	56.47	56.58
4	54.92	55.12	---	---	---	---	---	56.27	56.41	56.46	56.47	56.59
5	54.96	55.13	---	---	---	---	---	56.27	56.41	56.46	56.47	56.59
6	54.97	55.13	---	---	---	---	---	56.27	56.41	56.45	56.48	56.58
7	54.98	55.13	---	---	---	---	---	56.28	56.41	56.45	56.49	56.61
8	54.98	55.14	---	---	---	---	---	56.28	56.41	56.45	56.49	56.62
9	54.99	55.15	---	---	---	---	---	56.28	56.41	56.44	56.51	56.61
10	54.99	55.16	---	---	---	---	---	56.28	56.41	56.44	56.52	56.60
11	55.00	55.18	---	---	---	---	---	56.30	56.41	56.45	56.51	56.61
12	55.01	55.18	---	---	---	---	---	56.30	56.42	56.45	56.51	56.61
13	55.01	55.18	---	---	---	---	---	56.30	56.43	56.45	56.52	56.61
14	55.01	55.19	---	---	---	---	---	56.30	56.44	56.45	56.51	56.61
15	55.02	55.21	---	---	---	---	---	56.30	56.44	56.45	56.53	56.62
16	55.04	55.21	---	---	---	---	---	56.30	56.44	56.45	56.53	56.62
17	55.04	55.23	---	---	---	---	56.19	56.32	56.44	56.45	56.53	56.63
18	55.05	55.23	---	---	---	---	56.19	56.32	56.44	56.45	56.53	56.64
19	55.06	55.24	---	---	---	---	56.19	56.33	56.46	56.45	56.53	56.63
20	55.06	55.25	---	---	---	---	56.20	56.33	56.46	56.45	56.53	56.63
21	55.06	55.26	---	---	---	---	56.20	56.35	56.46	56.45	56.53	56.62
22	55.06	55.27	---	---	---	---	56.21	56.34	56.45	56.45	56.54	56.63
23	55.06	55.28	---	---	---	---	56.23	56.34	56.45	56.46	56.54	56.64
24	55.07	55.29	---	---	---	---	56.22	56.35	56.45	56.46	56.54	56.64
25	55.08	55.29	---	---	---	---	56.22	56.35	56.46	56.46	56.56	56.64
26	55.07	55.29	---	---	---	---	56.23	56.36	56.46	56.47	56.56	56.63
27	55.08	55.30	---	---	---	---	56.22	56.36	56.46	56.47	56.56	56.63
28	55.08	55.30	---	---	---	---	56.22	56.37	56.46	56.47	56.56	56.64
29	55.09	55.30	---	---	---	---	56.22	56.37	56.46	56.46	56.56	56.65
30	55.09	55.31	---	---	---	---	56.23	56.38	56.47	56.46	56.57	56.65
31	55.10	---	---	---	---	---	---	56.39	---	56.47	56.58	---
MEAN	55.01	55.21	---	---	---	---	---	56.31	56.43	56.46	56.52	56.62
MAX	55.10	55.31	---	---	---	---	---	56.39	56.47	56.47	56.58	56.65
MIN	54.78	55.10	---	---	---	---	---	56.23	56.39	56.44	56.47	56.57



QUALITY OF GROUND WATER

EL PASO COUNTY

384056104415601 - SC01606505°CCB - FOUNTAIN NO. 3

LOCATION.--Lat 38°40'56", long 104°41'56" in NW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec.5, T.16 S., R.65 W., El Paso County, Hydrologic Unit 11020003.

AQUIFER.--Fountain Creek Alluvial Aquifer.

WELL CHARACTERISTICS.--Municipal well, diameter 16 in. (24 in. prior to 1989), depth 53 ft, screened 38 to 53 ft.

DATUM.--Elevation of land-surface datum is 5,540 ft above sea level, from topographic map.

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	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 ORTHO, DIS- SOLVED (MG/L) AS P) (00671)
FEB 07...	1155	988	7.2	12.7	<.006	2.12	--	E.016
AUG 28...	1000	1110	7.1	12.7	<.006	1.93	.020	E.009

E Estimated laboratory analysis value.

384108104420701 - SC01606506DAA - FOUNTAIN NO. 2

LOCATION.--Lat 38°41'08", long 104°42'07", NE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec.6, T.16 S., R.65 W., in El Paso County, Hydrologic Unit 11020003.

AQUIFER.--Fountain Creek Alluvial Aquifer.

WELL CHARACTERISTICS.--Municipal well, diameter 16 in. (24 in. prior to 1990), depth 57 ft, screened 42 to 57 ft.

DATUM.--Elevation of land-surface datum is 5,549.6 ft above sea level, from levels.

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	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 ORTHO, DIS- SOLVED (MG/L) AS P) (00671)
FEB 07...	1130	1140	7.4	12.8	<.006	1.79	.011	.019
AUG 28...	0935	1190	7.1	12.7	<.006	1.25	.020	E.014

E Estimated laboratory analysis value.

384323104432201 - SC01506625AAB - WIDEFIELD NO. 5

LOCATION.--Lat 38°43'23", long 104°43'22", in NW<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec.25. T.15 S., R.66 W., El Paso County, Hydrologic Unit 11020003.

AQUIFER.--Widefield Aquifer of Fountain Creek Alluvium.

WELL CHARACTERISTICS.--Municipal well, diameter 16 in., depth 47 ft, screened 26.5 to 46.5 ft.

DATUM.--Elevation of land-surface datum is 5,640 ft above sea level, from topographic map.

PERIOD OF RECORD.--July 1982 and February to 1999 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	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 ORTHO, DIS- SOLVED (MG/L) AS P) (00671)
FEB 07...	1045	908	7.2	13.9	<.006	4.50	.002	.036

QUALITY OF GROUND WATER  
EL PASO COUNTY--Continued

384345104241401 - SC01506324CBB - SWEET WATER NO. 1

LOCATION.--Lat 38°43'45", long 104°24'11"(revised), in NW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec.24, T.15 S., R.63 W., El Paso County, Hydrologic Unit 11020004.

AQUIFER.--Black Squirrel Alluvial Aquifer.

WELL CHARACTERISTICS.--Public-supply well, diameter 16 in., depth 158 ft, screened 112 to 152 ft.

DATUM.--Elevation of land-surface datum is 5,712 ft above sea level, from topographic map.

PERIOD OF RECORD.--February 1999 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA SOLVED (MG/L AS N) (00608)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)
FEB 06...	1015	304	7.5	12.9	<.006	4.58	.003	.059
AUG 29...	1045	305	7.5	13.8	<.006	4.36	<.002	.055

384407104434801 - SC01506624BAD1 - WIDEFIELD NO. 4

LOCATION.--Lat 38°44'07", long 104°43'48", in SE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec.24, T.15 S., R.66 W., El Paso County, Hydrologic Unit 11020003.

AQUIFER.--Widefield Aquifer of Fountain Creek Alluvium.

WELL CHARACTERISTICS.--Municipal well, diameter 16 in., depth 71 ft, screened 41 to 71 ft.

DATUM.--Elevation of land-surface datum is 5,685 ft above sea level, from topographic map.

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA SOLVED (MG/L AS N) (00608)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)
FEB 07...	1020	576	7.2	13.2	<.006	6.75	.009	E.017
AUG 28...	1055	555	7.2	13.1	<.006	6.81	.005	E.015

E Estimated laboratory analysis value.

384433104440702 - SC01506613CBD2 - U-14

LOCATION.--Lat 38°44'33", long 104°44'07", in SW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec.13, T.15 S., R.66 W., El Paso County, Hydrologic Unit 11020003.

AQUIFER.--Widefield Aquifer of Fountain Creek Alluvium.

WELL CHARACTERISTICS.--Monitor well, diameter 2 in., depth 47 ft, screened 43 to 46 ft.

DATUM.--Elevation of land-surface datum is 5,701 ft above sea level, from levels.

PERIOD OF RECORD.--October 1992 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET) (72019)	SPE- CIFIC CON- DUCT- ANCE (US/CM (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA SOLVED (MG/L AS N) (00608)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)
FEB 06...	1450	31.76	554	7.1	12.4	<.006	7.69	.009	.021
AUG 28...	1155	35.71	542	7.0	13.5	<.006	7.14	.004	E.014

E Estimated laboratory analysis value.

QUALITY OF GROUND WATER

EL PASO COUNTY--Continued

384458104442601 - SC01506614AAD - SECURITY NO. 2

LOCATION.--Lat 38°44'58", long 104°44'26", in SE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec.14, T.15 S., R.66 W., El Paso County, Hydrologic Unit 11020003.

AQUIFER.--Widefield Aquifer of Fountain Creek Alluvium.

WELL CHARACTERISTICS.--Municipal well, diameter 24 in., depth 78 ft, screened 43 to 78 ft.

DATUM.--Elevation of land-surface datum is 5,715 ft above sea level, from topographic map.

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	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 ORTHO, DIS- SOLVED (MG/L AS P) (00671)
FEB 07...	1325	486	7.0	13.2	<.006	8.41	.004	E.017
AUG 28...	1320	475	7.0	13.1	<.006	7.24	.005	E.009

E Estimated laboratory analysis value.

384535104450801 - SC01506611BCD2 - VENETUCCI NO. 3

LOCATION.--Lat 38°45'35", long 104°45'08", in SE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec.11, T.15 S., R.66 W., El Paso County, Hydrologic Unit 11020003.

AQUIFER.--Widefield Aquifer of Fountain Creek Alluvium.

WELL CHARACTERISTICS.--Irrigation well, diameter 24 in., depth 80 ft, screening unknown.

DATUM.--Elevation of land-surface datum is 5,750 ft above sea level, from topographic map.

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	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 ORTHO, DIS- SOLVED (MG/L AS P) (00671)
FEB 06...	1355	488	7.2	12.5	<.006	8.30	.007	.062
AUG 29...	1510	454	7.1	12.9	<.006	7.20	.006	.055

384604104451502 - SC01506602CCC2 - U-9

LOCATION.--Lat 38°46'04", long 104°45'15", in SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec.2, T.15 S., R.66 W., El Paso County, Hydrologic Unit 11020003.

AQUIFER.--Widefield Aquifer of Fountain Creek Alluvium.

WELL CHARACTERISTICS.--Monitor well, diameter 2 in., depth 55 ft, screened 51 to 53 ft.

DATUM.--Elevation of land-surface datum is 5,773.8 ft above sea level, from levels.

PERIOD OF RECORD.--October 1992 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET) (72019)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	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 ORTHO, DIS- SOLVED (MG/L AS P) (00671)
FEB 06...	1545	31.77	587	8.0	12.1	<.006	11.3	.005	.134
AUG 28...	1425	33.21	596	8.0	13.3	<.006	9.39	.006	.129

## QUALITY OF GROUND WATER

EL PASO COUNTY--Continued

384610104453501 - SC01506603DDB - SECURITY NO. 14

LOCATION.--Lat 38°46'10", long 104°45'35", in NW<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec.14, T.15 S., R.66 W., El Paso County, Hydrologic Unit 11020003.

AQUIFER.--Widefield Aquifer of Fountain Creek Alluvium.

WELL CHARACTERISTICS.--Municipal well, diameter 24 in., depth 80 ft, screened 39 to 80 ft.

DATUM.--Elevation of land-surface datum is 5,779.2 ft above sea level, from levels.

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

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	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 ORTHO, DIS- SOLVED (MG/L AS P) (00671)
FEB 07...	1340	588	7.1	13.4	<.006	8.21	.004	.043
AUG 28...	1340	581	7.0	12.6	<.006	7.24	.009	.031

384617104455901 - SC01506603CAD - STRATMOOR HILLS NO. 4

LOCATION.--Lat 38°46'17", long 104°45'59", in SE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec.3, T.15 S., R.66 W., El Paso County, Hydrologic Unit 11020003.

AQUIFER.--Widefield Aquifer of Fountain Creek Alluvium.

WELL CHARACTERISTICS.--Municipal well, diameter 12 in. (16 in. prior to 1998), depth 49 ft, screened 29 to 49 ft.

DATUM.--Elevation of land-surface datum is 5,775.4 ft above sea level, from levels.

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

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	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 ORTHO, DIS- SOLVED (MG/L AS P) (00671)
FEB 07...	1440	706	7.4	13.5	<.006	9.85	.004	E.016
AUG 28...	1515	865	7.3	13.5	<.006	7.45	.020	.018

E Estimated laboratory analysis value.

384639104461401 - SC01506603BAC1 - MARS GAS

LOCATION.--Lat 38°46'39", long 104°46'14", in SW<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec.3, T.15 S., R.66 W., El Paso County, Hydrologic Unit 11020003.

AQUIFER.--Fountain Creek Alluvial Aquifer.

WELL CHARACTERISTICS.--Commercial well, diameter 6 in., depth 85 ft, screened 50 to 85 ft.

DATUM.--Elevation of land-surface datum is 5,820 ft above sea level, from topographic map.

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

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	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 ORTHO, DIS- SOLVED (MG/L AS P) (00671)
FEB 07...	1410	1080	7.2	11.9	E.005	3.74	.008	.019
AUG 29...	1440	1050	7.2	12.3	E.004	5.33	.011	E.013

E Estimated laboratory analysis value.

QUALITY OF GROUND WATER

EL PASO COUNTY--Continued

384653104451901 - SC01506602BBB - TH-18

LOCATION.--Lat 38°46'53", long 104°45'19", in NW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec.2. T.15 S., R.66 W., El Paso County, Hydrologic Unit 11020003.

AQUIFER.--Widefield Aquifer of Fountain Creek Alluvium.

WELL CHARACTERISTICS.--Monitor well, diameter 2 in., depth 122 ft, screened 96 to 122 ft.

DATUM.--Elevation of land-surface datum is 5,889.6 ft above sea level, from levels.

PERIOD OF RECORD.--October 1992 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET) (72019)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	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 ORTHO, DIS- SOLVED (MG/L AS P) (00671)
FEB 06...	1300	85.20	460	7.0	12.6	<.006	10.9	.002	.075
AUG 29...	1320	86.04	455	6.9	13.7	<.006	9.62	.004	.076

384718104463701 - SC01406633DAA - BARNES WELL

LOCATION.--Lat 38°47'18", long 104°46'37", in NE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec.33. T.14 S., R.66 W., El Paso County, Hydrologic Unit 11020003.

AQUIFER.--Fountain Creek Alluvial Aquifer.

WELL CHARACTERISTICS.--Domestic well, diameter 6 in., depth 72 ft, screening unknown.

DATUM.--Elevation of land-surface datum is 5,830 ft above sea level, from topographic map.

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH WATER WHOLE FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	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 ORTHO, DIS- SOLVED (MG/L AS P) (00671)
FEB 06...	1615	1330	7.1	13.2	<.006	11.6	.031	E.017
AUG 29...	1415	1240	7.0	13.4	<.006	8.25	.038	E.010

E Estimated laboratory analysis value.

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## CONVERSION FACTORS AND VERTICAL DATUM

<b>Multiply</b>	<b>By</b>	<b>To obtain</b>
<b><i>Length</i></b>		
inch (in.)	$2.54 \times 10^1$	millimeter
	$2.54 \times 10^{-2}$	meter
foot (ft)	$3.048 \times 10^{-1}$	meter
mile (mi)	$1.609 \times 10^0$	kilometer
<b><i>Area</i></b>		
acre	$4.047 \times 10^3$	square meter
	$4.047 \times 10^{-1}$	square hectometer
	$4.047 \times 10^{-3}$	square kilometer
square mile (mi <sup>2</sup> )	$2.590 \times 10^0$	square kilometer
<b><i>Volume</i></b>		
gallon (gal)	$3.785 \times 10^0$	liter
	$3.785 \times 10^0$	cubic decimeter
	$3.785 \times 10^{-3}$	cubic meter
million gallons (Mgal)	$3.785 \times 10^3$	cubic meter
	$3.785 \times 10^{-3}$	cubic hectometer
cubic foot (ft <sup>3</sup> )	$2.832 \times 10^1$	cubic decimeter
	$2.832 \times 10^{-2}$	cubic meter
cubic-foot-per-second day [(ft <sup>3</sup> /s) d]	$2.447 \times 10^3$	cubic meter
	$2.447 \times 10^{-3}$	cubic hectometer
acre-foot (acre-ft)	$1.233 \times 10^3$	cubic meter
	$1.233 \times 10^{-3}$	cubic hectometer
	$1.233 \times 10^{-6}$	cubic kilometer
<b><i>Flow</i></b>		
cubic foot per second (ft <sup>3</sup> /s)	$2.832 \times 10^1$	liter per second
	$2.832 \times 10^1$	cubic decimeter per second
	$2.832 \times 10^{-2}$	cubic meter per second
gallon per minute (gal/min)	$6.309 \times 10^{-2}$	liter per second
	$6.309 \times 10^{-2}$	cubic decimeter per second
	$6.309 \times 10^{-5}$	cubic meter per second
million gallons per day (Mgal/d)	$4.381 \times 10^1$	cubic decimeter per second
	$4.381 \times 10^{-2}$	cubic meter per second
<b><i>Mass</i></b>		
ton (short)	$9.072 \times 10^{-1}$	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.