

Water Resources Data Colorado Water Year 1997

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

By R.M. Crowfoot, A.V. Paillet, G.F. Ritz, M.E. Smith, R.D. Steger,
and G.B. O'Neill

Water-Data Report CO-97-1

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

UNITED STATES DEPARTMENT OF THE INTERIOR

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Lakewood, CO 80225

CALENDAR FOR WATER YEAR 1997

1996

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						1	2	1	2	3	4	5	6	7
6	7	8	9	10	11	12	3	4	5	6	7	8	9	8	9	10	11	12	13	14
13	14	15	16	17	18	19	10	11	12	13	14	15	16	15	16	17	18	19	20	21
20	21	22	23	24	25	26	17	18	19	20	21	22	23	22	23	24	25	26	27	28
27	28	29	30	31			24	25	26	27	28	29	30	29	30	31				

1997

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						1							1	
5	6	7	8	9	10	11	2	3	4	5	6	7	8	2	3	4	5	6	7	8
12	13	14	15	16	17	18	9	10	11	12	13	14	15	9	10	11	12	13	14	15
19	20	21	22	23	24	25	16	17	18	19	20	21	22	16	17	18	19	20	21	22
26	27	28	29	30	31		23	24	25	26	27	28	23	24	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
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6	7	8	9	10	11	12	4	5	6	7	8	9	10	8	9	10	11	12	13	14
13	14	15	16	17	18	19	11	12	13	14	15	16	17	15	16	17	18	19	20	21
20	21	22	23	24	25	26	18	19	20	21	22	23	24	22	23	24	25	26	27	28
27	28	29	30				25	26	27	28	29	30	31	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
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6	7	8	9	10	11	12	3	4	5	6	7	8	9	7	8	9	10	11	12	13
13	14	15	16	17	18	19	10	11	12	13	14	15	16	14	15	16	17	18	19	20
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PREFACE

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

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

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

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

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13. ABSTRACT <i>(Maximum 200 words)</i> Water-resources data for Colorado for the 1997 water year consist of records of stage, discharge, and water quality of streams; stage, contents, and water-quality of lakes and reservoirs; and water levels and water quality of wells and springs. This report (Volumes 1 and 2) contains discharge records for 327 gaging stations, stage and contents of 26 lakes and reservoirs, discharge measurements for 1 partial-record low-flow station and 1 miscellaneous site, peak flow information for 30 crest-stage partial-record stations; water-quality for 129 gaging stations and for 7 lakes and reservoirs, supplemental water-quality for 186 gaged sites; water-quality for 25 miscellaneous sites and 14 observation wells; water levels for 3 observation wells, and meteorological data for 34 sites. Eight 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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(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

By R.M. Crowfoot, A.V. Paillet, G.F. Ritz, M.E. Smith, R.D. Steger, and G.B. O'Neill

INTRODUCTION

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

This report (Volume 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 152 surface-water stations, peak discharges for 29 partial-record surface-water stations and discharge measurements only for 1 miscellaneous site; (2) stage and contents for 12 lakes and reservoirs; (3) water-quality data for 61 surface-water stations, 3 reservoirs, 14 wells, and miscellaneous surface-water-quality data for 75 gaged sites, 5 miscellaneous sites; and (4) ground-water level records for 1 site, and meteorological data for 23 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. Four pertinent stations operated by bordering States also 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-97-1." 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.

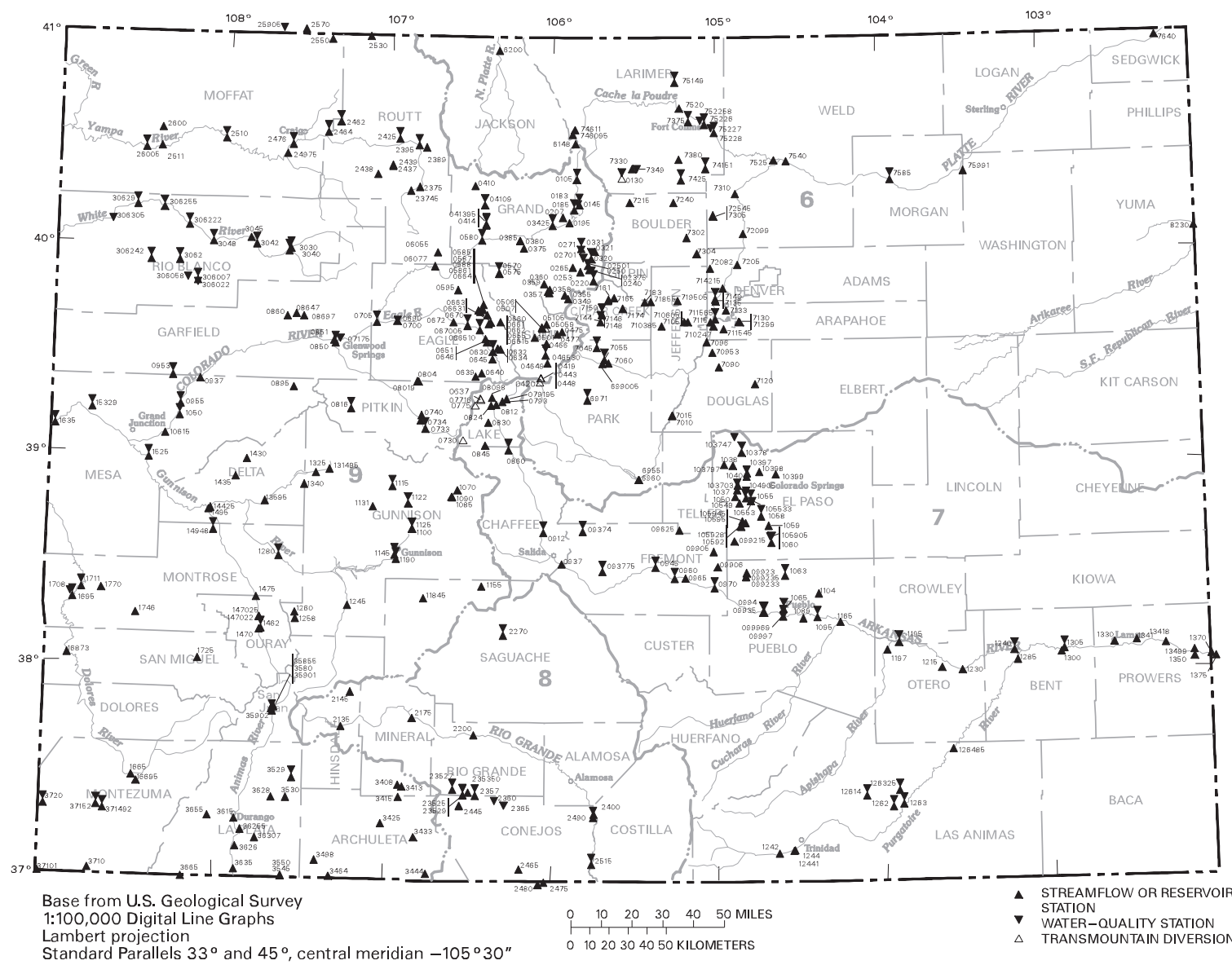
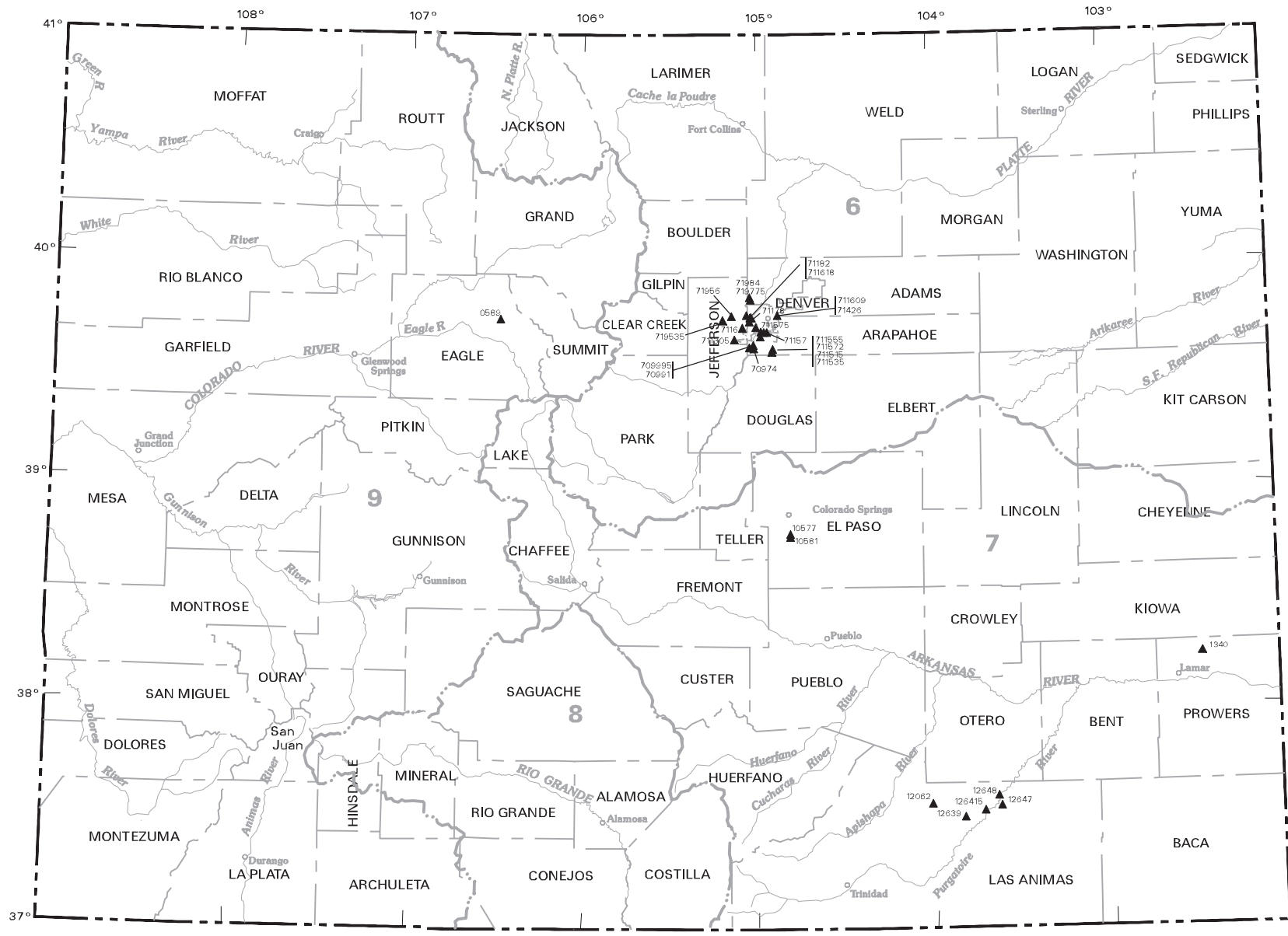
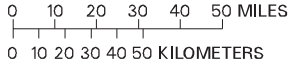


Figure 1.--Map showing locations of lake and surface-water stations and surface-water-quality stations in Colorado.



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

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 Boulder.
 City of Broomfield.
 City of Colorado Springs.
 City of Englewood.
 City of Fort Collins.
 City of Glendale.
 City of Golden.
 City of Gunnison.
 City of Idaho Springs.
 City of Lakewood.
 City of Longmont.
 City of Louisville.
 City of Loveland.
 City of Pueblo.
 City of Westminster.
 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 Department of Public Utilities.
 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.
 Garfield County.
 Gilpin County.
 Gunnison County.
 La Plata County.
 Lower Fountain Water-Quality Management Association.
 Meeker Sanitation District.
 Metro Wastewater Reclamation District.
 Moffat County.
 Mount Crested Butte Water and Sanitation District.
 Northern Colorado Water Conservancy District.
 Northwest Colorado Council of Governments.
 Pueblo Board of Water Works.
 Pueblo West Metro Water 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.
 Teller - Park Soil Conservation District.
 Town of Basalt.
 Town of Breckenridge.
 Town of Central City.
 Town of Crested Butte.
 Town of Empire.
 Town of Hotchkiss.
 Town of Meeker.
 Town of Rangely.
 Trinchera Water Conservancy District.
 Upper Arkansas River Water Conservancy District.
 Upper Eagle Regional Water Authority.
 Upper Gunnison River Water Conservancy District.
 Upper Yampa Water Conservancy District.
 Urban Drainage and Flood Control District.
 Yellowjacket Water Conservancy District.

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

OVERVIEW OF HYDROLOGIC CONDITIONS
[East of the Continental Divide]

Prepared by G.F. Ritz and M.E. Smith

Precipitation

Precipitation data for water year 1997 were obtained from published reports of the U.S. Department of Commerce, National Oceanic and Atmospheric Administration, National Climatic Data Center, for the four National Weather Service divisions in Colorado that are east of the Continental Divide (table 1). Precipitation and departures-from-normal precipitation (1961-90) are listed for the first 6 months (October-March) of the water year when precipitation is predominately snow and for the remaining 6 months (April-September) when precipitation is predominately rain. Also listed are the precipitation and departures-from-normal precipitation for the entire water year.

For October-March, precipitation was 17 percent less than normal in the Platte Drainage Basin, 21 percent less than normal in the Arkansas Drainage Basin, and 61 percent less than normal in the Kansas Drainage Basin. Precipitation was 19 percent greater than normal in the Rio Grande Drainage Basin. For April-September, precipitation was 12 percent greater than normal in the Kansas Drainage Basin, 28 percent greater than normal in the Arkansas Drainage Basin, 41 percent greater than normal in the Platte Drainage Basin, and 41 percent greater than normal in the Rio Grande Drainage Basin.

Graphs of monthly precipitation for the water year and for normal monthly precipitation, at selected weather stations, are shown in figure 3. Monthly precipitation data for water year 1997 were supplemented with ancillary information obtained from the Colorado State University, Department of Atmospheric Science, Colorado Climate Center, in Fort Collins.

Table 1. Precipitation during water year 1997 and departures-from-normal precipitation (1961-90), in inches

National Weather Service division	October-March		April-September		Water year 1997	
	Precipitation	Departure from normal	Precipitation	Departure from normal	Precipitation	Departure from normal
Arkansas Drainage Basin	3.19	-0.85	13.49	2.92	16.68	2.07
Kansas Drainage Basin	1.32	-2.04	14.81	1.56	16.13	-.48
Platte Drainage Basin	3.73	-.77	15.91	4.64	19.64	3.87
Rio Grande Drainage Basin	6.44	1.04	10.95	3.19	17.39	4.23

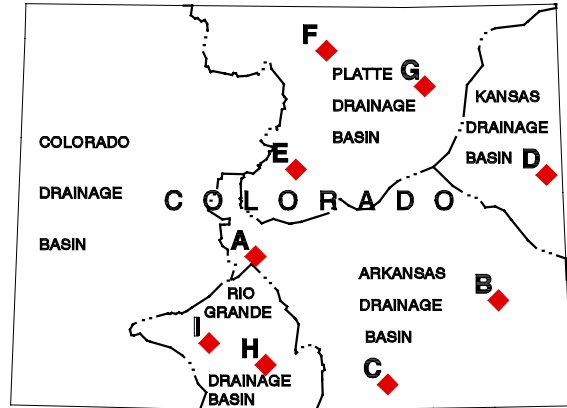
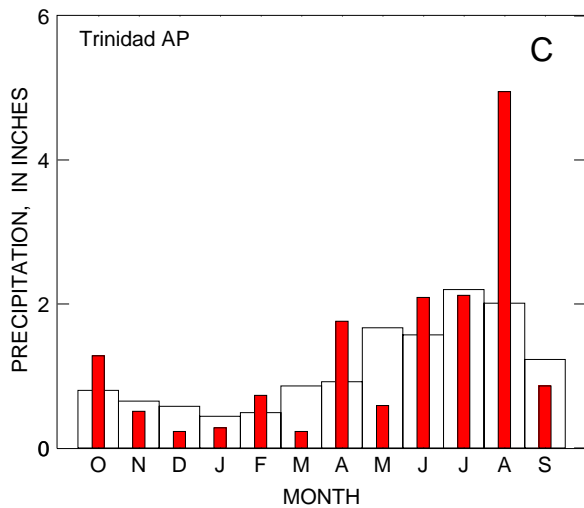
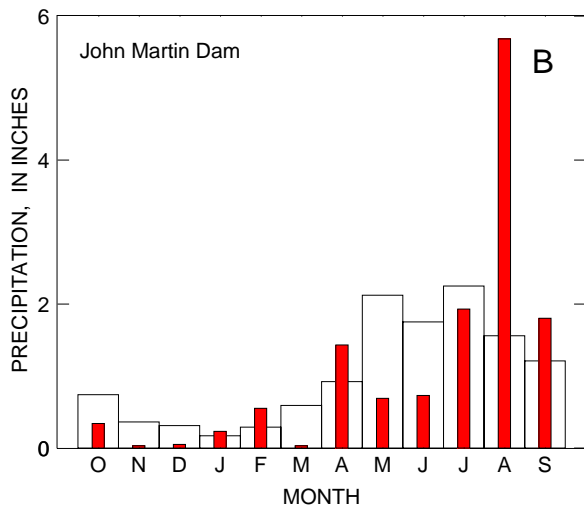
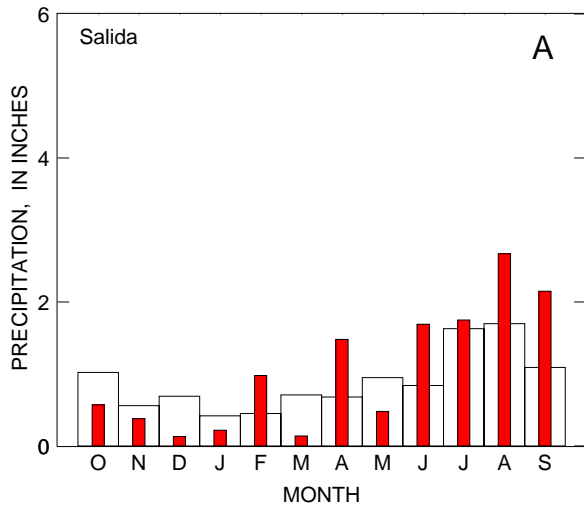
Streamflow

Monthly mean discharges during water year 1997 at selected streamflow-gaging stations are compared to long-term (reference period through previous water year) mean monthly discharges in figure 4. Individual graphs show the varied streamflow east of the Continental Divide. Streamflows during water year 1997, with a few exceptions, were not unusually higher or lower than long-term mean streamflows. The long-term mean monthly discharges used for gaging station 06706000, North Fork South Platte River below Geneva Creek, at Grant (fig. 4, site B), do not include records prior to water year 1964 (the year that imported water from the Colorado River Basin began flowing past the gaging station). Gaging station 07094500, Arkansas River at Parkdale (fig. 4, site D), was converted to seasonal operation in April 1995; the comparison period is April-September.

In the Platte River Basin, the graphs for gaging stations 06701500, South Platte River below Cheesman Lake (fig. 4, site A), and 06706000, North Fork South Platte River below Geneva Creek, at Grant (fig. 4, site B), had general temporal trends similar to the trends of the long-term mean monthly discharges. The graph for gaging station 06758500, South Platte River near Weldona (fig. 4, site C), indicates that water year 1997 monthly mean discharges generally did not follow the trend of long-term mean monthly discharges. Local water-management practices, which consisted mostly of storage, release, or diversion of water as determined by daily and seasonal irrigation and municipal needs, affected the trends in the three discharge graphs. The water year 1997 mean discharge at gaging station 06701500, South Platte River below Cheesman Lake, was 24 percent greater than the long-term mean. The water year 1997 mean discharge at gaging station 06706000, North Fork South Platte River below Geneva Creek, at Grant, was 31 percent greater than the long-term mean. The water year 1997 mean discharge at gaging station 06758500, South Platte River near Weldona, was 57 percent greater than the long-term mean; the June 1997 monthly mean discharge at this site was notably greater (233 percent) than the long-term mean for June.

In the Arkansas River Basin, the graph for gaging station 07094500, Arkansas River at Parkdale (fig. 4, site D), had a general temporal trend similar to that of the long-term mean monthly discharges. The graphs for gaging stations 07126300, Purgatoire River near Thatcher (fig. 4, site E), and 07133000, Arkansas River at Lamar (fig. 4, site F), indicate that water year 1997 monthly mean discharges generally did not follow the trend of long-term mean monthly discharges. Local water-management practices, which consisted mostly of storage, release, or diversion of water as determined by daily and seasonal irrigation and municipal needs, affected the trends in the three discharge graphs. The April through September 1997 mean discharge at gaging station 07094500, Arkansas River at Parkdale, was 32 percent greater than the long-term mean. The water year 1997 mean discharge at gaging station 07126300, Purgatoire River near Thatcher, was 48 percent less than the long-term mean; the April to September 1997 mean discharge at this site was notably less (58 percent) than the long-term mean for the same period. The water year 1997 mean discharge at gaging station 07133000, Arkansas River at Lamar, was 35 percent greater than the long-term mean.

In the Rio Grande Basin, the graph for gaging station 08217500, Rio Grande at Wagon Wheel Gap (fig. 4, site G), had a general temporal trend similar to that of the long-term mean monthly discharges. The graph for gaging station 08251500, Rio Grande near Lobatos (fig. 4, site H), indicates that 1997 monthly mean discharges generally did not follow the trend of long-term mean monthly discharges. Local water-management practices, which consisted mostly of storage, release, or diversion of water as determined by daily and seasonal irrigation and municipal needs, affected the trends in the two discharge graphs. The water year 1997 mean discharge at gaging station 08217500, Rio Grande at Wagon Wheel Gap, was 48 percent greater than the long-term mean. The water year 1997 mean discharge at gaging station 08251500, Rio Grande near Lobatos, was 4 percent greater than the long-term mean.



- EXPLANATION**
- Normal monthly precipitation for reference period
 - Monthly precipitation for water year 1997
 - WEATHER STATION--Letter refers to accompanying graph and map

Figure 3.--Comparison of monthly precipitation for water year 1997 to normal monthly precipitation for the reference period 1961–90.

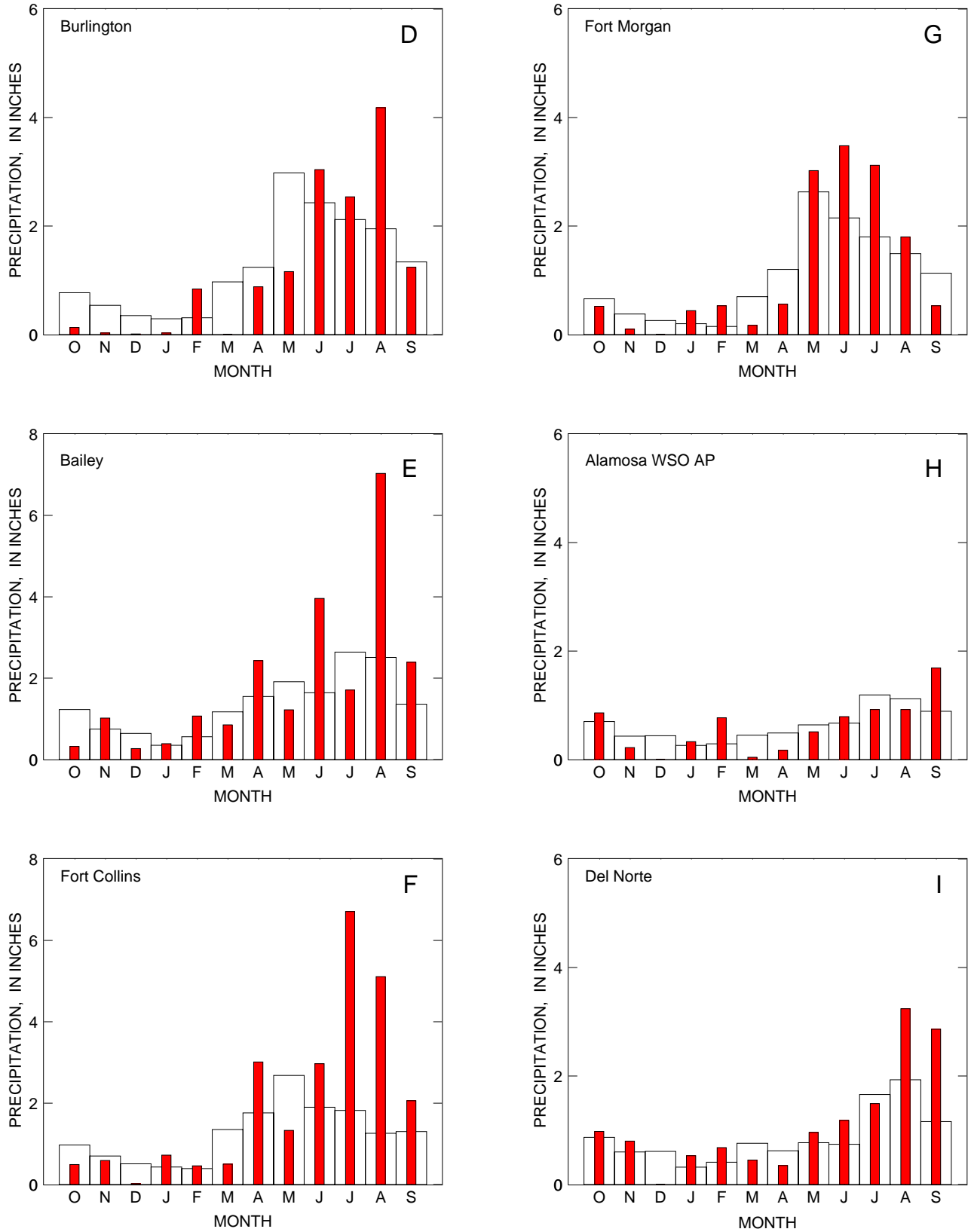
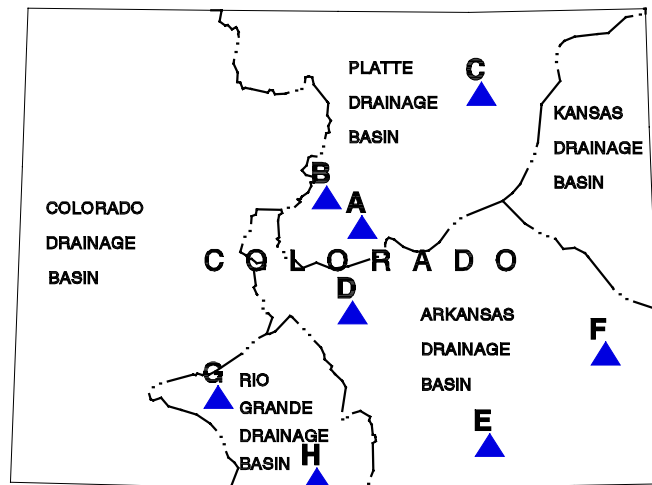
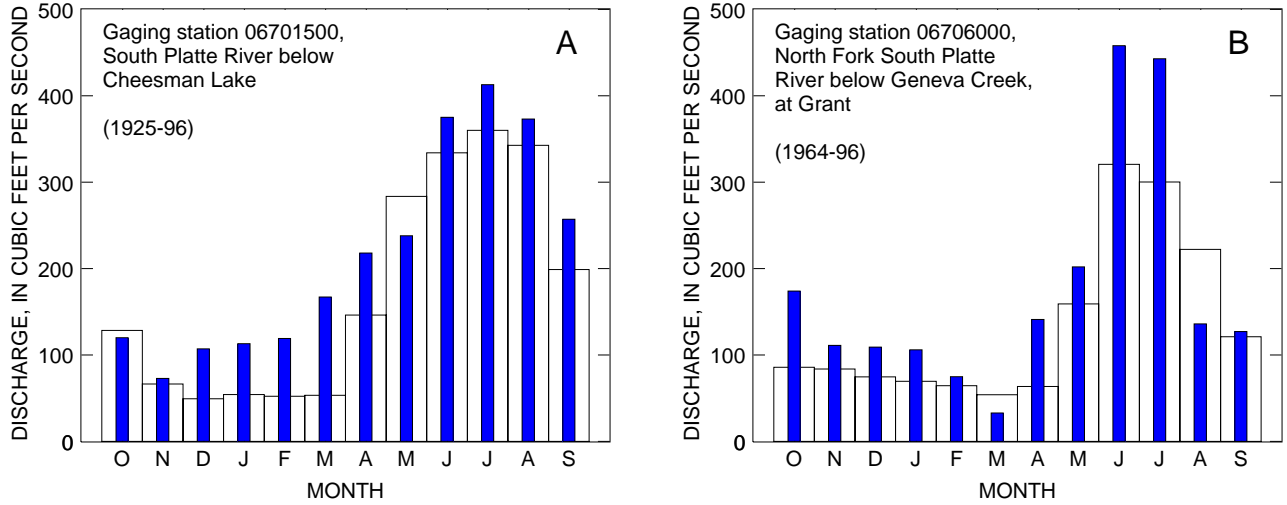


Figure 3.--Comparison of monthly precipitation for water year 1997 to normal monthly precipitation for the reference period 1961-90--Continued.



EXPLANATION

- Mean monthly discharge for reference period
- Monthly mean discharge for water year 1997

▲ A GAGING STATION--Letter refers to accompanying graph and map

(1925-96) REFERENCE PERIOD

Figure 4.--Comparison of monthly discharges for water year 1997 to mean monthly discharges for the reference periods indicated on the individual graphs.

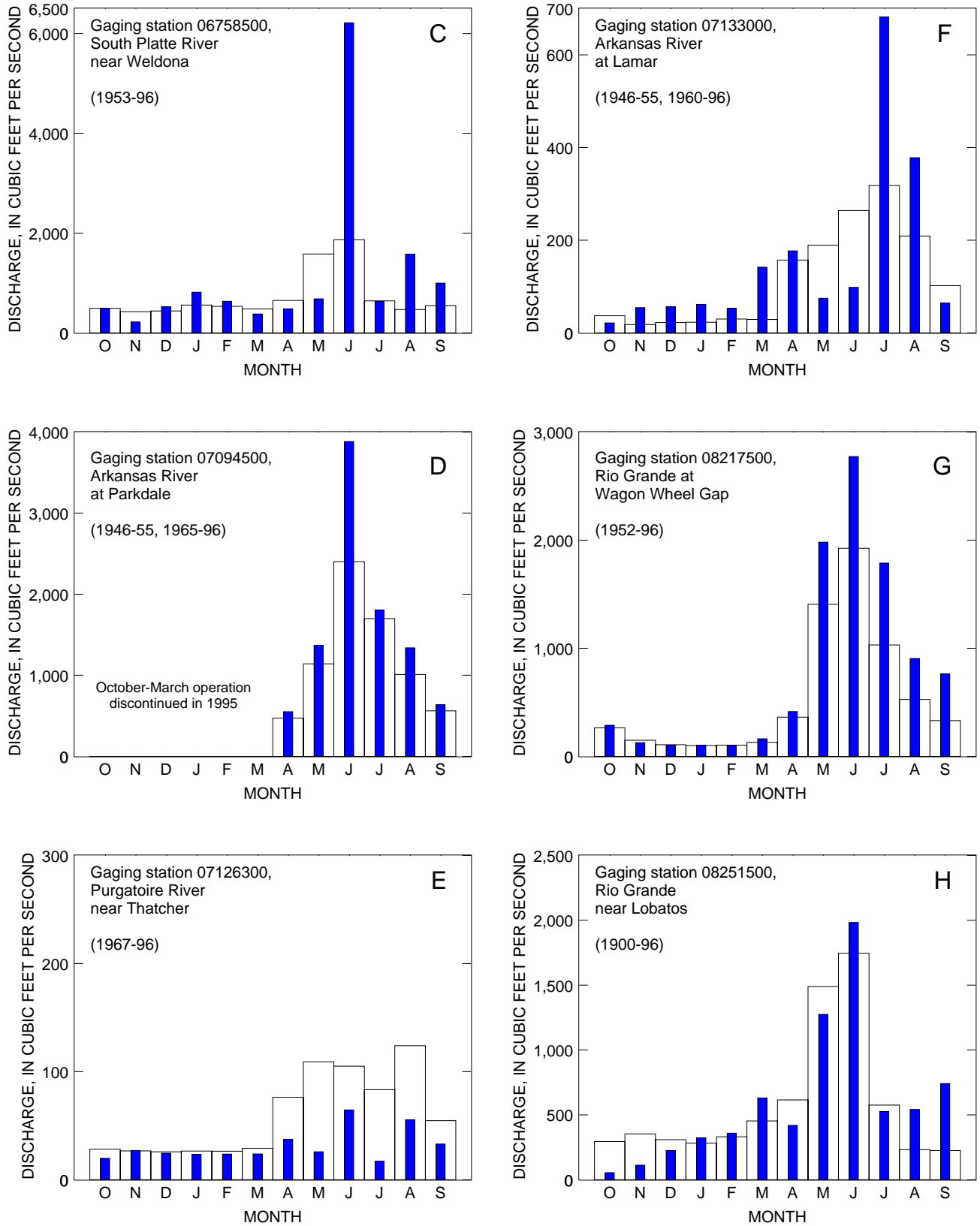


Figure 4.--Comparison of monthly discharges for water year 1997 to mean monthly discharges for the reference periods indicated on the individual graphs--Continued.

Peak discharges during water year 1997 and for the period of record (through previous water year) for selected streamflow-gaging stations are listed in table 2. No new discharge extremes occurred this water year at these gaging stations. The water year 1997 peak discharges at gaging stations 06620000, North Platte River near Northgate; 06752500, Cache La Poudre River near Greeley; 06758500, South Platte River near Weldona; 07106500, Fountain Creek at Pueblo; and 08220000, Rio Grande near Del Norte, were greater than the 75th percentile. The water year 1997 peak discharges at gaging stations 06701500, South Platte River below Cheesman Lake; 07126300, Purgatoire River near Thatcher; and 07128500, Purgatoire River near Las Animas, were less than the 25th percentile. Water year 1997 peak discharges at the other gaging stations listed in table 2 were within the middle 50 percent of the long-term discharge distributions.

Table 2. Peak discharges for water year 1997 and for the period of record at selected gaging stations

[mi², square miles; ft³/s, cubic feet per second; WY, water year]

Gaging-station identification		Drainage area (mi ²)	Period of record (water years)	Water year 1997		Period of record		Remarks on WY 1997 peak discharge
Station number	Station name			Date	Peak discharge (ft ³ /s)	Date	Peak discharge (ft ³ /s)	
06620000	North Platte River near Northgate	1,431	1904, 1915-96	6/5	4,390	6/11/23	6,720	Greater than 75th percentile
06696000	South Platte River near Lake George	963	1930-96	6/29	395	4/28/70	3,000	Less than median
06701500	South Platte River below Cheesman Lake	1,752	1926-96	6/29	642	4/29/70	4,640	Less than 25th percentile
06706000	North Fork South Platte River below Geneva Creek, at Grant	127	¹ 1964-96	7/28	691	6/18/95	1,160	Less than 75th percentile
06752500	Cache la Poudre River near Greeley	1,877	1903, 1916-17, 1919, 1924-96	6/13	3,670	6/14/83	6,360	Greater than 75th percentile
06758500	South Platte River near Weldona	13,245	1953-96	6/15	11,600	5/8/73	26,800	Greater than 75th percentile
07094500	Arkansas River at Parkdale	2,548	1946-55, 1965-96	6/21	4,990	6/18/95	6,830	Less than 75th percentile
07106500	Fountain Creek at Pueblo	926	1921-22, 1924-25, 1935, 1941-65, 1971-96	6/10	10,100	6/17/65	47,000	Greater than 75th percentile
07109500	Arkansas River near Avondale	6,327	1939-51, 1965-96	6/14	8,150	6/18/65	50,000	Less than 75th percentile
07124000	Arkansas River at Las Animas	14,417	1939-96	8/13	5,350	5/20/55	44,000	Less than 75th percentile
07126300	Purgatoire River near Thatcher	1,791	1965-96	8/1	2,540	6/18/65	47,700	Less than 25th percentile (5th lowest)
07128500	Purgatoire River near Las Animas	3,318	1922-31, 1949-96	8/12	2,500	5/20/55	70,000	Less than 25th percentile
07133000	Arkansas River at Lamar	19,780	1913, 1915, 1919-55, 1960-96	8/12	3,820	6/5/21	130,000	Greater than median
08220000	Rio Grande near Del Norte	1,320	1890-1996	6/2	7,440	10/5/11	18,000	Greater than 75th percentile
08240000	Rio Grande above mouth of Trinchera Creek, near Lasauses	5,740	1936-62, 1964-80, 1982-96	6/5	2,040	6/21/49	5,470	Less than 75th percentile
08246500	Conejos River near Mogote	282	1903-05, 1912-96	6/2	2,470	10/5/11	9,000	Greater than median
08251500	Rio Grande near Lobatos	7,700	1900-96	6/5	3,610	6/8/05	13,200	Greater than median

¹Period since imported water began flowing past this gaging station.

Chemical Quality of Streamflow

To determine if substantial changes occurred during water year 1997 in the chemical quality of streamflow, an analysis was made of specific conductance, which was measured at gaging stations on six selected streams. Specific conductance can be used to estimate the dissolved-solids concentration in water because specific conductance is directly proportional to the concentrations of ions in water. Each selected gaging station is the most downstream gaging station on that stream or is representative of a substantial part of the drainage area of that stream. For each selected gaging station, the distribution of specific conductance during water year 1997 is compared to the distribution of specific conductance for the reference period in figure 5.

The Wilcoxon-Mann-Whitney rank sum test was used to determine if there were significant differences between values of specific conductance for water year 1997 and values for the reference period (Ott, 1993). This test is a nonparametric counterpart to the common t-test and does not require the data to have a normal distribution.

The Wilcoxon-Mann-Whitney rank sum test was applied to the hypothesis that the mean specific conductance for water year 1997 was equal to the mean for the reference period. The procedure for testing the hypothesis involves computing a test statistic from the ranks of the data by using a pooled standard deviation and comparing the test statistics to a value obtained from a table of "Student's" t values (Box and others, 1978). The table value is $(1 - \alpha/2)$, where alpha (the level of significance) equals 0.05, at the appropriate degrees of freedom for the number of samples. If the absolute value of the computed test statistic (t_R) is greater than the tabular t value (t_{tab}), the hypothesis is rejected. A rejection of the hypothesis is statistical evidence that the two means are different. The Wilcoxon-Mann-Whitney rank sum test results were evaluated at the 95-percent confidence level.

Results of the Wilcoxon-Mann-Whitney rank sum tests for the six gaging stations are listed in table 3. For four of the six gaging stations, 06741510, Big Thompson River at Loveland; 07128500, Purgatoire River near Las Animas; 07133000, Arkansas River at Lamar; and 08217500, Rio Grande at Wagon Wheel Gap, the tests indicate that the mean specific conductance for water year 1997 and the mean specific conductance for the reference period are not statistically different at the specified level. For gaging station 06752280, Cache la Poudre River above Box Elder Creek, near Timnath, the mean specific conductance for water year 1997 is statistically different from the mean for the reference period. Annual mean discharge for water year 1997 was 194 percent greater than the mean flow for the reference period. Discharge and specific conductance are inversely related at this site; therefore, mean specific conductance for water year 1997 would be expected to be lower than the mean specific conductance for the reference period. Similarly, for gaging station 07094500, Arkansas River at Parkdale, mean annual discharge for April-September was 32 percent greater than the mean discharge for the reference period. Because discharge and specific conductance are inversely related at this site as well, mean specific conductance for water year 1997 also would be expected to be lower than the mean specific conductance for the reference period.

Table 3. Results of Wilcoxon-Mann-Whitney rank sum tests comparing mean specific conductance of discharge for water year 1997 with mean for the reference period at selected gaging stations

[Specific conductance, in microsiemens per centimeter at 25 degrees Celsius;
 t_R , calculated test statistic; t_{tab} , t-values from standard table; A, accepted, R, rejected]

Gaging-station identification		Specific conductance						Wilcoxon-Mann-Whitney rank sum test			
		Water year 1997			Reference period			Period used (water years)	t_R	t_{tab}	Hypothesis
Station number	Station name	Number of values	Mean	Standard deviation	Number of values	Mean	Standard deviation				
06741510	Big Thompson River at Loveland	12	986	587	120	1,027	510	1987-96	-0.24	1.98	A
06752280	Cache la Poudre River above Box Elder Creek, near Timnath	12	708	561	110	1,527	716	1987-96	-3.37	1.98	R
07094500	Arkansas River at Parkdale	9	191	66	141	245	69	1987-96	-2.25	1.98	R
07128500	Purgatoire River near Las Animas	13	3,392	1,085	180	2,977	1,046	1987-96	1.64	1.98	A
07133000	Arkansas River at Lamar	12	3,154	1,084	130	3,384	916	1987-96	-0.78	1.98	A
08217500	Rio Grande at Wagon Wheel Gap	9	85	23	84	91	23	1987-96	-0.84	1.99	A

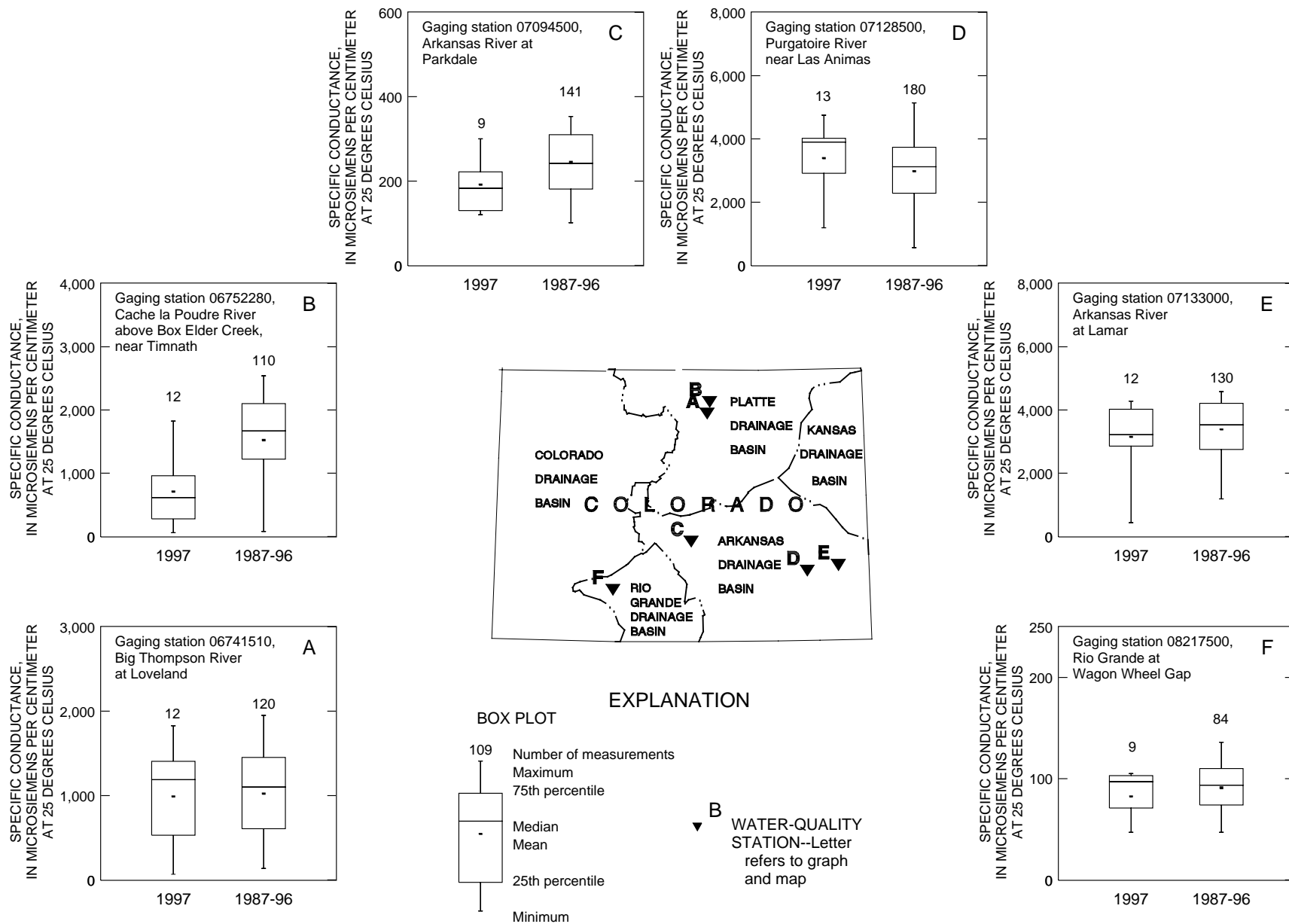


Figure 5.--Comparison of range and distribution of specific conductance measured during water year 1997 to long-term values.

SPECIAL NETWORKS AND PROGRAMS

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

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

The National Atmospheric Deposition Program/National Trends Network (NADP/NTN) provides continuous measurement and assessment of the chemical climate of precipitation throughout the United States. As the lead Federal agency, the USGS works together with over 100 organizations to accomplish the following objectives: (1) Provide a long-term, spatial and temporal record of atmospheric deposition generated from a network of 191 precipitation chemistry monitoring sites. (2) Provide the mechanism to evaluate the effectiveness of the significant reduction in SO₂ emissions that began in 1995 as implementation of the Clean Air Act Amendments (CAAA) occurred. (3) Provide the scientific basis and nationwide evaluation mechanism for implementation of the Phase II CAAA emission reductions for SO₂ and NO_x scheduled to begin in 2000.

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

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

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

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

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

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

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

EXPLANATION OF THE RECORDS

The surface-water and ground-water records published in this report are for the 1997 water year that began on October 1, 1996, and ended September 30, 1997. A calendar of the water year is provided on the inside of the front cover. The records contain streamflow data, stage and content data for lakes and reservoirs, ground-water level data, and water-quality data for surface and ground water. The locations of the stations where the surface-water data were collected are shown in figures 1 and 2. The following sections of the introductory text are presented to provide users with a more detailed explanation of how the hydrologic data published in this report were collected, analyzed, computed, and arranged for presentation.

Station Identification Numbers

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

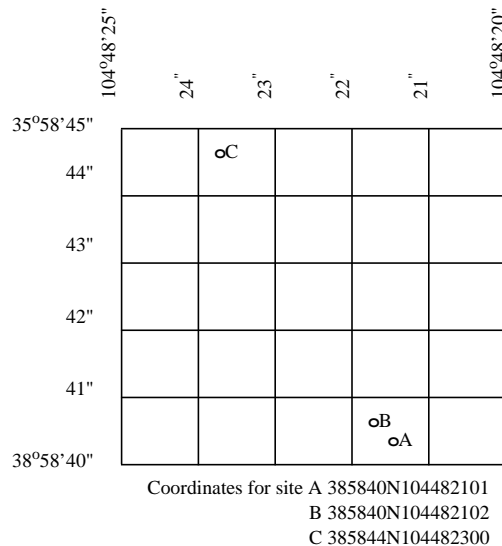
Downstream Order System

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

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

Latitude-Longitude System

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



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-mi² area described by the township and range designation is subdivided into 1-mi² 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 ft³/s; to the nearest tenth between 1.0 and 10 ft³/s; to whole numbers between 10 and 1,000 ft³/s; and to 3 significant figures for more than 1,000 ft³/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. Sulfate values in this report have not been corrected for this bias.

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

Accuracy of the Records

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

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

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

Classification of Records

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

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

Arrangement of Records

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

Onsite Measurements and Sample Collection

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

One sample can define adequately the water quality at a given time if the mixture of solutes throughout the stream cross section is homogeneous. However, the concentration of solutes at different locations in the cross section may vary widely with different rates of water discharge, depending on the source of material and the turbulence and mixing of the stream. Some streams must be sampled through several vertical sections to obtain a representative sample needed for an accurate mean concentration and for use in calculating load. All samples obtained for the National Stream Quality Accounting Network (see definitions) are obtained from at least several verticals. Whether samples are obtained from the centroid of flow or from several verticals, depends on flow conditions and other factors which must be evaluated by the collector.

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

For chemical-quality stations equipped with digital monitors, the records consist of daily maximum, minimum, and mean values for each constituent measured and are based upon hourly punches beginning at 0100 hours and ending at 2400 hours for the day of record. More detailed records (hourly values) may be obtained from the U.S.G.S. District Office whose address is given on the back of the title page of this report.

Water Temperature

Water temperatures are measured at most of the water-quality stations. In addition, water temperatures are taken at time of discharge measurements for water-discharge stations. For stations where water temperatures are taken manually once or twice daily, the water temperatures are taken at about the same time each day. Large streams have a small diurnal temperature change; shallow streams may have a daily range of several degrees and may follow closely the changes in air temperature. Some streams may be affected by waste-heat discharges.

At stations where recording instruments are used, either mean temperatures or maximum and minimum temperatures for each day are recorded to the nearest 0.1 degree Celsius. Water temperatures measured at the time of water-discharge measurements are published in this report as supplemental water-quality for gaging stations.

Sediment

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

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

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

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

Laboratory Measurements

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

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

Data Presentation

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

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

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

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

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

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

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

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

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

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

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

Remark Codes

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

PRINTED OUTPUT REMARK

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

Records of Ground-Water Quality

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

Data Collection and Computation

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

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

Data Presentation

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

ACCESS TO USGS WATER DATA

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

http://water.usgs.gov	National home page
http://webservice.cr.usgs.gov	Colorado home page

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

DEFINITION OF TERMS

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

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

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

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

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

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

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

Artesian means confined and is used to describe a well in which the water level stands above the top of the aquifer tapped by the well. A flowing artesian well is one in which the water level is above the land surface.

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.

Escherichia coli (E. coli) also are present in the digestive tract of warm-blooded animals. In the laboratory, E. coli is defined as all organisms that produce orange/yellow colonies when incubated for two hours at $35^{\circ}\text{C} \pm 0.2^{\circ}\text{C}$ and transferred to $44.5^{\circ}\text{C} \pm 0.2^{\circ}\text{C}$ for 22-24 hours on mTEC agar (nutrient medium for E. coli growth), and stained with phenol red solution. Their concentrations are expressed as number of colonies per 100 mL of sample.

Total coliform bacteria are a particular group of bacteria that are used as indicators of possible sewage pollution. They are characterized as aerobic or facultative anaerobic, gram-negative, nonspore-forming, rod-shaped bacteria which ferment lactose with gas formation within 48 hours at 35°C . In the laboratory these bacteria are defined as all the organisms that produce colonies with a golden-green metallic sheen within 24 hours when incubated at $35^{\circ}\text{C} \pm 1.0^{\circ}\text{C}$ on M-Endo medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Fecal coliform bacteria are bacteria that are present in the 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 $44.5^{\circ}\text{C} \pm 0.2^{\circ}\text{C}$ on M-FC medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Fecal streptococcal bacteria are bacteria found also in the intestine of warm-blooded animals. Their presence in water is considered to verify fecal pollution. They are characterized as gram-positive, cocci bacteria which are capable of growth in brain-heart infusion broth. In the laboratory they are defined as all the organism which produce red or pink colonies with 48 hours at $35^{\circ}\text{C} \pm 1.0^{\circ}\text{C}$ on KF-streptococcus medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

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

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 micro-organisms, such as bacteria.

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

Ash mass is the mass 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. The ash mass values of zooplankton and phytoplankton are expressed in grams per cubic meter (g/m^3), and periphyton and benthic organisms in grams per square meter (g/m^2).

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

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

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

Bottom material: See Bed material.

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

Cfs-day is the volume of water represented by flow of 1 cubic foot per second for 24 hours. It is equivalent to 86,400 cubic feet, approximately 1.9835 acre-feet, about 646,000 gallons or 2,447 cubic meters.

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

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

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

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

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

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 salt water.

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

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

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

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

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

Annual 7-day minimum is 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.)

Dissolved refers to that material in a representative water sample which passes through a 0.45 μ m membrane filter. This is a convenient operational definition used by Federal agencies that collect water data. Determinations of "dissolved" constituents are made on subsamples of the filtrate.

Dissolved-solids concentration of water is determined either analytically by the "residue-on-evaporation" method, or mathematically by totaling the concentrations of individual constituents reported in a comprehensive chemical analysis. During the analytical determination of dissolved solids, the bicarbonate (generally a major dissolved component of water) is converted to carbonate. Therefore, in the mathematical calculation of dissolved-solids concentration, the bicarbonate value, in milligrams per liter, is multiplied by 0.492 to reflect the change.

Drainage area of a stream at a specified location is that area, measured in a horizontal plane, enclosed by a topographic divide from which direct surface runoff from precipitation normally drains by gravity into the stream above the specified point. Figures of drainage area given herein include all closed basins, or noncontributing areas, within the area unless otherwise noted.

Drainage basin is a part of the surface of the earth that is occupied by a drainage system, which consists of a surface stream or body of impounded surface water together with all tributary surface streams and bodies of impounded surface water.

Gage height (G.H.) is the water-surface elevation referred to some arbitrary gage datum. Gage height is often used interchangeably with the more general term "stage" although gage height is more appropriate when used with a reading on a gage.

Gaging station is a particular site on a stream, canal, lake, or reservoir where systematic observations of hydrologic data are obtained.

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 and is expressed as the equivalent concentration of calcium carbonate (CaCO_3).

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

Hydrologic unit is a geographic area representing part or all of a surface drainage basin or distinct hydrologic feature as delineated by the Office of Water Data Coordination on the State Hydrologic Unit Maps; each hydrologic unit is identified by an eight-digit number.

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

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

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

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

Micrograms per gram ($\mu\text{g/g}$) 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 liter ($\mu\text{g/L}$, $\mu\text{g/L}$) is a unit expressing the concentration of chemical constituents in solution as mass (micrograms) of solute per unit volume (liter) of water. One thousand micrograms per liter is equivalent to one milligram per liter.

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

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

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

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

Organism is any living entity.

Organism count/area refers to the number of organisms collected and enumerated in a sample and adjusted to the number per unit area habitat, usually square meter (m^2), acre, or hectare. Periphyton, benthic organisms, and macrophytes are expressed in these terms.

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

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

Parameter Code is a 5-digit number used in the U.S. Geological Survey computerized data system, to uniquely identify a specific constituent. The codes used are the same as those used in the U.S. Environmental Protection Agency data system, STORET. The Environmental Protection Agency assigns and approves all requests for new codes.

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

Particle size is the diameter, in millimeters (mm), of a particle determined by either sieve or sedimentation methods. Sedimentation methods (pipet, bottom-withdrawal tube, visual-accumulation tube) determine fall diameter or particles in either distilled water (chemically dispersed) or in native water (the river water at the time and point of sampling).

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

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

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

Percent composition 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, mass, or volume.

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.

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

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

Plankton is a community of suspended, floating, or weakly swimming organisms that live in the open water of lakes and rivers.

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

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

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

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

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

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 by the plants (carbon method).

Milligrams of carbon per area or volume per unit time $\text{mg C}/(\text{m}^2 \times \text{time})$ for periphyton and macrophytes and $\text{mg C}/(\text{m}^3 \times \text{time})$ for phytoplankton are units for expressing primary productivity. They define 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.

Milligrams of oxygen per area or volume per unit time $\text{mg O}/(\text{m}^2 \times \text{time})$ for periphyton and macrophytes and $\text{mg O}/(\text{m}^3 \times \text{time})$ for phytoplankton are the units for expressing primary productivity. They define 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.

Radiochemical program is a network of regularly sampled water-quality stations where samples are collected to be analyzed for radioisotopes. The streams that are sampled represent major drainage basins in the conterminous United States.

Recoverable from bottom material is the amount of a given constituent that is in solution after a representative sample of bottom material has been digested by a method (usually using an acid or mixture of acids) that results in dissolution of readily soluble substances. Complete dissolution of all bottom material is not achieved by the digestion treatment and thus the determination represents less than the total amount (that is, less than 95 percent) of the constituent in the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Return period is the average time interval between occurrences of a hydrological event of a given or greater magnitude, usually expressed in years. May also be called recurrence interval.

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

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 of the first-order level nets of both the United States and Canada, formerly called Sea Level Datum of 1929.

Sediment is solid material that originates mostly from disintegrated rocks and is transported by, suspended in, or deposited from water; it includes chemical and biochemical precipitates and decomposed organic material such as humus. The quantity, characteristics, and cause of the occurrence of sediment in streams are influenced by environmental factors. Some major factors are degree of slope, length of slope, soil characteristics, land usage, and quantity and intensity of precipitation.

Bed load is the sediment that is transported in a stream by rolling, sliding, or skipping along the bed and very close to it. In this report, bed load is considered to consist of particles in transit within 0.25 ft of the streambed.

Bed load discharge (tons per day) is the quantity of bed load measured by dry weight that moves past a section as bed load in a given time.

Suspended sediment is the sediment that at any given time is maintained in suspension by the upward components of turbulent currents or that exists in suspension as a colloid.

Suspended-sediment concentration is the velocity-weighted concentration of suspended sediment in the sampled zone (from the water surface to a point approximately 0.3 ft above the bed) expressed as milligrams of dry sediment per liter of water-sediment mixture (mg/L).

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

Suspended-sediment discharge (tons/day) is the rate at which dry mass of sediment passes a section of a stream or is the quantity of sediment, as measured by dry mass or volume, that passes a section in a given time. It is calculated in units of tons per day as follows: concentration (mg/L) x discharge (ft³/s) x 0.0027.

Suspended-sediment load is a general term that refers to material in suspension. It is not synonymous with either discharge or concentration.

Total sediment discharge (tons/day) is the sum of the suspended-sediment discharge and the bed-load discharge. It is the total quantity of sediment, as measured by dry mass or volume, that passes a section during a given time.

Total-sediment load or total load is a term which refers to the total sediment (bed load plus suspended-sediment load) that is in transport. It is not synonymous with total-sediment discharge.

7-day 10-year low flow (7 Q₁₀) is the discharge at the 10-year recurrence interval taken from a frequency curve of annual values of the lowest mean discharge for 7 consecutive days (the 7-day low flow).

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

Solute is any substance that is dissolved in water.

Specific conductance is a measure of the ability of a water to conduct an electrical current. It is expressed in microsiemens per centimeter at 25°C. Specific conductance is related to the type and concentration of ions in solution and can be used for approximating the dissolved-solids content of the water. Commonly, the concentration of dissolved solids (in milligrams per liter) is about 65 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.

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

Streamflow is the discharge that occurs in a natural channel. Although the term "discharge" can be applied to the flow of a canal, the word "streamflow" uniquely describes the discharge in a surface stream course. The term "streamflow" is more general than "runoff" as streamflow may be applied to discharge whether or not it is affected by diversion or regulation.

Substrate is the physical surface upon which an organism lives.

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

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

Surface area of a lake is that area outlined on the latest USGS topographic map as the boundary of the lake and measured by a planimeter in acres. In localities not covered by topographic maps, the areas are computed from the best maps available at the time planimeted. All areas shown are those for the stage when the planimeted map was made.

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

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

Suspended, recoverable is the amount of a given constituent that is in solution after the part of a representative water-suspended sediment sample that is retained on a 0.45 µm membrane filter has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all the particulate matter is not achieved by the digestion treatment and thus the determination represents something less than the "total" amount (that is, less than 95 percent) of the constituent present in the sample. To achieve comparability of analytical data, equivalent digestion procedures are required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

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

Suspended, total is the total amount of a given constituent in the part of a representative water-suspended sediment sample that is retained on a 0.45 µm membrane filter. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to determine when the results should be reported as "suspended, total."

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

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

Kingdom.....	Animal
Phylum.....	Arthropoda
Class.....	Insecta
Order.....	Ephemeroptera
Family.....	Ephemeridae
Genus.....	<u>Hexagenia</u>
Species.....	<u>Hexagenia limbata</u>

Thermograph is an instrument that continuously records variation of temperature on a chart. The more general term "temperature recorder" is used in the table headings 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 that would be contained in a vessel or reservoir that had received equal quantities of water from the stream each day for the year.

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

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

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

Total discharge is the total quantity of any individual constituent, as measured by dry mass or volume, that passes through a stream cross-section per unit of time. This term needs to be qualified, such as "total sediment discharge," "total chloride discharge," and so on.

Total recoverable is the amount of a given constituent that is in solution after a representative water-suspended sediment sample has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all particulate matter is not achieved by the digestion treatment, and thus the determination represents something less than the "total" amount (that is, less than 95 percent) of the constituent present in the dissolved and suspended phases of the sample. To achieve comparability of analytical data, equivalent digestion procedures are required of all laboratories performing such analyses, because different digestion procedures are likely to produce different analytical results.

Tritium Network is a network of stations which has been established to provide baseline information on the occurrence of tritium in the Nation's surface waters. In addition to the surface-water stations in the network, tritium data are also obtained at a number of precipitation stations. The purpose of the precipitation stations is to provide an estimate sufficient for hydrologic studies of the tritium input to the United States.

Water year in Geological Survey reports dealing with surface-water supply is the 12-month period, October 1 through September 30. The water year is designated by the calendar year in which it ends and which includes 9 of the 12 months. Thus, the year ending September 30, 1980, is called the "1980 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.

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

WATER RESOURCES DATA - COLORADO, 1997
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WATER RESOURCES DATA - COLORADO, 1997
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
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
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 near Lake George, CO	06699500	236	1910-12, 1916, 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
South Platte River above North Fork at South Platte, CO	06702000	2,098	1905-12
North Fork South Platte River at Grant, CO	06702500	49.0	1910-17
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

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)
Plum Creek near Louviers, CO	06709500	302	1947-90
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 above Bear Creek Lake, near Morrison, CO	06711040	50.6	1986-89
South Platte River at Florida Avenue, at Denver, CO	06711590	--	1981-82
Cherry Creek near Melvin, CO	06712500	360	1939-69
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
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 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, ^a
South Saint Vrain Creek above Lyons, CO	06723400	81.4	1971-80
Lefthand Creek near Boulder, CO	06724500	52.0	1929-31, 1947-53, 1976-80
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
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, ^a
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

WATER RESOURCES DATA - COLORADO, 1997
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)
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
Lonetree Creek at Carr, CO	06753400	167	1993-95
Lonetree Creek near Nunn, CO	06753500	199	1951-57
Lonetree Creek near Greeley	06753990	567	1993-95
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
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 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, 1910-1924
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
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, ^a
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

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)
Middle Taylor Creek near Westcliffe, CO	07094900	3.19	1974-78, 1984-85
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
Womack Ditch near Fort Carson, CO	07105924	--	1978-91
Little Fountain Creek near Fountain, CO	07105940	26.9	1978-88
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	1974-79
Greenhorn Creek near Colorado City, CO	07108050	29.6	1974-79
Saint Charles River near Pueblo, CO	07108500	467	1941-53, 1955
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 North Avondale, CO	07110500	864	1941-46
Huerfano River at Manzanares Crossing near Redwing, CO	07111000	73.0	1923-82
Huerfano River at Malachite, CO	07111500	107	1923-25
Huerfano River near Badito, CO	07112000	499	1941-46
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 ^a
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 Hasty, 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

WATER RESOURCES DATA - COLORADO, 1997
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)
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
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
Lockwood Canyon Creek near Thatcher, CO	07126390	41.4	1983-92 ^a
Red Rock Canyon Creek at Mouth, near Thatcher, CO	07126415	48.8	1983-90 ^a
Chacuaco Creek at Mouth, near Timpas, CO	07126470	424	1983-92 ^a
Bent Canyon Creek at Mouth near Timpas, CO	07126480	56.2	1983-90 ^a
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
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
Willow Creek at Creede, CO	08216500	51.7	1951-82
Rio Grande at Wason below Creede, CO	08217000	705	1907-54
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
Kerber Creek at Ashley Ranch near Villa Grove, CO	08224500	38.0	1923-26, 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
La Garita Creek near La Garita, CO	08231000	61.0	1919-82
Mosca Creek near Mosca, CO	08234200	3.67	1967-70
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
Trinchera Creek above Turners Ranch near Fort Garland, CO	08240500	45.0	1923-82
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

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)
Ute Creek near Fort Garland, CO	08242500	32.0	1916, 1923-82
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 at San Luis, CO	08250000	220	1927-82
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, 1997
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
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
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 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
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 ^a
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
Purgatoire River near Thatcher, CO	07126300	1,791	Sed.	1983-92
Burke Arroyo Tributary near Thatcher, CO	07126320	4.66	Temp., S.C. Sed.	1983-86 1984-86
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 ^a
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 ^a
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
Rio Grande above Culebra Creek near Lobatos, CO	08249200	--	Temp., S.C.	1964-66 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.

PUBLICATIONS ON TECHNIQUES OF WATER-RESOURCES INVESTIGATIONS

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- 3-A19. *Levels at streamflow gaging stations*, by E.J. Kennedy: USGS--TWRI Book 3, Chapter A19. 1990. 31 pages.
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- 8-B2. *Calibration and maintenance of vertical-axis type current meters*, by G. F. Smoot and C. E. Novak: USGS--TWRI Book 8, Chapter B2. 1968. 15 pages.
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HYDROLOGIC-DATA STATION RECORDS
PLATTE RIVER BASIN

06614800 MICHIGAN RIVER NEAR CAMERON PASS, CO

LOCATION.--Lat 40°29'46", long 105°51'52", in S½ 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 mi².

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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.2	1.1	e.55	e.45	e.40	e.34	e.35	e.45	11	16	6.1	2.6
2	2.1	1.1	e.53	e.45	e.40	e.34	e.35	e.45	14	15	5.5	2.4
3	2.5	1.0	e.52	e.45	e.40	e.33	e.35	e.45	19	14	5.8	3.1
4	2.8	.99	e.52	e.45	e.40	e.33	e.35	e.45	22	13	5.7	3.8
5	2.4	.98	e.51	e.45	e.40	e.33	e.35	e.48	24	12	7.4	3.4
6	2.2	.94	e.50	e.45	e.40	e.33	e.35	e.52	22	12	7.4	3.1
7	2.1	e.90	e.50	e.45	e.40	e.33	e.35	e.54	22	12	5.8	2.8
8	2.0	e.87	e.50	e.45	e.40	e.33	e.35	e.58	23	12	5.1	2.5
9	1.9	e.83	e.50	e.45	e.39	e.33	e.35	e.64	22	11	5.1	2.3
10	1.8	e.80	e.50	e.45	e.38	e.33	e.35	e.74	22	10	7.8	2.1
11	1.8	.76	e.50	e.44	e.38	e.33	e.35	e.90	23	9.7	7.5	2.2
12	1.7	.84	e.50	e.43	e.37	e.32	e.35	e1.3	20	9.0	6.8	2.2
13	1.7	.77	e.50	e.42	e.36	e.33	e.35	e1.7	21	9.0	6.1	2.0
14	1.6	e.70	e.50	e.42	e.36	e.33	e.35	e2.3	22	8.3	6.5	1.8
15	1.5	e.70	e.50	e.41	e.35	e.33	e.35	2.5	21	8.1	5.7	1.7
16	1.4	e.68	e.50	e.40	e.35	e.33	e.35	3.4	20	7.7	5.4	1.8
17	1.6	e.66	e.50	e.40	e.35	e.33	e.36	4.4	20	7.7	5.2	1.7
18	1.6	e.65	e.50	e.40	e.35	e.33	e.37	5.2	22	8.0	5.0	3.7
19	1.5	e.64	e.50	e.40	e.35	e.34	e.38	5.6	32	7.8	4.7	9.4
20	1.5	e.62	e.50	e.40	e.35	e.35	e.39	5.7	42	8.0	4.3	13
21	1.4	e.61	e.50	e.40	e.35	e.35	e.40	6.6	40	7.3	3.9	13
22	1.3	e.60	e.49	e.40	e.35	e.35	e.41	7.1	34	6.9	3.7	10
23	1.2	e.60	e.48	e.40	e.35	e.35	e.42	7.0	27	7.5	3.5	9.1
24	1.2	e.60	e.47	e.40	e.35	e.35	e.44	7.1	23	7.5	3.2	8.4
25	1.2	e.60	e.47	e.40	e.35	e.35	e.45	6.5	21	6.8	3.1	7.5
26	1.2	e.60	e.46	e.40	e.35	e.35	e.45	5.9	21	6.2	3.0	7.1
27	1.2	e.60	e.46	e.40	e.35	e.35	e.45	5.4	19	5.7	2.9	6.5
28	1.2	e.60	e.45	e.40	e.35	e.35	e.45	5.2	19	5.6	2.8	5.7
29	e1.2	e.59	e.45	e.40	---	e.35	e.45	5.3	18	5.6	2.9	5.0
30	e1.2	e.57	e.45	e.40	---	e.35	e.45	6.0	17	6.0	2.6	4.6
31	1.2	---	e.45	e.40	---	e.35	---	8.0	---	6.8	2.5	---
TOTAL	51.4	22.50	15.26	13.02	10.34	10.49	11.47	108.40	683	282.2	153.0	144.5
MEAN	1.66	.75	.49	.42	.37	.34	.38	3.50	22.8	9.10	4.94	4.82
MAX	2.8	1.1	.55	.45	.40	.35	.45	8.0	42	16	7.8	13
MIN	1.2	.57	.45	.40	.35	.32	.35	.45	11	5.6	2.5	1.7
AC-FT	102	45	30	26	21	21	23	215	1350	560	303	287

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1974 - 1997, BY WATER YEAR (WY)

MEAN	.85	.55	.43	.36	.31	.33	.41	3.78	16.9	9.42	2.85	1.45
MAX	1.94	1.11	.88	.57	.55	.86	.80	9.50	27.1	24.8	6.83	4.82
(WY)	1983	1996	1996	1988	1986	1986	1994	1974	1990	1995	1983	1997
MIN	.32	.20	.25	.17	.16	.17	.22	.70	10.9	2.06	1.20	.49
(WY)	1980	1979	1979	1991	1977	1974	1982	1995	1992	1994	1988	1988

SUMMARY STATISTICS

FOR 1996 CALENDAR YEAR

FOR 1997 WATER YEAR

WATER YEARS 1974 - 1997

ANNUAL TOTAL	1474.31	1505.58	
ANNUAL MEAN	4.03	4.12	3.14
HIGHEST ANNUAL MEAN			4.61
LOWEST ANNUAL MEAN			1.97
HIGHEST DAILY MEAN	51 Jun 11	42 Jun 20	69 Jul 14 1995
LOWEST DAILY MEAN	e.40 Mar 27	e.32 Mar 12	.08 Nov 16 1989
ANNUAL SEVEN-DAY MINIMUM	.42 Mar 21	.33 Mar 6	.14 Jan 9 1979
INSTANTANEOUS PEAK FLOW		60 Jun 20	a,b 115 Jul 12 1995
INSTANTANEOUS PEAK STAGE		3.70 Jun 20	b,c 3.69 Jul 12 1995
ANNUAL RUNOFF (AC-FT)	2920	2990	2280
10 PERCENT EXCEEDS	10	12	10
50 PERCENT EXCEEDS	1.0	.84	.60
90 PERCENT EXCEEDS	.43	.35	.25

e-Estimated.

a-From rating curve extended above 82 ft³/s.

b-Also occurred Jul 13, 1995.

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

06620000 NORTH PLATTE RIVER NEAR NORTHGATE, CO

LOCATION.--Lat 40°56'15", long 106°20'16", in NE¼ SW¼ SE¼ 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 mi².

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 for June 5 to July 17, which are fair, and 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 satellite telemetry at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	153	209	223	e210	e170	e140	781	1940	3010	1070	787	236
2	151	201	209	e220	e160	e145	656	1580	3060	1020	674	251
3	147	192	174	e210	e150	e140	660	1250	3500	908	539	240
4	140	211	e185	e200	e140	e125	732	1090	3940	921	451	222
5	143	215	e205	e170	e145	e125	709	1120	4260	925	422	236
6	137	178	e200	e150	e140	e130	547	1360	4070	893	483	239
7	127	141	e210	e130	e140	e130	510	1600	3920	834	586	228
8	124	e250	e220	e135	e140	e130	532	1810	3710	785	530	240
9	118	235	e230	e140	e140	e140	529	2050	3650	785	441	242
10	114	249	e250	e150	e145	e150	507	2210	3630	835	454	220
11	111	239	e230	e140	e150	e160	423	2210	3500	878	602	199
12	106	251	e220	e125	e160	e175	402	2270	3270	831	650	195
13	99	253	e200	e135	e160	e170	455	2280	3180	794	604	246
14	97	231	e170	e140	e150	e160	382	2210	2850	840	554	234
15	100	218	e155	e145	e155	e180	408	2260	2460	753	633	205
16	102	188	e150	e150	e160	e210	500	2320	2230	710	515	191
17	97	148	e140	e160	e165	e260	697	2360	2070	642	419	193
18	e105	240	e130	e165	e170	e300	990	2540	1970	632	371	191
19	124	e300	e140	e165	e165	e360	1260	2830	1990	699	387	441
20	129	358	e150	e170	e160	e470	1490	2830	2090	759	411	1540
21	120	368	e170	e160	e150	e670	1680	2800	2410	695	372	2700
22	102	405	e170	e160	e145	e1000	1710	2750	2750	636	339	3370
23	102	468	e160	e150	e145	e1700	1510	2840	2740	608	311	2750
24	113	404	e160	e140	e140	e1500	1330	3130	2440	541	289	1490
25	116	e290	e170	e150	e140	e1400	1180	3830	2140	547	276	1110
26	e120	e270	e180	e160	e140	e1200	1070	3530	1810	523	266	889
27	e120	253	e190	e150	e145	e1100	1150	3200	1450	480	275	826
28	e130	235	e200	e150	e150	e1000	1220	2780	1300	474	274	885
29	173	276	e200	e145	---	e950	1550	2310	1240	526	270	727
30	149	258	e205	e150	---	885	1960	2240	1190	585	256	622
31	184	---	e205	e160	---	808	---	2520	---	764	248	---
TOTAL	3853	7734	5801	4885	4220	16013	27530	72050	81830	22893	13689	21358
MEAN	124	258	187	158	151	517	918	2324	2728	738	442	712
MAX	184	468	250	220	170	1700	1960	3830	4260	1070	787	3370
MIN	97	141	130	125	140	125	382	1090	1190	474	248	191
AC-FT	7640	15340	11510	9690	8370	31760	54610	142900	162300	45410	27150	42360

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1904 - 1997, BY WATER YEAR (WY)

	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
MEAN	160	151	102	82.6	87.9	172	762	1154	1497	645	268	152																																																																																		
MAX	538	366	200	177	199	722	2444	3649	3296	2367	763	712																																																																																		
(WY)	1962	1962	1928	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 1996 CALENDAR YEAR	FOR 1997 WATER YEAR	WATER YEARS 1904 - 1997
ANNUAL TOTAL	232420	281856	
ANNUAL MEAN	635	772	438
HIGHEST ANNUAL MEAN			878
LOWEST ANNUAL MEAN			117
HIGHEST DAILY MEAN	3760	4260	6450
LOWEST DAILY MEAN	^a 81	^b 97	^c 19
ANNUAL SEVEN-DAY MINIMUM	85	101	20
INSTANTANEOUS PEAK FLOW		4390	^d 6720
INSTANTANEOUS PEAK STAGE		6.52	^e 9.65
ANNUAL RUNOFF (AC-FT)	461000	559100	317200
10 PERCENT EXCEEDS	1990	2310	1240
50 PERCENT EXCEEDS	193	274	161
90 PERCENT EXCEEDS	109	140	68

e-Estimated.

a-Also occurred Sep 19.

b-Also occurred Oct 17.

c-Also occurred Jul 18-19, 1934.

d-Gage height 6.24 ft, site and datum then in use.

f-Backwater from ice jam.

06696000 SOUTH PLATTE RIVER NEAR LAKE GEORGE, CO

LOCATION.--Lat 38°54'19", long 105°28'22", in SW¹/₄sec.20, T.13 S., R.72 W., Park County, Hydrologic Unit 10190001, on left bank 700 ft downstream from Elevenmile Canyon Reservoir and 8.2 mi southwest of town of Lake George.

DRAINAGE AREA.--963 mi².

PERIOD OF RECORD.--October 1929 to current year. Monthly discharge only for some periods, published in WSP 1310.

REVISED RECORDS.--WSP 1730: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry, and Parshall flume. Elevation of gage is 8,458 ft above sea level, from topographic map. Prior to Oct. 26, 1940, at site 1 mi downstream at datum 8,423.95 ft, above sea level, adjustment of 1912.

REMARKS.--No estimated daily discharges. Records good. Natural flow of stream affected by transmountain diversions through East and West Hoosier ditches at Hoosier Pass prior to 1941, storage in Elevenmile Canyon Reservoir (see elsewhere in this report) and Antero Reservoir, capacity, 22,300 acre-ft, 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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	98	98	108	109	86	86	158	94	99	375	251	180
2	96	99	111	108	85	85	162	91	110	348	231	191
3	97	100	110	110	84	84	162	85	125	337	230	198
4	97	102	112	111	81	83	162	75	143	329	241	205
5	101	101	112	109	81	82	164	69	173	317	242	214
6	103	101	112	111	82	80	154	67	205	301	245	226
7	103	105	116	108	83	79	150	67	256	296	248	222
8	103	97	115	107	83	78	144	65	303	286	257	223
9	101	97	116	106	83	76	142	67	329	274	274	218
10	101	93	118	103	83	75	136	68	359	265	285	210
11	100	93	118	99	81	74	141	67	362	257	294	204
12	99	91	117	100	82	74	140	72	364	253	286	199
13	98	90	118	100	83	73	140	73	340	251	274	192
14	99	92	119	99	82	72	140	71	306	246	255	188
15	103	90	118	99	82	72	134	73	261	245	238	186
16	105	90	119	97	81	70	123	75	223	241	222	185
17	109	92	119	97	82	69	114	76	194	239	204	178
18	108	93	116	95	80	68	105	75	168	253	192	178
19	108	92	113	95	81	68	100	72	150	260	176	170
20	109	89	114	95	82	70	95	78	133	270	165	166
21	108	86	113	95	86	77	93	82	130	279	152	168
22	110	89	112	95	85	85	90	94	145	300	140	166
23	102	87	112	94	86	92	89	99	173	298	133	160
24	101	88	110	94	87	97	95	113	211	312	125	159
25	96	89	110	94	86	104	97	119	255	297	122	155
26	95	88	110	93	86	122	94	119	304	286	129	151
27	95	96	108	92	86	133	92	112	357	278	137	135
28	98	98	107	94	85	139	92	106	383	280	153	117
29	105	101	107	93	---	145	96	104	391	286	166	105
30	95	105	107	91	---	151	95	95	390	284	169	102
31	95	---	108	88	---	157	---	92	---	257	173	---
TOTAL	3138	2832	3505	3081	2334	2820	3699	2615	7342	8800	6409	5351
MEAN	101	94.4	113	99.4	83.4	91.0	123	84.4	245	284	207	178
MAX	110	105	119	111	87	157	164	119	391	375	294	226
MIN	95	86	107	88	80	68	89	65	99	239	122	102
AC-FT	6220	5620	6950	6110	4630	5590	7340	5190	14560	17450	12710	10610

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1930 - 1997, BY WATER YEAR (WY)

MEAN	56.6	43.1	29.5	27.4	28.3	41.9	94.5	96.0	149	190	156	77.8
MAX	221	166	113	133	117	201	436	775	614	786	459	288
(WY)	1931	1955	1997	1990	1990	1986	1970	1970	1949	1995	1984	1930
MIN	2.12	2.26	2.20	1.50	1.00	3.00	7.08	4.77	7.78	16.9	14.8	4.73
(WY)	1941	1940	1940	1933	1933	1933	1939	1961	1961	1940	1940	1953

SUMMARY STATISTICS FOR 1996 CALENDAR YEAR FOR 1997 WATER YEAR WATER YEARS 1930 - 1997

ANNUAL TOTAL	51910	51926	
ANNUAL MEAN	142	142	83.4
HIGHEST ANNUAL MEAN			218
LOWEST ANNUAL MEAN			14.1
HIGHEST DAILY MEAN	404	May 26	391
LOWEST DAILY MEAN	^a 47	Feb 12	65
ANNUAL SEVEN-DAY MINIMUM	48	Feb 9	67
INSTANTANEOUS PEAK FLOW			395
INSTANTANEOUS PEAK STAGE			3.30
ANNUAL RUNOFF (AC-FT)	103000	103000	60450
10 PERCENT EXCEEDS	233		211
50 PERCENT EXCEEDS	112		108
90 PERCENT EXCEEDS	62		81

a-Also occurred Feb 13-15.

b-No flow at times in Jan 1930, Feb 1931, and Nov 1935.

06697100 TARRYALL CREEK BELOW PARK GULCH NEAR COMO, CO

LOCATION.--Lat 39°16'54", long 105°47'13", in NW¼SW¼ 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.--Not determined.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May to September 1997.

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

REMARKS.--Records fair 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.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period May to September, 173 ft³/s, June 9, at 1115, gage height, 5.91 ft; minimum daily, 11 ft³/s, Sept. 28-30.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	50	56	47	e25
2	---	---	---	---	---	---	---	---	70	50	50	e30
3	---	---	---	---	---	---	---	---	83	46	37	e50
4	---	---	---	---	---	---	---	---	90	40	39	e33
5	---	---	---	---	---	---	---	---	104	36	38	e27
6	---	---	---	---	---	---	---	---	122	33	43	e25
7	---	---	---	---	---	---	---	---	147	32	51	e23
8	---	---	---	---	---	---	---	---	138	32	40	e22
9	---	---	---	---	---	---	---	23	163	32	33	e21
10	---	---	---	---	---	---	---	24	143	31	35	e20
11	---	---	---	---	---	---	---	26	125	29	33	e24
12	---	---	---	---	---	---	---	30	109	30	30	e21
13	---	---	---	---	---	---	---	30	115	27	e29	e19
14	---	---	---	---	---	---	---	34	118	25	e28	e19
15	---	---	---	---	---	---	---	37	103	23	e26	e17
16	---	---	---	---	---	---	---	42	99	e23	e25	e16
17	---	---	---	---	---	---	---	44	99	e22	e24	e15
18	---	---	---	---	---	---	---	46	97	e23	e30	e16
19	---	---	---	---	---	---	---	51	98	e25	e28	e15
20	---	---	---	---	---	---	---	51	102	e31	e25	e17
21	---	---	---	---	---	---	---	52	102	e27	e23	e23
22	---	---	---	---	---	---	---	62	130	e26	e21	e21
23	---	---	---	---	---	---	---	55	108	e26	e19	e19
24	---	---	---	---	---	---	---	45	100	e26	e18	e16
25	---	---	---	---	---	---	---	42	92	e26	e17	13
26	---	---	---	---	---	---	---	40	86	26	e24	13
27	---	---	---	---	---	---	---	35	81	29	e35	12
28	---	---	---	---	---	---	---	33	67	40	e34	11
29	---	---	---	---	---	---	---	33	65	41	e26	11
30	---	---	---	---	---	---	---	40	61	47	e24	11
31	---	---	---	---	---	---	---	43	---	41	e25	---
TOTAL	---	---	---	---	---	---	---	---	3067	1001	957	605
MEAN	---	---	---	---	---	---	---	---	102	32.3	30.9	20.2
MAX	---	---	---	---	---	---	---	---	163	56	51	50
MIN	---	---	---	---	---	---	---	---	50	22	17	11
AC-FT	---	---	---	---	---	---	---	---	6080	1990	1900	1200

e-Estimated.

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

PERIOD OF RECORD.--April to September 1997.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	pH 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)
APR 17...	1130	7.8	270	8.0	9.5	9.0	120	34	7.3	7.1
MAY 21...	0910	53	193	8.2	5.5	9.1	88	27	5.2	2.8
JUN 10...	0920	144	234	8.5	7.5	8.1	110	32	6.8	4.7
JUL 25...	0850	29	199	8.3	12.5	7.4	95	30	4.8	2.5
AUG 13...	1120	32	196	8.4	10.5	8.4	93	30	4.6	2.6
SEP 18...	0750	16	213	8.2	9.0	8.5	100	32	5.5	3.0

DATE	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-a BONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453)	ALKA-b 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)
APR 17...	0.3	1.1	138	113	35	0.9	0.1	6.7	161	160
MAY 21...	0.1	1.0	106	87	13	0.4	<0.1	9.1	112	110
JUN 10...	0.2	1.1	121	99	19	0.5	0.1	11	148	134
JUL 25...	0.1	0.7	117	96	9.5	0.2	<0.1	8.5	120	114
AUG 13...	0.1	0.6	--	81	11	0.2	<0.1	8.0	120	94
SEP 18...	0.1	0.8	113	95	13	0.4	<0.1	8.0	126	117

DATE	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS-SOLVED (TONS PER DAY) (70302)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AM-MONIA + ORGANIC DIS. TOTAL (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)
APR 17...	0.22	3.39	<0.01	0.06	<0.01	<0.2	<0.2	0.02	<0.01	<0.01
MAY 21...	0.15	16.1	<0.01	<0.05	<0.01	0.5	<0.2	0.09	<0.01	<0.01
JUN 10...	0.20	57.5	<0.01	<0.05	<0.01	0.4	0.3	<0.01	<0.01	<0.01
JUL 25...	0.16	9.33	<0.01	<0.05	<0.01	<0.2	<0.2	<0.01	<0.01	<0.01
AUG 13...	0.16	10.2	<0.01	<0.05	<0.01	0.2	<0.2	0.02	<0.01	<0.01
SEP 18...	0.17	5.41	<0.01	<0.05	<0.01	<0.2	<0.2	<0.01	<0.01	<0.01

a-Field dissolved bicarbonate, determined by incremental titration method.
b-Field total dissolved alkalinity, determined by incremental titration method.

PLATTE RIVER BASIN

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	ANTI- MONY, DIS- SOLVED (UG/L AS SB) (01095)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	BARIUM, DIS- SOLVED (UG/L AS BA) (01005)	BERYL- LIUM, DIS- SOLVED (UG/L AS BE) (01010)	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)
APR 17...	1	<1	<1	70	<1	<1	1	<1	1	72
MAY 21...	3	<1	<1	60	<1	<1	2	<1	2	68
JUN 10...	3	<1	<1	57	<1	<1	2	<1	1	42
JUL 25...	3	<1	<1	75	<1	<1	2	<1	1	110
AUG 13...	2	<1	<1	69	<1	<1	<1	<1	1	110
SEP 18...	2	<1	<1	78	<1	<1	<1	<1	<1	58

DATE	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)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	CARBON, ORGANIC DIS- SOLVED (MG/L AS C) (00681)
APR 17...	<1	16	<1	<1	<1	<1	<1	<1	--	--
MAY 21...	<1	10	1	1	<1	<1	1	1	--	--
JUN 10...	<1	6	1	<1	<1	<1	<1	1	--	--
JUL 25...	<1	9	1	<1	<1	<1	1	<1	--	--
AUG 13...	<1	9	1	<1	<1	<1	1	<1	--	--
SEP 18...	<1	9	<1	<1	<1	<1	2	<1	1.7	1.8

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SEDI- MENT, DIS- CHARGE, SUS- PENDEDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDEDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
MAY 21...	0910	53	91	13	69
JUN 10...	0920	144	15	5.8	50
JUL 25...	0850	29	16	1.3	89
AUG 13...	1120	32	15	1.2	87
SEP 18...	0750	16	8	0.32	85

06699005 TARRYALL CREEK BELOW ROCK CREEK, NEAR JEFFERSON, CO

LOCATION.--Lat 39°17'13", long 105°41'43", in NW¼NW¼ sec.8, T.9 S., R.74 W., Park County, Hydrologic Unit 10190001, on left bank 1,800 ft downstream from Rock Creek, 1.0 mi northwest of Bordenville, and 9 mi southeast of Jefferson.

DRAINAGE AREA.--230 mi².

PERIOD OF RECORD.--April 1983 to September 1997 (discontinued).

REVISED RECORDS.--WDR CO-86-1: Drainage area. WDR CO-87-1: 1986 (M).

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 9,020 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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	24	e12	e8.2	e7.2	e6.8	e11	46	167	166	151	79
2	29	23	e11	e8.6	e7.4	e6.8	e12	36	214	153	169	96
3	29	24	e10	e9.0	e7.4	e6.8	e14	34	265	142	124	149
4	29	25	e10	e9.4	e7.4	e6.2	e14	35	286	134	120	107
5	28	21	e9.8	e9.0	e7.4	e6.2	e15	44	319	128	121	106
6	27	18	e9.8	e8.6	e7.4	e6.2	e17	51	362	122	146	77
7	27	22	e10	e8.2	e7.0	e6.2	e19	56	468	124	164	74
8	26	29	e10	e8.2	e7.0	e6.2	21	60	429	120	127	65
9	26	20	e11	e8.4	e7.2	e6.2	23	62	516	121	104	58
10	26	e20	e12	e8.6	e7.2	e6.0	26	66	450	113	119	57
11	26	e21	e12	e9.0	e7.2	e5.2	24	71	389	112	116	66
12	26	e22	e12	e9.0	e7.2	e5.2	33	80	332	115	102	65
13	26	e22	e12	e9.0	e7.2	e5.4	26	78	372	103	95	54
14	25	e21	e12	e8.8	e7.0	e5.6	20	76	428	96	94	50
15	25	e21	e12	e8.6	e7.0	e5.6	24	76	334	89	84	49
16	25	e22	e12	e8.4	e7.2	e6.0	27	88	306	85	74	49
17	28	e22	e12	e8.2	e7.4	e5.6	39	100	318	84	73	48
18	27	e21	e11	e8.4	e7.8	e6.0	47	106	301	93	98	45
19	32	e19	e11	e8.4	e7.8	e7.0	49	118	307	107	84	43
20	31	e18	e11	e8.4	e8.0	e8.0	52	131	316	113	76	54
21	18	e18	e11	e8.4	e8.0	e8.4	60	135	314	100	72	66
22	23	e19	e11	e8.4	e8.0	e8.8	49	208	423	96	69	61
23	33	e17	e11	e8.4	e7.8	e9.2	43	193	341	96	64	53
24	27	e16	e11	e8.2	e7.6	e10	47	163	319	103	60	51
25	27	e16	e10	e8.0	e7.4	e9.4	36	152	285	93	75	46
26	28	e16	e10	e8.0	e7.0	e9.0	43	140	258	90	88	44
27	25	e16	e10	e8.6	e6.8	e9.0	45	123	242	95	107	45
28	26	e15	e10	e8.8	e6.6	e11	63	112	217	133	110	40
29	25	e14	e10	e7.8	---	e11	66	115	202	143	92	38
30	24	e13	e9.0	e7.4	---	e10	58	139	186	159	72	37
31	25	---	e8.8	e7.4	---	e10	---	145	---	131	80	---
TOTAL	828	595	334.4	261.8	205.6	229.0	1023	3039	9666	3559	3130	1872
MEAN	26.7	19.8	10.8	8.45	7.34	7.39	34.1	98.0	322	115	101	62.4
MAX	33	29	12	9.4	8.0	11	66	208	516	166	169	149
MIN	18	13	8.8	7.4	6.6	5.2	11	34	167	84	60	37
AC-FT	1640	1180	663	519	408	454	2030	6030	19170	7060	6210	3710

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1983 - 1997, BY WATER YEAR (WY)

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
MEAN	27.9	17.5	11.0	8.06	8.97	12.4	34.5	81.8	183	118	76.1	40.8			
MAX	59.4	31.8	17.9	12.5	20.5	29.2	85.4	148	457	407	161	83.0			
(WY)	1985	1985	1984	1987	1985	1985	1987	1987	1985	1995	1984	1983			
MIN	13.8	12.2	5.48	3.02	5.00	7.39	17.6	39.4	76.5	37.4	26.7	17.8			
(WY)	1993	1995	1988	1988	1992	1997	1984	1986	1992	1994	1994	1992			

SUMMARY STATISTICS

FOR 1996 CALENDAR YEAR

FOR 1997 WATER YEAR

WATER YEARS 1983 - 1997

ANNUAL TOTAL	18302.4	24742.8	
ANNUAL MEAN	50.0	67.8	50.8
HIGHEST ANNUAL MEAN			106
LOWEST ANNUAL MEAN			27.1
HIGHEST DAILY MEAN	383	Jun 16	797
LOWEST DAILY MEAN	e8.8	Dec 31	b ₃ .0
ANNUAL SEVEN-DAY MINIMUM	9.7	Dec 25	5.5
INSTANTANEOUS PEAK FLOW			542
INSTANTANEOUS PEAK STAGE			5.39
ANNUAL RUNOFF (AC-FT)	36300	49080	36800
10 PERCENT EXCEEDS	155	161	132
50 PERCENT EXCEEDS	26	27	26
90 PERCENT EXCEEDS	12	7.4	7.8

e-Estimated.
a-Also occurred Mar 12.
b-Also occurred Jan 4-29, 1988.
c-Maximum gage height, 7.00 ft, Apr 19, 1987, from floodmarks.

RESERVOIRS IN SOUTH PLATTE RIVER BASIN

06695500 ELEVENMILE CANYON RESERVOIR.--Lat 38°54'19", long 105°28'30", in N¹/₂SW¹/₄ sec.20, T.13 S., R.72 W., Park County, Hydrologic Unit 10190001, at north end of dam on South Platte River, 8 mi southwest of Lake George. DRAINAGE AREA, 963 mi². PERIOD OF RECORD, October 1932 to current year. Prior to September 1938, published in WSP 1310. REVISED RECORDS, WSP 1730: Drainage area. GAGE, nonrecording gage read once daily. Datum of gage is 8,597.00 ft above sea level, (levels by Denver Board of Water Commissioners); gage readings published are to datum.

Reservoir is formed by concrete arch dam; storage began in October 1932; dam completed in November 1932. Spillway built 5.00 ft higher, Aug. 1, 1957. Capacity, 97,780 acre-ft, between elevations 8,488.25 ft, invert of outlet pipe, and 8,597.00 ft, crest of spillway. Dead storage is negligible. Figures given represent total contents. Water is for municipal use by city of Denver. Records provided by Denver Board of Water Commissioners.

EXTREMES FOR PERIOD OF RECORD: Maximum contents observed, 111,200 acre-ft, Apr. 28, 1970, elevation, 8,600.82 ft; no contents at times in 1935.

EXTREMES FOR CURRENT YEAR: Maximum contents observed, 102,800 acre-ft, June 28, 29, elevation, 8,598.45 ft; minimum observed, 99,450 acre-ft, May 5-7, 10, elevation, 8,597.49 ft.

06701000 CHEESMAN LAKE.--Lat 39°12'26", long 105°16'18", in NW¹/₄SW¹/₄ sec.6, T.10 S., R.70 W., Douglas County, Hydrologic Unit 10190002, at dam on South Platte River, 4.1 mi southwest of Deckers. DRAINAGE AREA, 1,752 mi². PERIOD OF RECORD, September 1900 to December 1901, September 1902 to current year. Prior to October 1938, published in WSP 1310. Published as Lake Cheesman prior to 1947. REVISED RECORDS, WSP 1730: Drainage area. GAGE, nonrecording gage read once daily. Datum of gage is 6,834.91 ft above sea level, (levels by Denver Board of Water Commissioners); gage readings published are to datum.

Reservoir is formed by masonry dam. Storage began September 1900. Dam completed about October 1902. Capacity, 79,060 acre-ft at gage height 212 ft, spillway crest, above sill of lowest gate. No dead storage. Figures given represent total contents. Water is for municipal use by city of Denver. Records provided by Denver Board of Water Commissioners.

EXTREMES FOR PERIOD OF RECORD: Maximum contents observed, 81,360 acre-ft, Apr. 29, 1970, gage height, 214.60 ft, minimum observed since appreciable storage was attained, 3,650 acre-ft, Apr. 20, 1933, gage height, 55.02 ft.

EXTREMES FOR CURRENT YEAR: Maximum contents observed, 79,420 acre-ft, July 4, gage height, 212.41 ft; minimum observed, 60,680 acre-ft, Oct. 14, gage height, 189.25 ft.

MONTHEND ELEVATION AND CONTENTS AT 0800, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

Date	Elevation a (feet)	Contents (acre-feet)	Change in contents (acre-feet)	Gage height (feet)	Contents (acre-feet)	Change in contents (acre-feet)
06695500 ELEVENMILE CANYON RESERVOIR				06701000 CHEESMAN LAKE		
Sept. 30.....	8,597.62	99,900	-	190.05	61,280	-
Oct. 31.....	8,597.67	100,100	+200	191.04	62,020	+740
Nov. 30.....	8,597.68	100,100	0	195.05	65,090	+3,070
Dec. 31.....	8,597.68	100,100	0	196.87	66,510	+1,420
CAL YR 1996....	-	-	+130	-	-	-7,270
Jan. 31.....	8,597.65	100,000	-100	197.02	66,630	+120
Feb. 28.....	8,597.60	99,830	-170	196.04	65,860	-770
Mar. 31.....	8,597.85	100,700	+870	194.39	64,580	-1,280
Apr. 30.....	8,597.60	99,830	-870	193.35	63,780	-800
May 31.....	8,597.64	99,970	+140	193.34	63,770	-10
June 30.....	8,598.42	102,700	+2,730	212.22	79,260	+15,490
July 31.....	8,598.10	101,600	-1,100	212.22	79,260	0
Aug. 31.....	8,597.95	101,000	-600	210.18	77,480	-1,780
Sept. 30.....	8,597.67	100,100	-900	210.61	77,860	+380
WTR YR 1997....	-	-	+200	-	-	+16,580

a-Above sea level.

06701500 SOUTH PLATTE RIVER BELOW CHEESMAN LAKE, CO

LOCATION.--Lat 39°12'33", long 105°16'02", in SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec.6, T.10 S., R.70 W., Jefferson County, Hydrologic Unit 10190002, on left bank 1,400 ft downstream from toe of Cheesman Dam, and 3.8 mi southwest of Deckers.

DRAINAGE AREA.--1,752 mi².

PERIOD OF RECORD.--October 1924 to current year. Monthly discharge only for some periods, published in WSP 1310.

REVISED RECORDS.--WSP 1310: 1949. WSP 1730: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry, and Parshall flume. Datum of gage is 6,609.29 ft above sea level. Prior to May 14, 1956, at site 370 ft upstream at datum 0.50 ft higher.

REMARKS.--No estimated daily discharges. Records good. Natural flow of stream affected by minor transmountain diversion from Colorado River basin through Boreas Pass ditch, Elevenmile Canyon Reservoir and Cheesman Lake (see elsewhere in this report), diversions for irrigation of about 40,000 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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	117	76	51	96	108	166	169	130	302	589	428	256
2	182	76	64	97	108	166	170	131	302	545	414	195
3	135	76	92	98	108	166	170	131	302	487	419	124
4	98	61	101	98	108	166	211	130	302	481	421	177
5	98	52	100	98	108	166	242	171	302	486	435	254
6	99	52	100	98	97	177	242	200	354	464	444	292
7	136	67	100	110	89	185	242	200	359	435	447	292
8	203	90	99	124	89	185	242	200	248	427	443	293
9	203	101	100	124	89	184	242	232	205	426	438	320
10	203	101	101	124	89	184	242	251	207	423	436	341
11	148	101	101	124	89	184	242	249	208	400	445	340
12	133	101	101	124	90	184	242	249	209	388	454	340
13	152	101	101	124	90	173	242	249	209	378	433	340
14	178	91	101	124	91	165	243	249	212	368	400	340
15	141	79	101	124	91	165	244	249	212	356	374	312
16	103	79	101	126	91	165	243	311	316	344	410	276
17	93	79	101	126	91	166	243	364	405	335	410	277
18	76	79	101	126	104	166	267	361	405	321	329	279
19	76	75	113	126	126	147	300	360	405	328	292	220
20	76	66	124	126	150	119	300	335	376	345	292	182
21	112	67	124	115	166	129	300	318	357	366	292	151
22	152	67	124	106	166	161	276	250	381	383	292	130
23	122	67	124	106	166	170	219	192	455	406	325	129
24	101	67	124	106	166	168	195	193	549	412	346	161
25	101	60	124	106	166	168	165	194	603	405	412	193
26	101	51	124	107	166	168	129	194	603	401	401	236
27	90	51	124	108	166	168	128	196	604	390	305	277
28	75	51	124	108	166	168	130	218	620	394	254	328
29	76	51	124	108	---	168	130	277	632	411	254	327
30	76	51	124	108	---	168	130	302	612	450	254	327
31	76	---	109	108	---	168	---	302	---	448	253	---
TOTAL	3732	2186	3302	3503	3334	5183	6540	7388	11256	12792	11552	7709
MEAN	120	72.9	107	113	119	167	218	238	375	413	373	257
MAX	203	101	124	126	166	185	300	364	632	589	454	341
MIN	75	51	51	96	89	119	128	130	205	321	253	124
AC-FT	7400	4340	6550	6950	6610	10280	12970	14650	22330	25370	22910	15290

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1925 - 1997, BY WATER YEAR (WY)

MEAN	128	66.5	50.0	55.0	53.2	54.9	147	283	335	361	343	200
MAX	380	266	184	148	143	208	932	1716	1088	1451	984	431
(WY)	1985	1985	1996	1996	1990	1986	1942	1970	1995	1995	1984	1990
MIN	12.9	6.33	5.26	5.26	2.76	3.11	2.00	11.0	38.5	53.5	66.7	33.5
(WY)	1965	1960	1926	1926	1957	1957	1957	1938	1989	1967	1978	1978

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR	FOR 1997 WATER YEAR	FOR 1998 WATER YEAR	FOR 1999 WATER YEAR	FOR 2000 WATER YEAR
ANNUAL TOTAL	83465	78477			
ANNUAL MEAN	228	215			
HIGHEST ANNUAL MEAN					174
LOWEST ANNUAL MEAN					450
HIGHEST DAILY MEAN	713	Jul 18	632	Jun 29	4580
LOWEST DAILY MEAN	^a 51	Nov 26	^a 51	Nov 26	^b 1.6
ANNUAL SEVEN-DAY MINIMUM	52	Nov 25	52	Nov 25	1.6
INSTANTANEOUS PEAK FLOW			642	Jun 29	4640
INSTANTANEOUS PEAK STAGE			3.05	Jun 29	13.40
ANNUAL RUNOFF (AC-FT)	165600		155700		125900
10 PERCENT EXCEEDS	467		410		430
50 PERCENT EXCEEDS	150		168		96
90 PERCENT EXCEEDS	86		89		18

a-Also occurred Nov 27 to Dec 1.
b-Also occurred Apr 9-14, 1957.

392144105132401 SPRING CREEK AT LONG SCRAGGY RANCH RAIN GAGE, CO

PRECIPITATION RECORDS

LOCATION.--Lat 39°21'44", long 105°13'24", in SW¹/₄SE¹/₄ 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 to September 1997 (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 CURRENT YEAR.--Maximum daily rainfall during period of seasonal operation, 1.60 inches, June 6.

PRECIPITATION (INCHES), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	.01	.00	.00	.02	.24
2	---	---	---	---	---	---	---	.00	.02	.00	.12	.08
3	---	---	---	---	---	---	---	.00	.00	.00	.00	.00
4	---	---	---	---	---	---	---	.00	.00	.00	.27	.22
5	---	---	---	---	---	---	---	.00	.02	.00	.62	.00
6	---	---	---	---	---	---	---	.00	1.60	.00	.32	.01
7	---	---	---	---	---	---	---	.00	.26	.00	.10	.00
8	---	---	---	---	---	---	---	.00	.27	.00	.00	.00
9	---	---	---	---	---	---	---	.00	.05	.00	.43	.00
10	---	---	---	---	---	---	---	.00	.01	.00	.05	.00
11	---	---	---	---	---	---	---	.04	.00	.00	.01	.00
12	---	---	---	---	---	---	---	.10	.06	.00	.22	.00
13	---	---	---	---	---	---	---	.00	.05	.00	.01	.00
14	---	---	---	---	---	---	---	.00	.03	.00	.00	.00
15	---	---	---	---	---	---	---	.02	.05	.00	.00	.00
16	---	---	---	---	---	---	---	.01	.00	.00	.01	.00
17	---	---	---	---	---	---	---	.00	.00	.00	.22	.00
18	---	---	---	---	---	---	---	.00	.30	.00	.04	.00
19	---	---	---	---	---	---	---	.01	.00	.03	.02	.09
20	---	---	---	---	---	---	---	.00	.00	.00	.00	.10
21	---	---	---	---	---	---	---	.09	.32	.00	.02	.02
22	---	---	---	---	---	---	---	.43	.05	.00	.03	.25
23	---	---	---	---	---	---	---	.01	.05	.27	.00	.05
24	---	---	---	---	---	---	.01	.00	.06	.01	.25	.00
25	---	---	---	---	---	---	.57	.00	.00	.00	.16	.00
26	---	---	---	---	---	---	.10	.02	.00	.00	.55	.00
27	---	---	---	---	---	---	.00	.00	.00	.31	.03	.00
28	---	---	---	---	---	---	.04	.00	.02	.40	.10	.00
29	---	---	---	---	---	---	.00	.00	.00	.58	.03	.00
30	---	---	---	---	---	---	.00	.01	.00	.16	.00	.00
31	---	---	---	---	---	---	---	.00	---	1.27	.41	---
TOTAL	---	---	---	---	---	---	---	0.75	3.22	3.03	4.04	1.06

06701970 SPRING CREEK ABOVE MOUTH NEAR SOUTH PLATTE, CO

PRECIPITATION RECORDS

LOCATION.--Lat 39°23'37", long 105°11'01", in SE¹/₄SE¹/₄ 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.

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

GAGE.--Tipping-bucket rain gage (no wind shields used) with satellite telemetry. Elevation of gage is 6,320 ft above sea level, from topographic map.

REMARKS.--Records good.

EXTREMES FOR CURRENT YEAR.--Maximum daily rainfall during period of seasonal operation, 1.89 inches, Aug. 31.

PRECIPITATION (INCHES), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	.02	.00	.00	.01	.07
2	---	---	---	---	---	---	---	.00	.32	.00	.01	.06
3	---	---	---	---	---	---	---	.00	.00	.00	.00	.00
4	---	---	---	---	---	---	---	.00	.00	.01	.16	.05
5	---	---	---	---	---	---	---	.00	.00	.00	.41	.00
6	---	---	---	---	---	---	---	.00	1.31	.00	.09	.28
7	---	---	---	---	---	---	---	.00	.24	.00	.03	.00
8	---	---	---	---	---	---	---	.00	.11	.00	.00	.00
9	---	---	---	---	---	---	---	.00	.08	.00	.30	.00
10	---	---	---	---	---	---	---	.00	.23	.00	.00	.00
11	---	---	---	---	---	---	---	.07	.00	.01	.15	.00
12	---	---	---	---	---	---	---	.03	.04	.00	.29	.00
13	---	---	---	---	---	---	---	.00	.19	.00	.00	.00
14	---	---	---	---	---	---	---	.00	.05	.00	.00	.00
15	---	---	---	---	---	---	---	.00	.02	.00	.00	.00
16	---	---	---	---	---	---	---	.00	.01	.00	.01	.00
17	---	---	---	---	---	---	---	.00	.00	.00	.18	.00
18	---	---	---	---	---	---	---	.00	.03	.00	.01	.00
19	---	---	---	---	---	---	---	.00	.00	.00	.10	.05
20	---	---	---	---	---	---	---	.00	.00	.01	.00	.04
21	---	---	---	---	---	---	---	.09	.28	.00	.00	.00
22	---	---	---	---	---	---	---	.17	.00	.00	.11	.17
23	---	---	---	---	---	---	---	.00	.04	.18	.00	.01
24	---	---	---	---	---	---	---	.06	.00	.03	.06	.03
25	---	---	---	---	---	---	---	.32	.00	.00	.09	.04
26	---	---	---	---	---	---	.04	.02	.00	.00	.26	.00
27	---	---	---	---	---	---	.00	.00	.00	.19	.00	.00
28	---	---	---	---	---	---	.05	.00	.00	.25	.04	.00
29	---	---	---	---	---	---	.00	.03	.00	.28	.01	.00
30	---	---	---	---	---	---	.00	.00	.00	.06	.00	.00
31	---	---	---	---	---	---	---	.00	---	.85	1.89	---
TOTAL	---	---	---	---	---	---	---	0.43	2.98	1.90	4.18	0.77

06704500 DUCK CREEK NEAR GRANT, CO

LOCATION.--Lat 39°31'46", long 105°43'50", in NE¼NW¼ sec.13, T.6 S., R.75 W., Park County, Hydrologic Unit 10190002, on left bank 570 ft upstream from Geneva Creek Road, 650 ft upstream from the confluence with Geneva Creek, and 7.0 mi north of Grant.

DRAINAGE AREA.--7.78 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1994 to September 1997 (discontinued).

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 9,750 ft (revised) above sea level, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. Flow partially regulated by Duck Lake.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.5	e1.1	e1.0	e1.1	e1.1	e.70	.95	2.0	23	23	4.8	4.1
2	1.4	e1.1	e1.0	e1.1	e1.0	e.80	e1.0	1.8	25	23	4.5	4.0
3	1.4	e1.1	e1.0	e1.3	e.90	e.80	e1.0	2.1	26	22	4.0	4.6
4	1.4	e1.1	e1.0	e1.3	e.90	e.80	1.0	2.9	27	21	4.1	4.8
5	1.4	e1.1	e1.0	e1.2	e.90	e.80	e1.0	3.6	29	21	4.2	4.2
6	1.4	e1.1	e1.0	e1.1	e.90	e.80	e1.0	3.9	31	20	4.1	4.1
7	1.4	e1.1	e1.1	e1.0	e.80	e.80	e1.0	4.3	33	19	4.9	4.0
8	1.3	e1.2	e1.2	e.90	e.70	e.80	e1.0	4.6	34	19	4.0	3.8
9	1.3	e1.3	e1.2	e.80	e.70	e.80	e1.0	5.1	36	18	4.9	3.8
10	1.3	e1.3	e1.2	e.70	e.80	e.80	e1.0	5.6	36	18	6.7	3.9
11	1.4	e1.4	e1.1	e.70	e.80	e.80	e1.0	5.8	36	30	5.0	3.7
12	1.3	e1.4	e1.0	e.70	e.80	e.80	e1.0	5.9	35	30	4.7	3.6
13	1.3	e1.3	e1.0	e.80	e.80	e.80	e1.0	6.4	36	29	4.5	3.4
14	1.3	e1.3	e1.0	e.80	e.80	e.90	e1.1	7.1	36	27	4.5	3.4
15	1.4	e1.2	e.90	e.90	e.90	e.90	e1.2	7.9	34	26	4.4	3.3
16	1.5	e1.1	e.90	e1.0	e.90	e.90	e1.5	8.8	34	24	4.4	3.4
17	1.6	e1.1	e.80	e1.0	e.90	e.90	e2.0	10	33	26	4.6	3.2
18	e1.6	e1.1	e.80	e1.0	e.90	e.90	2.3	11	32	28	4.8	3.1
19	e1.6	e1.3	e.90	e1.0	e1.0	e.90	2.9	13	32	26	4.5	3.0
20	e1.4	e1.4	e1.0	e1.0	e1.0	e.90	3.2	14	32	24	4.2	3.7
21	e1.2	e1.3	e1.0	e1.0	e.90	.96	2.8	15	32	23	4.3	3.4
22	e1.3	e1.3	e1.0	e1.0	e.80	1.0	2.1	17	32	23	4.2	3.5
23	e1.3	e1.3	e.90	e1.0	e.70	1.2	2.0	18	32	22	4.2	3.3
24	e1.3	e1.2	e.90	e1.0	e.70	.97	1.9	19	31	20	4.2	3.2
25	e1.3	e1.1	e1.0	e1.0	e.60	.81	1.7	19	30	20	4.3	3.1
26	e1.3	e1.1	e1.0	e1.0	e.70	1.0	1.5	20	29	20	4.4	3.0
27	e1.3	e1.0	e1.1	e1.0	e.70	1.2	2.0	20	27	19	4.5	2.9
28	e1.2	e1.0	e1.1	e1.0	e.70	1.3	2.2	20	26	19	4.5	2.9
29	e1.2	e1.0	e1.1	e1.0	---	.99	2.4	22	25	6.9	4.2	2.8
30	e1.2	e1.0	e1.1	e1.1	---	1.1	2.2	22	24	7.0	4.2	2.7
31	e1.1	---	e1.1	e1.2	---	1.1	---	22	---	5.2	4.1	---
TOTAL	41.9	35.4	31.40	30.70	23.30	28.23	47.95	339.8	928	659.1	138.9	105.9
MEAN	1.35	1.18	1.01	.99	.83	.91	1.60	11.0	30.9	21.3	4.48	3.53
MAX	1.6	1.4	1.2	1.3	1.1	1.3	3.2	22	36	30	6.7	4.8
MIN	1.1	1.0	.80	.70	.60	.70	.95	1.8	23	5.2	4.0	2.7
AC-FT	83	70	62	61	46	56	95	674	1840	1310	276	210

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 1997, BY WATER YEAR (WY)

	1995	1996	1997	1995	1996	1997	1995	1996	1997	1995	1996	1997
MEAN	1.85	1.50	1.07	.91	.81	.87	1.41	8.41	29.8	22.8	6.37	3.35
MAX	3.05	2.23	1.55	1.18	1.04	.91	1.60	11.0	34.4	27.7	11.1	5.18
(WY)	1996	1996	1996	1996	1996	1996	1997	1997	1995	1995	1995	1995
MIN	1.15	1.09	.65	.57	.55	.78	1.07	3.41	24.1	19.5	3.55	1.35
(WY)	1995	1995	1995	1995	1995	1995	1995	1995	1996	1996	1996	1996

SUMMARY STATISTICS

FOR 1996 CALENDAR YEAR

FOR 1997 WATER YEAR

WATER YEARS 1995 - 1997

ANNUAL TOTAL	2065.54	2410.58	
ANNUAL MEAN	5.64	6.60	6.62
HIGHEST ANNUAL MEAN			7.33
LOWEST ANNUAL MEAN			5.92
HIGHEST DAILY MEAN	29	Jun 15	a ³⁶ Jun 9
LOWEST DAILY MEAN	e, b	.80 Dec 17	e ^{.60} Feb 25
ANNUAL SEVEN-DAY MINIMUM	.84	Mar 13	.69 Feb 23
INSTANTANEOUS PEAK FLOW			d ³⁹ Jun 7
INSTANTANEOUS PEAK STAGE			d ^{1.46} Jun 7
ANNUAL RUNOFF (AC-FT)	4100	4780	4790
10 PERCENT EXCEEDS	21	24	23
50 PERCENT EXCEEDS	1.3	1.4	1.4
90 PERCENT EXCEEDS	.97	.81	.70

e-Estimated.

a-Also occurred Jun 10-11, and 13-14.

b-Also occurred Dec 18.

c-Also occurred Feb 13, 1995.

d-Also occurred Jun 8, and 13-14.

**06704500 DUCK CREEK NEAR GRANT, CO--Continued
WATER-QUALITY RECORDS**

PERIOD OF RECORD.--May 1995 to September 1997 (discontinued).

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: May 1995 to September 1997 (discontinued).

WATER TEMPERATURE: May 1995 to September 1997 (discontinued).

INSTRUMENTATION.--Water-quality monitor since with satellite telemetry May 1995.

REMARKS.--Water temperature and specific conductance records are good.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum 63 microsiemens, June 4, 1995; minimum 33 microsiemens, July 18, 21-23, 1996.

WATER TEMPERATURE: Maximum 15.4°C, July 24, 1997; minimum 0.0°C, many days during winter months.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 58 microsiemens, Oct. 12; minimum, 34 microsiemens July 11-12, 16-20, and 22.

WATER TEMPERATURE: Maximum, 15.4°C, July 24; minimum, 0.0°C, on many days during winter months.

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM @ 25 DEG. C), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
				MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	57	56	57	53	52	53	51	50	51	50	49	50			
2	57	56	57	54	53	53	51	50	51	50	49	50			
3	57	57	57	---	---	---	51	50	51	50	49	50			
4	57	57	57	---	---	---	51	50	51	50	49	49			
5	57	57	57	53	52	53	51	50	51	50	---	---			
6	57	57	57	53	52	52	50	49	50	50	49	50			
7	57	57	57	54	53	53	50	49	50	50	---	---			
8	57	57	57	54	53	53	50	50	50	---	---	---			
9	57	56	57	53	52	53	51	50	50	---	---	---			
10	57	56	57	53	52	53	50	49	50	---	---	---			
11	57	56	57	53	52	53	50	49	50	---	---	---			
12	58	56	57	53	52	53	50	49	50	---	---	---			
13	57	56	57	53	52	52	50	50	50	50	49	---			
14	57	56	57	53	52	52	50	49	50	50	49	49			
15	57	56	56	52	51	52	50	50	50	49	48	49			
16	56	55	56	52	50	51	50	49	50	49	49	49			
17	55	54	55	52	51	52	50	49	49	50	49	49			
18	56	54	55	52	51	51	50	49	49	50	49	49			
19	56	55	55	51	51	51	50	49	50	50	49	49			
20	55	54	55	52	51	51	50	49	50	---	---	---			
21	55	54	55	52	51	52	50	49	50	---	---	---			
22	55	54	55	52	51	52	50	49	50	---	---	---			
23	54	54	54	52	51	52	50	49	49	---	---	---			
24	54	53	54	52	52	52	50	49	50	---	---	---			
25	54	53	54	53	51	52	50	49	50	---	---	---			
26	53	52	53	53	50	52	50	49	50	---	---	---			
27	54	53	53	51	50	51	50	49	50	---	---	---			
28	54	53	53	52	51	51	50	49	49	---	---	---			
29	53	52	53	51	50	51	50	49	50	---	---	---			
30	53	53	53	51	50	51	50	49	50	---	---	---			
31	54	52	53	---	---	---	50	49	50	50	49	50			
MONTH	58	52	55	---	---	---	51	49	50	---	---	---			

PLATTE RIVER BASIN

06704500 DUCK CREEK NEAR GRANT, CO--Continued

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM @ 25 DEG. C), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	49	49	49	53	51	52	55	53	54
2	---	---	---	50	49	49	53	51	52	55	53	54
3	---	---	---	50	48	49	54	51	52	55	53	54
4	---	---	---	49	48	49	53	50	52	55	52	53
5	---	---	---	50	---	---	55	52	53	54	52	53
6	---	---	---	50	49	50	54	---	---	54	52	53
7	---	---	---	50	49	50	53	50	52	54	53	53
8	---	---	---	50	49	50	53	51	52	56	53	54
9	---	---	---	50	49	50	53	52	52	57	54	55
10	---	---	---	51	49	50	52	51	52	57	55	56
11	---	---	---	50	49	50	53	---	---	56	54	56
12	---	---	---	50	49	50	53	49	52	57	55	56
13	---	---	---	50	49	50	53	51	53	57	56	56
14	---	---	---	50	49	50	53	52	52	56	55	56
15	---	---	---	51	50	50	53	52	52	57	55	56
16	---	---	---	51	50	50	53	51	52	55	53	54
17	---	---	---	51	50	50	53	50	52	54	52	53
18	---	---	---	51	50	50	54	50	52	52	51	51
19	---	---	---	51	50	50	53	49	51	52	50	51
20	---	---	---	52	50	51	53	49	51	50	49	50
21	---	---	---	52	51	51	53	49	51	49	48	49
22	---	---	---	52	51	52	55	52	53	48	47	48
23	---	---	---	52	51	52	54	53	54	49	46	47
24	---	---	---	52	51	52	54	52	53	47	46	46
25	---	---	---	53	---	---	54	53	54	47	46	46
26	---	---	---	53	51	52	54	53	53	46	45	46
27	---	---	---	53	52	52	55	53	53	46	45	46
28	49	46	49	53	52	52	54	53	53	46	45	46
29	---	---	---	53	52	52	55	52	54	46	44	45
30	---	---	---	54	51	52	55	53	54	46	45	46
31	---	---	---	54	52	52	---	---	---	47	45	46
MONTH	---	---	---	54	---	---	55	---	---	57	44	51

	JUNE			JULY			AUGUST			SEPTEMBER		
1	46	44	45	38	37	38	48	47	48	48	46	47
2	44	43	44	38	37	38	49	48	48	49	47	48
3	44	42	43	38	35	38	49	48	48	49	44	47
4	43	39	41	39	38	38	49	47	48	48	45	48
5	39	38	39	38	38	38	49	47	48	48	46	47
6	38	37	38	38	38	38	49	47	48	48	46	47
7	39	37	38	39	38	38	49	47	48	47	46	47
8	38	37	38	39	38	38	49	48	49	47	46	47
9	38	38	38	39	38	38	49	44	48	47	46	47
10	38	38	38	39	37	38	51	48	49	48	46	47
11	38	37	38	37	34	35	51	49	50	48	46	47
12	38	37	38	35	34	35	50	48	49	48	47	48
13	38	37	38	35	35	35	50	47	48	48	47	47
14	38	37	38	36	35	35	49	48	48	48	47	47
15	38	37	38	36	35	35	49	48	49	48	46	47
16	38	37	37	36	34	35	49	48	48	48	46	47
17	38	37	37	35	34	35	49	47	48	47	46	47
18	38	37	37	35	34	34	48	47	48	48	46	47
19	38	37	37	35	34	34	48	47	47	47	46	47
20	38	37	37	35	34	35	48	47	48	48	47	47
21	37	37	37	35	35	35	48	46	47	48	46	47
22	37	37	37	35	34	35	47	46	46	48	46	47
23	37	36	37	36	35	35	47	46	46	48	46	47
24	37	36	37	36	35	35	48	45	46	48	47	47
25	37	37	37	36	35	35	48	44	46	48	47	48
26	38	37	37	36	35	35	45	44	45	48	47	48
27	38	37	37	37	35	36	48	45	46	49	47	48
28	38	37	37	40	35	36	48	47	48	48	47	48
29	38	37	37	46	40	44	48	46	47	48	47	48
30	38	37	38	48	43	46	48	46	47	49	47	48
31	---	---	---	48	47	47	48	46	47	---	---	---
MONTH	46	36	38	48	34	37	51	44	48	49	44	47

06704500 DUCK CREEK NEAR GRANT, CO--Continued

TEMPERATURE, WATER (DEG. C) WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	8.3	3.8	5.6	4.2	1.4	2.3	1.9	.2	.9	2.8	1.3	2.0
2	8.8	3.9	6.0	4.9	1.2	2.4	1.1	.2	.7	3.3	1.8	2.3
3	8.5	5.3	6.5	---	---	---	1.6	.2	.6	2.3	1.4	1.8
4	8.6	4.3	6.1	---	---	---	1.1	-.1	.6	1.4	-.1	.8
5	9.0	4.2	6.0	3.9	1.2	2.3	1.9	.1	1.2	1.5	.0	.5
6	8.7	4.0	5.9	3.0	1.0	1.8	1.6	.8	1.2	1.2	.0	.5
7	8.7	4.2	5.9	2.9	.8	1.4	1.9	.7	1.1	1.3	.0	.6
8	8.8	4.2	5.8	2.8	.6	1.6	2.6	1.1	1.6	---	---	---
9	8.8	4.0	5.8	3.1	1.3	2.0	2.6	1.0	1.6	---	---	---
10	8.7	3.7	5.7	3.5	1.3	2.2	2.3	1.3	1.6	---	---	---
11	8.5	3.9	5.7	3.8	1.0	2.0	2.5	1.4	1.7	---	---	---
12	8.4	3.8	5.7	4.2	1.6	2.5	2.3	1.1	1.6	---	---	---
13	8.3	3.7	5.5	4.0	1.4	2.3	2.4	.9	1.5	1.7	.7	1.1
14	7.1	4.0	5.2	3.6	1.4	2.3	1.5	.4	.9	1.8	.3	.9
15	7.2	3.0	4.7	2.5	.3	1.5	1.1	.0	.4	1.4	.3	.8
16	5.2	2.8	3.7	2.2	.0	.9	1.4	.2	.7	1.6	.1	.6
17	4.4	1.6	2.6	2.0	.3	1.1	.4	.0	.1	1.8	.5	1.0
18	5.7	1.5	3.2	2.6	1.1	1.8	.8	.0	.3	2.4	.9	1.5
19	6.1	2.3	3.9	3.4	1.6	2.1	1.4	-.3	.7	2.8	.8	1.4
20	4.7	1.3	3.1	3.4	1.1	2.0	1.3	.3	.8	---	.6	---
21	3.6	1.0	1.8	2.9	.8	1.6	1.9	1.2	1.5	---	---	---
22	4.2	.5	1.9	3.5	1.2	2.0	1.8	1.2	1.4	---	---	---
23	4.3	1.9	3.0	2.7	1.4	1.9	1.4	.8	1.1	---	---	---
24	4.1	1.7	2.8	2.7	.8	1.3	1.4	.5	.9	---	---	---
25	4.0	2.2	2.8	2.7	.9	1.6	1.7	.8	1.2	---	---	---
26	4.0	1.3	2.4	2.1	.7	1.2	2.1	.9	1.5	---	---	---
27	4.6	1.7	2.9	2.0	.2	.8	2.2	1.3	1.6	---	---	---
28	5.1	1.8	3.1	2.3	.2	.9	2.0	.9	1.4	---	---	---
29	3.6	1.1	2.2	2.1	.2	1.0	2.4	1.1	1.5	---	---	---
30	3.9	1.3	2.3	1.6	.3	.7	2.5	1.1	1.7	2.6	---	---
31	4.3	1.2	2.4	---	---	---	2.5	.9	1.6	2.5	1.5	1.8
MONTH	9.0	.5	4.2	---	---	---	2.6	.0	1.1	---	---	---
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	2.1	.0	.6	1.5	.0	.8	2.8	.5	1.5
2	---	---	---	2.8	.1	1.1	2.0	.0	.7	4.4	.1	1.7
3	---	---	---	1.6	.5	.9	4.1	.0	1.2	5.6	.3	2.4
4	---	---	---	2.0	.0	.6	2.4	.0	.8	6.5	.7	2.9
5	---	---	---	1.9	.0	.4	2.0	.0	.6	7.0	1.0	3.5
6	---	---	---	3.0	.0	.9	3.0	.0	.5	5.7	1.2	3.4
7	---	---	---	3.2	.0	1.0	3.5	.0	.8	7.4	1.6	4.3
8	---	---	---	3.3	.0	1.1	2.9	.0	1.0	7.6	1.3	4.4
9	---	---	---	3.4	.1	1.2	3.9	.5	1.4	9.2	2.0	5.6
10	---	---	---	3.9	.5	1.5	1.0	.0	.3	9.5	1.5	5.5
11	---	---	---	4.3	.2	1.4	1.4	.0	.2	6.2	1.8	4.2
12	---	---	---	3.8	.3	1.5	2.1	.0	.4	8.6	1.2	4.7
13	---	---	---	4.3	.5	1.5	3.2	.0	.7	9.1	1.9	5.4
14	---	---	---	2.1	.3	1.0	3.5	.0	1.0	7.8	1.8	4.8
15	---	---	---	4.2	.5	1.6	4.0	.4	1.5	10.7	1.8	5.9
16	---	---	---	4.6	.9	1.9	4.8	.2	1.4	9.8	2.2	5.9
17	---	---	---	4.2	.8	1.8	4.5	.1	1.2	11.1	2.2	6.2
18	---	---	---	4.6	.3	1.5	4.2	.2	1.2	8.0	2.4	5.2
19	---	---	---	4.9	.7	1.9	4.8	.3	1.4	11.2	3.0	6.4
20	---	---	---	4.8	.7	1.7	4.1	.5	1.6	7.5	2.1	4.8
21	---	---	---	3.7	.6	1.5	3.8	.0	1.2	7.8	2.6	5.0
22	---	---	---	3.8	.5	1.5	4.4	.3	1.6	5.9	3.7	4.8
23	---	---	---	4.2	.4	1.4	3.8	.5	1.5	11.3	2.7	6.1
24	---	---	---	2.6	.1	.9	.9	.0	.4	6.9	3.3	4.9
25	---	---	---	4.1	.0	.8	2.8	.2	1.0	9.2	2.4	5.3
26	---	---	---	4.1	.0	1.1	3.0	.3	1.1	7.6	2.3	4.4
27	2.6	---	---	3.7	.1	1.2	5.2	.0	1.5	6.6	2.5	3.9
28	1.3	.0	.4	3.4	.0	1.0	3.7	1.0	2.0	6.3	3.0	4.5
29	---	---	---	3.4	.0	1.0	5.3	1.0	2.4	8.0	3.8	5.4
30	---	---	---	3.7	.0	.9	5.4	.4	2.1	10.2	3.6	6.3
31	---	---	---	4.1	.0	1.1	---	---	---	12.3	3.4	6.9
MONTH	---	---	---	4.9	.0	1.2	5.4	.0	1.1	12.3	.1	4.7

PLATTE RIVER BASIN

06704500 DUCK CREEK NEAR GRANT, CO--Continued

TEMPERATURE, WATER (DEG. C) WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	11.9	3.9	7.1	11.7	4.3	7.1	12.6	7.2	9.9	11.6	6.9	9.3
2	11.0	3.7	6.7	11.8	3.5	6.9	12.5	7.6	10.1	14.3	7.9	10.7
3	11.7	3.7	7.0	12.0	4.0	7.3	13.0	6.5	9.7	13.4	7.0	10.2
4	12.1	4.9	7.7	12.4	5.1	8.1	11.4	7.4	9.5	12.0	6.9	9.5
5	9.7	4.3	6.5	10.3	4.5	6.9	10.6	8.2	9.2	12.6	6.0	9.1
6	7.1	4.5	5.6	11.3	4.6	7.2	9.0	6.8	7.8	10.4	6.1	8.2
7	8.3	3.9	5.7	12.9	4.4	7.9	11.4	4.9	8.0	11.9	4.6	---
8	6.1	4.0	5.1	10.2	5.2	7.2	13.2	5.3	9.1	11.8	4.7	8.2
9	7.8	3.3	5.1	10.2	4.7	7.2	9.2	6.4	8.0	10.3	5.5	8.0
10	8.5	4.3	5.9	10.8	5.0	7.6	11.1	7.3	8.7	10.8	4.9	8.0
11	9.4	3.6	5.6	9.8	6.8	8.1	9.3	5.1	7.4	11.0	6.4	8.7
12	8.7	3.4	5.5	11.0	6.2	8.3	10.5	4.2	7.4	11.9	6.3	8.7
13	8.8	3.2	5.8	13.2	6.6	9.1	10.8	4.7	7.6	11.5	4.6	8.0
14	9.4	4.3	6.2	13.8	6.4	9.5	11.1	5.5	8.1	11.1	5.3	8.2
15	9.7	3.3	5.9	14.1	6.8	9.9	13.3	5.7	9.3	10.2	5.2	7.6
16	8.4	3.4	5.4	12.0	7.2	9.5	11.7	5.4	8.6	9.9	5.9	7.4
17	9.4	3.9	6.3	11.0	7.2	9.3	11.6	5.8	8.6	10.2	4.1	6.9
18	10.4	3.8	6.5	10.9	7.6	9.1	13.1	6.5	9.2	9.5	5.7	7.3
19	11.3	4.7	7.3	11.5	7.8	9.5	11.4	5.4	8.4	9.3	5.4	7.3
20	11.9	4.1	7.1	12.1	8.0	10.0	11.6	5.3	8.4	7.6	5.8	6.8
21	9.5	4.1	6.7	12.2	7.6	9.9	9.6	5.9	7.7	8.7	6.0	7.0
22	10.8	4.5	7.1	11.7	7.9	9.8	11.2	5.7	8.4	9.5	5.5	6.9
23	8.6	4.4	6.2	11.7	8.2	10.0	11.5	5.5	8.6	8.8	4.3	6.0
24	8.5	4.1	6.0	15.4	8.4	11.3	10.8	5.7	8.5	10.1	3.3	6.5
25	10.1	4.4	6.6	13.4	8.4	10.7	10.3	6.2	8.4	9.9	3.3	6.6
26	11.3	4.4	7.2	12.7	8.4	10.5	10.7	6.7	8.8	8.8	5.3	7.2
27	9.3	4.3	6.7	11.5	9.6	10.4	11.3	6.2	9.0	10.8	5.5	7.7
28	8.7	4.3	6.4	10.9	9.1	9.6	11.8	6.6	9.4	9.3	3.5	6.3
29	10.2	4.1	6.6	12.3	8.2	10.0	13.0	6.3	9.4	9.3	2.8	5.8
30	12.3	4.0	7.3	13.3	7.9	10.5	10.4	5.8	8.3	9.8	3.3	6.3
31	---	---	---	11.7	8.0	10.0	12.4	5.9	8.9	---	---	---
MONTH	12.3	3.2	6.4	15.4	3.5	9.0	13.3	4.2	8.7	14.3	2.8	---

**06704500 DUCK CREEK NEAR GRANT, CO--Continued
PRECIPITATION RECORDS**

PERIOD OF RECORD.--July 1995 to September 1997 (discontinued), seasonal records only.

GAGE.--Tipping-bucket rain gage (no wind shields used) with satellite telemetry. Elevation of gage is 10,100 ft above sea level, from topographic map.

REMARKS.--Records poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily rainfall, 0.78 inches, June 6, 1997.

EXTREMES FOR CURRENT YEAR.--Maximum daily rainfall during period of seasonal operation, 0.78 inches, June 6.

PRECIPITATION (INCHES), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	---	---	---	---	---	.00	.05	.00	.00	.35	.06
2	.00	---	---	---	---	---	.00	.02	.00	.00	.00	.00
3	.00	---	---	---	---	---	.25	.00	.00	.00	.12	.24
4	.00	---	---	---	---	---	.02	.00	.02	.00	.25	.01
5	.00	---	---	---	---	---	.00	.00	.01	.00	.25	.00
6	.00	---	---	---	---	---	.00	.00	.78	.00	.23	.02
7	.00	---	---	---	---	---	.00	.00	.17	.10	.21	.00
8	.00	---	---	---	---	---	.00	.00	.51	.09	.00	.00
9	.00	---	---	---	---	---	.04	.00	.08	.02	.38	.00
10	.00	---	---	---	---	---	.00	.00	.01	.00	.14	.01
11	.00	---	---	---	---	---	.00	.02	.18	.00	.02	.01
12	.00	---	---	---	---	---	.00	.12	.00	.00	.01	.00
13	.00	---	---	---	---	---	.00	.00	.50	.00	.01	.00
14	.00	---	---	---	---	---	.02	.02	.18	.00	.02	.00
15	.00	---	---	---	---	---	.08	.00	.00	.00	.05	.01
16	.00	---	---	---	---	---	.29	.00	.05	.00	.00	.00
17	.00	---	---	---	---	---	.09	.00	.00	.03	.09	.00
18	.12	---	---	---	---	---	.00	.00	.01	.22	.01	.00
19	.05	---	---	---	---	---	.00	.01	.00	.10	.00	.18
20	.00	---	---	---	---	---	.02	.03	.00	.00	.00	.18
21	.00	---	---	---	---	---	.18	.18	.02	.09	.01	.06
22	.01	---	---	---	---	---	.16	.21	.00	.01	.00	.06
23	.00	---	---	---	---	---	.08	.22	.16	.05	.00	.01
24	.00	---	---	---	---	---	.00	.17	.15	.00	.06	.00
25	.04	---	---	---	---	---	.05	.00	.00	.00	.12	.00
26	.00	---	---	---	---	---	.08	.05	.00	.00	.14	.02
27	.04	---	---	---	---	---	.33	.01	.00	.22	.08	.00
28	.09	---	---	---	---	---	.30	.02	.00	.37	.05	.00
29	.00	---	---	---	---	---	.00	.18	.00	.45	.05	.00
30	.01	---	---	---	---	---	.01	.00	.00	.07	.00	.00
31	.00	---	---	---	---	---	---	.00	---	.14	.00	---
TOTAL	0.36	---	---	---	---	---	2.00	1.31	2.83	1.96	2.65	0.87

06705500 GENEVA CREEK AT GRANT, CO

LOCATION.--Lat 39°28'20", long 105°40'54", in NE¼NE¼ sec.5, T.7 S., R.74 W., Park County, Hydrologic Unit 10190002, on right bank 0.2 mi downstream from Geneva Creek Campground, and 1.5 mi upstream from Grant.

DRAINAGE AREA.--74.6 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1908 to March 1918, published in WSP 1310. Prior to 1911, published as "at Sullivan's Ranch, near Grant". October 1994 to September 1997 (discontinued).

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 8,760 ft above sea level, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. Natural flow may be affected at times by Duck Lake.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	22	e19	e18	e12	e12	18	24	273	202	104	51
2	28	22	e19	e18	e12	e13	e16	23	306	188	103	51
3	27	22	e19	e19	e12	e14	e21	23	313	180	93	51
4	27	22	e19	e18	e12	e13	19	27	346	173	110	53
5	26	22	e18	e17	e12	e13	16	36	371	167	112	47
6	25	21	e18	e16	e12	e14	e19	42	340	155	112	45
7	25	23	e18	e16	e12	e15	e22	51	438	150	126	44
8	24	32	e18	e16	e12	e15	e16	57	430	156	109	41
9	24	30	e19	e16	e12	e15	e16	65	389	146	110	40
10	24	26	e20	e15	e12	e15	e14	79	347	140	162	40
11	24	25	e20	e14	e12	e16	e14	93	340	148	132	40
12	24	23	e20	e14	e12	e17	e14	88	323	140	119	39
13	24	20	e19	e14	e12	e16	e14	93	353	132	110	37
14	24	20	e18	e13	e12	e16	e14	106	354	127	102	36
15	23	20	e18	e13	e12	e16	e14	122	332	124	92	36
16	24	e18	e18	e13	e13	e18	e16	152	324	122	85	37
17	22	e18	e17	e12	e13	e19	23	185	326	120	82	35
18	25	e18	e17	e12	e13	e18	28	196	341	123	85	34
19	27	e18	e17	e12	e12	e18	32	205	385	123	75	34
20	26	17	e17	e13	e12	e18	37	197	391	117	70	41
21	e20	17	e16	e12	e11	e19	42	185	349	111	68	39
22	29	18	e16	e12	e11	18	31	209	334	108	65	40
23	27	20	e16	e12	e11	20	29	195	326	103	60	37
24	23	19	e16	e12	e12	19	26	210	305	103	60	35
25	23	e21	e16	e12	e12	e17	25	194	270	100	67	33
26	22	e20	e16	e12	e12	e17	23	185	258	96	65	33
27	23	e20	e16	e12	e13	19	25	163	249	100	63	32
28	23	e20	e17	e12	e12	18	29	156	228	114	66	31
29	22	e20	e17	e12	---	18	27	171	219	99	56	30
30	23	e20	e17	e12	---	17	25	185	209	113	54	29
31	22	---	e17	e13	---	18	---	222	---	106	52	---
TOTAL	759	634	548	432	337	511	665	3939	9769	4086	2769	1171
MEAN	24.5	21.1	17.7	13.9	12.0	16.5	22.2	127	326	132	89.3	39.0
MAX	29	32	20	19	13	20	42	222	438	202	162	53
MIN	20	17	16	12	11	12	14	23	209	96	52	29
AC-FT	1510	1260	1090	857	668	1010	1320	7810	19380	8100	5490	2320

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 1997, BY WATER YEAR (WY)

	1995	1996	1997	1995	1996	1997	1995	1996	1997	1995	1996	1997
MEAN	24.8	19.1	16.5	12.1	10.8	13.6	18.2	101	315	184	77.1	38.5
MAX	30.3	21.1	18.4	13.9	12.0	16.5	22.2	142	394	307	108	49.6
(WY)	1996	1997	1996	1997	1997	1997	1997	1996	1995	1995	1995	1995
MIN	19.6	15.5	13.3	9.65	8.53	11.3	12.5	35.1	226	112	33.9	26.9
(WY)	1995	1995	1995	1995	1995	1995	1995	1995	1996	1996	1996	1996

SUMMARY STATISTICS

FOR 1996 CALENDAR YEAR

FOR 1997 WATER YEAR

WATER YEARS 1995 - 1997

ANNUAL TOTAL	20217	25620		
ANNUAL MEAN	55.2	70.2		
HIGHEST ANNUAL MEAN			69.4	
LOWEST ANNUAL MEAN			82.2	1995
HIGHEST DAILY MEAN	282	Jun 22	746	Jun 17 1995
LOWEST DAILY MEAN	e10	Feb 24	e,b11	Feb 21
ANNUAL SEVEN-DAY MINIMUM	11	Feb 6	12	Feb 19
INSTANTANEOUS PEAK FLOW			547	Jun 8
INSTANTANEOUS PEAK STAGE			6.39	Jun 8
ANNUAL RUNOFF (AC-FT)	40100	50820	50250	
10 PERCENT EXCEEDS	183	196	202	
50 PERCENT EXCEEDS	23	24	22	
90 PERCENT EXCEEDS	12	12	12	

e-Estimated.

a-Also occurred Jun 18, 1995.

b-Also occurred Feb 22-23.

c-Also occurred Feb 7, 12-13, 1995.

PLATTE RIVER BASIN

06705500 GENEVA CREEK AT GRANT, CO--Continued

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM @ 25 DEG. C), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	88	84	86	78	76	77
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	87	82	85	78	72	76
5	---	---	---	---	---	---	---	---	---	75	69	72
6	---	---	---	---	---	---	---	---	---	72	67	69
7	---	---	---	---	---	---	---	---	---	69	64	67
8	---	---	---	---	---	---	---	---	---	67	63	64
9	---	---	---	---	---	---	---	---	---	65	59	62
10	---	---	---	---	---	---	---	---	---	61	51	58
11	---	---	---	---	---	---	---	---	---	55	51	53
12	---	---	---	---	---	---	---	---	---	57	52	54
13	---	---	---	---	---	---	---	---	---	57	49	54
14	---	---	---	---	---	---	---	---	---	54	49	52
15	---	---	---	---	---	---	---	---	---	54	46	50
16	---	---	---	---	---	---	---	---	---	50	43	47
17	---	---	---	---	---	---	---	---	---	48	39	44
18	---	---	---	---	---	---	82	69	75	45	39	43
19	---	---	---	---	---	---	79	69	73	46	39	43
20	---	---	---	---	---	---	78	68	72	46	40	44
21	---	---	---	---	---	---	80	66	72	48	43	46
22	---	---	---	---	---	---	---	---	---	46	43	45
23	---	---	---	---	---	---	---	---	---	49	43	47
24	---	---	---	---	---	---	---	---	---	47	41	45
25	---	---	---	---	---	---	---	---	---	47	43	46
26	---	---	---	---	---	---	---	---	---	47	43	46
27	---	---	---	90	80	86	---	---	---	48	46	47
28	---	---	---	90	76	84	90	78	83	48	46	47
29	---	---	---	88	83	87	87	79	81	48	45	47
30	---	---	---	---	---	---	80	76	78	47	42	46
31	---	---	---	---	---	---	---	---	---	46	35	43
MONTH	---	---	---	---	---	---	---	---	---	---	---	---
	JUNE			JULY			AUGUST			SEPTEMBER		
1	44	34	40	46	41	44	57	54	56	67	63	66
2	42	34	39	---	---	---	58	55	57	70	63	67
3	42	36	40	---	---	---	59	53	58	73	66	68
4	42	36	39	---	---	---	63	53	55	73	64	67
5	40	34	38	---	---	---	58	54	56	69	65	67
6	41	33	39	---	---	---	56	52	54	69	66	68
7	42	33	38	---	---	---	56	50	53	---	---	---
8	39	34	37	48	46	47	56	51	53	69	68	69
9	40	33	38	---	---	---	74	51	55	70	68	69
10	41	33	39	---	---	---	61	47	48	70	67	69
11	41	33	39	50	46	47	50	48	49	72	69	70
12	42	36	40	---	---	---	53	50	51	71	69	70
13	42	35	40	---	---	---	54	52	53	71	66	70
14	41	33	39	51	49	50	56	54	55	72	70	71
15	42	35	40	52	50	51	58	56	57	72	71	71
16	42	34	40	52	50	51	59	57	58	73	71	72
17	42	35	40	51	51	51	60	57	59	72	70	72
18	42	34	40	52	50	51	60	58	59	73	71	72
19	41	32	38	53	50	51	60	58	60	73	71	72
20	40	33	37	52	51	52	62	59	61	73	70	71
21	40	33	38	53	51	52	62	60	61	71	70	71
22	41	32	39	53	52	53	63	60	62	73	69	70
23	41	34	39	54	53	54	63	62	63	71	68	71
24	42	34	40	55	54	54	64	62	63	72	67	71
25	43	39	41	55	53	55	71	62	65	73	71	72
26	43	40	42	55	54	55	66	62	64	73	71	73
27	43	40	42	56	54	55	64	61	63	74	73	73
28	44	41	42	60	52	55	66	60	63	74	73	73
29	45	41	43	57	53	56	67	60	65	76	73	73
30	46	41	44	57	53	55	66	65	66	75	73	74
31	---	---	---	57	54	55	66	63	66	---	---	---
MONTH	46	32	40	---	---	---	74	47	58	---	---	---

06705500 GENEVA CREEK AT GRANT, CO--Continued

TEMPERATURE, WATER (DEG. C) WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	7.1	3.3	5.5	1.3	.0	.3	---	---	---	---	---	---
2	7.9	3.6	6.1	.8	.0	.2	---	---	---	---	---	---
3	9.6	6.0	7.4	1.3	.0	.4	---	---	---	---	---	---
4	7.5	4.4	6.2	2.4	.0	.9	---	---	---	---	---	---
5	8.0	3.9	6.1	1.1	.0	.3	---	---	---	---	---	---
6	7.6	3.6	5.8	.3	.0	.0	---	---	---	---	---	---
7	7.8	3.9	5.9	---	---	---	---	---	---	---	---	---
8	7.9	3.7	5.9	---	---	---	---	---	---	---	---	---
9	7.7	3.6	5.7	---	---	---	---	---	---	---	---	---
10	7.6	3.4	5.6	---	---	---	---	---	---	---	---	---
11	7.6	3.3	5.6	---	---	---	---	---	---	---	---	---
12	7.4	3.3	5.6	1.1	.0	.3	---	---	---	---	---	---
13	7.1	3.3	5.3	1.3	.0	.4	---	---	---	---	---	---
14	6.0	3.3	4.9	.9	.0	.3	---	---	---	---	---	---
15	5.4	1.7	3.7	1.0	.0	.2	---	---	---	---	---	---
16	4.1	1.3	2.6	---	---	---	---	---	---	---	---	---
17	1.5	.0	.3	---	---	---	---	---	---	---	---	---
18	2.0	.0	.7	---	---	---	---	---	---	---	---	---
19	4.1	.2	2.1	---	---	---	---	---	---	---	---	---
20	3.3	.0	1.4	1.2	.0	.3	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	1.8	.0	.5	---	---	---	---	---	---
23	.8	.0	.1	1.2	.0	.4	---	---	---	---	---	---
24	1.3	.0	.4	---	---	---	---	---	---	---	---	---
25	2.3	.0	.6	---	---	---	---	---	---	---	---	---
26	1.7	.0	.3	---	---	---	---	---	---	---	---	---
27	1.7	.0	.6	---	---	---	---	---	---	---	---	---
28	2.6	.0	1.3	---	---	---	---	---	---	---	---	---
29	1.8	.0	.5	---	---	---	---	---	---	---	---	---
30	.6	.0	.1	---	---	---	---	---	---	---	---	---
31	.6	.0	.2	---	---	---	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	1.7	.0	.6	3.6	1.1	2.3
2	---	---	---	---	---	---	---	---	---	5.1	.0	2.1
3	---	---	---	---	---	---	2.5	.0	1.1	7.1	.2	3.5
4	---	---	---	---	---	---	2.3	.2	1.0	9.0	1.2	4.8
5	---	---	---	---	---	---	.2	.0	.0	9.3	2.0	5.6
6	---	---	---	---	---	---	---	---	---	7.3	2.2	5.1
7	---	---	---	---	---	---	1.1	.0	.2	8.2	2.5	5.6
8	---	---	---	---	---	---	2.3	.0	.7	8.6	1.6	5.0
9	---	---	---	---	---	---	4.1	.0	1.3	9.6	2.6	6.0
10	---	---	---	---	---	---	.9	.0	.1	9.2	1.6	5.5
11	---	---	---	---	---	---	---	---	---	6.6	1.6	4.1
12	---	---	---	---	---	---	---	---	---	8.1	1.3	4.4
13	---	---	---	---	---	---	---	---	---	8.8	2.1	5.2
14	---	---	---	---	---	---	---	---	---	7.2	1.7	4.4
15	---	---	---	---	---	---	3.8	.0	1.0	9.7	1.9	5.4
16	---	---	---	---	---	---	5.5	.0	2.3	9.0	2.1	5.1
17	---	---	---	---	---	---	5.9	.0	2.6	9.6	1.9	5.2
18	---	---	---	---	---	---	5.4	.0	2.5	7.1	2.1	4.5
19	---	---	---	---	---	---	5.2	.3	2.6	9.5	2.8	5.6
20	---	---	---	---	---	---	5.7	1.1	3.1	6.7	1.8	4.4
21	---	---	---	---	---	---	4.6	.9	2.7	7.6	2.4	4.8
22	---	---	---	---	---	---	5.3	.0	2.5	5.7	3.5	4.5
23	---	---	---	---	---	---	4.8	.6	2.8	10.7	2.4	5.8
24	---	---	---	---	---	---	2.6	.0	.5	6.6	3.0	4.8
25	---	---	---	---	---	---	4.2	.0	1.2	8.8	1.9	5.0
26	---	---	---	3.0	---	---	2.6	.0	1.1	7.5	2.1	4.5
27	---	---	---	3.1	.0	1.5	5.5	.0	2.4	5.8	1.9	3.5
28	---	---	---	2.2	.0	.8	5.3	1.8	3.6	6.5	2.5	4.5
29	---	---	---	2.8	.0	.9	5.0	2.2	3.6	7.6	3.9	5.4
30	---	---	---	1.3	.0	.5	6.5	.3	3.1	10.0	3.7	6.6
31	---	---	---	2.7	.0	1.0	---	---	---	12.3	3.0	7.1
MONTH	---	---	---	---	---	---	---	---	---	12.3	.0	4.8

PLATTE RIVER BASIN

06705500 GENEVA CREEK AT GRANT, CO--Continued

TEMPERATURE, WATER (DEG. C) WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	11.8	3.5	7.2	12.3	4.7	8.4	14.1	8.6	11.5	12.1	8.4	10.5
2	11.3	3.2	6.9	---	3.5	---	13.5	9.3	11.5	14.4	9.5	11.9
3	11.7	3.3	7.3	12.5	4.6	8.6	14.0	7.9	11.0	13.9	9.1	12.0
4	12.8	4.8	8.2	13.4	6.0	9.6	12.5	9.0	11.0	12.6	9.3	11.2
5	9.7	3.9	6.8	11.4	5.0	8.2	11.7	9.9	10.7	12.5	7.8	10.5
6	7.6	4.2	5.7	---	4.9	---	10.6	7.8	9.0	10.8	8.0	9.7
7	8.5	3.7	5.9	---	4.7	---	11.2	5.6	8.4	11.9	---	---
8	6.2	4.0	5.2	10.2	6.0	8.3	13.3	6.1	9.8	11.2	6.1	9.1
9	8.0	2.5	5.1	---	4.9	---	11.2	7.6	9.4	10.6	7.1	9.3
10	8.8	4.2	6.3	---	5.5	---	11.3	8.3	9.4	11.1	6.3	9.0
11	10.7	3.6	6.5	9.9	6.6	8.3	9.8	5.9	8.2	11.1	7.9	9.6
12	9.4	3.3	6.2	---	5.4	---	10.5	4.8	7.8	11.6	7.5	9.6
13	9.5	4.1	6.6	---	5.9	---	10.3	5.4	8.1	11.1	6.0	8.9
14	10.5	4.8	7.3	14.1	6.0	10.0	10.5	6.4	8.6	10.9	6.9	9.3
15	10.9	3.1	6.5	14.4	6.5	10.7	12.9	6.5	9.7	10.5	6.6	8.8
16	9.2	3.5	6.2	12.2	6.6	9.8	12.2	6.5	9.6	9.9	6.7	8.5
17	10.9	4.2	7.4	11.1	6.6	9.3	11.7	7.1	9.7	9.9	5.2	7.7
18	12.1	4.0	7.8	10.3	6.5	8.7	12.5	8.2	10.3	10.6	6.6	8.6
19	12.9	5.3	8.7	11.2	6.9	8.9	11.8	6.7	9.4	10.0	6.7	8.4
20	12.8	4.3	8.2	12.1	7.5	9.9	12.4	6.6	9.6	8.6	6.6	7.7
21	10.9	4.5	7.8	12.3	6.7	9.8	10.3	7.3	8.8	8.9	7.0	7.9
22	12.4	5.2	8.8	11.3	7.4	9.6	11.7	6.7	9.3	8.4	6.8	7.6
23	10.3	4.9	7.5	12.2	7.6	10.2	12.2	7.1	10.0	7.6	5.2	6.5
24	9.2	4.4	6.9	15.5	8.1	11.7	11.8	7.4	9.8	8.8	3.9	6.6
25	11.2	4.9	7.8	13.9	8.4	11.4	11.5	7.6	9.8	9.0	4.2	7.0
26	12.6	5.1	8.5	12.3	8.1	10.6	11.9	8.2	10.1	9.5	6.4	8.1
27	10.8	5.0	8.0	11.3	9.4	10.5	13.1	7.7	10.5	10.1	6.8	8.4
28	10.2	4.7	7.6	10.4	8.7	9.5	12.5	8.4	10.8	8.3	4.7	6.8
29	11.2	4.4	8.0	12.8	8.8	10.5	13.1	8.1	10.8	8.1	3.5	6.2
30	13.3	4.2	8.6	14.7	9.4	11.9	11.4	7.6	9.7	8.6	4.1	6.7
31	---	---	---	13.2	9.7	11.5	12.1	7.4	9.9	---	---	---
MONTH	13.3	2.5	7.2	---	3.5	---	14.1	4.8	9.7	14.4	---	---

**06705500 GENEVA CREEK AT GRANT, CO--Continued
PRECIPITATION RECORDS**

PERIOD OF RECORD.--May 1995 to September 1997 (discontinued), seasonal records only.

GAGE.--Tipping-bucket rain gage (no wind shields used) with satellite telemetry. Elevation of gage is 8,760 ft above sea level, from topographic map.

REMARKS.--Records poor.

ESTREMES FOR PERIOD OF RECORD.--Maximum daily rainfall, 0.92 inches, May 18, 1995.

EXTREMES FOR CURRENT YEAR.--Maximum daily rainfall during period of seasonal operation, 0.75 inches, June 8.

PRECIPITATION (INCHES), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	---	---	---	---	---	.00	.00	.00	.00	.09	.17
2	.00	---	---	---	---	---	.00	.00	.00	.00	.01	.04
3	.00	---	---	---	---	---	.27	.00	.00	.00	.00	.35
4	.00	---	---	---	---	---	.01	.00	.04	.00	.38	.05
5	.00	---	---	---	---	---	.00	.00	.01	.00	.14	.00
6	.00	---	---	---	---	---	.00	.00	.56	.00	.18	.01
7	.00	---	---	---	---	---	.00	.00	.04	.06	.09	.00
8	.00	---	---	---	---	---	.04	.00	.75	.05	.00	.00
9	.00	---	---	---	---	---	.05	.00	.08	.01	.38	.00
10	.00	---	---	---	---	---	.00	.00	.00	.00	.07	.00
11	.00	---	---	---	---	---	.00	.09	.06	.00	.01	.05
12	.00	---	---	---	---	---	.00	.18	.01	.00	.02	.01
13	.00	---	---	---	---	---	.01	.00	.09	.00	.00	.00
14	.00	---	---	---	---	---	.05	.01	.02	.30	.00	.00
15	.00	---	---	---	---	---	.02	.00	.00	.00	.00	.00
16	.15	---	---	---	---	---	.00	.00	.03	.00	.00	.00
17	.00	---	---	---	---	---	.00	.00	.00	.01	.30	.00
18	.00	---	---	---	---	---	.00	.00	.00	.05	.14	.00
19	.00	---	---	---	---	---	.00	.00	.00	.02	.00	.11
20	.00	---	---	---	---	---	.05	.02	.00	.00	.05	.10
21	.00	---	---	---	---	---	.14	.13	.13	.00	.00	.01
22	.00	---	---	---	---	---	.00	.34	.00	.00	.00	.03
23	.00	---	---	---	---	---	.05	.17	.11	.02	.00	.02
24	.00	---	---	---	---	---	.00	.01	.01	.00	.06	.00
25	.00	---	---	---	---	---	.02	.02	.00	.00	.00	.00
26	.00	---	---	---	---	---	.02	.00	.00	.00	.05	.00
27	.02	---	---	---	---	---	.47	.00	.00	.24	.10	.00
28	.00	---	---	---	---	---	.16	.00	.00	.17	.33	.00
29	.00	---	---	---	---	---	.00	.02	.00	.26	.00	.00
30	.00	---	---	---	---	---	.01	.00	.00	.02	.13	.00
31	.00	---	---	---	---	---	---	.00	---	.20	.00	---
TOTAL	0.17	---	---	---	---	---	1.37	0.99	1.94	1.41	2.53	0.95

06706000 NORTH FORK SOUTH PLATTE RIVER BELOW GENEVA CREEK, AT GRANT, CO

LOCATION.--Lat 39°27'26", long 105°39'29", in NW¼ sec.10, T.7 S., R.74 W., Park County, Hydrologic Unit 10190002, on left bank at Grant, 1,550 ft downstream from Geneva Creek, and 1.3 mi downstream from east portal of Harold D. Roberts tunnel.

DRAINAGE AREA.--127 mi².

PERIOD OF RECORD.--July 1908 to November 1913 (published as "at Cassells"), June 1942 to current year. Monthly discharge only for some periods, published in WSP 1310. December 1913 to March 1918, equivalent records may be obtained by summation of flow of North Fork South Platte River at Grant (above Geneva Creek) and Geneva Creek at Grant.

REVISED RECORDS.--WSP 956: Drainage area at site at Cassells. WSP 1116: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry, and concrete control. Datum of gage is 8,560.81 ft above sea level, adjustment of 1960. See WSP 1710 or 1730 for history of changes prior to July 23, 1948. July 23, 1948 to Nov. 15, 1968, water-stage recorder at site 50 ft downstream at datum 3.49 ft, lower.

REMARKS.--Records good except for estimated daily discharges, which are fair. Small diversions upstream from station for irrigation of about 200 acres. Diversions from Colorado River basin to North Fork South Platte River upstream from station through Harold D. Roberts tunnel (see 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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	326	107	113	105	105	27	30	125	381	303	153	145
2	429	110	113	106	105	26	30	40	427	285	153	124
3	280	90	108	106	104	26	e36	42	441	272	143	172
4	209	90	110	107	104	25	33	47	477	260	164	179
5	255	116	112	107	104	24	e32	107	492	252	168	118
6	254	130	114	108	105	25	e32	180	472	240	172	75
7	168	121	114	108	106	22	e32	191	574	232	189	76
8	38	127	114	108	104	e19	e33	200	560	240	160	71
9	37	135	114	108	104	e18	133	139	529	225	163	69
10	93	135	114	108	104	e18	90	112	495	272	221	68
11	197	126	114	108	104	e18	47	132	482	383	179	69
12	289	112	114	108	104	18	52	127	456	430	162	68
13	300	110	113	108	104	19	60	130	496	471	150	63
14	305	109	111	108	103	e21	122	157	492	519	140	61
15	305	125	114	108	103	21	147	168	469	626	126	60
16	258	127	110	107	78	24	160	214	458	562	116	110
17	127	134	104	106	45	26	166	257	463	647	114	208
18	64	141	104	106	37	26	196	280	475	648	118	258
19	45	137	105	106	45	65	236	285	510	650	105	280
20	43	98	105	105	85	113	244	285	518	642	99	290
21	41	42	105	105	44	66	234	268	491	651	98	280
22	154	42	105	105	28	37	171	303	488	660	94	253
23	246	93	105	105	29	41	179	290	478	483	89	215
24	223	122	105	105	28	43	256	310	452	625	87	98
25	240	115	105	105	28	e33	261	288	402	636	96	56
26	187	110	106	105	28	e33	259	278	381	634	94	55
27	36	110	108	105	28	42	256	249	365	641	91	58
28	35	108	106	104	27	e36	185	236	352	614	95	56
29	54	110	107	105	---	38	266	248	338	253	117	77
30	74	112	108	105	---	e34	264	266	318	167	175	108
31	74	---	108	105	---	e34	---	315	---	205	189	---
TOTAL	5386	3344	3388	3295	2093	1018	4242	6269	13732	13728	4220	3820
MEAN	174	111	109	106	74.8	32.8	141	202	458	443	136	127
MAX	429	141	114	108	106	113	266	315	574	660	221	290
MIN	35	42	104	104	27	18	30	40	318	167	87	55
AC-FT	10680	6630	6720	6540	4150	2020	8410	12430	27240	27230	8370	7580

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1909 - 1997, BY WATER YEAR (WY)

MEAN	66.9	61.0	52.7	48.0	44.0	38.4	53.9	153	299	238	159	92.2
MAX	340	189	130	161	132	142	255	303	592	613	450	277
(WY)	1979	1979	1990	1981	1981	1995	1995	1970	1993	1993	1978	1993
MIN	20.5	19.6	11.4	8.57	8.43	10.6	18.2	67.4	74.0	49.5	34.6	26.0
(WY)	1945	1944	1944	1944	1944	1944	1944	1963	1963	1963	1954	1944

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1909 - 1997	
ANNUAL TOTAL	54298		64535			
ANNUAL MEAN	148		177		a 72.1	
HIGHEST ANNUAL MEAN					239 1978	
LOWEST ANNUAL MEAN					35.9 1954	
HIGHEST DAILY MEAN	677	Jun 11	660	Jul 22	973	Jun 18 1995
LOWEST DAILY MEAN	25	Feb 24	e, b 18	Mar 9	6.5	Nov 27 1958
ANNUAL SEVEN-DAY MINIMUM	26	Feb 19	19	Mar 8	7.2	Feb 11 1944
INSTANTANEOUS PEAK FLOW			691	Jul 28	1160	Jun 18 1995
INSTANTANEOUS PEAK STAGE			1.98	Jul 28	c 2.48	Jun 18 1995
ANNUAL RUNOFF (AC-FT)	107700		128000		a 52240	
10 PERCENT EXCEEDS	353		454		278	
50 PERCENT EXCEEDS	105		113		62	
90 PERCENT EXCEEDS	28		35		18	

e-Estimated.

a-Adjusted for inflow from Harold D. Roberts tunnel since 1964.

b-Also occurred Mar 10-12.

c-Maximum gage height, 4.72 ft, Feb 11, 1952, site and datum then in use.

393040105340400 DEER CREEK NEAR BAILEY, CO

LOCATION.--Lat 39°30'40", long 105°34'04", in SW¼NW¼, sec.21, T.6 S., R.73 W., Park County, Hydrologic Unit 10190002, on left bank 200 ft upstream from Deer Creek Trailhead parking lot, and 13 mi northwest of Bailey.

DRAINAGE AREA.--13.4 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--February 1996 to September 1997 (discontinued).

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

REMARKS.--Records poor. No known regulation or diversion.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.5	e4.6	e4.5	e5.0	e4.5	e2.4	e6.0	e5.0	63	83	14	12
2	5.4	e4.6	e4.5	e5.0	e4.5	e2.5	e5.0	e5.2	68	81	13	12
3	5.4	e4.6	e4.5	e6.0	e4.0	e2.6	e6.0	5.5	67	78	10	13
4	5.3	e4.7	e4.5	e6.0	e4.0	e2.7	e6.0	6.6	103	83	10	12
5	5.1	e4.7	e4.0	e5.0	e3.5	e2.8	e5.0	8.1	102	81	12	12
6	5.0	e4.7	e4.0	e4.5	e3.0	e3.0	e4.5	9.0	81	80	15	12
7	5.0	e4.7	e4.0	e4.0	e3.0	e3.0	e4.5	10	83	76	18	12
8	4.8	e4.5	e4.0	e4.0	e2.5	e3.0	e5.0	10	81	67	18	12
9	4.7	e4.5	e4.0	e4.0	e2.5	e3.0	e5.0	12	95	63	21	11
10	4.7	e5.0	e4.0	e4.0	e2.5	e3.0	e5.0	16	90	e58	25	12
11	4.7	e5.0	e4.5	e3.5	e2.5	e3.0	e5.0	17	66	e52	17	12
12	4.6	e5.0	e5.0	e3.0	e2.5	e3.0	e5.0	14	62	e49	17	11
13	4.6	e4.5	e5.0	e3.0	e2.5	e3.0	e5.0	16	59	e45	17	11
14	4.6	e4.5	e5.0	e3.0	e2.5	e3.0	e5.0	17	61	e42	e15	11
15	4.6	e4.0	e4.0	e3.5	e2.5	e3.0	e5.0	20	67	e40	e16	10
16	e4.6	e4.0	e3.5	e3.5	e2.5	e3.0	e5.0	27	71	e37	15	10
17	e4.5	e4.0	e3.0	e3.5	e2.6	e3.0	e5.0	34	87	e34	15	9.7
18	5.8	e4.0	e3.0	e3.5	e2.7	e3.0	e5.0	36	96	e31	15	9.6
19	5.1	e4.0	e3.0	e3.5	e2.8	e3.1	e5.0	36	98	e29	14	9.4
20	4.7	e4.0	e3.0	e4.0	e2.8	e3.2	e6.0	34	92	e26	e14	8.8
21	3.5	e4.0	e3.5	e4.0	e2.5	e3.3	e7.0	32	89	e24	e12	8.5
22	3.7	e4.0	e4.0	e3.5	e2.5	3.4	e6.0	39	82	e22	11	8.2
23	3.7	e4.0	e4.0	e3.5	e2.5	3.7	e6.0	35	82	e20	11	8.1
24	e4.0	e4.0	e4.0	e3.5	e2.5	e4.0	e5.0	39	82	e19	11	7.9
25	e4.2	e4.0	e4.0	e3.5	e2.5	e4.0	e4.5	37	80	e18	12	8.0
26	e4.2	e4.0	e4.0	e3.5	e2.5	e4.0	e4.6	36	78	e17	13	8.0
27	e4.3	e4.0	e4.0	e3.5	e2.5	e4.0	e4.7	34	82	16	13	7.6
28	e4.4	e4.5	e4.5	e3.5	e2.5	e4.5	e4.9	35	79	20	11	7.3
29	e4.5	e5.0	e5.0	e3.5	---	e5.0	e5.2	38	82	21	10	7.6
30	e4.6	e5.0	e5.0	e3.5	---	e5.0	e5.0	40	80	16	11	7.5
31	e4.6	---	e5.0	e4.0	---	e6.0	---	54	---	14	11	---
TOTAL	144.4	132.1	128.0	121.0	79.9	105.2	155.9	757.4	2408	1342	437	301.2
MEAN	4.66	4.40	4.13	3.90	2.85	3.39	5.20	24.4	80.3	43.3	14.1	10.0
MAX	5.8	5.0	5.0	6.0	4.5	6.0	7.0	54	103	83	25	13
MIN	3.5	4.0	3.0	3.0	2.5	2.4	4.5	5.0	59	14	10	7.3
AC-FT	286	262	254	240	158	209	309	1500	4780	2660	867	597

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 1997, BY WATER YEAR (WY)

	1996	1997	1997	1997	1997	1997	1997	1997	1997	1997	1997	1997
MEAN	4.66	4.40	4.13	3.90	2.79	3.23	4.97	22.0	53.6	29.9	11.3	8.08
MAX	4.66	4.40	4.13	3.90	2.85	3.39	5.20	24.4	80.3	43.3	14.1	10.0
(WY)	1997	1997	1997	1997	1997	1997	1997	1997	1997	1997	1997	1997
MIN	4.66	4.40	4.13	3.90	2.73	3.06	4.75	19.7	27.0	16.5	8.42	6.12
(WY)	1997	1997	1997	1997	1996	1996	1996	1996	1996	1996	1996	1996

SUMMARY STATISTICS

FOR 1997 WATER YEAR

WATER YEARS 1996 - 1997

ANNUAL TOTAL	6112.1	
ANNUAL MEAN	16.7	16.7
HIGHEST ANNUAL MEAN		16.7
LOWEST ANNUAL MEAN		16.7
HIGHEST DAILY MEAN	103	103
LOWEST DAILY MEAN	e2.4	e2.4
ANNUAL SEVEN-DAY MINIMUM	2.5	2.5
INSTANTANEOUS PEAK FLOW	136	136
INSTANTANEOUS PEAK STAGE	1.41	1.41
ANNUAL RUNOFF (AC-FT)	12120	12130
10 PERCENT EXCEEDS	62	34
50 PERCENT EXCEEDS	5.0	5.8
90 PERCENT EXCEEDS	3.0	3.0

e-Estimated.

PLATTE RIVER BASIN

393040105340400 DEER CREEK NEAR BAILEY, CO--Continued

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM @ 25 DEG. C), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	45	43	44	51	50	50
2	---	---	---	---	---	---	---	---	---	51	45	48
3	---	---	---	---	---	---	---	---	---	51	43	47
4	---	---	---	---	---	---	45	43	44	51	45	49
5	---	---	---	---	---	---	45	42	44	49	45	47
6	---	---	---	---	---	---	---	---	---	49	45	47
7	---	---	---	---	---	---	---	---	---	48	42	45
8	---	---	---	---	---	---	---	---	---	46	43	44
9	---	---	---	---	---	---	45	44	45	45	37	43
10	---	---	---	---	---	---	---	---	---	43	37	41
11	---	---	---	---	---	---	---	---	---	41	38	39
12	---	---	---	---	---	---	---	---	---	43	40	42
13	---	---	---	---	---	---	---	---	---	43	39	42
14	---	---	---	---	---	---	---	---	---	41	39	40
15	---	---	---	---	---	---	---	---	---	41	35	39
16	---	---	---	---	---	---	46	43	45	39	32	36
17	---	---	---	---	---	---	46	41	44	37	27	34
18	---	---	---	---	---	---	46	40	44	31	27	29
19	---	---	---	---	---	---	45	42	43	32	28	30
20	---	---	---	---	---	---	45	40	43	31	28	30
21	---	---	---	---	---	---	45	41	44	33	31	32
22	---	---	---	---	---	---	47	---	---	34	32	33
23	---	---	---	---	---	---	47	---	---	35	32	34
24	---	---	---	---	---	---	---	---	---	34	33	33
25	---	---	---	---	---	---	---	---	---	35	33	34
26	---	---	---	---	---	---	---	---	---	34	33	34
27	---	---	---	44	43	44	---	---	---	35	33	34
28	---	---	---	44	---	---	48	45	47	35	34	34
29	---	---	---	44	---	---	50	48	49	35	33	34
30	---	---	---	---	---	---	50	---	---	34	31	34
31	---	---	---	45	44	44	---	---	---	32	23	30
MONTH	---	---	---	---	---	---	---	---	---	51	23	38
	JUNE			JULY			AUGUST			SEPTEMBER		
1	30	22	26	32	31	32	36	35	35	37	35	36
2	29	23	27	32	32	32	36	35	36	37	36	36
3	30	24	28	33	32	32	36	33	35	37	35	36
4	---	---	---	33	32	32	36	34	35	36	35	35
5	---	---	---	33	32	33	36	35	35	37	34	35
6	30	28	29	33	32	33	36	34	35	37	35	36
7	30	27	29	33	33	33	35	34	34	37	35	36
8	29	26	28	33	33	33	35	34	35	37	35	36
9	28	26	28	34	33	33	35	34	35	37	35	36
10	29	27	28	34	33	33	35	34	34	37	35	36
11	30	28	29	34	33	33	35	34	34	37	35	36
12	31	29	30	34	33	33	34	34	34	37	36	36
13	31	30	30	34	33	34	34	34	34	37	35	36
14	31	28	30	35	34	34	35	34	34	36	35	36
15	30	29	30	35	33	34	35	34	34	36	35	36
16	31	30	30	35	34	34	35	34	34	36	35	36
17	32	31	32	35	34	34	35	34	34	36	35	36
18	32	30	31	35	34	34	35	34	35	37	35	36
19	32	28	30	35	34	34	35	34	34	37	35	36
20	31	29	30	35	34	35	35	34	34	37	36	36
21	31	30	31	35	34	35	35	34	35	37	35	36
22	31	28	30	35	34	34	35	34	34	38	36	37
23	30	29	30	35	34	35	35	34	35	38	36	37
24	30	30	30	35	34	35	35	34	35	38	37	37
25	30	29	30	35	34	35	36	34	35	39	37	38
26	30	29	30	35	34	35	36	34	35	38	37	37
27	31	30	30	35	34	35	36	34	35	38	37	38
28	32	31	32	35	34	35	36	34	35	38	37	37
29	32	31	32	36	34	35	36	35	35	38	37	37
30	32	32	32	36	34	35	36	35	35	38	37	38
31	---	---	---	36	34	35	37	33	36	---	---	---
MONTH	---	---	---	36	31	34	37	33	35	39	34	36

PLATTE RIVER BASIN

393040105340400 DEER CREEK NEAR BAILEY, CO--Continued

TEMPERATURE, WATER (DEG. C) WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	5.5	2.3	3.8	.3	.0	.1	---	---	---	---	---	---
2	5.5	2.1	3.9	.2	.0	.0	---	---	---	---	---	---
3	5.8	4.3	5.0	.9	.0	.4	---	---	---	---	---	---
4	5.3	3.1	4.4	.8	.0	.3	---	---	---	---	---	---
5	5.6	2.8	4.2	.9	.0	.3	---	---	---	---	---	---
6	5.2	2.3	3.8	---	---	---	---	---	---	---	---	---
7	5.3	2.1	3.7	---	---	---	---	---	---	---	---	---
8	5.4	2.2	3.7	---	---	---	.1	.0	.1	---	---	---
9	5.3	2.1	3.6	---	---	---	.2	.1	.1	---	---	---
10	5.3	2.1	3.7	.6	.0	.2	---	---	---	---	---	---
11	5.4	2.6	4.0	.4	.0	.1	---	---	---	---	---	---
12	5.5	2.7	4.0	.8	.2	.4	---	---	---	---	---	---
13	4.9	2.3	3.6	.9	.1	.5	---	---	---	---	---	---
14	4.6	2.2	3.3	.8	.2	.5	---	---	---	---	---	---
15	3.8	1.2	2.4	.4	.0	.2	---	---	---	---	---	---
16	2.8	.5	1.5	---	---	---	---	---	---	---	---	---
17	.5	.0	.0	---	---	---	---	---	---	---	---	---
18	.5	.0	.2	.2	.0	.0	---	---	---	---	---	---
19	2.7	.5	1.5	.5	.2	.4	---	---	---	---	---	---
20	1.7	.0	.5	.8	.2	.5	---	---	---	---	---	---
21	---	---	---	.7	.0	.3	---	---	---	---	---	---
22	---	---	---	1.0	.2	.6	---	---	---	---	---	---
23	---	---	---	.7	.0	.4	---	---	---	---	---	---
24	.3	.0	.1	---	---	---	---	---	---	---	---	---
25	.7	.0	.2	---	---	---	---	---	---	---	---	---
26	.1	.0	.0	---	---	---	---	---	---	---	---	---
27	.4	.0	.1	---	---	---	---	---	---	---	---	---
28	1.4	.3	.9	---	---	---	---	---	---	---	---	---
29	.6	.0	.1	---	---	---	---	---	---	---	---	---
30	.5	.0	.1	---	---	---	---	---	---	---	---	---
31	.3	.0	.1	---	---	---	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	.2	.0	.0	1.7	.0	.5
2	---	---	---	---	---	---	---	---	---	1.3	.0	.3
3	---	---	---	---	---	---	---	---	---	2.7	.0	.9
4	---	---	---	---	---	---	.7	.0	.1	4.1	.0	1.4
5	---	---	---	---	---	---	.1	.0	.0	4.4	.3	1.9
6	---	---	---	---	---	---	---	---	---	3.7	.4	1.8
7	---	---	---	---	---	---	---	---	---	4.7	.8	2.1
8	---	---	---	---	---	---	---	---	---	3.8	.5	1.8
9	---	---	---	---	---	---	.5	.0	.1	4.9	.5	2.3
10	---	---	---	---	---	---	---	---	---	5.0	.5	2.3
11	---	---	---	---	---	---	---	---	---	3.0	.6	1.6
12	---	---	---	---	---	---	---	---	---	4.7	.5	2.2
13	---	---	---	---	---	---	---	---	---	4.5	1.0	2.5
14	---	---	---	---	---	---	---	---	---	4.3	.8	2.4
15	---	---	---	---	---	---	---	---	---	5.7	1.0	2.8
16	---	---	---	---	---	---	.5	.0	.1	6.3	1.2	3.0
17	---	---	---	---	---	---	1.6	.0	.3	6.3	1.2	3.0
18	---	---	---	---	---	---	2.2	.0	.4	4.5	1.3	2.6
19	---	---	---	---	---	---	2.7	.0	.9	5.9	1.5	3.1
20	---	---	---	---	---	---	3.1	.2	1.1	4.8	1.2	2.7
21	---	---	---	---	---	---	3.1	.1	1.1	4.9	1.8	3.1
22	---	---	---	---	---	---	2.2	.0	.6	3.1	2.3	2.7
23	---	---	---	---	---	---	1.2	.0	.3	5.5	1.6	3.2
24	---	---	---	---	---	---	---	---	---	4.1	1.9	2.8
25	---	---	---	---	---	---	---	---	---	5.2	1.2	2.8
26	---	---	---	---	---	---	---	---	---	4.0	1.0	2.3
27	---	---	---	1.5	.0	.5	---	---	---	3.8	1.1	2.1
28	---	---	---	.3	.0	.1	1.2	.0	.4	4.8	1.4	2.8
29	---	---	---	.6	.0	.1	1.6	.1	.8	4.6	2.1	3.2
30	---	---	---	---	---	---	2.3	.0	.7	5.1	2.2	3.6
31	---	---	---	1.2	.0	.4	---	---	---	7.4	2.0	4.0
MONTH	---	---	---	---	---	---	---	---	---	7.4	.0	2.4

393040105340400 DEER CREEK NEAR BAILEY, CO--Continued

TEMPERATURE, WATER (DEG. C) WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	6.6	2.3	3.9	7.8	3.5	5.3	8.9	6.3	7.5	7.7	5.9	6.9
2	6.5	2.1	3.9	8.0	2.8	5.1	8.6	6.7	7.6	9.5	6.1	7.8
3	6.4	2.3	4.1	7.9	3.0	5.3	9.4	5.8	7.5	8.7	6.6	7.7
4	7.3	3.0	4.7	6.9	4.1	5.5	8.1	6.3	7.1	8.6	6.6	7.6
5	5.9	2.9	4.1	6.5	3.7	5.1	8.1	6.6	7.3	8.6	5.3	7.0
6	5.3	3.0	3.8	7.4	3.9	5.4	7.2	5.4	6.3	8.1	5.8	7.0
7	5.3	2.7	3.7	7.9	3.6	5.5	7.0	4.3	5.8	7.9	4.4	6.2
8	4.0	2.7	3.4	6.4	4.3	5.3	8.9	4.6	6.7	7.4	4.4	6.1
9	4.0	2.2	3.1	7.0	3.8	5.3	7.5	5.7	6.6	7.6	5.3	6.5
10	5.5	2.7	3.8	6.9	4.3	5.7	8.1	6.1	6.9	7.7	4.7	6.3
11	6.7	2.7	4.2	6.3	4.6	5.5	7.2	4.7	6.0	7.6	5.6	6.6
12	5.4	2.7	3.9	8.2	4.0	5.8	7.1	3.8	5.6	7.8	5.6	6.5
13	5.4	3.2	4.2	8.2	4.2	5.9	7.8	4.1	5.9	7.5	4.3	6.0
14	5.8	3.3	4.5	8.8	4.1	6.3	8.0	4.8	6.2	8.1	5.3	6.6
15	5.8	2.6	4.0	9.0	4.4	6.6	8.7	4.9	6.7	8.1	5.0	6.5
16	5.2	2.8	3.8	7.7	4.7	6.2	8.6	5.1	6.9	7.4	5.2	6.2
17	5.8	3.1	4.4	7.3	5.0	6.1	8.1	5.1	6.8	7.1	4.1	5.5
18	7.8	3.2	5.1	7.1	4.8	6.0	8.4	5.9	7.0	7.7	5.2	6.4
19	8.1	4.1	5.7	7.5	5.1	6.2	8.1	5.0	6.6	7.8	5.3	6.4
20	7.8	3.8	5.5	7.3	5.2	6.2	7.8	4.9	6.5	6.4	4.7	5.6
21	7.3	3.7	5.4	7.8	4.8	6.3	7.5	5.7	6.5	6.6	5.1	5.8
22	8.4	4.4	5.9	7.2	5.5	6.5	8.0	5.2	6.6	5.8	4.6	5.2
23	7.0	4.1	5.4	7.7	5.4	6.7	8.2	5.4	6.9	4.6	3.6	4.1
24	6.1	3.8	5.0	8.8	5.6	7.1	8.0	5.6	6.8	6.0	2.8	4.4
25	6.9	3.7	5.2	8.8	5.6	7.3	7.9	5.7	6.9	6.0	2.9	4.6
26	7.2	3.9	5.4	7.9	5.9	7.0	8.4	6.2	7.2	7.0	4.6	5.8
27	6.3	3.9	5.1	7.7	6.4	7.0	8.3	5.6	7.1	6.9	4.6	5.7
28	6.8	3.7	5.2	7.1	5.9	6.4	8.9	6.0	7.5	5.9	3.1	4.6
29	7.2	3.5	5.3	8.4	6.2	7.2	9.1	5.7	7.4	5.8	2.6	4.2
30	8.2	3.4	5.6	9.4	6.6	7.9	7.2	5.5	6.6	5.9	2.9	4.5
31	---	---	---	8.0	6.5	7.3	7.6	5.5	6.6	---	---	---
MONTH	8.4	2.1	4.6	9.4	2.8	6.2	9.4	3.8	6.8	9.5	2.6	6.0

PLATTE RIVER BASIN

393040105340400 DEER CREEK NEAR BAILEY, CO--Continued

PRECIPITATION RECORDS

PERIOD OF RECORD.--July 1996 to September 1997 (discontinued), seasonal records only.

GAGE.--Tipping-bucket rain gage (no wind shields used) with satellite telemetry. Elevation of gage is 9,280 ft above sea level, from topographic map.

REMARKS.--Records poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily rainfall, 1.57 inches, June 6, 1997.

EXTREMES FOR CURRENT YEAR.--Maximum daily rainfall during period of seasonal operation, 1.57 inches, June 6.

PRECIPITATION (INCHES), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	---	---	---	---	---	.00	.01	.00	.00	.18	.28
2	.00	---	---	---	---	---	.00	.00	.00	.00	.01	.18
3	.00	---	---	---	---	---	.57	.00	.00	.00	.18	.16
4	.00	---	---	---	---	---	.05	.00	.07	.00	.80	.02
5	.00	---	---	---	---	---	.00	.00	.00	.00	.07	.00
6	.00	---	---	---	---	---	.00	.00	1.57	.00	.12	.10
7	.00	---	---	---	---	---	.06	.00	.36	.18	.05	.00
8	.00	---	---	---	---	---	.01	.00	.66	.05	.00	.00
9	.00	---	---	---	---	---	.04	.00	.43	.06	.44	.22
10	.00	---	---	---	---	---	.00	.00	.02	.01	.15	.01
11	.00	---	---	---	---	---	.00	.12	.24	.04	.08	.11
12	.00	---	---	---	---	---	.00	.11	.01	.00	.03	.00
13	.00	---	---	---	---	---	.06	.00	.06	.00	.02	.00
14	.00	---	---	---	---	---	.02	.02	.03	.00	.00	.00
15	.00	---	---	---	---	---	.16	.03	.04	.00	.00	.00
16	.16	---	---	---	---	---	.00	.00	.33	.00	.00	.00
17	.00	---	---	---	---	---	.00	.00	.01	.00	.27	.00
18	.00	---	---	---	---	---	.00	.00	.00	.02	.08	.00
19	.00	---	---	---	---	---	.00	.01	.00	.04	.00	.25
20	.00	---	---	---	---	---	.13	.01	.00	.16	.06	.15
21	.00	---	---	---	---	---	.16	.32	.41	.00	.00	.05
22	.02	---	---	---	---	---	.00	.42	.01	.00	.04	.09
23	.00	---	---	---	---	---	.02	.35	.08	.02	.00	.41
24	.00	---	---	---	---	---	.00	.03	.02	.01	.08	.01
25	.00	---	---	---	---	---	.00	.00	.09	.00	.11	.00
26	.01	---	---	---	---	---	.00	.00	.01	.22	.05	.00
27	.07	---	---	---	---	---	.21	.00	.00	.22	.09	.00
28	.00	---	---	---	---	---	.50	.01	.01	.33	.46	.00
29	.00	---	---	---	---	---	.29	.06	.00	.04	.00	.01
30	.00	---	---	---	---	---	.05	.01	.00	.03	.03	.00
31	.00	---	---	---	---	---	---	.00	---	.31	.81	---
TOTAL	0.26	---	---	---	---	---	2.33	1.51	4.46	1.74	4.21	2.05

392133105184401 BUFFALO CREEK AT MORRISON CREEK RAIN GAGE, CO

PRECIPITATION RECORDS

LOCATION.--Lat 39°21'33", long 105°18'44", in SW¹/₄SW¹/₄ 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 to September 1997 (seasonal records only).

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

REMARKS.--Records good.

EXTREMES FOR CURRENT YEAR.--Maximum daily rainfall during period of seasonal operation, 1.67 inches, June 6.

PRECIPITATION (INCHES), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	.05	.00	.00	.48	.28
2	---	---	---	---	---	---	---	.00	.13	.00	.13	.05
3	---	---	---	---	---	---	---	.00	.00	.00	.00	.13
4	---	---	---	---	---	---	---	.00	.00	.00	.11	.22
5	---	---	---	---	---	---	---	.00	.00	.00	.00	.00
6	---	---	---	---	---	---	---	.00	1.67	.00	.00	.00
7	---	---	---	---	---	---	---	.00	.26	.00	.00	.00
8	---	---	---	---	---	---	---	.00	.00	.13	.00	.00
9	---	---	---	---	---	---	---	.00	.00	.00	.72	.00
10	---	---	---	---	---	---	.00	.00	.09	.00	.00	.00
11	---	---	---	---	---	---	.00	.09	.00	.01	.00	.00
12	---	---	---	---	---	---	.07	.03	.04	.00	.25	.00
13	---	---	---	---	---	---	.04	.00	.10	.00	.01	.00
14	---	---	---	---	---	---	.00	.00	.13	.00	.00	.00
15	---	---	---	---	---	---	.00	.11	.00	.00	.00	.00
16	---	---	---	---	---	---	.00	.00	.02	.00	.01	.00
17	---	---	---	---	---	---	.00	.00	.00	.00	.31	.00
18	---	---	---	---	---	---	.00	.00	.16	.00	.05	.00
19	---	---	---	---	---	---	.00	.00	.00	.15	.02	.05
20	---	---	---	---	---	---	.00	.01	.00	.01	.03	.10
21	---	---	---	---	---	---	.02	.29	.45	.00	.01	.02
22	---	---	---	---	---	---	.00	.05	.01	.00	.00	.40
23	---	---	---	---	---	---	.08	.01	.05	.08	.00	.00
24	---	---	---	---	---	---	.01	.00	.00	.00	.10	.00
25	---	---	---	---	---	---	.44	.00	.00	.02	.17	.00
26	---	---	---	---	---	---	.19	.01	.00	.02	.29	.00
27	---	---	---	---	---	---	.05	.00	.00	.15	.02	.00
28	---	---	---	---	---	---	.00	.00	.00	.24	.01	.00
29	---	---	---	---	---	---	.00	.01	.00	.30	.07	.00
30	---	---	---	---	---	---	.00	.00	.00	.00	.00	.00
31	---	---	---	---	---	---	---	.00	---	.52	.04	---
TOTAL	---	---	---	---	---	---	---	0.66	3.11	1.63	2.83	1.25

06706800 BUFFALO CREEK AT MOUTH AT BUFFALO CREEK RAIN GAGE, CO**PRECIPITATION RECORDS**

LOCATION.--Lat 39°23'27", long 105°16'15", in SE¹/₄SW¹/₄ sec.31, T.7 S., R.70 W., Jefferson County, Hydrologic Unit 10190002, on left bank 0.2 mi downstream from bridge on State Highway 67, 0.5 mi upstream from mouth, and in the community of Buffalo Creek.

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

GAGE.--Tipping-bucket rain gage (no wind shields used) with satellite telemetry. Elevation of gage is 6,630 ft above sea level, from topographic map.

REMARKS.--Records good.

EXTREMES FOR CURRENT YEAR.--Maximum daily rainfall during period of seasonal operation, 1.16 inches, Aug. 9.

PRECIPITATION (INCHES), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	.00	.04	.31
2	---	---	---	---	---	---	---	---	---	.00	.25	.09
3	---	---	---	---	---	---	---	---	---	.00	.00	.00
4	---	---	---	---	---	---	---	---	---	.00	.32	.17
5	---	---	---	---	---	---	---	---	---	.00	.73	.00
6	---	---	---	---	---	---	---	---	---	.00	.27	.10
7	---	---	---	---	---	---	---	---	---	.00	.01	.00
8	---	---	---	---	---	---	---	---	---	.00	.00	.00
9	---	---	---	---	---	---	---	---	---	.00	1.16	.00
10	---	---	---	---	---	---	---	---	---	.00	.02	.00
11	---	---	---	---	---	---	---	---	---	.02	.00	.00
12	---	---	---	---	---	---	---	---	---	.00	.39	.00
13	---	---	---	---	---	---	---	---	---	.00	.00	.00
14	---	---	---	---	---	---	---	---	---	.00	.00	.00
15	---	---	---	---	---	---	---	---	---	.00	.00	.00
16	---	---	---	---	---	---	---	---	---	.00	.04	.00
17	---	---	---	---	---	---	---	---	---	.00	.34	.00
18	---	---	---	---	---	---	---	---	---	.00	.05	.00
19	---	---	---	---	---	---	---	---	---	.00	.04	.04
20	---	---	---	---	---	---	---	---	---	.00	.01	.12
21	---	---	---	---	---	---	---	---	---	.00	.00	.03
22	---	---	---	---	---	---	---	---	.00	.00	.00	.23
23	---	---	---	---	---	---	---	---	.08	.10	.00	.07
24	---	---	---	---	---	---	---	---	.00	.00	.01	.00
25	---	---	---	---	---	---	---	---	.00	.29	.19	.00
26	---	---	---	---	---	---	---	---	.00	.00	.19	.00
27	---	---	---	---	---	---	---	---	.00	.31	.15	.00
28	---	---	---	---	---	---	---	---	.00	.88	.05	.00
29	---	---	---	---	---	---	---	---	.00	.35	.05	.00
30	---	---	---	---	---	---	---	---	.00	.06	.00	.00
31	---	---	---	---	---	---	---	---	---	1.06	.48	---
TOTAL	---	---	---	---	---	---	---	---	---	3.07	4.79	1.16

06709000 PLUM CREEK NEAR SEDALIA, CO

LOCATION.--Lat 39°26'18", long 104°58'57", in NE¼SE¼ sec.15, T.7 S., R.68 W., Douglas County, Hydrologic Unit 10190002, on right bank, on south side of County Road No. 20 bridge over Plum Creek, 1.0 mi west of Sedalia, and 1.4 mi downstream from the confluence of East and West Plum Creeks.

DRAINAGE AREA.--274 mi².

PERIOD OF RECORD.--June 1942 to September 1947. August 1990 to current year.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 5,720 ft above sea level, from topographic map. Aug. 1942 to Sept. 1947, water-stage recorder at site 150 ft upstream at different datum. Prior to Aug. 1942, nonrecording gage at bridge.

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.

COOPERATION.--U.S. Army Corps of Engineers.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.0	13	8.0	2.8	4.1	7.3	4.9	55	8.3	5.2	8.3	16
2	3.9	10	7.1	e2.9	4.2	9.0	7.7	55	6.9	4.2	10	15
3	2.5	9.0	8.7	3.0	3.7	9.6	8.0	53	6.0	4.1	8.9	12
4	1.9	7.2	11	2.6	2.7	9.0	16	50	4.9	3.9	8.2	15
5	1.5	7.3	10	2.6	3.4	8.1	32	52	4.1	3.7	34	23
6	1.2	7.5	7.3	2.4	4.1	9.6	31	56	5.5	3.6	50	21
7	1.1	7.5	7.2	3.4	6.5	10	40	57	51	3.4	43	17
8	1.1	7.7	6.8	6.6	6.4	10	37	55	56	3.2	38	14
9	.99	7.0	6.9	4.7	5.5	9.3	31	50	57	3.4	34	12
10	2.5	6.8	6.6	4.8	3.4	8.5	34	44	61	3.5	35	10
11	8.6	4.3	5.3	e4.4	4.5	7.3	32	41	54	3.6	49	9.9
12	1.6	4.3	5.5	e2.3	4.5	7.2	31	43	54	3.8	39	11
13	1.0	5.5	5.9	e.90	4.1	7.8	31	40	53	3.9	35	9.1
14	.99	5.8	5.9	e1.4	3.6	7.4	25	39	54	4.0	30	8.6
15	1.1	e6.3	5.5	e5.0	5.3	8.7	16	38	53	4.2	28	7.2
16	1.2	e7.0	5.1	e5.6	5.3	8.8	12	39	48	4.3	27	6.1
17	1.2	e7.9	e3.4	e5.4	5.7	8.8	14	40	44	4.4	26	5.5
18	1.4	e7.9	e2.1	e3.9	5.5	8.4	16	39	43	4.6	53	4.9
19	1.4	8.9	e1.9	e5.1	6.5	7.8	19	38	40	7.7	32	5.1
20	1.7	8.6	e1.9	e6.9	8.9	6.2	18	32	36	6.1	31	7.6
21	2.6	7.4	e2.0	e5.0	8.4	7.0	15	25	31	5.0	30	8.2
22	3.0	6.2	e2.1	e3.5	6.9	6.0	13	46	25	5.1	25	9.6
23	2.7	e6.5	e2.1	e2.8	8.5	6.0	13	47	21	5.5	20	17
24	2.8	e5.9	e2.0	e3.8	7.2	7.6	33	41	24	5.6	21	17
25	3.2	7.2	e2.1	e4.2	6.9	9.3	44	39	23	5.8	20	14
26	8.3	e7.1	e2.4	e3.9	8.7	9.4	44	39	18	5.9	26	12
27	9.4	e7.9	e3.5	5.6	8.3	6.7	41	31	14	6.0	24	11
28	11	7.6	e5.8	e6.6	7.2	5.0	43	17	12	7.8	23	9.4
29	13	7.9	4.8	e7.0	---	7.6	45	12	8.6	6.5	17	8.3
30	14	7.8	4.4	e4.5	---	7.3	49	12	6.8	16	16	7.1
31	14	---	3.6	e3.2	---	6.1	---	10	---	10	18	---
TOTAL	124.88	221.0	156.9	126.80	160.0	246.8	795.6	1235	923.1	164.0	859.4	343.6
MEAN	4.03	7.37	5.06	4.09	5.71	7.96	26.5	39.8	30.8	5.29	27.7	11.5
MAX	14	13	11	7.0	8.9	10	49	57	61	16	53	23
MIN	.99	4.3	1.9	.90	2.7	5.0	4.9	10	4.1	3.2	8.2	4.9
AC-FT	248	438	311	252	317	490	1580	2450	1830	325	1700	682

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1942 - 1997, BY WATER YEAR (WY)

	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954
MEAN	8.18	14.2	11.9	11.4	16.2	17.8	46.7	95.2	38.5	15.3	18.7	5.41	
MAX	31.8	30.6	29.1	23.0	27.8	37.5	112	332	134	71.2	147	13.6	
(WY)	1943	1943	1943	1943	1944	1944	1947	1944	1947	1947	1945	1947	
MIN	1.32	3.34	5.00	4.09	5.71	6.62	15.7	5.06	2.70	1.59	.020	.000	
(WY)	1945	1945	1944	1997	1997	1995	1943	1946	1946	1996	1996	1943	

SUMMARY STATISTICS FOR 1996 CALENDAR YEAR FOR 1997 WATER YEAR WATER YEARS 1942 - 1997

ANNUAL TOTAL	3647.67		5357.08		
ANNUAL MEAN	9.97		14.7		25.1
HIGHEST ANNUAL MEAN					58.3
LOWEST ANNUAL MEAN					10.6
HIGHEST DAILY MEAN	63	May 26	61	Jun 10	915
LOWEST DAILY MEAN	a.00	Aug 14	e.90	Jan 13	b.00
ANNUAL SEVEN-DAY MINIMUM	.00	Aug 14	1.2	Oct 13	.00
INSTANTANEOUS PEAK FLOW			261	Aug 18	c,d,7700
INSTANTANEOUS PEAK STAGE			3.92	Aug 18	f.6.52
ANNUAL RUNOFF (AC-FT)	7240		10630		18160
10 PERCENT EXCEEDS	25		41		49
50 PERCENT EXCEEDS	7.9		7.8		11
90 PERCENT EXCEEDS	.15		2.8		1.3

e-Estimated.

a-Also occurred Aug 15-Sep 2.

b-No flow many days, also during most years.

c-Site and datum then in use, from rating curve extended above 350 ft³/s on basis of slope-area determination of peak flow.

d-Highest flood of actual record probably occurred Jun 16, 1965. Discharge computed at Plum Creek near Louviers was 154,000 cfs.

f-Maximum gage height, 7.07 ft, Jan 15, 1993, backwater from ice.

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 mi².

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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	6.1	5.0	6.7	12	9.8	e36	25	1.4	.14	16
2	.00	.00	4.2	4.5	8.8	14	11	e35	16	.76	.46	17
3	.00	.00	1.6	5.8	5.5	9.5	9.5	e50	21	.08	.08	12
4	.00	.00	7.7	5.6	3.9	10	28	e54	20	.00	.00	9.5
5	.00	.00	e9.0	5.1	7.9	8.5	28	e80	15	.00	9.2	20
6	.00	.64	e8.5	4.3	13	14	22	e47	26	.02	42	26
7	.00	1.3	7.3	2.2	5.8	11	16	e56	65	.05	35	18
8	.00	.97	8.9	6.2	4.8	9.0	44	e56	55	.03	42	8.8
9	.00	1.2	10	6.2	1.6	11	31	e66	60	.02	33	7.4
10	.00	2.2	4.8	3.1	2.0	14	21	e70	67	.00	25	6.6
11	.00	1.6	4.3	1.7	1.9	16	14	e56	56	.00	42	5.7
12	.00	1.5	5.8	.45	5.0	13	12	e47	62	.00	34	5.2
13	.00	2.1	5.8	.25	3.8	23	28	41	54	.00	27	3.6
14	.00	2.5	5.8	1.1	1.9	23	28	34	58	.00	26	3.5
15	.00	3.4	4.2	5.8	5.2	27	19	39	62	.00	27	3.0
16	.00	4.9	4.9	6.1	6.2	34	12	33	47	.00	17	1.7
17	.00	3.2	.40	4.8	3.8	17	21	39	49	.00	34	1.4
18	.00	6.4	1.8	12	5.8	8.1	14	27	50	.00	51	.21
19	.00	5.4	.23	14	9.9	5.9	33	55	36	.00	13	.30
20	.00	4.3	e2.4	7.9	10	5.9	36	48	27	.00	9.9	3.8
21	.00	5.9	e2.5	5.6	10	11	23	47	45	.00	14	4.7
22	.00	7.7	e2.5	3.2	6.8	14	21	65	34	.00	22	7.5
23	.00	5.5	e2.4	4.5	8.5	13	20	64	32	.00	20	13
24	.00	9.8	1.2	3.6	9.3	13	28	58	31	.00	18	9.1
25	.00	11	1.9	5.8	8.2	17	77	48	23	.00	15	7.9
26	.00	8.9	2.3	4.7	9.4	35	e38	54	16	.00	15	7.7
27	.00	10	6.0	5.6	9.3	26	e43	45	11	13	17	6.9
28	.00	8.4	4.8	12	9.0	18	e56	42	7.2	.00	17	6.0
29	.00	9.6	4.1	10	---	22	e42	32	7.3	.00	7.8	5.7
30	.00	10	5.5	4.9	---	28	e52	31	3.7	.35	7.6	4.8
31	.00	---	5.7	3.3	---	13	---	32	---	.98	17	---
TOTAL	0.00	128.41	142.63	165.30	184.0	495.9	837.3	1487	1081.2	16.69	638.18	243.01
MEAN	.000	4.28	4.60	5.33	6.57	16.0	27.9	48.0	36.0	.54	20.6	8.10
MAX	.00	11	10	14	13	35	77	80	67	13	51	26
MIN	.00	.00	.23	.25	1.6	5.9	9.5	27	3.7	.00	.00	.21
AC-FT	.00	255	283	328	365	984	1660	2950	2140	33	1270	482

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984 - 1997, BY WATER YEAR (WY)

	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
MEAN	12.0	16.4	13.2	12.6	15.9	26.8	60.3	152	48.3	15.7	12.6	5.95		
MAX	71.8	75.9	44.3	29.7	42.7	62.1	126	779	135	66.5	63.4	31.1		
(WY)	1985	1985	1985	1985	1988	1988	1987	1984	1984	1995	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 1996 CALENDAR YEAR

FOR 1997 WATER YEAR

WATER YEARS 1984 - 1997

ANNUAL TOTAL	2395.64	5419.62				
ANNUAL MEAN	6.55	14.8	27.5			
HIGHEST ANNUAL MEAN			68.3			
LOWEST ANNUAL MEAN			7.84			
HIGHEST DAILY MEAN	e ₃₀	May 25	e ₈₀	May 5	1770	May 15 1984
LOWEST DAILY MEAN	a _{.00}	Jul 3	a _{.00}	Oct 1	b _{.00}	Jul 2 1989
ANNUAL SEVEN-DAY MINIMUM	.00	Jul 3	.00	Oct 1	.00	Jul 2 1989
INSTANTANEOUS PEAK FLOW			465	Jul 27	c ₂₈₅₀	Jun 28 1995
INSTANTANEOUS PEAK STAGE			5.20	Jul 27	10.63	Jun 28 1995
ANNUAL RUNOFF (AC-FT)	4750	10750	19930			
10 PERCENT EXCEEDS	18	44	66			
50 PERCENT EXCEEDS	5.5	7.8	13			
90 PERCENT EXCEEDS	.00	.00	.00			

e-Estimated.

a-No flow many days.

b-No flow many days, most years.

c-From rating curve extended above 450 ft³/s.

06709600 CHATFIELD LAKE NEAR LITTLETON, CO

LOCATION.--Lat 39°33'26", long 105°03'27", in NW¹/₄SE¹/₄ sec.1, T.6 S., R.69 W., Jefferson County, Hydrologic Unit 10190002, near left end of dam on South Platte River at mouth of Plum Creek and 4.7 mi southwest of courthouse in Littleton.

DRAINAGE AREA.--3,018 mi².

PERIOD OF RECORD.--Contents, May 1975 to current year. Water-quality data available, October 1976 to September 1981.

GAGE.--Water-stage recorder. Datum of gage is 5,500.00 ft above sea level, (levels by U.S. Army, Corps of Engineers); gage readings have been reduced to elevations above sea level.

REMARKS.--Reservoir is formed by earthfill dam. Storage began May 29, 1975. Capacity, 235,000 acre-ft at elevation 5,500 ft, crest of spillway. No dead storage. Figures given represent total contents. Reservoir is for flood control and recreation.

COOPERATION.--Records provided by U.S. Army, Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 54,690 acre-ft, May 26, 1980, elevation, 5,447.58 ft; minimum since first filling in June 1979; 16,650 acre-ft, Dec. 18, 1995, elevation 5,423.63 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 27,860 acre-ft, July 30, elevation, 5,432.56 ft; minimum, 20,500 acre-ft, June 6, elevation, 5,427.02 ft.

MONTHEND ELEVATION AND CONTENTS AT 0800, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.	5,428.56	22,410	-
Oct. 31.	5,429.34	23,420	+1,010
Nov. 30.	5,428.60	22,460	-960
Dec. 31.	5,429.70	23,890	+1,430
CAL YR 1996	-	-	+6,110
Jan. 31.	5,431.54	26,400	+2,510
Feb. 28.	5,431.97	27,000	+600
Mar. 31.	5,432.05	27,120	+120
Apr. 30.	5,432.05	27,120	0
May 31.	5,427.93	21,610	-5,510
June 30.	5,432.02	27,080	+5,470
July 31.	5,432.51	27,780	+700
Aug. 31.	5,432.07	27,150	-630
Sept. 30.	5,432.00	27,040	-110
WTR YR 1997.	-	-	+4,630

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

LOCATION.--Lat 39°37'57", long 105°00'52", in SW¼NW¼ 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 mi².

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.--No estimated daily discharges. 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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	20	45	9.6	8.8	71	48	168	293	528	579	98
2	31	22	42	14	11	67	63	170	361	448	642	111
3	21	14	39	10	14	69	54	148	410	428	493	143
4	28	21	37	16	13	66	139	149	423	340	536	104
5	28	15	42	11	14	62	143	134	367	321	568	104
6	27	14	38	15	7.1	56	66	91	379	283	659	110
7	33	14	42	16	11	36	68	68	331	295	714	207
8	26	11	37	16	10	36	88	110	92	344	686	181
9	30	14	42	21	13	31	91	171	80	324	650	94
10	25	17	56	11	21	35	92	128	296	274	633	81
11	16	12	18	6.8	42	41	87	130	538	227	699	45
12	20	13	17	8.6	47	44	59	142	537	196	684	53
13	22	13	19	9.5	59	48	56	165	599	106	675	128
14	27	11	19	15	61	46	51	185	635	116	569	57
15	32	27	12	18	63	49	30	185	824	142	423	48
16	27	103	18	10	62	47	34	172	774	177	401	52
17	29	101	17	10	61	47	34	168	820	185	225	36
18	26	105	12	14	66	45	33	172	786	152	113	41
19	31	110	14	14	59	46	33	211	734	187	104	42
20	37	147	11	18	55	43	24	291	694	305	142	47
21	35	150	15	12	78	41	27	235	599	381	91	46
22	30	141	17	11	77	42	34	211	514	425	158	40
23	33	120	17	13	74	43	34	291	522	472	144	69
24	29	115	12	9.6	78	54	229	378	529	380	67	44
25	27	109	14	9.1	70	55	204	380	546	335	55	44
26	77	74	17	11	74	42	191	350	570	229	30	98
27	38	67	12	14	74	42	167	283	550	356	34	77
28	35	45	9.4	11	68	44	160	175	574	427	55	76
29	31	43	12	13	---	43	177	164	580	307	163	72
30	36	43	14	13	---	43	179	164	529	227	163	66
31	30	---	12	15	---	46	---	235	---	693	155	---
TOTAL	946	1711	728.4	395.2	1290.9	1480	2695	6024	15486	9610	11310	2414
MEAN	30.5	57.0	23.5	12.7	46.1	47.7	89.8	194	516	310	365	80.5
MAX	77	150	56	21	78	71	229	380	824	693	714	207
MIN	16	11	9.4	6.8	7.1	31	24	68	80	106	30	36
AC-FT	1880	3390	1440	784	2560	2940	5350	11950	30720	19060	22430	4790

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 1997, BY WATER YEAR (WY)

	1996	1997	1997	1997	1997	1996	1997	1996	1997	1996	1997	1996	1997
MEAN	30.5	57.0	23.5	12.7	46.1	37.4	96.8	176	361	261	236	80.6	
MAX	30.5	57.0	23.5	12.7	46.1	47.7	104	194	516	310	365	80.8	
(WY)	1997	1997	1997	1997	1997	1997	1996	1997	1997	1997	1997	1996	1996
MIN	30.5	57.0	23.5	12.7	46.1	27.1	89.8	158	205	213	107	80.5	
(WY)	1997	1997	1997	1997	1997	1996	1997	1996	1996	1996	1996	1997	1997

SUMMARY STATISTICS

FOR 1997 WATER YEAR

WATER YEARS 1996 - 1997

ANNUAL TOTAL	54090.5		
ANNUAL MEAN	148		148
HIGHEST ANNUAL MEAN			148
LOWEST ANNUAL MEAN			148
HIGHEST DAILY MEAN	824	Jun 15	824
LOWEST DAILY MEAN	6.8	Jan 11	3.3
ANNUAL SEVEN-DAY MINIMUM	11	Jan 11	8.7
INSTANTANEOUS PEAK FLOW	1390	Jul 31	1390
INSTANTANEOUS PEAK STAGE	13.64	Jul 31	13.64
ANNUAL RUNOFF (AC-FT)	107300		107400
10 PERCENT EXCEEDS	480		343
50 PERCENT EXCEEDS	61		74
90 PERCENT EXCEEDS	13		13

06710385 BEAR CREEK ABOVE EVERGREEN, CO

LOCATION.--Lat 39°37'58", long 105°19'59", in SE¼NE¼ sec.9, T.5 S., R.71 W., Jefferson County, Hydrologic Unit 10190002, on right bank 0.6 mi upstream from Evergreen Lake dam at Evergreen.

DRAINAGE AREA.--104 mi².

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

GAGE.--Water-stage recorder. Elevation of gage 7,076 ft above sea level, from topographic map. Prior to May 1, 1986, at site 200 ft downstream at present 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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31	21	e14	e12	e11	e11	e18	74	102	91	69	62
2	28	17	e14	e12	e11	e11	e18	69	108	85	63	66
3	27	20	e13	e12	e11	e11	e19	67	99	81	72	72
4	26	22	e13	e12	e11	e11	e19	68	94	78	74	75
5	25	17	e13	e11	e11	e11	e19	78	105	77	91	80
6	24	19	e13	e11	e10	e11	e19	88	132	74	113	65
7	23	15	e13	e11	e9.6	e11	e19	97	295	71	112	62
8	22	29	e13	e11	e9.6	e11	e19	93	275	71	104	61
9	21	23	e13	e11	e9.6	e11	e19	87	291	69	95	61
10	21	19	e12	e10	e9.6	e11	e17	89	286	66	123	64
11	20	17	e12	e9.0	e9.6	e12	e16	91	263	65	125	e63
12	20	18	e12	e8.0	e9.6	e12	e15	84	242	64	107	e60
13	20	18	e12	e9.0	e9.6	e12	e15	81	274	60	99	e58
14	20	17	e12	e10	e10	e12	e17	83	261	57	91	e56
15	19	17	e12	e11	e10	e13	e20	84	226	54	85	e53
16	19	12	e11	e12	e10	e13	28	90	213	51	80	e50
17	19	19	e11	e12	e10	e13	31	97	201	50	80	e57
18	16	32	e11	e12	e10	e13	34	102	182	51	80	e52
19	24	26	e11	e12	e10	e14	36	96	175	52	75	e50
20	22	26	e11	e12	e10	e15	41	93	172	69	71	e54
21	17	18	e11	e12	e10	e15	49	87	159	57	70	e50
22	16	19	e11	e12	e10	e15	43	125	152	50	67	e45
23	26	18	e11	e12	e10	e15	40	106	144	48	65	e43
24	20	18	e11	e12	e10	e15	40	116	140	47	62	e41
25	22	e18	e11	e12	e10	e16	38	103	128	50	63	e40
26	20	e16	e12	e12	e10	e17	42	97	119	49	63	e39
27	19	e15	e12	e11	e10	e17	41	89	116	47	65	e38
28	22	e14	e12	e11	e11	e17	56	86	112	57	65	e37
29	20	e14	e12	e11	---	e17	66	86	105	61	59	e36
30	17	e14	e12	e11	---	e17	74	88	97	72	56	e35
31	20	---	e12	e11	---	e17	---	91	---	71	58	---
TOTAL	666	568	373	347.0	283.2	417	928	2785	5268	1945	2502	1625
MEAN	21.5	18.9	12.0	11.2	10.1	13.5	30.9	89.8	176	62.7	80.7	54.2
MAX	31	32	14	12	11	17	74	125	295	91	125	80
MIN	16	12	11	8.0	9.6	11	15	67	94	47	56	35
AC-FT	1320	1130	740	688	562	827	1840	5520	10450	3860	4960	3220

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1985 - 1997, BY WATER YEAR (WY)

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
MEAN	29.0	24.0	16.6	13.6	12.7	15.7	35.4	88.9	107	60.3	47.3	33.8	
MAX	85.1	56.2	32.8	18.7	18.2	26.7	89.7	230	280	134	87.3	54.2	
(WY)	1985	1985	1985	1996	1996	1992	1987	1987	1995	1995	1991	1997	
MIN	16.0	9.65	8.67	9.00	8.68	9.57	13.9	44.1	46.7	27.5	20.1	17.2	
(WY)	1995	1993	1995	1995	1994	1995	1991	1993	1994	1994	1994	1994	

SUMMARY STATISTICS

FOR 1996 CALENDAR YEAR

FOR 1997 WATER YEAR

WATER YEARS 1985 - 1997

ANNUAL TOTAL	10593	17707.2	
ANNUAL MEAN	28.9	48.5	40.5
HIGHEST ANNUAL MEAN			63.8
LOWEST ANNUAL MEAN			22.5
HIGHEST DAILY MEAN	90	Jun 16	421
LOWEST DAILY MEAN	e,a11	Dec 16	295
ANNUAL SEVEN-DAY MINIMUM	11	Dec 16	e8.0
INSTANTANEOUS PEAK FLOW			9.6
INSTANTANEOUS PEAK STAGE			403
ANNUAL RUNOFF (AC-FT)	21010	35120	573
10 PERCENT EXCEEDS	57	102	4.37
50 PERCENT EXCEEDS	20	22	5.39
90 PERCENT EXCEEDS	15	11	11

e-Estimated.

a-Also occurred Dec 17-25, 1996.

06710500 BEAR CREEK AT MORRISON, CO

LOCATION.--Lat 39°39'11", long 105°11'43", in SE¹/₄SW¹/₄ 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 mi².

PERIOD OF RECORD.--Streamflow records, 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 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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29	25	28	e15	e12	e11	23	168	105	97	77	62
2	27	24	22	e15	e12	e11	23	155	117	89	73	74
3	26	20	23	e15	e12	e11	23	140	106	84	70	79
4	25	22	20	e15	e12	e11	38	128	110	80	82	83
5	25	18	e18	e15	e12	e11	41	132	131	76	95	94
6	24	19	e18	e15	e12	e11	32	142	173	76	124	78
7	23	17	e18	e15	e12	e11	33	146	291	71	118	72
8	24	11	e18	e14	e12	e12	37	134	263	67	110	68
9	23	23	e17	e14	e12	e13	35	125	294	65	105	65
10	22	20	e17	e14	e12	e14	36	121	341	65	122	61
11	22	18	e17	e14	e12	e15	33	119	350	64	149	60
12	22	19	e17	e14	e12	e16	46	113	296	65	130	60
13	22	21	e17	e14	e12	e18	37	106	333	59	116	55
14	22	20	e17	e14	e12	e20	37	106	341	54	103	53
15	22	20	e17	e14	e12	e21	39	112	264	50	94	50
16	23	21	e17	e14	e12	e23	44	114	249	47	88	49
17	25	15	e17	e14	e12	24	50	125	246	46	88	47
18	20	21	e16	e14	e12	24	55	127	216	45	91	46
19	25	28	e16	e13	e12	24	59	120	210	50	81	47
20	26	26	e16	e13	e12	27	65	116	199	66	75	61
21	25	22	e16	e13	e12	29	74	108	193	57	73	55
22	19	23	e16	e13	e12	27	71	141	183	47	68	54
23	24	23	e16	e13	e11	26	68	133	170	44	68	57
24	25	21	e16	e13	e11	26	82	137	167	44	62	59
25	24	18	e16	e13	e11	22	76	125	153	47	63	51
26	26	19	e16	e13	e11	23	89	116	142	51	67	48
27	23	19	e16	e13	e11	26	92	106	132	45	70	47
28	24	20	e15	e13	e11	24	136	101	123	69	68	42
29	26	18	e15	e13	---	26	150	99	114	68	63	39
30	22	24	e15	e12	---	21	177	100	106	81	58	39
31	24	---	e15	e12	---	21	---	99	---	80	57	---
TOTAL	739	615	538	426	330	599	1801	3814	6118	1949	2708	1755
MEAN	23.8	20.5	17.4	13.7	11.8	19.3	60.0	123	204	62.9	87.4	58.5
MAX	29	28	28	15	12	29	177	168	350	97	149	94
MIN	19	11	15	12	11	11	23	99	105	44	57	39
AC-FT	1470	1220	1070	845	655	1190	3570	7570	12140	3870	5370	3480

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1900 - 1997, BY WATER YEAR (WY)

	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
MEAN	31.2	23.6	17.0	13.7	14.3	20.1	52.8	147	139	72.7	63.9	43.9																																																																																						
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 1996 CALENDAR YEAR	FOR 1997 WATER YEAR	WATER YEARS 1900 - 1997
ANNUAL TOTAL	11123	21392	
ANNUAL MEAN	30.4	58.6	52.8
HIGHEST ANNUAL MEAN			125
LOWEST ANNUAL MEAN			14.6
HIGHEST DAILY MEAN	122	May 26	350 Jun 11
LOWEST DAILY MEAN	e _a 10	Sep 10	b ₁₁ Nov 8
ANNUAL SEVEN-DAY MINIMUM	12	Sep 5	11 Feb 23
INSTANTANEOUS PEAK FLOW			485 Jun 13
INSTANTANEOUS PEAK STAGE			d _{6.06} Jun 13
ANNUAL RUNOFF (AC-FT)	22060	42430	38240
10 PERCENT EXCEEDS	54	131	120
50 PERCENT EXCEEDS	23	28	26
90 PERCENT EXCEEDS	15	12	11

e-Estimated.

a-Also occurred Sep 11.

b-Also occurred Feb 23 to Mar 7, which are all estimated discharges.

c-Result of freezeup.

d-Maximum gage height, 6.07 ft, Jun 7.

06710605 BEAR CREEK ABOVE BEAR CREEK LAKE NEAR MORRISON, CO

LOCATION.--Lat 39°39'08", long 105°10'23", in NW¹/₄NE¹/₄ 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 mi².

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

GAGE.--Water-stage recorder. 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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	5.1	12	22	14	17	2.1	e86	115	87	68	62
2	15	.29	8.5	24	12	16	.87	e84	127	82	61	76
3	24	.23	8.5	25	11	20	1.5	e80	120	76	57	83
4	23	.14	8.4	20	8.7	18	20	e92	113	68	69	88
5	22	2.5	11	6.8	7.3	15	26	e120	121	66	83	104
6	19	4.2	15	13	11	17	5.0	e140	172	65	131	77
7	18	2.5	14	11	9.5	19	9.9	155	437	61	122	70
8	17	1.7	13	15	7.1	23	21	149	393	56	108	66
9	15	2.0	14	18	7.6	28	10	137	382	56	92	63
10	13	2.1	13	16	7.5	28	11	134	352	50	118	62
11	12	2.2	13	e17	6.2	36	13	133	321	49	147	60
12	13	2.2	12	e17	7.6	42	e14	126	272	49	133	59
13	11	2.2	12	e18	8.0	35	e15	117	307	44	115	54
14	11	2.2	9.6	e18	8.4	25	e17	114	302	39	102	53
15	11	2.2	7.0	e17	13	25	e19	114	248	35	92	50
16	12	1.9	8.8	e16	11	24	e22	117	227	33	85	48
17	14	1.3	8.1	e15	12	21	e32	125	220	32	84	45
18	9.4	2.0	8.1	e13	13	13	e37	133	210	31	85	42
19	12	6.4	8.1	12	14	14	e44	128	200	31	80	42
20	13	9.8	13	12	17	21	e48	124	194	39	74	59
21	13	8.3	21	11	16	23	e54	116	182	33	72	52
22	11	9.1	18	10	13	15	e58	162	174	31	68	51
23	15	16	17	10	18	10	e52	153	163	30	64	58
24	15	12	15	9.2	19	11	e47	159	159	30	61	62
25	12	9.0	16	9.1	19	6.1	e45	143	146	30	61	55
26	14	11	14	10	19	6.4	e44	131	131	30	61	50
27	12	6.8	20	9.1	16	3.4	e52	120	122	29	64	47
28	13	6.4	22	9.7	14	3.1	e58	111	116	54	63	43
29	14	8.0	19	11	---	3.4	e70	106	111	65	59	e41
30	10	11	20	9.9	---	2.9	e80	108	98	78	55	e40
31	12	---	20	13	---	2.8	---	109	---	78	52	---
TOTAL	438.4	150.76	419.1	437.8	339.9	544.1	928.37	3826	6235	1537	2586	1762
MEAN	14.1	5.03	13.5	14.1	12.1	17.6	30.9	123	208	49.6	83.4	58.7
MAX	24	16	22	25	19	42	80	162	437	87	147	104
MIN	9.4	.14	7.0	6.8	6.2	2.8	.87	80	98	29	52	40
AC-FT	870	299	831	868	674	1080	1840	7590	12370	3050	5130	3490

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 1997, BY WATER YEAR (WY)

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	
MEAN	13.3	14.9	17.2	14.9	14.8	19.1	44.1	117	122	45.0	30.3	20.4
MAX	25.8	32.1	30.6	27.1	23.4	44.8	158	377	512	216	83.4	58.7
(WY)	1996	1987	1996	1996	1987	1987	1987	1987	1995	1995	1997	1997
MIN	4.34	.38	9.50	1.69	.23	1.26	2.83	6.95	14.9	5.23	2.80	4.17
(WY)	1990	1990	1995	1995	1995	1995	1989	1989	1989	1989	1989	1989

SUMMARY STATISTICS

FOR 1996 CALENDAR YEAR

FOR 1997 WATER YEAR

WATER YEARS 1987 - 1997

ANNUAL TOTAL	9838.16	19204.43	
ANNUAL MEAN	26.9	52.6	39.5
HIGHEST ANNUAL MEAN			96.1
LOWEST ANNUAL MEAN			10.4
HIGHEST DAILY MEAN	159	May 26	437
LOWEST DAILY MEAN	.14	Nov 4	.14
ANNUAL SEVEN-DAY MINIMUM	1.7	Nov 2	1.7
INSTANTANEOUS PEAK FLOW			568
INSTANTANEOUS PEAK STAGE			6.03
ANNUAL RUNOFF (AC-FT)	19510	38090	28610
10 PERCENT EXCEEDS	56	129	79
50 PERCENT EXCEEDS	20	22	18
90 PERCENT EXCEEDS	6.6	7.2	3.5

e-Estimated.

06711500 BEAR CREEK AT MOUTH, AT SHERIDAN, CO

LOCATION.--Lat 39°39'08", long 105°01'57", in NW¹/₄NW¹/₄ 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 mi².

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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	105	113	e34	22	24	24	8.1	226	111	89	82	67
2	103	115	e32	22	24	24	10	192	121	78	92	86
3	107	116	31	24	23	25	8.6	162	127	73	80	92
4	102	100	27	25	20	26	33	149	114	66	126	100
5	114	86	27	21	19	21	56	149	113	62	157	135
6	111	87	35	20	21	21	28	158	149	60	183	103
7	112	86	36	e21	21	22	17	170	516	58	186	86
8	109	88	35	19	19	23	19	173	569	56	149	79
9	108	90	35	e21	18	26	20	162	531	57	129	76
10	108	71	33	e22	18	27	16	151	477	53	138	71
11	108	59	32	e22	19	27	17	145	424	50	210	66
12	104	48	27	e22	20	38	15	142	375	50	216	63
13	104	49	24	e22	21	40	16	132	387	47	155	58
14	104	49	22	e22	18	32	18	123	431	43	130	55
15	104	48	18	e22	19	28	16	124	353	35	109	52
16	103	e48	19	e22	20	28	18	123	321	30	97	49
17	104	e48	e24	e22	21	28	20	127	296	27	95	47
18	104	e48	e24	e22	e25	22	21	135	267	22	108	44
19	99	49	e24	22	e24	19	22	134	245	22	101	46
20	105	53	e24	25	e30	21	26	130	225	28	88	58
21	110	55	e24	29	e31	23	36	123	203	35	83	60
22	110	54	e24	23	e23	23	48	148	191	29	79	59
23	106	58	e24	22	e24	18	50	172	176	31	73	79
24	109	55	e24	21	e24	19	158	163	167	26	68	72
25	107	51	e24	19	e22	17	127	161	161	26	63	64
26	128	49	e24	21	25	15	128	144	142	28	67	56
27	113	43	e24	21	24	12	112	133	128	39	80	52
28	112	e41	e23	20	25	10	154	125	120	184	73	49
29	113	e38	23	21	---	8.1	187	116	116	111	74	46
30	111	e36	23	20	---	8.5	235	115	106	81	67	43
31	111	---	23	21	---	8.8	---	110	---	88	63	---
TOTAL	3348	1931	823	678	622	684.4	1639.7	4517	7662	1684	3421	2013
MEAN	108	64.4	26.5	21.9	22.2	22.1	54.7	146	255	54.3	110	67.1
MAX	128	116	36	29	31	40	235	226	569	184	216	135
MIN	99	36	18	19	18	8.1	8.1	110	106	22	63	43
AC-FT	6640	3830	1630	1340	1230	1360	3250	8960	15200	3340	6790	3990

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1927 - 1997, BY WATER YEAR (WY)

	MEAN	23.2	23.2	21.5	19.6	19.1	22.1	51.2	149	105	36.9	37.1	24.7
MAX (WY)	1985	1985	1985	1970	1942	1960	1942	1973	1949	1983	1984	1938	
MIN (WY)	1955	1955	1955	1921	1945	1945	1935	1935	1963	1967	1973	1954	1956

SUMMARY STATISTICS FOR 1996 CALENDAR YEAR FOR 1997 WATER YEAR WATER YEARS 1927 - 1997

ANNUAL TOTAL	15997.6	29023.1	
ANNUAL MEAN	43.7	79.5	44.8
HIGHEST ANNUAL MEAN			157
LOWEST ANNUAL MEAN			6.53
HIGHEST DAILY MEAN	295	May 26	569 Jun 8
LOWEST DAILY MEAN	6.4	Aug 7	8.1 Mar 29
ANNUAL SEVEN-DAY MINIMUM	8.0	Aug 3	8.9 Mar 28
INSTANTANEOUS PEAK FLOW			1230 Jul 28
INSTANTANEOUS PEAK STAGE			5.49 Jul 28
ANNUAL RUNOFF (AC-FT)	31730	57570	32490
10 PERCENT EXCEEDS	105	158	94
50 PERCENT EXCEEDS	29	52	16
90 PERCENT EXCEEDS	14	20	6.0

e-Estimated.

a-Present datum, from floodmarks, from rating curve extended above 3400 ft³/s.

06711545 LITTLE DRY CREEK AT GREENWOOD VILLAGE, CO

LOCATION.--Lat 39°37'02", long 104°57'08" in SE¼ NW¼ sec.13, T.5 S., R.68 W., Arapahoe County, Hydrologic Unit 10190002, on right bank, 0.3 mi west of University Boulevard, and 0.5 mi south of East Bellevue Avenue.

DRAINAGE AREA.--14.4 mi².

PERIOD OF RECORD.--June 1994 to September 1997 (discontinued).

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 5,427 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 upstream from station. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4.3	3.9	4.3	3.7	3.4	7.2	2.8	4.5	4.1	3.9	65	19
2	3.9	3.8	4.1	3.8	3.2	4.1	10	4.5	4.0	4.0	9.4	20
3	3.9	4.0	3.5	3.7	3.1	3.3	4.4	4.5	4.9	4.9	6.9	22
4	4.0	6.0	3.6	3.4	3.0	3.1	21	4.5	3.9	4.7	37	12
5	3.9	3.8	3.9	3.3	3.0	2.9	34	4.2	3.8	4.9	98	24
6	5.2	3.7	4.0	3.2	3.2	2.9	6.3	4.0	24	4.9	121	6.1
7	7.4	3.6	3.9	3.3	3.5	2.9	4.9	3.9	123	4.7	15	e6.5
8	8.2	3.9	3.9	3.8	3.8	2.9	7.8	3.9	38	4.6	8.7	6.9
9	8.8	3.9	3.9	e3.6	3.4	2.9	4.4	3.8	13	4.7	7.4	5.0
10	e3.0	3.7	3.9	e3.5	3.1	3.0	5.7	4.0	5.3	4.7	7.9	4.7
11	3.7	3.6	3.8	e2.8	3.1	3.2	5.4	3.9	6.1	4.1	12	4.6
12	3.4	3.6	3.6	e2.2	3.0	3.7	4.3	3.8	15	4.1	9.8	4.7
13	3.3	3.6	3.8	e2.1	6.1	3.8	3.9	3.8	151	4.3	17	4.6
14	3.6	3.8	3.6	e2.2	3.4	3.2	3.7	4.1	21	4.3	6.7	4.7
15	3.4	4.8	3.4	e2.4	3.3	2.9	3.7	5.1	8.2	6.5	12	4.4
16	3.5	7.9	3.4	e2.8	3.3	3.0	3.7	3.9	6.8	5.7	44	5.0
17	4.4	5.8	3.1	e2.5	3.4	3.2	3.6	3.8	5.7	6.4	24	4.5
18	3.7	5.4	3.2	e3.5	6.9	3.2	3.5	9.1	16	4.5	33	4.4
19	3.6	4.9	3.2	4.7	10	3.2	3.5	7.1	13	4.6	15	5.0
20	3.9	4.2	3.2	4.0	5.2	3.4	3.5	4.6	5.2	6.5	7.6	8.8
21	5.2	4.0	3.9	3.6	6.0	3.4	3.6	4.5	4.8	5.3	6.4	7.0
22	3.6	4.0	6.3	3.4	4.0	3.2	3.6	39	5.8	4.8	7.2	5.5
23	3.8	4.1	5.0	3.3	3.7	2.9	3.5	16	15	4.7	6.0	29
24	3.4	3.9	4.2	3.2	3.7	10	87	5.2	9.8	9.4	5.8	8.2
25	3.6	3.9	3.9	3.3	3.4	6.1	39	4.5	4.9	26	7.0	5.6
26	25	3.9	3.9	3.2	3.7	3.6	15	4.3	5.0	9.7	14	5.2
27	6.9	5.1	3.8	3.1	3.2	3.1	5.7	4.6	4.4	e138	8.2	5.1
28	4.3	4.6	3.8	3.1	3.1	2.9	4.7	6.0	4.3	e139	12	4.7
29	4.8	4.1	3.7	4.1	---	3.7	4.7	4.5	4.4	e30	29	4.8
30	3.9	5.3	3.8	3.6	---	2.9	4.5	4.3	4.5	58	7.1	4.9
31	3.9	---	3.8	3.4	---	2.8	---	3.7	---	151	24	---
TOTAL	159.5	130.8	119.4	101.8	111.2	112.6	311.4	187.6	534.9	672.9	684.1	256.9
MEAN	5.15	4.36	3.85	3.28	3.97	3.63	10.4	6.05	17.8	21.7	22.1	8.56
MAX	25	7.9	6.3	4.7	10	10	87	39	151	151	121	29
MIN	3.3	3.6	3.1	2.1	3.0	2.8	2.8	3.7	3.8	3.9	5.8	4.4
AC-FT	316	259	237	202	221	223	618	372	1060	1330	1360	510

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 1997, BY WATER YEAR (WY)

	1994	1995	1996	1997
MEAN	4.67	3.72	2.87	2.73
MAX	5.15	4.36	3.85	3.28
(WY)	1997	1997	1997	1997
MIN	3.77	3.33	2.04	2.22
(WY)	1995	1995	1995	1995

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR	FOR 1997 WATER YEAR	WATER YEARS 1994 - 1997
ANNUAL TOTAL	2484.8	3383.1	
ANNUAL MEAN	6.79	9.27	8.36
HIGHEST ANNUAL MEAN			9.27 1997
LOWEST ANNUAL MEAN			6.61 1996
HIGHEST DAILY MEAN	216 May 26	a ₁₅₁ Jun 13	287 May 17 1995
LOWEST DAILY MEAN	1.7 Aug 6	e _{2.1} Jan 13	b _{1.4} Feb 12 1995
ANNUAL SEVEN-DAY MINIMUM	1.9 Feb 26	2.4 Jan 11	1.6 Jul 6 1994
INSTANTANEOUS PEAK FLOW		630 Jul 27	630 Jul 27 1997
INSTANTANEOUS PEAK STAGE		9.61 Jul 27	9.61 Jul 27 1997
ANNUAL RUNOFF (AC-FT)	4930	6710	6060
10 PERCENT EXCEEDS	10	15	12
50 PERCENT EXCEEDS	3.8	4.3	3.8
90 PERCENT EXCEEDS	2.2	3.2	2.0

e-Estimated.
a-Also occurred Jul 31.
b-Also occurred Feb 13, 1995.

06711565 SOUTH PLATTE RIVER AT ENGLEWOOD, CO

LOCATION.--Lat 39°39'54", long 105°00'13", in NW¹/₄NE¹/₄ 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 mi².

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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	153	142	96	49	52	109	69	426	437	656	830	239
2	151	145	92	53	57	105	103	402	526	553	850	255
3	150	143	84	52	58	107	81	349	596	537	656	317
4	146	134	76	58	53	103	240	337	598	430	774	280
5	155	116	82	50	51	96	290	321	527	414	958	303
6	155	112	85	52	49	91	130	281	606	375	1050	232
7	159	110	92	64	51	64	110	262	1050	383	1020	325
8	154	111	84	54	48	64	136	304	660	425	936	291
9	156	116	89	61	44	65	137	372	597	406	882	182
10	149	105	106	54	46	70	136	308	768	353	865	168
11	144	82	68	50	69	76	134	304	1020	296	1010	122
12	140	75	58	60	76	90	99	319	972	277	1010	119
13	136	71	60	60	93	97	96	329	1210	183	946	210
14	143	74	56	59	90	88	93	342	1150	185	793	128
15	145	78	45	69	95	86	70	355	1280	212	587	113
16	142	175	54	51	91	82	72	330	1180	239	577	115
17	143	167	58	67	92	84	73	326	1200	258	389	91
18	143	171	66	57	106	75	75	343	1160	210	292	91
19	143	171	51	48	105	75	74	381	1070	243	245	93
20	150	220	47	61	90	73	72	459	989	372	293	121
21	153	228	57	66	122	73	83	398	859	445	213	118
22	151	220	64	54	106	78	104	419	741	470	293	111
23	147	197	59	54	101	70	104	513	756	521	276	197
24	145	192	53	50	106	90	555	587	746	446	168	133
25	144	186	53	44	91	93	430	593	748	446	141	120
26	258	143	57	49	100	71	387	536	767	312	116	170
27	173	129	54	51	107	66	326	465	723	558	185	148
28	156	98	51	49	100	68	350	335	741	814	195	143
29	154	95	53	57	---	65	402	311	747	612	358	135
30	156	101	53	54	---	64	448	306	656	384	320	126
31	153	---	54	54	---	70	---	376	---	1070	310	---
TOTAL	4747	4107	2057	1711	2249	2508	5479	11689	25080	13085	17538	5196
MEAN	153	137	66.4	55.2	80.3	80.9	183	377	836	422	566	173
MAX	258	228	106	69	122	109	555	593	1280	1070	1050	325
MIN	136	71	45	44	44	64	69	262	437	183	116	91
AC-FT	9420	8150	4080	3390	4460	4970	10870	23190	49750	25950	34790	10310

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1983 - 1997, BY WATER YEAR (WY)

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
MEAN	160	174	97.4	79.5	86.2	134	374	868	782	576	425	165			
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	243	79.0	98.8	43.7			
(WY)	1993	1990	1995	1991	1991	1991	1991	1989	1990	1994	1994	1992			

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1983 - 1997	
ANNUAL TOTAL	56167		95446			
ANNUAL MEAN	153		261		298	
HIGHEST ANNUAL MEAN					692	
LOWEST ANNUAL MEAN					124	
HIGHEST DAILY MEAN	900	May 26	1280	Jun 15	4010	Jun 28 1995
LOWEST DAILY MEAN	41	Feb 6	^a 44	Jan 25	^b 20	Sep 13 1994
ANNUAL SEVEN-DAY MINIMUM	47	Jan 27	49	Feb 4	24	Sep 13 1994
INSTANTANEOUS PEAK FLOW			2180	Jul 31	^c 9710	Jun 4 1995
INSTANTANEOUS PEAK STAGE			4.04	Jul 31	7.21	Jun 4 1995
ANNUAL RUNOFF (AC-FT)	111400		189300		215900	
10 PERCENT EXCEEDS	311		685		768	
50 PERCENT EXCEEDS	130		143		142	
90 PERCENT EXCEEDS	50		54		49	

a-Also occurred Feb 9.

b-Also occurred Sep 18, 1994.

c-From rating curve extended above 3800 ft³/s.

PLATTE RIVER BASIN

06711565 SOUTH PLATTE RIVER AT ENGLEWOOD, CO--Continued

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM @ 25 DEG. C), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	1020	598	780	697	655	672	---	---	---
2	---	---	---	974	617	750	760	626	688	---	---	---
3	---	---	---	661	572	621	697	661	681	---	---	---
4	836	767	794	630	587	612	---	---	---	---	---	---
5	838	730	804	636	566	596	828	347	544	---	---	---
6	965	788	838	642	575	593	695	616	669	---	---	---
7	1140	749	928	707	642	683	751	663	721	---	---	---
8	1010	820	917	729	686	706	---	---	---	---	---	---
9	968	826	881	702	681	694	691	573	628	---	---	---
10	908	782	833	691	670	680	718	578	657	---	---	---
11	857	708	771	702	622	668	1140	613	779	---	---	---
12	735	685	716	658	597	628	924	749	810	---	---	---
13	798	684	745	637	597	622	766	722	746	---	---	---
14	729	631	674	667	614	643	---	---	---	---	---	---
15	668	616	643	652	621	638	---	---	---	---	---	---
16	638	598	620	653	621	638	---	---	---	---	---	---
17	627	589	610	642	614	631	---	---	---	---	---	---
18	704	520	603	653	622	638	---	---	---	---	---	---
19	766	667	700	698	651	665	---	---	---	---	---	---
20	691	592	664	691	592	664	---	---	---	---	---	---
21	1030	629	778	664	637	653	---	---	---	---	---	---
22	854	631	705	662	627	641	---	---	---	---	---	---
23	840	617	695	676	630	648	---	---	---	---	---	---
24	693	609	644	---	---	---	---	---	---	---	---	---
25	656	578	615	822	560	616	---	---	---	---	---	---
26	789	633	695	608	571	589	---	---	---	---	---	---
27	737	598	655	699	577	607	---	---	---	---	---	---
28	640	583	618	698	654	679	---	---	---	---	---	---
29	---	---	---	770	664	713	---	---	---	---	---	---
30	---	---	---	727	664	700	---	---	---	---	---	---
31	---	---	---	717	649	678	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---
	JUNE			JULY			AUGUST			SEPTEMBER		
1	425	399	413	303	284	293	410	265	372	548	375	429
2	442	388	409	314	284	302	395	324	359	559	400	450
3	560	379	407	315	274	289	352	318	335	402	346	376
4	411	385	398	316	286	296	482	234	331	478	337	418
5	429	385	398	326	295	305	380	280	340	448	337	406
6	553	326	399	329	287	307	499	296	347	491	403	431
7	354	213	316	312	281	294	370	328	346	431	346	387
8	351	279	317	324	271	300	357	308	339	415	360	384
9	355	264	303	326	295	305	406	323	352	463	404	435
10	474	279	325	340	306	316	377	327	353	474	408	440
11	379	299	328	343	319	330	423	298	351	507	424	469
12	355	311	323	381	331	343	---	---	---	554	450	490
13	650	215	309	418	378	396	436	313	340	526	296	390
14	437	302	331	424	387	402	371	312	336	468	353	413
15	355	306	322	577	361	402	444	318	355	480	392	427
16	372	268	311	---	---	---	639	267	342	509	394	431
17	313	258	291	---	---	---	454	328	359	516	413	461
18	429	256	296	---	---	---	576	345	430	566	471	516
19	320	258	282	417	365	396	601	409	443	567	489	536
20	340	246	264	390	336	362	468	358	395	582	465	524
21	287	255	264	---	---	---	463	414	436	544	488	515
22	347	258	274	---	---	---	440	338	374	583	459	549
23	363	242	285	---	---	---	355	300	327	619	325	498
24	368	259	277	---	---	---	453	334	420	557	513	529
25	300	271	285	404	285	349	574	441	472	600	516	555
26	311	261	281	427	359	377	586	423	496	642	461	542
27	276	258	265	472	233	375	567	423	491	546	481	509
28	291	264	276	477	214	361	561	421	494	544	489	514
29	315	271	287	528	273	422	639	378	424	559	491	526
30	309	273	293	---	---	---	425	369	398	583	511	549
31	---	---	---	488	196	341	---	---	---	---	---	---
MONTH	650	---	---	---	---	---	---	---	---	642	296	470

06711565 SOUTH PLATTE RIVER AT ENGLEWOOD, CO--Continued

TEMPERATURE, WATER (DEG. C) WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	6.9	1.0	3.9	11.8	8.4	9.9	11.9	8.3	9.8
2	---	---	---	8.4	2.9	5.8	8.4	5.2	6.1	12.8	7.5	9.6
3	---	---	---	7.1	3.5	5.6	13.5	4.7	9.1	14.6	7.3	10.5
4	5.0	1.5	2.8	5.5	2.3	3.9	11.2	5.7	9.1	15.7	8.6	11.8
5	5.1	1.0	2.7	6.9	.4	3.9	8.2	4.4	5.9	16.9	9.7	12.8
6	3.6	1.8	2.5	9.1	2.8	6.1	11.9	3.7	7.6	15.5	10.7	12.9
7	5.3	.9	2.6	10.0	3.9	7.0	12.0	5.7	9.2	15.7	11.1	13.1
8	5.5	.4	2.6	11.0	4.4	7.8	10.0	4.9	7.0	15.5	9.8	12.6
9	5.2	.6	2.8	11.2	5.1	8.1	9.8	4.5	7.0	17.2	10.2	13.2
10	5.0	.9	2.8	11.2	5.3	8.1	6.4	3.0	4.3	18.2	11.0	14.2
11	5.4	1.2	3.4	12.2	5.4	9.1	6.5	1.4	3.7	14.7	11.4	12.9
12	6.2	3.1	4.4	10.3	6.1	8.5	9.0	1.3	5.3	17.2	10.3	13.4
13	6.3	3.2	4.7	8.5	2.9	5.1	11.7	3.5	7.8	17.5	10.9	13.9
14	6.1	1.8	4.1	4.4	1.7	3.2	---	---	---	15.5	11.1	13.2
15	7.4	3.1	5.3	8.0	1.6	5.0	---	---	---	18.9	11.6	14.7
16	8.1	3.0	5.8	10.1	3.9	7.5	---	---	---	---	---	---
17	8.1	4.5	6.4	9.8	6.0	8.2	---	---	---	---	---	---
18	6.8	3.8	5.4	11.9	5.4	8.8	---	---	---	---	---	---
19	7.4	2.5	5.3	13.2	6.3	10.1	---	---	---	---	---	---
20	6.7	2.8	4.4	---	---	---	---	---	---	18.7	12.7	15.2
21	6.3	1.5	3.8	13.7	8.9	11.3	---	---	---	18.0	13.4	15.5
22	5.8	.7	3.5	12.3	7.0	9.8	---	---	---	15.6	14.0	14.7
23	4.1	1.7	2.8	12.7	7.1	10.1	---	---	---	18.6	13.4	15.5
24	5.7	1.2	3.3	---	---	---	---	---	---	18.4	13.9	15.7
25	6.2	.9	3.7	10.1	2.3	6.5	---	---	---	18.5	14.3	15.8
26	4.9	2.5	3.9	13.9	6.0	10.0	---	---	---	18.0	13.9	15.4
27	5.8	1.5	3.7	14.4	8.1	10.9	---	---	---	17.0	13.0	14.8
28	4.8	1.5	2.8	13.0	5.8	9.8	---	---	---	18.7	12.5	15.4
29	---	---	---	12.4	8.3	10.1	---	---	---	16.5	13.7	15.0
30	---	---	---	14.7	6.0	10.5	---	---	---	19.5	13.4	16.1
31	---	---	---	14.8	8.0	11.7	---	---	---	22.0	14.1	17.5
MONTH	---	---	---	---	---	---	---	---	---	---	---	---
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	21.3	15.2	17.8	21.5	16.5	18.7	22.9	19.2	20.8	22.0	17.8	19.9
2	19.9	15.8	17.6	22.1	16.1	18.6	22.4	19.5	20.7	20.3	18.6	19.4
3	21.0	15.7	17.8	22.2	16.2	18.7	24.1	18.8	21.0	23.9	18.0	20.5
4	22.0	16.2	18.6	22.9	16.1	19.0	23.7	19.0	20.6	22.3	18.1	20.1
5	21.4	16.5	18.4	22.4	16.4	19.2	21.0	19.3	20.1	23.0	18.0	20.3
6	20.9	16.8	18.2	21.6	16.4	19.0	19.5	17.8	18.4	22.3	18.1	20.1
7	20.8	15.8	17.1	23.7	16.8	19.7	22.2	18.4	19.8	---	---	---
8	16.7	14.3	15.3	21.3	17.4	19.2	22.4	18.6	20.2	23.5	17.4	20.0
9	14.4	13.2	13.8	23.4	17.0	19.9	20.5	18.7	19.3	22.4	17.1	19.7
10	17.4	12.5	14.7	23.1	17.5	20.2	19.8	18.5	18.9	22.9	17.0	19.8
11	18.4	14.3	16.0	20.3	18.1	19.1	21.6	18.1	19.3	21.8	17.4	19.5
12	17.0	14.5	15.5	23.1	17.0	20.0	21.5	17.9	19.2	22.4	17.4	19.8
13	17.9	14.1	15.5	23.9	17.4	20.7	21.7	17.9	19.4	23.2	17.0	20.1
14	18.9	14.6	16.3	24.6	17.6	21.3	20.9	17.9	19.2	21.8	17.2	19.7
15	17.7	15.2	16.3	25.2	18.4	21.9	23.1	17.4	19.7	21.9	16.8	19.4
16	18.6	15.2	16.5	---	---	---	21.7	15.7	19.0	20.5	17.0	18.9
17	18.6	15.3	16.7	---	---	---	21.3	16.1	18.9	20.1	16.0	18.1
18	19.8	15.6	17.4	---	---	---	21.7	17.6	19.3	19.4	15.8	18.0
19	19.7	16.1	17.5	24.5	19.0	21.5	20.8	16.8	18.8	18.4	15.8	16.8
20	19.9	16.0	17.5	23.2	18.9	20.9	23.2	16.7	19.7	16.6	14.4	15.5
21	20.4	16.0	17.8	---	---	---	22.8	17.9	20.2	15.1	14.1	14.6
22	21.8	16.2	18.7	---	---	---	23.9	17.2	20.2	15.8	14.1	14.9
23	21.6	16.9	18.7	---	---	---	24.2	17.4	20.6	14.6	13.5	13.9
24	19.9	16.9	18.3	---	---	---	24.2	17.8	20.8	17.8	13.1	15.3
25	20.2	16.6	18.2	23.2	18.9	20.9	23.6	18.4	20.8	18.9	13.4	16.1
26	21.8	16.4	18.7	23.5	18.8	21.1	22.7	18.4	20.2	18.9	14.9	16.9
27	20.3	16.9	18.5	22.6	18.9	20.2	23.8	18.0	20.6	20.0	14.6	17.2
28	21.0	16.6	18.5	22.0	18.1	19.5	24.0	18.8	21.2	18.9	13.5	16.3
29	21.5	16.6	18.7	22.6	18.4	20.4	24.0	18.6	21.1	18.8	13.3	16.2
30	21.8	16.4	18.7	25.1	19.4	21.5	22.8	18.1	20.3	18.8	13.5	16.4
31	---	---	---	22.9	19.1	20.7	23.6	17.7	20.2	---	---	---
MONTH	22.0	12.5	17.3	---	---	---	24.2	15.7	20.0	---	---	---

PLATTE RIVER BASIN

06712000 CHERRY CREEK NEAR FRANKTOWN, CO

LOCATION.--Lat 39°21'21", long 104°45'46", in NE¼ sec.15, T.8 S., R.66 W., Douglas County, Hydrologic Unit 10190003, on right bank 1.5 mi upstream from Russellville Gulch, and 2.5 mi south of Franktown.

DRAINAGE AREA.--169 mi².

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 1996 TO SEPTEMBER 1997 DAILY MEAN VALUES

Table with columns for DAY, OCT, NOV, DEC, JAN, FEB, MAR, APR, MAY, JUN, JUL, AUG, SEP. It contains daily discharge data from day 1 to 31, including a summary row for TOTAL, MEAN, MAX, MIN, and AC-FT.

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 1997, BY WATER YEAR (WY)

Table with columns for MEAN, MAX, (WY), MIN, (WY) and rows for 1940-1997, 1945-1997, 1950-1997.

SUMMARY STATISTICS

FOR 1996 CALENDAR YEAR

FOR 1997 WATER YEAR

WATER YEARS 1940 - 1997

Summary statistics table for 1996, 1997, and historical years (1940-1997) including annual total, mean, highest/lowest annual/daily means, peak flow/stage, and runoff percentages.

e-Estimated. a-Also occurred Sep 4-6, and 9. b-Also occurred Jul 16-21, 24-25. c-Also occurred Sep 30 and Oct 1, 1950. d-Site and datum then in use, by float measurement. f-Maximum gage height, 7.43 ft, Aug 2, 1997, current site and datum.

393109104464500 CHERRY CREEK NEAR PARKER, CO

LOCATION.--Lat 39°31'09", long 104°46'45", in SE¼NW¼NE¼ 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 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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.8	2.0	1.8	2.6	5.2	6.8	6.0	8.1	2.9	2.0	2.8	2.3
2	1.8	1.9	1.9	3.0	5.4	7.7	6.4	7.3	2.8	1.4	3.2	2.3
3	1.8	1.9	1.7	3.2	4.8	8.1	6.8	7.3	3.0	1.9	3.4	2.3
4	1.5	2.0	1.9	2.9	3.6	7.8	8.7	6.8	2.4	2.7	3.6	17
5	1.5	1.7	1.8	1.9	4.1	6.2	11	5.8	1.8	2.7	4.7	14
6	1.8	1.9	1.8	1.6	4.9	8.3	11	5.8	3.3	2.9	87	4.9
7	1.9	1.6	1.9	1.6	4.7	8.7	10	7.0	5.8	2.8	97	4.9
8	1.8	1.7	1.8	1.8	4.1	9.2	8.7	5.1	3.2	2.8	21	3.9
9	1.8	1.8	1.8	2.9	4.4	9.3	8.2	4.2	4.8	2.9	8.5	3.4
10	e1.8	1.9	1.8	2.2	4.3	9.7	7.6	3.7	5.8	3.0	5.1	3.0
11	e1.9	1.9	1.7	1.5	4.7	9.8	7.0	3.5	4.8	3.0	e50	3.3
12	1.9	2.0	1.6	1.4	5.1	9.4	7.0	3.0	4.1	3.2	e40	3.2
13	1.2	1.8	1.7	1.4	5.3	9.0	7.4	2.8	11	3.1	22	3.2
14	1.3	1.9	1.7	1.4	4.2	8.2	7.7	2.8	7.8	3.1	15	3.1
15	1.5	1.9	1.7	1.7	4.8	7.7	7.6	2.8	5.3	3.0	11	3.2
16	2.0	1.9	1.7	2.0	5.6	7.0	7.0	3.0	4.4	3.5	7.2	3.0
17	2.0	1.9	1.7	2.0	5.9	6.4	6.5	3.1	3.6	3.5	6.0	3.1
18	2.1	1.9	1.6	2.3	6.1	5.9	6.3	3.1	3.1	3.4	36	2.9
19	2.1	1.9	1.6	3.1	7.2	6.2	5.9	3.1	2.8	4.0	6.2	2.3
20	2.1	1.6	1.7	4.2	7.3	6.2	5.8	2.8	3.2	2.8	5.6	1.6
21	2.2	1.6	1.8	4.4	7.5	5.6	5.3	2.8	3.1	2.8	4.3	1.6
22	2.0	1.8	1.7	3.8	5.8	5.5	5.2	4.3	3.1	2.8	3.4	1.8
23	2.2	2.1	1.7	4.4	7.2	5.3	5.2	5.2	2.7	2.7	3.0	2.5
24	2.2	2.0	1.7	3.9	7.2	5.9	10	3.9	3.0	3.1	2.9	2.2
25	2.1	2.1	1.7	3.7	6.5	5.8	12	3.1	2.8	3.1	2.8	1.9
26	2.1	1.9	1.7	5.3	8.5	7.3	14	3.1	2.4	3.3	2.8	2.1
27	2.1	1.9	1.7	4.3	7.0	7.6	13	3.0	2.8	3.3	2.7	2.0
28	2.1	1.9	1.9	3.6	7.0	7.3	11	3.0	2.7	14	3.5	2.1
29	2.1	1.9	2.2	5.0	---	7.4	9.1	3.1	2.7	19	3.4	2.0
30	2.1	1.9	2.2	5.0	---	7.0	7.0	3.1	2.5	6.1	2.4	1.9
31	2.1	---	2.2	5.2	---	6.4	---	3.1	---	3.1	2.4	---
TOTAL	58.9	56.2	55.4	93.3	158.4	228.7	244.4	128.8	113.7	121.0	468.9	107.0
MEAN	1.90	1.87	1.79	3.01	5.66	7.38	8.15	4.15	3.79	3.90	15.1	3.57
MAX	2.2	2.1	2.2	5.3	8.5	9.8	14	8.1	11	19	97	17
MIN	1.2	1.6	1.6	1.4	3.6	5.3	5.2	2.8	1.8	1.4	2.4	1.6
AC-FT	117	111	110	185	314	454	485	255	226	240	930	212

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 1997, BY WATER YEAR (WY)

	1992	1993	1994	1995	1996	1997
MEAN	2.16	3.39	3.89	5.07	9.43	15.6
MAX	3.95	8.85	8.97	8.84	14.1	42.8
(WY)	1996	1996	1996	1996	1993	1992
MIN	1.26	.79	.76	1.51	1.74	3.82
(WY)	1992	1995	1995	1995	1995	1995

SUMMARY STATISTICS

FOR 1996 CALENDAR YEAR

FOR 1997 WATER YEAR

WATER YEARS 1992 - 1997

ANNUAL TOTAL	2003.1	1834.7	
ANNUAL MEAN	5.47	5.03	6.97
HIGHEST ANNUAL MEAN			8.92
LOWEST ANNUAL MEAN			5.03
HIGHEST DAILY MEAN	e ₈₀	97	229
LOWEST DAILY MEAN	a _{1.2}	1.2	b _{.43}
ANNUAL SEVEN-DAY MINIMUM	1.3	1.6	.45
INSTANTANEOUS PEAK FLOW		168	c ₄₅₇
INSTANTANEOUS PEAK STAGE		6.18	7.17
ANNUAL RUNOFF (AC-FT)	3970	3640	5050
10 PERCENT EXCEEDS	12	8.2	14
50 PERCENT EXCEEDS	3.0	3.1	3.6
90 PERCENT EXCEEDS	1.6	1.7	1.1

e-Estimated.

a-Also occurred Aug 10 and Oct 13.

b-Also occurred Aug 25, 1994.

c-From rating curve extended above 140 ft³/s.

06712990 CHERRY CREEK LAKE NEAR DENVER, CO

LOCATION.--Lat 39°39'03", long 104°51'13", in NW¼NE¼ sec.2, T.5 S., R.67 W., Arapahoe County, Hydrologic Unit 10190003, 0.2 mi from right end of dam, 0.8 mi southwest from intersection of Interstate Highway 225 and Parker Road, 1.6 mi northwest of intersection of Parker and Airline Roads, and 11.5 mi upstream from mouth.

DRAINAGE AREA.--385 mi².

PERIOD OF RECORD.--Contents, October 1960 to current year. Water-quality data available, October 1976 to September 1981.

GAGE.--Water-stage recorder. Datum of gage is 5,598.00 ft above sea level (levels by U.S. Army, Corps of Engineers); gage readings have been reduced to elevations above sea level.

REMARKS.--Reservoir is formed by earthfill dam. Dam completed in June 1950; storage began May 15, 1957. Capacity, 92,820 acre-ft, at elevation 5,598.00 ft, crest of spillway. No dead storage. Figures given represent total contents. Reservoir is for flood control and recreation.

COOPERATION.--Records provided by U.S. Army, Corps of Engineers.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 31,120 acre-ft, June 3, 1973, elevation, 5,565.82 ft; minimum, 9,980 acre-ft, Nov. 23-24, 1978, elevation, 5,545.90 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 13,530 acre-ft, Aug. 8, elevation, 5,550.85 ft; minimum, 12,370 acre-ft, Nov. 1-3, elevation, 5,549.48 ft.

MONTHEND ELEVATION AND CONTENTS AT 0800, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.	5,549.58	12,460	-
Oct. 31.	5,549.49	12,380	-80
Nov. 30.	5,549.67	12,530	+150
Dec. 31.	5,550.02	12,820	+290
CAL YR 1996.	-	-	-160
Jan. 31.	5,550.35	13,140	+320
Feb. 28.	5,550.53	13,260	+120
Mar. 31.	5,550.69	13,400	+140
Apr. 30.	5,550.48	13,220	-180
May 31.	5,550.04	12,840	-380
June 30.	5,550.14	12,920	+80
July 31.	5,550.70	13,400	+480
Aug. 31.	5,550.09	12,880	-520
Sept. 30.	5,550.30	13,060	+180
WTR YR 1997.	-	-	+600

06713000 CHERRY CREEK BELOW CHERRY CREEK LAKE, CO

LOCATION.--Lat 39°39'10", long 104°51'40", in SW¹/₄SW¹/₄ sec.35, T.4 S., R.67 W., Denver County, Hydrologic Unit 10190003, on right bank 2,000 ft downstream from Cherry Creek Dam, 2.2 mi southeast of Sullivan, 9 mi southeast of Civic Center in Denver, and 11 mi upstream from mouth.

DRAINAGE AREA.--385 mi².

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

REVISED RECORDS.--WSP 1730: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 5,490.51 ft above sea level, (Corps of Engineers bench mark).

REMARKS.--Records fair except for estimated daily discharges, and for discharges less than 1 ft³/s, which are poor. Flow regulated by Cherry Creek Lake (see elsewhere in this report). Diversions upstream from station for irrigation of about 1,800 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.--Maximum flood known, 34,000 ft³/s, Aug. 3, 1933, by slope-area measurement near present site (Castlewood Dam failure).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.05	.00	.00	.00	.00	19	.00	17	4.7	.00	32	.00
2	.00	.00	.00	.00	.00	19	4.6	17	4.7	3.7	32	.00
3	.01	.00	.00	.00	.00	19	e8.0	17	1.5	7.9	32	.00
4	.01	.00	.00	.00	.00	19	e12	17	.00	.00	33	1.1
5	.00	.00	.00	.00	.00	19	e16	17	.00	.00	34	.01
6	.00	.00	.00	.00	.00	18	e16	17	.00	.00	35	.00
7	.00	.00	.00	.00	.00	17	e16	7.4	.00	.00	34	.00
8	.00	.00	.00	.00	.00	17	e16	.00	.00	.00	34	.00
9	.00	.00	.00	.00	.00	17	16	.00	.00	.00	35	.00
10	.00	.00	.00	.00	.00	17	16	.00	.00	.00	35	.00
11	.00	.00	.00	.00	.00	9.9	16	.00	.00	.00	36	.00
12	.00	.00	.00	.00	.00	.00	16	.00	.03	.00	36	.00
13	.00	.00	.00	.00	.00	.00	16	14	.06	.00	36	.00
14	.00	.00	.00	.00	.00	.00	16	112	.00	.00	35	.00
15	.00	.00	.00	.00	.00	.00	16	.00	.00	.00	35	.00
16	.00	.00	.00	.00	.00	.00	16	.00	.00	.00	35	.00
17	.00	.00	.00	.00	.00	.00	15	.00	.00	.00	34	.00
18	.00	.00	.00	.00	.00	.00	15	.00	.00	.00	34	.00
19	.00	.00	.00	.00	.00	.00	15	.00	.00	.00	34	.00
20	.00	.00	.00	.00	.00	.00	15	2.6	.00	.00	34	.00
21	.00	.00	.00	.00	13	.00	15	9.2	.00	.00	34	.00
22	.00	.00	.00	.00	18	.00	16	9.6	.00	.00	34	.00
23	.00	.00	.00	.00	19	.00	17	9.9	.00	.00	34	.00
24	.00	.00	.00	.00	19	.00	18	10	.00	.00	34	.00
25	.00	.00	.00	.00	19	.00	17	7.4	.00	.00	34	.00
26	.00	.00	.00	.00	19	.00	17	5.4	.00	.00	10	.00
27	.00	.00	.00	.00	19	.00	17	5.2	.00	.02	.00	.00
28	.00	.00	.00	.00	19	.00	17	4.8	.00	3.5	.00	.00
29	.00	.00	.00	.00	---	.00	17	4.3	.00	.02	.00	.00
30	.00	.00	.00	.00	---	.00	17	4.7	.00	4.0	.00	.00
31	.00	---	.00	.00	---	.00	---	4.7	---	16	.05	---
TOTAL	0.07	0.00	0.00	0.00	145.00	190.90	444.60	313.20	10.99	35.14	865.05	1.11
MEAN	.002	.000	.000	.000	5.18	6.16	14.8	10.1	.37	1.13	27.9	.037
MAX	.05	.00	.00	.00	19	19	18	112	4.7	16	36	1.1
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.1	.00	.00	.00	288	379	882	621	.22	.70	1720	2.2

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1950 - 1997, BY WATER YEAR (WY)

MEAN	1.47	1.55	2.50	2.00	6.77	12.1	16.1	10.3	9.44	4.83	10.7	2.72
MAX	29.6	38.5	39.1	42.4	60.3	108	166	104	243	71.3	218	54.2
(WY)	1985	1985	1985	1985	1984	1974	1984	1984	1973	1983	1965	1965
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1958	1958	1958	1958	1958	1958	1958	1958	1961	1964	1957	1957

SUMMARY STATISTICS

	FOR 1996 CALENDAR YEAR	FOR 1997 WATER YEAR	WATER YEARS 1950 - 1997
ANNUAL TOTAL	2216.33	2006.06	
ANNUAL MEAN	6.06	5.50	6.72
HIGHEST ANNUAL MEAN			38.8 1984
LOWEST ANNUAL MEAN			.000 1967
HIGHEST DAILY MEAN	38 May 23	112 May 14	721 Aug 1 1956
LOWEST DAILY MEAN	a.00 Feb 10	a.00 Oct 2	b.00 May 19 1957
ANNUAL SEVEN-DAY MINIMUM	.00 Jul 10	.00 Oct 5	b.00 May 19 1957
INSTANTANEOUS PEAK FLOW		1470 May 14	1470 May 14 1997
INSTANTANEOUS PEAK STAGE		6.56 May 14	6.56 May 14 1997
ANNUAL RUNOFF (AC-FT)	4400	3980	4870
10 PERCENT EXCEEDS	18	19	7.1
50 PERCENT EXCEEDS	3.6	.00	.00
90 PERCENT EXCEEDS	.00	.00	.00

e-Estimated.

a-No flow many days.

b-No flow most of time since May 1957.

PLATTE RIVER BASIN

06713300 CHERRY CREEK AT GLENDALE, CO

LOCATION.--Lat 39°42'22", long 104°56'13", in SW¼NW¼ 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 mi².

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

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

GAGE.--Water-stage recorder with crest-stage gage. Elevation of gage is 5,320 ft above sea level, from topographic map.

REMARKS.--Records fair, except for estimated daily discharges, 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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e20	10	6.5	4.9	5.4	25	2.8	21	21	15	98	45
2	e20	9.6	6.2	4.9	4.6	21	15	22	21	11	38	53
3	e19	11	5.9	5.3	4.6	20	7.5	22	19	15	29	22
4	e18	11	5.6	4.6	4.5	21	89	23	13	15	49	105
5	e18	8.1	5.8	4.3	4.4	20	60	23	12	16	78	183
6	e17	7.9	5.9	4.5	4.9	20	25	25	53	16	181	59
7	e16	7.7	6.3	5.4	6.4	20	19	22	117	16	51	50
8	e16	7.3	5.5	6.0	5.9	20	17	11	34	15	33	24
9	e15	7.0	5.5	6.0	4.8	19	32	9.4	16	14	39	18
10	e15	7.1	5.5	4.9	4.5	20	29	9.4	19	13	39	17
11	e14	6.8	5.4	4.4	4.3	19	32	9.9	15	11	71	17
12	e13	6.6	5.3	4.6	4.4	8.8	26	11	13	10	50	17
13	e12	6.8	5.1	4.6	4.6	6.2	26	14	155	9.4	39	19
14	e11	6.6	4.9	4.6	4.3	5.0	25	97	56	9.5	38	17
15	e10	8.9	4.7	5.2	4.0	4.7	24	20	37	11	38	16
16	e10	11	4.8	5.0	3.8	4.2	24	13	23	12	68	16
17	9.7	7.8	3.9	4.6	3.7	3.9	24	10	18	11	103	16
18	9.5	8.0	3.8	5.5	14	3.9	24	17	24	11	92	16
19	9.2	6.9	3.8	7.7	15	3.9	24	15	21	11	79	18
20	8.7	6.4	4.6	6.4	11	3.5	23	10	13	11	53	20
21	9.2	6.0	7.0	5.7	9.9	3.4	25	15	9.6	9.2	71	15
22	8.4	6.1	8.8	5.0	15	3.4	24	62	8.6	7.9	50	14
23	8.6	6.4	6.2	4.7	19	3.4	24	34	32	9.3	50	65
24	7.7	6.0	5.6	4.7	19	11	192	22	22	9.7	48	46
25	7.8	6.0	5.6	4.6	18	6.8	93	23	18	25	49	24
26	33	6.0	5.5	4.6	19	3.9	60	21	17	18	65	23
27	11	7.6	5.3	4.6	19	3.5	41	22	14	130	52	23
28	9.8	6.3	5.0	4.9	19	3.7	24	21	14	320	40	22
29	8.8	6.2	4.9	5.7	---	3.5	21	21	16	181	47	23
30	9.9	7.3	5.1	5.0	---	2.8	21	20	18	212	51	21
31	10	---	5.2	4.6	---	2.8	---	20	---	236	47	---
TOTAL	405.3	226.4	169.2	157.5	257.0	317.3	1073.3	685.7	869.2	1411.0	1836	1024
MEAN	13.1	7.55	5.46	5.08	9.18	10.2	35.8	22.1	29.0	45.5	59.2	34.1
MAX	33	11	8.8	7.7	19	25	192	97	155	320	181	183
MIN	7.7	6.0	3.8	4.3	3.7	2.8	2.8	9.4	8.6	7.9	29	14
AC-FT	804	449	336	312	510	629	2130	1360	1720	2800	3640	2030

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1985 - 1997, BY WATER YEAR (WY)

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
MEAN	12.7	9.77	9.38	11.0	16.7	28.2	36.5	36.3	37.8	26.0	26.0	20.7	
MAX (WY)	38.0	22.2	29.8	45.7	53.2	75.2	74.5	88.5	85.3	55.9	59.2	43.0	
MIN (WY)	1986	1988	1988	1985	1988	1985	1986	1995	1995	1995	1997	1995	
MIN (WY)	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 1996 CALENDAR YEAR	FOR 1997 WATER YEAR	WATER YEARS 1985 - 1997
ANNUAL TOTAL	7121.9	8431.9	
ANNUAL MEAN	19.5	23.1	21.6
HIGHEST ANNUAL MEAN			36.2 1988
LOWEST ANNUAL MEAN			10.9 1994
HIGHEST DAILY MEAN	194 May 26	320 Jul 28	461 May 17 1995
LOWEST DAILY MEAN	^a 3.8 Dec 18	^b 2.8 Mar 30	1.1 Apr 1 1991
ANNUAL SEVEN-DAY MINIMUM	4.4 Dec 14	3.3 Mar 26	1.6 Sep 29 1993
INSTANTANEOUS PEAK FLOW		1860 Jul 28	1970 Jul 20 1986
INSTANTANEOUS PEAK STAGE		9.36 Jul 28	^c 6.74 Jul 20 1986
ANNUAL RUNOFF (AC-FT)	14130	16720	15660
10 PERCENT EXCEEDS	35	50	57
50 PERCENT EXCEEDS	15	14	12
90 PERCENT EXCEEDS	6.3	4.6	3.9

e-Estimated.

a-Also occurred Dec 19.

b-Also occurred Mar 31 to Apr 1.

c-Maximum gage height, 9.36 ft, Jul 28, 1997.

06713500 CHERRY CREEK AT DENVER, CO

LOCATION.--Lat 39°44'47", long 105°00'00", in NE1/4 sec.33, T.3 S., R.68 W., Denver County, Hydrologic Unit 10190003, on right bank 300 ft upstream from Market Street Bridge in Denver, and 0.7 mi upstream from mouth.

DRAINAGE AREA.--409 mi².

PERIOD OF RECORD.--August 1942 to September 1969, February 1980 to September 1983, and annual maximums 1984, 1985. April 1986 to current year. Water-quality data available, April 1993 to July 1995.

REVISED RECORDS.--WSP 1710: Drainage area. WDR CO-82-1: 1982 (M).

GAGE.--Water-stage recorder. Elevation of gage is 5,180 ft above sea level, from topographic map. See WSP 1730 for history of changes prior to July 16, 1951. Prior to March 1, 1995, at site 0.2 mi downstream, on downstream side of Wazee Street Bridge, at different datum.

REMARKS.--Records fair except for estimated daily discharges which are poor. Several diversions upstream from station for irrigation of about 1,900 acres. Floodflow regulated by Cherry Creek Reservoir 11 mi upstream, capacity, 95,960 acre-ft. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of July 26, 1885, reached a discharge of 20,000 ft³/s, by float measurement. Flood of May 19 and 20, 1864, reached a somewhat higher stage. Flood of Aug. 3, 1933, reached a discharge of about 15,000 ft³/s, as determined by rise of South Platte River at Denver.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	17	12	9.6	9.3	e32	e9.0	e32	22	21	97	52
2	28	15	11	10	9.1	e27	25	e35	22	19	61	63
3	28	15	11	11	8.6	e26	13	e38	20	22	49	34
4	27	18	11	10	9.0	e27	99	37	15	21	78	134
5	23	13	11	9.9	8.9	e26	68	34	16	23	103	199
6	24	13	10	11	10	e26	37	34	75	24	168	79
7	25	13	11	11	12	e26	31	32	148	24	61	75
8	24	13	10	12	11	e26	29	21	42	23	55	46
9	23	12	11	11	9.7	e26	43	19	30	22	57	38
10	25	12	10	11	9.2	e26	38	16	21	21	58	34
11	26	12	10	9.8	9.5	e25	41	18	19	20	203	30
12	20	12	10	9.0	9.6	e24	33	17	19	20	63	33
13	19	12	10	10	e9.3	e20	31	17	153	19	54	33
14	19	13	9.9	11	e9.0	e10	30	89	75	17	56	29
15	17	16	9.7	12	e8.6	e9.0	29	15	53	18	55	26
16	17	20	11	11	e8.0	e8.0	30	11	40	18	62	24
17	16	14	9.9	10	e8.4	e6.0	30	12	27	18	98	24
18	16	15	9.4	12	e11	e5.0	30	28	33	17	102	23
19	18	12	11	14	e21	e5.0	30	19	33	17	85	28
20	18	11	12	12	e19	e4.5	30	14	23	19	73	34
21	18	11	14	10	e18	e4.3	31	19	20	17	79	26
22	17	11	16	9.7	e25	e8.0	31	88	19	17	67	29
23	18	11	13	9.6	e25	e11	35	39	46	25	63	82
24	19	11	11	9.7	e24	e17	253	25	30	18	59	56
25	19	11	11	9.5	e25	e15	e150	23	28	48	58	28
26	52	11	10	9.1	e25	e12	e100	24	24	20	70	27
27	23	13	10	9.4	e25	e8.0	e80	24	21	147	60	27
28	22	12	9.6	9.7	e25	e3.5	e50	24	22	420	50	26
29	19	11	9.4	13	---	e2.8	e40	22	22	133	49	26
30	18	13	9.8	9.6	---	e2.5	e28	21	23	184	56	25
31	20	---	9.7	8.7	---	e5.0	---	20	---	190	51	---
TOTAL	684	393	334.4	325.3	402.2	473.6	1504.0	867	1141	1622	2300	1390
MEAN	22.1	13.1	10.8	10.5	14.4	15.3	50.1	28.0	38.0	52.3	74.2	46.3
MAX	52	20	16	14	25	32	253	89	153	420	203	199
MIN	16	11	9.4	8.7	8.0	2.5	9.0	11	15	17	49	23
AC-FT	1360	780	663	645	798	939	2980	1720	2260	3220	4560	2760

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1942 - 1997, BY WATER YEAR (WY)

	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957
MEAN	13.8	11.0	9.46	9.12	14.7	23.6	26.3	35.1	30.1	24.4	38.2	17.5	11.8	11.9	11.9
MAX	31.2	30.3	54.4	27.5	73.8	179	119	119	118	161	236	64.9	118	119	119
(WY)	1943	1988	1988	1943	1948	1948	1983	1983	1944	1983	1945	1965	1944	1945	1945
MIN	3.66	3.61	3.39	3.17	4.18	3.25	3.28	6.10	3.17	3.74	4.05	4.03	3.66	3.61	3.39
(WY)	1949	1955	1956	1956	1952	1955	1955	1966	1946	1948	1948	1948	1949	1955	1956

SUMMARY STATISTICS FOR 1996 CALENDAR YEAR FOR 1997 WATER YEAR WATER YEARS 1942 - 1997

ANNUAL TOTAL	9588.9	11436.5	
ANNUAL MEAN	26.2	31.3	
HIGHEST ANNUAL MEAN			21.1
LOWEST ANNUAL MEAN			70.7
HIGHEST DAILY MEAN	280	May 26	1983
LOWEST DAILY MEAN	7.3	Feb 15	6.00
ANNUAL SEVEN-DAY MINIMUM	9.4	Feb 11	1954
INSTANTANEOUS PEAK FLOW			1350
INSTANTANEOUS PEAK STAGE			Aug 8 1945
ANNUAL RUNOFF (AC-FT)	19020		a.40
10 PERCENT EXCEEDS	47		Jun 16 1948
50 PERCENT EXCEEDS	21		0.93
90 PERCENT EXCEEDS	11		Jun 14 1948
INSTANTANEOUS PEAK FLOW			b3120
INSTANTANEOUS PEAK STAGE			Aug 5 1945
ANNUAL RUNOFF (AC-FT)			c5.25
10 PERCENT EXCEEDS			15280
50 PERCENT EXCEEDS			40
90 PERCENT EXCEEDS			10

e-Estimated.
a-Also occurred Jun 17-18, 1948.
b-Site and datum then in use.
c-Maximum gage height, 11.98 ft, Jun 28, 1997.

06714000 SOUTH PLATTE RIVER AT DENVER, CO

LOCATION.--Lat 39°45'35", long 105°00'10", in NW¼SE¼ 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 mi².

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. 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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	209	180	141	82	87	189	98	461	459	684	934	326
2	207	183	132	89	90	172	182	443	536	569	872	321
3	208	184	126	89	91	167	122	401	587	575	675	360
4	193	184	118	97	84	163	530	385	610	470	954	588
5	200	149	120	93	82	152	471	371	539	455	1230	639
6	207	154	124	91	86	152	194	338	856	422	1290	357
7	209	158	136	92	92	126	160	314	1330	420	1020	441
8	201	157	126	91	91	121	177	325	717	459	906	399
9	202	160	133	97	85	123	197	399	671	440	888	270
10	198	161	149	93	80	123	196	346	766	393	864	252
11	194	132	115	83	100	132	214	342	972	338	1550	191
12	181	118	101	77	116	135	164	361	932	329	1050	186
13	174	115	102	81	131	141	153	371	1390	236	934	295
14	185	116	93	77	135	138	140	449	1160	222	813	205
15	185	135	90	91	141	126	124	407	1230	250	620	186
16	182	235	94	83	133	119	116	380	1130	274	603	185
17	177	222	74	77	143	122	116	373	1140	308	533	161
18	189	226	78	89	199	114	124	455	1110	257	445	160
19	175	220	73	98	187	108	127	432	1030	275	348	186
20	189	270	86	95	169	106	126	493	955	392	376	236
21	191	276	100	101	199	107	134	468	842	467	304	202
22	184	272	119	90	175	111	152	577	735	482	357	219
23	182	244	105	88	181	101	172	570	804	562	350	533
24	183	240	94	83	171	147	1270	610	754	486	258	250
25	188	233	90	79	162	145	666	621	757	545	235	202
26	414	194	91	83	181	109	534	569	778	378	236	250
27	228	184	90	82	171	100	424	524	734	775	231	237
28	199	148	90	83	163	82	407	401	742	1690	222	223
29	196	136	88	103	---	94	447	375	766	918	374	210
30	198	150	88	87	---	91	476	352	670	586	350	203
31	202	---	91	82	---	94	---	414	---	1270	335	---
TOTAL	6230	5536	3257	2726	3725	3910	8413	13327	25702	15927	20157	8473
MEAN	201	185	105	87.9	133	126	280	430	857	514	650	282
MAX	414	276	149	103	199	189	1270	621	1390	1690	1550	639
MIN	174	115	73	77	80	82	98	314	459	222	222	160
AC-FT	12360	10980	6460	5410	7390	7760	16690	26430	50980	31590	39980	16810

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1976 - 1997, 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	
MEAN	199	194	139	123	141	192	425	913	845	592	483	237											
MAX (WY)	1184	809	366	282	273	420	1377	2970	2759	2546	1774	911	1985	1985	1985	1985	1983	1983	1983	1983	1983	1984	1984
MIN (WY)	66.8	94.4	84.1	64.9	80.7	94.9	99.1	218	164	139	177	76.5	1978	1978	1978	1978	1978	1978	1978	1978	1978	1978	1977

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR				FOR 1997 WATER YEAR				WATER YEARS 1976 - 1997			
ANNUAL TOTAL	79218				117383							
ANNUAL MEAN	216				322				a375			
HIGHEST ANNUAL MEAN									961			
LOWEST ANNUAL MEAN									b138			
HIGHEST DAILY MEAN	1780				May 26				1690			
LOWEST DAILY MEAN	c73				Feb 1				73			
ANNUAL SEVEN-DAY MINIMUM	77				Jan 29				81			
INSTANTANEOUS PEAK FLOW									6220			
INSTANTANEOUS PEAK STAGE									8.64			
ANNUAL RUNOFF (AC-FT)	157100				232800				271500			
10 PERCENT EXCEEDS	400				755				745			
50 PERCENT EXCEEDS	181				197				185			
90 PERCENT EXCEEDS	91				90				86			

a-Average discharge for 79 years (water years 1896-1974), 344 ft³/s; 249200 acre-ft/yr, prior to completion of Chatfield Dam.
b-Maximum daily discharge for period of record, 12000 ft³/s, Jun 17, 1965.
c-Also occurred Feb 2 and Dec 19.
d-Minimum daily discharge for period of record, 8.8 ft³/s, Mar 25, 1951.
e-Maximum discharge and stage for period of record, 40300 ft³/s, Jun 17, 1965, gage height, 18.66 ft, from floodmarks, present datum, from rating curve extended above 2700 ft³/s, on basis of contracted-opening measurement of peak flow.
g-Maximum gage height for statistical period, 9.42 ft, Jun 4, 1995.

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 to September 1997.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	pH (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS TOTAL AS CACO3 (00900)	CALCIUM DIS-SOLVED AS CA (00915)	MAGNE-SIUM, DIS-SOLVED AS MG (00925)	SODIUM, DIS-SOLVED AS NA (00930)
MAY 01...	1330	473	576	8.2	10.5	9.7	180	51	11	43
JUN 10...	1045	573	348	7.9	14.5	8.5	100	30	6.5	26
JUL 23...	1540	540	401	8.2	25.0	6.9	120	34	8.4	31
JUL 30...	1005	376	532	7.9	20.0	7.5	150	45	9.1	44
AUG 07...	1120	1040	394 ^a	8.0	19.5	8.5	120	36	8.0	28
SEP 09...	1045	262	640	8.1	18.5	8.1	170	51	10	49

DATE	POTAS-SIUM, DIS-SOLVED AS K (00935)	BICAR-BONATE WATER DIS-SOLVED FIELD MG/L AS HCO3 (00453)	ALKA-LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)	SULFATE DIS-SOLVED AS SO4 (00945)	CHLO-RIDE, DIS-SOLVED AS CL (00940)	FLUO-RIDE, DIS-SOLVED AS F (00950)	SILICA, DIS-SOLVED AS SIO2 (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L) (00631)
MAY 01...	3.4	126	103	93	47	0.6	6.9	344	0.01	2.0
JUN 10...	2.4	87	71	50	25	0.4	12	213	0.01	1.1
JUL 23...	2.7	84	69	55	26	0.7	7.5	250	0.03	1.9
JUL 30...	3.9	118	97	92	32	0.6	9.1	334	0.04	2.0
AUG 07...	2.7	93	76	61	24	0.6	8.6	244	0.02	0.86
SEP 09...	3.6	144	118	97	40	0.7	9.9	371	0.01	2.1

DATE	NITRO-GEN, AMMONIA DIS-SOLVED AS N (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L) AS N (00625)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L) AS N (00623)	PHOS-PHORUS TOTAL (MG/L) AS P (00665)	PHOS-PHORUS DIS-SOLVED (MG/L) AS P (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L) AS P (00671)	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 SUS-PENDE TOTAL (MG/L) AS C (00689)
MAY 01...	<0.01	0.6	0.3	0.21	0.12	0.15	14	28	--	--
JUN 10...	0.03	1.2	0.4	0.52	0.08	0.08	210	27	5.7	1.6
JUL 23...	0.04	0.7	<0.2	0.26	0.16	0.14	33	13	3.7	0.9
JUL 30...	0.08	0.8	0.5	0.28	0.21	0.16	53	31	5	1.4
AUG 07...	0.04	0.6	0.4	0.18	0.11	0.08	12	7	3.7	0.9
SEP 09...	0.02	0.4	0.2	0.27	0.20	0.18	10	47	3.5	1.4

a-Laboratory analyzed value.

b-Field dissolved bicarbonate, determined by incremental titration method.

c-Field total dissolved alkalinity, determined by incremental titration method.

PLATTE RIVER BASIN

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

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SEDI- ^d 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)
MAY					
01...	1330	473	37	47	--
JUN					
10...	1045	573	89	138	97
JUL					
23...	1540	540	27	39	92
30...	1005	376	67	68	98
AUG					
07...	1120	1040	97	272	74
SEP					
09...	1045	262	17	12	97

d-Suspended-sediment concentration determined from a subsample split of a composite sample.

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

LOCATION.--Lat 39°48'44", long 104°57'28", in NW¹/₄NW¹/₄ 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 mi².

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.--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. 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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.8	7.6	8.8	17	96	13	4.4	40	26	109	788	94
2	5.8	12	9.2	12	98	10	21	20	28	17	476	136
3	7.1	129	12	11	98	8.7	9.1	15	37	23	359	144
4	6.7	242	9.6	13	96	9.6	375	14	63	74	545	329
5	7.0	200	12	15	96	9.7	416	13	18	113	1250	521
6	6.6	196	11	12	99	9.7	118	11	515	90	1350	115
7	12	193	11	62	99	8.8	117	12	1470	85	576	178
8	13	187	11	112	98	11	9.6	11	745	120	414	157
9	12	132	12	116	95	13	61	13	714	173	397	40
10	9.4	13	12	117	95	11	136	13	620	263	410	16
11	7.1	11	9.9	105	59	9.8	260	12	599	277	1560	14
12	7.1	17	7.9	98	16	11	200	11	565	269	1050	22
13	9.5	16	7.6	105	13	12	180	12	943	162	739	43
14	11	14	8.5	106	12	9.9	141	28	1100	142	767	19
15	11	11	11	114	14	7.6	37	9.5	1250	170	569	12
16	11	14	6.9	108	14	7.6	16	7.6	1040	184	535	114
17	11	13	15	104	13	6.6	18	11	827	231	538	113
18	9.4	14	98	114	46	3.8	21	63	776	179	310	38
19	11	12	95	81	92	5.2	22	40	679	205	96	85
20	11	10	122	103	77	10	24	44	636	304	115	176
21	12	9.0	135	106	107	9.2	28	84	527	390	35	114
22	11	11	154	102	84	11	53	174	414	402	80	103
23	11	11	136	101	123	9.5	71	78	413	490	82	243
24	9.6	11	118	98	107	10	1480	63	352	428	30	169
25	9.7	12	115	98	18	9.2	652	73	350	482	17	109
26	160	11	98	98	15	4.8	348	21	286	336	30	143
27	12	11	19	98	15	4.1	41	57	233	657	57	140
28	7.4	10	16	97	14	3.7	20	23	224	1510	14	126
29	9.4	9.7	12	101	---	10	26	19	216	677	119	113
30	9.8	13	11	96	---	9.1	50	19	154	104	114	106
31	6.8	---	12	95	---	6.9	---	18	---	997	97	---
TOTAL	444.2	1552.3	1316.4	2615	1809	275.5	4955.1	1029.1	15820	9663	13519	3732
MEAN	14.3	51.7	42.5	84.4	64.6	8.89	165	33.2	527	312	436	124
MAX	160	242	154	117	123	13	1480	174	1470	1510	1560	521
MIN	5.8	7.6	6.9	11	12	3.7	4.4	7.6	18	17	14	12
AC-FT	881	3080	2610	5190	3590	546	9830	2040	31380	19170	26810	7400

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1982 - 1997, BY WATER YEAR (WY)

	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
MEAN	112	105	61.6	84.9	75.1	117	309	750	579	490	395	140				
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 1996 CALENDAR YEAR FOR 1997 WATER YEAR WATER YEARS 1982 - 1997

ANNUAL TOTAL		26945.6		56730.6												
ANNUAL MEAN		73.6		155												
HIGHEST ANNUAL MEAN																
LOWEST ANNUAL MEAN																
HIGHEST DAILY MEAN		1330		May 26		1560		Aug 11		4110		May 27		1987		
LOWEST DAILY MEAN		a5.6		Apr 1		3.7		Mar 28		2.1		Mar 14		1995		
ANNUAL SEVEN-DAY MINIMUM		6.8		Sep 30		6.1		Mar 26		3.7		Mar 11		1995		
INSTANTANEOUS PEAK FLOW																
INSTANTANEOUS PEAK STAGE																
ANNUAL RUNOFF (AC-FT)		53450				112500				202200						
10 PERCENT EXCEEDS		181				485				648						
50 PERCENT EXCEEDS		22				57				66						
90 PERCENT EXCEEDS		8.6				9.4				8.9						

a-Also occurred Apr 2 and 23.

394839104570300 SAND CREEK AT MOUTH NEAR COMMERCE CITY, CO

LOCATION.--Lat 39°48'39", long 104°57'03", in SE¼NW¼NW¼ sec.12, T.3 S., R.68 W., Adams County, Hydrologic Unit 10190003, on left bank 0.1 mi downstream from confluence of Burlington Ditch and Sand Creek in northeast corner of Metro Sewer Plant.

DRAINAGE AREA.--191 mi².

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.

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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	42	e13	21	12	48	350	18	64	44	65	351	179
2	27	24	19	12	60	347	50	63	58	64	137	172
3	29	37	18	12	57	328	30	59	52	70	112	160
4	25	54	16	12	41	346	140	57	48	100	174	230
5	32	26	19	12	34	321	214	56	45	69	397	510
6	39	18	20	11	75	320	117	52	202	113	748	241
7	39	14	18	11	50	266	24	49	546	113	232	230
8	38	16	20	14	50	213	18	47	141	121	102	245
9	41	16	20	15	38	213	16	64	95	160	87	240
10	53	14	22	13	33	207	53	73	110	157	104	194
11	35	13	17	15	30	203	61	55	177	151	547	188
12	17	14	16	16	19	202	49	63	154	117	417	148
13	15	14	16	16	16	202	41	71	192	109	224	114
14	14	14	15	15	16	64	41	74	293	112	93	107
15	e17	17	13	17	17	23	33	68	134	107	81	103
16	e17	31	12	20	15	19	28	64	118	106	78	76
17	e17	24	10	19	16	19	21	53	136	108	137	55
18	e17	26	9.7	25	26	16	17	52	142	104	143	113
19	e15	23	13	67	69	13	21	61	142	554	155	125
20	e16	27	14	52	43	11	31	61	113	312	157	117
21	e16	22	16	47	28	13	31	54	80	223	176	108
22	e17	21	26	35	18	11	28	151	76	224	201	107
23	e16	19	29	43	208	10	34	117	88	225	206	115
24	16	18	21	37	285	17	351	74	97	241	193	155
25	15	19	19	33	423	25	143	62	96	289	186	150
26	65	19	20	35	414	19	83	75	84	272	161	147
27	35	18	17	38	374	17	72	54	66	302	141	143
28	21	19	15	43	357	16	68	50	62	693	129	141
29	16	20	13	63	---	14	71	46	72	1100	172	132
30	e17	23	14	53	---	16	68	42	72	995	150	128
31	e18	---	12	46	---	15	---	43	---	671	147	---
TOTAL	797	633	530.7	859	2860	3856	1972	1974	3735	8047	6338	4873
MEAN	25.7	21.1	17.1	27.7	102	124	65.7	63.7	125	260	204	162
MAX	65	54	29	67	423	350	351	151	546	1100	748	510
MIN	14	13	9.7	11	15	10	16	42	44	64	78	55
AC-FT	1580	1260	1050	1700	5670	7650	3910	3920	7410	15960	12570	9670

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 1997, BY WATER YEAR (WY)

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
MEAN	30.4	22.8	19.2	17.5	31.4	45.3	41.9	78.6	82.2	128	108	71.2
MAX	51.7	33.7	32.6	27.7	102	124	65.7	124	137	260	204	162
(WY)	1996	1996	1996	1997	1997	1997	1997	1995	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 1996 CALENDAR YEAR

FOR 1997 WATER YEAR

WATER YEARS 1992 - 1997

ANNUAL TOTAL	15130.6	36474.7	
ANNUAL MEAN	41.3	99.9	58.3
HIGHEST ANNUAL MEAN			99.9
LOWEST ANNUAL MEAN			35.5
HIGHEST DAILY MEAN	e500	May 26	1100 Jul 29 1997
LOWEST DAILY MEAN	4.0	Jul 4	4.0 Jul 4 1996
ANNUAL SEVEN-DAY MINIMUM	7.2	Jun 28	7.2 Jun 28 1996
INSTANTANEOUS PEAK FLOW		a5750	Jul 29 1997
INSTANTANEOUS PEAK STAGE		12.12	Jul 29 1997
ANNUAL RUNOFF (AC-FT)	30010	72350	42250
10 PERCENT EXCEEDS	113	230	131
50 PERCENT EXCEEDS	21	53	30
90 PERCENT EXCEEDS	13	15	13

e-Estimated.

a-From rating curve extended above 500 ft³/s.

393647105425317 SOUTH CLEAR CREEK ABOVE NAYLOR CREEK NEAR GEORGETOWN, CO

LOCATION.--Lat 39°36'47", long 105°42'53", T.5 S., R.74 W. (unsurveyed), Clear Creek County, Hydrologic Unit 10190004, on left bank 200 ft upstream from Naylor Creek, and 9.5 mi south of Georgetown.

DRAINAGE AREA.--2.19 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1996 to September 1997 (discontinued).

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 10,710 ft above sea level, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. No known regulation or diversions.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.93	e.54	e.45	e.40	e.35	e.32	e.42	e1.0	17	3.0	2.1	1.3
2	.85	e.54	e.45	e.40	e.34	e.32	e.45	e1.0	15	2.9	2.0	1.3
3	.82	e.54	e.45	e.40	e.34	e.31	e.48	e1.0	13	2.8	1.7	1.5
4	.78	e.54	e.45	e.40	e.33	e.32	e.51	e1.0	13	2.8	2.0	1.6
5	.75	e.54	e.45	e.40	e.32	e.32	e.54	e1.4	11	2.7	2.0	1.1
6	.72	e.54	e.45	e.40	e.32	e.32	e.54	e2.0	12	2.6	2.6	1.1
7	.70	e.54	e.45	e.40	e.32	e.32	e.54	e2.7	18	2.6	2.8	1.0
8	.66	e.54	e.45	e.40	e.32	e.32	e.54	4.1	13	2.6	2.3	.97
9	.65	e.54	e.45	e.40	e.32	e.32	e.54	5.0	11	2.5	2.0	.95
10	.63	e.54	e.45	e.40	e.32	e.32	e.54	e5.7	10	2.4	4.0	.94
11	.62	e.54	e.45	e.40	e.32	e.32	e.54	e6.6	9.6	2.4	2.7	.96
12	.61	e.54	e.45	e.40	e.32	e.32	e.54	e7.8	8.3	2.3	2.4	.88
13	.61	e.54	e.45	e.39	e.32	e.32	e.54	8.9	9.9	2.0	2.1	.81
14	.61	e.54	e.45	e.38	e.32	e.32	e.54	11	9.6	1.9	1.7	.79
15	.60	e.54	e.45	e.37	e.32	e.32	e.54	13	7.8	1.7	1.4	.79
16	e.62	e.54	e.43	e.37	e.32	e.32	e.54	16	7.2	1.7	1.2	.83
17	e.61	e.54	e.42	e.37	e.32	e.33	e.54	19	7.0	1.7	1.2	.77
18	e.60	e.54	e.41	e.38	e.32	e.34	e.54	19	6.6	1.9	1.3	.77
19	e.60	e.52	e.40	e.39	e.32	e.35	e.57	18	6.4	2.0	1.2	.80
20	e.60	e.51	e.40	e.40	e.32	e.37	e.60	14	5.8	2.0	1.1	1.4
21	e.60	e.50	e.40	e.40	e.32	e.38	e.63	13	5.3	1.6	1.2	1.4
22	e.58	e.49	e.40	e.40	e.32	e.39	e.58	14	5.3	1.5	1.1	1.6
23	e.57	e.48	e.40	e.40	e.32	e.40	e.56	15	5.4	1.5	1.1	1.3
24	e.56	e.47	e.40	e.40	e.32	e.40	e.56	13	5.0	1.3	1.2	1.1
25	e.56	e.46	e.40	e.40	e.32	e.40	e.80	12	4.1	1.3	1.3	.99
26	e.55	e.45	e.40	e.40	e.32	e.40	e1.0	10	3.8	1.4	1.3	1.0
27	e.54	e.45	e.40	e.40	e.32	e.40	e1.2	9.8	3.6	1.8	1.3	.97
28	e.54	e.45	e.40	e.40	e.32	e.40	e1.0	11	3.4	2.2	1.2	.88
29	e.54	e.45	e.40	e.40	---	e.40	e1.0	13	3.3	2.1	1.1	.82
30	e.54	e.45	e.40	e.40	---	e.40	e1.0	17	3.1	2.7	1.1	.81
31	e.54	---	e.40	e.41	---	e.41	---	18	---	2.1	1.2	---
TOTAL	19.69	15.40	13.21	12.26	9.04	10.88	18.92	304.0	253.5	66.0	52.9	31.43
MEAN	.64	.51	.43	.40	.32	.35	.63	9.81	8.45	2.13	1.71	1.05
MAX	.93	.54	.45	.41	.35	.41	1.2	19	18	3.0	4.0	1.6
MIN	.54	.45	.40	.37	.32	.31	.42	1.0	3.1	1.3	1.1	.77
AC-FT	39	31	26	24	18	22	38	603	503	131	105	62

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 1997, BY WATER YEAR (WY)

	1996	1997	1997	1997	1997	1997	1997	1996	1996	1997	1996	1996
MEAN	.64	.51	.43	.40	.32	.35	.63	9.42	6.95	2.19	1.20	.88
MAX	.64	.51	.43	.40	.32	.35	.63	9.81	8.45	2.24	1.71	1.05
(WY)	1997	1997	1997	1997	1997	1997	1997	1997	1997	1996	1997	1997
MIN	.64	.51	.43	.40	.32	.35	.63	9.04	5.45	2.13	.69	.71
(WY)	1997	1997	1997	1997	1997	1997	1997	1996	1996	1997	1996	1996

SUMMARY STATISTICS

FOR 1997 WATER YEAR

WATER YEARS 1996 - 1997

ANNUAL TOTAL	807.23	
ANNUAL MEAN	2.21	2.21
HIGHEST ANNUAL MEAN		2.21 1997
LOWEST ANNUAL MEAN		2.21 1997
HIGHEST DAILY MEAN	^a 19 May 17	^{e,b} 19 May 19 1996
LOWEST DAILY MEAN	^e .31 Mar 3	^e .31 Mar 3 1997
ANNUAL SEVEN-DAY MINIMUM	.32 Feb 25	^e .32 Feb 25 1997
INSTANTANEOUS PEAK FLOW	31 May 17	31 May 17 1997
INSTANTANEOUS PEAK STAGE	7.83 May 17	7.83 May 17 1997
ANNUAL RUNOFF (AC-FT)	1600	1600
10 PERCENT EXCEEDS	7.1	8.0
50 PERCENT EXCEEDS	.58	.82
90 PERCENT EXCEEDS	.32	.38

e-Estimated.

a-Also occurred May 18.

b-Also occurred May 17-18, 1997, which were not estimated days.

393647105425317 SOUTH CLEAR CREEK ABOVE NAYLOR CREEK NEAR GEORGETOWN, CO--Continued

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM @ 25 DEG. C), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	---	---	---	80	77	79
2	---	---	---	---	---	---	---	---	---	82	80	81
3	---	---	---	---	---	---	---	---	---	83	82	82
4	---	---	---	---	---	---	---	---	---	85	75	82
5	---	---	---	---	---	---	---	---	---	77	69	74
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	65	57	62
9	---	---	---	---	---	---	---	---	---	61	54	58
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	55	41	51
14	---	---	---	---	---	---	---	---	---	50	40	48
15	---	---	---	---	---	---	---	---	---	52	39	48
16	---	---	---	---	---	---	---	---	---	48	38	44
17	---	---	---	---	---	---	---	---	---	41	28	37
18	---	---	---	---	---	---	---	---	---	43	36	39
19	---	---	---	---	---	---	---	---	---	44	34	40
20	---	---	---	---	---	---	---	---	---	42	36	40
21	---	---	---	---	---	---	---	---	---	45	39	43
22	---	---	---	---	---	---	---	---	---	46	41	43
23	---	---	---	---	---	---	---	---	---	50	39	45
24	---	---	---	---	---	---	---	---	---	45	39	43
25	---	---	---	---	---	---	---	---	---	46	42	44
26	---	---	---	---	---	---	---	---	---	49	43	47
27	---	---	---	---	---	---	---	---	---	55	49	52
28	---	---	---	---	---	---	---	---	---	60	51	56
29	---	---	---	---	---	---	77	75	76	61	47	56
30	---	---	---	---	---	---	78	75	77	52	40	47
31	---	---	---	---	---	---	---	---	---	52	35	45
MONTH	---	---	---	---	---	---	---	---	---	---	---	---
	JUNE			JULY			AUGUST			SEPTEMBER		
1	50	40	45	86	82	84	84	77	81	85	79	82
2	53	42	48	90	81	85	87	77	83	84	79	81
3	55	46	50	92	84	88	92	72	86	102	70	81
4	56	44	51	91	86	88	84	73	81	87	76	82
5	56	47	53	91	86	89	85	76	80	87	69	83
6	59	48	56	93	87	90	78	64	69	86	79	83
7	54	43	48	95	84	90	70	59	65	85	63	78
8	55	46	50	88	86	87	81	63	72	87	43	69
9	55	49	53	91	86	88	81	65	77	73	46	60
10	59	54	57	93	88	90	66	52	57	100	47	74
11	60	56	58	91	87	88	73	60	67	99	95	97
12	63	58	61	95	87	90	75	68	72	104	96	99
13	62	50	57	101	91	96	80	72	76	106	98	102
14	57	52	55	104	93	98	82	77	79	107	100	104
15	64	56	60	106	96	101	88	79	83	107	101	104
16	66	60	64	104	98	100	87	80	84	103	99	101
17	67	60	63	101	97	98	88	76	84	107	102	104
18	69	63	65	99	79	94	87	78	83	106	101	104
19	71	63	66	95	74	91	85	75	80	106	97	104
20	71	63	68	94	76	88	88	71	82	100	81	86
21	74	68	71	93	87	90	87	77	84	88	74	85
22	75	68	72	94	77	89	88	84	86	81	74	78
23	74	66	70	97	88	91	88	77	85	85	81	83
24	74	66	71	95	90	92	92	77	84	90	81	86
25	79	73	76	98	92	94	85	76	81	94	88	91
26	82	76	79	108	91	94	84	79	82	94	90	92
27	83	78	80	94	78	88	86	78	82	96	90	93
28	83	79	81	89	64	81	86	77	81	98	93	95
29	85	79	82	88	72	81	88	82	84	99	95	97
30	88	80	84	85	60	74	86	82	84	100	95	98
31	---	---	---	85	74	82	84	82	82	---	---	---
MONTH	88	40	63	108	60	90	92	52	79	107	43	89

393647105425317 SOUTH CLEAR CREEK ABOVE NAYLOR CREEK NEAR GEORGETOWN, CO--Continued

TEMPERATURE, WATER (DEG. C) WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	6.3	1.2	3.5	11.6	3.8	6.8	12.4	6.5	9.2	11.0	5.6	8.0
2	6.0	1.2	3.6	12.0	2.6	6.7	12.2	7.1	9.4	12.9	7.1	9.1
3	7.6	1.2	4.4	12.0	3.2	7.1	13.9	5.6	8.9	12.4	5.8	8.5
4	8.6	2.4	5.6	12.0	4.3	7.5	13.9	7.1	9.5	12.8	6.6	9.3
5	7.4	2.6	4.8	10.2	3.9	6.5	9.9	7.9	9.0	12.6	5.1	8.1
6	5.3	2.3	3.9	10.6	4.2	6.5	7.9	5.9	7.0	10.3	5.5	7.3
7	7.1	2.0	4.1	12.2	3.4	7.1	9.5	4.4	6.8	11.7	3.5	6.8
8	5.1	2.6	3.8	9.1	4.6	6.5	12.0	4.7	7.9	11.1	3.0	6.3
9	5.7	1.3	3.5	10.1	3.5	6.3	9.3	5.4	7.2	10.3	3.9	6.6
10	7.3	2.7	4.7	11.0	4.0	7.0	10.6	7.0	8.2	9.1	3.5	6.2
11	8.0	2.1	4.8	8.2	4.9	6.5	9.8	4.4	6.6	9.6	4.5	7.0
12	8.6	2.6	5.1	11.1	3.6	6.7	10.7	3.3	6.3	10.9	4.9	7.0
13	7.2	1.3	4.9	12.5	4.1	7.5	11.7	4.2	7.0	10.6	2.7	6.1
14	8.1	3.8	5.6	13.5	3.7	7.9	9.4	4.6	6.6	10.0	3.7	6.3
15	9.7	2.3	5.6	14.0	4.4	8.4	12.9	4.5	7.7	8.9	3.6	6.0
16	7.6	3.3	5.3	10.7	4.7	7.5	12.2	4.4	7.7	8.9	4.3	6.0
17	9.5	3.6	6.1	10.0	4.7	7.2	10.0	4.8	7.3	8.9	2.5	5.3
18	11.7	3.8	6.9	9.6	4.6	6.8	11.1	5.8	7.8	8.8	4.1	6.1
19	11.8	5.2	8.0	9.4	5.0	7.3	10.6	4.3	6.9	8.7	4.1	6.1
20	11.7	4.6	7.7	10.1	5.2	7.6	12.5	4.1	7.5	7.1	4.1	5.5
21	11.0	4.4	7.5	11.1	4.4	7.5	9.5	4.8	6.7	7.4	4.5	5.5
22	12.5	5.1	8.2	9.8	5.1	7.5	11.1	4.6	7.5	7.4	3.4	4.9
23	9.8	5.1	7.2	10.2	5.5	7.9	12.2	4.4	7.8	4.9	2.7	3.7
24	9.7	4.1	6.6	14.7	5.7	9.3	12.2	4.8	7.9	8.2	.6	3.8
25	11.6	4.4	7.2	11.5	5.8	8.7	9.7	5.5	7.5	8.2	.2	4.0
26	12.2	4.7	7.8	11.2	5.7	8.1	12.4	6.1	8.6	8.2	3.6	5.7
27	9.8	4.6	7.1	10.3	7.1	8.3	12.6	5.4	8.4	9.2	3.4	5.7
28	10.6	4.3	7.0	9.2	6.8	7.7	13.4	5.9	9.0	7.6	1.1	4.0
29	10.0	3.9	6.7	11.2	7.3	8.9	12.3	5.8	8.2	7.4	.3	3.3
30	12.5	3.3	7.2	14.2	7.8	10.2	10.1	4.7	7.3	8.2	1.1	4.1
31	---	---	---	11.0	7.5	9.4	9.6	4.9	7.2	---	---	---
MONTH	12.5	1.2	5.8	14.7	2.6	7.6	13.9	3.3	7.8	12.9	.2	6.1

393647105425317 SOUTH CLEAR CREEK ABOVE NAYLOR CREEK NEAR GEORGETOWN, CO--Continued

PRECIPITATION RECORDS

PERIOD OF RECORD.--July 1996 to September 1997 (discontinued), seasonal records only.

GAGE.--Tipping-bucket rain gage (no wind shields used) with satellite telemetry. Elevation of gage is 10,710 ft above sea level, from topographic map.

REMARKS.--Records poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily rainfall, 0.74 inches, Sept. 3, 1997.

EXTREMES FOR CURRENT YEAR.--Maximum daily rainfall during period of seasonal operation, 0.74 inches, Sept. 3.

PRECIPITATION (INCHES), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	---	---	---	---	---	.00	.05	.00	.00	.06	.20
2	.00	---	---	---	---	---	.00	.10	.00	.00	.04	.09
3	.00	---	---	---	---	---	.17	.03	.00	.00	.01	.74
4	.00	---	---	---	---	---	.02	.00	.07	.00	.08	.02
5	.00	---	---	---	---	---	.00	.00	.01	.00	.15	.00
6	.00	---	---	---	---	---	.00	---	.65	.00	---	.03
7	.00	---	---	---	---	---	.02	---	.47	.14	---	.00
8	.00	---	---	---	---	---	.00	.00	.35	.01	---	.00
9	.00	---	---	---	---	---	.03	.00	.12	.02	---	.00
10	.00	---	---	---	---	---	.00	---	.05	.02	---	.00
11	.00	---	---	---	---	---	.00	---	.22	.03	---	.05
12	.00	---	---	---	---	---	.00	---	.00	.00	.04	.00
13	.00	---	---	---	---	---	.00	.00	.44	.00	.02	.00
14	.00	---	---	---	---	---	.03	.03	.14	.00	.01	.00
15	.00	---	---	---	---	---	.20	.03	.00	.00	.00	.07
16	.00	---	---	---	---	---	.27	.00	.11	.01	.00	.05
17	.00	---	---	---	---	---	.25	.00	.00	.09	.01	.00
18	.03	---	---	---	---	---	.05	.01	.00	.21	.08	.01
19	.11	---	---	---	---	---	.00	.10	.00	.03	.01	.20
20	.00	---	---	---	---	---	.00	.06	.00	.00	.00	.29
21	.00	---	---	---	---	---	.05	.27	.13	.00	.06	.30
22	.02	---	---	---	---	---	.09	.33	.07	.00	.00	.02
23	.01	---	---	---	---	---	.18	.00	.17	.08	.00	.06
24	.00	---	---	---	---	---	.00	.20	.01	.00	.14	.00
25	.00	---	---	---	---	---	.03	.00	.00	.00	.12	.00
26	.00	---	---	---	---	---	.05	.03	.01	.13	.05	.05
27	.05	---	---	---	---	---	.40	.00	.00	.27	.17	.00
28	.04	---	---	---	---	---	.13	.04	.01	.22	.05	.00
29	.01	---	---	---	---	---	.16	.26	.00	.10	.00	.00
30	.00	---	---	---	---	---	.14	.02	.00	.07	.02	.00
31	.01	---	---	---	---	---	---	.00	---	.08	.04	---
TOTAL	0.28	---	---	---	---	---	2.27	---	3.03	1.51	---	2.18

06714400 SOUTH CLEAR CREEK ABOVE LOWER CABIN CREEK RESERVOIR NEAR GEORGETOWN, CO

LOCATION (REVISED).--Lat 39°38'47", long 105°42'23", (unsurveyed), T.5 S., R.74 W., Clear Creek County, Hydrologic Unit 10190004, on right bank, 0.5 mi south of Lower Cabin Creek Reservoir, and 4.0 mi south of Georgetown.

DRAINAGE AREA.--Not determined.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1994 to September 1997 (discontinued).

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 10,100 ft above sea level, from topographic map. Prior to Oct. 22, 1996, at site 0.5 mi downstream at different datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. No known diversions upstream of station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.9	e5.0	e4.0	e3.5	e3.0	e2.9	e4.5	4.8	42	42	26	17
2	6.5	e5.0	e4.0	e3.5	e3.0	e2.9	e4.5	4.6	45	40	26	17
3	6.1	e5.0	e4.0	e3.5	e3.0	e2.8	e4.5	4.9	45	39	26	19
4	4.7	e5.0	e4.0	e3.5	e3.0	e2.9	e4.5	5.9	47	38	26	18
5	4.4	e5.0	e4.0	e3.5	e3.0	e2.9	e4.5	7.5	46	37	26	16
6	4.3	e5.4	e4.0	e3.5	e3.0	e3.0	e4.5	9.1	45	36	27	16
7	4.2	e5.9	e4.0	e3.5	e3.0	e3.0	e4.5	11	54	36	28	15
8	e4.3	e5.7	e4.0	e3.5	e3.0	e3.0	e4.5	13	51	35	26	15
9	e4.3	e5.4	e4.0	e3.5	e3.0	e3.0	e4.5	15	47	34	26	14
10	e4.4	e5.2	e4.0	e3.5	e3.0	e3.0	e4.5	18	45	33	30	14
11	e4.6	e5.1	e4.0	e3.5	e3.0	e3.0	e4.5	20	46	32	27	13
12	e4.7	e5.0	e4.0	e3.5	e3.0	e3.0	e4.3	19	46	30	26	13
13	e4.9	e5.0	e4.0	e3.5	e3.0	e3.0	e4.1	22	49	29	26	13
14	e5.0	e5.0	e4.0	e3.4	e3.0	e3.0	e4.0	27	51	29	26	12
15	e5.0	e5.0	e4.0	e3.3	e3.0	e3.0	e4.0	31	48	28	25	12
16	e5.0	e5.0	e3.9	e3.2	e3.0	e3.0	e4.0	37	48	28	24	12
17	e5.0	e5.0	e3.8	e3.1	e3.0	e3.1	e4.2	41	47	28	24	11
18	e5.0	e4.7	e3.8	e3.1	e3.0	e3.1	4.7	43	47	27	23	11
19	e5.0	e4.6	e3.7	e3.0	e3.0	e3.2	6.4	43	47	27	22	11
20	e5.0	e4.5	e3.7	e3.0	e3.0	e3.4	7.8	40	48	27	22	12
21	e5.0	e4.4	e3.6	e3.0	e3.0	e3.5	7.2	39	49	26	21	11
22	e5.0	e4.3	e3.6	e3.0	e3.0	e3.6	5.4	40	49	25	21	11
23	e5.0	e4.2	e3.5	e3.0	e3.0	e3.8	5.1	38	50	25	20	11
24	e5.0	e4.1	e3.5	e3.0	e3.0	e3.9	9.9	38	50	24	20	10
25	e5.0	e4.0	e3.5	e3.0	e3.0	e4.0	e11	35	49	24	21	9.5
26	e5.0	e4.0	e3.5	e3.0	e3.0	e4.0	e9.0	31	48	24	20	9.2
27	e5.0	e4.0	e3.5	e3.0	e3.0	e4.0	e7.0	26	46	25	20	8.9
28	e5.0	e4.0	e3.5	e3.0	e3.0	e4.0	5.2	24	45	26	19	8.7
29	e5.0	e4.0	e3.5	e3.0	---	e4.0	5.2	26	43	25	18	8.6
30	e5.0	e4.0	e3.5	e3.0	---	e4.0	5.0	29	43	27	18	8.4
31	e5.0	---	e3.5	e3.0	---	e4.2	---	35	---	25	17	---
TOTAL	154.3	142.5	117.6	100.6	84.0	103.2	163.0	777.8	1416	931	727	377.3
MEAN	4.98	4.75	3.79	3.25	3.00	3.33	5.43	25.1	47.2	30.0	23.5	12.6
MAX	6.9	5.9	4.0	3.5	3.0	4.2	11	43	54	42	30	19
MIN	4.2	4.0	3.5	3.0	3.0	2.8	4.0	4.6	42	24	17	8.4
AC-FT	306	283	233	200	167	205	323	1540	2810	1850	1440	748

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 1997, BY WATER YEAR (WY)

	1995	1996	1997	1995	1996	1997	1995	1996	1997	1995	1996	1997
MEAN	6.16	4.82	3.75	2.82	2.59	2.76	3.72	18.6	47.0	36.8	19.5	10.9
MAX	8.18	5.41	4.46	3.36	3.00	3.33	5.43	25.1	64.2	56.1	23.5	12.9
(WY)	1996	1996	1996	1996	1997	1997	1997	1997	1995	1995	1997	1995
MIN	4.98	4.29	3.01	1.85	1.81	2.02	1.98	6.58	29.5	24.4	11.5	7.22
(WY)	1997	1995	1995	1995	1995	1995	1995	1995	1996	1996	1996	1996

SUMMARY STATISTICS

FOR 1996 CALENDAR YEAR

FOR 1997 WATER YEAR

WATER YEARS 1995 - 1997

ANNUAL TOTAL	3775.5	5094.3	
ANNUAL MEAN	10.3	14.0	13.3
HIGHEST ANNUAL MEAN			15.3
LOWEST ANNUAL MEAN			10.7
HIGHEST DAILY MEAN			107
LOWEST DAILY MEAN	e2.5	e2.8	a1.6
ANNUAL SEVEN-DAY MINIMUM	2.6	2.9	1.6
INSTANTANEOUS PEAK FLOW		59	b
INSTANTANEOUS PEAK STAGE		1.70	c
ANNUAL RUNOFF (AC-FT)	7490	10100	9660
10 PERCENT EXCEEDS	30	40	33
50 PERCENT EXCEEDS	5.0	5.0	5.1
90 PERCENT EXCEEDS	3.0	3.0	2.2

e-Estimated.

a-Also occurred Feb 5-13, 1995

b-Probably occurred Jun 19, 1995.

c-Site and datum then in use.

06714400 SOUTH CLEAR CREEK ABOVE LOWER CABIN CREEK RESERVOIR NEAR GEORGETOWN, CO--Continued

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM @ 25 DEG. C), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	---	---	---	95	89	90
2	---	---	---	---	---	---	---	---	---	96	88	91
3	---	---	---	---	---	---	---	---	---	96	88	92
4	---	---	---	---	---	---	---	---	---	95	87	90
5	---	---	---	---	---	---	---	---	---	91	85	89
6	---	---	---	---	---	---	---	---	---	89	84	86
7	---	---	---	---	---	---	---	---	---	85	81	84
8	---	---	---	---	---	---	---	---	---	84	79	82
9	---	---	---	---	---	---	---	---	---	82	76	79
10	---	---	---	---	---	---	---	---	---	78	72	75
11	---	---	---	---	---	---	---	---	---	76	71	72
12	---	---	---	---	---	---	---	---	---	76	72	75
13	---	---	---	---	---	---	---	---	---	76	67	73
14	---	---	---	---	---	---	---	---	---	71	66	69
15	---	---	---	---	---	---	---	---	---	71	61	67
16	---	---	---	---	---	---	---	---	---	67	59	63
17	---	---	---	---	---	---	---	---	---	64	53	60
18	---	---	---	---	---	---	---	---	---	60	54	57
19	---	---	---	---	---	---	---	---	---	60	54	57
20	---	---	---	---	---	---	---	---	---	61	55	59
21	---	---	---	---	---	---	---	---	---	64	60	62
22	---	---	---	---	---	---	---	---	---	64	60	62
23	---	---	---	---	---	---	---	---	---	67	59	64
24	---	---	---	---	---	---	---	---	---	65	59	63
25	---	---	---	---	---	---	---	---	---	66	61	64
26	---	---	---	---	---	---	---	---	---	67	62	65
27	---	---	---	---	---	---	---	---	---	69	66	68
28	---	---	---	---	---	---	---	---	---	70	68	69
29	---	---	---	---	---	---	---	---	---	70	63	68
30	---	---	---	---	---	---	---	---	---	67	59	64
31	---	---	---	---	---	---	---	---	---	66	53	61
MONTH	---	---	---	---	---	---	---	---	---	96	53	72
	JUNE			JULY			AUGUST			SEPTEMBER		
1	60	53	57	54	52	53	53	52	53	67	58	61
2	59	52	56	54	52	53	53	52	53	62	60	61
3	59	54	57	54	51	53	55	52	53	69	57	62
4	60	54	57	54	52	53	54	53	53	67	63	64
5	59	54	57	54	52	53	54	53	54	64	62	63
6	61	57	60	54	51	53	54	53	54	64	62	63
7	61	54	58	55	51	53	54	53	54	64	62	63
8	60	55	58	55	51	53	54	53	54	64	63	63
9	62	56	59	55	53	54	55	53	54	64	63	63
10	63	58	61	55	54	54	55	53	54	64	63	64
11	63	59	61	55	54	55	54	53	54	65	63	64
12	62	58	61	56	54	55	55	54	55	65	63	64
13	62	56	59	56	54	55	55	54	55	65	64	64
14	60	55	58	56	54	55	55	54	55	65	64	65
15	60	50	58	55	54	55	55	54	55	66	64	65
16	61	54	58	56	54	55	55	54	55	66	63	66
17	60	55	59	56	55	56	56	55	55	67	65	66
18	60	55	58	56	54	55	57	55	56	---	---	---
19	59	51	56	56	54	55	57	56	56	---	---	---
20	57	51	55	56	54	55	57	56	56	---	---	---
21	56	53	55	55	54	55	57	56	57	---	---	---
22	56	52	55	55	54	55	58	56	57	---	---	---
23	55	48	54	55	54	55	58	57	57	---	---	---
24	55	51	54	55	54	54	59	57	58	---	---	---
25	55	53	54	55	53	54	59	57	58	---	---	---
26	55	52	54	55	53	54	59	57	59	---	---	---
27	54	52	53	55	53	54	60	58	59	---	---	---
28	54	52	53	55	53	54	60	59	59	---	---	---
29	54	52	53	54	52	53	60	59	59	---	---	---
30	54	52	53	54	53	53	60	58	59	---	---	---
31	---	---	---	54	52	53	61	59	60	---	---	---
MONTH	63	48	57	56	51	54	61	52	56	---	---	---

06714400 SOUTH CLEAR CREEK ABOVE LOWER CABIN CREEK RESERVOIR NEAR GEORGETOWN, CO--Continued

TEMPERATURE, WATER (DEG. C) WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	6.8	2.3	4.7	---	---	---	---	---	---	---	---	---
2	9.0	2.2	5.3	---	---	---	---	---	---	---	---	---
3	8.6	4.6	6.1	---	---	---	---	---	---	---	---	---
4	6.8	2.8	4.9	---	---	---	---	---	---	---	---	---
5	8.8	2.4	5.2	---	---	---	---	---	---	---	---	---
6	8.4	2.0	4.9	---	---	---	---	---	---	---	---	---
7	8.6	2.5	5.1	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	---	---	---	4.9	.1	1.6
2	---	---	---	---	---	---	---	---	---	5.0	.1	1.4
3	---	---	---	---	---	---	---	---	---	6.4	.1	2.3
4	---	---	---	---	---	---	---	---	---	8.0	.4	3.6
5	---	---	---	---	---	---	---	---	---	8.0	.5	3.9
6	---	---	---	---	---	---	---	---	---	7.3	.7	3.5
7	---	---	---	---	---	---	---	---	---	7.8	.8	3.3
8	---	---	---	---	---	---	---	---	---	7.9	.2	3.0
9	---	---	---	---	---	---	---	---	---	8.2	.2	3.1
10	---	---	---	---	---	---	---	---	---	8.1	.2	3.0
11	---	---	---	---	---	---	---	---	---	6.0	.3	2.2
12	---	---	---	---	---	---	---	---	---	7.5	.4	2.9
13	---	---	---	---	---	---	---	---	---	7.6	.9	3.1
14	---	---	---	---	---	---	---	---	---	6.9	.6	2.8
15	---	---	---	---	---	---	---	---	---	8.6	.7	3.2
16	---	---	---	---	---	---	---	---	---	7.8	.9	3.1
17	---	---	---	---	---	---	---	---	---	7.6	1.0	3.2
18	---	---	---	---	---	---	---	---	---	7.6	1.1	3.1
19	---	---	---	---	---	---	---	---	---	8.2	1.3	3.6
20	---	---	---	---	---	---	---	---	---	5.8	1.0	3.0
21	---	---	---	---	---	---	---	---	---	6.0	1.5	3.3
22	---	---	---	---	---	---	---	---	---	3.9	2.2	3.0
23	---	---	---	---	---	---	---	---	---	9.1	1.5	4.2
24	---	---	---	---	---	---	---	---	---	5.7	2.0	3.3
25	---	---	---	---	---	---	---	---	---	8.3	1.2	3.6
26	---	---	---	---	---	---	---	---	---	6.3	.9	3.1
27	---	---	---	---	---	---	---	---	---	5.6	1.2	2.8
28	---	---	---	---	---	---	---	---	---	5.7	1.8	3.5
29	---	---	---	---	---	---	---	---	---	6.9	2.5	4.3
30	---	---	---	---	---	---	---	---	---	9.9	2.5	5.1
31	---	---	---	---	---	---	---	---	---	10.9	2.4	5.5
MONTH	---	---	---	---	---	---	---	---	---	10.9	.1	3.2

06714400 SOUTH CLEAR CREEK ABOVE LOWER CABIN CREEK RESERVOIR NEAR GEORGETOWN, CO--Continued

TEMPERATURE, WATER (DEG. C) WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	9.8	2.7	5.6	10.5	4.2	6.5	12.8	6.5	8.7	11.3	6.7	8.6
2	9.0	2.5	5.2	11.0	3.8	6.6	11.3	7.1	8.8	13.2	7.4	9.4
3	10.2	2.2	5.6	10.9	3.9	6.8	13.2	6.1	8.5	13.9	6.8	9.0
4	10.4	3.1	6.2	10.4	4.6	6.9	13.1	6.9	9.0	13.2	7.0	9.4
5	9.1	3.2	5.5	9.2	4.4	6.3	9.7	7.4	8.4	12.1	6.2	8.6
6	6.0	3.4	4.5	9.6	4.7	6.5	7.6	6.2	7.0	10.7	6.4	8.0
7	7.9	2.9	4.9	11.5	4.3	7.0	9.6	5.2	7.3	11.1	5.1	7.5
8	5.3	3.2	4.2	7.9	5.0	6.4	12.7	5.5	8.3	11.9	4.9	7.6
9	6.7	2.3	4.2	9.1	4.4	6.4	9.9	6.2	7.7	11.6	5.6	7.8
10	8.3	3.3	5.1	10.4	4.8	7.0	10.4	7.0	8.2	11.4	5.3	7.7
11	9.9	2.8	5.6	7.9	5.3	6.5	9.8	5.3	7.1	10.4	6.0	8.0
12	9.1	3.1	5.5	10.3	4.8	6.9	11.6	4.8	7.4	12.1	6.1	8.1
13	8.3	2.4	5.4	11.9	4.8	7.5	11.7	5.6	7.8	12.6	4.8	7.7
14	8.9	4.0	5.8	12.7	4.6	7.7	10.8	5.8	7.6	11.8	5.4	7.9
15	10.2	2.8	5.7	12.9	5.0	8.0	12.8	5.9	8.3	10.4	5.4	7.4
16	8.0	3.4	5.3	10.3	5.3	7.4	11.7	6.0	8.3	10.4	5.6	7.3
17	9.3	3.9	6.0	9.8	5.3	7.2	10.4	6.1	8.0	10.9	4.6	7.0
18	10.5	3.9	6.4	9.0	5.4	6.9	11.3	6.7	8.3	---	---	---
19	11.1	4.9	7.2	9.5	5.5	7.3	10.7	5.9	7.7	---	---	---
20	11.1	4.3	7.0	10.0	5.7	7.6	12.2	5.7	8.1	---	---	---
21	10.0	4.2	6.7	10.7	5.2	7.6	10.5	6.2	7.7	---	---	---
22	11.0	4.8	7.3	10.2	5.8	7.6	11.7	6.1	8.2	---	---	---
23	8.7	4.5	6.3	9.9	6.0	7.9	12.4	6.0	8.6	---	---	---
24	9.2	4.1	6.2	13.7	6.1	9.0	12.5	6.4	8.7	---	---	---
25	9.7	4.5	6.5	11.0	6.1	8.3	10.2	6.7	8.3	---	---	---
26	10.8	4.7	6.9	10.7	6.1	8.0	12.0	7.1	8.9	---	---	---
27	8.5	4.5	6.4	10.0	7.1	8.0	12.5	6.5	8.9	---	---	---
28	9.8	4.4	6.5	9.5	6.8	7.7	14.3	6.8	9.5	---	---	---
29	10.0	4.3	6.7	10.4	7.2	8.5	12.3	6.8	8.6	---	---	---
30	11.2	4.1	6.9	13.9	7.3	9.5	10.4	6.1	8.0	---	---	---
31	---	---	---	10.2	7.2	8.6	10.6	6.3	8.1	---	---	---
MONTH	11.2	2.2	5.9	13.9	3.8	7.4	14.3	4.8	8.2	---	---	---

**06714400 SOUTH CLEAR CREEK ABOVE LOWER CABIN CREEK RESERVOIR NEAR GEORGETOWN, CO--Continued
PRECIPITATION RECORDS**

PERIOD OF RECORD.--July to September 1997 (discontinued).

GAGE.--Tipping-bucket rain gage (no wind shields used) with satellite telemetry. Elevation of gage is 10,100 ft above sea level, from topographic map.

REMARKS.--Records poor.

EXTREMES FOR CURRENT YEAR.--Maximum daily rainfall during period from July to September, 1.24 inches, Sept. 3.

PRECIPITATION (INCHES), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	---	.04	.30
2	---	---	---	---	---	---	---	---	---	---	.00	.33
3	---	---	---	---	---	---	---	---	---	---	.52	1.24
4	---	---	---	---	---	---	---	---	---	---	.00	.00
5	---	---	---	---	---	---	---	---	---	---	.20	.00
6	---	---	---	---	---	---	---	---	---	---	.46	.00
7	---	---	---	---	---	---	---	---	---	---	.08	.00
8	---	---	---	---	---	---	---	---	---	---	.00	.00
9	---	---	---	---	---	---	---	---	---	---	.12	.00
10	---	---	---	---	---	---	---	---	---	---	.44	.00
11	---	---	---	---	---	---	---	---	---	---	.04	.05
12	---	---	---	---	---	---	---	---	---	---	.01	.00
13	---	---	---	---	---	---	---	---	---	---	.00	.00
14	---	---	---	---	---	---	---	---	---	---	.01	.00
15	---	---	---	---	---	---	---	---	---	.02	.00	.05
16	---	---	---	---	---	---	---	---	---	.09	.00	.00
17	---	---	---	---	---	---	---	---	---	.90	.01	.00
18	---	---	---	---	---	---	---	---	---	.49	.24	.01
19	---	---	---	---	---	---	---	---	---	.19	.01	.14
20	---	---	---	---	---	---	---	---	---	.04	.00	.17
21	---	---	---	---	---	---	---	---	---	.01	.02	.13
22	---	---	---	---	---	---	---	---	---	.01	.00	.03
23	---	---	---	---	---	---	---	---	---	.06	.00	.00
24	---	---	---	---	---	---	---	---	---	.00	.14	.00
25	---	---	---	---	---	---	---	---	---	.00	.06	.00
26	---	---	---	---	---	---	---	---	---	.16	.55	.03
27	---	---	---	---	---	---	---	---	---	.28	.15	.00
28	---	---	---	---	---	---	---	---	---	.34	.02	.00
29	---	---	---	---	---	---	---	---	---	.27	.00	.00
30	---	---	---	---	---	---	---	---	---	.16	.07	.00
31	---	---	---	---	---	---	---	---	---	.30	.12	---
TOTAL	---	---	---	---	---	---	---	---	---	---	3.31	2.48

06714600 SOUTH CLEAR CREEK ABOVE LEAVENWORTH CREEK NEAR GEORGETOWN, CO

LOCATION.--Lat 39°41'13", long 105°41'56", in NE¼SW¼ sec.20, T.4 S., R.74 W., Clear Creek County, Hydrologic Unit 10190004, on right bank 240 ft upstream from the confluence of Leavenworth Creek, and 3.1 mi south of Georgetown.

DRAINAGE AREA.--16.0 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1994 to September 1997 (discontinued).

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

REMARKS.--No estimated daily discharges. Records good. Flow is entirely regulated by Lower Cabin Creek Reservoir.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	7.5	4.9	5.1	4.3	4.0	4.3	5.4	58	67	29	22
2	11	7.0	5.1	5.1	4.3	4.0	4.3	5.3	67	67	27	22
3	11	6.8	5.2	5.1	4.3	3.9	4.3	5.4	67	60	28	22
4	11	6.1	5.3	5.0	4.1	3.9	4.4	5.5	67	49	26	22
5	10	4.6	5.5	4.7	4.2	3.9	4.3	5.8	72	50	28	22
6	9.6	4.6	5.7	4.7	4.2	3.9	4.2	6.2	74	54	34	22
7	9.2	4.5	5.7	4.7	4.2	3.9	4.3	6.5	80	50	40	22
8	6.9	4.3	5.8	4.7	4.2	3.9	4.3	6.8	90	40	29	22
9	6.0	4.2	5.9	4.7	4.2	3.9	4.4	8.0	77	44	24	22
10	8.3	4.1	5.9	4.5	4.2	3.9	4.4	8.2	67	37	26	22
11	8.3	3.9	5.9	4.2	4.2	4.0	4.4	8.2	71	40	43	22
12	8.4	3.9	5.9	4.2	4.1	4.0	4.4	8.0	75	41	37	21
13	8.3	4.1	5.8	4.2	4.2	4.0	4.4	8.5	90	41	29	21
14	8.4	4.4	5.7	4.2	4.2	4.0	4.2	10	113	39	28	20
15	8.3	4.6	5.5	4.2	4.2	4.1	4.3	13	99	35	24	20
16	8.5	4.7	5.5	4.2	4.1	4.1	4.3	13	78	33	23	20
17	8.7	5.0	5.5	4.1	4.2	4.1	4.4	14	71	33	23	18
18	8.9	5.3	5.5	4.7	4.2	4.1	4.5	15	73	34	24	19
19	8.9	5.2	5.5	4.7	4.1	4.1	4.6	16	78	40	27	19
20	9.0	4.5	5.5	4.7	4.2	4.1	4.6	17	77	35	26	19
21	8.8	4.5	5.1	4.6	4.1	4.2	4.8	18	77	30	24	18
22	8.5	4.6	5.5	4.5	4.0	4.2	4.7	24	89	32	23	18
23	8.2	4.6	5.5	4.5	3.9	4.2	4.8	50	108	32	24	18
24	7.8	4.6	5.4	4.5	3.9	4.2	4.9	62	94	29	25	17
25	7.5	4.5	5.4	4.5	3.8	4.2	4.9	58	70	29	24	17
26	7.4	4.5	5.4	4.5	3.7	4.3	4.9	61	68	25	24	16
27	7.4	4.5	5.4	4.4	3.9	4.3	5.1	56	64	24	24	16
28	7.3	4.6	5.3	4.3	4.1	4.3	5.3	42	65	24	23	15
29	7.6	4.7	5.3	4.4	---	4.2	5.3	35	68	32	22	15
30	7.9	4.8	5.2	4.4	---	4.2	5.4	39	64	35	22	15
31	7.9	---	5.2	4.4	---	4.3	---	47	---	32	22	---
TOTAL	266.0	145.2	170.0	140.7	115.3	126.4	137.4	677.8	2311	1213	832	584
MEAN	8.58	4.84	5.48	4.54	4.12	4.08	4.58	21.9	77.0	39.1	26.8	19.5
MAX	11	7.5	5.9	5.1	4.3	4.3	5.4	62	113	67	43	22
MIN	6.0	3.9	4.9	4.1	3.7	3.9	4.2	5.3	58	24	22	15
AC-FT	528	288	337	279	229	251	273	1340	4580	2410	1650	1160

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 1997, BY WATER YEAR (WY)

	1995	1996	1996	1996	1996	1995	1996	1996	1997	1995	1995	1996
MEAN	10.1	6.44	6.05	5.08	4.05	7.54	7.51	18.7	65.2	51.9	25.7	16.1
MAX	14.4	8.40	8.42	6.84	4.17	11.7	11.0	26.1	77.0	77.5	34.4	19.5
(WY)	1996	1996	1996	1996	1996	1995	1996	1996	1997	1995	1995	1997
MIN	7.35	4.84	4.25	3.87	3.87	4.08	4.58	8.13	48.1	39.0	15.7	10.2
(WY)	1995	1997	1995	1995	1995	1997	1997	1995	1996	1996	1996	1996

SUMMARY STATISTICS

FOR 1996 CALENDAR YEAR

FOR 1997 WATER YEAR

WATER YEARS 1995 - 1997

ANNUAL TOTAL	5712.3	6718.8	
ANNUAL MEAN	15.6	18.4	18.7
HIGHEST ANNUAL MEAN			21.2
LOWEST ANNUAL MEAN			16.6
HIGHEST DAILY MEAN	60	113	147
LOWEST DAILY MEAN	3.4	3.7	3.4
ANNUAL SEVEN-DAY MINIMUM	3.5	3.9	3.5
INSTANTANEOUS PEAK FLOW		127	215
INSTANTANEOUS PEAK STAGE		5.45	a 5.96
ANNUAL RUNOFF (AC-FT)	11330	13330	13580
10 PERCENT EXCEEDS	45	57	50
50 PERCENT EXCEEDS	8.3	6.0	8.6
90 PERCENT EXCEEDS	4.6	4.1	4.0

a-Maximum gage height, 6.78 ft, Jun 17, 1995, backwater from debris.

**06714600 SOUTH CLEAR CREEK ABOVE LEAVENWORTH CREEK NEAR GEORGETOWN, CO--Continued
WATER-QUALITY RECORDS**

PERIOD OF RECORD.--May 1995 to September 1997 (discontinued).

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: May 1995 to September 1997 (discontinued).

WATER TEMPERATURE: May 1995 to September 1997 (discontinued).

INSTRUMENTATION.--Water-quality monitor since with satellite telemetry May 1995.

REMARKS.--Water temperature and specific conductance records are good.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum 117 microsiemens, Aug. 3, 1996; minimum 64 microsiemens, July 21-23, 1995.

WATER TEMPERATURE: Maximum 13.9°C, July 24, 1996; minimum 0.0°C, Mar. 5-6, 1997.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 116 microsiemens, May 7-8; minimum, 72 microsiemens June 24.

WATER TEMPERATURE: Maximum, 13.4°C, Aug. 3; minimum, 0.0°C, on Mar. 5-6.

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM @ 25 DEG. C), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
				MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	90	90	90	94	94	94	96	96	96	101	100	100			
2	90	89	90	95	94	94	96	95	95	101	100	100			
3	90	89	89	95	94	95	95	95	95	100	99	100			
4	90	89	90	98	95	96	95	94	95	100	100	100			
5	91	90	90	98	97	98	95	93	95	101	100	101			
6	91	90	91	98	97	98	95	94	95	101	101	101			
7	92	91	92	98	97	97	95	94	95	102	101	101			
8	100	92	94	99	98	98	95	94	95	102	101	102			
9	102	93	96	100	98	99	95	94	95	102	102	102			
10	95	92	93	100	99	99	95	94	95	102	102	102			
11	94	92	93	100	99	100	95	94	95	102	101	101			
12	93	92	93	101	100	100	96	95	95	102	101	102			
13	93	92	93	100	99	100	96	96	96	103	102	102			
14	93	92	92	100	99	99	96	95	96	103	102	103			
15	93	92	92	99	97	98	96	95	96	103	102	103			
16	92	90	92	98	96	98	96	95	96	103	103	103			
17	92	91	92	98	96	97	96	95	96	103	103	103			
18	93	92	93	96	95	95	97	95	96	104	103	103			
19	94	93	93	97	95	96	97	97	97	104	104	104			
20	94	93	94	98	97	97	97	96	97	105	104	104			
21	95	94	94	98	97	97	98	97	97	104	103	104			
22	95	94	94	98	97	97	98	97	98	104	103	104			
23	95	94	94	98	97	97	99	98	98	104	104	104			
24	95	94	95	98	97	97	99	98	98	104	103	104			
25	95	94	95	98	97	98	99	99	99	104	104	104			
26	95	92	94	98	95	98	99	99	99	104	104	104			
27	96	95	95	99	98	98	100	99	99	105	104	104			
28	95	95	95	98	98	98	100	99	100	104	103	104			
29	95	94	94	98	97	98	100	100	100	104	103	104			
30	94	94	94	98	96	97	100	100	100	105	104	104			
31	94	93	94	---	---	---	101	100	100	105	104	104			
MONTH	102	89	93	101	94	97	101	93	97	105	99	103			

06714600 SOUTH CLEAR CREEK ABOVE LEAVENWORTH CREEK NEAR GEORGETOWN, CO--Continued

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM @ 25 DEG. C), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	104	104	104	103	102	103	105	102	104	109	107	108
2	104	103	104	104	103	103	105	102	104	108	107	107
3	104	103	103	103	102	103	106	104	105	109	106	107
4	104	103	103	103	101	103	106	100	105	110	107	108
5	104	103	103	103	102	103	106	104	105	111	109	110
6	104	102	103	105	103	104	106	104	105	112	110	111
7	104	103	103	105	104	105	106	105	105	116	109	112
8	104	103	103	106	104	105	106	104	105	116	112	114
9	104	103	103	106	105	105	106	104	105	112	110	111
10	104	103	103	106	105	105	105	104	104	111	109	110
11	103	103	103	106	105	105	105	104	105	110	108	109
12	103	102	102	106	105	105	106	100	105	110	109	109
13	102	102	102	106	105	105	106	105	106	109	107	108
14	102	101	102	105	104	105	107	106	106	109	103	106
15	102	102	102	106	104	105	108	106	107	104	103	103
16	103	102	103	106	105	105	109	106	108	103	102	102
17	104	103	103	106	105	105	109	107	108	104	102	102
18	103	103	103	106	104	105	109	107	108	104	100	102
19	103	103	103	106	104	105	111	108	109	102	97	100
20	103	101	102	106	104	105	112	108	110	100	98	99
21	103	102	103	106	105	105	112	109	111	100	94	98
22	103	102	103	106	105	105	110	108	109	97	93	95
23	103	102	103	107	105	105	109	106	108	93	87	90
24	103	102	102	105	103	104	108	103	105	89	88	88
25	103	102	102	105	104	104	108	106	107	89	88	89
26	103	102	103	106	104	105	109	106	108	89	87	88
27	103	103	103	106	104	105	107	106	106	90	87	88
28	103	100	103	106	104	105	108	106	107	91	88	90
29	---	---	---	106	104	105	108	106	108	92	91	91
30	---	---	---	106	104	105	109	107	108	91	88	90
31	---	---	---	106	104	105	---	---	---	90	84	87
MONTH	104	100	103	107	101	105	112	100	107	116	84	101
	JUNE			JULY			AUGUST			SEPTEMBER		
1	87	81	85	77	74	76	87	84	85	86	85	86
2	83	80	82	77	74	76	87	85	86	87	79	86
3	84	79	82	78	75	77	87	84	85	86	85	86
4	83	76	80	80	77	79	87	86	86	86	86	86
5	81	77	79	80	78	79	87	83	86	86	86	86
6	80	76	79	79	75	78	85	82	84	86	85	86
7	79	74	77	80	77	79	83	81	82	86	85	86
8	78	75	77	81	79	80	87	82	85	86	85	86
9	80	77	79	81	78	80	87	86	86	86	85	86
10	81	78	79	82	80	81	87	82	86	86	85	86
11	80	78	79	81	80	80	82	80	81	86	84	86
12	80	78	79	81	80	81	84	80	82	87	86	86
13	79	77	78	81	79	80	84	83	83	86	86	86
14	78	75	77	82	80	81	85	83	84	87	86	86
15	78	76	77	84	80	82	86	84	85	87	86	86
16	79	77	78	83	82	83	85	84	85	87	86	87
17	79	77	78	84	82	83	86	85	85	92	86	88
18	79	76	78	84	81	83	86	83	85	87	87	87
19	78	73	76	82	80	81	84	83	84	88	87	87
20	77	74	75	83	81	82	84	83	84	88	87	88
21	77	75	76	85	83	84	85	84	84	88	87	88
22	77	74	76	84	82	84	85	84	85	89	88	88
23	76	74	75	85	83	84	85	83	85	89	88	89
24	76	72	76	86	83	85	85	83	84	90	89	89
25	78	74	77	85	84	85	85	84	84	90	89	90
26	77	73	76	87	85	86	85	82	84	91	90	90
27	77	75	77	87	86	87	85	81	84	93	91	92
28	77	74	76	87	86	87	85	85	85	92	91	92
29	76	74	76	87	83	84	86	84	85	93	92	92
30	77	75	76	85	82	83	86	84	85	93	92	93
31	---	---	---	86	83	84	86	85	86	---	---	---
MONTH	87	72	78	87	74	82	87	80	85	93	79	88

06714600 SOUTH CLEAR CREEK ABOVE LEAVENWORTH CREEK NEAR GEORGETOWN, CO--Continued

TEMPERATURE, WATER (DEG. C) WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	9.5	7.3	7.9	5.7	3.9	4.4	2.8	1.3	2.2	3.2	2.1	2.6
2	9.5	7.1	8.0	5.8	3.8	4.4	2.5	1.2	1.8	3.8	2.6	3.1
3	9.7	7.8	8.3	5.8	3.9	4.6	2.5	1.3	1.8	3.3	2.0	2.7
4	8.8	7.4	8.0	5.4	3.9	4.4	2.1	.8	1.5	2.0	.9	1.4
5	9.5	7.3	8.0	5.5	3.7	4.2	2.5	1.4	2.2	1.8	.7	1.1
6	9.4	7.1	7.9	4.2	2.6	3.4	2.6	2.1	2.3	1.7	.5	1.0
7	9.3	7.3	7.9	3.9	2.3	2.8	2.6	1.8	2.1	2.0	.5	1.3
8	9.8	7.1	7.9	4.9	2.3	3.5	3.3	2.3	2.7	2.2	1.0	1.5
9	9.9	7.2	7.9	5.3	3.2	3.9	3.6	2.4	2.8	2.0	1.3	1.5
10	9.5	7.1	7.8	5.2	3.4	4.0	3.2	2.2	2.6	2.1	1.5	1.9
11	9.5	7.2	7.9	5.3	3.0	3.7	2.9	1.7	2.5	1.9	.5	1.1
12	9.4	7.1	7.8	5.4	3.2	3.8	3.1	2.4	2.7	1.5	.4	.9
13	9.3	7.0	7.7	5.3	3.3	3.8	3.3	2.1	2.5	2.3	1.3	1.8
14	8.4	7.0	7.5	5.2	3.3	3.9	2.5	1.3	1.7	2.5	1.4	1.8
15	8.7	6.7	7.3	3.7	2.1	3.1	1.9	.8	1.3	2.6	1.3	1.7
16	8.3	6.0	6.8	3.5	1.8	2.6	2.1	1.0	1.5	2.1	1.0	1.4
17	6.9	5.4	5.8	3.7	2.1	2.9	1.2	.6	.8	2.5	1.3	1.7
18	7.9	5.4	6.4	4.1	3.4	3.7	1.3	.1	.9	3.1	1.8	2.2
19	8.0	6.4	6.7	4.9	3.4	3.8	2.1	1.3	1.7	3.2	1.7	2.1
20	6.8	4.7	5.7	4.7	2.9	3.7	2.3	1.5	1.9	3.2	1.7	2.2
21	6.1	4.3	4.9	4.6	2.8	3.3	2.8	2.1	2.3	2.3	1.1	1.7
22	6.6	4.2	5.1	4.8	3.1	3.7	2.7	2.1	2.3	2.4	1.1	1.6
23	6.5	5.2	5.6	4.1	2.8	3.4	2.3	1.4	2.0	2.5	1.3	1.7
24	6.2	4.9	5.2	3.8	2.2	2.7	2.2	1.3	1.8	1.9	1.0	1.3
25	6.5	5.1	5.5	3.9	2.2	2.8	2.6	1.8	2.1	2.9	1.1	1.9
26	5.9	3.8	4.8	3.2	2.0	2.4	3.0	1.7	2.2	2.8	1.7	2.1
27	6.4	4.5	5.2	2.9	1.6	2.0	3.0	2.1	2.4	3.1	1.1	2.0
28	6.7	4.9	5.5	3.3	1.8	2.2	2.5	1.6	2.0	2.7	.9	1.5
29	5.4	3.8	4.5	3.2	1.8	2.3	3.1	1.8	2.3	2.9	1.3	1.9
30	6.2	4.3	4.7	2.7	1.4	2.0	3.1	2.2	2.5	3.2	1.4	2.1
31	5.7	3.9	4.5	---	---	---	3.3	2.2	2.6	3.5	2.2	2.5
MONTH	9.9	3.8	6.6	5.8	1.4	3.4	3.6	.1	2.1	3.8	.4	1.8
	FEBRUARY			MARCH			APRIL			MAY		
1	3.3	1.7	2.1	2.9	.7	1.3	3.0	.6	1.8	5.3	2.0	3.1
2	3.4	1.5	2.1	3.4	1.0	1.8	2.6	.6	1.9	5.6	1.7	2.8
3	2.4	.8	1.6	2.2	.9	1.5	6.0	1.7	3.0	6.4	2.1	3.4
4	2.3	.8	1.4	2.6	.5	1.3	4.4	.1	2.4	6.8	2.6	3.9
5	2.8	.9	1.5	2.8	.0	1.0	4.4	1.0	2.0	7.2	2.7	4.1
6	2.0	1.0	1.3	3.6	.0	1.7	4.2	.6	1.7	7.4	2.8	4.2
7	2.6	.7	1.3	3.7	1.1	1.8	4.7	.9	2.0	7.0	3.1	4.2
8	2.6	.6	1.2	3.9	1.0	1.9	4.8	1.2	2.4	7.0	2.8	4.1
9	2.5	.9	1.4	3.9	1.0	1.8	5.2	1.3	2.6	6.8	2.8	4.1
10	2.7	.9	1.5	4.2	1.2	2.0	2.3	.6	1.3	6.9	3.0	4.3
11	2.8	1.2	1.8	4.6	1.3	2.2	3.2	.5	1.2	5.3	3.0	3.8
12	3.2	1.2	1.8	4.5	1.4	2.3	3.0	.2	1.2	6.7	3.2	4.3
13	3.0	.9	1.5	4.2	1.0	2.0	4.3	.5	1.7	7.0	3.4	4.5
14	2.4	.8	1.2	2.2	.7	1.5	4.5	1.1	2.2	6.2	3.5	4.4
15	2.8	.6	1.6	4.5	1.4	2.3	5.8	1.7	2.9	6.9	3.5	4.6
16	3.4	1.2	1.9	4.8	1.6	2.4	6.2	1.8	3.0	6.9	3.7	4.7
17	3.6	1.6	2.1	4.5	1.6	2.5	6.5	1.6	3.1	7.4	3.9	5.1
18	3.1	1.3	2.0	4.8	1.3	2.3	6.1	1.9	3.1	7.4	4.3	5.1
19	3.5	.9	1.7	5.3	1.7	2.7	6.6	2.1	3.4	7.6	4.3	5.2
20	2.3	.9	1.5	5.6	1.8	2.9	6.7	2.3	3.5	7.5	4.3	5.3
21	2.9	.8	1.4	5.5	2.1	3.0	3.9	2.0	2.8	6.7	4.8	5.5
22	2.8	.4	1.2	5.5	1.8	2.9	6.1	2.0	3.1	6.0	5.1	5.5
23	2.0	.9	1.3	5.7	1.9	3.0	4.7	1.9	2.7	7.6	5.5	6.4
24	2.6	.8	1.3	3.7	1.3	2.0	2.1	.6	1.3	7.9	6.4	7.1
25	3.1	.8	1.5	4.9	.7	2.1	5.1	1.6	2.7	8.1	6.6	7.1
26	2.9	1.0	1.6	5.8	1.5	2.8	4.1	1.9	2.6	7.9	6.7	7.1
27	3.2	1.0	1.6	5.6	1.1	2.7	5.8	1.5	3.0	8.0	6.6	7.0
28	1.9	.2	1.2	5.5	1.0	2.5	6.2	2.7	3.5	8.1	6.8	7.1
29	---	---	---	4.6	1.4	2.4	5.4	2.2	3.2	7.8	6.8	7.1
30	---	---	---	5.7	1.3	2.7	6.0	2.1	3.2	8.4	6.8	7.3
31	---	---	---	6.0	1.7	2.9	---	---	---	9.2	6.9	7.5
MONTH	3.6	.2	1.6	6.0	.0	2.2	6.7	.1	2.5	9.2	1.7	5.2

06714600 SOUTH CLEAR CREEK ABOVE LEAVENWORTH CREEK NEAR GEORGETOWN, CO--Continued

TEMPERATURE, WATER (DEG. C) WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	9.4	7.0	7.9	11.3	9.6	10.3	13.1	11.1	11.6	12.4	11.0	11.5
2	8.7	7.2	7.8	11.6	9.7	10.4	12.8	11.3	11.7	13.0	10.5	11.6
3	9.2	7.2	7.8	11.3	9.6	10.3	13.4	11.3	11.9	13.1	11.0	11.6
4	9.5	7.4	8.1	11.4	9.7	10.3	12.8	11.3	11.8	13.2	11.2	11.8
5	9.4	7.6	8.2	11.0	9.7	10.2	12.2	11.5	11.8	12.6	11.0	11.5
6	8.7	7.5	8.1	11.5	9.9	10.4	11.8	11.5	11.6	12.4	11.0	11.5
7	9.3	7.3	7.9	11.8	9.8	10.5	12.7	11.4	11.9	12.9	10.8	11.5
8	8.3	7.7	8.0	10.8	9.7	10.1	13.2	11.3	11.9	12.9	10.7	11.5
9	8.4	7.4	7.8	11.2	9.8	10.3	12.3	11.2	11.6	12.8	11.0	11.5
10	8.8	7.4	7.9	11.3	9.7	10.3	12.4	11.4	11.7	12.9	10.9	11.6
11	9.3	7.4	8.1	10.7	9.9	10.3	12.8	11.4	11.8	12.5	11.0	11.6
12	9.2	7.7	8.3	11.4	9.8	10.4	12.7	11.2	11.7	12.6	10.9	11.4
13	9.7	7.7	8.6	11.7	9.9	10.5	12.6	11.1	11.6	12.5	10.7	11.3
14	9.7	8.3	8.9	12.0	9.8	10.6	12.6	11.0	11.4	12.5	10.9	11.3
15	9.7	8.3	8.8	12.2	10.1	10.8	12.9	10.9	11.5	12.3	10.7	11.3
16	9.2	8.2	8.6	11.4	10.0	10.6	12.7	10.9	11.4	11.9	10.7	11.1
17	9.6	8.0	8.6	11.7	10.3	10.7	12.2	10.8	11.4	12.3	10.4	11.0
18	10.0	8.2	8.9	11.2	10.1	10.6	12.9	11.0	11.4	12.4	10.6	11.3
19	10.2	8.6	9.1	11.7	10.5	10.8	12.5	11.0	11.4	12.3	10.4	11.1
20	10.5	8.4	9.2	11.8	10.4	10.9	12.7	10.9	11.5	12.1	10.2	10.8
21	10.4	8.9	9.6	12.2	10.2	10.8	12.9	11.0	11.4	11.4	10.4	10.8
22	11.1	9.1	10.0	12.0	10.4	10.9	12.8	10.9	11.5	11.3	10.1	10.5
23	10.6	9.7	10.1	11.9	10.6	11.1	12.7	10.9	11.5	10.6	9.7	10.1
24	10.5	9.3	9.8	12.7	10.6	11.3	12.7	11.1	11.6	11.5	9.5	10.1
25	10.5	9.0	9.5	12.2	10.6	11.1	12.7	11.1	11.5	11.6	9.2	10.1
26	10.9	9.1	9.7	11.8	10.6	11.0	12.9	11.2	11.7	11.0	9.9	10.4
27	10.5	9.1	9.7	11.9	10.7	11.0	12.7	11.0	11.6	11.4	9.6	10.2
28	10.9	9.3	9.9	12.0	10.6	11.0	12.9	11.0	11.6	11.0	9.0	9.7
29	11.1	9.5	10.1	12.0	10.9	11.4	12.7	11.0	11.5	11.0	8.9	9.5
30	11.5	9.6	10.4	13.2	11.3	11.8	12.2	10.9	11.4	11.0	9.0	9.7
31	---	---	---	12.2	11.3	11.7	12.3	10.9	11.4	---	---	---
MONTH	11.5	7.0	8.8	13.2	9.6	10.7	13.4	10.8	11.6	13.2	8.9	11.0

06714800 LEAVENWORTH CREEK AT MOUTH NEAR GEORGETOWN, CO

LOCATION.--Lat 39°41'14", long 105°41'59", in NE¼SW¼ 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 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1994 to September 1997 (discontinued).

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 9,280 ft (revised) 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.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.8	e4.2	e3.4	e2.1	e1.8	e1.8	e1.6	2.8	66	53	29	11
2	6.2	e4.2	e3.3	e2.0	e1.8	e1.8	e1.6	2.7	73	49	27	10
3	6.1	e4.1	e3.2	e2.0	e1.8	e1.8	e1.6	2.7	72	47	26	10
4	5.7	e4.0	e3.2	e2.0	e1.8	e1.8	e1.6	3.0	80	44	27	10
5	5.5	e4.0	e3.1	e2.0	e1.8	e1.8	e1.6	4.2	82	42	27	9.2
6	5.2	e4.0	e3.1	e2.0	e1.8	e1.8	e1.6	5.7	81	41	30	8.8
7	5.2	e4.0	e3.1	e2.0	e1.8	e1.8	e1.6	7.2	100	43	28	8.5
8	5.0	e4.0	e3.0	e2.0	e1.8	e1.8	e1.6	7.9	98	40	25	8.1
9	5.0	e4.0	e3.0	e2.0	e1.8	e1.8	e1.6	8.6	95	36	24	7.9
10	5.0	e4.0	e2.9	e2.0	e1.8	e1.8	e1.6	9.9	91	35	30	7.8
11	5.0	e4.0	e2.8	e2.0	e1.8	e1.8	e1.7	10	92	35	27	7.7
12	5.0	e4.0	e2.8	e2.0	e1.8	e1.8	e1.8	10	85	34	25	7.7
13	5.0	e4.0	e2.8	e1.9	e1.8	e1.8	e1.8	11	85	33	23	7.2
14	5.0	e4.0	e2.8	e1.9	e1.8	e1.8	e1.9	13	86	33	22	7.0
15	4.9	e4.0	e2.8	e1.9	e1.8	e1.8	e2.0	15	81	33	20	7.0
16	4.9	e4.0	e2.8	e1.9	e1.8	e1.8	e2.0	19	79	33	18	7.5
17	4.9	e3.9	e2.7	e1.8	e1.8	e1.7	2.1	26	78	32	18	7.0
18	6.9	e3.8	e2.7	e1.8	e1.8	e1.7	2.3	32	77	32	17	7.0
19	5.6	e3.8	e2.6	e1.8	e1.8	e1.7	2.9	36	85	35	16	7.1
20	5.1	e3.7	e2.5	e1.8	e1.8	e1.6	3.6	35	88	32	14	8.3
21	e4.8	e3.6	e2.5	e1.8	e1.8	e1.6	3.9	36	89	30	13	7.6
22	e4.9	e3.6	e2.4	e1.8	e1.8	e1.6	3.2	41	89	28	13	7.9
23	e4.8	e3.5	e2.4	e1.8	e1.8	e1.6	2.9	40	88	28	12	7.5
24	e4.7	e3.5	e2.3	e1.8	e1.8	e1.6	4.1	41	79	28	12	7.1
25	e4.6	e3.5	e2.3	e1.8	e1.8	e1.6	2.8	39	73	27	13	6.8
26	e4.5	e3.5	e2.3	e1.8	e1.8	e1.6	2.9	35	71	27	12	6.9
27	e4.5	e3.5	e2.2	e1.8	e1.8	e1.5	3.0	32	66	27	11	6.7
28	e4.5	e3.5	e2.2	e1.8	e1.8	e1.6	2.9	31	61	28	11	6.3
29	e4.4	e3.4	e2.2	e1.8	---	e1.6	2.9	34	59	27	10	6.1
30	e4.4	e3.4	e2.1	e1.8	---	e1.6	2.8	41	57	30	10	6.1
31	e4.3	---	e2.1	e1.8	---	e1.6	---	52	---	30	11	---
TOTAL	158.4	114.7	83.6	58.7	50.4	53.0	69.5	683.7	2406	1072	601	233.8
MEAN	5.11	3.82	2.70	1.89	1.80	1.71	2.32	22.1	80.2	34.6	19.4	7.79
MAX	6.9	4.2	3.4	2.1	1.8	1.8	4.1	52	100	53	30	11
MIN	4.3	3.4	2.1	1.8	1.8	1.5	1.6	2.7	57	27	10	6.1
AC-FT	314	228	166	116	100	105	138	1360	4770	2130	1190	464

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 1997, BY WATER YEAR (WY)

	1995	1996	1997	1995	1996	1997	1995	1996	1997	1995	1996	1997
MEAN	6.06	3.82	2.45	1.81	1.63	1.58	2.07	18.5	71.4	50.4	18.7	8.31
MAX	7.33	4.35	2.70	1.93	1.80	1.71	2.32	28.5	80.2	81.7	25.7	10.9
(WY)	1996	1996	1997	1996	1997	1997	1997	1996	1997	1995	1995	1995
MIN	5.11	3.28	2.08	1.62	1.35	1.42	1.61	5.10	62.8	34.6	11.2	6.28
(WY)	1997	1995	1995	1995	1995	1995	1995	1995	1996	1997	1996	1996

SUMMARY STATISTICS

FOR 1996 CALENDAR YEAR

FOR 1997 WATER YEAR

WATER YEARS 1995 - 1997

ANNUAL TOTAL	4969.1	5584.8		
ANNUAL MEAN	13.6	15.3		
HIGHEST ANNUAL MEAN			15.6	
LOWEST ANNUAL MEAN			17.7	1995
HIGHEST DAILY MEAN	a ₈₃	Jun 11	13.8	1996
LOWEST DAILY MEAN	e _{1.3}	Mar 9	125	Jun 21 1995
ANNUAL SEVEN-DAY MINIMUM	1.5	Mar 3	e _{1.5}	Mar 27
INSTANTANEOUS PEAK FLOW			1.6	Mar 21
INSTANTANEOUS PEAK STAGE			124	Jun 7
ANNUAL RUNOFF (AC-FT)	9860	11080	4.81	Jun 7
10 PERCENT EXCEEDS	51	42	c _{4.79}	Jul 12 1995
50 PERCENT EXCEEDS	4.1	4.1		
90 PERCENT EXCEEDS	1.7	1.8		

e-Estimated.

a-Also occurred Jun 22.

b-Also occurred Mar 13, 1995.

c-Maximum gage height, 5.69 ft, Jun 17, 1995.

PLATTE RIVER BASIN

06714800 LEAVENWORTH CREEK AT MOUTH NEAR GEORGETOWN, CO--Continued

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM @ 25 DEG. C), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	144	137	140	129	127	128
2	---	---	---	---	---	---	145	137	140	131	125	128
3	---	---	---	---	---	---	141	136	138	129	126	128
4	---	---	---	---	---	---	140	134	137	129	116	125
5	---	---	---	---	---	---	140	120	137	119	112	116
6	---	---	---	---	---	---	---	---	---	116	103	112
7	---	---	---	---	---	---	143	136	140	107	99	103
8	---	---	---	---	---	---	---	---	---	103	96	100
9	---	---	---	---	---	---	139	131	135	97	89	94
10	---	---	---	---	---	---	---	---	---	94	83	89
11	---	---	---	---	---	---	---	---	---	91	83	88
12	---	---	---	---	---	---	---	---	---	93	87	91
13	---	---	---	---	---	---	139	132	137	92	78	87
14	---	---	---	---	---	---	138	135	136	87	76	81
15	---	---	---	---	---	---	137	133	135	86	69	79
16	---	---	---	---	---	---	136	130	133	78	65	73
17	---	---	---	---	---	---	134	127	130	74	60	68
18	---	---	---	---	---	---	130	124	126	68	59	64
19	---	---	---	---	---	---	126	118	123	65	56	62
20	---	---	---	---	---	---	123	111	118	62	58	61
21	---	---	---	---	---	---	122	111	116	63	57	60
22	---	---	---	---	---	---	125	122	124	60	57	59
23	---	---	---	---	---	---	126	120	124	62	56	60
24	---	---	---	---	---	---	130	120	126	60	58	59
25	---	---	---	---	---	---	127	117	122	61	58	59
26	---	---	---	---	---	---	125	121	123	62	59	60
27	---	---	---	---	---	---	132	118	124	63	61	62
28	---	---	---	149	135	140	125	122	123	64	63	63
29	---	---	---	142	139	140	126	123	125	70	62	65
30	---	---	---	149	136	141	128	125	127	71	63	68
31	---	---	---	143	136	139	---	---	---	67	57	63
MONTH	---	---	---	---	---	---	---	---	---	131	56	82
	JUNE			JULY			AUGUST			SEPTEMBER		
1	59	52	56	47	46	46	63	61	62	82	79	81
2	54	51	53	48	46	47	62	61	62	83	74	82
3	55	49	52	48	47	48	63	60	62	83	78	82
4	53	45	50	49	48	48	64	62	64	84	79	83
5	49	45	47	50	48	49	65	61	64	83	81	82
6	50	47	48	52	49	50	65	62	64	82	80	80
7	49	43	47	54	52	53	64	63	64	83	80	82
8	47	43	45	54	53	53	65	64	64	85	82	83
9	48	45	47	56	54	55	65	64	64	85	83	84
10	49	46	48	56	55	55	66	63	65	86	83	84
11	50	46	48	56	55	55	65	63	64	86	83	86
12	49	46	47	57	56	56	66	63	64	91	86	89
13	50	46	48	58	57	57	67	66	67	90	88	89
14	47	44	46	58	57	57	68	67	68	90	88	89
15	46	44	45	58	57	57	69	68	68	89	87	88
16	45	44	45	58	56	57	71	69	70	92	88	90
17	46	44	45	58	57	57	72	70	71	93	90	91
18	45	42	44	61	57	58	73	70	71	93	89	91
19	44	38	42	63	55	60	73	72	72	92	90	91
20	42	39	41	61	59	60	74	72	73	94	88	92
21	43	40	41	60	59	59	74	72	73	94	91	92
22	43	40	41	60	59	60	75	73	74	93	91	92
23	43	40	42	62	60	61	76	74	75	93	92	92
24	44	43	43	61	60	61	76	73	75	94	92	93
25	45	43	44	61	60	60	77	75	76	94	92	93
26	45	44	44	65	60	61	77	73	76	95	93	94
27	46	44	45	64	60	63	78	74	77	97	95	96
28	46	44	45	64	62	63	80	74	79	97	94	96
29	46	44	45	63	59	62	79	77	78	96	94	95
30	46	45	46	65	59	63	80	77	78	97	94	95
31	---	---	---	64	60	62	81	78	80	---	---	---
MONTH	59	38	46	65	46	57	81	60	70	97	74	89

06714800 LEAVENWORTH CREEK AT MOUTH NEAR GEORGETOWN, CO--Continued

TEMPERATURE, WATER (DEG. C) WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	5.6	2.2	4.0	.9	---	---	---	---	---	---	---	---
2	5.8	2.1	4.2	.8	---	---	---	---	---	---	---	---
3	6.9	4.2	5.6	1.3	---	---	---	---	---	---	---	---
4	5.6	2.9	4.5	1.1	.0	.5	---	---	---	---	---	---
5	5.5	2.5	4.3	.9	.0	---	---	---	---	---	---	---
6	5.2	2.3	4.0	---	.0	---	---	---	---	---	---	---
7	5.4	2.7	4.2	---	---	---	---	---	---	---	---	---
8	5.3	2.4	4.0	.2	.0	---	---	---	---	---	---	---
9	5.4	2.4	4.0	.8	.0	---	---	---	---	---	---	---
10	5.4	2.3	4.0	.9	.0	.3	---	---	---	---	---	---
11	5.6	2.5	4.1	.8	.0	---	---	---	---	---	---	---
12	5.1	2.4	4.0	1.0	.0	.3	---	---	---	---	---	---
13	4.8	2.2	3.7	1.1	.1	.4	---	---	---	---	---	---
14	4.3	2.6	3.3	1.1	.2	.5	---	---	---	---	---	---
15	3.3	.7	2.2	.6	.0	---	---	---	---	---	---	---
16	2.7	.0	1.2	.4	.0	---	---	---	---	---	---	---
17	---	---	---	.5	.0	---	---	---	---	---	---	---
18	.5	---	---	.8	.4	.6	---	---	---	---	---	---
19	2.0	.1	.9	1.3	.6	.7	---	---	---	---	---	---
20	---	---	---	1.2	.1	.7	---	---	---	---	---	---
21	---	---	---	1.1	.0	.3	---	---	---	---	---	---
22	---	---	---	1.4	.3	.7	---	---	---	---	---	---
23	---	---	---	.9	.2	.5	---	---	---	---	---	---
24	---	---	---	---	.0	---	---	---	---	---	---	---
25	---	---	---	.7	.0	---	---	---	---	---	---	---
26	---	---	---	---	.0	---	---	---	---	---	---	---
27	.5	---	---	---	---	---	---	---	---	---	---	---
28	1.4	.0	.5	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	---	---	---
30	---	---	---	---	---	---	---	---	---	---	---	---
31	.7	---	---	---	---	---	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	.9	.0	.2	3.0	.0	1.0
2	---	---	---	---	---	---	.0	.0	.0	2.4	.0	.5
3	---	---	---	---	---	---	2.3	.0	.6	4.4	.0	1.5
4	---	---	---	---	---	---	2.0	.0	.3	5.2	.4	2.2
5	---	---	---	---	---	---	1.7	.0	.3	5.0	.5	2.2
6	---	---	---	---	---	---	.6	.0	.1	4.8	.5	2.0
7	---	---	---	---	---	---	1.3	.0	.2	4.6	.6	1.9
8	---	---	---	---	---	---	1.9	.0	.5	4.6	.2	1.8
9	---	---	---	---	---	---	2.6	.0	.6	4.9	.0	2.0
10	---	---	---	---	---	---	.2	.0	.0	5.0	.2	1.9
11	---	---	---	---	---	---	.1	.0	.0	3.1	.4	1.4
12	---	---	---	---	---	---	.1	.0	.0	4.8	.2	2.0
13	---	---	---	---	---	---	.6	.0	.1	5.3	.7	2.3
14	---	---	---	---	---	---	1.1	.0	.3	4.3	.6	1.9
15	---	---	---	---	---	---	2.7	.0	.9	5.8	.7	2.2
16	---	---	---	---	---	---	3.5	.0	1.2	5.4	.8	2.2
17	---	---	---	---	---	---	3.5	.0	1.3	5.6	.8	2.3
18	---	---	---	---	---	---	3.1	.1	1.2	4.8	1.0	2.2
19	---	---	---	---	---	---	3.6	.2	1.3	5.0	.8	2.2
20	---	---	---	---	---	---	3.7	.4	1.3	4.7	.6	2.0
21	---	---	---	---	---	---	1.2	.0	.4	4.2	1.0	2.2
22	---	---	---	---	---	---	3.3	.0	.9	2.6	1.4	1.9
23	---	---	---	---	---	---	2.8	.0	.8	5.6	1.1	2.6
24	---	---	---	---	---	---	.0	.0	.0	3.9	1.1	2.2
25	---	---	---	---	---	---	.3	.0	.0	5.0	.7	2.1
26	---	---	---	---	---	---	.8	.0	.1	4.5	.4	1.9
27	---	---	---	---	---	---	2.0	.0	.6	3.9	.6	1.7
28	---	---	---	1.9	.0	.6	3.5	.4	1.3	5.1	1.1	2.5
29	---	---	---	2.2	.0	.5	3.3	.1	1.2	3.8	1.8	2.7
30	---	---	---	2.1	.0	.5	3.6	.0	1.2	5.9	1.9	3.1
31	---	---	---	2.5	.0	.8	---	---	---	7.2	1.5	3.3
MONTH	---	---	---	---	---	---	3.7	.0	.6	7.2	.0	2.1

PLATTE RIVER BASIN

06714800 LEAVENWORTH CREEK AT MOUTH NEAR GEORGETOWN, CO--Continued

TEMPERATURE, WATER (DEG. C) WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	6.3	1.7	3.2	9.4	3.8	6.1	11.4	6.4	8.7	9.8	6.6	8.4
2	5.0	1.6	3.1	10.4	2.8	6.1	11.1	7.0	8.9	11.5	6.9	9.1
3	6.6	1.5	3.5	10.0	3.4	6.4	12.0	5.8	8.8	10.7	7.1	9.3
4	6.7	1.9	3.7	10.0	3.9	6.7	11.4	7.1	9.1	11.6	7.8	9.7
5	6.2	2.1	3.5	8.4	3.6	6.0	9.4	7.6	8.6	10.5	6.4	8.7
6	4.6	2.4	3.2	8.7	3.5	5.9	7.9	5.7	6.6	9.2	6.3	7.8
7	5.7	2.1	3.4	10.5	3.5	6.6	9.1	4.3	6.7	9.2	---	---
8	3.7	2.3	2.9	7.4	4.2	5.8	11.4	4.8	7.8	9.4	4.5	7.1
9	4.5	1.8	3.0	8.5	3.5	6.0	9.5	6.0	7.8	8.9	5.5	7.5
10	5.8	2.3	3.6	9.2	4.1	6.7	9.9	6.6	7.9	9.2	5.2	7.4
11	7.3	2.1	4.2	7.5	4.8	6.1	9.4	4.5	6.7	9.0	6.3	7.8
12	6.6	2.3	4.1	9.6	3.8	6.5	9.6	3.6	6.5	9.0	6.2	7.8
13	7.0	2.0	4.3	10.4	4.5	7.1	9.6	4.7	7.0	8.8	4.7	6.9
14	6.6	2.9	4.4	11.3	3.9	7.3	9.4	5.1	7.1	9.0	5.5	7.4
15	7.1	2.1	4.2	11.7	4.5	7.9	11.1	5.2	7.8	8.7	5.4	7.2
16	5.6	2.4	3.9	9.7	4.9	7.3	10.4	5.4	7.9	7.9	6.0	7.0
17	6.8	3.0	4.6	8.6	5.0	7.0	9.8	5.3	7.6	7.9	4.1	6.1
18	8.4	2.9	5.1	7.7	4.8	6.4	9.5	6.6	8.0	9.4	5.8	7.5
19	8.7	3.7	5.6	7.9	5.0	6.5	9.0	5.3	7.2	9.0	6.3	7.4
20	9.2	3.3	5.7	9.5	5.2	7.3	10.5	5.1	7.7	8.2	4.8	6.8
21	8.3	3.3	5.5	9.7	4.8	7.2	10.1	5.8	7.9	7.6	5.7	6.8
22	9.3	3.8	6.2	9.4	5.3	7.3	10.8	6.1	8.3	6.7	4.8	5.9
23	7.2	3.7	5.4	9.3	6.0	7.7	11.1	5.9	8.6	5.6	4.2	4.9
24	8.1	3.3	5.4	12.7	5.9	8.9	10.8	6.4	8.7	6.7	2.4	4.6
25	8.2	3.2	5.6	9.9	6.1	8.2	10.5	6.8	8.7	6.8	2.5	5.0
26	8.9	3.5	6.0	10.1	5.7	7.8	10.7	7.4	9.1	7.8	5.1	6.6
27	7.7	3.7	5.8	8.8	6.8	7.8	10.5	6.9	8.9	7.8	5.2	6.7
28	9.1	3.6	6.1	9.6	6.3	7.7	11.3	7.1	9.4	6.3	3.1	5.0
29	9.2	3.7	6.3	10.6	6.8	8.4	11.0	7.1	9.0	6.0	2.2	4.4
30	10.5	3.7	6.6	12.8	7.1	9.7	8.9	6.1	7.8	6.8	2.8	5.1
31	---	---	---	9.6	7.0	8.5	9.8	5.9	7.8	---	---	---
MONTH	10.5	1.5	4.6	12.8	2.8	7.1	12.0	3.6	8.0	11.6	---	---

**06714800 LEAVENWORTH CREEK AT MOUTH NEAR GEORGETOWN, CO--Continued
PRECIPITATION RECORDS**

PERIOD OF RECORD.--May 1995 to September 1997 (discontinued), seasonal records only.

GAGE.--Tipping-bucket rain gage (no wind shields used) with satellite telemetry. Elevation of gage is 9,280 ft (revised) above sea level, from topographic map.

REMARKS.--Records poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily rainfall, 1.04 inches, May 27, 1996.

EXTREMES FOR CURRENT YEAR.--Maximum daily precipitation during period of seasonal operation, 0.92 inches, April 27.

PRECIPITATION (INCHES), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.01	---	---	---	---	---	.00	.04	.00	.00	.01	.10
2	.00	---	---	---	---	---	.00	.00	.02	.00	.00	.49
3	.00	---	---	---	---	---	.00	.00	.00	.00	.58	.20
4	.00	---	---	---	---	---	.00	.00	.00	.00	.07	.00
5	.00	---	---	---	---	---	.00	.00	.00	.00	.40	.00
6	.00	---	---	---	---	---	.00	.00	.74	.00	.24	.00
7	.00	---	---	---	---	---	.00	.00	.15	.00	.01	.00
8	.00	---	---	---	---	---	.00	.00	.74	.00	.00	.00
9	.00	---	---	---	---	---	.01	.00	.10	.00	.05	.00
10	.00	---	---	---	---	---	.00	.00	.05	.04	.19	.00
11	.00	---	---	---	---	---	.00	.00	.18	.00	.06	.21
12	.00	---	---	---	---	---	.00	.00	.03	.00	.00	.00
13	.00	---	---	---	---	---	.15	.00	.16	.00	.00	.00
14	.00	---	---	---	---	---	.26	.00	.14	.00	.00	.00
15	.00	---	---	---	---	---	.00	.00	.00	.00	.00	.00
16	.02	---	---	---	---	---	.01	.00	.04	.06	.00	.00
17	.00	---	---	---	---	---	.00	.00	.00	.03	.00	.01
18	.28	---	---	---	---	---	.00	.00	.03	.15	.08	.01
19	.00	---	---	---	---	---	.00	.00	.03	.18	.05	.16
20	.05	---	---	---	---	---	.14	.00	.00	.11	.00	.06
21	.00	---	---	---	---	---	.43	.31	.00	.01	.03	.10
22	.01	---	---	---	---	---	.01	.23	.00	.00	.00	.02
23	.00	---	---	---	---	---	.15	.01	.07	.05	.00	.01
24	.00	---	---	---	---	---	.00	.03	.00	.01	.20	.01
25	.00	---	---	---	---	---	.01	.00	.00	.04	.01	.00
26	.00	---	---	---	---	---	.14	.00	.00	.00	.23	.02
27	.26	---	---	---	---	---	.92	.08	.00	.15	.34	.00
28	.09	---	---	---	---	---	.36	.02	.00	.18	.01	.00
29	.02	---	---	---	---	---	.10	.35	.00	.21	.00	.02
30	.00	---	---	---	---	---	.14	.01	.00	.26	.00	.00
31	.00	---	---	---	---	---	---	.00	---	.22	.06	---
TOTAL	0.74	---	---	---	---	---	2.83	1.08	2.48	1.70	2.62	1.42

394308105413800 CLEAR CREEK ABOVE GEORGETOWN RESERVOIR NEAR GEORGETOWN, CO

LOCATION.--Lat 39°43'08", long 105°41'38", in SW¹/₄NE¹/₄, sec.8, T.4 S., R.74 W., Clear Creek County, Hydrologic Unit 10190004, on left bank 300 ft upstream from Georgetown Reservoir, and 1.0 mi north of Georgetown.

DRAINAGE AREA.--Not determined.

PERIOD OF RECORD.--July to September 1997.

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

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

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period July 2 to September 30, 376 ft³/s, July 3, at 0030, gage height 4.70 ft; minimum daily, 43 ft³/s, Sept. 29.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	---	179	78
2	---	---	---	---	---	---	---	---	---	e357	167	79
3	---	---	---	---	---	---	---	---	---	336	164	85
4	---	---	---	---	---	---	---	---	---	316	165	81
5	---	---	---	---	---	---	---	---	---	300	172	77
6	---	---	---	---	---	---	---	---	---	289	176	73
7	---	---	---	---	---	---	---	---	---	279	164	71
8	---	---	---	---	---	---	---	---	---	265	146	69
9	---	---	---	---	---	---	---	---	---	253	136	67
10	---	---	---	---	---	---	---	---	---	249	160	66
11	---	---	---	---	---	---	---	---	---	244	162	67
12	---	---	---	---	---	---	---	---	---	233	146	e64
13	---	---	---	---	---	---	---	---	---	232	130	59
14	---	---	---	---	---	---	---	---	---	228	124	57
15	---	---	---	---	---	---	---	---	---	227	114	56
16	---	---	---	---	---	---	---	---	---	222	110	62
17	---	---	---	---	---	---	---	---	---	216	108	54
18	---	---	---	---	---	---	---	---	---	212	108	55
19	---	---	---	---	---	---	---	---	---	229	107	53
20	---	---	---	---	---	---	---	---	---	215	101	62
21	---	---	---	---	---	---	---	---	---	200	97	56
22	---	---	---	---	---	---	---	---	---	194	95	56
23	---	---	---	---	---	---	---	---	---	193	90	54
24	---	---	---	---	---	---	---	---	---	195	91	52
25	---	---	---	---	---	---	---	---	---	186	94	50
26	---	---	---	---	---	---	---	---	---	174	96	48
27	---	---	---	---	---	---	---	---	---	175	94	50
28	---	---	---	---	---	---	---	---	---	172	90	45
29	---	---	---	---	---	---	---	---	---	177	84	43
30	---	---	---	---	---	---	---	---	---	190	80	44
31	---	---	---	---	---	---	---	---	---	188	80	---
TOTAL	---	---	---	---	---	---	---	---	---	---	3830	1833
MEAN	---	---	---	---	---	---	---	---	---	---	124	61.1
MAX	---	---	---	---	---	---	---	---	---	---	179	85
MIN	---	---	---	---	---	---	---	---	---	---	80	43
AC-FT	---	---	---	---	---	---	---	---	---	---	7600	3640

e-Estimated.

394359105411900 CLEAR CREEK BELOW GEORGETOWN RESERVOIR NEAR GEORGETOWN, CO

LOCATION.--Lat 39°43'59", long 105°41'19", in SE¼NE¼, sec.5, T.4 S., R.74 W., Clear Creek County, Hydrologic Unit 10190004, on left bank 30 ft upstream from spillway on Georgetown Reservoir, and 2.0 mi north of Georgetown.

DRAINAGE AREA.--Not determined.

PERIOD OF RECORD.--July to September 1997.

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

REMARKS.--Records fair except for estimated daily discharges, which are poor. No diversion or regulation upstream from gage. 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 CURRENT YEAR.--Maximum discharge during period July 8 to September 30, 323 ft³/s, July 8, at 1715 and July 13, at 0600, gage height 4.04 ft; minimum daily, 44 ft³/s, Sept. 30.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	---	177	72
2	---	---	---	---	---	---	---	---	---	---	161	73
3	---	---	---	---	---	---	---	---	---	---	158	78
4	---	---	---	---	---	---	---	---	---	---	162	75
5	---	---	---	---	---	---	---	---	---	---	169	71
6	---	---	---	---	---	---	---	---	---	---	178	67
7	---	---	---	---	---	---	---	---	---	---	162	64
8	---	---	---	---	---	---	---	---	---	e278	141	62
9	---	---	---	---	---	---	---	---	---	274	129	61
10	---	---	---	---	---	---	---	---	---	266	154	59
11	---	---	---	---	---	---	---	---	---	261	158	59
12	---	---	---	---	---	---	---	---	---	244	141	59
13	---	---	---	---	---	---	---	---	---	242	122	57
14	---	---	---	---	---	---	---	---	---	239	112	57
15	---	---	---	---	---	---	---	---	---	236	101	56
16	---	---	---	---	---	---	---	---	---	229	95	60
17	---	---	---	---	---	---	---	---	---	220	93	55
18	---	---	---	---	---	---	---	---	---	216	93	53
19	---	---	---	---	---	---	---	---	---	236	96	53
20	---	---	---	---	---	---	---	---	---	222	90	59
21	---	---	---	---	---	---	---	---	---	203	86	55
22	---	---	---	---	---	---	---	---	---	194	84	55
23	---	---	---	---	---	---	---	---	---	191	80	53
24	---	---	---	---	---	---	---	---	---	194	81	50
25	---	---	---	---	---	---	---	---	---	187	84	49
26	---	---	---	---	---	---	---	---	---	170	86	49
27	---	---	---	---	---	---	---	---	---	168	84	49
28	---	---	---	---	---	---	---	---	---	165	81	46
29	---	---	---	---	---	---	---	---	---	170	77	45
30	---	---	---	---	---	---	---	---	---	184	74	44
31	---	---	---	---	---	---	---	---	---	185	73	---
TOTAL	---	---	---	---	---	---	---	---	---	---	3582	1745
MEAN	---	---	---	---	---	---	---	---	---	---	116	58.2
MAX	---	---	---	---	---	---	---	---	---	---	178	78
MIN	---	---	---	---	---	---	---	---	---	---	73	44
AC-FT	---	---	---	---	---	---	---	---	---	---	7100	3460

e-Estimated.

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

LOCATION.--Lat 39°45'07", long 105°39'41", in NE¼NW¼ 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 mi².

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

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 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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	52	33	e18	e16	12	e10	e16	35	331	369	188	85
2	49	30	e18	e16	12	e10	e17	33	394	349	173	85
3	50	32	e18	e16	12	e9.5	e18	32	405	331	171	93
4	49	32	e18	e15	12	e9.5	e18	33	454	309	174	89
5	47	29	e18	e15	13	e9.5	e19	41	515	295	178	81
6	44	e26	23	e15	13	e9.0	20	52	496	285	188	78
7	43	e23	23	e14	13	e9.0	21	64	511	276	177	75
8	40	e24	21	e14	13	e8.5	22	72	565	268	158	73
9	38	e24	23	e14	12	e9.0	22	80	518	258	144	71
10	39	e24	23	e14	11	e9.5	21	93	471	253	165	69
11	39	e23	23	e14	11	e10	20	103	488	250	173	68
12	39	e23	23	e14	e11	e10	23	97	489	240	159	69
13	38	e23	21	e14	e11	e11	23	99	504	235	141	65
14	38	e23	21	e14	e11	e11	19	112	530	231	134	64
15	38	e23	e18	e14	e12	e11	19	127	526	229	122	63
16	39	e22	e18	e14	e12	e11	20	147	470	226	116	68
17	35	e23	e18	e14	e11	e12	22	173	464	220	113	63
18	37	e23	e18	e14	e11	e12	25	202	494	216	113	61
19	43	e24	e18	e14	e10	e13	27	219	587	229	113	61
20	42	e23	e18	e14	e11	e12	31	227	618	221	108	68
21	30	e24	e17	e15	e11	e12	40	221	588	206	102	64
22	32	26	e17	e15	e10	e13	33	263	591	200	101	64
23	38	25	e17	e14	e10	e13	32	260	603	197	96	62
24	38	23	e17	e14	e10	e14	35	277	542	198	96	59
25	34	23	e17	e13	e10	e14	32	260	478	194	99	56
26	35	22	e17	e13	e10	e14	36	246	453	182	101	55
27	33	22	e17	12	e10	e15	33	218	421	181	99	55
28	34	21	e17	12	e10	e15	38	193	402	178	96	52
29	35	23	e17	12	---	e15	39	195	396	182	90	49
30	31	e18	e16	12	---	e15	36	213	380	192	85	48
31	33	---	e16	12	---	e16	---	257	---	192	85	---
TOTAL	1212	734	584	433	315	362.5	777	4644	14684	7392	4058	2013
MEAN	39.1	24.5	18.8	14.0	11.3	11.7	25.9	150	489	238	131	67.1
MAX	52	33	23	16	13	16	40	277	618	369	188	93
MIN	30	18	16	12	10	8.5	16	32	331	178	85	48
AC-FT	2400	1460	1160	859	625	719	1540	9210	29130	14660	8050	3990

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 1997, BY WATER YEAR (WY)

	1995	1996	1997	1995	1996	1997	1995	1996	1997	1995	1996	1997
MEAN	37.4	23.9	19.7	15.3	14.3	17.4	26.0	129	469	347	137	64.7
MAX	45.2	28.0	24.9	19.2	16.7	21.0	32.1	189	497	555	197	76.7
(WY)	1996	1996	1996	1996	1996	1995	1996	1996	1996	1995	1995	1995
MIN	27.9	19.3	15.4	12.8	11.3	11.7	20.2	48.6	420	238	83.1	50.2
(WY)	1995	1995	1995	1995	1995	1997	1995	1995	1996	1997	1996	1996

SUMMARY STATISTICS

FOR 1996 CALENDAR YEAR

FOR 1997 WATER YEAR

WATER YEARS 1995 - 1997

ANNUAL TOTAL	35378	37208.5	
ANNUAL MEAN	96.7	102	109
HIGHEST ANNUAL MEAN			126
LOWEST ANNUAL MEAN			98.0
HIGHEST DAILY MEAN	609	Jun 22	618
LOWEST DAILY MEAN	e14	Feb 11	e8.5
ANNUAL SEVEN-DAY MINIMUM	16	Feb 6	9.1
INSTANTANEOUS PEAK FLOW			736
INSTANTANEOUS PEAK STAGE			6.05
ANNUAL RUNOFF (AC-FT)	70170	73800	78720
10 PERCENT EXCEEDS	310	280	342
50 PERCENT EXCEEDS	34	33	30
90 PERCENT EXCEEDS	17	12	14

e-Estimated.

394730105464802 HOOP CREEK ABOVE TRIBUTARY AT FLORAL PARK NEAR BERTHOUD PASS, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 39°47'30", long 105°46'48", (unsurveyed), Clear Creek County, Hydrologic Unit 14010001, 1.25 mi upstream from the confluence with West Fork Clear Creek, and 9.5 mi west of Empire.

PERIOD OF RECORD.--April to September 1997.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	pH (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS TOTAL (MG/L CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)
JUN 06...	1200	3.0	56	7.9	1.5	6.7	10.8	11	2.8
SEP 23...	1302	0.95	30	7.5	3.5	2.7	9.7	9	2.4

DATE	TIME	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 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)
JUN 06...	0.87	5.4	0.5	7.6	1.9	10	<0.1	4.9	47	
SEP 23...	0.83	1.7	0.3	11	1.9	1.4	<0.1	5.1	22	

DATE	TIME	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AM-MONIA + ORGANIC DIS-SOLVED (MG/L AS N) (00623)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO-DIS-SOLVED (MG/L AS P) (00671)
JUN 06...	31	<0.001	0.046	<0.002	<0.2	<0.2	0.010	0.005	0.004	
SEP 23...	21	<0.001	0.052	<0.002	<0.2	<0.2	0.005	0.004	0.003	

DATE	TIME	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, 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)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
JUN 06...	<1	<1	10	<10	190	32	<1	<10	<10	2	<10	<3	
SEP 23...	<1	<1	<10	<10	50	14	<1	<10	<10	<1	<10	<3	

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SEDI-MENT, DIS-SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-SUS-PENDED (T/DAY) (80155)
JUN 06...	1210	3.0	9	0.07
SEP 23...	1255	0.95	3	0.01

394730105464801 HOOP CREEK TRIBUTARY AT FLORAL PARK NEAR BERTHOUD PASS, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 39°47'30", long 105°46'48", (unsurveyed), Clear Creek County, Hydrologic Unit 14010001, 10 ft above confluence with Hoop Creek, 1.25 mi upstream from the confluence with West Fork Clear Creek, and 9.5 mi west of Empire.

PERIOD OF RECORD.--April to September 1997.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	pH (STAND-ARD UNITS) (00400)	TEMPER-ATURE (DEG C) (00010)	OXYGEN, DIS-SOLVED WATER (MG/L) (00300)	HARD-NESS, TOTAL AS (MG/L) CACO3 (00900)	CALCIUM DIS-SOLVED AS (MG/L) CA (00915)	MAGNE-SIUM, DIS-SOLVED AS (MG/L) (00925)
APR 23...	1450	0.30	279	8.0	1.0	10.7	53	15	3.8

DATE	TIME	SODIUM, DIS-SOLVED (MG/L) AS NA (00930)	POTAS-SIUM, DIS-SOLVED (MG/L) AS K (00935)	ALKA-LINITY LAB (MG/L) CACO3 (90410)	SULFATE DIS-SOLVED (MG/L) AS SO4 (00945)	CHLO-RIDE, SOLVED (MG/L) AS CL (00940)	FLUO-RIDE, DIS-SOLVED (MG/L) AS F (00950)	SILICA, DIS-SOLVED (MG/L) AS (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)
APR 23...	31	0.82	14	4.0	70	<0.1	8.0	163	141	

DATE	TIME	NITRO-GEN, NITRITE DIS-SOLVED (MG/L) AS N (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L) AS N (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L) AS N (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L) AS N (00625)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L) AS N (00623)	PHOS-PHORUS, TOTAL (MG/L) AS P (00665)	PHOS-PHORUS, DIS-SOLVED (MG/L) AS P (00666)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L) AS P (00671)
APR 23...		0.003	0.060	<0.002	<0.20	<0.20	<0.001	<0.001	0.001

DATE	TIME	CADMIUM WATER UNFLTRD TOTAL (UG/L) AS CD (01027)	COPPER, TOTAL RECOV-ERABLE (UG/L) AS CU (01042)	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)	ZINC, TOTAL RECOV-ERABLE (UG/L) AS ZN (01092)	ZINC, DIS-SOLVED (UG/L) AS ZN (01090)	
APR 23...		<1	1.1	<10	<10	50	3.1	<1	<10	<10	1.8	<10

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SEDI-MENT, DIS-SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-SUS-PENDED (T/DAY) (80155)
APR 23...	1440	0.30	3	<0.01
APR 23...	1445	0.30	4	<0.01

**394714105465200 HOOP CREEK BELOW FLORAL PARK NEAR BERTHOUD PASS, CO
WATER-QUALITY RECORDS**

LOCATION.--Lat 39°47'14", long 105°46'52", (unsurveyed), Clear Creek County, Hydrologic Unit 14010001, 0.9 mi upstream from the confluence with West Fork Clear Creek and 9.2 mi west of Empire.

PERIOD OF RECORD.--April to September 1997.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	pH (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS TOTAL (MG/L AS CAC03) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)
APR 23...	1535	0.50	261	7.5	1.0	3.2	10.5	55	15
JUN 06...	1115	19	49	8.3	2.5	6.5	10.6	10	2.8
SEP 23...	1227	1.8	42	7.3	5.0	2.1	11.1	11	3.0

DATE	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 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)
APR 23...	4.2	23	0.9	13	3.6	66	<0.1	7.4	158
JUN 06...	0.80	4.5	0.4	9.6	1.6	7.0	0.1	5.7	38
SEP 23...	0.93	3.2	0.4	13	1.8	3.9	<0.1	5.8	29

DATE	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L AS N) (70301)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AM-MONIA + ORGANIC DIS-SOLVED (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)
APR 23...	129	0.004	0.114	0.002	<0.20	<0.20	0.001	<0.001	0.003
JUN 06...	29	<0.001	0.076	<0.002	<0.2	0.3	0.009	0.004	0.005
SEP 23...	27	<0.001	0.043	<0.002	<0.2	<0.2	0.004	0.003	0.002

DATE	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, 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)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
APR 23...	<1	<1	<10	<10	160	59	<1	<10	20	11	<10	--
JUN 06...	<1	<1	<10	<10	280	26	<1	<10	10	2	10	8
SEP 23...	<1	<1	<10	<10	90	35	<1	<10	<10	4	<10	<3

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SEDI-MENT, DIS-SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-SUS-PENDED (T/DAY) (80155)
APR 23...	1520	0.50	4	0.01
APR 23...	1525	0.50	--	--
JUN 06...	1100	19	23	1.2
SEP 23...	1212	1.8	8	0.04

394716105474100 WEST HOOP CREEK TRIBUTARY AT UPPER STATION NEAR BERTHOUD PASS, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 39°47'16", long 105°47'41", (unsurveyed), Clear Creek County, Hydrologic Unit 14010001, 0.75 mi upstream from the confluence with Hoop Creek, and 10.5 mi west of Empire.

PERIOD OF RECORD.--April to September 1997.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	pH (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS TOTAL (MG/L) (00900)	CALCIUM DIS-SOLVED (MG/L) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L) (00925)	SODIUM, DIS-SOLVED (MG/L) (00930)
APR 23...	1356	0.28	33	7.3	1.6	0.6	10.3	12	3.5	0.74	1.7
JUN 06...	1125	7.6	22	8.0	3.0	4.4	9.1	7	2.2	0.49	1.3
SEP 23...	1337	0.86	27	7.5	4.0	2.3	9.0	9	2.7	0.59	1.5

DATE	POTAS-SIUM, DIS-SOLVED (MG/L) AS K (00935)	ALKA-LINITY 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)
APR 23...	0.3	15	1.6	0.1	0.1	8.4	33	26
JUN 06...	0.4	9.8	1.2	0.1	0.1	6.9	26	19
SEP 23...	0.3	13	1.2	0.1	0.1	7.6	23	22

DATE	NITRO-GEN, NITRITE DIS-SOLVED (MG/L) AS N (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L) AS N (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L) AS N (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L) AS N (00625)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L) AS N (00623)	PHOS-PHORUS TOTAL (MG/L) AS P (00665)	PHOS-PHORUS DIS-SOLVED (MG/L) AS P (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L) AS P (00671)
APR 23...	0.002	0.107	<0.002	<0.2	<0.2	0.009	0.008	0.010
JUN 06...	<0.001	0.066	<0.002	<0.2	<0.2	0.010	0.007	0.010
SEP 23...	0.001	0.042	<0.002	<0.2	<0.2	0.012	0.008	0.006

DATE	CADMIUM WATER UNFLTRD TOTAL (UG/L) AS CD (01027)	CADMIUM DIS-SOLVED (UG/L) AS CD (01025)	COPPER, TOTAL RECOV-ERABLE (UG/L) AS CU (01042)	COPPER, DIS-SOLVED (UG/L) AS CU (01040)	IRON, TOTAL RECOV-ERABLE (UG/L) AS FE (01045)	IRON, DIS-SOLVED (UG/L) AS FE (01046)	LEAD, 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)	ZINC, TOTAL RECOV-ERABLE (UG/L) AS ZN (01092)	ZINC, DIS-SOLVED (UG/L) AS ZN (01090)
APR 23...	1	<1	<10	<10	19	4	<1	<10	<10	<1	<10	11
JUN 06...	<1	<1	<10	<10	60	15	--	--	<10	<1	<10	<3
SEP 23...	<1	<1	<10	<10	40	5	<1	<10	<10	<1	<10	6

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SEDI-MENT, DIS-SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-SUS-PENDED (T/DAY) (80155)
APR 23...	1345	0.28	9	0.01
APR 23...	1350	0.28	4	0.00
JUN 06...	1115	7.5	66	1.3
SEP 23...	1325	0.86	4	0.01

394657105471500 WEST HOOP CREEK TRIBUTARY AT LOWER STATION NEAR BERTHOUD PASS, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 39°46'57", long 105°47'15", (unsurveyed), Clear Creek County, Hydrologic Unit 14010001, 0.25 mi upstream from the confluence with Hoop Creek, and 7.5 mi west of Empire.

PERIOD OF RECORD.--April to September 1997.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	pH (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS TOTAL (MG/L) (00900)	CALCIUM DIS-SOLVED (MG/L) (00915)
APR 23...	1620	0.61	56	7.9	1.0	1.2	10.4	15	4.3
JUN 06...	1315	9.2	31	8.2	3.5	3.3	10.2	9	2.6
SEP 23...	1132	0.77	28	7.3	4.0	4.3	10.2	10	2.8

DATE	TIME	MAGNE-SIUM, DIS-SOLVED (MG/L) (00925)	SODIUM, DIS-SOLVED (MG/L) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L) (00935)	ALKA-LINITY LAB (MG/L) (90410)	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)
APR 23...	0.92	4.4	0.4	15	2.1	6.6	0.1	8.3	23	
JUN 06...	0.60	2.0	0.4	10	1.4	2.1	0.1	6.9	30	
SEP 23...	0.62	1.6	0.3	13	1.3	0.4	0.1	7.5	25	

DATE	TIME	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L) (00613)	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)	NITRO-GEN, AM-MONIA + ORGANIC DIS-SOLVED (MG/L) (00623)	PHOS-PHORUS TOTAL (MG/L) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L) (00671)
APR 23...	36	0.005	0.096	<0.002	<0.2	<0.2	0.007	0.009	0.006	
JUN 06...	23	0.001	0.045	<0.002	<0.2	<0.2	0.015	0.006	0.008	
SEP 23...	23	<0.001	0.014	<0.002	<0.2	<0.2	0.008	0.005	0.003	

DATE	CADMIUM WATER UNFLTRD TOTAL (UG/L) (AS CD) (01027)	CADMIUM DIS-SOLVED (UG/L) (AS CD) (01025)	COPPER, TOTAL RECOV-ERABLE (UG/L) (AS CU) (01042)	COPPER, DIS-SOLVED (UG/L) (AS CU) (01040)	IRON, TOTAL RECOV-ERABLE (UG/L) (AS FE) (01045)	IRON, DIS-SOLVED (UG/L) (AS FE) (01046)	LEAD, 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)	ZINC, TOTAL RECOV-ERABLE (UG/L) (AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L) (AS ZN) (01090)
APR 23...	<1	1	<10	<10	29	5	<1	<10	<10	<1	<10	8
JUN 06...	<1	<1	<10	<10	270	17	1	<10	10	<1	<10	<3
SEP 23...	<1	<1	<10	<10	100	10	<1	<10	<10	<1	<10	6

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SEDI-MENT, DIS-SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-SUS-PENDED (T/DAY) (80155)
APR 23...	1605	0.61	5	0.01
APR 23...	1610	0.61	5	0.01
JUN 06...	1300	9.2	50	1.2
SEP 23...	1120	0.77	--	--

394634105465800 HOOP CREEK AT MOUTH NEAR BERTHOUD FALLS, CO

LOCATION.--Lat 39°46'34", long 105°46'58", T.3 S., R.75 W. (unsurveyed), Clear Creek County, Hydrologic Unit 10190004, on left bank 10 ft downstream from U.S. Highway 40 culvert, and 1.0 mi southeast of Berthoud Falls.

DRAINAGE AREA.--Not determined.

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 9,595 ft above sea level, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Natural flow of stream affected by minor transmountain diversion from Colorado River basin through Berthoud Pass ditch (see elsewhere in this report).

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge during period of seasonal operation, 61 ft³/s, June 22, during period of estimated record. Maximum recorded discharge, 73 ft³/s, June 27, at 0730, gage height 1.52 ft; minimum daily, 0.90 ft³/s, May 3.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	1.2	16	18	8.0	3.7
2	---	---	---	---	---	---	---	e1.0	24	15	7.4	3.7
3	---	---	---	---	---	---	---	.90	e26	15	7.8	4.7
4	---	---	---	---	---	---	---	1.4	e27	14	7.4	4.8
5	---	---	---	---	---	---	---	1.6	e28	16	7.8	3.9
6	---	---	---	---	---	---	---	1.7	e29	18	7.8	3.5
7	---	---	---	---	---	---	---	1.9	e31	18	7.4	3.2
8	---	---	---	---	---	---	---	2.3	e33	19	7.4	3.3
9	---	---	---	---	---	---	---	2.7	e33	20	7.5	3.3
10	---	---	---	---	---	---	---	3.2	e32	19	7.5	3.3
11	---	---	---	---	---	---	---	3.5	e33	18	7.4	3.6
12	---	---	---	---	---	---	---	3.6	e37	17	8.1	3.0
13	---	---	---	---	---	---	---	4.0	e40	16	7.9	2.6
14	---	---	---	---	---	---	---	4.6	e43	15	7.9	2.4
15	---	---	---	---	---	---	---	5.2	e47	16	7.7	2.5
16	---	---	---	---	---	---	---	6.7	e46	15	7.4	3.2
17	---	---	---	---	---	---	---	9.2	e45	14	7.1	2.4
18	---	---	---	---	---	---	---	12	e48	13	7.1	2.3
19	---	---	---	---	---	---	---	14	e52	12	7.2	2.6
20	---	---	---	---	---	---	---	13	e55	13	6.9	3.8
21	---	---	---	---	---	---	---	13	e57	13	6.4	3.2
22	---	---	---	---	---	---	---	12	e61	13	6.0	3.1
23	---	---	---	---	---	---	---	13	e56	12	5.6	2.6
24	---	---	---	---	---	---	---	13	e54	12	6.2	2.2
25	---	---	---	---	---	---	---	13	e54	12	5.9	2.0
26	---	---	---	---	---	---	---	12	e48	10	5.0	2.2
27	---	---	---	---	---	---	---	13	44	10	4.7	2.1
28	---	---	---	---	---	---	---	12	34	9.5	4.5	1.9
29	---	---	---	---	---	---	---	1.1	13	31	8.9	4.3
30	---	---	---	---	---	---	---	1.0	11	23	8.8	4.1
31	---	---	---	---	---	---	---	12	---	8.7	3.9	---
TOTAL	---	---	---	---	---	---	---	230.70	1187	438.9	207.3	88.8
MEAN	---	---	---	---	---	---	---	7.44	39.6	14.2	6.69	2.96
MAX	---	---	---	---	---	---	---	14	61	20	8.1	4.8
MIN	---	---	---	---	---	---	---	.90	16	8.7	3.9	1.8
AC-FT	---	---	---	---	---	---	---	458	2350	871	411	176

e--Estimated.

394634105465800 HOOP CREEK AT MOUTH NEAR BERTHOUD FALLS, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1997 to September 1997.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: May 1997 to September 1997.

WATER TEMPERATURE: May 1997 to September 1997.

INSTRUMENTATION.--Water-quality monitor since May 1997.

REMARKS.--Water temperature and specific conductance records are rated good.

EXTREMES FOR CURRENT PERIOD.--

SPECIFIC CONDUCTANCE: Maximum, 440 microsiemens, Sept. 5; minimum, 23 microsiemens, June 20, 22.

WATER TEMPERATURE: Maximum 10.7°C, Sept. 2; minimum, 1.0°C, May 26.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	pH (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	OXYGEN, DIS-SOLVED (MG/L) (00300)	HARD-NESS TOTAL (MG/L CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)			
APR 23...	1710	0.88	282	7.3	0.5	14	11.4	51	14			
JUN 06...	1230	28	58	8.1	4.0	5.3	9.2	13	3.4			
SEP 23...	1040	2.8	55	7.5	4.5	2.2	9.2	15	4.0			
DATE	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 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)			
APR 23...	3.9	32	0.9	16	4.3	73	<0.1	8.3	165			
JUN 06...	1.0	5.0	0.5	10	1.7	9.5	0.1	6.4	45			
SEP 23...	1.1	3.9	0.4	15	1.8	6.7	<0.1	6.6	35			
DATE	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)			
APR 23...	147	0.004	0.066	<0.002	<0.2	<0.2	0.012	<0.001	0.002			
JUN 06...	34	0.001	0.061	<0.002	<0.2	<0.2	0.010	0.004	0.004			
SEP 23...	34	0.001	0.017	<0.002	<0.2	<0.2	0.005	0.003	0.002			
DATE	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	
APR 23...	<1	<1	<10	<10	160	59	<1	<10	20	11	<10	--
JUN 06...	<1	<1	<10	<10	280	26	<1	<10	10	2	10	8
SEP 23...	<1	<1	<10	<10	90	35	<1	<10	<10	4	<10	<3

PLATTE RIVER BASIN

394634105465800 HOOP CREEK AT MOUTH NEAR BERTHOUD FALLS, CO--Continued

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

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)
FEB				
26...	1320	0.30	3	<0.01
26...	1325	0.30	28	0.02
26...	1330	0.30	3	<0.01
MAR				
05...	1245	0.20	1	<0.01
13...	1600	0.80	16	0.03
17...	1800	1.0	11	0.03
19...	1900	1.2	15	0.05
20...	1330	0.51	15	0.02
25...	1730	1.0	19	0.05
27...	1520	0.70	5	0.01
31...	1805	0.50	3	<0.01
APR				
03...	1450	0.60	9	0.01
16...	0945	0.70	23	0.04
17...	1035	4.9	6	0.09
18...	1000	0.74	15	0.03
19...	0930	0.74	3	0.01
21...	0830	0.90	5	0.01
22...	1825	0.90	217	0.53
23...	1645	0.90	43	0.10
23...	1700	0.88	15	0.04
24...	1630	0.90	21	0.05
25...	1455	1.0	102	0.27
26...	1445	1.0	31	0.08
27...	2120	1.0	18	0.05
28...	2120	1.0	11	0.03
29...	1055	1.1	8	0.02
30...	1755	1.0	4	0.01
MAY				
01...	1025	0.96	2	<0.01
02...	1015	46	8	1.0
02...	1635	0.83	3	0.01
03...	0900	0.83	2	<0.01
03...	2045	1.0	17	0.05
04...	0830	0.96	4	0.01
04...	2200	1.8	4	0.02
05...	0945	0.96	5	0.01
05...	1710	2.1	101	0.57
06...	0825	1.5	5	0.02
06...	1745	2.1	31	0.17
07...	1240	1.7	4	0.02
07...	2100	2.3	9	0.06
08...	0905	1.9	3	0.02
09...	0920	2.2	3	0.02
10...	0810	2.7	3	0.02
10...	2155	3.7	10	0.10
11...	1120	3.3	4	0.03
11...	1840	3.7	6	0.06
12...	0840	3.3	4	0.04
12...	2015	4.1	9	0.10
13...	0725	3.7	11	0.10
13...	1830	4.5	18	0.21
14...	0855	4.5	7	0.08
14...	1840	4.9	29	0.38
15...	0830	4.5	10	0.13
15...	1835	6.5	34	0.59
16...	0745	5.4	15	0.22
16...	2050	9.3	43	1.1
17...	0925	7.1	28	0.53
17...	2115	12	154	5.0
18...	1035	12	30	0.98
19...	0840	13	32	1.1

394634105465800 HOOP CREEK AT MOUTH NEAR BERTHOUD FALLS, CO--Continued

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

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)
MAY				
20...	1155	11	45	1.3
20...	2130	14	72	2.7
21...	1140	12	33	1.1
21...	1145	17	41	1.9
21...	1155	12	19	0.63
21...	1156	12	58	1.9
21...	1945	16	285	12
22...	1120	12	105	3.4
22...	1800	14	171	6.5
23...	1155	13	193	6.8
23...	1900	14	112	4.2
24...	1600	14	34	1.3
25...	0835	13	32	1.1
25...	1926	13	32	1.1
26...	1130	13	16	0.55
26...	1730	11	26	0.76
27...	1015	12	17	0.56
28...	1024	12	14	0.45
28...	1710	13	14	0.49
29...	1010	13	45	1.6
29...	2010	12	24	0.77
30...	1045	11	18	0.53
30...	2145	11	16	0.48
31...	0945	11	15	0.44
31...	1420	11	85	2.5
JUN				
01...	1130	12	57	1.9
02...	0810	24	122	7.9
02...	2100	22	113	6.7
03...	1715	26	278	20
04...	1035	27	38	2.8
04...	2355	27	81	5.9
05...	1137	28	75	5.7
05...	2040	28	61	4.6
06...	0645	29	51	4.0
06...	1220	29	38	3.0
08...	0930	33	67	6.0
10...	1000	32	36	3.1
10...	2230	32	54	4.7
11...	1100	33	21	1.8
11...	2121	33	78	7.0
12...	1030	37	63	6.3
13...	1155	40	113	12
14...	1000	43	74	8.6
14...	2015	43	389	45
15...	2004	47	171	22
16...	1120	46	57	7.1
16...	1720	46	129	16
17...	1020	45	20	2.4
18...	0940	48	16	2.1
19...	1300	52	38	5.3
20...	0845	55	46	6.8
20...	2300	55	144	21
21...	1007	57	209	32
22...	1158	61	59	9.7
22...	1930	61	75	12
24...	1125	54	62	9.0
24...	2045	54	43	6.2
25...	1005	54	186	27
26...	0910	48	18	2.4
26...	0955	48	12	1.6
28...	0830	35	10	0.93
29...	0630	28	14	1.0
30...	0830	21	10	0.55
30...	1125	17	6	0.28
30...	1130	16	7	0.31
30...	1231	16	8	0.32
30...	1331	21	5	0.30
30...	1431	18	7	0.36
30...	1531	21	9	0.52
30...	1631	18	9	0.44
30...	1731	18	9	0.45
30...	1831	23	7	0.43
30...	1931	23	8	0.52
30...	2031	35	8	0.77
30...	2131	23	5	0.28
30...	2231	21	5	0.26
30...	2331	18	7	0.35

PLATTE RIVER BASIN

394634105465800 HOOP CREEK AT MOUTH NEAR BERTHOUD FALLS, CO--Continued

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)
JUL				
01...	0031	13	5	0.19
01...	0131	13	5	0.17
01...	0231	16	7	0.29
01...	0331	15	5	0.20
01...	0431	21	6	0.31
01...	0531	21	5	0.28
01...	0631	13	6	0.22
01...	0731	18	6	0.29
01...	0815	21	5	0.27
01...	0831	23	7	0.43
01...	0931	21	6	0.36
02...	0855	15	4	0.16
03...	2020	15	5	0.22
05...	1314	15	3	0.12
07...	1930	16	4	0.16
08...	1110	18	1	0.07
10...	1000	18	6	0.27
11...	0915	15	5	0.19
12...	1030	16	5	0.21
14...	1045	13	3	0.10
15...	1925	15	15	0.59
16...	2100	16	4	0.17
17...	1400	13	16	0.58
18...	1735	13	10	0.36
21...	1235	13	5	0.19
22...	0945	10	2	0.05
24...	1145	13	5	0.18
25...	1839	12	6	0.20
28...	2130	8.3	3	0.07
28...	1000	9.3	2	0.05
28...	1714	9.3	1	0.02
28...	1715	9.3	1	0.04
28...	1730	12	2	0.08
28...	1745	9.3	6	0.16
28...	1800	9.3	10	0.26
28...	1815	8.3	6	0.14
28...	1830	8.3	4	0.08
28...	1845	7.4	3	0.05
28...	1900	9.3	3	0.08
28...	1915	9.3	4	0.09
28...	1930	9.3	72	1.8
28...	1945	8.3	2	0.03
28...	2000	9.3	1	0.03
28...	2015	9.3	3	0.07
28...	2030	8.3	1	0.02
28...	2045	8.3	1	0.03
28...	2100	9.3	1	0.01
28...	2115	9.3	2	0.04
28...	2145	8.3	3	0.06
28...	2200	8.3	1	0.02
28...	2215	9.3	1	0.04
28...	2230	8.3	2	0.05
28...	2245	7.4	3	0.06
29...	1100	8.3	2	0.03
30...	1125	8.0	2	0.05
31...	1950	8.3	5	0.11
31...	0200	8.3	3	0.06
31...	1310	9.3	2	0.04
31...	1644	9.3	6	0.16
31...	1645	9.3	5	0.12
31...	1654	9.3	6	0.16
31...	1704	8.7	35	0.83
31...	1714	8.3	150	3.4
31...	1729	9.3	68	1.7
31...	1734	8.3	42	0.95
31...	1744	7.4	42	0.85
31...	1754	9.5	26	0.67
31...	1804	9.5	32	0.81
31...	1814	7.4	31	0.61
31...	1824	7.4	13	0.27
31...	1834	7.4	11	0.22
31...	1844	7.4	8	0.16
31...	1854	8.3	8	0.17
31...	1904	8.0	7	0.14
31...	1914	7.0	5	0.09
31...	1924	8.0	5	0.11
31...	1934	8.8	3	0.08
31...	1944	9.3	7	0.16
31...	2114	8.3	5	0.12
31...	2224	10	5	0.14

394634105465800 HOOP CREEK AT MOUTH NEAR BERTHOUD FALLS, CO--Continued

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

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)
AUG				
01...	1735	8.3	3	0.06
03...	1015	7.4	2	0.05
03...	2029	8.3	19	0.43
03...	2030	8.3	23	0.51
03...	2039	9.3	47	1.2
03...	2049	10	102	2.8
03...	2059	10	151	4.1
03...	2109	11	318	9.5
03...	2119	11	416	12
03...	2129	9.3	298	7.5
03...	2139	11	245	7.3
03...	2149	8.3	320	7.2
03...	2159	8.3	372	8.3
03...	2209	9.0	252	6.1
03...	2219	11	158	4.7
03...	2229	12	113	3.7
03...	2239	12	97	3.2
03...	2249	11	81	2.4
03...	2259	10	68	1.8
03...	2309	10	56	1.5
03...	2319	9.5	42	1.1
03...	2329	9.3	40	0.99
03...	2339	8.3	33	0.73
03...	2349	8.3	30	0.68
03...	2359	7.4	25	0.51
04...	0009	7.4	22	0.45
05...	1413	8.3	18	0.40
05...	1414	8.3	18	0.41
05...	1423	9.0	46	1.1
05...	1433	9.3	54	1.4
05...	1443	8.3	431	9.7
05...	1453	9.0	249	6.1
05...	1503	9.3	392	9.8
05...	1513	10	154	4.1
05...	1523	9.0	98	2.4
05...	1533	8.3	65	1.5
05...	1543	8.3	54	1.2
05...	1553	8.3	36	0.82
05...	1603	8.3	35	0.79
05...	1613	7.4	20	0.41
05...	1623	7.9	16	0.35
05...	1633	8.3	15	0.33
05...	1643	7.4	12	0.24
05...	1653	7.4	16	0.32
05...	1703	7.4	11	0.22
05...	1713	7.4	11	0.22
05...	1723	7.4	11	0.21
05...	1733	7.4	9	0.19
05...	1743	7.4	10	0.20
05...	1753	8.3	9	0.19
05...	1925	8.8	23	0.54
07...	1535	6.6	3	0.05
09...	0900	7.4	11	0.22
09...	1929	7.4	3	0.06
09...	1939	7.4	2	0.04
09...	1954	7.4	3	0.07
09...	2009	7.4	13	0.26
09...	2024	7.9	8	0.17
09...	2039	8.3	4	0.10
09...	2054	7.4	3	0.07
09...	2109	7.4	4	0.09
09...	2124	6.9	3	0.06
09...	2139	6.9	2	0.03
09...	2154	7.4	2	0.03
09...	2209	8.0	1	0.03
09...	2224	6.9	4	0.07
09...	2239	7.9	3	0.06
09...	2254	7.4	4	0.09
09...	2309	7.4	3	0.05
09...	2324	7.4	1	0.01
09...	2339	7.4	2	0.04
09...	2354	7.4	2	0.04
10...	0009	7.4	3	0.05
10...	0024	7.4	3	0.05
10...	0039	7.4	4	0.07
10...	0054	7.4	4	0.08
10...	0109	7.4	6	0.12
11...	0845	8.8	4	0.09

PLATTE RIVER BASIN

394634105465800 HOOP CREEK AT MOUTH NEAR BERTHOUD FALLS, CO--Continued

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SEDI- MENT, SUS- PENDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)
AUG				
13...	1850	7.4	3	0.07
15...	1855	8.3	1	0.03
18...	1140	7.0	1	0.03
18...	1444	7.4	2	0.05
18...	1454	7.4	2	0.04
18...	1509	7.4	4	0.07
18...	1524	6.9	6	0.11
18...	1539	7.0	19	0.36
18...	1554	7.0	137	2.6
18...	1609	7.4	84	1.7
18...	1624	7.4	28	0.56
18...	1639	7.4	31	0.63
18...	1654	7.4	15	0.30
18...	1709	7.4	10	0.20
18...	1724	7.4	18	0.36
18...	1739	7.4	21	0.42
18...	1754	7.4	4	0.07
18...	1809	7.4	5	0.09
18...	1824	7.4	10	0.20
18...	1839	6.9	3	0.06
18...	1854	6.6	4	0.07
18...	1909	6.9	4	0.08
18...	1924	7.4	1	0.03
18...	1939	6.9	3	0.06
18...	1954	7.0	4	0.08
18...	2009	6.8	8	0.14
18...	2024	7.4	5	0.10
20...	0815	7.4	2	0.04
22...	1405	5.8	1	0.01
28...	1852	4.1	6	0.06
30...	1500	4.1	4	0.05
SEP				
01...	1430	3.6	8	0.07
08...	1610	3.6	6	0.06
12...	0920	3.0	5	0.04
22...	1650	3.2	2	0.02
23...	1031	2.6	2	0.01

394634105465800 HOOP CREEK AT MOUTH NEAR BERTHOUD FALLS, CO--Continued

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SEDI-MENT DIS-CHARGE, BEDLOAD (TONS/DAY) (80225)	SED. BEDLOAD SIEVE DIAM. % FINER THAN .125 MM (80227)	SED. BEDLOAD SIEVE DIAM. % FINER THAN .250 MM (80228)	SED. BEDLOAD SIEVE DIAM. % FINER THAN .500 MM (80229)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 1.00 MM (80230)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 2.00 MM (80231)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 4.00 MM (80232)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 8.00 MM (80233)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 16.0 MM (80234)	
MAY												
14...	1955	5.5	0.100	0.00	0.500	20.9	48.0	71.9	93.4	100	--	
15...	0734	4.5	12.8	0.00	0.200	12.7	39.1	67.0	89.5	99.7	100	
16...	0935	6.5	0.200	0.00	0.100	0.900	4.40	38.8	89.7	100	--	
16...	0950	4.9	0.200	0.200	0.200	3.00	9.60	48.5	94.4	100	--	
19...	0746	13	13.5	0.00	0.100	13.3	39.2	68.7	89.4	98.7	100	

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SEDI-MENT DIS-CHARGE, BEDLOAD (TONS/DAY) (80225)	SED. BEDLOAD SIEVE DIAM. % FINER THAN .125 MM (80227)	SED. BEDLOAD SIEVE DIAM. % FINER THAN .250 MM (80228)	SED. BEDLOAD SIEVE DIAM. % FINER THAN .500 MM (80229)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 1.00 MM (80230)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 2.00 MM (80231)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 4.00 MM (80232)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 8.00 MM (80233)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 16.0 MM (80234)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 32.0 MM (80235)
MAY												
20...	1719	12	10.1	0.100	0.200	12.4	34.7	54.7	71.1	79.8	80.3	100
20...	1735	13	13.3	0.00	0.300	11.6	36.0	66.1	89.6	99.2	100	--
21...	1228	11	5.70	0.00	0.200	8.50	32.4	64.1	90.1	99.6	100	--
21...	1239	12	7.00	0.00	0.200	5.50	21.9	50.2	83.7	98.0	100	--
22...	0950	12	26.9	0.00	0.100	2.50	11.2	42.1	83.4	98.7	100	--
22...	1005	11	15.3	0.100	0.200	3.90	19.4	50.5	83.3	97.3	100	--
22...	1015	11	9.30	0.100	0.200	6.40	25.8	54.4	81.1	95.7	100	--
23...	0930	13	9.50	0.00	0.300	12.7	40.5	67.1	87.7	96.5	100	--
23...	0940	13	9.20	0.100	0.200	13.6	38.8	65.7	84.9	94.7	95.3	100
24...	1727	14	5.10	0.100	0.400	18.9	50.0	76.0	92.4	99.2	100	--
24...	1737	14	4.40	0.00	0.300	17.1	44.0	70.2	87.3	95.8	100	--
27...	1055	13	1.50	0.00	0.600	29.2	64.6	85.7	96.1	99.1	100	--
27...	1105	13	0.800	0.00	0.400	21.7	52.9	76.2	92.1	96.8	100	--
28...	1045	12	1.10	0.00	0.200	14.5	33.8	57.3	84.0	98.3	100	--
28...	1055	12	0.800	0.100	0.200	16.9	43.1	69.2	92.6	97.7	100	--
30...	0955	11	0.700	0.00	0.300	21.3	48.1	68.2	84.3	89.6	89.6	100
30...	1005	11	0.600	0.100	0.200	19.3	53.6	81.0	95.0	100	--	--

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SEDI-MENT DIS-CHARGE, BEDLOAD (TONS/DAY) (80225)	SED. BEDLOAD SIEVE DIAM. % FINER THAN .125 MM (80227)	SED. BEDLOAD SIEVE DIAM. % FINER THAN .250 MM (80228)	SED. BEDLOAD SIEVE DIAM. % FINER THAN .500 MM (80229)	SED. BEDLOAD SIEVE DIAM. % FINER THAN 1.00 MM (80230)
JUN							
01...	1633	19	20.8	0.100	0.300	5.60	14.6
01...	1643	17	16.1	0.100	1.00	14.0	35.9
02...	1510	21	13.2	0.200	1.10	15.2	36.0
02...	1520	21	11.0	0.200	0.800	12.9	28.9
03...	1425	26	12.6	0.100	0.700	9.20	25.4
03...	1435	26	12.2	0.200	0.700	11.1	28.1
05...	1435	28	10.2	0.100	0.700	12.7	31.1
06...	1425	29	2.50	0.100	0.700	11.4	32.2
06...	1435	29	5.30	0.200	0.700	9.80	24.0
08...	1203	33	3.50	0.100	0.400	7.10	23.2
08...	1213	33	3.30	0.100	0.400	8.40	24.0
12...	1105	37	7.40	0.100	0.400	7.30	25.2
12...	1115	37	7.30	0.100	0.400	6.80	20.3
13...	1835	40	19.2	0.200	0.500	5.30	13.0
13...	1845	40	14.0	0.100	0.700	8.90	21.2
15...	1425	47	11.9	0.200	0.700	8.30	20.6
16...	1105	46	3.50	0.200	0.700	12.7	31.2

PLATTE RIVER BASIN

394634105465800 HOOP CREEK AT MOUTH NEAR BERTHOUD FALLS, CO--Continued

PARTICLE-SIZE DISTRIBUTION OF SURFACE BED MATERIAL, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	SED.	SED.	SED.	SED.	SED.	SED.
	BEDLOAD SIEVE DIAM. % FINER THAN 2.00 MM (80231)	BEDLOAD SIEVE DIAM. % FINER THAN 4.00 MM (80232)	BEDLOAD SIEVE DIAM. % FINER THAN 8.00 MM (80233)	BEDLOAD SIEVE DIAM. % FINER THAN 16.0 MM (80234)	BEDLOAD SIEVE DIAM. % FINER THAN 32.0 MM (80235)	BEDLOAD SIEVE DIAM. % FINER THAN 64.0 MM (80236)
JUN						
01...	27.0	38.0	43.2	44.1	44.1	100
01...	60.0	80.0	92.0	95.8	100	--
02...	58.5	80.4	94.7	98.8	100	--
02...	45.3	57.3	67.6	73.6	75.0	100
03...	48.5	73.0	90.2	96.5	100	--
03...	52.3	74.7	92.3	96.7	100	--
05...	54.3	75.1	88.8	96.6	100	--
06...	56.8	78.3		93.4	100	--
06...	42.6	61.9	82.4	100	--	--
08...	46.8	71.8	90.0	100	--	--
08...	47.9	71.2	88.4	100	--	--
12...	50.9	75.7	91.0	100	--	--
12...	40.9	60.5	80.5	100	--	--
13...	24.3	38.1	51.8	59.3	67.8	100
13...	34.5	49.4	60.5	63.2	63.2	100
15...	33.7	44.8	54.4	60.9	68.3	100
16...	53.0	71.0	83.2	91.5	100	--

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SEDI- MENT DIS- CHARGE, BEDLOAD (TONS/ DAY) (80225)	SED.	SED.	SED.	SED.	SED.	SED.	SED.	SED.	
				BEDLOAD SIEVE DIAM. % FINER THAN .125 MM (80227)	BEDLOAD SIEVE DIAM. % FINER THAN .250 MM (80228)	BEDLOAD SIEVE DIAM. % FINER THAN .500 MM (80229)	BEDLOAD SIEVE DIAM. % FINER THAN 1.00 MM (80230)	BEDLOAD SIEVE DIAM. % FINER THAN 2.00 MM (80231)	BEDLOAD SIEVE DIAM. % FINER THAN 4.00 MM (80232)	BEDLOAD SIEVE DIAM. % FINER THAN 8.00 MM (80233)	BEDLOAD SIEVE DIAM. % FINER THAN 16.0 MM (80234)	BEDLOAD SIEVE DIAM. % FINER THAN 32.0 MM (80235)
JUN												
16...	1115	46	6.60	0.100	0.400	5.60	17.0	36.1	61.4	80.2	88.8	100
18...	1332	48	3.90	0.200	0.400	12.6	33.9	58.7	76.9	89.9	97.5	100
18...	1353	48	4.90	0.100	0.400	10.6	30.8	54.1	73.2	85.6	91.6	100
20...	1025	55	5.20	0.200	0.600	12.0	28.5	43.5	68.9	84.2	98.6	100
20...	1040	55	9.50	0.200	0.400	5.70	15.8	30.7	51.2	72.1	86.3	100
23...	1440	56	7.10	0.200	0.500	7.90	21.5	43.6	65.0	80.3	93.0	100
23...	1450	56	4.60	0.200	0.600	11.3	29.0	51.8	68.4	81.9	92.4	100
26...	1044	48	0.500	0.300	0.900	16.2	43.2	69.9	86.7	97.1	100	--
26...	1045	48	0.900	0.200	0.500	13.5	34.7	59.8	77.7	91.5	100	--

394634105465800 HOOP CREEK AT MOUTH NEAR BERTHOUD FALLS, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	4.3	1.6	2.4
22	---	---	---	---	---	---	---	---	---	2.8	1.9	2.2
23	---	---	---	---	---	---	---	---	---	4.9	1.6	2.6
24	---	---	---	---	---	---	---	---	---	4.0	1.7	2.4
25	---	---	---	---	---	---	---	---	---	4.2	1.3	2.2
26	---	---	---	---	---	---	---	---	---	2.6	1.0	1.6
27	---	---	---	---	---	---	---	---	---	3.1	1.2	1.7
28	---	---	---	---	---	---	---	---	---	4.2	1.4	2.4
29	---	---	---	---	---	---	---	---	---	3.0	2.2	2.5
30	---	---	---	---	---	---	---	---	---	5.4	2.1	3.1
31	---	---	---	---	---	---	---	---	---	6.7	2.0	3.4
MONTH	---	---	---	---	---	---	---	---	---	---	---	---
	JUNE			JULY			AUGUST			SEPTEMBER		
1	6.4	2.2	3.3	7.5	2.8	4.5	10.0	5.1	7.0	8.7	6.7	7.5
2	5.2	2.0	3.1	8.6	2.2	4.7	8.8	5.6	7.1	10.7	6.3	8.2
3	5.6	1.9	3.2	7.8	2.6	4.8	9.9	5.0	7.1	9.5	4.4	6.9
4	5.5	2.1	3.3	7.6	3.1	5.0	9.9	6.0	7.6	10.2	5.3	7.3
5	5.3	2.3	3.2	6.8	2.9	4.6	7.8	6.1	7.0	9.7	5.4	7.1
6	4.2	2.2	3.0	7.9	2.9	4.6	6.1	4.5	5.4	8.1	5.5	6.7
7	4.6	2.2	3.0	8.4	3.0	5.2	7.7	3.4	5.4	8.5	4.6	6.3
8	3.7	2.3	2.8	6.3	3.6	4.8	9.4	4.2	6.3	8.7	4.4	6.3
9	3.6	2.0	2.8	7.7	3.1	4.9	8.1	5.1	6.6	9.0	5.2	6.8
10	5.4	2.4	3.3	7.3	3.6	5.2	8.0	5.8	6.7	9.4	4.8	6.7
11	5.6	2.1	3.2	6.0	4.0	5.0	7.1	4.3	5.7	8.2	5.5	6.8
12	5.6	2.2	3.2	7.4	3.3	5.2	7.6	3.5	5.4	9.0	5.5	6.6
13	5.6	2.0	3.3	8.5	3.6	5.5	8.0	4.3	5.9	7.7	4.3	5.9
14	5.3	2.3	3.3	9.2	3.2	5.6	7.2	4.6	5.8	8.6	4.9	6.4
15	5.4	1.9	3.1	9.6	3.7	6.0	9.5	4.8	6.7	8.5	4.9	6.4
16	4.9	2.1	3.2	8.8	4.0	5.8	9.1	5.0	6.7	6.9	4.7	5.8
17	4.3	2.7	3.4	8.1	4.2	5.7	8.3	5.1	6.6	7.8	3.5	5.4
18	6.6	2.6	3.8	6.6	4.1	5.3	8.0	5.5	6.5	8.6	4.9	6.6
19	6.5	3.0	4.2	6.6	4.2	5.5	7.9	4.9	5.8	8.1	4.3	6.3
20	7.1	2.8	4.2	7.8	4.3	5.9	8.6	4.3	6.3	7.3	3.1	4.8
21	6.9	2.8	4.4	8.3	4.0	5.9	9.1	5.3	6.8	6.5	4.2	5.2
22	7.7	3.0	4.7	8.0	4.5	6.1	9.0	5.6	7.1	6.1	3.5	4.5
23	5.9	2.9	4.3	8.7	5.1	6.6	9.7	5.4	7.3	5.3	3.2	3.9
24	6.3	2.9	4.2	9.2	5.3	6.9	9.1	5.8	7.3	7.3	2.6	4.3
25	7.0	2.6	4.4	7.9	4.6	6.3	8.3	6.0	7.2	7.9	2.6	4.9
26	6.9	2.8	4.5	7.9	4.6	6.2	10.3	6.5	8.1	7.2	4.9	6.0
27	6.4	3.0	4.5	8.0	5.6	6.5	9.9	6.3	8.1	8.2	5.1	6.2
28	8.0	3.0	4.8	8.2	5.6	6.6	9.8	6.4	7.9	6.6	2.7	4.5
29	8.1	3.0	4.9	8.1	5.5	6.7	9.8	6.3	7.6	7.1	2.4	4.4
30	8.5	2.9	5.0	8.9	5.6	7.0	8.9	5.5	7.0	7.5	3.0	4.8
31	---	---	---	7.9	5.6	6.6	8.4	5.5	7.0	---	---	---
MONTH	8.5	1.9	3.7	9.6	2.2	5.7	10.3	3.4	6.7	10.7	2.4	6.0

06716100 WEST FORK CLEAR CREEK ABOVE MOUTH NEAR EMPIRE, CO

LOCATION.--Lat 39°45'32", long 105°39'34", in NE¼SW¼ sec.27, T.3 S., R.74 W., Clear Creek County, Hydrologic Unit 10190004, on left bank, 60 ft downstream from frontage road bridge and 1.2 mi east of Empire.

DRAINAGE AREA.--57.6 mi².

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 good 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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34	27	e18	e16	e13	e12	19	27	270	383	124	52
2	33	26	e18	e16	e13	e11	19	26	343	351	116	53
3	34	26	e18	e16	e13	e11	19	25	387	318	118	58
4	34	26	e18	e16	e13	e11	21	27	452	302	126	55
5	34	25	e18	e16	e13	e11	19	33	474	300	127	50
6	33	e21	e19	e16	e12	e11	20	41	474	294	124	49
7	32	e18	e19	e15	e12	e12	19	51	494	259	115	48
8	31	e19	e19	e15	e12	e11	17	61	522	226	107	46
9	31	e20	e19	e15	e12	e11	17	68	507	236	106	44
10	31	e22	e19	e15	e12	e11	16	78	477	246	110	41
11	30	e21	e18	e15	e12	e11	17	82	487	258	102	43
12	31	e21	e18	e15	e12	e12	20	81	520	308	95	42
13	30	e21	e18	e14	e11	e12	21	85	520	299	89	39
14	30	e21	e18	e14	e12	e12	20	96	520	273	86	41
15	30	e21	e18	e14	e12	e12	16	108	521	245	78	39
16	30	e20	e18	e14	e12	12	17	135	528	200	73	43
17	29	e20	e17	e14	e11	13	17	166	517	194	72	39
18	31	e21	e17	e14	e11	13	20	194	535	187	73	37
19	31	e21	e17	e15	e11	13	20	208	582	184	73	37
20	32	e21	e17	e14	e11	15	23	212	638	173	70	48
21	27	e20	e17	e14	e12	16	28	213	644	162	65	45
22	28	e20	e17	e14	e11	17	25	234	675	155	63	44
23	30	e20	e17	e14	e11	18	25	228	605	158	61	42
24	29	e20	e17	e14	e11	18	26	228	571	158	64	38
25	28	e19	e17	e13	e11	18	27	218	575	148	63	37
26	28	e19	e16	e13	e10	18	26	208	527	140	59	36
27	28	e18	e16	e13	e11	19	25	189	484	138	58	36
28	28	e17	e16	e13	e12	19	27	174	465	132	57	35
29	27	e17	e16	e13	---	18	28	187	415	129	55	33
30	27	e17	e16	e13	---	18	28	188	376	129	54	34
31	26	---	e16	e13	---	18	---	212	---	131	53	---
TOTAL	937	625	542	446	329	434	642	4083	15105	6816	2636	1284
MEAN	30.2	20.8	17.5	14.4	11.8	14.0	21.4	132	504	220	85.0	42.8
MAX	34	27	19	16	13	19	28	234	675	383	127	58
MIN	26	17	16	13	10	11	16	25	270	129	53	33
AC-FT	1860	1240	1080	885	653	861	1270	8100	29960	13520	5230	2550

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 1997, BY WATER YEAR (WY)

	1995	1996	1997	1995	1996	1997	1995	1996	1997	1995	1996	1997
MEAN	28.5	21.9	16.3	13.5	11.8	14.1	21.0	124	427	267	93.9	44.9
MAX	33.4	29.0	20.9	16.2	12.4	15.5	26.4	194	504	395	143	54.7
(WY)	1996	1996	1996	1996	1996	1996	1996	1996	1997	1995	1995	1995
MIN	22.0	15.9	10.4	9.92	11.1	12.8	15.3	47.2	388	185	54.1	37.2
(WY)	1995	1995	1995	1995	1995	1995	1995	1995	1996	1996	1996	1996

SUMMARY STATISTICS

FOR 1996 CALENDAR YEAR

FOR 1997 WATER YEAR

WATER YEARS 1995 - 1997

ANNUAL TOTAL	30394	33879	
ANNUAL MEAN	83.0	92.8	90.5
HIGHEST ANNUAL MEAN			94.4
LOWEST ANNUAL MEAN			84.3
HIGHEST DAILY MEAN	514	Jun 22	720
LOWEST DAILY MEAN	e10	Mar 4	e, a, 9.5
ANNUAL SEVEN-DAY MINIMUM	11	Feb 27	9.6
INSTANTANEOUS PEAK FLOW			b, 774
INSTANTANEOUS PEAK STAGE			b, 6.67
ANNUAL RUNOFF (AC-FT)	60290	67200	65560
10 PERCENT EXCEEDS	290	296	298
50 PERCENT EXCEEDS	29	27	27
90 PERCENT EXCEEDS	14	12	11

e-Estimated.

a-Also occurred Jan 17-20, 1995.

b-Also occurred Jun 20, 1995.

06716500 CLEAR CREEK NEAR LAWSON, CO

LOCATION.--Lat 39°45'57", long 105°37'32", in NW¼NW¼ sec.25, T.3 S., R.74 W., Clear Creek County, Hydrologic Unit 10190004, on left bank at east edge of Lawson, 30 ft downstream from private bridge, and 2.0 mi downstream from West Fork Clear Creek.

DRAINAGE AREA.--147 mi².

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 fair 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). No other diversion upstream from station. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	82	56	e35	35	28	28	42	62	602	758	347	135
2	78	53	e35	35	28	25	41	59	723	708	319	136
3	79	55	e35	32	28	25	40	58	774	665	313	148
4	79	56	e35	32	27	25	44	59	876	620	330	141
5	77	52	e35	e30	27	25	41	71	984	600	328	129
6	74	51	e36	e31	27	28	36	88	979	590	341	124
7	72	43	e35	e31	27	26	38	110	1000	557	319	119
8	70	46	e36	e31	27	26	39	128	1070	519	287	116
9	67	51	e37	e31	28	26	39	144	1040	510	266	113
10	67	49	e38	e30	27	25	38	170	968	508	290	108
11	65	47	41	e30	27	27	34	189	987	513	295	107
12	62	46	41	e31	27	28	36	183	985	544	272	108
13	62	46	39	e30	26	28	37	186	1000	532	245	102
14	61	45	38	e31	26	27	37	217	1030	509	234	101
15	61	45	e33	e30	29	27	37	252	1030	486	213	99
16	63	44	e34	e30	26	28	38	301	972	451	201	106
17	59	43	e33	e30	27	28	40	356	956	440	196	99
18	60	48	e33	e31	26	28	45	409	994	431	195	93
19	67	48	e33	e30	26	29	47	444	1130	436	197	93
20	66	46	e34	e30	27	33	53	458	1250	426	187	108
21	53	44	e33	e30	26	35	68	452	1250	405	175	102
22	53	45	e33	e29	25	37	58	519	1240	393	169	103
23	61	44	e34	30	26	38	57	508	1220	388	158	99
24	61	42	e33	e28	26	39	61	530	1100	388	159	93
25	57	40	e33	e27	26	35	58	505	1010	380	165	89
26	58	40	e34	30	26	37	61	477	939	360	160	87
27	56	37	e33	29	26	39	58	436	876	356	157	88
28	57	38	e33	28	25	39	66	402	823	347	153	84
29	58	42	36	28	---	41	67	407	786	347	145	80
30	53	e35	36	28	---	38	65	427	766	354	138	78
31	54	---	35	28	---	40	---	483	---	354	137	---
TOTAL	1992	1377	1089	936	747	960	1421	9090	29360	14875	7091	3188
MEAN	64.3	45.9	35.1	30.2	26.7	31.0	47.4	293	979	480	229	106
MAX	82	56	41	35	29	41	68	530	1250	758	347	148
MIN	53	35	33	27	25	25	34	58	602	347	137	78
AC-FT	3950	2730	2160	1860	1480	1900	2820	18030	58240	29500	14060	6320

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1946 - 1997, BY WATER YEAR (WY)

MEAN	60.1	42.9	33.5	28.7	27.3	27.5	42.3	194	614	411	171	88.8
MAX	132	79.9	50.8	41.0	36.8	37.4	89.1	431	1000	943	404	193
(WY)	1962	1985	1985	1971	1970	1971	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 1996 CALENDAR YEAR	FOR 1997 WATER YEAR	WATER YEARS 1946 - 1997
ANNUAL TOTAL	64503	72126	
ANNUAL MEAN	176	198	146
HIGHEST ANNUAL MEAN			225
LOWEST ANNUAL MEAN			72.3
HIGHEST DAILY MEAN	1100	Jun 22	a1250 Jun 20
LOWEST DAILY MEAN	b28	Feb 23	c25 Feb 22
ANNUAL SEVEN-DAY MINIMUM	29	Mar 4	26 Feb 27
INSTANTANEOUS PEAK FLOW			1390 Jun 22
INSTANTANEOUS PEAK STAGE			6.76 Jun 22
ANNUAL RUNOFF (AC-FT)	127900	143100	d7.41 Jun 4 1956
10 PERCENT EXCEEDS	573	570	105700
50 PERCENT EXCEEDS	55	58	425
90 PERCENT EXCEEDS	31	28	50

e-Estimated.
a-Also occurred Jun 21.
b-Also occurred Mar 6-9, and 16.
c-Also occurred Feb 28, Mar 2-5, and 10.
d-Site and datum then in use.

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

LOCATION.--Lat 39°42'53", long 105°34'17", in NW¼SW¼ sec.9, T.4 S., R.73 W., Clear Creek County, Hydrologic Unit 10190004, on right bank, 750 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 mi².

PERIOD OF RECORD (REVISED).--October 1994 to current year. Records for May 14, 1996 (when gage was moved 750 ft upstream) to September 30, 1997, may not be equivalent to earlier 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 750 ft downstream at different datum.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	9.0	e6.8	e5.5	e4.6	e4.5	6.4	18	71	46	31	18
2	11	9.2	e6.8	e5.6	e4.6	e4.6	6.9	16	73	44	28	19
3	11	8.8	e6.8	e5.7	e4.6	e4.7	7.5	15	69	42	31	20
4	10	8.5	e6.8	e5.8	e4.6	e4.8	6.9	17	74	42	35	19
5	10	e11	e6.8	e5.7	e4.6	e4.9	6.4	21	85	40	33	17
6	9.6	e10	e6.8	e5.6	e4.5	e4.8	6.7	24	87	38	42	16
7	9.4	e9.0	e7.0	e5.6	e4.6	e4.9	e6.8	29	124	37	39	16
8	9.3	e9.3	e7.2	e5.5	e4.5	e4.9	e7.2	29	126	32	35	16
9	9.3	e9.6	e7.4	e5.4	e4.5	e5.0	e8.0	30	125	26	33	15
10	9.1	e10	e7.4	e5.4	e4.5	e5.0	e7.8	33	122	25	37	15
11	9.0	e9.7	e7.6	e5.4	e4.5	e5.0	e7.5	34	124	25	36	16
12	9.4	e9.6	e7.5	e5.4	e4.5	e5.0	e7.5	33	119	24	40	15
13	9.2	e9.6	e7.4	e5.4	e4.5	e5.1	e7.5	35	123	22	40	14
14	8.8	e9.6	e7.2	e5.5	e4.5	e5.2	e7.4	38	122	21	38	14
15	e9.5	e9.6	e7.0	e5.5	e4.4	e5.2	e7.3	41	115	20	37	14
16	e10	e9.0	e6.8	e5.4	e4.5	4.6	6.7	46	112	20	35	14
17	e10	e9.1	e6.8	e5.4	e4.6	4.5	9.4	50	105	21	35	14
18	e11	e9.2	e6.8	e5.4	e4.5	4.6	11	53	100	22	34	15
19	e12	e9.3	e6.8	e5.4	e4.4	5.0	13	54	97	23	32	15
20	e13	e9.0	e6.8	e5.4	e4.4	5.6	15	55	93	21	30	17
21	e11	e8.8	e6.8	e5.4	e4.4	6.2	18	55	88	20	29	16
22	e12	e8.6	e6.8	e5.3	e4.4	5.9	13	63	86	20	26	17
23	e13	e8.4	e6.7	e5.2	e4.4	6.3	12	54	74	19	22	15
24	e14	e8.2	e6.6	e5.1	e4.4	5.9	12	56	66	19	21	15
25	e13	e7.9	e6.4	e5.0	e4.3	6.8	15	55	61	18	22	14
26	e12	e7.7	e6.3	e5.0	e4.5	6.0	13	53	58	18	22	14
27	e12	e7.5	e6.2	e5.0	e4.5	6.0	14	48	57	19	23	13
28	e12	e7.3	e6.0	e4.9	e4.5	6.8	17	47	55	25	25	12
29	e11	e7.1	e5.8	e4.8	---	6.6	19	49	52	29	19	12
30	e10	e6.9	e5.6	e4.7	---	6.9	19	53	49	32	16	12
31	8.6	---	e5.5	e4.6	---	6.5	---	60	---	32	17	---
TOTAL	331.2	266.5	209.2	165.0	125.8	167.8	314.9	1264	2712	842	943	459
MEAN	10.7	8.88	6.75	5.32	4.49	5.41	10.5	40.8	90.4	27.2	30.4	15.3
MAX	14	11	7.6	5.8	4.6	6.9	19	63	126	46	42	20
MIN	8.6	6.9	5.5	4.6	4.3	4.5	6.4	15	49	18	16	12
AC-FT	657	529	415	327	250	333	625	2510	5380	1670	1870	910

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 1997, BY WATER YEAR (WY)

	1995	1996	1997	1995	1996	1997	1995	1996	1997	1995	1996	1997
MEAN	9.35	6.86	5.74	4.95	4.16	4.75	9.18	37.6	107	48.9	22.8	13.5
MAX	10.7	8.88	6.75	5.40	4.52	5.41	10.5	40.8	186	100	30.4	15.5
(WY)	1997	1997	1997	1996	1996	1997	1997	1997	1995	1995	1997	1995
MIN	7.70	4.62	4.10	4.12	3.45	3.84	6.85	35.0	43.3	19.1	9.26	9.64
(WY)	1995	1995	1995	1995	1995	1995	1995	1996	1996	1996	1996	1996

SUMMARY STATISTICS

FOR 1996 CALENDAR YEAR

FOR 1997 WATER YEAR

WATER YEARS 1995 - 1997

ANNUAL TOTAL	5120.2	7800.4					
ANNUAL MEAN	14.0	21.4	22.9				
HIGHEST ANNUAL MEAN			33.5				
LOWEST ANNUAL MEAN			13.7				
HIGHEST DAILY MEAN	55	May 30	126	Jun 8	275	Jun 19	1995
LOWEST DAILY MEAN	e3.7	Mar 27	e4.3	Feb 25	e3.1	Feb 18	1995
ANNUAL SEVEN-DAY MINIMUM	4.2	Feb 11	4.4	Feb 19	3.2	Feb 15	1995
INSTANTANEOUS PEAK FLOW			175	Jun 8	175	Jun 8	1997
INSTANTANEOUS PEAK STAGE			6.51	Jun 8	6.51	Jun 8	1997
ANNUAL RUNOFF (AC-FT)	10160	15470	16560				
10 PERCENT EXCEEDS	40	53	53				
50 PERCENT EXCEEDS	9.2	10	9.0				
90 PERCENT EXCEEDS	4.8	4.8	4.1				

e-Estimated.

06718300 CLEAR CREEK ABOVE JOHNSON GULCH NEAR IDAHO SPRINGS, CO

LOCATION.--Lat 39°44'47", long 105°26'08", in NE¼SW¼ 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 mi².

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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	136	e85	e54	e38	e35	e36	e60	116	869	1000	460	227
2	129	e78	e54	e39	e35	e37	e61	110	1010	941	417	222
3	128	e76	e53	e38	e35	e36	e63	107	1040	894	413	250
4	128	e74	e52	e38	e35	e36	e66	109	1150	825	476	239
5	127	e72	e53	e39	e34	e37	e60	128	1280	792	464	200
6	124	e60	e52	e40	e34	e37	e58	154	1280	764	504	174
7	120	e54	e51	e39	e34	e38	e56	e200	1430	716	459	168
8	117	e60	e51	e39	e34	e39	e56	e202	1450	665	409	162
9	114	e64	e50	e38	e34	e40	e55	e209	1410	636	380	158
10	113	e60	e50	e39	e33	e43	e54	e215	1320	632	418	171
11	113	e64	e51	e39	e34	e45	e54	e220	1360	635	418	172
12	112	e64	e50	e39	e34	e45	e53	e230	1360	674	394	174
13	111	e63	e50	e39	e35	e45	e54	e240	1380	655	364	163
14	110	e62	e49	e39	e36	e45	e58	e250	1390	621	346	160
15	109	e62	e48	e38	e35	e45	e61	e270	1390	598	313	158
16	111	e62	e48	e39	e36	e45	e70	e290	1330	551	298	154
17	109	e62	e47	e38	e37	e44	e80	e340	1310	538	293	149
18	109	e63	e47	e38	e36	e45	e93	e400	1340	532	289	141
19	118	e64	e45	e37	e35	e45	e102	e490	1470	539	288	140
20	116	e64	e46	e37	e34	e44	e106	e580	1560	526	276	162
21	100	e62	e46	e36	e34	e45	108	e660	1520	497	254	154
22	101	e62	e45	e37	e35	e45	95	e600	1500	479	243	153
23	110	e60	e44	e38	e36	e45	93	e570	1480	469	227	147
24	115	e59	e43	e37	e36	e45	99	e560	1380	480	225	141
25	105	e58	e44	e36	e36	e45	98	e530	1270	475	239	137
26	e100	e57	e43	e37	e36	e47	102	e480	1200	441	233	138
27	e99	e56	e42	e38	e36	e49	100	e500	1150	435	228	139
28	e96	e56	e41	e38	e35	e50	112	e550	1100	432	229	132
29	e94	e56	e40	e37	---	e52	117	e600	1060	442	222	127
30	e92	e55	e39	e36	---	e54	119	e650	1020	467	213	125
31	e91	---	e40	e35	---	e57	---	681	---	472	224	---
TOTAL	3457	1894	1468	1175	979	1361	2363	11241	38809	18823	10216	4937
MEAN	112	63.1	47.4	37.9	35.0	43.9	78.8	363	1294	607	330	165
MAX	136	85	54	40	37	57	119	681	1560	1000	504	250
MIN	91	54	39	35	33	36	53	107	869	432	213	125
AC-FT	6860	3760	2910	2330	1940	2700	4690	22300	76980	37340	20260	9790

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 1997, BY WATER YEAR (WY)

	1995	1996	1997	1995	1996	1997	1995	1996	1997	1995	1996	1997
MEAN	97.5	62.8	50.5	42.2	37.3	45.5	71.3	378	1235	854	322	164
MAX	116	75.6	60.8	54.6	46.2	49.4	85.2	549	1325	1398	441	189
(WY)	1996	1996	1996	1996	1996	1996	1996	1996	1995	1995	1995	1995
MIN	65.0	49.6	43.2	34.1	30.5	43.1	49.9	221	1086	557	195	140
(WY)	1995	1995	1995	1995	1995	1995	1995	1995	1996	1996	1996	1996

SUMMARY STATISTICS FOR 1996 CALENDAR YEAR FOR 1997 WATER YEAR WATER YEARS 1995 - 1997

ANNUAL TOTAL	91033	96723		
ANNUAL MEAN	249	265		281
HIGHEST ANNUAL MEAN				326
LOWEST ANNUAL MEAN				251
HIGHEST DAILY MEAN	1380	Jun 22	1560	Jun 20
LOWEST DAILY MEAN	e39	Dec 30	e33	Feb 10
ANNUAL SEVEN-DAY MINIMUM	41	Dec 25	34	Feb 5
INSTANTANEOUS PEAK FLOW			1690	Jun 20
INSTANTANEOUS PEAK STAGE			7.33	Jun 20
ANNUAL RUNOFF (AC-FT)	180600	191900		203300
10 PERCENT EXCEEDS	840	735		898
50 PERCENT EXCEEDS	96	102		81
90 PERCENT EXCEEDS	46	37		38

e-Estimated.
a-Also occurred Feb 17-19.
b-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 NE¹/₄SW¹/₄ 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 mi².

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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.0	3.8	2.9	3.2	e2.4	e2.6	9.1	30	95	46	18	6.5
2	4.7	3.5	e3.1	3.4	e2.4	e2.7	8.1	29	108	e50	14	6.7
3	4.6	3.7	e3.0	3.4	e2.4	e2.7	11	29	112	e48	12	6.5
4	4.4	3.8	e3.0	3.0	e2.4	e2.8	12	31	118	e43	17	7.0
5	4.0	3.5	e3.0	e2.9	e2.4	e2.8	11	36	118	e40	18	5.9
6	3.8	3.2	e3.0	e2.9	e2.4	e2.9	8.7	41	130	e37	20	5.1
7	3.6	2.1	e3.0	e2.9	e2.4	e3.0	9.0	45	232	e34	17	4.8
8	3.5	3.4	e3.0	e3.0	e2.3	e3.2	9.6	49	195	e30	12	4.4
9	3.4	3.6	e3.1	e3.0	e2.3	e3.4	9.0	51	196	e26	10	4.2
10	3.3	3.5	e3.2	e3.0	e2.3	4.2	9.3	55	204	e23	14	4.0
11	3.3	3.2	e3.3	e2.9	e2.3	4.9	e9.0	58	195	e18	13	4.4
12	3.3	3.3	e3.2	e2.9	e2.2	6.0	e9.0	56	195	18	10	5.0
13	3.3	3.3	e3.1	e3.0	e2.2	5.7	e9.0	61	169	18	10	4.0
14	3.2	3.2	e3.1	e3.0	e2.2	5.9	8.3	71	150	18	8.0	3.8
15	3.3	3.4	e3.1	e3.0	e2.1	5.6	8.9	81	134	16	7.3	3.7
16	3.4	2.4	e3.0	e3.1	2.2	5.5	9.9	93	122	15	6.5	3.8
17	3.5	2.9	e3.0	e3.1	e1.9	6.1	12	111	112	14	7.2	3.7
18	3.1	4.4	e3.0	e3.0	e2.0	5.5	14	119	100	16	6.6	3.6
19	3.8	4.2	e3.0	e3.0	e2.0	5.8	16	125	94	15	6.1	3.8
20	4.1	4.0	e3.0	e2.9	e2.1	7.4	17	114	88	15	6.0	5.7
21	3.1	3.5	e3.0	e2.9	e2.1	8.3	21	112	81	13	5.6	5.0
22	2.7	3.5	e3.0	e2.8	e2.2	8.8	19	134	76	11	5.4	8.5
23	3.6	3.5	e3.0	e2.8	e2.2	9.2	19	128	68	9.9	5.1	7.1
24	3.6	2.7	e3.0	e2.7	e2.2	9.7	19	128	66	9.7	4.9	6.5
25	3.6	3.1	e3.0	e2.7	e2.3	9.1	21	117	65	11	5.5	4.9
26	3.6	2.7	e3.0	e2.6	e2.4	9.0	21	108	64	11	6.3	4.6
27	3.6	2.4	e3.0	e2.5	e2.4	9.9	22	94	59	9.5	5.9	4.4
28	3.7	2.6	e3.1	e2.5	e2.5	9.1	25	85	56	11	6.5	4.2
29	3.8	3.0	2.9	e2.5	---	9.5	27	86	52	13	4.9	4.0
30	3.5	3.4	3.1	e2.5	---	8.4	29	82	47	18	5.1	3.9
31	3.6	---	3.1	e2.4	---	8.7	---	83	---	21	5.0	---
TOTAL	113.0	98.8	94.3	89.5	63.2	188.4	432.9	2442	3501	678.1	292.9	149.7
MEAN	3.65	3.29	3.04	2.89	2.26	6.08	14.4	78.8	117	21.9	9.45	4.99
MAX	5.0	4.4	3.3	3.4	2.5	9.9	29	134	232	50	20	8.5
MIN	2.7	2.1	2.9	2.4	1.9	2.6	8.1	29	47	9.5	4.9	3.6
AC-FT	224	196	187	178	125	374	859	4840	6940	1350	581	297

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 1997, BY WATER YEAR (WY)

	1995	1996	1997	1995	1996	1997	1995	1996	1997	1995	1996	1997
MEAN	4.02	3.41	2.92	2.59	2.18	4.31	12.5	89.8	136	28.3	8.03	5.34
MAX	5.32	4.25	4.03	3.59	2.89	6.08	15.3	112	228	49.7	10.3	6.64
(WY)	1996	1996	1996	1996	1996	1997	1996	1995	1995	1995	1995	1995
MIN	3.08	2.68	1.68	1.30	1.38	2.21	7.60	78.4	61.7	13.4	4.33	4.38
(WY)	1995	1995	1995	1995	1995	1995	1995	1996	1996	1996	1996	1996

SUMMARY STATISTICS

FOR 1996 CALENDAR YEAR

FOR 1997 WATER YEAR

WATER YEARS 1995 - 1997

ANNUAL TOTAL	6065.0	8143.8	
ANNUAL MEAN	16.6	22.3	24.9
HIGHEST ANNUAL MEAN			35.6
LOWEST ANNUAL MEAN			16.9
HIGHEST DAILY MEAN	116	May 19	415
LOWEST DAILY MEAN	2.1	Nov 7	1.2
ANNUAL SEVEN-DAY MINIMUM	2.7	Feb 10	1.3
INSTANTANEOUS PEAK FLOW		512	Jun 7
INSTANTANEOUS PEAK STAGE		5.65	Jun 7
ANNUAL RUNOFF (AC-FT)	12030	16150	18050
10 PERCENT EXCEEDS	71	81	81
50 PERCENT EXCEEDS	4.0	5.0	4.8
90 PERCENT EXCEEDS	3.0	2.6	2.1

e-Estimated.

a-From rating curve extended above 300 ft³/s.

06719505 CLEAR CREEK AT GOLDEN, CO

LOCATION.--Lat 39°45'11", long 105°14'05", in NE¼NW¼ 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 mi².

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.

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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	98	78	49	e52	e62	51	63	138	876	959	403	192
2	92	73	50	e52	e62	52	65	123	1060	881	352	189
3	90	73	53	e52	e60	52	61	116	1100	840	340	206
4	89	74	40	e47	e60	45	79	118	1210	775	440	215
5	86	67	e40	47	60	45	78	146	1370	744	406	188
6	83	63	e45	e47	e60	47	57	180	1390	713	482	152
7	78	57	e50	e48	e60	52	58	216	1610	660	426	145
8	77	58	e56	e50	e60	52	61	243	1600	609	362	139
9	83	72	e60	e52	e60	50	55	260	1620	576	322	133
10	80	65	e60	e52	e56	49	51	283	1470	564	353	149
11	82	60	e60	e54	e56	52	45	310	1470	552	366	152
12	81	60	e56	57	e56	57	51	299	1500	604	335	159
13	81	60	55	e54	e56	53	52	300	1570	587	308	147
14	79	59	55	e54	e58	48	51	339	1560	545	288	145
15	77	61	e54	e54	e60	50	50	374	1550	521	264	140
16	79	62	e54	e54	e54	51	55	421	1430	460	245	132
17	79	55	e54	e52	e48	56	58	497	1400	444	241	129
18	74	69	e54	e54	46	54	67	584	1400	439	239	125
19	84	65	e52	e54	44	53	74	639	1550	440	236	121
20	84	65	e51	e54	45	59	85	676	1700	442	230	149
21	69	62	e50	e54	49	63	112	644	1660	416	207	142
22	64	60	e50	e54	47	63	95	790	1600	401	201	146
23	90	60	e50	e54	51	67	81	751	1570	385	186	137
24	104	57	e50	e54	47	73	104	801	1430	398	179	134
25	95	53	e50	e54	49	62	91	754	1330	394	194	119
26	91	54	e50	e54	57	64	105	692	1240	366	189	123
27	86	49	e50	e54	54	63	99	599	1170	357	187	124
28	84	45	e52	e56	48	58	125	550	1100	360	188	117
29	87	51	e52	e58	---	62	135	548	1040	372	184	112
30	77	59	e52	e60	---	54	140	585	977	400	176	109
31	72	---	e52	e62	---	60	---	654	---	405	190	---
TOTAL	2575	1846	1606	1654	1525	1717	2303	13630	41553	16609	8719	4370
MEAN	83.1	61.5	51.8	53.4	54.5	55.4	76.8	440	1385	536	281	146
MAX	104	78	60	62	62	73	140	801	1700	959	482	215
MIN	64	45	40	47	44	45	45	116	876	357	176	109
AC-FT	5110	3660	3190	3280	3020	3410	4570	27040	82420	32940	17290	8670

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 1997, 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	83.1	60.8	48.3	42.5	41.5	42.8	71.2	307	805	480	206	125												
MAX	192	115	86.6	70.5	66.9	58.9	112	655	1522	1203	475	231												
(WY)	1985	1985	1984	1984	1985	1984	1984	1984	1995	1995	1984	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 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1975 - 1997	
ANNUAL TOTAL	80412		98107			
ANNUAL MEAN	220		269		193	
HIGHEST ANNUAL MEAN					321	
LOWEST ANNUAL MEAN					109	
HIGHEST DAILY MEAN	1290		1700		2300	
LOWEST DAILY MEAN	e, a 34		b 40		18	
ANNUAL SEVEN-DAY MINIMUM	34		47		24	
INSTANTANEOUS PEAK FLOW			1860		2370	
INSTANTANEOUS PEAK STAGE			7.75		c 6.44	
ANNUAL RUNOFF (AC-FT)	159500		194600		140000	
10 PERCENT EXCEEDS	759		762		543	
50 PERCENT EXCEEDS	82		81		77	
90 PERCENT EXCEEDS	40		50		36	

e-Estimated.
a-Also occurred Jan 2-7.
b-Also occurred Dec 5.
c-Maximum gage height, 8.10 ft, Jun 21, 1995.

06720500 SOUTH PLATTE RIVER AT HENDERSON, CO

LOCATION.--Lat 39°55'19", long 104°52'00", in SE¼NE¼ 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 mi².

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. Water-quality data available, July 1955 to September 1957, June 1962 to September 1973, and April 1988 to September 1995.

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 5,003.12 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 2.00 ft, higher. May 11 to Oct. 2, 1969, nonrecording gage at site 500 ft downstream at present datum.

REMARKS.--No estimated daily discharges. Records good except for period Apr. 3 to May 8, which is 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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	294	290	221	286	361	356	74	264	755	703	1990	488
2	272	317	233	279	369	367	188	247	1040	471	1310	706
3	280	373	214	247	372	338	164	234	1080	437	1010	635
4	279	557	209	203	356	338	452	214	1300	492	1440	573
5	279	519	208	192	352	342	1360	212	1330	553	2910	1870
6	282	479	205	199	373	341	491	214	1800	581	3670	612
7	291	465	207	252	382	311	383	220	4650	520	1890	562
8	305	459	211	387	384	278	198	224	3040	421	1170	562
9	301	438	261	389	374	279	240	305	2720	487	1050	458
10	318	290	299	388	380	276	343	362	2520	650	1130	399
11	295	286	301	380	350	252	490	357	2370	639	2370	382
12	276	271	297	383	284	247	403	398	2300	630	2290	365
13	264	232	297	399	272	254	346	358	2880	549	1550	331
14	285	219	300	393	278	292	316	355	3310	519	1410	310
15	287	212	298	401	284	295	179	381	3180	467	1090	291
16	285	258	301	394	277	274	136	366	2840	451	945	342
17	282	233	296	379	273	251	109	388	2320	551	1030	395
18	275	247	374	395	282	243	61	424	2310	526	856	359
19	277	235	387	416	439	241	31	530	2260	770	610	388
20	281	227	415	428	378	199	51	440	2330	799	555	664
21	304	210	441	422	425	113	88	380	2140	692	478	507
22	291	218	473	385	369	92	106	886	1920	655	535	520
23	292	217	468	386	376	88	121	819	1900	774	570	894
24	326	220	427	370	423	118	2560	552	1760	738	483	688
25	323	219	390	367	351	137	1500	524	1530	720	467	523
26	621	218	384	370	357	92	782	499	1530	679	438	536
27	398	222	309	366	352	77	375	457	1180	778	414	564
28	348	223	301	364	349	71	317	403	1040	2100	325	538
29	339	201	290	375	---	88	304	537	962	3060	449	515
30	327	211	291	373	---	97	297	622	851	1240	485	486
31	304	---	289	359	---	85	---	574	---	2440	444	---
TOTAL	9581	8766	9597	10927	9822	6832	12465	12746	61148	25092	35364	16463
MEAN	309	292	310	352	351	220	416	411	2038	809	1141	549
MAX	621	557	473	428	439	367	2560	886	4650	3060	3670	1870
MIN	264	201	205	192	272	71	31	212	755	421	325	291
AC-FT	19000	17390	19040	21670	19480	13550	24720	25280	121300	49770	70140	32650

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1976 - 1997, 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	
MEAN	341	322	290	313	319	360	501	1101	1298	835	640	386											
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 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1976 - 1997	
ANNUAL TOTAL	152956		218803			
ANNUAL MEAN	418		599		a 560	
HIGHEST ANNUAL MEAN					1379	
LOWEST ANNUAL MEAN					252	
HIGHEST DAILY MEAN	3600		May 26		b 6500	
LOWEST DAILY MEAN	89		Mar 13		c 27	
ANNUAL SEVEN-DAY MINIMUM	168		Apr 17		d 69	
INSTANTANEOUS PEAK FLOW			7960		12300	
INSTANTANEOUS PEAK STAGE			8.46		f 7.58	
ANNUAL RUNOFF (AC-FT)	303400		434000		405700	
10 PERCENT EXCEEDS	678		1380		1060	
50 PERCENT EXCEEDS	324		375		332	
90 PERCENT EXCEEDS	212		212		177	

a-Average discharge for 48 years (water years 1927-74), 366 ft³/s; 265200 acre-ft/yr, prior to completion of Chatfield Dam.

b-Maximum daily discharge for period of record, 13200 ft³/s, May 7, 1973.

c-Minimum daily discharge for period of record, 4.4 ft³/s, Apr 1, 1950.

d-Maximum discharge and stage for period of record, 33000 ft³/s, May 6, 1973, gage height, 11.67 ft, from rating curve extended above 7200 ft³/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.

06720820 BIG DRY CREEK AT WESTMINSTER, CO

LOCATION.--Lat 39°54'20", long 105°02'04", in NE¼SE¼ 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 mi².

PERIOD OF RECORD.--July 1987 to September 1995, November 1996 to September 1997.

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

GAGE.--Water-stage recorder and concrete and steel 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.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 378 ft³/s, Aug. 4 and 5, 1997, gage height, 6.08 ft; minimum daily, 0.16 ft³/s, Jan. 12, 1995.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period from November to September, 378 ft³/s, Aug. 4, at 2030, and Aug. 5, at 2315, gage height 6.08 ft; minimum daily, 0.81 ft³/s, Dec. 19.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	2.3	1.5	2.7	2.7	1.2	24	53	84	30	21
2	---	---	1.7	1.5	2.4	2.9	3.9	21	52	84	27	27
3	---	---	1.6	1.5	2.3	3.1	2.7	9.9	52	82	24	32
4	---	---	1.5	1.3	1.4	1.7	10	9.2	52	82	108	21
5	---	---	1.7	1.2	1.2	1.5	15	7.9	58	87	130	25
6	---	---	1.8	1.2	1.2	1.4	4.7	7.0	88	89	151	18
7	---	---	1.5	1.1	1.5	1.4	3.8	6.2	96	88	35	17
8	---	---	1.6	1.3	1.6	1.4	3.3	4.8	26	75	14	24
9	---	---	1.7	1.3	1.5	1.4	2.8	9.6	31	31	7.7	46
10	---	---	1.6	1.2	1.3	1.3	3.8	6.3	42	31	12	38
11	---	---	1.4	1.1	1.3	1.3	30	5.7	57	31	17	40
12	---	---	1.4	1.2	1.3	1.3	31	8.0	51	32	22	38
13	---	---	1.3	1.2	1.5	1.4	33	4.4	50	37	16	39
14	---	---	1.3	1.2	e2.0	2.5	5.3	18	50	42	11	39
15	---	---	1.2	1.3	e3.0	1.5	2.2	60	46	41	8.0	41
16	---	---	1.2	1.3	e6.0	1.3	3.2	70	46	41	9.0	45
17	---	---	1.2	1.3	e9.2	1.6	1.9	66	38	41	9.4	40
18	---	---	1.0	1.5	e8.6	2.2	1.5	66	24	44	11	41
19	---	---	.81	3.2	5.5	1.6	1.5	70	32	67	18	44
20	---	e2.0	.93	3.0	6.1	1.5	1.5	73	36	57	20	46
21	---	2.0	1.3	2.3	6.0	1.4	1.4	73	37	48	21	24
22	---	1.7	4.6	2.0	4.9	1.5	1.3	91	41	38	14	16
23	---	1.5	4.0	1.8	4.9	1.5	4.1	74	44	54	9.8	24
24	---	1.5	2.9	1.1	4.5	4.3	92	71	49	49	11	12
25	---	1.5	3.1	.88	3.8	3.9	86	66	67	42	19	9.5
26	---	1.5	2.8	1.8	3.9	2.8	47	60	81	41	19	9.4
27	---	1.6	3.0	1.8	2.9	2.2	23	56	69	42	22	8.7
28	---	1.8	2.5	1.8	2.4	1.6	10	49	71	48	31	8.8
29	---	1.6	2.1	2.2	---	1.4	12	50	75	54	31	9.3
30	---	2.9	1.8	2.5	---	1.3	7.7	53	77	106	29	6.7
31	---	---	1.7	2.8	---	1.3	---	53	---	62	21	---
TOTAL	---	---	58.54	50.38	94.9	58.2	446.8	1243.0	1591	1750	907.9	810.4
MEAN	---	---	1.89	1.63	3.39	1.88	14.9	40.1	53.0	56.5	29.3	27.0
MAX	---	---	4.6	3.2	9.2	4.3	92	91	96	106	151	46
MIN	---	---	.81	.88	1.2	1.3	1.2	4.4	24	31	7.7	6.7
AC-FT	---	---	116	100	188	115	886	2470	3160	3470	1800	1610

e-Estimated.

06720990 BIG DRY CREEK AT MOUTH NEAR FORT LUPTON, CO

LOCATION.--Lat 40°04'09", long 104°49'52", in NE¼SE¼ 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 mi².

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 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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	63	e22	19	e23	e23	23	30	32	48	21	134	41
2	59	e22	19	e23	e23	23	31	45	49	20	68	65
3	59	e22	18	e22	e23	23	43	38	47	13	37	67
4	55	e22	17	e22	e23	23	48	26	48	11	33	70
5	57	e22	16	e22	e23	24	78	34	41	34	273	102
6	51	e22	15	e22	e23	24	84	26	50	27	409	78
7	50	e22	18	e22	e23	24	72	26	249	15	372	69
8	44	e22	18	e22	e23	24	63	21	124	12	97	67
9	48	e22	19	e22	e23	24	65	22	68	11	62	61
10	48	e22	19	e23	e23	23	63	20	62	12	57	55
11	42	e22	19	e23	e23	21	70	22	46	12	64	53
12	36	e22	19	e23	e23	18	93	21	42	16	64	56
13	33	e22	19	e23	e23	19	93	18	42	19	57	50
14	33	e22	18	e23	e23	19	86	16	45	21	51	50
15	26	e29	21	e23	e23	19	51	16	37	22	35	48
16	17	e27	20	e23	e23	18	37	17	34	20	40	46
17	14	e24	21	e23	e24	19	29	18	35	18	58	48
18	20	e23	e23	e23	e24	19	23	17	32	15	57	44
19	24	e22	e23	e23	e24	18	13	17	26	31	47	46
20	23	e22	e23	e23	e24	19	15	14	25	75	45	63
21	29	e22	e23	e23	e24	17	18	13	40	41	41	54
22	24	e22	e23	e23	e24	33	17	29	35	27	22	51
23	22	e22	e23	e23	e24	32	23	91	30	35	17	54
24	22	e22	e23	e23	e24	39	96	69	34	70	17	56
25	24	e21	e23	e23	e24	57	218	70	30	46	17	51
26	27	19	e23	e23	e24	50	186	65	40	35	18	49
27	56	18	e23	e23	e24	46	116	61	26	21	17	45
28	34	18	e23	e23	23	45	66	57	25	75	18	43
29	28	18	e23	e23	---	53	36	60	28	123	24	43
30	25	18	e23	e23	---	53	34	65	26	166	35	42
31	e24	---	e23	e23	---	43	---	58	---	454	41	---
TOTAL	1117	655	637	706	655	892	1897	1104	1464	1518	2327	1667
MEAN	36.0	21.8	20.5	22.8	23.4	28.8	63.2	35.6	48.8	49.0	75.1	55.6
MAX	63	29	23	23	24	57	218	91	249	454	409	102
MIN	14	18	15	22	23	17	13	13	25	11	17	41
AC-FT	2220	1300	1260	1400	1300	1770	3760	2190	2900	3010	4620	3310

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 1997, BY WATER YEAR (WY)

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
MEAN	39.4	27.1	21.7	20.3	20.9	33.3	50.9	53.8	64.9	53.2	46.9	52.9
MAX	64.3	29.9	23.5	22.8	26.7	50.1	63.2	85.5	117	111	75.1	67.0
(WY)	1995	1992	1992	1997	1996	1992	1997	1994	1995	1995	1997	1993
MIN	30.2	21.8	19.6	14.0	12.0	18.4	39.2	26.4	35.8	30.9	27.4	27.1
(WY)	1992	1997	1994	1995	1995	1993	1993	1993	1993	1994	1994	1994

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR	FOR 1997 WATER YEAR	WATER YEARS 1992 - 1997
ANNUAL TOTAL	13996.5	14639	
ANNUAL MEAN	38.2	40.1	40.5
HIGHEST ANNUAL MEAN			53.2
LOWEST ANNUAL MEAN			35.1
HIGHEST DAILY MEAN	262	May 27	454
LOWEST DAILY MEAN	8.8	Jul 22	a11
ANNUAL SEVEN-DAY MINIMUM	11	Apr 26	14
INSTANTANEOUS PEAK FLOW			541
INSTANTANEOUS PEAK STAGE			9.04
ANNUAL RUNOFF (AC-FT)	27760	29040	29340
10 PERCENT EXCEEDS	72	65	76
50 PERCENT EXCEEDS	29	29	28
90 PERCENT EXCEEDS	18	18	17

e-Estimated.
a-Also occurred Jul 9.

06724000 ST. VRAIN CREEK AT LYONS, CO

LOCATION.--Lat 40°13'05", long 105°15'34", in NW¹/₄NW¹/₄ sec.20, T.3 N., R.70 W., Boulder County, Hydrologic Unit 10190005, on left bank 75 ft southwest of U.S. Highway 36 (State Highways 7 and 66) at southeast edge of Lyons, 400 ft upstream from St. Vrain Supply Canal, and 0.4 mi downstream from confluence of North and South St. Vrain Creeks.

DRAINAGE AREA.--212 mi².

PERIOD OF RECORD.--Streamflow records, August 1887 to September 1891, June 1895 to current year. Monthly discharge only for some periods, published in WSP 1310. Published as "near Lyons" 1901, 1903. Water-quality data available, October 1977 to February 1981.

REVISED RECORDS.--WSP 1310: 1898, 1900. WSP 1730: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 5,292 ft above sea level, from topographic map. Prior to Apr. 6, 1923, nonrecording gages near present site at different datums. Apr. 6, 1923 to Sept. 30, 1956, water-stage recorder at same site at datum 1.00 ft higher.

REMARKS.--No estimated daily discharges. Records good. Diversions upstream from station for irrigation of about 2,000 acres. Flow partly regulated by small reservoirs upstream from station.

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

EXTREMES OUTSIDE PERIOD OF RECORD.--Outstanding floods occurred in June 1864 and May 1876. Flood in May or June 1894 reached a stage of 9.13 ft, from information by local resident, discharge, about 9,800 ft³/s. For discussions of these floods, see WSP 997.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	120	49	28	25	27	23	66	319	723	450	273	88
2	113	45	25	28	28	27	69	300	992	387	254	101
3	115	42	24	28	26	26	61	272	1040	388	250	103
4	150	42	27	23	24	24	59	282	964	373	267	109
5	137	44	32	17	25	24	59	363	1060	386	283	105
6	125	41	33	21	25	22	54	472	1140	381	314	103
7	116	33	28	21	23	22	57	569	1550	363	267	93
8	97	37	29	26	24	23	54	566	1390	354	223	86
9	85	45	27	27	26	24	55	485	1500	351	189	80
10	73	42	25	22	24	22	52	431	1370	351	250	79
11	70	39	25	20	24	21	50	397	1330	380	264	78
12	63	38	24	21	24	23	57	329	1260	331	300	77
13	61	37	25	22	23	25	58	273	1180	289	284	70
14	56	36	24	22	23	24	54	286	1030	282	218	71
15	51	39	18	25	24	27	49	306	1060	278	190	71
16	48	37	20	24	25	25	47	336	988	266	172	73
17	53	34	18	23	26	27	48	375	932	265	170	73
18	46	46	19	24	22	25	50	476	961	273	162	68
19	55	45	23	25	21	25	65	550	1100	277	168	75
20	59	40	29	25	22	28	74	528	1190	270	170	131
21	45	41	28	24	23	37	93	486	1050	269	146	148
22	42	39	27	22	22	38	101	571	984	275	138	132
23	46	38	26	23	25	42	112	573	924	260	132	136
24	51	34	23	23	22	49	165	608	787	276	115	153
25	49	40	23	23	21	45	169	589	685	296	113	124
26	50	39	25	25	23	51	182	516	614	264	121	101
27	43	31	27	26	24	63	206	399	559	245	115	100
28	44	26	24	25	22	69	288	297	529	236	114	96
29	63	31	25	24	---	71	381	283	515	208	108	89
30	46	30	26	24	---	66	366	365	473	204	105	78
31	51	---	24	28	---	66	---	497	---	270	90	---
TOTAL	2223	1160	781	736	668	1084	3201	13099	29880	9498	5965	2891
MEAN	71.7	38.7	25.2	23.7	23.9	35.0	107	423	996	306	192	96.4
MAX	150	49	33	28	28	71	381	608	1550	450	314	153
MIN	42	26	18	17	21	21	47	272	473	204	90	68
AC-FT	4410	2300	1550	1460	1320	2150	6350	25980	59270	18840	11830	5730

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1896 - 1997, BY WATER YEAR (WY)

MEAN	38.9	24.2	17.0	13.9	13.4	19.7	90.0	296	529	293	134	67.4
MAX	189	137	70.0	59.0	56.0	76.0	347	773	1096	701	299	263
(WY)	1896	1924	1903	1903	1903	1903	1926	1980	1969	1907	1899	1938
MIN	3.64	4.65	4.20	3.35	2.31	2.42	14.1	94.5	148	80.6	41.1	21.9
(WY)	1957	1940	1945	1932	1990	1964	1966	1977	1954	1934	1934	1934

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1896 - 1997	
ANNUAL TOTAL	53726		71186			
ANNUAL MEAN	147		195		128	
HIGHEST ANNUAL MEAN					222	
LOWEST ANNUAL MEAN					46.3	
HIGHEST DAILY MEAN	934	May 26	1550	Jun 7	2120	May 7 1969
LOWEST DAILY MEAN	17	Jan 18	17	Jan 5	a,00	Jan 19 1922
ANNUAL SEVEN-DAY MINIMUM	19	Feb 11	21	Dec 13	.31	Mar 24 1957
INSTANTANEOUS PEAK FLOW			1640	Jun 7	10500	Jun 22 1941
INSTANTANEOUS PEAK STAGE			5.89	Jun 7	9.06	Jun 22 1941
ANNUAL RUNOFF (AC-FT)	106600		141200		92910	
10 PERCENT EXCEEDS	489		521		382	
50 PERCENT EXCEEDS	62		63		39	
90 PERCENT EXCEEDS	21		23		9.0	

a-Also occurred Jan 20, 1922 and Jan 12-13, 1950.

06725450 ST. VRAIN CREEK BELOW LONGMONT, CO

LOCATION.--Lat 40°09'30", long 105°00'48", in NW¼NW¼ sec.9, T.2 N., R.68 W., Weld County, Hydrologic Unit 10190005, on left 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 mi².

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. Elevation of gage is 4,852 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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	74	59	31	49	42	36	49	450	638	309	97	93
2	68	56	31	49	39	37	62	328	910	e280	95	104
3	71	55	28	50	39	37	63	275	956	e270	82	108
4	69	55	31	49	39	37	66	270	962	e265	114	108
5	66	51	32	46	38	37	72	347	1080	e250	149	97
6	64	53	33	48	38	36	68	507	1150	e240	327	114
7	65	51	29	47	38	35	67	629	1640	e230	245	120
8	63	50	31	49	37	35	58	646	1530	e220	177	119
9	65	49	37	47	37	34	60	646	1530	e215	154	117
10	70	47	37	44	38	35	61	551	1550	e210	186	114
11	71	45	32	43	38	34	64	561	1520	e205	157	111
12	73	43	31	43	39	34	65	646	1500	e200	134	113
13	71	46	32	43	39	35	67	500	1470	e198	147	105
14	72	46	33	44	38	35	67	418	1370	e192	126	102
15	71	47	27	49	37	36	71	390	1340	e188	114	103
16	68	42	30	48	36	35	74	406	1320	e177	127	107
17	65	35	30	47	37	35	74	390	1250	162	120	107
18	64	37	28	47	39	35	81	318	1220	151	122	116
19	82	39	27	e21	38	36	85	363	1220	143	111	131
20	77	44	32	e6.1	42	36	91	330	1270	157	107	201
21	84	37	41	44	39	35	92	271	1230	161	89	216
22	79	35	44	46	37	34	74	368	1220	163	86	221
23	66	39	43	44	37	35	90	453	1170	164	80	286
24	62	35	43	44	37	40	205	499	985	176	79	296
25	62	39	45	42	37	37	207	520	850	175	79	255
26	81	40	46	42	39	35	205	500	780	176	83	215
27	62	39	46	43	38	34	214	407	643	165	94	197
28	63	33	46	43	37	35	291	333	562	197	82	190
29	60	33	46	42	---	38	451	263	513	168	89	172
30	56	35	48	42	---	40	564	321	386	104	95	e165
31	58	---	49	43	---	40	---	433	---	104	93	---
TOTAL	2122	1315	1119	1344.1	1069	1113	3758	13339	33765	6015	3840	4503
MEAN	68.5	43.8	36.1	43.4	38.2	35.9	125	430	1126	194	124	150
MAX	84	59	49	50	42	40	564	646	1640	309	327	296
MIN	56	33	27	6.1	36	34	49	263	386	104	79	93
AC-FT	4210	2610	2220	2670	2120	2210	7450	26460	66970	11930	7620	8930

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1976 - 1997, 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	
MEAN	68.0	56.6	49.6	45.0	44.7	49.4	78.5	244	389	176	146	103											
MAX	159	126	91.5	92.8	94.0	111	259	1155	1227	485	185	152											
(WY)	1985	1985	1985	1980	1980	1980	1980	1980	1995	1995	1986	1982											
MIN	45.5	34.5	30.8	25.7	27.9	28.9	27.5	35.8	63.3	100	88.9	53.7											
(WY)	1990	1979	1979	1978	1978	1982	1982	1977	1981	1981	1977	1977											

SUMMARY STATISTICS

	FOR 1996 CALENDAR YEAR	FOR 1997 WATER YEAR	WATER YEARS 1976 - 1997
ANNUAL TOTAL	42131	73302.1	
ANNUAL MEAN	115	201	121
HIGHEST ANNUAL MEAN			257
LOWEST ANNUAL MEAN			54.8
HIGHEST DAILY MEAN	868	Jun 22	2580
LOWEST DAILY MEAN	^a 27	Dec 15	^e 6.1
ANNUAL SEVEN-DAY MINIMUM	29	Apr 25	22
INSTANTANEOUS PEAK FLOW			2960
INSTANTANEOUS PEAK STAGE			^b 6.53
ANNUAL RUNOFF (AC-FT)	83570	145400	87610
10 PERCENT EXCEEDS	288	516	206
50 PERCENT EXCEEDS	54	70	66
90 PERCENT EXCEEDS	33	35	35

e-Estimated.

a-Also occurred Dec 19.

b-Maximum gage height, 11.45 ft, Jan 13, 1993, backwater from ice.

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

LOCATION.--Lat 40°03'06", long 105°10'42", in SE¹/₄NW¹/₄ 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 mi².

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.--No estimated daily discharges. Records good. 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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	87	68	45	42	38	49	67	255	134	291	196	121
2	78	63	53	49	38	45	74	234	145	228	147	118
3	79	57	48	51	35	59	76	209	142	197	130	121
4	87	66	44	51	32	50	88	208	275	189	194	122
5	90	70	47	44	34	48	94	248	620	206	266	118
6	84	46	44	45	31	58	74	259	707	207	400	114
7	87	43	42	46	36	51	73	261	1160	215	252	106
8	91	52	44	48	43	52	56	247	986	214	169	106
9	82	57	46	50	37	53	42	225	1100	195	132	104
10	82	52	45	46	38	57	42	201	1100	193	200	103
11	82	48	45	44	36	53	44	188	1180	199	207	102
12	84	46	48	27	42	58	46	171	1360	196	168	99
13	87	45	40	50	48	60	49	139	1450	235	141	88
14	88	52	42	68	46	45	46	128	1280	275	118	95
15	82	59	44	34	41	46	46	140	1220	237	94	95
16	79	57	38	28	43	39	54	151	1140	160	67	97
17	81	53	50	40	46	39	54	162	1060	171	77	94
18	85	45	38	49	55	38	69	170	1150	194	73	89
19	74	58	59	54	56	36	69	149	1300	210	78	80
20	72	48	55	48	57	47	70	132	1330	242	67	98
21	73	47	50	55	63	58	85	138	1120	228	78	88
22	75	48	49	45	52	71	92	281	963	196	118	95
23	63	47	56	40	52	61	89	270	898	173	141	109
24	67	47	46	42	54	90	252	230	790	184	130	81
25	75	49	41	41	54	78	262	206	733	191	129	69
26	70	50	43	35	57	85	210	198	613	194	125	67
27	72	47	43	39	51	80	190	160	496	150	132	65
28	70	43	48	36	57	76	234	136	385	152	133	60
29	68	44	42	40	---	59	260	132	380	134	134	57
30	63	45	43	35	---	62	293	136	320	254	125	61
31	56	---	43	34	---	65	---	126	---	230	119	---
TOTAL	2413	1552	1421	1356	1272	1768	3200	5890	25537	6340	4540	2822
MEAN	77.8	51.7	45.8	43.7	45.4	57.0	107	190	851	205	146	94.1
MAX	91	70	59	68	63	90	293	281	1450	291	400	122
MIN	56	43	38	27	31	36	42	126	134	134	67	57
AC-FT	4790	3080	2820	2690	2520	3510	6350	11680	50650	12580	9010	5600

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 1997, BY WATER YEAR (WY)

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	
MEAN	47.4	53.0	49.4	47.9	47.2	51.6	79.2	191	325	229	134	75.9
MAX	77.8	78.8	74.9	68.3	61.3	76.8	145	465	868	492	170	111
(WY)	1997	1992	1989	1987	1996	1987	1987	1995	1995	1995	1993	1995
MIN	31.5	37.7	36.1	37.6	34.3	31.2	37.4	114	127	154	95.5	50.8
(WY)	1987	1993	1988	1988	1992	1989	1989	1991	1992	1988	1991	1992

SUMMARY STATISTICS

FOR 1996 CALENDAR YEAR

FOR 1997 WATER YEAR

WATER YEARS 1987 - 1997

ANNUAL TOTAL	46428	58111										
ANNUAL MEAN	127	159								111		
HIGHEST ANNUAL MEAN										198		1995
LOWEST ANNUAL MEAN										85.5		1989
HIGHEST DAILY MEAN	754	Jun 22	1450	Jun 13	1450	Jun 13	1997					
LOWEST DAILY MEAN	^a 38	Dec 16	27	Jan 12	20	Dec 26	1987					
ANNUAL SEVEN-DAY MINIMUM	43	Dec 12	35	Jan 31	23	Dec 23	1987					
INSTANTANEOUS PEAK FLOW			1500	Jun 13	1950	May 17	1995					
INSTANTANEOUS PEAK STAGE			7.32	Jun 13	7.85	May 17	1995					
ANNUAL RUNOFF (AC-FT)	92090	115300								80540		
10 PERCENT EXCEEDS	295	260								220		
50 PERCENT EXCEEDS	74	74								62		
90 PERCENT EXCEEDS	47	42								36		

a-Also occurred Dec 18.

06730400 COAL CREEK NEAR LOUISVILLE, CO

LOCATION.--Lat 39°58'34", long 105°07'00", in NW¼SE¼ 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.--Not determined.

PERIOD OF RECORD.--July to September 1997.

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.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period July to September not determined; maximum gage height, 2.06 ft, July 30; maximum daily discharge, 38 ft³/s, August 6; minimum daily, 0.63 ft³/s, July 15.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	---	e9.2	1.1	2.7
2	---	---	---	---	---	---	---	---	---	9.2	.71	3.4
3	---	---	---	---	---	---	---	---	---	8.6	.69	2.8
4	---	---	---	---	---	---	---	---	---	e5.5	16	2.5
5	---	---	---	---	---	---	---	---	---	e4.0	12	2.1
6	---	---	---	---	---	---	---	---	---	e2.5	38	5.3
7	---	---	---	---	---	---	---	---	---	e1.8	9.1	2.5
8	---	---	---	---	---	---	---	---	---	e1.3	5.6	1.8
9	---	---	---	---	---	---	---	---	---	e1.1	4.1	1.6
10	---	---	---	---	---	---	---	---	---	e1.0	7.4	1.5
11	---	---	---	---	---	---	---	---	---	.96	6.2	1.4
12	---	---	---	---	---	---	---	---	---	1.2	6.3	1.4
13	---	---	---	---	---	---	---	---	---	.78	6.4	1.3
14	---	---	---	---	---	---	---	---	---	.68	5.1	1.4
15	---	---	---	---	---	---	---	---	---	.63	5.0	1.2
16	---	---	---	---	---	---	---	---	---	.74	4.7	1.0
17	---	---	---	---	---	---	---	---	---	.75	11	1.1
18	---	---	---	---	---	---	---	---	---	.77	15	.99
19	---	---	---	---	---	---	---	---	---	9.0	5.5	.70
20	---	---	---	---	---	---	---	---	---	1.4	4.2	2.0
21	---	---	---	---	---	---	---	---	---	1.4	3.6	1.1
22	---	---	---	---	---	---	---	---	---	1.7	3.3	1.5
23	---	---	---	---	---	---	---	---	---	2.1	2.9	3.4
24	---	---	---	---	---	---	---	---	---	2.3	2.7	1.7
25	---	---	---	---	---	---	---	---	---	2.6	2.4	1.3
26	---	---	---	---	---	---	---	---	---	2.3	4.4	2.3
27	---	---	---	---	---	---	---	---	---	2.3	2.5	2.4
28	---	---	---	---	---	---	---	---	---	15	3.3	2.4
29	---	---	---	---	---	---	---	---	---	2.0	4.2	2.4
30	---	---	---	---	---	---	---	---	---	22	2.5	2.5
31	---	---	---	---	---	---	---	---	---	2.2	2.8	---
TOTAL	---	---	---	---	---	---	---	---	---	117.01	198.70	59.69
MEAN	---	---	---	---	---	---	---	---	---	3.77	6.41	1.99
MAX	---	---	---	---	---	---	---	---	---	.22	.38	5.3
MIN	---	---	---	---	---	---	---	---	---	.63	.69	.70
AC-FT	---	---	---	---	---	---	---	---	---	232	394	118

e-Estimated.

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

LOCATION.--Lat 40°21'14", long 105°35'01", in SE¼SW¼ 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.--39.4 mi² (determined by the National Park Service).

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1995 to September 1997 (discontinued).

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

REMARKS.--Records fair, except for estimated daily discharges, which are poor. No diversion or regulation upstream from gage.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	15	e9.5	e5.4	e4.1	e4.4	e8.9	32	389	207	134	58
2	26	e15	e9.2	e5.3	e4.1	e4.5	e9.1	28	457	174	120	56
3	33	15	e9.3	e5.3	e4.1	e4.7	e9.3	27	533	173	109	56
4	40	14	e9.6	e5.2	e4.1	e4.9	e9.5	26	558	165	100	62
5	33	14	e8.8	e5.2	e4.0	e5.0	e9.7	35	591	160	122	57
6	29	e15	e9.2	e5.1	e4.0	e5.2	e9.9	48	526	150	167	52
7	28	e14	e8.0	e5.0	e4.0	e5.3	e10	63	454	152	132	50
8	25	e13	e7.6	e5.0	e4.0	e5.5	10	72	426	153	107	51
9	24	e13	e7.2	e4.9	e4.0	e5.7	10	73	450	142	98	43
10	23	e14	e7.0	e4.9	e4.0	e5.8	e11	86	401	146	241	40
11	22	e13	e6.8	e4.8	e4.0	e6.0	e11	98	467	143	244	39
12	21	e12	e6.7	e4.8	e4.0	e6.1	e11	90	401	128	171	40
13	21	11	e6.6	e4.7	e4.0	e6.2	e11	87	364	129	141	40
14	20	11	e6.5	e4.7	e4.0	e6.3	e12	102	384	126	129	38
15	19	e11	e6.4	e4.7	e4.0	e6.4	10	107	396	121	108	39
16	19	e12	e6.3	e4.6	e3.9	e6.5	12	147	317	119	101	37
17	16	e12	e6.2	e4.6	e3.9	e6.6	12	189	327	114	106	35
18	e18	e11	e6.1	e4.5	e3.8	e6.7	15	218	377	117	103	38
19	e17	e11	e6.0	e4.5	e3.8	e6.8	17	232	470	125	108	62
20	e16	e11	e6.0	e4.5	e3.8	e6.9	21	218	554	123	95	143
21	e16	e11	e5.9	e4.5	e3.7	e7.0	28	242	480	119	85	127
22	e17	11	e5.8	e4.5	e3.6	e7.2	22	348	440	113	82	99
23	e16	11	e5.8	e4.4	e3.7	e7.4	20	321	395	110	75	93
24	e16	e11	e5.8	e4.4	e3.8	e7.5	20	289	323	118	74	91
25	15	e11	e5.8	e4.3	e3.9	e7.7	28	240	295	115	74	75
26	15	e11	e5.7	e4.3	e4.0	e7.8	28	191	269	107	79	72
27	e15	e10	e5.7	e4.3	e4.1	e8.0	26	152	260	101	78	82
28	e15	e10	e5.6	e4.2	e4.2	e8.2	33	135	235	97	74	67
29	15	e10	e5.5	e4.2	---	e8.4	51	157	227	104	69	59
30	e15	e10	e5.4	e4.2	---	e8.5	40	187	216	117	60	54
31	e15	---	e5.4	e4.2	---	e8.6	---	265	---	158	55	---
TOTAL	648	363	211.4	145.2	110.6	201.8	525.4	4505	11982	4126	3441	1855
MEAN	20.9	12.1	6.82	4.68	3.95	6.51	17.5	145	399	133	111	61.8
MAX	40	15	9.6	5.4	4.2	8.6	51	348	591	207	244	143
MIN	15	10	5.4	4.2	3.6	4.4	8.9	26	216	97	55	35
AC-FT	1290	720	419	288	219	400	1040	8940	23770	8180	6830	3680

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 1997, BY WATER YEAR (WY)

MEAN	17.9	10.9	6.74	4.37	4.16	5.36	16.4	144	345	127	79.3	45.3
MAX	20.9	12.1	6.82	4.68	4.36	6.51	17.5	145	399	133	111	61.8
(WY)	1997	1997	1997	1997	1996	1997	1997	1997	1997	1997	1997	1997
MIN	14.9	9.60	6.66	4.05	3.95	4.21	15.2	142	290	121	47.7	28.9
(WY)	1996	1996	1996	1996	1997	1996	1996	1996	1996	1996	1996	1996

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1996 - 1997	
ANNUAL TOTAL	21278.3		28114.4			
ANNUAL MEAN	58.1		77.0		67.2	
HIGHEST ANNUAL MEAN					77.0	
LOWEST ANNUAL MEAN					57.4	
HIGHEST DAILY MEAN	410		591		591	
LOWEST DAILY MEAN	a,e 3.4		e 3.6		e,a 3.4	
ANNUAL SEVEN-DAY MINIMUM	3.5		3.7		e 3.5	
INSTANTANEOUS PEAK FLOW			787		787	
INSTANTANEOUS PEAK STAGE			6.78		6.78	
ANNUAL RUNOFF (AC-FT)	42210		55760		48690	
10 PERCENT EXCEEDS	200		233		216	
50 PERCENT EXCEEDS	17		17		16	
90 PERCENT EXCEEDS	4.0		4.4		4.1	

e--Estimated.

a--Also occurred Mar 4, and 7-8 (all are estimated discharges).

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

WATER-QUALITY RECORDS

PERIOD OF RECORD.--January 1995 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT- ANCE (US/CM) (00095)	pH FIELD (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	BICAR- ^a BONATE WATER DIS IT MG/L AS HCO3 (00453)	ALKA- ^b LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 (39086)
OCT 1996								
03...	1220	36	18	7.2	9.5	9.3	6	5
NOV								
22...	1200	11	24	7.0	5.0	10.1	8	7
DEC								
09...	1350	7.1	25	7.0	0.0	10.5	9	7
JAN 1997								
22...	1310	4.4	26	6.9	0.0	10.8	9	7
FEB								
12...	1235	4.0	28	7.1	0.0	10.7	9	7
MAR								
12...	1210	6.1	31	7.1	0.0	10.5	11	9
APR								
10...	1320	11	31	7.0	0.5	10.9	10	8
MAY								
09...	1550	68	28	7.1	12.0	8.5	7	6
JUN								
05...	1215	492	17	6.8	8.0	9.3	4	4
19...	1710	408	14	6.9	11.0	7.8	4	3
JUL								
08...	1235	140	13	7.2	11.0	9.1	4	4
AUG								
04...	1115	102	13	7.0	14.0	8.0	5	4
SEP								
11...	0840	42	16	7.2	10.0	8.6	5	4

DATE	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, AM- MONIA + ORGANIC DIS- SOLVED (MG/L AS N) (00623)	PHOS- PHORUS TOTAL (MG/L AS P) (00665)	PHOS- PHORUS DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS ORTHO, DIS- SOLVED (MG/L AS P) (00671)
OCT 1996								
03...	<0.01	0.09	<0.015	<0.2	<0.2	<0.01	<0.01	<0.01
NOV								
22...	0.03	0.18	0.03	<0.2	<0.2	<0.01	<0.01	<0.01
DEC								
09...	0.01	0.17	<0.015	<0.2	<0.2	<0.01	<0.01	<0.01
JAN 1997								
22...	<0.01	0.14	<0.015	<0.2	<0.2	<0.01	<0.01	<0.01
FEB								
12...	<0.01	0.15	<0.015	0.2	<0.2	<0.01	<0.01	<0.01
MAR								
12...	<0.01	0.12	<0.015	<0.2	<0.2	<0.01	<0.01	<0.01
APR								
10...	<0.01	0.08	<0.015	<0.2	<0.2	0.04	<0.01	<0.01
MAY								
09...	<0.01	0.08	<0.015	0.2	<0.2	0.05	<0.01	<0.01
JUN								
05...	<0.01	0.08	<0.015	<0.2	<0.2	<0.01	<0.01	<0.01
19...	<0.01	0.11	<0.015	<0.2	<0.2	<0.01	<0.01	<0.01
JUL								
08...	<0.01	0.08	<0.015	<0.2	<0.2	<0.01	<0.01	<0.01
AUG								
04...	<0.01	0.09	0.02	<0.2	<0.2	0.02	<0.01	0.01
SEP								
11...	<0.01	0.09	0.02	<0.2	<0.2	<0.01	<0.01	<0.01

a-Field dissolved bicarbonate, determined by incremental titration method.
b-Field total dissolved alkalinity, determined by incremental titration method.

PLATTE RIVER BASIN

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

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SEDI- MENT, DIS- CHARGE, SUS- PENDEDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDEDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
MAR 1997					
12...	1210	6.1	1 ^c	0.02	--
APR					
10...	1320	11	1 ^c	0.02	--
MAY					
09...	1550	68	8 ^c	1.5	--
JUN					
05...	1130	510	12	16	--
19...	1650	401	8	8.7	58
19...	1710	408	9 ^c	9.9	47
JUL					
08...	1230	140	5	1.9	57
08...	1235	140	6 ^c	2.3	51
AUG					
04...	1115	102	6 ^c	1.7	69

c-Suspended-sediment concentration determined from a subsample split of a composite sample.

06733000 BIG THOMPSON RIVER AT ESTES PARK, CO

LOCATION.--Lat 40°22'42", long 105°30'48", in NW¼NW¼ 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 Highways 7 and 66, 900 ft downstream from Black Canyon Creek, and 0.3 mi northwest of Estes powerplant. Station is upstream from Lake Estes.

DRAINAGE AREA.--137 mi².

PERIOD OF RECORD.--October 1946 to current year. Prior to October 1947, published as Thompson River at Estes Park.

GAGE.--Water-stage recorder with satellite telemetry, and Parshall flume with overflow weirs. Datum of gage is 7,492.5 ft above sea level (levels by U.S. Bureau of Reclamation). Prior to May 18, 1949, at site 740 ft downstream at different datum. May 18, 1949 to Mar. 22, 1951, at site 60 ft upstream at datum 1.2 ft higher.

REMARKS.--Records good except for estimated daily discharges, which are poor. Diversion from Colorado River basin passed this station from Aug. 10, 1947 to Aug. 2, 1950. Small power developments and small diversions for irrigation and municipal use above station. Diversions upstream from station from Wind River to Lake Estes (bypassing this station), were 1510 acre-ft during current year.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	73	36	16	e19	e17	e15	27	90	883	462	e297	128
2	67	34	e16	e19	e17	e15	26	81	1030	400	256	126
3	79	34	e17	e19	e17	e15	30	79	1080	389	234	124
4	91	34	e18	e20	e16	e15	34	81	1080	372	229	131
5	83	33	e19	e20	e16	e15	30	105	1180	362	284	124
6	75	30	e20	e20	e16	e15	25	135	1110	338	401	118
7	70	e33	e21	e20	e15	e15	27	170	1030	329	346	114
8	65	e33	e21	e20	e15	e15	27	189	990	333	265	109
9	62	34	e21	e20	e15	e15	27	187	1090	317	240	97
10	59	31	e21	e20	e14	e15	21	212	931	321	567	91
11	55	30	e21	e20	e14	e15	25	241	1040	325	551	86
12	53	29	e21	e20	e14	e15	27	213	906	290	411	84
13	51	28	e21	e20	e13	e15	27	204	814	286	342	81
14	50	28	e20	e21	e13	e15	26	242	846	277	308	81
15	48	29	e20	e21	e13	e15	27	258	876	267	256	77
16	49	24	e20	e20	e13	e15	31	351	722	264	235	77
17	44	26	e20	e20	e14	e15	35	452	725	249	238	72
18	39	36	e20	e20	e14	e15	41	532	818	255	228	76
19	46	38	e20	e20	e14	20	50	557	992	260	233	117
20	45	33	e20	e20	e14	24	59	513	1100	270	211	257
21	32	30	e19	e20	e14	27	79	568	998	262	196	249
22	48	30	e19	e20	e14	27	64	852	922	246	180	194
23	43	30	e19	e19	e15	29	60	726	836	239	172	185
24	40	24	e19	e19	e15	30	e58	662	709	266	162	187
25	38	25	e19	e19	e15	24	e61	564	645	256	161	157
26	37	25	e19	e19	e15	26	67	457	591	230	165	143
27	38	19	e19	e19	e15	28	e69	369	573	217	163	154
28	37	25	e19	e19	e15	27	87	339	527	207	158	138
29	37	26	e19	e19	---	27	120	398	510	224	150	125
30	39	23	e19	e18	---	24	103	456	483	239	134	115
31	39	---	e19	e18	---	26	---	614	---	339	125	---
TOTAL	1632	890	602	608	412	609	1390	10897	26037	9091	7898	3817
MEAN	52.6	29.7	19.4	19.6	14.7	19.6	46.3	352	868	293	255	127
MAX	91	38	21	21	17	30	120	852	1180	462	567	257
MIN	32	19	16	18	13	15	21	79	483	207	125	72
AC-FT	3240	1770	1190	1210	817	1210	2760	21610	51640	18030	15670	7570

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1947 - 1997, BY WATER YEAR (WY)

MEAN	42.3	27.0	16.7	12.5	12.1	14.7	40.4	246	570	329	146	69.9
MAX	112	52.7	35.1	25.1	22.7	25.5	103	479	947	739	273	143
(WY)	1962	1962	1948	1948	1962	1986	1962	1958	1949	1957	1983	1961
MIN	22.2	15.6	9.68	4.89	5.77	8.39	17.2	112	191	112	66.7	37.4
(WY)	1989	1965	1977	1977	1977	1977	1995	1968	1954	1977	1954	1988

SUMMARY STATISTICS FOR 1996 CALENDAR YEAR FOR 1997 WATER YEAR WATER YEARS 1947 - 1997

ANNUAL TOTAL	48957	63883	
ANNUAL MEAN	134	175	128
HIGHEST ANNUAL MEAN			189
LOWEST ANNUAL MEAN			63.3
HIGHEST DAILY MEAN	858	Jun 22	1180
LOWEST DAILY MEAN	e, a 13	Mar 6	e, b 13
ANNUAL SEVEN-DAY MINIMUM	14	Mar 3	13
INSTANTANEOUS PEAK FLOW			1340
INSTANTANEOUS PEAK STAGE			6.25
ANNUAL RUNOFF (AC-FT)	97110	126700	92400
10 PERCENT EXCEEDS	440	540	390
50 PERCENT EXCEEDS	45	46	37
90 PERCENT EXCEEDS	16	15	11

e-Estimated.

a-Also occurred Mar 7.

b-Also occurred Feb 14-16.

c-Also occurred Jan 14-16, 1977.

d-Caused by failure of Lawn Lake Dam, gage height, indeterminate; maximum natural discharge, 1870 ft³/s, Jun 18, 1995, gage height, 6.80 ft.

PLATTE RIVER BASIN

06734900 OLYMPUS TUNNEL AT LAKE ESTES, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 40°22'30", long 105°29'13", in SE¼NW¼ 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.--Tunnel is part of Colorado-Big Thompson project. Field data collected prior to 1974 water year available in district office. Records of discharge are estimated values.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT- ANCE (US/CM) (00095)	pH (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)	HARD- NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)
NOV 12...	1434	500	40	7.6	4.0	11.6	14	4.3	0.87	1.5
MAR 10...	1200	420	51	7.6	1.5	10.1	22	6.7	1.2	2.2
JUL 18...	1028	520	21	7.4	14.5	7.5	8	2.3	0.46	1.1
DATE		SODIUM AD- SORP- TION RATIO (00931)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY 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)
NOV 12...		0.2	0.6	17	2.0	0.5	0.2	4.7	16	25
MAR 10...		0.2	0.7	24	2.7	0.7	0.1	5.3	36	34
JUL 18...		0.2	0.3	9.4	1.5	0.4	0.1	3.7	23	16
DATE		SOLIDS, DIS- SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS- SOLVED (TONS PER DAY) (70302)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + DIS- SOLVED 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)
NOV 12...		0.02	21.7	<0.01	0.08	0.02	<0.2	0.06	<0.01	<0.01
MAR 10...		0.05	40.4	<0.01	0.07	0.02	<0.2	<0.01	<0.01	<0.01
JUL 18...		0.03	32.0	<0.01	<0.05	0.03	<0.2	<0.01	<0.01	<0.01
DATE		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 12...		5	<0.5	4.3	<1	<5	<3	<10	35	<10
MAR 10...		7	<0.5	<4.0	<1	<5	<3	<10	19	<10
JUL 18...		4	<0.5	<4.0	<1	<5	<3	<10	60	<10
DATE		LITHIUM DIS- SOLVED (UG/L AS LI) (01130)	MANGA- NESE, DIS- SOLVED (UG/L AS MN) (01056)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)	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)
NOV 12...		<4	3	<10	<10	<10	<1	25	<6	4
MAR 10...		<4	3	20	<10	<10	<1	40	<6	3
JUL 18...		<4	3	10	<10	<10	<1	13	<6	<3

06737500 HORSETOOTH RESERVOIR NEAR FORT COLLINS, CO

LOCATION.--Lat 40°36'00", long 105°10'06", in NW¼SW¼ 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 three 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 FOR CURRENT YEAR.--Maximum contents, observed, 145,600 acre-ft, June 30, elevation, 5,427.97 ft; minimum, observed, 113,300 acre-ft, Oct. 20, elevation, 5,410.84 ft.

MONTHEND ELEVATION AND CONTENTS AT 0800, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	5,411.97	115,300	-
Oct. 31	5,411.32	114,200	-1,100
Nov. 30	5,413.84	118,700	+4,500
Dec. 31	5,416.39	123,300	+4,600
CAL YR 1996	-	-	+5,200
Jan. 31	5,418.68	127,600	+4,300
Feb. 28	5,420.81	131,600	+4,000
Mar. 31	5,421.30	132,500	+900
Apr. 30	5,423.74	137,200	+4,700
May 31	5,417.19	124,800	-12,400
June 30	5,427.97	145,600	+20,800
July 31	5,425.17	140,000	-5,600
Aug. 31	5,422.54	134,900	-5,100
Sept. 30	5,413.07	117,300	-17,600
WTR YR 1997	-	-	+2,000

06737500 HORSETOOTH RESERVOIR NEAR FORT COLLINS, CO--Continued

WATER-QUALITY RECORDS

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

REMARKS.--Samples collected at various depths near north end of reservoir near Soldier Canyon Dam.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	SAM- PLING DEPTH (FEET) (00003)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	pH (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)
OCT						
08...	1015	0.1	48	7.4	16.5	7.5
08...	1016	5.0	48	7.4	16.0	7.5
08...	1017	10	48	7.4	16.0	7.5
08...	1018	15	48	7.4	16.0	7.5
08...	1019	20	48	7.4	16.0	7.5
08...	1020	25	48	7.4	16.0	7.4
08...	1021	30	48	7.3	15.5	6.9
08...	1022	40	47	7.3	15.5	6.8
08...	1023	50	47	7.2	15.5	6.7
08...	1024	60	48	7.2	15.0	6.2
08...	1025	70	51	7.0	12.5	4.4
08...	1026	80	53	6.9	11.5	4.7
08...	1027	90	54	6.9	11.0	4.8
08...	1028	100	55	6.9	10.5	4.6
08...	1029	110	55	6.7	10.5	4.5
08...	1030	120	56	6.9	10.0	4.3
08...	1031	130	57	6.8	10.0	3.9
08...	1032	140	58	6.8	9.5	3.3
MAY						
19...	1020	0.1	55	7.9	10.5	8.8
19...	1021	5.0	55	7.8	10.5	8.8
19...	1022	10	55	7.8	10.5	8.8
19...	1023	15	55	7.8	10.5	8.8
19...	1024	20	55	7.8	10.5	8.8
19...	1025	25	55	7.8	10.5	8.8
19...	1026	30	55	7.8	10.5	8.8
19...	1027	40	54	7.8	8.5	9.1
19...	1028	50	54	7.8	8.0	9.1
19...	1029	60	53	7.8	7.0	9.2
19...	1030	70	53	7.8	7.0	9.2
19...	1031	80	53	7.8	6.5	9.2
19...	1032	90	53	7.7	6.5	9.2
19...	1033	100	53	7.7	6.5	9.1
19...	1034	110	53	7.7	6.5	9.1
AUG						
21...	1000	0.1	49	8.0	21.5	7.7
21...	1001	5.0	49	8.1	21.0	7.7
21...	1002	10	49	7.9	20.0	7.5
21...	1003	15	49	7.8	20.0	7.4
21...	1004	20	50	7.7	20.0	7.3
21...	1005	25	52	7.6	20.0	6.9
21...	1006	30	46	7.4	18.5	6.2
21...	1007	40	45	7.1	17.5	5.2
21...	1008	50	47	7.0	15.0	5.5
21...	1010	60	50	7.1	12.0	6.2
21...	1011	70	52	7.1	10.0	6.8
21...	1012	80	53	7.1	9.5	6.8
21...	1013	90	53	7.1	9.0	6.9
21...	1014	100	53	7.1	9.0	6.9
21...	1015	110	53	7.1	8.5	6.9
21...	1016	120	53	7.1	8.5	7.0
21...	1017	130	54	7.1	8.5	7.0
21...	1018	140	54	7.1	8.0	6.9
21...	1019	150	54	7.1	8.0	6.7

06737500 HORSETOOTH RESERVOIR NEAR FORT COLLINS, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	SAMPLING DEPTH (FEET)	SPECIFIC CONDUCTANCE (US/CM)	pH (STANDARD UNITS)	TEMPERATURE (DEG C)	TRANSPARANCY (SECCHI DISK (IN))	OXYGEN, DIS-SOLVED (MG/L)	COLIFORM, FECAL, UM-MF (COLS./100 ML)	HARDNESS TOTAL (MG/L AS CAC03)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNESIUM DIS-SOLVED (MG/L AS MG)
OCT											
08...	1045	0.1	48	7.4	16.5	158	7.5	<1	21	6.7	1.1
08...	1100	140	58	6.8	9.5	--	3.3	--	25	8.0	1.3
MAY											
19...	1045	0.1	55	7.9	10.5	109	8.8	<1	23	7.3	1.2
19...	1100	110	53	7.7	6.5	--	9.1	--	24	7.5	1.2
AUG											
21...	1030	0.1	49	8.0	21.5	150	7.7	K1	20	6.3	1.0
21...	1045	150	54	7.1	8.0	--	6.7	--	23	7.3	1.2

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORPTION RATIO	POTASSIUM DIS-SOLVED (MG/L AS K)	ALKALINITY LAB AS CACO3 (90410)	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLORIDE, DIS-SOLVED (MG/L AS CL)	FLUORIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS, RESIDUE AT 180 DEG. C SOLVED (MG/L)	SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L)	NITROGEN, NITRITE, DIS-SOLVED (MG/L AS N)
OCT											
08...	2.0	0.2	0.6	22	2.3	0.7	0.1	2.8	48	30	<0.01
08...	2.3	0.2	0.7	26	2.9	0.8	0.2	4.7	50	37	<0.01
MAY											
19...	2.0	0.2	0.6	25	2.7	0.8	0.1	2.4	47	32	<0.01
19...	2.1	0.2	0.6	25	2.6	0.8	0.2	2.5	47	33	<0.01
AUG											
21...	1.8	0.2	0.6	22	2.2	0.7	0.1	2.9	35	29	<0.01
21...	2.0	0.2	0.6	25	2.1	0.8	0.1	3.1	40	33	<0.01

DATE	NITROGEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITROGEN, AMMONIA DIS-SOLVED (MG/L AS N)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N)	PHOSPHORUS TOTAL (MG/L AS P)	PHOSPHORUS DIS-SOLVED (MG/L AS P)	PHOSPHORUS ORTHO, DIS-SOLVED (MG/L AS P)	CHLOROPHYTOPLANKTON CHROMO FLUOROM (UG/L)	CHLOROPHYTOPLANKTON CHROMO FLUOROM (UG/L)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C)	CARBON, ORGANIC SUSPENDED TOTAL (MG/L AS C)
OCT										
08...	<0.05	0.02	<0.2	<0.01	<0.01	<0.01	0.2	<0.1	--	--
08...	0.15	<0.02	<0.2	0.02	<0.01	<0.01	--	--	3.3	<0.1
MAY										
19...	<0.05	0.02	<0.2	<0.01	<0.01	<0.01	0.5	<0.1	--	--
19...	<0.05	0.02	<0.2	0.01	<0.01	<0.01	--	--	--	--
AUG										
21...	<0.05	<0.01	0.2	<0.01	<0.01	<0.01	3.4	<0.1	--	--
21...	0.16	<0.01	<0.2	<0.01	<0.01	0.01	--	--	--	--

DATE	TIME	BARIUM, DIS-SOLVED (UG/L AS BA)	BERYLLIUM, DIS-SOLVED (UG/L AS BE)	BORON, DIS-SOLVED (UG/L AS B)	CADMIUM, DIS-SOLVED (UG/L AS CD)	CHROMIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)
OCT										
08...	1045	17	<0.5	4.9	<1	<5	<3	<10	9	<10
08...	1100	15	<0.5	4.4	<1	<5	<3	<10	12	<10
MAY										
19...	1045	16	<0.5	4.3	<1	<5	<3	<10	15	<10
19...	1100	17	<0.5	4.8	<1	<5	<3	<10	8	<10
AUG										
21...	1030	15	<0.5	<4.0	<1	<5	<3	<10	4	<10
21...	1045	15	<0.5	<4.0	<1	<5	<3	<10	<3	<10

DATE	LITHIUM, DIS-SOLVED (UG/L AS LI)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DIS-SOLVED (UG/L AS MN)	MOLYBDENUM, DIS-SOLVED (UG/L AS MO)	NICKEL, DIS-SOLVED (UG/L AS NI)	SILVER, DIS-SOLVED (UG/L AS AG)	STRONTIUM, DIS-SOLVED (UG/L AS SR)	VANADIUM, DIS-SOLVED (UG/L AS V)	ZINC, DIS-SOLVED (UG/L AS ZN)
OCT									
08...	<4	--	1	<10	<10	<0.2	29	<6	<3
08...	<4	--	2	<10	<10	<0.2	37	<6	<3
MAY									
19...	<4	<10	3	<10	<10	<0.2	33	<6	<3
19...	<4	<10	<1	<10	<10	<0.2	34	<6	5
AUG									
21...	<4	<10	<1	<10	<10	<0.2	27	<6	<3
21...	<4	<10	<1	<10	<10	<0.2	32	<6	<3

K-Based on non-ideal colony count.

403147105083800 HORSETOOTH RESERVOIR NEAR FORT COLLINS, CO

WATER-QUALITY RECORDS

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

REMARKS.--Samples were collected near surface and near bottom, near south end of reservoir near Spring Canyon Dam.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	SAM-PLING DEPTH (FEET) (00003)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	pH (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)
OCT						
08...	1125	0.1	49	7.3	16.0	7.4
08...	1126	5.0	49	7.3	15.5	7.3
08...	1127	10	49	7.3	15.5	6.9
08...	1128	15	48	7.2	15.5	6.8
08...	1129	20	48	7.2	15.5	6.9
08...	1130	25	49	7.2	15.5	7.0
08...	1131	30	49	7.2	15.5	7.0
08...	1132	40	49	7.2	15.5	7.0
08...	1133	50	49	7.2	15.5	6.8
08...	1134	60	49	7.1	15.0	6.5
08...	1135	70	52	6.8	12.5	4.2
08...	1136	80	54	6.8	11.5	3.7
08...	1137	90	57	6.8	10.0	3.7
08...	1138	100	60	6.8	9.0	3.4
MAY						
19...	1130	0.1	57	7.7	13.0	8.2
19...	1131	5.0	57	7.7	13.0	8.2
19...	1132	10	57	7.7	13.0	8.2
19...	1133	15	56	7.7	13.0	8.2
19...	1134	20	56	7.7	13.0	8.2
19...	1135	25	56	7.7	13.0	8.2
19...	1136	30	55	7.7	8.5	8.8
19...	1137	40	54	7.7	7.5	8.9
19...	1138	50	54	7.7	7.5	9.0
19...	1139	60	54	7.7	7.0	9.0
19...	1140	70	54	7.7	6.5	9.0
19...	1141	80	54	7.6	6.5	9.0
AUG						
21...	1120	0.10	49	8.2	21.5	7.8
21...	1121	5.0	49	8.2	21.0	7.9
21...	1122	10	49	8.2	20.0	7.9
21...	1123	15	49	7.8	20.0	7.3
21...	1124	20	49	7.6	20.0	7.2
21...	1125	25	49	7.4	19.5	6.7
21...	1126	30	48	7.2	19.5	6.3
21...	1127	40	43	7.2	17.5	6.6
21...	1128	50	45	7.0	16.0	5.7
21...	1129	60	50	7.0	12.5	6.0
21...	1130	70	51	7.0	10.5	6.4
21...	1131	80	53	7.1	9.5	6.5
21...	1132	90	54	7.1	9.0	6.5
21...	1133	100	54	7.1	9.0	6.5

DATE	TIME	SAM-PLING DEPTH (FEET) (00003)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	pH (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	TRANS-PAR-ENCY (SECCHI DISK) (IN) (00077)	OXYGEN, DIS-SOLVED (MG/L) (00300)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML) (31625)	HARD-NESS TOTAL (MG/L AS CaCO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS Ca) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L) (00925)
OCT											
08...	1145	0.1	49	7.3	16.0	121	7.4	K1	22	6.8	1.1
08...	1200	100	60	6.8	9.0	--	3.4	--	25	7.7	1.3
MAY											
19...	1145	0.1	57	7.7	13.0	73.0	8.2	<1	23	7.0	1.2
19...	1200	80.0	54	7.6	6.5	--	9.0	--	23	7.4	1.2
AUG											
21...	1145	0.1	49	8.2	21.5	144	7.8	K3	20	6.3	1.0
21...	1200	100	54	7.1	9.0	--	6.5	--	23	7.1	1.2

K-Based on non-ideal colony count.

403147105083800 HORSETOOTH RESERVOIR NEAR FORT COLLINS, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORPTION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY 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 (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, DIS-SOLVED (MG/L AS N) (00613)
OCT 08...	2.0	0.2	0.6	23	2.5	0.6	0.1	2.8	32	30	<0.01
OCT 08...	2.3	0.2	0.6	25	2.9	0.8	0.1	4.6	42	36	<0.01
MAY 19...	2.0	0.2	0.6	25	2.7	1.0	0.2	2.8	49	33	<0.01
MAY 19...	2.1	0.2	0.6	25	2.6	0.8	0.2	2.8	53	33	<0.01
AUG 21...	1.9	0.2	0.6	22	2.1	0.7	0.1	2.9	35	29	<0.01
AUG 21...	1.9	0.2	0.6	24	2.6	0.7	0.1	3.3	40	33	<0.01

DATE	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	CHLOR-A PHYTO-PLANK-TON FLUOROM (UG/L) (70953)	CHLOR-B PHYTO-PLANK-TON CHROMO FLUOROM (UG/L) (70954)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)
OCT 08...	<0.05	<0.02	<0.2	<0.01	<0.01	<0.01	0.5	<0.1	--	--
OCT 08...	0.15	<0.02	<0.2	0.01	<0.01	0.01	--	--	3.3	<0.1
MAY 19...	<0.05	0.01	<0.2	<0.01	<0.01	<0.01	0.2	<0.1	--	--
MAY 19...	<0.05	0.02	<0.2	<0.01	<0.01	<0.01	--	--	--	--
AUG 21...	<0.05	<0.01	0.3	<0.01	<0.01	<0.01	2.6	<0.1	--	--
AUG 21...	0.15	<0.01	<0.2	<0.01	<0.01	0.01	--	--	--	--

DATE	TIME	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)
OCT 08...	1145	17	<0.5	4.9	<1	<5	<3	<10	9	<10
OCT 08...	1200	15	<0.5	4.4	1	<5	<3	<10	11	<10
MAY 19...	1145	15	<0.5	5.8	<1	<5	<3	<10	18	<10
MAY 19...	1200	16	<0.5	7.8	<1	<5	<3	<10	15	<10
AUG 21...	1145	15	<0.5	<4.0	<1	<5	<3	<10	5	<10
AUG 21...	1200	15	<0.5	<4.0	<1	<5	<3	<10	15	<10

DATE	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 08...	<4	--	<1	<10	10	<0.2	29	<6	<3
OCT 08...	<4	--	2	<10	<10	<0.2	35	<6	<3
MAY 19...	<4	10	4	<10	<10	<0.2	32	<6	4
MAY 19...	<4	10	<1	<10	<10	<0.2	35	<6	10
AUG 21...	<4	<10	<1	<10	<10	<0.2	27	<6	<3
AUG 21...	<4	10	2	<10	<10	<0.2	31	<6	<3

06738000 BIG THOMPSON RIVER AT MOUTH OF CANYON, NEAR DRAKE, CO

LOCATION.--Lat 40°25'18", long 105°13'34", in SW¼SW¼ 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 mi².

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. 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 (see station 09013000 in Volume 2 for diversion during current year); 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, 238,400 acre-ft diverted during current year; and Dille tunnel since Apr. 20, 1959, 60,940 acre-ft, diverted during current year, 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 ft³/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, 1170 ft³/s, June 9, gage height, 4.42 ft; minimum daily, 20 ft³/s (estimated), Dec. 10.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	99	47	31	e30	e25	e30	38	117	501	254	73	140
2	98	51	e28	e29	e30	e29	41	41	784	330	59	147
3	112	59	e35	e29	e28	e28	39	40	944	327	56	125
4	110	49	e30	e33	e31	e28	41	39	838	332	98	114
5	92	31	e29	e30	e30	e28	43	40	816	396	97	114
6	88	29	e32	e29	e29	e28	41	49	867	394	81	113
7	81	23	e31	e27	e30	e29	32	64	1010	357	85	112
8	69	30	e29	e31	e28	e29	31	72	902	381	102	111
9	63	35	e30	e30	e28	e28	31	92	1100	377	105	107
10	75	33	e20	e31	e27	e30	e34	259	1080	350	81	107
11	74	30	e24	e31	e23	e28	38	344	912	298	193	105
12	72	33	e24	e31	e23	e30	36	367	904	273	220	101
13	75	34	e28	e31	e30	e32	35	336	828	184	139	96
14	64	33	e30	e31	e30	e31	37	312	753	91	81	94
15	66	33	e33	e29	e30	e32	38	382	708	78	76	65
16	66	31	e31	e32	e28	e26	38	462	694	72	73	35
17	58	29	e33	e32	e28	e30	43	386	593	63	56	34
18	60	39	e34	e28	e28	e43	54	502	584	75	52	34
19	61	37	e31	e26	e33	37	66	366	701	77	54	35
20	66	34	e30	e29	e33	34	72	265	754	63	64	37
21	60	32	e30	e30	e31	41	85	571	834	52	67	42
22	49	32	e30	e31	e28	46	71	779	752	77	73	48
23	53	32	e31	e31	e28	41	79	1100	680	107	61	48
24	51	31	e32	e31	e28	40	107	641	635	83	51	44
25	56	32	e31	e31	e28	42	111	423	522	62	78	38
26	57	33	e30	e29	e27	41	120	302	428	70	83	36
27	54	30	e28	e29	e24	38	131	193	343	98	69	36
28	52	29	e31	e31	e28	38	161	124	315	84	69	36
29	51	34	e31	e29	---	39	210	87	267	71	126	36
30	49	35	e30	e29	---	35	296	142	232	58	144	91
31	49	---	e30	e29	---	36	---	379	---	71	139	---
TOTAL	2130	1040	927	929	794	1047	2199	9276	21281	5605	2805	2281
MEAN	68.7	34.7	29.9	30.0	28.4	33.8	73.3	299	709	181	90.5	76.0
MAX	112	59	35	33	33	46	296	1100	1100	396	220	147
MIN	49	23	20	26	23	26	31	39	232	52	51	34
AC-FT	4220	2060	1840	1840	1570	2080	4360	18400	42210	11120	5560	4520

CAL YR 1996 TOTAL 39495 MEAN 108 MAX 655 MIN 20 AC-FT 78340
WTR YR 1997 TOTAL 50314 MEAN 138 MAX 1100 MIN 20 AC-FT 99800

e-Estimated.

06741510 BIG THOMPSON RIVER AT LOVELAND, CO

LOCATION.--Lat 40°22'43", long 105°03'38", in SE¹/₄SE¹/₄ 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 mi².

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. 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.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	5.6	5.0	5.0	6.2	4.5	5.1	3.1	36	141	24	13
2	3.9	5.8	4.8	5.0	5.8	4.3	6.1	2.9	87	116	20	17
3	3.7	5.4	5.3	5.0	5.6	4.3	4.9	2.8	174	111	27	23
4	3.6	5.4	5.0	4.7	5.6	e4.4	4.5	2.9	497	95	37	33
5	3.5	5.4	4.8	5.0	5.5	4.7	4.6	5.5	695	81	44	37
6	3.5	5.4	7.5	e5.0	5.4	4.6	4.3	21	860	74	79	30
7	3.6	5.2	13	e5.0	e5.3	4.4	4.1	26	1420	75	36	34
8	3.5	5.3	13	5.0	e5.1	4.5	4.2	42	1220	81	9.7	39
9	3.2	5.7	13	5.0	e4.9	4.3	4.2	52	1620	75	20	35
10	3.5	5.4	10	e4.8	e4.8	4.4	2.4	221	1760	63	51	32
11	4.2	5.4	5.0	e4.5	4.8	4.8	2.1	371	1480	68	25	32
12	3.7	5.4	5.0	e4.4	4.9	4.8	1.8	387	1350	72	28	31
13	3.6	5.4	5.0	e4.4	4.7	4.9	1.7	337	1360	54	30	31
14	11	5.9	4.8	e4.2	4.6	5.1	1.7	257	1300	59	30	27
15	11	6.3	e4.8	e4.2	4.6	5.0	1.7	261	1260	64	30	48
16	10	6.6	e4.9	e4.2	4.6	4.4	1.7	277	1200	67	30	33
17	9.5	5.5	e4.9	e4.1	4.6	4.3	1.7	202	1100	48	39	23
18	9.8	5.5	e4.9	e4.6	4.6	4.3	1.7	182	1040	29	44	18
19	9.3	5.6	e4.9	e5.3	4.7	3.6	1.7	113	1120	34	41	19
20	9.9	5.3	e4.9	e5.5	4.8	4.6	1.8	68	1170	35	32	100
21	9.1	5.4	e5.0	e5.8	4.7	4.6	1.8	399	1220	30	31	89
22	9.1	5.3	e5.0	e6.0	4.6	4.8	18	635	1140	29	31	29
23	8.4	5.4	e5.0	e6.0	e4.5	4.6	62	636	1000	35	34	27
24	8.3	5.0	e5.0	e6.0	4.6	5.0	116	284	896	34	26	12
25	8.0	5.1	e5.0	e6.0	e4.5	5.0	40	99	733	42	25	40
26	11	5.1	e4.9	e5.9	e4.5	4.3	22	31	601	61	25	85
27	8.7	5.3	e4.8	e5.9	4.6	4.2	4.2	18	472	88	17	78
28	7.6	5.3	4.8	e5.9	4.6	4.2	3.6	44	365	123	6.4	75
29	7.5	5.3	4.8	e5.9	---	4.9	3.3	71	277	136	6.6	73
30	6.6	5.4	4.9	e6.0	---	5.0	3.1	68	210	29	9.1	53
31	5.9	---	4.9	6.1	---	4.8	---	62	---	20	12	---
TOTAL	217.2	164.1	184.6	160.4	137.7	141.6	336.0	5181.2	27663	2069	899.8	1216
MEAN	7.01	5.47	5.95	5.17	4.92	4.57	11.2	167	922	66.7	29.0	40.5
MAX	13	6.6	13	6.1	6.2	5.1	116	636	1760	141	79	100
MIN	3.2	5.0	4.8	4.1	4.5	3.6	1.7	2.8	36	20	6.4	12
AC-FT	431	325	366	318	273	281	666	10280	54870	4100	1780	2410

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1979 - 1997, BY WATER YEAR (WY)

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	
MEAN	26.9	21.3	9.70	12.5	11.2	11.0	39.4	246	331	126	80.7	36.8								
MAX	66.0	95.8	36.4	62.8	59.9	49.3	292	2078	1493	418	153	83.9								
(WY)	1990	1985	1985	1980	1980	1980	1980	1980	1983	1995	1981	1982								
MIN	6.15	3.96	2.86	2.55	2.42	2.19	4.49	4.07	25.0	29.9	29.0	16.6								
(WY)	1988	1982	1993	1994	1993	1996	1981	1981	1982	1987	1997	1990								

SUMMARY STATISTICS

FOR 1996 CALENDAR YEAR

FOR 1997 WATER YEAR

WATER YEARS 1979 - 1997

ANNUAL TOTAL	12945.5	38370.6	
ANNUAL MEAN	35.4	105	79.6
HIGHEST ANNUAL MEAN			321
LOWEST ANNUAL MEAN			28.4
HIGHEST DAILY MEAN	321	Jun 23	4240
LOWEST DAILY MEAN	^a 1.8	Mar 10	^b 1.7
ANNUAL SEVEN-DAY MINIMUM	1.9	Mar 28	1.7
INSTANTANEOUS PEAK FLOW			1790
INSTANTANEOUS PEAK STAGE			6.61
ANNUAL RUNOFF (AC-FT)	25680	76110	^c 10.10
10 PERCENT EXCEEDS	130	235	141
50 PERCENT EXCEEDS	7.5	6.0	16
90 PERCENT EXCEEDS	2.2	4.2	3.2

e-Estimated.

a-Also occurred Mar 11-12, 29-30.

b-Also occurred Apr 14-19.

c-From high-water mark.

PLATTE RIVER BASIN

06741510 BIG THOMPSON RIVER AT LOVELAND, CO--Continued
WATER-QUALITY RECORDS

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	pH (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)	ALKA-LINITY LAB (MG/L) AS CAC03 (90410)
OCT											
15...	1041	11	782	8.1	11.5	8.6	330	81	31	--	122
NOV											
13...	0947	5.3	1380	8.1	6.0	10.3	620	150	59	--	197
DEC											
10...	1025	12	1830	8.3	4.5	11.0	890	190	100	--	177
JAN											
13...	1615	4.5	1400	8.2	0.0	12.8	630	160	57	--	197
FEB											
19...	1028	4.5	1410	8.2	3.5	12.4	640	160	58	58	190
MAR											
11...	1010	4.8	1440	8.2	7.5	11.4	660	170	58	--	187
APR											
08...	1339	4.3	1340	8.4	5.5	12.9	650	160	57	--	180
MAY											
12...	1459	390	85	8.0	11.5	9.1	32	9.3	2.1	--	25
JUN											
11...	1003	1500	67	7.9	10.0	9.6	27	7.6	1.8	--	21
JUL											
24...	1108	48	789	8.3	21.5	8.6	310	65	36	36	91
AUG											
13...	1039	30	1040	8.2	18.0	9.9	430	89	51	--	111
SEP											
08...	1058	40	278	8.1	17.0	8.5	110	28	9.7	--	50

DATE	SULFATE DIS-SOLVED (MG/L) AS SO4 (00945)	CHLO-RIDE, DIS-SOLVED (MG/L) AS CL (00940)	FLUO-RIDE, DIS-SOLVED (MG/L) AS F (00950)	SILICA, DIS-SOLVED (MG/L) AS SIO2 (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	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)
OCT										
15...	--	--	--	--	--	0.03	0.14	0.02	<0.01	<0.01
NOV										
13...	--	--	--	--	--	<0.01	0.47	0.03	<0.01	<0.01
DEC										
10...	--	--	--	--	--	0.01	0.35	0.04	<0.01	<0.01
JAN										
13...	--	--	--	--	--	0.01	0.78	<0.02	<0.01	<0.01
FEB										
19...	580	17	0.4	6.0	1080	<0.01	0.61	<0.02	<0.01	<0.01
MAR										
11...	--	--	--	--	--	<0.01	0.59	<0.02	0.01	<0.01
APR										
08...	--	--	--	--	--	<0.01	0.64	0.02	<0.01	<0.01
MAY										
12...	--	--	--	--	--	--	--	--	--	--
JUN										
11...	--	--	--	--	--	<0.01	0.09	<0.01	<0.01	<0.01
JUL										
24...	300	5.7	0.3	5.3	563	<0.01	0.08	<0.01	<0.01	0.02
AUG										
13...	--	--	--	--	--	0.01	0.15	0.03	<0.01	<0.01
SEP										
08...	--	--	--	--	--	<0.01	0.09	<0.01	<0.01	<0.01

06741510 BIG THOMPSON RIVER AT LOVELAND, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	ALUM- INUM, DIS- SOLVED (UG/L AS AL) (01106)	ARSENIC DIS- SOLVED (UG/L AS AS) (01000)	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CADMIUM DIS- SOLVED (UG/L AS CD) (01025)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR) (01034)	CHRO- MIUM, DIS- SOLVED (UG/L AS CR) (01030)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV- ERABLE (UG/L AS PB) (01051)
OCT 15...	--	--	<1	--	--	--	<1	<1	180	<1
NOV 13...	--	--	<1	--	--	--	<1	<1	160	<1
DEC 10...	--	--	--	--	--	--	<1	<1	100	<1
JAN 13...	--	--	<1	--	--	--	1	<1	90	<1
FEB 19...	<5	<1	<1	<1	<1	<1	<1	<1	100	<1
MAR 11...	--	--	<1	--	--	--	1	1	100	<1
APR 08...	--	--	--	--	--	--	1	<1	70	<1
MAY 12...	--	--	<1	--	--	--	2	2	800	1
JUN 11...	--	--	<1	--	--	--	3	2	1500	1
JUL 24...	<5	1	<1	<1	<1	<1	3	1	640	<1
AUG 13...	--	--	<1	--	--	--	<1	<1	280	<1
SEP 08...	--	--	<1	--	--	--	2	1	290	<1

DATE	LEAD, DIS- SOLVED (UG/L AS PB) (01049)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG) (71900)	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, TOTAL RECOV- ERABLE (UG/L AS AG) (01077)	SILVER, DIS- SOLVED (UG/L AS AG) (01075)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)
OCT 15...	--	--	--	--	--	--	<1	<0.2	--
NOV 13...	--	--	--	--	--	--	<1	<0.2	--
DEC 10...	--	--	--	--	--	--	<1	<0.2	--
JAN 13...	--	--	--	--	--	--	<1	<0.2	--
FEB 19...	<1	40	<0.1	<0.1	<1	19	<1	<0.2	<3
MAR 11...	--	--	--	--	--	--	<1	<0.2	--
APR 08...	--	--	--	--	--	--	--	<0.2	--
MAY 12...	--	--	--	--	--	--	<1	<0.2	--
JUN 11...	--	--	--	--	--	--	<1	<0.2	--
JUL 24...	<1	50	<0.1	<0.1	1	1	<1	<0.2	<3
AUG 13...	--	--	--	--	--	--	<1	<0.2	--
SEP 08...	--	--	--	--	--	--	<1	<0.2	--

06742500 CARTER LAKE NEAR BERTHOUD, CO

LOCATION.--Lat 40°19'28", long 105°12'41", in SE¼ 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 FOR CURRENT YEAR.--Maximum contents, 108,600 acre-ft, May 1-3, elevation, 5,758.70 ft; minimum contents, 40,680 acre-ft, Oct. 27, elevation, 5,690.32 ft.

MONTHEND ELEVATION AND CONTENTS AT 0800, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.	5,695.46	44,980	-
Oct. 31.	5,692.43	42,430	-2,550
Nov. 30.	5,710.07	57,980	+15,550
Dec. 31.	5,720.00	67,450	+9,470
CAL YR 1996.	-	-	-13,290
Jan. 31.	5,734.59	82,230	+14,780
Feb. 28.	5,749.04	97,730	+15,500
Mar. 31.	5,755.90	105,400	+7,670
Apr. 30.	5,758.32	108,100	+2,700
May 31.	5,755.51	105,000	-3,100
June 30.	5,756.85	106,500	+1,500
July 31.	5,738.45	86,290	-20,210
Aug. 31.	5,728.64	76,090	-10,200
Sept. 30.	5,714.60	62,240	-13,850
WTR YR 1997.	-	-	+17,260

**06742500 CARTER LAKE NEAR BERTHOUD, CO--Continued
WATER-QUALITY RECORDS**

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

REMARKS.--Samples were collected near surface and near bottom, near southeast end of reservoir.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	SAM- PLING DEPTH (FEET) (00003)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	pH (STAND- ARD UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	OXYGEN, DIS- SOLVED (MG/L) (00300)
OCT						
10...	1010	0.1	70	8.0	15.0	8.4
10...	1011	5.0	70	8.0	15.0	8.4
10...	1012	10	70	8.0	15.0	8.4
10...	1013	15	70	8.0	15.0	8.3
10...	1014	20	70	8.0	15.0	8.3
10...	1015	25	70	8.0	14.5	8.2
10...	1016	30	70	7.9	14.5	8.1
10...	1017	40	70	7.8	14.5	7.8
10...	1018	50	68	7.6	14.0	6.2
10...	1019	60	65	7.2	13.0	4.5
10...	1020	70	65	7.1	12.0	3.6
10...	1021	77	66	7.0	11.0	2.8
MAY						
28...	1035	0.1	58	8.5	13.5	8.7
28...	1036	5.0	58	8.5	13.5	8.7
28...	1037	10	58	8.5	13.5	8.6
28...	1038	15	58	8.5	13.5	8.6
28...	1039	20	58	8.5	13.5	8.6
28...	1040	25	58	8.5	13.0	8.6
28...	1041	30	56	8.0	8.0	9.1
28...	1043	40	56	7.9	6.5	9.2
28...	1044	50	55	7.9	6.5	9.0
28...	1045	60	55	7.8	6.0	9.0
28...	1046	70	55	7.8	6.0	8.9
28...	1047	80	55	7.7	5.5	8.8
28...	1048	90	55	7.7	5.5	8.7
28...	1049	100	55	7.7	5.5	8.6
28...	1050	110	55	7.6	5.5	8.6
28...	1051	120	55	7.6	5.0	8.6
28...	1052	130	55	7.6	5.0	8.5
28...	1053	140	55	7.6	5.0	8.5
AUG						
19...	1035	0.1	68	8.1	20.0	7.4
19...	1036	5.0	68	8.2	20.0	7.3
19...	1037	10	68	8.1	20.0	7.3
19...	1038	15	69	8.1	20.0	7.3
19...	1039	20	69	8.2	20.0	7.3
19...	1040	25	66	7.9	17.0	7.5
19...	1041	30	61	7.7	13.5	7.7
19...	1042	40	56	7.6	7.0	7.3
19...	1043	50	55	7.5	7.0	7.1
19...	1044	60	55	7.5	6.5	6.9
19...	1045	70	55	7.4	6.5	6.8
19...	1046	80	55	7.4	6.5	6.7
19...	1047	90	55	7.3	6.0	6.5
19...	1048	100	56	7.3	6.0	6.2

PLATTE RIVER BASIN
06742500 CARTER LAKE NEAR BERTHOUD, CO--Continued
 WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	SAM-PLING DEPTH (FEET) (00003)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	pH (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, UM-MF (COLS./100 ML) (31625)	HARD-NESS TOTAL (MG/L AS CACO3) (00900)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)
OCT											
10...	1025	0.1	70	8.0	15.0	140	8.4	K6	33	11	1.3
10...	1040	77	66	7.0	11.0	--	2.8	--	30	9.8	1.3
MAY											
28...	1100	0.1	58	8.5	13.5	110	8.7	<1	25	8.1	1.2
28...	1115	140	55	7.6	5.0	--	8.5	--	25	7.8	1.2
AUG											
19...	1100	0.1	68	8.1	20.0	81	7.4	K1	29	9.6	1.2
19...	1115	100	56	7.3	6.0	--	6.2	--	23	7.4	1.1

DATE	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY LAB AS (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 SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)
OCT										
10...	2.3	0.2	0.7	34	2.8	0.7	0.1	3.1	56	42
10...	2.2	0.2	0.6	31	2.8	0.6	0.1	3.9	68	40
MAY										
28...	2.0	0.2	0.6	28	2.7	0.7	0.1	2.4	42	35
28...	2.0	0.2	0.6	27	2.7	0.7	0.1	3.3	42	35
AUG										
19...	2.1	0.2	0.6	32	2.6	0.6	0.1	2.1	44	38
19...	1.9	0.2	0.6	26	2.5	0.6	0.1	3.7	39	34

DATE	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	CHLOR-A PHYTO-PLANK-TON CHROMO FLUOROM (UG/L) (70953)	CHLOR-B PHYTO-PLANK-TON CHROMO FLUOROM (UG/L) (70954)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)
OCT										
10...	<0.01	<0.05	<0.02	0.2	<0.01	<0.01	<0.01	0.9	<0.1	--
10...	<0.01	0.06	<0.02	<0.2	<0.01	<0.01	<0.01	--	--	3.2
MAY										
28...	<0.01	<0.05	<0.01	<0.2	<0.01	<0.01	<0.01	0.3	<0.1	--
28...	<0.01	<0.05	0.03	<0.2	<0.01	<0.01	<0.01	--	--	--
AUG										
19...	<0.01	<0.05	<0.01	<0.2	<0.01	<0.01	<0.01	1.2	<0.1	--
19...	<0.01	0.13	<0.01	<0.2	<0.01	<0.01	0.01	--	--	--

DATE	TIME	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)
OCT										
10...	1025	27	<0.5	5.6	<1	<5	<3	<10	<3	<10
10...	1040	23	<0.5	4.5	2	<5	<3	<10	<3	<10
MAY										
28...	1100	17	<0.5	4.1	<1	<5	<3	<10	<3	<10
28...	1115	16	<0.5	<4.0	<1	<5	<3	<10	4	<10
AUG										
19...	1100	24	<0.5	4.4	<1	<5	<3	<10	<3	<10
19...	1115	15	<0.5	<4.0	1	<5	<3	<10	8	<10

DATE	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									
10...	<4	--	<1	<10	<10	<0.2	42	<6	<3
10...	<4	--	4	<10	<10	<0.2	41	<6	<3
MAY									
28...	<4	<10	<1	<10	<10	<0.2	37	<6	<3
28...	<4	<10	<1	<10	<10	<0.2	37	<6	9
AUG									
19...	<4	<10	<1	<10	<10	<0.2	38	<6	<3
19...	<4	10	1	<10	<10	<0.2	34	<6	3

K-Based on non-ideal colony count.

06746095 JOE WRIGHT CREEK ABOVE JOE WRIGHT RESERVOIR, CO

LOCATION.--Lat 40°32'24", long 105°52'56", in SE¹/₄SE¹/₄ 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 mi².

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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7.9	e3.7	e1.8	e1.4	e1.0	e1.0	e1.0	e1.3	66	77	24	10
2	7.8	e3.5	e1.7	e1.4	e1.0	e1.0	e1.0	e1.3	80	68	22	9.8
3	9.9	e3.4	e1.7	e1.4	e1.0	e1.0	e1.0	e1.3	97	64	22	14
4	10	e3.3	e1.6	e1.4	e1.0	e1.0	e1.0	e1.4	102	60	22	14
5	8.4	e3.2	e1.6	e1.4	e1.0	e1.0	e1.0	e1.4	111	56	27	12
6	7.8	e3.1	e1.5	e1.4	e1.0	e1.0	e1.0	e1.5	109	53	28	12
7	7.6	e3.0	e1.5	e1.4	e1.0	e1.0	e1.0	e1.8	106	51	24	11
8	7.3	e2.8	e1.5	e1.4	e1.0	e1.0	e1.0	e2.3	106	49	22	10
9	7.1	e2.7	e1.5	e1.4	e1.0	e1.0	e1.0	e2.8	103	47	21	9.6
10	7.0	e2.6	e1.5	e1.4	e1.0	e1.0	e1.0	e4.0	101	46	30	8.6
11	6.7	e2.5	e1.5	e1.3	e1.0	e1.0	e1.0	e4.8	104	44	28	9.7
12	6.6	e2.4	e1.5	e1.3	e1.0	e1.0	e1.0	e4.8	96	41	25	9.0
13	6.3	e2.4	e1.5	e1.3	e1.0	e1.0	e.98	e5.2	96	40	24	8.4
14	6.1	e2.2	e1.5	e1.3	e1.0	e1.0	e1.0	e8.0	100	37	26	8.2
15	5.9	e2.2	e1.5	e1.2	e1.0	e1.0	e1.0	e10	97	35	22	7.8
16	5.7	e2.1	e1.5	e1.2	e1.0	e1.0	e1.0	e15	92	34	20	7.8
17	e5.8	e2.0	e1.5	e1.2	e1.0	e1.0	e1.0	e20	94	33	19	7.4
18	e5.7	e2.0	e1.5	e1.2	e1.0	e1.0	e1.1	25	102	33	19	13
19	e5.6	e1.9	e1.4	e1.1	e1.0	e1.0	e1.1	25	99	32	18	31
20	e5.5	e1.9	e1.4	e1.1	e1.0	e1.0	e1.1	28	69	32	16	40
21	e5.3	e1.8	e1.4	e1.1	e1.0	e1.0	e1.1	40	64	29	15	40
22	e5.2	e1.8	e1.4	e1.0	e1.0	e1.0	e1.1	46	62	28	15	33
23	e5.0	e1.8	e1.4	e1.0	e1.0	e1.0	e1.1	e45	56	31	14	30
24	e4.8	e1.8	e1.4	e1.0	e1.0	e1.0	e1.1	e43	49	29	13	27
25	e4.7	e1.8	e1.4	e1.0	e1.0	e1.0	e1.2	40	44	27	13	26
26	e4.5	e1.8	e1.4	e1.0	e1.0	e1.0	e1.2	34	40	26	13	26
27	e4.3	e1.8	e1.4	e1.0	e1.0	e1.0	e1.2	29	37	24	12	24
28	e4.2	e1.8	e1.4	e1.0	e1.0	e1.0	e1.2	26	33	24	11	22
29	e4.1	e1.8	e1.4	e1.0	---	e1.0	e1.2	33	58	24	11	20
30	e3.9	e1.8	e1.4	e1.0	---	e1.0	e1.2	40	81	24	11	18
31	e3.8	---	e1.4	e1.0	---	e1.0	---	47	---	26	10	---
TOTAL	190.5	70.9	46.1	37.3	28.0	31.0	31.88	587.9	2454	1224	597	519.3
MEAN	6.15	2.36	1.49	1.20	1.00	1.00	1.06	19.0	81.8	39.5	19.3	17.3
MAX	10	3.7	1.8	1.4	1.0	1.0	1.2	47	111	77	30	40
MIN	3.8	1.8	1.4	1.0	1.0	1.0	.98	1.3	33	24	10	7.4
AC-FT	378	141	91	74	56	61	63	1170	4870	2430	1180	1030

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1979 - 1997, BY WATER YEAR (WY)

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
MEAN	2.49	1.36	.91	.72	.65	.67	1.09	13.6	52.5	27.3	8.49	4.43							
MAX	6.15	3.20	1.85	1.60	1.34	1.50	3.39	34.6	88.5	90.8	21.5	17.3							
(WY)	1979	1981	1986	1996	1996	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 1996 CALENDAR YEAR

FOR 1997 WATER YEAR

WATER YEARS 1979 - 1997

ANNUAL TOTAL	4246.8	5817.88	
ANNUAL MEAN	11.6	15.9	9.53
HIGHEST ANNUAL MEAN			16.9
LOWEST ANNUAL MEAN			5.40
HIGHEST DAILY MEAN	133	Jun 11	150
LOWEST DAILY MEAN	e1.0	Apr 2	a.20
ANNUAL SEVEN-DAY MINIMUM	1.1	Mar 27	.20
INSTANTANEOUS PEAK FLOW			135
INSTANTANEOUS PEAK STAGE			b5.62
ANNUAL RUNOFF (AC-FT)	8420	11540	c5.60
10 PERCENT EXCEEDS	32	46	6900
50 PERCENT EXCEEDS	3.3	2.8	30
90 PERCENT EXCEEDS	1.2	1.0	1.5
			.45

e-Estimated.

a-Also occurred Jan 31 to Apr 4, 1979, and Feb 9 to Apr 9, 1981.

b-Maximum recorded gage height, 6.24 ft, May 24, backwater from ice.

c-Maximum gage height, 10.64 ft, May 15, 1993, present datum, backwater from ice.

06746110 JOE WRIGHT CREEK BELOW JOE WRIGHT RESERVOIR, CO

LOCATION.--Lat 40°33'43", long 105°51'48", in SE¼NE¼ 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 mi².

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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.99	e2.0	e2.0	e2.0	e2.0	e1.9	e1.9	4.6	e180	117	36	62
2	.92	e2.0	e2.0	e2.0	e1.9	e1.9	e1.9	4.3	e40	116	36	63
3	1.1	e2.0	e2.0	e2.0	e1.9	e1.9	e1.9	4.4	e24	102	33	68
4	1.1	e2.0	e2.0	e2.0	e1.9	e1.9	e1.9	4.6	e24	86	25	73
5	.89	e2.0	e2.0	e2.0	e1.9	e1.9	e2.0	4.7	e24	85	23	77
6	.82	e2.0	e2.0	e2.0	e1.9	e1.9	e2.0	5.0	e23	85	31	71
7	.79	e2.0	e2.0	e2.0	e1.9	e1.9	e2.1	5.1	e21	80	38	68
8	.79	e2.0	e2.0	e2.0	e1.9	e1.9	e2.2	5.3	e20	61	37	68
9	.79	e2.0	e2.0	e2.0	e1.9	e1.9	e2.2	5.5	e19	51	30	64
10	.79	e2.0	e2.0	e2.0	e1.9	e1.9	e2.2	5.8	e19	64	29	62
11	.79	e2.0	e2.0	e2.0	e1.9	e1.9	e2.2	6.0	e19	58	36	62
12	.79	e2.0	e2.0	e2.0	e1.9	e1.9	e2.2	5.9	e19	58	42	62
13	.77	e2.0	e2.0	e2.0	e1.9	e1.9	e2.2	6.2	e19	57	41	62
14	1.6	e2.0	e2.0	e2.0	e1.9	e1.9	e2.2	6.4	e20	58	37	65
15	2.5	e2.0	e2.0	e2.0	e1.9	e1.9	e2.2	7.0	e120	52	36	70
16	31	e2.0	e2.0	e2.0	e1.9	e1.9	e2.2	8.0	e160	49	32	65
17	57	e2.0	e2.0	e2.0	e1.9	e1.9	e2.2	8.9	e170	45	28	62
18	36	e2.0	e2.0	e2.0	e1.9	e1.9	e2.4	9.7	e130	36	22	64
19	.77	e2.0	e2.0	e2.0	e1.9	e1.9	e2.7	10	105	41	16	75
20	e.60	e2.0	e2.0	e2.0	e1.9	e1.9	e3.1	11	121	43	14	100
21	e.60	e2.0	e2.0	e2.0	e1.9	e1.9	e3.4	43	168	43	14	118
22	e.60	e2.0	e2.0	e2.0	e1.9	e1.9	e3.8	85	184	40	20	126
23	e.60	e2.0	e2.0	e2.0	e1.9	e1.9	e4.0	91	190	34	23	46
24	e.70	e2.0	e2.0	e2.0	e1.9	e1.9	e4.5	97	166	33	20	4.5
25	e.70	e2.0	e2.0	e2.0	e1.9	e1.9	4.5	108	108	32	36	5.3
26	e.70	e2.0	e2.0	e2.0	e1.9	e1.9	4.6	112	94	32	79	5.6
27	e.70	e2.0	e2.0	e2.0	e1.9	e1.9	4.6	115	84	32	79	5.7
28	e.70	e2.0	e2.0	e2.0	e1.9	e1.9	4.6	110	68	32	73	5.5
29	e.70	e2.0	e2.0	e2.0	---	e1.9	4.6	113	88	32	63	5.6
30	e2.0	e2.0	e2.0	e2.0	---	e1.9	4.6	115	118	32	63	5.6
31	e2.0	---	e2.0	e2.0	---	e1.9	---	e130	---	35	62	---
TOTAL	150.80	60.0	62.0	62.0	53.3	58.9	87.1	1247.4	2545	1721	1154	1690.8
MEAN	4.86	2.00	2.00	2.00	1.90	1.90	2.90	40.2	84.8	55.5	37.2	56.4
MAX	57	2.0	2.0	2.0	2.0	1.9	4.6	130	190	117	79	126
MIN	.60	2.0	2.0	2.0	1.9	1.9	1.9	4.3	19	32	14	4.5
AC-FT	299	119	123	123	106	117	173	2470	5050	3410	2290	3350

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1979 - 1997, BY WATER YEAR (WY)

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	
MEAN	4.34	1.05	.69	.59	.53	.51	.66	11.6	63.6	39.0	31.0	29.7								
MAX	20.8	3.01	2.00	2.00	1.90	1.90	2.90	40.2	100	90.8	84.7	61.8								
(WY)	1995	1982	1997	1997	1997	1997	1997	1997	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 1996 CALENDAR YEAR

FOR 1997 WATER YEAR

WATER YEARS 1979 - 1997

ANNUAL TOTAL	7224.52	8892.30	
ANNUAL MEAN	19.7	24.4	15.3
HIGHEST ANNUAL MEAN			24.4
LOWEST ANNUAL MEAN			3.69
HIGHEST DAILY MEAN	189	Jun 23	245
LOWEST DAILY MEAN	e.43	Feb 2	e,a.60
ANNUAL SEVEN-DAY MINIMUM	.45	Jan 27	.64
INSTANTANEOUS PEAK FLOW			267
INSTANTANEOUS PEAK STAGE			2.78
ANNUAL RUNOFF (AC-FT)	14330	17640	11070
10 PERCENT EXCEEDS	99	79	57
50 PERCENT EXCEEDS	1.4	2.0	1.0
90 PERCENT EXCEEDS	.45	1.9	.33

e-Estimated.
a-Also occurred Oct 21-23.
b-Also occurred Apr 4, 1991.
c-Maximum gage height, 2.78 ft, Jul 10, 1997.

06751490 NORTH FORK CACHE LA POUVRE RIVER AT LIVERMORE, CO

LOCATION.--Lat 40°47'15", long 105°15'06", in SW¼SE¼ 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 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1986 to current year. May 1929 to September 1931, May 1947 to September 1960, published as near Livermore; records are not considered equivalent.

GAGE.--Water-stage recorder. Elevation of gage is 5,715 ft above sea level, from topographic map.

REMARKS.--Records good except 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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.9	8.0	e7.3	7.5	e21	e7.2	7.1	70	e274	e46	27	28
2	6.2	7.8	e7.3	7.5	e23	e6.0	7.7	69	e319	e42	24	27
3	6.3	7.5	e7.3	e7.5	23	e5.3	7.4	78	e343	e38	22	24
4	6.5	7.4	e7.3	e7.6	e25	5.1	8.2	84	e329	e34	20	24
5	6.4	7.3	7.1	e7.7	e26	e5.1	11	85	e310	e31	21	21
6	5.7	7.3	6.9	e7.9	26	4.9	9.8	82	e300	e28	53	17
7	5.7	6.4	e7.0	e7.8	28	4.7	9.3	81	e357	e24	57	16
8	5.4	6.0	e7.0	7.6	e29	4.6	9.4	73	e367	e20	50	15
9	5.3	6.6	6.8	7.2	e30	4.6	9.3	70	e397	e20	46	14
10	5.5	6.5	7.1	e6.6	e31	4.6	8.1	70	e426	e18	52	13
11	5.6	6.3	7.2	e5.8	31	6.3	8.4	69	e411	e14	52	12
12	5.7	6.2	6.9	e5.3	30	7.4	8.1	77	e344	e13	52	11
13	5.7	5.9	7.2	e5.1	30	7.8	9.3	82	e328	e11	60	13
14	5.7	6.1	7.7	e5.0	e31	7.5	10	e131	e338	e9.0	62	25
15	5.7	e6.6	e7.8	e5.0	32	7.5	11	e158	e341	e8.9	55	15
16	5.9	e6.8	e7.7	e5.0	29	e8.7	11	e158	e315	e9.1	48	9.8
17	6.5	e7.0	e7.7	e4.9	29	9.9	11	e158	e288	e8.1	47	9.4
18	6.7	7.6	e7.7	e6.0	30	e9.6	14	e159	e279	e7.6	47	9.1
19	6.7	9.4	e7.7	e6.9	e31	9.0	16	e201	e253	e8.6	44	11
20	6.5	10	e7.7	e8.1	e31	7.8	16	e221	e230	e11	41	19
21	6.5	9.6	7.7	e9.2	e30	7.9	16	e222	e223	e11	36	34
22	6.6	8.7	7.3	e9.2	e25	e8.1	17	e223	e222	e11	40	38
23	6.5	8.2	7.3	e9.2	e21	e9.8	17	e237	e184	e9.2	47	37
24	6.4	8.0	e7.4	e9.2	e17	9.3	29	e226	e113	e9.6	45	43
25	6.2	7.4	7.4	e9.3	e14	8.4	53	e228	e91	e9.6	44	42
26	6.7	7.9	7.6	e9.8	e11	8.9	80	e262	e80	e17	44	42
27	7.0	7.6	7.4	e10	e9.8	8.2	82	e299	e74	e18	35	38
28	7.2	7.0	7.6	e10	e8.5	7.9	78	e298	e64	e33	29	35
29	7.1	e7.3	7.3	e11	---	7.7	74	e338	e57	e102	42	34
30	7.1	e7.3	7.4	e15	---	7.5	71	e265	e51	e89	36	33
31	7.8	---	7.5	e19	---	7.3	---	e225	---	e36	27	---
TOTAL	195.7	221.7	228.3	252.9	702.3	224.6	719.1	4999	7708	746.7	1305	709.3
MEAN	6.31	7.39	7.36	8.16	25.1	7.25	24.0	161	257	24.1	42.1	23.6
MAX	7.8	10	7.8	19	32	9.9	82	338	426	102	62	43
MIN	5.3	5.9	6.8	4.9	8.5	4.6	7.1	69	51	7.6	20	9.1
AC-FT	388	440	453	502	1390	445	1430	9920	15290	1480	2590	1410

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 1997, BY WATER YEAR (WY)

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	
MEAN	9.63	10.2	7.90	8.60	12.8	17.3	50.1	132	221	32.3	18.6	10.8
MAX	17.8	14.7	11.6	27.6	48.2	55.5	244	365	857	133	52.5	23.6
(WY)	1991	1987	1994	1996	1996	1990	1990	1995	1995	1995	1991	1997
MIN	4.85	6.62	3.58	3.60	5.00	6.35	4.57	10.3	20.3	5.23	4.24	4.48
(WY)	1989	1988	1988	1988	1995	1995	1995	1989	1987	1989	1988	1987

SUMMARY STATISTICS

FOR 1996 CALENDAR YEAR

FOR 1997 WATER YEAR

WATER YEARS 1987 - 1997

ANNUAL TOTAL	19224.0	18012.6	
ANNUAL MEAN	52.5	49.3	
HIGHEST ANNUAL MEAN			44.2
LOWEST ANNUAL MEAN			118
HIGHEST DAILY MEAN	614	May 27	8.06
LOWEST DAILY MEAN	5.3	Oct 9	1995
ANNUAL SEVEN-DAY MINIMUM	5.6	Oct 6	1989
INSTANTANEOUS PEAK FLOW			1995
INSTANTANEOUS PEAK STAGE			1991
ANNUAL RUNOFF (AC-FT)	38130	35730	1991
10 PERCENT EXCEEDS	152	169	1991
50 PERCENT EXCEEDS	16	11	1991
90 PERCENT EXCEEDS	6.5	6.3	1991

e-Estimated.
a-Also occurred Mar 9-10.
b-Also occurred Sep 3, 1988 and Apr 27, 1989.
c-From high-water mark.

**06751490 NORTH FORK CACHE LA POUVRE RIVER AT LIVERMORE, CO--Continued
WATER-QUALITY RECORDS**

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	pH (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 PERCENT (00932)
OCT											
17...	0944	6.4	453	8.5	3.5	10.4	210	58	16	15	13
NOV											
14...	1038	6.3	418	8.6	3.0	11.8	180	50	14	15	15
DEC											
11...	1013	7.6	374	8.6	2.5	11.6	170	47	13	15	16
JAN											
15...	1225	5.0	386	8.3	0.0	12.1	170	48	12	15	16
FEB											
19...	1503	30	203	9.1	4.5	12.0	85	25	5.5	7.0	15
MAR											
11...	1510	6.5	387	8.8	10.0	12.6	160	45	12	17	18
APR											
09...	1116	9.6	287	8.6	1.0	12.0	120	34	9.0	12	17
MAY											
13...	1130	98	131	8.4	11.0	9.7	52	15	3.3	5.5	18
JUN											
11...	1916	410	88	8.0	16.0	7.8	35	10	2.3	3.8	18
JUL											
25...	1122	9.6	419	8.4	20.5	8.3	190	52	14	13	13
AUG											
13...	1436	70	199	8.9	18.0	9.2	84	25	5.4	7.7	17
SEP											
16...	1050	11	357	8.4	13.5	8.5	160	46	12	12	14

DATE	SODIUM AD-SORP-TION RATIO (00931)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY 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 SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED PER (TONS AC-FT) (70303)
OCT										
17...	0.4	2.1	216	15	10	1.1	15	268	262	0.36
NOV										
14...	0.5	1.5	193	17	9.9	1.2	12	230	237	0.31
DEC										
11...	0.5	1.5	173	17	11	1.0	10	222	220	0.30
JAN										
15...	0.5	1.4	173	19	12	1.0	12	232	225	0.32
FEB										
19...	0.3	1.2	87	11	3.8	0.9	11	122	118	0.17
MAR										
11...	0.6	1.6	162	17	15	1.1	8.0	216	215	0.29
APR										
09...	0.5	1.2	125	13	9.9	1.0	10	175	166	0.24
MAY										
13...	0.3	1.1	54	7.2	3.1	0.8	12	98	80	0.13
JUN										
11...	0.3	0.8	39	3.0	1.3	0.5	12	70	58	0.09
JUL										
25...	0.4	1.9	201	15	7.1	1.1	13	251	237	0.34
AUG										
13...	0.4	1.1	93	5.5	3.4	0.9	15	135	120	0.18
SEP										
16...	0.4	1.6	167	12	7.5	1.2	15	210	207	0.29

06751490 NORTH FORK CACHE LA POUVRE RIVER AT LIVERMORE, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	SOLIDS, DIS- SOLVED (TONS PER DAY) (70302)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN, TOTAL (MG/L AS N) (00600)	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 17...	4.60	0.02	<0.05	0.02	--	<0.2	--	<0.01	<0.01	<0.01
NOV 14...	3.91	0.01	<0.05	<0.02	--	<0.2	--	<0.01	0.01	<0.01
DEC 11...	4.74	0.01	<0.05	<0.02	--	<0.2	--	<0.01	<0.01	<0.01
JAN 15...	3.16	<0.01	0.15	<0.02	--	<0.2	--	<0.01	<0.01	<0.01
FEB 19...	9.85	<0.01	0.10	<0.02	--	<0.2	--	<0.01	<0.01	<0.01
MAR 11...	3.81	<0.01	0.06	<0.02	0.20	0.2	0.26	<0.01	<0.01	<0.01
APR 09...	4.54	<0.01	<0.05	<0.02	--	<0.2	--	<0.01	<0.01	<0.01
MAY 13...	25.8	<0.01	<0.05	<0.01	0.57	0.6	0.57	0.04	<0.01	<0.01
JUN 11...	77.7	<0.01	<0.05	<0.01	0.39	0.4	0.39	0.09	<0.01	<0.01
JUL 25...	6.51	<0.01	<0.05	<0.01	0.25	0.3	0.25	<0.01	<0.01	0.01
AUG 13...	25.5	<0.01	<0.05	<0.01	--	--	--	--	<0.01	0.01
SEP 16...	6.18	<0.01	<0.05	<0.01	--	<0.2	--	<0.01	<0.01	<0.01

DATE	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)
OCT 17...	130	<0.5	50	<1	<5	<3	<10	17	<10
NOV 14...	110	<0.5	40	<1	<5	<3	<10	37	<10
DEC 11...	110	<0.5	40	<1	<5	<3	<10	25	<10
JAN 15...	110	<0.5	40	2	<5	<3	<10	7	<10
FEB 19...	54	<0.5	20	<1	<5	<3	<10	26	<10
MAR 11...	100	<0.5	40	<1	<5	<3	<10	35	<10
APR 09...	78	<0.5	27.6	<1	<5	<3	<10	48	10
MAY 13...	39	<0.5	14.8	<1	<5	<3	<10	88	<10
JUN 11...	26	<0.5	4.3	<1	<5	<3	<10	84	<10
JUL 25...	120	<0.5	42.4	2	<5	<3	<10	14	<10
AUG 13...	58	<0.5	25.3	<1	<5	4	<10	89	<10
SEP 16...	110	<0.5	40.2	<1	<5	<3	<10	32	<10

PLATTE RIVER BASIN

06751490 NORTH FORK CACHE LA POUVRE RIVER AT LIVERMORE, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

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)	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...	15	16	10	<10	<1	370	<6	<3
NOV 14...	14	11	<10	<10	<1	330	<6	<3
DEC 11...	13	9	<10	<10	<1	310	<6	<3
JAN 15...	13	7	<10	<10	<1	300	<6	<3
FEB 19...	5	13	<10	<10	<1	130	<6	<3
MAR 11...	14	23	<10	<10	<1	300	<6	4
APR 09...	10	11	<10	<10	<1	220	<6	<3
MAY 13...	5	11	<10	<10	<1	82	<6	<3
JUN 11...	<4	9	<10	<10	<1	58	<6	<3
JUL 25...	14	21	<10	<10	<1	330	<6	10
AUG 13...	8	12	<10	<10	<1	140	<6	<3
SEP 16...	13	34	<10	<10	<1	280	<6	5

SUSPENDED SEDIMENT DISCHARGE, WATER YEARS OCTOBER 1995 TO SEPTEMBER 1996

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)
OCT 17...	0924	6.4	30	0.51
NOV 14...	1023	6.3	11	0.18
DEC 11...	0952	7.9	8	0.17
JAN 15...	1203	5.0	15	0.21
FEB 19...	1446	30	5	0.44
MAR 11...	1446	6.5	2	0.03
APR 09...	1058	9.6	5	0.12
MAY 13...	1040	98	50	13
JUN 11...	1900	410	39	44
JUL 25...	1103	9.6	7	0.18
AUG 13...	1422	70	17	3.2
SEP 16...	1040	11	10	0.30

PLATTE RIVER BASIN

06752258 CACHE LA POUDBRE RIVER AT SHIELDS STREET, AT FORT COLLINS, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 40°36'11", long 105°05'43", in NE¼SE¼ 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 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	pH (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)	ALKA-LINITY LAB AS CACO3) (MG/L AS CACO3) (90410)	
OCT	16...	1406	51	209	8.5	12.0	8.9	88	25	6.1	--	79
NOV	15...	0952	67	229	8.3	3.0	11.5	99	29	6.5	--	83
DEC	11...	1314	65	204	8.7	3.5	11.8	90	26	6.1	--	72
JAN	14...	1342	47	318	8.2	0.0	12.8	140	40	9.2	7.5	108
FEB	20...	0827	29	307	8.3	3.0	11.7	140	40	8.7	--	99
MAR	12...	0914	42	250	8.4	7.0	10.3	110	32	7.2	--	89
APR	09...	1424	4.4	357	8.7	3.0	12.0	160	46	12	--	141
MAY	13...	1350	316	71	8.2	11.5	10.1	29	8.9	1.7	--	30
JUL	24...	1428	256	56	8.1	19.0	8.0	23	6.6	1.5	1.8	24
AUG	14...	0905	558	98	8.2	15.0	7.9	42	12	2.8	--	39
SEP	03...	1051	72	79	8.2	13.5	9.3	32	9.7	1.9	--	31
	16...	1440	118	110	8.4	14.5	8.9	47	14	3.0	--	42

DATE	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	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)
OCT	16...	--	--	--	--	0.02	0.10	<0.02	<0.01	<0.01
NOV	15...	--	--	--	--	<0.01	0.19	0.04	<0.01	<0.01
DEC	11...	--	--	--	--	0.01	0.10	0.02	<0.01	<0.01
JAN	14...	49	3.7	0.3	11	198	<0.01	0.28	<0.01	<0.01
FEB	20...	--	--	--	--	<0.01	0.17	<0.02	<0.01	0.01
MAR	12...	--	--	--	--	<0.01	0.07	<0.02	0.01	<0.01
APR	09...	--	--	--	--	<0.01	0.60	0.05	0.02	<0.01
MAY	13...	--	--	--	--	<0.01	0.02	<0.01	<0.01	<0.01
JUL	24...	4.7	0.6	0.1	6.5	42	<0.01	0.03	<0.01	0.01
AUG	14...	--	--	--	--	--	--	--	--	--
SEP	03...	--	--	--	--	<0.01	0.09	<0.01	<0.01	<0.01
	16...	--	--	--	--	<0.01	0.11	<0.01	0.01	<0.01

06752258 CACHE LA POUVRE RIVER AT SHIELDS STREET, AT FORT COLLINS, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	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)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)
OCT 16...	--	--	--	--	<1	80	--
NOV 15...	--	--	--	--	<1	70	--
DEC 11...	--	--	--	--	<1	50	--
JAN 14...	<5.0	<1	<1	<1	<1	70	<1
FEB 20...	--	--	--	--	<1	70	--
MAR 12...	--	--	--	--	<1	80	--
APR 09...	--	--	--	--	<1	120	--
MAY 13...	--	--	--	--	3	240	--
JUL 24...	20.5	<1	<1	<1	1	200	<1
AUG 14...	--	--	--	--	1	220	--
SEP 03...	--	--	--	--	2	180	--
16...	--	--	--	--	2	160	--

DATE	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 16...	--	--	--	--	<0.2	--
NOV 15...	--	--	--	--	<0.2	--
DEC 11...	--	--	--	--	<0.2	--
JAN 14...	20	<0.1	<1	<1	<0.2	3
FEB 20...	--	--	--	--	<0.2	--
MAR 12...	--	--	--	--	<0.2	--
APR 09...	--	--	--	--	<0.2	--
MAY 13...	--	--	--	--	<0.2	--
JUL 24...	20	<0.1	<1	<1	<0.2	<3
AUG 14...	--	--	--	--	<0.2	--
SEP 03...	--	--	--	--	<0.2	--
16...	--	--	--	--	<0.2	--

06752260 CACHE LA POUVRE RIVER AT FORT COLLINS, CO

LOCATION.--Lat 40°35'21", long 105°04'09", in SE¹/₄NW¹/₄ sec.12, T.7 N., R.69 W., Larimer County, Hydrologic Unit 10190007, on left bank 100 ft (revised) upstream from Lincoln Street Bridge in Fort Collins.

DRAINAGE AREA.--1,127 mi².

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 Nov. 10, 1988 at site 4,300 ft upstream, at different datum. Prior to May 22, 1987, at site 300 ft downstream, at different datum. May 22, 1987 to Oct. 16, 1996, at site 100 ft upstream, at same 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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	40	25	32	46	30	34	20	102	944	255	53	228
2	36	31	30	45	30	40	11	12	1600	207	33	314
3	30	53	26	43	28	40	9.9	31	2280	200	177	203
4	35	54	23	39	23	42	8.7	30	2050	230	284	184
5	83	54	23	29	22	33	8.8	94	2190	218	234	293
6	50	50	33	22	24	35	7.1	140	2210	153	633	274
7	33	39	46	23	23	39	6.0	155	2560	241	212	119
8	20	27	46	33	21	41	5.9	114	2510	231	175	189
9	27	38	54	46	23	38	6.2	227	2790	186	240	231
10	38	59	59	45	26	43	7.0	304	2360	87	529	242
11	39	54	56	e37	32	42	5.1	321	2260	82	600	191
12	35	50	46	e34	36	47	3.9	338	2140	102	557	176
13	33	58	44	e35	36	47	3.9	314	1970	93	580	142
14	31	73	42	e43	33	48	4.2	358	1980	106	558	75
15	37	69	29	e52	29	39	6.1	332	2010	44	586	65
16	48	70	24	e55	35	38	7.5	384	1670	32	485	80
17	46	44	20	40	35	52	6.6	513	1700	86	561	105
18	20	45	18	32	37	54	5.8	514	1790	178	555	99
19	15	81	19	34	33	46	5.0	398	2140	173	401	162
20	26	58	23	32	41	49	9.2	513	2480	166	267	320
21	26	47	32	30	51	51	39	548	2590	156	207	404
22	18	44	55	24	53	49	51	659	2410	147	162	330
23	11	51	51	22	81	49	44	806	1970	135	211	315
24	25	54	46	17	79	49	83	558	1610	201	130	268
25	26	42	45	15	91	45	48	359	1070	136	45	221
26	37	44	47	14	107	35	12	234	719	111	60	201
27	37	45	44	17	50	48	11	202	524	110	77	203
28	34	32	46	24	36	41	8.1	193	382	712	69	209
29	42	27	45	22	---	26	11	217	366	846	83	189
30	47	32	45	24	---	33	102	353	269	284	276	192
31	37	---	50	27	---	27	---	441	---	321	287	---
TOTAL	1062	1450	1199	1001	1145	1300	557.0	9764	53544	6229	9327	6224
MEAN	34.3	48.3	38.7	32.3	40.9	41.9	18.6	315	1785	201	301	207
MAX	83	81	59	55	107	54	102	806	2790	846	633	404
MIN	11	25	18	14	21	26	3.9	12	269	32	33	65
AC-FT	2110	2880	2380	1990	2270	2580	1100	19370	106200	12360	18500	12350

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 1997, BY WATER YEAR (WY)

	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
MEAN	20.5	22.3	20.5	27.4	29.7	33.2	103	436	979	256	72.6	35.0			
MAX	94.1	122	97.3	123	135	136	652	2720	4771	1450	301	207			
(WY)	1985	1985	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 1996 CALENDAR YEAR	FOR 1997 WATER YEAR	WATER YEARS 1975 - 1997
ANNUAL TOTAL	68678.2	92802.0	
ANNUAL MEAN	188	254	172
HIGHEST ANNUAL MEAN			779
LOWEST ANNUAL MEAN			41.8
HIGHEST DAILY MEAN	2080	Jun 16	2790 Jun 9
LOWEST DAILY MEAN	4.9	Apr 19	^a 3.9 Apr 12
ANNUAL SEVEN-DAY MINIMUM	19	Sep 17	5.2 Apr 8
INSTANTANEOUS PEAK FLOW			^c 6660 Jun 9
INSTANTANEOUS PEAK STAGE			7.22 Jun 9
ANNUAL RUNOFF (AC-FT)	136200	184100	^d 124700 Jun 21 1983
10 PERCENT EXCEEDS	559	558	362
50 PERCENT EXCEEDS	60	50	22
90 PERCENT EXCEEDS	26	20	2.8

e-Estimated.
a-Also occurred Apr 13.
b-Also occurred Aug 19, Sep 4, 18-19, 1987, and many days in 1988.
c-Site and datum then in use.
d-Maximum gage height, 9.15 ft, Jun 2, 1991, present site and datum.

06752260 CACHE LA POUDBRE RIVER AT FORT COLLINS, CO--Continued

WATER-QUALITY RECORDS

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

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1987 to current year.

pH: October 1987 to current year.

WATER TEMPERATURE: October 1987 to current year.

INSTRUMENTATION.--Water-quality monitor since October 1987.

REMARKS.--Specific conductance record rated good, except Oct. 16-29, which are fair. pH record rated fair. Temperature record rated good.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum,1,020 microsiemens, April 10; minimum, 34 microsiemens, June 21.

pH: Maximum, 9.0 pH units, Aug. 29; minimum, 7.1 pH units, May 23.

WATER TEMPERATURE: Maximum, 22.4°C Aug. 2; minimum 0.2°C Mar. 15.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	pH (STAND-ARD UNITS) (00400)	TEMPER-ATURE (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)	ALKA-LINITY LAB (MG/L AS CACO3) (90410)
OCT 16...	0923	42	224	8.1	11.0	9.2	95	27	6.6	--	87
NOV 14...	1420	71	235	8.4	4.0	11.3	100	30	6.8	--	85
DEC 12...	1033	44	249	8.5	1.5	12.1	110	31	7.4	--	84
JAN 16...	1220	58	259	8.2	0.0	13.3	100	30	7.0	6.9	88
FEB 21...	1056	47	240	8.3	1.0	12.6	110	31	7.3	--	84
MAR 13...	0921	44	262	8.4	6.0	12.1	110	33	7.7	--	90
APR 11...	1047	5.2	474	8.3	4.5	13.8	190	52	14	--	151
MAY 15...	1047	315	90	8.2	9.5	10.3	37	11	2.3	--	36
JUN 13...	0859	2140	44	7.8	10.5	9.7	18	5.2	1.2	--	18
JUL 17...	1238	22	165	8.2	17.0	8.7	68	19	4.9	5.8	60
AUG 15...	0757	575	98	8.1	15.0	8.3	42	12	2.8	--	38
SEP 04...	0941	179	100	8.0	14.5	9.7	42	12	2.7	--	37

DATE	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	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)
OCT 16...	--	--	--	--	--	0.02	0.08	<0.02	<0.01	<0.01
NOV 14...	--	--	--	--	--	0.01	0.21	0.03	<0.01	<0.01
DEC 12...	--	--	--	--	--	0.01	<0.01	<0.02	<0.01	<0.01
JAN 16...	32	3.6	0.3	11	158	<0.01	0.22	<0.02	<0.01	<0.01
FEB 21...	--	--	--	--	--	<0.01	0.15	<0.02	<0.01	<0.01
MAR 13...	--	--	--	--	--	<0.01	0.07	<0.02	<0.01	<0.01
APR 11...	--	--	--	--	--	<0.01	0.70	0.05	<0.01	<0.01
MAY 15...	--	--	--	--	--	<0.01	0.01	<0.01	<0.01	<0.01
JUN 13...	--	--	--	--	--	<0.01	0.03	<0.01	0.02	<0.01
JUL 17...	15	3.2	0.2	6.7	101	<0.01	0.13	<0.01	<0.01	<0.01
AUG 15...	--	--	--	--	--	--	--	--	--	--
SEP 04...	--	--	--	--	--	<0.01	0.08	<0.01	<0.01	<0.01

PLATTE RIVER BASIN

06752260 CACHE LA POUFRE RIVER AT FORT COLLINS, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	ALUM-	ARSENIC	CADMIUM	CHRO-	COPPER,	IRON,	LEAD,
	DIS- SOLVED (UG/L AS AL) (01106)	DIS- SOLVED (UG/L AS AS) (01000)	DIS- SOLVED (UG/L AS CD) (01025)	DIS- SOLVED (UG/L AS CR) (01030)	DIS- SOLVED (UG/L AS CU) (01040)	TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	DIS- SOLVED (UG/L AS PB) (01049)
OCT 16...	--	--	--	--	<1	100	--
NOV 14...	--	--	--	--	<1	80	--
DEC 12...	--	--	--	--	<1	60	--
JAN 16...	<5	<1	<1	<1	<1	70	<1
FEB 21...	--	--	--	--	<1	70	--
MAR 13...	--	--	--	--	<1	90	--
APR 11...	--	--	--	--	<1	190	--
MAY 15...	--	--	--	--	3	360	--
JUN 13...	--	--	--	--	<1	580	--
JUL 17...	11.2	<1	<1	<1	1	170	<1
AUG 15...	--	--	--	--	1	240	--
SEP 04...	--	--	--	--	2	190	--

DATE	MANGA-	MERCURY	NICKEL,	SELE-	SILVER,	ZINC,
	TOTAL RECOV- ERABLE (UG/L AS MN) (01055)	DIS- SOLVED (UG/L AS HG) (71890)	DIS- SOLVED (UG/L AS NI) (01065)	DIS- SOLVED (UG/L AS SE) (01145)	DIS- SOLVED (UG/L AS AG) (01075)	DIS- SOLVED (UG/L AS ZN) (01090)
OCT 16...	--	--	--	--	<0.2	--
NOV 14...	--	--	--	--	<0.2	--
DEC 12...	--	--	--	--	<0.2	--
JAN 16...	10	<0.1	<1	<1	<0.2	<3
FEB 21...	--	--	--	--	<0.2	--
MAR 13...	--	--	--	--	<0.2	--
APR 11...	--	--	--	--	<0.2	--
MAY 15...	--	--	--	--	<0.2	--
JUN 13...	--	--	--	--	<0.2	--
JUL 17...	20	<0.1	<1	<1	<0.2	4
AUG 15...	--	--	--	--	<0.2	--
SEP 04...	--	--	--	--	<0.2	--

06752260 CACHE LA POUDBRE RIVER AT FORT COLLINS, CO--Continued

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM @ 25 DEG. C), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	280	205	240	268	217	242	---	---	---	---	---	---
2	252	183	235	294	251	269	---	---	---	---	---	---
3	250	221	237	257	217	238	---	---	---	---	---	---
4	254	222	242	263	240	254	---	---	---	---	---	---
5	228	142	166	249	230	238	---	---	---	---	---	---
6	198	163	182	258	237	247	---	---	---	---	---	---
7	228	188	208	276	241	255	---	---	---	---	---	---
8	314	228	281	332	276	300	---	---	---	---	---	---
9	278	256	264	375	280	342	---	---	---	---	---	---
10	280	205	252	280	225	239	---	---	---	---	---	---
11	221	198	208	250	223	236	---	---	---	---	---	---
12	264	212	237	278	236	254	---	---	---	---	---	---
13	271	243	258	284	233	266	---	---	---	---	---	---
14	263	243	254	---	---	---	---	---	---	---	---	---
15	262	199	241	---	---	---	---	---	---	---	---	---
16	239	186	215	---	---	---	---	---	---	---	---	---
17	196	166	181	---	---	---	---	---	---	---	---	---
18	269	190	228	---	---	---	---	---	---	---	---	---
19	328	267	294	---	---	---	---	---	---	---	---	---
20	341	259	316	---	---	---	---	---	---	---	---	---
21	259	227	239	---	---	---	---	---	---	---	---	---
22	312	227	253	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	388	318	347	---	---	---	---	---	---	---	---	---
25	322	290	304	---	---	---	---	---	---	---	---	---
26	321	244	280	---	---	---	---	---	---	---	---	---
27	249	229	239	---	---	---	---	---	---	---	---	---
28	244	221	235	---	---	---	---	---	---	---	---	---
29	249	209	231	---	---	---	---	---	---	---	---	---
30	218	198	208	---	---	---	---	---	---	---	---	---
31	240	212	224	---	---	---	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	335	295	311	244	191	208
2	---	---	---	---	---	---	418	335	383	364	244	316
3	---	---	---	---	---	---	436	378	411	344	249	277
4	---	---	---	---	---	---	447	367	417	289	270	281
5	---	---	---	---	---	---	429	379	405	271	159	231
6	---	---	---	---	---	---	428	418	424	159	114	142
7	---	---	---	343	312	323	434	396	412	114	99	107
8	---	---	---	318	263	288	438	426	432	135	90	106
9	---	---	---	321	278	297	450	437	443	92	78	86
10	---	---	---	321	273	285	1020	433	537	83	80	81
11	---	---	---	280	270	274	633	462	510	81	76	79
12	---	---	---	279	267	274	483	460	471	79	70	76
13	---	---	---	271	246	258	474	463	469	83	73	76
14	---	---	---	674	238	297	475	462	468	98	74	84
15	---	---	---	658	242	326	499	433	458	98	89	93
16	---	---	---	324	282	303	441	418	428	98	80	87
17	---	---	---	307	248	269	426	412	421	84	68	74
18	---	---	---	260	238	251	436	407	422	70	58	63
19	---	---	---	265	257	260	452	414	435	66	53	60
20	---	---	---	259	239	252	462	333	440	64	55	58
21	---	---	---	272	256	262	333	213	241	63	53	56
22	---	---	---	265	248	256	217	185	199	62	48	54
23	---	---	---	271	252	263	216	185	198	55	44	48
24	---	---	---	286	251	261	216	146	177	54	48	51
25	---	---	---	294	250	269	310	156	200	60	52	56
26	---	---	---	315	276	294	410	310	378	68	57	62
27	---	---	---	325	260	292	411	379	392	81	65	70
28	---	---	---	275	246	255	429	411	420	91	71	77
29	---	---	---	318	275	290	426	369	397	91	73	80
30	---	---	---	281	262	270	369	187	268	76	65	71
31	---	---	---	305	260	280	---	---	---	65	57	61
MONTH	---	---	---	---	---	---	1020	146	386	364	44	106

06752260 CACHE LA POUDBRE RIVER AT FORT COLLINS, CO--Continued

pH (STANDARD UNITS), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
FEBRUARY			MARCH			APRIL			MAY			
1	---	---	---	---	---	---	8.4	7.8	8.0	---	---	---
2	---	---	---	---	---	---	7.9	7.7	7.8	8.5	7.8	8.1
3	---	---	---	---	---	---	8.2	7.8	7.9	8.6	7.9	8.2
4	---	---	---	---	---	---	8.1	7.7	7.9	8.6	8.0	8.3
5	---	---	---	---	---	---	8.2	7.7	7.9	8.6	7.9	8.2
6	---	---	---	---	---	---	8.2	7.9	8.0	8.6	7.8	8.1
7	---	---	---	8.6	8.2	8.4	8.2	7.8	8.0	8.5	7.8	8.1
8	---	---	---	8.7	8.2	8.4	8.2	7.8	8.0	8.7	7.6	8.0
9	---	---	---	8.7	8.2	8.4	8.1	7.9	8.0	8.5	7.7	8.0
10	---	---	---	8.7	8.3	8.5	8.1	7.9	8.0	8.5	7.6	7.9
11	---	---	---	8.8	8.3	8.5	8.2	7.9	8.0	8.3	7.6	7.9
12	---	---	---	8.8	8.3	8.5	8.2	8.0	8.1	8.5	7.6	7.9
13	---	---	---	8.6	8.0	8.3	8.2	7.9	8.1	8.5	7.5	7.9
14	---	---	---	8.2	7.9	8.0	8.2	7.9	8.0	8.1	7.5	7.8
15	---	---	---	8.2	7.9	8.0	8.3	7.9	8.0	8.8	7.6	8.0
16	---	---	---	8.3	7.9	8.1	8.3	7.8	8.0	8.5	7.8	8.1
17	---	---	---	8.4	8.0	8.1	8.3	7.8	8.0	8.2	7.8	7.9
18	---	---	---	8.3	7.9	8.1	8.3	7.8	8.0	8.1	7.6	7.9
19	---	---	---	8.5	7.9	8.2	8.3	7.8	8.0	8.0	7.5	7.8
20	---	---	---	8.5	7.9	8.2	8.3	7.9	8.1	7.8	7.4	7.6
21	---	---	---	8.7	8.0	8.3	8.5	8.0	8.2	7.9	7.4	7.6
22	---	---	---	8.6	8.0	8.3	8.6	8.1	8.3	7.7	7.3	7.5
23	---	---	---	8.6	8.0	8.3	8.7	8.0	8.3	7.5	7.1	7.3
24	---	---	---	8.6	8.1	8.3	8.4	8.0	8.2	7.5	7.2	7.4
25	---	---	---	8.6	8.1	8.3	8.3	8.0	8.1	7.7	7.3	7.5
26	---	---	---	8.5	8.1	8.3	8.5	7.9	8.2	7.9	7.4	7.6
27	---	---	---	8.6	8.1	8.3	8.6	8.0	8.2	8.0	7.4	7.7
28	---	---	---	8.5	7.8	8.1	8.5	8.0	8.2	---	---	---
29	---	---	---	8.4	7.8	8.1	8.7	8.0	8.3	8.6	8.0	8.2
30	---	---	---	8.4	7.9	8.1	---	---	---	8.6	7.9	8.2
31	---	---	---	8.4	7.8	8.1	---	---	---	8.6	7.4	8.1
MONTH	---	---	---	---	---	---	---	---	---	---	---	---
JUNE			JULY			AUGUST			SEPTEMBER			
1	8.0	7.4	7.7	7.6	7.2	7.4	8.3	7.5	7.8	8.4	7.7	7.9
2	8.0	7.4	7.7	7.7	7.3	7.5	8.2	7.4	7.7	8.0	7.7	7.8
3	7.7	7.2	7.4	7.9	7.4	7.6	8.6	7.5	8.0	8.5	7.7	7.9
4	7.7	7.3	7.5	7.7	7.3	7.5	8.5	7.7	8.0	8.5	7.6	7.9
5	7.7	7.2	7.4	7.7	7.3	7.5	8.3	7.6	7.9	8.4	7.6	7.9
6	7.6	7.2	7.4	7.8	7.3	7.6	8.1	7.7	7.9	8.7	7.7	8.1
7	7.6	7.2	7.3	7.9	7.5	7.6	8.2	7.6	7.9	8.6	7.8	8.1
8	7.8	7.3	7.4	8.0	7.4	7.7	8.5	7.6	7.9	8.7	7.9	8.2
9	7.8	7.3	7.5	8.1	7.3	7.7	8.3	7.8	7.9	8.8	7.8	8.2
10	8.0	7.4	7.8	8.4	7.4	7.8	8.2	7.8	8.0	8.8	7.8	8.1
11	8.3	7.6	7.9	8.4	7.4	7.7	8.2	7.8	7.9	8.9	7.8	8.1
12	8.1	7.9	8.0	8.4	7.4	7.8	8.2	7.6	7.9	8.7	7.8	8.1
13	---	---	---	8.3	7.5	7.8	8.3	7.6	7.9	8.8	7.8	8.2
14	---	---	---	8.4	7.4	7.8	8.2	7.7	7.9	8.8	7.8	8.2
15	---	---	---	8.6	7.4	7.9	8.1	7.3	7.7	8.9	7.8	8.2
16	---	---	---	8.3	7.6	7.9	8.0	7.3	7.5	8.8	7.9	8.2
17	---	---	---	8.2	7.5	7.8	7.9	7.3	7.5	8.8	7.9	8.2
18	---	---	---	8.2	7.4	7.8	8.0	7.3	7.5	8.5	7.8	8.0
19	---	---	---	8.1	7.5	7.7	8.1	7.3	7.5	8.2	7.8	7.9
20	---	---	---	8.3	7.5	7.8	8.2	7.3	7.6	8.2	7.8	8.0
21	---	---	---	8.4	7.5	7.8	8.3	7.3	7.7	8.1	7.8	7.9
22	---	---	---	8.4	7.5	7.8	8.6	7.6	7.9	---	7.8	8.1
23	---	---	---	8.3	7.4	7.8	8.6	7.6	8.0	8.4	8.1	8.2
24	---	---	---	8.2	7.4	7.7	8.7	7.6	8.0	8.7	8.2	8.3
25	---	---	---	8.5	7.4	7.9	8.8	7.6	8.0	8.7	8.2	8.4
26	7.6	7.2	7.4	8.7	7.6	8.1	8.7	7.5	7.9	8.8	8.1	8.4
27	7.7	7.3	7.5	8.7	7.7	8.0	8.7	7.6	8.0	8.9	8.1	8.4
28	7.6	7.3	7.4	8.1	7.7	7.8	8.8	7.6	8.0	8.8	8.1	8.4
29	7.6	7.3	7.4	8.1	7.8	7.9	9.0	7.6	8.1	8.8	8.1	8.4
30	7.6	7.3	7.4	8.2	7.8	7.9	8.4	7.7	7.9	8.9	8.1	8.5
31	---	---	---	8.1	7.7	7.9	8.4	7.8	8.0	---	---	---
MONTH	---	---	---	8.7	7.2	7.8	9.0	7.3	7.9	---	7.6	8.1

06752260 CACHE LA POUDBRE RIVER AT FORT COLLINS, CO--Continued

TEMPERATURE, WATER (DEG. C) WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	15.7	12.7	14.1	6.2	3.4	4.8	---	---	---	---	---	---
2	14.0	12.4	13.1	7.5	3.8	5.9	---	---	---	---	---	---
3	14.6	11.2	12.9	7.5	4.4	6.1	---	---	---	---	---	---
4	16.6	12.7	14.5	8.4	6.3	7.5	---	---	---	---	---	---
5	15.5	12.5	14.5	7.4	5.1	6.3	---	---	---	---	---	---
6	15.8	12.9	14.5	6.1	3.5	4.3	---	---	---	---	---	---
7	15.6	12.7	14.2	4.3	2.2	3.4	---	---	---	---	---	---
8	16.2	11.7	13.9	4.3	1.9	3.3	---	---	---	---	---	---
9	15.5	12.2	13.8	6.8	2.8	5.0	---	---	---	---	---	---
10	14.6	11.8	13.5	6.8	4.0	5.7	---	---	---	---	---	---
11	15.3	12.0	13.9	6.2	3.9	5.3	---	---	---	---	---	---
12	15.7	12.8	14.4	6.0	3.3	4.8	---	---	---	---	---	---
13	15.8	12.8	14.4	6.0	4.7	5.2	---	---	---	---	---	---
14	14.3	12.6	13.5	---	---	---	---	---	---	---	---	---
15	13.8	11.0	12.4	---	---	---	---	---	---	---	---	---
16	12.4	9.6	11.2	---	---	---	---	---	---	---	---	---
17	9.6	5.5	7.0	---	---	---	---	---	---	---	---	---
18	9.4	5.0	7.1	---	---	---	---	---	---	---	---	---
19	11.3	7.6	9.1	---	---	---	---	---	---	---	---	---
20	8.8	6.4	7.9	---	---	---	---	---	---	---	---	---
21	7.3	4.6	5.9	---	---	---	---	---	---	---	---	---
22	8.0	3.9	6.0	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	7.9	5.9	7.2	---	---	---	---	---	---	---	---	---
25	8.3	6.7	7.5	---	---	---	---	---	---	---	---	---
26	7.7	5.9	6.8	---	---	---	---	---	---	---	---	---
27	7.2	5.2	6.3	---	---	---	---	---	---	---	---	---
28	8.0	5.1	6.7	---	---	---	---	---	---	---	---	---
29	8.2	6.5	7.5	---	---	---	---	---	---	---	---	---
30	7.3	5.4	5.9	---	---	---	---	---	---	---	---	---
31	5.4	3.8	4.5	---	---	---	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	12.2	8.2	9.9	12.4	9.2	10.5
2	---	---	---	---	---	---	8.3	5.6	6.8	15.6	7.6	10.7
3	---	---	---	---	---	---	13.3	4.5	8.7	14.2	8.6	11.6
4	---	---	---	---	---	---	11.9	7.2	9.4	15.2	10.4	13.0
5	---	---	---	---	---	---	9.1	4.1	6.4	15.7	10.8	13.4
6	---	---	---	---	---	---	10.6	2.9	6.3	13.9	8.8	11.5
7	---	---	---	7.7	3.2	5.5	12.6	4.0	7.7	14.3	8.7	11.1
8	---	---	---	8.4	4.0	6.3	7.7	4.2	5.6	14.3	8.2	10.5
9	---	---	---	8.4	4.1	6.4	4.2	1.5	3.3	12.3	6.6	9.3
10	---	---	---	10.2	5.6	7.6	4.9	1.1	2.5	12.8	6.8	9.3
11	---	---	---	10.9	6.4	8.4	8.1	1.0	3.6	9.7	7.2	8.4
12	---	---	---	9.2	6.5	8.0	10.4	.9	4.8	11.8	6.7	9.0
13	---	---	---	6.5	2.3	5.2	12.9	2.2	6.9	12.2	6.7	9.2
14	---	---	---	2.5	.6	1.7	11.9	5.1	8.1	11.8	7.6	9.5
15	---	---	---	4.6	.2	2.2	14.8	7.0	10.3	14.8	8.3	11.2
16	---	---	---	7.6	.9	4.4	17.9	9.4	12.9	14.4	9.2	11.8
17	---	---	---	8.4	4.1	6.4	19.3	10.1	14.2	14.1	10.0	11.9
18	---	---	---	9.9	5.1	7.5	17.4	11.0	14.1	13.4	10.4	11.6
19	---	---	---	11.9	6.6	9.4	18.8	11.4	14.5	12.1	9.2	10.5
20	---	---	---	13.0	8.3	10.9	17.9	11.3	14.4	12.4	9.4	10.7
21	---	---	---	13.4	9.3	11.4	14.0	9.1	10.9	12.4	9.2	10.4
22	---	---	---	12.6	7.8	10.4	12.5	7.5	10.1	9.9	8.4	9.4
23	---	---	---	11.9	7.6	10.1	14.2	9.7	12.0	11.6	7.6	9.4
24	---	---	---	11.0	4.7	7.7	12.1	4.3	6.9	11.4	9.1	10.1
25	---	---	---	8.7	2.7	5.9	12.3	3.2	7.3	11.3	8.8	9.9
26	---	---	---	11.9	6.1	9.1	16.0	8.3	11.4	10.8	8.7	9.8
27	---	---	---	12.7	8.3	10.2	18.0	9.1	13.1	11.4	7.8	9.7
28	---	---	---	11.2	5.8	8.7	15.7	12.3	13.9	13.8	9.4	11.2
29	---	---	---	11.0	6.9	8.9	15.2	11.5	13.2	12.7	10.4	11.3
30	---	---	---	12.1	6.0	9.1	13.7	9.3	11.3	14.1	9.8	11.8
31	---	---	---	13.5	7.4	10.6	---	---	---	15.6	10.5	12.8
MONTH	---	---	---	---	---	---	19.3	.9	9.4	15.7	6.6	10.7

06752260 CACHE LA POUDDRE RIVER AT FORT COLLINS, CO--Continued

TEMPERATURE, WATER (DEG. C) WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	13.0	11.7	12.1	15.6	12.7	14.2	21.1	15.9	18.6	15.6	12.8	14.1
2	11.7	10.1	11.1	16.2	10.8	13.2	22.4	17.6	19.9	13.6	12.9	13.1
3	11.8	10.0	11.0	16.6	12.0	14.1	21.6	17.0	19.6	17.6	12.6	14.7
4	13.1	11.0	11.9	16.5	12.0	14.0	20.9	17.1	18.9	18.0	14.1	15.8
5	12.7	11.1	12.0	15.1	11.9	13.3	18.8	17.0	18.1	17.6	13.2	15.2
6	11.9	10.8	11.2	14.4	11.1	12.7	17.9	15.3	16.4	16.9	13.3	15.0
7	11.5	9.3	10.4	16.2	11.0	13.3	19.8	14.4	16.8	15.8	13.2	14.7
8	11.0	10.1	10.7	16.4	12.1	14.1	21.8	16.3	18.9	16.7	12.4	14.6
9	10.6	9.4	9.9	17.9	11.9	14.6	19.8	16.5	17.8	17.4	12.9	15.0
10	12.2	10.0	10.9	18.4	12.6	15.2	17.2	15.0	16.0	17.9	12.8	15.3
11	13.0	10.3	11.6	16.4	13.0	14.4	16.9	14.1	15.2	17.0	13.6	15.4
12	12.4	10.7	11.4	18.1	12.1	14.9	17.7	14.0	15.8	17.8	13.2	15.4
13	---	---	---	18.3	12.7	15.3	19.3	14.9	16.9	18.1	13.3	15.9
14	12.7	10.8	11.8	19.0	12.4	15.7	19.2	14.9	16.9	18.2	14.0	16.4
15	12.8	10.8	11.6	20.6	13.0	16.8	20.4	15.1	17.6	18.1	14.1	16.2
16	13.4	10.8	11.7	18.5	15.1	17.0	18.8	15.8	17.4	16.0	13.2	14.4
17	12.6	10.9	11.7	---	14.7	16.4	18.6	16.6	17.5	16.6	11.7	14.3
18	14.1	11.0	12.3	19.3	13.4	16.0	19.4	16.2	17.6	15.5	13.0	14.4
19	14.6	12.1	13.0	16.9	14.3	15.6	18.4	15.6	17.0	14.4	12.2	12.8
20	13.3	11.6	12.3	19.2	13.9	16.3	20.5	15.4	17.9	12.3	10.9	11.7
21	13.9	11.9	12.9	20.7	14.6	17.5	20.3	16.8	18.5	11.9	10.7	11.2
22	14.8	12.2	13.5	21.2	15.5	18.2	20.8	16.3	18.6	13.0	11.2	12.0
23	15.0	12.8	13.8	20.7	15.7	18.2	22.0	16.4	19.2	12.5	11.9	12.1
24	13.7	12.4	13.0	19.9	15.1	17.5	20.9	16.9	19.2	15.5	11.0	13.0
25	15.6	11.8	13.6	20.8	16.0	18.1	21.0	16.6	18.8	16.6	12.0	14.2
26	17.4	13.0	14.9	21.2	15.7	18.4	19.7	15.5	17.5	16.1	13.6	14.9
27	16.0	13.3	14.5	19.8	16.6	18.1	19.2	14.1	16.6	17.1	13.3	15.2
28	15.8	12.7	14.3	17.2	15.2	16.2	18.9	14.2	16.5	15.8	11.9	14.0
29	17.4	12.6	15.0	19.5	16.3	17.8	20.7	13.9	16.7	15.9	11.5	13.7
30	17.5	12.5	15.1	20.9	17.1	18.9	16.5	12.5	14.3	16.4	11.9	14.1
31	---	---	---	19.4	16.9	18.0	16.4	12.4	14.3	---	---	---
MONTH	---	---	---	---	10.8	15.9	22.4	12.4	17.5	18.2	10.7	14.3

06752270 CACHE LA POUDBRE RIVER BELOW FORT COLLINS, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 40°34'01", long 105°01'36", in NW¹/₄NE¹/₄ 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 mi².

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	pH (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)	ALKA-LINITY LAB (MG/L) AS CACO3 (90410)
OCT											
15...	1403	42	381	9.1	15.0	14.0	160	43	12	--	120
NOV											
13...	1331	54	379	9.1	7.0	14.4	150	42	11	--	120
DEC											
10...	1356	82	331	9.0	5.5	13.6	140	38	10	--	105
JAN											
15...	1536	42	384	8.4	0.0	13.5	160	43	12	13	126
FEB											
20...	1033	43	386	8.6	3.5	12.5	170	49	12	--	122
MAR											
12...	1116	28	369	8.9	7.5	14.1	160	44	11	--	121
APR											
10...	1351	8.6	668	8.6	5.0	13.0	290	78	24	--	209
MAY											
14...	0925	277	102	8.3	8.5	11.7	40	12	2.5	--	38
JUN											
12...	0933	2210	49	7.7	11.0	9.3	20	5.8	1.3	--	20
JUL											
22...	1102	156	141	8.9	18.0	10.1	58	16	4.2	5.3	45
AUG											
14...	1126	566	141	8.4	16.0	8.7	--	--	--	--	--
SEP											
03...	1325	104	238	9.0	16.0	11.9	92	23	8.1	--	57

DATE	SULFATE DIS-SOLVED (MG/L) AS SO4 (00945)	CHLO-RIDE, DIS-SOLVED (MG/L) AS CL (00940)	FLUO-RIDE, DIS-SOLVED (MG/L) AS F (00950)	SILICA, DIS-SOLVED (MG/L) AS SIO2 (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	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)
OCT										
15...	--	--	--	--	--	0.05	1.1	0.02	0.15	0.18
NOV										
13...	--	--	--	--	--	0.03	0.81	<0.02	0.15	0.14
DEC										
10...	--	--	--	--	--	0.02	0.35	0.60	0.15	0.15
JAN										
15...	56	7.2	0.4	11	228	0.01	0.63	<0.02	0.11	0.11
FEB										
20...	--	--	--	--	--	<0.01	1.1	<0.02	0.11	0.15
MAR										
12...	--	--	--	--	--	0.02	0.70	<0.02	0.11	0.09
APR										
10...	--	--	--	--	--	0.04	0.41	0.83	0.21	0.24
MAY										
14...	--	--	--	--	--	<0.01	0.13	<0.01	0.02	0.02
JUN										
12...	--	--	--	--	--	<0.01	0.01	<0.01	<0.01	<0.01
JUL										
22...	20	2.3	0.2	6.3	93	<0.01	0.23	<0.01	0.06	0.04
AUG										
14...	--	--	--	--	--	--	--	--	--	--
SEP										
03...	--	--	--	--	--	<0.01	0.30	<0.01	0.05	0.04

06752270 CACHE LA POUDBRE RIVER BELOW FORT COLLINS, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	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)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)
OCT 15...	--	--	--	--	1	270	--
NOV 13...	--	--	--	--	<1	100	--
DEC 10...	--	--	--	--	<1	90	--
JAN 15...	<5	<1	<1	<1	<1	120	<1
FEB 20...	--	--	--	--	<1	100	--
MAR 12...	--	--	--	--	1	110	--
APR 10...	--	--	--	--	1	200	--
MAY 14...	--	--	--	--	2	300	--
JUN 12...	--	--	--	--	<1	710	--
JUL 22...	14.7	<1	<1	<1	1	150	<1
AUG 14...	--	--	--	--	--	--	--
SEP 03...	--	--	--	--	4	160	--

DATE	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 15...	--	--	--	--	<0.2	--
NOV 13...	--	--	--	--	<0.2	--
DEC 10...	--	--	--	--	<0.2	--
JAN 15...	20	<0.1	<1	<1	<0.2	<3
FEB 20...	--	--	--	--	<0.2	--
MAR 12...	--	--	--	--	<0.2	--
APR 10...	--	--	--	--	<0.2	--
MAY 14...	--	--	--	--	<0.2	--
JUN 12...	--	--	--	--	<0.2	--
JUL 22...	10	<0.1	<1	<1	<0.2	9
AUG 14...	--	--	--	--	--	--
SEP 03...	--	--	--	--	<0.2	--

06752280 CACHE LA POUDE RIVER ABOVE BOX ELDER CREEK NEAR TIMNATH, CO

LOCATION.--Lat 40° 33'07", long 105° 00'39", in NE¼NW¼ 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 mi².

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. 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 fair. 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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	15	18	32	5.7	14	3.8	37	696	154	111	188
2	12	14	14	30	5.2	20	4.2	5.0	1290	136	64	245
3	10	36	11	29	4.5	20	4.5	6.0	2160	108	142	208
4	11	35	10	24	5.2	16	4.8	6.3	2120	130	236	154
5	44	36	9.6	18	7.0	4.8	5.3	26	2200	132	208	225
6	28	32	13	12	7.8	5.2	4.5	69	2260	94	666	259
7	15	25	26	9.2	9.2	5.2	4.6	89	2550	137	264	122
8	6.9	12	27	15	7.1	7.3	4.6	56	2540	144	142	152
9	9.1	13	35	28	7.4	5.1	4.9	117	2770	113	233	189
10	12	36	39	13	8.3	5.4	4.6	192	2520	58	453	199
11	18	31	37	5.8	13	7.2	4.9	200	2370	34	536	167
12	14	26	28	5.9	17	9.1	4.8	230	2240	56	485	153
13	11	31	26	6.3	18	11	4.6	200	2100	49	498	137
14	9.5	53	22	9.6	15	14	4.4	229	e2110	57	478	91
15	10	49	20	32	13	8.6	4.0	240	e2080	32	498	67
16	20	53	11	37	15	6.4	4.0	247	e1770	15	425	86
17	24	31	12	28	16	13	2.9	347	e1790	28	482	98
18	8.7	24	6.1	14	17	12	2.6	400	e1870	93	500	92
19	4.3	52	5.3	11	16	7.6	2.6	261	e2230	97	385	147
20	8.6	43	6.8	12	17	11	2.4	356	2540	97	255	266
21	9.1	28	12	11	30	12	4.2	396	2670	90	209	338
22	6.4	27	33	6.1	30	11	4.6	506	2560	85	174	294
23	4.7	30	37	4.7	53	10	4.5	676	2100	80	190	285
24	11	36	27	4.2	53	11	40	430	1780	120	158	240
25	16	28	26	4.1	56	8.9	38	262	1160	80	71	196
26	27	23	25	4.0	71	5.5	6.4	152	718	64	75	177
27	26	28	24	4.0	38	7.6	5.2	129	512	49	83	174
28	24	18	28	4.0	20	8.5	4.8	126	364	440	77	183
29	25	13	25	4.0	---	4.4	4.5	122	273	1690	62	167
30	31	13	27	4.1	---	4.1	26	223	183	344	216	169
31	25	---	34	4.6	---	4.0	---	298	---	337	238	---
TOTAL	494.3	891	674.8	426.6	575.4	289.9	221.2	6633.3	54526	5143	8614	5468
MEAN	15.9	29.7	21.8	13.8	20.6	9.35	7.37	214	1818	166	278	182
MAX	44	53	39	37	71	20	40	676	2770	1690	666	338
MIN	4.3	12	5.3	4.0	4.5	4.0	2.4	5.0	183	15	62	67
AC-FT	980	1770	1340	846	1140	575	439	13160	108200	10200	17090	10850

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 - 1997, BY WATER YEAR (WY)

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
MEAN	13.8	23.4	20.9	23.9	26.9	31.6	113	428	980	229	51.8	32.8						
MAX	55.0	122	114	139	156	159	633	2729	4430	1288	278	182						
(WY)	1985	1985	1985	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 1996 CALENDAR YEAR

FOR 1997 WATER YEAR

WATER YEARS 1980 - 1997

ANNUAL TOTAL		51206.6		83957.5									
ANNUAL MEAN		140		230									
HIGHEST ANNUAL MEAN									700			1983	
LOWEST ANNUAL MEAN									19.4			1989	
HIGHEST DAILY MEAN		2140		Jun 16		2770		Jun 9	5460		Jun 21	1983	
LOWEST DAILY MEAN		3.5		Apr 20		2.4		Apr 20	1.0		Oct 14	1989	
ANNUAL SEVEN-DAY MINIMUM		5.0		Jan 1		3.2		Apr 15	2.3		Apr 9	1995	
INSTANTANEOUS PEAK FLOW						4410		Jul 29	5810		Jun 21	1983	
INSTANTANEOUS PEAK STAGE						a		10.84	Jul 29		b	8.02	Jun 21 1983
ANNUAL RUNOFF (AC-FT)		101600		166500									
10 PERCENT EXCEEDS		410		483					319				
50 PERCENT EXCEEDS		34		30					9.4				
90 PERCENT EXCEEDS		7.1		4.8					4.0				

e-Estimated.

a-From floodmarks.

b-Site and datum then in use. Maximum gage height, 10.84 ft, Jul 29, 1997, from floodmarks.

**06752280 CACHE LA POUDE 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 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	pH (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)	ALKA-LINITY LAB (MG/L AS CAC03) (90410)
OCT 17...	1324	25	674	8.7	8.0	11.7	290	77	24	--	118
NOV 15...	1249	45	554	8.8	3.5	12.8	230	63	18	--	118
DEC 12...	1326	27	750	8.8	4.0	13.4	330	89	27	--	131
JAN 22...	1331	5.2	1620	8.1	3.0	10.8	790	210	65	70	204
FEB 20...	1315	18	852	8.7	4.0	13.4	360	97	29	--	147
MAR 12...	1336	9.8	1070	8.6	9.5	12.5	460	120	38	--	155
APR 10...	1029	4.6	1820	8.3	2.0	11.9	960	250	80	--	211
MAY 14...	1125	150	317	8.6	11.0	10.5	120	33	9.9	--	52
JUN 12...	1252	2230	59	7.9	12.0	9.4	24	7.0	1.6	--	22
JUL 22...	1338	81	241	9.0	21.0	10.2	94	25	7.5	9.0	51
AUG 14...	1350	490	177	8.5	17.0	8.7	71	20	5.2	--	52
SEP 03...	1520	120	352	9.0	18.0	11.2	140	37	12	--	63

DATE	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	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)
OCT 17...	--	--	--	--	--	0.07	0.90	0.02	0.10	0.09
NOV 15...	--	--	--	--	--	0.03	0.73	0.04	0.07	0.06
DEC 12...	--	--	--	--	--	0.03	0.78	0.20	0.06	0.06
JAN 22...	710	23	1.0	12	1310	0.03	2.3	0.15	0.05	0.04
FEB 20...	--	--	--	--	--	<0.01	1.4	<0.02	0.09	0.15
MAR 12...	--	--	--	--	--	0.02	1.2	0.04	0.07	0.08
APR 10...	--	--	--	--	--	0.02	0.41	0.17	0.12	0.03
MAY 14...	--	--	--	--	--	<0.01	0.12	<0.01	0.01	0.01
JUN 12...	--	--	--	--	--	<0.01	0.05	<0.01	0.01	<0.01
JUL 22...	59	2.9	0.2	6.1	162	<0.01	0.20	<0.01	0.02	0.03
AUG 14...	--	--	--	--	--	--	--	--	--	--
SEP 03...	--	--	--	--	--	0.01	0.28	<0.01	0.02	0.02

PLATTE RIVER BASIN

06752280 CACHE LA POUDRE RIVER ABOVE BOX ELDER CREEK NEAR TIMNATH, CO--Continued

WATER-QUALITY DATA WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	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)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, TOTAL, RECOV- ERABLE (UG/L AS FE) (01045)	LEAD, DIS- SOLVED (UG/L AS PB) (01049)
OCT 17...	--	--	--	--	<1	110	--
NOV 15...	--	--	--	--	<1	100	--
DEC 12...	--	--	--	--	<1	90	--
JAN 22...	<5	<1	<1	<1	1	250	<1
FEB 20...	--	--	--	--	<1	120	--
MAR 12...	--	--	--	--	1	170	--
APR 10...	--	--	--	--	<1	90	--
MAY 14...	--	--	--	--	2	370	--
JUN 12...	--	--	--	--	<1	630	--
JUL 22...	13.0	<1	<1	<1	1	200	<1
AUG 14...	--	--	--	--	1	370	--
SEP 03...	--	--	--	--	2	170	--

DATE	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 17...	--	--	--	--	<0.2	--
NOV 15...	--	--	--	--	<0.2	--
DEC 12...	--	--	--	--	<0.2	--
JAN 22...	60	<0.1	<1	6	<0.2	<3
FEB 20...	--	--	--	--	<0.2	--
MAR 12...	--	--	--	--	<0.2	--
APR 10...	--	--	--	--	<0.20	--
MAY 14...	--	--	--	--	<0.20	--
JUN 12...	--	--	--	--	<0.20	--
JUL 22...	20	<0.1	<1	<1	<0.20	15
AUG 14...	--	--	--	--	<0.20	--
SEP 03...	--	--	--	--	<0.20	--

06752500 CACHE LA POUDE RIVER NEAR GREELEY, CO

LOCATION.--Lat 40°25'04", long 104°38'22", in NW¼ 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 mi².

PERIOD OF RECORD.--Streamflow records, March to October 1903, August to November 1904, January 1914 to December 1919, June 1924 to current year. Monthly discharge only for some periods, published in WSP 1310. Water-quality data available, 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.

REVISED RECORDS.--WSP 1440: 1935, 1938(M), 1942-43. WSP 1730: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 4,610 ft above sea level, from topographic map. See WSP 1710 or 1730 for history of changes prior to Dec. 14, 1933.

REMARKS.--Records fair except for July 1 to Sept. 9, and 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 of about 250,000 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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e251	e135	153	167	147	104	83	33	266	146	560	335
2	e216	e128	156	167	143	99	89	66	621	72	269	328
3	e146	e127	151	168	141	101	88	38	1280	78	124	312
4	e133	e182	156	170	136	108	89	34	1870	75	130	141
5	e125	e231	151	150	140	109	93	32	1950	69	152	92
6	e140	e233	152	152	143	99	82	32	2040	69	711	139
7	e130	e236	145	140	141	99	81	24	2120	76	889	114
8	e122	e232	152	147	141	97	84	31	2320	77	524	91
9	e116	e226	159	143	138	95	89	44	2320	71	523	106
10	e119	e228	175	149	137	101	89	44	2550	51	516	115
11	e116	e249	181	114	143	104	87	57	2340	50	815	118
12	e113	e244	175	69	143	104	86	56	2140	53	706	108
13	e109	e225	170	138	127	106	84	47	2370	39	657	102
14	e110	e235	158	140	125	107	81	51	2450	42	614	102
15	e106	e245	139	146	123	106	86	70	2130	38	545	100
16	e114	e252	142	156	121	102	76	77	1970	41	543	100
17	e118	e246	79	153	119	101	64	62	1670	34	712	103
18	e124	e211	106	152	121	107	64	53	1670	33	579	106
19	e117	e199	137	144	123	105	36	63	1740	46	554	109
20	e115	e222	151	143	114	102	26	66	1950	57	417	258
21	e115	e212	152	154	101	145	58	79	2220	48	355	396
22	e121	e202	149	152	109	128	40	220	2330	42	272	453
23	e121	e199	157	144	108	99	38	353	2120	43	225	480
24	e115	e198	154	141	129	97	87	364	1830	62	188	462
25	e114	e203	152	136	129	98	97	245	1460	67	152	417
26	e131	e194	147	135	137	99	41	159	897	61	106	381
27	e122	e188	154	136	147	96	28	160	561	56	97	302
28	e124	e190	156	136	119	87	24	126	376	123	100	272
29	e123	e175	160	138	---	86	24	127	295	1180	91	260
30	e132	155	155	139	---	82	26	134	198	877	161	245
31	e137	---	161	144	---	82	---	226	---	633	332	---
TOTAL	3995	6202	4685	4463	3645	3155	2020	3173	50054	4409	12619	6647
MEAN	129	207	151	144	130	102	67.3	102	1668	142	407	222
MAX	251	252	181	170	147	145	97	364	2550	1180	889	480
MIN	106	127	79	69	101	82	24	24	198	33	91	91
AC-FT	7920	12300	9290	8850	7230	6260	4010	6290	99280	8750	25030	13180

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1903 - 1997, BY WATER YEAR (WY)

	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
MEAN	95.7	114	106	96.2	103	104	114	218	492	103	54.2	58.6																																																																																			
MAX	337	368	237	249	311	343	836	3045	4786	1475	407	222																																																																																			
(WY)	1962	1962	1985	1984	1984	1980	1983	1980	1983	1983	1997	1997																																																																																			
MIN	7.13	6.63	34.5	37.4	38.1	33.9	7.77	9.58	9.45	13.0	5.43	9.53																																																																																			
(WY)	1935	1935	1935	1935	1935	1935	1935	1954	1977	1954	1940	1948																																																																																			

SUMMARY STATISTICS

	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1903 - 1997	
ANNUAL TOTAL	77253.3		105067			
ANNUAL MEAN	211		288		137	
HIGHEST ANNUAL MEAN					872	
LOWEST ANNUAL MEAN					27.9	
HIGHEST DAILY MEAN	1740		2550		6090	
LOWEST DAILY MEAN	8.0		24		.80	
ANNUAL SEVEN-DAY MINIMUM	8.3		34		1.5	
INSTANTANEOUS PEAK FLOW			3670		6360	
INSTANTANEOUS PEAK STAGE			8.48		8.92	
ANNUAL RUNOFF (AC-FT)	153200		208400		99060	
10 PERCENT EXCEEDS	306		568		193	
50 PERCENT EXCEEDS	147		136		76	
90 PERCENT EXCEEDS	56		57		16	

e-Estimated.
b-Also occurred Apr 29 and May 7.
a-Also occurred Apr 25.
c-Maximum gage height, 8.95 ft, Jun 22, 1983.

PLATTE RIVER BASIN

06754000 SOUTH PLATTE RIVER NEAR KERSEY, CO

LOCATION.--Lat 40°24'44", long 104°33'46", in NW¼SW¼ 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 mi².

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. 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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1190	972	829	683	994	784	392	1620	e1230	1180	4610	795
2	1070	897	848	676	872	e780	404	1360	e2350	831	2960	806
3	927	895	854	672	839	e770	469	1110	4540	573	1900	1010
4	895	965	841	667	751	758	553	887	5190	393	1400	891
5	872	1100	825	628	743	750	e600	742	6340	324	2490	1030
6	878	e1220	827	615	714	742	e610	915	7240	305	6090	1640
7	858	1200	814	572	701	734	e700	1030	10700	345	8360	1190
8	852	1190	823	610	693	710	774	1040	15200	328	4450	1070
9	845	1190	846	675	701	688	665	1030	13700	279	2980	1080
10	847	1170	896	686	689	665	558	943	14500	244	2660	1010
11	866	1080	935	628	694	658	461	1030	14300	261	3170	887
12	858	1050	915	504	692	658	549	1250	13500	317	4470	807
13	814	1030	922	452	729	652	648	1260	13700	349	4040	744
14	810	1000	900	e480	703	640	795	1030	15600	354	3270	742
15	803	1030	860	e770	796	635	750	886	14000	343	2760	732
16	830	1040	805	817	e810	635	621	893	13600	308	2180	694
17	e840	e990	593	767	e830	642	522	796	12300	291	2270	698
18	e850	951	566	774	836	674	433	647	11200	255	2120	763
19	e860	993	568	790	732	654	344	620	11100	278	1760	769
20	e850	1020	712	781	691	641	254	608	11700	482	1320	1060
21	e840	969	899	808	686	684	222	532	11900	758	1160	1650
22	e850	923	867	750	678	643	189	1010	11400	518	1020	1600
23	e870	905	811	742	e740	577	183	2130	10100	412	901	1690
24	e850	891	705	742	e800	574	368	2440	9020	500	878	2030
25	e850	901	772	726	781	529	e3480	1750	7210	686	755	1850
26	915	894	695	709	770	510	e2900	1490	5710	778	612	1600
27	1120	872	733	710	790	494	2360	1420	4410	788	541	1490
28	1010	867	716	691	799	445	1750	e1220	3010	1040	492	1420
29	952	861	684	753	---	429	1560	e1100	2270	4890	429	1390
30	963	850	668	774	---	410	1600	e1130	1730	4360	485	1310
31	962	---	678	864	---	401	---	1150	---	4310	772	---
TOTAL	27797	29916	24407	21516	21254	19566	25714	35069	278750	27080	73305	34448
MEAN	897	997	787	694	759	631	857	1131	9292	874	2365	1148
MAX	1190	1220	935	864	994	784	3480	2440	15600	4890	8360	2030
MIN	803	850	566	452	678	401	183	532	1230	244	429	694
AC-FT	55140	59340	48410	42680	42160	38810	51000	69560	552900	53710	145400	68330

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1976 - 1997, 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	
MEAN	861	917	840	813	848	948	1079	2458	3527	1107	834	818	1985	1985	1985	1985	1985	1985	1985	1985	1985	1985	1985
MAX	3388	2585	1337	1434	1641	1852	3894	13060	14520	5784	2783	2079	1985	1985	1985	1985	1985	1985	1985	1985	1985	1985	1985
(WY)	1985	1985	1985	1984	1984	1983	1983	1980	1983	1983	1984	1984	1984	1984	1984	1984	1984	1984	1984	1984	1984	1984	1984
MIN	415	488	568	503	540	473	144	251	113	183	304	259	1985	1985	1985	1985	1985	1985	1985	1985	1985	1985	
(WY)	1978	1978	1982	1982	1978	1982	1982	1977	1977	1994	1981	1977	1985	1985	1985	1985	1985	1985	1985	1985	1985	1985	1985

SUMMARY STATISTICS FOR 1996 CALENDAR YEAR FOR 1997 WATER YEAR WATER YEARS 1976 - 1997

	FOR 1996 CALENDAR YEAR	FOR 1997 WATER YEAR	FOR 1997 WATER YEAR	FOR 1997 WATER YEAR	FOR 1997 WATER YEAR	FOR 1997 WATER YEAR	
ANNUAL TOTAL	366102	618822					
ANNUAL MEAN	1000	1695					
HIGHEST ANNUAL MEAN					a	1254	
LOWEST ANNUAL MEAN						3631	
HIGHEST DAILY MEAN		8350	May 27	15600	Jun 14	b	21500
LOWEST DAILY MEAN		143	Apr 28	183	Apr 23	c	61
ANNUAL SEVEN-DAY MINIMUM		177	Apr 24	285	Apr 18	d	63
INSTANTANEOUS PEAK FLOW				17500	Jun 14		22900
INSTANTANEOUS PEAK STAGE				10.40	Jun 14		11.00
ANNUAL RUNOFF (AC-FT)	726200	1227000					908200
10 PERCENT EXCEEDS	1940	3210					2080
50 PERCENT EXCEEDS	825	839					764
90 PERCENT EXCEEDS	382	484					315

e-Estimated.

a-Average discharge for 71 years (water years 1902-03, 1906-74), 777 ft³/s; 562900 acre-ft/yr, prior to completion of Chatfield Dam.

b-Maximum daily discharge for period of record, 31000 ft³/s, Jun 7, 1921.

c-Minimum daily discharge for period of record, 28 ft³/s, Apr 30, 1955.

d-Maximum discharge and stage for period of record, 31500 ft³/s, May 8, 1973, gage height, 11.73 ft.

06754000 SOUTH PLATTE RIVER NEAR KERSEY, CO--Continued
(National Water-Quality Assessment Program station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--1950 to 1953, April 1993 to September 1995, May to September 1997.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	pH 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)
MAY 09...	1020	1130	651	8.0	12.5	8.8	210	47	22	44
JUN 11...	1105	14200	340	7.8	15.5	7.5	83	21	7.5	18
JUL 23...	1050	424	1330	8.0	22.0	7.4	480	110	52	100
AUG 22...	1440	1000	1110	8.1	24.0	8.1	380	87	39	84
SEP 10...	0945	990	1170	8.2	18.5	8.2	380	88	40	90

DATE	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	BICAR-BONATE WATER DIS IT FIELD (MG/L AS HCO3) (00453)	ALKA-LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3) (39086)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)
MAY 09...	3.3	117	96	170	26	0.6	11	431	0.03	2.6
JUN 11...	2.0	67	55	73	12	0.4	7.3	216	0.01	0.76
JUL 23...	6.0	216	177	400	48	0.9	11	971	0.08	5.2
AUG 22...	5.6	196	161	310	39	0.8	11	782	0.06	4.4
SEP 10...	6.2	218	179	330	46	0.9	11	802	0.03	4.5

DATE	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	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 SUS-PENDED TOTAL (MG/L AS C) (00689)
MAY 09...	0.11	1.0	0.4	0.45	0.25	0.26	88	14	--	--
JUN 11...	0.03	0.7	0.3	0.18	0.11	0.13	140	10	6.5	3.8
JUL 23...	0.10	1.4	0.4	0.54	0.35	0.29	<3	34	4.4	2.8
AUG 22...	0.05	1.0	0.4	0.51	0.31	0.31	<3	13	4.2	1.7
SEP 10...	0.10	1.1	0.4	0.57	0.40	0.39	<3	9	4.0	0.3

a-Field dissolved bicarbonate, determined by incremental titration method.
 b-Field total dissolved alkalinity, determined by incremental titration method.

PLATTE RIVER BASIN

06754000 SOUTH PLATTE RIVER NEAR KERSEY, CO--Continued**(National Water-Quality Assessment Program station)**

SUSPENDED SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SEDI- MENT, DIS- CHARGE, 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)
MAY					
09...	1020	1130	186	569	--
JUN					
11...	1105	14200	497	19100	53
JUL					
23...	1050	424	125	143	95
AUG					
22...	1440	1000	103	278	83
SEP					
10...	0945	990	97	259	81

c-Suspended-sediment concentration determined from a subsample split of a composite sample.

06758500 SOUTH PLATTE RIVER NEAR WELDONA, CO

LOCATION.--Lat 40°19'19", long 103°55'17", in SW¼SW¼ sec.7, T.4 N., R.58 W., Morgan County, Hydrologic Unit 10190003, on left bank 400 ft 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 mi².

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.

REMARKS.--Records good except for estimated daily discharges, and those above 1,620 ft³/s, which are 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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1040	223	200	803	630	570	200	877	651	1340	3190	327
2	1020	167	190	811	708	566	147	883	714	814	2980	367
3	925	150	192	813	709	559	123	762	1740	593	1880	441
4	768	145	187	813	672	590	e76	602	2970	408	1240	629
5	698	146	189	797	668	463	81	435	3070	282	948	658
6	639	225	181	772	672	456	85	319	3540	265	1930	917
7	627	261	180	751	669	426	324	340	3990	233	4350	1130
8	563	247	183	721	643	375	314	611	5660	309	4710	827
9	506	231	187	704	624	347	457	890	8380	303	2520	805
10	481	216	204	720	624	323	522	903	9440	262	2010	852
11	472	217	220	738	622	295	553	759	9430	240	1930	849
12	444	190	247	509	636	281	625	797	9820	207	2180	883
13	424	167	248	324	633	276	709	824	9130	272	3070	811
14	402	148	246	497	588	272	754	e590	9070	302	2510	764
15	390	141	298	800	577	271	691	519	11000	298	2080	760
16	377	142	618	1070	579	272	e490	577	10200	291	1640	733
17	370	142	727	1050	592	275	335	615	9760	264	1370	702
18	370	215	444	989	614	388	271	566	8460	240	1390	729
19	382	314	401	1070	609	420	313	480	7130	272	1280	808
20	385	297	698	1100	626	422	264	455	6970	334	1130	880
21	389	308	955	1200	703	398	165	430	7410	498	834	1160
22	419	298	1050	1220	682	405	190	472	8000	469	691	1550
23	485	273	1030	1070	658	419	250	1120	7990	342	592	1520
24	461	258	1000	914	e610	435	255	1670	7200	328	463	1710
25	379	256	983	808	607	439	470	948	6750	357	415	1860
26	269	257	885	746	623	e390	2040	673	5660	410	339	1680
27	308	250	875	702	576	306	1420	634	4540	463	261	1500
28	374	238	939	711	583	299	1070	647	3480	520	182	1410
29	325	234	920	701	---	264	648	604	2450	1270	231	1330
30	278	221	834	677	---	253	645	581	1820	4600	248	1300
31	269	---	793	621	---	232	---	561	---	2830	276	---
TOTAL	15239	6577	16304	25222	17737	11687	14487	21144	186425	19616	48870	29892
MEAN	492	219	526	814	633	377	483	682	6214	633	1576	996
MAX	1040	314	1050	1220	709	590	2040	1670	11000	4600	4710	1860
MIN	269	141	180	324	576	232	76	319	651	207	182	327
AC-FT	30230	13050	32340	50030	35180	23180	28730	41940	369800	38910	96930	59290

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1976 - 1997, 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	
MEAN	531	482	575	722	672	535	792	1775	2566	843	642	681											
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 1996 CALENDAR YEAR

FOR 1997 WATER YEAR

WATER YEARS 1976 - 1997

ANNUAL TOTAL	240604	413200	
ANNUAL MEAN	657	1132	a900
HIGHEST ANNUAL MEAN			2995
LOWEST ANNUAL MEAN			231
HIGHEST DAILY MEAN	3840	May 28	11000
LOWEST DAILY MEAN	104	Mar 23	e76
ANNUAL SEVEN-DAY MINIMUM	132	Mar 19	135
INSTANTANEOUS PEAK FLOW			11600
INSTANTANEOUS PEAK STAGE			8.42
ANNUAL RUNOFF (AC-FT)	477200	819600	652300
10 PERCENT EXCEEDS	1220	2120	1610
50 PERCENT EXCEEDS	497	593	457
90 PERCENT EXCEEDS	186	224	161

e-Estimated.

a-Average discharge for 22 years (water years 1953-74), 572 ft³/s; 414400 acre-ft/yr, prior to completion of Chatfield Dam.

b-Maximum daily discharge for period of record, 20800 ft³/s, May 9, 1973.

c-Maximum discharge and stage for period of record, 26800 ft³/s, May 8, 1973, gage height, 11.68 ft, from rating curve extended above 16000 ft³/s.

PLATTE RIVER BASIN

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 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	pH (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	OXYGEN, DIS-SOLVED (MG/L) (00300)	COLI-FORM, FECAL, UM-MF (COLS./100 ML) (31625)	STREP-TOCOCCI, FECAL, KF AGAR (COLS./100 ML) (31673)	HARD-NESS TOTAL (MG/L CACO3) (00900)	CALCIUM DIS-SOLVED AS CA) (MG/L) (00915)
DEC 31...	1105	712	1490	8.5	3.5	12.8	K32	310	510	120
MAR 26...	1106	403	1570	8.5	11.5	12.7	<4	K17	530	130
JUL 15...	1106	311	1430	8.5	24.0	11.2	59	69	470	100
SEP 18...	1100	727	1380	8.4	18.5	10.4	K63	120	490	110
DATE	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)	ALKA-LINITY 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)
DEC 31...	50	120	2	6.3	233	440	66	1.1	12	1030
MAR 26...	50	130	2	7.2	240	470	79	1.0	11	1130
JUL 15...	51	130	3	7.1	194	460	64	1.0	9.3	1030
SEP 18...	49	110	2	6.8	223	420	57	1.0	12	986
DATE	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	SOLIDS, DIS-SOLVED (TONS PER AC-FT) (70303)	SOLIDS, DIS-SOLVED (TONS PER DAY) (70302)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AM-MONIA DIS-SOLVED (MG/L AS N) (00608)	PHOS-PHORUS DIS-SOLVED 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)
DEC 31...	987	1.40	1980	0.05	1.0	6.4	0.36	0.68	0.52	0.50
MAR 26...	1050	1.54	1230	<0.01	0.5	5.3	0.02	0.44	0.33	0.31
JUL 15...	959	1.40	867	0.04	1.2	3.3	<0.01	0.19	0.08	0.08
SEP 18...	932	1.34	1940	0.01	0.8	4.9	<0.01	0.37	0.27	0.27
DATE	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)	
DEC 31...	41	<0.5	250	<1	6	<3	<10	<3	<10	
MAR 26...	43	<0.5	250	<1	<5	<3	<10	<3	<10	
JUL 15...	63	<0.5	252	<1	<5	<3	<10	<3	<10	
SEP 18...	55	<0.5	250	1	<5	<3	<10	<3	10	
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)	
DEC 31...	33	7	<10	<10	3	<1	1400	<6	7	
MAR 26...	33	9	<10	10	3	<1	1400	<6	11	
JUL 15...	38	10	<10	<10	3	<1	1400	<6	<3	
SEP 18...	37	5	<10	<10	3	<1	1400	<6	7	

K-Based on non-ideal colony count.

06759910 SOUTH PLATTE RIVER AT COOPER BRIDGE, NEAR BALZAC, CO

LOCATION.--Lat 40°21'23", long 103°31'39", in SW¼NE¼ 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 mi² (Area at downstream site used prior to October 1987).

PERIOD OF RECORD.--October 1987 to current year. Records prior to water year 1993 can be obtained from the Colorado Division of Water Resources. Statistical summary computed for 1993 to current year. Water-quality data available, April 1993 to September 1995.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 4,140 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 and transbasin diversions, storage reservoirs, ground-water withdrawals 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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1250	26	18	e730	554	e670	155	318	192	1010	3290	200
2	1250	23	17	e760	597	e660	158	402	208	536	3390	e260
3	1270	22	15	e770	631	e620	148	456	e1150	257	2630	e360
4	1200	20	16	755	609	e610	132	380	2190	189	1930	488
5	1050	22	18	737	595	e580	116	277	3050	138	1340	576
6	945	26	53	682	578	e560	109	e290	e3580	88	1280	610
7	890	34	92	646	577	e540	115	232	4390	e25	3400	951
8	818	22	102	700	551	e460	171	311	5330	e29	4870	924
9	720	21	112	712	550	e390	195	e510	7250	e190	3580	807
10	700	20	121	729	529	e330	167	635	9120	e170	2620	838
11	681	20	132	441	520	312	169	660	9300	135	2320	843
12	646	20	e130	308	522	291	233	571	9830	126	2420	839
13	635	18	e90	431	516	255	296	602	9820	122	2930	778
14	605	17	e70	416	474	251	e350	513	9530	165	3100	746
15	568	19	e180	482	486	244	289	381	10500	186	2520	729
16	569	23	e310	726	647	246	241	370	10700	162	1970	712
17	580	e21	e480	1010	695	248	120	394	9570	140	1440	696
18	570	18	e540	1010	e620	e270	73	380	9030	130	1250	639
19	551	30	e240	1060	e640	377	81	378	8030	123	1180	700
20	553	50	e240	1150	e680	414	125	e360	7470	151	1050	823
21	541	36	e570	1080	e690	383	172	e350	7280	e280	885	996
22	e280	28	e850	1090	e720	338	185	e330	7310	380	673	1450
23	e57	23	e960	1040	e750	331	212	e410	7280	e300	530	1650
24	e63	22	e930	885	e780	337	e300	759	6950	e220	439	1720
25	55	21	e890	796	e760	324	348	e840	6210	203	372	1980
26	35	19	e850	810	e740	e280	706	e620	5440	213	e300	1920
27	38	18	e780	761	e720	275	e1060	e330	4490	244	e250	1660
28	33	18	e770	727	e700	248	e740	282	3410	353	e230	1550
29	45	18	e880	710	---	e220	e390	237	2360	982	201	1530
30	55	18	e870	669	---	192	e250	263	1480	3550	182	1400
31	36	---	e780	614	---	178	---	194	---	3620	181	---
TOTAL	17289	693	12106	23437	17431	11434	7806	13035	182450	14417	52753	29375
MEAN	558	23.1	391	756	623	369	260	420	6082	465	1702	979
MAX	1270	50	960	1150	780	670	1060	840	10700	3620	4870	1980
MIN	33	17	15	308	474	178	73	194	192	25	181	200
AC-FT	34290	1370	24010	46490	34570	22680	15480	25850	361900	28600	104600	58270

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 1997, BY WATER YEAR (WY)

	1993	1994	1995	1996	1997
MEAN	327	97.6	330	596	565
MAX	733	274	700	812	787
(WY)	1996	1994	1993	1993	1993
MIN	58.8	22.7	60.4	145	109
(WY)	1995	1995	1995	1995	1995

SUMMARY STATISTICS

FOR 1996 CALENDAR YEAR

FOR 1997 WATER YEAR

WATER YEARS 1993 - 1997

ANNUAL TOTAL	194725	382226	
ANNUAL MEAN	532	1047	818
HIGHEST ANNUAL MEAN			1723
LOWEST ANNUAL MEAN			308
HIGHEST DAILY MEAN	2910	Sep 21	10700
LOWEST DAILY MEAN	15	Dec 3	15
ANNUAL SEVEN-DAY MINIMUM	17	Nov 28	17
INSTANTANEOUS PEAK FLOW			11400
INSTANTANEOUS PEAK STAGE			8.25
ANNUAL RUNOFF (AC-FT)	386200	758100	592700
10 PERCENT EXCEEDS	1080	2460	1250
50 PERCENT EXCEEDS	364	520	323
90 PERCENT EXCEEDS	36	35	40

e-Estimated.

a-Also occurred Dec 31, 1994.

06764000 SOUTH PLATTE RIVER AT JULESBURG, CO

LOCATION (REVISED).--Lat 40°58'46", long 102°15'15", in NW¹/₄NE¹/₄ and NE¹/₄SE¹/₄ (two channels) sec.33, T.12 N., R.44 W., Sedgwick County, Hydrologic Unit 10190018, on left bank of channel 4 (left channel) 215 ft downstream from bridge, on right bank of channel 2, 5 ft downstream from bridge on U.S. Highway 385, and on left bank of channel 1, 5 ft upstream from bridge on U.S. Highway 385, 0.9 mi southeast of Julesburg, 3.0 mi upstream from Colorado-Nebraska State line, and 8 mi downstream from Lodgepole Creek.

DRAINAGE AREA.--23,193 mi².

PERIOD OF RECORD.--April 1902 to current year. Monthly discharge only for some periods, published in WSP 1310. Published as "near Julesburg" 1903-8, 1915-16, and as "at Ovid" 1922-24. Water-quality data available, October 1945 to September 1995.

REVISED RECORDS.--WSP 1310: 1902, 1906-7, 1948(P). WSP 1440: 1903-4. WDR CO-86-1: Drainage area.

GAGE.--Three water-stage recorders with satellite telemetry. Datum of gages is 3,446.76 ft above sea level. See WSP 1710 or 1730 for history of changes prior to Oct. 1, 1956. Since Oct. 1, 1956, water-stage recorders on channels nos. 2 and 4. Channel no. 2: Oct. 1, 1956 to Sept. 22, 1965, at site 300 ft downstream at present datum. Channel no. 4: Oct. 1, 1956 to Dec. 10, 1958, at site 135 ft downstream at present datum. Since May 11, 1973, supplementary water-stage recorder on channel no. 2 at bridge 800 ft upstream at same datum. Since Aug. 16, 1996, water-stage recorder on channel no. 1; satellite telemetry installed Oct. 24, 1996.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Natural flow of stream affected by transmountain diversions, storage reservoirs, power developments, ground-water withdrawals and diversions for irrigation of 1,200,000 acres upstream from station, 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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e1440	201	336	e938	e821	e1040	433	180	234	2700	4970	185
2	e1390	194	342	e943	e777	e1060	418	177	211	2140	3580	155
3	e1350	192	335	e911	e752	e983	397	168	310	1710	3020	132
4	e1360	193	325	e871	e745	e937	393	145	818	1330	2720	121
5	e1370	187	334	e803	e763	e923	392	124	1200	997	2360	115
6	e1350	184	347	e777	e718	e917	344	87	e2070	806	2380	127
7	e1220	177	350	e740	e684	e903	321	84	e2600	706	2100	148
8	e1160	171	347	e701	e651	e809	330	77	3160	548	2000	157
9	e1080	172	365	e649	e647	e781	e323	67	3780	340	3020	e215
10	e1040	174	389	e580	e631	e751	e293	68	4900	245	3430	e410
11	e991	168	400	e512	e633	e688	313	66	6400	199	2770	438
12	e947	164	400	e407	e626	e641	353	70	7860	239	2430	448
13	e903	163	404	e404	e624	e618	412	79	8650	191	2180	474
14	e842	157	409	e404	e648	e587	474	76	8580	132	2150	513
15	e907	156	378	e429	e654	e539	549	76	e9200	112	2450	544
16	e895	158	365	e455	e648	e537	578	70	e8580	110	2320	560
17	e692	147	e354	e510	e671	e517	e519	56	e8400	105	2020	532
18	e603	154	e353	e621	e678	e506	e517	53	e9120	100	1850	520
19	e498	210	e378	e792	e703	e354	424	51	e9500	101	1680	486
20	e446	320	e405	e963	e702	e277	316	48	e9110	97	e1480	496
21	e434	339	e457	e1080	e782	e303	250	46	e8530	93	e1330	541
22	e444	337	e484	e1140	e883	e336	200	46	e7490	81	e1040	e634
23	e467	342	e507	e1130	e940	e329	190	50	e6980	73	891	e770
24	e458	332	e534	e1130	e975	e300	162	54	e7190	70	856	920
25	380	352	e606	e1100	e976	e271	142	93	e7040	68	717	1030
26	321	349	e645	e1010	e980	e350	136	538	e6980	71	625	1100
27	295	349	e725	e1010	e991	e484	149	766	6490	73	567	1210
28	273	e365	e783	e961	e1010	e531	e157	545	5180	72	537	1310
29	271	e372	e841	e926	---	e510	161	358	4190	77	e402	1260
30	232	e361	e843	e890	---	e481	189	297	3390	82	269	1170
31	211	---	e878	e859	---	e463	---	338	---	1550	210	---
TOTAL	24270	7140	14619	24646	21313	18726	9835	4953	168143	15218	58354	16721
MEAN	783	238	472	795	761	604	328	160	5605	491	1882	557
MAX	1440	372	878	1140	1010	1060	578	766	9500	2700	4970	1310
MIN	211	147	325	404	624	271	136	46	211	68	210	115
AC-FT	48140	14160	29000	48890	42270	37140	19510	9820	333500	30180	115700	33170

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1902 - 1997, BY WATER YEAR (WY)

MEAN	299	346	405	516	606	555	551	1051	1507	312	172	243
MAX	2427	2358	1371	1566	1864	2200	2808	9922	12200	5059	1882	1964
(WY)	1985	1985	1985	1970	1930	1939	1983	1980	1983	1983	1997	1984
MIN	5.85	23.0	18.8	89.9	78.9	56.9	17.3	24.1	8.33	2.15	2.52	5.60
(WY)	1904	1911	1912	1965	1935	1904	1904	1911	1910	1903	1902	1903

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR	FOR 1997 WATER YEAR	WATER YEARS 1902 - 1997
ANNUAL TOTAL	209243	383938	
ANNUAL MEAN	572	1052	550
HIGHEST ANNUAL MEAN			2882
LOWEST ANNUAL MEAN			76.3
HIGHEST DAILY MEAN	2850	Sep 23	e9500
LOWEST DAILY MEAN	e40	Aug 1	a46
ANNUAL SEVEN-DAY MINIMUM	47	Jul 27	e50
INSTANTANEOUS PEAK FLOW			e,c 9630
INSTANTANEOUS PEAK STAGE			Not determined
ANNUAL RUNOFF (AC-FT)	415000	761500	398700
10 PERCENT EXCEEDS	1190	2340	1130
50 PERCENT EXCEEDS	423	512	228
90 PERCENT EXCEEDS	86	114	28

e-Estimated.

a-Also occurred May 22.

b-Also occurred Aug 19-20, 1902, and Jul 25 to Aug 7, 1903.

c-Estimated instantaneous peak flow for all channels.

d-From floodmarks in gage well.

06823000 NORTH FORK REPUBLICAN RIVER AT COLORADO-NEBRASKA STATE LINE

LOCATION.--Lat 40°04'10", long 102°03'05", in SE¼ NW¼ sec.10, T.1 N., R.42 W., Dundy County, Nebraska, Hydrologic Unit 10250002, on right bank 100 ft east of Colorado-Nebraska State line, 9.5 mi upstream from confluence with Arikaree River, and at mile 448.

DRAINAGE AREA.--2,370 mi², of which about 174 mi² contributes directly to surface runoff.

PERIOD OF RECORD.--October 1930 to current year. Prior to October 1932, published as North Fork of Arikaree River at Colorado-Nebraska State line. Monthly discharge only for some periods, published in WSP 1310.

REVISED RECORDS.--WSP 1240: 1947(M). WSP 1390: 1934. WDR CO-94-1: Drainage area.

GAGE.--Water-stage recorder. Steel piling control since January 1965. Datum of gage is 3,336.09 ft above sea level. Prior to Oct. 17, 1934, nonrecording gage at present site and datum.

REMARKS.--Records fair except for estimated discharges and period Oct. 26 to Nov. 5, which are poor. Natural flow affected by diversion in Haigler Canal for irrigation of about 2,700 acres in Colorado and Nebraska.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32	35	51	51	39	50	49	51	12	7.0	18	8.0
2	33	38	52	51	e39	50	52	49	16	7.0	12	7.8
3	40	41	53	50	e39	49	53	47	39	7.0	9.2	8.3
4	41	42	51	49	e39	48	52	44	41	6.8	14	9.2
5	41	40	57	46	e38	45	51	21	39	6.6	74	9.1
6	41	36	52	e44	e37	45	50	13	35	6.8	86	8.7
7	31	37	52	e43	e37	45	53	11	25	7.0	69	16
8	29	42	52	e42	e36	44	57	11	22	7.3	48	18
9	40	43	53	44	e36	44	56	10	28	7.2	22	16
10	39	43	51	47	e36	43	56	10	28	6.0	16	15
11	39	44	50	47	e36	43	57	10	28	5.6	16	13
12	41	44	49	e47	e37	44	58	9.9	27	5.9	19	12
13	41	45	50	e48	e38	45	58	9.6	27	6.3	19	12
14	36	44	50	e49	e39	43	57	9.6	27	6.5	19	15
15	36	44	50	e49	39	42	56	9.2	26	6.1	23	16
16	29	46	51	e46	48	45	56	9.1	26	6.4	23	9.0
17	57	50	e45	e44	53	46	57	9.1	24	4.0	23	8.4
18	57	46	e44	e44	52	45	57	9.1	18	4.4	25	7.6
19	46	47	e44	e45	52	44	58	9.1	13	5.0	25	15
20	45	47	e45	e45	52	43	56	8.9	19	6.6	25	11
21	45	48	e45	e43	50	41	54	8.9	8.7	7.2	24	8.7
22	40	49	e44	e42	50	40	53	9.4	7.1	7.2	27	9.1
23	41	51	e43	e41	50	40	50	26	7.2	7.0	24	12
24	41	51	e43	41	52	39	51	18	6.8	5.6	22	12
25	42	49	e42	e38	53	38	51	16	11	5.4	21	12
26	47	50	e42	e37	53	37	50	23	8.3	6.4	16	10
27	46	53	e43	e37	53	38	48	15	7.2	7.2	13	9.6
28	37	53	e46	e37	52	44	48	14	6.9	7.2	9.7	8.2
29	34	52	e47	e37	---	42	50	15	6.7	7.8	9.4	7.0
30	32	52	e49	e38	---	46	49	20	6.1	7.3	9.4	5.1
31	34	---	50	e38	---	47	---	31	---	23	8.2	---
TOTAL	1233	1362	1496	1360	1235	1355	1603	556.9	596.0	216.8	768.9	328.8
MEAN	39.8	45.4	48.3	43.9	44.1	43.7	53.4	18.0	19.9	6.99	24.8	11.0
MAX	57	53	57	51	53	50	58	51	41	23	86	18
MIN	29	35	42	37	36	37	48	8.9	6.1	4.0	8.2	5.1
AC-FT	2450	2700	2970	2700	2450	2690	3180	1100	1180	430	1530	652

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1935 - 1997, BY WATER YEAR (WY)

	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50
MEAN	37.2	57.0	61.0	60.5	62.5	65.0	58.1	42.2	35.2	19.0	19.0	26.6				
MAX	67.1	83.5	74.7	73.4	76.8	85.8	85.7	104	113	93.8	72.4	128				
(WY)	1963	1957	1954	1953	1960	1960	1980	1951	1962	1962	1950	1951				
MIN	11.1	27.0	40.5	39.4	44.1	43.7	23.5	11.0	12.2	5.36	4.12	5.78				
(WY)	1979	1989	1993	1979	1997	1997	1972	1992	1952	1978	1940	1978				

SUMMARY STATISTICS

	FOR 1996 CALENDAR YEAR			FOR 1997 WATER YEAR			WATER YEARS 1935 - 1997		
ANNUAL TOTAL	12880.1			12111.4					
ANNUAL MEAN	35.2			33.2			45.1		
HIGHEST ANNUAL MEAN							65.3		
LOWEST ANNUAL MEAN							30.0		
HIGHEST DAILY MEAN	76	Feb 6		86	Aug 6	761	May 15	1951	
LOWEST DAILY MEAN	a2.4	Sep 12		4.0	Jul 17	1.7	Jul 11	1938	
ANNUAL SEVEN-DAY MINIMUM	2.7	May 19		5.5	Jul 13	2.3	Aug 5	1940	
INSTANTANEOUS PEAK FLOW				93	Aug 6	2110	Apr 28	1947	
INSTANTANEOUS PEAK STAGE				b1.27	Aug 6	5.92	Apr 28	1947	
ANNUAL RUNOFF (AC-FT)	25550			24020			32640		
10 PERCENT EXCEEDS	54			52			72		
50 PERCENT EXCEEDS	41			39			50		
90 PERCENT EXCEEDS	9.7			7.3			9.0		

e-Estimated.

a-Also occurred Sep 13.

b-Maximum gage height, 3.78 ft, Jan 12, 1997, backwater from ice.

07079300 EAST FORK ARKANSAS RIVER AT HIGHWAY 24 NEAR LEADVILLE, CO

LOCATION.--Lat 39°16'21", long 106°18'21", in NW¹/₄NW¹/₄ sec. 14, T.9 S., R.80 W., Lake County, Hydrologic Unit 11020001, on right bank 20 ft downstream from U.S. Highway 24, 0.35 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 mi².

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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	15	e15	e9.2	e12	e13	15	19	305	193	82	42
2	21	17	e16	e8.6	e12	e14	14	18	464	175	84	38
3	21	15	e20	e8.2	e12	e14	15	18	371	170	76	37
4	20	16	e19	e8.0	e13	e13	15	21	627	162	73	36
5	20	15	e18	e7.9	e13	e13	15	27	730	158	84	36
6	19	15	e16	e7.8	e14	e13	15	31	718	145	111	36
7	18	18	e15	e7.8	e15	e13	16	35	739	135	109	35
8	17	e17	e14	e7.7	e16	e12	14	38	811	137	74	33
9	17	15	e14	e7.8	e16	11	14	45	403	124	77	31
10	17	e15	e14	e7.8	e15	e13	14	58	331	127	84	29
11	17	e15	e14	e8.0	e15	e12	14	67	301	126	79	31
12	17	15	e13	e8.5	e15	e12	16	65	306	118	72	33
13	17	15	e14	e8.5	e15	13	14	65	312	110	71	32
14	17	15	e16	e8.2	e14	e12	14	74	324	105	76	32
15	16	15	e15	e8.4	e13	12	13	83	298	103	63	31
16	18	15	e15	e8.6	e13	11	14	109	266	104	58	31
17	18	15	e16	e8.8	e13	11	15	130	260	98	55	30
18	19	15	e14	e9.0	e12	12	16	146	277	100	55	29
19	18	15	e15	e9.0	e12	11	18	162	384	107	53	28
20	18	15	e15	e9.8	e12	13	19	189	390	100	50	29
21	19	15	e15	e10	e12	13	18	191	372	92	46	30
22	e18	15	e14	e10	e12	14	16	199	354	91	43	31
23	17	15	e13	e10	e12	14	16	172	308	94	42	29
24	16	15	e13	e10	e12	14	17	178	264	89	41	29
25	16	15	e13	e10	e13	14	16	166	236	86	48	27
26	16	e16	e12	e10	e13	13	17	149	222	79	52	27
27	16	e16	e12	e11	e13	14	19	126	211	81	52	27
28	16	e15	e11	e11	e13	14	21	113	200	86	49	26
29	16	e15	e10	e11	---	15	20	124	200	91	44	25
30	17	e14	e9.4	e12	---	15	19	147	198	91	40	24
31	16	---	e9.4	e12	---	14	---	184	---	92	41	---
TOTAL	549	459	439.8	284.6	372	402	479	3149	11182	3569	1984	934
MEAN	17.7	15.3	14.2	9.18	13.3	13.0	16.0	102	373	115	64.0	31.1
MAX	21	18	20	12	16	15	21	199	811	193	111	42
MIN	16	14	9.4	7.7	12	11	13	18	198	79	40	24
AC-FT	1090	910	872	565	738	797	950	6250	22180	7080	3940	1850

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 1997, BY WATER YEAR (WY)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
MEAN	18.1	13.9	11.9	10.4	10.2	10.3	13.9	97.9	250	101	41.4	24.8
MAX	22.9	18.1	15.4	13.0	13.3	13.0	19.8	205	404	266	75.1	32.2
(WY)	1996	1996	1996	1996	1997	1997	1996	1996	1996	1995	1995	1995
MIN	15.1	10.8	10.1	9.17	7.10	8.74	10.5	38.4	146	42.2	23.5	19.3
(WY)	1995	1992	1992	1995	1993	1995	1993	1995	1992	1994	1994	1994

SUMMARY STATISTICS

FOR 1996 CALENDAR YEAR

FOR 1997 WATER YEAR

WATER YEARS 1990 - 1997

ANNUAL TOTAL	26439.8	23803.4	
ANNUAL MEAN	72.2	65.2	52.0
HIGHEST ANNUAL MEAN			73.0
LOWEST ANNUAL MEAN			34.5
HIGHEST DAILY MEAN	670	811	811
LOWEST DAILY MEAN	e, a 9.4	e 7.7	6.0
ANNUAL SEVEN-DAY MINIMUM	10	7.8	6.7
INSTANTANEOUS PEAK FLOW		b 1010	b 1010
INSTANTANEOUS PEAK STAGE		4.23	4.23
ANNUAL RUNOFF (AC-FT)	52440	47210	37660
10 PERCENT EXCEEDS	258	176	148
50 PERCENT EXCEEDS	18	17	18
90 PERCENT EXCEEDS	11	11	9.5

e-Estimated.

a-Also occurred Dec 31.

b-From rating curve extended above 520 ft³/s.

07081200 ARKANSAS RIVER NEAR LEADVILLE, CO

LOCATION.--Lat 39°15'26", long 106°20'35", in NW¹/₄NW¹/₄ sec. 21, T.9 S., R.80 W., Lake County, Hydrologic Unit 11020001, on right bank, 500 ft downstream from confluence of East Fork Arkansas River and Tennessee Creek, 0.5 mi downstream from highway bridge, and 2.8 mi northwest of Leadville.

DRAINAGE AREA.--98.8 mi².

PERIOD OF RECORD.--October 1967 to September 1983. April 1990 to current year. Water-quality data available, May 1990 to September 1996.

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

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 9,730 ft above sea level, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. Transmountain diversions from Colorado River Basin enters above this station (see elsewhere in this report). Small diversions upstream for irrigation and municipal use, amounts unknown. 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.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33	26	e21	e18	e19	e15	25	38	524	308	129	71
2	31	27	e20	e17	e19	e15	23	34	661	271	122	65
3	34	26	e19	e17	e20	e14	24	34	687	256	113	63
4	37	26	e19	e17	e19	e14	24	44	727	241	103	61
5	36	25	e19	e17	e18	e14	23	69	858	240	159	59
6	33	25	e19	e16	e18	e14	e23	96	974	221	208	58
7	32	22	e19	e16	e18	e14	23	125	899	203	277	59
8	31	26	e18	e16	e18	e14	21	155	1120	206	212	54
9	31	24	e18	e16	e18	e14	21	217	1070	185	182	50
10	30	24	e18	e16	e18	e14	20	256	958	190	217	48
11	30	e24	e18	e16	e18	e14	19	198	885	185	222	49
12	29	24	e19	e16	e18	e16	20	185	803	187	196	51
13	29	24	e20	e17	e18	e15	18	176	792	168	193	50
14	29	24	e21	e18	e18	e15	18	189	736	154	229	49
15	28	24	e21	e18	e18	e15	18	197	723	147	187	47
16	29	25	e21	e18	e18	15	21	229	673	149	162	48
17	29	28	e22	e19	e17	15	27	268	650	139	150	47
18	29	27	e22	e19	e17	15	33	317	633	140	148	44
19	33	26	e21	e18	e17	16	40	328	706	152	144	43
20	34	27	e21	e18	e17	19	49	362	761	144	115	44
21	e32	25	e20	e18	e17	20	52	331	824	127	69	45
22	e30	25	e21	e18	e17	21	42	398	757	123	66	47
23	29	25	e22	e18	e17	23	38	334	751	132	74	47
24	28	26	e21	e19	e16	23	36	323	657	121	72	44
25	29	25	e20	e19	e16	22	32	306	541	114	78	41
26	28	e24	e21	e19	e16	21	33	270	425	102	87	40
27	27	e24	e21	e19	e16	23	34	219	392	108	83	40
28	27	e24	e21	e19	e15	24	42	202	361	127	78	38
29	28	e23	e20	e19	---	25	43	270	333	159	69	36
30	26	e23	e19	e19	---	23	40	375	327	150	66	35
31	26	---	e19	e19	---	24	---	396	---	148	69	---
TOTAL	937	748	621	549	491	546	882	6941	21208	5297	4279	1473
MEAN	30.2	24.9	20.0	17.7	17.5	17.6	29.4	224	707	171	138	49.1
MAX	37	28	22	19	20	25	52	398	1120	308	277	71
MIN	26	22	18	16	15	14	18	34	327	102	66	35
AC-FT	1860	1480	1230	1090	974	1080	1750	13770	42070	10510	8490	2920

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1968 - 1997, BY WATER YEAR (WY)

	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
MEAN	26.4	21.0	16.4	14.6	14.3	14.9	29.1	168	360	139	61.5	34.5
MAX	38.3	28.9	21.7	19.0	20.5	20.8	52.9	412	707	382	138	55.8
(WY)	1971	1971	1983	1996	1973	1971	1989	1996	1997	1995	1997	1982
MIN	16.5	11.6	11.6	9.15	7.93	8.82	12.7	55.3	114	35.9	23.8	16.7
(WY)	1978	1977	1978	1977	1978	1974	1970	1981	1977	1977	1977	1974

SUMMARY STATISTICS

FOR 1996 CALENDAR YEAR

FOR 1997 WATER YEAR

WATER YEARS 1968 - 1997

ANNUAL TOTAL	39605	43972	
ANNUAL MEAN	108	120	76.2
HIGHEST ANNUAL MEAN			120
LOWEST ANNUAL MEAN			32.4
HIGHEST DAILY MEAN	782	Jun 6	1120
LOWEST DAILY MEAN	e, a 18	Jan 10	b 14
ANNUAL SEVEN-DAY MINIMUM	18	Jan 8	c 7.0
INSTANTANEOUS PEAK FLOW			d 1360
INSTANTANEOUS PEAK STAGE			4.38
ANNUAL RUNOFF (AC-FT)	78560	87220	55190
10 PERCENT EXCEEDS	395	327	220
50 PERCENT EXCEEDS	30	29	26
90 PERCENT EXCEEDS	19	17	13

e-Estimated.

a-Also occurred Jan 11-14, Jan 29 to Feb 1, and Dec 8-11.

b-Also occurred Mar 4-11.

c-Also occurred Feb 4-20, 1978.

d-From rating curve extended above 950 ft³/s.

07082400 TURQUOISE LAKE NEAR LEADVILLE, CO

LOCATION.--Lat 39°15'10", long 106°22'26", in SW¼NE¼ sec.19, T.9 S., R.80 W., Lake County, Hydrologic Unit 11020001, in control house of Sugar Loaf Dam on Lake Fork, 4.0 mi west of Leadville, and 4.6 mi upstream from mouth.

DRAINAGE AREA.--28.1 mi².

PERIOD OF RECORD.--April 1968 to current year.

GAGE.--Nonrecording gage read once daily. Datum of gage is 9,869.40 ft above sea level, (levels by U.S. Bureau of Reclamation); gage readings have been reduced to elevations above sea level.

REMARKS.--Reservoir formed by earthfill dam completed in 1909, capacity, 17,400 acre-ft. Enlargement of dam began Dec. 8, 1965, and closure was made Apr. 15, 1968. Enlarged capacity, 129,400 acre-ft at elevation 9,869.40 ft, crest of spillway. Dead storage, 2,770 acre-ft below elevation 9,765.90 ft, sill of lowest outlet. Figures given are total contents. Since Apr. 15, 1968, Turquoise Lake has been a regulatory reservoir for the Fryingpan-Arkansas project and stores water imported from the Colorado River basin through Charles H. Boustead Tunnel for irrigation, municipal water supply, and power development. It also stores water for industrial use, and water imported from the Colorado River basin through Busk-Ivanhoe tunnel for irrigation and through Homestake tunnel for municipal water supply.

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

EXTREMES (at 0800 of the following day) FOR PERIOD OF RECORD.--Maximum contents, 131,820 acre-ft, July 10, 1983, elevation, 9,870.73 ft; minimum since appreciable storage was attained, 14,510 acre-ft, Oct. 1, 1968, elevation, 9,782.85 ft.

EXTREMES (at 0800 of the following day) FOR CURRENT YEAR.--Maximum contents, 128,750 acre-ft, July 6, elevation, 9,869.04 ft; minimum, 64,360 acre-ft, May 15, elevation, 9,829.38 ft.

MONTHEND ELEVATION AND CONTENTS, AT 0800, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.	9,860.21	113,280	-
Oct. 31.	9,856.66	107,220	-6,060
Nov. 30.	9,852.20	99,740	-7,480
Dec. 31.	9,848.19	93,150	-6,590
CAL YR 1996.	-	-	-29,070
Jan. 31.	9,843.44	85,510	-7,640
Feb. 28.	9,837.70	76,580	-8,930
Mar. 31.	9,833.56	70,370	-6,210
Apr. 30.	9,833.56	70,370	-
May 31.	9,836.75	75,130	+4,760
June 30.	9,868.08	127,040	+51,910
July 31.	9,868.91	128,520	+1,480
Aug. 31.	9,867.38	125,800	-2,720
Sept. 30.	9,865.20	121,950	-3,850
WTR YR 1997.	-	-	+8,670

07086000 ARKANSAS RIVER AT GRANITE, CO

LOCATION.--Lat 39°02'34", long 106°15'55", in SE¹/₄SW¹/₄ 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 mi².

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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	164	188	e190	e191	282	440	377	230	1620	1570	688	279
2	159	181	194	e195	278	430	352	197	2200	1370	669	270
3	170	182	194	199	278	435	338	190	2670	1250	648	251
4	164	190	191	195	282	453	344	201	2490	1280	655	234
5	129	186	191	190	294	485	336	262	e2040	1280	749	210
6	121	182	194	190	294	475	334	331	1880	1250	806	197
7	119	167	197	184	281	481	329	370	1680	1270	850	204
8	120	173	204	188	286	486	309	426	1750	1080	757	192
9	119	176	e202	190	302	486	242	514	1780	831	750	182
10	118	176	210	193	294	476	218	578	1790	789	774	182
11	117	174	207	192	294	450	204	587	1750	781	768	188
12	114	177	207	190	286	441	200	577	2040	718	744	207
13	114	176	e204	189	318	448	197	595	2310	695	762	218
14	111	182	197	190	350	429	191	610	2280	778	808	214
15	113	206	200	232	346	407	201	690	2220	985	738	185
16	142	235	207	244	338	418	212	850	2000	1050	648	170
17	187	231	e195	248	342	391	238	1010	1930	1050	636	179
18	185	240	e190	250	342	365	262	1050	e2080	1020	594	170
19	197	245	e188	252	333	369	279	1070	2210	988	545	170
20	197	243	e190	254	342	386	293	1290	2460	987	465	176
21	180	223	249	252	342	399	315	1330	2630	938	413	185
22	177	215	214	250	350	397	284	1420	2540	891	360	189
23	187	212	200	247	346	396	288	1430	2460	894	298	215
24	188	203	e197	250	e360	394	297	1490	2370	870	286	281
25	185	201	e199	249	e397	377	284	1420	2100	783	295	269
26	185	200	194	249	394	374	291	1180	1870	673	338	294
27	185	201	194	249	390	379	300	980	1740	681	344	324
28	189	197	194	240	417	377	320	863	1610	702	326	318
29	194	197	e195	230	---	387	305	925	1620	677	276	271
30	185	200	e193	e268	---	371	260	1150	1640	660	270	193
31	187	---	191	280	---	372	---	1290	---	680	280	---
TOTAL	4902	5959	6172	6920	9158	12974	8400	25106	61760	29471	17540	6617
MEAN	158	199	199	223	327	419	280	810	2059	951	566	221
MAX	197	245	249	280	417	486	377	1490	2670	1570	850	324
MIN	111	167	188	184	278	365	191	190	1610	660	270	170
AC-FT	9720	11820	12240	13730	18160	25730	16660	49800	122500	58460	34790	13120

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1910 - 1997, BY WATER YEAR (WY)

MEAN	157	130	107	103	109	128	242	702	1282	904	541	246
MAX (WY)	1977	1983	1983	1983	1985	1985	1962	1984	1984	1983	1984	1961
MIN (WY)	82.4	64.3	48.5	39.8	45.0	55.0	97.1	191	432	217	151	105
	1932	1945	1977	1918	1919	1919	1933	1935	1934	1934	1934	1990

SUMMARY STATISTICS FOR 1996 CALENDAR YEAR FOR 1997 WATER YEAR WATER YEARS 1910 - 1997

ANNUAL TOTAL	184599		194979					
ANNUAL MEAN	504		534				389	
HIGHEST ANNUAL MEAN							687	
LOWEST ANNUAL MEAN							188	
HIGHEST DAILY MEAN	3040		May 20		2670		Jun 3	
LOWEST DAILY MEAN	e 84		Feb 29		111		Oct 14	
ANNUAL SEVEN-DAY MINIMUM	91		Feb 27		115		Oct 9	
INSTANTANEOUS PEAK FLOW					2780		Jun 4	
INSTANTANEOUS PEAK STAGE					5.74		Jun 4	
ANNUAL RUNOFF (AC-FT)	366200		386700		281900			
10 PERCENT EXCEEDS	1520		1350		1050			
50 PERCENT EXCEEDS	194		293		170			
90 PERCENT EXCEEDS	100		183		74			

e-Estimated.

**07086000 ARKANSAS RIVER AT GRANITE, CO--Continued
WATER-QUALITY RECORD**

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 specific conductance are good except for Feb. 16, 19, 27, which are fair, and Mar. 5 to Apr.1, Aug. 9, 12-13, 20, 26, and Sept. 2-3, 12-13, which are poor. Records for water temperature are good except for Feb. 21-22, Mar. 6, Apr. 24, which are fair, and Oct. 16-18, 22-23, Aug. 8-9, 11-20, 23, 26, 28, and Sept. 3, 12, 29, which are poor. Daily data that are not published are either missing or of unacceptable quality.

EXTREMES FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 249 microsiemens, Jan. 16, 1996; minimum, 69 microsiemens, Feb. 25, 1997.

WATER TEMPERATURE: Maximum, 18.7°C, Aug. 17, 1994; minimum, 0.0°C, many days.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 214 microsiemens, Sept. 16, 19; minimum, 69 microsiemens, Feb. 25.

WATER TEMPERATURE: Maximum, 18.3°C, Sept. 2; minimum, 0.0°C, many days.

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM @ 25 DEG. C), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	174	163	171	176	148	156	143	126	131	140	135	137
2	175	172	174	169	140	148	134	124	130	142	137	138
3	181	173	176	158	139	144	143	129	135	137	129	132
4	194	171	181	151	139	147	139	128	132	133	124	128
5	195	181	186	174	146	153	134	126	130	133	121	127
6	186	180	183	170	148	153	133	129	131	126	122	125
7	186	181	183	160	139	149	141	115	131	129	123	127
8	199	181	195	166	134	150	135	116	130	137	127	134
9	198	187	192	158	143	149	145	124	131	138	132	135
10	193	186	191	159	138	146	146	129	139	135	131	133
11	195	190	193	164	137	145	143	138	141	133	128	130
12	195	185	190	180	145	153	144	138	142	129	122	126
13	189	183	187	181	150	156	152	136	141	125	122	123
14	188	183	186	179	149	155	143	131	138	135	124	131
15	203	187	193	156	130	146	140	129	137	134	112	122
16	204	158	188	130	122	126	135	129	132	115	111	113
17	168	161	162	130	112	119	141	119	135	117	109	112
18	174	145	158	131	123	126	141	126	137	115	110	113
19	165	155	159	145	129	136	141	130	136	114	111	113
20	159	152	155	143	133	136	149	125	136	116	111	113
21	---	---	---	158	125	136	149	140	143	119	112	117
22	---	---	---	150	138	142	144	138	141	118	114	116
23	170	148	158	143	135	138	142	137	140	122	117	119
24	174	148	155	148	125	134	140	133	136	124	111	117
25	156	146	151	149	125	134	138	131	134	113	110	111
26	157	145	149	145	121	131	136	131	134	115	111	114
27	152	143	146	145	127	135	142	133	137	114	110	113
28	164	140	147	140	123	132	142	132	136	117	109	114
29	166	145	154	137	128	132	135	129	132	122	114	119
30	181	145	153	136	127	131	133	130	132	122	101	111
31	178	148	154	---	---	---	139	130	136	109	102	106
MONTH	---	---	---	181	112	141	152	115	135	142	101	122

07086000 ARKANSAS RIVER AT GRANITE, CO--Continued

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM @ 25 DEG. C), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	104	102	103	85	80	82	107	103	105	155	150	152
2	103	97	100	85	79	82	108	106	107	175	152	163
3	106	101	104	83	76	79	107	104	106	181	170	174
4	106	101	104	82	75	79	105	103	104	180	173	177
5	110	103	107	78	76	77	105	103	104	178	164	171
6	109	105	107	80	76	79	103	96	99	165	148	154
7	107	99	102	84	75	80	97	93	95	149	145	146
8	101	94	98	80	75	77	97	93	95	145	125	134
9	102	92	97	79	74	77	99	96	97	127	117	121
10	100	91	96	78	73	75	100	98	99	118	111	115
11	108	92	100	84	75	79	105	100	102	114	110	112
12	111	100	106	86	79	82	110	102	106	113	110	111
13	109	89	101	86	81	84	123	105	115	112	108	110
14	93	84	88	86	77	82	130	122	125	112	108	110
15	96	86	93	86	82	84	134	127	130	111	99	106
16	93	88	90	91	85	87	137	132	134	99	89	96
17	97	88	92	94	90	92	140	135	137	90	81	85
18	103	89	97	99	93	95	140	135	138	86	81	83
19	97	88	92	105	96	99	140	128	132	86	84	85
20	100	90	95	110	102	105	133	130	131	85	80	83
21	99	78	92	110	105	108	130	128	130	81	79	80
22	89	78	83	110	106	108	137	128	132	85	79	82
23	96	84	91	111	105	108	136	129	132	84	81	83
24	94	74	89	110	107	108	129	128	128	83	77	80
25	85	69	79	109	101	106	128	126	127	80	76	78
26	94	83	89	110	102	106	131	126	128	86	79	83
27	93	86	90	109	104	107	135	129	131	94	85	88
28	95	81	86	108	102	105	139	133	136	97	94	95
29	---	---	---	108	102	104	139	137	138	96	94	95
30	---	---	---	104	98	102	156	136	143	98	87	94
31	---	---	---	108	99	103	---	---	---	88	82	85
MONTH	111	69	95	111	73	92	156	93	120	181	76	111
	JUNE			JULY			AUGUST			SEPTEMBER		
1	85	78	81	78	73	75	106	98	102	168	161	164
2	79	70	76	83	73	78	108	99	104	167	---	---
3	72	70	71	84	78	82	99	95	98	164	---	---
4	81	71	75	81	74	78	98	90	95	155	149	152
5	85	79	82	77	72	75	98	93	96	---	---	---
6	86	83	84	76	72	74	111	94	98	---	---	---
7	91	86	89	76	72	73	114	97	105	---	---	---
8	95	90	92	95	76	84	101	93	98	---	---	---
9	96	88	92	104	95	99	96	---	---	---	---	---
10	92	89	90	109	95	102	---	---	---	---	---	---
11	90	87	89	106	96	101	---	---	---	---	---	---
12	87	77	82	106	101	104	89	---	---	192	172	176
13	77	74	76	105	96	101	90	---	---	173	165	169
14	77	75	76	101	79	92	---	---	---	167	159	162
15	77	76	76	88	78	82	---	---	---	188	158	169
16	81	75	78	84	78	81	---	---	---	214	174	191
17	83	80	81	85	78	82	---	---	---	210	192	201
18	80	77	79	81	76	78	---	---	---	212	198	205
19	79	74	76	89	81	86	---	---	---	214	203	208
20	76	71	73	88	83	86	113	---	---	211	186	196
21	73	70	71	87	84	86	115	110	113	190	184	187
22	73	70	72	91	84	87	134	110	120	188	183	185
23	73	71	72	95	85	90	134	130	132	206	166	187
24	72	70	72	95	84	88	137	132	134	180	161	171
25	77	71	74	100	85	91	137	131	135	183	169	178
26	78	75	77	103	91	96	---	136	---	183	165	175
27	82	76	79	110	91	95	141	133	138	171	150	159
28	82	78	80	109	100	103	---	---	---	154	148	151
29	81	76	79	112	106	110	153	149	150	151	147	149
30	79	73	76	111	107	109	---	---	---	207	151	172
31	---	---	---	112	97	106	183	167	172	---	---	---
MONTH	96	70	79	112	72	89	---	---	---	---	---	---

ARKANSAS RIVER BASIN

07086000 ARKANSAS RIVER AT GRANITE, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	12.9	5.4	8.8	5.4	1.1	3.1	1.8	.0	.4	1.5	.0	.4
2	10.3	5.6	8.3	5.9	.8	3.2	.5	.0	.1	2.3	.0	.7
3	10.7	7.9	9.2	4.2	1.3	2.7	.9	.0	.1	1.1	.0	.5
4	10.1	5.6	8.3	6.3	2.0	3.8	.4	.0	.0	1.4	.0	.2
5	12.2	5.3	8.8	4.6	1.3	3.1	1.2	.0	.4	.0	.0	.0
6	12.4	5.2	8.9	4.0	.6	2.3	.5	.0	.1	.5	.0	.1
7	11.9	5.2	8.6	2.5	.0	.6	1.3	.0	.2	.1	.0	.0
8	11.7	4.7	8.4	3.6	.0	1.1	2.1	.0	.6	.6	.0	.1
9	12.0	4.9	8.5	4.2	.8	4.0	1.9	.0	.5	.4	.0	.0
10	11.8	4.8	8.4	4.1	.4	2.2	2.1	.2	.7	.8	.0	.2
11	11.8	4.5	8.3	4.9	.0	2.3	1.8	.2	.7	1.1	.0	.2
12	11.5	4.2	8.1	5.2	.6	2.7	2.3	.0	.7	.0	.0	.0
13	11.3	4.3	8.0	5.2	1.0	3.1	2.0	.0	.4	.2	.0	.0
14	10.1	4.6	7.4	5.1	1.2	3.0	.5	.0	.1	.7	.0	.1
15	9.7	3.7	7.0	3.1	2.0	2.5	.0	.0	.0	.6	.0	.1
16	6.8	---	---	3.1	.8	2.0	.0	.0	.0	1.1	.0	.1
17	6.4	---	---	2.2	.0	.9	.0	.0	.0	1.4	.0	.2
18	8.0	---	---	3.7	1.3	2.5	.0	.0	.0	2.1	.0	.5
19	8.6	4.0	6.4	5.7	2.2	4.0	.0	.0	.0	2.2	.0	.5
20	6.4	3.7	5.0	5.6	2.5	3.7	.0	.0	.0	2.0	.0	.5
21	---	---	---	5.0	1.4	3.1	.1	.0	.0	1.6	.0	.4
22	5.1	---	---	5.9	2.7	3.9	.5	.0	.1	1.8	.0	.4
23	6.3	---	---	3.5	1.8	2.7	.6	.0	.1	1.8	.0	.4
24	6.7	1.6	4.2	3.5	.5	1.8	.7	.0	.1	1.6	.0	.3
25	5.1	2.6	3.9	3.3	.7	1.6	.7	.0	.1	1.5	.0	.4
26	6.0	1.9	3.6	2.7	.0	.9	1.6	.0	.5	1.7	.1	.6
27	5.8	2.0	3.6	2.5	.0	.7	1.6	.0	.4	1.8	.0	.5
28	5.5	1.9	3.7	2.2	.0	.5	1.6	.0	.3	1.6	.0	.2
29	4.6	1.5	3.0	1.4	.0	.4	1.8	.0	.4	2.3	.0	.6
30	6.0	1.0	3.3	1.4	.0	.5	1.7	.0	.4	2.1	.0	.5
31	5.2	1.3	3.1	---	---	---	2.1	.0	.6	1.9	.2	.8
MONTH	---	---	---	6.3	.0	2.3	2.3	.0	.3	2.3	.0	.3
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	2.4	.0	.8	2.2	.0	.6	4.6	1.6	3.0	7.3	3.0	4.9
2	2.5	.0	.6	2.8	.0	.9	3.2	.8	1.8	8.7	.0	4.1
3	1.2	.0	.4	1.2	.2	.6	5.4	.6	2.8	9.9	2.6	5.7
4	2.0	.0	.5	1.8	.0	.5	4.8	2.2	3.2	12.7	3.2	8.0
5	1.6	.0	.4	2.1	.0	.7	2.8	.3	1.4	13.4	4.6	8.9
6	2.1	.0	.6	---	.0	---	4.1	.0	1.5	11.4	4.6	8.3
7	2.2	.0	.5	2.6	.0	.8	4.7	.0	2.1	9.9	4.0	7.1
8	2.1	.0	.4	2.5	.0	.9	6.2	.7	3.1	10.6	3.0	6.9
9	2.0	.0	.4	2.5	.2	1.0	5.5	1.2	3.1	11.1	4.3	7.6
10	1.8	.0	.4	2.9	.2	1.0	3.1	.0	1.4	11.2	3.8	7.6
11	2.7	.0	.7	3.1	.0	1.1	.9	.0	.3	9.9	4.3	7.2
12	2.9	.0	.8	2.9	.1	1.1	4.0	.0	1.3	10.3	5.1	7.7
13	2.3	.0	.6	3.0	.2	1.1	6.4	.0	2.4	10.4	4.8	7.8
14	2.1	.0	.6	2.4	.0	.8	7.7	.1	3.3	10.3	5.0	7.8
15	2.2	.0	.7	3.4	.5	1.4	8.0	1.9	4.7	10.1	5.5	8.0
16	2.8	.0	.8	3.4	.5	1.4	9.5	1.5	5.2	9.4	5.6	7.8
17	2.9	.0	.8	3.0	.6	1.4	9.8	1.4	5.6	9.4	5.9	7.8
18	2.9	.1	.9	3.5	.2	1.4	9.4	1.8	5.5	8.6	6.4	7.6
19	2.8	.0	.7	4.1	.5	2.0	8.7	2.0	5.4	10.9	6.4	8.5
20	1.4	.0	.5	5.2	.5	2.5	8.7	2.6	5.7	9.2	6.4	7.9
21	2.4	.0	.7	5.1	.8	2.8	5.7	3.1	4.4	8.6	6.3	7.5
22	1.7	.0	.5	4.6	.9	2.7	7.3	1.0	4.0	7.8	6.6	6.9
23	1.6	.0	.4	5.9	1.0	3.2	6.0	1.9	4.1	9.3	5.4	7.4
24	1.6	.0	.3	3.1	1.2	2.0	3.1	1.4	2.4	8.9	7.3	8.0
25	2.0	.0	.5	4.7	.0	2.0	7.4	.6	3.6	8.9	6.2	7.5
26	2.4	.0	.7	5.7	.3	2.8	8.5	2.5	5.1	8.9	6.0	7.4
27	1.6	.0	.5	5.0	1.2	3.0	9.8	1.9	5.8	9.0	6.0	7.3
28	1.5	.0	.5	5.3	.4	2.9	7.7	4.1	6.1	8.9	6.2	7.4
29	---	---	---	4.4	1.6	2.8	8.7	4.1	5.9	8.8	7.2	7.9
30	---	---	---	5.7	.0	2.6	8.4	1.6	5.0	10.6	6.9	8.8
31	---	---	---	5.6	.8	3.1	---	---	---	12.5	7.6	10.0
MONTH	2.9	.0	.6	---	.0	---	9.8	.0	3.6	13.4	.0	7.5

07086000 ARKANSAS RIVER AT GRANITE, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	12.8	8.2	10.6	14.2	9.3	11.7	16.6	12.8	14.7	15.6	11.6	13.5
2	11.4	8.0	9.6	13.7	8.2	10.9	16.4	12.9	14.4	18.3	11.3	14.4
3	12.7	7.5	10.0	13.9	8.4	11.1	16.1	12.5	14.2	---	12.5	---
4	13.1	8.5	10.8	14.2	8.5	11.4	16.0	13.0	14.3	15.7	11.4	13.8
5	11.7	8.1	10.0	13.7	8.5	11.2	14.7	13.2	13.9	---	---	---
6	10.1	7.1	9.0	13.2	8.8	11.1	13.6	11.8	12.8	---	---	---
7	11.7	7.6	9.4	13.1	8.9	11.1	15.7	11.2	13.2	---	---	---
8	9.3	7.2	8.0	11.9	9.6	10.9	---	12.0	---	---	---	---
9	10.8	6.1	8.3	14.0	8.6	11.3	---	12.7	---	---	---	---
10	10.7	7.1	8.7	13.8	10.0	12.1	---	---	---	---	---	---
11	11.6	7.1	9.3	12.7	10.7	11.7	---	11.8	---	---	---	---
12	11.1	7.5	9.5	14.7	10.0	12.2	---	11.5	---	16.1	---	---
13	10.7	8.2	9.4	15.9	10.9	13.3	---	11.9	---	15.0	9.2	12.4
14	10.5	7.7	9.2	15.3	10.7	13.1	---	11.7	---	14.7	9.6	12.3
15	11.2	7.2	9.2	16.0	11.8	13.9	---	11.8	---	14.0	9.1	11.5
16	11.3	8.2	9.8	14.5	11.7	13.3	---	12.0	---	13.5	8.6	11.1
17	11.6	8.4	10.0	15.1	11.6	13.3	---	12.4	---	13.3	7.2	10.6
18	12.9	8.0	10.6	13.9	11.6	13.0	---	---	---	14.8	9.3	11.9
19	13.4	9.5	11.2	14.1	11.8	12.9	---	12.0	---	15.4	10.0	12.4
20	13.7	8.7	11.3	14.5	12.2	13.3	---	11.9	---	12.4	8.8	10.4
21	11.9	9.2	10.6	14.7	11.9	13.4	15.6	11.0	13.2	12.3	8.6	10.3
22	13.6	9.0	11.2	14.3	12.0	13.2	17.3	11.4	13.9	11.4	8.3	9.8
23	13.7	9.6	11.7	14.7	12.4	13.6	---	10.6	---	12.0	6.1	9.1
24	13.1	9.9	11.6	16.4	12.7	14.4	16.3	10.7	13.4	14.2	8.2	11.1
25	13.7	9.9	11.7	15.9	12.7	14.2	16.8	10.5	13.3	14.2	8.1	11.3
26	13.7	9.6	11.7	14.3	12.1	13.4	---	11.7	---	12.8	9.9	11.4
27	12.8	9.7	11.2	14.8	12.5	13.5	17.5	11.0	14.1	14.6	10.1	12.1
28	13.4	9.1	11.3	14.3	12.2	13.1	---	11.8	---	13.7	9.3	11.4
29	14.2	9.3	11.8	15.2	12.0	13.3	16.1	10.9	13.4	13.4	---	---
30	14.6	9.3	11.9	15.8	12.8	14.0	13.9	10.8	12.0	13.5	7.1	10.4
31	---	---	---	15.9	12.5	14.1	15.7	10.5	13.0	---	---	---
MONTH	14.6	6.1	10.3	16.4	8.2	12.7	---	---	---	---	---	---

07091200 ARKANSAS RIVER NEAR NATHROP, CO

LOCATION.--Lat 38°39'08", long 106°03'02", in SE¹/₄SW¹/₄ 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 mi².

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 fair. Natural flow of stream affected by transmountain diversions (see elsewhere in this report), storage reservoirs, power development, diversions for irrigation of about 15,000 acres, 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, 5,540 ft³/s, July 14, 1995, gage height, 8.63 ft, maximum gage height, 9.94 ft, Aug. 31, 1978, backwater from unnamed tributary; minimum daily discharge, 95 ft³/s, Feb. 25-27, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period of seasonal operation, 4,370 ft³/s, June 22, gage height, 8.02 ft; minimum daily discharge, 320 ft³/s, May, 4.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	408	---	---	---	---	---	492	388	2400	2590	1260	603
2	403	---	---	---	---	---	479	334	3200	2300	1300	605
3	e404	---	---	---	---	---	450	324	3770	2080	1270	585
4	---	---	---	---	---	---	477	320	3870	2070	1230	538
5	---	---	---	---	---	---	461	351	3580	2040	1340	513
6	---	---	---	---	---	---	446	438	3220	1960	1420	488
7	---	---	---	---	---	---	448	495	3210	1890	1570	496
8	---	---	---	---	---	---	451	531	3280	1790	1400	478
9	---	---	---	---	---	---	399	665	3200	1390	1330	458
10	---	---	---	---	---	---	355	762	3100	1290	1350	457
11	---	---	---	---	---	e600	336	832	3100	1430	1410	462
12	---	---	---	---	---	577	337	854	3250	1340	1350	471
13	---	---	---	---	---	580	337	918	3470	1300	1320	481
14	---	---	---	---	---	568	336	1050	3400	1300	1400	475
15	---	---	---	---	---	538	343	1090	3330	1560	1330	460
16	---	---	---	---	---	548	343	1290	3080	1690	1160	446
17	---	---	---	---	---	546	355	1520	2890	1690	1120	448
18	---	---	---	---	---	493	379	1690	3050	1650	1080	430
19	---	---	---	---	---	492	402	1710	3600	1610	949	426
20	---	---	---	---	---	503	418	1940	4000	1680	892	440
21	---	---	---	---	---	524	437	1990	4170	1580	784	483
22	---	---	---	---	---	519	421	2100	4150	1380	754	477
23	---	---	---	---	---	513	408	2120	4030	1410	633	483
24	---	---	---	---	---	511	450	2110	3850	1360	613	532
25	---	---	---	---	---	487	416	2100	3520	1290	635	521
26	---	---	---	---	---	484	446	1830	3100	1150	657	510
27	---	---	---	---	---	486	447	1570	2920	1180	674	560
28	---	---	---	---	---	480	465	1220	2700	1280	644	552
29	---	---	---	---	---	498	470	1240	2680	1280	624	540
30	---	---	---	---	---	472	421	1480	2670	1250	603	444
31	---	---	---	---	---	481	---	1760	---	1230	601	---
TOTAL	---	---	---	---	---	---	12425	37022	99790	49040	32703	14862
MEAN	---	---	---	---	---	---	414	1194	3326	1582	1055	495
MAX	---	---	---	---	---	---	492	2120	4170	2590	1570	605
MIN	---	---	---	---	---	---	336	320	2400	1150	601	426
AC-FT	---	---	---	---	---	---	24640	73430	197900	97270	64870	29480

e-Estimated.

ARKANSAS RIVER BASIN

07091200 ARKANSAS RIVER NEAR NATHROP, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	7.5	5.2	6.4	10.5	6.8	7.9
2	---	---	---	---	---	---	6.1	3.3	4.3	11.2	4.0	7.4
3	---	---	---	---	---	---	7.4	2.8	5.4	12.9	3.8	8.2
4	---	---	---	---	---	---	8.1	5.5	6.4	14.3	5.3	9.7
5	---	---	---	---	---	---	6.5	3.5	4.9	14.5	6.9	11.0
6	---	---	---	---	---	---	5.5	2.0	3.8	13.2	9.3	11.4
7	---	---	---	---	---	---	7.2	2.2	4.7	12.6	9.0	10.8
8	---	---	---	---	---	---	7.9	3.7	5.7	12.4	8.9	10.7
9	---	---	---	---	---	---	7.8	3.7	5.6	12.4	---	---
10	---	---	---	---	---	---	5.4	2.1	3.3	12.4	---	---
11	---	---	---	---	---	---	7.0	.8	2.6	---	---	---
12	---	---	---	5.3	2.6	3.9	7.8	.7	2.8	---	---	---
13	---	---	---	5.5	2.6	4.0	8.9	.6	3.5	---	---	---
14	---	---	---	4.8	2.1	3.5	9.4	1.2	4.2	12.0	---	---
15	---	---	---	6.2	2.5	4.5	10.9	2.6	6.4	13.0	9.4	11.1
16	---	---	---	6.3	3.7	5.3	12.4	3.3	7.6	12.0	9.3	10.9
17	---	---	---	6.8	3.7	5.1	12.0	3.6	7.9	11.8	9.1	10.6
18	---	---	---	6.1	2.7	4.6	12.1	5.1	8.5	11.2	9.1	10.3
19	---	---	---	7.2	3.3	5.5	12.4	5.7	8.7	12.1	9.0	10.5
20	---	---	---	8.0	4.2	6.3	11.5	6.4	9.1	11.0	9.0	10.0
21	---	---	---	6.8	5.0	6.1	9.7	7.2	8.2	10.4	8.5	9.5
22	---	---	---	8.0	5.1	6.7	9.9	5.2	7.3	9.7	8.3	9.2
23	---	---	---	8.6	5.1	6.9	9.0	5.6	7.3	10.8	7.5	9.1
24	---	---	---	7.0	4.3	5.6	6.7	4.1	4.8	10.6	9.0	9.7
25	---	---	---	6.5	2.3	4.7	7.1	3.1	5.2	10.8	8.0	9.5
26	---	---	---	7.8	3.1	5.6	9.6	5.2	7.0	10.5	8.2	9.5
27	---	---	---	8.2	4.4	6.5	11.2	5.6	8.6	10.3	7.7	9.0
28	---	---	---	8.1	4.5	6.4	11.3	7.6	9.4	10.5	8.1	9.3
29	---	---	---	7.7	5.3	6.3	10.6	7.4	8.9	11.9	8.8	10.0
30	---	---	---	7.7	3.2	5.6	10.7	5.9	8.6	12.6	9.1	10.7
31	---	---	---	8.0	4.0	6.2	---	---	---	13.3	9.8	11.5
MONTH	---	---	---	---	---	---	12.4	.6	6.2	---	---	---
	JUNE			JULY			AUGUST			SEPTEMBER		
1	13.2	10.5	12.0	13.3	11.5	12.5	16.2	14.3	15.2	16.1	13.4	14.9
2	12.4	9.8	11.0	12.9	10.9	12.0	15.9	14.7	15.2	18.2	14.1	15.9
3	12.5	9.0	10.8	13.2	11.1	12.2	15.5	14.1	14.9	18.2	14.4	16.2
4	12.5	10.4	11.6	13.3	11.7	12.6	16.0	14.3	15.1	17.3	13.8	15.5
5	12.0	10.1	10.9	13.0	11.5	12.4	15.7	14.7	15.2	16.9	13.0	14.7
6	11.1	9.4	10.2	13.2	11.6	12.5	15.1	13.6	14.1	16.0	12.2	14.1
7	10.8	9.4	10.2	12.9	11.6	12.2	14.9	12.7	13.7	15.9	10.7	13.3
8	10.6	8.9	9.7	12.7	11.6	12.2	16.4	13.2	14.9	16.2	10.7	13.6
9	10.4	7.9	9.2	13.1	10.8	12.0	15.7	13.5	14.6	15.6	11.4	13.7
10	10.6	9.4	10.0	13.8	11.7	12.7	15.6	13.5	14.2	16.2	11.4	14.1
11	11.5	9.2	10.3	13.4	12.1	12.5	14.7	12.0	13.5	15.8	11.6	14.0
12	11.3	9.5	10.3	13.5	11.2	12.5	15.3	11.6	13.5	16.0	11.7	14.1
13	11.0	9.7	10.4	14.6	12.0	13.3	15.3	12.1	13.7	15.1	10.8	13.2
14	11.0	9.6	10.4	15.0	12.5	13.8	15.4	11.4	13.4	14.9	11.1	13.2
15	10.6	8.9	10.0	15.3	12.8	14.1	16.3	11.9	14.1	14.6	10.4	12.7
16	11.5	9.8	10.5	14.9	13.3	14.1	15.8	12.7	14.4	15.3	10.7	12.9
17	12.0	9.9	10.9	14.6	12.8	13.8	16.6	12.5	14.5	14.2	11.3	12.8
18	12.2	9.9	11.1	14.3	13.0	13.8	16.3	13.9	15.0	15.4	11.2	13.4
19	12.8	10.8	11.9	14.2	12.8	13.5	15.7	12.7	14.3	16.7	11.6	14.0
20	12.5	10.7	11.6	14.1	12.8	13.5	15.9	12.6	14.4	14.4	10.7	11.9
21	12.4	10.9	11.7	14.6	13.0	13.9	15.6	12.7	14.2	12.3	9.9	11.0
22	12.8	10.7	11.7	14.7	13.2	14.1	17.1	13.0	14.8	12.1	9.8	11.0
23	13.1	11.2	12.3	14.8	13.3	14.1	17.5	13.7	15.4	12.7	9.2	11.1
24	12.9	11.3	12.2	16.1	13.5	14.7	17.4	13.4	15.4	13.5	9.3	11.5
25	12.9	11.3	12.2	15.7	14.1	15.0	16.8	13.3	15.2	14.2	9.4	12.0
26	12.8	11.1	12.1	15.3	14.2	14.8	17.4	13.7	15.5	13.4	10.5	12.1
27	12.4	11.2	11.8	15.2	13.7	14.6	17.7	13.5	15.8	14.8	10.5	12.7
28	12.9	10.7	11.8	14.9	13.9	14.4	18.1	14.2	16.2	14.0	9.8	12.1
29	13.3	11.1	12.3	14.9	13.6	14.2	17.5	14.4	16.1	13.4	9.1	11.5
30	13.6	11.4	12.5	15.3	13.9	14.5	16.4	14.3	15.2	13.9	8.9	11.7
31	---	---	---	15.4	14.0	14.7	16.3	13.1	14.6	---	---	---
MONTH	13.6	7.9	11.1	16.1	10.8	13.5	18.1	11.4	14.7	18.2	8.9	13.2

07093700 ARKANSAS RIVER NEAR WELLSVILLE, CO

LOCATION.--Lat 38°30'10", long 105°56'21", in SW¼NE¼ 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 mi².

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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	400	455	462	464	494	613	548	449	2560	2540	1300	638
2	396	458	465	457	493	622	555	400	3540	2300	1340	642
3	399	452	463	472	478	618	522	368	4190	2090	1320	632
4	419	464	465	467	478	626	544	356	4350	2050	1280	573
5	394	468	457	413	489	657	529	380	3960	2020	1380	551
6	376	464	481	421	495	667	499	461	3560	1960	1510	521
7	370	458	487	e390	491	669	500	520	3600	1880	e1680	530
8	367	443	478	427	472	686	501	549	3620	1830	e1590	507
9	320	466	481	e410	463	682	465	664	3520	1460	e1470	483
10	305	461	497	438	468	682	403	758	3340	1310	e1480	479
11	302	457	495	e420	476	681	390	818	3360	1470	1540	476
12	296	454	491	e400	477	650	380	842	3460	1370	1450	477
13	287	456	488	e420	478	650	375	874	3710	1320	e1410	486
14	288	453	489	436	507	647	370	1050	3630	1280	e1470	489
15	284	455	442	432	519	611	369	1090	3510	1560	e1400	477
16	286	489	461	447	530	617	378	1310	3210	1680	e1260	459
17	323	495	e435	464	521	622	394	1630	2980	1680	e1190	459
18	338	499	e420	488	529	568	421	1820	3140	1660	e1150	443
19	359	514	e458	496	537	561	439	1890	3800	1620	1030	440
20	371	513	e460	483	533	574	454	2100	4240	1700	976	458
21	371	507	473	476	541	593	475	2140	4310	1620	862	526
22	368	490	479	472	514	588	482	2270	4200	1440	836	529
23	395	482	478	461	530	579	469	2310	4050	1450	724	529
24	401	480	456	459	529	573	532	2300	3860	1400	686	558
25	417	462	460	456	557	553	494	2300	3540	1330	693	560
26	421	459	474	463	587	550	506	2000	3060	1160	710	544
27	425	473	483	462	580	547	507	1760	2890	1180	716	580
28	440	467	474	457	576	539	514	1350	2650	1290	694	579
29	456	461	462	448	---	555	520	1360	2600	1310	647	568
30	460	469	456	451	---	533	491	1610	2590	1300	646	490
31	464	---	456	502	---	538	---	1910	---	1270	629	---
TOTAL	11498	14124	14526	13952	14342	18851	14026	39639	105030	49530	35069	15683
MEAN	371	471	469	450	512	608	468	1279	3501	1598	1131	523
MAX	464	514	497	502	587	686	555	2310	4350	2540	1680	642
MIN	284	443	420	390	463	533	369	356	2560	1160	629	440
AC-FT	22810	28010	28810	27670	28450	37390	27820	78620	208300	98240	69560	31110

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1961 - 1997, BY WATER YEAR (WY)

	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
MEAN	414	424	381	349	345	339	404	1062	2146	1505	907	522					
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 1996 CALENDAR YEAR

FOR 1997 WATER YEAR

WATER YEARS 1961 - 1997

ANNUAL TOTAL	300159	346270		
ANNUAL MEAN	820	949	741	
HIGHEST ANNUAL MEAN			a 1135	1984
LOWEST ANNUAL MEAN			358	1977
HIGHEST DAILY MEAN	4200	May 20	4350	Jun 4
LOWEST DAILY MEAN	284	Oct 15	284	Oct 15
ANNUAL SEVEN-DAY MINIMUM	293	Oct 10	293	Oct 10
INSTANTANEOUS PEAK FLOW			4570	Jun 4
INSTANTANEOUS PEAK STAGE			7.54	Jun 4
ANNUAL RUNOFF (AC-FT)	595400	686800	536700	
10 PERCENT EXCEEDS	2250	2190	1650	
50 PERCENT EXCEEDS	457	520	456	
90 PERCENT EXCEEDS	325	402	261	

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 SE¹/₄SE¹/₄ sec.13, T.51 N., R.75 W., 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 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD (REVISED).--March 1989 to current year (seasonal records only). Records for December 1980 to September 1986 (continuous records) and October 1986 to October 1988 (seasonal records only), at site 0.2 mi downstream, not equivalent because of seepage at that site.

GAGE (REVISED).--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 for estimated daily discharges, and those below 0.50 ft³/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.

AVERAGE DISCHARGE.--5 years (water years 1981-86), 5.89 ft³/s; 4,270 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,360 ft³/s, Aug. 14, 1983, gage height, 8.22 ft, result of indirect determination of peak flow; no flow, July 17-23, 1989.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period of seasonal operation, 6.0 ft³/s, May 22, gage height, 2.21 ft; minimum daily, 0.12 ft³/s, July 15.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	e1.8	.99	e.56	.49	.50
2	---	---	---	---	---	---	---	e1.6	e1.1	e.56	.45	.42
3	---	---	---	---	---	---	---	1.4	e1.2	e.55	.44	.34
4	---	---	---	---	---	---	---	1.4	e1.4	e.56	.49	.36
5	---	---	---	---	---	---	---	1.2	e1.6	e.54	.51	.36
6	---	---	---	---	---	---	---	1.2	e1.8	e.47	.79	.29
7	---	---	---	---	---	---	---	1.2	2.0	e.38	1.1	.29
8	---	---	---	---	---	---	---	1.1	1.9	e.32	.76	.24
9	---	---	---	---	---	---	---	1.0	2.8	e.26	.62	.22
10	---	---	---	---	---	---	---	1.0	1.7	e.24	.66	.24
11	---	---	---	---	---	---	---	1.0	1.4	e.22	.70	.32
12	---	---	---	---	---	---	---	1.0	1.2	.29	.56	.36
13	---	---	---	---	---	---	---	.88	1.1	.22	.52	.30
14	---	---	---	---	---	---	---	.89	1.1	.17	.43	.27
15	---	---	---	---	---	---	---	.97	1.1	.12	.37	.29
16	---	---	---	---	---	---	---	.96	1.0	.13	.32	.39
17	---	---	---	---	---	---	---	.95	.90	.13	.48	.35
18	---	---	---	---	---	---	---	e1.9	.90	.86	.17	.69
19	---	---	---	---	---	---	---	1.7	.91	.77	.31	.48
20	---	---	---	---	---	---	---	1.5	.94	.66	.89	.48
21	---	---	---	---	---	---	---	1.7	1.5	.61	.54	.43
22	---	---	---	---	---	---	---	1.3	3.7	.61	.49	.67
23	---	---	---	---	---	---	---	e1.3	2.4	.73	.67	.41
24	---	---	---	---	---	---	---	e1.3	1.8	.59	.53	.31
25	---	---	---	---	---	---	---	e1.4	1.6	e.54	.39	.32
26	---	---	---	---	---	---	---	e1.4	1.4	e.49	.35	.49
27	---	---	---	---	---	---	---	e1.5	1.3	e.46	.37	.44
28	---	---	---	---	---	---	---	e1.5	1.3	e.46	.59	.32
29	---	---	---	---	---	---	---	e1.6	1.2	e.49	.62	.29
30	---	---	---	---	---	---	---	e1.6	1.1	e.56	.61	.48
31	---	---	---	---	---	---	---	1.0	---	.58	.41	---
TOTAL	---	---	---	---	---	---	---	40.60	32.12	12.83	15.48	11.70
MEAN	---	---	---	---	---	---	---	1.31	1.07	.41	.50	.39
MAX	---	---	---	---	---	---	---	3.7	2.8	.89	1.1	.72
MIN	---	---	---	---	---	---	---	.88	.46	.12	.29	.22
AC-FT	---	---	---	---	---	---	---	81	64	25	31	23

e--Estimated.

**07093740 BADGER CREEK, UPPER STATION, NEAR HOWARD, CO--Continued
WATER-QUALITY RECORDS**

PERIOD OF RECORD.--February 1981 to October 1988 (seasonal record only) at site 1,000 ft downstream, not equivalent because of seepage at site. March 1989 to current year (seasonal record only).

PERIOD OF DAILY RECORD.--Daily sediment record June 1981 to October 1988 (seasonal only) at site 1,000 ft downstream, not equivalent because of seepage at site. Daily sediment record March 1989 to current year (seasonal only). Daily water temperature record March 1995 to current year (seasonal record only).

INSTRUMENTATION.--Pumping sediment sampler since June 1981. Water temperature probe with satellite telemetry.

REMARKS.--Records for water temperature are good except for Apr. 18-22, which are fair. Records of daily sediment during period of seasonal operation (Apr. 22 to June 16) are fair except for June 4-16 and estimated sediment discharge, which are poor. Daily water temperature data that are not published during period of seasonal operation (Apr. 18 to Sept. 30) are either missing or of unacceptable quality.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum during period of seasonal operation, 30.7°C, July 28, 1995; minimum, 0.0°C, Oct. 7, 15, 19, 29, 1995 and Apr. 30, 1996..

SEDIMENT CONCENTRATIONS: Maximum daily during period of seasonal operation, 25,800 mg/L, Aug. 20, 1982; minimum daily, 0 mg/L, many days.

SEDIMENT LOADS: Maximum daily during period of seasonal operation, 15,600 tons, Aug. 14, 1983; minimum daily, 0 ton, many days.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum during period of seasonal operation, 29.9°C, July 24; minimum, 0.2°C, May 3.

SEDIMENT CONCENTRATIONS: Maximum daily mean during period of seasonal operation, 1,100 mg/L, May 22; minimum daily mean, 37 mg/L, June 5.

SEDIMENT LOADS: Maximum daily during period of seasonal operation, 12 tons, May 22; minimum daily, 0.12 ton, May 13-14.

MISCELLANEOUS FIELD MEASUREMENTS, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

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				
01...	0930	0.80	433	4.0	16...	1215	1.1	--	17.5
APR					16...	1230	1.0	431	17.5
18...	1600	1.7	388	13.5	JUL				
MAY					11...	1200	0.20	418	16.0
02...	1445	1.6	424	14.5	AUG				
14...	1300	0.96	439	14.0	05...	1000	0.50	391	15.0
27...	1200	1.4	--	11.0	SEP				
27...	1300	1.4	453	11.0	08...	1400	0.20	406	23.5

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE (T/DAY) (80155)
APR				
22...	1450	1.7	398	1.8
MAY				
02...	1445	1.6	228	0.98
14...	1300	0.96	54	0.14
27...	1200	1.4	96	0.36
JUN				
16...	1215	1.1	56	0.17

07093740 BADGER CREEK, UPPER STATION, NEAR HOWARD, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	25.3	6.2	14.4	25.8	6.7	14.8	27.2	12.5	19.0	21.2	10.3	15.4
2	21.0	5.7	13.0	27.3	3.6	14.3	25.5	12.9	18.3	25.9	11.5	17.2
3	25.0	5.4	13.5	28.1	4.4	14.7	23.9	10.0	16.4	26.7	12.0	17.2
4	24.4	6.0	13.6	24.2	6.8	14.3	24.8	10.5	16.6	23.9	11.1	16.1
5	25.0	5.8	13.7	23.4	5.1	13.7	22.2	13.8	16.8	24.6	7.6	14.7
6	22.2	5.6	12.7	23.9	6.1	13.9	14.1	10.7	12.3	23.1	8.5	14.0
7	17.7	9.1	13.3	22.1	5.4	12.5	20.6	9.1	13.8	24.2	5.1	13.1
8	15.6	7.4	11.0	21.8	5.6	12.4	23.8	9.3	15.7	23.6	5.6	13.3
9	17.5	6.0	10.8	22.8	4.2	12.3	22.1	8.7	14.3	22.1	7.5	13.6
10	21.8	8.5	13.9	23.5	4.8	13.3	20.8	11.4	14.6	23.0	6.7	13.7
11	23.4	7.4	14.6	17.3	8.5	13.1	21.6	7.4	13.5	21.3	7.4	13.2
12	20.3	6.5	12.8	23.5	5.0	13.7	23.7	6.4	14.2	23.3	8.2	14.3
13	20.8	8.4	13.7	26.7	4.9	15.0	20.0	8.0	13.6	22.0	6.5	13.5
14	22.0	7.4	13.3	28.7	7.0	16.6	22.6	6.1	13.2	20.6	7.6	13.6
15	21.2	5.4	12.5	28.3	8.0	16.3	25.6	6.2	14.6	20.1	6.6	12.7
16	21.2	6.7	13.6	23.6	7.1	15.0	22.6	6.6	13.5	22.5	8.0	13.8
17	20.6	6.9	13.8	25.0	6.7	14.8	25.3	6.4	14.2	20.0	6.8	12.4
18	25.2	7.1	15.3	24.2	7.4	14.3	20.0	7.4	12.9	23.4	8.7	14.5
19	24.7	8.4	15.8	24.7	7.6	14.8	21.3	7.2	13.3	19.5	8.6	13.0
20	27.3	7.0	16.3	22.2	10.8	15.7	22.6	7.3	14.3	12.5	7.6	9.5
21	24.3	6.4	15.3	24.9	9.6	16.0	20.0	7.7	13.4	15.1	7.9	10.6
22	27.5	7.8	16.8	29.3	9.1	16.3	23.4	8.4	15.0	17.5	7.1	11.0
23	26.0	8.4	16.1	26.7	10.2	16.9	26.1	8.2	16.1	14.9	7.3	9.9
24	25.1	7.4	15.4	29.9	10.9	18.6	26.5	8.4	16.0	21.1	6.6	12.2
25	25.8	7.7	15.5	28.7	9.4	17.9	23.4	8.6	14.9	21.4	4.9	11.9
26	25.6	7.4	15.0	23.5	10.6	16.0	24.9	11.0	16.3	17.7	7.4	12.2
27	23.1	6.4	14.4	23.6	11.9	16.1	26.7	8.8	16.4	21.9	6.1	12.4
28	27.7	5.9	15.6	21.4	12.0	15.2	25.7	10.5	17.1	20.6	3.8	10.9
29	25.0	6.1	14.7	25.6	11.4	16.8	21.0	9.5	15.0	20.7	3.2	10.6
30	28.4	5.0	15.5	27.4	12.9	18.8	20.6	9.0	14.0	21.2	4.1	11.3
31	---	---	---	25.2	14.0	18.7	21.6	8.6	14.0	---	---	---
MONTH	28.4	5.0	14.2	29.9	3.6	15.3	27.2	6.1	14.9	26.7	3.2	13.1

07093740 BADGER CREEK, UPPER STATION, NEAR HOWARD, CO--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

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)
	APRIL			MAY			JUNE		
1	---	---	---	e1.8	---	e2.4	.99	121	.33
2	---	---	---	e1.6	232	e1.0	e1.1	50	e.15
3	---	---	---	1.4	271	1.0	e1.2	76	e.25
4	---	---	---	1.4	226	.83	e1.4	73	e.28
5	---	---	---	1.2	188	.61	e1.6	37	e.16
6	---	---	---	1.2	121	.40	e1.8	47	e.23
7	---	---	---	1.2	156	.51	2.0	300	1.8
8	---	---	---	1.1	159	.49	1.9	152	.82
9	---	---	---	1.0	87	.23	2.8	304	2.4
10	---	---	---	1.0	87	.24	1.7	108	.49
11	---	---	---	1.0	75	.20	1.4	50	.19
12	---	---	---	1.0	59	.16	1.2	60	.19
13	---	---	---	.88	51	.12	1.1	---	e.23
14	---	---	---	.89	52	.12	1.1	---	e.21
15	---	---	---	.97	48	.13	1.1	---	e.19
16	---	---	---	.96	65	.17	1.0	57	.15
17	---	---	---	.95	61	.16	.90	---	---
18	e1.9	---	---	.90	62	.15	.86	---	---
19	1.7	---	---	.91	63	.15	.77	---	---
20	1.5	---	---	.94	84	.22	.66	---	---
21	1.7	---	---	1.5	244	1.9	.61	---	---
22	1.3	398	1.4	3.7	1100	12	.61	---	---
23	e1.3	193	e.62	2.4	605	3.9	.73	---	---
24	e1.3	---	e.66	1.8	203	1.0	.59	---	---
25	e1.4	---	e.38	1.6	157	.66	e.54	---	---
26	e1.4	---	e2.3	1.4	142	.54	e.49	---	---
27	e1.5	---	e1.4	1.3	90	.32	e.46	---	---
28	e1.5	---	e2.1	1.3	103	.35	e.46	---	---
29	e1.6	---	e1.7	1.2	103	.33	e.49	---	---
30	e1.6	---	e1.5	1.1	64	.20	e.56	---	---
31	---	---	---	1.0	82	.23	---	---	---
TOTAL	---	---	---	40.60	---	30.72	32.12	---	---
	JULY			AUGUST			SEPTEMBER		
1	e.56	---	---	.49	---	---	.50	---	---
2	e.56	---	---	.45	---	---	.42	---	---
3	e.55	---	---	.44	---	---	.34	---	---
4	e.56	---	---	.49	---	---	.36	---	---
5	e.54	---	---	.51	---	---	.36	---	---
6	e.47	---	---	.79	---	---	.29	---	---
7	e.38	---	---	1.1	---	---	.29	---	---
8	e.32	---	---	.76	---	---	.24	---	---
9	e.26	---	---	.62	---	---	.22	---	---
10	e.24	---	---	.66	---	---	.24	---	---
11	e.22	---	---	.70	---	---	.32	---	---
12	.29	---	---	.56	---	---	.36	---	---
13	.22	---	---	.52	---	---	.30	---	---
14	.17	---	---	.43	---	---	.27	---	---
15	.12	---	---	.37	---	---	.29	---	---
16	.13	---	---	.32	---	---	.39	---	---
17	.13	---	---	.48	---	---	.35	---	---
18	.17	---	---	.69	---	---	.30	---	---
19	.31	---	---	.48	---	---	.25	---	---
20	.89	---	---	.48	---	---	.35	---	---
21	.54	---	---	.43	---	---	.72	---	---
22	.49	---	---	.41	---	---	.67	---	---
23	.67	---	---	.41	---	---	.54	---	---
24	.53	---	---	.31	---	---	.52	---	---
25	.39	---	---	.32	---	---	.48	---	---
26	.35	---	---	.49	---	---	.48	---	---
27	.37	---	---	.44	---	---	.48	---	---
28	.59	---	---	.32	---	---	.46	---	---
29	.62	---	---	.29	---	---	.43	---	---
30	.61	---	---	.31	---	---	.48	---	---
31	.58	---	---	.41	---	---	---	---	---
TOTAL	12.83	---	---	15.48	---	---	11.70	---	---

e--Estimated.

07093775 BADGER CREEK, LOWER STATION, NEAR HOWARD, CO

LOCATION.--Lat 38°28'02", long 105°51'34", in SW¹/₄SW¹/₄ 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 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--December 1980 to September 1996, October 1996 to September 1997 (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 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.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,990 ft³/s, July 8, 1996, from rating curve extended above 160 ft³/s on the basis of slope-area measurement of peak flow; gage height, 10.73 ft, from floodmarks; minimum daily, 0.56 ft³/s, Feb. 4, 1982.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period of seasonal operation, 16 ft³/s, Apr. 12, gage height, 3.98 ft; minimum daily, 4.2 ft³/s, Aug. 29 and Sept. 8-10.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e5.9	---	---	---	---	---	9.2	8.7	8.0	5.4	5.4	4.8
2	---	---	---	---	---	---	9.6	8.2	8.0	5.4	5.4	4.5
3	---	---	---	---	---	---	9.1	8.0	7.9	5.8	5.4	4.3
4	---	---	---	---	---	---	9.9	7.9	7.7	6.6	5.3	4.3
5	---	---	---	---	---	---	9.5	7.9	7.6	6.7	5.6	4.3
6	---	---	---	---	---	---	9.0	7.9	7.8	6.6	6.4	4.3
7	---	---	---	---	---	---	8.6	8.0	8.9	6.5	6.6	4.3
8	---	---	---	---	---	---	8.6	8.0	9.8	6.5	6.1	4.2
9	---	---	---	---	---	---	8.6	8.0	11	6.5	5.8	4.2
10	---	---	---	---	---	---	8.5	8.0	11	6.5	6.4	4.2
11	---	---	---	---	---	7.3	8.3	8.3	9.8	6.5	6.3	4.4
12	---	---	---	---	---	7.5	9.6	8.4	9.2	6.4	5.8	4.6
13	---	---	---	---	---	7.9	8.6	8.1	8.6	5.9	5.5	4.5
14	---	---	---	---	---	8.7	8.1	7.7	8.7	5.5	5.4	4.4
15	---	---	---	---	---	8.7	8.1	7.7	8.4	5.4	5.1	4.4
16	---	---	---	---	---	9.3	8.3	7.5	9.5	5.3	5.1	4.7
17	---	---	---	---	---	9.5	8.3	7.5	9.1	5.4	5.1	4.5
18	---	---	---	---	---	9.3	8.7	7.3	8.5	5.6	5.9	4.4
19	---	---	---	---	---	9.5	8.4	7.7	7.9	6.0	5.4	4.3
20	---	---	---	---	---	10	8.4	7.9	7.6	6.8	5.1	5.1
21	---	---	---	---	---	11	8.4	8.2	7.5	6.2	5.1	6.1
22	---	---	---	---	---	10	8.6	10	7.1	5.9	5.1	5.7
23	---	---	---	---	---	9.9	8.8	9.8	7.1	6.5	4.8	5.3
24	---	---	---	---	---	10	9.6	9.4	7.1	5.7	4.5	5.1
25	---	---	---	---	---	9.0	8.0	9.0	6.9	5.4	4.8	5.0
26	---	---	---	---	---	8.9	8.3	8.9	6.8	5.5	4.8	4.9
27	---	---	---	---	---	8.9	8.7	8.8	6.3	5.6	4.7	4.8
28	---	---	---	---	---	8.8	9.2	8.7	6.3	5.8	4.3	4.8
29	---	---	---	---	---	9.0	9.2	8.6	5.9	6.1	4.2	5.0
30	---	---	---	---	---	8.3	8.8	8.4	5.7	6.2	4.5	5.0
31	---	---	---	---	---	8.5	---	8.2	---	5.7	4.9	---
TOTAL	---	---	---	---	---	---	263.0	256.7	241.7	185.9	164.8	140.4
MEAN	---	---	---	---	---	---	8.77	8.28	8.06	6.00	5.32	4.68
MAX	---	---	---	---	---	---	9.9	10	11	6.8	6.6	6.1
MIN	---	---	---	---	---	---	8.0	7.3	5.7	5.3	4.2	4.2
AC-FT	---	---	---	---	---	---	522	509	479	369	327	278

e--Estimated.

ARKANSAS RIVER BASIN

07093775 BADGER CREEK, LOWER STATION, NEAR HOWARD, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	9.8	5.1	6.8	---	---	---
2	---	---	---	---	---	---	6.0	2.2	3.9	---	---	---
3	---	---	---	---	---	---	9.8	2.5	5.8	---	---	---
4	---	---	---	---	---	---	8.7	5.4	6.7	---	---	---
5	---	---	---	---	---	---	9.6	2.8	5.4	---	---	---
6	---	---	---	---	---	---	9.4	1.4	4.4	19.4	---	---
7	---	---	---	---	---	---	11.0	1.6	5.5	17.3	6.0	10.6
8	---	---	---	---	---	---	11.0	4.3	6.6	17.2	6.2	10.1
9	---	---	---	---	---	---	10.1	2.8	5.9	22.1	7.2	12.2
10	---	---	---	---	---	---	6.3	1.4	3.3	21.9	6.0	12.2
11	---	---	---	---	---	---	7.2	1.1	2.6	20.0	6.2	11.5
12	---	---	---	14.6	1.0	5.6	7.2	1.2	3.1	21.8	7.3	12.3
13	---	---	---	15.6	1.0	5.6	10.5	1.3	4.7	19.6	5.6	11.5
14	---	---	---	10.6	.7	3.8	11.8	1.9	6.0	21.2	6.7	12.1
15	---	---	---	15.0	1.3	5.6	12.1	3.4	7.3	21.0	7.0	12.7
16	---	---	---	16.0	2.0	6.3	14.2	5.2	9.0	21.3	6.9	12.7
17	---	---	---	13.2	2.1	6.1	13.9	4.7	8.9	22.4	7.0	13.2
18	---	---	---	16.6	1.8	6.8	12.9	5.2	8.7	19.8	7.6	13.1
19	---	---	---	17.6	2.1	7.6	14.0	5.2	9.1	20.8	9.0	12.7
20	---	---	---	18.1	2.6	8.2	13.6	6.0	9.5	21.5	6.8	12.0
21	---	---	---	11.0	3.7	6.9	14.4	6.8	9.6	20.5	8.8	13.1
22	---	---	---	14.4	---	---	11.9	5.0	8.2	19.7	10.0	13.1
23	---	---	---	13.7	---	---	10.3	6.6	8.2	20.9	7.3	12.6
24	---	---	---	7.3	3.2	4.8	7.3	4.8	5.5	16.5	8.5	11.2
25	---	---	---	11.8	2.9	5.9	8.6	4.0	5.7	20.7	6.3	11.9
26	---	---	---	13.4	3.4	7.0	9.1	4.3	6.6	20.0	6.6	11.9
27	---	---	---	12.8	4.0	7.3	15.0	4.6	9.1	17.7	5.3	10.4
28	---	---	---	12.9	4.1	7.5	12.8	7.0	9.7	19.5	6.2	12.0
29	---	---	---	11.3	4.9	6.9	13.5	6.8	9.4	18.4	7.8	12.4
30	---	---	---	12.3	3.7	6.8	13.8	5.6	9.2	21.7	9.6	14.1
31	---	---	---	10.8	4.3	7.0	---	---	---	25.9	8.9	15.9
MONTH	---	---	---	---	---	---	15.0	1.1	6.8	---	---	---
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	23.2	9.6	15.6	25.0	12.5	17.7	26.9	14.5	19.4	23.3	13.7	17.7
2	22.4	9.3	14.9	25.3	11.9	17.9	28.7	14.9	18.5	27.9	14.7	19.0
3	24.8	10.6	16.5	24.7	12.8	17.2	28.3	13.4	18.9	28.3	14.7	19.0
4	24.3	10.5	15.4	26.8	10.6	16.5	26.2	14.5	18.4	26.6	13.4	18.0
5	22.7	10.0	15.0	22.6	9.3	15.3	24.6	15.5	18.3	25.4	11.3	16.7
6	22.9	9.7	14.5	25.6	9.9	15.9	18.1	13.7	15.8	25.2	11.8	15.7
7	19.1	10.9	14.3	25.5	10.0	15.3	26.4	12.6	17.3	25.6	9.4	15.4
8	19.6	9.0	12.5	22.9	10.0	15.1	28.2	12.3	18.2	26.4	10.0	16.2
9	22.2	7.0	12.6	25.7	9.0	14.8	21.4	11.5	15.9	24.6	11.1	15.6
10	19.2	10.4	13.7	25.9	9.5	15.8	23.3	13.3	16.4	26.5	10.5	15.8
11	23.7	8.9	14.5	20.3	11.4	15.1	20.5	10.0	14.4	26.1	10.9	15.9
12	22.2	8.6	13.4	25.8	9.6	15.8	26.3	9.4	15.7	24.9	10.9	16.0
13	20.7	10.3	14.4	26.0	9.8	16.6	24.5	10.9	16.3	23.4	9.5	14.9
14	23.0	10.6	14.7	28.0	10.5	17.7	24.9	9.7	15.5	24.5	10.6	15.6
15	21.7	7.9	13.7	28.7	11.7	18.0	26.6	9.8	16.4	21.7	9.8	14.5
16	19.8	9.2	13.8	27.3	11.1	16.7	26.0	10.6	16.5	24.2	10.9	15.0
17	22.1	9.1	14.5	27.4	10.7	16.3	27.2	10.5	16.6	22.2	10.1	14.7
18	25.7	9.4	16.0	25.9	10.7	16.1	27.1	13.4	17.6	22.2	11.3	15.5
19	24.8	10.9	17.0	25.1	11.6	17.1	23.5	10.7	15.6	22.8	11.6	15.5
20	24.1	11.1	16.5	25.8	13.1	17.4	25.2	11.0	16.8	14.1	10.7	12.0
21	24.2	10.5	16.4	26.9	12.7	17.1	24.4	11.0	15.9	16.2	10.4	12.5
22	23.9	12.2	17.1	29.8	12.4	18.0	28.7	11.8	17.8	16.7	10.4	13.1
23	22.6	11.8	16.6	27.1	12.8	17.9	27.9	---	---	18.0	10.3	13.0
24	21.9	11.8	16.3	29.1	12.8	19.3	27.4	11.8	18.1	20.3	10.0	13.9
25	22.5	12.3	16.6	27.6	12.3	18.3	26.8	12.7	17.6	20.8	9.5	14.0
26	22.7	12.1	16.6	25.2	13.0	17.1	26.4	14.2	18.3	17.2	11.2	13.9
27	20.7	11.8	16.2	26.2	14.2	17.7	27.7	12.4	18.5	21.6	10.9	14.9
28	22.7	12.0	16.9	22.8	14.8	17.4	27.4	13.6	18.9	20.6	9.5	13.9
29	25.1	12.6	17.7	23.8	14.1	17.7	23.6	13.4	17.6	21.0	8.7	13.5
30	25.8	12.5	18.1	24.9	15.2	18.4	24.6	13.2	17.1	21.2	9.3	14.0
31	---	---	---	22.1	14.8	17.8	---	---	---	---	---	---
MONTH	25.8	7.0	15.4	29.8	9.0	16.9	---	---	---	28.3	8.7	15.2

07094500 ARKANSAS RIVER AT PARKDALE, CO

LOCATION.--Lat 38°29'14", long 105°22'23", in NE1/4NW1/4 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 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1945 to September 1955, October 1964 to September 1994, April 1995 to current year (seasonal record only). Monthly discharge only for October 1945 to May 1946, published in WSP 1311. Water-quality data available November 1986 to September 1993.

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.--Records good except for estimated daily discharges, which are poor. Natural flow of stream affected by transmountain diversions, storage reservoirs, diversions for irrigation of about 35,000 acres upstream from station, and return flow from irrigated areas. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,830 ft³/s, June 18, 1995, gage height 8.82 ft; maximum gage height, 9.13 ft, June 9, 1985; minimum daily, 199 ft³/s, Mar. 17, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period of seasonal operation, 4,990 ft³/s, June 21, gage height, 7.48 ft; minimum daily, 420 ft³/s, May 5.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e450	---	---	---	---	---	605	549	2480	e3010	1480	804
2	---	---	---	---	---	---	631	514	3640	2680	1560	791
3	---	---	---	---	---	---	624	453	4150	2370	1530	797
4	---	---	---	---	---	---	623	430	4340	2260	1500	730
5	---	---	---	---	---	---	630	420	4260	2260	1530	685
6	---	---	---	---	---	---	585	468	4040	2170	1670	646
7	---	---	---	---	---	---	572	581	4050	2090	2010	617
8	---	---	---	---	---	768	561	646	3990	2060	1830	617
9	---	---	---	---	---	787	563	700	4010	1770	1660	577
10	---	---	---	---	---	787	508	845	3830	1550	1650	559
11	---	---	---	---	---	783	473	947	3800	1600	1740	560
12	---	---	---	---	---	768	444	1010	3800	1590	1710	549
13	---	---	---	---	---	761	449	1000	3990	1520	1650	549
14	---	---	---	---	---	762	451	1180	3980	1480	1660	558
15	---	---	---	---	---	738	449	1260	3920	1600	1650	549
16	---	---	---	---	---	713	467	1400	3790	1770	1510	527
17	---	---	---	---	---	719	454	1630	3500	1820	1420	523
18	---	---	---	---	---	689	467	1830	3530	1810	1380	500
19	---	---	---	---	---	648	496	1960	3940	1790	1310	480
20	---	---	---	---	---	652	513	2110	4580	1850	1230	495
21	---	---	---	---	---	669	529	2230	4830	1810	1130	624
22	---	---	---	---	---	671	570	2300	4760	1660	1070	772
23	---	---	---	---	---	663	541	2480	4540	1620	968	724
24	---	---	---	---	---	653	640	2380	4350	1590	853	696
25	---	---	---	---	---	652	641	2430	4090	1530	838	732
26	---	---	---	---	---	625	591	2160	e3500	1410	867	693
27	---	---	---	---	---	626	628	1970	e3300	1370	874	701
28	---	---	---	---	---	611	596	1620	e3210	1460	856	731
29	---	---	---	---	---	608	613	1490	e3170	1520	803	714
30	---	---	---	---	---	618	607	1590	e3100	1510	781	667
31	---	---	---	---	---	592	---	1890	---	1490	757	---
TOTAL	---	---	---	---	---	---	16521	42473	116470	56020	41477	19167
MEAN	---	---	---	---	---	---	551	1370	3882	1807	1338	639
MAX	---	---	---	---	---	---	641	2480	4830	3010	2010	804
MIN	---	---	---	---	---	---	444	420	2480	1370	757	480
AC-FT	---	---	---	---	---	---	32770	84250	231000	111100	82270	38020

e-Estimated.

07094500 ARKANSAS RIVER AT PARKDALE, CO--Continued

WATER TEMPERATURE, (DEG. C), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	8.9	7.7	8.3	12.3	10.1	11.3
2	---	---	---	---	---	---	7.7	5.1	6.5	10.9	8.3	9.8
3	---	---	---	---	---	---	9.2	4.1	6.8	13.4	9.1	11.3
4	---	---	---	---	---	---	10.1	4.8	8.1	15.9	10.4	13.0
5	---	---	---	---	---	---	8.9	5.5	7.2	17.6	11.4	14.2
6	---	---	---	---	---	---	7.9	4.4	6.1	15.6	12.9	14.3
7	---	---	---	---	---	---	9.6	5.1	7.3	14.7	13.1	13.9
8	---	---	---	7.2	3.0	5.1	9.9	6.2	7.9	13.7	12.1	12.9
9	---	---	---	7.8	3.8	5.8	8.8	5.7	7.4	14.5	11.1	12.8
10	---	---	---	7.7	4.4	5.8	8.5	2.6	5.4	14.9	12.9	14.0
11	---	---	---	8.6	3.8	6.3	4.6	1.3	2.8	14.6	13.0	14.0
12	---	---	---	8.7	5.2	6.7	8.7	1.2	4.0	15.0	12.1	13.6
13	---	---	---	8.9	4.9	6.7	10.0	2.7	6.1	15.3	11.9	13.9
14	---	---	---	6.0	2.4	4.6	11.2	5.0	7.4	14.7	12.5	13.7
15	---	---	---	6.0	2.2	4.1	12.1	6.4	9.0	16.0	12.4	14.2
16	---	---	---	9.3	4.3	6.8	13.9	9.3	11.3	15.4	13.5	14.4
17	---	---	---	10.3	6.4	8.0	14.7	9.6	12.2	15.1	12.6	14.0
18	---	---	---	10.3	5.7	8.0	14.7	11.0	12.7	14.6	13.0	13.8
19	---	---	---	11.1	5.9	8.6	14.4	11.1	12.7	13.7	11.5	12.6
20	---	---	---	12.2	7.1	9.7	14.0	11.5	12.9	14.0	11.6	12.7
21	---	---	---	10.1	8.0	9.0	13.0	11.5	12.2	13.2	11.5	12.4
22	---	---	---	10.8	6.9	8.8	12.2	9.9	11.1	13.0	11.8	12.5
23	---	---	---	12.6	7.9	10.1	11.6	10.5	10.9	12.8	11.1	12.0
24	---	---	---	9.6	5.4	7.7	10.5	6.4	8.5	12.4	11.6	12.0
25	---	---	---	9.1	4.0	6.6	7.6	5.6	6.5	13.1	10.8	11.9
26	---	---	---	10.5	5.3	8.0	9.7	6.0	7.8	13.5	11.4	12.4
27	---	---	---	11.3	6.8	9.1	12.0	7.8	9.9	12.5	10.4	11.6
28	---	---	---	11.1	7.0	9.1	12.9	10.6	11.8	13.4	10.3	11.7
29	---	---	---	9.7	7.2	8.2	13.7	10.9	12.2	13.6	11.9	12.7
30	---	---	---	10.7	5.9	8.4	13.2	10.2	11.7	15.8	12.9	14.1
31	---	---	---	11.4	6.7	8.9	---	---	---	16.5	13.7	15.1
MONTH	---	---	---	---	---	---	14.7	1.2	8.8	17.6	8.3	13.0
	JUNE			JULY			AUGUST			SEPTEMBER		
1	16.2	14.3	15.4	16.8	14.8	15.6	20.7	17.2	18.8	19.8	16.2	18.2
2	15.7	13.4	14.7	16.3	14.2	15.3	20.4	18.4	19.4	20.3	17.2	18.9
3	14.9	12.9	14.0	16.5	14.2	15.4	20.6	17.2	18.9	21.9	18.8	20.4
4	15.3	13.2	14.2	17.6	14.8	16.2	19.7	17.3	18.5	21.9	18.3	20.0
5	14.8	13.0	13.9	17.0	14.9	16.1	19.6	17.2	18.3	20.9	17.2	19.1
6	14.1	12.0	13.1	17.6	14.1	15.8	18.5	15.8	17.1	21.1	17.1	18.6
7	13.5	11.9	12.6	17.3	14.3	15.9	16.7	14.3	15.5	20.4	15.4	17.8
8	12.8	11.7	12.1	16.1	13.3	15.1	18.9	15.3	17.0	20.5	15.7	18.0
9	11.9	10.2	11.1	17.1	13.5	15.4	18.2	16.2	17.4	19.8	16.0	17.4
10	13.3	11.0	12.2	17.8	14.1	16.0	17.7	15.9	16.8	20.0	14.9	17.2
11	13.9	11.1	12.5	17.3	15.7	16.3	17.4	14.9	16.1	19.7	15.6	17.5
12	13.4	11.8	12.7	18.2	14.0	16.0	17.9	14.5	16.2	21.1	16.1	18.4
13	13.9	11.7	12.7	18.8	14.9	16.9	18.2	15.5	16.8	20.3	15.6	17.7
14	14.3	12.2	13.2	19.8	16.4	18.1	17.5	14.8	16.3	19.8	15.9	17.8
15	13.6	11.4	12.5	19.7	17.3	18.5	18.3	14.6	16.5	19.2	15.4	16.9
16	13.0	11.7	12.3	18.8	16.6	17.8	18.9	15.5	17.2	20.1	14.5	16.5
17	14.5	12.0	13.2	18.3	15.6	17.1	19.0	16.2	17.6	19.8	14.6	16.7
18	15.9	12.8	14.3	18.0	15.9	16.8	19.2	16.9	17.9	19.1	14.6	16.7
19	16.2	13.6	14.9	18.2	15.4	16.8	18.6	16.1	17.5	19.2	15.4	17.1
20	15.7	13.7	14.8	18.2	16.1	17.1	19.2	15.8	17.6	16.4	12.5	13.8
21	15.9	13.5	14.7	18.4	15.9	17.2	18.1	16.0	17.2	13.4	11.5	12.5
22	15.7	14.0	14.8	19.4	15.7	17.6	19.7	16.0	17.9	15.3	12.3	13.5
23	16.2	13.9	14.9	19.3	16.5	18.0	20.8	16.8	18.8	14.1	12.7	13.5
24	15.6	14.1	15.0	20.1	16.6	18.4	21.1	17.1	19.1	16.1	11.9	14.0
25	15.5	14.1	14.9	20.2	17.0	18.7	21.6	17.6	19.4	16.5	12.9	14.7
26	15.8	14.1	15.0	19.8	17.3	18.4	21.4	17.5	19.4	16.0	13.7	15.0
27	15.3	14.0	14.7	19.8	16.9	18.4	21.3	17.0	19.4	17.5	13.4	15.6
28	16.1	13.5	14.7	18.6	16.7	17.6	22.6	18.5	20.4	17.0	13.9	15.5
29	16.6	14.3	15.4	19.3	16.5	17.8	20.7	17.9	19.4	16.5	13.1	14.8
30	---	14.5	---	20.2	16.6	18.3	18.5	16.6	17.7	16.5	13.2	14.9
31	---	---	---	20.7	16.5	18.4	20.2	16.6	18.0	---	---	---
MONTH	---	10.2	---	20.7	13.3	17.0	22.6	14.3	17.9	21.9	11.5	16.6

ARKANSAS RIVER BASIN

07096000 ARKANSAS RIVER AT CANON CITY, CO

LOCATION.--Lat 38°26'02", long 105°15'24", in SE¼SE¼ sec.31, T.18 S., R.72 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 mi².

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.--Records good except for estimated daily discharges, which are poor. 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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	349	407	400	461	529	644	591	465	2380	2750	1340	622
2	346	398	395	464	519	671	608	433	3440	2480	1430	602
3	344	394	429	466	504	675	604	378	4180	2210	1380	598
4	e335	403	425	476	499	675	576	355	4510	2080	1350	559
5	e325	408	448	449	502	684	586	339	4380	2060	1370	525
6	e314	410	463	433	518	729	529	363	3970	1980	1530	498
7	301	405	470	418	511	734	499	410	4000	1900	1880	480
8	277	375	465	409	504	741	488	460	4080	1880	1730	474
9	268	397	475	417	496	762	490	500	4240	1610	1540	439
10	224	407	477	416	500	765	440	642	3940	1360	1590	423
11	219	397	495	421	508	764	405	753	3840	1410	1670	414
12	215	393	491	375	515	775	377	838	3820	1410	1660	389
13	212	382	489	359	519	803	378	838	4060	1330	1600	388
14	203	380	478	441	513	814	381	1010	4050	1290	1600	393
15	205	372	459	499	556	773	372	1100	3950	1410	1580	389
16	216	386	430	456	561	734	404	1260	3770	1610	1350	376
17	222	411	478	468	564	723	412	1580	3420	1670	1210	371
18	267	411	378	477	572	696	407	1810	3440	1670	1170	357
19	278	437	340	498	580	642	418	1980	3910	1650	1100	341
20	320	442	408	477	569	640	423	2130	4480	1730	997	361
21	325	442	460	464	592	655	447	2300	4670	1720	889	472
22	312	435	484	468	548	659	603	2440	4610	1530	831	589
23	330	428	499	438	571	650	571	2580	4420	1500	759	585
24	352	420	488	432	577	639	584	2450	4250	1470	665	556
25	334	398	440	430	572	646	620	2490	3990	1410	643	584
26	360	391	465	423	637	615	556	2230	3420	1280	660	584
27	379	398	484	428	622	621	588	1950	3210	1240	658	594
28	398	402	483	429	639	625	526	1580	2960	1320	648	625
29	414	393	476	437	---	617	532	1430	2840	1390	610	605
30	408	404	460	455	---	621	527	1530	2810	1390	594	571
31	405	---	458	485	---	584	---	1840	---	1370	595	---
TOTAL	9457	12126	14090	13769	15297	21376	14942	40464	115040	51110	36629	14764
MEAN	305	404	455	444	546	690	498	1305	3835	1649	1182	492
MAX	414	442	499	499	639	814	620	2580	4670	2750	1880	625
MIN	203	372	340	359	496	584	372	339	2380	1240	594	341
AC-FT	18760	24050	27950	27310	30340	42400	29640	80260	228200	101400	72650	29280

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1889 - 1997, BY WATER YEAR (WY)

MEAN	373	377	368	344	341	351	428	1118	2301	1485	858	452
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 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1889 - 1997	
ANNUAL TOTAL	287393		359064			
ANNUAL MEAN	785		984		735	
HIGHEST ANNUAL MEAN					1299	
LOWEST ANNUAL MEAN					329	
HIGHEST DAILY MEAN	4140	May 20	4670	Jun 21	9480	Jun 29 1957
LOWEST DAILY MEAN	203	Oct 14	203	Oct 14	69	May 13 1959
ANNUAL SEVEN-DAY MINIMUM	213	Oct 11	213	Oct 11	87	Apr 9 1940
INSTANTANEOUS PEAK FLOW			4780		Jun 21	a 19000
INSTANTANEOUS PEAK STAGE			9.78		Jun 21	b, c 10.70
ANNUAL RUNOFF (AC-FT)	570000		712200		532800	
10 PERCENT EXCEEDS	2170		2330		1730	
50 PERCENT EXCEEDS	404		548		414	
90 PERCENT EXCEEDS	304		372		240	

e-Estimated.

a-Site and datum then in use, from rating curve extended above 5000 ft³/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 specific conductance are good except Feb. 25 to Mar. 16 and Apr. 21 to May 8, which are poor. Records for water temperature are good except Jan. 30 to Apr. 15, which are fair. Daily data that are not published are either missing or of unacceptable quality.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 673 microsiemens, July 10, 1996; minimum, 94 microsiemens, June 9, 1996.

WATER TEMPERATURE: Maximum, 22.5°C, Aug. 27, 1994; minimum, 0.0°C, many days during the winter.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 383 microsiemens, Apr. 28; minimum, 115 microsiemens, June 3-4.

WATER TEMPERATURE: Maximum, 22.0°C, Aug. 28; minimum, 0.1°C, Dec. 17-19.

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM @ 25 DEG. C), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	278	270	274	283	278	280	256	248	251	239	237	237
2	275	270	273	282	278	279	259	247	251	240	236	237
3	276	269	272	280	276	279	271	254	262	243	240	242
4	277	266	272	282	278	280	268	253	259	242	239	240
5	270	264	267	281	274	276	268	249	258	241	236	238
6	275	267	269	275	271	273	251	244	248	259	240	246
7	280	272	275	275	269	272	248	240	245	266	259	262
8	280	273	277	280	267	273	246	240	243	262	248	253
9	286	275	279	283	272	279	248	242	245	257	245	252
10	300	281	288	279	271	273	247	243	245	263	247	254
11	309	296	303	274	269	272	248	243	246	264	252	258
12	313	301	309	276	268	272	248	243	246	292	256	274
13	313	301	309	272	267	270	248	242	246	298	284	290
14	315	300	309	271	266	269	245	241	243	285	264	276
15	322	307	315	276	269	272	244	240	242	264	246	252
16	320	308	315	275	270	272	257	239	246	252	246	248
17	324	315	320	267	260	265	268	254	260	258	222	252
18	323	309	315	262	249	254	280	263	270	---	---	---
19	310	296	302	---	---	---	290	280	287	---	---	---
20	300	288	294	---	---	---	290	265	279	---	---	---
21	288	280	285	248	246	247	265	249	256	216	211	213
22	294	282	286	251	248	249	249	231	243	222	215	218
23	296	287	291	253	249	251	239	231	235	222	215	218
24	291	282	285	258	251	254	242	237	240	227	221	223
25	285	280	282	259	254	256	250	240	246	246	226	231
26	284	279	282	261	255	258	255	245	252	226	219	223
27	283	276	279	258	250	254	245	230	238	224	216	219
28	282	275	277	257	250	253	232	227	230	233	217	222
29	284	280	282	265	247	253	236	227	232	225	219	222
30	286	282	284	265	252	256	242	234	238	231	217	223
31	282	278	280	---	---	---	241	238	239	230	225	227
MONTH	324	264	289	---	---	---	290	227	249	---	---	---

ARKANSAS RIVER BASIN

07096000 ARKANSAS RIVER AT CANON CITY, CO--Continued

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM @ 25 DEG.C), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	227	217	223	---	---	---	225	216	220	301	290	295
2	217	214	216	---	---	---	221	215	218	369	301	326
3	219	215	217	---	197	---	225	217	220	378	315	366
4	217	213	215	201	195	197	236	225	230	361	315	345
5	220	210	214	202	189	195	240	232	236	375	320	338
6	218	212	215	203	184	192	245	236	240	375	320	333
7	217	213	215	---	186	---	240	233	236	360	321	343
8	218	209	214	---	---	---	237	228	233	374	257	343
9	225	212	217	---	---	---	235	227	232	265	246	253
10	225	210	216	---	---	---	242	228	237	253	226	236
11	225	208	215	197	190	195	257	240	251	234	218	225
12	225	215	219	205	190	199	270	251	258	218	198	209
13	220	213	217	248	205	230	279	265	271	198	191	193
14	218	214	216	317	246	284	280	273	277	193	181	188
15	215	206	211	312	245	266	279	274	277	181	177	179
16	212	202	205	288	239	256	290	278	285	180	171	177
17	204	199	202	249	224	238	290	288	289	171	152	163
18	206	200	203	229	223	225	294	279	283	152	141	146
19	205	199	202	237	229	232	290	269	276	143	141	142
20	206	202	204	239	232	236	284	263	268	143	136	141
21	208	195	203	240	226	232	268	233	262	141	132	134
22	203	192	197	236	222	228	272	242	260	150	140	148
23	213	197	202	232	223	228	288	272	280	150	145	147
24	223	212	215	234	220	227	280	259	268	149	143	147
25	---	---	---	231	221	225	262	257	260	144	139	142
26	---	---	---	233	227	231	273	259	265	148	139	143
27	---	---	---	238	229	234	378	270	291	157	146	152
28	---	---	---	241	234	238	383	269	275	174	156	165
29	---	---	---	242	228	233	282	270	276	192	174	187
30	---	---	---	233	222	227	291	278	285	193	183	189
31	---	---	---	228	222	224	---	---	---	185	167	178
MONTH	---	---	---	---	---	---	383	215	259	378	132	215
	JUNE			JULY			AUGUST			SEPTEMBER		
1	167	144	155	141	126	137	200	186	194	259	251	255
2	144	121	130	134	126	131	216	180	189	259	251	256
3	122	115	119	139	131	135	190	185	187	252	248	250
4	122	115	118	138	133	136	206	182	187	255	246	250
5	125	119	123	136	133	134	196	181	189	265	251	260
6	132	123	128	135	131	133	190	178	183	269	262	265
7	189	129	142	136	131	134	200	184	191	274	267	270
8	192	135	151	135	133	134	193	179	187	276	270	273
9	177	166	172	154	134	143	262	176	182	279	272	275
10	180	175	177	168	154	162	227	174	182	283	277	281
11	176	164	170	181	162	168	196	190	192	285	278	281
12	165	155	160	178	158	161	204	192	198	287	282	284
13	156	145	150	184	163	168	202	194	200	287	282	285
14	151	142	145	169	165	166	197	188	192	286	275	280
15	144	139	142	167	154	163	188	183	184	281	272	277
16	145	140	143	154	142	146	188	181	184	281	272	277
17	157	145	154	143	139	141	198	188	191	281	274	278
18	155	146	152	143	141	142	195	189	191	287	274	279
19	146	132	139	146	143	144	199	194	196	293	284	287
20	132	125	128	283	144	155	204	197	200	293	282	288
21	127	122	125	175	157	167	211	202	205	292	287	290
22	125	121	123	167	155	161	225	211	217	294	273	284
23	125	121	123	189	164	170	226	219	222	281	271	277
24	124	121	122	170	167	169	245	226	237	280	275	277
25	125	122	124	173	168	170	242	238	240	278	271	274
26	133	124	130	175	167	171	246	238	242	274	263	267
27	136	132	134	245	175	186	243	238	240	272	267	269
28	142	133	138	190	176	185	242	239	241	272	262	266
29	143	138	140	220	183	188	243	238	241	263	260	261
30	142	136	139	199	184	193	252	241	245	268	259	262
31	---	---	---	202	196	198	256	249	252	---	---	---
MONTH	192	115	140	283	126	158	262	174	206	294	246	273

07096000 ARKANSAS RIVER AT CANON CITY, CO--Continued

TEMPERATURE, WATER (DEG.C), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	14.6	13.5	14.1	6.4	4.8	5.8	1.4	.2	.9	3.4	2.8	3.1
2	14.6	13.4	13.9	6.9	5.0	6.1	1.2	.2	.5	3.8	3.1	3.4
3	14.1	13.0	13.5	7.5	5.9	6.7	.3	.2	.3	4.5	3.8	4.1
4	14.5	13.1	13.8	7.9	6.1	7.0	.4	.2	.3	4.4	3.1	3.9
5	15.1	13.1	14.1	7.6	6.0	6.8	.6	.2	.4	3.1	1.3	2.2
6	15.1	13.6	14.4	6.9	5.2	6.1	1.2	.5	.9	1.3	.9	1.1
7	15.3	13.8	14.4	5.2	3.7	4.3	1.2	.4	.8	.9	.8	.8
8	14.9	12.5	13.7	4.0	2.8	3.5	2.2	.8	1.5	.9	.8	.8
9	14.4	12.2	13.3	5.6	3.8	4.7	3.3	1.9	2.6	.8	.7	.8
10	14.5	11.6	13.1	6.2	4.7	5.5	4.5	3.1	3.7	.7	.7	.7
11	15.2	12.1	13.6	6.2	4.6	5.4	4.4	3.5	3.9	.8	.7	.8
12	15.1	12.2	13.5	5.8	4.4	5.1	4.1	3.2	3.7	.8	.7	.7
13	14.9	12.0	13.3	6.2	5.1	5.6	3.7	3.0	3.4	.8	.7	.7
14	14.1	11.9	12.9	5.7	4.9	5.2	3.3	2.0	2.8	.8	.7	.7
15	14.0	11.4	12.7	6.1	4.9	5.6	2.0	.5	1.1	.8	.7	.8
16	13.1	10.6	11.7	---	3.8	---	.7	.5	.5	.8	.7	.8
17	10.8	8.1	9.3	---	2.0	---	.5	.1	.3	.8	.7	.7
18	9.1	6.5	7.9	---	3.1	---	.6	.1	.4	.8	.7	.8
19	10.8	8.0	9.2	---	---	---	.6	.1	.5	.9	.8	.8
20	10.2	7.8	9.4	---	---	---	.5	.3	.4	.9	.8	.9
21	7.8	6.1	6.8	6.5	---	---	.4	.3	.4	1.0	.8	.9
22	6.6	4.2	5.5	7.1	5.4	6.4	.4	.3	.3	1.1	.9	1.0
23	7.4	5.1	6.2	6.7	5.2	6.2	.5	.3	.4	1.2	.9	1.1
24	8.2	5.9	7.0	5.2	4.0	4.4	.4	.3	.4	1.2	1.0	1.1
25	8.5	6.8	7.5	4.4	3.4	3.8	.4	.3	.4	1.2	.9	1.1
26	7.4	6.0	6.8	3.7	2.3	3.1	.4	.4	.4	1.7	1.1	1.4
27	6.1	4.4	5.1	2.3	1.6	2.0	.7	.4	.5	1.6	1.2	1.3
28	6.9	4.5	5.8	1.9	.2	1.4	.8	.4	.6	1.4	1.1	1.2
29	7.0	5.3	6.3	2.5	1.5	2.0	1.1	.5	.8	1.6	1.3	1.4
30	7.1	5.3	6.3	2.0	1.4	1.7	2.1	1.1	1.6	1.8	1.3	1.5
31	6.8	5.4	5.9	---	---	---	2.8	2.1	2.4	3.5	1.8	2.6
MONTH	15.3	4.2	10.4	---	---	---	4.5	.1	1.2	4.5	.7	1.4
	FEBRUARY			MARCH			APRIL			MAY		
1	4.2	3.3	3.7	4.3	3.8	4.0	11.9	10.3	11.0	11.7	10.5	11.0
2	4.3	4.0	4.2	5.0	4.1	4.4	10.7	8.3	9.5	10.5	9.0	9.8
3	4.3	3.9	4.1	5.4	4.9	5.1	10.4	7.3	8.8	11.5	9.5	10.3
4	3.9	2.9	3.4	5.4	4.8	4.9	11.2	9.9	10.5	12.4	10.7	11.5
5	3.0	2.4	2.6	4.8	4.1	4.5	11.0	9.3	10.1	13.6	11.8	12.6
6	2.5	2.2	2.3	5.5	4.6	4.9	9.5	7.6	8.7	13.8	12.7	13.3
7	2.4	2.0	2.3	6.2	5.0	5.5	10.6	8.1	9.3	13.6	12.9	13.2
8	2.4	1.9	2.2	6.9	5.7	6.2	10.8	9.3	10.2	13.1	11.7	12.6
9	2.4	2.0	2.2	7.5	6.5	6.9	10.3	8.8	9.7	15.1	10.5	12.8
10	2.3	1.9	2.1	7.7	6.9	7.3	10.2	6.3	8.7	15.6	12.8	14.2
11	2.5	1.7	2.0	8.2	6.8	7.5	6.3	4.6	5.4	15.1	13.1	14.0
12	3.5	2.5	2.9	8.2	7.3	7.8	6.7	4.6	5.6	15.1	12.0	13.6
13	3.9	3.2	3.5	8.1	6.8	7.6	8.6	5.9	7.1	15.0	12.3	13.8
14	3.9	3.5	3.7	7.7	5.4	6.0	9.7	8.0	8.7	14.4	12.7	13.7
15	4.2	3.5	3.7	6.0	3.9	5.0	11.4	9.2	10.2	15.6	12.7	14.2
16	4.7	4.1	4.3	8.8	5.5	7.0	14.3	10.6	12.1	15.3	13.4	14.5
17	5.5	4.7	5.0	10.8	8.1	9.4	15.0	10.8	12.9	15.5	13.0	14.3
18	5.9	5.2	5.5	10.9	8.0	9.7	15.2	12.4	13.9	14.8	12.7	13.8
19	6.8	5.9	6.2	11.9	8.5	10.3	15.7	12.7	14.2	13.8	11.7	12.4
20	6.9	6.0	6.5	13.2	9.7	11.6	15.4	13.3	14.5	13.9	11.6	12.7
21	6.0	4.8	5.2	12.6	10.8	11.5	14.7	13.0	13.9	13.7	11.5	12.6
22	4.8	3.7	4.1	12.5	9.3	11.0	13.2	10.5	12.0	13.3	12.0	12.7
23	3.8	2.9	3.3	13.5	10.4	12.1	12.5	11.3	12.0	13.1	11.3	12.3
24	2.9	2.5	2.6	12.9	7.9	10.3	11.9	7.7	10.0	12.9	11.7	12.2
25	2.5	2.3	2.4	9.9	6.3	8.2	7.7	6.0	6.8	13.7	10.7	12.1
26	3.5	2.4	2.8	11.6	7.8	9.9	8.8	6.3	7.4	13.5	11.4	12.6
27	3.5	3.2	3.4	13.1	9.6	11.3	10.7	7.9	9.2	12.6	10.7	11.8
28	4.0	3.4	3.6	12.6	9.8	11.4	11.7	10.2	10.9	13.4	10.6	11.9
29	---	---	---	11.7	9.2	10.2	12.3	10.8	11.5	13.9	12.2	12.9
30	---	---	---	12.2	8.2	10.4	12.0	10.1	11.2	16.0	13.0	14.4
31	---	---	---	12.7	9.7	11.4	---	---	---	17.1	14.0	15.5
MONTH	6.9	1.7	3.6	13.5	3.8	8.2	15.7	4.6	10.2	17.1	9.0	12.9

ARKANSAS RIVER BASIN

07096000 ARKANSAS RIVER AT CANON CITY, CO--Continued

TEMPERATURE, WATER (DEG.C), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	16.7	14.7	15.6	17.1	14.7	16.0	20.8	17.8	19.4	19.9	17.2	18.6
2	15.8	13.7	14.8	16.4	13.8	15.3	20.5	18.7	19.7	20.2	18.0	19.2
3	15.1	13.2	14.3	16.6	14.1	15.5	20.6	17.8	19.4	21.2	19.5	20.4
4	15.6	13.3	14.4	17.2	14.8	16.0	20.1	18.3	19.2	21.4	19.2	20.3
5	15.1	13.2	14.2	16.8	15.2	16.1	19.6	17.9	18.6	20.5	18.2	19.4
6	14.6	12.3	13.5	17.2	14.3	15.8	19.1	16.4	17.7	20.3	18.0	19.0
7	13.9	12.5	13.2	17.0	14.6	16.0	17.2	15.1	16.2	19.5	16.7	18.1
8	13.4	12.4	13.0	16.2	13.8	15.2	19.0	16.0	17.5	19.5	16.6	18.1
9	13.8	11.3	12.5	16.8	14.0	15.6	18.8	17.1	18.0	18.4	17.0	17.7
10	15.3	12.3	13.7	17.7	14.6	16.2	18.1	16.4	17.1	19.2	15.8	17.4
11	15.6	12.4	14.0	17.2	16.0	16.6	17.9	15.7	16.9	18.8	16.4	17.7
12	15.0	12.9	14.0	17.8	14.6	16.2	18.7	15.2	17.0	20.1	17.1	18.5
13	15.0	12.6	13.8	18.3	15.4	17.0	18.8	16.3	17.6	19.3	16.5	17.9
14	15.7	13.3	14.5	19.5	16.5	18.2	18.1	15.7	17.0	19.8	16.8	18.1
15	14.7	12.2	13.5	19.8	17.8	18.8	18.7	15.3	17.1	18.7	15.8	17.3
16	14.3	12.3	13.3	18.8	17.0	18.1	19.0	16.3	17.8	18.3	15.4	16.8
17	15.5	12.9	14.2	18.6	15.9	17.4	19.3	17.0	18.2	18.6	15.3	16.9
18	16.9	13.7	15.3	18.1	16.3	17.2	19.4	17.5	18.4	18.3	15.7	17.0
19	16.9	14.3	15.7	18.2	15.8	17.1	19.0	16.7	18.1	18.7	15.9	17.3
20	16.6	14.2	15.6	18.6	16.6	17.5	19.4	16.6	18.1	16.8	13.2	14.6
21	16.7	13.9	15.4	19.1	16.5	17.8	19.1	16.9	18.0	13.7	12.2	13.0
22	16.5	14.4	15.5	19.5	16.4	18.0	19.7	16.6	18.2	15.3	13.1	14.2
23	17.0	14.1	15.5	19.5	17.1	18.5	20.8	17.6	19.1	14.5	13.6	14.0
24	16.6	14.4	15.5	20.2	17.4	18.9	21.2	18.1	19.5	15.3	12.5	14.0
25	16.3	14.2	15.3	20.2	17.7	19.1	21.4	18.6	19.9	16.2	13.4	14.9
26	16.8	14.2	15.5	20.4	18.0	19.0	21.1	18.3	19.7	16.1	14.3	15.3
27	15.8	14.0	15.1	20.7	17.6	18.9	20.9	18.4	19.8	17.3	14.0	15.8
28	16.8	13.7	15.1	19.2	17.4	18.2	22.0	19.2	20.6	16.8	14.3	15.6
29	17.2	14.3	15.7	19.6	17.2	18.4	21.1	19.3	20.0	16.2	13.6	15.0
30	17.5	14.5	16.1	20.5	17.3	19.0	19.3	17.6	18.2	16.4	13.7	15.2
31	---	---	---	20.9	17.2	19.0	19.8	17.1	18.4	---	---	---
MONTH	17.5	11.3	14.6	20.9	13.8	17.3	22.0	15.1	18.4	21.4	12.2	16.9

07096250 FOURMILE CREEK BELOW CRIPPLE CREEK NEAR VICTOR, CO

LOCATION.--Lat 38°03'52", long 105°13'37", in SW¼SE¼ 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 mi².

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.--Records good except for Aug. 27 to Sept. 26 and 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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	27	8.9	4.8	4.3	4.3	8.2	10	26	30	21	12
2	15	26	9.1	4.8	4.2	4.8	9.1	10	26	29	22	11
3	15	26	8.1	5.1	4.0	4.8	9.7	9.3	31	29	21	11
4	15	26	7.5	4.3	4.2	4.3	11	8.1	31	21	13	11
5	15	25	e6.5	5.5	5.6	4.7	9.2	8.8	29	19	12	11
6	15	25	e6.0	e5.0	6.8	4.7	6.1	9.5	31	19	14	12
7	15	25	e5.0	e4.5	5.7	4.7	6.7	9.7	51	19	14	12
8	15	15	e6.0	e5.0	5.2	5.2	7.1	10	54	18	13	13
9	14	10	e6.5	e5.0	6.6	5.3	7.4	11	66	18	12	13
10	14	9.4	7.0	e4.5	6.1	5.0	8.3	12	85	19	13	13
11	14	8.8	6.8	e4.0	5.6	5.4	8.9	13	62	19	13	13
12	14	8.9	6.7	e3.5	4.1	6.0	9.6	17	59	19	12	13
13	14	9.0	7.1	e3.5	4.0	6.4	9.1	16	75	15	12	14
14	14	8.8	6.8	e3.2	4.0	5.9	10	16	90	15	12	13
15	14	9.0	e6.5	e4.0	4.3	5.6	9.8	16	91	15	11	13
16	14	9.0	e6.0	e5.0	4.2	5.8	8.9	17	82	15	11	12
17	25	7.1	e6.0	6.0	4.1	5.3	8.8	15	76	15	11	13
18	26	10	e6.5	5.3	4.0	5.2	9.0	13	65	15	15	13
19	26	9.2	e6.0	5.1	4.4	4.9	9.1	18	64	14	13	13
20	27	8.6	e5.5	4.7	3.5	5.4	8.8	19	56	13	12	11
21	29	8.0	e5.0	4.3	4.1	5.2	9.8	23	41	13	11	9.1
22	27	8.4	e5.0	5.1	4.2	4.8	10	31	40	12	11	9.3
23	27	8.2	e6.0	4.3	7.4	4.9	11	40	38	11	11	9.3
24	27	7.1	6.6	4.1	7.4	5.5	11	32	44	9.7	11	8.7
25	27	7.5	6.1	5.4	5.7	4.5	11	29	42	9.8	18	9.5
26	27	6.8	5.8	3.9	4.4	6.3	11	29	42	13	25	10
27	29	7.8	5.5	3.7	5.3	6.9	13	28	39	13	18	10
28	29	7.2	4.8	4.8	4.9	7.0	15	28	36	15	16	10
29	29	8.6	4.6	3.8	---	7.9	14	31	34	17	14	9.6
30	28	8.1	4.4	4.5	---	7.4	12	31	31	34	14	9.6
31	27	---	4.7	4.2	---	8.1	---	29	---	24	14	---
TOTAL	642	380.5	193.0	140.9	138.3	172.2	292.6	589.4	1537	547.5	440	342.1
MEAN	20.7	12.7	6.23	4.55	4.94	5.55	9.75	19.0	51.2	17.7	14.2	11.4
MAX	29	27	9.1	6.0	7.4	8.1	15	40	91	34	25	14
MIN	14	6.8	4.4	3.2	3.5	4.3	6.1	8.1	26	9.7	11	8.7
AC-FT	1270	755	383	279	274	342	580	1170	3050	1090	873	679

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 1997, BY WATER YEAR (WY)

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
MEAN	16.7	13.3	8.33	7.89	6.85	7.72	20.1	61.0	58.3	27.7	19.3	15.4
MAX	21.1	21.8	16.6	15.4	11.6	9.82	40.2	149	128	75.8	37.7	30.2
(WY)	1995	1995	1996	1996	1996	1996	1994	1994	1995	1995	1995	1995
MIN	6.65	7.57	5.66	4.55	3.79	5.55	9.75	12.3	11.8	11.2	4.95	5.19
(WY)	1994	1994	1994	1997	1995	1997	1997	1996	1996	1993	1993	1993

SUMMARY STATISTICS

FOR 1996 CALENDAR YEAR

FOR 1997 WATER YEAR

WATER YEARS 1993 - 1997

ANNUAL TOTAL	4815.1	5415.5	
ANNUAL MEAN	13.2	14.8	21.9
HIGHEST ANNUAL MEAN			38.2
LOWEST ANNUAL MEAN			12.6
HIGHEST DAILY MEAN	34	May 26	91
LOWEST DAILY MEAN	4.4	Dec 30	e3.2
ANNUAL SEVEN-DAY MINIMUM	5.1	Dec 25	4.0
INSTANTANEOUS PEAK FLOW			a102
INSTANTANEOUS PEAK STAGE			a3.67
ANNUAL RUNOFF (AC-FT)	9550	10740	15880
10 PERCENT EXCEEDS	23	29	52
50 PERCENT EXCEEDS	12	10	12
90 PERCENT EXCEEDS	6.9	4.6	5.4

e-Estimated.

a-Also occurred Jun 15.

b-From rating curve extended above 127 ft³/s.

07096500 FOURMILE CREEK NEAR CANON CITY, CO

LOCATION.--Lat 38°26'11", long 105°11'27", in NE¹/₄SW¹/₄ sec.35, T.18 S., R.70 W., Fremont County, Hydrologic Unit 11020002, on left bank 1,000 ft downstream from railroad bridge, 0.6 mi upstream from mouth, and 2.8 mi east of courthouse in Canon City.

DRAINAGE AREA.--434 mi².

PERIOD OF RECORD.--April to October 1910 (gage heights and discharge measurements only), October 1948 to September 1953, November 1970 to September 1997 (discontinued). Published as "Oil or Fourmile Creek" in 1910 and as Oil Creek near Canon City, 1948-53.

REVISED RECORDS.--WDR CO-84-1: 1982(M), 1983 (M); WDR CO-85-1: 1984 (M).

GAGE.--Water-stage recorder with satellite telemetry. Concrete control since Oct. 1, 1974. Elevation of gage is 5,254 ft, above sea level, from topographic map. Apr. to Oct. 1910, nonrecording gage at site 1,200 ft upstream at different datum. Oct. 1948 to Sept. 1953, water-stage recorder at site 0.6 mi upstream at different datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. Diversions for irrigation of about 500 acres upstream from station. Water imported to basin from Arkansas River for irrigation of a few small orchards upstream from station. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	42	24	14	12	12	11	32	33	32	28	20
2	22	40	24	14	12	12	11	33	33	32	52	18
3	22	37	23	14	12	12	8.0	32	30	30	37	16
4	23	38	20	13	11	12	7.2	28	29	27	28	15
5	24	39	13	11	12	11	7.6	25	30	23	22	15
6	25	40	e12	e9.0	12	12	8.0	21	31	22	47	15
7	24	40	e10	e8.0	12	12	7.0	22	44	21	30	13
8	25	40	e12	e8.0	12	12	6.6	22	58	20	23	13
9	22	37	13	e10	12	11	7.1	22	84	20	22	13
10	18	36	13	e12	12	9.5	7.5	23	98	19	25	12
11	18	35	13	e10	12	7.0	10	22	93	20	24	15
12	18	34	12	e8.0	12	6.2	12	25	99	20	21	18
13	20	32	12	e9.0	12	5.3	12	27	101	19	20	17
14	17	32	13	e10	12	4.8	13	26	103	18	19	15
15	16	30	12	e12	11	5.9	10	23	95	18	14	13
16	19	30	12	13	9.9	4.6	9.8	23	86	18	15	12
17	23	30	e8.0	12	7.8	4.0	8.7	23	82	16	21	12
18	28	28	e9.0	13	8.9	3.7	6.8	24	72	16	29	13
19	29	29	e9.0	14	9.9	3.4	6.4	24	69	17	32	13
20	32	28	e10	14	9.8	3.2	5.8	26	63	21	24	15
21	38	26	e12	13	11	3.1	6.4	25	57	17	22	16
22	38	25	14	12	10	3.0	7.6	28	50	17	21	17
23	37	25	15	12	11	3.2	8.7	38	44	17	22	21
24	37	24	14	12	9.5	3.3	29	37	44	16	14	19
25	38	26	15	12	9.7	3.8	32	36	44	16	16	18
26	38	25	15	12	11	3.7	28	37	45	17	29	16
27	37	25	15	12	11	4.1	28	33	43	19	32	15
28	42	24	15	12	11	3.4	32	31	38	20	27	15
29	41	24	14	13	---	3.4	33	31	36	19	23	14
30	41	24	14	12	---	4.4	33	33	33	72	20	12
31	43	---	15	12	---	4.0	---	31	---	37	18	---
TOTAL	876	945	432.0	362.0	308.5	203.0	413.2	863	1767	696	777	456
MEAN	28.3	31.5	13.9	11.7	11.0	6.55	13.8	27.8	58.9	22.5	25.1	15.2
MAX	43	42	24	14	12	12	33	38	103	72	52	21
MIN	16	24	8.0	8.0	7.8	3.0	5.8	21	29	16	14	12
AC-FT	1740	1870	857	718	612	403	820	1710	3500	1380	1540	904

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1949 - 1997, BY WATER YEAR (WY)

	MEAN	MAX	(WY)	MIN	(WY)	MEAN	MAX	(WY)	MIN	(WY)	MEAN	MAX	(WY)	MIN	(WY)
1949	26.4	92.3	1985	1.74	1953	23.3	67.5	1985	3.20	1953	15.4	35.5	1978	3.77	1953
1950	12.7	28.0	1985	3.20	1952	11.7	36.2	1983	2.79	1952	12.2	36.8	1985	.94	1953
1951	11.7	36.2	1983	2.79	1952	12.2	36.8	1985	1.61	1950	27.5	103	1985	1.95	1950
1952	12.2	36.8	1985	1.61	1950	27.5	103	1985	2.25	1950	68.4	354	1980	1.71	1953
1953	27.5	354	1980	2.25	1950	68.4	354	1980	1.83	1952	49.2	207	1983	1.83	1952
1954	49.2	207	1983	1.83	1952	33.0	181	1985	1.70	1951	33.0	181	1985	1.70	1951
1955	33.0	181	1985	1.70	1951	39.0	264	1984	.85	1950	39.0	264	1984	.85	1950
1956	39.0	264	1984	.85	1950	30.8	234	1984	.85	1950	30.8	234	1984	.85	1950

SUMMARY STATISTICS

	FOR 1996 CALENDAR YEAR	FOR 1997 WATER YEAR	WATER YEARS 1949 - 1997
ANNUAL TOTAL	7425.9	8098.7	
ANNUAL MEAN	20.3	22.2	29.7
HIGHEST ANNUAL MEAN			95.1
LOWEST ANNUAL MEAN			3.04
HIGHEST DAILY MEAN	63	103	1110
LOWEST DAILY MEAN	e ^a 1.0	3.0	b
ANNUAL SEVEN-DAY MINIMUM	1.9	3.3	.00
INSTANTANEOUS PEAK FLOW		603	c
INSTANTANEOUS PEAK STAGE		4.10	d
ANNUAL RUNOFF (AC-FT)	14730	16060	21520
10 PERCENT EXCEEDS	30	38	55
50 PERCENT EXCEEDS	20	18	17
90 PERCENT EXCEEDS	11	8.0	3.5

e-Estimated.

a-Also occurred Mar 27.

b-Also occurred Sep 4-10, 1950, and Sep 23, 1951.

c-From rating curve extended above 96 ft³/s, on basis of slope-area measurement of peak flow.

d-From floodmarks, site and datum then in use.

07097000 ARKANSAS RIVER AT PORTLAND, CO

LOCATION.--Lat 38°23'18", long 105°00'56", in NE¼NE¼ 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 mi².

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 Geological Survey.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	354	457	420	399	477	601	501	579	2300	2820	1370	670
2	349	436	403	385	474	641	565	512	3450	2570	1530	637
3	345	435	414	391	462	642	527	441	4280	2310	1460	616
4	363	437	405	401	448	638	529	390	4690	2150	1380	585
5	358	440	411	372	442	654	530	360	4630	2140	1440	540
6	321	454	429	e350	458	681	500	371	4150	2050	1750	511
7	304	452	442	e340	454	682	468	423	4350	1940	2060	479
8	293	429	437	e420	443	693	488	475	4470	1870	1860	474
9	283	430	439	e460	435	796	457	495	4610	1630	1620	466
10	e260	441	441	467	433	834	426	609	4450	1340	1710	440
11	e230	423	459	463	450	766	408	718	4340	1330	1780	431
12	e220	424	446	e350	455	691	380	782	4230	1380	1760	418
13	e220	422	445	e330	462	716	375	778	e4300	1290	1650	410
14	e220	422	436	e340	452	737	369	887	4460	1250	1600	406
15	e222	422	421	e370	498	698	352	998	4350	1320	1610	398
16	e220	431	375	e360	499	651	378	1110	e3900	1540	1390	393
17	e230	466	e310	e380	510	632	394	1430	3740	1620	1260	385
18	e240	448	e280	e520	514	614	363	1650	3660	1620	e1200	377
19	275	484	e310	573	518	550	375	1830	4130	1620	1170	361
20	315	472	e370	586	516	557	375	1980	4780	1760	1040	394
21	360	461	e400	564	538	562	379	2140	5020	1730	940	480
22	355	449	e420	548	505	567	526	2290	4930	1530	834	645
23	361	441	e420	545	514	565	517	2470	4720	1450	793	651
24	385	440	e430	537	521	560	640	2350	4490	1430	665	610
25	384	419	427	538	511	565	642	2400	4210	1370	853	626
26	403	421	430	546	595	530	536	2190	3660	1260	707	616
27	442	420	457	544	577	527	562	1880	3380	1230	710	612
28	461	430	448	540	598	532	548	1530	3130	1310	689	648
29	480	413	429	537	---	544	604	1320	2950	1430	645	621
30	460	435	401	485	---	549	661	1420	2890	1530	612	602
31	461	---	395	450	---	511	---	1760	---	1450	632	---
TOTAL	10174	13154	12750	14091	13759	19486	14375	38568	122650	51270	38720	15502
MEAN	328	438	411	455	491	629	479	1244	4088	1654	1249	517
MAX	480	484	459	586	598	834	661	2470	5020	2820	2060	670
MIN	220	413	280	330	433	511	352	360	2300	1230	612	361
AC-FT	20180	26090	25290	27950	27290	38650	28510	76500	243300	101700	76800	30750

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 1997, BY WATER YEAR (WY)

MEAN	393	417	376	353	347	366	514	1204	2557	1620	951	457
MAX	1083	748	693	626	775	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 1996 CALENDAR YEAR

FOR 1997 WATER YEAR

WATER YEARS 1939 - 1997

ANNUAL TOTAL	297286	364499	
ANNUAL MEAN	812	999	804
HIGHEST ANNUAL MEAN			1387
LOWEST ANNUAL MEAN			315
HIGHEST DAILY MEAN	4320	May 20	7460
LOWEST DAILY MEAN	a220	Sep 5	66
ANNUAL SEVEN-DAY MINIMUM	223	Oct 11	76
INSTANTANEOUS PEAK FLOW			C21100
INSTANTANEOUS PEAK STAGE			12.18
ANNUAL RUNOFF (AC-FT)	589700	723000	582100
10 PERCENT EXCEEDS	2180	2290	1920
50 PERCENT EXCEEDS	429	529	460
90 PERCENT EXCEEDS	310	367	223

e-Estimated.

a-Also occurred Oct 12-14, and 16, (which were estimated days).

b-Also occurred Oct 13-14, and 16, (also estimated days).

c-From rating curve extended above 5300 ft³/s.

07097000 ARKANSAS RIVER AT PORTLAND, CO--Continued
WATER-QUALITY RECORDS

PERIOD OF RECORD.--February 1977 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1979 to current year.

WATER TEMPERATURE: October 1979 to current year.

INSTRUMENTATION.--Water-quality monitor since November 1982, with satellite telemetry.

REMARKS.--Specific conductance records fair except May 3 to Sept. 5, which are poor. Water temperature records good. Specific conductance data may not be representative of the cross section at the site during flash floods. Daily data that are not published are either missing or of unacceptable quality. 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, 1,380 microsiemens (observer), Sept. 30, 1981; minimum, 111 microsiemens, June 22, 1984.

WATER TEMPERATURES: Maximum, 26.0°C, July 27, 1987; minimum, 0.0°C, many days during winter months.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 700 microsiemens, Oct. 18; minimum, 133 microsiemens, June 22, 24.

WATER TEMPERATURES: Maximum, 24.6°C, Aug. 29; minimum, 1.0°C, Apr. 11-12.

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM @ 25 DEG. C), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	514	499	508	484	480	481	468	453	462	470	460	465
2	505	493	499	484	478	481	469	460	466	464	453	460
3	504	490	497	479	473	476	464	442	455	466	458	464
4	501	474	490	478	464	472	463	431	454	465	453	459
5	486	466	476	474	462	467	460	441	449	464	452	456
6	474	465	470	468	457	462	460	440	450	467	451	459
7	486	470	479	467	459	463	450	439	445	457	444	450
8	497	479	490	471	462	466	448	434	442	457	425	446
9	520	497	504	473	458	466	451	440	445	457	428	443
10	573	520	541	469	458	463	444	433	439	458	446	452
11	632	573	594	467	461	464	441	428	435	460	450	455
12	678	632	654	469	461	465	---	424	---	479	455	465
13	670	614	641	468	460	464	---	---	---	480	464	473
14	674	603	641	467	460	464	---	---	---	466	438	457
15	676	628	654	473	463	468	---	---	---	438	414	426
16	652	598	628	475	465	470	460	417	445	429	391	415
17	631	593	615	472	454	462	448	418	431	425	404	413
18	700	549	611	458	449	452	488	447	457	421	413	417
19	582	544	565	451	422	437	531	476	502	418	413	416
20	583	524	554	429	403	421	527	450	485	413	407	411
21	554	519	534	427	396	417	525	441	463	411	402	408
22	545	530	537	437	411	426	472	434	456	405	394	400
23	546	527	537	443	428	435	463	444	451	407	402	405
24	528	502	515	458	435	450	471	424	445	406	401	404
25	513	502	509	464	451	459	467	437	460	405	371	394
26	506	490	500	468	455	463	467	436	453	405	398	401
27	507	488	495	465	454	459	454	430	441	402	395	398
28	516	505	510	470	450	461	450	429	437	395	368	383
29	518	485	502	472	461	468	460	439	447	399	390	394
30	490	478	486	470	459	465	470	460	465	413	399	403
31	493	479	485	---	---	---	472	460	468	415	401	409
MONTH	700	465	539	484	396	459	---	---	---	480	368	429

ARKANSAS RIVER BASIN

07097000 ARKANSAS RIVER AT PORTLAND, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	16.8	11.7	14.2	9.1	5.3	6.9	4.5	1.2	2.6	6.7	3.8	5.2
2	15.3	11.3	13.1	9.6	5.0	7.1	3.5	1.2	2.1	8.2	4.4	6.1
3	14.6	10.0	12.3	9.5	6.2	7.8	2.9	1.1	1.7	8.4	5.2	6.5
4	16.1	11.2	13.5	10.5	6.9	8.5	2.5	1.1	1.5	6.4	3.4	5.0
5	17.0	11.3	14.0	10.0	6.1	7.8	3.5	1.1	2.0	3.4	1.3	2.0
6	17.5	11.9	14.6	8.0	5.8	6.9	2.4	1.7	2.0	1.6	1.1	1.2
7	16.9	11.9	14.3	7.0	4.0	5.3	4.0	1.2	2.4	1.2	1.1	1.1
8	16.8	11.3	14.0	6.5	3.0	4.7	4.9	1.3	2.9	1.2	1.1	1.1
9	16.2	10.8	13.5	8.3	4.0	6.0	6.1	2.8	4.3	1.2	1.1	1.1
10	16.4	10.5	13.7	9.1	4.5	6.7	6.7	3.8	5.1	1.2	1.1	1.1
11	17.2	11.4	14.3	9.1	5.2	6.9	7.3	4.5	5.6	1.1	1.1	1.1
12	17.4	11.6	14.5	8.3	5.0	6.4	6.7	3.6	5.0	1.2	1.1	1.1
13	17.2	---	---	8.5	5.2	6.8	6.6	3.5	4.9	1.1	1.1	1.1
14	16.5	11.8	14.1	7.4	5.6	6.4	5.0	2.5	3.6	1.1	1.1	1.1
15	16.6	11.7	14.3	6.9	5.0	5.9	3.1	1.3	2.1	1.2	1.1	1.1
16	15.5	10.8	13.1	6.4	4.4	5.6	2.7	1.1	1.5	1.2	1.1	1.1
17	12.6	9.3	11.0	5.5	3.4	4.3	1.2	1.1	1.1	1.2	1.1	1.1
18	12.2	6.2	9.3	7.9	3.5	5.4	1.2	1.1	1.1	1.8	1.1	1.3
19	13.1	7.5	10.2	9.2	4.7	6.9	1.2	1.1	1.1	4.1	1.2	2.1
20	11.4	9.1	10.3	10.1	6.0	8.0	1.2	1.1	1.1	4.2	1.3	2.3
21	9.1	6.6	7.7	8.9	5.8	7.2	1.2	1.1	1.1	4.0	1.3	2.3
22	9.4	4.3	6.8	8.6	5.1	6.7	1.3	1.1	1.2	3.5	1.1	2.0
23	9.5	5.8	7.8	7.2	5.8	6.4	2.3	1.2	1.5	4.1	1.3	2.4
24	10.5	6.0	8.2	7.2	4.3	5.7	3.0	1.1	1.7	3.5	1.2	2.0
25	10.7	6.8	8.7	6.6	3.4	4.8	3.6	1.2	2.0	3.0	1.1	1.7
26	9.4	6.1	7.9	5.0	2.7	3.6	1.9	1.1	1.4	4.8	1.5	2.9
27	7.6	4.7	5.9	4.4	1.8	2.9	4.3	1.7	2.7	2.9	1.2	1.7
28	9.2	4.6	6.8	4.8	1.2	3.0	4.2	1.3	2.5	3.6	1.1	2.0
29	9.3	5.4	7.3	4.9	2.3	3.5	5.1	1.2	2.8	3.5	1.9	2.4
30	9.8	5.7	7.6	4.7	2.2	3.3	5.0	2.4	3.7	5.1	1.2	2.9
31	7.7	6.1	6.6	---	---	---	6.6	3.1	4.8	7.2	3.0	4.9
MONTH	17.5	---	---	10.5	1.2	5.9	7.3	1.1	2.6	8.4	1.1	2.3
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	7.5	4.2	5.6	6.7	2.7	4.3	11.4	8.8	9.8	13.3	9.5	11.5
2	6.7	3.9	5.2	7.9	2.8	4.9	8.8	6.4	7.6	12.8	7.2	10.2
3	6.7	3.3	4.7	8.0	3.6	5.4	10.8	5.7	8.0	15.7	7.4	11.6
4	5.1	2.1	3.4	5.3	2.7	3.9	11.6	7.5	9.3	16.9	9.6	13.3
5	3.7	1.1	2.2	6.4	1.5	3.8	9.9	6.4	8.3	18.3	11.2	14.6
6	2.7	1.2	1.8	7.9	2.7	4.9	10.0	4.8	7.2	17.7	11.0	14.7
7	4.4	1.2	2.4	8.6	3.3	5.5	11.9	5.1	8.2	16.6	12.5	14.7
8	4.7	1.2	2.5	9.1	3.8	6.1	11.0	7.1	8.8	14.6	11.7	13.2
9	5.0	1.3	2.7	9.0	4.8	6.6	11.0	5.9	8.3	18.1	11.0	14.3
10	4.1	1.3	2.4	8.9	5.3	6.8	8.3	2.2	5.7	18.9	12.6	15.6
11	4.7	1.4	2.6	10.0	5.2	7.3	7.8	1.0	3.9	17.5	13.2	15.2
12	5.7	2.4	3.8	10.1	6.5	7.9	8.4	1.0	4.5	17.7	12.2	14.7
13	6.5	2.8	4.3	10.1	5.9	7.6	10.9	2.7	6.6	17.5	12.5	14.9
14	7.3	2.4	4.5	5.9	3.2	4.8	10.8	4.8	7.8	16.8	13.1	14.7
15	7.9	2.6	5.0	6.5	2.5	4.3	14.5	6.7	10.3	18.1	12.6	15.1
16	8.3	3.5	5.6	9.0	3.5	6.3	17.1	9.4	12.8	18.2	13.6	15.7
17	8.4	4.5	6.2	11.4	6.8	8.6	17.0	10.0	13.4	17.4	13.6	15.3
18	9.7	5.2	7.1	11.8	6.9	9.2	18.3	10.8	14.4	15.8	13.7	14.7
19	10.4	6.4	8.0	13.3	7.6	10.1	17.5	11.5	14.5	14.1	12.1	12.7
20	8.4	4.9	6.8	14.5	8.6	11.2	18.0	11.7	14.6	15.3	11.1	13.2
21	7.5	2.5	4.8	13.5	9.6	11.2	15.0	11.4	13.2	14.5	12.4	13.5
22	5.5	1.5	3.4	12.9	7.9	10.3	14.4	9.6	12.0	14.3	12.3	13.3
23	3.3	1.4	2.1	13.3	8.2	10.7	12.9	10.1	11.5	14.5	12.3	13.1
24	3.1	1.2	1.7	10.6	5.6	8.8	10.6	5.9	8.0	14.2	11.7	12.9
25	4.0	1.2	2.0	10.6	5.0	7.5	8.3	4.6	6.2	14.7	11.1	12.7
26	6.1	1.4	3.2	13.0	6.2	9.3	11.5	6.2	8.5	14.8	11.8	13.2
27	5.6	1.5	3.1	13.5	7.8	10.3	15.2	8.2	11.5	13.9	11.5	12.6
28	6.6	1.9	3.9	13.2	8.2	10.4	15.1	10.6	12.8	14.9	10.8	12.7
29	---	---	---	10.1	7.2	8.7	16.5	10.3	13.3	14.6	12.0	13.5
30	---	---	---	12.7	6.2	9.2	15.6	9.2	12.4	17.6	13.0	15.0
31	---	---	---	13.8	7.9	10.6	---	---	---	18.4	14.4	16.3
MONTH	10.4	1.1	4.0	14.5	1.5	7.6	18.3	1.0	9.8	18.9	7.2	13.8

07097000 ARKANSAS RIVER AT PORTLAND, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	17.9	15.0	16.4	18.0	15.4	16.7	22.6	19.1	20.8	22.9	18.1	20.1
2	16.3	14.8	15.4	17.4	14.8	16.1	23.0	19.5	20.7	23.0	18.9	20.6
3	15.9	14.2	15.0	17.8	14.9	16.3	22.8	19.2	20.7	23.4	19.6	21.2
4	16.3	13.7	14.9	18.7	15.6	16.9	21.9	19.6	20.5	---	19.7	---
5	15.4	13.5	14.5	18.2	16.0	16.9	19.9	18.6	19.3	---	20.5	---
6	14.8	13.0	14.1	17.8	15.5	16.4	19.5	17.2	18.5	22.2	18.3	20.2
7	14.2	13.2	13.8	18.6	15.8	16.8	18.9	16.1	17.3	22.5	17.1	19.7
8	13.9	12.6	13.1	17.7	15.4	16.2	20.8	16.5	18.3	22.4	17.1	19.7
9	13.9	11.4	12.4	18.4	14.9	16.6	21.2	17.7	19.0	20.4	17.4	18.9
10	15.3	12.3	13.7	19.4	15.4	17.2	18.5	17.4	18.0	21.7	16.6	19.0
11	15.7	12.8	14.3	19.6	16.8	17.7	19.5	17.0	18.1	21.8	16.9	19.3
12	15.6	13.5	14.6	19.9	15.5	17.4	20.0	16.1	18.0	22.4	16.9	19.6
13	15.1	13.1	14.2	20.5	16.4	18.2	20.7	17.1	18.9	21.9	17.0	19.6
14	16.4	13.9	15.0	21.8	17.3	19.3	20.1	16.7	18.2	22.4	17.2	19.7
15	15.0	12.9	14.1	22.5	18.3	20.2	20.2	16.4	18.2	21.4	16.8	19.2
16	14.9	12.7	13.7	21.4	18.1	19.4	20.9	17.3	18.8	19.5	16.5	18.2
17	16.0	13.3	14.5	20.9	17.1	18.7	21.4	17.5	19.2	20.9	16.2	18.4
18	17.4	14.1	15.5	20.5	17.3	18.4	21.3	18.5	19.8	20.6	16.0	18.5
19	17.6	15.1	16.3	19.7	16.6	17.9	21.5	17.7	19.4	20.8	16.4	18.6
20	17.3	15.2	16.2	20.4	17.3	18.7	21.9	17.7	19.6	18.1	14.1	15.6
21	17.1	14.6	15.9	21.0	17.2	18.9	22.0	17.8	19.6	14.6	13.3	13.9
22	17.2	15.1	16.2	21.1	17.4	19.1	22.3	17.3	19.6	17.1	13.6	15.1
23	17.3	14.6	16.0	21.9	18.1	19.7	23.2	18.2	20.5	16.3	14.4	15.1
24	17.3	14.9	16.2	22.3	18.5	20.2	23.9	18.6	21.0	17.6	13.7	15.4
25	---	14.6	15.8	22.1	18.9	20.3	23.8	19.0	---	18.9	14.1	16.3
26	17.7	14.9	16.1	21.9	18.7	20.2	24.1	---	---	18.5	15.0	16.7
27	16.7	14.6	15.7	22.4	18.3	20.0	24.2	19.6	21.0	19.7	15.5	17.4
28	17.0	14.2	15.7	20.8	18.7	19.5	24.1	19.6	21.7	19.0	15.2	16.9
29	18.0	14.7	16.4	21.6	18.1	19.5	24.6	20.0	21.9	18.9	14.5	16.5
30	18.1	15.5	16.8	22.0	18.7	20.2	20.8	18.5	19.6	19.0	14.5	16.6
31	---	---	---	22.1	18.6	20.4	22.2	17.7	19.6	---	---	---
MONTH	---	11.4	15.1	22.5	14.8	18.4	24.6	---	---	---	13.3	---

07099050 BEAVER CREEK ABOVE UPPER BEAVER CEMETERY, NEAR PENROSE, CO

LOCATION.--Lat 38°33'42", long 105°01'17", in SE¹/₄NW¹/₄NE¹/₄ 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 mi².

PERIOD OF RECORD.--March 1991 to current year (seasonal record). Water-quality data available, March 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 good except for estimated daily discharges, which are poor. Natural flow of creek 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.--Maximum discharge during period of seasonal operation, 659 ft³/s, June 10, 1997, gage height, 5.57 ft, from rating curve extended above 600 ft³/s; maximum gage height, 6.45 ft, May 12, 1994; minimum daily, 4.2 ft³/s, Mar. 25, 1996.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period of seasonal operation, 659 ft³/s, June 10, gage height, 5.57 ft; minimum daily, 4.5 ft³/s, Mar. 9.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	16	---	---	---	---	14	81	125	76	86	79
2	26	14	---	---	---	---	14	67	133	68	98	72
3	26	15	---	---	---	---	10	63	137	65	110	68
4	25	17	---	---	---	---	20	71	130	61	89	71
5	27	15	---	---	---	---	17	98	131	60	138	73
6	25	15	---	---	---	---	10	108	134	56	138	60
7	22	12	---	---	---	---	9.3	109	189	53	123	56
8	19	8.5	---	---	---	4.9	13	104	195	51	117	52
9	17	17	---	---	---	4.5	14	100	209	51	105	e48
10	17	16	---	---	---	5.1	15	100	538	47	118	e46
11	17	13	---	---	---	5.5	15	96	597	40	110	e48
12	17	12	---	---	---	8.1	15	102	560	43	98	e52
13	e17	13	---	---	---	9.5	14	101	520	35	90	e48
14	e15	13	---	---	---	10	11	98	388	30	81	e44
15	e14	12	---	---	---	10	13	102	362	28	73	e43
16	e12	12	---	---	---	12	14	104	349	25	66	e42
17	e14	9.4	---	---	---	14	15	107	309	23	63	e40
18	e15	13	---	---	---	14	19	112	274	26	79	40
19	16	14	---	---	---	13	19	119	261	35	75	37
20	18	14	---	---	---	18	20	120	e223	37	65	40
21	23	---	---	---	---	24	21	119	e190	38	63	43
22	16	---	---	---	---	19	19	123	e170	31	57	44
23	19	---	---	---	---	16	20	129	e160	19	61	47
24	19	---	---	---	---	16	46	128	148	22	54	45
25	18	---	---	---	---	12	24	121	136	21	58	39
26	18	---	---	---	---	11	22	120	133	23	110	36
27	21	---	---	---	---	15	34	112	121	24	84	34
28	20	---	---	---	---	16	55	111	110	46	67	32
29	25	---	---	---	---	15	71	116	94	54	68	29
30	19	---	---	---	---	11	94	120	84	110	69	28
31	19	---	---	---	---	12	---	124	---	82	71	---
TOTAL	602	---	---	---	---	---	697.3	3285	7110	1380	2684	1436
MEAN	19.4	---	---	---	---	---	23.2	106	237	44.5	86.6	47.9
MAX	27	---	---	---	---	---	94	129	597	110	138	79
MIN	12	---	---	---	---	---	9.3	63	84	19	54	28
AC-FT	1190	---	---	---	---	---	1380	6520	14100	2740	5320	2850

e-Estimated.

07099060 BEAVER CREEK ABOVE HIGHWAY 115, NEAR PENROSE, CO

LOCATION.--Lat 38°29'21", long 104°59'49", in NE¼NE¼ 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 Highway 115, and 4.7 mi north of Penrose.

DRAINAGE AREA.--138 mi².

PERIOD OF RECORD.--March 1991 to current year (seasonal record).

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 5,659.08 ft above sea level.

REMARKS.--Records fair except for estimated daily discharges and discharges below 1.5 ft³/s, which are poor. Natural flow of creek is affected by storage reservoirs, diversions for municipal use by Colorado Springs, and diversions for irrigation, mainly by the Beaver Park Irrigation Company. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge during period of seasonal operation, 611 ft³/s, May 30, 1995, gage height, 6.55 ft, from rating curve extended above 420 ft³/s; no flow many days.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period of seasonal operation, 500 ft³/s, June 10, gage height, 6.45 ft, from rating curve extended above 420 ft³/s; no flow many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.02	.02	---	---	---	---	.07	81	53	28	41	33
2	.03	.01	---	---	---	---	.07	50	58	23	51	29
3	.02	.00	---	---	---	---	.06	40	58	20	57	23
4	.02	.00	---	---	---	---	.05	41	53	16	45	25
5	.02	.00	---	---	---	---	.11	63	53	15	66	29
6	.02	.00	---	---	---	---	.06	88	52	11	66	14
7	.02	.00	---	---	---	.14	.03	83	128	9.2	60	9.0
8	.03	.00	---	---	---	.20	.03	69	126	9.8	56	7.7
9	.03	.25	---	---	---	.18	.05	63	154	9.2	50	5.5
10	.03	.30	---	---	---	.12	.08	61	438	3.1	61	3.1
11	.03	.77	---	---	---	.12	.08	57	403	.00	80	3.5
12	.02	e3.0	---	---	---	.12	.07	63	364	.00	61	7.5
13	.03	1.4	---	---	---	.12	.06	64	346	.00	48	3.8
14	.02	.65	---	---	---	.11	.06	62	280	.00	41	3.5
15	.02	.72	---	---	---	.10	.06	62	236	.00	34	1.3
16	.03	.32	---	---	---	.10	.06	62	218	.00	28	.50
17	.03	.47	---	---	---	.11	.05	63	189	.00	25	.00
18	.02	1.2	---	---	---	.12	.04	64	151	.00	35	.00
19	.02	.41	---	---	---	.10	.05	72	133	.00	34	.00
20	.02	.10	---	---	---	.11	.05	71	102	.00	22	.00
21	6.9	e.03	---	---	---	.60	.05	69	86	.00	20	3.8
22	.26	---	---	---	---	.12	.04	68	75	.00	12	3.9
23	.02	---	---	---	---	.09	.04	75	65	.00	16	7.0
24	.12	---	---	---	---	.08	56	72	61	.00	6.4	12
25	.08	---	---	---	---	.08	19	63	57	.00	8.6	11
26	.03	---	---	---	---	.08	12	61	58	.00	50	6.2
27	5.7	---	---	---	---	.07	23	54	53	.00	40	3.5
28	5.0	---	---	---	---	.07	e90	51	48	4.3	25	1.2
29	13	---	---	---	---	.07	e100	55	41	6.8	24	1.3
30	.15	---	---	---	---	.06	e90	57	34	54	25	1.6
31	.02	---	---	---	---	.06	---	55	---	41	27	---
TOTAL	31.76	---	---	---	---	---	391.32	1959	4173	250.40	1215.0	249.90
MEAN	1.02	---	---	---	---	---	13.0	63.2	139	8.08	39.2	8.33
MAX	.13	---	---	---	---	---	100	88	438	54	80	33
MIN	.02	---	---	---	---	---	.03	40	34	.00	6.4	.00
AC-FT	63	---	---	---	---	---	776	3890	8280	497	2410	496

e-Estimated.

07099215 TURKEY CREEK NEAR FOUNTAIN, CO

LOCATION.--Lat 38°36'42", long 104°53'39", in NW¹/₄SE¹/₄ sec. 33, T.16 S., R.67 W., El Paso County, Hydrologic Unit 11020002, on Fort Carson Military Reservation, on left (revised) 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 mi².

PERIOD OF RECORD.--Streamflow records, May 1978 to September 1989, May 1995 to current year. 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. Elevation of gage is 6,420 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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.33	.22	.30	.00	e.30	e.15	.00	15	5.2	5.4	3.3	2.3
2	.30	.16	.28	.00	e.20	e.15	.01	13	4.7	5.0	2.9	2.1
3	.29	.16	.31	.01	e.15	e.15	.00	10	4.2	4.5	2.5	1.9
4	.24	.13	.47	.06	e.10	e.14	.02	11	3.7	4.4	2.5	1.9
5	.22	.13	.37	e.06	e.09	e.15	.01	20	3.5	4.0	7.4	2.3
6	.18	.13	.43	e.04	e.09	e.16	.03	26	4.2	3.6	6.8	1.8
7	.16	.18	.45	e.04	e.10	.20	.05	27	12	3.2	6.3	1.6
8	.17	.14	.74	e.04	e.10	.23	.00	26	14	3.1	5.5	1.5
9	.12	.09	.12	e.02	e.15	.20	.01	24	23	3.2	4.8	1.4
10	.12	.07	.08	e.02	e.20	.19	.00	24	e380	2.5	6.4	1.4
11	.07	.05	.07	e.01	e.18	.20	.19	23	e80	2.4	6.2	1.3
12	.07	.07	.07	e.00	e.15	.20	.16	22	e50	2.4	5.9	1.3
13	.05	.06	.13	e.00	e.15	.20	.15	20	e60	2.0	5.3	1.2
14	.00	.08	.12	e.00	e.18	.24	.16	19	e30	1.7	4.6	1.1
15	.01	.09	.09	e.00	e.20	.18	.07	18	e28	1.7	3.9	1.0
16	.01	e.07	e.07	e.00	e.18	.18	.05	17	e25	1.5	3.4	.96
17	.04	e.06	e.06	e.00	e.18	.28	.00	16	22	1.3	3.2	.92
18	.06	e.06	e.04	e.00	e.20	.27	.00	15	21	1.2	3.2	.89
19	.00	e.07	e.04	e.02	e.18	.23	.00	16	19	1.3	2.9	.85
20	.02	.08	e.05	e.10	e.16	.16	.00	13	15	1.6	2.6	.83
21	.23	.11	e.07	e.15	e.15	.13	.00	12	13	1.3	2.6	.79
22	.14	.10	e.08	e.20	e.14	.14	.00	12	11	1.0	2.3	.84
23	.09	.13	e.07	e.22	e.12	.12	.00	11	10	.89	2.3	.96
24	.04	e.17	e.07	e.20	e.10	.11	2.3	10	9.2	.83	2.2	.83
25	.00	e.19	e.08	e.18	e.10	.09	6.2	8.8	8.5	.68	2.2	.79
26	.02	.25	e.06	e.20	e.12	.00	.16	8.2	8.1	.76	3.9	.77
27	.28	.28	e.08	e.12	e.12	.00	.36	7.2	7.5	.68	5.0	.71
28	.28	.30	e.10	e.10	e.13	.00	3.0	6.7	7.0	3.9	3.3	.69
29	.31	.27	.12	e.15	---	.01	14	6.5	6.5	5.2	2.9	.64
30	.26	.18	.00	e.20	---	.01	18	6.8	6.0	4.7	2.5	.67
31	.23	---	.00	e.25	---	.00	---	5.9	---	3.1	2.3	---
TOTAL	4.34	4.08	5.02	2.39	4.22	4.47	44.93	470.1	891.3	79.04	121.1	36.24
MEAN	.14	.14	.16	.077	.15	.14	1.50	15.2	29.7	2.55	3.91	1.21
MAX	.33	.30	.74	.25	.30	.28	.18	27	380	5.4	7.4	2.3
MIN	.00	.05	.00	.00	.09	.00	.00	5.9	3.5	.68	2.2	.64
AC-FT	8.6	8.1	10	4.7	8.4	8.9	89	932	1770	157	240	72

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1978 - 1997, BY WATER YEAR (WY)

	1978	1979	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
MEAN	1.42	.80	.33	.17	.15	.34	1.45	7.26	6.36	1.37	2.14	.85			
MAX	14.6	7.06	2.34	1.17	.82	1.41	8.01	36.6	29.7	5.11	13.8	6.38			
(WY)	1985	1985	1985	1985	1985	1987	1985	1980	1997	1995	1982	1982			
MIN	.000	.000	.000	.000	.000	.000	.000	.057	.006	.002	.000	.000			
(WY)	1979	1979	1979	1979	1979	1980	1981	1981	1978	1989	1989	1978			

SUMMARY STATISTICS

	FOR 1996 CALENDAR YEAR	FOR 1997 WATER YEAR	WATER YEARS 1978 - 1997
ANNUAL TOTAL	115.07	1667.23	
ANNUAL MEAN	.31	4.57	1.83
HIGHEST ANNUAL MEAN			5.53
LOWEST ANNUAL MEAN			.083
HIGHEST DAILY MEAN	a 8.5 Jul 10	e 380 Jun 10	e 380 Jun 10 1997
LOWEST DAILY MEAN	b .00 Jan 1	b .00 Oct 14	b .00 Jun 4 1978
ANNUAL SEVEN-DAY MINIMUM	b .00 Jan 1	b .00 Jan 12	b .00 Jun 9 1978
INSTANTANEOUS PEAK FLOW		c 850 Jun 10	c 850 Jun 10 1997
INSTANTANEOUS PEAK STAGE		d 6.56 Jun 10	d 6.56 Jun 10 1997
ANNUAL RUNOFF (AC-FT)	228	3310	1320
10 PERCENT EXCEEDS	.70	12	4.6
50 PERCENT EXCEEDS	.04	.24	.16
90 PERCENT EXCEEDS	.00	.01	.00

e-Estimated.

a-Also occurred Aug 24.

b-No flow many days some years.

c-From rating curve extended above 400 ft³/s on the basis of slope-area measurement of peak flow.

d-From floodmarks.

07099230 TURKEY CREEK ABOVE TELLER RESERVOIR, NEAR STONE CITY, CO

LOCATION.--Lat 38°27'54", long 104°49'33", in NE¹/₄SW¹/₄ 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 mi².

REVISED RECORDS.--WDR CO-89-1: Drainage area.

PERIOD OF RECORD.--Streamflow records, May 1978 to current year. Water-quality data available, May 1978 to September 1981.

GAGE.--Water-stage recorder with satellite telemetry and concrete control with V-notch sharp-crested weir. 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.--Records fair except for June 13 to Aug. 11, and those above 190 ft³/s, which are poor. Diversions upstream from gage for irrigation, amount unknown. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.13	.12	.24	.40	.63	.99	.90	13	14	5.0	2.0	3.6
2	.14	.10	.25	.41	.68	1.0	.93	14	13	4.5	1.6	3.3
3	.15	.10	.27	.38	.70	1.0	.92	14	12	4.0	1.4	3.0
4	.14	.10	.29	.36	.74	1.0	.92	13	11	3.5	1.5	2.8
5	.14	.12	.33	.36	.81	.98	.92	16	127	3.0	3.1	2.6
6	.13	.11	.34	.37	.85	.99	.92	25	31	2.5	e30	2.5
7	.14	.12	.37	.38	.87	.96	.89	32	16	2.0	e15	2.1
8	.14	.12	.40	.38	.92	.95	.88	35	19	1.5	e10	1.8
9	.14	.13	.40	.38	.95	.91	.90	33	25	2.0	e8.0	1.6
10	.13	.13	.41	.39	.94	.91	.92	34	506	2.0	e18	1.6
11	.14	.11	.44	.41	.97	.86	.90	33	207	2.0	15	1.3
12	.14	.12	.36	.42	1.0	.86	.92	33	133	1.5	13	1.2
13	.14	.13	.37	.43	1.0	.85	.92	32	111	2.0	11	.86
14	.14	.14	.40	.43	.97	.85	.88	30	106	1.5	10	.64
15	.13	.15	.41	.43	.99	.87	.85	29	110	1.5	8.9	.57
16	.13	.15	.43	.44	.95	.90	.85	28	81	1.5	7.6	.40
17	.13	.15	.43	.48	.95	.85	.88	27	35	1.4	6.8	.34
18	.13	.16	.43	.52	.95	.85	.79	26	32	1.3	6.4	.33
19	.14	.17	.41	.51	.98	.86	.75	28	36	1.2	6.2	.31
20	.14	.14	.41	.50	.98	.86	.73	25	31	1.6	5.1	.57
21	.15	.15	.37	.51	1.0	.88	.73	23	20	1.3	4.4	1.0
22	.15	.16	.35	.50	.98	.92	.75	22	20	1.1	3.6	.99
23	.15	.16	.33	.52	.98	.97	.77	23	23	1.4	3.1	1.4
24	.15	.17	.33	.57	.92	1.0	1.4	22	22	1.3	2.6	1.9
25	.15	.18	.34	.57	.97	1.0	1.2	20	19	1.3	2.0	1.6
26	.16	.19	.35	.55	1.0	1.0	1.1	19	13	1.2	2.3	1.3
27	.18	.21	.35	.54	.99	.95	1.2	17	9.6	1.2	4.7	1.0
28	.19	.22	.35	.60	1.0	.90	1.1	16	7.9	1.0	5.0	.82
29	.18	.22	.35	.59	---	.97	1.1	16	6.3	1.0	4.0	.78
30	.17	.21	.36	.62	---	.97	3.7	15	5.7	1.2	4.1	.61
31	.16	---	.38	.62	---	.91	---	15	---	1.0	3.6	---
TOTAL	4.53	4.44	11.25	14.57	25.67	28.77	30.62	728	1802.5	58.5	220.0	42.82
MEAN	.15	.15	.36	.47	.92	.93	1.02	23.5	60.1	1.89	7.10	1.43
MAX	.19	.22	.44	.62	1.0	1.0	3.7	35	506	5.0	30	3.6
MIN	.13	.10	.24	.36	.63	.85	.73	13	5.7	1.0	1.4	.31
AC-FT	9.0	8.8	22	29	51	57	61	1440	3580	116	436	85

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1978 - 1997, BY WATER YEAR (WY)

	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	
MEAN	3.01	1.99	.87	.67	.66	.63	1.26	12.6	11.6	2.95	3.91	1.54									
MAX	44.6	26.7	6.47	2.69	2.58	2.75	12.9	73.6	60.1	17.1	40.9	18.1									
(WY)	1985	1985	1985	1985	1985	1985	1985	1980	1997	1985	1982	1982									
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000									
(WY)	1979	1979	1979	1979	1979	1979	1979	1979	1979	1978	1990	1978									

SUMMARY STATISTICS

	FOR 1996 CALENDAR YEAR	FOR 1997 WATER YEAR	WATER YEARS 1978 - 1997
ANNUAL TOTAL	256.95	2971.67	
ANNUAL MEAN	.70	8.14	3.57
HIGHEST ANNUAL MEAN			13.1 1985
LOWEST ANNUAL MEAN			.000 1991
HIGHEST DAILY MEAN	12 Jul 10	506 Jun 10	506 Jun 10 1997
LOWEST DAILY MEAN	^a .07 Jul 6	^b .10 Nov 2	^c .00 May 18 1978
ANNUAL SEVEN-DAY MINIMUM	.09 Jul 2	.11 Nov 1	.00 May 18 1978
INSTANTANEOUS PEAK FLOW		2090 Jun 5	^d 3640 Aug 20 1982
INSTANTANEOUS PEAK STAGE		11.03 Jun 5	^f 11.51 Aug 20 1982
ANNUAL RUNOFF (AC-FT)	510	5890	2590
10 PERCENT EXCEEDS	1.3	21	5.4
50 PERCENT EXCEEDS	.40	.94	.43
90 PERCENT EXCEEDS	.14	.15	.00

e-Estimated.

a-Also occurred Jul 7-8.

b-Also occurred Nov 3-4.

c-No flow many days during most years.

d-From rating curve extended above 100 ft³/s, on the basis of slope-area measurements at gage heights 8.04 ft and 11.27 ft.

f-Maximum gage height, 11.88 ft, Jun 8, 1987, site and datum then in use.

07099233 TELLER RESERVOIR NEAR STONE CITY, CO

LOCATION.--Lat 38°26'33", long 104°49'31", in SE¼NW¼ sec.31, T.18 S., R.66 W., in Pueblo County, Hydrologic Unit 11020002, at left upstream end of dam on Turkey Creek on Fort Carson Military Reservation, 1.4 mi upstream from Booth Gulch, and 2.0 mi east of Stone City.

DRAINAGE AREA.--71.5 mi².

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 good except for June 14-20 and estimated midnight contents which are poor. Reservoir is formed by an earthfill dam completed around 1908. Maximum capacity of reservoir is 1,780 acre-ft at an uncontrolled spillway elevation of about 88 ft, 1980 survey. There is a controlled outlet from reservoir, however, considerable leakage occurs. Reservoir is used for recreation and for amphibious training for Fort Carson.

EXTREMES (at 2400) 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 (at 2400) FOR CURRENT YEAR.--Maximum contents, 1,630 acre-ft, June 10, elevation, 87.12 ft; minimum contents, 376 acre-ft, Mar. 28, Apr. 3, 8, 19-21, elevation, 76.76 ft, Apr. 20.

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY OBSERVATION AT 24:00 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	466	424	403	390	385	388	378	452	1270	1090	961	1190
2	464	423	402	389	385	388	377	478	1260	1070	930	1190
3	462	422	401	388	384	388	376	511	1260	1040	914	1190
4	460	421	400	388	384	388	378	540	1250	1020	e1000	1190
5	459	420	399	386	384	388	378	570	1390	991	e1100	1180
6	458	418	400	386	383	386	378	621	1360	965	e1130	1180
7	456	416	399	386	383	386	377	688	1290	936	e1160	1180
8	454	416	398	385	382	386	376	762	1260	931	e1180	1170
9	452	415	399	384	382	386	377	830	1270	938	e1200	1170
10	450	414	398	384	382	385	378	896	1630	942	e1220	1170
11	449	413	397	384	382	384	378	964	1520	944	e1240	1170
12	447	412	396	384	382	384	379	1030	1450	944	1240	1160
13	445	412	395	383	383	383	379	1080	1430	944	1240	1160
14	443	412	394	382	382	383	379	1140	1420	943	1230	1150
15	441	411	394	382	382	383	380	1190	1380	940	1220	1150
16	439	410	394	382	383	382	379	1240	1360	936	1220	1140
17	437	409	392	381	383	382	378	1280	1340	934	1220	1140
18	435	409	392	381	384	382	377	1290	1310	939	1210	1130
19	433	408	390	382	386	381	376	1300	1290	943	1210	1130
20	432	407	390	384	385	381	376	1300	1280	946	1200	1130
21	431	407	388	383	385	380	376	1300	1270	953	1200	1130
22	430	407	389	383	385	380	377	1300	1250	964	1190	1130
23	428	407	388	384	385	379	380	1300	1230	970	1190	1130
24	428	407	388	384	386	379	415	1300	1220	980	1180	1130
25	426	406	388	384	386	378	426	1290	1200	993	1180	1130
26	424	406	386	384	386	378	432	1290	1190	1000	1180	1120
27	428	406	388	384	388	377	435	1280	1180	1010	1180	1120
28	428	405	388	384	388	376	438	1280	1160	1020	1180	1120
29	426	405	388	384	---	378	438	1280	1140	1010	1190	1120
30	426	403	388	384	---	378	438	1280	1120	993	1190	1110
31	426	---	389	385	---	377	---	1270	---	977	1190	---
TOTAL	13683	12351	12201	11914	10755	11854	11709	32332	38980	30206	36075	34510
MEAN	441	412	394	384	384	382	390	1040	1300	974	1160	1150
MAX	466	424	403	390	388	388	438	1300	1630	1090	1240	1190
MIN	424	403	386	381	382	376	376	452	1120	931	914	1110

CAL YR 1996 TOTAL 202191 MEAN 552 MAX 676 MIN 386
WTR YR 1997 TOTAL 256570 MEAN 703 MAX 1630 MIN 376

e-Estimated.

07099235 TURKEY CREEK NEAR STONE CITY, CO

LOCATION.--Lat 38°26'22", long 104°49'34", in SW¼SW¼ sec.31, T.18 S., R.66 W., Pueblo County, Hydrologic Unit 11020002, on Fort Carson Military Reservation, on right bank, 0.2 mi downstream from Teller Reservoir Dam, 1.1 mi upstream from military road No. 11, and 2.0 mi southeast of Stone City.

DRAINAGE AREA.--71.5 mi².

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 concrete control with V-notch sharp-crested weir since Dec. 6, 1989. Elevation of gage is 5,395 ft above sea level, from topographic map. Prior to June 12, 1987, at site 0.1 mi upstream at different datum.

REMARKS.--Records are fair except Oct. 1 to July 7, which are poor. Flow regulated by Teller Reservoir 0.2 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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.14	.10	.08	.06	.04	.08	.02	.06	2.2	e1.0	.42	2.3
2	.14	.11	.07	.06	.05	.08	.02	.06	2.2	e.90	.44	2.3
3	.14	.12	.07	.05	.04	.08	.02	.07	2.1	e.80	.45	2.3
4	.14	.15	.08	.05	.05	.07	.02	.09	2.3	e.75	.53	2.3
5	.15	.12	.09	.05	.04	.07	.03	.08	2.4	e.70	1.1	2.2
6	.16	.11	.09	.05	.05	.07	.03	.10	11	e.65	1.3	2.1
7	.14	.11	.09	.05	.05	.07	.02	.12	16	e.60	1.4	2.1
8	.11	.11	.10	.05	.05	.07	.02	.15	15	e.56	1.6	2.0
9	.10	.12	.08	.05	.05	.06	.01	.22	15	.52	1.6	2.0
10	.11	.11	.08	.05	.05	.06	.02	.35	44	.51	1.6	1.9
11	.13	.12	.07	.04	.05	.05	.02	.43	52	.52	1.9	1.9
12	.14	.11	.08	.04	.06	.05	.02	.49	36	.46	1.9	1.8
13	.15	.11	.07	.04	.07	.05	.02	.51	e25	.50	1.9	1.8
14	.18	.12	.06	.05	.07	.04	.02	.59	e12	.47	2.6	1.8
15	.18	.12	.07	.04	.07	.04	.02	.67	e7.2	.48	2.6	1.7
16	.19	.14	.08	.04	.08	.04	.02	.72	e6.3	.46	2.6	1.7
17	.21	.15	.08	.04	.09	.03	.02	.74	e5.5	.47	2.6	1.6
18	.21	.13	.07	.04	.09	.03	.02	.79	e4.7	.48	2.5	1.6
19	.20	.10	.07	.04	.08	.03	.02	1.5	e4.1	.50	2.5	1.6
20	.17	.14	.08	.04	.08	.03	.02	2.2	e3.5	.53	2.5	1.6
21	.17	.13	.08	.04	.07	.03	.02	2.4	e3.1	.51	2.5	1.6
22	.17	.08	.08	.04	.08	.03	.02	2.4	e2.7	.48	2.4	1.5
23	.16	.07	.07	.05	.08	.02	.02	2.4	e2.5	.46	2.4	1.4
24	.15	.07	.07	.05	.08	.02	.02	2.6	e2.2	.45	2.4	1.4
25	.12	.08	.08	.05	.08	.02	.01	2.7	e2.0	.44	2.4	1.4
26	.12	.10	.08	.04	.08	.02	.01	2.3	e1.8	.44	2.4	1.4
27	.12	.10	.08	.04	.09	.02	.01	2.3	e1.6	.43	2.3	1.3
28	.12	.11	.06	.04	.08	.02	.05	2.3	e1.4	.41	2.3	1.3
29	.11	.11	.06	.04	---	.03	.07	2.3	e1.3	.41	2.3	1.2
30	.10	.09	.06	.04	---	.03	.07	2.2	e1.1	.42	2.3	1.2
31	.11	---	.06	.04	---	.03	---	2.3	---	.41	2.3	---
TOTAL	4.54	3.34	2.34	1.40	1.85	1.37	0.71	36.14	288.2	16.72	60.04	52.3
MEAN	.15	.11	.075	.045	.066	.044	.024	1.17	9.61	.54	1.94	1.74
MAX	.21	.15	.10	.06	.09	.08	.07	2.7	52	1.0	2.6	2.3
MIN	.10	.07	.06	.04	.04	.02	.01	.06	1.1	.41	.42	1.2
AC-FT	9.0	6.6	4.6	2.8	3.7	2.7	1.4	72	572	33	119	104

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1978 - 1997, BY WATER YEAR (WY)

	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
MEAN	.31	.30	.25	.23	.23	.23	.19	1.12	2.56	1.20	.82	.64								
MAX	1.64	1.57	1.47	1.49	1.54	1.36	.92	8.37	20.3	9.78	4.43	3.03								
(WY)	1983	1983	1983	1983	1983	1983	1983	1995	1995	1995	1995	1995								
MIN	.010	.010	.010	.010	.010	.015	.015	.011	.010	.010	.010	.010								
(WY)	1992	1992	1992	1979	1979	1992	1979	1979	1978	1991	1991	1991								

SUMMARY STATISTICS

FOR 1996 CALENDAR YEAR

FOR 1997 WATER YEAR

WATER YEARS 1978 - 1997

ANNUAL TOTAL	73.81	468.95		
ANNUAL MEAN	.20	1.28	.68	
HIGHEST ANNUAL MEAN			3.93	1995
LOWEST ANNUAL MEAN			.024	1979
HIGHEST DAILY MEAN	.33	May 25	70	May 31 1995
LOWEST DAILY MEAN	a .06	Dec 14	b .01	Apr 9
ANNUAL SEVEN-DAY MINIMUM	.07	Dec 25	.02	Apr 21
INSTANTANEOUS PEAK FLOW			c 77	Jun 10
INSTANTANEOUS PEAK STAGE			6.21	Jun 10
ANNUAL RUNOFF (AC-FT)	146	930	496	6.29
10 PERCENT EXCEEDS	.27	2.4	1.6	
50 PERCENT EXCEEDS	.22	.12	.13	
90 PERCENT EXCEEDS	.10	.03	.01	

e-Estimated.

a-Also occurred Dec 28-31.

b-Also occurred Apr 25-27.

c-From rating curve extended above 31 ft³/s.

d-From rating curve extended above 62 ft³/s.

07099350 PUEBLO RESERVOIR NEAR PUEBLO, CO

LOCATION.--Lat 38°16'15", long 104°43'30", in NE¹/₄ 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 mi².

RESERVOIR ELEVATIONS AND CONTENTS RECORDS

PERIOD OF RECORD.--January 1974 to current year.

GAGE.--Nonrecording gage. Datum of gage is 4,898.70 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 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 FOR CURRENT YEAR.--Maximum contents, 280,930 acre-ft, Mar. 16, elevation, 4,885.56 ft; minimum contents, 198,560 acre-ft, Oct. 13, elevation, 4,866.55 ft.

MONTHEND ELEVATION AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30.	4,866.54	198,520	-
Oct. 31.	4,867.00	200,290	+1,770
Nov. 30.	4,869.71	210,900	+10,610
Dec. 31.	4,875.05	232,840	+21,940
CAL YR 1996.	-	-	-42,500
Jan. 31.	4,879.40	251,960	+19,120
Feb. 28.	4,882.96	268,480	+16,520
Mar. 31.	4,882.40	265,840	-2,640
Apr. 30.	4,874.16	229,090	-36,750
May 31.	4,870.51	214,100	-14,990
June 30.	4,870.76	215,110	+1,010
July 31.	4,869.05	208,290	-6,820
Aug. 31.	4,870.54	214,220	+5,930
Sept. 30.	4,866.88	199,830	-14,390
WTR YR 1997.	-	-	+1,310

**07099350 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 SW¹/₄NW¹/₄, 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 1996 TO SEPTEMBER 1997

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)
MAY 1997							
07...	1145	--	--	--	--	1.2	--
07...	1146	0.0	515	8.5	15.5	--	7.0
07...	1147	3.0	515	8.5	15.5	--	7.0
07...	1148	6.0	517	8.4	14.5	--	6.9
07...	1149	9.0	515	8.3	14.0	--	6.7
07...	1150	12.0	512	8.2	13.5	--	6.7
07...	1151	15.0	503	8.3	12.5	--	7.1
07...	1152	18.0	501	8.3	12.0	--	7.4
07...	1153	21.0	508	8.1	12.0	--	5.8
07...	1154	22.0	511	8.0	12.0	--	5.3
JUN							
18...	1215	--	--	--	--	0.9	--
18...	1216	0.0	264	8.5	21.0	--	7.8
18...	1217	3.0	259	8.5	20.0	--	7.9
18...	1218	6.0	209	8.4	16.5	--	7.8
18...	1219	9.0	205	8.4	16.5	--	7.8
18...	1220	12.0	199	8.3	16.0	--	7.9
18...	1221	15.0	195	8.3	15.5	--	7.9
18...	1222	18.0	194	8.3	15.0	--	7.8
18...	1223	21.0	195	8.2	15.0	--	7.7
18...	1224	23.0	196	8.2	15.0	--	7.7
AUG							
19...	1310	--	--	--	--	0.6	--
19...	1311	0.0	287	8.7	23.0	--	8.6
19...	1312	3.0	288	8.7	22.5	--	8.9
19...	1313	6.0	287	8.7	22.0	--	9.0
19...	1314	9.0	287	8.7	21.5	--	9.2
19...	1315	12.0	294	8.6	20.5	--	8.1
19...	1316	15.0	314	8.3	19.0	--	7.8
19...	1317	18.0	315	8.2	18.5	--	7.5
SEP							
23...	1200	--	--	--	--	1.1	--
23...	1201	0.0	376	8.5	20.0	--	7.8
23...	1202	3.0	375	8.5	20.0	--	7.8
23...	1203	6.0	376	8.5	19.5	--	7.7
23...	1204	9.0	387	8.4	19.5	--	7.6
23...	1205	12.0	439	8.4	17.5	--	7.8
23...	1206	15.0	490	8.2	15.5	--	7.8
23...	1207	17.0	498	8.2	15.5	--	7.7

ARKANSAS RIVER BASIN

**07099350 PUEBLO RESERVOIR NEAR PUEBLO, CO--Continued
WATER-QUALITY RECORDS**

381725104494400 PUEBLO RESERVOIR SITE 3B

LOCATION.--Lat 38°17'25", long 104°49'44", in SW¹/₄SW¹/₄, 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.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

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)
MAY 1997							
07...	1120	--	--	--	--	2.7	--
07...	1121	0.0	513	8.7	15.0	--	9.1
07...	1122	3.0	513	8.7	15.0	--	9.2
07...	1123	6.0	513	8.7	14.5	--	8.8
07...	1124	9.0	505	8.5	13.5	--	8.2
07...	1125	12.0	499	8.4	12.5	--	8.0
07...	1126	15.0	494	8.4	12.0	--	8.1
07...	1127	18.0	494	8.4	12.0	--	8.0
07...	1128	21.0	496	8.3	11.5	--	7.7
07...	1129	24.0	503	8.2	11.0	--	7.1
07...	1130	27.0	506	8.2	10.5	--	6.8
07...	1131	30.0	516	8.1	10.5	--	6.2
07...	1132	31.0	520	8.0	10.5	--	6.0
JUN							
18...	1155	--	--	--	--	1.4	--
18...	1156	0.0	333	8.8	23.0	--	8.6
18...	1157	3.0	328	8.8	21.0	--	8.7
18...	1158	6.0	305	8.7	20.0	--	8.3
18...	1159	9.0	290	8.6	19.5	--	8.0
18...	1200	12.0	289	8.5	19.0	--	7.6
18...	1201	15.0	231	8.5	18.5	--	7.7
18...	1202	18.0	233	8.4	18.0	--	7.6
18...	1203	21.0	209	8.4	16.5	--	7.7
18...	1204	24.0	203	8.3	16.5	--	7.6
18...	1205	27.0	197	8.3	16.0	--	7.7
18...	1206	30.0	196	8.3	15.5	--	7.5
18...	1207	31.0	196	8.2	15.5	--	7.4
AUG							
19...	1145	--	--	--	--	1.8	--
19...	1146	0.0	301	8.6	22.5	--	8.3
19...	1147	3.0	302	8.6	22.5	--	8.2
19...	1148	6.0	302	8.6	22.0	--	8.2
19...	1149	9.0	301	8.6	22.0	--	8.2
19...	1150	12.0	301	8.6	22.0	--	8.1
19...	1151	15.0	300	8.6	22.0	--	8.0
19...	1152	18.0	295	8.6	22.0	--	7.8
19...	1153	21.0	291	8.6	22.0	--	7.8
19...	1154	24.0	288	8.5	21.0	--	7.5
19...	1155	27.0	291	8.5	20.5	--	7.0
19...	1156	28.0	293	8.3	20.0	--	6.2
SEP							
23...	1135	--	--	--	--	1.7	--
23...	1136	0.0	361	8.3	20.5	--	7.0
23...	1137	3.0	361	8.3	20.5	--	6.9
23...	1138	6.0	361	8.3	20.5	--	6.9
23...	1139	9.0	361	8.3	20.5	--	6.9
23...	1140	12.0	363	8.3	20.5	--	6.8
23...	1141	15.0	364	8.3	20.5	--	6.8
23...	1142	18.0	368	8.3	20.5	--	6.8
23...	1143	21.0	425	8.3	20.0	--	6.8
23...	1144	24.0	500	8.2	17.5	--	7.0

**07099350 PUEBLO RESERVOIR NEAR PUEBLO, CO--Continued
WATER-QUALITY RECORDS**

381647104475300 PUEBLO RESERVOIR SITE 4B

LOCATION.--Lat 38°16'47", long 104°47'53", in NW¹/₄SE¹/₄, 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 1996 TO SEPTEMBER 1997

DATE	TIME	SAMPLING DEPTH (FEET) (00003)	SPECIFIC CONDUCTANCE (US/CM) (00095)	pH	TEMPERATURE WATER (DEG C) (00010)	TRANSPARANCY (SECCHI DISK) (M) (00078)	OXYGEN, DIS-SOLVED (MG/L) (00300)
				WATER WHOLE FIELD (STANDARD ARD UNITS) (00400)			
MAY 1997							
07...	1105	--	--	--	--	5.2	--
07...	1106	0.0	498	8.6	13.5	--	8.8
07...	1107	6.0	491	8.6	12.5	--	8.8
07...	1108	12.0	487	8.5	12.0	--	8.6
07...	1109	18.0	490	8.4	11.5	--	8.3
07...	1110	24.0	491	8.4	9.0	--	8.1
07...	1111	30.0	488	8.3	9.0	--	7.9
07...	1112	36.0	487	8.3	9.0	--	7.9
07...	1113	42.0	484	8.3	9.0	--	7.9
07...	1114	48.0	486	8.3	9.0	--	7.9
07...	1115	54.0	487	8.3	8.5	--	7.7
07...	1116	58.0	488	8.3	8.5	--	7.7
JUN							
18...	1115	--	--	--	--	2.4	--
18...	1116	0.0	333	8.6	21.5	--	8.1
18...	1117	6.0	334	8.6	21.5	--	8.3
18...	1118	12.0	329	8.6	19.5	--	7.7
18...	1119	18.0	308	8.5	18.5	--	6.8
18...	1120	24.0	282	8.4	17.5	--	6.9
18...	1121	30.0	271	8.3	17.5	--	7.0
18...	1122	36.0	237	8.3	16.5	--	7.1
18...	1123	42.0	226	8.3	16.5	--	7.3
18...	1124	48.0	209	8.3	15.5	--	7.4
18...	1125	54.0	205	8.5	15.0	--	7.4
18...	1126	58.0	199	8.3	14.5	--	7.4
AUG							
19...	1105	--	--	--	--	3.5	--
19...	1106	0.0	307	8.5	22.5	--	7.5
19...	1107	6.0	307	8.5	22.5	--	7.4
19...	1108	12.0	306	8.4	22.5	--	7.4
19...	1109	18.0	307	8.4	22.0	--	7.2
19...	1110	24.0	307	8.4	22.0	--	7.0
19...	1111	30.0	306	8.3	22.0	--	6.6
19...	1112	36.0	299	8.3	21.5	--	6.5
19...	1113	42.0	296	8.2	21.0	--	6.0
19...	1114	48.0	292	8.1	20.5	--	5.7
19...	1115	54.0	291	8.1	20.0	--	5.4
19...	1116	57.0	297	8.0	20.0	--	4.8
SEP							
23...	1100	--	--	--	--	1.7	--
23...	1101	0.0	353	8.2	20.5	--	6.2
23...	1102	6.0	353	8.2	20.5	--	6.2
23...	1103	12.0	353	8.2	20.5	--	6.2
23...	1104	18.0	354	8.2	20.5	--	6.2
23...	1105	24.0	353	8.2	20.5	--	6.2
23...	1106	30.0	353	8.2	20.5	--	6.2
23...	1107	36.0	354	8.2	20.5	--	6.1
23...	1108	40.0	357	8.2	20.5	--	6.1

**07099350 PUEBLO RESERVOIR NEAR PUEBLO, CO--Continued
WATER-QUALITY RECORDS**

381559104465500 PUEBLO RESERVOIR SITE 5C

LOCATION.--Lat 38°15'59", long 104°46'55", in SW¹/₄NE¹/₄, 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.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

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)
MAY 1997							
07...	1035	--	--	--	--	4.9	--
07...	1036	0.0	486	8.4	12.5	--	8.4
07...	1037	3.0	486	8.4	12.5	--	8.4
07...	1038	6.0	486	8.4	12.0	--	8.4
07...	1039	9.0	486	8.4	12.0	--	8.4
07...	1040	12.0	486	8.4	12.0	--	8.4
07...	1041	15.0	486	8.4	12.0	--	8.3
07...	1042	18.0	485	8.4	12.0	--	8.3
07...	1043	21.0	487	8.4	11.0	--	8.3
07...	1044	24.0	488	8.4	10.5	--	8.2
07...	1045	27.0	487	8.4	10.5	--	8.2
07...	1046	30.0	488	8.4	10.5	--	8.2
07...	1047	33.0	487	8.4	10.5	--	8.1
07...	1048	36.0	488	8.4	10.0	--	8.1
07...	1049	39.0	491	8.3	9.5	--	8.0
07...	1050	41.0	491	8.3	9.5	--	7.8
JUN							
18...	1050	--	--	--	--	2.4	--
18...	1051	0.0	338	8.6	21.5	--	8.2
18...	1052	3.0	336	8.7	20.5	--	8.3
18...	1053	6.0	339	8.7	20.5	--	8.4
18...	1054	9.0	340	8.6	20.0	--	8.3
18...	1055	12.0	345	8.6	19.5	--	7.8
18...	1056	15.0	340	8.5	19.0	--	7.4
18...	1057	18.0	284	8.3	18.5	--	6.9
18...	1058	21.0	271	8.3	18.0	--	6.9
18...	1059	24.0	267	8.3	17.5	--	6.9
18...	1100	27.0	294	8.3	17.5	--	6.7
18...	1101	30.0	256	8.3	17.5	--	6.9
18...	1102	33.0	257	8.2	17.0	--	6.8
18...	1103	36.0	247	8.2	17.0	--	6.9
18...	1104	39.0	236	8.2	16.5	--	7.1
18...	1105	42.0	233	8.2	16.5	--	7.1
18...	1106	45.0	219	8.3	16.0	--	7.1
18...	1107	48.0	211	8.3	15.5	--	7.2
18...	1108	51.0	209	8.2	15.5	--	7.2
18...	1109	54.0	210	8.2	15.5	--	7.1
18...	1110	57.0	210	8.2	15.5	--	7.1
18...	1111	59.0	211	8.2	15.5	--	7.0
AUG							
19...	1030	--	--	--	--	3.8	--
19...	1031	0.0	307	8.5	22.5	--	7.5
19...	1032	3.0	307	8.5	22.5	--	7.5
19...	1033	6.0	307	8.5	22.5	--	7.5
19...	1034	9.0	307	8.5	22.5	--	7.4
19...	1035	12.0	308	8.5	22.5	--	7.4
19...	1036	15.0	307	8.4	22.5	--	7.4
19...	1037	18.0	307	8.4	22.5	--	7.2
19...	1038	21.0	307	8.4	22.5	--	7.2
19...	1039	24.0	307	8.4	22.0	--	6.9
19...	1040	27.0	307	8.3	22.0	--	6.7
19...	1041	30.0	308	8.3	22.0	--	6.3
19...	1042	33.0	307	8.2	22.0	--	6.0
19...	1043	36.0	306	8.1	21.5	--	5.5
19...	1044	39.0	306	8.1	21.0	--	5.2
19...	1045	42.0	304	8.1	21.0	--	5.0
19...	1046	45.0	304	8.0	21.0	--	5.0
19...	1047	48.0	301	8.0	20.5	--	5.0
19...	1048	51.0	299	8.0	20.5	--	4.9
19...	1049	54.0	293	8.0	20.5	--	5.4
19...	1050	57.0	294	8.0	20.5	--	5.2
19...	1051	59.0	301	8.0	20.5	--	4.4

**07099350 PUEBLO RESERVOIR NEAR PUEBLO, CO--Continued
WATER-QUALITY RECORDS**

381559104465500 PUEBLO RESERVOIR SITE 5C--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

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)
SEP 1997							
23...	1040	--	--	--	--	1.8	--
23...	1041	0.0	353	8.1	20.5	--	5.9
23...	1042	3.0	353	8.1	20.5	--	5.8
23...	1043	6.0	353	8.1	20.5	--	5.8
23...	1044	9.0	352	8.1	20.5	--	5.8
23...	1045	12.0	352	8.1	20.5	--	5.8
23...	1046	15.0	353	8.1	20.5	--	5.8
23...	1047	18.0	353	8.1	20.5	--	5.8
23...	1048	21.0	353	8.1	20.5	--	5.8
23...	1049	24.0	353	8.1	20.5	--	5.8
23...	1050	27.0	353	8.1	20.5	--	5.8
23...	1051	30.0	353	8.1	20.5	--	5.8
23...	1052	33.0	353	8.1	20.5	--	5.8
23...	1053	36.0	353	8.1	20.5	--	5.8
23...	1054	39.0	353	8.1	20.5	--	5.8
23...	1055	42.0	353	8.1	20.5	--	5.8
23...	1056	45.0	353	8.1	20.5	--	5.8
23...	1057	48.0	353	8.1	20.5	--	5.8
23...	1058	51.0	354	8.1	20.5	--	5.8
23...	1059	54.0	355	8.1	20.5	--	5.8
23...	1100	57.0	360	8.1	20.5	--	5.8
23...	1101	60.0	401	8.1	19.5	--	5.6
23...	1102	61.0	409	8.1	19.5	--	5.4

07099350 PUEBLO RESERVOIR NEAR PUEBLO, CO--Continued
WATER-QUALITY RECORDS

381548104453300 PUEBLO RESERVOIR SITE 6C

LOCATION.--Lat 38°15'48", long 104°45'33", in NE¹/₄SE¹/₄, 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, and 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 1996 TO SEPTEMBER 1997

DATE	TIME	SAM- PLING DEPTH (FEET) (00003)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	pH WATER WHOLE FIELD (STAND- ARDS UNITS) (00400)	TEMPER- ATURE WATER (DEG C) (00010)	TRANS- PAR- ENCY (SECCHI DISK) (M) (00078)	OXYGEN, DIS- SOLVED (MG/L) (00300)
MAY 1997							
07...	1015	--	--	--	--	6.4	--
07...	1016	0.0	486	8.4	12.5	--	8.3
07...	1017	6.0	486	8.4	12.0	--	8.3
07...	1018	12.0	486	8.4	11.5	--	8.3
07...	1019	18.0	484	8.4	11.0	--	8.3
07...	1020	24.0	484	8.4	11.0	--	8.4
07...	1021	30.0	485	8.4	10.5	--	8.3
07...	1022	36.0	485	8.4	10.0	--	8.3
07...	1023	42.0	486	8.4	9.5	--	8.1
07...	1024	48.0	485	8.3	9.5	--	8.0
07...	1025	54.0	484	8.3	9.0	--	8.0
07...	1026	60.0	484	8.3	9.0	--	8.0
07...	1027	66.0	485	8.3	9.0	--	7.9
07...	1028	72.0	486	8.3	9.0	--	7.8
07...	1029	78.0	487	8.3	8.5	--	7.7
07...	1030	84.0	487	8.3	8.5	--	7.7
07...	1031	90.0	487	8.2	8.0	--	7.7
07...	1032	93.0	484	8.2	8.0	--	7.6
JUN							
18...	1015	--	--	--	--	3.0	--
18...	1016	0.0	359	8.6	20.5	--	8.0
18...	1017	6.0	359	8.6	20.0	--	8.1
18...	1018	12.0	358	8.6	20.0	--	8.2
18...	1019	18.0	356	8.6	19.0	--	7.7
18...	1020	24.0	362	8.4	18.0	--	7.0
18...	1021	30.0	352	8.3	17.5	--	6.8
18...	1022	36.0	268	8.3	16.5	--	6.9
18...	1023	42.0	219	8.3	16.0	--	7.2
18...	1024	48.0	224	8.3	16.0	--	7.2
18...	1025	54.0	222	8.2	15.5	--	7.1
18...	1026	60.0	211	8.2	15.5	--	7.1
18...	1027	66.0	216	8.2	15.5	--	7.1
18...	1028	72.0	226	8.2	15.5	--	7.0
18...	1029	78.0	226	8.2	15.0	--	6.8
18...	1030	84.0	260	8.2	15.0	--	6.5
18...	1031	90.0	284	8.1	14.5	--	5.2
AUG							
19...	1000	--	--	--	--	4.0	--
19...	1001	0.0	308	8.4	22.5	--	7.4
19...	1002	6.0	308	8.4	22.5	--	7.4
19...	1003	12.0	307	8.4	22.5	--	7.4
19...	1004	18.0	307	8.4	22.5	--	7.3
19...	1005	24.0	307	8.4	22.5	--	7.3
19...	1006	30.0	307	8.4	22.0	--	6.8
19...	1007	36.0	307	8.2	21.5	--	5.7
19...	1008	42.0	309	8.0	21.0	--	4.4
19...	1009	48.0	304	8.0	20.5	--	4.5
19...	1010	54.0	305	7.9	20.5	--	4.4
19...	1011	60.0	304	7.9	20.5	--	4.3
19...	1012	66.0	295	7.9	20.0	--	4.1
19...	1013	72.0	296	7.9	20.0	--	4.7
19...	1014	78.0	300	7.9	20.0	--	4.1
19...	1015	80.0	305	7.9	20.0	--	3.7
SEP							
23...	1015	--	--	--	--	2.0	--
23...	1016	0.0	350	8.0	20.5	--	5.4
23...	1017	6.0	351	8.0	20.5	--	5.4
23...	1018	12.0	351	8.0	20.5	--	5.4
23...	1019	18.0	351	8.0	20.5	--	5.4
23...	1020	24.0	351	8.0	20.5	--	5.4
23...	1021	30.0	351	8.0	20.5	--	5.4
23...	1022	36.0	351	8.0	20.5	--	5.4
23...	1023	42.0	352	8.0	20.5	--	5.4
23...	1024	48.0	352	8.0	20.5	--	5.4
23...	1025	54.0	352	8.0	20.5	--	5.4
23...	1026	60.0	353	8.0	20.5	--	5.4
23...	1027	66.0	353	8.0	20.5	--	5.4
23...	1028	72.0	355	8.0	20.5	--	5.4
23...	1029	78.0	365	8.0	20.5	--	4.9
23...	1030	84.0	418	8.0	19.0	--	5.6
23...	1031	86.0	420	8.0	19.0	--	5.6

**07099350 PUEBLO RESERVOIR NEAR PUEBLO, CO--Continued
WATER-QUALITY RECORDS**

381602104435200 PUEBLO RESERVOIR SITE 7B

LOCATION.--Lat 38°16'02", long 104°43'52", in SE¹/₄NW¹/₄, 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.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

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)
MAY 1997							
07...	0930	--	--	--	--	3.7	--
07...	0931	0.0	486	8.3	12.0	--	8.2
07...	0932	3.0	486	8.3	12.0	--	8.2
07...	0933	6.0	485	8.3	12.0	--	8.2
07...	0934	9.0	485	8.3	12.0	--	8.2
07...	0935	12.0	485	8.3	12.0	--	8.2
07...	0936	15.0	485	8.3	11.5	--	8.2
07...	0937	18.0	486	8.3	11.0	--	8.2
07...	0938	21.0	484	8.3	11.0	--	8.2
07...	0939	24.0	484	8.3	10.5	--	8.2
07...	0940	27.0	483	8.3	10.5	--	8.2
07...	0941	30.0	482	8.3	10.0	--	8.1
07...	0942	33.0	482	8.3	9.5	--	8.1
07...	0943	36.0	482	8.3	9.5	--	8.0
07...	0944	39.0	482	8.3	9.5	--	8.0
07...	0945	42.0	481	8.3	9.5	--	7.9
07...	0946	45.0	482	8.3	9.0	--	7.9
07...	0947	48.0	481	8.3	9.0	--	7.9
07...	0948	51.0	481	8.3	9.0	--	8.0
07...	0949	54.0	482	8.3	9.0	--	8.0
07...	0950	57.0	482	8.3	9.0	--	8.0
07...	0951	60.0	482	8.3	9.0	--	8.0
07...	0952	63.0	482	8.3	9.0	--	8.0
07...	0953	66.0	482	8.3	8.5	--	7.9
07...	0954	69.0	483	8.3	8.5	--	7.9
07...	0955	72.0	483	8.3	8.5	--	7.9
07...	0956	75.0	483	8.3	8.5	--	7.9
07...	0957	78.0	483	8.2	8.5	--	7.9
07...	0958	81.0	483	8.2	8.5	--	7.9
07...	0959	84.0	483	8.2	8.5	--	7.9
07...	1000	87.0	483	8.2	8.5	--	7.9
07...	1001	90.0	483	8.2	8.5	--	7.9
07...	1002	93.0	483	8.2	8.5	--	7.9
07...	1003	96.0	484	8.2	8.5	--	7.9
07...	1004	99.0	484	8.2	8.0	--	7.9
07...	1005	102	484	8.2	8.0	--	7.8
07...	1006	105	482	8.2	8.0	--	7.9
07...	1007	108	481	8.2	8.0	--	7.8
07...	1008	111	481	8.2	7.5	--	7.7
07...	1009	114	481	8.2	7.5	--	7.6
07...	1010	116	481	8.2	7.5	--	7.4

ARKANSAS RIVER BASIN

**07099350 PUEBLO RESERVOIR NEAR PUEBLO, CO--Continued
WATER-QUALITY RECORDS**

381602104435200 PUEBLO RESERVOIR SITE 7B--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	SAMPLING DEPTH (FEET) (00003)	SPECIFIC CONDUCTANCE (US/CM) (00095)	pH		TEMPERATURE WATER (DEG C) (00010)	TRANSPAR- ENCY (SECCHI DISK) (M) (00078)	OXYGEN, DIS- SOLVED (MG/L) (00300)
				WATER WHOLE FIELD (STAND- ARD UNITS) (00400)				
JUN 1997								
18...	0930	--	--	--	--		3.0	--
18...	0931	0.0	366	8.5	19.5	--	--	7.7
18...	0932	3.0	366	8.5	19.5	--	--	7.8
18...	0933	6.0	365	8.5	19.5	--	--	7.8
18...	0934	9.0	365	8.5	19.5	--	--	7.8
18...	0935	12.0	366	8.5	19.5	--	--	7.8
18...	0936	15.0	365	8.5	19.5	--	--	7.8
18...	0937	18.0	365	8.5	19.5	--	--	7.7
18...	0938	21.0	366	8.5	19.0	--	--	7.7
18...	0939	24.0	367	8.4	18.5	--	--	7.2
18...	0940	27.0	367	8.4	18.5	--	--	7.1
18...	0941	30.0	368	8.3	18.5	--	--	6.9
18...	0942	33.0	363	8.3	18.0	--	--	6.5
18...	0943	36.0	351	8.2	17.5	--	--	6.4
18...	0944	39.0	325	8.2	16.5	--	--	6.3
18...	0945	42.0	325	8.2	16.5	--	--	6.3
18...	0946	45.0	326	8.2	16.5	--	--	6.3
18...	0947	48.0	309	8.1	16.0	--	--	6.2
18...	0948	51.0	275	8.1	16.0	--	--	6.5
18...	0949	54.0	277	8.1	16.0	--	--	6.3
18...	0950	57.0	313	8.1	16.0	--	--	6.2
18...	0951	60.0	308	8.1	16.0	--	--	6.2
18...	0952	63.0	297	8.1	15.5	--	--	6.2
18...	0953	66.0	288	8.1	15.5	--	--	6.3
18...	0954	69.0	299	8.1	15.5	--	--	6.3
18...	0955	72.0	280	8.1	15.5	--	--	6.3
18...	0956	75.0	296	8.1	15.5	--	--	6.3
18...	0957	78.0	293	8.1	15.5	--	--	6.3
18...	0958	81.0	315	8.1	15.5	--	--	6.2
18...	0959	84.0	313	8.1	15.0	--	--	6.2
18...	1000	87.0	310	8.1	15.0	--	--	6.2
18...	1001	90.0	309	8.1	14.5	--	--	6.1
18...	1002	93.0	308	8.1	14.5	--	--	6.0
18...	1003	96.0	318	8.0	14.0	--	--	5.9
18...	1004	99.0	336	8.0	14.0	--	--	5.8
18...	1005	102	370	8.0	13.0	--	--	5.7
18...	1006	105	410	8.0	12.5	--	--	5.5
18...	1007	108	428	7.9	12.0	--	--	5.2
18...	1008	111	448	7.9	11.5	--	--	5.1
18...	1009	114	469	7.9	10.5	--	--	4.7
18...	1010	117	475	7.9	10.5	--	--	4.6
18...	1011	120	477	7.9	10.5	--	--	4.6

**07099350 PUEBLO RESERVOIR NEAR PUEBLO, CO--Continued
WATER-QUALITY RECORDS**

381602104435200 PUEBLO RESERVOIR SITE 7B--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

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 1997							
19...	0920	--	--	--	--	3.7	--
19...	0921	0.0	308	8.3	22.0	--	6.8
19...	0922	3.0	308	8.3	22.0	--	6.8
19...	0923	6.0	307	8.3	22.0	--	6.8
19...	0924	9.0	308	8.3	22.0	--	6.8
19...	0925	12.0	307	8.3	22.0	--	6.8
19...	0926	15.0	307	8.3	22.0	--	6.8
19...	0927	18.0	308	8.3	22.0	--	6.8
19...	0928	21.0	308	8.3	22.0	--	6.8
19...	0929	24.0	308	8.3	22.0	--	6.8
19...	0930	27.0	308	8.3	22.0	--	6.7
19...	0931	30.0	308	8.3	22.0	--	6.8
19...	0932	33.0	308	8.3	22.0	--	6.7
19...	0933	36.0	308	8.3	22.0	--	6.3
19...	0934	39.0	309	8.2	22.0	--	5.7
19...	0935	42.0	311	8.1	21.5	--	5.2
19...	0936	45.0	312	8.0	21.5	--	4.2
19...	0937	48.0	309	7.9	21.0	--	3.5
19...	0938	51.0	309	7.9	20.5	--	3.4
19...	0939	54.0	308	7.9	20.5	--	3.2
19...	0940	57.0	307	7.9	20.5	--	3.2
19...	0941	60.0	312	7.9	20.5	--	3.2
19...	0942	63.0	309	7.9	20.0	--	3.3
19...	0943	66.0	308	7.9	20.0	--	3.4
19...	0944	69.0	319	7.9	20.0	--	3.4
19...	0945	72.0	311	7.9	20.0	--	3.4
19...	0946	75.0	315	7.9	20.0	--	3.3
19...	0947	78.0	312	7.9	20.0	--	3.3
19...	0948	81.0	314	7.9	19.5	--	3.3
19...	0949	84.0	312	7.9	19.5	--	3.0
19...	0950	87.0	311	7.9	19.5	--	2.5
19...	0951	90.0	308	7.9	19.0	--	2.3
19...	0952	93.0	307	7.9	19.0	--	2.1
19...	0953	96.0	303	7.9	19.0	--	1.9
19...	0954	99.0	298	7.9	18.5	--	1.6
19...	0955	102	297	7.8	18.5	--	1.5
19...	0956	105	291	7.8	18.5	--	1.2
19...	0957	108	288	7.8	18.0	--	0.6
19...	0958	111	287	7.8	17.5	--	0.1
19...	0959	114	286	7.8	17.0	--	0.1
SEP							
23...	0910	--	--	--	--	2.0	--
23...	0911	0.0	351	7.8	20.5	--	5.1
23...	0912	3.0	351	7.8	20.5	--	5.1
23...	0913	6.0	350	7.8	20.5	--	5.1
23...	0914	9.0	350	7.8	20.5	--	5.0
23...	0915	12.0	350	7.8	20.5	--	5.0
23...	0916	15.0	350	7.8	20.5	--	5.0
23...	0917	18.0	350	7.8	20.5	--	5.0
23...	0918	21.0	350	7.8	20.5	--	5.0
23...	0919	24.0	350	7.8	20.5	--	5.0
23...	0920	27.0	349	7.9	20.5	--	5.0
23...	0921	30.0	349	7.8	20.5	--	5.0
23...	0922	33.0	349	7.8	20.5	--	5.0
23...	0923	36.0	349	7.9	20.5	--	5.0
23...	0924	39.0	349	7.9	20.5	--	5.0
23...	0925	42.0	349	7.9	20.5	--	5.0
23...	0926	45.0	349	7.9	20.5	--	5.0
23...	0927	48.0	349	7.9	20.5	--	5.0
23...	0928	51.0	349	7.9	20.5	--	4.9
23...	0929	54.0	350	7.9	20.5	--	4.9
23...	0930	57.0	349	7.9	20.5	--	4.9
23...	0931	60.0	349	7.9	20.5	--	4.8
23...	0932	63.0	349	7.9	20.5	--	4.9
23...	0933	66.0	349	7.9	20.5	--	4.9
23...	0934	69.0	349	7.9	20.5	--	4.9
23...	0935	72.0	349	7.9	20.5	--	4.8
23...	0936	75.0	350	7.9	20.5	--	4.6
23...	0937	78.0	354	7.8	20.5	--	3.1
23...	0938	81.0	356	7.8	20.5	--	2.5
23...	0939	84.0	352	7.7	20.5	--	2.2
23...	0940	87.0	344	7.7	20.0	--	1.8
23...	0941	90.0	345	7.7	20.0	--	1.3
23...	0942	93.0	340	7.7	20.0	--	0.9
23...	0943	96.0	339	7.6	20.0	--	0.9
23...	0944	99.0	335	7.6	20.0	--	0.4
23...	0945	102	333	7.6	19.5	--	0.2
23...	0946	105	332	7.6	19.5	--	0.2
23...	0947	108	331	7.6	19.5	--	0.1
23...	0948	111	331	7.6	19.0	--	0.1
23...	0949	114	330	7.6	19.0	--	0.1

ARKANSAS RIVER BASIN

07099400 ARKANSAS RIVER ABOVE PUEBLO, CO

LOCATION.--Lat 38°16'18", long 104°43'03", in SE¼NE¼ 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 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Streamflow records, October 1965 to current year. Water-quality data available, October 1965 to September 1970, December 1985 to current year. Sediment data available October 1965 to September 1970. 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 poor. 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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	162	464	82	83	313	261	1360	808	1800	2380	921	573
2	163	445	83	83	314	261	1350	911	2690	2210	962	578
3	163	444	83	85	281	278	1180	824	3620	2130	1010	579
4	151	445	82	85	216	289	1100	632	e4100	2080	1150	541
5	146	410	82	85	172	200	1120	567	e4310	1920	1370	726
6	146	363	83	85	107	184	1120	567	e4460	1580	1460	828
7	146	305	83	85	88	218	1150	616	e3550	1430	1550	811
8	146	286	83	86	88	253	1170	699	e4020	1400	1570	590
9	146	369	83	86	86	253	1110	730	e4320	1400	1320	363
10	147	430	82	86	86	328	1030	899	e1690	1400	1430	318
11	e88	442	81	86	86	488	1010	954	e3790	1290	1660	318
12	e64	404	81	86	86	570	968	1060	e4710	1260	1720	317
13	e64	265	81	87	85	456	928	1220	e3550	1380	1630	318
14	e64	166	82	88	85	344	924	1260	3330	1360	1490	317
15	64	114	82	88	85	426	924	1310	3800	1160	1260	340
16	64	115	82	88	84	565	941	1380	4790	1060	1170	358
17	64	116	82	88	83	766	986	1560	4960	1050	1170	392
18	64	100	82	88	83	765	1060	1710	5110	1130	1120	390
19	64	92	82	88	83	775	1120	1820	4710	1300	1000	391
20	64	93	81	88	135	806	1140	1860	5180	1290	881	388
21	71	95	81	88	224	818	1180	1910	5400	1490	758	386
22	101	95	82	231	259	945	1210	1930	5600	1660	568	452
23	174	96	82	316	260	940	1190	2060	5910	1680	486	615
24	280	98	82	317	260	903	634	2140	4960	1660	398	717
25	364	98	82	317	260	964	659	2150	4170	1570	345	762
26	390	98	83	317	260	1040	677	2150	3630	1410	383	824
27	389	87	83	316	260	1060	618	2150	3180	1190	418	759
28	448	81	83	315	260	1190	507	1900	2870	1110	468	728
29	476	82	83	312	---	1290	563	1430	2650	895	537	653
30	478	82	83	313	---	1280	735	1170	2490	678	573	367
31	477	---	83	313	---	1330	---	1360	---	922	574	---
TOTAL	5828	6780	2549	4879	4689	20246	29664	41737	119350	44475	31352	15699
MEAN	188	226	82.2	157	167	653	989	1346	3978	1435	1011	523
MAX	478	464	83	317	314	1330	1360	2150	5910	2380	1720	828
MIN	64	81	81	83	83	184	507	567	1690	678	345	317
AC-FT	11560	13450	5060	9680	9300	40160	58840	82790	236700	88220	62190	31140

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 1997, 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	365	251	155	178	227	320	587	1188	2471	1718	1052	467												
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 1996 CALENDAR YEAR	FOR 1997 WATER YEAR	WATER YEARS 1975 - 1997
ANNUAL TOTAL	271060	327248	
ANNUAL MEAN	741	897	a-750
HIGHEST ANNUAL MEAN			1227
LOWEST ANNUAL MEAN			265
HIGHEST DAILY MEAN	3710	Jun 11	b-5910
LOWEST DAILY MEAN	c-64	Oct 12	c-47
ANNUAL SEVEN-DAY MINIMUM	64	Oct 12	d-49
INSTANTANEOUS PEAK FLOW		6060	f-10100
INSTANTANEOUS PEAK STAGE		7.29	g-9.40
ANNUAL RUNOFF (AC-FT)	537600	649100	543300
10 PERCENT EXCEEDS	1990	2070	1910
50 PERCENT EXCEEDS	445	477	395
90 PERCENT EXCEEDS	83	83	88

e-Estimated.

a-Average discharge for 8 years (water years 1966-73), 643 ft³/s; 465900 acre-ft/yr, prior to completion of Pueblo Dam.

b-Also the maximum daily discharge for period of record.

c-Also occurred Oct 13-20.

d-Minimum daily discharge for period of record, 28 ft³/s, May 11, 1967.

f-Present site and datum, from rating curve extended above 1600 ft³/s, on basis of slope-area measurement of peak flow.

g-From floodmarks.

**07099400 ARKANSAS RIVER ABOVE PUEBLO, 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 good. Records for daily water temperature are good. Daily data not published are either missing or of unacceptable quality. 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.

EXTREMES FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 814 microsiemens, Nov. 14, 1990; minimum, 223 microsiemens, 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, 598 microsiemens, Dec. 27; minimum, 245 microsiemens, July 2.

WATER TEMPERATURE: Maximum, 20.5°C, Sept. 22; minimum, 2.6°C, Jan. 17.

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM @ 25 DEG. C), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	443	433	437	456	444	449	559	534	545	573	555	561
2	444	438	442	465	455	459	552	530	541	575	553	559
3	442	437	440	468	460	464	554	535	542	569	553	560
4	447	434	440	467	452	461	559	536	545	568	549	558
5	444	429	439	476	462	468	561	539	549	569	547	554
6	450	436	443	493	470	482	568	546	552	567	549	556
7	454	444	448	479	450	461	566	541	553	572	547	555
8	454	437	447	489	459	469	577	548	559	560	544	551
9	449	428	440	465	443	453	581	550	564	567	549	555
10	444	430	439	458	449	454	580	554	564	560	548	554
11	524	431	481	466	456	459	579	552	564	564	545	553
12	531	484	499	476	465	470	594	554	570	568	544	555
13	506	475	485	505	468	488	584	557	566	581	549	562
14	493	466	477	568	485	503	578	560	566	581	546	559
15	497	462	474	521	507	513	583	556	564	586	550	561
16	488	460	469	521	507	513	587	559	570	575	548	560
17	470	448	460	512	498	505	577	560	566	583	545	559
18	477	452	464	535	494	514	568	556	561	584	544	555
19	480	461	466	545	505	520	570	557	562	577	543	555
20	471	456	465	541	505	522	572	559	565	575	548	559
21	486	461	469	533	502	514	585	563	569	571	541	553
22	470	435	456	538	509	522	577	558	568	554	501	520
23	455	427	439	537	516	527	572	557	565	511	501	504
24	449	426	441	541	514	526	592	557	567	514	506	509
25	460	438	452	545	518	532	586	560	571	521	509	513
26	458	427	440	541	516	524	590	558	568	520	505	511
27	452	443	448	555	516	537	598	560	571	517	508	511
28	452	434	441	547	529	537	580	559	566	516	507	510
29	441	431	437	546	528	536	574	556	565	518	507	510
30	442	437	440	546	531	539	566	554	560	514	504	508
31	447	440	443	---	---	---	575	555	561	509	502	505
MONTH	531	426	454	568	443	497	598	530	561	586	501	542

07099400 ARKANSAS RIVER ABOVE PUEBLO, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	19.0	17.9	18.3	13.5	12.8	13.2	9.4	7.8	8.4	6.1	4.9	5.3
2	18.6	17.6	18.0	13.1	12.4	12.7	8.9	7.6	8.1	6.7	5.0	5.6
3	18.7	17.7	18.0	12.7	12.3	12.5	9.0	7.4	7.9	6.0	5.1	5.4
4	18.9	17.8	18.2	13.0	12.2	12.5	8.7	7.1	7.7	6.1	4.7	5.2
5	19.0	17.7	18.1	12.5	11.9	12.2	8.7	7.2	7.7	5.1	4.5	4.7
6	18.8	17.7	18.1	12.2	11.7	11.9	7.7	7.3	7.5	5.6	4.0	4.6
7	18.7	17.6	18.0	12.6	11.7	12.1	8.4	7.0	7.5	5.4	3.9	4.4
8	18.8	17.5	18.0	12.4	11.4	11.9	8.1	7.0	7.4	5.3	4.1	4.4
9	18.7	17.5	17.9	12.2	11.6	11.8	8.2	6.9	7.4	5.4	3.9	4.4
10	18.7	17.4	17.9	12.0	11.3	11.6	8.3	6.8	7.3	4.3	3.7	4.0
11	19.2	17.4	18.0	11.5	10.7	11.2	8.4	7.0	7.5	4.3	3.2	3.7
12	19.2	17.1	17.8	11.1	10.6	10.8	8.4	6.8	7.3	4.4	3.1	3.5
13	19.3	17.1	17.9	11.1	10.0	10.5	8.1	6.8	7.2	4.1	3.2	3.5
14	19.1	17.1	17.7	10.4	9.9	10.1	7.9	6.4	6.9	4.3	3.1	3.5
15	19.3	16.8	17.7	10.0	9.7	9.8	7.5	6.3	6.7	4.7	2.9	3.6
16	19.2	16.6	17.4	9.9	9.4	9.7	7.3	5.7	6.3	4.0	2.8	3.2
17	18.3	16.1	17.0	10.4	9.4	9.8	6.7	5.4	5.8	4.4	2.6	3.3
18	18.4	15.8	16.7	10.9	9.5	10.1	6.3	4.9	5.4	4.3	3.0	3.6
19	17.9	15.9	16.5	11.2	9.8	10.2	6.0	4.9	5.3	4.8	3.3	3.8
20	17.8	15.4	16.2	11.0	9.7	10.1	6.3	4.9	5.4	4.7	3.2	3.7
21	16.5	15.2	15.6	10.7	9.6	9.9	6.0	5.2	5.5	4.5	3.1	3.6
22	16.8	14.7	15.6	10.3	9.4	9.7	6.2	5.3	5.6	3.7	2.9	3.2
23	16.3	15.2	15.6	9.7	9.2	9.5	5.5	4.8	5.2	3.8	3.1	3.4
24	15.9	14.9	15.4	10.2	9.1	9.4	6.4	4.7	5.2	3.7	3.1	3.3
25	15.2	14.5	14.8	10.2	9.0	9.3	6.0	4.6	5.3	3.7	3.1	3.3
26	15.5	14.5	14.9	9.6	8.8	9.0	5.6	4.4	4.8	3.7	3.1	3.3
27	14.8	14.4	14.6	9.7	8.6	8.9	6.2	4.7	5.3	3.3	3.0	3.2
28	14.8	14.4	14.5	9.9	8.3	8.9	6.2	4.3	5.2	3.6	2.9	3.1
29	14.5	14.0	14.2	9.8	8.3	8.8	6.2	4.8	5.3	3.6	3.0	3.2
30	14.4	13.8	14.0	9.2	8.1	8.5	5.8	4.8	5.3	3.8	3.0	3.3
31	13.8	13.3	13.6	---	---	---	6.4	4.9	5.4	4.0	3.3	3.6
MONTH	19.3	13.3	16.7	13.5	8.1	10.6	9.4	4.3	6.4	6.7	2.6	3.9
DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	4.0	3.4	3.6	4.3	3.4	3.8	6.8	6.3	6.6	9.2	8.0	8.4
2	3.8	3.2	3.5	4.5	3.6	3.9	6.7	6.3	6.5	9.4	8.3	8.9
3	4.0	3.3	3.5	4.8	3.7	4.1	7.1	6.6	6.8	9.3	8.5	8.8
4	4.0	3.3	3.5	4.4	3.7	3.9	7.2	6.6	6.9	9.3	8.7	8.9
5	4.0	3.3	3.5	4.6	3.5	4.0	7.1	6.6	6.8	9.2	8.4	8.8
6	3.7	3.2	3.4	4.8	3.6	4.1	7.0	6.6	6.8	9.2	8.4	8.8
7	4.6	3.1	3.6	5.1	3.9	4.4	7.3	6.7	7.0	9.1	8.6	8.8
8	4.8	3.0	3.6	4.9	3.9	4.4	7.2	6.7	7.0	9.1	8.4	8.8
9	4.9	3.0	3.6	5.2	4.2	4.5	7.3	6.8	7.0	9.5	8.8	9.1
10	4.6	3.1	3.6	5.2	4.1	4.6	7.1	6.9	7.0	9.5	8.8	9.0
11	4.8	3.1	3.6	5.0	4.3	4.5	7.3	6.8	7.0	9.6	8.8	9.1
12	4.7	3.3	3.7	5.2	4.5	4.8	7.3	6.7	6.9	9.8	9.0	9.3
13	4.7	3.2	3.7	5.7	4.6	4.9	7.3	6.7	6.9	9.8	9.0	9.3
14	5.0	3.0	3.7	4.9	4.5	4.7	7.5	6.8	7.1	9.8	8.9	9.3
15	5.1	3.0	3.8	5.2	4.5	4.7	7.7	7.2	7.4	9.9	9.0	9.4
16	5.0	3.0	3.7	5.7	4.6	5.1	7.7	7.2	7.4	9.9	9.2	9.5
17	4.9	3.3	3.9	5.6	4.9	5.2	7.8	7.1	7.3	9.7	9.2	9.4
18	5.2	3.3	4.0	5.6	4.9	5.2	7.7	7.1	7.3	9.9	9.4	9.6
19	5.3	3.6	4.2	5.7	5.0	5.3	7.7	7.2	7.4	10.0	9.3	9.6
20	4.5	3.4	3.8	5.7	5.1	5.3	7.6	7.2	7.3	9.8	9.4	9.5
21	4.4	3.6	3.9	5.6	5.0	5.2	7.6	6.3	7.3	9.9	9.3	9.7
22	4.3	3.4	3.8	5.5	5.0	5.2	7.6	7.1	7.3	10.2	9.6	10.0
23	3.9	3.6	3.7	5.6	4.9	5.2	7.6	7.2	7.4	10.0	9.6	9.8
24	4.2	3.3	3.7	5.4	5.0	5.1	7.4	6.9	7.2	10.3	9.8	10.1
25	4.3	3.3	3.7	5.7	5.1	5.4	7.8	7.2	7.5	10.4	9.7	10.0
26	4.2	3.4	3.7	5.9	5.4	5.6	8.1	7.6	7.8	11.0	9.7	10.5
27	4.1	3.3	3.6	7.5	5.4	6.3	8.3	7.4	7.7	10.9	9.9	10.4
28	4.4	3.4	3.7	6.5	6.1	6.3	8.3	7.5	7.8	11.0	10.2	10.7
29	---	---	---	6.5	6.0	6.3	8.5	7.5	7.9	10.7	10.3	10.5
30	---	---	---	6.7	6.2	6.4	8.7	7.7	8.1	11.1	10.4	10.7
31	---	---	---	6.8	6.3	6.5	---	---	---	11.2	10.4	10.7
MONTH	5.3	3.0	3.7	7.5	3.4	5.0	8.7	6.3	7.2	11.2	8.0	9.5

07099969 ARKANSAS RIVER AT ST. CHARLES MESA DIVERSION AT PUEBLO, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 38°15'13", long 104°36'20", in SW¹/₄NW¹/₄ 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 mi².

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 good except for Dec. 8-10, which are poor. Daily data not published are either missing or of poor quality. Specific conductance data is not representative of the cross section at the site "and is more representative of flow entering diversion". Specific conductance data representative of the cross section at the site is published as Arkansas River at Moffat Street at Pueblo (07099970) since water year 1991.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 1,980 microsiemens, Nov. 24, 1988; minimum, 225 microsiemens, Aug. 25, 1995.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 1,550 microsiemens, Oct. 17-18; minimum, 250 microsiemens, Aug. 5.

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM @ 25 DEG.C), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	716	684	697	597	577	585	867	839	852	---	---	---
2	712	689	701	602	587	592	860	841	854	---	---	---
3	711	697	704	605	590	598	883	829	849	---	---	---
4	735	700	717	607	588	598	904	818	864	---	---	---
5	743	713	732	628	598	607	924	878	903	---	---	---
6	754	717	740	641	608	622	920	826	857	---	---	---
7	769	733	753	655	622	637	865	841	854	---	---	---
8	775	728	751	643	612	628	854	840	847	---	---	---
9	776	713	752	641	596	618	869	846	855	---	---	---
10	786	726	758	604	587	597	886	875	878	---	---	---
11	916	718	761	613	591	600	882	844	869	---	---	---
12	976	862	921	624	601	611	874	816	849	---	---	---
13	1240	930	1030	700	612	638	863	811	845	---	---	---
14	1250	1010	1210	741	673	693	863	830	854	---	---	---
15	1350	1250	1330	778	741	767	860	824	844	---	---	---
16	1470	1350	1410	768	738	755	867	821	847	---	---	---
17	1550	1450	1490	757	737	746	866	796	836	---	---	---
18	1550	850	1160	758	727	744	899	795	852	---	---	---
19	1090	982	1030	779	723	746	---	---	---	---	---	---
20	1110	1030	1080	825	779	803	---	---	---	---	---	---
21	1120	945	1020	845	793	819	---	---	---	---	---	---
22	955	791	891	851	826	839	---	---	---	---	---	---
23	803	647	749	853	737	814	---	---	---	---	---	---
24	659	603	636	805	774	794	---	---	---	---	---	---
25	648	603	622	817	780	799	---	---	---	627	616	621
26	647	570	604	835	789	813	---	---	---	629	612	623
27	605	553	586	853	791	818	---	---	---	628	611	619
28	599	569	587	874	834	856	---	---	---	635	610	619
29	650	567	594	870	842	857	---	---	---	631	617	623
30	596	571	582	861	823	844	---	---	---	630	616	626
31	596	580	587	---	---	---	---	---	---	643	626	634
MONTH	1550	553	845	874	577	715	---	---	---	---	---	---

07099969 ARKANSAS RIVER AT ST. CHARLES MESA DIVERSION AT PUEBLO, CO--Continued

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM @ 25 DEG. C), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	637	620	628	627	611	619	506	502	504	596	570	585
2	631	618	625	630	606	618	506	501	503	583	538	564
3	644	619	627	642	610	623	533	499	515	618	547	573
4	666	644	659	635	592	603	531	514	522	618	584	599
5	689	649	662	655	615	632	532	513	520	621	597	614
6	749	689	711	653	629	640	527	519	522	617	596	609
7	759	733	750	648	623	636	522	508	517	620	598	611
8	795	721	751	636	607	622	523	515	519	612	583	599
9	812	735	772	638	612	625	531	511	520	603	590	597
10	800	720	767	637	585	616	539	526	533	601	554	577
11	787	726	753	595	574	587	552	529	537	572	555	562
12	779	741	758	583	563	572	549	530	538	571	540	557
13	772	742	759	603	559	578	549	532	540	544	524	537
14	780	718	755	606	589	596	549	532	541	543	527	535
15	773	746	763	598	574	589	549	533	543	538	526	533
16	776	733	759	586	557	573	555	534	544	536	524	531
17	778	751	767	571	544	561	545	526	538	531	516	525
18	795	744	770	559	531	544	541	523	533	526	517	523
19	795	753	776	557	537	546	534	514	525	526	520	523
20	786	682	745	550	536	542	528	516	523	525	520	522
21	682	623	647	552	536	545	528	460	517	528	520	524
22	627	612	619	548	530	538	520	510	516	527	522	525
23	649	621	628	545	538	540	526	513	519	546	520	526
24	711	613	637	559	537	543	602	365	484	528	522	525
25	636	615	625	552	523	537	639	556	614	530	520	525
26	632	613	624	530	519	524	632	603	620	532	522	527
27	631	618	625	529	509	522	637	613	624	535	526	530
28	629	608	624	521	503	512	639	610	628	543	526	533
29	---	---	---	514	498	506	642	604	625	576	534	549
30	---	---	---	510	503	506	624	583	607	583	569	576
31	---	---	---	509	499	504	---	---	---	582	541	560
MONTH	812	608	700	655	498	571	642	365	543	621	516	554
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	543	527	536	316	290	304	447	374	389	499	451	471
2	535	509	522	---	---	---	385	371	379	480	457	471
3	518	502	511	---	---	---	386	371	379	484	455	473
4	511	490	498	378	289	301	386	328	367	483	463	473
5	493	468	475	309	299	304	377	250	337	483	438	463
6	487	449	464	330	302	314	415	254	357	451	433	441
7	483	358	447	331	319	325	373	343	354	451	434	442
8	462	431	448	340	321	328	354	344	348	491	442	461
9	451	431	439	335	318	327	395	324	356	525	488	505
10	729	429	536	331	319	323	478	270	368	534	497	521
11	737	373	436	346	316	332	417	264	356	541	494	523
12	381	327	364	348	324	336	387	331	371	537	500	523
13	384	335	364	334	318	326	411	364	369	536	501	519
14	388	366	374	337	318	326	378	363	370	531	502	517
15	384	350	367	356	328	339	407	372	388	526	479	502
16	366	350	358	356	338	348	408	393	398	518	487	506
17	359	341	349	353	340	346	402	394	398	515	491	505
18	344	331	336	350	325	341	407	397	401	511	486	503
19	340	313	330	331	317	321	437	403	416	513	500	506
20	332	304	314	337	319	322	437	415	427	566	430	507
21	312	289	299	334	302	316	---	---	---	519	456	501
22	313	299	307	---	---	---	489	447	464	530	445	507
23	310	287	295	---	---	---	485	469	476	502	471	488
24	314	295	301	---	---	---	512	471	485	487	472	480
25	310	296	304	---	---	---	523	495	511	500	482	488
26	320	302	310	346	325	332	506	478	493	502	471	486
27	314	299	305	367	341	350	518	478	494	516	411	505
28	311	300	306	383	350	360	497	469	484	519	511	516
29	318	303	311	415	334	378	586	448	486	528	509	515
30	317	302	308	660	334	483	487	451	465	581	528	563
31	---	---	---	394	379	385	548	307	461	---	---	---
MONTH	737	287	384	---	---	---	---	---	---	581	411	496

07099970 ARKANSAS RIVER AT MOFFAT STREET, AT PUEBLO, CO

LOCATION.--Lat 38°15'13", long 104°36'20", in SW¼NW¼ 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 mi².

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 estimated daily discharge, July 2, which is poor. Records do not include diversion for municipal supply of Saint Charles Mesa Water Association. 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.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	93	417	69	75	294	243	1350	778	1670	2360	824	563
2	93	398	72	76	292	240	1360	866	2660	e2180	888	556
3	93	393	64	77	280	242	1190	808	3730	2080	914	549
4	84	385	65	85	201	282	1040	608	4270	2020	1040	516
5	75	358	55	79	176	206	1080	503	4480	1870	1360	633
6	68	311	71	79	119	172	1080	512	4610	1520	1550	781
7	63	255	67	79	88	194	1100	556	3770	1290	1520	750
8	74	225	68	79	84	222	1130	642	4230	1260	1560	583
9	70	291	65	79	85	225	1070	675	4470	1250	1310	369
10	65	369	63	78	86	278	986	818	1990	1250	1500	301
11	59	384	64	78	86	418	971	908	3520	1170	1880	296
12	27	363	68	79	86	520	939	985	4910	1120	1750	295
13	19	239	71	79	87	455	893	1180	3940	1230	1650	302
14	9.8	144	71	79	83	320	872	1230	3510	1230	1480	297
15	9.2	83	72	79	77	380	860	1290	3830	1050	1230	301
16	8.6	90	72	81	79	515	876	1350	4890	918	1100	316
17	8.2	92	76	81	76	676	910	1570	5080	913	1100	337
18	24	98	77	80	74	723	968	1720	5280	964	1070	354
19	19	106	77	79	76	710	1050	1840	4890	1180	953	353
20	17	82	75	80	103	750	1080	1890	5280	1190	829	384
21	29	64	75	82	184	760	1120	1940	5560	1360	693	394
22	53	54	74	171	235	893	1200	1990	5730	1560	560	412
23	101	61	74	289	240	910	1180	2100	6030	1580	460	534
24	191	63	75	287	254	905	738	2230	5280	1520	398	646
25	276	63	74	290	246	940	649	2220	4350	1500	312	683
26	330	80	78	293	247	1020	660	2210	3860	1330	357	798
27	341	91	75	293	239	1030	615	2210	3330	1090	385	721
28	375	70	75	288	238	1150	498	1950	2960	1030	426	683
29	413	71	73	283	---	1300	504	1410	2710	882	504	634
30	423	72	75	291	---	1300	683	1050	2500	592	567	358
31	423	---	75	290	---	1330	---	1220	---	836	585	---
TOTAL	3933.8	5772	2205	4438	4415	19309	28652	41259	123320	41325	30755	14699
MEAN	127	192	71.1	143	158	623	955	1331	4111	1333	992	490
MAX	423	417	78	293	294	1330	1360	2230	6030	2360	1880	798
MIN	8.2	54	55	75	74	172	498	503	1670	592	312	295
AC-FT	7800	11450	4370	8800	8760	38300	56830	81840	244600	81970	61000	29160

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 1997, BY WATER YEAR (WY)

	1989	1990	1991	1992	1993	1994	1995	1996	1997
MEAN	240	184	83.2	89.5	158	308	542	1145	2419
MAX	431	265	269	161	312	623	955	1716	4111
(WY)	1996	1991	1995	1991	1996	1997	1997	1996	1997
MIN	125	87.9	16.1	16.7	64.2	159	217	491	970
(WY)	1990	1989	1990	1989	1995	1990	1991	1989	1989

SUMMARY STATISTICS

FOR 1996 CALENDAR YEAR

FOR 1997 WATER YEAR

WATER YEARS 1989 - 1997

ANNUAL TOTAL	253669.8	320082.8	
ANNUAL MEAN	693	877	681
HIGHEST ANNUAL MEAN			1107
LOWEST ANNUAL MEAN			444
HIGHEST DAILY MEAN	3930	Jun 11	6030
LOWEST DAILY MEAN	8.2	Oct 17	8.2
ANNUAL SEVEN-DAY MINIMUM	14	Oct 14	14
INSTANTANEOUS PEAK FLOW			a6230
INSTANTANEOUS PEAK STAGE			12.70
ANNUAL RUNOFF (AC-FT)	503200	634900	a10400
10 PERCENT EXCEEDS	1890	2040	1750
50 PERCENT EXCEEDS	389	423	322
90 PERCENT EXCEEDS	64	72	47

e-Estimated.

a-From rating curve extended above 5200 ft³/s on the 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 water temperature are good. Records for specific conductance are poor. Daily data not published are either during periods of estimated daily discharge, or are missing or unrepresentative of the river 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.

EXTREMES FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily mean, 1,490 microsiemens, Oct. 17, 1996; minimum daily mean, 252 microsiemens, 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, 1,490 microsiemens, Oct. 17, minimum daily mean, 283 microsiemens, July 5.

WATER TEMPERATURE: Maximum, 24.4°C, Aug. 25; minimum, 0.0°C, Dec. 18.

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM @ 25 DEG. C), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
 DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	634	503	784	---	546	545	454	503	493	289	---	400
2	638	509	786	---	544	544	458	491	501	---	330	400
3	641	514	790	---	545	548	464	493	496	---	334	402
4	652	514	804	---	580	525	459	509	483	---	---	402
5	673	522	849	---	589	556	463	522	461	283	---	394
6	681	541	788	---	640	570	465	518	450	286	---	384
7	700	561	786	---	683	566	460	519	---	293	322	380
8	691	553	779	---	683	547	462	509	435	295	320	392
9	692	538	795	---	703	550	463	507	426	294	---	434
10	705	513	817	---	698	536	469	502	---	291	---	453
11	---	516	808	---	685	505	473	495	---	299	---	455
12	884	525	781	---	690	486	473	490	---	299	---	455
13	---	561	777	---	691	491	470	478	353	293	---	452
14	---	624	786	---	695	519	471	482	363	293	337	450
15	1330	706	776	---	702	507	472	480	356	298	349	437
16	1410	687	779	---	698	487	473	478	347	306	354	440
17	1490	679	769	---	706	477	473	483	339	304	354	439
18	---	677	784	---	708	468	469	481	326	300	357	433
19	999	679	---	---	714	470	462	486	320	289	366	435
20	1050	739	---	---	678	466	465	485	305	290	371	---
21	969	762	---	---	576	469	---	487	290	288	---	431
22	---	789	---	---	545	468	464	494	298	---	394	---
23	---	757	---	---	553	475	467	494	286	---	405	415
24	566	738	---	---	---	478	---	494	292	---	417	408
25	541	743	---	540	550	473	522	494	295	---	445	420
26	525	748	---	542	549	461	527	495	301	299	424	423
27	504	744	---	539	550	459	530	498	296	312	425	---
28	505	788	---	539	549	456	534	496	294	317	416	444
29	511	788	---	542	---	455	531	500	299	---	---	438
30	501	776	---	545	---	455	522	507	293	---	395	484
31	505	---	---	552	---	454	---	504	---	335	---	---
MEAN	---	643	---	---	---	499	---	496	---	---	---	---
MAX	---	789	---	---	---	570	---	522	---	---	---	---
MIN	---	503	---	---	---	454	---	478	---	---	---	---

07099970 ARKANSAS RIVER AT MOFFAT STREET, AT PUEBLO, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	20.7	15.3	18.1	13.8	10.9	12.1	7.2	3.9	5.6	---	---	---
2	18.4	14.6	16.5	13.5	10.0	11.6	6.1	4.2	5.2	---	---	---
3	18.6	13.8	16.3	13.3	10.1	11.5	6.1	2.6	4.4	---	---	---
4	20.4	14.9	17.4	13.7	10.7	11.9	5.4	3.2	4.1	---	---	---
5	20.6	15.0	17.7	13.0	9.8	11.3	6.6	3.1	4.8	---	---	---
6	20.5	15.2	17.6	11.7	9.4	10.5	5.9	4.5	5.3	---	---	---
7	19.6	14.9	17.1	10.7	8.1	9.4	6.6	3.5	5.0	---	---	---
8	19.6	14.1	16.7	11.4	8.0	9.7	6.4	3.8	5.3	---	---	---
9	19.2	14.0	16.4	12.3	8.6	10.3	8.3	4.9	6.6	---	---	---
10	19.1	13.8	16.3	12.5	9.0	10.5	8.5	6.0	7.2	---	---	---
11	19.9	14.1	17.0	11.9	8.7	10.1	8.3	5.6	6.9	---	---	---
12	20.5	14.1	17.1	11.3	8.7	9.8	7.6	4.6	6.2	---	---	---
13	18.0	13.8	16.4	11.7	8.2	9.8	7.4	4.7	6.1	---	---	---
14	17.1	14.2	15.3	9.5	7.9	8.6	6.3	3.9	5.0	---	---	---
15	16.0	14.3	15.1	8.1	6.9	7.6	5.0	2.7	3.8	---	---	---
16	15.4	13.9	14.6	8.3	6.2	7.6	4.8	2.1	3.4	---	---	---
17	14.3	11.4	12.6	8.6	5.4	7.0	2.8	.1	1.4	---	---	---
18	14.9	7.9	11.6	10.3	6.3	8.4	1.2	.0	.5	---	---	---
19	14.1	10.5	12.1	11.5	8.1	9.9	---	---	---	---	---	---
20	13.1	10.6	11.8	11.6	8.4	10.0	---	---	---	---	---	---
21	10.7	8.5	9.5	9.7	7.6	8.6	---	---	---	---	---	---
22	12.6	6.5	9.3	8.9	7.0	8.0	---	---	---	---	---	---
23	13.8	9.6	11.9	8.2	6.3	7.2	---	---	---	---	---	---
24	15.8	10.9	13.4	8.6	5.8	7.0	---	---	---	4.4	---	---
25	15.2	11.7	13.2	9.0	5.8	7.1	---	---	---	4.2	.9	2.5
26	14.1	10.3	12.3	6.9	5.2	6.1	---	---	---	4.9	1.9	3.3
27	12.8	10.6	11.6	6.9	4.5	5.5	---	---	---	3.9	1.8	2.6
28	15.2	11.3	12.9	7.2	3.5	5.6	---	---	---	5.0	1.0	2.9
29	13.3	10.4	12.1	8.5	5.7	7.0	---	---	---	4.7	2.9	3.7
30	14.6	11.1	12.6	7.6	5.3	6.4	---	---	---	5.9	1.6	3.6
31	11.8	10.9	11.4	---	---	---	---	---	---	7.2	3.6	5.3
MONTH	20.7	6.5	14.3	13.8	3.5	8.9	---	---	---	---	---	---
	FEBRUARY			MARCH			APRIL			MAY		
1	6.4	3.7	5.0	6.9	1.9	4.2	8.4	6.0	7.0	11.2	7.4	8.9
2	5.9	2.7	4.4	7.9	1.7	4.7	6.4	5.7	6.1	12.4	7.5	9.4
3	6.1	2.4	4.1	7.8	2.6	5.1	9.8	6.0	7.4	13.4	7.5	9.8
4	5.5	2.0	3.8	5.7	2.1	3.9	9.4	6.2	7.4	14.0	7.9	10.4
5	4.6	1.7	3.4	7.1	1.4	4.2	7.6	5.7	6.7	14.5	8.3	10.8
6	3.7	2.3	3.0	8.3	1.9	5.3	8.6	5.3	6.7	13.6	8.1	10.5
7	5.5	2.0	3.4	8.6	2.8	5.9	10.0	5.5	7.2	12.5	8.3	10.1
8	5.4	1.3	3.4	8.7	2.6	5.7	8.1	5.9	6.7	10.8	8.1	9.2
9	6.1	1.7	3.9	8.5	3.3	5.9	10.1	5.8	7.5	14.2	8.7	10.8
10	4.7	1.9	3.6	9.4	3.1	6.2	6.6	5.5	6.1	13.3	8.3	10.4
11	4.9	1.1	3.0	8.9	3.2	5.6	8.6	5.2	6.4	13.2	8.4	10.2
12	5.6	2.3	4.0	8.9	3.6	5.8	9.5	5.0	6.8	13.1	8.6	10.3
13	5.7	2.6	4.0	8.6	3.8	5.8	10.3	5.3	7.2	12.4	8.7	10.2
14	6.0	1.4	3.8	5.0	2.9	3.9	9.9	5.5	7.4	12.2	8.8	10.1
15	7.4	2.3	4.7	7.6	2.2	4.5	11.2	6.3	8.1	13.2	8.7	10.5
16	7.7	2.6	5.3	9.1	3.0	5.6	11.4	7.1	8.5	13.2	9.0	10.5
17	7.9	3.8	6.0	8.1	4.5	5.9	11.5	6.3	8.4	12.5	8.9	10.3
18	8.5	3.8	6.3	8.9	4.3	6.1	11.0	6.6	8.3	11.8	9.1	10.0
19	8.9	5.0	6.8	9.2	3.9	6.1	11.4	6.8	8.5	10.7	9.1	9.7
20	7.1	3.8	5.6	9.4	4.4	6.3	11.0	6.8	8.4	12.1	9.0	10.0
21	5.7	2.5	4.4	9.1	4.5	6.3	10.2	6.9	8.0	12.1	9.2	10.3
22	6.1	1.6	4.0	8.6	4.3	6.0	10.4	6.7	8.0	11.7	9.6	10.4
23	4.4	2.2	2.9	8.2	4.4	5.7	9.4	6.8	7.8	12.1	9.4	10.4
24	5.4	1.5	3.3	6.5	4.3	5.0	8.6	4.0	6.3	11.8	9.4	10.4
25	6.1	1.3	3.6	8.5	4.1	5.7	8.5	6.2	7.3	12.5	9.4	10.5
26	4.9	2.1	3.5	9.1	4.3	6.1	10.8	6.9	8.4	12.8	9.5	10.9
27	5.2	1.5	3.3	8.9	4.6	6.5	13.1	6.7	9.3	12.2	9.4	10.7
28	6.6	2.2	4.1	9.1	5.5	6.9	12.0	7.3	9.4	13.5	10.3	11.4
29	---	---	---	7.1	5.3	5.9	12.7	7.1	9.5	12.8	10.1	11.3
30	---	---	---	9.2	5.2	6.7	12.6	7.1	9.4	14.8	10.4	12.1
31	---	---	---	9.5	5.5	7.0	---	---	---	14.4	10.4	12.0
MONTH	8.9	1.1	4.2	9.5	1.4	5.6	13.1	4.0	7.7	14.8	7.4	10.4

ARKANSAS RIVER BASIN

0709970 ARKANSAS RIVER AT MOFFAT STREET, AT PUEBLO, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	14.1	10.6	11.9	19.0	16.1	17.1	21.7	17.9	19.3	23.3	18.5	20.4
2	12.6	10.8	11.5	---	---	---	20.3	17.9	18.9	22.9	19.0	20.5
3	13.5	10.8	12.0	18.9	---	---	22.3	17.7	19.5	23.3	19.2	20.7
4	13.9	11.6	12.6	19.4	16.3	17.4	21.8	18.2	19.4	22.8	18.8	20.4
5	14.3	12.3	13.2	19.3	16.4	17.5	19.6	18.4	18.9	23.0	18.6	20.4
6	14.4	12.1	13.5	19.6	16.4	17.4	19.4	18.5	18.7	22.8	18.9	20.3
7	17.4	13.4	14.2	19.3	16.1	17.3	21.1	18.3	19.2	23.0	18.5	20.3
8	14.9	13.4	13.9	20.1	16.2	17.6	21.7	18.4	19.6	23.8	18.5	20.6
9	14.8	13.7	14.2	20.1	16.3	17.8	21.5	18.2	19.4	21.9	18.0	19.7
10	20.2	14.0	16.5	20.3	16.7	18.0	19.8	18.6	19.0	23.5	17.6	20.2
11	17.6	13.1	14.7	19.8	16.7	17.8	21.5	15.0	19.0	23.5	17.6	20.2
12	15.6	14.0	14.6	20.6	16.5	18.1	21.4	18.4	19.6	23.1	17.9	20.2
13	16.2	14.1	14.9	20.6	16.6	18.1	21.8	18.9	19.9	23.3	17.7	20.3
14	16.4	14.2	14.9	20.7	16.8	18.3	21.6	18.5	19.7	23.5	18.2	20.6
15	16.0	14.0	14.8	21.3	16.9	18.6	22.3	18.4	19.9	23.7	17.9	20.5
16	15.9	14.6	15.1	21.3	16.9	18.6	22.3	18.4	19.7	22.5	18.3	20.2
17	16.1	14.8	15.3	21.4	16.7	18.5	21.8	18.5	19.8	22.8	18.1	20.1
18	16.5	14.9	15.6	20.9	16.7	18.3	22.0	18.9	19.9	23.1	17.9	20.2
19	16.5	14.9	15.6	20.7	17.4	18.5	22.6	18.4	20.0	22.6	18.1	20.0
20	16.7	15.1	15.7	20.4	17.4	18.6	23.0	18.6	20.6	18.9	16.6	17.5
21	16.7	15.2	15.8	20.7	17.5	18.7	23.3	---	---	19.1	16.4	17.9
22	16.8	15.5	16.0	---	17.7	---	23.9	18.2	20.5	21.6	18.2	19.5
23	17.2	15.4	16.2	---	---	---	24.0	18.2	20.6	20.1	18.3	19.0
24	17.3	15.6	16.4	---	---	---	24.1	18.0	20.7	21.9	18.3	19.6
25	17.4	15.7	16.4	21.0	---	---	24.4	18.1	20.8	22.2	18.0	19.7
26	18.1	15.7	16.7	20.6	17.5	18.6	24.0	18.4	20.7	21.6	18.3	19.6
27	18.0	15.8	16.6	21.3	17.7	18.9	24.2	18.5	21.0	22.2	18.4	19.8
28	18.1	16.0	16.9	20.4	17.9	18.8	22.9	18.7	20.6	21.5	17.9	19.2
29	18.6	16.1	17.0	21.7	17.8	19.3	23.8	18.6	20.6	21.8	17.5	19.2
30	18.9	16.1	17.2	21.8	17.8	19.4	21.7	18.7	19.9	22.0	17.1	19.3
31	---	---	---	22.1	17.8	19.5	22.9	18.6	20.1	---	---	---
MONTH	20.2	10.6	15.0	---	---	---	24.4	---	---	23.8	16.4	19.9

07103700 FOUNTAIN CREEK NEAR COLORADO SPRINGS, CO

LOCATION.--Lat 38°51'17", long 104°52'39", in SE¼SW¼ sec.3, T.14 S., R.67 W., El Paso County, Hydrologic Unit 11020003, on left bank 200 ft upstream from diversion to city of Colorado Springs, 0.5 mi east of bridge on U.S. Highway 24 near west city limits of Colorado Springs, and 1.0 mi downstream from Sutherland Creek.

DRAINAGE AREA.--103 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1958 to current year.

GAGE.--Water-stage recorder with satellite telemetry, and V-notch weir. Elevation of gage is 6,110 ft above sea level, from topographic map. Apr. 1958 to Feb. 3, 1992 and Apr. 16, 1992 to current year, at present site and datum. Feb. 4 to Apr. 15, 1992 gage temporarily located 80 ft upstream, at same datum.

REMARKS.--Records good. Natural flow of stream affected by storage reservoirs, power developments, diversions for irrigation and municipal use, and at times, transbasin diversion from Beaver Creek drainage and transmountain diversions from Colorado River basin.

**DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES**

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	28	16	8.1	9.7	9.3	6.7	9.7	39	73	57	76	54
2	28	16	8.2	10	8.3	6.9	11	38	73	48	83	56
3	28	16	4.9	9.4	8.0	7.5	9.5	37	72	48	73	55
4	26	16	6.6	8.3	6.0	6.2	10	34	72	48	65	68
5	27	16	6.7	3.6	6.4	7.4	11	48	71	47	79	54
6	27	16	9.9	6.5	6.3	7.6	9.4	73	469	43	65	52
7	26	19	9.5	7.6	5.8	7.8	9.5	79	455	40	60	43
8	26	21	9.6	8.0	6.4	7.7	9.0	83	345	37	54	37
9	25	17	9.7	9.1	6.3	7.4	10	66	623	37	50	35
10	25	14	9.1	9.2	7.2	7.1	9.8	61	623	38	56	36
11	23	12	9.0	7.3	7.5	7.8	11	60	238	38	56	37
12	23	11	8.6	5.7	7.7	8.3	12	71	161	38	56	37
13	22	10	8.5	6.9	8.1	8.5	13	67	166	35	52	35
14	23	10	8.3	7.7	7.7	8.5	12	53	176	32	45	34
15	22	10	4.7	7.8	9.5	8.2	12	54	209	29	44	33
16	16	9.4	8.0	7.3	8.3	9.6	13	51	208	28	42	33
17	16	7.9	3.2	7.0	7.9	9.4	13	44	206	27	44	33
18	17	8.6	3.3	7.4	7.6	13	14	40	194	27	54	32
19	16	8.9	8.2	7.8	7.6	13	14	41	183	25	46	31
20	15	8.5	13	7.4	7.1	13	14	48	168	34	44	34
21	16	10	14	7.2	7.1	11	17	63	152	36	41	34
22	18	8.9	11	6.4	6.5	11	16	73	144	36	38	29
23	17	9.5	9.4	7.1	9.1	11	21	73	135	30	36	27
24	17	8.7	8.5	6.6	7.5	12	37	67	137	28	36	26
25	17	9.3	9.0	5.3	8.8	13	21	71	121	32	71	24
26	17	8.3	8.6	8.0	9.1	10	26	70	112	31	100	23
27	18	8.3	8.6	7.3	8.4	11	35	66	104	59	65	23
28	18	8.1	8.6	6.2	6.8	9.4	40	64	89	91	62	23
29	16	8.4	8.7	9.8	---	9.9	46	68	81	73	60	23
30	16	8.5	8.6	9.2	---	9.5	45	76	72	84	57	22
31	16	---	9.1	9.3	---	9.4	---	73	---	69	55	---
TOTAL	645	351.3	261.2	236.1	212.3	288.8	530.9	1851	5932	1325	1765	1083
MEAN	20.8	11.7	8.43	7.62	7.58	9.32	17.7	59.7	198	42.7	56.9	36.1
MAX	28	21	14	10	9.5	13	46	83	623	91	100	68
MIN	15	7.9	3.2	3.6	5.8	6.2	9.0	34	71	25	36	22
AC-FT	1280	697	518	468	421	573	1050	3670	11770	2630	3500	2150

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 1997, BY WATER YEAR (WY)

MEAN	12.5	10.5	8.49	7.96	7.54	8.91	13.1	30.4	32.2	21.8	19.1	14.1
MAX	44.0	34.6	18.8	18.5	13.6	15.2	33.4	172	198	108	60.9	36.1
(WY)	1985	1985	1985	1985	1986	1985	1985	1980	1997	1995	1965	1997
MIN	5.29	4.98	4.14	4.46	4.44	4.91	5.90	6.37	6.69	6.48	5.48	5.00
(WY)	1979	1965	1990	1994	1972	1965	1963	1989	1989	1964	1974	1978

SUMMARY STATISTICS

FOR 1996 CALENDAR YEAR

FOR 1997 WATER YEAR

WATER YEARS 1958 - 1997

ANNUAL TOTAL	6558.6	14481.6										
ANNUAL MEAN	17.9	39.7								15.5		
HIGHEST ANNUAL MEAN										39.7		1997
LOWEST ANNUAL MEAN										7.29		1963
HIGHEST DAILY MEAN				71	May 26		^a 623	Jun 9		^a 623	Jun 9	1997
LOWEST DAILY MEAN				3.2	Dec 17		3.2	Dec 17		2.0	Jan 24	1969
ANNUAL SEVEN-DAY MINIMUM				6.3	Dec 13		6.3	Dec 13		3.0	Mar 20	1965
INSTANTANEOUS PEAK FLOW							^b 3340	Jun 6		^b 3340	Jun 6	1997
INSTANTANEOUS PEAK STAGE							5.57	Jun 6		^c 5.57	Jun 6	1997
ANNUAL RUNOFF (AC-FT)				13010			28720			11260		
10 PERCENT EXCEEDS				30			73			28		
50 PERCENT EXCEEDS				15			17			9.6		
90 PERCENT EXCEEDS				9.0			7.4			5.5		

a-Also occurred Jun 10, 1997.

b-From rating curve extended above 488 ft³/s, on basis of slope-area measurements of peak flow at gage heights, 3.87 ft, 4.52 ft, and 5.27 ft.

c-Maximum gage height, 6.15 ft, Sep 3, 1991, from floodmark.

**07103700 FOUNTAIN CREEK NEAR COLORADO SPRINGS, CO--Continued
WATER-QUALITY RECORDS**

PERIOD OF RECORD.--December 1974 to current year.

PERIOD OF DAILY RECORD.--Suspended-sediment discharge August 1995 to current year (peak flows only).

INSTRUMENTATION.--Pumping sediment sampler since August 1995.

REMARKS.--Records for daily sediment during peak flows are fair.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SEDIMENT CONCENTRATIONS: Maximum daily mean during peak flows, 8,090 mg/L, June 6, 1997; minimum daily mean, 125 mg/L, June 28, 1997.

SEDIMENT LOADS: Maximum daily during peak flows, 41,800 tons, June 6, 1997; minimum daily, 12 tons, Aug. 15, 1996.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATIONS: Maximum daily mean during peak flows, 8,090 mg/L, June 6; minimum daily mean, 125 mg/L, June 28.

SEDIMENT LOADS: Maximum daily during peak flows, 41,800 tons, June 6; minimum daily, 30 tons, June 1, 28.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	pH (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)	STREP-TOCOCCI, FECAL, (COLS. PER 100 ML) (31673)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)
OCT 23...	0900	17	252	8.2	3.0	11.6	0.4	K600	170	28	5.3
NOV 21...	0840	11	337	8.3	5.0	9.9	0.6	75	140	36	7.3
DEC 12...	0845	8.6	363	7.9	1.5	11.4	<0.1	60	200	39	8.2
JAN 23...	1200	7.1	417	8.4	2.5	11.0	0.5	>300	>500	44	9.1
FEB 20...	0945	7.1	416	7.8	2.5	10.9	0.4	K50	K27	41	8.7
MAR 20...	0900	13	314	7.8	4.5	10.5	0.6	K870	87	31	6.2
MAY 01...	1015	40	313	7.8	5.5	10.0	0.8	140	190	30	5.9
29...	1015	62	170	7.7	7.5	9.4	0.6	70	100	16	2.9
JUN 26...	0930	109	188	7.6	10.5	8.7	0.7	200	170	20	3.7
JUL 24...	1030	27	301	7.9	14.0	8.2	0.4	140	390	31	6.3
AUG 14...	0945	46	187	7.7	11.5	8.4	1.2	350	270	18	3.4
SEP 18...	1000	36	196	7.8	12.0	8.4	e1.2	130	340	20	3.8

DATE	ALKA-LINITY 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)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDE (MG/L) (00530)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)
OCT 23...	87	12	13	2.7	4	<0.01	0.59	<0.015	<0.2	<0.01
NOV 21...	122	16	19	2.8	<1	0.02	0.94	<0.015	<0.2	<0.01
DEC 12...	128	17	22	2.8	2	0.02	1.2	0.020	<0.2	<0.01
JAN 23...	148	20	27	2.7	6	0.01	1.1	0.020	0.2	<0.01
FEB 20...	148	20	26	2.6	4	0.02	1.3	<0.015	<0.2	<0.01
MAR 20...	106	14	18	2.9	11	<0.01	0.95	<0.015	<0.2	<0.01
MAY 01...	74	18	--	2.7	41	<0.01	1.03	<0.015	0.47	<0.01
29...	47	10	8.5	2.5	23	<0.01	0.12	<0.015	<0.2	<0.01
JUN 26...	52	14	9.5	2.6	27	<0.01	0.68	0.024	0.22	0.01
JUL 24...	94	18	15	2.7	7	<0.01	1.01	<0.015	<0.2	0.01
AUG 14...	56	11	8.1	2.8	55	<0.01	0.56	<0.015	<0.2	<0.01
SEP 18...	62	11	8.9	2.7	19	<0.01	0.56	<0.015	<0.20	<0.01

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

07103700 FOUNTAIN CREEK NEAR COLORADO SPRINGS, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	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)	CHRO- MIUM, HEXA- VALENT, DIS. (UG/L AS CR) (01032)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	IRON, DIS- SOLVED (UG/L AS FE) (01046)
OCT 23...	<1	<1	<1	<1	<1	<1	<1	260	30
NOV 21...	<1	<1	<1	<1	<1	<1	1	180	33
DEC 12...	<1	<1	<1	<1	<1	<1	<1	150	11
JAN 23...	<1	<1	<1	<1	<1	1	1	160	20
FEB 20...	<1	<1	<1	<1	<1	<1	<1	130	13
MAR 20...	<1	<1	<1	<1	<1	1	1.2	400	14
MAY 01...	<1	<1	1	<1	<1	3	<1	3400	12
JUN 29...	<1	<1	<1	<1	<1	1	<1	970	13
JUL 26...	<1	<1	<1	<1	<1	4	2.5	1900	8.0
AUG 24...	<1	<1	<1	<1	<1	2	1.4	430	6.9
SEP 18...	<1	<1	<1	<1	<1	2	<1	890	6.7

DATE	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)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)
OCT 23...	<1	<1	40	34	<1	<1	<10	<3
NOV 21...	<1	<1	30	34	<1	<1	<10	<3
DEC 12...	<1	<1	40	34	1	<1	<10	4.0
JAN 23...	<1	<1	30	29	<1	<1	<10	5.0
FEB 20...	<1	<1	40	29	<1	<1	<10	6.0
MAR 20...	<1	<1	51	26	<1	<1	<10	6.5
MAY 01...	6	<1	180	24	1	<1	20	<3
JUN 29...	2	<1	64	14	<1	<1	<10	<3
JUL 26...	3	<1	110	29	<1	<1	20	5.5
AUG 24...	<1	<1	51	25	<1	<1	<10	5.4
SEP 14...	4	<1.0	110	16	1	<1.0	20	<3.0
SEP 18...	1	<1.0	60	15	<1	<1.0	<10	5.4

ARKANSAS RIVER BASIN

07103700 FOUNTAIN CREEK NEAR COLORADO SPRINGS, CO--Continued

MISCELLANEOUS FIELD MEASUREMENTS, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

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				
08...	1455	27	186	10.5	08...	1135	88	172	6.5
11...	1320	17	275	8.5	08...	1200	79	171	7.0
NOV					JUN				
08...	1410	17	261	5.5	07...	1340	290	170	10.0
21...	1145	10	360	4.0	09...	1830	518	134	10.0
DEC					10...	1135	488	165	9.0
09...	1515	9.4	394	5.0	JUL				
JAN					09...	1615	40	261	13.5
23...	1100	7.2	427	2.0	29...	1200	55	212	13.5
FEB					AUG				
25...	1025	7.7	475	0.0	05...	1900	124	170	16.0
MAR					08...	0610	58	135	11.0
18...	1000	13	303	3.5	SEP				
APR					18...	1645	31	198	14.5
25...	1130	18	349	1.0					

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
MAY				
08...	1200	79	329	70
JUN				
07...	1340	290	1950	1530
09...	1830	518	2860	4000
10...	1500	428	2660	3070
JUL				
29...	1200	55	95	14
AUG				
05...	1900	124	4420	1480

07103700 FOUNTAIN CREEK NEAR COLORADO SPRINGS, CO--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MEAN	MEAN	SEDIMENT	MEAN	MEAN	SEDIMENT	MEAN	MEAN	SEDIMENT
	DISCHARGE	CONCEN-		DISCHARGE	CONCEN-		DISCHARGE	DISCHARGE	
	(CFS)	TRATION	(TONS/DAY)	(CFS)	TRATION	(TONS/DAY)	(CFS)	TRATION	(TONS/DAY)
		(MG/L)			(MG/L)			(MG/L)	
		OCTOBER			NOVEMBER			DECEMBER	
1	28	---	---	16	---	---	8.1	---	---
2	28	---	---	16	---	---	8.2	---	---
3	28	---	---	16	---	---	4.9	---	---
4	26	---	---	16	---	---	6.6	---	---
5	27	---	---	16	---	---	6.7	---	---
6	27	---	---	16	---	---	9.9	---	---
7	26	---	---	19	---	---	9.5	---	---
8	26	---	---	21	---	---	9.6	---	---
9	25	---	---	17	---	---	9.7	---	---
10	25	---	---	14	---	---	9.1	---	---
11	23	---	---	12	---	---	9.0	---	---
12	23	---	---	11	---	---	8.6	---	---
13	22	---	---	10	---	---	8.5	---	---
14	23	---	---	10	---	---	8.3	---	---
15	22	---	---	10	---	---	4.7	---	---
16	16	---	---	9.4	---	---	8.0	---	---
17	16	---	---	7.9	---	---	3.2	---	---
18	17	---	---	8.6	---	---	3.3	---	---
19	16	---	---	8.9	---	---	8.2	---	---
20	15	---	---	8.5	---	---	13	---	---
21	16	---	---	10	---	---	14	---	---
22	18	---	---	8.9	---	---	11	---	---
23	17	---	---	9.5	---	---	9.4	---	---
24	17	---	---	8.7	---	---	8.5	---	---
25	17	---	---	9.3	---	---	9.0	---	---
26	17	---	---	8.3	---	---	8.6	---	---
27	18	---	---	8.3	---	---	8.6	---	---
28	18	---	---	8.1	---	---	8.6	---	---
29	16	---	---	8.4	---	---	8.7	---	---
30	16	---	---	8.5	---	---	8.6	---	---
31	16	---	---	---	---	---	9.1	---	---
TOTAL	645	---	---	351.3	---	---	261.2	---	---
		JANUARY			FEBRUARY			MARCH	
1	9.7	---	---	9.3	---	---	6.7	---	---
2	10	---	---	8.3	---	---	6.9	---	---
3	9.4	---	---	8.0	---	---	7.5	---	---
4	8.3	---	---	6.0	---	---	6.2	---	---
5	3.6	---	---	6.4	---	---	7.4	---	---
6	6.5	---	---	6.3	---	---	7.6	---	---
7	7.6	---	---	5.8	---	---	7.8	---	---
8	8.0	---	---	6.4	---	---	7.7	---	---
9	9.1	---	---	6.3	---	---	7.4	---	---
10	9.2	---	---	7.2	---	---	7.1	---	---
11	7.3	---	---	7.5	---	---	7.8	---	---
12	5.7	---	---	7.7	---	---	8.3	---	---
13	6.9	---	---	8.1	---	---	8.5	---	---
14	7.7	---	---	7.7	---	---	8.5	---	---
15	7.8	---	---	9.5	---	---	8.2	---	---
16	7.3	---	---	8.3	---	---	9.6	---	---
17	7.0	---	---	7.9	---	---	9.4	---	---
18	7.4	---	---	7.6	---	---	13	---	---
19	7.8	---	---	7.6	---	---	13	---	---
20	7.4	---	---	7.1	---	---	13	---	---
21	7.2	---	---	7.1	---	---	11	---	---
22	6.4	---	---	6.5	---	---	11	---	---
23	7.1	---	---	9.1	---	---	11	---	---
24	6.6	---	---	7.5	---	---	12	---	---
25	5.3	---	---	8.8	---	---	13	---	---
26	8.0	---	---	9.1	---	---	10	---	---
27	7.3	---	---	8.4	---	---	11	---	---
28	6.2	---	---	6.8	---	---	9.4	---	---
29	9.8	---	---	---	---	---	9.9	---	---
30	9.2	---	---	---	---	---	9.5	---	---
31	9.3	---	---	---	---	---	9.4	---	---
TOTAL	236.1	---	---	212.3	---	---	288.8	---	---

ARKANSAS RIVER BASIN

07103700 FOUNTAIN CREEK NEAR COLORADO SPRINGS, CO--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

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
1	9.7	---	---	39	---	---	73	131	30	
2	11	---	---	38	---	---	73	---	---	
3	9.5	---	---	37	---	---	72	---	---	
4	10	---	---	34	---	---	72	---	---	
5	11	---	---	48	---	---	71	---	---	
6	9.4	---	---	73	---	---	469	8090	41800	
7	9.5	---	---	79	---	---	455	4920	11300	
8	9.0	---	---	83	---	---	345	1760	1840	
9	10	---	---	66	---	---	623	3950	9190	
10	9.8	---	---	61	---	---	623	3070	6670	
11	11	---	---	60	---	---	238	1660	1090	
12	12	---	---	71	---	---	161	---	e574	
13	13	---	---	67	---	---	166	1260	566	
14	12	---	---	53	---	---	176	---	e703	
15	12	---	---	54	---	---	209	1840	1040	
16	13	---	---	51	---	---	208	---	---	
17	13	---	---	44	---	---	206	---	---	
18	14	---	---	40	---	---	194	475	249	
19	14	---	---	41	---	---	183	---	e184	
20	14	---	---	48	---	---	168	283	129	
21	17	---	---	63	547	166	152	---	---	
22	16	---	---	73	350	95	144	---	---	
23	21	---	---	73	---	---	135	220	80	
24	37	---	---	67	---	---	137	---	---	
25	21	---	---	71	---	---	121	---	---	
26	26	---	---	70	---	---	112	289	88	
27	35	---	---	66	---	---	104	---	e57	
28	40	---	---	64	---	---	89	125	30	
29	46	---	---	68	---	---	81	---	---	
30	45	---	---	76	---	---	72	---	---	
31	---	---	---	73	---	---	---	---	---	
TOTAL	530.9	---	---	1851	---	---	5932	---	---	
		JULY			AUGUST			SEPTEMBER		
1	57	---	---	76	309	63	54	---	---	
2	48	---	---	83	---	---	56	---	---	
3	48	---	---	73	---	---	55	---	---	
4	48	---	---	65	---	---	68	---	---	
5	47	---	---	79	240	62	54	---	---	
6	43	---	---	65	---	---	52	---	---	
7	40	---	---	60	---	---	43	---	---	
8	37	---	---	54	---	---	37	---	---	
9	37	---	---	50	---	---	35	---	---	
10	38	---	---	56	---	---	36	---	---	
11	38	---	---	56	---	---	37	---	---	
12	38	---	---	56	---	---	37	---	---	
13	35	---	---	52	---	---	35	---	---	
14	32	---	---	45	---	---	34	---	---	
15	29	---	---	44	---	---	33	---	---	
16	28	---	---	42	---	---	33	---	---	
17	27	---	---	44	---	---	33	---	---	
18	27	---	---	54	---	---	32	---	---	
19	25	---	---	46	---	---	31	---	---	
20	34	---	---	44	---	---	34	---	---	
21	36	---	---	41	---	---	34	---	---	
22	36	---	---	38	---	---	29	---	---	
23	30	---	---	36	---	---	27	---	---	
24	28	---	---	36	---	---	26	---	---	
25	32	---	---	71	---	---	24	---	---	
26	31	---	---	100	---	---	23	---	---	
27	59	1560	635	65	---	---	23	---	---	
28	91	796	285	62	---	---	23	---	---	
29	73	993	429	60	---	---	23	---	---	
30	84	740	209	57	---	---	22	---	---	
31	69	728	243	55	---	---	---	---	---	
TOTAL	1325	---	---	1765	---	---	1083	---	---	

e-Estimated.

07103703 CAMP CREEK AT GARDEN OF THE GODS, CO

LOCATION.--Lat 38°52'37", long 104°52'20", in SE¼NE¼ sec.34, T.13 S., R.67 W., El Paso County, Hydrologic Unit 11020003, on right bank, 70 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 mi².

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

GAGE.--Water-stage recorder and satellite telemetry. Elevation of gage is 6,310 ft above sea level, from topographic map.

REMARKS.--Records fair except those above 100 ft³/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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	7.2	3.0	1.7	.56	.00
2	.00	.00	.00	.00	.00	.00	.00	7.4	2.6	1.3	.24	.00
3	.00	.00	.00	.00	.00	.00	.00	5.3	2.2	.94	.03	.00
4	.00	.00	.00	.00	.00	.00	.00	4.0	2.0	.69	.01	.02
5	.00	.00	.00	.00	.00	.00	.00	7.0	2.0	.61	.12	.00
6	.00	.00	.00	.00	.00	.00	.00	11	20	.40	.02	.17
7	.00	.00	.00	.00	.00	.00	.00	13	139	.21	.13	.00
8	.00	.00	.00	.00	.00	.00	.00	15	59	.04	.08	.00
9	.00	.00	.00	.00	.00	.00	.00	14	51	.10	.00	.00
10	.00	.00	.00	.00	.00	.00	.00	14	139	.07	.00	.00
11	.00	.00	.00	.00	.00	.00	.00	13	65	.00	.11	.00
12	.00	.00	.00	.00	.00	.00	.00	14	56	.00	.51	.00
13	.00	.00	.00	.00	.00	.00	.00	13	43	.00	.58	.00
14	.00	.00	.00	.00	.00	.00	.00	e12	37	.00	.36	.00
15	.00	.00	.00	.00	.00	.00	.00	12	33	.00	.17	.00
16	.00	.00	.00	.00	.00	.00	.00	11	30	.00	.04	.00
17	.00	.00	.00	.00	.00	.00	.00	9.4	27	.00	.00	.00
18	e.00	.00	.00	.00	.00	.00	.00	8.6	23	.00	.00	.00
19	e.00	.00	.00	.00	.00	.00	.00	8.8	18	.00	.00	.00
20	e.00	.00	.00	.00	.00	.00	.00	7.0	15	.00	.16	.00
21	e.00	.00	.00	.00	.00	.00	.02	6.2	12	.00	.24	.00
22	e.00	.00	.00	.00	.00	.00	.00	6.6	10	.00	.19	.01
23	e.00	.00	.00	.00	.00	.00	.07	8.1	8.3	.00	.07	.00
24	e.00	.00	.00	.00	.00	.00	.08	6.9	7.8	.00	.00	.00
25	.00	.00	.00	.00	.00	.00	.07	6.0	6.5	.00	.14	.00
26	.00	.00	.00	.00	.00	.00	.08	5.3	5.2	.01	.00	.00
27	.00	.00	.00	.00	.00	.00	.09	4.8	4.4	.06	.02	.00
28	.00	.00	.00	.00	.00	.00	.07	4.3	3.7	.02	.09	.00
29	.00	.00	.00	.00	---	.00	.01	3.8	3.0	.93	.01	.00
30	.00	.00	.00	.00	---	.00	5.8	3.7	2.2	.02	.00	.00
31	.00	---	.00	.00	---	.00	---	3.4	---	.45	.00	---
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	6.29	265.8	829.9	7.55	3.88	0.20
MEAN	.000	.000	.000	.000	.000	.000	.21	8.57	27.7	.24	.13	.007
MAX	.00	.00	.00	.00	.00	.00	5.8	15	139	1.7	.58	.17
MIN	.00	.00	.00	.00	.00	.00	.00	3.4	2.0	.00	.00	.00
AC-FT	.00	.00	.00	.00	.00	.00	12	527	1650	15	7.7	.4

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 1997, BY WATER YEAR (WY)

	1992	1993	1994	1995	1996	1997
MEAN	.025	.000	.000	.003	.000	.10
MAX	.12	.002	.001	.015	.000	.38
(WY)	1995	1995	1993	1995	1993	1996
MIN	.000	.000	.000	.000	.000	.000
(WY)	1993	1993	1994	1993	1993	1994

SUMMARY STATISTICS FOR 1996 CALENDAR YEAR FOR 1997 WATER YEAR WATER YEARS 1992 - 1997

ANNUAL TOTAL	16.20	1113.62	
ANNUAL MEAN	.044	3.05	1.99
HIGHEST ANNUAL MEAN			6.03 1995
LOWEST ANNUAL MEAN			.044 1996
HIGHEST DAILY MEAN	1.7 Mar 25	139 Jun 7	a 139 Jun 7 1997
LOWEST DAILY MEAN	b .00 Jan 1	b .00 Oct 1	b .00 Aug 15 1992
ANNUAL SEVEN-DAY MINIMUM	.00 Jan 1	.00 Oct 1	.00 Aug 15 1992
INSTANTANEOUS PEAK FLOW		218 Jun 6	c 273 Sep 2 1994
INSTANTANEOUS PEAK STAGE		4.51 Jun 6	5.28 Sep 2 1994
ANNUAL RUNOFF (AC-FT)	32	2210	1440
10 PERCENT EXCEEDS	.00	7.1	2.1
50 PERCENT EXCEEDS	.00	.00	.00
90 PERCENT EXCEEDS	.00	.00	.00

e-Estimated.

a-Also occurred Jun 10, 1997.

b-No flow most of the time most years.

c-From rating curve extended above 40 ft³/s on the basis of contracted-opening measurement.

ARKANSAS RIVER BASIN

07103747 MONUMENT CREEK AT PALMER LAKE, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 39°06'07", long 104°53'27", in SE¹/₄SE¹/₄ sec.9, T.11 S., R.67 W., El Paso County, Hydrologic Unit 11020003, on left bank 0.9 mi upstream from Monument Lake, 1.5 mi downstream from North Monument Creek, and 1.9 mi southeast of town of Palmer Lake.

PERIOD OF RECORD.--April 1977 to September 1980; January 1984 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	pH (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)	STREP-TOCOCCI, FECAL, KF AGAR PER (COLS. 100 ML) (31673)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)
OCT											
22...	1000	0.90	190	8.0	5.0	9.5	0.6	25	32	23	4.2
NOV											
20...	0900	1.3	162	7.9	3.5	10.2	0.5	26	39	18	3.2
DEC											
11...	0930	0.90	194	7.8	2.5	10.6	0.2	K14	56	21	3.8
JAN											
22...	1200	0.50	198	7.6	1.0	11.0	--	K1	K8	21	3.9
FEB											
19...	1000	0.84	197	7.8	2.0	10.7	0.5	K9	15	23	4.0
MAR											
19...	0900	0.61	198	7.6	5.0	10.1	0.5	77	36	22	4.0
APR											
23...	1000	4.5	120	--	4.5	--	0.4	<1	30	14	2.1
MAY											
28...	0930	12	94	7.7	9.0	8.8	0.2	K2	27	11	1.5
JUN											
25...	0900	15	103	8.1	14.5	7.5	0.7	21	88	11	1.6
JUL											
23...	0945	1.4	165	7.7	20.0	7.1	0.7	K200	69	20	3.3
AUG											
13...	1100	14	116	8.0	15.5	7.5	0.7	K13	K20	13	1.8
SEP											
17...	1030	7.6	131	7.8	15.5	7.4	0.6	K22	42	15	2.3

DATE	ALKA-LINITY 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)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)
OCT										
22...	73	8.6	6.9	1.8	<1	<0.01	<0.05	<0.015	<0.2	<0.01
NOV										
20...	59	8.3	5.7	2.0	<1	<0.01	<0.05	<0.015	<0.2	<0.01
DEC										
11...	61	9.5	12	2.0	<1	0.18	4.7	0.71	1.5	0.96
JAN										
22...	67	11	11	1.7	<1	<0.01	0.07	0.02	<0.2	<0.01
FEB										
19...	67	11	9.8	1.6	10	0.01	0.05	0.015	0.2	0.01
MAR										
19...	66	11	11	1.8	9	<0.01	<0.05	<0.015	<0.2	<0.01
APR										
23...	40	7.8	4.2	1.7	6	<0.01	<0.05	<0.015	<0.2	<0.01
MAY										
28...	31	6.9	2.1	1.6	<1	<0.01	<0.05	<0.015	<0.2	<0.01
JUN										
25...	34	5.7	1.8	1.8	4	<0.01	<0.05	<0.015	<0.2	<0.01
JUL										
23...	64	6.1	4.5	1.9	3	<0.01	<0.05	<0.015	0.2	<0.01
AUG										
13...	41	6.1	1.8	1.6	2	<0.01	0.05	<0.015	<0.2	<0.01
SEP										
17...	49	5.6	2.4	1.6	4	<0.01	<0.05	<0.015	<0.2	<0.01

K-Based on non-ideal colony count.

07103747 MONUMENT CREEK AT PALMER LAKE, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	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)	CHRO- MIUM, HEXA- VALENT, DIS. (UG/L AS CR) (01032)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	IRON, DIS- SOLVED (UG/L AS FE) (01046)
OCT 22...	<1	<1	<1	<1	3	<1	<1	600	240
NOV 20...	<1	<1	<1	<1	<1	<1	<1	330	170
DEC 11...	<1	<1	<1	<1	<1	<1	<1	280	120
JAN 22...	<1	<1	<1	<1	<1	<1	<1	370	19
FEB 19...	<1	<1	<1	<1	<1	<1	<1	1100	56
MAR 19...	<1	<1	<1	<1	<1	1	<1	480	78
APR 23...	<1	<1	<1	<1	<1	2	<1	210	43
MAY 28...	<1	<1	<1	<1	<1	<1	<1	230	36
JUN 25...	<1	<1	<1	<1	<1	<1	<1	420	38
JUL 23...	<1	<1	<1	<1	<1	1	<1	620	230
AUG 13...	<1	<1	<1	<1	<1	2	<1	410	55
SEP 17...	<1	<1	<1	<1	<1	1	1.1	440	130

DATE	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)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)
OCT 22...	<1	<1	230	210	<1	<1	<10	<3
NOV 20...	<1	<1	100	89	<1	<1	<10	<3
DEC 11...	<1	<1	120	110	<1	<1	<10	<3
JAN 22...	<1	<1	220	190	<1	<1	<10	<3
FEB 19...	<1	<1	290	220	<1	<1	<10	<3
MAR 19...	<1	<1	130	107	<1	<1	<10	<3
APR 23...	<1	<1	29	20	<1	<1	<10	<3
MAY 28...	<1	<1	20	12	<1	<1	<10	5.3
JUN 25...	<1	<1	39	23	<1	<1	<10	<3
JUL 23...	<1	<1	93	78	<1	<1	<10	5.1
AUG 13...	<1	<1	37	26	<1	<1	<10	<3
SEP 17...	<1	<1	47	38	<1	<1	<10	<3

07103780 MONUMENT CREEK ABOVE NORTH GATE BOULEVARD, AT U.S. AIR FORCE ACADEMY, CO

LOCATION.--Lat 39°01'52", long 104°50'52", in SW¹/₄SW¹/₄ 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 mi².

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder with satellite telemetry and crest-stage gage. Elevation of gage is 6,640 ft above sea level, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Storage and diversions upstream from station for municipal supply of Monument and Palmer Lake.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6.2	5.0	e4.9	4.6	4.2	e6.7	5.5	39	20	21	34	16
2	5.5	5.3	e4.8	4.4	4.0	6.5	5.8	42	21	19	26	16
3	5.2	5.9	e4.5	4.5	4.0	5.7	6.8	45	19	16	24	23
4	5.2	6.3	e4.7	4.6	e4.5	4.2	11	50	20	15	26	29
5	5.3	5.9	e4.9	e4.5	e4.4	e4.0	13	47	20	12	35	29
6	5.1	5.1	5.1	e4.1	e4.6	3.6	13	45	29	8.9	36	26
7	5.1	7.3	6.4	e3.8	e4.9	3.6	13	56	117	8.6	37	25
8	4.8	5.1	6.4	e4.0	e5.2	3.3	11	64	106	8.2	37	21
9	4.7	4.7	4.6	e4.4	e5.4	3.4	5.7	65	117	5.8	31	19
10	4.7	e4.8	4.8	e4.4	e5.4	3.3	5.8	59	124	5.6	32	15
11	4.9	e4.9	6.4	e4.0	e3.8	3.2	e5.7	44	104	5.7	35	12
12	4.4	e5.0	5.4	e3.7	3.3	3.2	e5.7	46	90	5.5	28	12
13	4.6	e4.9	5.4	e4.0	3.7	3.2	5.9	43	91	5.1	28	7.4
14	4.8	e4.8	5.0	e4.3	e3.6	3.6	6.6	e42	99	5.3	19	7.3
15	4.4	e4.8	e4.7	e4.6	e3.5	4.3	9.8	e42	87	5.9	11	7.7
16	4.9	e5.0	e4.2	e4.3	3.5	3.2	9.7	41	79	6.0	12	12
17	5.8	e5.4	e3.6	e4.3	3.2	3.3	9.7	40	65	5.7	14	14
18	4.4	e5.4	e3.4	e4.6	3.3	3.6	10	40	55	4.9	16	12
19	4.4	e5.2	e3.5	e5.0	3.3	3.2	8.9	38	53	4.3	18	9.8
20	4.5	e5.2	e4.0	e5.4	3.5	3.2	5.7	34	39	4.6	17	10
21	4.5	e5.4	e4.6	4.8	e3.4	3.5	5.7	30	30	4.5	14	11
22	4.3	5.5	e4.8	e5.0	e3.3	3.4	5.9	28	32	4.0	12	14
23	4.3	5.4	4.8	4.9	3.4	3.6	6.8	32	34	4.4	15	21
24	4.8	5.3	e4.7	e6.6	4.2	5.8	21	33	36	4.4	12	19
25	5.9	5.2	4.6	e5.4	e4.5	7.4	24	34	34	4.5	13	18
26	8.9	5.2	e4.7	4.4	4.6	9.5	29	33	30	5.2	20	17
27	4.8	5.4	4.8	4.9	7.3	11	29	31	24	6.2	35	15
28	4.9	e5.0	4.6	7.7	6.7	7.4	30	33	16	13	52	14
29	9.8	5.2	4.5	4.2	---	7.8	26	28	11	17	48	11
30	4.8	5.3	4.6	4.4	---	7.2	29	25	14	46	47	7.9
31	4.7	---	4.6	4.6	---	5.3	---	20	---	53	42	---
TOTAL	160.6	158.9	148.0	144.4	118.7	150.2	374.7	1249	1616	335.3	826	471.1
MEAN	5.18	5.30	4.77	4.66	4.24	4.85	12.5	40.3	53.9	10.8	26.6	15.7
MAX	9.8	7.3	6.4	7.7	7.3	11	30	65	124	53	52	29
MIN	4.3	4.7	3.4	3.7	3.2	3.2	5.5	20	11	4.0	11	7.3
AC-FT	319	315	294	286	235	298	743	2480	3210	665	1640	934

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1985 - 1997, BY WATER YEAR (WY)

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
MEAN	4.70	5.48	4.69	4.22	4.56	7.63	20.5	40.6	23.7	9.03	7.29	5.34	
MAX (WY)	9.71	9.37	9.00	9.51	8.85	14.8	46.2	105	60.4	30.6	26.6	15.7	
MIN (WY)	1.95	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 1996 CALENDAR YEAR

FOR 1997 WATER YEAR

WATER YEARS 1985 - 1997

ANNUAL TOTAL	2633.8	5752.9											
ANNUAL MEAN	7.20	15.8								10.8			
HIGHEST ANNUAL MEAN										21.8			1995
LOWEST ANNUAL MEAN										3.82			1989
HIGHEST DAILY MEAN	48	May 29				124	Jun 10	345			Apr 30		1985
LOWEST DAILY MEAN	a2.8	Aug 13				b3.2	Feb 17			.58	Oct 15		1989
ANNUAL SEVEN-DAY MINIMUM	3.1	Aug 11				3.3	Mar 7			.69	Aug 26		1989
INSTANTANEOUS PEAK FLOW						169	Jun 7			372	Apr 30		1985
INSTANTANEOUS PEAK STAGE						5.13	Jun 7			6.05	Apr 30		1985
ANNUAL RUNOFF (AC-FT)	5220					11410				7840			
10 PERCENT EXCEEDS	14					39				27			
50 PERCENT EXCEEDS	5.3					5.8				5.5			
90 PERCENT EXCEEDS	3.7					4.0				1.8			

e-Estimated.

a-Also occurred Aug 14.

b-Also occurred Mar 11-13, 16, and 19-20.

**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 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	pH (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)	STREP-TOCOCCI, FECAL, KF AGAR (COLS. PER 100 ML) (31673)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)
OCT											
22...	1230	3.8	333	8.9	7.0	10.5	1.1	K23	K12	30	5.0
NOV											
20...	1115	4.8	322	8.7	7.5	9.2	1.0	K9	K8	26	4.4
DEC											
11...	1115	8.2	313	8.4	4.5	10.2	1.1	K36	K8	26	4.6
JAN											
22...	1345	8.7	329	8.1	0.5	11.4	1.8	K24	K12	26	4.5
FEB											
19...	1230	2.7	387	8.3	7.0	10.0	1.8	--	K4	30	4.9
MAR											
19...	1115	3.2	402	8.4	11.0	--	1.4	90	<1	30	5.2
APR											
23...	1245	5.4	301	8.1	13.0	--	2.1	K5	K9	25	4.1
MAY											
28...	1445	33	138	8.0	14.0	8.0	0.8	K11	28	14	2.1
JUN											
25...	1045	35	147	7.8	18.0	7.5	0.9	82	82	16	2.4
JUL											
23...	1230	4.5	340	8.6	25.0	7.0	1.2	110	K350	28	4.5
AUG											
13...	1345	29	181	8.1	21.5	6.7	1.4	K80	K18	18	2.7
SEP											
17...	1300	13	178	8.5	19.0	8.0	1.2	K55	K55	19	2.9

DATE	ALKA-LINITY 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)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	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)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)
OCT										
22...	94	28	25	1.4	2	0.02	0.62	<0.015	0.4	0.87
NOV										
20...	83	25	24	1.6	<1	0.04	1.0	0.34	0.8	0.89
DEC										
11...	85	24	24	1.5	<1	0.02	0.68	0.18	0.6	1.1
JAN										
22...	81	29	24	1.4	24	0.01	2.0	0.15	0.5	1.2
FEB										
19...	96	37	33	1.1	10	0.02	1.3	0.16	0.8	1.3
MAR										
19...	107	34	34	1.4	6	<0.01	0.59	0.02	0.6	2.1
APR										
23...	82	26	21	1.5	6	0.02	0.928	<0.015	0.52	1.03
MAY										
28...	42	9.7	5.4	1.6	16	<0.01	0.082	<0.015	0.21	0.143
JUN										
25...	45	10	5.9	1.7	38	<0.01	0.079	<0.015	0.37	0.134
JUL										
23...	86	29	24	1.4	2	0.018	1.2	0.02	0.54	1.02
AUG										
13...	54	11	9.3	1.5	18	<0.01	0.405	<0.015	0.35	0.249
SEP										
17...	60	9.6	9.2	1.6	11	<0.01	<0.05	<0.015	0.27	0.248

K-Based on non-ideal colony count.

ARKANSAS RIVER BASIN

07103780 MONUMENT CREEK ABOVE NORTH GATE BOULEVARD, AT U.S. AIR FORCE ACADEMY, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	CADMIUM WATER UNFLTRD TOTAL (UG/L AS CD) (01027)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)	CHROMIUM, TOTAL SOLVED (UG/L AS CR) (01030)	CHROMIUM, HEXAVALENT, DIS. (UG/L AS CR) (01032)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOVERABLE (UG/L AS FE) (01045)	IRON, DIS-SOLVED (UG/L AS FE) (01046)
OCT 22...	<1	<1	<1	<1	<1	2	2	430	220
NOV 20...	<1	<1	<1	<1	<1	2	2	300	140
DEC 11...	<1	<1	<1	<1	<1	2	2	410	130
JAN 22...	<1	<1	<1	<1	<1	4	3	880	35
FEB 19...	<1	<1	<1	<1	<1	4	3	290	77
MAR 19...	<1	<1	<1	<1	<1	3	2.7	260	32
APR 23...	<1	<1	<1	<1	<1	4	2.4	270	81
MAY 28...	<1	<1	<1	<1	<1	1	<1.0	770	110
JUN 25...	<1	<1	<1	<1	<1	1	<1.0	1400	84
JUL 23...	<1	<1	<1	<1	<1	3	3.3	360	110
AUG 13...	<1	<1	<1	<1	<1	2	1.7	1000	87
SEP 17...	<1	<1	<1	<1	<1	2	1.5	620	110

DATE	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN) (01055)	MANGANESE, DIS-SOLVED (UG/L AS MN) (01056)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI) (01067)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
OCT 22...	<1	<1	40	36	2	1	<10	10
NOV 20...	<1	<1	40	31	2	1	<10	<3
DEC 11...	<1	<1	50	36	2	1	<10	6
JAN 22...	1	<1	130	54	3	2	20	10
FEB 19...	<1	<1	60	38	3	2	10	13
MAR 19...	<1	<1	56	44	3	2.5	10	<3
APR 23...	<1	<1	50	37	2	1.1	10	6.9
MAY 28...	<1	<1	84	26	<1	<1	<10	<3
JUN 25...	2	<1	120	40	<1	<1	<10	<3
JUL 23...	<1	<1	45	27	2	3.2	20	16
AUG 13...	1	<1	110	34	1	<1	<10	<3
SEP 17...	<1	<1	65	24	<1	<1	<10	8.1

MISCELLANEOUS FIELD MEASUREMENTS, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPECIFIC CONDUCTANCE (US/CM) (00095)	TEMPERATURE WATER (DEG C) (00010)	DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPECIFIC CONDUCTANCE (US/CM) (00095)	TEMPERATURE WATER (DEG C) (00010)
OCT 1996					APR 1997				
08...	1125	4.3	313	12.5	25...	1635	30	225	7.0
NOV 20...	1200	5.2	319	7.5	MAY 13...	1320	47	133	15.5
DEC 06...	0925	5.0	326	1.0	JUN 11...	1400	102	112	15.5
JAN 1997					JUL 14...	1410	4.2	246	26.0
24...	1315	6.9	383	2.5	AUG 07...	1205	41	183	18.5
FEB 27...	1145	8.8	350	1.0	SEP 05...	1440	29	185	22.5
MAR 17...	1225	3.2	405	8.5					

07103797 WEST MONUMENT CREEK BELOW RAMPART RESERVOIR, CO

LOCATION.--Lat 38°58'30", long 104°57'18", in NE¼SE¼ 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 mi².

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.--Records good 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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.9	4.9	4.5	4.1	4.6	4.7	4.3	5.5	5.2	4.8	5.7	6.9
2	3.3	4.8	4.5	4.1	4.5	4.7	4.2	5.3	5.3	4.7	8.3	6.9
3	3.5	4.8	4.4	4.1	4.5	4.7	4.4	5.3	5.2	4.7	8.5	7.2
4	3.5	4.8	4.5	4.1	4.5	4.7	4.4	5.9	5.1	4.7	6.7	7.4
5	3.5	4.9	11	4.0	4.5	4.7	4.3	6.8	5.2	4.8	5.7	7.3
6	3.5	5.0	16	4.0	4.8	4.7	4.3	7.0	12	4.5	5.3	7.4
7	3.4	4.8	12	4.0	5.0	4.8	4.2	6.5	23	4.4	5.6	7.4
8	3.3	4.6	2.9	4.0	4.9	4.8	4.2	6.2	17	4.3	5.9	7.5
9	e3.4	4.5	2.2	4.1	5.3	4.7	4.2	6.1	14	4.3	6.2	7.6
10	3.5	4.4	2.1	4.1	5.6	3.9	4.2	6.2	13	4.2	6.6	7.6
11	3.8	4.4	2.4	4.1	5.6	3.8	4.1	6.1	11	4.2	6.6	7.7
12	3.8	4.4	3.6	4.1	5.7	3.9	4.1	6.2	9.5	4.9	6.8	7.7
13	4.0	4.4	3.6	3.5	5.7	4.0	4.0	6.1	9.0	5.2	6.6	7.7
14	3.8	4.5	4.0	1.4	5.6	3.9	4.0	5.9	7.9	5.2	6.5	7.7
15	3.8	4.6	4.4	4.3	5.7	3.9	4.2	5.8	7.1	5.3	6.5	7.7
16	3.8	4.5	4.3	9.8	5.7	4.1	4.2	5.8	6.5	5.7	6.5	7.7
17	3.6	4.9	4.3	4.3	5.6	4.1	4.2	5.7	6.1	5.7	6.7	7.7
18	3.5	5.7	4.2	4.5	5.0	4.2	4.1	5.6	5.6	5.7	7.1	7.7
19	3.8	5.7	4.1	4.6	4.7	4.2	4.1	5.6	5.2	6.4	7.0	7.7
20	3.8	5.8	3.9	4.6	4.7	4.2	4.1	5.5	5.0	6.6	6.9	7.7
21	3.3	5.8	3.9	4.5	4.8	4.2	4.1	5.4	5.9	6.5	6.8	7.8
22	3.3	5.8	3.8	4.3	4.8	4.2	4.1	5.7	5.9	6.5	6.7	7.9
23	3.4	5.6	3.5	4.3	4.8	4.2	4.1	5.6	5.4	6.4	6.7	7.0
24	3.6	4.8	3.5	4.4	4.7	4.1	e4.2	5.5	5.8	6.3	6.6	5.4
25	4.2	4.5	4.0	4.3	4.7	4.1	4.3	5.4	5.3	6.5	6.9	4.7
26	4.1	4.5	4.0	4.3	4.6	4.2	4.2	5.3	5.3	7.2	7.0	4.6
27	4.1	4.5	4.0	4.3	4.7	4.2	4.4	5.3	5.2	7.8	6.6	4.5
28	4.1	4.5	4.0	4.3	4.6	4.1	4.8	5.3	5.0	5.7	6.6	4.5
29	4.1	4.5	4.0	4.4	---	4.2	5.4	5.3	4.8	5.4	6.7	4.3
30	4.3	4.5	4.0	4.4	---	4.1	5.5	5.3	4.8	5.7	6.7	4.1
31	4.9	---	4.1	4.5	---	4.2	---	5.3	---	5.3	6.8	---
TOTAL	115.9	145.4	145.7	133.8	139.9	132.5	128.9	178.5	231.3	169.6	205.8	205.0
MEAN	3.74	4.85	4.70	4.32	5.00	4.27	4.30	5.76	7.71	5.47	6.64	6.83
MAX	4.9	5.8	16	9.8	5.7	4.8	5.5	7.0	23	7.8	8.5	7.9
MIN	3.3	4.4	2.1	1.4	4.5	3.8	4.0	5.3	4.8	4.2	5.3	4.1
AC-FT	230	288	289	265	277	263	256	354	459	336	408	407

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 1997, BY WATER YEAR (WY)

	1994	1995	1996	1997	1994	1995	1996	1997	1994	1995	1996	1997
MEAN	6.05	7.22	7.84	7.31	7.29	7.50	7.93	10.2	10.2	12.1	10.3	7.89
MAX	10.1	10.6	9.68	9.36	8.75	10.7	10.5	17.5	15.1	20.6	15.7	12.2
(WY)	1995	1995	1994	1996	1996	1994	1996	1996	1996	1994	1994	1994
MIN	3.74	4.85	4.70	4.32	5.00	4.27	4.30	5.76	7.71	5.47	6.64	5.62
(WY)	1997	1997	1997	1997	1997	1997	1997	1997	1997	1997	1997	1995

SUMMARY STATISTICS

FOR 1996 CALENDAR YEAR

FOR 1997 WATER YEAR

WATER YEARS 1994 - 1997

ANNUAL TOTAL	3506.9	1932.3		
ANNUAL MEAN	9.58	5.29	7.75	
HIGHEST ANNUAL MEAN			10.0	1996
LOWEST ANNUAL MEAN			5.29	1997
HIGHEST DAILY MEAN	27	May 19	23	Jun 7
LOWEST DAILY MEAN	2.1	Dec 10	1.4	Jan 14
ANNUAL SEVEN-DAY MINIMUM	3.0	Dec 8	3.0	Dec 8
INSTANTANEOUS PEAK FLOW			a46	Jun 6
INSTANTANEOUS PEAK STAGE			5.54	Jun 6
ANNUAL RUNOFF (AC-FT)	6960	3830	5610	
10 PERCENT EXCEEDS	18	7.2	14	
50 PERCENT EXCEEDS	9.0	4.7	7.9	
90 PERCENT EXCEEDS	4.0	3.9	4.2	

e-Estimated.

a-From rating curve extended above 30 ft³/s.

07103800 WEST MONUMENT CREEK AT U.S. AIR FORCE ACADEMY, CO

LOCATION.--Lat 38°58'14", long 104°54'08", in SW¹/₄SW¹/₄ 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 mi².

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

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, and those above 100 ft³/s 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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.99	7.7	e.45	e.20	e.12	.31	3.5	3.8	4.1	6.6	1.8	1.4
2	4.1	7.0	e.45	e.20	e.12	.33	3.9	3.7	3.9	5.4	1.6	1.3
3	4.3	5.4	e.50	e.20	e.12	.31	4.0	3.4	3.7	3.7	1.5	1.3
4	4.3	5.0	e.56	e.17	e.11	.28	4.2	4.0	3.4	3.5	1.5	1.3
5	4.3	4.7	e.62	e.15	e.10	.29	4.2	5.6	3.2	3.4	1.5	1.3
6	4.3	4.6	.64	e.15	e.10	.30	4.2	7.5	8.6	3.2	1.6	1.4
7	4.3	5.0	e.62	e.15	e.10	.33	4.2	8.8	108	3.0	1.5	1.4
8	4.3	4.9	.64	e.15	e.10	.34	2.8	9.3	106	2.9	1.4	1.2
9	4.2	5.0	.55	e.14	e.10	.35	.76	9.0	92	2.8	1.4	1.2
10	4.3	5.1	e.54	e.13	e.10	.35	.72	8.7	154	2.6	1.5	1.2
11	4.4	5.2	e.50	e.12	e.10	1.3	.83	8.6	109	2.6	1.5	1.2
12	4.4	3.2	.49	e.10	e.10	4.2	1.2	8.7	63	2.5	1.8	1.1
13	4.4	.86	.49	e.09	e.11	4.0	1.5	8.3	53	2.4	2.2	1.1
14	4.3	.79	e.44	e.09	e.12	4.3	.61	8.3	42	2.3	1.6	1.0
15	4.4	.74	e.35	e.09	e.13	4.7	.61	8.3	31	2.2	1.5	1.0
16	4.4	e.68	e.30	e.09	e.15	5.7	.63	8.1	26	2.1	1.5	1.0
17	5.2	e.66	e.27	e.10	e.18	5.8	.66	7.7	21	2.0	1.7	.96
18	7.4	.68	e.25	e.11	.20	1.9	.68	7.3	18	2.0	1.9	.93
19	8.6	.74	e.25	e.12	.23	.55	.70	7.0	16	2.0	1.6	.95
20	8.6	.74	e.25	e.12	.24	.52	.72	6.4	13	2.1	1.6	1.0
21	8.8	.74	e.22	e.12	.24	.55	.85	6.1	11	2.0	1.5	1.1
22	9.6	.75	e.19	e.12	.24	.54	.84	6.2	11	1.9	1.4	1.2
23	9.8	.78	e.17	e.12	.24	.54	.93	6.0	10	1.8	1.4	1.4
24	8.9	.74	e.17	e.12	.26	.56	1.3	5.6	10	1.7	1.3	1.2
25	8.9	e.68	e.17	e.12	.31	.56	1.1	5.3	9.4	1.8	1.5	1.1
26	8.7	e.54	e.17	e.12	.31	.53	1.1	5.1	8.7	1.8	1.9	1.0
27	8.6	e.47	e.17	e.12	.31	.56	1.5	4.8	7.0	2.4	1.5	1.0
28	8.6	e.47	e.17	e.12	.31	.53	2.3	4.6	5.3	2.4	1.4	.96
29	8.4	e.47	e.17	e.12	---	.54	3.5	4.7	6.4	1.9	1.4	.93
30	8.0	e.47	e.17	e.12	---	.52	4.2	4.7	6.3	2.6	1.3	.91
31	7.9	---	e.19	e.12	---	1.2	---	4.4	---	1.9	1.3	---
TOTAL	191.69	74.80	11.12	3.99	4.85	42.79	58.24	200.0	964.0	81.5	48.1	34.04
MEAN	6.18	2.49	.36	.13	.17	1.38	1.94	6.45	32.1	2.63	1.55	1.13
MAX	9.8	7.7	.64	.20	.31	5.8	4.2	9.3	154	6.6	2.2	1.4
MIN	.99	.47	.17	.09	.10	.28	.61	3.4	3.2	1.7	1.3	.91
AC-FT	380	148	22	7.9	9.6	85	116	397	1910	162	95	68

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 1997, BY WATER YEAR (WY)

	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
MEAN	1.86	1.18	.90	.61	.33	.47	1.82	6.26	4.86	2.50	2.58	1.83																
MAX	11.7	7.74	8.62	8.78	3.63	2.46	12.4	30.5	32.1	23.3	23.8	20.3																
(WY)	1972	1971	1971	1971	1971	1971	1971	1980	1997	1970	1970	1970																
MIN	.000	.000	.000	.000	.000	.000	.001	.11	.20	.031	.017	.000																
(WY)	1993	1993	1994	1993	1976	1991	1989	1976	1976	1993	1993	1993																

SUMMARY STATISTICS

	FOR 1996 CALENDAR YEAR	FOR 1997 WATER YEAR	WATER YEARS 1970 - 1997	
ANNUAL TOTAL	505.38	1715.12		
ANNUAL MEAN	1.38	4.70	1.83	
HIGHEST ANNUAL MEAN			13.4	1971
LOWEST ANNUAL MEAN			.10	1993
HIGHEST DAILY MEAN	9.8	Oct 23	154	Jun 10 1997
LOWEST DAILY MEAN	e, ^a .17	Dec 23	e, ^a .09	Jan 13 1976
ANNUAL SEVEN-DAY MINIMUM	.17	Dec 23	.10	Jan 12 1976
INSTANTANEOUS PEAK FLOW			d ^b 169	Jun 10 1997
INSTANTANEOUS PEAK STAGE		3.24	f	3.24 Jun 10 1997
ANNUAL RUNOFF (AC-FT)	1000	3400	1330	
10 PERCENT EXCEEDS	4.3	8.6	5.1	
50 PERCENT EXCEEDS	.75	1.4	.46	
90 PERCENT EXCEEDS	.52	.13	.06	

e-Estimated.

a-Also occurred Dec 24-30.

b-Also occurred Jan 14-16.

c-No flow many days during 1976, 1991-92.

d-From rating curve extended above 68 ft³/s.

f-Maximum gage height, 3.88 ft, Dec 22, 1983, backwater from ice.

07103970 MONUMENT CREEK ABOVE WOODMEN ROAD, AT COLORADO SPRINGS, CO

LOCATION.--Lat 38°56'02", long 104°49'00", in SW¼NE¼ 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 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1996 to September 1997.

GAGE.--Water-stage recorder with satellite telemetry, concrete control, and crest-stage gage. Elevation of gage is 6,270 ft above sea level, from topographic map.

REMARKS.--Records fair except for estimated daily discharges and those above 400 ft³/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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e18	18	e12	15	11	17	13	60	28	36	79	37
2	e18	17	e12	15	11	16	17	64	30	34	46	31
3	e18	17	e12	15	10	15	15	67	29	27	49	36
4	e50	17	e12	15	11	12	19	77	30	23	75	42
5	e25	16	e12	e15	10	15	22	74	36	24	105	43
6	e22	16	14	e13	11	11	23	77	79	21	64	51
7	e19	17	e13	e12	12	10	22	98	352	19	56	43
8	e18	15	e12	e13	13	11	20	119	319	19	54	36
9	e17	14	12	e14	13	11	13	128	333	15	46	33
10	17	14	12	e14	12	11	13	128	417	15	60	31
11	17	15	13	e14	13	10	e15	84	334	16	91	23
12	19	14	12	e14	11	11	e16	91	300	16	93	25
13	20	12	12	e14	9.6	11	16	70	260	14	76	17
14	21	13	11	e14	13	10	e16	65	228	23	51	17
15	21	13	e11	e14	11	10	17	65	198	18	31	17
16	22	13	12	e14	11	10	17	62	168	17	33	20
17	20	e13	e11	e13	10	12	17	58	130	16	56	25
18	20	13	e10	e14	10	11	17	64	108	14	38	24
19	20	13	e10	e14	10	10	17	55	101	18	39	21
20	21	13	e10	e14	11	9.6	13	52	77	20	37	23
21	21	13	e10	14	11	9.7	22	49	54	17	32	25
22	22	12	e10	12	11	9.6	14	60	53	15	28	33
23	22	12	e11	13	10	9.6	20	48	71	15	31	40
24	23	12	e12	12	12	12	66	41	72	14	46	33
25	24	12	e12	11	14	14	56	46	60	15	42	29
26	26	12	e13	12	11	15	66	43	51	20	35	28
27	22	13	e14	11	13	21	71	38	43	37	39	26
28	20	e12	e15	13	15	15	66	38	34	46	63	25
29	23	e12	15	11	---	15	60	40	28	43	65	22
30	18	e13	15	12	---	15	51	36	25	90	65	17
31	17	---	14	12	---	12	---	30	---	101	73	---
TOTAL	661	416	376	413	320.6	381.5	830	2027	4048	818	1698	873
MEAN	21.3	13.9	12.1	13.3	11.4	12.3	27.7	65.4	135	26.4	54.8	29.1
MAX	50	18	15	15	15	21	71	128	417	101	105	51
MIN	17	12	10	11	9.6	9.6	13	30	25	14	28	17
AC-FT	1310	825	746	819	636	757	1650	4020	8030	1620	3370	1730

SUMMARY STATISTICS

FOR 1997 WATER YEAR

ANNUAL TOTAL	12862.1
ANNUAL MEAN	35.2
HIGHEST DAILY MEAN	417 Jun 10
LOWEST DAILY MEAN	a 9.6 Feb 13
ANNUAL SEVEN-DAY MINIMUM	10 Mar 17
INSTANTANEOUS PEAK FLOW	b 596 Aug 12
INSTANTANEOUS PEAK STAGE	6.38 Aug 12
ANNUAL RUNOFF (AC-FT)	25510
10 PERCENT EXCEEDS	70
50 PERCENT EXCEEDS	17
90 PERCENT EXCEEDS	11

e-Estimated.

a-Also occurred on Mar 20, and 22-23.

b-From rating curve extended above 370 ft³/s.

**07103970 MONUMENT CREEK ABOVE WOODMEN ROAD AT COLORADO SPRINGS, CO--Continued
WATER-QUALITY RECORDS**

PERIOD OF RECORD.--Daily sediment record May to September 1997 (peak flows only).

PERIOD OF DAILY RECORD.--Suspended-sediment discharge May to September 1997 (peak flows only).

INSTRUMENTATION.--Pumping sediment sampler since May 1997.

REMARKS.--Records fair.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SEDIMENT CONCENTRATIONS: Maximum daily mean during peak flows, 3,070 mg/L, June 7, 1997; minimum daily mean, 107 mg/L, Aug. 2, 1997.

SEDIMENT LOADS: Maximum daily during peak flows, 3,060 tons, June 7, 1997; minimum daily, 14 tons, Aug. 2, 1997.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATIONS: Maximum daily mean during peak flows, 3,070 mg/L, June 7; minimum daily mean, 107 mg/L, Aug. 2.

SEDIMENT LOADS: Maximum daily during peak flows, 3,060 tons, June 7; minimum daily, 14 tons, Aug. 2.

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SEDI- MENT, DIS- CHARGE, SUS- PENDE D (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDE D (T/DAY) (80155)
MAY				
12...	1515	80	194	42
JUN				
10...	1100	374	1200	1210
JUL				
29...	0935	30	138	11
AUG				
05...	1215	80	496	107
05...	2010	186	1280	643

MISCELLANEOUS FIELD MEASUREMENTS, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

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				
04...	1235	18	340	15.0	06...	1320	33	239	21.0
NOV					10...	1100	374	152	11.5
13...	1040	13	386	5.0	17...	1250	132	157	15.0
DEC					JUL				
06...	1410	14	365	1.0	10...	1250	17	306	22.5
JAN					29...	0855	32	275	16.5
23...	1410	14	375	0.5	29...	0935	30	275	16.5
FEB					AUG				
25...	1445	14	406	3.0	05...	1215	80	218	17.5
MAR					07...	0805	52	252	13.5
19...	1505	10	383	15.5	SEP				
APR					02...	1520	30	263	22.0
21...	1640	105	--	9.0	18...	1355	25	269	22.0
29...	1230	55	295	12.5					
MAY									
12...	1515	80	165	15.5					
12...	1520	79	165	15.5					

07103970 MONUMENT CREEK ABOVE WOODMEN ROAD AT COLORADO SPRINGS, CO--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

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	e18	---	---	18	---	---	e12	---	---
2	e18	---	---	17	---	---	e12	---	---
3	e18	---	---	17	---	---	e12	---	---
4	e50	---	---	17	---	---	e12	---	---
5	e25	---	---	16	---	---	e12	---	---
6	e22	---	---	16	---	---	14	---	---
7	e19	---	---	17	---	---	e13	---	---
8	e18	---	---	15	---	---	e12	---	---
9	e17	---	---	14	---	---	12	---	---
10	17	---	---	14	---	---	12	---	---
11	17	---	---	15	---	---	13	---	---
12	19	---	---	14	---	---	12	---	---
13	20	---	---	12	---	---	12	---	---
14	21	---	---	13	---	---	11	---	---
15	21	---	---	13	---	---	e11	---	---
16	22	---	---	13	---	---	12	---	---
17	20	---	---	e13	---	---	e11	---	---
18	20	---	---	13	---	---	e10	---	---
19	20	---	---	13	---	---	e10	---	---
20	21	---	---	13	---	---	e10	---	---
21	21	---	---	13	---	---	e10	---	---
22	22	---	---	12	---	---	e10	---	---
23	22	---	---	12	---	---	e11	---	---
24	23	---	---	12	---	---	e12	---	---
25	24	---	---	12	---	---	e12	---	---
26	26	---	---	12	---	---	e13	---	---
27	22	---	---	13	---	---	e14	---	---
28	20	---	---	e12	---	---	e15	---	---
29	23	---	---	e12	---	---	15	---	---
30	18	---	---	e13	---	---	15	---	---
31	17	---	---	---	---	---	14	---	---
TOTAL	661	---	---	416	---	---	376	---	---
	JANUARY			FEBRUARY			MARCH		
1	15	---	---	11	---	---	17	---	---
2	15	---	---	11	---	---	16	---	---
3	15	---	---	10	---	---	15	---	---
4	15	---	---	11	---	---	12	---	---
5	e15	---	---	10	---	---	15	---	---
6	e13	---	---	11	---	---	11	---	---
7	e12	---	---	12	---	---	10	---	---
8	e13	---	---	13	---	---	11	---	---
9	e14	---	---	13	---	---	11	---	---
10	e14	---	---	12	---	---	11	---	---
11	e14	---	---	13	---	---	10	---	---
12	e14	---	---	11	---	---	11	---	---
13	e14	---	---	9.6	---	---	11	---	---
14	e14	---	---	13	---	---	10	---	---
15	e14	---	---	11	---	---	10	---	---
16	e14	---	---	11	---	---	10	---	---
17	e13	---	---	10	---	---	12	---	---
18	e14	---	---	10	---	---	11	---	---
19	e14	---	---	10	---	---	10	---	---
20	e14	---	---	11	---	---	9.6	---	---
21	14	---	---	11	---	---	9.7	---	---
22	12	---	---	11	---	---	9.6	---	---
23	13	---	---	10	---	---	9.6	---	---
24	12	---	---	12	---	---	12	---	---
25	11	---	---	14	---	---	14	---	---
26	12	---	---	11	---	---	15	---	---
27	11	---	---	13	---	---	21	---	---
28	13	---	---	15	---	---	15	---	---
29	11	---	---	---	---	---	15	---	---
30	12	---	---	---	---	---	15	---	---
31	12	---	---	---	---	---	12	---	---
TOTAL	413	---	---	320.6	---	---	381.5	---	---

e-Estimated.

ARKANSAS RIVER BASIN

07103970 MONUMENT CREEK ABOVE WOODMEN ROAD AT COLORADO SPRINGS, CO--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

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
1	13	---	---	60	---	---	28	---	---	
2	17	---	---	64	---	---	30	---	---	
3	15	---	---	67	---	---	29	---	---	
4	19	---	---	77	---	---	30	---	---	
5	22	---	---	74	---	---	36	---	---	
6	23	---	---	77	---	---	79	1210	791	
7	22	---	---	98	---	---	352	3070	3060	
8	20	---	---	119	---	---	319	1180	1070	
9	13	---	---	128	---	---	333	586	543	
10	13	---	---	128	---	---	417	1380	1620	
11	e15	---	---	84	---	---	334	663	602	
12	e16	---	---	91	---	---	300	579	480	
13	16	---	---	70	---	---	260	556	396	
14	e16	---	---	65	---	---	228	---	---	
15	17	---	---	65	---	---	198	---	---	
16	17	---	---	62	---	---	168	---	---	
17	17	---	---	58	---	---	130	---	---	
18	17	---	---	64	---	---	108	---	---	
19	17	---	---	55	---	---	101	---	---	
20	13	---	---	52	---	---	77	---	---	
21	22	---	---	49	---	---	54	---	---	
22	14	---	---	60	1000	217	53	---	---	
23	20	---	---	48	---	---	71	824	362	
24	66	---	---	41	---	---	72	1170	301	
25	56	---	---	46	---	---	60	---	---	
26	66	---	---	43	---	---	51	---	---	
27	71	---	---	38	---	---	43	---	---	
28	66	---	---	38	---	---	34	---	---	
29	60	---	---	40	---	---	28	---	---	
30	51	---	---	36	---	---	25	---	---	
31	---	---	---	30	---	---	---	---	---	
TOTAL	830	---	---	2027	---	---	4048	---	---	
		JULY			AUGUST			SEPTEMBER		
1	36	---	---	79	593	166	37	---	---	
2	34	---	---	46	107	14	31	---	---	
3	27	---	---	49	144	20	36	---	---	
4	23	---	---	75	483	333	42	---	---	
5	24	---	---	105	921	303	43	---	---	
6	21	---	---	64	492	91	51	---	---	
7	19	---	---	56	---	---	43	---	---	
8	19	---	---	54	---	---	36	---	---	
9	15	---	---	46	---	---	33	---	---	
10	15	---	---	60	147	42	31	---	---	
11	16	---	---	91	1000	331	23	---	---	
12	16	---	---	93	922	759	25	---	---	
13	14	---	---	76	1010	266	17	---	---	
14	23	763	110	51	---	---	17	---	---	
15	18	---	---	31	---	---	17	---	---	
16	17	---	---	33	---	---	20	---	---	
17	16	---	---	56	636	258	25	---	---	
18	14	---	---	38	---	---	24	---	---	
19	18	---	---	39	---	---	21	---	---	
20	20	---	---	37	---	---	23	---	---	
21	17	---	---	32	---	---	25	---	---	
22	15	---	---	28	---	---	33	---	---	
23	15	---	---	31	---	---	40	---	---	
24	14	---	---	46	---	---	33	---	---	
25	15	---	---	42	---	---	29	---	---	
26	20	---	---	35	---	---	28	---	---	
27	37	621	169	39	---	---	26	---	---	
28	46	---	e45	63	---	---	25	---	---	
29	43	212	41	65	---	---	22	---	---	
30	90	604	172	65	---	---	17	---	---	
31	101	427	130	73	---	---	---	---	---	
TOTAL	818	---	---	1698	---	---	873	---	---	

e-Estimated.

07103980 COTTONWOOD CREEK AT WOODMEN ROAD NEAR COLORADO SPRINGS, CO

LOCATION.--Lat 38°56'22", long 104°44'26", in NE¼NE¼ sec.11, T.13 S., R.66 W., El Paso County, Hydrologic Unit 11020003, on right bank, 100 ft downstream from Woodmen Road, 4.0 mi east of Interstate 25, and 5.0 mi upstream from mouth.

DRAINAGE AREA.--10.3 mi².

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 and crest-stage gage. Elevation of gage is 6,680 ft above sea level, from topographic map.

REMARKS.--Records fair except for period Nov. 20 to Apr. 10, and 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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.47	.58	.45	1.5	e1.1	3.6	e.48	1.9	.58	.74	8.4	.49
2	.38	.63	.40	1.4	e1.0	3.7	e.45	1.4	.61	.55	.91	.43
3	.58	.60	e.36	1.1	e1.0	1.2	e.44	.60	.50	.51	.79	.47
4	4.2	.68	.31	1.1	e.98	e1.8	e.52	.72	.62	.67	12	.74
5	.56	.51	.46	e1.0	e.94	2.3	e.48	.85	6.4	.72	26	.36
6	.53	.52	.69	e.70	e.84	e2.0	e.46	.91	24	.80	4.4	5.8
7	.67	.57	.74	e.50	e1.1	1.4	e.46	.47	22	.47	.72	.52
8	.63	.84	1.2	e.60	e1.1	.79	e.44	.61	11	.42	.54	.29
9	.70	.98	.87	e.64	e1.0	e.75	e.45	.83	15	.52	.70	.29
10	1.0	.84	.80	e.70	e1.2	e.75	e.45	.69	30	.43	4.0	.27
11	1.2	.89	1.2	e.60	e1.2	e.75	1.6	1.4	5.2	1.2	17	.21
12	1.3	.80	1.4	e.50	.87	e.85	.80	3.0	22	.40	22	.20
13	.73	.79	.96	e.48	.87	e.75	1.5	e1.0	12	.29	2.7	.22
14	.67	.86	1.2	e.54	e1.2	e1.4	.93	e.95	26	.52	.88	.17
15	.78	.70	1.2	e.80	.89	e1.2	.20	.87	4.9	.68	.57	.45
16	.65	.56	e1.3	1.0	1.3	.98	.26	.91	2.8	.61	1.7	.94
17	.53	.60	e1.2	.99	1.6	e.70	e.38	.87	1.8	.52	4.9	.80
18	.47	.46	e.60	e1.3	.89	e.80	e.40	2.2	1.4	.46	2.4	.75
19	.42	.37	e.55	e1.1	.97	1.0	e.40	e.85	1.3	1.8	2.0	.64
20	.74	e.41	.41	e1.3	e1.3	e.38	e.55	e.88	.98	5.7	.94	1.9
21	1.8	e.41	.66	e1.1	1.7	e.42	3.5	e1.3	.74	1.4	.70	2.3
22	1.2	e.40	.86	e1.1	e1.4	e.42	.41	e4.6	.57	1.2	2.2	9.0
23	1.2	e.40	.79	.88	e1.2	e.40	6.0	1.4	14	1.3	.70	1.9
24	1.0	e.41	.79	e1.1	e1.2	.74	17	.71	2.2	.99	7.8	1.2
25	.83	e.42	.61	e1.2	e1.3	3.3	17	.63	1.3	.91	8.4	.95
26	1.1	e.50	.37	.72	e1.3	e.42	16	1.1	1.6	1.2	1.3	.59
27	2.8	1.3	.65	e1.1	e1.4	e.42	23	.54	2.7	1.8	.71	.51
28	1.6	1.1	1.1	e1.2	e1.4	e.44	12	.43	1.5	6.7	.54	.70
29	.63	.92	1.7	e1.2	---	e.46	3.8	.93	1.3	8.3	.63	.67
30	.74	1.3	1.3	e1.1	---	e.46	1.4	.85	1.0	13	.52	.50
31	.67	---	1.5	e1.1	---	e.45	---	.66	---	.83	.88	---
TOTAL	30.78	20.35	26.63	29.65	32.25	35.03	111.76	35.06	216.00	55.64	137.93	34.26
MEAN	.99	.68	.86	.96	1.15	1.13	3.73	1.13	7.20	1.79	4.45	1.14
MAX	4.2	1.3	1.7	1.5	1.7	3.7	23	4.6	30	13	26	9.0
MIN	.38	.37	.31	.48	.84	.38	.20	.43	.50	.29	.52	.17
AC-FT	61	40	53	59	64	69	222	70	428	110	274	68

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 1997, BY WATER YEAR (WY)

	1992	1993	1994	1995	1996	1997
MEAN	1.26	.71	.55	.52	.63	.86
MAX	2.59	.89	.86	.96	1.15	1.25
(WY)	1995	1996	1997	1997	1994	1997
MIN	.35	.47	.33	.33	.42	.49
(WY)	1993	1993	1993	1994	1994	1995

SUMMARY STATISTICS

	FOR 1996 CALENDAR YEAR	FOR 1997 WATER YEAR	WATER YEARS 1992 - 1997
ANNUAL TOTAL	583.20	765.34	
ANNUAL MEAN	1.59	2.10	1.58
HIGHEST ANNUAL MEAN			2.74
LOWEST ANNUAL MEAN			.65
HIGHEST DAILY MEAN	32	May 25	42
LOWEST DAILY MEAN	a.15	Jan 23	b.15
ANNUAL SEVEN-DAY MINIMUM	.20	Jan 30	.17
INSTANTANEOUS PEAK FLOW		419	c1090
INSTANTANEOUS PEAK STAGE		4.06	d5.57
ANNUAL RUNOFF (AC-FT)	1160	1520	1150
10 PERCENT EXCEEDS	2.0	3.9	2.4
50 PERCENT EXCEEDS	.67	.87	.62
90 PERCENT EXCEEDS	.30	.42	.30

e-Estimated.

a-Also occurred Feb 3.

b-Also occurred Jan 23, Feb 3, 1996.

c-From rating curve extended above 1.1 ft³/s, on basis of slope-area measurement of peak flow.

d-From floodmarks.

07103990 COTTONWOOD CREEK AT MOUTH AT PIKEVIEW, CO

LOCATION.--Lat 38°55'41", long 104°38'35", in SW¹/₄SW¹/₄ sec.8, T.13 S, R.67 W., El Paso County, Hydrologic Unit 11020003, on left bank 70 ft upstream from Vincent Drive bridge, 0.3 mi south of Woodmen Valley Road, and 0.3 mi upstream from mouth.

DRAINAGE AREA.--18.7 mi².

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 60 ft³/s, which are poor. Natural flow of stream affected by runoff from industrial and residential areas of northeast Colorado Springs. 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.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9.9	5.2	6.3	5.7	7.6	7.5	5.3	6.3	7.0	7.0	14	6.8
2	7.9	5.8	5.2	5.5	7.3	4.9	6.8	5.6	6.6	6.7	13	5.6
3	8.5	6.1	2.9	5.6	6.9	4.9	4.8	6.8	6.7	7.5	8.5	6.5
4	28	6.1	3.4	4.6	7.3	5.0	6.0	5.0	5.8	7.1	30	7.4
5	6.5	6.7	3.5	4.7	6.8	5.0	5.3	6.1	10	6.7	40	6.0
6	6.9	6.9	4.4	e3.7	4.4	4.4	4.9	7.4	26	7.6	9.9	17
7	7.5	6.4	4.3	e3.1	7.0	4.7	4.6	7.1	43	7.0	11	5.4
8	7.4	6.5	4.6	e3.5	6.4	5.1	4.4	8.0	23	6.8	9.5	4.7
9	6.1	4.5	5.1	e3.7	5.6	5.3	5.0	5.6	37	6.6	9.4	5.0
10	6.5	5.5	5.5	3.8	7.8	5.1	4.5	6.8	96	6.3	12	5.8
11	6.5	6.3	5.0	e3.5	7.7	4.9	4.4	7.2	9.2	6.6	31	6.6
12	7.2	5.6	5.4	e3.3	7.0	4.8	3.8	8.3	28	6.7	43	6.1
13	6.8	6.4	4.9	e3.5	7.7	5.0	3.3	6.4	19	6.2	13	5.5
14	6.2	8.8	4.8	e4.0	7.7	4.7	4.0	6.4	36	6.1	6.7	6.1
15	6.7	9.4	5.1	4.8	7.5	4.4	4.2	5.9	12	6.0	8.1	4.7
16	7.2	8.5	4.9	4.6	6.6	4.5	4.6	5.8	9.9	5.9	7.7	4.5
17	7.3	6.5	3.3	5.2	7.3	4.3	4.1	5.9	8.9	5.8	9.4	4.4
18	7.8	10	e3.2	5.6	7.4	4.1	4.3	10	9.2	5.8	9.8	4.6
19	7.8	11	e3.4	6.5	7.8	4.5	4.4	6.6	10	7.8	8.8	4.8
20	8.9	9.3	3.8	5.1	7.5	4.1	4.4	6.9	8.9	8.7	7.7	6.6
21	8.7	9.1	3.6	4.7	7.5	4.2	10	8.5	8.3	6.4	7.6	8.7
22	7.3	8.7	3.5	4.6	6.7	4.2	4.5	28	7.8	6.1	9.5	13
23	6.7	8.6	3.6	4.7	4.4	4.1	13	6.3	22	7.0	7.3	6.4
24	6.0	8.0	3.4	5.9	4.2	6.0	24	5.8	8.4	7.1	9.8	4.5
25	6.9	7.3	4.2	7.4	5.6	5.2	20	6.4	8.0	6.6	16	4.5
26	7.3	6.5	4.5	7.6	4.1	4.4	24	7.6	8.8	9.4	6.2	5.2
27	8.9	6.4	4.9	6.9	5.1	4.4	26	6.6	8.4	14	5.2	5.7
28	6.5	6.7	4.7	8.3	5.0	4.7	11	6.4	7.5	20	5.1	5.1
29	5.9	7.1	5.0	7.0	---	5.0	7.2	7.9	6.7	20	6.6	5.0
30	5.4	5.5	5.8	8.4	---	5.0	6.0	6.3	7.5	23	5.9	5.7
31	5.3	---	6.1	8.0	---	4.9	---	7.2	---	13	8.0	---
TOTAL	242.5	215.4	138.3	163.5	183.9	149.3	238.8	231.1	505.6	267.5	389.7	187.9
MEAN	7.82	7.18	4.46	5.27	6.57	4.82	7.96	7.45	16.9	8.63	12.6	6.26
MAX	28	11	6.3	8.4	7.8	7.5	26	28	96	23	43	17
MIN	5.3	4.5	2.9	3.1	4.1	4.1	3.3	5.0	5.8	5.8	5.1	4.4
AC-FT	481	427	274	324	365	296	474	458	1000	531	773	373

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1986 - 1997, BY WATER YEAR (WY)

	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
MEAN	5.16	4.57	3.80	3.90	4.32	5.31	5.06	7.24	8.62	7.64	7.64	5.56
MAX	9.59	7.18	6.76	5.30	6.57	11.1	7.96	19.5	26.4	16.8	12.6	9.86
(WY)	1995	1997	1995	1994	1997	1992	1997	1995	1995	1995	1997	1995
MIN	1.93	2.90	1.92	2.30	2.28	2.67	3.31	2.71	3.05	2.34	5.41	2.67
(WY)	1987	1987	1992	1987	1990	1991	1989	1986	1990	1992	1993	1986

SUMMARY STATISTICS

FOR 1996 CALENDAR YEAR

FOR 1997 WATER YEAR

WATER YEARS 1986 - 1997

ANNUAL TOTAL	2391.2	2913.5	
ANNUAL MEAN	6.53	7.98	5.88
HIGHEST ANNUAL MEAN			10.4
LOWEST ANNUAL MEAN			4.01
HIGHEST DAILY MEAN	69	96	150
LOWEST DAILY MEAN	2.8	2.9	.01
ANNUAL SEVEN-DAY MINIMUM	3.3	3.5	.12
INSTANTANEOUS PEAK FLOW		^a 638	^b 2380
INSTANTANEOUS PEAK STAGE		6.45	^c 8.26
ANNUAL RUNOFF (AC-FT)	4740	5780	4260
10 PERCENT EXCEEDS	8.9	10	8.4
50 PERCENT EXCEEDS	5.4	6.4	4.2
90 PERCENT EXCEEDS	3.8	4.4	2.3

e-Estimated.

a-From rating curve extended above 56 ft³/s on the basis of timed-drift measurement of flow.

b-From rating curve extended above 60 ft³/s, on basis of culvert measurement of peak flow, gage height not determined.

c-From flood mark, maximum gage height for flood of Jun 17, 1993 not determined.

07104000 MONUMENT CREEK AT PIKEVIEW, CO

LOCATION.--Lat 38°55'04", long 104°49'05", in NW¼SE¼ sec.18, T.13 S., R.66 W., El Paso County, Hydrologic Unit 11020003, on right bank 0.1 mi west of Interstate 25, 0.9 mi downstream from Cottonwood Creek, and 1.3 mi downstream from Woodmen Valley Road.

DRAINAGE AREA.--204 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1938 to September 1949, January 1976 to current year.

REVISED RECORDS.--WDR CO-90-1: 1989 (M).

GAGE.--Water-stage recorder with satellite telemetry, and crest-stage gage. Datum of gage is 6,203.26 ft above sea level. Sept. 1938 to Oct. 1949, nonrecording gage at present site at datum 0.10 ft lower. Jan. 1976 to June 6, 1994 at present site, at datum 2.00 ft lower.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Natural flow of stream affected by storage reservoirs, power developments, diversions for irrigation, municipal use and return flow from irrigation, and sewage-effluent discharge.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of May 30, 1935, reached a stage of about 14 ft, datum then in use, discharge unknown.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	31	e22	e18	e18	e24	16	63	39	40	86	53
2	25	29	e21	e20	e20	e25	26	68	42	40	65	38
3	24	27	e19	e19	e19	e24	22	72	38	36	57	45
4	64	27	e19	e19	e19	e23	23	81	34	34	97	56
5	35	27	e18	e18	e18	e23	30	85	38	34	126	59
6	26	29	e18	e17	e17	e21	29	88	137	31	85	75
7	28	29	e17	e14	e17	e20	25	103	368	28	71	57
8	27	30	17	e16	e17	e20	21	117	293	27	67	46
9	21	26	20	e16	e18	20	16	120	329	24	65	47
10	22	27	19	e17	e18	19	18	116	596	22	83	43
11	20	28	17	e18	e19	21	18	96	311	23	134	33
12	20	25	16	e19	e18	20	17	100	282	22	179	31
13	19	22	18	e17	e17	18	18	92	238	19	111	28
14	19	20	e16	e18	e18	17	17	93	245	27	83	29
15	18	20	e15	e19	e18	18	16	81	190	25	52	29
16	18	20	e15	e18	e18	19	17	71	172	22	46	33
17	21	17	e12	e17	e17	16	18	81	154	21	74	40
18	28	24	e13	e17	e16	16	19	86	130	20	66	32
19	26	22	e14	e17	e17	15	20	74	120	25	63	29
20	29	20	e15	e18	e16	14	18	75	104	33	57	36
21	34	19	e16	e18	e18	13	30	80	87	27	52	43
22	29	18	e18	e19	e17	13	25	101	86	22	48	48
23	28	16	e19	e18	e20	14	29	73	116	19	54	56
24	29	17	e20	e17	e21	17	106	72	95	17	60	43
25	29	17	e19	e17	e21	22	106	72	95	17	61	37
26	33	e17	e20	e19	e21	22	103	73	83	27	57	37
27	39	e18	e21	e18	e22	24	133	70	68	44	58	36
28	33	e19	e20	e18	e23	22	109	74	47	73	74	34
29	34	e20	e20	e18	---	21	82	68	36	66	80	32
30	32	e21	e20	e18	---	20	62	61	32	108	84	29
31	30	---	e19	e18	---	18	---	47	---	97	86	---
TOTAL	861	682	553	550	518	599	1189	2553	4605	1070	2381	1234
MEAN	27.8	22.7	17.8	17.7	18.5	19.3	39.6	82.4	154	34.5	76.8	41.1
MAX	64	31	22	20	23	25	133	120	596	108	179	75
MIN	18	16	12	14	16	13	16	47	32	17	46	28
AC-FT	1710	1350	1100	1090	1030	1190	2360	5060	9130	2120	4720	2450

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 1997, BY WATER YEAR (WY)

	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															
MEAN	18.1	17.0	14.5	13.2	14.2	20.7	45.4	88.7	46.3	25.2	28.1	16.0																																										
MAX	82.8	55.3	30.2	26.8	28.7	46.2	259	338	160	95.0	80.6	46.7																																										
(WY)	1985	1985	1996	1986	1991	1984	1942	1947	1995	1995	1945	1985																																										
MIN	1.90	4.27	3.95	4.40	4.06	6.67	10.2	12.7	5.20	2.01	1.11	1.74																																										
(WY)	1940	1979	1979	1979	1940	1944	1978	1946	1976	1939	1940	1939																																										

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR	FOR 1997 WATER YEAR	WATER YEARS 1939 - 1997	
ANNUAL TOTAL	10660.8	16795		
ANNUAL MEAN	29.1	46.0	29.6	
HIGHEST ANNUAL MEAN			72.1	1942
LOWEST ANNUAL MEAN			8.21	1978
HIGHEST DAILY MEAN	e850	Aug 1	596	Jun 10
LOWEST DAILY MEAN	5.0	Aug 13	e12	Dec 17
ANNUAL SEVEN-DAY MINIMUM	8.7	Aug 7	14	Dec 14
INSTANTANEOUS PEAK FLOW			a1810	Aug 12
INSTANTANEOUS PEAK STAGE		9.58	Aug 12	b3750
ANNUAL RUNOFF (AC-FT)	21150	33310	c7.48	Aug 5 1981
10 PERCENT EXCEEDS	39	95		
50 PERCENT EXCEEDS	23	25		
90 PERCENT EXCEEDS	15	17		4.6

e-Estimated.
a-From rating curve extended above 850 ft³/s, on basis of a slope-area measurement of peak flow of 1730 ft³/s.
b-From slope-area measurement of peak flow.
c-Datum then in use, maximum gage height, 9.89 ft, Aug 19, 1996.

**07104000 MONUMENT CREEK AT PIKEVIEW, CO--Continued
WATER-QUALITY RECORDS**

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

PERIOD OF DAILY RECORD.--Suspended-sediment discharge August 1995 to September 1997 for selected peak flows only (discontinued).

INSTRUMENTATION.--Pumping sediment sampler since August 1995.

REMARKS.--Records fair for selected peak flows.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SEDIMENT CONCENTRATIONS: Maximum daily mean during selected peak flows, 4,710 mg/L, July 27, 1996; minimum daily, 203 mg/L, Aug. 14, 1996.

SEDIMENT LOADS: Maximum daily during selected peak flows, 3,420 tons, June 10, 1997; minimum daily mean, 38 tons, May 24, 1996.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATIONS: Maximum daily mean during selected peak flows, 2,800 mg/L, June 14; minimum daily mean, 333 mg/L, Aug. 10.

SEDIMENT LOADS: Maximum daily during selected peak flows, 3,420 tons, June 10; minimum daily, 95 tons, Aug. 10.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	pH (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)	STREP-TOCOCCI, FECAL, KF AGAR (COLS. PER 100 ML) AS CA (31673)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)
OCT											
22...	1415	30	414	8.5	9.5	9.2	1.0	>300	290	48	6.2
NOV											
20...	1315	21	486	8.5	10.0	8.7	0.8	55	62	57	7.6
DEC											
11...	1330	15	473	8.4	7.0	9.5	0.3	K43	75	56	7.7
JAN											
22...	1515	30	481	8.2	0.0	11.4	0.8	K35	120	55	7.1
FEB											
19...	1400	26	499	8.4	9.5	9.2	0.4	K38	K28	60	7.5
MAR											
19...	1330	15	478	8.5	15.5	8.1	0.6	K11	K180	54	7.3
APR											
23...	1445	21	412	8.4	15.0	--	1.0	K10	100	51	6.5
MAY											
28...	1330	74	244	8.1	14.0	7.8	0.5	K40	K65	27	3.7
JUN											
25...	1230	85	253	8.0	19.5	7.0	0.8	250	220	29	3.8
JUL											
23...	1345	18	463	8.5	27.5	6.4	1.1	150	200	54	6.7
AUG											
13...	1445	100	324	8.1	21.5	6.7	1.4	430	440	37	4.9
SEP											
17...	1415	38	352	8.4	21.0	7.3	1.1	160	210	42	5.5

DATE	ALKA-LINITY 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)	RESIDUE TOTAL AT 105 DEG. C, PENDED (MG/L) (00530)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA + DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)
OCT										
22...	105	58	19	1.1	128	0.02	1.9	<0.015	0.3	0.07
NOV										
20...	124	73	24	1.2	58	0.01	2.5	0.02	0.4	0.10
DEC										
11...	117	72	23	1.2	100	0.02	2.5	<0.015	0.3	0.11
JAN										
22...	115	72	29	1.1	282	<0.01	2.9	0.03	0.4	0.13
FEB										
19...	120	80	29	0.9	128	0.02	2.9	0.02	0.2	0.16
MAR										
19...	116	76	26	1.2	115	0.01	2.4	<0.015	0.2	0.20
APR										
23...	104	64	21	1.1	256	<0.01	1.73	<0.015	0.48	0.176
MAY										
28...	63	29	11	1.5	114	<0.01	0.692	<0.015	0.21	0.119
JUN										
25...	65	32	11	1.5	187	<0.01	0.706	0.017	0.43	0.091
JUL										
23...	115	69	20	1.2	102	0.012	2.21	0.015	2.0	0.088
AUG										
13...	84	41	15	1.2	228	0.010	1.07	0.018	0.60	0.102
SEP										
17...	94	46	17	1.2	70	<0.01	1.41	<0.015	0.33	0.150

K-Based on non-ideal colony count.

07104000 MONUMENT CREEK AT PIKEVIEW, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	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)	CHRO- MIUM, HEXA- VALENT, DIS. (UG/L AS CR) (01032)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	IRON, DIS- SOLVED (UG/L AS FE) (01046)
OCT 22...	<1	<1	<1	<1	<1	4	1	2500	15
NOV 20...	<1	<1	<1	<1	<1	3	<1	2000	11
DEC 11...	<1	<1	<1	<1	<1	3	<1	1800	8
JAN 22...	<1	<1	2	<1	<1	6	1	4100	<3
FEB 19...	<1	<1	<1	<1	<1	4	1	2100	3
MAR 19...	<1	<1	<1	<1	<1	3	1	1600	11
APR 23...	<1	<1	<1	<1	<1	7	1	3000	8.1
MAY 28...	<1	<1	<1	<1	<1	3	<1	2000	28
JUN 25...	<1	<1	<1	<1	<1	4	1.1	3000	11
JUL 23...	<1	<1	<1	<1	<1	4	<2.2	1700	<3
AUG 13...	<1	<1	1	<1	<1	5	1.2	4000	4.6
SEP 17...	<1	<1	<1	<1	<1	5	3.7	1500	4.6

DATE	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)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)
OCT 22...	3	<1	90	21	2	<1	10	4
NOV 20...	3	<1	80	29	2	<1	10	<3
DEC 11...	3	<1	80	35	3	1	10	<3
JAN 22...	8	<1	140	33	4	<1	30	5
FEB 19...	3	<1	90	28	3	2.0	20	6
MAR 19...	3	<1	63	16	2	1.4	10	<3
APR 23...	5	<1	130	18	4	<1	20	<3
MAY 28...	3	<1	100	9.2	2	<1	20	<3
JUN 25...	5	<1	110	6.2	2	<1	20	<3
JUL 23...	2	<1	53	3.3	1	1.5	10	4.9
AUG 13...	9	<1	130	4.5	4	<1	30	<3
SEP 17...	1	<1	63	4.0	1	1.0	10	4.8

ARKANSAS RIVER BASIN

07104000 MONUMENT CREEK AT PIKEVIEW, CO--Continued

MISCELLANEOUS FIELD MEASUREMENTS, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

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				
09...	1645	20	--	15.0	03...	1035	37	315	17.0
NOV					06...	1535	39	304	23.0
20...	1505	20	503	8.5	09...	1535	271	168	13.5
DEC					09...	1545	276	168	13.5
09...	1250	18	504	3.5	17...	1320	152	203	16.5
JAN					JUL				
23...	1305	19	481	0.0	10...	1110	23	425	19.5
FEB					31...	0900	90	250	18.0
25...	1330	36	503	2.5	31...	0920	87	250	18.0
MAR					SEP				
20...	0700	14	512	2.5	05...	1040	55	300	18.5
APR									
23...	1255	21	413	14.5					
29...	1400	74	350	14.5					
MAY									
08...	1605	122	201	13.0					
09...	1405	115	199	15.0					

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

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)
MAY				
08...	1605	122	483	159
JUN				
09...	1545	276	1530	1140
10...	1345	398	1220	1310
JUL				
31...	0900	90	498	121
AUG				
05...	1930	528	4250	6060

07104000 MONUMENT CREEK AT PIKEVIEW, CO--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

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
1	21	---	---	31	---	---	e22	---	---	
2	25	---	---	29	---	---	e21	---	---	
3	24	---	---	27	---	---	e19	---	---	
4	64	---	---	27	---	---	e19	---	---	
5	35	---	---	27	---	---	e18	---	---	
6	26	---	---	29	---	---	e18	---	---	
7	28	---	---	29	---	---	e17	---	---	
8	27	---	---	30	---	---	17	---	---	
9	21	---	---	26	---	---	20	---	---	
10	22	---	---	27	---	---	19	---	---	
11	20	---	---	28	---	---	17	---	---	
12	20	---	---	25	---	---	16	---	---	
13	19	---	---	22	---	---	18	---	---	
14	19	---	---	20	---	---	e16	---	---	
15	18	---	---	20	---	---	e15	---	---	
16	18	---	---	20	---	---	e15	---	---	
17	21	---	---	17	---	---	e12	---	---	
18	28	---	---	24	---	---	e13	---	---	
19	26	---	---	22	---	---	e14	---	---	
20	29	---	---	20	---	---	e15	---	---	
21	34	---	---	19	---	---	e16	---	---	
22	29	---	---	18	---	---	e18	---	---	
23	28	---	---	16	---	---	e19	---	---	
24	29	---	---	17	---	---	e20	---	---	
25	29	---	---	17	---	---	e19	---	---	
26	33	---	---	e17	---	---	e20	---	---	
27	39	---	---	e18	---	---	e21	---	---	
28	33	---	---	e19	---	---	e20	---	---	
29	34	---	---	e20	---	---	e20	---	---	
30	32	---	---	e21	---	---	e20	---	---	
31	30	---	---	---	---	---	e19	---	---	
TOTAL	861	---	---	682	---	---	553	---	---	
							MARCH			
		JANUARY			FEBRUARY					
1	e18	---	---	e18	---	---	e24	---	---	
2	e20	---	---	e20	---	---	e25	---	---	
3	e19	---	---	e19	---	---	e24	---	---	
4	e19	---	---	e19	---	---	e23	---	---	
5	e18	---	---	e18	---	---	e23	---	---	
6	e17	---	---	e17	---	---	e21	---	---	
7	e14	---	---	e17	---	---	e20	---	---	
8	e16	---	---	e17	---	---	e20	---	---	
9	e16	---	---	e18	---	---	20	---	---	
10	e17	---	---	e18	---	---	19	---	---	
11	e18	---	---	e19	---	---	21	---	---	
12	e19	---	---	e18	---	---	20	---	---	
13	e17	---	---	e17	---	---	18	---	---	
14	e18	---	---	e18	---	---	17	---	---	
15	e19	---	---	e18	---	---	18	---	---	
16	e18	---	---	e18	---	---	19	---	---	
17	e17	---	---	e17	---	---	16	---	---	
18	e17	---	---	e16	---	---	16	---	---	
19	e17	---	---	e17	---	---	15	---	---	
20	e18	---	---	e16	---	---	14	---	---	
21	e18	---	---	e18	---	---	13	---	---	
22	e19	---	---	e17	---	---	13	---	---	
23	e18	---	---	e20	---	---	14	---	---	
24	e17	---	---	e21	---	---	17	---	---	
25	e17	---	---	e21	---	---	22	---	---	
26	e19	---	---	e21	---	---	22	---	---	
27	e18	---	---	e22	---	---	24	---	---	
28	e18	---	---	e23	---	---	22	---	---	
29	e18	---	---	---	---	---	21	---	---	
30	e18	---	---	---	---	---	20	---	---	
31	e18	---	---	---	---	---	18	---	---	
TOTAL	550	---	---	518	---	---	599	---	---	

e-Estimated.

ARKANSAS RIVER BASIN

07104000 MONUMENT CREEK AT PIKEVIEW, CO--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

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	---	---	63	---	---	39	---	---
2	26	---	---	68	---	---	42	---	---
3	22	---	---	72	---	---	38	---	---
4	23	---	---	81	---	---	34	---	---
5	30	---	---	85	---	---	38	---	---
6	29	---	---	88	---	---	137	1100	1140
7	25	---	---	103	---	---	368	2490	2640
8	21	---	---	117	---	---	293	---	e1430
9	16	---	---	120	---	---	329	2060	1930
10	18	---	---	116	---	---	596	2000	3420
11	18	---	---	96	---	---	311	881	750
12	17	---	---	100	---	---	282	1690	1890
13	18	---	---	92	---	---	238	681	452
14	17	---	---	93	---	---	245	2800	2270
15	16	---	---	81	---	---	190	---	---
16	17	---	---	71	---	---	172	---	---
17	18	---	---	81	---	---	154	---	---
18	19	---	---	86	---	---	130	---	---
19	20	---	---	74	---	---	120	---	---
20	18	---	---	75	---	---	104	---	---
21	30	---	---	80	---	---	87	---	---
22	25	---	---	101	667	318	86	---	---
23	29	---	---	73	---	---	116	1420	1320
24	106	---	---	72	---	---	95	---	---
25	106	---	---	72	---	---	95	---	---
26	103	---	---	73	---	---	83	---	---
27	133	---	---	70	---	---	68	---	---
28	109	---	---	74	---	---	47	---	---
29	82	---	---	68	---	---	36	---	---
30	62	---	---	61	---	---	32	---	---
31	---	---	---	47	---	---	---	---	---
TOTAL	1189	---	---	2553	---	---	4605	---	---
		JULY		AUGUST			SEPTEMBER		
1	40	---	---	86	---	---	53	---	---
2	40	---	---	65	---	---	38	---	---
3	36	---	---	57	---	---	45	---	---
4	34	---	---	97	978	906	56	---	---
5	34	---	---	126	1300	574	59	---	---
6	31	---	---	85	---	---	75	---	---
7	28	---	---	71	---	---	57	---	---
8	27	---	---	67	---	---	46	---	---
9	24	---	---	65	---	---	47	---	---
10	22	---	---	83	333	95	43	---	---
11	23	---	---	134	849	465	33	---	---
12	22	---	---	179	1240	1990	31	---	---
13	19	---	---	111	---	---	28	---	---
14	27	---	---	83	---	---	29	---	---
15	25	---	---	52	---	---	29	---	---
16	22	---	---	46	---	---	33	---	---
17	21	---	---	74	---	---	40	---	---
18	20	---	---	66	---	---	32	---	---
19	25	---	---	63	---	---	29	---	---
20	33	---	---	57	---	---	36	---	---
21	27	---	---	52	---	---	43	---	---
22	22	---	---	48	---	---	48	---	---
23	19	---	---	54	---	---	56	---	---
24	17	---	---	60	---	---	43	---	---
25	17	---	---	61	---	---	37	---	---
26	27	---	---	57	---	---	37	---	---
27	44	---	---	58	---	---	36	---	---
28	73	706	270	74	---	---	34	---	---
29	66	892	272	80	---	---	32	---	---
30	108	1020	390	84	---	---	29	---	---
31	97	---	---	86	---	---	---	---	---
TOTAL	1070	---	---	2381	---	---	1234	---	---

e-Estimated.

07104905 MONUMENT CREEK AT BIJOU STREET, AT COLORADO SPRINGS, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 38°50'14", long 104°49'44", in NW¹/₄NW¹/₄ sec.18, T.14 S., R.66 W., El Paso County, Hydrologic Unit 11020003 at bridge on Bijou Street in Colorado Springs.

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	pH (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)	STREP-TOCOCCI, KF AGAR (COLS. PER 100 ML) (31673)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)
OCT											
22...	1600	30	625	8.4	10.5	9.0	1.2	140	240	69	12
NOV											
20...	1515	20	731	8.5	11.0	8.8	0.7	87	100	81	15
DEC											
11...	1500	21	716	8.5	7.0	9.6	0.5	K48	97	86	15
JAN											
23...	0930	19	765	--	0.0	11.5	0.1	67	K17	86	15
FEB											
19...	1530	14	795	8.5	11.0	8.9	0.8	93	260	92	16
MAR											
19...	1430	12	805	8.3	19.5	7.1	0.4	80	K250	86	16
APR											
23...	1600	24	648	8.4	14.5	--	1.6	K43	130	73	13
MAY											
28...	1515	59	376	8.2	19.0	7.1	0.6	200	120	40	6.7
JUN											
25...	1415	72	367	8.2	23.0	7.0	0.7	K180	280	40	6.8
JUL											
23...	1500	22	708	8.4	30.0	6.5	1.2	270	190	80	15
AUG											
13...	1545	67	436	8.2	23.0	6.7	1.5	600	950	48	7.8
SEP											
17...	1415	36	561	8.4	23.0	7.0	1.5	230	210	64	11

DATE	ALKA-LINITY 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)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)
OCT										
22...	139	130	25	1.3	152	0.02	3.2	<0.015	0.5	0.05
NOV										
20...	158	160	28	1.4	36	<0.01	4.0	0.02	0.3	0.06
DEC										
11...	153	160	26	1.4	116	0.02	4.2	0.02	0.2	0.09
JAN										
23...	156	170	39	1.3	38	0.01	4.2	0.03	0.3	0.12
FEB										
19...	159	190	40	1.1	262	0.03	4.7	<0.015	0.4	0.10
MAR										
19...	160	200	31	1.5	69	0.01	4.5	<0.015	<0.2	0.12
APR										
23...	136	150	27	1.2	368	0.013	3.07	<0.015	0.79	0.134
MAY										
28...	80	69	14	1.5	171	<0.01	1.52	<0.015	0.99	0.110
JUN										
25...	82	65	13	1.6	167	<0.01	1.25	<0.015	0.52	0.080
JUL										
23...	154	160	24	1.4	86	0.013	3.48	<0.015	0.39	0.062
AUG										
13...	99	77	16	1.2	280	0.011	1.63	<0.015	0.79	0.081
SEP										
17...	127	110	22	1.4	100	<0.01	2.59	<0.015	0.37	0.111

K-Based on non-ideal colony count.

ARKANSAS RIVER BASIN

07104905 MONUMENT CREEK AT BIJOU STREET, AT COLORADO SPRINGS, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	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)	CHRO- MIUM, HEXA- VALENT, DIS- SOLVED (UG/L AS CR) (01032)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	IRON, DIS- SOLVED (UG/L AS FE) (01046)
OCT 22...	<1	<1	1	<1	<1	5	1	3400	<3
NOV 20...	<1	<1	<1	<1	<1	4	2	1700	<3
DEC 11...	<1	<1	2	<1	<1	5	1	3400	<3
JAN 23...	<1	<1	<1	<1	<1	2	2	980	<3
FEB 19...	<1	<1	2	<1	<1	8	1	5000	<3
MAR 19...	<1	<1	2	<1	<1	3	1.6	1500	<3
APR 23...	<1	<1	3	<1	<1	9	<1	6100	<3
MAY 28...	<1	<1	1	<1	2	5	<1	3300	4.4
JUN 25...	<1	<1	2	<1	<1	5	1.4	2900	<3
JUL 23...	<1	<1	1	<1	<1	3	1.4	1500	<3
AUG 13...	<1	<1	2	<1	<1	9	3.0	5300	<3
SEP 17...	<1	<1	1	<1	<1	10	6.8	3000	<3

DATE	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)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)
OCT 22...	4	<1	90	2	3	<1	20	<3
NOV 20...	2	<1	40	3	3	1	10	<3
DEC 11...	5	<1	100	4	5	2	20	4
JAN 23...	1	<1	30	5	3	2	<10	<3
FEB 19...	9	<1	150	3	6	2	30	<3
MAR 19...	2	<1	39	3.8	2	1.4	10	<3
APR 23...	9	<1	170	3.1	6	<1	50	<3
MAY 28...	4	<1	120	<1	3	<1	20	7.5
JUN 25...	4	<1	96	1.1	2	<1	20	<3
JUL 23...	2	<1	52	3.0	1	1.4	20	6.6
AUG 13...	11	<1	160	1.1	5	1.0	30	<3
SEP 17...	2	<1	74	<1	2	1.0	20	<3

07105000 BEAR CREEK NEAR COLORADO SPRINGS, CO

LOCATION.--Lat 38°49'21", long 104°53'17", in NE¼NE¼ 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 mi².

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, and those above 80 ft³/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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.9	1.9	1.9	e1.5	e1.4	e1.2	e1.5	9.2	4.7	7.3	6.3	5.5
2	2.7	2.1	1.9	e1.4	e1.3	e1.2	e1.4	8.6	4.8	7.3	6.5	5.3
3	2.6	2.0	1.8	e1.3	e1.2	e1.2	1.4	7.5	4.6	7.7	6.2	4.9
4	2.5	1.9	1.8	e1.2	e1.2	e1.3	1.4	7.4	4.4	7.2	6.3	6.4
5	2.5	1.9	1.8	e1.1	e1.2	e1.3	1.4	7.2	4.7	7.0	8.2	9.9
6	2.4	1.9	1.9	e1.1	e1.2	e1.2	1.4	9.3	5.4	6.7	10	7.7
7	2.3	1.8	1.8	e1.1	e1.3	e1.2	1.5	10	9.0	6.2	11	6.8
8	2.3	1.8	1.8	e1.2	e1.3	e1.2	1.6	9.3	8.2	5.9	11	6.8
9	2.2	1.9	1.9	e1.2	e1.3	1.2	1.6	8.5	17	5.8	10	6.6
10	2.1	1.9	1.8	e1.2	e1.3	1.2	1.6	7.8	81	5.6	10	5.1
11	2.1	1.9	1.8	e1.1	e1.4	1.2	1.5	7.4	54	5.6	9.0	4.6
12	2.0	1.9	1.8	e1.1	e1.4	1.3	1.5	7.0	39	5.4	8.2	4.2
13	2.0	1.9	1.9	e1.1	e1.3	1.3	1.6	6.8	31	5.2	7.8	3.5
14	2.0	1.9	1.8	e1.1	e1.2	1.2	1.6	6.6	27	5.2	7.4	3.2
15	2.0	1.9	e1.6	e1.2	e1.3	1.3	1.5	6.5	23	5.2	6.7	3.1
16	1.9	1.8	e1.6	e1.1	e1.4	1.4	1.5	6.3	20	5.1	6.5	3.1
17	1.9	1.8	e1.5	e1.1	e1.5	1.4	1.5	5.6	17	5.0	6.2	3.0
18	2.1	1.9	e1.3	e1.1	e1.4	1.4	e1.5	5.1	16	4.9	6.4	3.0
19	2.3	1.9	e1.3	e1.2	e1.4	1.4	e1.3	5.3	15	e4.8	5.9	3.1
20	2.4	1.9	e1.3	e1.2	e1.3	1.5	e1.3	5.0	14	e5.0	5.6	3.4
21	2.3	1.9	e1.3	e1.2	e1.3	1.5	e1.5	5.3	14	e5.1	5.3	3.2
22	2.2	1.9	e1.4	e1.3	e1.2	e1.5	e1.7	5.8	13	5.1	5.1	3.2
23	2.2	1.9	e1.4	e1.2	e1.3	e1.5	e2.0	5.8	13	4.8	4.9	3.4
24	2.2	1.8	e1.4	e1.2	e1.1	e1.5	e2.5	5.7	12	4.7	4.8	3.4
25	2.2	1.9	e1.5	e1.1	e1.1	e1.3	e3.0	5.7	11	4.8	5.0	3.4
26	2.0	1.8	e1.5	e1.2	e1.2	e1.8	e5.0	5.6	10	4.8	4.9	3.3
27	2.0	1.8	e1.5	e1.2	e1.2	e1.9	e7.4	5.4	9.8	5.2	4.1	3.2
28	2.0	1.9	e1.4	e1.1	e1.2	e1.9	e7.8	5.2	9.3	5.6	4.1	3.2
29	1.8	1.9	e1.5	e1.2	---	e1.8	e7.4	5.3	8.8	5.4	3.9	3.1
30	1.9	1.9	e1.5	e1.2	---	e1.8	e9.4	4.9	8.0	6.3	4.3	3.1
31	1.9	---	e1.6	e1.3	---	e1.6	---	4.7	---	5.8	5.4	---
TOTAL	67.9	56.6	50.3	36.8	35.9	43.7	77.3	205.8	508.7	175.7	207.0	131.7
MEAN	2.19	1.89	1.62	1.19	1.28	1.41	2.58	6.64	17.0	5.67	6.68	4.39
MAX	2.9	2.1	1.9	1.5	1.5	1.9	9.4	10	81	7.7	11	9.9
MIN	1.8	1.8	1.3	1.1	1.1	1.2	1.3	4.7	4.4	4.7	3.9	3.0
AC-FT	135	112	100	73	71	87	153	408	1010	349	411	261

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 1997, BY WATER YEAR (WY)

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
MEAN	1.71	1.44	1.29	1.14	1.16	1.29	1.98	8.19	6.65	3.26	2.82	2.22
MAX	2.76	2.38	1.94	1.76	1.79	1.84	3.01	18.9	17.0	7.55	6.68	4.39
(WY)	1995	1996	1996	1996	1996	1995	1994	1995	1997	1995	1997	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 1996 CALENDAR YEAR

FOR 1997 WATER YEAR

WATER YEARS 1992 - 1997

ANNUAL TOTAL	668.84	1597.4		
ANNUAL MEAN	1.83	4.38		
HIGHEST ANNUAL MEAN			2.96	
LOWEST ANNUAL MEAN			5.12	1995
HIGHEST DAILY MEAN	5.5	Jul 10	.41	1993
LOWEST DAILY MEAN	.80	Jul 6	81	Jun 10 1997
ANNUAL SEVEN-DAY MINIMUM	.90	Jul 2	a1.1	Jan 5
INSTANTANEOUS PEAK FLOW			b162	Jun 10
INSTANTANEOUS PEAK STAGE			2.24	Jun 10
ANNUAL RUNOFF (AC-FT)	1330	3170	2.24	Jun 10 1997
10 PERCENT EXCEEDS	2.3	8.3	2140	
50 PERCENT EXCEEDS	1.8	2.0	6.0	
90 PERCENT EXCEEDS	1.3	1.2	1.7	
			.30	

e-Estimated.

a-Also occurred Jan 6-7, 11-14, 16-18, 25, 28, and Feb 24-25.

b-From rating curve extended above 80 ft³/s.

07105490 CHEYENNE CREEK AT EVANS AVENUE AT COLORADO SPRINGS, CO

LOCATION.--Lat 38°47'26", Long 104°51'49", SW¹/₄NW¹/₄ sec.35, T.14 S., R.67W., 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 mi².

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.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	10	6.5	3.1	e3.3	3.1	2.7	3.4	49	28	31	35	16
2	e9.8	6.5	3.2	3.4	3.1	2.7	3.5	42	31	27	35	15
3	e9.8	7.7	2.1	4.1	3.0	2.7	3.3	34	30	25	34	15
4	e9.4	7.8	3.3	3.9	2.8	2.9	3.9	33	30	24	34	15
5	e9.4	6.9	3.4	2.0	2.9	2.9	4.5	44	29	23	43	15
6	e9.0	5.4	3.2	3.4	2.8	3.1	5.1	57	32	21	57	14
7	e6.9	2.3	2.8	3.7	2.8	3.3	5.5	59	58	20	75	13
8	e6.9	2.4	2.7	4.1	2.7	3.5	5.4	56	60	19	69	13
9	e7.8	2.1	3.0	3.5	2.9	3.6	5.4	50	105	18	62	13
10	e7.4	3.1	3.4	3.4	2.8	3.5	4.7	46	432	18	59	13
11	e7.4	4.9	3.4	e3.0	3.1	3.8	3.0	43	236	18	53	13
12	e7.4	5.5	3.4	e2.1	3.1	4.0	4.1	40	170	17	48	12
13	e7.4	5.6	3.4	e2.1	3.0	3.9	5.1	38	133	16	43	11
14	e7.4	5.6	3.0	e2.2	3.0	3.3	4.3	38	113	15	39	11
15	e7.4	5.6	1.2	e2.4	3.1	3.3	2.3	39	100	14	36	10
16	e7.1	5.3	3.4	e2.2	3.0	3.5	1.6	40	98	14	34	9.6
17	6.7	3.9	1.5	e2.1	3.1	3.7	.88	40	93	13	31	9.2
18	6.5	5.7	1.7	e2.4	3.1	3.7	1.2	40	90	12	30	9.1
19	6.5	5.1	2.1	e2.8	3.1	2.9	2.2	44	87	21	28	8.9
20	6.3	4.5	2.4	e2.5	3.1	2.3	4.0	45	79	25	27	10
21	5.3	3.8	2.1	e2.3	2.9	2.9	6.2	48	73	20	25	10
22	5.5	3.7	2.4	e2.2	2.9	3.0	7.0	50	68	17	23	10
23	6.7	4.2	e2.3	e2.4	3.1	3.0	8.4	51	62	9.4	22	10
24	6.5	3.2	e2.1	e2.5	3.1	2.6	20	49	60	6.1	20	10
25	6.3	3.8	e2.3	2.7	3.2	2.5	16	48	55	15	21	8.9
26	5.8	3.4	e2.6	3.1	3.1	3.3	18	46	51	17	22	8.3
27	6.3	3.0	e2.3	3.0	3.1	3.5	19	43	48	17	19	8.3
28	6.7	3.3	e2.7	3.1	2.8	3.6	27	40	46	22	17	8.2
29	7.4	4.2	e3.0	3.4	---	3.3	45	38	42	25	17	8.4
30	7.0	3.2	e2.8	3.1	---	3.0	56	32	37	45	16	8.3
31	6.5	---	e3.0	3.1	---	3.5	---	25	---	36	16	---
TOTAL	226.5	138.2	83.3	89.5	83.8	99.5	295.98	1347	2576	620.5	1090	336.2
MEAN	7.31	4.61	2.69	2.89	2.99	3.21	9.87	43.5	85.9	20.0	35.2	11.2
MAX	10	7.8	3.4	4.1	3.2	4.0	56	59	432	45	75	16
MIN	5.3	2.1	1.2	2.0	2.7	2.3	.88	25	28	6.1	16	8.2
AC-FT	449	274	165	178	166	197	587	2670	5110	1230	2160	667

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 1997, BY WATER YEAR (WY)

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
MEAN	4.48	3.67	2.67	2.76	2.59	3.03	8.59	39.9	37.8	11.7	12.0	6.17
MAX	7.31	4.65	3.84	4.54	3.64	4.39	20.7	86.4	93.1	30.5	35.2	11.2
(WY)	1997	1996	1995	1996	1996	1994	1994	1994	1995	1995	1997	1997
MIN	.73	.84	.46	.91	1.53	.53	.88	2.63	2.60	1.03	2.09	1.12
(WY)	1993	1993	1993	1993	1993	1993	1993	1996	1993	1993	1993	1993

SUMMARY STATISTICS

FOR 1996 CALENDAR YEAR

FOR 1997 WATER YEAR

WATER YEARS 1992 - 1997

ANNUAL TOTAL	1820.60	6986.48	
ANNUAL MEAN	4.97	19.1	12.4
HIGHEST ANNUAL MEAN			21.8
LOWEST ANNUAL MEAN			1.40
HIGHEST DAILY MEAN	^a 20	432	432
LOWEST DAILY MEAN	.86	Jul 7	.10
ANNUAL SEVEN-DAY MINIMUM	1.2	Jul 3	.23
INSTANTANEOUS PEAK FLOW		^b 595	^b 595
INSTANTANEOUS PEAK STAGE		3.51	3.51
ANNUAL RUNOFF (AC-FT)	3610	13860	9000
10 PERCENT EXCEEDS	9.5	48	31
50 PERCENT EXCEEDS	3.8	6.7	3.9
90 PERCENT EXCEEDS	2.1	2.6	.84

e-Estimated.

a-Also occurred Aug 30.

b-From rating curve extended above 437 ft³/s.

07105500 FOUNTAIN CREEK AT COLORADO SPRINGS, CO

LOCATION.--Lat 38°48'59", long 104°49'20", in NE¼SW¼ 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 mouth of Cheyenne Creek, and 1.3 mi downstream from mouth of Monument Creek.

DRAINAGE AREA.--392 mi².

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. Prior to Oct. 1, 1972, nonrecording gage at same site at different datum.

REMARKS.--Records good except for estimated daily discharges and those above 1000 ft³/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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	71	56	35	32	30	e34	28	240	163	135	162	132
2	71	54	36	34	29	35	50	224	153	130	137	126
3	72	55	29	33	28	34	33	e170	147	123	124	125
4	107	55	35	33	25	32	38	e127	143	123	239	164
5	77	53	37	25	26	32	44	e118	158	120	446	143
6	64	52	37	31	25	29	44	e150	632	111	262	193
7	63	49	32	24	25	27	42	252	1250	99	212	e178
8	63	49	32	36	e25	27	43	265	933	87	196	e150
9	61	45	40	42	e26	27	38	245	1390	84	184	e135
10	60	44	33	e41	e27	25	35	230	1990	77	208	e100
11	56	46	32	e40	29	26	33	215	1190	82	308	91
12	56	45	31	e38	27	27	36	259	1100	86	238	91
13	56	42	31	e37	26	28	37	222	1040	68	223	79
14	56	41	30	e39	26	28	33	209	819	72	160	78
15	55	42	24	e40	29	27	30	206	515	65	134	73
16	49	42	29	e39	28	29	34	202	539	61	124	78
17	48	37	14	e38	27	29	32	193	496	57	150	80
18	55	44	19	37	25	33	32	197	464	53	170	75
19	56	41	24	42	26	26	32	200	382	105	141	71
20	58	39	33	40	25	28	31	191	353	86	132	93
21	69	40	34	38	28	28	e51	229	344	74	113	97
22	58	38	37	28	25	28	e48	339	345	61	104	101
23	60	44	33	32	31	27	225	207	362	46	110	112
24	60	39	29	27	e31	46	551	192	433	41	110	94
25	60	38	33	26	e30	40	362	192	329	51	292	86
26	60	34	31	33	30	34	467	190	265	119	206	79
27	73	40	36	26	31	37	314	171	214	164	148	73
28	61	36	35	28	e32	31	237	163	189	226	154	68
29	60	40	33	31	---	32	192	195	161	197	159	66
30	58	35	33	28	---	32	248	176	147	313	152	60
31	55	---	33	32	---	27	---	155	---	159	153	---
TOTAL	1928	1315	980	1050	772	945	3420	6324	16646	3275	5651	3091
MEAN	62.2	43.8	31.6	33.9	27.6	30.5	114	204	555	106	182	103
MAX	107	56	40	42	32	46	551	339	1990	313	446	193
MIN	48	34	14	24	25	25	28	118	143	41	104	60
AC-FT	3820	2610	1940	2080	1530	1870	6780	12540	33020	6500	11210	6130

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1976 - 1997, 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	
MEAN	44.5	36.7	29.4	27.1	26.0	37.2	72.0	178	132	75.2	80.2	45.8											
MAX	212	143	81.3	61.6	56.6	83.6	166	767	555	268	182	103											
(WY)	1985	1985	1985	1985	1985	1985	1985	1980	1997	1995	1997	1997											
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 1996 CALENDAR YEAR

FOR 1997 WATER YEAR

WATER YEARS 1976 - 1997

ANNUAL TOTAL	20324	45397		
ANNUAL MEAN	55.5	124		
HIGHEST ANNUAL MEAN			67.4	1995
LOWEST ANNUAL MEAN			155	1978
HIGHEST DAILY MEAN	395	May 26	1990	Jun 10 1997
LOWEST DAILY MEAN	14	Dec 17	14	Dec 17 1978
ANNUAL SEVEN-DAY MINIMUM	21	Jul 2	24	Dec 13 1979
INSTANTANEOUS PEAK FLOW			4550	Jun 10 1994
INSTANTANEOUS PEAK STAGE			8.03	Jun 10 1994
ANNUAL RUNOFF (AC-FT)	40310	90040	48800	
10 PERCENT EXCEEDS	86	242	139	
50 PERCENT EXCEEDS	43	56	33	
90 PERCENT EXCEEDS	29	28	14	

e-Estimated.

a-From slope-area measurement of peak flow.

b-From floodmark.

**07105500 FOUNTAIN CREEK AT COLORADO SPRINGS, CO--Continued
WATER-QUALITY RECORDS**

PERIOD OF RECORD.--April 1975 to current year. Daily sediment record August 1995 to current year (peak flows only).

PERIOD OF DAILY RECORD.--Suspended-sediment discharge August 1995 to current year (peak flows only).

INSTRUMENTATION.--Pumping sediment sampler since August 1995.

REMARKS.--Records for daily sediment during peak flows are fair.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SEDIMENT CONCENTRATIONS: Maximum daily mean during peak flows, 8,520 mg/L, Aug. 2, 1996; minimum daily mean, 109 mg/L, June 12, 1996.

SEDIMENT LOADS: Maximum daily during peak flows, 39,800 tons, June 6, 1997; minimum daily, 9.4 tons, June 12, 1996.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATIONS: Maximum daily mean during peak flows, 6,230 mg/L, June 6; minimum daily mean, 344 mg/L, May 29.

SEDIMENT LOADS: Maximum daily during peak flows, 39,800 tons, June 6; minimum daily, 118 tons, June 5.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	pH (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)	STREP-TOCOCCI, FECAL, KF AGAR (COLS. PER 100 ML) (31673)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	ALKA-LINITY LAB (MG/L AS CACO3) (90410)
OCT												
23...	1045	60	532	8.3	4.5	11.4	0.7	K540	240	54	12	123
NOV												
21...	1045	40	622	8.4	5.5	11.4	0.7	K320	370	64	14	140
DEC												
12...	1030	30	683	8.2	1.5	11.6	e0.1	K390	180	73	17	146
JAN												
23...	1330	34	732	8.3	2.0	11.2	0.6	K20	89	76	17	148
FEB												
20...	1130	24	728	8.2	3.5	10.1	0.6	95	140	71	16	149
MAR												
20...	1030	36	580	8.2	9.0	9.8	1.2	K590	520	56	12	122
MAY												
01...	1215	242	368	7.8	11.0	9.1	0.9	150	190	38	7.8	76
29...	1230	154	275	7.8	11.5	8.9	0.7	230	200	27	5.5	61
JUN												
26...	1100	280	334	8.3	15.0	8.3	0.8	460	200	35	7.0	76
JUL												
24...	1130	42	622	8.2	22.5	7.0	0.9	K440	350	63	15	132
AUG												
14...	1100	164	340	8.0	16.0	7.8	2.0	560	1500	34	6.8	77
SEP												
18...	1230	77	463	8.2	19.5	7.5	E1.8	250	210	49	10	103

DATE	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SULFIDE TOTAL (MG/L AS S) (00745)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + DIS-ORGANIC TOTAL (MG/L AS N) (00625)	PHOS-PHORUS ORTHO, SOLVED (MG/L AS P) (00671)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)
OCT											
23...	110	20	2.0	--	75	0.02	2.1	<0.015	0.2	0.02	4
NOV											
21...	130	23	2.2	<0.5	52	<0.01	2.5	<0.015	0.2	0.04	5
DEC											
12...	150	28	2.0	--	82	0.02	2.8	0.02	0.3	0.06	7
JAN											
23...	160	35	1.8	--	122	0.01	3.5	0.03	0.3	0.07	7
FEB											
20...	170	30	1.9	--	38	0.02	3.2	<0.015	<0.2	0.05	7
MAR											
20...	130	23	2.2	--	394	0.01	2.3	0.04	<0.2	0.06	6
MAY											
01...	62	21	2.6	--	170	<0.01	1.18	<0.015	0.55	0.048	2
29...	44	10	2.6	<0.5	31	<0.01	0.824	<0.015	0.29	0.046	2
JUN											
26...	54	13	2.2	--	107	<0.01	1.16	<0.015	0.32	0.039	2
JUL											
24...	130	23	2.4	--	42	0.015	2.45	<0.015	0.26	0.031	4
AUG											
14...	57	12	2.5	--	171	0.010	1.09	0.059	0.33	0.030	2
SEP											
18...	90	17	2.4	--	42	<0.010	1.74	<0.015	<0.2	0.039	1

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

07105500 FOUNTAIN CREEK AT COLORADO SPRINGS, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	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)	CHRO- MIUM, HEXA- VALENT, DIS. (UG/L AS CR) (01032)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)
OCT 23...	--	--	--	--	<1	<1	<1	<1	<1	3	<1	1800
NOV 21...	<1	<1	70	70	<1	<1	<1	<1	<1	2	1	1400
DEC 12...	--	--	--	--	<1	<1	1	<1	<1	3	1	1700
JAN 23...	--	--	--	--	<1	<1	2	<1	<1	4	1	3100
FEB 20...	--	--	--	--	<1	<1	1	<1	<1	4	1	2700
MAR 20...	--	--	--	--	<1	<1	5	<1	<1	10	<1	7500
MAY 01...	--	--	--	--	<1	<1	4	<1	<1	7	1.4	5100
29...	<1	<1	40	31	<1	<1	1	<1	<1	3	<1	2400
JUN 26...	--	--	--	--	<1	<1	1	<1	<1	4	1.0	3100
JUL 24...	--	--	--	--	<1	<1	<1	<1	<1	3	1.3	990
AUG 14...	--	--	--	--	<1	<1	1	<1	<1	5	2.1	3400
SEP 18...	--	--	--	--	<1	<1	<1	<1	<1	2	<1	1200

DATE	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)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	CYANIDE TOTAL (MG/L AS CN) (00720)
OCT 23...	<3	2	<1	70	23	2	<1	4	10	<3	--
NOV 21...	<3	2	<1	70	25	2	<1	5	10	<3	<0.01
DEC 12...	<3	3	<1	80	32	3	2	7	20	<3	--
JAN 23...	<3	5	<1	100	21	4	<1	7	20	<3	--
FEB 20...	<3	4	<1	110	28	4	1	7	20	10	--
MAR 20...	<3	17	<1	230	14	7	<1	6	60	<3	--
MAY 01...	4.7	21	<1	270	8.1	5	<1	2	40	3.6	--
29...	6.0	4	<1	110	7.4	2	<1	2	20	9.0	<0.01
JUN 26...	5.6	6	<1	140	20	1	<1	2	30	3.2	--
JUL 24...	<3	2	<1	70	33	<1	1.4	4	10	<3	--
AUG 14...	<3	8	<1	120	8.9	3	<1	2	20	<3	--
SEP 18...	<3	1	<1	55	15	1	<1	1	10	4.8	--

ARKANSAS RIVER BASIN

07105500 FOUNTAIN CREEK AT COLORADO SPRINGS, CO--Continued

MISCELLANEOUS FIELD MEASUREMENTS, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

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				
02...	1430	73	540	14.5	06...	1655	243	292	12.5
NOV					09...	1230	250	--	12.5
22...	1605	38	715	9.0	20...	1500	193	306	18.5
DEC					23...	1430	185	--	14.5
24...	1340	31	736	0.5	23...	1530	190	325	14.5
JAN					JUN				
22...	1445	27	828	3.0	06...	1355	141	390	20.0
FEB					07...	1145	930	--	14.0
11...	1355	25	810	7.0	07...	1150	866	238	14.0
MAR					17...	1715	461	265	16.5
05...	1415	25	850	8.0	JUL				
APR					02...	1520	134	493	21.0
15...	1330	29	600	16.0	29...	1240	120	--	18.5
22...	1220	55	583	13.0	29...	1300	120	505	18.5
25...	1330	364	430	4.5	AUG				
28...	1400	295	390	13.0	13...	1400	182	430	21.0
					SEP				
					10...	1450	99	533	22.5

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
MAY				
09...	1230	250	594	401
23...	1430	185	482	241
JUN				
07...	1145	930	3030	7610
10...	1630	1330	4310	15500
JUL				
29...	1240	120	143	46
AUG				
05...	2045	477	3470	4470

07105500 FOUNTAIN CREEK AT COLORADO SPRINGS, CO--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

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	71	---	---	56	---	---	35	---	---
2	71	---	---	54	---	---	36	---	---
3	72	---	---	55	---	---	29	---	---
4	107	---	---	55	---	---	35	---	---
5	77	---	---	53	---	---	37	---	---
6	64	---	---	52	---	---	37	---	---
7	63	---	---	49	---	---	32	---	---
8	63	---	---	49	---	---	32	---	---
9	61	---	---	45	---	---	40	---	---
10	60	---	---	44	---	---	33	---	---
11	56	---	---	46	---	---	32	---	---
12	56	---	---	45	---	---	31	---	---
13	56	---	---	42	---	---	31	---	---
14	56	---	---	41	---	---	30	---	---
15	55	---	---	42	---	---	24	---	---
16	49	---	---	42	---	---	29	---	---
17	48	---	---	37	---	---	14	---	---
18	55	---	---	44	---	---	19	---	---
19	56	---	---	41	---	---	24	---	---
20	58	---	---	39	---	---	33	---	---
21	69	---	---	40	---	---	34	---	---
22	58	---	---	38	---	---	37	---	---
23	60	---	---	44	---	---	33	---	---
24	60	---	---	39	---	---	29	---	---
25	60	---	---	38	---	---	33	---	---
26	60	---	---	34	---	---	31	---	---
27	73	---	---	40	---	---	36	---	---
28	61	---	---	36	---	---	35	---	---
29	60	---	---	40	---	---	33	---	---
30	58	---	---	35	---	---	33	---	---
31	55	---	---	---	---	---	33	---	---
TOTAL	1928	---	---	1315	---	---	980	---	---
	JANUARY			FEBRUARY			MARCH		
1	32	---	---	30	---	---	e34	---	---
2	34	---	---	29	---	---	35	---	---
3	33	---	---	28	---	---	34	---	---
4	33	---	---	25	---	---	32	---	---
5	25	---	---	26	---	---	32	---	---
6	31	---	---	25	---	---	29	---	---
7	24	---	---	25	---	---	27	---	---
8	36	---	---	e25	---	---	27	---	---
9	42	---	---	e26	---	---	27	---	---
10	e41	---	---	e27	---	---	25	---	---
11	e40	---	---	29	---	---	26	---	---
12	e38	---	---	27	---	---	27	---	---
13	e37	---	---	26	---	---	28	---	---
14	e39	---	---	26	---	---	28	---	---
15	e40	---	---	29	---	---	27	---	---
16	e39	---	---	28	---	---	29	---	---
17	e38	---	---	27	---	---	29	---	---
18	37	---	---	25	---	---	33	---	---
19	42	---	---	26	---	---	26	---	---
20	40	---	---	25	---	---	28	---	---
21	38	---	---	28	---	---	28	---	---
22	28	---	---	25	---	---	28	---	---
23	32	---	---	31	---	---	27	---	---
24	27	---	---	e31	---	---	46	---	---
25	26	---	---	e30	---	---	40	---	---
26	33	---	---	30	---	---	34	---	---
27	26	---	---	31	---	---	37	---	---
28	28	---	---	e32	---	---	31	---	---
29	31	---	---	---	---	---	32	---	---
30	28	---	---	---	---	---	32	---	---
31	32	---	---	---	---	---	27	---	---
TOTAL	1050	---	---	772	---	---	945	---	---

e-Estimated.

ARKANSAS RIVER BASIN

07105500 FOUNTAIN CREEK AT COLORADO SPRINGS, CO--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

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
1	28	---	---	240	---	---	163	---	---	
2	50	---	---	224	---	---	153	---	---	
3	33	---	---	e170	---	---	147	---	---	
4	38	---	---	e127	---	---	143	---	---	
5	44	---	---	e118	---	---	158	---	e118	
6	44	---	---	e150	---	---	632	6230	39800	
7	42	---	---	252	---	---	1250	3570	13500	
8	43	---	---	265	---	---	933	2030	6100	
9	38	---	---	245	---	---	1390	2860	12200	
10	35	---	---	230	---	---	1990	5400	32300	
11	33	---	---	215	---	---	1190	---	---	
12	36	---	---	259	---	---	1100	---	---	
13	37	---	---	222	---	---	1040	446	1290	
14	33	---	---	209	---	---	819	1790	4900	
15	30	---	---	206	---	---	515	---	---	
16	34	---	---	202	---	---	539	---	---	
17	32	---	---	193	---	---	496	---	---	
18	32	---	---	197	---	---	464	1440	1870	
19	32	---	---	200	---	---	382	---	---	
20	31	---	---	191	---	---	353	---	---	
21	e51	---	---	229	1170	1100	344	---	---	
22	e48	---	---	339	1800	2630	345	---	---	
23	225	---	---	207	593	340	362	---	---	
24	551	---	---	192	---	---	433	---	---	
25	362	---	---	192	---	---	329	---	---	
26	467	---	---	190	---	---	265	---	---	
27	314	---	---	171	---	---	214	---	---	
28	237	---	---	163	---	---	189	---	---	
29	192	---	---	195	344	239	161	---	---	
30	248	---	---	176	---	---	147	---	---	
31	---	---	---	155	---	---	---	---	---	
TOTAL	3420	---	---	6324	---	---	16646	---	---	
		JULY			AUGUST			SEPTEMBER		
1	135	---	---	162	612	335	132	---	---	
2	130	---	---	137	---	---	126	---	---	
3	123	---	---	124	---	---	125	---	---	
4	123	---	---	239	643	1280	164	649	664	
5	120	---	---	446	1460	2750	143	---	---	
6	111	---	---	262	---	---	193	1140	1220	
7	99	---	---	212	---	---	e178	---	---	
8	87	---	---	196	---	---	e150	---	---	
9	84	---	---	184	---	---	e135	---	---	
10	77	---	---	208	393	257	e100	---	---	
11	82	---	---	308	1770	2650	91	---	---	
12	86	---	---	238	1430	2980	91	---	---	
13	68	---	---	223	821	799	79	---	---	
14	72	---	---	160	---	---	78	---	---	
15	65	---	---	134	---	---	73	---	---	
16	61	---	---	124	---	---	78	---	---	
17	57	---	---	150	381	256	80	---	---	
18	53	---	---	170	---	---	75	---	---	
19	105	393	239	141	---	---	71	---	---	
20	86	---	---	132	---	---	93	---	---	
21	74	---	---	113	---	---	97	---	---	
22	61	---	---	104	---	---	101	---	---	
23	46	---	---	110	---	---	112	---	---	
24	41	---	---	110	---	---	94	---	---	
25	51	---	---	292	1150	2300	86	---	---	
26	119	999	636	206	470	368	79	---	---	
27	164	594	683	148	---	---	73	---	---	
28	226	885	775	154	---	---	68	---	---	
29	197	560	553	159	---	---	66	---	---	
30	313	1660	2250	152	---	---	60	---	---	
31	159	455	270	153	---	---	---	---	---	
TOTAL	3275	---	---	5651	---	---	3091	---	---	

e-Estimated.

07105530 FOUNTAIN CREEK BELOW JANITELL ROAD BELOW COLORADO SPRINGS, CO

LOCATION.--Lat 38°48'11", long 104°47'43", in NE¼SE¼ sec.29, T.14 S., R.66 W., El Paso County, Hydrologic Unit 11020003, on right bank at upstream side of bridge on Janitell Road below Colorado Springs.

DRAINAGE AREA.--413 mi².

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder with satellite telemetry, and crest-stage gage. 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.

REMARKS.--Records good except for those above 2,060 ft³/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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	139	129	102	54	79	156	97	268	174	217	303	223
2	144	137	107	58	76	139	139	266	162	217	267	215
3	155	139	90	55	73	123	105	257	157	208	244	215
4	191	135	101	56	70	121	114	257	149	207	453	295
5	171	127	104	47	72	112	125	262	175	203	676	234
6	141	124	105	52	72	106	124	285	896	200	354	321
7	136	124	98	43	89	101	119	285	1540	176	305	232
8	130	130	99	58	100	100	120	298	961	157	290	208
9	126	127	77	64	99	102	115	290	1510	153	276	198
10	122	127	67	73	96	95	111	274	2580	145	325	186
11	113	130	68	69	102	95	108	262	1460	155	435	176
12	116	124	57	62	102	96	117	297	1170	157	336	173
13	114	117	55	59	99	94	118	246	1130	126	311	163
14	121	117	55	65	100	99	73	233	1560	115	236	166
15	110	116	50	64	111	101	56	232	923	101	195	138
16	99	119	55	54	107	102	59	231	816	96	189	142
17	98	114	39	53	109	101	56	225	660	79	224	131
18	107	116	45	68	103	107	60	228	530	68	251	124
19	113	112	48	76	104	97	70	236	471	172	206	120
20	116	107	55	77	100	95	71	225	435	145	191	169
21	152	108	64	69	106	95	148	258	399	138	173	174
22	115	110	72	56	108	99	96	452	377	111	157	174
23	118	131	65	60	114	98	133	259	374	80	166	183
24	116	112	54	53	105	149	614	231	449	72	162	149
25	113	111	56	53	111	113	400	222	349	87	571	140
26	115	104	55	61	122	104	415	237	314	230	327	126
27	158	120	62	67	124	105	379	202	299	213	241	121
28	121	103	61	75	126	96	315	195	280	378	246	116
29	130	109	58	82	---	104	265	232	260	420	249	117
30	138	105	57	76	---	102	269	182	241	491	241	104
31	134	---	56	81	---	97	---	159	---	300	239	---
TOTAL	3972	3584	2137	1940	2779	3304	4991	7786	20801	5617	8839	5233
MEAN	128	119	68.9	62.6	99.3	107	166	251	693	181	285	174
MAX	191	139	107	82	126	156	614	452	2580	491	676	321
MIN	98	103	39	43	70	94	56	159	149	68	157	104
AC-FT	7880	7110	4240	3850	5510	6550	9900	15440	41260	11140	17530	10380

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 1997, BY WATER YEAR (WY)

	1990	1991	1992	1993	1994	1995	1996	1997
MEAN	93.4	86.7	65.8	72.1	83.8	97.7	119	246
MAX	179	119	102	96.0	99.3	131	166	841
(WY)	1995	1997	1995	1996	1997	1992	1997	1995
MIN	47.3	48.6	39.5	46.2	56.4	76.4	86.1	78.6
(WY)	1993	1990	1990	1990	1990	1991	1993	1993

SUMMARY STATISTICS

FOR 1996 CALENDAR YEAR

FOR 1997 WATER YEAR

WATER YEARS 1990 - 1997

ANNUAL TOTAL	42074	70983		
ANNUAL MEAN	115	194	133	
HIGHEST ANNUAL MEAN			246	1995
LOWEST ANNUAL MEAN			76.0	1993
HIGHEST DAILY MEAN	706	May 25	2580	Jun 10
LOWEST DAILY MEAN	39	Dec 17	39	Dec 17
ANNUAL SEVEN-DAY MINIMUM	50	Dec 13	50	Dec 13
INSTANTANEOUS PEAK FLOW			5100	Jun 10
INSTANTANEOUS PEAK STAGE			7.44	Jun 10
ANNUAL RUNOFF (AC-FT)	83450	140800		
10 PERCENT EXCEEDS	161	323		
50 PERCENT EXCEEDS	103	124		
90 PERCENT EXCEEDS	67	62		

a-From rating curve extended above 7000 ft³/s.

**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.--

- SPECIFIC CONDUCTANCE: October 1990 to current year.
- WATER TEMPERATURE: October 1990 to current year.
- pH: October 1990 to current year.
- DISSOLVED OXYGEN: October 1990 to current year.

INSTRUMENTATION.--Water-quality monitor with satellite telemetry.

REMARKS.--Records for daily specific conductance are fair. Records for daily pH are fair. Records for daily water temperature are good. Records for daily dissolved oxygen are fair. Daily data that are not published are either missing or of unacceptable quality.

EXTREMES FOR PERIOD OF RECORD.--

- SPECIFIC CONDUCTANCE: Maximum, 1,710 microsiemens, Nov. 20, 1994; minimum, 114 microsiemens, May 9, 1994.
- WATER TEMPERATURE: Maximum, 25.1°C, July 16, 1993; minimum, 0.0°C, Apr. 24, 1997.
- pH: Maximum, 8.8 units, July 19, 1995; minimum, 6.7 units, July 26, 1995.
- DISSOLVED OXYGEN: Maximum, 11.3 mg/l, May 5, 1991; minimum, 4.4 mg/l, Mar. 28, 1991.

EXTREMES FOR CURRENT YEAR.--

- SPECIFIC CONDUCTANCE: Maximum, 1,280 microsiemens, Mar. 1; minimum, 123 microsiemens, June 13-14.
- pH: Maximum, 8.3 units, June 6 and Aug. 24-25; minimum, 6.9 units, July 19.
- WATER TEMPERATURE: Maximum, 24.8°C, July 24; minimum, 0.0°C, Apr. 24.
- DISSOLVED OXYGEN: Maximum, 11.1 mg/l, Dec. 9; minimum, 5.7 mg/l, Apr. 20, 28, and July 3.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	pH (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)	STREP-TOCOCCI, FECAL, KF AGAR (COLS. PER 100 ML) (31673)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	ALKA-LINITY LAB AS CAC03) (90410)
OCT												
23...	1300	129	693	7.9	13.5	7.9	5.2	300	100	49	15	105
NOV												
21...	1400	124	725	7.9	13.0	8.5	8.6	200	200	50	16	109
DEC												
12...	1215	68	770	7.9	11.5	8.6	4.1	190	110	55	17	115
JAN												
23...	1430	71	747	8.0	9.5	8.5	3.9	K38	220	59	18	122
FEB												
20...	1300	110	769	7.8	11.0	8.5	12	96	280	55	16	108
MAR												
20...	1215	133	717	7.8	15.0	7.7	5.2	370	170	41	13	102
MAY												
01...	1400	277	528	8.0	11.0	8.6	2.1	170	180	43	13	87
29...	1400	190	453	7.8	12.5	8.2	1.8	90	140	35	11	78
JUN												
26...	1330	297	457	8.0	16.5	7.7	1.5	120	83	37	11	78
JUL												
24...	1300	86	766	8.1	23.5	6.5	4.9	310	180	58	20	127
AUG												
14...	1300	261	525	8.1	17.0	7.5	2.7	K190	360	41	13	95
SEP												
18...	1330	144	700	8.1	21.0	6.8	e6.1	100	350	51	19	116

DATE	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SULFIDE TOTAL (MG/L AS S) (00745)	RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)
OCT											
23...	150	35	1.8	--	36	0.18	4.3	0.70	1.6	0.53	4
NOV											
21...	160	38	1.8	<0.5	18	0.18	4.6	1.20	2.4	0.55	4
DEC											
12...	160	44	1.9	--	16	0.19	4.4	0.75	1.7	1.10	--
JAN											
23...	170	49	1.7	--	20	0.17	4.3	1.6	2.9	0.54	7
FEB											
20...	170	48	1.8	--	46	0.20	4.0	3.4	4.8	0.40	4
MAR											
20...	150	39	1.8	--	94	0.20	2.4	1.6	7.7	0.03	3
MAY											
01...	120	29	2.4	--	116	0.06	1.97	0.448	1.1	0.080	3
29...	94	19	2.3	<0.5	77	<0.01	1.16	<0.015	0.5	0.124	2
JUN											
26...	96	19	2.4	--	91	0.05	1.33	1.17	1.7	0.031	3
JUL											
24...	180	37	2.1	--	24	0.08	3.58	0.119	1.3	0.065	4
AUG											
14...	110	22	2.3	--	109	0.019	1.73	0.018	0.58	0.065	3
SEP											
18...	170	33	1.9	--	20	0.080	3.28	0.564	1.2	0.144	4

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

07105530 FOUNTAIN CREEK BELOW JANITELL ROAD, BELOW COLORADO SPRINGS, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	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)	CHRO- MIUM, HEXA- VALENT, DIS- SOLVED (UG/L AS CR) (01032)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)
OCT 23...	--	--	--	--	<1	<1	<1	<1	<1	3	1.0	790
NOV 21...	<1	<1	130	139	<1	<1	<1	<1	<1	4	2.0	570
DEC 12...	--	--	--	--	<1	<1	1	<1	<1	4	2.0	640
JAN 23...	--	--	--	--	<1	<1	<1	<1	<1	4	2.0	790
FEB 20...	--	--	--	--	<1	<1	<1	<1	<1	4	2.0	860
MAR 20...	--	--	--	--	<1	<1	2	<1	<1	5	1.7	1900
MAY 01...	--	--	--	--	<1	<1	2	<1	<1	4	<1	3400
29...	1	<1	70	77	<1	<1	1	<1	<1	3	<1	1900
JUN 26...	--	--	--	--	<1	<1	<1	<1	<1	2	<1	1800
JUL 24...	--	--	--	--	<1	<1	<1	<1	<1	3	1.1	530
AUG 14...	--	--	--	--	<1	<1	3	<1	<1	5	2.7	2200
SEP 18...	--	--	--	--	<1	<1	<1	<1	<1	3	2.0	490

DATE	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)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	CYANIDE TOTAL (MG/L AS CN) (00720)
OCT 23...	27	2	<1	90	70	3	2	4	30	23	--
NOV 21...	37	2	<1	100	80	3	2	4	40	32	<0.01
DEC 12...	32	2	<1	90	72	4	2	--	40	36	--
JAN 23...	32	2	<1	90	71	4	3	7	40	34	--
FEB 20...	29	2	<1	110	82	4	3	4	50	41	--
MAR 20...	24	5	<1	130	60	3	2.3	3	60	30	--
MAY 01...	12	8	<1	180	28	4	<1	3	40	12	--
29...	8.7	3	<1	97	21	3	<1	2	30	20	<0.01
JUN 26...	8.0	3	<1	94	30	1	1.2	3	20	5.4	--
JUL 24...	11	1	<1	78	62	2	2.5	4	30	23	--
AUG 14...	11	5	<1	100	29	3	<1	3	40	20	--
SEP 18...	11	<1	<1	65	40	5	4.9	4	30	33	--

07105530 FOUNTAIN CREEK BELOW JANITELL ROAD, BELOW COLORADO SPRINGS, CO--Continued

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM @ 25 DEG. C), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	616	545	590	632	607	620	773	691	736	755	662	713
2	614	546	587	631	586	605	748	690	720	748	666	721
3	615	548	589	713	576	609	792	724	758	762	679	730
4	610	334	568	666	573	599	771	717	739	739	685	714
5	610	406	548	614	548	588	763	696	731	783	714	736
6	629	540	589	618	581	599	736	691	708	765	677	717
7	630	555	605	642	596	616	758	704	727	846	750	799
8	639	574	613	639	571	604	745	691	719	841	735	784
9	643	579	622	660	607	629	725	662	707	779	731	747
10	658	592	633	662	625	638	753	702	731	759	721	734
11	671	626	648	648	608	627	764	692	742	774	726	753
12	664	592	641	664	612	636	768	707	742	783	735	758
13	695	605	641	658	607	631	756	702	735	789	730	765
14	663	631	647	---	---	---	754	680	725	884	739	799
15	649	604	628	709	698	705	783	705	740	1020	792	886
16	701	604	660	728	684	706	765	711	723	1000	835	899
17	696	647	677	859	711	744	779	710	745	862	786	826
18	---	---	---	714	667	689	819	717	771	952	811	871
19	---	---	---	695	638	677	783	710	755	1020	792	929
20	---	---	---	722	648	698	802	743	773	979	790	872
21	---	---	---	714	678	699	789	738	765	872	740	803
22	---	---	---	756	702	721	746	709	732	858	773	823
23	---	---	---	905	671	741	756	719	741	840	773	793
24	656	617	635	748	647	712	771	729	752	828	768	795
25	635	590	620	748	681	716	747	690	727	840	739	783
26	657	597	630	737	703	726	771	708	737	777	724	747
27	811	581	622	1130	709	858	768	711	731	779	719	755
28	666	579	622	907	687	795	727	646	696	823	759	786
29	646	593	623	767	688	725	728	647	693	784	749	765
30	630	604	620	752	712	735	747	655	715	801	731	771
31	635	611	623	---	---	---	747	672	726	755	722	739
MONTH	---	---	---	---	---	---	819	646	734	1020	662	784
DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	1280	633	825	743	701	720	344	324	336
2	---	---	---	---	---	---	784	576	656	343	333	337
3	---	---	---	751	---	---	712	673	695	352	334	343
4	793	731	760	829	697	746	713	631	689	347	323	337
5	777	727	747	826	686	753	707	654	678	339	319	332
6	792	688	740	836	654	738	675	626	650	327	305	312
7	772	691	729	799	634	730	683	615	634	---	---	---
8	786	637	725	805	620	696	664	632	646	---	---	---
9	754	616	690	748	654	716	679	637	654	---	---	---
10	785	652	696	787	672	725	650	605	625	283	247	270
11	779	660	712	779	695	754	714	610	649	354	277	307
12	747	642	726	752	713	736	709	640	678	337	286	306
13	760	681	728	748	706	727	699	629	660	316	286	305
14	784	705	741	741	703	719	697	630	656	364	296	325
15	773	718	735	759	715	740	733	688	709	359	303	322
16	756	707	724	773	750	761	722	676	695	361	269	338
17	765	699	730	766	720	746	713	676	697	400	349	373
18	749	690	730	748	708	731	725	681	702	482	364	403
19	760	687	729	763	705	741	712	675	696	429	290	365
20	742	681	716	785	700	745	697	653	672	390	254	317
21	947	681	855	743	689	729	691	405	612	319	227	275
22	833	719	782	734	707	721	466	414	440	287	179	218
23	833	715	756	835	698	727	489	366	465	324	202	267
24	818	734	773	823	676	733	386	308	345	302	273	288
25	800	718	760	750	646	681	421	383	401	288	275	280
26	769	720	737	702	662	680	403	317	375	300	275	289
27	765	727	743	695	658	674	413	333	373	302	272	290
28	753	697	719	724	668	692	393	332	362	321	279	298
29	---	---	---	716	689	702	389	346	370	336	240	306
30	---	---	---	746	693	710	355	336	346	319	270	297
31	---	---	---	766	694	721	---	---	---	339	296	317
MONTH	---	---	---	---	---	---	784	308	585	---	---	---

07105530 FOUNTAIN CREEK BELOW JANITELL ROAD, BELOW COLORADO SPRINGS, CO--Continued

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM @ 25 DEG. C), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	374	284	313	526	484	508	505	311	383	580	384	494
2	341	288	301	537	498	514	580	355	424	574	379	496
3	355	274	320	506	319	395	458	377	415	600	502	558
4	369	304	337	410	350	373	451	187	387	600	306	527
5	342	242	318	386	358	370	343	167	281	481	249	435
6	511	126	308	418	355	375	335	248	295	600	253	429
7	195	148	174	406	363	389	380	301	339	511	329	445
8	197	182	188	413	383	399	382	335	361	521	445	486
9	214	188	197	---	---	---	372	332	349	558	491	523
10	212	143	173	---	---	---	450	329	382	573	505	545
11	238	163	218	701	565	635	426	232	328	647	527	590
12	177	152	159	608	534	577	444	233	384	654	537	588
13	171	123	158	625	548	592	423	284	349	624	501	561
14	187	123	171	620	505	555	432	348	398	574	436	521
15	204	179	190	586	548	567	440	386	413	674	428	597
16	199	176	190	610	564	584	511	377	418	---	---	---
17	233	179	196	689	584	644	503	369	393	---	---	---
18	303	194	235	677	621	654	410	285	342	---	---	---
19	302	237	284	666	625	646	482	344	395	---	---	---
20	307	271	294	---	---	---	478	350	429	682	555	615
21	332	295	315	---	---	---	466	370	401	658	556	615
22	347	309	330	688	567	631	430	326	391	642	505	613
23	470	323	356	760	662	712	378	340	362	622	449	563
24	445	364	396	756	712	741	384	303	365	647	559	608
25	592	382	483	712	622	690	346	271	308	645	583	625
26	565	418	499	681	311	550	---	---	---	679	587	638
27	535	478	512	---	---	---	---	---	---	697	617	658
28	573	445	504	---	290	---	549	442	482	701	617	662
29	480	419	455	631	295	423	523	413	469	688	620	659
30	522	428	482	587	313	388	504	412	460	721	627	682
31	---	---	---	370	315	341	538	403	469	---	---	---
MONTH	592	123	302	---	---	---	---	---	---	---	---	---

pH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	8.0	7.7	7.8	7.7	7.5	7.6	7.8	7.5	7.7	7.8	7.4	7.6
2	8.0	7.4	7.7	7.8	7.5	7.6	7.8	7.5	7.6	7.8	7.4	7.6
3	7.6	7.4	7.5	7.9	7.5	7.6	7.7	7.4	7.6	7.6	7.4	7.4
4	7.8	7.4	7.5	7.9	7.5	7.7	7.8	7.5	7.6	7.7	7.3	7.4
5	7.6	7.3	7.5	7.9	7.6	7.7	7.8	7.5	7.6	7.6	7.3	7.4
6	7.5	7.3	7.4	7.9	7.6	7.7	7.7	7.5	7.6	7.6	7.3	7.5
7	7.5	7.3	7.4	7.9	7.6	7.7	7.8	7.6	7.6	7.6	7.3	7.4
8	7.6	7.4	7.5	7.9	7.6	7.7	7.8	7.6	7.6	7.5	7.3	7.4
9	7.6	7.4	7.5	7.9	7.6	7.7	7.8	7.6	7.7	7.6	7.2	7.4
10	7.6	7.4	7.5	7.9	7.5	7.7	8.0	7.6	7.8	7.6	7.2	7.3
11	7.7	7.5	7.6	7.9	7.5	7.6	8.0	7.7	7.9	7.4	7.1	7.3
12	7.7	7.5	7.6	7.8	7.5	7.7	8.0	7.8	7.9	7.4	7.2	7.3
13	7.8	7.5	7.6	8.0	7.5	7.6	8.0	7.8	7.9	7.5	7.2	7.3
14	7.7	7.4	7.6	7.7	7.5	7.6	8.1	7.8	7.9	7.5	7.3	7.3
15	7.6	7.4	7.5	7.8	7.5	7.7	8.0	7.7	7.8	7.5	7.3	7.4
16	7.7	7.4	7.5	7.9	7.6	7.7	8.0	7.7	7.8	7.6	7.4	7.5
17	7.7	7.4	7.6	7.8	7.5	7.6	7.8	7.7	7.8	7.6	7.4	7.5
18	7.9	7.5	7.7	7.8	7.5	7.6	7.8	7.7	7.7	7.7	7.5	7.6
19	7.9	7.6	7.8	7.7	7.5	7.6	7.9	7.7	7.8	7.9	7.6	7.7
20	8.0	7.6	7.8	7.8	7.5	7.6	8.0	7.7	7.8	7.8	7.6	7.7
21	8.0	7.6	7.8	7.8	7.5	7.6	8.0	7.6	7.8	7.9	7.7	7.8
22	8.0	7.8	7.9	7.7	7.5	7.6	8.0	7.6	7.7	7.9	7.7	7.8
23	8.1	7.8	7.9	7.8	7.5	7.6	7.9	7.6	7.7	8.1	7.8	7.9
24	8.1	7.8	7.9	7.8	7.5	7.6	7.9	7.6	7.7	8.0	7.7	7.8
25	8.1	7.8	7.9	7.8	7.6	7.6	8.0	7.5	7.7	7.9	7.7	7.8
26	8.1	7.6	7.8	7.8	7.5	7.6	7.8	7.5	7.6	8.1	7.6	7.8
27	7.9	7.6	7.7	7.8	7.6	7.7	7.8	7.6	7.7	7.8	7.6	7.6
28	7.9	7.6	7.7	7.8	7.5	7.6	8.0	7.6	7.7	7.8	7.5	7.6
29	7.9	7.5	7.7	7.9	7.6	7.7	8.0	7.5	7.7	7.6	7.5	7.5
30	7.5	7.5	7.5	7.8	7.5	7.6	7.8	7.5	7.6	7.6	7.4	7.5
31	7.6	7.5	7.5	---	---	---	7.8	7.5	7.6	7.6	7.4	7.4
MONTH	8.1	7.3	7.6	8.0	7.5	7.6	8.1	7.4	7.7	8.1	7.1	7.5

07105530 FOUNTAIN CREEK BELOW JANITELL ROAD, BELOW COLORADO SPRINGS, CO--Continued

pH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	7.6	7.4	7.5	7.6	7.3	7.5	7.6	7.4	7.5	7.6	7.2	7.4
2	7.7	7.4	7.6	7.6	7.3	7.5	7.6	7.3	7.5	7.5	7.2	7.4
3	7.7	7.5	7.6	7.7	7.4	7.5	7.6	7.4	7.5	7.5	7.2	7.4
4	7.7	7.3	7.5	7.7	7.5	7.6	7.5	7.4	7.5	7.6	7.1	7.4
5	7.5	7.3	7.4	7.6	7.4	7.5	7.6	7.4	7.5	7.5	7.2	7.4
6	7.6	7.3	7.4	7.7	7.4	7.5	7.5	7.4	7.4	7.5	7.3	7.4
7	7.6	7.3	7.4	7.7	7.5	7.5	7.5	7.4	7.4	7.4	7.3	7.3
8	7.5	7.3	7.4	7.7	7.4	7.5	7.5	7.4	7.5	7.4	7.3	7.3
9	7.6	7.3	7.5	7.7	7.4	7.5	7.5	7.4	7.5	7.5	7.3	7.4
10	7.6	7.4	7.5	7.7	7.5	7.5	7.7	7.5	7.6	7.5	7.3	7.4
11	7.6	7.4	7.5	7.7	7.5	7.5	7.6	7.4	7.5	7.5	7.3	7.4
12	7.7	7.4	7.6	7.6	7.5	7.5	7.5	7.4	7.4	7.5	7.3	7.4
13	7.7	7.5	7.6	7.6	7.5	7.5	7.6	7.0	7.5	7.5	7.3	7.4
14	7.7	7.4	7.5	7.7	7.5	7.5	7.9	7.4	7.6	7.5	7.3	7.4
15	7.7	7.3	7.5	7.6	7.4	7.5	8.1	7.3	7.6	7.8	7.4	7.6
16	7.7	7.3	7.5	7.6	7.4	7.5	8.1	7.2	7.6	7.8	7.5	7.7
17	7.7	7.2	7.4	7.6	7.4	7.5	8.2	7.3	7.6	7.8	7.5	7.7
18	7.6	7.3	7.4	7.6	7.4	7.5	8.0	7.0	7.6	7.8	7.6	7.7
19	7.8	7.3	7.4	7.6	7.4	7.5	8.2	7.3	7.6	7.7	7.6	7.7
20	7.6	7.3	7.4	7.7	7.4	7.6	8.0	7.2	7.5	7.9	7.5	7.6
21	7.5	7.3	7.4	7.7	7.5	7.6	8.0	7.2	7.6	7.7	7.5	7.6
22	7.5	7.3	7.4	7.7	7.5	7.6	7.7	7.4	7.5	7.7	7.4	7.6
23	7.6	7.3	7.4	7.7	7.5	7.5	7.9	7.1	7.5	7.8	7.5	7.6
24	7.6	7.3	7.4	7.6	7.5	7.5	7.6	7.4	7.5	7.7	7.5	7.6
25	7.6	7.3	7.4	7.6	7.4	7.5	7.5	7.2	7.3	7.7	7.6	7.6
26	7.6	7.4	7.5	7.6	7.4	7.5	7.3	7.2	7.3	7.7	7.5	7.6
27	7.6	7.4	7.5	7.5	7.4	7.5	7.5	7.2	7.3	7.7	7.5	7.6
28	7.7	7.4	7.5	7.5	7.4	7.5	7.5	7.2	7.4	7.9	7.5	7.7
29	---	---	---	7.5	7.3	7.4	7.5	7.3	7.4	7.7	7.5	7.6
30	---	---	---	7.5	7.3	7.4	7.5	7.3	7.4	7.7	7.5	7.6
31	---	---	---	7.5	7.4	7.4	---	---	---	7.8	7.6	7.7
MONTH	7.8	7.2	7.5	7.7	7.3	7.5	8.2	7.0	7.5	7.9	7.1	7.5
	JUNE			JULY			AUGUST			SEPTEMBER		
1	7.8	7.6	7.7	7.7	7.5	7.6	7.6	7.5	7.5	8.1	7.8	7.9
2	7.8	7.6	7.7	7.6	7.5	7.6	7.7	7.4	7.5	8.0	7.8	7.9
3	7.9	7.6	7.8	7.7	7.5	7.6	7.7	7.4	7.6	8.0	7.8	7.9
4	7.9	7.7	7.8	7.7	7.5	7.6	7.9	7.4	7.7	7.9	7.6	7.8
5	7.9	7.7	7.8	7.7	7.5	7.6	7.7	7.2	7.6	7.9	7.7	7.8
6	8.3	7.8	7.8	7.7	7.4	7.6	7.7	7.5	7.6	7.9	7.7	7.8
7	8.2	7.9	8.0	7.8	7.4	7.6	7.7	7.5	7.6	7.9	7.7	7.8
8	7.9	7.8	7.9	7.7	7.5	7.6	7.7	7.6	7.7	7.9	7.7	7.8
9	8.0	7.9	8.0	---	---	---	7.8	7.6	7.7	8.0	7.7	7.9
10	7.9	7.8	7.8	---	---	---	7.8	7.6	7.7	8.0	7.7	7.8
11	7.9	7.7	7.9	7.7	7.4	7.5	7.8	7.6	7.7	7.9	7.5	7.7
12	8.0	7.7	7.8	7.8	7.4	7.5	7.9	7.6	7.7	7.9	7.5	7.6
13	8.0	7.8	7.8	7.7	7.4	7.5	7.8	7.7	7.7	7.8	7.6	7.7
14	8.0	7.7	7.8	7.7	7.4	7.6	7.8	7.6	7.8	7.9	7.5	7.7
15	7.8	7.7	7.7	7.7	7.5	7.6	7.8	7.7	7.8	7.9	7.6	7.7
16	7.9	7.7	7.8	7.8	7.6	7.7	7.9	7.7	7.8	---	---	---
17	7.9	7.7	7.8	7.9	7.5	7.6	7.9	7.6	7.8	---	---	---
18	7.9	7.8	7.8	7.6	7.4	7.5	7.8	7.7	7.7	---	---	---
19	7.9	7.8	7.8	7.8	6.9	7.6	8.1	7.7	7.9	7.9	7.6	7.7
20	7.9	7.8	7.8	7.9	7.5	7.8	8.2	8.0	8.1	7.9	7.5	7.7
21	8.0	7.8	7.9	8.1	7.9	8.0	8.2	8.0	8.1	7.9	7.7	7.8
22	8.0	7.8	7.9	8.1	7.8	7.9	8.2	8.0	8.1	7.9	7.6	7.8
23	8.0	7.7	7.9	8.0	7.7	7.9	8.2	8.0	8.1	7.9	7.6	7.8
24	8.0	7.7	7.9	8.0	7.4	7.7	8.3	8.0	8.1	7.9	7.5	7.7
25	8.0	7.8	7.9	7.7	7.4	7.5	8.3	7.9	8.1	7.7	7.5	7.6
26	8.2	7.9	8.0	7.7	7.2	7.5	8.1	7.9	8.0	7.7	7.5	7.6
27	8.0	7.8	7.9	7.8	7.3	7.6	8.1	8.0	8.0	7.7	7.3	7.5
28	7.9	7.7	7.8	7.6	7.4	7.5	8.2	8.0	8.1	7.6	7.3	7.4
29	7.8	7.5	7.7	7.6	7.4	7.5	8.1	7.9	8.0	7.5	7.2	7.4
30	7.7	7.5	7.6	7.6	7.4	7.5	8.1	7.9	8.0	7.5	7.2	7.4
31	---	---	---	7.6	7.5	7.5	8.2	7.9	8.1	---	---	---
MONTH	8.3	7.5	7.8	---	---	---	8.3	7.2	7.8	---	---	---

07105530 FOUNTAIN CREEK BELOW JANITELL ROAD, BELOW COLORADO SPRINGS, CO--Continued

TEMPERATURE, WATER (DEG.C), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	17.9	11.4	14.9	13.6	3.2	10.7	11.9	6.0	8.7	10.5	5.4	7.9
2	16.0	11.4	14.0	14.1	7.1	11.0	10.5	5.1	8.1	11.4	5.7	8.6
3	16.8	10.9	14.0	13.3	7.2	10.9	12.6	6.1	8.7	12.1	6.6	9.3
4	17.2	11.5	14.6	14.5	8.0	11.8	10.4	5.7	7.6	10.1	4.2	7.4
5	18.0	11.0	14.6	13.7	6.9	10.8	10.7	6.0	8.3	9.6	3.9	6.8
6	18.3	11.7	15.1	11.3	6.8	9.6	10.1	6.0	8.5	8.7	3.0	6.1
7	17.7	11.6	14.9	11.2	5.3	8.7	11.6	4.7	8.5	10.7	3.2	6.8
8	17.8	11.3	14.8	11.7	5.5	8.9	11.3	6.5	8.9	8.6	4.4	6.3
9	17.2	10.8	14.4	13.3	6.4	10.2	11.2	5.5	8.9	8.4	3.1	5.5
10	17.4	11.0	14.6	13.8	6.8	10.7	11.7	7.1	9.8	7.1	2.6	5.2
11	18.2	11.9	15.3	13.4	6.5	10.6	11.6	6.3	9.5	8.7	3.6	5.8
12	18.5	11.8	15.4	13.2	7.1	10.8	11.2	5.4	8.9	8.5	1.9	5.4
13	18.4	11.7	15.3	13.5	6.1	11.3	10.8	5.7	8.8	8.8	2.9	6.5
14	17.6	11.7	15.0	12.0	8.8	10.8	10.2	5.5	7.6	9.3	4.5	7.1
15	16.8	11.4	14.8	11.6	7.3	10.1	10.3	4.6	7.3	9.3	5.0	6.8
16	17.3	11.4	14.6	11.1	6.8	9.0	9.7	5.6	7.1	8.0	3.4	6.3
17	14.7	9.0	12.5	12.2	6.9	9.1	10.4	4.8	7.8	9.3	4.5	6.6
18	15.1	7.4	12.0	11.9	5.5	9.6	9.6	6.4	7.7	9.3	4.4	6.5
19	16.2	9.2	13.0	14.0	7.8	11.5	9.7	5.6	7.7	9.2	3.7	6.0
20	13.6	9.3	11.6	14.1	8.4	11.8	8.9	5.1	7.3	9.4	3.3	6.4
21	12.3	5.8	9.5	13.1	7.9	11.1	9.9	5.3	7.5	9.0	3.9	6.5
22	13.0	5.6	10.1	13.8	8.4	11.8	9.4	4.8	7.0	9.4	4.2	7.0
23	13.9	6.8	11.1	11.9	8.3	10.0	8.9	4.3	6.9	9.6	4.3	7.1
24	14.3	5.1	11.6	12.6	7.1	10.1	9.2	5.2	7.4	9.8	4.3	7.2
25	14.1	8.8	11.8	12.5	6.8	10.2	9.2	4.8	7.0	10.2	4.3	7.0
26	13.9	8.4	11.1	11.5	6.3	9.4	9.1	4.6	7.1	10.3	4.2	7.3
27	9.8	6.2	8.5	11.8	6.6	8.9	9.6	5.1	7.2	9.3	4.4	7.4
28	13.7	6.4	10.9	12.5	6.0	9.0	10.1	4.5	7.1	10.1	4.3	7.3
29	13.7	6.9	11.1	11.8	5.9	9.1	10.5	4.8	7.4	9.7	5.3	7.8
30	14.2	7.1	11.3	11.1	4.9	8.3	10.3	5.2	7.8	10.9	5.6	8.4
31	11.8	8.2	10.5	---	---	---	10.9	5.3	8.2	11.4	5.7	9.1
MONTH	18.5	5.1	13.0	14.5	3.2	10.2	12.6	4.3	7.9	12.1	1.9	6.9
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	11.9	6.2	9.3	11.0	4.4	7.1	14.2	9.3	12.1	11.4	5.0	8.3
2	11.3	5.6	8.9	12.1	4.2	8.2	12.1	5.3	8.8	10.4	3.7	7.2
3	10.8	5.8	8.6	11.6	4.8	8.7	15.2	7.1	11.4	12.6	3.5	8.2
4	11.0	5.3	8.0	9.7	4.5	7.5	14.7	9.5	11.7	15.2	5.8	10.3
5	10.1	4.6	7.7	11.5	4.7	8.2	11.5	6.1	9.0	15.3	7.0	10.9
6	9.3	5.0	7.1	13.1	4.4	9.3	13.5	5.1	9.5	11.9	6.6	9.5
7	10.0	4.0	7.1	13.6	5.7	10.0	14.5	5.5	10.2	10.9	7.1	9.1
8	10.7	4.7	7.2	13.6	6.0	10.2	12.3	7.4	9.9	10.9	6.0	8.5
9	10.8	4.6	7.5	13.2	6.5	10.1	12.7	5.2	9.1	14.2	6.0	9.6
10	10.6	4.7	7.6	13.0	6.3	10.2	9.5	5.9	8.1	13.6	6.7	10.1
11	10.6	4.0	7.7	14.2	6.5	10.8	10.9	4.5	7.6	12.5	7.0	9.5
12	8.6	4.4	7.2	13.6	7.4	11.0	12.3	4.5	8.2	14.3	6.5	10.0
13	10.3	5.0	7.9	13.6	7.4	10.5	13.9	4.7	9.5	13.3	6.9	10.4
14	10.9	4.0	7.7	10.9	5.2	8.5	15.1	4.0	10.2	13.2	7.6	10.7
15	11.8	4.4	8.2	12.4	6.1	9.1	15.5	4.1	11.5	15.6	8.0	11.9
16	12.3	4.5	8.8	14.2	5.8	10.2	17.2	7.7	12.7	16.7	8.6	12.4
17	12.5	5.5	9.5	13.5	8.2	11.0	18.2	6.2	13.2	15.7	9.2	12.6
18	11.9	6.6	9.9	14.7	7.1	11.2	17.6	7.2	13.4	14.6	6.7	12.0
19	12.5	5.9	10.0	15.6	7.1	11.9	17.1	10.0	13.9	11.7	8.7	9.6
20	11.0	6.1	9.1	15.2	8.6	12.4	17.4	10.3	14.0	16.6	7.1	11.4
21	10.8	5.8	8.2	14.6	9.3	12.1	15.0	9.6	12.2	14.7	9.8	11.8
22	11.0	4.7	7.8	15.4	8.2	12.0	14.7	7.0	11.0	13.1	9.6	11.2
23	9.5	5.0	6.8	14.9	8.4	11.9	15.7	8.2	11.7	14.6	8.2	11.2
24	10.0	4.4	7.0	12.0	6.4	8.8	9.0	.0	2.8	13.2	8.5	10.9
25	10.6	5.0	7.6	13.5	4.9	9.3	5.1	1.4	3.3	13.6	8.5	10.9
26	9.9	4.3	7.4	15.0	6.3	10.9	9.5	3.3	6.2	13.7	8.4	10.8
27	9.4	5.1	7.4	15.6	6.9	11.3	14.2	3.7	8.8	12.7	6.3	9.5
28	10.3	3.7	7.1	14.2	6.4	10.7	12.9	6.4	9.6	13.7	6.9	10.4
29	---	---	---	12.0	8.1	10.1	15.2	5.9	10.0	13.7	8.9	11.2
30	---	---	---	14.7	5.9	10.8	13.0	4.9	8.9	15.7	9.7	12.6
31	---	---	---	15.7	6.8	11.9	---	---	---	19.0	9.9	14.3
MONTH	12.5	3.7	8.0	15.7	4.2	10.2	18.2	.0	9.9	19.0	3.5	10.5

07105530 FOUNTAIN CREEK BELOW JANITELL ROAD, BELOW COLORADO SPRINGS, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	17.9	11.1	14.5	20.6	12.4	16.3	18.9	15.9	17.8	20.1	15.2	17.6
2	16.7	11.7	13.8	19.0	12.1	15.5	20.9	15.3	17.1	19.9	15.2	17.5
3	17.9	11.2	14.2	19.7	---	---	22.1	14.2	17.8	18.3	16.3	17.2
4	19.1	11.0	14.8	19.8	12.4	15.7	21.8	15.6	18.3	20.5	15.5	17.9
5	17.4	12.4	14.5	18.8	12.3	15.5	18.5	16.1	17.0	20.4	14.5	17.5
6	18.6	9.1	14.2	18.6	12.8	15.7	16.9	13.9	15.1	20.2	14.5	17.3
7	14.6	11.0	12.3	17.9	12.1	15.3	18.0	12.5	15.0	20.5	13.8	17.0
8	13.7	10.8	11.7	18.1	12.9	15.2	19.4	12.6	15.8	20.8	13.8	17.1
9	13.1	9.2	10.9	---	---	---	17.6	13.3	15.3	19.3	14.5	16.5
10	11.9	9.9	10.7	---	---	---	15.4	14.1	14.8	20.9	14.0	17.2
11	13.0	9.0	11.0	19.8	---	---	18.7	13.8	16.1	19.5	13.9	16.9
12	13.5	9.1	11.2	21.6	13.2	17.1	18.7	10.2	15.3	20.4	13.8	17.8
13	14.2	9.9	12.2	21.6	13.6	17.5	19.0	12.4	15.7	20.9	15.1	18.0
14	15.7	11.5	13.4	23.4	14.1	18.3	19.0	11.2	15.5	20.8	15.5	18.3
15	12.5	10.3	11.4	24.1	15.3	19.3	20.1	12.5	16.1	20.5	15.2	17.4
16	14.6	9.5	11.8	23.1	15.2	18.7	19.5	13.2	16.2	---	---	---
17	14.9	9.9	12.3	22.4	14.8	18.6	19.4	13.7	16.1	---	---	---
18	16.2	10.5	13.7	22.9	15.8	19.3	19.4	14.4	16.5	---	---	---
19	17.4	11.7	14.4	21.4	17.0	18.8	19.5	13.0	16.1	20.6	---	---
20	18.1	11.6	14.7	20.0	14.9	16.7	19.4	13.0	16.0	16.7	13.6	14.7
21	18.0	11.8	14.7	21.4	13.5	17.1	21.7	13.5	17.2	15.3	12.1	13.9
22	18.5	12.4	15.3	22.4	14.8	18.0	21.5	14.1	17.5	16.8	13.7	15.4
23	17.3	12.4	14.9	24.2	15.7	19.5	22.6	14.6	18.3	15.7	12.9	14.5
24	18.1	12.3	15.0	24.8	16.9	20.4	22.2	14.7	18.2	18.6	12.8	15.7
25	17.7	12.0	14.6	22.1	16.4	18.9	22.0	16.0	18.8	18.9	12.6	16.0
26	18.0	11.8	14.5	23.9	16.0	19.2	20.4	15.2	17.8	19.2	13.3	16.7
27	17.2	11.7	14.3	23.8	15.9	19.0	21.7	15.2	18.2	20.2	14.4	17.4
28	18.4	11.7	14.8	20.7	15.6	17.8	22.5	16.3	19.0	19.0	13.4	16.5
29	19.3	12.1	15.4	20.4	16.0	18.0	20.3	16.0	18.3	19.4	12.8	16.4
30	19.8	12.2	15.8	19.9	16.2	17.8	19.0	15.4	17.2	19.5	13.2	16.8
31	---	---	---	21.7	15.8	18.4	20.7	14.9	17.4	---	---	---
MONTH	19.8	9.0	13.6	---	---	---	22.6	10.2	16.8	---	---	---

OXYGEN, DISSOLVED (MG/L), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	7.7	6.3	7.0	---	---	---	10.1	8.6	9.1	9.9	8.2	8.8
2	8.2	6.7	7.5	9.3	7.1	8.1	10.3	8.8	9.3	9.3	7.6	8.4
3	8.5	6.9	7.7	9.3	7.2	8.0	10.1	8.3	9.2	8.8	7.4	8.1
4	8.2	6.9	7.5	8.8	7.1	7.8	10.3	9.0	9.7	9.9	7.9	8.7
5	8.5	6.7	7.6	9.4	7.2	8.2	10.0	8.8	9.4	9.7	7.9	8.8
6	8.2	6.9	7.5	9.5	8.0	8.6	10.3	9.0	9.4	10.2	8.5	9.1
7	8.3	6.9	7.5	10.3	8.3	9.1	11.0	9.0	9.7	9.7	7.8	8.6
8	8.3	6.9	7.6	10.6	8.3	9.2	10.3	9.1	9.6	9.4	8.3	8.8
9	8.4	7.0	7.5	10.0	7.8	8.8	11.1	8.3	9.5	9.9	8.7	9.3
10	8.2	6.8	7.4	9.9	7.5	8.5	10.0	8.6	9.2	10.3	8.6	9.3
11	7.8	6.8	7.3	9.9	7.5	8.5	10.2	8.4	9.2	9.8	8.5	9.1
12	8.0	6.4	7.3	9.7	7.7	8.5	10.7	8.4	9.4	10.7	8.3	9.2
13	7.9	6.7	7.3	10.3	7.6	8.2	10.4	8.5	9.3	10.0	8.0	8.8
14	8.0	6.8	7.5	8.9	7.8	8.2	10.9	9.0	9.7	9.2	8.1	8.6
15	8.2	7.0	7.5	9.6	8.1	8.7	10.9	8.7	9.7	9.2	8.2	8.7
16	7.8	6.6	7.2	10.1	8.6	9.2	9.9	8.7	9.4	9.9	8.2	8.9
17	8.4	7.0	7.7	9.9	8.4	9.1	10.1	8.2	9.0	9.4	8.3	8.8
18	9.3	6.6	7.8	10.4	7.9	8.9	9.5	8.3	8.8	9.9	8.4	9.1
19	8.2	6.0	7.2	9.2	7.0	8.0	9.5	8.4	8.9	10.2	8.6	9.2
20	7.9	6.2	7.3	8.7	7.0	7.8	9.9	8.5	9.0	9.9	8.2	8.9
21	9.5	7.2	8.1	9.1	7.4	8.1	9.8	8.4	8.9	9.6	8.3	8.8
22	8.6	6.1	7.3	8.6	7.0	7.7	10.2	8.6	9.1	9.5	7.9	8.6
23	8.5	7.0	7.5	8.9	7.4	8.2	10.3	8.6	9.2	9.5	8.2	8.7
24	8.8	6.8	7.6	9.5	7.8	8.5	9.9	8.2	8.9	9.5	8.3	8.9
25	8.4	6.9	7.5	9.5	7.6	8.4	10.3	8.4	9.0	9.6	8.2	8.9
26	8.7	6.9	7.5	9.7	8.0	8.7	10.1	7.8	8.9	10.3	8.2	9.0
27	8.8	7.1	8.0	9.7	8.5	9.0	9.8	8.1	9.1	9.7	8.5	9.0
28	9.1	6.8	8.0	9.7	8.0	8.8	10.3	8.6	9.2	9.8	8.4	9.1
29	---	---	---	9.9	8.2	8.9	10.3	8.4	9.1	9.7	8.5	9.0
30	---	---	---	10.4	8.6	9.2	9.8	8.4	8.9	9.2	8.1	8.7
31	---	---	---	---	---	---	9.6	8.1	8.8	9.4	7.9	8.6
MONTH	---	---	---	---	---	---	11.1	7.8	9.2	10.7	7.4	8.9

07105533 FOUNTAIN CREEK AT CIRCLE DRIVE BELOW COLORADO SPRINGS, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 38°47'49", long 104°47'06", in SE¼4SW¼4 sec.28, T.14 S., R.66 W., El Paso County, Hydrologic Unit 11020003, approximately 100 ft downstream from Circle Drive below Colorado Springs.

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	pH (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)	STREP-TOCOCCI, FECAL, KF AGAR (COLS. PER 100 ML) (31673)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)
OCT											
23...	1430	108	688	8.0	14.0	8.1	5.6	260	100	50	15
NOV											
22...	0900	115	740	7.6	11.5	8.7	11	93	120	49	15
DEC											
12...	1330	66	776	8.0	11.5	8.7	4.2	330	67	57	17
JAN											
24...	0915	54	839	7.7	5.0	10.4	6.5	120	90	61	19
FEB											
20...	1445	90	777	7.8	10.5	8.8	17	150	350	49	15
MAR											
20...	1415	81	734	7.8	15.5	7.9	7.7	340	K58	42	14
MAY											
01...	1545	165	516	7.9	12.5	8.2	2.7	K62	190	41	13
29...	1515	199	427	7.9	13.0	8.4	1.2	85	180	33	11
JUN											
26...	1430	282	379	8.1	18.0	7.5	1.1	120	180	34	8.8
JUL											
24...	1415	79	786	8.2	30.0	6.3	4.1	180	170	59	21
AUG											
14...	1415	223	526	8.2	19.0	7.3	2.4	350	400	41	13
SEP											
18...	1445	120	685	8.0	21.0	6.8	e5.7	240	260	51	18

DATE	ALKA-LINITY 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)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)
OCT										
23...	105	150	34	1.8	37	0.25	5.6	0.80	1.4	0.46
NOV										
22...	103	150	38	1.9	4	0.31	4.9	0.56	4.3	0.26
DEC										
12...	118	170	44	1.8	30	0.01	0.12	<0.015	<0.2	<0.01
JAN										
24...	120	180	46	1.8	16	0.24	4.5	2.2	3.5	1.2
FEB										
20...	103	170	49	1.9	42	0.21	3.7	4.6	5.7	0.26
MAR										
20...	90	150	41	1.8	37	0.22	2.3	6.2	8.6	0.03
MAY										
01...	82	110	28	2.5	90	0.082	1.75	1.08	1.8	0.120
29...	76	87	18	2.2	34	0.031	1.76	0.059	0.42	0.179
JUN										
26...	74	73	14	2.5	123	0.028	1.21	0.337	0.64	0.032
JUL										
24...	126	190	36	2.0	21	0.220	3.90	0.370	1.4	0.053
AUG										
14...	94	110	22	2.3	119	0.048	1.93	0.136	0.77	0.120
SEP										
18...	112	170	32	2.0	34	0.034	3.19	0.110	0.71	0.080

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

07105533 FOUNTAIN CREEK AT CIRCLE DRIVE BELOW COLORADO SPRINGS, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	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)	CHRO- MIUM, HEXA- VALENT, DIS. (UG/L AS CR) (01032)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	IRON, DIS- SOLVED (UG/L AS FE) (01046)
OCT 23...	<1	<1	<1	<1	<1	3	1	840	23
NOV 22...	<1	<1	<1	<1	<1	5	2	820	46
DEC 12...	<1	<1	1	<1	<1	4	1	860	27
JAN 24...	<1	<1	1	<1	<1	4	2	570	37
FEB 20...	<1	<1	1	<1	<1	4	2	870	23
MAR 20...	<1	<1	1	<1	<1	4	2	700	21
MAY 01...	<1	<1	2	<1	<1	4	<1	2500	8.9
29...	<1	<1	1	<1	<1	3	<1	2300	9.0
JUN 26...	<1	<1	1	<1	<1	4	<1	3600	7.2
JUL 24...	<1	<1	<1	<1	<1	2	1.7	440	8.0
AUG 14...	<1	<1	1	<1	<1	3	2.0	2200	5.2
SEP 18...	<1	<1	<1	<1	<1	2	1.3	510	16

DATE	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)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)
OCT 23...	2	<1	90	68	3	2	30	28
NOV 22...	2	<1	90	75	3	2	40	24
DEC 12...	2	<1	100	70	4	2	40	30
JAN 24...	2	<1	80	65	3	2	30	28
FEB 20...	2	<1	110	83	4	3	50	31
MAR 20...	2	<1	91	65	3	2.3	50	30
MAY 01...	5	<1	110	25	3	<1	30	12
29...	4	<1	110	17	3	<1	30	15
JUN 26...	6	<1	160	20	2	<1	30	<3
JUL 24...	1	<1	72	61	2	2.5	30	22
AUG 14...	4	1	98	24	3	<1	30	13
SEP 18...	<1	<1	66	47	5	4.2	30	30

07105800 FOUNTAIN CREEK AT SECURITY, CO

LOCATION.--Lat 38°43'46", long 104°44'00", in NE¼SW¼ 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 mi².

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, 1966 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 1500 ft³/s, which are poor. Natural flow of stream affected by storage reservoirs, power developments, ground-water withdrawals, diversions for irrigation of about 5,100 acres and for municipal use, return flow from irrigated areas, and flows from sewage treatment plants.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	174	146	117	81	107	124	102	246	227	218	272	243
2	171	153	135	86	105	118	136	240	220	214	184	237
3	174	154	112	82	104	117	111	237	209	213	184	238
4	199	154	128	82	100	114	118	236	194	205	382	328
5	230	144	132	71	102	109	124	262	195	208	1140	305
6	190	141	139	79	100	113	124	273	867	199	626	345
7	170	138	130	67	102	111	122	247	e1700	185	369	316
8	167	142	134	84	104	107	120	277	1070	169	321	245
9	162	135	144	91	104	107	117	261	1680	170	350	239
10	163	134	126	98	103	106	111	250	e2900	179	490	207
11	157	140	122	95	111	105	102	225	1760	154	545	183
12	156	132	92	84	112	105	108	287	1520	150	345	167
13	154	124	89	79	110	105	108	220	1600	150	414	163
14	161	122	92	84	109	107	96	221	e3500	146	261	161
15	156	123	79	90	113	107	70	229	e1460	113	223	148
16	137	124	93	81	110	109	60	231	e1100	105	222	140
17	121	116	61	77	112	110	59	231	607	93	391	149
18	137	125	69	87	109	112	60	233	571	86	466	148
19	155	117	77	98	110	106	68	250	510	231	291	146
20	159	112	94	100	107	103	67	232	462	145	221	177
21	206	114	105	92	110	104	140	252	436	145	201	175
22	161	117	117	75	107	106	105	430	441	126	179	184
23	163	136	107	80	110	103	90	373	450	107	183	189
24	164	125	95	76	107	155	e802	279	598	102	171	167
25	162	120	96	78	107	116	e537	261	504	114	530	173
26	164	117	93	84	113	110	e582	271	455	209	431	184
27	213	132	101	88	111	108	e481	248	413	177	302	178
28	184	122	102	97	113	100	e380	242	354	406	285	163
29	177	130	91	107	---	106	244	307	306	558	255	151
30	158	125	88	105	---	108	256	255	263	742	257	133
31	150	---	87	107	---	103	---	220	---	255	252	---
TOTAL	5195	3914	3247	2685	3012	3414	5600	8026	26572	6274	10743	5982
MEAN	168	130	105	86.6	108	110	187	259	886	202	347	199
MAX	230	154	144	107	113	155	802	430	3500	742	1140	345
MIN	121	112	61	67	100	100	59	220	194	86	171	133
AC-FT	10300	7760	6440	5330	5970	6770	11110	15920	52710	12440	21310	11870

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 1997, BY WATER YEAR (WY)

	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			
MEAN	74.1	64.9	56.0	61.1	68.2	78.7	98.5	187	186	113	119	80.3																								
MAX (WY)	317	188	133	115	115	162	250	841	886	381	347	199																								
MIN (WY)	1985	1985	1986	1985	1996	1992	1985	1995	1997	1995	1997	1997																								
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1965 - 1997, BY WATER YEAR (WY)	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 1996 CALENDAR YEAR				FOR 1997 WATER YEAR				WATER YEARS 1965 - 1997				
ANNUAL TOTAL				52282				84664					
ANNUAL MEAN				143				232					99.1
HIGHEST ANNUAL MEAN													271
LOWEST ANNUAL MEAN													31.5
HIGHEST DAILY MEAN				874	May 25		e3500	Jun 14	5650		Jun 17	1965	
LOWEST DAILY MEAN				57	Apr 26		59	Apr 17	1.9		Mar 1	1965	
ANNUAL SEVEN-DAY MINIMUM				76	Apr 24		69	Apr 14	4.2		Feb 25	1965	
INSTANTANEOUS PEAK FLOW							a10600	Jun 14		b25000		Jul 24	1965
INSTANTANEOUS PEAK STAGE							c10.08	Jun 14		d11.30		Jul 24	1965
ANNUAL RUNOFF (AC-FT)				103700			167900			71800			
10 PERCENT EXCEEDS				199			413			173			
50 PERCENT EXCEEDS				117			145			70			
90 PERCENT EXCEEDS				90			91			23			

e-Estimated.

a-From rating curve extended above 6800 ft³/s, on basis of slope-area measurement of peak flow.

b-From rating curve extended above 2900 ft³/s, on basis of slope-area measurement of peak flow.

c-From floodmark.

d-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 current year.

WATER TEMPERATURE: October 1990 to current year.

pH: October 1990 to current year.

DISSOLVED OXYGEN: October 1990 to current year.

INSTRUMENTATION.--Water-quality monitor with satellite telemetry.

REMARKS.--Records for daily specific conductance are fair. Records for daily pH are fair. Records for daily water temperature are good. Records for daily dissolved oxygen are poor. Daily data that are not published are either missing or of unacceptable quality.

EXTREMES FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 1,460 microsiemens, Mar. 6, 1996; minimum, 101 microsiemens, June 12, 1995.

pH: Maximum, 8.9 units Apr. 18-20, 1997; minimum 6.5 units, May 24-25, 1996.

WATER TEMPERATURE: Maximum, 29.8°C, July 17, 1991; minimum, 0.0°C, on many days during winter months.

DISSOLVED OXYGEN: Maximum, 12.1 mg/L, Feb. 2, 1996; minimum, 3.5 mg/L, Aug. 9, 1992.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 1,190 microsiemens, Jan. 16, Mar. 1; minimum, 207 microsiemens, July 29-30.

pH: Maximum, 8.9 units Apr. 18-20; minimum, 7.1 units, Oct. 28-30, May 22-24.

WATER TEMPERATURE: Maximum, 27.9°C, July 24; minimum, 0.0°C, several days.

DISSOLVED OXYGEN: Maximum, 12.0 mg/L, Mar. 9, 16; minimum, 4.0 mg/L, July 26.

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM @ 25 DEG. C), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	752	709	730	798	747	771	902	791	836	979	867	905
2	733	681	717	792	764	777	889	774	811	957	800	879
3	743	707	724	---	---	---	903	818	862	946	814	897
4	755	361	717	---	---	---	881	816	848	948	814	879
5	743	361	648	---	---	---	900	817	859	985	854	902
6	752	711	731	793	731	760	860	812	832	946	828	888
7	765	726	743	789	739	758	927	831	860	1010	891	949
8	763	728	745	746	709	727	885	819	845	1070	913	982
9	766	730	750	765	720	743	858	773	808	966	877	918
10	765	725	745	778	730	750	900	830	857	---	---	---
11	786	748	769	738	692	717	908	842	870	---	---	---
12	783	757	768	754	700	720	933	866	890	---	---	---
13	786	754	767	780	725	756	927	866	892	---	---	---
14	830	758	787	800	756	774	943	862	892	---	---	---
15	780	732	756	794	748	770	945	858	890	---	---	---
16	814	766	795	818	753	777	956	871	902	1190	991	1100
17	841	780	810	859	770	801	983	850	930	1080	966	999
18	808	764	782	809	727	754	1050	924	980	1150	960	1030
19	794	758	775	772	738	756	982	900	942	1140	978	1090
20	852	739	776	785	747	766	997	885	930	1080	936	1020
21	820	731	775	778	741	765	975	888	922	1020	906	958
22	818	756	779	813	758	784	941	858	891	1020	924	973
23	809	759	787	887	756	802	944	859	896	1000	918	951
24	785	747	766	815	782	797	933	854	890	1000	901	939
25	799	761	781	818	745	787	906	842	880	966	842	890
26	788	745	769	837	775	794	897	831	867	962	852	896
27	890	715	750	1160	777	899	909	858	882	945	816	868
28	847	732	772	1040	813	911	896	837	862	909	834	872
29	788	749	769	838	771	803	890	830	855	888	850	869
30	763	732	745	849	794	820	933	846	883	912	862	887
31	776	744	759	---	---	---	919	867	891	891	802	852
MONTH	890	361	758	---	---	---	1050	773	879	---	---	---

ARKANSAS RIVER BASIN

07105800 FOUNTAIN CREEK AT SECURITY, CO--Continued

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM @ 25 DEG. C), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	911	793	852	1190	788	989	786	756	772	600	549	579
2	857	761	809	1180	818	939	796	736	759	584	528	559
3	850	755	804	825	782	806	777	754	766	555	461	497
4	907	818	854	873	806	820	792	756	778	480	438	461
5	898	798	853	896	839	860	787	759	775	473	411	441
6	911	820	867	874	819	841	767	735	749	429	373	393
7	904	808	846	862	796	831	748	690	726	378	349	362
8	903	770	830	856	794	827	738	699	717	356	319	333
9	896	763	803	836	790	816	770	722	741	393	299	326
10	853	765	809	831	786	811	791	749	769	389	343	357
11	846	767	816	836	805	824	839	768	809	442	337	368
12	850	748	822	841	807	826	839	781	811	469	355	398
13	846	797	822	827	780	803	840	779	805	438	362	408
14	878	781	830	825	782	813	891	821	848	474	415	442
15	861	780	815	874	812	850	966	810	924	454	412	438
16	1180	761	934	845	823	833	996	828	950	458	426	446
17	833	729	793	838	816	831	1010	879	976	468	441	455
18	841	775	814	838	810	825	1010	757	871	495	446	464
19	880	794	829	839	776	811	844	761	793	498	453	466
20	835	759	797	836	733	794	822	748	787	469	449	460
21	882	808	845	798	727	770	872	637	782	474	412	453
22	914	780	847	802	754	775	761	678	723	474	415	441
23	838	734	786	782	744	769	802	733	779	474	352	407
24	837	757	797	832	743	800	733	438	508	359	304	343
25	885	807	846	794	757	778	530	426	488	349	320	337
26	853	767	810	804	748	776	510	387	426	389	326	352
27	871	816	842	780	740	764	665	409	494	384	341	360
28	847	788	818	780	754	768	676	540	595	419	344	386
29	---	---	---	780	743	763	687	568	630	460	306	406
30	---	---	---	765	739	753	624	530	584	416	365	395
31	---	---	---	780	733	749	---	---	---	451	416	432
MONTH	1180	729	828	1190	727	813	1010	387	738	600	299	418
	JUNE			JULY			AUGUST			SEPTEMBER		
1	483	435	449	520	469	499	636	510	573	708	598	647
2	473	428	449	660	482	541	654	534	594	733	634	673
3	497	461	480	590	485	533	639	543	591	707	658	685
4	499	445	480	577	499	538	646	582	614	699	411	555
5	495	413	448	584	486	539	570	387	478	668	461	597
6	485	290	428	651	508	561	578	405	492	691	381	613
7	342	251	312	641	522	587	577	512	542	673	405	577
8	289	257	269	655	530	585	587	488	550	676	615	651
9	284	222	253	758	539	650	600	501	563	706	661	684
10	---	---	---	758	625	692	614	498	556	732	686	709
11	---	---	---	797	718	758	584	287	436	849	709	739
12	---	---	---	779	699	739	603	511	557	753	680	727
13	---	---	---	768	666	717	614	529	572	776	739	756
14	---	---	---	763	722	742	630	556	596	826	720	752
15	---	---	---	774	720	747	677	605	642	814	754	784
16	---	---	---	784	743	764	768	612	678	808	755	778
17	---	---	---	---	---	---	730	638	684	772	735	759
18	---	---	---	---	---	---	639	594	616	788	756	774
19	---	---	---	---	---	---	673	607	638	787	674	763
20	---	---	---	---	---	---	766	618	653	796	652	693
21	---	---	---	---	---	---	785	658	684	749	648	699
22	---	---	---	---	---	---	794	661	699	729	638	704
23	---	---	---	838	800	819	734	672	701	716	623	670
24	---	---	---	852	818	835	738	695	713	710	627	668
25	---	---	---	862	808	835	751	667	709	673	624	648
26	---	---	---	---	---	---	663	570	616	700	650	672
27	---	---	---	737	395	566	677	611	644	722	670	698
28	---	---	---	628	359	494	673	612	646	736	668	712
29	---	---	---	672	207	440	678	578	629	749	694	728
30	565	488	526	601	207	404	652	587	623	786	718	758
31	---	---	---	608	501	581	700	601	634	---	---	---
MONTH	---	---	---	---	---	---	794	287	610	849	381	696

07105800 FOUNTAIN CREEK AT SECURITY, CO--Continued

pH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	7.6	7.4	7.5	7.5	7.3	7.4	7.7	7.6	7.6	7.5	7.2	7.3
2	7.7	7.4	7.6	7.5	7.2	7.4	7.8	7.6	7.7	7.5	7.2	7.3
3	7.6	7.3	7.5	7.5	7.2	7.3	7.8	7.7	7.7	---	---	---
4	7.6	7.2	7.4	7.5	7.2	7.3	7.8	7.7	7.7	---	---	---
5	7.5	7.3	7.4	7.5	7.2	7.4	7.8	7.7	7.7	---	---	---
6	7.6	7.3	7.4	7.5	7.3	7.4	7.8	7.7	7.7	---	---	---
7	7.6	7.3	7.4	7.5	7.3	7.4	7.9	7.7	7.7	---	---	---
8	7.6	7.3	7.5	7.5	7.2	7.4	7.7	7.6	7.6	---	---	---
9	7.6	7.3	7.4	7.6	7.2	7.4	7.7	7.6	7.6	---	---	---
10	7.5	7.3	7.4	7.6	7.3	7.5	7.8	7.5	7.7	---	---	---
11	7.6	7.3	7.4	7.6	7.3	7.5	7.7	7.5	7.6	---	---	---
12	7.6	7.3	7.5	7.6	7.3	7.4	7.7	7.5	7.6	---	---	---
13	7.6	7.3	7.5	7.5	7.3	7.4	7.7	7.5	7.6	---	---	---
14	7.5	7.3	7.4	7.5	7.3	7.4	7.7	7.5	7.6	---	---	---
15	7.6	7.3	7.5	7.6	7.3	7.5	7.7	7.4	7.5	---	---	---
16	7.7	7.4	7.6	7.6	7.3	7.5	7.5	7.4	7.4	---	---	---
17	7.8	7.5	7.6	7.6	7.4	7.5	7.5	7.5	7.5	8.1	8.0	8.0
18	7.7	7.4	7.5	7.6	7.4	7.5	7.5	7.2	7.4	8.2	7.9	8.0
19	7.6	7.3	7.5	7.7	7.4	7.5	7.5	7.2	7.4	8.2	8.0	8.0
20	7.7	7.3	7.5	7.7	7.2	7.5	7.5	7.2	7.4	8.2	8.0	8.0
21	7.5	7.3	7.4	7.6	7.2	7.4	7.5	7.4	7.4	8.0	7.5	7.7
22	7.6	7.4	7.5	7.5	7.4	7.4	7.6	7.4	7.5	7.9	7.6	7.7
23	7.5	7.3	7.4	7.6	7.2	7.4	7.5	7.4	7.4	7.9	7.6	7.7
24	7.6	7.3	7.4	7.6	7.4	7.5	7.5	7.3	7.4	8.0	7.6	7.7
25	7.6	7.3	7.5	7.6	7.4	7.5	7.5	7.3	7.4	8.0	7.7	7.8
26	7.6	7.3	7.5	7.7	7.4	7.6	7.5	7.4	7.4	8.1	7.7	7.8
27	7.5	7.2	7.4	7.7	7.5	7.6	7.5	7.3	7.4	8.0	7.7	7.8
28	7.3	7.1	7.2	7.7	7.5	7.6	7.5	7.3	7.4	8.1	7.8	7.9
29	7.3	7.1	7.2	7.8	7.5	7.6	7.6	7.2	7.4	8.2	7.9	8.1
30	7.3	7.1	7.2	7.7	7.6	7.6	7.4	7.2	7.3	8.4	8.0	8.2
31	7.6	7.2	7.4	---	---	---	7.4	7.2	7.3	8.2	8.0	8.0
MONTH	7.8	7.1	7.4	7.8	7.2	7.5	7.9	7.2	7.5	---	---	---
	FEBRUARY			MARCH			APRIL			MAY		
1	8.1	7.9	8.0	8.0	7.6	7.8	8.0	7.8	7.9	8.0	7.9	7.9
2	8.1	7.9	8.0	7.7	7.5	7.6	7.9	7.8	7.8	8.1	7.9	8.0
3	8.0	7.8	7.9	7.8	7.7	7.8	7.9	7.8	7.9	8.1	8.0	8.0
4	8.0	7.7	7.9	8.0	7.7	7.8	7.9	7.8	7.8	8.2	8.0	8.1
5	7.9	7.7	7.8	8.0	7.8	7.8	7.9	7.8	7.9	8.2	8.0	8.1
6	7.9	7.6	7.7	8.0	7.7	7.8	8.0	7.9	7.9	8.1	8.0	8.0
7	7.9	7.6	7.8	8.0	7.8	7.9	8.1	7.7	7.9	8.1	8.0	8.1
8	8.0	7.8	7.8	8.0	7.8	7.9	7.9	7.6	7.7	8.1	8.0	8.1
9	8.0	7.8	7.8	8.0	7.7	7.9	8.0	7.6	7.8	8.2	8.0	8.1
10	8.0	7.8	7.9	8.1	7.9	8.0	8.0	7.6	7.8	8.2	8.0	8.1
11	8.0	7.8	7.8	8.1	7.9	8.0	7.9	7.6	7.7	8.2	8.0	8.1
12	7.9	7.8	7.8	8.1	7.9	8.0	7.9	7.6	7.7	8.2	8.0	8.1
13	8.1	7.7	7.9	8.1	7.9	8.0	8.1	7.5	7.8	8.2	7.9	8.0
14	8.0	7.8	7.8	8.1	7.8	7.9	8.0	7.6	7.8	8.0	7.8	7.9
15	8.0	7.8	7.8	8.2	7.9	8.0	8.5	7.7	8.0	8.0	7.8	7.9
16	8.0	7.8	7.9	8.2	7.9	8.0	8.5	7.7	8.0	7.9	7.7	7.8
17	8.0	7.8	7.8	8.2	8.0	8.1	8.6	7.6	8.0	7.9	7.6	7.8
18	8.1	7.8	7.9	8.2	8.0	8.1	8.9	7.6	8.1	7.8	7.6	7.7
19	8.0	7.8	7.9	8.1	7.7	7.9	8.9	7.7	8.2	7.6	7.5	7.6
20	8.0	7.8	7.9	7.9	7.6	7.7	8.9	7.7	8.2	7.7	7.4	7.5
21	8.0	7.8	7.9	8.1	7.7	7.8	8.5	7.6	7.9	7.6	7.2	7.5
22	8.1	7.8	7.9	8.1	7.7	7.8	8.2	7.8	8.0	7.5	7.1	7.4
23	8.1	7.9	7.9	8.0	7.7	7.8	8.2	7.9	8.1	7.5	7.1	7.3
24	8.0	7.8	7.9	7.9	7.7	7.8	8.1	7.9	7.9	7.2	7.1	7.2
25	8.1	7.9	8.0	8.0	7.8	7.9	8.0	7.9	7.9	7.3	7.2	7.3
26	8.2	7.9	8.0	8.1	7.9	7.9	8.1	7.9	8.0	7.4	7.3	7.3
27	8.1	7.9	8.0	8.1	7.9	8.0	8.2	7.9	8.0	7.5	7.4	7.5
28	8.1	7.8	7.9	8.0	7.9	7.9	8.1	8.0	8.0	7.7	7.5	7.6
29	---	---	---	8.1	7.9	8.0	8.2	8.0	8.1	7.9	7.6	7.7
30	---	---	---	8.1	7.9	8.0	8.1	7.9	8.0	7.9	7.7	7.8
31	---	---	---	8.0	7.9	7.9	---	---	---	7.9	7.7	7.8
MONTH	8.2	7.6	7.9	8.2	7.5	7.9	8.9	7.5	7.9	8.2	7.1	7.8

07105800 FOUNTAIN CREEK AT SECURITY, CO--Continued

pH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	7.9	7.7	7.8	7.9	7.4	7.7	8.0	7.6	7.8	8.0	7.7	7.8
2	7.9	7.7	7.8	7.9	7.4	7.7	8.0	7.6	7.9	8.0	7.7	7.8
3	7.9	7.7	7.8	7.9	7.7	7.8	8.0	7.7	7.9	8.0	7.7	7.8
4	8.1	7.7	7.9	7.9	7.7	7.8	8.0	7.7	7.9	8.0	7.4	7.8
5	8.0	7.5	7.8	8.0	7.7	7.8	7.9	7.4	7.8	7.9	7.5	7.7
6	7.7	7.4	7.6	7.9	7.7	7.8	8.0	7.8	7.9	7.9	7.6	7.8
7	7.9	7.4	7.5	7.9	7.6	7.8	8.0	7.8	7.9	7.9	7.6	7.8
8	7.6	7.3	7.5	7.8	7.6	7.7	7.9	7.8	7.8	8.0	7.8	7.9
9	7.5	7.3	7.5	7.9	7.6	7.7	7.9	7.8	7.9	8.0	7.8	7.9
10	---	---	---	8.0	7.6	7.8	7.9	7.6	7.8	8.0	7.7	7.9
11	---	---	---	8.1	7.7	7.8	7.9	7.6	7.8	8.0	7.8	7.9
12	---	---	---	7.9	7.7	7.8	7.9	7.7	7.9	8.1	7.8	8.0
13	---	---	---	8.0	7.7	7.8	7.9	7.7	7.8	8.1	7.8	8.0
14	---	---	---	8.0	7.7	7.8	7.9	7.8	7.9	8.1	7.8	7.9
15	---	---	---	8.0	7.7	7.9	8.0	7.8	7.9	8.1	7.8	8.0
16	---	---	---	8.1	7.5	7.8	8.0	7.8	7.9	8.1	7.9	8.0
17	---	---	---	8.3	7.9	8.1	8.1	7.7	7.9	8.1	7.8	8.0
18	---	---	---	8.4	7.9	8.2	7.9	7.6	7.8	8.1	7.8	7.9
19	---	---	---	8.3	7.5	7.9	8.0	7.7	7.9	8.1	7.8	7.9
20	---	---	---	8.0	7.6	7.9	7.9	7.7	7.8	8.0	7.7	7.8
21	---	---	---	8.1	7.9	8.0	7.9	7.8	7.9	8.0	7.8	7.9
22	---	---	---	8.1	7.8	8.0	7.9	7.8	7.9	8.0	7.8	7.9
23	---	---	---	---	---	---	7.9	7.8	7.9	8.0	7.8	7.9
24	---	---	---	---	---	---	8.0	7.8	7.9	8.0	7.5	7.8
25	---	---	---	---	---	---	8.0	7.6	7.8	7.7	7.4	7.6
26	---	---	---	---	---	---	7.8	7.5	7.7	7.7	7.4	7.5
27	---	---	---	---	---	---	7.9	7.8	7.9	7.7	7.5	7.6
28	---	---	---	7.9	7.6	7.8	7.9	7.8	7.8	7.7	7.5	7.6
29	---	---	---	8.0	7.5	7.8	7.9	7.7	7.8	7.7	7.5	7.6
30	7.9	7.7	7.8	7.9	7.5	7.8	7.9	7.7	7.8	7.7	7.4	7.6
31	---	---	---	8.0	7.8	7.9	8.0	7.7	7.8	---	---	---
MONTH	---	---	---	---	---	---	8.1	7.4	7.9	8.1	7.4	7.8

TEMPERATURE, WATER (DEG.C), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	19.6	11.8	15.3	13.3	6.9	9.5	10.1	3.3	6.4	8.3	3.1	5.8
2	16.9	11.3	13.7	13.4	6.5	9.8	7.7	3.5	5.5	11.7	4.2	7.1
3	18.2	10.9	14.0	12.5	7.2	10.0	9.9	2.6	5.5	10.5	5.3	7.4
4	19.1	12.3	15.3	15.1	8.3	11.2	8.2	3.3	5.0	7.3	2.3	4.8
5	20.1	11.5	15.2	13.9	7.0	10.0	10.7	3.3	6.1	3.8	1.0	2.5
6	20.1	12.2	15.6	10.6	7.1	8.4	7.1	5.6	6.4	5.1	.6	2.5
7	19.5	11.8	15.0	10.1	5.1	7.2	9.2	3.8	6.4	6.1	.1	2.2
8	19.7	11.4	14.9	11.8	4.8	7.8	9.6	4.3	6.7	6.7	2.1	3.7
9	18.8	11.0	14.4	13.0	6.2	9.4	10.2	5.9	7.8	7.3	.2	3.1
10	19.2	10.7	14.4	13.9	6.7	10.0	10.4	7.0	8.4	---	---	---
11	20.1	11.5	15.1	13.8	6.8	9.9	11.3	6.1	8.0	---	---	---
12	19.9	11.5	15.2	13.5	7.3	9.9	10.6	4.6	7.1	---	---	---
13	19.5	11.8	15.3	13.6	8.9	10.3	9.8	4.5	6.7	---	---	---
14	18.6	12.0	14.8	10.4	7.7	9.0	5.9	1.4	4.5	---	---	---
15	17.6	11.5	14.2	10.7	7.0	8.6	5.3	.2	2.7	---	---	---
16	17.6	10.4	13.3	8.7	5.7	7.2	4.8	.5	2.7	3.8	.0	1.3
17	14.4	7.9	10.8	9.1	5.0	7.0	1.8	.0	.8	6.6	.0	2.6
18	15.8	6.5	10.6	12.2	5.0	8.3	3.8	.0	.9	8.1	1.8	4.6
19	16.1	8.9	11.8	14.7	7.4	10.6	6.5	.0	2.4	8.8	2.1	4.8
20	12.0	6.5	10.0	14.9	8.4	10.9	6.7	.9	3.3	9.0	2.1	5.2
21	11.1	5.4	7.9	12.5	7.9	9.8	7.0	3.0	4.7	8.6	2.7	4.8
22	13.4	4.5	8.7	13.6	7.6	10.2	6.7	2.0	4.2	7.6	1.6	4.1
23	14.2	7.1	10.2	10.0	5.7	8.1	4.1	1.6	2.7	8.4	2.8	5.1
24	14.5	7.8	10.9	10.6	6.2	8.1	6.2	.3	2.9	8.2	2.0	4.4
25	14.0	8.2	10.8	12.0	6.4	8.4	7.4	2.0	4.1	6.9	.4	3.4
26	13.0	8.2	10.3	8.8	5.4	7.1	5.4	.0	2.6	8.8	3.4	5.7
27	8.2	5.0	7.3	10.1	4.9	6.8	8.4	2.8	5.0	6.1	2.7	4.2
28	14.2	6.9	10.3	10.4	3.3	6.9	7.8	2.4	4.8	8.8	1.9	5.0
29	13.9	7.2	10.4	10.2	5.2	7.3	8.4	2.5	5.2	8.6	4.1	6.1
30	14.7	7.2	10.5	8.6	2.6	5.6	8.1	3.2	5.6	9.7	3.1	6.2
31	10.4	7.4	8.7	---	---	---	9.7	4.0	6.5	10.8	5.3	7.7
MONTH	20.1	4.5	12.4	15.1	2.6	8.8	11.3	.0	4.9	---	---	---

07105800 FOUNTAIN CREEK AT SECURITY, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	11.1	5.9	8.0	11.0	3.1	6.3	14.5	8.5	11.2	13.2	6.9	9.9
2	9.7	4.7	7.0	12.6	3.4	7.3	11.4	5.0	8.2	11.9	5.1	8.4
3	8.4	4.4	6.0	11.6	4.6	7.7	16.5	6.4	10.8	14.4	5.3	9.8
4	9.3	3.7	5.5	8.0	3.4	5.6	14.9	8.7	11.1	16.8	7.3	11.8
5	8.5	3.1	5.0	12.0	1.4	6.1	9.4	5.8	7.7	16.7	8.7	12.6
6	---	2.8	---	14.2	3.6	8.1	12.5	4.4	8.3	13.7	8.4	11.2
7	8.9	2.3	4.7	14.8	4.5	8.9	15.0	5.0	9.5	13.2	8.3	10.6
8	9.6	1.7	5.0	14.8	4.7	9.1	11.8	6.1	8.5	11.7	7.0	9.5
9	9.9	2.3	5.6	13.3	5.2	8.7	13.6	3.8	7.7	15.4	7.0	11.0
10	9.3	2.3	5.3	12.8	5.5	8.5	7.4	4.0	5.9	14.1	8.0	11.4
11	10.3	2.9	5.8	15.5	5.5	9.7	8.7	1.5	4.7	14.4	8.0	11.0
12	6.8	3.2	5.0	14.9	6.7	10.1	12.7	1.7	6.4	15.7	7.6	11.3
13	9.2	3.4	5.9	14.7	6.7	9.6	15.3	2.9	8.4	15.5	8.0	11.8
14	10.9	2.6	6.0	9.2	3.7	6.0	16.2	4.7	9.6	14.9	8.8	12.0
15	11.7	3.3	6.9	11.8	2.9	6.7	16.4	7.6	11.5	17.1	9.3	13.2
16	12.3	3.9	7.7	14.7	4.3	9.1	19.2	8.7	12.7	18.2	9.9	13.9
17	12.0	5.4	8.3	14.5	7.8	10.2	20.6	7.6	13.3	17.2	10.4	13.9
18	12.1	5.3	8.4	16.5	6.5	10.7	19.3	8.5	13.5	15.8	10.6	13.1
19	12.4	6.5	8.7	17.7	6.5	11.4	19.6	9.4	14.0	12.1	9.3	10.3
20	10.0	5.0	7.0	17.0	8.0	12.0	20.1	10.1	14.5	18.0	7.7	12.5
21	10.2	3.5	6.3	16.6	8.4	11.6	14.3	9.5	11.9	17.0	11.3	13.6
22	9.5	2.2	5.7	17.6	7.1	11.5	16.5	7.0	10.9	14.9	11.1	12.6
23	6.2	3.3	4.6	16.6	7.4	11.2	16.4	8.6	11.6	16.9	9.6	12.8
24	9.9	.3	4.3	10.3	4.2	7.5	10.1	.4	3.8	15.4	9.8	12.6
25	11.4	1.1	5.5	14.6	3.6	8.2	7.4	2.4	4.4	16.1	9.7	12.6
26	9.1	2.3	5.4	16.5	5.8	10.4	11.3	4.4	7.2	16.4	9.5	12.5
27	9.5	3.1	5.6	16.3	6.8	10.8	15.0	4.9	9.9	14.3	7.6	11.1
28	8.5	3.6	5.1	14.4	5.7	9.6	14.3	7.8	11.0	16.3	8.3	12.1
29	---	---	---	11.2	6.5	8.2	17.1	7.4	11.7	14.5	10.3	12.5
30	---	---	---	15.7	5.1	9.8	14.6	6.5	10.6	17.8	11.4	14.5
31	---	---	---	17.3	6.3	11.2	---	---	---	21.8	11.4	16.2
MONTH	---	.3	---	17.7	1.4	9.1	20.6	.4	9.7	21.8	5.1	12.0
	JUNE			JULY			AUGUST			SEPTEMBER		
1	18.5	12.7	16.1	21.9	13.5	17.6	22.4	17.2	19.2	21.9	16.1	18.8
2	19.3	13.2	15.6	21.1	13.6	17.1	24.2	16.6	19.1	20.1	16.3	18.5
3	21.3	12.6	16.1	22.0	12.6	17.1	24.3	15.5	19.4	20.6	17.1	18.3
4	21.8	12.5	16.6	21.7	13.6	17.1	23.9	17.0	19.8	23.3	16.6	19.1
5	20.3	13.9	16.5	20.9	13.7	17.1	19.4	17.6	18.0	22.5	15.8	18.9
6	21.6	10.4	15.7	20.4	14.4	17.1	18.0	15.6	16.4	22.8	15.5	18.6
7	15.2	12.1	13.6	19.6	13.9	16.7	20.8	13.8	16.9	22.5	14.9	18.4
8	14.7	11.8	12.8	19.9	14.1	17.0	22.0	13.9	17.7	23.0	14.9	18.5
9	13.7	10.0	11.7	23.7	13.7	18.1	21.1	14.7	17.4	21.0	15.1	17.3
10	---	---	---	24.4	14.5	18.7	17.1	15.4	16.1	23.0	14.3	18.1
11	---	---	---	21.9	15.7	18.0	21.2	14.9	17.4	22.4	14.8	17.8
12	---	---	---	23.7	14.5	18.7	21.0	14.0	17.4	22.8	15.2	18.2
13	---	---	---	22.9	14.8	18.6	21.3	12.4	16.9	23.0	14.8	18.5
14	---	---	---	25.3	15.2	19.9	21.5	14.2	17.4	23.4	15.6	18.9
15	---	---	---	26.2	16.2	20.9	22.9	13.8	17.9	22.8	15.1	18.5
16	---	---	---	24.9	16.3	20.1	21.6	14.6	17.9	21.0	15.8	17.9
17	---	---	---	26.3	15.5	20.1	22.5	13.6	17.8	21.4	14.5	17.4
18	---	---	---	26.2	14.9	20.9	21.0	14.9	17.3	22.0	14.4	17.9
19	---	---	---	24.7	18.1	20.1	21.3	14.3	17.4	22.0	14.8	17.8
20	---	---	---	23.1	16.2	18.8	21.9	14.1	17.6	15.8	12.5	13.6
21	---	---	---	24.4	14.9	19.0	23.7	14.6	18.6	14.7	11.6	13.0
22	---	---	---	25.0	16.1	20.2	22.9	15.2	18.8	17.1	13.4	15.1
23	---	---	---	27.4	16.6	21.4	25.0	15.7	19.8	15.4	12.6	14.0
24	---	---	---	27.9	17.3	22.5	24.6	15.8	19.7	20.0	12.7	15.6
25	---	---	---	27.3	15.8	21.6	24.7	17.2	19.8	20.7	12.0	15.8
26	---	---	---	26.5	17.4	20.7	23.7	16.6	19.5	20.4	13.1	16.5
27	---	---	---	26.4	17.3	20.6	24.3	16.3	19.8	21.8	13.8	17.3
28	---	---	---	22.3	16.7	19.0	24.6	17.1	20.2	19.8	12.7	15.9
29	---	---	---	23.1	17.3	19.4	22.1	17.0	19.5	21.1	12.2	16.0
30	22.0	---	---	22.5	17.2	19.3	20.2	16.4	18.3	21.3	12.8	16.5
31	---	---	---	23.7	16.8	19.6	22.7	15.9	18.5	---	---	---
MONTH	---	---	---	27.9	12.6	19.1	25.0	12.4	18.3	23.4	11.6	17.2

07105800 FOUNTAIN CREEK AT SECURITY, CO--Continued

OXYGEN, DISSOLVED (MG/L), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	9.0	7.4	8.1	---	---	---	7.8	6.8	7.2	7.8	6.8	7.2
2	8.4	6.6	7.8	---	---	---	7.7	6.4	7.3	7.7	6.8	7.2
3	8.8	6.7	7.8	7.3	5.7	6.4	8.1	6.5	7.3	7.6	7.0	7.2
4	9.1	7.2	8.0	6.9	5.6	6.2	7.6	6.6	7.2	7.5	6.5	7.0
5	8.5	7.4	8.0	7.0	5.8	6.3	8.1	7.4	7.7	7.6	6.5	6.9
6	8.8	7.3	8.0	6.4	5.4	5.9	8.4	7.8	8.2	7.6	6.4	7.0
7	8.9	6.6	7.8	6.3	5.5	5.8	8.5	7.0	7.8	7.9	6.6	7.1
8	9.7	5.4	9.3	5.7	4.8	5.3	8.5	6.7	7.6	7.9	6.4	7.1
9	9.7	6.2	8.0	7.6	4.9	5.3	8.3	7.0	7.7	7.9	6.8	7.3
10	---	---	---	7.3	5.3	6.0	8.2	7.7	8.0	7.9	6.5	7.2
11	---	---	---	7.2	6.2	6.6	8.3	7.0	7.7	7.9	6.6	7.2
12	---	---	---	7.7	6.5	6.9	8.7	7.0	7.7	8.0	6.7	7.4
13	---	---	---	8.2	6.7	7.3	9.0	6.9	7.8	8.3	6.9	7.5
14	---	---	---	8.5	6.7	7.4	8.2	6.8	7.6	8.3	6.8	7.6
15	---	---	---	8.3	6.2	7.4	8.3	6.5	7.5	8.7	6.9	7.7
16	---	---	---	7.2	5.6	6.4	8.2	6.7	7.4	8.5	6.4	7.4
17	---	---	---	7.0	5.2	6.1	8.6	6.7	7.6	8.8	6.0	7.8
18	---	---	---	6.7	5.2	5.8	8.2	6.8	7.6	8.1	5.6	6.8
19	---	---	---	7.2	5.1	5.8	8.3	6.8	7.6	7.6	5.5	6.6
20	---	---	---	7.3	5.9	6.6	8.3	6.7	7.6	8.5	7.2	8.0
21	---	---	---	7.1	5.2	6.3	8.3	6.4	7.4	8.7	7.6	8.2
22	---	---	---	7.3	5.9	6.6	8.1	6.2	7.2	8.1	7.3	7.6
23	---	---	---	7.2	6.0	6.6	7.9	5.9	6.9	8.5	7.8	8.1
24	---	---	---	7.2	5.4	6.5	7.6	5.0	6.3	8.6	7.0	7.9
25	---	---	---	7.8	4.1	6.2	7.5	5.4	7.1	8.5	6.7	7.5
26	---	---	---	7.2	4.0	5.6	7.7	6.4	7.1	7.6	6.0	6.9
27	---	---	---	7.8	6.5	7.2	7.8	6.4	7.1	8.0	5.6	6.8
28	---	---	---	8.2	7.2	7.7	7.5	6.3	6.9	8.4	6.2	7.2
29	---	---	---	7.5	5.8	6.6	7.6	6.7	7.1	9.1	5.8	8.0
30	---	---	---	6.9	6.0	6.5	7.8	7.0	7.3	9.1	5.2	7.7
31	---	---	---	7.0	6.0	6.6	7.9	6.7	7.3	---	---	---
MONTH	---	---	---	---	---	---	9.0	5.0	7.4	9.1	5.2	7.4

07105900 JIMMY CAMP CREEK AT FOUNTAIN, CO

LOCATION.--Lat 38°41'04", long 104°41'17", in NW¼SE¼ sec.5, T.16 S., R.65 W., El Paso County, Hydrologic Unit 11020003, on right bank at downstream side of bridge on county road, 1,000 ft east of Fountain, and 1.5 mi upstream from mouth.

DRAINAGE AREA.--65.6 mi².

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. Jan. 1976 to Sept. 3, 1986 at datum 4.0 ft higher. Aug. 14, 1991 to July 14, 1994, at site 110 ft downstream, at same datum.

REMARKS.--Records fair except for estimated daily discharges, and those above 10 ft³/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.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 17, 1965 reached an estimated discharge of 124,000 ft³/s, gage height, unknown.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.2	1.8	1.8	1.8	1.7	1.7	1.8	2.5	2.3	1.6	3.4	2.2
2	2.2	1.9	1.8	1.8	1.7	1.7	1.8	2.5	2.2	1.6	3.3	2.2
3	2.2	1.9	1.8	1.8	1.7	1.7	1.8	2.5	2.2	1.7	3.2	2.2
4	2.2	1.8	1.8	1.8	1.7	1.7	1.8	2.5	2.2	1.8	3.2	2.3
5	2.2	1.8	1.8	1.8	1.7	1.7	1.9	2.4	2.2	1.8	3.2	2.3
6	2.2	1.8	1.8	1.8	1.7	1.7	1.9	2.5	2.2	1.9	3.4	2.0
7	2.2	1.8	1.8	e1.7	1.7	1.7	1.9	2.5	2.2	2.0	3.2	2.0
8	2.2	1.8	1.8	1.8	1.7	1.7	1.9	2.4	2.2	2.0	3.0	2.0
9	2.1	1.8	1.8	1.8	1.7	1.7	2.0	2.4	2.3	2.0	2.9	2.0
10	2.1	1.8	1.8	1.7	1.7	1.7	2.0	2.4	2.8	2.0	2.9	1.9
11	2.1	1.8	1.8	1.7	1.7	1.7	2.0	2.4	2.2	2.1	2.8	1.9
12	2.1	1.8	1.8	e1.6	1.7	1.7	2.0	2.4	2.1	2.1	2.8	1.9
13	2.1	1.8	1.8	e1.5	1.7	1.7	2.0	2.3	2.1	2.2	2.8	1.8
14	2.1	1.8	1.8	e1.6	1.7	1.7	2.1	2.3	114	2.2	2.7	1.8
15	2.1	1.8	1.8	1.7	1.7	1.7	2.1	2.4	2.7	2.3	2.6	1.8
16	2.1	1.8	1.8	e1.6	1.7	1.7	2.1	2.5	1.9	2.3	2.6	1.8
17	2.2	1.8	e1.7	e1.6	1.7	1.7	2.1	2.5	1.8	2.4	2.7	1.8
18	2.1	1.8	e1.7	1.7	1.7	1.6	2.1	2.5	1.8	2.5	2.8	1.8
19	2.1	1.8	e1.7	1.7	1.7	1.7	2.2	2.4	1.8	2.6	2.5	1.8
20	2.1	1.8	1.8	1.7	1.7	1.7	2.2	2.3	1.8	2.8	2.5	1.8
21	2.1	1.8	1.8	1.7	1.7	1.7	2.3	2.3	1.8	2.4	2.4	1.7
22	2.1	1.8	1.8	1.7	1.7	1.7	2.3	2.4	1.8	2.4	2.4	1.7
23	2.1	1.8	1.8	1.7	1.7	1.7	2.4	2.3	1.8	2.5	2.3	1.7
24	2.1	1.8	1.8	1.7	1.7	1.8	e2.5	2.3	2.1	2.6	2.3	1.7
25	2.0	1.8	1.8	1.7	1.7	1.7	2.5	2.3	1.7	2.6	2.3	1.7
26	2.0	1.8	1.8	1.7	1.7	1.7	2.5	2.4	1.7	2.7	2.3	1.6
27	2.0	1.8	1.8	1.7	1.7	1.8	2.4	2.4	1.6	2.8	2.2	1.6
28	2.0	1.8	1.8	1.7	1.7	1.8	2.4	2.4	1.6	2.8	2.2	1.6
29	2.0	1.8	1.8	1.7	---	1.8	2.4	2.4	1.6	3.0	2.2	1.6
30	1.9	1.8	1.8	1.7	---	1.8	2.5	2.6	1.6	6.6	2.2	1.6
31	1.9	---	1.8	1.7	---	1.8	---	2.6	---	3.6	2.2	---
TOTAL	65.1	54.2	55.5	52.9	47.6	53.2	63.9	75.0	172.3	75.9	83.5	55.8
MEAN	2.10	1.81	1.79	1.71	1.70	1.72	2.13	2.42	5.74	2.45	2.69	1.86
MAX	2.2	1.9	1.8	1.8	1.7	1.8	2.5	2.6	114	6.6	3.4	2.3
MIN	1.9	1.8	1.7	1.5	1.7	1.6	1.8	2.3	1.6	1.6	2.2	1.6
AC-FT	129	108	110	105	94	106	127	149	342	151	166	111

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1976 - 1997, 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	
MEAN	2.11	2.30	1.76	1.68	1.62	1.76	1.71	2.52	3.90	3.19	4.47	1.83											
MAX	3.55	6.49	3.17	2.74	2.39	3.54	2.72	10.1	27.8	27.9	13.4	5.12											
(WY)	1985	1982	1995	1986	1977	1980	1993	1995	1985	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	1990	1986	1989	1989	1993	1990											

SUMMARY STATISTICS

FOR 1996 CALENDAR YEAR

FOR 1997 WATER YEAR

WATER YEARS 1976 - 1997

ANNUAL TOTAL	925.04	854.9		
ANNUAL MEAN	2.53	2.34	2.40	
HIGHEST ANNUAL MEAN			5.12	1995
LOWEST ANNUAL MEAN			1.20	1990
HIGHEST DAILY MEAN	44	Aug 15	114	Jun 14
LOWEST DAILY MEAN	e.86	Feb 1	e1.5	Jan 13
ANNUAL SEVEN-DAY MINIMUM	.97	Jan 8	1.6	Jan 11
INSTANTANEOUS PEAK FLOW			b1740	Jun 14
INSTANTANEOUS PEAK STAGE			8.53	Jun 14
ANNUAL RUNOFF (AC-FT)	1830	1700	1740	
10 PERCENT EXCEEDS	4.2	2.5	2.9	
50 PERCENT EXCEEDS	1.8	1.8	1.7	
90 PERCENT EXCEEDS	1.1	1.7	.94	

e-Estimated.

a-Also occurred Apr 13 and 15, 1990.

b-From rating curve extended above 80 ft³/s, on basis of slope-area measurement of peak flow.

c-From rating curve extended above 100 ft³/s, on basis of slope-area measurement of peak flow.

d-From floodmark.

07105905 FOUNTAIN CREEK ABOVE LITTLE FOUNTAIN CREEK, BELOW FOUNTAIN, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 38°37'50", long 104°40'50", in SW¼NW¼ sec.28, T.16 S., R.65 W., El Paso County, Hydrologic Unit 11020003, approximately 1 mi upstream from mouth of Little Fountain Creek below Fountain.

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	pH (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)	STREP-TOCOCCI, FECAL, KF AGAR (COLS. PER 100 ML) (31673)	CALCIUM DIS-SOLVED (MG/L) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L) (00925)	ALKA-LINITY LAB (MG/L AS CAC03) (90410)	
OCT	25...	0900	119	884	8.0	7.5	8.6	3.3	140	100	66	22	137
NOV	22...	1115	125	931	8.0	7.5	9.9	4.9	K63	67	66	23	143
DEC	13...	0915	90	1060	8.1	4.0	10.7	4.7	120	130	77	26	155
JAN	24...	1115	74	1070	8.2	5.0	9.9	6.0	K410	640	80	27	163
FEB	21...	0915	99	958	8.0	3.5	10.2	e13	120	87	63	21	134
MAR	21...	0900	46	936	7.6	10.0	7.9	15	--	K35	61	21	125
MAY	02...	1030	262	691	8.0	10.5	8.7	4.6	K42	120	53	18	106
	30...	0930	219	652	7.7	15.5	7.9	4.0	K790	K1100	49	17	104
JUN	27...	0900	310	654	7.9	15.0	7.9	5.5	540	330	50	16	104
JUL	25...	1000	46	1080	8.1	21.5	7.0	3.0	220	K80	82	28	169
AUG	15...	1000	132	788	8.0	17.5	7.3	3.1	420	350	58	21	128
SEP	19...	0945	100	911	7.9	17.0	7.3	e3.2	330	170	65	24	144

DATE	SULFATE (MG/L) AS SO4 (00945)	CHLO-RIDE, DIS-SOLVED (MG/L) AS CL (00940)	FLUO-RIDE, DIS-SOLVED (MG/L) AS F (00950)	SULFIDE TOTAL (MG/L) AS S (00745)	RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L) AS N (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L) AS N (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L) AS N (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L) AS N (00625)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L) AS P (00671)	SELE-NIUM, DIS-SOLVED (UG/L) AS SE (01145)	
OCT	25...	230	44	1.8	--	60	<0.01	<0.05	<0.015	<0.2	<0.01	4
NOV	22...	240	45	1.8	<0.5	20	0.13	1.3	0.35	1.2	0.86	5
DEC	13...	270	51	1.8	--	14	0.06	6.3	0.21	0.7	0.61	6
JAN	24...	280	54	1.6	--	22	0.09	5.3	0.72	1.5	0.62	8
FEB	21...	230	52	1.7	--	58	0.10	5.5	2.0	2.8	0.42	5
MAR	21...	230	48	1.8	--	45	0.22	6.5	2.6	3.6	0.28	4
MAY	02...	170	34	2.2	--	168	0.052	2.88	0.136	0.82	0.291	3
	30...	160	25	2.0	<0.5	101	0.019	2.24	0.023	0.77	0.308	4
JUN	27...	160	26	2.1	--	153	0.260	2.92	0.477	1.2	0.084	3
JUL	25...	290	45	1.8	--	19	0.063	3.75	0.082	0.61	0.230	5
AUG	15...	200	32	2.0	--	118	0.024	2.45	0.038	0.61	0.288	4
SEP	19...	260	42	1.8	--	36	0.035	4.26	0.086	0.73	0.350	5

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

ARKANSAS RIVER BASIN

07105905 FOUNTAIN CREEK ABOVE LITTLE FOUNTAIN CREEK, BELOW FOUNTAIN, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	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)	CHRO- MIUM, HEXA- VALENT, DIS. (UG/L AS CR) (01032)	COPPER, TOTAL RECOV- ERABLE (UG/L AS CU) (01042)	COPPER, DIS- SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)
OCT 25...	--	--	--	--	<1	<1	<1	<1	<1	6	4	1700
NOV 22...	<1	1	160	170	<1	<1	<1	<1	4	3	2	800
DEC 13...	--	--	--	--	<1	<1	1	<1	<1	4	2	990
JAN 24...	--	--	--	--	<1	<1	1	<1	<1	4	3	1200
FEB 21...	--	--	--	--	<1	<1	<1	<1	<1	5	2	1400
MAR 21...	--	--	--	--	<1	<1	1	<1	<1	20	12	1000
MAY 02...	--	--	--	--	<1	<1	3	<1	<1	13	2.7	4900
MAY 30...	3	<1	90	101	<1	<1	2	<1	<1	8	1.0	4700
JUN 27...	--	--	--	--	<1	<1	2	<1	<1	7	1.1	4300
JUL 25...	--	--	--	--	<1	<1	<1	<1	<1	6	3.4	540
AUG 15...	--	--	--	--	<1	<1	1	<1	<1	6	2.4	3100
SEP 19...	--	--	--	--	<1	<1	<1	<1	<1	4	2.5	810

DATE	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)	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067)	NICKEL, DIS- SOLVED (UG/L AS NI) (01065)	SELE- NIUM, DIS- SOLVED (UG/L AS SE) (01145)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)	ZINC, DIS- SOLVED (UG/L AS ZN) (01090)	CYANIDE TOTAL (MG/L AS CN) (00720)
OCT 25...	19	3	<1	80	12	4	3	4	30	16	--
NOV 22...	18	1	<1	70	18	4	3	5	30	20	<0.01
DEC 13...	19	3	<1	70	22	4	2	6	30	23	--
JAN 24...	11	2	<1	90	37	5	3	8	30	20	--
FEB 21...	17	2	<1	120	60	4	3	5	40	28	--
MAR 21...	18	2	<1	130	81	4	3	4	30	23	--
MAY 02...	6.3	8	<1	170	6.8	5	1.3	3	40	9.5	--
MAY 30...	6.0	10	<1	180	4.3	6	1.2	4	40	13	<0.01
JUN 27...	9.4	6	<1	140	12	5	2.3	3	30	<3	--
JUL 25...	<3.0	1	<1	46	22	4	3.7	5	10	17	--
AUG 15...	7.9	6	<1	110	9.6	5	1.7	4	30	10	--
SEP 19...	3.6	1	<1	58	16	5	3.6	5	20	13	--

07105920 LITTLE FOUNTAIN CREEK ABOVE KEATON RESERVOIR NEAR FORT CARSON, CO

LOCATION.--Lat 38°40'54", long 104°51'29", in NE¼SW¼ sec.2, T.16 S, R.67 W., El Paso County, Hydrologic Unit 11020003, on right bank 100 ft upstream from Keaton Reservoir, 0.7 mi upstream from State Highway 115, and 4.8 mi southwest of Fort Carson.

DRAINAGE AREA.--11.0 mi².

PERIOD OF RECORD.--May 1978 to September 1987. October 1987 to September 1988, seasonal record only. February 1995 to current year. Water-quality data available, May 1978 to September 1982.

REVISED RECORDS.--WDR CO-80-1: 1979.

GAGE.--Water-stage recorder with satellite telemetry. Parshall flume and crest-stage gage, until destroyed by flood of June 9, 1997. Elevation of gage is 6,430 ft above sea level, from topographic map.

REMARKS.--Records fair except for estimated daily discharges and those above 70 ft³/s, which are poor. No known diversions upstream from station. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.9	.96	1.1	.98	e.76	e.53	1.5	32	11	13	21	5.5
2	1.8	.85	1.1	1.0	e.77	e.53	1.5	25	9.9	14	21	5.0
3	1.7	.82	.96	1.1	e.79	e.56	1.4	19	9.0	12	19	4.9
4	1.6	.83	1.0	.94	e.76	e.54	1.7	26	8.0	13	17	4.7
5	1.7	.82	1.1	e.70	e.76	.60	1.6	54	7.4	12	25	4.6
6	1.5	.82	1.1	e.50	e.76	.62	1.4	40	7.4	12	32	4.2
7	1.3	.78	e1.1	e.61	e.76	.75	1.5	29	18	12	33	3.7
8	1.3	.80	e1.0	e.56	e.76	.74	1.5	24	23	12	29	3.5
9	1.2	.82	e.98	e.50	e.76	.83	1.4	22	e150	9.8	25	3.4
10	1.2	.85	e1.1	e.44	e.70	.82	1.3	20	e550	5.5	25	3.2
11	1.1	.84	e1.0	e.40	e.64	.87	1.0	19	e200	e7.2	23	3.2
12	.96	.76	e.93	e.46	e.57	1.0	1.3	18	e130	e7.6	20	3.0
13	.96	.76	e.92	e.50	e.56	1.0	1.3	28	e93	e7.2	18	2.8
14	.84	.78	e.90	e.52	e.58	.73	1.4	44	e77	e7.0	16	2.7
15	.82	.82	e.88	e.50	e.54	.71	1.5	41	e65	e6.5	14	2.4
16	.82	.82	e.85	e.46	e.57	.93	1.5	37	e59	e6.0	12	2.3
17	.82	.86	e.83	e.49	e.64	.97	1.6	34	e50	e5.5	11	2.2
18	.82	.89	e.82	e.52	e.68	1.0	1.6	32	e45	e5.3	11	2.0
19	.82	.89	e.84	e.47	e.64	.96	1.6	31	e45	e6.0	9.9	2.0
20	.84	.89	e.85	e.46	e.54	1.1	1.7	28	38	e6.8	8.9	2.7
21	.92	.89	e.82	e.54	e.58	1.3	1.8	24	35	e7.2	8.1	2.8
22	.81	.89	e.85	e.54	e.53	1.3	1.6	29	31	e6.6	7.2	2.6
23	.82	.96	e.89	e.45	e.50	1.2	1.8	33	27	e6.0	6.8	3.0
24	.82	.96	e.89	e.44	e.50	1.3	3.8	30	25	e5.8	6.1	3.1
25	.82	.96	e.89	e.51	e.48	1.1	2.0	27	22	e5.2	5.7	2.7
26	.82	.91	e.89	e.53	e.47	1.3	3.8	24	19	e5.0	7.3	2.4
27	.92	.96	e.89	e.56	e.49	1.5	5.2	20	17	e5.0	8.3	2.3
28	.98	1.1	e.89	e.58	e.49	1.5	8.8	17	16	e5.0	6.6	2.2
29	1.1	1.0	e.93	e.64	---	1.5	19	15	15	e5.7	6.2	2.0
30	.96	1.0	e.96	e.68	---	1.4	39	14	14	29	5.9	1.9
31	.96	---	e.94	e.70	---	1.5	---	13	---	20	5.9	---
TOTAL	33.93	26.29	29.20	18.28	17.58	30.69	116.1	849	1816.7	280.9	464.9	93.0
MEAN	1.09	.88	.94	.59	.63	.99	3.87	27.4	60.6	9.06	15.0	3.10
MAX	1.9	1.1	1.1	1.1	.79	1.5	39	54	550	29	33	5.5
MIN	.81	.76	.82	.40	.47	.53	1.0	13	7.4	5.0	5.7	1.9
AC-FT	67	52	58	36	35	61	230	1680	3600	557	922	184

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1978 - 1997, BY WATER YEAR (WY)

	1978	1979	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
MEAN	3.76	2.21	1.23	1.03	.98	1.57	6.71	25.4	15.2	4.46	7.07	3.17			
MAX	29.0	13.0	3.89	2.25	1.78	5.13	17.6	81.5	60.6	11.6	28.2	13.5			
(WY)	1985	1985	1985	1985	1983	1987	1987	1995	1997	1985	1982	1982			
MIN	.18	.29	.30	.30	.36	.52	.75	.90	1.04	.17	.11	.032			
(WY)	1979	1979	1979	1979	1981	1981	1981	1981	1981	1978	1978	1978			

SUMMARY STATISTICS

FOR 1996 CALENDAR YEAR

FOR 1997 WATER YEAR

^aWATER YEARS 1978 - 1997

ANNUAL TOTAL	440.63	3776.57	
ANNUAL MEAN	1.20	10.3	5.95
HIGHEST ANNUAL MEAN			12.2 1985
LOWEST ANNUAL MEAN			1.17 1996
HIGHEST DAILY MEAN		e ⁵⁵⁰ Jun 10	550 Jun 10 1997
LOWEST DAILY MEAN	b.39 Jul 10	e.40 Jan 11	c.00 Aug 22 1978
ANNUAL SEVEN-DAY MINIMUM	.48 Jul 2	.47 Jan 10	d.914 Aug 22 1978
INSTANTANEOUS PEAK FLOW		f.4.19 Jun 9	d.914 Jun 9 1997
INSTANTANEOUS PEAK STAGE			f.4.19 Jun 9 1997
ANNUAL RUNOFF (AC-FT)	874	7490	4310
10 PERCENT EXCEEDS	1.9	26	15
50 PERCENT EXCEEDS	.97	1.5	1.6
90 PERCENT EXCEEDS	.71	.57	.50

e-Estimated.

a-Does not include 1988 to 1994 water years.

b-Also occurred Jul 8.

c-Also occurred Aug 23-28, and Sep 8-24, 1978.

d-From rating curve extended above 70 ft³/s, on basis of critical-depth measurement of peak flow.

f-From floodmark.

07105928 LITTLE FOUNTAIN CREEK NEAR FORT CARSON, CO

LOCATION.--Lat 38°40'49", long 104°51'08", in SW¹/₄SE¹/₄ sec.2, T.16 S., R.67 W., El Paso County, Hydrologic Unit 11020003, on right bank 0.3 mi downstream from Keaton Reservoir, 0.4 mi upstream from State Highway 115, 1.2 mi upstream from Deadman Canyon, and 4.8 mi southwest of Fort Carson.

DRAINAGE AREA.--11.8 mi².

PERIOD OF RECORD.--Streamflow records, May 1978 to September 1989. January 1995 to current year. Water-quality data available, May to September 1978.

REVISED RECORDS--WDR CO-80-1: 1979.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 6,360 ft above sea level, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, and those above 160 ft³/s, which are poor. At times during the year, natural flow of stream may be affected by Womack 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.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.6	.77	.36	.47	.26	.23	.25	23	13	6.4	e18	4.1
2	1.5	.74	e.35	.51	.26	.23	.08	20	12	5.8	e17	3.6
3	1.4	.70	.34	.78	.24	.24	.05	16	11	5.3	e15	3.3
4	1.3	.71	.42	.63	.22	.26	.03	18	11	4.8	e13	4.6
5	1.3	.68	.38	.23	.21	.28	.02	33	10	4.4	e24	3.6
6	1.2	.59	.46	.28	.21	.28	.02	47	9.2	3.9	30	2.7
7	.98	.49	.48	.38	.21	.31	.02	45	20	3.8	33	2.3
8	.92	.50	.45	.33	.19	.37	.01	41	21	3.6	30	2.7
9	.87	.58	.50	.29	.19	.40	.01	36	82	2.7	24	2.1
10	.82	.54	.53	.28	.19	.44	.01	34	580	1.2	23	1.9
11	.76	.51	.48	e.20	.18	.47	.01	31	228	3.6	21	1.6
12	.66	.52	.45	e.21	.16	.46	.01	30	138	3.7	18	2.7
13	.57	.51	.45	e.23	.16	.90	.01	28	92	3.3	17	3.5
14	.52	.53	.45	e.26	.16	.57	.00	26	84	3.1	14	3.4
15	.51	.53	e.43	e.27	.16	.56	.00	25	68	2.6	12	2.9
16	.45	.53	e.38	e.23	.17	.63	.09	23	61	2.1	11	2.3
17	.41	.44	.35	e.27	.18	1.3	.34	22	54	1.9	9.1	1.7
18	.44	.49	.36	.28	.19	.65	.36	21	47	1.7	8.3	1.0
19	.44	.50	.34	.25	.16	.38	.43	21	41	1.7	8.6	.46
20	.42	.46	.33	.25	.22	1.1	.61	19	34	2.3	7.3	.20
21	.66	.46	.33	.33	.25	.50	.92	18	28	3.0	6.7	.19
22	.56	.46	.29	.32	.23	.58	.91	20	24	2.1	5.9	.16
23	.54	.49	.29	.27	.23	.63	.67	21	20	1.7	5.4	.11
24	.51	.57	.27	.23	.23	.82	3.8	20	17	1.4	4.6	.09
25	.51	.51	.27	.23	.23	1.1	1.3	19	15	1.2	4.2	.06
26	.38	.49	.28	.19	.23	.72	3.3	18	12	1.2	5.7	.05
27	.68	.54	.31	.16	.24	1.1	4.8	17	11	1.1	7.0	.05
28	.79	.42	.43	.17	.24	1.1	8.4	16	9.8	3.5	5.3	.04
29	.77	.53	.45	.18	---	.66	15	15	8.4	5.5	4.9	.04
30	.76	.46	.47	.18	---	.76	25	14	7.4	28	4.5	.03
31	.77	---	.48	.22	---	.77	---	13	---	17	4.4	---
TOTAL	24.00	16.25	12.16	9.11	5.80	18.80	66.46	750	1768.8	133.6	411.9	51.48
MEAN	.77	.54	.39	.29	.21	.61	2.22	24.2	59.0	4.31	13.3	1.72
MAX	1.6	.77	.53	.78	.26	1.3	25	47	580	28	33	4.6
MIN	.38	.42	.27	.16	.16	.23	.00	13	7.4	1.1	4.2	.03
AC-FT	48	32	24	18	12	37	132	1490	3510	265	817	102

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1978 - 1997, BY WATER YEAR (WY)

	1978	1979	1985	1986	1987	1988	1989	1995	1996	1997	1978	1979
MEAN	2.94	1.33	.33	.19	.28	.82	4.88	20.0	12.7	2.74	5.41	1.90
MAX	31.2	14.2	2.88	.98	1.27	3.71	18.2	71.5	59.0	9.98	27.1	12.6
(WY)	1985	1985	1985	1985	1983	1987	1985	1995	1997	1985	1982	1982
MIN	.000	.000	.000	.000	.000	.085	.064	.071	.31	.000	.000	.000
(WY)	1979	1979	1979	1979	1979	1989	1989	1981	1988	1978	1978	1978

SUMMARY STATISTICS

	FOR 1996 CALENDAR YEAR	FOR 1997 WATER YEAR	WATER YEARS 1978 - 1997
ANNUAL TOTAL	271.66	3268.36	
ANNUAL MEAN	.74	8.95	4.17
HIGHEST ANNUAL MEAN			11.7
LOWEST ANNUAL MEAN			.22
HIGHEST DAILY MEAN	6.8 Jul 10	580 Jun 10	580 Jun 10 1997
LOWEST DAILY MEAN	a.00 Feb 24	b.00 Apr 14	a.00 May 30 1978
ANNUAL SEVEN-DAY MINIMUM	.00 Jul 2	.01 Apr 9	.00 Jun 15 1978
INSTANTANEOUS PEAK FLOW		c.914 Jun 10	c.914 Jun 10 1997
INSTANTANEOUS PEAK STAGE		7.29 Jun 10	7.29 Jun 10 1997
ANNUAL RUNOFF (AC-FT)	539	6480	3020
10 PERCENT EXCEEDS	1.7	21	12
50 PERCENT EXCEEDS	.50	.67	.45
90 PERCENT EXCEEDS	.03	.19	.00

e-Estimated.

a-No flow at times most years.

b-Also occurred Apr 15.

c-From rating curve extended above 160 ft³/s on the basis of critical-depth measurement of peak flow.

07105945 ROCK CREEK ABOVE FORT CARSON RESERVATION, CO

LOCATION.--Lat 38°42'27", long 104°50'46", in NW¼NW¼ sec.36, T.15 S., R.67 W., El Paso County, Hydrologic Unit 11020003, on right bank 50 ft (revised) upstream from county road bridge, 0.6 mi northwest of Rock Creek Park, 1.2 mi upstream from State Highway 115, and 3.2 mi southwest of Ft. Carson.

DRAINAGE AREA.--6.79 mi².

PERIOD OF RECORD.--May 1978 to current year. Water-quality data available, May to September 1978.

REVISED RECORDS.--WDR CO-85-1: 1982.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 6,390 ft above sea level, from topographic map.

REMARKS.--Records fair except for Apr. 28 to May 21, June 9, and 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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.5	.75	.47	.57	.45	.40	.94	25	12	e7.5	e5.0	e3.6
2	1.4	.67	e.43	.57	.45	.42	.94	22	11	e6.8	e4.7	e3.3
3	1.3	.65	.44	.58	.44	.42	.94	17	10	e6.2	e4.4	e3.3
4	1.3	.63	e.45	.57	.41	.40	.98	19	9.0	e5.5	e4.5	e3.1
5	1.2	.57	e.44	.53	.43	e.37	1.1	32	8.4	e5.2	e9.8	e2.8
6	1.1	.53	e.45	e.52	.46	e.39	1.0	43	7.6	e4.8	e8.0	e2.7
7	1.1	.54	.46	e.50	.45	.41	1.0	40	13	e4.3	e10	e2.6
8	1.0	.52	.45	e.51	.43	.42	1.0	38	12	e3.6	e10	e2.6
9	.88	.53	.45	.52	.41	.45	1.0	32	131	e3.2	e7.0	e2.5
10	.82	.53	.45	.52	.38	.42	.98	29	e255	e3.0	e6.6	e2.4
11	.80	.55	.45	.49	.38	.42	.81	27	e50	e3.0	e7.2	e2.3
12	.73	.56	.48	.49	.38	.49	1.0	25	e36	e2.8	e6.5	e2.2
13	.66	.51	.49	.49	.38	.49	1.0	23	e40	e2.6	e5.8	e2.2
14	.66	.49	.49	.47	e.37	.52	1.0	21	e49	e2.4	e4.6	e2.1
15	.64	.49	.43	.46	e.36	.54	1.0	20	e42	e2.2	e3.9	e2.1
16	.61	.49	e.42	.45	e.35	.53	1.0	19	e39	e2.0	e3.1	e2.0
17	.61	.47	e.37	.43	e.34	.58	1.1	18	e41	e1.8	e2.5	e2.0
18	.61	.49	.38	.42	e.33	.57	1.1	17	e38	e1.7	e2.2	e1.9
19	.58	.49	.43	e.40	.32	.60	1.2	18	e25	e1.9	e2.1	e1.9
20	.59	.49	.54	e.39	.33	.62	1.4	16	e23	e2.7	e4.5	e1.9
21	.73	.49	.54	e.40	.32	.72	1.7	16	e20	e2.6	e7.0	e1.8
22	.68	.48	.53	.41	.38	.76	1.9	e25	e18	e2.2	e6.3	e1.7
23	.70	.50	.52	.41	.39	.76	2.3	e35	e16	e1.9	e5.9	e1.5
24	.65	.53	.51	.41	.38	.79	e6.8	e30	e14	e1.7	e5.4	e1.9
25	.67	.53	.53	e.40	.38	.73	5.7	e25	e12	e1.4	e4.8	e1.4
26	.64	.51	.53	e.39	.39	.83	5.7	e20	e11	e1.5	e5.2	e1.8
27	.72	.52	.53	.41	.38	.89	8.0	e19	e11	e1.5	e5.7	e1.9
28	.82	.51	.51	e.40	.38	.90	15	17	e9.9	e3.4	e4.8	e1.9
29	.83	e.46	.53	e.39	---	.88	27	15	e9.1	e4.1	e4.5	e1.9
30	.76	e.47	.57	.41	---	.85	33	15	e8.2	e6.4	e4.2	e1.7
31	.76	---	.57	.45	---	.93	---	13	---	e5.0	e3.9	---
TOTAL	26.05	15.95	14.84	14.36	10.85	18.50	127.59	731	981.2	104.9	170.1	67.0
MEAN	.84	.53	.48	.46	.39	.60	4.25	23.6	32.7	3.38	5.49	2.23
MAX	1.5	.75	.57	.58	.46	.93	33	43	255	7.5	10	3.6
MIN	.58	.46	.37	.39	.32	.37	.81	13	7.6	1.4	2.1	1.4
AC-FT	52	32	29	28	22	37	253	1450	1950	208	337	133

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1978 - 1997, BY WATER YEAR (WY)

	1978	1979	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
MEAN	1.68	1.08	.51	.48	.49	.97	4.20	10.7	6.00	2.08	2.92	1.41			
MAX	20.7	10.7	2.25	1.42	1.33	2.43	12.3	39.1	32.7	7.23	14.8	7.75			
(WY)	1985	1985	1985	1985	1985	1987	1985	1995	1997	1985	1982	1982			
MIN	.000	.028	.051	.073	.12	.29	.34	.41	.31	.010	.000	.000			
(WY)	1979	1979	1979	1979	1979	1981	1981	1996	1996	1978	1978	1978			

SUMMARY STATISTICS

FOR 1996 CALENDAR YEAR

FOR 1997 WATER YEAR

WATER YEARS 1978 - 1997

ANNUAL TOTAL	313.23	2282.34	
ANNUAL MEAN	.86	6.25	2.77
HIGHEST ANNUAL MEAN			7.70 1985
LOWEST ANNUAL MEAN			.36 1989
HIGHEST DAILY MEAN	20 Jul 10	e ²⁵⁵ Jun 10	e ²⁵⁵ Jun 10 1997
LOWEST DAILY MEAN	a.02 May 22	b.32 Feb 19	c.00 Jul 6 1978
ANNUAL SEVEN-DAY MINIMUM	.03 May 18	d.34 Feb 15	d.00 Jul 6 1978
INSTANTANEOUS PEAK FLOW		d ⁷⁷⁰ Jun 10	d ⁷⁷⁰ Jun 10 1997
INSTANTANEOUS PEAK STAGE		f ^{9.71} Jun 10	f ^{9.71} Jun 10 1997
ANNUAL RUNOFF (AC-FT)	621	4530	2000
10 PERCENT EXCEEDS	1.5	18	6.1
50 PERCENT EXCEEDS	.49	1.0	.66
90 PERCENT EXCEEDS	.19	.41	.15

e-Estimated.

a-Also occurred May 23-24, and Jul 6-7.

b-Also occurred Feb 21.

c-No flow many days in most years.

d-Estimated on basis of slope-area measurement of peak flow at site 1.4 mi downstream.

f-From floodmarks.

07105950 ROCK CREEK NEAR FORT CARSON, CO

LOCATION.--Lat 38°41'49", long 104°49'39", in SW¹/₄SW¹/₄ sec.31, T.15 S., R.66 W., El Paso County, Hydrologic Unit 11020003, on left bank at Fort Carson Scout Camp, 0.2 mi downstream from bridge on State Highway 115, and 2.9 mi southwest of Fort Carson.

DRAINAGE AREA.--7.79 mi².

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 6,150 ft above sea level, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Some diversions upstream from station for irrigation and other uses, amounts unknown. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

REVISIONS.--Revised mean daily discharges, in cubic feet per second, for periods in September 1996, are given below. These figures supercede those published in the report for 1996.

Sept. 7.....	0.21	Sept. 13.....	0.12	Sept. 19.....	0.06	Sept. 25.....	0.03
8.....	0.18	14.....	0.10	20.....	0.05	26.....	0.03
9.....	0.17	15.....	0.09	21.....	0.05	27.....	0.03
10.....	0.14	16.....	0.08	22.....	0.04	28.....	0.02
11.....	0.13	17.....	0.07	23.....	0.04	29.....	0.02
12.....	0.12	18.....	0.07	24.....	0.03	30.....	0.02

MONTH	TOTAL	MEAN	MAX	MIN
Sept. 1996	4.70	0.16	1.1	0.02
Wtr Yr 1996	49.95	0.14		

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.01	.06	.10	.00	.00	.00	.00	25	5.0	6.4	2.5	1.8
2	.01	.07	.09	.00	.00	.00	.00	25	4.6	e5.8	2.1	1.7
3	.01	.07	.07	.00	.00	.00	.00	23	4.2	e4.9	1.7	1.6
4	.01	.08	.06	.00	.00	.00	.00	25	3.8	e4.3	1.7	1.5
5	.01	.09	.05	.00	.00	.00	.00	23	3.6	e3.8	8.4	1.4
6	.01	.10	.04	.00	.00	.00	.00	20	4.2	e3.3	11	1.3
7	.01	.10	.02	.00	.00	.00	.00	21	13	e3.0	11	1.2
8	.01	.10	.01	.00	.00	.00	.00	22	11	e2.7	9.4	1.1
9	.01	.11	.00	.00	.00	.00	.00	22	57	e2.4	8.0	1.0
10	.02	.12	.00	.00	.00	.00	.00	21	337	e2.1	8.6	.93
11	.02	.12	.00	.00	.00	.00	.00	20	123	2.3	9.9	.83
12	.02	.12	.00	.00	.00	.00	.00	18	78	2.1	8.9	.70
13	.02	.12	.00	.00	.00	.00	.00	14	e40	1.5	8.4	.63
14	.02	.12	.00	.00	.00	.00	.00	12	e48	1.3	7.3	.60
15	.03	.12	.00	.00	.00	.00	.00	9.7	e43	1.1	6.2	.57
16	.03	.15	.00	.00	.00	.00	.01	7.6	e36	1.2	5.5	.55
17	.03	.17	.00	.00	.00	.00	.02	11	e30	1.2	5.2	.51
18	.03	.16	.00	.00	.00	.00	.03	11	e28	1.1	4.9	.46
19	.04	.16	.00	.00	.00	.00	.04	12	e23	1.2	4.5	.42
20	.04	.16	.00	.00	.00	.00	.05	10	21	1.2	5.0	.44
21	.04	.15	.00	.00	.00	.00	.05	9.2	18	1.3	5.2	.39
22	.04	.16	.00	.00	.00	.00	.06	16	17	1.3	4.2	.34
23	.04	.16	.00	.00	.00	.00	.05	20	15	e1.2	3.0	.32
24	.04	.16	.00	.00	.00	.00	2.2	16	13	e1.0	1.9	.27
25	.04	.15	.00	.00	.00	.00	4.1	14	12	.99	.88	.23
26	.04	.14	.00	.00	.00	.00	4.6	9.2	11	.95	1.1	.20
27	.05	.13	.00	.00	.00	.00	7.7	5.4	10	.90	2.9	.17
28	.05	.13	.00	.00	.00	.00	17	3.6	9.5	.88	1.5	.15
29	.06	.12	.00	.00	---	.00	28	3.3	8.5	1.0	2.0	.14
30	.06	.12	.00	.00	---	.00	29	1.5	7.4	4.2	2.0	.15
31	.06	---	.00	.00	---	.00	---	1.7	---	2.7	1.9	---
TOTAL	0.91	3.72	0.44	0.00	0.00	0.00	92.91	452.2	1034.8	69.32	156.78	21.60
MEAN	.029	.12	.014	.000	.000	.000	3.10	14.6	34.5	2.24	5.06	.72
MAX	.06	.17	.10	.00	.00	.00	29	25	337	6.4	11	1.8
MIN	.01	.06	.00	.00	.00	.00	.00	1.5	3.6	.88	.88	.14
AC-FT	1.8	7.4	.9	.00	.00	.00	184	897	2050	137	311	43

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1978 - 1997, BY WATER YEAR (WY)

MEAN	1.06	.54	.090	.051	.038	.14	2.72	9.17	4.76	1.19	1.65	.61
MAX	18.6	9.66	1.43	.81	.67	1.28	10.0	42.8	34.5	6.57	15.4	6.75
(WY)	1985	1985	1985	1985	1985	1985	1985	1980	1997	1982	1982	1982
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000
(WY)	1979	1979	1979	1979	1979	1979	1981	1989	1989	1978	1978	1978

SUMMARY STATISTICS

	FOR 1996 CALENDAR YEAR	FOR 1997 WATER YEAR	WATER YEARS 1978 - 1997
ANNUAL TOTAL	55.02	1832.68	
ANNUAL MEAN	.15	5.02	1.88
HIGHEST ANNUAL MEAN			6.24 1985
LOWEST ANNUAL MEAN			.000 1989
HIGHEST DAILY MEAN	16 Jul 10	337 Jun 10	337 Jun 10 1997
LOWEST DAILY MEAN	a .00 Jan 1	b .00 Dec 9	a .00 Jun 15 1978
ANNUAL SEVEN-DAY MINIMUM	.00 Jan 1	c .00 Dec 9	c .00 Jun 15 1978
INSTANTANEOUS PEAK FLOW		c 770 Jun 10	c 770 Jun 10 1997
INSTANTANEOUS PEAK STAGE		d 7.28 Jun 10	d 7.28 Jun 10 1997
ANNUAL RUNOFF (AC-FT)	109	3640	1360
10 PERCENT EXCEEDS	.20	13	4.1
50 PERCENT EXCEEDS	.00	.10	.00
90 PERCENT EXCEEDS	.00	.00	.00

e-Estimated.

a-No flow most of time.

b-No flow many days.

c-From rating curve extended above 100 ft³/s on basis of slope-area measurement of peak flow.

d-From floodmarks.

07106000 FOUNTAIN CREEK NEAR FOUNTAIN, CO

LOCATION.--Lat 38°36'06", long 104°40'11", in SW¹/₄NE¹/₄ 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 mi².

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.--Records fair except for estimated daily discharges and those above 1,000 ft³/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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	207	167	161	104	153	138	115	331	198	234	418	241
2	209	171	181	106	147	148	146	316	215	229	265	230
3	219	169	156	109	145	142	152	281	182	218	288	229
4	216	170	170	108	132	136	140	266	178	193	272	260
5	274	160	172	100	136	132	127	275	174	207	1540	369
6	196	157	181	108	133	134	116	347	846	201	966	290
7	196	150	163	96	133	137	112	357	2420	194	480	319
8	197	159	160	104	133	134	104	349	1140	174	354	233
9	191	156	167	e110	137	133	103	339	1770	174	302	215
10	178	153	144	e110	132	135	102	313	5470	160	417	194
11	170	165	147	e110	132	131	97	287	2440	168	615	186
12	167	160	119	e105	133	130	103	376	1860	184	336	195
13	167	150	115	e120	128	131	111	285	1590	159	550	177
14	175	151	119	e130	128	132	106	257	e3800	133	290	172
15	156	155	109	119	138	131	86	261	e2000	155	254	155
16	128	156	111	107	137	136	72	256	e1400	185	268	140
17	119	145	99	104	135	134	74	247	772	120	349	136
18	133	163	89	108	132	135	58	244	697	122	466	132
19	146	158	92	116	130	132	66	310	602	214	257	144
20	158	150	95	126	127	128	58	264	488	212	257	179
21	213	149	95	119	125	129	95	286	412	119	238	182
22	150	153	111	98	126	130	253	631	391	118	213	178
23	148	176	116	103	129	131	185	410	383	98	219	206
24	140	189	108	112	126	176	1000	258	628	87	215	169
25	135	168	108	114	127	147	688	268	445	76	507	155
26	141	166	110	118	141	149	729	285	443	205	558	160
27	210	176	110	124	136	154	607	254	405	172	261	144
28	192	173	117	141	136	145	490	242	373	536	248	145
29	175	180	114	155	---	148	324	344	355	580	242	138
30	170	170	114	151	---	148	341	295	310	1200	247	117
31	173	---	109	157	---	136	---	216	---	494	239	---
TOTAL	5449	4865	3962	3592	3747	4282	6760	9450	32387	7321	12131	5790
MEAN	176	162	128	116	134	138	225	305	1080	236	391	193
MAX	274	189	181	157	153	176	1000	631	5470	1200	1540	369
MIN	119	145	89	96	125	128	58	216	174	76	213	117
AC-FT	10810	9650	7860	7120	7430	8490	13410	18740	64240	14520	24060	11480

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 1997, BY WATER YEAR (WY)

	1939	1940	1953	1952	1941	1941	1954	1950	1953	1952	1954	1939
MEAN	58.2	71.6	59.4	61.4	66.8	75.1	99.0	189	167	99.4	120	60.5
MAX	201	162	155	167	152	199	590	899	1080	432	476	207
(WY)	1995	1997	1986	1996	1996	1987	1942	1995	1997	1995	1945	1996
MIN	3.70	10.0	5.14	6.99	6.07	6.39	4.30	9.78	4.50	3.47	3.15	1.31
(WY)	1954	1940	1953	1952	1941	1941	1954	1950	1953	1952	1954	1939

SUMMARY STATISTICS

	FOR 1996 CALENDAR YEAR	FOR 1997 WATER YEAR	WATER YEARS 1939 - 1997
ANNUAL TOTAL	58891	99736	
ANNUAL MEAN	161	273	93.5
HIGHEST ANNUAL MEAN			295
LOWEST ANNUAL MEAN			10.3
HIGHEST DAILY MEAN	1130	5470	5470
LOWEST DAILY MEAN	32	^a 58	^b .00
ANNUAL SEVEN-DAY MINIMUM	42	73	.27
INSTANTANEOUS PEAK FLOW		^c 11500	^d 22100
INSTANTANEOUS PEAK STAGE		9.91	^e 9.19
ANNUAL RUNOFF (AC-FT)	116800	197800	67770
10 PERCENT EXCEEDS	221	428	185
50 PERCENT EXCEEDS	150	160	51
90 PERCENT EXCEEDS	65	109	6.5

e-Estimated.
a-Also occurred Apr 20.
b-Also occurred Sep 30, 1939.
c-From rating curve extended above 5400 ft³/s.
d-From rating curve extended above 3000 ft³/s, on basis of slope-area measurement of peak flow.
f-At different datum.
g-Maximum gage height, 10.34 ft, Sep 3, 1994, present datum.

**0710600 FOUNTAIN CREEK NEAR FOUNTAIN, CO--Continued
WATER-QUALITY RECORDS**

PERIOD OF RECORD.--November 1987 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: November 1987 to current year.

pH: November 1987 to current year.

WATER TEMPERATURE: November 1987 to current year.

DISSOLVED OXYGEN: November 1987 to current year.

INSTRUMENTATION.--Water-quality monitor with satellite telemetry.

REMARKS.--Records for daily specific conductance are fair. Records for daily pH are fair. Records for daily water temperature are good except June 7-25, which are fair. Records for daily dissolved oxygen are poor. Daily data that are not published are either missing or of unacceptable quality.

EXTREMES FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 1,660 microsiemens, Aug. 27-28, 1996; minimum, 141 microsiemens, Aug. 8, 1991.

pH: Maximum, 8.5 units, July 15, Sept. 4, 1991; minimum 6.5 units, Oct. 26, 28-29, 31, 1995.

WATER TEMPERATURE: Maximum, 31.8°C, July 9, 1990; minimum, 0.0°C, on many days during winter months.

DISSOLVED OXYGEN: Maximum, 12.6 mg/L, Dec. 20, 1987; minimum, 3.7 mg/L, July 9, 1993.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 1,220 microsiemens, Jan. 16-17; minimum, 296 microsiemens, June 8.

pH: Maximum, 8.3 units, Sept. 15; minimum, 7.3 units, Nov. 23-24, Apr. 22-24.

WATER TEMPERATURE: Maximum, 29.0°C, July 23; minimum, 0.0°C, many days.

DISSOLVED OXYGEN: Maximum, 12.2 mg/L, Mar. 15; minimum, 4.9 mg/L, July 19-20.

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM @ 25 DEG. C), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	880	808	843	965	852	921	1040	975	1000	1110	1040	1070
2	873	818	854	946	906	931	1010	970	993	1100	1030	1080
3	889	844	860	929	864	901	1020	974	998	1110	1020	1070
4	---	---	---	---	---	---	1020	984	1010	1110	1040	1070
5	---	---	---	957	833	845	1020	979	1000	1130	1040	1070
6	---	---	---	---	---	---	1010	975	995	1100	1040	1070
7	---	---	---	952	894	922	1020	980	997	1140	1070	1110
8	883	839	861	913	869	894	1010	993	1000	1160	1100	1130
9	880	841	863	911	861	891	1000	977	992	1130	1060	1100
10	880	829	856	887	861	874	1030	977	999	1100	1030	1060
11	888	857	870	---	---	---	1030	997	1010	1100	1030	1070
12	---	---	---	---	---	---	1040	1010	1030	1140	1080	1100
13	---	---	---	---	---	---	1050	1010	1030	1120	1090	1110
14	---	---	---	---	---	---	1060	1010	1030	1110	1040	1080
15	---	---	---	982	928	945	1060	1000	1030	1120	1040	1080
16	---	---	---	984	926	952	1050	990	1020	1220	1090	1180
17	---	---	---	984	920	951	1090	994	1040	1220	1110	1170
18	---	---	---	931	884	902	1140	1050	1090	1180	1090	1120
19	---	---	---	---	---	---	1100	1010	1060	1210	1090	1160
20	---	---	---	976	930	941	1040	977	1020	1170	1100	1140
21	---	---	---	972	922	945	1010	968	989	1160	1070	1110
22	---	---	---	977	933	948	994	957	975	1140	1070	1100
23	---	---	---	968	925	952	991	950	966	1130	1080	1100
24	---	---	---	987	925	963	1000	958	979	1140	1070	1090
25	954	886	923	982	937	955	992	955	971	1120	1050	1090
26	923	875	897	1000	949	969	992	949	968	1120	1050	1080
27	---	---	---	1050	949	982	990	948	965	1100	997	1050
28	---	---	---	1130	1010	1090	988	949	962	1060	987	1020
29	---	---	---	1010	967	991	1010	951	977	1030	997	1010
30	---	---	---	1020	969	997	1040	977	1000	1040	992	1010
31	942	834	900	---	---	---	1060	1010	1030	1010	981	997
MONTH	---	---	---	---	---	---	1140	948	1000	1220	981	1090

0710600 FOUNTAIN CREEK NEAR FOUNTAIN, CO--Continued

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM @ 25 DEG. C), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	991	941	968	---	---	---
2	---	---	---	---	---	---	980	897	950	---	---	---
3	---	---	---	988	896	948	960	882	918	---	---	---
4	---	---	---	1000	909	966	955	930	941	---	---	---
5	1020	970	989	---	---	---	990	948	967	---	---	---
6	986	915	952	1000	---	---	---	---	---	---	---	---
7	925	870	894	---	---	---	---	---	---	---	---	---
8	926	863	889	---	---	---	---	---	---	---	---	---
9	933	872	898	---	---	---	---	---	---	---	---	---
10	948	890	915	993	932	961	---	---	---	---	---	---
11	963	924	939	971	891	934	985	944	962	---	---	---
12	988	950	964	940	900	917	991	911	944	---	---	---
13	981	---	---	---	---	---	950	888	915	591	---	---
14	---	---	---	---	---	---	949	886	914	639	529	595
15	---	---	---	---	---	---	968	891	915	640	611	631
16	---	---	---	---	---	---	967	929	945	636	597	624
17	---	---	---	---	---	---	984	916	939	657	626	640
18	---	---	---	988	952	965	1070	984	1020	710	616	652
19	---	---	---	997	949	969	1020	883	977	687	622	656
20	---	---	---	995	940	970	1010	890	943	688	643	664
21	1000	---	---	981	936	957	959	887	911	696	587	660
22	1010	---	---	977	902	956	---	---	---	662	562	621
23	---	---	---	956	910	939	---	---	---	665	535	589
24	---	---	---	992	882	958	785	478	632	---	---	---
25	---	---	---	988	948	961	742	610	676	---	---	---
26	---	---	---	979	934	959	751	602	676	---	---	---
27	1000	---	---	970	896	948	752	611	682	---	---	---
28	987	905	951	978	894	935	---	---	---	702	593	661
29	---	---	---	982	922	950	---	---	---	705	499	626
30	---	---	---	967	921	945	774	658	722	614	499	573
31	---	---	---	976	925	942	---	---	---	622	569	599
MONTH	---	---	---	---	---	---	---	---	---	---	---	---
	JUNE			JULY			AUGUST			SEPTEMBER		
1	653	622	641	827	793	811	919	678	773	783	703	742
2	662	615	637	828	793	809	983	882	928	785	729	761
3	718	661	689	842	752	798	941	854	890	755	718	741
4	739	669	701	783	717	750	907	780	883	750	---	---
5	706	555	648	851	720	775	780	384	550	764	---	---
6	697	348	572	897	838	875	727	508	670	---	---	---
7	408	310	370	917	852	894	776	708	747	---	---	---
8	425	296	379	943	892	921	788	738	770	---	---	---
9	384	306	345	939	894	921	773	737	761	---	---	---
10	---	---	---	---	---	---	770	602	710	---	---	---
11	---	---	---	1030	823	929	675	454	568	---	---	---
12	---	---	---	---	---	---	692	628	651	940	876	914
13	---	---	---	906	817	856	725	486	615	970	895	944
14	---	---	---	1090	906	1000	770	713	739	967	890	930
15	---	---	---	1040	948	1010	846	770	807	992	895	954
16	---	---	---	1080	1020	1050	866	701	834	982	875	921
17	---	---	---	1040	811	924	876	608	857	1030	982	1000
18	---	---	---	899	861	871	787	441	627	1030	967	995
19	---	---	---	898	863	878	856	762	807	1030	940	1000
20	---	---	---	---	---	---	787	624	726	956	---	---
21	---	---	---	---	---	---	805	770	784	---	---	---
22	---	---	---	1090	1040	1070	793	764	778	1030	---	---
23	---	---	---	1130	1080	1110	791	753	775	---	---	---
24	---	---	---	1150	1120	1140	787	772	782	937	---	---
25	702	661	684	1160	1070	1140	788	482	728	---	---	---
26	751	673	707	1090	604	1010	636	405	516	---	---	---
27	743	699	722	927	612	815	831	636	757	---	---	---
28	762	718	746	904	575	676	842	756	806	---	---	---
29	756	---	---	915	379	640	799	704	750	---	---	---
30	---	---	---	606	358	442	777	702	733	---	---	---
31	---	---	---	722	606	677	744	697	733	---	---	---
MONTH	---	---	---	---	---	---	983	384	744	---	---	---

07106000 FOUNTAIN CREEK NEAR FOUNTAIN, CO--Continued

pH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	7.8	7.6	7.7	7.8	7.7	7.7	7.6	7.6	7.6	7.8	7.7	7.7
2	7.8	7.6	7.7	7.8	7.7	7.7	7.6	7.5	7.6	8.0	7.7	7.8
3	7.7	7.6	7.6	7.8	7.6	7.7	7.7	7.5	7.6	7.9	7.9	7.9
4	7.8	7.6	7.7	7.8	7.7	7.7	7.7	7.6	7.7	7.9	7.8	7.8
5	7.8	7.6	7.7	7.8	7.7	7.7	7.8	7.5	7.7	7.8	7.7	7.8
6	8.0	7.8	7.9	7.8	7.7	7.7	7.8	7.7	7.8	7.8	7.7	7.8
7	8.1	7.8	7.9	7.8	7.7	7.7	7.8	7.8	7.8	7.8	7.7	7.7
8	8.1	7.9	8.0	7.8	7.7	7.7	7.9	7.7	7.8	7.8	7.6	7.7
9	8.1	8.0	8.0	7.8	7.7	7.7	7.8	7.6	7.7	7.8	7.6	7.7
10	8.1	8.0	8.0	7.8	7.6	7.7	7.7	7.6	7.6	7.8	7.7	7.8
11	8.1	8.0	8.0	7.9	7.7	7.8	7.7	7.6	7.7	7.8	7.6	7.7
12	8.1	---	---	7.9	7.7	7.7	7.7	7.6	7.7	7.8	7.6	7.6
13	8.1	---	---	7.8	7.7	7.7	7.8	7.5	7.6	7.7	7.6	7.6
14	---	---	---	7.8	7.7	7.7	7.7	7.6	7.6	7.7	7.5	7.6
15	---	---	---	7.9	7.7	7.8	7.7	7.5	7.6	7.7	7.4	7.6
16	---	---	---	7.8	7.6	7.7	7.6	7.5	7.6	7.7	7.5	7.7
17	---	---	---	7.7	7.6	7.6	7.6	7.5	7.5	7.7	7.5	7.6
18	---	---	---	7.6	7.5	7.6	7.7	7.5	7.6	7.7	7.5	7.6
19	---	---	---	7.7	7.5	7.6	7.7	7.5	7.6	7.7	7.6	7.6
20	---	---	---	7.6	7.4	7.5	7.7	7.4	7.6	7.6	7.6	7.6
21	---	---	---	7.5	7.4	7.5	7.7	7.6	7.7	7.7	7.6	7.6
22	---	---	---	7.5	7.4	7.4	7.7	7.6	7.7	7.7	7.6	7.7
23	---	---	---	7.4	7.3	7.4	7.7	7.6	7.6	7.7	7.6	7.7
24	---	---	---	7.4	7.3	7.3	7.6	7.5	7.6	7.7	7.6	7.7
25	7.8	7.7	7.8	7.5	7.4	7.4	7.7	7.6	7.6	7.7	7.5	7.6
26	7.8	7.7	7.7	7.5	7.4	7.5	7.7	7.6	7.6	7.7	7.6	7.6
27	7.7	7.6	7.6	7.6	7.5	7.5	7.7	7.6	7.6	7.6	7.6	7.6
28	7.7	7.6	7.6	7.5	7.5	7.5	7.8	7.6	7.7	7.6	7.4	7.5
29	7.7	7.6	7.6	7.6	7.5	7.6	7.8	7.7	7.7	7.6	7.5	7.5
30	7.7	7.6	7.6	7.6	7.5	7.6	7.7	7.7	7.7	7.6	7.4	7.5
31	7.7	7.6	7.7	---	---	---	7.8	7.6	7.7	7.6	7.5	7.5
MONTH	---	---	---	7.9	7.3	7.6	7.9	7.4	7.7	8.0	7.4	7.7
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	7.7	7.5	7.6	7.9	7.7	7.8	7.9	7.7	7.8	7.9	7.8	7.8
2	7.8	7.6	7.7	7.8	7.7	7.7	7.8	7.7	7.7	7.9	7.8	7.8
3	7.8	7.7	7.7	7.8	7.7	7.7	7.9	7.7	7.8	7.9	7.8	7.8
4	7.8	7.7	7.8	7.8	7.6	7.7	7.9	7.7	7.8	7.9	7.8	7.8
5	8.0	7.8	7.9	7.7	7.6	7.7	7.9	7.7	7.8	7.9	7.8	7.8
6	8.0	7.9	7.9	7.7	7.6	7.7	7.8	---	---	7.8	7.7	7.8
7	8.0	7.9	7.9	7.7	7.6	7.6	---	---	---	7.8	7.7	7.8
8	8.0	7.8	7.9	7.7	7.6	7.6	---	---	---	7.8	7.7	7.8
9	7.9	7.8	7.9	7.7	7.5	7.6	---	---	---	7.8	7.7	7.8
10	7.9	7.8	7.8	7.7	7.6	7.6	---	---	---	7.9	7.7	7.8
11	7.8	7.7	7.8	7.7	7.5	7.6	7.8	---	---	7.9	7.8	7.8
12	---	7.7	---	7.7	7.5	7.6	7.8	7.7	7.7	7.8	7.7	7.7
13	---	7.6	---	7.6	7.4	7.6	7.9	7.7	7.8	8.0	7.7	7.8
14	7.7	7.6	7.6	7.6	7.5	7.5	7.9	7.7	7.8	8.0	7.9	8.0
15	7.8	7.6	7.7	7.6	7.5	7.6	8.0	7.8	7.8	8.0	7.9	7.9
16	7.8	7.6	7.7	7.6	7.4	7.5	8.0	7.8	7.9	8.0	7.9	8.0
17	7.8	7.7	7.7	7.6	7.4	7.5	8.0	7.8	7.9	8.0	7.9	8.0
18	7.8	7.6	7.7	7.7	7.5	7.6	8.0	7.8	7.9	8.0	7.9	8.0
19	7.9	7.6	7.8	7.7	7.5	7.6	8.0	7.8	7.9	8.0	7.9	7.9
20	7.9	7.7	7.8	7.7	7.5	7.6	8.0	7.8	7.9	8.0	7.9	8.0
21	7.8	7.6	7.8	7.8	7.5	7.6	8.0	7.6	7.9	8.0	7.8	8.0
22	7.8	7.7	7.7	7.9	7.5	7.6	7.7	7.3	7.5	8.0	7.8	7.9
23	7.7	7.6	7.7	7.9	7.6	7.7	7.6	7.3	7.5	8.0	7.7	7.9
24	7.7	7.6	7.6	7.8	7.5	7.7	7.9	7.3	7.7	8.0	7.9	8.0
25	7.7	7.6	7.7	7.7	7.5	7.6	7.7	7.6	7.6	8.0	7.9	7.9
26	7.7	7.5	7.6	7.8	7.6	7.7	7.7	7.6	7.7	7.9	7.9	7.9
27	7.9	7.5	7.7	7.8	7.6	7.7	7.8	7.6	7.7	7.9	7.8	7.9
28	7.9	7.6	7.8	7.7	7.6	7.6	7.8	7.6	7.7	7.9	7.7	7.8
29	---	---	---	7.7	7.6	7.6	7.8	7.7	7.8	8.0	7.8	7.9
30	---	---	---	7.8	7.6	7.7	7.9	7.7	7.8	8.0	7.8	7.9
31	---	---	---	7.9	7.7	7.8	---	---	---	8.0	7.8	7.9
MONTH	---	7.5	---	7.9	7.4	7.6	---	---	---	8.0	7.7	7.9

07106000 FOUNTAIN CREEK NEAR FOUNTAIN, CO--Continued

pH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	8.0	7.9	7.9	7.8	7.7	7.8	8.1	7.9	8.0	8.1	7.9	8.0
2	8.0	7.8	7.9	7.9	7.8	7.8	8.0	8.0	8.0	8.1	7.9	8.0
3	7.9	7.8	7.9	8.0	7.9	7.9	8.1	8.0	8.0	8.0	7.9	8.0
4	8.0	7.8	7.9	7.9	7.9	7.9	8.0	7.8	8.0	8.0	7.8	7.9
5	8.2	8.0	8.1	8.0	7.9	7.9	7.9	7.7	7.8	8.0	7.7	7.9
6	8.2	7.9	8.1	8.0	7.9	7.9	7.9	7.8	7.9	8.1	7.9	8.0
7	---	---	---	8.0	7.9	7.9	8.2	7.9	8.1	8.0	7.9	8.0
8	---	---	---	8.1	7.9	8.0	8.2	8.2	8.2	8.1	8.0	8.1
9	---	---	---	8.1	8.0	8.0	8.2	8.1	8.2	8.2	8.1	8.2
10	---	---	---	8.1	8.0	8.1	8.1	8.1	8.1	8.2	8.1	8.2
11	---	---	---	8.1	8.0	8.1	8.1	8.0	8.1	8.1	7.9	8.0
12	---	---	---	8.1	8.0	8.1	8.2	8.1	8.1	8.2	8.0	8.1
13	---	---	---	8.2	8.0	8.1	8.1	7.9	8.0	8.2	8.1	8.2
14	---	---	---	8.1	8.0	8.0	8.1	8.0	8.0	8.2	8.1	8.2
15	---	---	---	8.1	8.0	8.0	8.1	8.0	8.0	8.3	8.2	8.2
16	---	---	---	8.1	8.0	8.0	8.1	8.0	8.1	8.2	8.0	8.1
17	---	---	---	8.1	7.8	8.0	8.0	7.8	8.0	8.1	8.0	8.0
18	---	---	---	8.1	8.0	8.0	7.9	7.7	7.8	8.1	7.7	8.0
19	---	---	---	8.1	7.7	8.0	8.0	7.9	8.0	8.2	8.0	8.1
20	---	---	---	7.9	7.7	7.8	8.0	8.0	8.0	8.0	7.7	7.8
21	---	---	---	7.8	7.7	7.8	8.0	7.9	7.9	---	---	---
22	---	---	---	8.0	7.4	7.8	8.0	7.8	7.9	---	---	---
23	---	---	---	8.0	7.9	8.0	8.0	7.8	7.9	---	---	---
24	---	---	---	8.0	7.9	8.0	8.0	7.9	7.9	---	---	---
25	7.8	7.5	7.6	8.1	7.9	8.0	7.9	7.6	7.8	---	---	---
26	7.6	7.5	7.6	8.1	7.7	8.0	7.9	7.7	7.8	---	---	---
27	7.8	7.5	7.6	8.0	7.7	7.9	8.1	7.7	8.0	---	---	---
28	7.8	7.7	7.7	8.0	7.8	7.9	8.1	8.0	8.1	---	---	---
29	7.8	7.7	7.8	8.2	7.8	8.0	8.1	8.0	8.1	---	---	---
30	7.8	7.7	7.8	8.1	7.7	7.9	8.0	7.9	8.0	---	---	---
31	---	---	---	7.9	7.8	7.8	8.0	7.9	8.0	---	---	---
MONTH	---	---	---	8.2	7.4	7.9	8.2	7.6	8.0	---	---	---

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	21.2	11.3	15.6	12.8	5.2	8.3	7.9	.6	3.8	8.1	2.3	5.0
2	17.0	11.0	13.6	12.8	4.9	8.4	6.7	1.3	3.5	11.3	3.3	6.6
3	18.4	10.4	13.8	11.7	5.7	8.4	6.2	.0	2.5	9.9	4.3	6.6
4	20.5	11.1	15.0	14.4	7.0	10.0	4.9	.4	2.2	7.0	1.2	3.6
5	20.5	11.3	15.4	12.2	5.6	8.6	8.5	.2	3.9	2.5	.0	.9
6	20.8	11.7	15.5	9.6	4.5	6.8	4.9	3.1	4.0	4.6	.0	1.1
7	19.4	11.1	14.6	10.5	2.5	5.7	7.3	1.1	3.8	2.9	.0	.5
8	19.6	10.3	14.4	9.6	2.6	5.7	5.7	1.7	3.7	4.8	.0	1.3
9	19.0	10.1	14.0	11.5	4.2	7.4	9.0	3.7	5.9	5.1	.0	1.3
10	19.0	9.9	13.9	12.4	4.5	8.0	10.2	5.1	6.8	2.0	.0	.4
11	19.8	10.2	15.0	12.4	4.8	7.9	9.9	3.9	6.3	.4	.0	.0
12	---	---	---	11.7	5.5	7.8	9.2	2.4	5.3	.0	.0	.0
13	20.1	---	---	12.9	5.7	8.5	8.9	2.2	4.9	.0	.0	.0
14	---	---	---	7.3	5.9	6.5	6.2	.7	3.1	.5	.0	.0
15	17.9	---	---	7.6	4.8	6.2	4.9	.0	1.5	2.9	.0	.6
16	---	---	---	6.3	3.4	5.1	3.9	.0	1.1	1.0	.0	.1
17	---	---	---	6.9	2.7	4.4	.5	.0	.1	2.3	.0	.5
18	---	---	---	10.8	2.8	6.5	.6	.0	.1	6.0	.0	2.4
19	---	---	---	13.2	5.4	8.8	1.0	.0	.1	8.6	.7	4.0
20	---	---	---	13.3	6.6	9.2	2.0	.0	.5	8.0	.7	4.2
21	---	---	---	11.4	5.6	7.9	4.7	.3	2.1	8.1	1.7	4.1
22	---	---	---	10.6	5.0	7.4	5.9	1.0	2.7	6.7	.0	2.7
23	---	---	---	7.3	4.0	5.5	3.0	.0	1.0	7.7	.6	3.6
24	---	---	---	8.9	4.4	5.9	4.7	.0	1.4	7.7	.0	3.0
25	13.6	---	---	9.8	3.7	5.9	6.6	.0	2.6	6.1	.0	2.1
26	12.6	6.2	8.5	6.3	3.1	4.4	3.9	.0	1.3	8.0	2.1	4.3
27	7.8	4.2	6.2	7.9	2.0	4.1	8.2	2.0	4.2	3.8	.2	2.0
28	13.1	5.4	8.9	7.9	.3	4.0	7.5	1.4	3.8	7.6	.0	3.0
29	13.7	6.0	9.2	8.5	3.3	5.4	8.3	1.9	4.5	7.6	2.4	4.6
30	13.7	5.7	9.2	6.8	1.5	3.7	7.8	2.3	4.7	9.1	.6	4.6
31	8.4	6.3	6.9	---	---	---	9.6	2.9	5.7	11.1	3.2	6.6
MONTH	---	---	---	14.4	.3	6.7	10.2	.0	3.1	11.3	.0	2.6

ARKANSAS RIVER BASIN

07106000 FOUNTAIN CREEK NEAR FOUNTAIN, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	10.8	4.6	6.9	10.9	1.4	5.3	14.1	7.1	10.4	13.7	7.5	10.5
2	9.0	2.9	5.6	12.6	1.5	6.4	8.9	4.6	6.9	11.3	5.6	8.8
3	7.5	1.8	4.4	12.0	2.9	6.8	16.5	5.1	10.3	16.2	5.1	10.5
4	8.4	1.0	3.8	6.8	1.7	4.3	15.2	7.9	10.5	18.2	7.7	12.8
5	7.0	.6	3.2	11.2	.0	5.0	10.2	4.0	6.9	18.9	9.5	13.9
6	4.3	1.3	2.4	13.4	1.5	6.8	---	---	---	15.5	9.7	12.8
7	7.5	.2	2.8	14.5	2.5	7.8	---	---	---	15.8	8.9	11.9
8	8.2	.0	3.1	14.1	2.8	8.0	---	---	---	14.0	7.7	10.4
9	9.1	.0	3.9	13.5	3.8	8.0	---	---	---	17.6	7.9	12.4
10	7.2	.0	3.3	13.6	3.5	7.8	---	---	---	18.5	8.7	13.0
11	9.4	.5	4.2	15.6	3.6	8.9	---	---	---	16.8	8.7	12.3
12	---	---	---	14.9	5.0	9.2	13.0	.0	5.3	17.6	8.4	12.5
13	---	---	---	15.0	4.9	8.8	15.6	.9	7.6	16.8	8.7	13.0
14	9.7	.0	4.3	9.4	2.5	5.0	16.3	2.9	9.1	16.9	9.4	13.1
15	11.3	1.3	5.6	11.3	.4	5.1	18.0	6.1	10.9	19.0	9.9	14.3
16	12.2	2.0	6.5	14.8	2.3	8.3	19.8	7.8	12.6	20.5	10.7	15.2
17	11.0	4.0	7.1	15.6	6.6	9.9	21.0	6.5	13.1	19.4	11.2	15.3
18	12.4	3.6	7.5	16.8	5.1	10.2	20.4	7.3	13.3	18.6	11.2	14.4
19	12.5	4.8	7.9	18.0	4.9	11.0	21.1	8.4	14.1	12.9	10.4	11.6
20	10.1	3.0	5.8	18.5	6.8	11.9	21.5	9.1	14.5	18.5	8.4	13.6
21	9.0	1.6	4.7	18.4	6.9	11.7	18.0	9.3	12.1	20.8	12.7	16.0
22	8.0	.2	3.9	18.1	5.9	11.5	17.5	6.7	11.5	18.8	12.6	14.1
23	5.2	.3	2.3	16.4	6.2	10.9	17.3	8.3	11.8	21.2	10.9	15.0
24	8.6	.0	3.1	11.0	3.1	7.0	9.5	.7	4.7	18.1	10.8	14.4
25	9.7	.0	4.0	14.9	1.8	7.5	9.2	2.9	5.4	19.2	10.9	14.6
26	7.2	.4	3.5	17.0	4.1	9.9	13.0	4.4	7.9	19.0	10.6	15.4
27	7.3	.3	3.5	16.5	5.1	10.1	16.8	5.4	10.8	17.4	9.1	13.2
28	8.2	1.4	4.2	15.6	4.4	9.4	15.3	8.9	12.1	18.5	9.8	14.1
29	---	---	---	9.1	5.0	6.7	17.5	8.2	12.6	17.3	11.6	14.1
30	---	---	---	16.1	2.7	8.8	16.1	7.7	11.9	20.2	12.4	15.9
31	---	---	---	17.6	4.6	10.6	---	---	---	24.6	12.5	18.2
MONTH	---	---	---	18.5	.0	8.3	---	---	---	24.6	5.1	13.5
	JUNE			JULY			AUGUST			SEPTEMBER		
1	24.5	13.9	18.8	23.3	14.0	18.5	24.9	17.9	20.7	24.2	16.3	19.9
2	21.4	14.6	17.2	23.2	13.7	18.2	27.1	17.4	20.9	23.5	16.8	19.7
3	24.0	13.9	18.3	24.1	13.0	18.4	26.5	16.5	21.1	21.3	17.4	18.9
4	24.1	13.9	18.5	23.9	14.3	18.5	26.0	17.9	21.2	24.7	17.0	20.0
5	24.0	15.1	18.6	23.5	14.1	18.3	20.1	18.1	18.7	24.7	16.5	20.1
6	23.5	11.8	17.4	23.0	14.3	18.1	18.1	16.2	16.9	24.9	16.1	19.8
7	15.4	11.9	14.2	25.2	14.1	18.2	22.3	15.0	18.1	24.5	15.6	19.5
8	15.4	13.2	14.2	23.2	14.3	18.1	23.7	14.9	19.2	24.3	15.3	19.5
9	13.8	11.3	12.4	25.3	14.1	19.5	23.3	15.6	19.1	21.4	15.6	17.7
10	---	---	---	26.7	15.3	20.4	18.3	16.2	17.2	23.8	14.1	18.4
11	17.5	11.2	13.9	25.3	16.4	19.7	22.8	15.7	18.5	23.9	14.8	18.7
12	18.3	11.3	14.3	25.5	14.9	19.8	23.7	14.9	19.0	24.4	15.2	19.1
13	18.5	12.3	15.1	26.5	15.2	20.0	23.1	14.4	18.7	24.1	14.9	19.1
14	---	---	---	27.3	15.6	21.1	23.2	15.2	18.8	25.1	15.8	19.9
15	17.6	12.7	14.8	28.7	16.9	22.2	24.6	14.6	19.2	23.4	15.2	19.2
16	17.6	11.9	14.4	26.9	16.7	20.7	24.4	15.5	19.4	21.4	16.0	18.2
17	19.1	12.3	15.7	26.3	15.7	20.2	23.8	15.9	19.6	21.7	14.4	17.6
18	21.5	13.1	16.9	27.2	15.8	20.9	22.1	15.0	18.0	22.4	14.3	17.6
19	22.0	14.4	17.9	26.9	18.0	20.4	24.7	15.0	18.7	22.9	14.7	18.2
20	22.7	14.3	18.4	27.1	16.8	20.6	24.6	14.9	18.9	15.8	11.9	13.4
21	22.7	14.8	18.5	27.6	15.8	20.8	25.6	15.3	19.6	14.3	11.5	12.8
22	23.4	15.3	19.0	27.9	17.6	21.9	24.1	15.8	19.7	19.9	13.3	15.5
23	23.0	15.2	19.0	29.0	17.6	22.2	25.5	16.1	20.6	15.9	12.8	14.1
24	22.9	15.1	18.3	28.9	17.6	22.5	25.7	16.4	20.8	20.9	12.7	15.9
25	22.3	14.6	18.0	27.7	17.4	21.4	26.1	17.6	20.9	21.6	11.7	16.1
26	22.5	14.2	17.7	27.8	17.8	21.6	25.0	17.8	20.8	20.6	12.7	16.6
27	22.4	13.7	17.4	28.4	18.1	21.6	26.0	17.2	21.3	22.7	13.4	17.6
28	23.5	13.8	18.3	23.5	17.9	20.0	26.0	17.6	21.4	20.7	12.5	16.3
29	24.4	14.5	19.1	25.0	18.1	20.8	25.0	17.7	20.6	22.1	11.6	16.3
30	24.1	14.8	19.2	23.9	17.8	20.5	21.2	17.0	19.0	21.7	12.9	17.3
31	---	---	---	25.4	17.7	21.0	24.0	16.3	19.3	---	---	---
MONTH	---	---	---	29.0	13.0	20.2	27.1	14.4	19.5	25.1	11.5	17.8

07106000 FOUNTAIN CREEK NEAR FOUNTAIN, CO--Continued

OXYGEN, DISSOLVED (MG/L), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	8.0	6.2	7.1	9.7	7.4	8.6	---	---	---	---	---	---
2	8.2	6.9	7.5	9.6	7.3	8.4	10.1	7.4	9.1	---	---	---
3	8.3	7.0	7.7	9.0	7.1	8.0	10.3	7.1	8.7	10.1	7.9	9.2
4	8.4	6.8	7.5	8.2	6.6	7.5	10.1	7.7	9.0	11.7	8.9	10.5
5	8.3	6.4	7.3	8.6	6.7	7.7	---	---	---	11.9	9.3	11.0
6	8.1	6.3	7.2	8.7	7.4	8.0	---	---	---	11.9	9.9	10.8
7	8.0	6.4	7.2	10.8	8.6	9.4	---	---	---	11.2	8.8	10.2
8	8.1	6.7	7.4	11.7	8.8	10.3	---	---	---	11.4	7.5	9.5
9	8.6	6.8	7.7	10.8	8.2	9.5	---	---	---	10.9	7.5	9.4
10	8.7	6.7	7.7	10.5	7.9	9.2	---	---	---	11.5	8.4	10.3
11	8.6	6.7	7.6	10.4	8.0	9.2	---	---	---	10.9	7.2	9.2
12	---	---	---	10.1	8.1	9.2	---	---	---	10.2	7.0	8.6
13	---	---	---	9.9	7.7	8.9	---	---	---	9.5	7.5	8.5
14	---	---	---	9.8	9.2	9.5	---	---	---	9.8	8.0	8.9
15	---	---	---	10.2	9.0	9.5	---	---	---	10.2	8.8	9.5
16	---	---	---	10.9	9.3	10.1	---	---	---	10.2	8.8	9.5
17	---	---	---	11.3	9.5	10.5	---	---	---	9.7	8.5	9.1
18	---	---	---	11.3	8.3	9.8	---	---	---	9.9	7.6	8.8
19	---	---	---	10.2	7.8	9.0	---	---	---	10.1	7.8	9.0
20	---	---	---	9.6	7.7	8.8	---	---	---	9.7	7.5	8.6
21	---	---	---	10.3	8.4	9.4	---	---	---	9.0	7.0	8.0
22	---	---	---	10.4	8.3	9.5	---	---	---	9.8	7.5	8.6
23	---	---	---	11.6	9.4	10.5	---	---	---	9.5	7.2	8.4
24	---	---	---	11.0	9.2	10.1	---	---	---	9.2	6.7	8.0
25	---	---	---	11.7	8.7	10.5	---	---	---	9.1	6.9	8.0
26	10.0	8.1	9.1	---	---	---	---	---	---	8.6	6.5	7.6
27	11.0	9.6	10.1	---	---	---	9.9	6.2	8.0	9.3	6.6	8.0
28	10.0	7.3	8.6	---	---	---	9.1	6.4	7.8	7.8	6.8	7.3
29	9.3	7.0	8.3	---	---	---	---	---	---	7.5	6.6	7.1
30	9.5	7.2	8.4	---	---	---	---	---	---	8.1	6.6	7.4
31	9.7	8.5	9.1	---	---	---	---	---	---	9.2	6.9	8.0
MONTH	---	---	---	---	---	---	---	---	---	---	---	---
	FEBRUARY			MARCH			APRIL			MAY		
1	9.9	7.7	8.8	10.8	7.1	9.0	7.9	5.7	6.8	10.0	7.9	8.8
2	9.9	7.4	8.6	10.5	6.5	8.4	9.0	6.7	7.8	10.9	8.7	9.7
3	9.9	7.1	8.6	9.7	6.6	8.2	8.1	5.8	7.0	11.4	7.4	9.4
4	11.1	8.1	9.6	10.7	8.5	9.4	8.0	5.7	6.9	10.3	7.1	8.6
5	11.8	8.1	10.2	11.4	7.2	9.2	9.8	6.8	8.2	9.6	6.9	8.2
6	11.4	9.7	10.8	11.1	6.4	8.6	---	---	---	9.5	7.7	8.5
7	11.8	8.1	10.3	10.2	6.3	8.1	---	---	---	9.9	7.7	8.9
8	11.1	7.2	9.2	10.2	6.4	8.0	---	---	---	10.5	8.2	9.5
9	10.6	6.3	8.6	9.8	6.6	8.1	---	---	---	10.5	7.3	8.8
10	10.4	6.9	8.7	9.7	6.6	8.2	---	---	---	9.9	7.0	8.6
11	10.1	6.2	8.2	9.9	6.0	7.8	---	---	---	9.9	7.5	8.7
12	10.8	7.0	8.9	9.1	6.3	7.6	12.0	8.0	10.0	10.0	7.1	8.6
13	9.1	7.0	8.1	9.2	6.1	7.7	12.0	7.6	9.5	9.7	7.8	8.5
14	10.3	6.8	8.5	11.0	8.1	9.5	10.8	7.4	8.9	9.3	7.8	8.4
15	10.3	6.9	8.5	12.2	7.4	9.7	9.8	7.2	8.4	9.1	7.4	8.2
16	10.3	7.2	8.8	10.9	6.3	8.4	9.3	6.9	8.1	9.0	7.3	8.0
17	9.6	7.1	8.4	8.5	6.3	7.5	9.6	6.7	8.0	8.8	7.3	8.0
18	10.0	7.6	8.8	9.5	5.9	7.6	9.1	6.2	7.5	8.7	7.5	8.1
19	9.8	7.7	8.8	9.5	5.8	7.6	8.6	6.1	7.2	8.7	8.2	8.4
20	9.5	7.4	8.4	8.2	5.7	7.0	8.5	6.2	7.2	9.2	7.2	8.1
21	9.9	7.5	8.7	7.9	5.8	6.8	8.3	6.8	7.6	8.2	6.9	7.6
22	11.6	8.1	9.7	8.4	6.6	7.5	8.9	6.1	7.6	8.3	7.2	7.8
23	11.3	9.5	10.5	7.3	5.8	6.6	8.7	6.6	7.7	8.1	6.4	7.4
24	11.5	7.6	9.9	8.5	5.8	7.2	---	---	---	8.4	7.1	7.7
25	11.6	7.1	9.4	10.2	6.0	8.1	---	---	---	8.4	6.8	7.6
26	11.4	8.4	9.7	8.4	6.0	7.2	---	---	---	8.6	6.9	7.6
27	11.2	8.1	9.6	7.3	5.7	6.5	---	---	---	9.1	7.6	8.3
28	10.4	7.8	9.2	7.2	5.4	6.3	---	---	---	9.1	7.2	8.1
29	---	---	---	7.6	5.8	6.7	---	---	---	8.2	7.2	7.7
30	---	---	---	9.2	6.7	8.0	---	---	---	7.7	6.6	7.2
31	---	---	---	7.6	5.6	6.6	---	---	---	7.8	6.0	6.9
MONTH	11.8	6.2	9.1	12.2	5.4	7.8	---	---	---	11.4	6.0	8.3

07106300 FOUNTAIN CREEK NEAR PINON, CO

LOCATION.--Lat 38°26'23", long 104°35'35", in NW¹/₄SE¹/₄ sec.31, T.18 S., R.64 W., Pueblo County, Hydrologic Unit 11020003, on left bank (revised), 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 mi².

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. 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.

REMARKS.--Records fair except those above 3,000 ft³/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 of about 10,000 acres, and return flow from irrigated areas.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	187	196	161	103	143	140	122	343	206	213	350	260
2	182	193	168	102	141	164	122	331	210	209	272	234
3	189	194	153	105	141	151	132	305	182	202	256	222
4	190	193	145	100	133	151	127	290	171	179	227	231
5	226	183	144	100	131	150	119	278	167	164	1310	330
6	175	182	157	96	130	141	113	307	267	156	1500	233
7	171	174	144	96	127	142	107	326	1870	159	546	295
8	169	177	135	99	126	141	103	306	921	149	351	220
9	159	180	138	106	132	141	101	316	1100	142	314	207
10	154	183	123	e105	131	141	99	302	e5600	125	362	203
11	145	191	119	e105	126	138	90	280	e3000	108	492	173
12	131	193	99	e103	132	137	94	327	e2500	106	315	163
13	130	182	91	101	131	142	96	275	e2200	81	401	150
14	128	179	90	126	129	137	92	254	e4000	83	269	157
15	132	182	88	135	131	140	82	251	e1800	89	241	163
16	105	176	89	125	137	143	61	247	e1300	87	231	142
17	104	177	89	113	133	146	57	234	819	81	235	148
18	123	180	84	116	136	143	50	221	621	79	441	154
19	139	181	105	128	140	140	42	266	703	77	238	144
20	149	171	105	133	135	137	45	231	520	285	209	169
21	195	167	101	131	140	135	45	223	472	121	217	210
22	175	166	94	119	148	131	118	316	468	83	198	201
23	166	174	92	109	154	131	82	494	467	59	192	231
24	153	203	90	110	153	136	672	269	688	51	187	198
25	154	181	94	106	147	178	560	261	429	47	215	168
26	159	177	96	109	150	162	578	272	424	57	719	162
27	207	172	95	114	153	152	592	249	393	142	270	152
28	245	174	105	128	148	144	509	238	367	199	246	161
29	206	177	102	141	---	136	373	234	e314	315	238	154
30	196	170	104	138	---	139	339	321	e300	1310	265	143
31	196	---	104	143	---	133	---	219	---	430	253	---
TOTAL	5140	5428	3504	3545	3858	4442	5722	8786	32479	5588	11560	5778
MEAN	166	181	113	114	138	143	191	283	1083	180	373	193
MAX	245	203	168	143	154	178	672	494	5600	1310	1500	330
MIN	104	166	84	96	126	131	42	219	167	47	187	142
AC-FT	10200	10770	6950	7030	7650	8810	11350	17430	64420	11080	22930	11460

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1973 - 1997, BY WATER YEAR (WY)

	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
MEAN	72.7	88.9	82.9	92.7	99.0	105	110	251	189	98.1	130	68.4													
MAX	457	289	155	174	149	207	299	1349	1083	365	385	205													
(WY)	1985	1985	1985	1996	1996	1992	1985	1980	1997	1985	1982	1982													
MIN	.81	5.77	30.0	19.0	35.3	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 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1973 - 1997	
ANNUAL TOTAL	58627		95830			
ANNUAL MEAN	160		263		114	
HIGHEST ANNUAL MEAN					283	
LOWEST ANNUAL MEAN					29.4	
HIGHEST DAILY MEAN	1790		e5600		e5600	
LOWEST DAILY MEAN	a25		42		b.00	
ANNUAL SEVEN-DAY MINIMUM	28		55		c.00	
INSTANTANEOUS PEAK FLOW			c10100		d10200	
INSTANTANEOUS PEAK STAGE			f7.46		g7.05	
ANNUAL RUNOFF (AC-FT)	116300		190100		82940	
10 PERCENT EXCEEDS	219		381		220	
50 PERCENT EXCEEDS	148		159		77	
90 PERCENT EXCEEDS	63		96		2.7	

e-Estimated.

a-Also occurred May 19-20.

b-No flow at times during most years prior to 1985.

c-From rating curve extended above 9600 ft³/s.

d-From rating curve extended above 7300 ft³/s.

f-From floodmark.

g-Site and datum then in use. Maximum gage height, 7.46 ft, Jun 10, 1997, present site and datum.

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 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	pH (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)	STREP-TOCOCCI, FECAL, KF AGAR (COLS. PER 100 ML) (31673)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)
DEC 13...	1115	81	1120	8.3	5.5	10.1	3.7	K22	K18	83	27
MAR 21...	1100	115	1020	8.2	12.5	7.8	4.8	--	K10	76	23
MAY 30...	1215	292	718	8.1	18.0	7.7	4.5	87	K60	56	18
SEP 19...	1130	115	1010	8.3	19.0	7.1	e0.7	130	K130	82	26

DATE	ALKA-LINITY 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)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC (MG/L AS N) (00625)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)
DEC 13...	173	290	52	1.9	44	0.03	5.3	0.03	0.5	0.62	5
MAR 21...	152	260	54	1.9	89	0.01	7.0	<0.015	0.7	0.34	4
MAY 30...	116	180	27	1.7	251	<0.01	0.842	<0.015	0.5	0.193	--
SEP 19...	168	300	43	2.0	153	<0.01	3.04	<0.015	0.55	0.225	6

DATE	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)	CHRO-MIUM, HEXA-VALENT, DIS-ERABLE (UG/L AS CR) (01032)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, DIS-SOLVED (UG/L AS FE) (01046)
DEC 13...	<1	<1	1	<1	<1	4	2.0	1800	4.0
MAR 21...	<1	<1	2	<1	<1	13	7.1	2100	6.8
MAY 30...	<1	<1	6	<1	<1	15	1.1	12000	3.8
SEP 19...	<1	<1	2	<1	<1	5	2.0	3400	3.1

DATE	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)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
DEC 13...	4	<1	90	4.0	5	2.0	5	30	14
MAR 21...	4	<1	110	2.5	4	2.8	4	30	28
MAY 30...	27	<1	440	<1	12	1.4	--	90	3.1
SEP 19...	4	<1	140	4.0	6	3.5	6	30	4.3

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

07106300 FOUNTAIN CREEK NEAR PINON, CO--Continued

MISCELLANEOUS FIELD MEASUREMENTS, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

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 1996					MAY 1997				
01...	1200	194	950	17.5	09...	1230	310	734	15.5
NOV					JUN				
21...	1100	176	1030	9.0	04...	1120	179	843	21.0
DEC					17...	1415	722	668	20.5
05...	0900	165	1120	5.5	23...	1500	446	870	21.5
20...	1530	107	1060	1.5	25...	1600	361	730	24.0
JAN 1997					JUL				
21...	1355	136	1180	8.0	08...	1345	151	982	26.0
FEB					AUG				
10...	1335	145	1070	6.0	13...	1535	393	630	25.5
MAR					27...	1310	271	810	26.5
04...	1235	164	1010	6.5	SEP				
APR					10...	1620	180	915	26.5
08...	1200	113	1090	6.5					
21...	1215	46	1190	18.5					
22...	1015	193	955	8.5					
28...	1405	403	800	15.5					

ARKANSAS RIVER BASIN

07106500 FOUNTAIN CREEK AT PUEBLO, CO

LOCATION.--Lat 38°17'16", long 104°36'02", in SE¼SW¼ 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 mi².

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. 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 prior 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 2,000 ft³/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 of about 14,000 acres upstream from station, and return flow from irrigated areas.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1903, that of June 17, 1965. Flood of June 4, 1921, reached a discharge of 34,000 ft³/s, by slope-area measurement. Flood of May 30, 1935, reached a discharge of 35,000 ft³/s, by slope-area measurement.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	176	211	163	94	148	139	119	330	228	216	354	273
2	172	210	162	89	144	152	109	304	246	198	313	232
3	185	217	160	91	138	152	135	287	222	207	297	211
4	191	215	154	94	136	150	121	273	210	193	242	214
5	221	214	154	95	135	141	121	248	208	185	944	370
6	192	208	157	88	132	139	112	274	302	180	1280	237
7	180	200	157	e92	129	132	108	304	2500	182	633	352
8	174	193	151	e94	127	130	103	295	1180	170	391	232
9	168	193	153	e96	137	131	105	300	1420	158	345	205
10	164	187	148	e98	132	129	107	277	5820	153	464	198
11	161	184	138	e98	138	131	106	269	2730	139	545	174
12	154	183	125	e98	139	127	108	313	e2300	134	340	160
13	153	177	114	e98	139	128	108	338	e1900	111	436	158
14	155	179	111	e100	145	131	113	312	e4100	85	297	157
15	158	180	110	e105	146	137	105	291	1510	78	237	149
16	137	178	111	e108	148	137	70	271	1250	64	208	131
17	137	182	e100	e110	147	143	60	241	947	49	243	121
18	142	181	e105	e120	146	140	60	225	771	44	533	124
19	154	187	e120	e130	157	136	61	274	749	40	287	122
20	161	180	e120	138	145	134	49	238	563	179	240	141
21	178	176	e120	135	144	136	43	232	485	112	248	193
22	180	174	e115	132	143	134	96	268	464	65	219	197
23	175	176	e110	124	144	135	110	635	412	54	209	225
24	176	191	e100	124	143	137	1090	308	547	45	205	186
25	176	178	e105	114	144	178	672	291	349	39	221	157
26	185	168	e105	120	141	153	666	303	411	30	765	142
27	209	163	e105	121	140	142	721	278	349	92	283	139
28	236	169	100	130	140	136	621	260	346	185	243	132
29	210	167	100	133	---	137	438	260	313	348	270	126
30	206	166	97	138	---	137	320	333	287	1120	267	114
31	204	---	97	142	---	138	---	256	---	319	305	---
TOTAL	5470	5587	3867	3449	3947	4302	6757	9088	33119	5174	11864	5572
MEAN	176	186	125	111	141	139	225	293	1104	167	383	186
MAX	236	217	163	142	157	178	1090	635	5820	1120	1280	370
MIN	137	163	97	88	127	127	43	225	208	30	205	114
AC-FT	10850	11080	7670	6840	7830	8530	13400	18030	65690	10260	23530	11050

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1922 - 1997, BY WATER YEAR (WY)

	50.0	62.1	60.1	62.8	68.5	65.4	78.1	178	140	77.3	116	45.6
MEAN	50.0	62.1	60.1	62.8	68.5	65.4	78.1	178	140	77.3	116	45.6
MAX	513	303	193	185	174	217	564	1188	1104	429	650	241
(WY)	1985	1985	1985	1985	1985	1992	1942	1995	1997	1995	1965	1982
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	1955	1950	1963	1964	1960	1978

SUMMARY STATISTICS FOR 1996 CALENDAR YEAR FOR 1997 WATER YEAR WATER YEARS 1922 - 1997

	FOR 1996 CALENDAR YEAR	FOR 1997 WATER YEAR	WATER YEARS 1922 - 1997
ANNUAL TOTAL	62542	98196	
ANNUAL MEAN	171	269	85.4
HIGHEST ANNUAL MEAN			325
LOWEST ANNUAL MEAN			4.42
HIGHEST DAILY MEAN	3340	5820	10000
LOWEST DAILY MEAN	24	30	a .00
ANNUAL SEVEN-DAY MINIMUM	30	62	b .00
INSTANTANEOUS PEAK FLOW		10100	c 47000
INSTANTANEOUS PEAK STAGE		8.04	c 19.00
ANNUAL RUNOFF (AC-FT)	124100	194800	61870
10 PERCENT EXCEEDS	216	378	175
50 PERCENT EXCEEDS	151	161	34
90 PERCENT EXCEEDS	59	100	1.0

e-Estimated.

a-No flow at times many years.

b-Site and datum then in use, from rating curve extended above 400 ft³/s, on basis of contracted-opening measurement of peak flow.

c-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.

INSTRUMENTATION.--Water-quality monitor with satellite telemetry.

REMARKS.--Records for daily water temperature and specific conductance are fair. Daily data that are not published are either missing or of unacceptable quality.

EXTREMES FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 3,460 microsiemens, July 7, 1989; minimum, 162 microsiemens, June 7, 1997.

WATER TEMPERATURE: Maximum, 33.1°C, July 17, 1991; minimum, 0.0°C, many days during the winter months.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 1,620 microsiemens, July 23; minimum, 162 microsiemens, June 7.

WATER TEMPERATURE: Maximum, 31.7°C, July 15, 24; minimum, 0.0°C, many days during winter.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	pH (STAND-ARD UNITS) (00400)	TEMPER-ATURE (DEG C) (00010)	OXYGEN, WATER 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)
OCT								
25...	1045	180	1200	8.4	8.0	9.1	1.9	220
NOV								
22...	1345	180	1160	8.3	7.5	10.0	1.8	K30
DEC								
13...	1345	113	1250	8.4	8.5	10.1	1.5	K40
JAN								
24...	1345	129	1240	8.3	9.5	10.1	1.8	K500
FEB								
21...	1230	153	1160	8.3	7.0	10.0	e2.7	K67
MAR								
21...	1345	138	1150	8.3	17.5	8.1	1.7	--
MAY								
02...	1345	270	886	8.3	14.0	8.3	2.0	K38
30...	1430	323	749	8.1	22.0	7.4	3.4	--
JUN								
27...	1115	383	846	8.1	19.5	7.6	2.3	880
JUL								
25...	1245	40	1400	8.3	29.0	6.1	0.8	420
AUG								
15...	1200	256	984	8.3	22.0	7.1	1.3	390
SEP								
19...	1430	113	1120	8.4	24.0	6.7	e0.4	180

DATE	STREP-TOCOCCI, FECAL, KF AGAR (COLS. PER 100 ML) (31673)	RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)
OCT								
25...	110	109	0.01	5.0	0.02	0.6	0.49	15
NOV								
22...	K50	60	<0.01	5.0	0.09	0.5	0.49	20
DEC								
13...	K25	48	0.01	5.5	<0.015	0.4	0.50	17
JAN								
24...	K69	--	0.01	4.9	0.02	0.4	0.45	19
FEB								
21...	K36	114	0.01	6.1	<0.015	0.4	0.50	13
MAR								
21...	K10	82	<0.01	7.0	<0.015	0.5	0.29	14
MAY								
02...	200	328	<0.01	3.02	<0.015	0.98	0.270	9
30...	--	200	<0.01	2.31	<0.015	0.50	0.155	9
JUN								
27...	560	410	<0.01	2.80	0.016	0.92	0.121	10
JUL								
25...	370	163	0.015	3.22	0.028	0.41	0.119	31
AUG								
15...	490	410	0.01	2.28	<0.015	0.83	0.149	12
SEP								
19...	210	225	<0.01	2.96	<0.015	0.34	0.208	15

e-Estimated.

K-Based on non-ideal colony count.

07106500 FOUNTAIN CREEK AT PUEBLO, CO--Continued

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM @25 DEG. C), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	1080	1030	1050	1080	1050	1060	1250	1160	1210	1190	1140	1170
2	1060	1040	1050	1090	1050	1070	1280	1210	1240	1190	1140	1160
3	1070	1030	1050	1110	1050	1080	1230	1170	1200	1180	1130	1150
4	1060	1010	1040	1140	1090	1110	1250	1200	1220	1180	1140	1160
5	1050	898	987	1160	1100	1130	1240	1190	1220	1180	1110	1140
6	1030	936	987	1170	1140	1150	1240	1180	1210	1150	1080	1120
7	1060	1010	1040	1150	1050	1090	1210	1170	1190	1160	1070	1120
8	1070	1030	1050	1080	1070	1080	1220	1170	1190	1170	1100	1150
9	1070	1030	1050	1100	1070	1090	1190	1130	1160	1220	1110	1170
10	1080	1040	1060	1110	1080	1100	1180	1130	1150	---	---	---
11	1090	1030	1060	1120	1090	1110	1200	1160	1180	---	---	---
12	1100	1050	1070	1160	1120	1130	1210	1170	1180	---	---	---
13	1090	1050	1070	1180	1130	1160	1210	1180	1200	---	---	---
14	1110	1060	1090	1190	1160	1170	1200	1160	1180	---	---	---
15	1130	1060	1090	1200	1170	1180	1210	1110	1180	---	---	---
16	1170	1120	1150	1210	1180	1190	1210	1150	1190	---	---	---
17	1190	1140	1160	1210	1170	1190	1240	1090	1150	---	---	---
18	1230	1120	1170	1220	1160	1190	---	---	---	---	---	---
19	1220	1100	1150	1200	1140	1170	---	---	---	---	---	---
20	1180	1110	1140	1190	1160	1180	---	---	---	---	---	---
21	1150	1070	1100	1200	1160	1180	---	---	---	1270	1230	1250
22	1110	1070	1080	1200	1160	1180	1200	1050	1150	1270	1230	1250
23	1140	1090	1110	1280	1160	1200	1210	1170	1190	1280	1250	1270
24	1150	1110	1130	1230	1140	1180	1230	1150	1200	1280	1240	1260
25	1140	1110	1130	1220	1160	1190	1220	1170	1200	1320	1260	1290
26	1150	1100	1120	1230	1190	1210	1250	1130	1200	1300	1260	1280
27	1250	1090	1140	1260	1180	1220	1230	1130	1200	1270	1230	1250
28	1120	1000	1060	1320	1160	1240	1240	1200	1220	1290	1190	1240
29	1130	1070	1100	1320	1230	1270	1230	1180	1200	1240	1190	1210
30	1100	1050	1070	1240	1190	1220	1210	1150	1180	1220	1160	1190
31	1090	1060	1070	---	---	---	1180	1140	1170	1220	1140	1180
MONTH	1250	898	1080	1320	1050	1160	---	---	---	---	---	---
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	1180	1100	1140	1180	1140	1160	1210	1150	1180	918	879	893
2	1220	1130	1180	1250	1130	1190	1240	1190	1230	906	865	882
3	1210	1160	1180	1250	1150	1190	1190	1110	1150	887	730	871
4	1200	1040	1140	1180	1140	1170	1200	1150	1170	890	866	880
5	1210	1170	1190	1200	1140	1170	1240	1180	1210	891	858	871
6	1210	1180	1190	1220	1140	1180	1250	1170	1220	892	840	864
7	1200	1150	1170	1190	1130	1160	1260	1180	1220	875	648	834
8	1230	1170	1190	1170	1110	1140	1220	1190	1210	922	648	861
9	1210	1150	1180	1220	1130	1180	1250	1150	1200	884	748	779
10	1210	1170	1190	1210	1140	1170	1210	1180	1200	797	776	785
11	1240	1180	1200	1180	1140	1160	1240	1180	1210	826	785	803
12	1220	1170	1200	1200	1150	1170	1260	1170	1210	833	770	804
13	1210	1170	1190	1190	1150	1170	1250	1120	1170	856	782	813
14	1210	1170	1190	1190	1150	1170	1180	1110	1140	875	795	828
15	1230	1170	1200	1190	1140	1160	1190	1130	1160	888	864	874
16	1210	1150	1180	1190	1140	1170	1240	1160	1200	892	845	869
17	1210	1150	1180	1200	1130	1160	1270	1230	1250	919	865	889
18	1190	1140	1160	1190	1150	1170	1280	1220	1250	944	914	925
19	1170	1130	1150	1190	1140	1170	1330	1260	1290	953	890	920
20	1200	1170	1180	1200	1160	1190	1380	1280	1320	940	904	922
21	1210	1170	1190	1230	1190	1210	1320	1130	1240	988	907	922
22	1210	1150	1180	1240	1200	1220	1370	929	1100	950	830	882
23	1230	1150	1180	1230	1130	1160	992	935	958	844	205	425
24	1210	1130	1170	1190	1160	1180	1020	926	994	---	---	---
25	1220	1170	1190	1190	1100	1140	---	---	---	---	---	---
26	1210	1160	1180	1160	1120	1140	---	---	---	---	---	---
27	1190	1140	1160	1220	1160	1190	---	---	---	---	---	---
28	1190	1140	1170	1310	1180	1210	---	---	---	962	891	905
29	---	---	---	1250	1190	1220	967	894	927	969	897	926
30	---	---	---	1260	1170	1210	970	918	946	943	756	841
31	---	---	---	1250	1130	1200	---	---	---	920	872	901
MONTH	1240	1040	1180	1310	1100	1180	---	---	---	---	---	---

07106500 FOUNTAIN CREEK AT PUEBLO, CO--Continued

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM @ 25 DEG. C), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	973	895	922	1010	971	988	902	828	876	1330	969	1020
2	981	878	929	1010	971	992	910	804	869	1030	980	996
3	963	888	916	1020	945	989	1030	863	927	1040	1010	1020
4	929	904	915	1010	945	977	1200	891	939	1040	996	1020
5	946	911	925	1050	1010	1030	1200	456	735	1050	832	931
6	963	722	870	1100	1050	1070	1040	562	764	997	932	962
7	906	162	506	1260	1100	1160	887	746	823	997	777	878
8	---	---	---	1300	1230	1270	903	842	885	999	868	932
9	---	---	---	1320	1170	1290	1130	853	908	1050	966	1010
10	---	---	---	1330	1170	1230	964	630	888	1070	1020	1040
11	---	---	---	1230	1190	1210	953	657	848	1090	1050	1070
12	---	---	---	1250	1190	1220	929	754	868	1100	1060	1080
13	---	---	---	1220	1180	1200	939	718	864	1110	1080	1090
14	---	---	---	1200	1150	1170	963	792	902	1120	1080	1090
15	---	---	---	1220	1160	1190	1030	951	985	1120	1100	1100
16	---	---	---	1260	1200	1220	1050	1020	1030	1150	1120	1130
17	---	---	---	1300	1230	1260	1060	1010	1030	1170	1130	1140
18	---	---	---	1330	1250	1290	1060	607	827	1160	1120	1130
19	---	---	---	1350	1300	1330	990	796	906	1160	1130	1140
20	---	---	---	1370	862	1100	1040	982	1010	1220	1080	1140
21	---	---	---	1200	1150	1170	1060	991	1030	1250	1070	1110
22	---	---	---	1220	1170	1190	1100	1060	1070	1390	1060	1110
23	---	---	---	1620	1220	1300	1110	1080	1100	1190	1050	1090
24	---	---	---	1540	1340	1370	1130	1090	1110	1150	1060	1100
25	---	---	---	1430	1360	1400	1140	1060	1110	1170	1140	1160
26	---	---	---	1470	864	1420	1070	529	721	1190	1160	1180
27	---	---	---	1390	913	1150	953	747	867	1220	1180	1200
28	---	---	---	1210	801	1030	995	939	964	1240	1210	1220
29	---	---	---	921	667	798	1330	926	1010	1250	1220	1230
30	---	---	---	1460	500	766	1020	944	962	1270	1240	1260
31	---	---	---	897	672	820	1280	879	1000	---	---	---
MONTH	---	---	---	1620	500	1150	1330	456	930	1390	777	1090

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	21.2	11.8	16.1	11.9	4.5	7.7	6.6	.0	2.7	7.7	1.7	4.6
2	18.3	11.5	14.3	12.1	4.0	7.8	5.4	.5	2.4	11.5	2.4	6.6
3	18.2	10.2	13.9	12.0	5.0	8.2	4.4	.0	1.4	9.1	4.2	6.3
4	20.2	11.7	15.4	13.9	7.1	9.9	4.4	.0	1.2	7.5	1.1	3.9
5	19.7	11.7	15.6	12.0	5.2	8.3	6.7	.0	2.9	1.2	.0	.3
6	20.4	11.9	15.8	9.8	4.8	6.9	4.0	1.9	3.0	3.0	.0	.7
7	19.5	11.5	15.1	9.0	2.2	5.0	6.1	.0	2.8	.1	.0	.0
8	19.9	10.5	14.8	8.6	1.7	4.9	5.0	.2	2.6	1.5	.0	.2
9	19.0	10.2	14.3	10.3	2.9	6.4	9.4	1.7	5.2	2.4	.0	.4
10	19.0	10.1	14.3	11.2	3.4	7.0	9.2	3.8	6.0	.0	.0	.0
11	20.0	10.4	14.7	10.9	3.4	6.8	9.5	3.7	6.0	.0	.0	.0
12	20.3	10.5	14.9	10.1	4.5	6.8	8.5	1.6	4.7	.0	.0	.0
13	20.3	10.5	15.0	10.8	3.7	7.0	8.3	1.7	4.6	.0	.0	.0
14	19.1	10.8	14.7	6.7	4.8	6.1	6.2	.8	3.0	.0	.0	.0
15	19.0	10.8	14.5	6.0	3.6	4.8	4.2	.0	1.2	.0	.0	.0
16	18.0	9.1	13.0	6.4	2.5	4.9	3.5	.0	.7	.0	.0	.0
17	14.3	8.8	11.1	6.5	.8	3.5	.0	.0	.0	.0	.0	.0
18	13.7	7.1	10.2	10.0	1.7	5.6	.0	.0	.0	.6	.0	.1
19	12.5	7.5	9.8	13.1	5.2	8.6	.0	.0	.0	4.0	.0	1.0
20	11.8	6.7	9.3	12.7	5.4	8.6	.1	.0	.0	5.1	.0	2.2
21	8.9	4.9	6.6	10.0	4.6	7.0	.5	.0	.0	6.9	1.2	3.2
22	11.8	1.9	6.5	8.3	4.0	6.1	2.6	.0	1.0	5.6	.0	2.1
23	12.0	4.3	8.0	5.8	3.5	4.6	1.4	.0	.2	7.3	.5	3.4
24	13.2	4.6	8.7	7.6	3.0	4.8	2.1	.0	.4	6.1	.0	2.3
25	13.8	5.8	9.1	8.1	1.8	4.5	4.3	.0	1.5	4.3	.0	1.4
26	12.1	5.0	8.0	4.2	1.6	2.9	1.1	.0	.2	7.4	.1	3.2
27	7.2	3.2	5.4	5.5	.4	2.3	8.0	.0	3.4	3.4	.0	1.3
28	12.7	4.5	8.2	5.1	.0	2.1	7.5	1.5	3.8	4.4	.0	1.6
29	11.6	4.9	8.2	7.7	1.8	4.4	8.3	1.9	4.6	6.2	1.5	3.6
30	12.7	4.8	8.4	6.3	1.5	3.6	6.8	1.5	4.2	8.0	.0	3.5
31	8.1	5.7	6.4	---	---	---	9.3	2.4	5.5	10.1	2.6	6.2
MONTH	21.2	1.9	11.6	13.9	.0	5.9	9.5	.0	2.4	11.5	.0	1.9

07108900 ST. CHARLES RIVER AT VINELAND, CO

LOCATION.--Lat 38°14'44", long 104°29'09", in NE¼SW¼ sec.6, T.21 S., R.63 W., Pueblo County, Hydrologic Unit 11020002, on right bank at right downstream end of downstream bridge on U.S. Highway 50C, 1.6 mi west of Vineland, and 3.0 mi upstream from mouth.

DRAINAGE AREA.--474 mi².

PERIOD OF RECORD.--October 1978 to current year. March 1968 to September 1974 at site 2.6 mi upstream and at different datum, published as 07108800 St. Charles River near Vineland, 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, which are poor. Natural flow of stream affected by diversions upstream from station for irrigation of about 8,500 acres, and for 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 ft³/s, at site 5.0 mi downstream.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	30	19	18	15	14	24	159	48	17	12	205
2	15	29	18	16	17	14	24	194	48	15	21	27
3	15	28	16	16	18	14	21	163	49	14	13	21
4	14	28	15	14	15	13	18	144	65	15	13	18
5	14	22	15	14	14	12	17	140	99	16	52	15
6	13	16	20	13	14	11	14	121	78	16	183	15
7	13	18	20	15	14	13	13	118	81	14	51	15
8	13	18	17	15	14	13	12	115	102	15	45	13
9	14	18	19	14	13	12	13	112	93	13	36	11
10	14	17	18	14	14	12	13	104	137	14	185	10
11	14	19	19	e14	14	12	13	100	117	12	119	10
12	14	19	19	e13	15	12	14	98	89	12	61	11
13	12	18	19	e12	15	14	13	100	92	11	152	11
14	12	20	18	e11	15	17	13	99	91	9.5	50	11
15	11	18	16	11	14	17	13	99	87	10	38	10
16	11	17	16	13	14	18	10	97	69	9.5	29	10
17	12	16	e15	14	13	19	11	99	56	10	28	9.1
18	12	17	e15	13	14	17	9.7	110	54	7.6	41	9.6
19	12	16	e15	14	14	17	11	123	41	8.9	24	11
20	12	17	e14	15	14	18	11	152	36	10	21	12
21	12	17	13	15	14	19	11	167	33	14	19	14
22	13	18	13	14	14	19	14	185	30	18	18	14
23	14	18	14	14	13	18	13	184	26	11	16	15
24	13	19	16	14	13	19	31	180	25	11	15	16
25	14	19	14	15	14	21	49	157	23	11	12	18
26	13	18	15	16	14	19	61	147	26	12	13	17
27	15	18	15	14	15	20	75	136	22	14	14	16
28	22	18	16	14	13	20	108	116	22	16	12	16
29	30	19	17	15	---	24	131	95	24	16	12	15
30	30	20	18	15	---	26	177	52	21	15	14	15
31	30	---	17	16	---	23	---	50	---	12	14	---
TOTAL	467	585	511	441	400	517	957.7	3916	1784	399.5	1333	610.7
MEAN	15.1	19.5	16.5	14.2	14.3	16.7	31.9	126	59.5	12.9	43.0	20.4
MAX	30	30	20	18	18	26	177	194	137	18	185	205
MIN	11	16	13	11	13	11	9.7	50	21	7.6	12	9.1
AC-FT	926	1160	1010	875	793	1030	1900	7770	3540	792	2640	1210

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1979 - 1997, BY WATER YEAR (WY)

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
MEAN	13.9	14.7	12.4	12.3	13.0	17.6	60.3	152	87.5	37.6	49.0	20.8							
MAX	39.5	31.8	22.4	16.6	22.5	45.3	306	484	358	108	207	120							
(WY)	1983	1983	1983	1984	1987	1987	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 1996 CALENDAR YEAR	FOR 1997 WATER YEAR	WATER YEARS 1979 - 1997
ANNUAL TOTAL	8779.2	11921.9	
ANNUAL MEAN	24.0	32.7	41.1
HIGHEST ANNUAL MEAN			88.4
LOWEST ANNUAL MEAN			9.52
HIGHEST DAILY MEAN	581	205	1550
LOWEST DAILY MEAN	8.3	7.6	.25
ANNUAL SEVEN-DAY MINIMUM	8.6	9.4	2.7
INSTANTANEOUS PEAK FLOW		1480	7560
INSTANTANEOUS PEAK STAGE		7.68	12.70
ANNUAL RUNOFF (AC-FT)	17410	23650	29750
10 PERCENT EXCEEDS	31	99	93
50 PERCENT EXCEEDS	16	16	14
90 PERCENT EXCEEDS	12	12	6.5

e-Estimated.
a-From rating curve extended above 1800 ft³/s.

ARKANSAS RIVER BASIN

07109500 ARKANSAS RIVER NEAR AVONDALE, CO

LOCATION.--Lat 38°14'53", long 104°23'55", in NE¼SW¼ 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 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1939 to September 1951, February 1965 to current year. Statistical summary computed for 1975 to current year.

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 January 21, 1965, at site 550 ft downstream at datum 1.37 ft lower. January 21, 1965 to September 30, 1991, 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, storage reservoirs, power developments, ground-water withdrawals, diversions for irrigation of about 123,000 acres 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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	445	749	331	289	539	467	1480	1350	1920	2730	1380	1170
2	431	728	333	291	537	465	1480	1410	2550	2560	1450	916
3	439	724	336	294	543	467	1450	1410	3730	2430	1420	897
4	430	720	326	294	471	502	1230	1160	4340	2370	1480	874
5	429	703	314	285	449	458	1260	995	4680	2230	2460	959
6	417	641	336	285	387	399	1260	986	4810	1960	3280	1200
7	385	595	341	284	346	384	1260	1070	5700	1670	2620	1190
8	398	544	335	303	345	436	1300	1150	5710	1610	2280	1060
9	408	565	338	308	332	440	1290	1220	5520	1600	1960	720
10	393	647	338	313	329	464	1190	1270	6490	1600	2290	621
11	395	676	322	326	331	573	1160	1380	6130	1560	2770	593
12	326	693	324	302	332	726	1160	1390	6730	1440	2760	573
13	300	617	318	e300	339	723	1120	1610	5740	1520	2440	571
14	292	496	314	e310	329	561	1100	1610	5990	1560	2180	562
15	302	425	306	e310	315	574	1090	1660	5000	1420	1870	557
16	283	410	307	e300	314	691	1080	1680	5590	1220	1610	561
17	258	394	309	e310	314	837	1080	1830	5760	1190	1590	557
18	259	381	312	e310	311	1000	1130	2020	5920	1210	1760	593
19	292	381	e312	e320	313	934	1190	2210	5540	1420	1570	590
20	295	350	e315	e330	320	992	1230	2300	5540	1560	1320	608
21	309	333	e312	341	378	992	1250	2330	5860	1680	1170	719
22	363	329	311	367	452	1080	1370	2410	5850	1860	993	694
23	367	342	303	508	458	1100	1380	2750	6080	1880	828	816
24	460	366	299	517	478	1090	1570	2720	5850	1830	790	983
25	533	364	282	526	491	1120	1500	2630	4610	1790	643	978
26	600	366	279	522	496	1230	1430	2600	4340	1620	1010	1080
27	640	375	290	513	489	1230	1440	2590	3740	1450	861	995
28	705	350	292	516	483	1300	1270	2460	3350	1450	787	935
29	758	340	284	531	---	1420	1100	1930	3140	1510	813	893
30	754	336	277	551	---	1430	1230	1520	2910	1720	962	671
31	742	---	284	540	---	1440	---	1540	---	1590	959	---
TOTAL	13408	14940	9680	11496	11221	25525	38080	55191	149120	53240	50306	24136
MEAN	433	498	312	371	401	823	1269	1780	4971	1717	1623	805
MAX	758	749	341	551	543	1440	1570	2750	6730	2730	3280	1200
MIN	258	329	277	284	311	384	1080	986	1920	1190	643	557
AC-FT	26590	29630	19200	22800	22260	50630	75530	109500	295800	105600	99780	47870

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 1997, 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	527	457	344	378	429	530	830	1621	2814	1951	1336	639												
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 1996 CALENDAR YEAR

FOR 1997 WATER YEAR

WATER YEARS 1975 - 1997

ANNUAL TOTAL	364840	456343	
ANNUAL MEAN	997	1250	a990
HIGHEST ANNUAL MEAN			1626
LOWEST ANNUAL MEAN			411
HIGHEST DAILY MEAN	e5410	Jul 10	b6930
LOWEST DAILY MEAN	258	Oct 17	c90
ANNUAL SEVEN-DAY MINIMUM	283	Oct 14	d118
INSTANTANEOUS PEAK FLOW			15400
INSTANTANEOUS PEAK STAGE		7.64	Jun 14
ANNUAL RUNOFF (AC-FT)	723700	905200	717200
10 PERCENT EXCEEDS	2220	2610	2320
50 PERCENT EXCEEDS	685	758	586
90 PERCENT EXCEEDS	333	310	270

e-Estimated.

a-Average discharge for 20 years (water years 1940-51, 1966-73), 867 ft³/s; 628100 acre-ft/yr, prior to completion of Pueblo Reservoir.

b-Maximum daily discharge for period of record, 12100 ft³/s, Apr 24, 1942.

c-Minimum daily discharge for period of record, 50 ft³/s, Apr 2, 1940.

d-Maximum discharge and stage for period of record, about 50000 ft³/s, Jun 18, 1965, gage height, 9.77 ft, from rating curve extended above 6700 ft³/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 North Avondale.

**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.--

SPECIFIC CONDUCTANCE: July 1979 to September 1980, December 1985 to current year.

WATER TEMPERATURE: July 1979 to September 1980, December 1985 to current year.

pH: July 1979 to September 1980, August 1988 to current year.

DISSOLVED OXYGEN: July 1979 to September 1980, August 1988 to current year.

INSTRUMENTATION.--Water-quality monitor with satellite telemetry.

REMARKS.--Records for daily specific conductance are good except Oct. 31 to Dec. 12, Jan. 22-24, Jan. 26 to Feb. 7, Feb. 28 to Mar. 25, Apr. 2-9, May 9-23, and Sept. 14-15, 21-24, which are poor. Records for daily pH are fair except Oct. 1 to Mar. 31, which are poor. Records for daily water temperature are good. Records for daily dissolved oxygen are poor. Daily data that are not published are either missing or of unacceptable quality. Water-quality data prior to December 1985 are published in other reports.

EXTREMES FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 1,380 microsiemens, Jan.24, 25, 1980; minimum, 246 microsiemens, June 16, 1980.

pH: Maximum, 9.1 units, Dec. 3, 1989; minimum, 7.2 units, several days in 1992, 1995-96.

WATER TEMPERATURE: Maximum, 31.5°C, Aug. 6, 1980; minimum, 0.0°C, many days.

DISSOLVED OXYGEN: Maximum, 14.0 mg/L, Feb. 16, 1996; minimum, 2.6 mg/L, July 14, 1992.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 1,220 microsiemens, Oct. 17-18; minimum, 351 microsiemens, June 23-24.

pH: Maximum, 8.7 units, Mar. 9-10; minimum, 7.4 units, Mar. 1 and Apr. 24.

WATER TEMPERATURE: Maximum, 25.8°C, Aug. 25, 27; minimum, 0.0°C, many days.

DISSOLVED OXYGEN: Maximum, 13.1 mg/L, Dec. 17, Jan. 10; minimum, 3.7 mg/L, Sept. 15.

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM @ 25 DEG. C), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	884	864	875	750	653	723	1020	993	1000	916	902	909
2	877	858	869	754	734	743	1030	1010	1020	915	898	908
3	890	870	877	766	745	754	1030	992	1010	909	895	902
4	908	888	894	775	752	765	1040	976	1030	901	876	889
5	934	908	922	803	766	777	1140	1040	1060	893	879	887
6	942	922	928	835	803	815	1100	1050	1070	892	877	886
7	975	941	958	883	835	850	1070	1040	1060	887	873	880
8	983	923	964	887	852	874	1080	1050	1070	886	848	877
9	972	939	954	853	623	808	1090	1060	1080	876	852	865
10	983	950	967	628	593	611	1100	1080	1090	882	870	876
11	981	944	963	629	607	621	1110	1090	1100	877	866	872
12	1050	968	1020	638	618	629	1120	1090	1100	888	863	881
13	1070	1030	1050	704	637	653	1130	1090	1110	880	---	---
14	1090	1060	1080	744	704	729	1120	1090	1110	---	---	---
15	1130	1070	1100	805	742	779	1120	1090	1100	---	---	---
16	1170	1120	1140	828	804	813	1100	1040	1070	---	---	---
17	1220	1160	1190	834	810	822	1060	982	1030	---	---	---
18	1220	1190	1210	853	829	841	1070	1010	1040	---	---	---
19	1200	1130	1160	858	825	838	1060	1010	1040	---	---	---
20	1180	1160	1170	894	852	871	1040	996	1020	896	865	880
21	1190	1180	1180	913	891	903	1010	960	995	889	864	876
22	1180	1140	1160	929	897	909	981	949	963	881	822	863
23	1140	1080	1110	912	893	904	953	927	942	839	796	816
24	---	889	---	927	894	908	943	909	924	864	838	856
25	889	854	870	912	894	904	937	916	926	886	835	858
26	855	821	833	921	901	914	937	914	927	899	853	874
27	826	800	812	931	898	911	932	898	914	907	841	869
28	820	814	817	980	892	956	924	906	915	866	838	852
29	814	744	785	1010	975	994	922	903	914	864	843	856
30	776	721	760	1010	987	1000	924	905	915	849	832	842
31	753	703	739	---	---	---	919	901	911	857	838	847
MONTH	---	703	---	1010	593	821	1140	898	1010	---	---	---

ARKANSAS RIVER BASIN

07109500 ARKANSAS RIVER NEAR AVONDALE, CO--Continued

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM @ 25 DEG. C), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	863	847	855	906	872	892	607	584	595	711	---	---
2	874	858	866	940	891	911	592	547	576	---	---	---
3	879	864	874	965	924	942	598	565	577	675	640	654
4	935	878	910	958	860	885	600	582	591	706	664	679
5	959	932	941	964	867	919	597	581	589	714	684	698
6	1020	959	995	985	956	974	601	587	594	719	691	710
7	1070	1010	1050	1030	969	987	603	591	598	---	---	---
8	---	---	---	---	977	908	611	597	603	---	---	---
9	---	---	---	---	925	864	889	626	608	615	---	600
10	---	---	---	880	807	858	644	619	632	629	532	587
11	1080	---	---	807	708	749	644	625	636	549	515	535
12	1080	---	---	708	684	692	657	624	638	541	501	523
13	---	---	---	749	686	705	651	626	641	506	486	498
14	1090	---	---	792	749	781	654	633	646	517	482	507
15	1110	1070	1090	786	739	773	652	629	641	522	435	493
16	1110	1080	1090	778	734	747	641	617	629	582	528	543
17	1090	1050	1070	772	716	746	636	607	621	558	546	552
18	1100	---	---	716	679	696	624	593	609	558	523	545
19	---	---	---	709	663	692	614	587	598	540	524	532
20	1110	---	---	671	645	657	596	577	589	540	524	532
21	1050	917	998	652	631	646	607	582	592	557	535	550
22	917	869	887	686	619	660	636	585	607	568	552	560
23	900	867	883	---	---	---	625	603	613	606	558	573
24	899	873	888	---	---	---	846	611	667	593	568	578
25	910	881	895	---	---	---	769	640	714	580	572	576
26	908	887	896	---	---	---	---	---	---	588	576	581
27	917	890	902	---	---	---	---	---	---	591	---	---
28	908	885	896	---	---	---	---	---	---	---	---	---
29	---	---	---	---	---	---	---	---	---	615	---	---
30	---	---	---	---	---	---	761	704	740	643	609	622
31	---	---	---	---	---	---	---	---	---	625	601	614
MONTH	---	---	---	---	---	---	---	---	---	---	---	---
	JUNE			JULY			AUGUST			SEPTEMBER		
1	604	---	---	401	389	395	570	521	536	1160	644	719
2	---	542	---	395	382	388	554	502	528	683	643	663
3	553	498	542	402	384	391	531	507	520	683	660	670
4	536	483	517	394	382	387	507	468	494	696	656	673
5	542	490	513	407	378	390	630	449	492	757	594	681
6	537	493	511	446	388	410	699	448	548	608	581	591
7	615	499	537	447	425	435	591	507	541	643	573	599
8	565	491	520	448	429	439	507	483	493	701	569	601
9	497	479	484	444	422	431	520	480	495	770	694	710
10	699	478	535	442	416	428	652	488	539	801	761	778
11	752	510	631	464	414	428	619	503	544	807	779	789
12	510	443	462	454	431	444	533	495	509	806	774	787
13	466	435	446	431	404	418	645	499	532	786	735	773
14	524	445	468	412	392	401	531	489	507	764	717	751
15	527	460	502	444	403	415	561	502	519	759	723	739
16	460	433	449	447	435	442	550	535	543	736	713	724
17	438	419	433	450	438	445	558	528	541	732	688	713
18	420	408	414	448	422	436	632	521	560	742	708	722
19	412	400	406	422	384	399	583	525	548	731	692	714
20	404	376	392	539	384	422	608	568	583	722	681	702
21	376	359	369	530	416	459	644	590	608	773	698	724
22	370	359	366	416	386	402	724	625	653	788	726	749
23	365	351	356	386	375	380	724	697	709	773	677	749
24	391	351	364	409	371	383	777	688	712	730	639	662
25	381	370	375	382	365	373	793	765	780	667	646	657
26	402	375	384	398	372	382	881	581	702	652	602	622
27	411	390	395	490	395	426	724	606	683	659	626	641
28	402	391	396	530	434	456	721	693	704	672	632	650
29	412	392	400	557	468	495	701	653	686	673	644	659
30	406	397	402	995	486	607	789	642	674	812	659	748
31	---	---	---	540	486	512	718	635	651	---	---	---
MONTH	---	---	---	995	365	426	881	448	585	1160	569	699

07109500 ARKANSAS RIVER NEAR AVONDALE, CO--Continued

pH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

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

ARKANSAS RIVER BASIN

07109500 ARKANSAS RIVER NEAR AVONDALE, CO--Continued

pH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	8.6	8.1	8.4	8.0	7.9	8.0	8.2	8.1	8.1	8.2	7.7	8.0
2	8.5	7.9	8.3	8.1	7.9	8.0	8.2	8.0	8.1	8.4	8.1	8.2
3	8.3	7.7	8.2	8.1	7.9	8.0	8.2	8.1	8.1	8.4	8.2	8.3
4	8.3	7.7	8.2	8.1	7.9	8.0	8.2	8.0	8.1	8.4	8.2	8.3
5	8.3	7.9	8.2	8.1	7.9	8.0	8.1	7.9	7.9	8.4	8.2	8.3
6	8.3	7.9	8.1	8.1	7.9	8.0	8.0	7.8	7.9	8.4	8.1	8.3
7	8.3	8.0	8.2	8.1	7.8	8.0	8.1	7.9	8.0	8.5	8.2	8.3
8	8.3	8.2	8.2	8.1	7.9	8.0	8.2	8.0	8.0	8.5	8.2	8.3
9	8.3	8.2	8.3	8.2	8.1	8.1	8.1	8.0	8.1	8.3	8.1	8.2
10	8.3	8.1	8.2	8.2	8.0	8.1	8.1	7.8	8.0	8.3	8.2	8.2
11	8.2	8.0	8.1	8.2	7.9	8.1	8.1	7.9	8.0	8.2	8.1	8.2
12	8.2	8.0	8.1	8.2	7.9	8.1	8.1	8.0	8.0	8.2	8.1	8.2
13	8.2	7.9	8.2	8.3	7.9	8.1	8.1	7.8	8.1	8.1	8.0	8.1
14	8.2	7.9	8.1	8.4	7.9	8.2	8.1	8.0	8.1	8.1	8.0	8.0
15	8.3	8.0	8.2	8.3	8.0	8.2	8.1	8.0	8.1	8.2	8.0	8.1
16	8.3	8.2	8.2	8.3	7.9	8.2	8.1	8.0	8.1	8.4	8.1	8.3
17	8.3	8.0	8.2	8.4	7.9	8.2	8.1	8.0	8.1	8.4	8.2	8.3
18	8.2	8.0	8.1	8.4	8.0	8.2	8.2	8.0	8.1	8.3	8.1	8.2
19	8.2	7.9	8.1	8.4	8.0	8.2	8.1	8.0	8.1	8.4	8.1	8.2
20	8.1	7.9	8.0	8.3	8.0	8.2	8.1	8.0	8.1	8.4	8.1	8.2
21	8.1	8.0	8.0	8.4	8.0	8.2	8.1	8.1	8.1	8.2	7.9	8.0
22	8.1	8.0	8.0	8.4	8.1	8.2	8.1	8.0	8.1	8.0	7.9	7.9
23	8.1	8.0	8.0	8.4	8.0	8.2	8.1	8.0	8.1	8.2	7.8	8.0
24	8.1	8.0	8.0	8.4	8.1	8.3	8.1	8.0	8.0	8.2	7.9	8.1
25	8.1	8.0	8.0	8.4	8.1	8.3	8.1	7.9	8.0	8.2	7.9	8.1
26	8.1	8.0	8.1	8.4	8.1	8.2	8.1	7.9	8.0	8.2	8.0	8.1
27	8.1	8.0	8.1	8.2	8.0	8.1	8.1	8.0	8.1	8.2	8.0	8.1
28	8.1	8.0	8.1	8.2	8.0	8.1	8.2	8.1	8.1	8.3	8.1	8.2
29	8.1	8.0	8.1	8.1	8.0	8.0	8.2	8.0	8.1	8.3	8.1	8.2
30	8.1	8.0	8.0	8.1	7.9	8.0	8.1	7.8	8.0	8.3	8.1	8.2
31	---	---	---	8.2	8.0	8.1	8.1	8.1	8.1	---	---	---
MONTH	8.6	7.7	8.1	8.4	7.8	8.1	8.2	7.8	8.1	8.5	7.7	8.2

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	20.8	15.1	18.0	12.2	8.5	10.2	6.1	1.8	4.1	7.1	4.0	5.8
2	19.0	14.7	16.8	12.0	8.0	10.2	5.4	2.7	4.0	8.9	3.8	6.4
3	18.2	13.2	15.8	11.7	8.4	10.2	4.2	.7	2.7	8.8	6.0	7.4
4	20.0	14.5	17.2	13.2	9.9	11.5	4.2	.9	2.5	7.0	4.1	5.5
5	20.6	14.8	17.7	12.2	8.5	10.4	5.5	1.1	3.5	4.2	1.7	2.7
6	20.2	15.1	17.7	10.3	7.9	9.2	4.9	3.0	3.9	3.9	.9	2.3
7	19.6	14.8	17.3	9.1	6.1	7.8	5.4	2.2	3.8	1.0	.0	.0
8	19.2	13.9	16.6	9.0	5.4	7.3	5.2	2.2	3.8	2.4	.0	.8
9	18.8	13.3	16.2	10.3	6.3	8.4	7.7	3.3	5.6	2.4	.0	1.0
10	18.8	13.3	16.1	10.7	7.0	9.0	8.4	5.1	6.7	1.3	.0	.7
11	19.7	13.6	16.6	10.4	7.2	9.0	8.3	4.9	6.6	.0	.0	.0
12	19.7	13.4	16.7	10.0	7.2	8.6	7.4	3.7	5.7	.0	.0	.0
13	19.8	13.5	16.8	10.5	6.8	8.7	7.2	3.5	5.5	.0	.0	.0
14	19.0	13.5	16.5	8.7	7.5	7.9	6.2	3.2	4.7	.0	.0	.0
15	18.7	13.7	16.4	7.5	5.9	6.6	4.6	1.6	3.1	.0	.0	.0
16	17.5	12.2	14.9	7.3	5.4	6.5	3.8	1.0	2.3	.1	.0	.0
17	14.7	11.1	12.7	6.6	3.3	5.2	1.0	.0	.1	.0	.0	.0
18	14.3	7.7	11.2	9.1	4.0	6.7	.0	.0	.0	.1	.0	.0
19	12.9	9.4	11.2	11.2	6.5	9.0	.0	.0	.0	4.6	.0	1.0
20	13.4	9.8	11.4	11.4	7.6	9.6	.2	.0	.0	6.2	1.5	3.9
21	9.8	7.5	8.6	9.2	6.7	7.8	2.6	.0	1.2	6.8	3.5	4.9
22	10.7	4.6	7.8	8.2	6.4	7.3	4.2	.9	2.4	5.2	1.8	3.7
23	---	6.7	---	7.7	5.2	6.3	2.1	.3	1.4	5.9	2.3	4.0
24	13.2	---	---	7.3	4.5	5.8	2.1	.0	.9	5.3	2.2	4.0
25	13.1	9.7	11.4	7.4	4.0	5.7	4.2	.7	2.3	4.0	.9	2.8
26	11.8	8.7	10.5	5.7	3.5	4.5	2.0	.0	.8	5.2	1.4	3.4
27	10.0	7.8	8.8	5.0	3.1	3.9	5.6	.4	3.1	4.9	2.2	3.2
28	12.7	8.3	10.5	5.1	1.1	3.4	6.6	2.8	4.7	4.4	.5	2.6
29	12.0	8.7	10.5	7.1	3.7	5.4	7.2	3.5	5.3	5.6	3.7	4.4
30	12.8	8.5	10.7	6.2	4.0	5.1	6.4	3.4	5.1	6.1	1.8	4.1
31	11.2	8.6	9.3	---	---	---	7.8	4.3	6.2	8.6	4.5	6.5
MONTH	---	---	---	13.2	1.1	7.6	8.4	.0	3.3	8.9	.0	2.6

07109500 ARKANSAS RIVER NEAR AVONDALE, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	7.9	5.6	6.9	7.3	2.4	4.9	10.8	6.5	8.6	12.8	8.9	11.0
2	6.7	4.0	5.6	8.4	2.6	5.7	8.2	6.0	6.5	13.5	7.6	10.3
3	6.3	3.4	5.0	9.3	4.4	6.8	10.9	5.8	8.3	14.5	7.7	11.2
4	5.7	2.5	4.2	6.5	3.4	4.9	11.7	6.6	9.0	15.6	9.3	12.6
5	4.5	2.0	3.3	7.6	1.8	4.8	8.8	6.0	7.2	16.9	11.0	14.0
6	3.3	2.3	2.7	9.8	3.2	6.6	9.9	4.5	7.1	15.9	11.3	13.9
7	5.7	1.3	3.2	10.7	4.5	7.7	11.3	5.0	8.1	15.1	11.2	13.3
8	5.2	.5	2.9	10.8	4.7	7.9	9.3	5.6	7.0	13.6	9.9	11.3
9	6.4	.9	3.6	10.5	5.7	8.1	11.5	5.2	8.0	16.6	9.9	13.0
10	5.5	1.4	3.7	11.9	5.2	8.5	9.1	4.8	5.9	16.9	10.8	14.0
11	5.0	1.5	3.3	11.1	5.2	8.3	7.2	3.7	5.5	15.7	10.6	13.3
12	6.0	2.3	4.3	10.7	4.9	8.1	9.8	3.5	6.5	16.1	10.0	13.1
13	7.0	2.7	4.7	9.9	5.2	7.7	11.2	4.3	7.8	15.8	10.3	13.2
14	6.9	1.4	4.2	7.1	3.7	4.9	11.3	5.0	8.3	15.2	10.6	13.0
15	8.5	2.1	5.3	7.9	2.0	5.0	13.1	6.3	9.7	16.2	10.6	13.5
16	9.0	3.0	6.2	10.3	3.3	6.9	14.1	7.9	10.8	16.8	10.8	13.9
17	9.7	5.0	7.3	10.1	5.5	7.9	14.4	6.9	10.7	16.0	11.0	13.6
18	10.2	4.7	7.7	10.8	5.4	8.2	13.6	7.4	10.7	13.9	10.8	12.5
19	10.4	6.2	8.2	11.5	4.7	8.3	14.5	7.8	11.0	12.7	10.3	11.5
20	9.0	4.8	6.9	11.9	5.7	8.9	14.0	7.8	10.9	14.5	9.9	12.1
21	7.3	4.0	5.7	11.5	5.8	8.9	11.9	8.0	10.1	14.9	11.0	12.8
22	6.8	2.4	4.8	11.0	5.4	8.3	12.3	7.0	9.6	14.4	11.4	12.8
23	5.6	2.1	3.5	9.8	5.3	7.7	11.2	7.6	9.6	15.8	11.1	13.3
24	5.6	1.0	3.1	8.2	5.0	6.4	9.2	5.9	7.4	14.8	11.0	12.8
25	6.2	1.3	3.7	9.7	3.8	6.6	7.7	5.9	6.7	15.5	10.8	12.9
26	5.4	2.7	4.0	10.9	4.2	7.6	11.8	6.8	8.9	15.6	11.0	13.0
27	4.6	1.5	3.2	11.0	4.9	8.1	14.1	7.8	10.9	---	10.9	---
28	6.6	2.7	4.6	10.9	6.1	8.4	14.1	9.4	12.1	---	---	---
29	---	---	---	8.4	5.5	6.5	13.9	10.0	12.3	---	---	---
30	---	---	---	10.9	4.7	7.7	13.8	9.2	11.9	18.3	12.2	15.1
31	---	---	---	11.5	5.3	8.4	---	---	---	19.0	12.6	15.8
MONTH	10.4	.5	4.7	11.9	1.8	7.2	14.5	3.5	8.9	---	---	---
	JUNE			JULY			AUGUST			SEPTEMBER		
1	17.9	12.4	15.3	21.2	16.5	18.8	23.4	19.4	21.7	24.4	17.9	21.2
2	15.2	12.8	13.9	20.5	16.5	18.4	22.0	19.0	20.7	23.7	19.8	21.7
3	16.7	12.5	14.3	20.9	16.2	18.5	24.6	18.5	21.5	24.7	19.8	22.1
4	16.5	12.9	14.5	21.2	16.4	18.7	23.7	19.3	21.6	23.7	19.1	21.7
5	16.5	13.4	14.7	21.4	16.6	18.9	21.2	18.8	19.9	24.2	19.5	22.0
6	16.7	13.6	15.0	20.7	16.6	18.5	20.2	18.9	19.3	23.8	19.1	21.6
7	17.0	14.5	15.6	20.2	16.0	18.2	22.1	18.1	19.9	23.3	18.5	21.1
8	16.5	14.8	15.6	22.0	16.4	19.1	23.4	18.4	20.8	23.8	18.4	21.2
9	16.0	14.5	15.1	22.3	16.6	19.3	22.4	18.6	20.6	22.4	18.5	20.5
10	16.9	14.4	15.5	22.6	16.9	19.6	20.5	18.9	19.5	23.5	17.9	20.6
11	18.0	15.6	16.8	21.3	17.4	19.4	23.0	18.8	20.4	23.7	18.4	21.1
12	17.7	15.2	16.4	23.1	16.9	19.9	22.8	18.3	20.3	23.6	18.7	21.2
13	18.1	15.0	16.4	23.1	17.0	20.0	23.3	19.2	21.1	23.3	18.4	20.9
14	17.5	15.4	16.6	23.4	17.1	20.1	23.1	18.6	20.8	23.7	19.1	21.4
15	17.4	15.5	16.4	24.2	17.6	20.8	23.7	18.3	21.0	23.8	19.0	21.5
16	17.2	15.2	16.1	24.0	17.9	21.0	22.9	18.5	21.0	22.4	18.8	20.8
17	18.2	15.1	16.5	23.8	17.5	20.6	23.1	18.7	20.7	23.3	18.4	20.8
18	19.0	15.6	17.2	23.1	17.3	20.3	22.8	19.1	20.9	23.4	17.7	20.7
19	19.0	16.2	17.5	22.2	18.0	20.1	23.8	18.4	21.0	22.8	18.1	20.5
20	19.2	16.0	17.5	22.7	17.8	20.2	24.4	18.8	21.4	---	---	---
21	19.3	16.2	17.7	23.7	18.2	20.8	23.7	18.4	21.3	---	---	---
22	19.3	16.4	17.7	24.0	18.3	20.9	24.4	18.7	21.7	---	---	---
23	19.5	16.1	17.7	24.0	18.4	21.0	25.4	19.4	22.5	19.4	---	---
24	19.7	16.3	17.9	24.2	18.2	20.9	25.1	19.5	22.4	21.2	16.5	18.7
25	19.4	16.6	18.0	23.4	18.0	20.6	25.8	20.0	22.8	21.7	16.4	19.2
26	20.0	16.3	17.9	23.0	18.1	20.3	24.5	20.0	22.3	21.2	17.0	19.4
27	19.8	16.5	18.1	23.2	18.4	20.7	25.8	20.4	23.1	22.3	17.7	20.0
28	20.4	16.5	18.3	22.2	18.4	20.3	24.8	20.7	23.1	21.0	17.1	19.2
29	20.7	16.8	18.6	23.1	18.6	20.8	24.8	20.0	22.5	21.3	16.1	18.9
30	21.5	17.0	19.0	23.4	19.5	21.6	22.6	19.4	21.2	21.6	16.6	19.3
31	---	---	---	24.7	19.7	22.1	23.0	18.9	21.0	---	---	---
MONTH	21.5	12.4	16.6	24.7	16.0	20.0	25.8	18.1	21.2	---	---	---

ARKANSAS RIVER BASIN

07109500 ARKANSAS RIVER NEAR AVONDALE, CO--Continued

OXYGEN, DISSOLVED (MG/L), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	7.3	5.4	6.3	8.7	6.9	8.0	11.4	7.0	9.4	10.5	7.7	9.1
2	7.5	5.7	6.5	8.8	6.7	7.9	11.6	7.1	9.3	10.7	6.8	9.0
3	7.6	5.6	6.5	8.7	6.8	7.9	12.2	8.1	10.1	10.2	6.9	8.4
4	7.4	4.3	6.1	8.4	6.7	7.5	11.7	8.3	10.1	10.6	7.5	9.0
5	6.6	4.8	5.5	8.6	6.9	7.7	10.6	5.9	9.2	12.3	8.8	10.7
6	---	---	---	9.1	7.3	8.2	11.0	7.1	8.6	12.6	9.0	11.1
7	---	---	---	9.6	7.9	8.7	11.2	6.0	8.8	12.2	8.8	10.5
8	---	---	---	10.0	7.9	9.0	11.7	6.8	9.3	12.6	7.9	10.4
9	7.8	5.5	6.5	9.5	7.2	8.5	11.3	6.9	8.9	12.6	10.0	11.1
10	8.0	5.1	6.6	9.9	7.3	8.6	10.2	5.7	7.5	13.1	9.5	11.7
11	8.2	5.4	6.6	9.9	8.0	8.7	11.1	6.6	8.3	11.1	8.8	9.8
12	7.8	4.9	6.2	9.9	7.8	8.8	11.6	7.3	9.0	11.2	8.6	9.9
13	---	---	---	9.9	7.9	8.8	11.5	8.2	9.8	11.1	7.9	10.2
14	---	---	---	9.3	7.9	8.5	11.4	8.7	9.9	10.9	9.4	10.3
15	8.8	---	---	10.0	8.4	8.9	12.4	9.5	10.8	11.1	9.5	10.3
16	8.1	5.1	6.4	9.6	7.8	8.8	12.1	9.2	10.9	11.0	8.4	9.9
17	8.8	5.2	6.7	11.1	9.0	10.1	13.1	10.3	11.4	---	---	---
18	9.2	5.7	7.5	10.5	7.5	9.4	11.3	8.8	10.2	---	---	---
19	9.6	5.7	7.3	9.4	6.6	8.1	11.8	8.7	10.0	---	---	---
20	9.4	5.9	7.4	9.3	6.9	8.0	11.6	8.5	10.3	11.4	8.7	10.3
21	9.9	6.4	7.8	9.8	7.4	8.3	11.8	9.3	10.6	10.4	8.8	9.7
22	9.2	6.0	7.7	10.1	7.4	8.5	11.4	9.9	10.8	11.5	---	---
23	---	---	---	10.0	7.6	8.7	12.1	10.5	11.3	---	---	---
24	---	---	---	11.0	8.3	9.3	12.6	10.1	11.2	---	---	---
25	8.1	6.1	6.7	11.0	8.1	9.4	11.8	9.6	10.9	12.5	9.8	11.2
26	---	---	---	11.2	8.4	9.7	12.7	10.1	11.5	12.0	9.3	10.8
27	---	---	---	12.2	9.0	10.5	11.6	8.6	10.4	12.1	9.6	11.0
28	---	---	---	11.8	7.7	10.1	10.9	8.6	9.8	12.7	9.8	11.5
29	8.3	---	---	10.8	6.9	9.0	10.7	8.1	9.6	11.1	9.7	10.3
30	8.6	7.3	7.9	11.3	7.6	9.0	10.9	8.0	9.5	12.0	9.3	10.7
31	8.8	7.2	8.2	---	---	---	10.7	7.8	9.2	10.5	8.3	9.4
MONTH	---	---	---	12.2	6.6	8.8	13.1	5.7	9.9	---	---	---
	FEBRUARY			MARCH			APRIL			MAY		
1	10.2	8.0	9.0	11.2	8.4	9.7	9.4	7.9	8.6	8.2	7.0	7.6
2	11.0	8.5	9.8	11.0	7.9	9.6	10.3	8.5	9.6	8.4	7.4	7.9
3	11.2	9.2	10.1	10.7	8.0	9.1	10.4	7.8	9.6	8.7	7.1	7.9
4	11.1	8.9	10.1	11.0	8.3	9.5	9.5	7.8	8.6	8.3	6.7	7.6
5	12.1	9.3	10.6	11.4	7.9	9.9	9.3	8.0	8.8	8.0	6.5	7.2
6	11.3	9.0	10.3	10.7	7.5	9.0	10.2	8.6	9.4	8.0	6.5	7.2
7	11.5	9.1	10.5	11.0	7.7	9.1	10.4	8.5	9.5	7.9	6.3	7.2
8	11.8	8.3	10.6	11.0	7.1	8.8	10.7	8.8	9.9	8.3	6.8	7.7
9	11.7	8.0	10.4	11.2	7.1	9.1	10.7	8.2	9.7	8.3	6.8	7.6
10	11.6	8.3	10.4	10.9	7.2	9.0	10.3	8.3	9.7	8.4	6.9	7.5
11	11.7	8.6	10.4	10.8	7.5	8.9	10.9	9.1	10.1	8.5	7.2	7.7
12	11.4	8.4	9.9	10.3	7.4	9.0	10.8	8.7	10.0	8.5	6.9	7.8
13	10.9	8.3	9.6	9.6	7.5	8.4	10.8	8.2	9.7	8.3	7.1	7.7
14	12.1	8.4	10.1	10.1	7.8	9.0	10.7	8.2	9.5	8.3	7.1	7.7
15	11.7	7.5	9.8	10.3	7.9	9.2	10.4	7.6	9.1	8.4	7.0	7.7
16	11.8	7.4	9.9	10.4	7.4	8.9	10.3	7.7	8.9	8.1	6.5	7.5
17	11.9	7.4	9.5	10.4	7.7	8.8	10.2	7.6	8.9	8.0	6.7	7.5
18	11.7	6.4	8.8	9.6	7.7	8.6	10.1	7.4	8.8	8.1	7.0	7.6
19	11.7	7.0	8.5	9.7	7.3	8.7	9.7	7.3	8.6	8.3	7.2	7.8
20	12.1	7.0	8.6	9.7	7.4	8.4	9.8	7.4	8.5	8.2	6.8	7.7
21	10.6	7.8	8.9	9.7	7.6	8.5	9.4	7.5	8.3	8.1	6.7	7.5
22	10.3	7.3	9.0	9.5	7.2	8.3	9.7	7.6	8.7	7.7	7.1	7.5
23	10.8	7.9	9.5	9.6	7.4	8.6	9.4	8.1	8.8	8.0	7.0	7.5
24	11.0	8.6	9.9	9.5	8.0	8.9	9.1	7.8	8.6	7.9	7.0	7.4
25	10.5	7.7	9.3	10.3	8.1	9.2	9.2	8.5	8.9	8.0	6.6	7.4
26	10.5	8.3	9.3	10.1	7.8	9.1	9.1	7.6	8.6	8.0	6.9	7.4
27	10.5	8.6	9.5	9.7	7.6	8.7	8.7	7.2	8.1	---	7.2	---
28	10.6	8.3	9.3	9.4	7.8	8.6	8.2	6.6	7.5	---	---	---
29	---	---	---	9.6	8.1	9.0	8.0	6.7	7.3	---	---	---
30	---	---	---	9.9	7.9	9.1	8.1	6.6	7.3	7.1	6.0	6.6
31	---	---	---	9.9	8.3	9.0	---	---	---	7.2	6.0	6.6
MONTH	12.1	6.4	9.7	11.4	7.1	9.0	10.9	6.6	8.9	---	---	---

07109500 ARKANSAS RIVER NEAR AVONDALE, CO--Continued

OXYGEN, DISSOLVED (MG/L), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	7.5	6.2	6.9	6.5	5.4	5.9	8.6	7.3	7.9	8.1	5.5	7.1
2	7.6	6.6	7.2	6.4	5.5	6.0	8.5	7.5	7.9	8.0	6.5	7.1
3	7.6	7.1	7.4	6.8	5.9	6.3	8.4	6.7	7.6	7.3	6.4	6.9
4	7.5	7.0	7.3	6.7	5.7	6.3	8.0	6.9	7.4	7.6	5.9	6.9
5	7.4	6.7	7.2	6.6	5.5	6.1	7.9	7.3	7.6	7.3	5.7	6.5
6	7.3	6.5	7.2	6.4	5.3	5.9	7.8	6.6	7.6	7.5	6.3	6.7
7	7.4	6.3	6.9	6.2	5.5	5.8	8.2	7.2	7.7	7.4	6.4	6.9
8	7.5	6.9	7.2	6.5	5.4	6.0	8.1	6.5	7.4	7.4	6.2	6.8
9	7.9	7.1	7.6	6.4	5.3	6.0	7.5	6.5	7.0	7.3	6.2	6.7
10	7.7	6.2	7.2	6.5	5.5	6.0	7.5	6.3	7.1	7.3	6.1	6.7
11	7.0	6.1	6.7	6.4	5.5	6.0	7.4	6.6	7.0	7.0	5.7	6.3
12	7.5	6.8	7.2	6.4	5.3	5.9	7.2	6.3	6.7	6.6	5.5	6.0
13	7.5	6.7	7.2	6.7	5.4	6.2	7.1	6.2	6.6	6.3	4.5	5.6
14	7.3	6.3	6.9	6.9	5.7	6.3	7.3	6.4	6.8	6.0	4.2	5.1
15	7.1	6.4	6.9	6.8	5.4	6.1	7.7	6.5	7.1	6.6	3.7	5.3
16	7.4	7.1	7.2	6.6	5.4	5.9	7.7	6.7	7.2	7.1	4.2	6.0
17	7.6	7.0	7.3	6.8	5.4	6.1	8.0	7.0	7.6	7.3	6.1	6.7
18	7.6	6.5	7.2	6.7	5.6	6.1	8.1	7.2	7.6	7.2	5.6	6.6
19	7.4	6.8	7.1	6.7	5.6	6.2	8.3	7.2	7.7	7.3	6.0	6.7
20	7.2	6.7	7.0	7.0	5.7	6.3	8.7	7.2	7.8	---	---	---
21	7.3	6.7	7.0	6.6	5.8	6.2	8.6	7.2	7.9	---	---	---
22	7.3	6.9	7.1	8.1	6.1	6.8	8.7	7.1	7.7	---	---	---
23	7.2	6.7	7.0	7.5	7.0	7.3	8.3	7.2	7.7	---	---	---
24	7.1	6.4	6.9	8.1	6.8	7.5	8.9	7.1	7.8	---	6.7	---
25	7.0	6.4	6.7	8.1	7.1	7.5	8.1	6.9	7.5	8.6	6.8	7.4
26	6.9	6.1	6.6	8.1	7.1	7.6	8.3	6.9	7.6	8.4	6.9	7.5
27	6.8	6.2	6.5	8.4	7.4	7.9	8.1	7.0	7.5	7.9	6.6	7.2
28	6.8	6.1	6.5	10.5	8.1	9.3	8.2	7.1	7.5	8.0	6.6	7.3
29	6.7	5.7	6.3	9.2	7.4	8.5	8.1	7.0	7.6	8.0	6.8	7.4
30	6.3	5.6	6.0	8.6	7.6	8.1	8.1	6.8	7.5	8.0	7.0	7.4
31	---	---	---	8.6	7.3	7.9	8.3	6.3	7.5	---	---	---
MONTH	7.9	5.6	7.0	10.5	5.3	6.6	8.9	6.2	7.5	---	---	---

07110400 CHICO CREEK NEAR PUEBLO CHEMICAL DEPOT, CO

LOCATION.--Lat 38°21'40", long 104°23'15", in NE¹/₄NE¹/₄ sec. 36, T.19 S., R.63 W., Pueblo County, Hydrologic Unit 11020004, on right bank, 6.6 mi northwest of the Pueblo Chemical Depot Headquarters, 8.0 mi northeast of Pueblo Memorial Airport, 9.3 mi upstream from mouth, and 10.5 mi northwest of Boone.

DRAINAGE AREA.--Not determined.

PERIOD OF RECORD.--May to September 1997.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 4,982 ft above sea level, from topographic map.

REMARKS.--Records fair except for July 30, 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.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period May to September, 3,590 ft³/s, July 30, from rating curve extended above 240 ft³/s on the basis of slope-area measurement of peak flow, gage-height, 9.85 ft, from floodmark; minimum daily, no flow, several days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	.14	.04	3.4	1.7
2	---	---	---	---	---	---	---	1.0	.14	.02	2.6	.19
3	---	---	---	---	---	---	---	.92	.12	.02	6.2	.12
4	---	---	---	---	---	---	---	.75	.10	.02	1.6	.08
5	---	---	---	---	---	---	---	.65	.10	.02	5.5	.07
6	---	---	---	---	---	---	---	.71	.12	.02	134	.08
7	---	---	---	---	---	---	---	.67	.62	.02	21	.06
8	---	---	---	---	---	---	---	.70	2.5	.03	4.1	.04
9	---	---	---	---	---	---	---	.64	18	.03	.66	.04
10	---	---	---	---	---	---	---	.64	5.1	.02	5.3	.03
11	---	---	---	---	---	---	---	.71	1.9	.02	1.7	.02
12	---	---	---	---	---	---	---	.68	.55	.02	.44	.02
13	---	---	---	---	---	---	---	.50	.73	.01	.11	.01
14	---	---	---	---	---	---	---	.45	1.4	.01	.10	.01
15	---	---	---	---	---	---	---	.49	.86	.01	.08	.01
16	---	---	---	---	---	---	---	.41	.35	.01	.08	.01
17	---	---	---	---	---	---	---	.33	.37	.01	.08	.01
18	---	---	---	---	---	---	---	.28	.26	.00	.07	.01
19	---	---	---	---	---	---	---	.40	.85	.00	.07	.01
20	---	---	---	---	---	---	---	.37	.14	.01	.08	.02
21	---	---	---	---	---	---	---	.47	.08	.01	.08	.03
22	---	---	---	---	---	---	---	.81	.06	.01	.08	.01
23	---	---	---	---	---	---	---	.69	.06	.00	.07	.02
24	---	---	---	---	---	---	---	1.0	.05	.00	.07	.01
25	---	---	---	---	---	---	---	.87	1.8	.00	.07	.01
26	---	---	---	---	---	---	---	.59	78	.00	.07	.01
27	---	---	---	---	---	---	---	.34	9.5	.00	.07	.01
28	---	---	---	---	---	---	---	.27	.41	.00	.06	.01
29	---	---	---	---	---	---	---	.24	.07	.00	7.5	.01
30	---	---	---	---	---	---	---	.24	.05	399	2.3	.01
31	---	---	---	---	---	---	---	.18	---	16	.50	---
TOTAL	---	---	---	---	---	---	---	---	124.43	415.36	198.04	2.67
MEAN	---	---	---	---	---	---	---	---	4.15	13.4	6.39	.089
MAX	---	---	---	---	---	---	---	---	.78	399	134	1.7
MIN	---	---	---	---	---	---	---	---	.05	.00	.06	.01
AC-FT	---	---	---	---	---	---	---	---	247	824	393	5.3

07116500 HUERFANO RIVER NEAR BOONE, CO

LOCATION.--Lat 38°13'30", long 104°15'37", in NE¼NE¼ 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 mi².

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 same site, different datum.

REMARKS.--Records fair except estimated daily discharges and discharges above 1000 ft³/s, which are poor. Natural flow of stream affected by diversions for irrigation of about 48,000 acres, 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.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.6	13	9.9	17	4.4	7.8	11	48	104	1.3	.25	7.8
2	2.9	14	9.3	16	4.4	7.8	7.6	86	66	.73	.14	4.1
3	3.3	15	11	12	4.4	7.1	6.7	108	66	.49	7.3	2.9
4	4.5	14	12	8.0	4.7	7.0	5.3	114	21	5.5	.00	1.1
5	3.8	14	13	6.1	5.2	9.3	5.9	95	5.4	5.0	.01	6.5
6	3.8	19	11	6.5	6.0	6.7	6.7	29	8.7	1.4	1.8	8.6
7	3.7	21	12	e6.0	6.1	5.9	6.0	21	31	.95	.15	22
8	3.2	22	14	e6.0	e6.0	6.0	5.4	22	125	1.0	.12	19
9	2.6	20	19	e5.0	e6.0	5.6	5.1	36	223	.77	.19	12
10	3.7	22	20	e6.0	5.5	5.4	5.7	30	435	.48	239	13
11	4.6	24	19	e6.0	5.4	5.8	10	9.6	299	.37	567	15
12	4.4	25	18	e7.0	5.3	5.8	18	5.4	145	.32	769	10
13	3.4	25	18	e7.0	5.7	6.3	20	4.5	111	.20	296	3.5
14	2.9	27	15	e7.0	5.5	6.3	10	3.1	76	.07	205	2.0
15	3.7	22	13	e7.0	5.7	7.3	6.8	2.6	57	.06	74	1.6
16	5.8	9.3	13	e6.0	5.4	6.8	16	3.1	56	.00	57	.96
17	7.4	9.4	e13	e7.0	5.2	5.9	15	2.0	28	.00	46	1.1
18	6.6	8.3	e14	e10	5.5	8.3	13	1.7	19	.00	38	1.2
19	4.1	8.0	e14	e15	5.7	21	9.0	2.6	48	.00	21	2.2
20	3.5	8.1	e15	e20	6.9	14	5.3	3.6	61	.05	14	6.0
21	3.7	8.0	e17	19	7.0	9.6	5.9	10	17	103	11	14
22	4.2	8.2	e15	13	7.7	7.0	8.5	27	5.0	5.3	9.6	18
23	3.7	8.2	e15	11	7.8	8.1	7.8	7.5	4.5	1.4	7.8	60
24	3.4	8.4	e15	6.5	e8.0	7.4	34	41	4.0	.67	5.7	86
25	3.2	8.9	e15	7.7	e8.0	8.6	57	75	2.1	.66	4.4	45
26	6.0	8.6	e14	8.7	8.4	6.1	44	77	18	.39	3.3	25
27	12	8.7	e15	5.5	e8.0	5.4	31	73	1.8	.23	2.3	30
28	17	9.0	e15	5.3	7.8	5.0	21	68	1.4	.34	1.7	27
29	11	9.8	e18	4.5	---	5.5	34	73	1.0	55	1.5	11
30	12	9.3	22	4.8	---	5.7	39	92	.84	1.8	1.8	21
31	11	---	21	4.8	---	5.0	---	106	---	.70	2.0	---
TOTAL	168.7	427.2	465.2	271.4	171.7	229.5	470.7	1276.7	2040.74	188.18	2387.06	477.56
MEAN	5.44	14.2	15.0	8.75	6.13	7.40	15.7	41.2	68.0	6.07	77.0	15.9
MAX	17	27	22	20	8.4	21	57	114	435	103	769	86
MIN	2.6	8.0	9.3	4.5	4.4	5.0	5.1	1.7	.84	.00	.00	.96
AC-FT	335	847	923	538	341	455	934	2530	4050	373	4730	947

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 - 1997, BY WATER YEAR (WY)

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
MEAN	8.28	15.2	14.4	20.2	24.1	20.4	22.4	151	110	29.2	33.4	6.75						
MAX	46.7	46.0	34.2	65.1	64.5	129	94.3	1113	667	226	254	26.5						
(WY)	1985	1986	1987	1984	1984	1984	1988	1987	1983	1995	1981	1995						
MIN	.000	.000	.000	.000	.13	2.12	.47	.53	.16	.000	.36	.000						
(WY)	1990	1990	1990	1990	1990	1990	1990	1992	1981	1989	1988	1980						

SUMMARY STATISTICS FOR 1996 CALENDAR YEAR FOR 1997 WATER YEAR WATER YEARS 1980 - 1997

ANNUAL TOTAL	4178.46	8574.64	
ANNUAL MEAN	11.4	23.5	38.0
HIGHEST ANNUAL MEAN			153
LOWEST ANNUAL MEAN			5.09
HIGHEST DAILY MEAN	165	Aug 28	769
LOWEST DAILY MEAN	a.00	Jul 7	b.00
ANNUAL SEVEN-DAY MINIMUM	.00	Jul 24	.03
INSTANTANEOUS PEAK FLOW			c2250
INSTANTANEOUS PEAK STAGE			10.14
ANNUAL RUNOFF (AC-FT)	8290	17010	27520
10 PERCENT EXCEEDS	22	51	59
50 PERCENT EXCEEDS	8.2	7.8	6.2
90 PERCENT EXCEEDS	.20	1.4	.00

e-Estimated.

a-No flow many days most years.

b-Also occurred Jul 17-19, and Aug 4.

c-From rating curve extended above 1790 ft³/s.

d-From rating curve extended above 1130 ft³/s. Maximum discharge for period of record, 19400 ft³/s, Aug 1, 1923, gage height, 9.4 ft, datum then in use, from rating curve extended above 1200 ft³/s, on the basis of slope-area measurement of peak flow.

f-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°07'33", long 103°54'41", in NW¹/₄NW¹/₄ sec.21, T.22 S., R.58 W., Otero County, Hydrologic Unit 11020005, 600 ft downstream from gage on Catlin Canal, on right bank 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 mi², of which 54 mi² 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. 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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	364	356	453	381	671	455	1140	e790	1050	1990	921	777
2	337	294	443	387	674	445	1150	e766	1440	1740	836	788
3	379	270	447	392	648	422	1160	e773	2450	1530	868	619
4	386	250	463	391	456	374	1070	e786	3120	1480	839	585
5	396	259	460	394	372	444	960	e809	3500	1440	2010	566
6	373	276	463	379	339	432	947	829	3710	1350	2400	719
7	362	304	479	342	286	400	933	e777	4170	1150	2440	920
8	334	349	508	e340	244	392	946	e820	4860	921	1530	947
9	328	386	514	e330	230	419	984	e898	5080	1030	1310	764
10	345	446	520	e310	227	416	949	e950	5100	1040	1650	439
11	353	518	521	e290	216	419	892	e1030	5450	1040	2660	325
12	363	558	483	e270	226	501	736	e1050	5320	1010	3820	290
13	327	705	452	e280	217	608	868	e1080	5680	998	2610	326
14	281	627	412	e290	190	599	847	e1130	5220	1000	2290	328
15	252	569	376	e310	180	484	813	e1190	5170	904	1930	318
16	249	553	363	e310	184	432	784	e1190	4710	708	1630	296
17	250	478	e340	e310	185	516	733	1330	5000	561	1480	289
18	232	461	e310	e360	156	690	744	1490	5090	484	1440	289
19	240	447	e320	e420	166	777	787	1540	5110	513	1600	315
20	263	458	e340	e460	195	753	849	1390	4710	804	1310	353
21	257	436	e340	e530	210	790	892	e1440	4690	972	1070	483
22	271	413	e330	529	251	803	961	e1420	4850	1070	820	619
23	314	417	e350	514	316	906	1070	1640	4960	1210	603	623
24	334	425	e350	548	353	924	1230	1960	5150	1220	392	836
25	403	444	e350	544	350	901	1420	1850	4770	1200	310	926
26	488	441	e340	579	414	962	1150	1850	3900	1170	315	851
27	582	437	e360	598	437	1030	886	1810	3510	1040	719	697
28	637	441	e370	597	468	1050	e811	1790	2920	888	574	575
29	558	450	e370	619	---	1170	e790	1510	2560	1190	491	513
30	438	454	e370	629	---	1280	e825	1150	2220	969	483	475
31	459	---	368	655	---	1240	---	960	---	1160	622	---
TOTAL	11155	12922	12565	13288	8861	21034	28327	37998	125470	33782	41973	16851
MEAN	360	431	405	429	316	679	944	1226	4182	1090	1354	562
MAX	637	705	521	655	674	1280	1420	1960	5680	1990	3820	947
MIN	232	250	310	270	156	374	733	766	1050	484	310	289
AC-FT	22130	25630	24920	26360	17580	41720	56190	75370	248900	67010	83250	33420

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 1997, 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	414	424	360	415	407	400	572	1218	2219	1450	998	452												
MAX (WY)	1234	925	773	854	1249	867	1526	3888	4420	4108	2384	1209	1985	1985	1987	1985	1985	1987	1995	1995	1984	1982		
MIN (WY)	91.0	152	133	175	180	175	86.6	21.2	433	286	526	84.5	1979	1979	1991	1990	1995	1978	1977	1978	1978			

SUMMARY STATISTICS

	FOR 1996 CALENDAR YEAR	FOR 1997 WATER YEAR	WATER YEARS 1975 - 1997
ANNUAL TOTAL	271747	364226	
ANNUAL MEAN	742	998	a 779
HIGHEST ANNUAL MEAN			1327
LOWEST ANNUAL MEAN			351
HIGHEST DAILY MEAN	3690	5680	b 8480
LOWEST DAILY MEAN	232	156	c 30
ANNUAL SEVEN-DAY MINIMUM	249	179	d 46
INSTANTANEOUS PEAK FLOW		6030	f 23300
INSTANTANEOUS PEAK STAGE		Not determined	10.81
ANNUAL RUNOFF (AC-FT)	539000	722400	564100
10 PERCENT EXCEEDS	1600	1970	1690
50 PERCENT EXCEEDS	507	598	448
90 PERCENT EXCEEDS	337	292	199

e-Estimated.

a-Average discharge for 9 years (water years 1965-73), 636 ft³/s, 460800 acre-ft/yr, prior to completion of Pueblo Dam.

b-Maximum daily discharge for period of record, 43200 ft³/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 ft³/s, Jun 18, 1965, gage height, 7.95 ft, site and datum then in use, from rating curve extended above 13000 ft³/s, on basis of flow-over-dam computation of peak flow.

**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 good, except Mar. 19-25, July 1 to Sept. 30, which are fair, and Oct. 1-9, Oct. 29 to Nov. 13, Nov. 27 to Dec. 3, Dec. 28-31, and Feb. 21-24, which are poor. Records for water temperature are good. Daily data that are not published are either missing or of unacceptable quality.

EXTREMES FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 1,800 microsiemens, Apr. 27, 1991; minimum, 244 microsiemens, May 25, 1993.

WATER TEMPERATURE: Maximum, 30.9°C, Aug. 9, 1992; minimum, 0.0°C, many days during the winter months.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 1,750 microsiemens, Dec. 30; minimum, 450 microsiemens, June 24-25.

WATER TEMPERATURE: Maximum, 28.1°C, July 24; minimum, 0.0°C, many days during winter.

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM @ 25 DEG.C), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
				MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	1230	1170	1200	984	913	946	1360	1320	1340	1430	1410	1420			
2	1170	1140	1160	1060	982	1020	1380	1360	1370	1430	1410	1420			
3	1210	1150	1180	1160	1050	1120	1380	---	---	1430	1410	1420			
4	1220	1200	1210	1230	1150	1190	---	---	---	1430	1400	1420			
5	1240	1200	1220	1210	1170	1200	1370	---	---	1420	1380	1400			
6	1280	1230	1260	1180	1150	1160	1390	1320	1360	1390	1360	1380			
7	1290	1250	1270	1170	1140	1150	1390	1340	1370	1440	1360	1410			
8	1280	1250	1270	1180	1140	1160	1370	1340	1360	1420	1380	1400			
9	1280	1240	1270	1180	1090	1150	1400	1350	1370	1390	1370	1380			
10	1270	1240	1250	1100	1060	1080	1400	1360	1380	1410	1350	1380			
11	1270	1240	1250	1070	1020	1040	1390	1370	1380	1550	1400	1460			
12	1260	1210	1250	1030	1010	1020	1390	1380	1380	1600	1540	1560			
13	1270	1210	1240	1020	971	998	1390	1370	1380	1630	1550	1590			
14	1300	1250	1270	1030	974	992	1390	1370	1370	1570	1490	1540			
15	1330	1280	1300	1130	1030	1080	1390	1370	1380	1490	1430	1460			
16	1320	1290	1300	1200	1110	1180	1390	1360	1380	1440	1380	1410			
17	1320	1260	1290	1200	1150	1190	1450	1370	1410	1390	1310	1360			
18	1310	1270	1290	1230	1110	1160	1540	1420	1470	1430	1280	1330			
19	1350	1310	1330	1190	1100	1140	1670	1540	1580	1330	1260	1300			
20	1370	1340	1350	1180	1110	1150	1560	1460	1530	1310	1250	1290			
21	1400	1340	1360	1220	1180	1200	1460	1370	1430	1300	1240	1260			
22	1400	1350	1370	1250	1210	1240	1380	1310	1340	1330	1230	1290			
23	1370	1330	1350	1270	1230	1250	1310	1270	1300	1670	1250	1380			
24	1340	1310	1330	1260	1220	1250	1350	1310	1330	1280	1120	1170			
25	1320	1170	1250	1280	1250	1260	1340	1280	1310	1160	1110	1130			
26	1180	1010	1080	1280	1230	1260	1370	1310	1340	1160	1090	1120			
27	1010	942	959	1290	1240	1270	1360	1300	1340	1130	1100	1120			
28	946	864	910	1290	1250	1270	1390	1320	1370	1110	1090	1100			
29	943	866	900	1350	1290	1320	1380	1280	1330	1100	1070	1090			
30	976	882	944	1350	1320	1330	1750	1290	1430	1100	1080	1090			
31	964	918	941	---	---	---	1450	1400	1420	1100	1070	1090			
MONTH	1400	864	1210	1350	913	1160	---	---	---	1670	1070	1330			

ARKANSAS RIVER BASIN

07119700 ARKANSAS RIVER AT CATLIN DAM NEAR FOWLER, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	21.4	14.2	17.7	12.0	5.6	8.3	5.7	.7	3.1	7.5	3.6	5.5
2	19.4	14.0	16.5	12.7	5.4	8.8	5.4	2.0	3.4	8.3	3.4	5.8
3	18.8	11.7	15.1	12.2	6.2	9.3	5.0	.6	2.6	9.0	5.2	7.0
4	20.7	13.1	16.6	15.2	9.1	11.6	4.1	.7	2.4	7.1	3.2	5.3
5	21.3	14.3	17.6	13.9	7.7	10.4	4.2	.6	2.3	3.2	.9	1.9
6	20.7	14.0	17.3	10.3	6.4	8.3	4.0	2.3	3.2	4.3	.2	1.6
7	18.9	14.1	16.3	9.4	4.2	6.8	5.3	.9	2.9	.5	.1	.2
8	19.6	12.2	15.8	8.9	3.4	6.1	5.5	1.3	3.5	.3	.1	.2
9	19.4	12.1	15.6	9.8	4.1	6.8	7.7	2.4	4.9	.9	.1	.3
10	19.7	12.1	15.8	10.3	5.0	7.5	9.3	5.5	6.9	.3	.1	.2
11	20.6	12.5	16.4	9.6	5.2	7.2	8.1	4.9	6.3	.9	.2	.5
12	20.6	12.7	16.6	8.5	5.3	6.6	7.0	2.7	4.8	.9	.2	.3
13	20.9	12.9	16.8	8.9	5.1	6.9	6.6	2.3	4.4	.5	.2	.3
14	20.0	12.4	16.1	7.4	6.3	6.9	5.7	1.7	3.4	.6	.1	.3
15	20.1	12.3	16.0	7.1	5.6	6.2	2.8	.0	1.1	.6	.2	.4
16	19.2	11.1	14.8	5.7	3.3	5.0	1.4	.0	.3	.3	.0	.1
17	14.8	9.4	12.0	5.0	1.5	3.4	.0	.0	.0	.2	.0	.0
18	15.2	5.9	10.4	7.8	2.9	5.3	.0	.0	.0	.6	.0	.3
19	13.5	9.0	11.1	11.7	5.7	8.6	.0	.0	.0	.6	.0	.2
20	14.8	8.6	11.1	12.2	7.7	9.7	.0	.0	.0	.7	.0	.2
21	9.2	5.4	7.7	8.7	6.7	7.5	.0	.0	.0	1.3	.0	.4
22	11.8	2.1	6.9	9.0	6.3	7.4	.0	.0	.0	2.2	.1	.7
23	12.3	5.2	8.8	7.6	3.4	5.6	.0	.0	.0	3.9	.0	1.2
24	13.7	6.5	10.1	5.9	2.0	3.9	.0	.0	.0	4.2	.3	2.1
25	12.8	8.3	10.6	6.7	2.4	4.4	.0	.0	.0	2.7	.1	1.6
26	11.1	6.8	8.8	4.2	2.3	3.2	.0	.0	.0	4.1	.3	2.1
27	7.8	5.5	6.8	5.2	1.8	3.0	.1	.0	.0	2.7	.1	1.6
28	11.7	5.8	8.5	3.5	.1	1.9	.2	.0	.0	3.9	.1	1.7
29	11.3	6.8	9.2	6.9	2.7	4.4	2.1	.0	.4	6.4	3.2	4.4
30	13.0	6.5	9.4	5.9	2.9	4.4	4.2	.0	2.0	6.3	1.5	4.0
31	8.2	6.0	6.7	---	---	---	7.8	3.4	5.3	8.3	3.9	6.1
MONTH	21.4	2.1	12.9	15.2	.1	6.5	9.3	.0	2.0	9.0	.0	1.8
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	9.2	6.7	7.7	9.2	3.1	5.8	13.5	9.7	11.6	16.2	12.3	14.2
2	7.6	5.1	6.5	10.3	3.1	6.6	11.5	7.3	8.8	13.7	11.3	12.6
3	8.1	3.8	5.7	11.8	5.0	8.0	10.8	6.3	8.7	15.9	9.9	12.9
4	6.9	1.9	4.1	9.0	3.9	6.2	14.1	9.2	11.5	18.3	12.5	15.4
5	6.1	.9	3.3	9.3	2.1	5.6	11.6	7.3	9.7	20.2	14.3	17.1
6	2.9	1.2	2.0	10.9	3.7	7.3	10.1	4.9	7.7	22.1	15.2	18.2
7	5.3	.3	2.5	12.4	5.1	8.7	12.8	7.2	10.2	19.1	14.8	16.9
8	6.1	.0	2.6	13.4	6.1	9.7	11.1	6.6	8.5	16.3	12.6	14.1
9	8.7	1.4	4.6	13.0	7.0	9.9	11.9	5.3	9.2	18.4	11.5	14.8
10	7.3	.8	4.3	13.9	6.1	10.0	10.0	2.9	6.2	20.3	14.2	17.3
11	6.5	1.5	4.0	14.3	7.2	10.7	7.4	2.1	4.2	19.3	15.3	17.3
12	8.5	2.1	4.8	14.8	8.3	11.4	8.5	1.4	4.9	19.1	13.6	16.4
13	7.2	1.3	3.9	12.0	8.1	10.3	11.3	5.2	8.1	18.8	14.4	16.9
14	8.6	.3	4.2	8.1	4.0	6.3	13.1	7.5	10.4	19.2	14.8	17.1
15	10.3	1.6	5.6	7.9	1.3	4.7	15.7	9.2	12.3	20.3	14.8	17.7
16	11.2	2.6	6.7	11.5	3.4	7.5	18.1	11.7	14.6	21.5	15.9	18.8
17	12.1	5.3	8.2	12.3	7.9	9.9	19.2	12.0	15.5	21.3	16.8	19.3
18	13.4	4.8	8.7	13.9	8.5	11.2	17.8	12.8	15.5	19.4	16.1	17.6
19	12.0	7.3	9.4	14.1	8.4	11.3	19.5	12.9	16.1	16.6	13.6	15.0
20	10.1	4.8	7.1	15.3	10.1	12.7	19.7	14.3	17.0	18.2	12.9	15.6
21	7.9	3.4	5.2	14.1	10.6	12.4	17.4	13.9	15.7	19.1	15.7	17.4
22	8.4	.8	4.5	14.6	9.2	11.9	15.9	10.7	13.3	18.5	15.3	16.9
23	4.9	.1	2.4	12.4	9.8	11.2	15.0	11.6	13.4	19.8	15.2	17.5
24	5.6	.0	2.3	11.4	7.7	9.7	---	---	---	18.8	15.2	17.1
25	7.8	1.5	4.3	10.9	5.4	8.2	---	---	---	18.6	14.0	16.2
26	6.6	2.6	4.3	12.2	6.7	9.7	---	---	---	18.7	14.5	16.6
27	5.0	1.0	3.3	12.6	8.7	10.8	---	---	---	17.3	14.1	15.9
28	8.2	2.8	5.2	12.8	8.4	10.7	---	---	---	19.2	14.0	16.5
29	---	---	---	11.0	7.4	8.9	---	---	---	18.8	15.7	17.5
30	---	---	---	10.9	5.5	8.3	18.2	13.4	15.5	21.7	16.4	18.7
31	---	---	---	12.8	8.0	10.6	---	---	---	22.3	17.8	19.7
MONTH	13.4	.0	4.9	15.3	1.3	9.2	---	---	---	22.3	9.9	16.6

07121500 TIMPAS CREEK AT MOUTH, NEAR SWINK, CO

LOCATION.--Lat 38°00'11", long 103°39'20", in NW¼SW¼ sec.35, T.23 S., R.56 W., Otero County, Hydrologic Unit 11020005, on left bank at downstream side (revised) of 23rd Rd. Bridge, 1.7 mi southwest of Swink, and 2.9 mi upstream from mouth.

DRAINAGE AREA.--496 mi².

PERIOD OF RECORD.--January 1922 to September 1925, March 1968 to current year.

REVISED RECORDS.--WDR CO 76-1: 1975.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 4,120 ft above sea level, from topographic map. Jan. 1922 to Sept. 1925 at several sites downstream at different datum. Mar. 1968 to May 29, 1975, at site 140 ft downstream at datum 0.13 ft lower.

REMARKS.--Records good except for estimated daily discharges, which are poor. Natural flow of stream affected by minor diversions upstream from station for irrigation, water imported from Arkansas River and Crooked Arroyo for irrigation upstream from station, and return flow from irrigated areas. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge since at least 1922, 21,400 ft³/s, June 17, 1965.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997 DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	122	164	28	20	17	15	35	104	61	66	e75	98
2	114	166	27	19	17	14	35	115	69	63	e75	94
3	116	169	26	19	17	14	40	76	65	60	e70	70
4	114	157	25	19	16	14	41	102	68	60	e340	68
5	116	143	24	19	16	22	49	98	72	70	e300	67
6	120	135	25	19	17	99	78	84	75	76	e250	76
7	110	135	25	19	16	95	49	93	193	77	e225	140
8	103	133	25	19	16	93	46	67	139	71	e180	116
9	106	131	24	19	16	84	45	60	164	72	151	117
10	103	128	24	19	16	75	66	59	175	70	247	100
11	108	116	22	19	16	75	140	67	176	67	e566	86
12	115	119	22	19	15	76	150	72	170	63	e1270	97
13	120	126	22	18	15	88	74	65	170	71	e100	90
14	108	142	22	18	15	74	53	64	180	70	e70	88
15	100	131	21	18	15	68	44	64	161	68	e65	65
16	106	82	22	18	15	40	44	59	144	63	e70	61
17	99	79	22	18	14	39	41	59	113	63	e80	64
18	107	64	22	18	14	51	37	63	79	63	e85	64
19	112	45	22	17	15	52	36	69	69	67	e80	66
20	119	40	21	17	15	46	38	62	73	73	e70	64
21	115	38	21	17	15	37	39	73	67	74	72	68
22	117	37	21	17	15	45	42	79	68	69	76	58
23	126	35	21	17	15	40	41	72	63	68	74	54
24	133	35	21	17	16	44	121	74	62	66	72	51
25	112	33	21	17	15	46	170	75	66	63	76	53
26	173	32	21	17	15	42	133	80	68	72	72	55
27	222	31	20	17	15	40	118	72	65	70	68	67
28	241	30	20	17	14	39	102	64	71	79	75	98
29	232	30	20	17	---	39	91	64	78	223	78	92
30	193	29	20	17	---	44	95	80	75	e137	74	76
31	187	---	20	18	---	48	---	69	---	e100	84	---
TOTAL	4069	2735	697	559	433	1598	2093	2304	3099	2374	5190	2363
MEAN	131	91.2	22.5	18.0	15.5	51.5	69.8	74.3	103	76.6	167	78.8
MAX	241	169	28	20	17	99	170	115	193	223	1270	140
MIN	99	29	20	17	14	14	35	59	61	60	65	51
AC-FT	8070	5420	1380	1110	859	3170	4150	4570	6150	4710	10290	4690

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1922 - 1997, BY WATER YEAR (WY)

MEAN	89.8	78.8	36.2	24.0	32.3	61.9	63.5	74.5	83.9	74.0	87.2	73.1
MAX	265	210	109	60.4	84.6	201	170	187	318	200	401	159
(WY)	1924	1924	1971	1923	1924	1924	1924	1995	1923	1923	1923	1986
MIN	27.4	30.4	9.80	7.87	11.4	24.8	11.0	14.0	24.5	18.1	15.8	15.7
(WY)	1979	1992	1979	1975	1976	1981	1978	1981	1981	1974	1974	1974

SUMMARY STATISTICS

FOR 1996 CALENDAR YEAR

FOR 1997 WATER YEAR

WATER YEARS 1922 - 1997

ANNUAL TOTAL	28431	27514										
ANNUAL MEAN	77.7	75.4								65.2		
HIGHEST ANNUAL MEAN										130		1923
LOWEST ANNUAL MEAN										25.2		1975
HIGHEST DAILY MEAN	546			Aug 28		e ₁₂₇₀	Aug 12			2670		Aug 17 1923
LOWEST DAILY MEAN	a ₁₄			Feb 14		b ₁₄	Feb 17			3.3		Aug 7 1977
ANNUAL SEVEN-DAY MINIMUM	15			Feb 9		c ₁₄	Feb 26			5.7		Dec 16 1978
INSTANTANEOUS PEAK FLOW						c ₃₇₀₀	Aug 11			d ₁₂₃₀₀		Jul 10 1978
INSTANTANEOUS PEAK STAGE						f _{16.10}	Aug 11			f _{21.11}		Jul 10 1978
ANNUAL RUNOFF (AC-FT)	56390	54570								47230		
10 PERCENT EXCEEDS	131	138								127		
50 PERCENT EXCEEDS	67	67								49		
90 PERCENT EXCEEDS	18	17								15		

e-Estimated.
a-Also occurred Feb 15.
b-Also occurred Feb 18, 28, and Mar 2-4.
c-From rating curve extended above 1800 ft³/s, on basis of slope-area measurement of peak flow.
d-From rating curve extended above 250 ft³/s, on basis of contracted-opening measurement of peak flow.
f-From floodmark.

07123000 ARKANSAS RIVER AT LA JUNTA, CO

LOCATION.--Lat 37°59'26", long 103°31'55", in SE¼NE¼ 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 mi², of which 115 mi² 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, and nonrecording gage read twice daily. 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.--Records fair except for estimated daily discharges, which are poor. 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.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	75	150	175	105	293	586	57	70	384	210	247	37
2	72	79	175	106	405	609	46	103	567	111	70	34
3	79	64	172	100	419	624	50	84	924	73	48	40
4	70	54	175	104	367	596	50	176	1100	61	76	42
5	72	54	151	98	290	489	54	103	e2200	85	545	38
6	72	52	127	102	266	339	57	86	e2300	115	e2020	50
7	68	126	121	96	374	332	58	82	e2500	75	e2900	187
8	70	98	117	96	346	299	55	90	e3700	278	e2000	180
9	70	94	122	212	329	283	57	93	e4500	335	e800	173
10	70	88	140	228	309	273	58	116	e4800	66	e500	69
11	74	85	138	172	301	268	54	78	e3800	51	e1300	60
12	75	88	140	256	306	275	45	129	e4200	48	e3620	54
13	75	101	145	287	288	301	46	100	e3700	45	e3800	60
14	76	114	139	265	288	310	56	74	e3200	143	e2490	59
15	74	518	129	259	278	92	50	75	e2600	58	e3300	62
16	73	293	130	253	275	66	51	75	e1830	32	e2450	57
17	67	276	105	233	290	53	58	125	e2300	27	e2000	51
18	67	260	224	255	290	65	52	241	e2100	32	e1450	42
19	70	252	264	267	273	51	48	310	e2100	29	e844	40
20	68	229	255	243	282	51	48	244	e2550	48	e582	49
21	64	185	250	121	289	67	47	244	e2800	110	e550	60
22	65	177	237	96	318	47	45	480	e2900	96	e264	81
23	67	168	222	90	342	46	46	440	e2900	50	e250	78
24	68	175	251	94	426	44	269	550	e2750	65	e160	76
25	72	175	128	99	458	48	164	644	e2550	108	e106	82
26	70	184	111	88	467	58	248	658	e2400	126	e90	78
27	65	179	117	80	529	51	125	590	e2000	55	74	71
28	68	178	110	100	563	45	92	644	e1600	54	85	53
29	136	184	110	108	---	48	66	620	e1200	313	45	50
30	228	177	109	127	---	53	92	391	e700	216	48	47
31	235	---	108	129	---	61	---	194	---	72	45	---
TOTAL	2575	4857	4897	4869	9661	6530	2244	7909	73155	3187	32759	2060
MEAN	83.1	162	158	157	345	211	74.8	255	2439	103	1057	68.7
MAX	235	518	264	287	563	624	269	658	4800	335	3800	187
MIN	64	52	105	80	266	44	45	70	384	27	45	34
AC-FT	5110	9630	9710	9660	19160	12950	4450	15690	145100	6320	64980	4090

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 1997, 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	180	118	120	148	162	101	117	512	968	579	320	132												
MAX (WY)	1189	545	335	453	620	400	770	3082	4307	3634	1345	464												
MIN (WY)	1985	1987	1987	1987	1985	1987	1987	1987	1995	1995	1984	1982												
MIN (WY)	8.82	4.21	13.5	9.50	6.37	19.6	6.67	21.9	103	80.2	66.2	9.59												
(WY)	1978	1979	1976	1976	1976	1978	1978	1981	1988	1981	1987	1977												

SUMMARY STATISTICS

	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1975 - 1997	
ANNUAL TOTAL	69836		154703			
ANNUAL MEAN	191		424		a 289	
HIGHEST ANNUAL MEAN					832	
LOWEST ANNUAL MEAN					107	
HIGHEST DAILY MEAN	1390	Jul 13	e4800	Jun 10	b 9790	Aug 22 1984
LOWEST DAILY MEAN	24	Aug 12	27	Jul 17	c 2.5	Dec 8 1978
ANNUAL SEVEN-DAY MINIMUM	28	Aug 7	41	Aug 30	d 3.0	Dec 4 1978
INSTANTANEOUS PEAK FLOW			Not determined		d 18000	Aug 22 1984
INSTANTANEOUS PEAK STAGE			Not determined		f 11.09	Aug 22 1984
ANNUAL RUNOFF (AC-FT)	138500		306900		209100	
10 PERCENT EXCEEDS	414		1140		615	
50 PERCENT EXCEEDS	115		121		106	
90 PERCENT EXCEEDS	47		50		21	

e-Estimated.

a-Average discharge for 61 years (water years 1913-73), 244 ft³/s; 176800 acre-ft/yr, prior to completion of Pueblo Dam.

b-Maximum daily discharge for period of record, 61100 ft³/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 ft³/s, Jun 4, 1921, gage height, 18.40 ft, site and datum then in use, from rating curve extended above 15000 ft³/s, on basis of slope-area measurement of peak flow.

f-Maximum gage height for statistical period, 12.12 ft, Jun 4, 1995.

07124000 ARKANSAS RIVER AT LAS ANIMAS, CO

LOCATION.--Lat 38°04'51", long 103°13'09", in SE¹/₄NE¹/₄ 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 mi², of which 441 mi² 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.

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 estimated daily discharges, which are poor. Natural flow of stream affected by transmountain diversions, storage reservoirs, power developments, ground-water withdrawals and diversions for irrigation of about 412,000 acres, 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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	131	176	196	166	203	588	58	79	165	735	122	104
2	112	154	190	159	440	591	57	74	350	351	125	107
3	102	120	179	162	510	591	61	86	512	310	97	112
4	98	106	168	155	534	563	66	87	1120	262	99	122
5	95	91	174	148	450	519	58	128	996	190	105	120
6	96	89	181	149	378	410	59	93	1040	132	780	112
7	88	85	183	145	384	353	58	83	1620	126	3720	120
8	87	82	175	147	426	353	57	76	2120	124	2800	181
9	84	82	180	e160	406	316	57	71	2670	328	1390	181
10	81	84	178	e150	373	297	58	72	3360	184	531	185
11	80	84	182	e140	341	289	59	83	3350	104	794	125
12	79	83	168	e130	327	282	59	71	3940	99	3540	115
13	79	84	162	e130	333	288	58	80	3460	87	4810	103
14	79	103	162	e130	297	298	57	69	3650	83	3670	101
15	76	253	157	e140	304	238	57	68	3320	90	3340	98
16	74	355	158	e140	292	119	54	71	3090	84	2900	95
17	71	282	e150	e150	288	95	51	70	2960	77	2430	93
18	71	294	e130	e160	288	80	51	73	3450	69	2000	94
19	72	282	e130	e170	283	74	52	154	4010	72	1590	100
20	75	274	e140	e180	266	67	48	242	3880	77	1440	103
21	73	258	e145	e182	272	65	49	163	3810	78	820	104
22	73	237	e150	186	287	66	50	234	3540	81	457	106
23	76	239	e160	195	315	62	52	333	3720	83	265	108
24	81	226	155	198	368	62	69	316	3780	82	200	109
25	85	221	155	204	461	58	243	549	3850	80	639	110
26	88	219	155	196	475	65	141	595	3770	76	204	116
27	86	218	149	186	497	67	190	657	2990	84	138	111
28	120	217	165	186	552	57	112	587	2630	86	128	98
29	209	217	165	192	---	53	95	653	1980	115	122	93
30	287	214	158	196	---	57	79	534	1310	268	110	92
31	230	---	164	207	---	61	---	285	---	138	106	---
TOTAL	3138	5429	5064	5139	10350	7084	2215	6736	80443	4755	39472	3418
MEAN	101	181	163	166	370	229	73.8	217	2681	153	1273	114
MAX	287	355	196	207	552	591	243	657	4010	735	4810	185
MIN	71	82	130	130	203	53	48	68	165	69	97	92
AC-FT	6220	10770	10040	10190	20530	14050	4390	13360	159600	9430	78290	6780

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 1997, 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	161	123	132	164	196	114	112	496	950	533	284	118												
MAX	1092	532	378	453	761	405	877	3205	4263	3339	1273	373												
(WY)	1985	1987	1987	1985	1985	1987	1987	1987	1995	1995	1997	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												

SUMMARY STATISTICS FOR 1996 CALENDAR YEAR FOR 1997 WATER YEAR WATER YEARS 1975 - 1997

ANNUAL TOTAL	79465	173243	
ANNUAL MEAN	217	475	a 282
HIGHEST ANNUAL MEAN			841 1995
LOWEST ANNUAL MEAN			b 84.1 1976
HIGHEST DAILY MEAN	2020 Jul 14	4810 Aug 13	b 5960 Jul 21 1995
LOWEST DAILY MEAN	37 May 19	48 Apr 20	c 3.0 Nov 30 1974
ANNUAL SEVEN-DAY MINIMUM	43 Apr 24	50 Apr 17	d 4.1 Sep 26 1977
INSTANTANEOUS PEAK FLOW		5350 Aug 13	d 7150 Aug 24 1984
INSTANTANEOUS PEAK STAGE		9.08 Aug 13	f 7.38 Aug 24 1984
ANNUAL RUNOFF (AC-FT)	157600	343600	204400
10 PERCENT EXCEEDS	481	1200	551
50 PERCENT EXCEEDS	136	154	116
90 PERCENT EXCEEDS	57	69	15

e-Estimated.

a-Average discharge for 34 years (water years 1940-73), 203 ft³/s; 147100 acre-ft/yr, prior to completion of Pueblo Dam.

b-Maximum daily discharge for period of record, 25800 ft³/s, May 20, 1955.

c-Minimum daily discharge for period of record, 0.9 ft³/s, Jul 31, Aug 1 and 3, 1964.

d-Maximum discharge and stage for period of record, 44000 ft³/s, May 20, 1955, gage height, 15.03 ft, site and datum then in use, from rating curve extended above 24000 ft³/s, on basis of slope-area measurement of peak flow..

f-Maximum gage height for statistical period, 9.08 ft, Aug 13, 1997.

**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. Records for daily water temperature are good. Daily data that are not published are either missing or of unacceptable quality.

EXTREMES FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 7,950 microsiemens, Jan. 22, 1986; minimum, 310 microsiemens, July 21, 1990.

WATER TEMPERATURE: Maximum, 34.5°C, Aug. 18, 1986; minimum, 0.0°C, many days during most winters.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 5,840 microsiemens, May 14; minimum, 593 microsiemens, Aug. 7.

WATER TEMPERATURE: Maximum, 32.2°C, July 23; minimum, 0.0°C, many days during winter.

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM @ 25 DEG. C), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	3160	2820	3030	2420	2240	2360	2810	2750	2780	2790	2720	2760
2	3460	3120	3260	2660	2370	2480	2800	2750	2780	2750	2720	2730
3	3570	3460	3520	2840	2620	2720	2880	2730	2790	2770	2700	2730
4	3520	3280	3420	3040	2830	2910	2860	2780	2820	2820	2740	2780
5	3290	3210	3250	3230	3040	3130	2900	2750	2810	2800	2740	2770
6	3370	3170	3280	3290	3100	3180	2890	2790	2840	2760	2740	2750
7	3640	3360	3510	3470	3290	3380	2840	2760	2800	2810	2670	2740
8	3720	3590	3660	3430	3310	3380	2830	2790	2810	2870	2700	2780
9	3770	3600	3690	3380	3260	3320	2830	2780	2810	2880	2620	2750
10	3820	3610	3750	3290	3180	3240	2840	2780	2810	---	---	---
11	3810	3730	3780	3300	3190	3240	2850	2810	2830	---	---	---
12	3850	3730	3810	3280	3190	3240	2880	2840	2860	---	---	---
13	3810	3760	3790	3240	3140	3200	2860	2840	2850	2250	2050	2200
14	3790	3690	3740	3170	2620	2940	2860	2820	2840	2240	2110	2180
15	3860	3700	3750	2650	1560	2270	2910	2830	2860	2180	2050	2130
16	3880	3760	3810	2090	1570	1790	2880	2810	2840	2130	2030	2090
17	3940	3790	3860	2320	2090	2250	2890	2770	2830	2180	2070	2130
18	3930	3730	3840	2360	2280	2320	3420	2990	3200	2240	2120	2180
19	3840	3750	3780	2430	2290	2370	3490	3300	3400	---	---	---
20	3840	3540	3660	2500	2380	2440	3240	2970	3100	---	---	---
21	3700	3560	3650	2560	2490	2530	2990	2710	2860	2520	2270	2400
22	3700	3520	3610	2640	2550	2620	2740	2640	2690	2630	2460	2520
23	3560	3390	3440	2680	2630	2660	2770	2680	2720	2650	2560	2610
24	3510	3200	3380	2720	2670	2700	2970	2700	2840	2740	2610	2670
25	3270	3040	3180	2710	2690	2700	2900	2740	2820	2710	2570	2660
26	3090	2920	3030	2740	2690	2720	2970	2630	2760	2700	2480	2570
27	3100	2980	3050	2720	2680	2710	2870	2750	2810	2720	2580	2660
28	3060	2250	2780	2750	2690	2720	2810	2670	2710	2820	2610	2710
29	2250	1930	2080	2760	2710	2740	2760	2620	2680	2770	2670	2720
30	1940	1770	1850	2820	2720	2760	2780	2750	2760	2720	2630	2690
31	2240	1920	2020	---	---	---	2790	2750	2770	2640	2450	2560
MONTH	3940	1770	3360	3470	1560	2770	3490	2620	2840	---	---	---

ARKANSAS RIVER BASIN

07124000 ARKANSAS RIVER AT LAS ANIMAS, CO--Continued

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM @ 25 DEG. C), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	2690	2450	2640	1650	1600	1620	3190	2920	3080	4660	3780	4310
2	2450	1540	1740	1630	1550	1590	3170	3120	3150	4270	3980	4110
3	1560	1230	1490	1640	1550	1600	3230	3060	3160	4730	3330	4090
4	1320	1140	1220	1670	1580	1640	3320	3060	3200	4940	3980	4440
5	1260	1160	1200	1710	1650	1680	3320	3270	3290	3980	2760	3040
6	1300	1200	1250	2020	1680	1800	3410	3270	3330	4400	3140	3920
7	---	---	---	2450	1950	2090	3550	3270	3420	4510	3730	4250
8	---	---	---	2010	1910	1940	3590	3280	3440	4820	4200	4560
9	---	---	---	2000	1910	1950	3960	3590	3770	5290	4160	4810
10	---	---	---	2050	1960	2010	4070	3830	3980	4920	4440	4740
11	2150	2120	2140	2050	1980	2020	4050	3850	3980	4880	3790	4190
12	2180	2140	2160	2050	2000	2030	4380	3960	4150	5130	4220	4830
13	2170	2130	2150	2140	2030	2060	4340	3930	4210	4800	3530	4040
14	2230	2140	2180	2140	2000	2050	4420	4260	4350	5840	4340	5160
15	2200	2160	2190	2690	2020	2280	4410	4250	4320	5110	4640	4910
16	2250	2190	2230	3100	2690	2950	4620	4390	4520	4640	4000	4200
17	2250	2210	2230	3130	3090	3110	4880	4620	4760	4290	3830	4110
18	2240	2200	2220	---	---	---	4670	4290	4520	3830	2910	3300
19	2260	2210	2230	3300	3010	3140	4470	3960	4260	2910	1920	2090
20	2310	2250	2280	3560	3150	3410	4480	3720	4310	2020	1860	1940
21	2260	2210	2240	3630	3440	3580	4110	3700	3930	3040	1890	2540
22	2240	2120	2180	3450	3150	3330	4220	3860	4050	2990	1630	2120
23	2140	2020	2090	3680	3440	3520	4060	3550	3930	1640	1480	1580
24	2020	1820	1900	3750	3500	3640	3950	3040	3290	1540	1180	1360
25	1840	1690	1740	3830	3670	3780	4310	1980	2380	1530	1280	1360
26	1770	1690	1730	3820	3590	3660	3640	2560	3090	1440	1260	1350
27	1740	1630	1700	3840	3580	3710	2660	2070	2310	1390	1300	1330
28	1650	1590	1620	3830	3450	3590	3800	2660	3170	1480	1320	1400
29	---	---	---	3540	3450	3500	4000	3180	3710	1460	1370	1420
30	---	---	---	3500	3260	3390	4930	3700	4440	1710	1380	1490
31	---	---	---	3310	3060	3200	---	---	---	2230	1710	1920
MONTH	---	---	---	---	---	---	4930	1980	3720	5840	1180	3190
	JUNE			JULY			AUGUST			SEPTEMBER		
1	2810	2230	2600	---	---	---	4510	2620	3960	4420	4290	4340
2	2250	1690	1900	---	---	---	3390	2540	2940	4330	4180	4250
3	1860	1360	1690	---	---	---	4130	3390	3980	4280	4060	4170
4	1360	1140	1230	---	---	---	4280	4020	4090	4260	3640	4010
5	1220	1070	1110	---	---	---	5020	2630	4410	3640	3420	3540
6	1160	1050	1100	---	---	---	2630	1140	1810	3500	3320	3420
7	1110	1030	1050	---	---	---	1280	593	919	3550	3180	3320
8	1080	1030	1050	3350	3200	3260	1330	633	981	3430	2230	2610
9	1120	945	1030	3220	1630	2200	1950	1310	1570	2730	2430	2590
10	1050	931	990	3400	1740	2560	2480	2000	2240	3020	2410	2660
11	---	---	---	3670	3400	3550	2920	1560	2340	3780	3020	3460
12	---	---	---	3720	3540	3630	1560	897	1110	3680	3500	3610
13	---	---	---	4210	3650	3850	1100	1000	1040	3950	3560	3830
14	---	---	---	4610	4130	4320	1110	1030	1070	3940	3690	3860
15	---	---	---	4270	2970	3710	---	---	---	3950	3660	3800
16	---	---	---	4240	3920	4090	---	---	---	4170	3930	4030
17	916	---	---	---	---	---	---	---	---	4320	4070	4200
18	885	837	849	---	---	---	---	---	---	4950	4250	4540
19	853	809	833	---	---	---	---	---	---	4290	3930	4070
20	925	821	884	---	---	---	---	---	---	3970	3640	3820
21	953	920	937	---	---	---	2000	1840	1920	3920	3530	3670
22	947	922	933	---	3910	---	2280	1860	2080	4050	3800	3940
23	923	898	908	4880	3710	4320	2760	2260	2490	3880	3650	3750
24	908	861	881	4630	4200	4410	3010	2740	2890	3800	3650	3690
25	870	802	838	5160	4190	4510	3030	1670	1880	3750	3590	3690
26	849	761	805	5440	4760	5110	3590	1880	2850	3700	3360	3510
27	919	797	841	5340	3860	4540	4250	3590	4030	3420	3340	3380
28	981	895	926	4220	3910	4120	4320	4210	4250	3790	3420	3620
29	1070	926	993	4840	3840	4340	4750	3710	4190	3770	3430	3620
30	1180	1070	1130	4350	1970	2540	5130	4530	4880	3740	3490	3620
31	---	---	---	3780	2050	2860	4590	4390	4530	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	4950	2230	3690

07124000 ARKANSAS RIVER AT LAS ANIMAS, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	21.8	13.9	17.5	10.8	6.1	8.0	5.5	1.0	3.3	8.3	4.2	6.2
2	17.9	12.8	15.3	11.8	5.7	8.6	5.0	2.1	3.5	9.0	4.3	6.5
3	19.3	10.3	14.4	12.2	6.6	9.4	4.5	.1	2.2	7.5	5.4	6.5
4	20.9	12.3	16.2	14.6	9.2	11.3	4.1	.3	2.1	6.8	3.6	5.3
5	21.8	13.0	17.0	14.8	7.9	10.9	4.1	.1	2.1	3.7	1.3	2.6
6	21.3	13.2	17.0	11.9	7.1	9.2	3.8	2.3	3.2	4.3	.9	2.3
7	17.4	13.6	15.3	11.2	5.3	7.8	5.4	1.5	3.3	3.0	.0	.9
8	20.3	10.8	15.1	10.8	4.0	7.2	6.1	1.6	4.0	2.1	.0	.6
9	20.2	11.2	15.3	11.9	4.8	8.1	7.7	2.9	5.4	4.0	.0	1.2
10	20.7	11.3	15.6	11.6	5.3	8.1	9.1	5.2	7.1	.0	.0	.0
11	21.8	12.2	16.5	10.2	4.9	7.1	9.4	5.5	7.3	.0	.0	.0
12	21.7	12.0	16.5	9.2	4.7	6.5	8.3	4.1	6.3	.0	.0	.0
13	21.1	12.0	16.2	10.3	4.1	6.7	7.9	3.7	5.8	.0	.0	.0
14	20.5	11.7	15.9	8.3	5.3	6.7	5.7	2.6	4.4	.0	.0	.0
15	20.8	13.0	16.4	7.4	6.0	6.7	3.8	.2	2.0	.0	.0	.0
16	19.9	11.2	15.0	6.0	3.0	4.9	2.6	.0	1.2	.0	.0	.0
17	15.1	9.8	11.9	4.5	1.7	3.2	.3	.0	.0	.0	.0	.0
18	16.0	7.1	11.2	7.0	2.7	4.9	.1	.0	.0	---	.0	---
19	15.7	9.4	12.1	10.5	5.4	7.9	.0	.0	.0	---	---	---
20	15.9	9.5	12.1	11.8	7.8	9.6	.0	.0	.0	---	---	---
21	10.1	6.4	8.3	9.2	6.8	7.7	.1	.0	.0	4.1	.0	1.7
22	12.4	3.9	8.0	8.3	6.7	7.4	1.4	.0	.4	3.6	.3	2.1
23	13.8	5.9	9.7	7.5	3.8	6.2	2.2	.0	.6	5.9	1.0	3.3
24	14.9	7.0	10.7	5.7	2.2	3.8	2.5	.0	.7	6.1	1.7	3.8
25	13.4	8.0	10.7	6.2	2.4	4.1	2.7	.0	.8	4.7	.6	2.6
26	11.3	7.7	9.7	3.9	1.9	2.8	.9	.0	.3	5.4	.5	2.8
27	9.6	7.5	8.6	4.8	1.9	3.1	4.7	.0	2.2	2.9	.4	1.7
28	11.7	6.4	9.2	5.3	.9	3.3	5.4	1.7	3.5	5.1	.0	2.1
29	11.4	7.8	9.6	7.8	4.2	5.8	5.4	1.3	3.5	8.0	3.1	5.0
30	11.7	7.5	9.3	5.9	3.0	4.9	6.6	2.7	4.7	8.2	2.2	5.2
31	8.1	6.2	7.0	---	---	---	8.7	4.5	6.5	9.5	4.1	6.7
MONTH	21.8	3.9	13.0	14.8	.9	6.7	9.4	.0	2.8	---	---	---
	FEBRUARY			MARCH			APRIL			MAY		
1	10.0	6.4	8.0	7.8	3.9	5.6	18.4	7.4	12.4	19.2	10.0	14.0
2	7.7	5.1	6.4	8.6	4.1	6.2	10.7	6.9	8.8	18.4	8.9	12.8
3	7.8	4.9	6.2	10.0	5.5	7.6	15.5	7.0	11.0	20.7	7.5	13.7
4	6.2	3.3	4.6	8.6	5.8	7.1	18.7	9.5	13.3	23.7	10.4	16.5
5	4.5	1.7	3.2	8.3	4.3	6.3	12.7	6.1	8.9	23.0	13.5	17.7
6	3.8	1.9	2.8	10.1	4.5	7.2	16.4	4.0	9.6	25.4	13.4	18.3
7	4.3	1.3	2.6	11.1	5.8	8.4	18.0	4.8	10.6	22.0	12.5	17.1
8	4.3	.4	2.3	11.9	6.7	9.2	10.7	4.3	7.0	15.9	12.4	14.1
9	6.2	2.6	4.2	12.6	7.6	9.9	16.6	3.3	8.9	23.1	9.7	15.8
10	5.9	2.4	4.1	13.5	7.3	10.3	7.4	2.4	4.6	25.0	10.8	17.3
11	4.7	2.2	3.4	13.6	7.9	10.7	9.9	1.2	4.8	21.9	12.2	16.3
12	5.8	2.4	3.8	14.4	8.6	11.4	11.4	.5	5.6	23.5	11.0	16.5
13	4.4	2.4	3.3	11.6	7.9	10.0	16.9	1.9	8.7	24.1	12.0	17.6
14	5.9	1.0	3.4	7.9	4.0	6.5	17.6	4.4	10.7	23.6	12.3	17.3
15	7.7	2.6	4.9	8.4	1.6	4.9	20.5	5.8	12.5	25.5	12.5	18.7
16	9.1	3.7	6.3	11.1	3.7	7.1	21.9	8.6	14.5	27.9	13.6	20.3
17	10.4	6.1	8.1	12.7	6.0	9.2	23.5	8.6	15.3	28.6	15.3	21.3
18	11.7	6.6	9.0	16.6	6.7	11.1	20.8	9.4	14.8	26.5	15.0	19.9
19	11.0	8.3	9.4	18.1	5.7	11.4	23.3	9.4	15.7	19.3	15.1	16.6
20	9.7	6.2	7.9	19.8	7.5	13.1	23.7	11.1	16.8	21.5	13.9	17.4
21	7.0	4.5	6.0	17.0	7.9	11.9	21.0	11.3	15.1	23.4	15.8	19.0
22	7.2	2.2	4.7	18.6	7.0	12.2	18.1	9.8	13.3	21.3	15.5	18.2
23	5.2	.9	3.0	14.8	8.2	11.0	20.2	9.0	13.7	23.1	17.0	19.8
24	3.3	.0	1.6	15.4	6.9	10.1	12.2	7.5	9.1	23.3	17.7	20.2
25	6.0	2.2	3.8	16.3	4.8	9.9	9.2	7.2	8.1	21.5	17.2	19.0
26	4.4	2.7	3.7	18.1	5.4	11.2	14.9	6.7	10.2	21.1	17.2	18.9
27	4.7	.9	3.0	19.1	7.5	12.5	18.7	8.6	13.1	19.4	15.9	17.5
28	6.2	3.0	4.5	18.7	6.5	11.5	20.9	11.2	15.3	21.2	15.6	18.1
29	---	---	---	10.6	6.2	8.4	20.6	10.9	15.5	19.9	17.5	18.7
30	---	---	---	17.4	3.7	10.0	22.3	11.0	15.9	21.9	16.9	19.1
31	---	---	---	18.5	5.8	11.4	---	---	---	26.0	17.5	21.3
MONTH	11.7	.0	4.8	19.8	1.6	9.5	23.7	.5	11.5	28.6	7.5	17.7

07124200 PURGATOIRE RIVER AT MADRID, CO

LOCATION (REVISED).--Lat 37°07'46", long 104°38'20", in SW¼NE¼ 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 mi².

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 800 ft³/s, and estimated daily discharges, which are poor. Diversions for irrigation of about 6,000 acres upstream from station. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	23	e15	e25	e21	16	30	e111	e305	e170	e160	70
2	22	20	e16	e24	e20	17	29	e106	e380	e160	e210	62
3	22	19	e17	e24	e18	19	29	e99	e410	138	e170	68
4	31	20	e18	e21	14	18	29	e92	e455	126	e290	72
5	29	21	e20	e20	15	17	27	e92	e500	122	e390	71
6	25	21	e19	e18	e15	16	22	e105	e485	106	e240	67
7	23	20	e20	e15	e15	18	22	e110	e500	100	e270	67
8	22	18	e21	e16	e16	19	24	e115	e480	94	e240	57
9	21	23	e20	e16	e17	20	24	e124	e440	82	e360	81
10	21	21	21	e17	e17	20	23	e120	e400	77	e380	76
11	20	20	18	e15	e16	20	e23	e115	e390	82	219	68
12	18	20	e17	e14	e17	21	e24	e160	e350	78	173	56
13	18	19	e17	e14	e15	23	25	e166	e340	78	160	52
14	18	19	e16	e15	e16	23	33	e172	e320	71	141	50
15	18	19	e15	e16	e17	22	30	e180	e330	70	128	47
16	17	18	e15	e15	18	21	36	e210	e360	65	116	45
17	17	18	e13	e14	19	22	36	e220	e340	64	108	44
18	17	19	e11	e15	16	24	37	e270	e310	63	103	43
19	17	20	e12	e15	16	22	40	e320	e300	e270	92	43
20	17	20	e14	e16	15	23	42	e400	e310	e110	85	47
21	22	18	e15	e16	15	27	46	e520	e290	e95	81	68
22	18	18	e16	e18	13	33	57	e520	e310	e130	75	62
23	23	18	e15	e18	e14	33	53	e500	e290	e95	115	59
24	24	18	e16	e17	e14	32	62	e440	e260	e110	74	61
25	22	16	e14	e17	e15	34	67	e400	e225	e87	66	53
26	20	e16	e13	e18	e15	35	57	e350	e220	e80	72	49
27	40	e15	e16	e18	e16	35	60	e300	e210	e230	64	46
28	26	e15	e18	e20	e17	31	85	e240	e200	e270	62	45
29	34	e16	e20	e21	---	30	97	e220	e190	e210	64	45
30	26	e15	e20	e20	---	27	107	e210	e180	e300	68	43
31	25	---	e23	e21	---	34	---	e245	---	e560	80	---
TOTAL	697	563	521	549	452	752	1276	7232	10080	4293	4856	1717
MEAN	22.5	18.8	16.8	17.7	16.1	24.3	42.5	233	336	138	157	57.2
MAX	40	23	23	25	21	35	107	520	500	560	390	81
MIN	17	15	11	14	13	16	22	92	180	63	62	43
AC-FT	1380	1120	1030	1090	897	1490	2530	14340	19990	8520	9630	3410

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1972 - 1997, BY WATER YEAR (WY)

	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
MEAN	29.8	24.4	20.8	18.3	19.5	20.7	46.6	137	206	129	114	57.0														
MAX	78.5	37.7	40.3	36.6	37.2	55.9	204	413	589	313	342	232														
(WY)	1983	1983	1984	1984	1983	1987	1987	1980	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 1996 CALENDAR YEAR

FOR 1997 WATER YEAR

WATER YEARS 1972 - 1997

ANNUAL TOTAL	12082	32988	
ANNUAL MEAN	33.0	90.4	70.8
HIGHEST ANNUAL MEAN			145
LOWEST ANNUAL MEAN			21.6
HIGHEST DAILY MEAN	298	Jul 25	e560 Jul 31
LOWEST DAILY MEAN	e11	Dec 18	e11 Dec 18
ANNUAL SEVEN-DAY MINIMUM	14	Dec 15	14 Dec 15
INSTANTANEOUS PEAK FLOW			4130 Aug 5
INSTANTANEOUS PEAK STAGE			6.91 Aug 5
ANNUAL RUNOFF (AC-FT)	23960	65430	51270
10 PERCENT EXCEEDS	61	290	180
50 PERCENT EXCEEDS	24	30	30
90 PERCENT EXCEEDS	17	16	13

e-Estimated.

a-Also occurred Feb 24 to Mar 2, 1977.

b-From rating curve extended above 300 ft³/s, on basis of timed-drift measurement, and slope-area measurements of peak flow.

c-From floodmarks.

07124400 TRINIDAD LAKE NEAR TRINIDAD, CO

LOCATION.--Lat 37°08'27", long 104°33'03", in NE¼SW¼ 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 mi².

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 except those for Dec. 11 to Jan. 29, which are fair. Reservoir is formed by a rock and earthfill dam completed in 1977. Storage began Aug. 19, 1977. Reservoir area-capacity tables were revised beginning Nov. 1, 1994 after a resurvey by the Corp of Engineers. Total capacity, 184,000 acre-ft, at elevation 6,285.00 ft. Elevation of high crest of spillway, 6,258 ft, with capacity of 120,400 acre-ft. Elevation of notch crest in spillway is 6,243.0 ft, capacity, 92,580 acre-ft. Permanent pool is 4,112 acre-ft at elevation 6,143.1 ft. Elevation of outlet invert is 6,095.0 ft. Reservoir is used for flood control, storage for irrigation, and to help control sedimentation. Figures given are total contents.

COOPERATION.--Capacity tables provided by U.S. Army, Corps of Engineers.

EXTREMES (AT 2400) FOR PERIOD OF RECORD.--Maximum contents, 61,800 acre-ft, Apr. 26, 1983, elevation, 6222.66 ft; no contents prior to Aug. 19, 1977.

EXTREMES (AT 2400) FOR CURRENT YEAR.--Maximum contents, 24,800 acre-ft, Aug. 25-26, maximum elevation, 6,185.34 ft, Aug. 25; minimum contents, 8,070 acre-ft, Oct. 10-11, minimum elevation, 6,155.27 ft.

Capacity table (elevation, in feet, and contents, in acre-feet, effective Nov. 1, 1994)

6,150.0	6,098	6,180.0	21,000
6,155.0	7,956	6,185.0	24,530
6,160.0	10,080	6,190.0	28,370
6,165.0	12,360	6,195.0	32,550
6,170.0	14,940	6,200.0	37,010
6,175.0	17,800	6,205.0	41,820

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY OBSERVATION AT 24:00 VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8110	8960	10000	10800	11800	12700	14200	16300	18500	23600	18200	22900
2	8080	9020	9960	10800	11800	12700	14200	16400	18600	23300	18200	22500
3	8090	9070	9920	10900	11900	12800	14200	16600	18700	23000	18300	22100
4	8120	9120	9860	10900	11900	12800	14200	16700	19000	22700	18500	21800
5	8130	9170	9870	11000	11900	12800	14200	16900	19400	22400	19100	21500
6	8120	9200	9920	11000	11900	12900	14200	17100	19800	22000	19500	21100
7	8110	9240	9960	11000	12000	12900	14200	17200	20200	21600	20000	20700
8	8100	9280	10000	11100	12000	12900	14200	17400	20500	21300	20400	20400
9	8080	9330	10100	11100	12000	13000	14200	17700	20800	20900	21000	20100
10	8070	9380	10100	11100	12100	13000	14200	17800	21200	20500	21800	19800
11	8070	9410	10200	11200	12100	13100	14200	18000	21500	20200	22200	19400
12	8080	9460	10200	11200	12100	13100	14300	18300	21700	19800	22500	19100
13	8080	9500	10300	11200	12200	13100	14300	18600	21900	19400	22800	18900
14	8090	9560	10300	11200	12200	13200	14400	18600	22100	19000	23100	18700
15	8110	9590	10300	11200	12200	13200	14400	18500	22300	18600	23400	18500
16	8120	9610	10300	11300	12300	13300	14500	18400	22500	18300	23500	18200
17	8130	9660	10300	11300	12300	13300	14500	18300	23000	18100	23700	18000
18	8180	9710	10300	11300	12300	13300	14500	18300	23300	17900	23900	17700
19	8220	9760	10300	11300	12400	13400	14600	18200	23400	18100	24000	17400
20	8250	9800	10300	11400	12400	13400	14600	18300	23600	18000	24100	17100
21	8300	9840	e10400	11400	12400	13500	14700	18600	23800	17900	24200	16900
22	8340	9890	e10400	11500	12500	13600	14800	19000	23900	17800	24400	16700
23	8400	9910	e10400	11500	12500	13600	14900	19200	24000	17700	24500	16500
24	8460	9950	10500	11500	12500	13700	15000	19400	24000	17600	24700	16300
25	8520	9990	10500	11500	12500	13800	15200	19500	24000	17500	24800	16000
26	8550	10000	10500	11600	12600	13800	15300	19500	24000	17400	24800	15800
27	8640	10100	10600	e11600	12600	13900	15500	19400	24000	17500	24600	15700
28	8710	10100	10600	11600	12700	14000	15700	19200	24000	17700	24200	15500
29	8790	10100	10700	11700	---	14000	15900	19000	23900	17700	23800	15300
30	8850	10100	10700	11700	---	14100	16100	18700	23800	18000	23500	15200
31	8900	---	10700	11800	---	14100	---	18600	---	18200	23200	---
MAX	8900	10100	10700	11800	12700	14100	16100	19500	24000	23600	24800	22900
MIN	8070	8960	9860	10800	11800	12700	14200	16300	18500	17400	18200	15200

CAL YR 1996 MAX 30900 MIN 8070
WTR YR 1997 MAX 24800 MIN 8070

e-Estimated.

07124410 PURGATOIRE RIVER BELOW TRINIDAD LAKE, CO

LOCATION.--Lat 37°08'37", long 104°32'49", in NE¼SW¼ 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 mi².

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 water-stage recorder in shelter about 1,000 ft downstream.

REMARKS.--Records good except those below 0.5 ft³/s, which are fair. Natural flow of stream affected by diversions upstream from station for irrigation of about 6,000 acres. Flow since Aug. 19, 1977, completely regulated by Trinidad Lake (station 07124400) immediately 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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	34	.47	38	.58	.58	.28	14	9.0	297	248	151	230
2	29	.44	38	.58	.58	.28	21	9.0	298	248	150	233
3	18	.43	39	.58	.51	.23	20	9.0	290	246	150	234
4	16	e.44	40	.58	.51	.20	18	9.0	267	260	135	234
5	24	e.38	15	.58	.51	.20	18	9.0	277	282	98	234
6	28	.38	.33	.58	.51	.21	18	9.0	287	282	8.3	233
7	28	.38	.33	.68	.51	.23	18	13	271	277	6.1	233
8	28	.38	.33	.78	.51	.08	18	11	263	274	6.1	231
9	28	.38	.33	.77	.51	.08	18	11	264	262	4.6	234
10	22	.38	.30	.77	.51	.08	18	11	236	256	4.9	236
11	16	.38	.27	.77	.51	.08	6.6	11	221	255	4.9	235
12	14	.38	.28	.77	.44	.08	.25	15	220	255	4.9	200
13	13	.38	.28	.77	.38	.08	.22	7.8	222	254	4.9	139
14	12	.38	.28	.77	.38	.08	7.9	116	223	254	2.1	139
15	8.5	.38	.28	e.77	.38	.08	15	218	224	252	2.8	139
16	8.2	.38	.28	.77	.34	.06	17	250	217	208	4.1	153
17	3.8	.38	.28	.73	.33	.06	17	256	95	157	4.1	136
18	.59	.38	.28	.68	.33	.06	17	258	146	154	34	162
19	.58	.39	.28	.68	.33	.06	17	297	205	154	27	162
20	.58	.38	.28	.68	.33	.06	17	315	198	154	27	162
21	.58	.38	.28	.68	.29	.06	17	317	208	147	23	161
22	.59	.38	.28	.68	.28	.06	17	318	215	139	21	161
23	.50	.38	.28	.68	.28	.06	17	317	228	139	21	161
24	.44	.38	.28	.68	.28	.06	17	317	235	139	21	161
25	.47	.38	.28	.66	.28	.06	7.3	317	206	142	21	160
26	.44	.38	.31	.58	.28	.06	.27	317	191	148	63	147
27	.44	.38	.33	.58	.28	.06	.27	316	200	148	160	124
28	.45	.38	.38	.58	.28	.06	.23	315	206	148	211	117
29	.44	15	.33	.49	---	.07	.22	312	206	150	232	116
30	.44	37	.44	.99	---	.08	6.7	310	234	150	231	115
31	.45	---	.58	.58	---	.08	---	301	---	151	230	---
TOTAL	337.49	62.91	178.18	21.05	11.24	3.28	378.96	5300.8	6850	6333	2063.8	5382
MEAN	10.9	2.10	5.75	.68	.40	.11	12.6	171	228	204	66.6	179
MAX	34	37	40	.99	.58	.28	21	318	298	282	232	236
MIN	.44	.38	.27	.49	.28	.06	.22	7.8	95	139	2.1	115
AC-FT	669	125	353	42	22	6.5	752	10510	13590	12560	4090	10680

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1977 - 1997, BY WATER YEAR (WY)

	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
MEAN	24.0	6.63	2.78	2.79	3.26	3.40	32.6	174	202	176	148	113
MAX	96.0	25.9	11.9	14.7	13.1	17.8	91.7	375	614	306	285	283
(WY)	1984	1984	1979	1977	1977	1977	1982	1994	1983	1983	1991	1984
MIN	.35	.015	.001	.012	.056	.007	.073	25.5	51.5	40.5	36.1	5.15
(WY)	1989	1982	1995	1985	1984	1982	1984	1980	1977	1977	1977	1987

SUMMARY STATISTICS

FOR 1996 CALENDAR YEAR

FOR 1997 WATER YEAR

WATER YEARS 1977 - 1997

ANNUAL TOTAL	19414.97	26922.71	
ANNUAL MEAN	53.0	73.8	76.9
HIGHEST ANNUAL MEAN			146
LOWEST ANNUAL MEAN			42.8
HIGHEST DAILY MEAN	321	May 24	917
LOWEST DAILY MEAN	a.04	Mar 11	c.00
ANNUAL SEVEN-DAY MINIMUM	.04	Mar 15	.00
INSTANTANEOUS PEAK FLOW			963
INSTANTANEOUS PEAK STAGE			7.89
ANNUAL RUNOFF (AC-FT)	38510	53400	55720
10 PERCENT EXCEEDS	236	251	246
50 PERCENT EXCEEDS	16	8.3	12
90 PERCENT EXCEEDS	.09	.28	.04

e-Estimated.

a-Also occurred Mar 12-13, 15-29, and Mar 31 to Apr 2.

b-Also occurred Mar 17-28.

c-No flow at times most years.

07126140 VAN BREMER ARROYO NEAR TYRONE, CO

LOCATION.--Lat 37°23'58", long 104°06'55", in SW¼SW¼, sec.27, T.30 S., R. 60 W., Las Animas County, Hydrologic Unit 11020010, on left bank, on Pinon Canyon Army Maneuver Site, 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 mi².

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder with satellite telemetry, crest-stage gage, and artificial control. Elevation of gage is 5,310 ft above sea level, from topographic map.

REMARKS.--No estimated daily discharges. Records good except for discharges less than 0.05 ft³/s, which are poor. Natural flow affected by return flow from irrigation and storage in a small channel reservoir upstream.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
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	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.04	.00
3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.43	.00
10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.13	.00
11	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.48	.00
12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.40	.00
13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	.00	.00	.00	.00	.05	.00	.00	.00
23	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
26	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02	.00	.00
29	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	---	.00	.00	.00	.00	.00	.00	.58
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.02	1.48	0.58
MEAN	.000	.000	.000	.000	.000	.000	.000	.000	.002	.001	.048	.019
MAX	.00	.00	.00	.00	.00	.00	.00	.00	.05	.02	.48	.58
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	.00	.00	.00	.00	.00	.00	.1	.04	2.9	1.2

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1985 - 1997, BY WATER YEAR (WY)

	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
MEAN	2.12	.039	.019	.021	.041	.004	.045	1.07	1.48	.56	1.96	2.57	
MAX	17.3	.23	.11	.16	.48	.035	.42	5.11	7.44	2.74	8.30	10.3	
(WY)	1986	1986	1987	1987	1987	1987	1987	1987	1985	1990	1986	1988	
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.001	.000	.000	
(WY)	1990	1990	1990	1989	1989	1989	1989	1990	1990	1997	1996	1991	

SUMMARY STATISTICS

	FOR 1996 CALENDAR YEAR	FOR 1997 WATER YEAR	WATER YEARS 1985 - 1997
ANNUAL TOTAL	91.56	2.13	
ANNUAL MEAN	.25	.006	.77
HIGHEST ANNUAL MEAN			2.53 1986
LOWEST ANNUAL MEAN			.006 1997
HIGHEST DAILY MEAN	* 6.8 May 5	.58 Sep 30	171 Aug 23 1986
LOWEST DAILY MEAN	e, a .00 Jan 1	a .00 Oct 1	a .00 Jul 27 1985
ANNUAL SEVEN-DAY MINIMUM	.00 Jan 1	.00 Oct 1	.00 Aug 5 1985
INSTANTANEOUS PEAK FLOW		5.8 Aug 11	b 511 Aug 23 1986
INSTANTANEOUS PEAK STAGE		5.00 Aug 11	c 10.02 Aug 23 1986
ANNUAL RUNOFF (AC-FT)	182	4.2	557
10 PERCENT EXCEEDS	.16	.00	1.5
50 PERCENT EXCEEDS	.00	.00	.00
90 PERCENT EXCEEDS	.00	.00	.00

*-Also occurred May 6.

e-Estimated.

a-No flow many days most years.

b-From rating curve extended above 45 ft³/s, on basis of flow through culvert computation.

c-Maximum gage height, 11.58 ft, Sep 9, 1995.

**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. Elevation of gage is 5,310 ft above sea level, from topographic map.

REMARKS.--Records good. Records published for period of seasonal operation only (Oct. 1 to Nov. 6 and Apr. 18 to Sept. 30). Daily data that are not published during this period are either missing or of unacceptable quality.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily rainfall during period of seasonal operation, 3.00 inches, Sept. 9, 1995.

EXTREMES FOR CURRENT YEAR.--Maximum daily rainfall during period of seasonal operation, 1.29 inches, Aug. 9.

PRECIPITATION (INCHES), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	---	---	---	---	---	.00	.00	.00	.06	.02
2	.00	.00	---	---	---	---	---	.02	.00	.00	.42	.00
3	.00	.00	---	---	---	---	---	.00	.00	.00	.00	.00
4	.00	.01	---	---	---	---	---	.00	.28	.00	.00	.00
5	.00	.00	---	---	---	---	---	.00	.00	.05	.33	.00
6	.00	e.00	---	---	---	---	---	.00	.53	.10	.03	.12
7	.00	---	---	---	---	---	---	.02	.13	.00	.00	.00
8	.00	---	---	---	---	---	---	.01	.07	.00	.00	.00
9	.00	---	---	---	---	---	---	.00	.18	.00	1.29	.02
10	.00	---	---	---	---	---	---	.00	.30	.00	.19	.00
11	.00	---	---	---	---	---	---	.00	.00	.11	.53	.00
12	.00	---	---	---	---	---	---	.03	.00	.00	.00	.00
13	.00	---	---	---	---	---	---	.00	.03	.00	.06	.00
14	.03	---	---	---	---	---	---	.00	.00	.00	.00	.00
15	.01	---	---	---	---	---	---	.03	.00	.00	.00	.00
16	.00	---	---	---	---	---	---	.00	.22	.00	.00	.00
17	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
18	.00	---	---	---	---	---	e.00	.00	.00	.00	.08	.00
19	.00	---	---	---	---	---	.00	.10	.00	.22	.00	.00
20	.00	---	---	---	---	---	.00	.15	.00	.00	.02	.33
21	.07	---	---	---	---	---	.42	.00	.00	.00	.01	.24
22	.06	---	---	---	---	---	.08	.11	.79	.00	.00	.35
23	.00	---	---	---	---	---	.10	.12	.00	.00	.00	.03
24	.00	---	---	---	---	---	.20	.00	.00	.00	.00	.03
25	.00	---	---	---	---	---	.49	.00	.00	.00	.00	.00
26	.00	---	---	---	---	---	.00	.00	.03	.34	.02	.00
27	.26	---	---	---	---	---	.00	.00	.00	.02	.00	.00
28	.00	---	---	---	---	---	.00	.00	.00	.86	.00	.00
29	.00	---	---	---	---	---	.00	.00	.00	.02	.00	.00
30	.00	---	---	---	---	---	.00	.00	.00	.00	.00	.00
31	.00	---	---	---	---	---	---	.00	---	.00	.04	---
TOTAL	0.43	---	---	---	---	---	---	0.59	2.56	1.72	3.08	1.14

e--Estimated.

07126200 VAN BREMER ARROYO NEAR MODEL, CO

LOCATION.--Lat 37°20'45", long 103°57'27", in sec.13, T.31 S., R.59 W., Las Animas County, Hydrologic Unit 11020010, on right bank 3 mi upstream from mouth, 16 mi east of Model, and 33 mi northeast of Trinidad.

DRAINAGE AREA.--175 mi², of which 11.8 mi² is noncontributing.

WATER-DISCHARGE RECORDS

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

REVISIONS.--WDR CO-84-1: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry and crest-stage gages. Elevation of gage is 4,960 ft above sea level, from topographic map.

REMARKS.--No estimated daily discharges. Records fair, except those for Sept. 4-30, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.14	.20	.21	.20	.20	.16	.11	.10	.07	.04	.10	.11
2	.14	.20	.21	.19	.20	.15	.12	.10	.06	.04	.10	.10
3	.14	.20	.18	.20	.18	.14	.12	.10	.06	.04	4.9	.10
4	.12	.20	.18	.18	.17	.14	.12	.10	.06	.04	.64	.08
5	.12	.20	.18	.19	.17	.14	.12	.10	.06	.04	.24	.10
6	.12	.20	.20	.20	.18	.14	.11	.10	.07	.04	.17	.11
7	.12	.18	.20	.18	.19	.14	.11	.10	.14	.04	.13	.14
8	.12	.18	.19	.18	.18	.14	.11	.10	.08	.04	.10	.12
9	.13	.20	.20	.19	.17	.12	.12	.10	.06	.04	5.0	.16
10	.14	.20	.19	.19	.17	.12	.11	.10	.07	.04	11	.16
11	.14	.20	.17	.17	.17	.13	.12	.10	.06	.04	1.5	.14
12	.14	.20	.17	.17	.17	.13	.12	.10	.05	.04	3.4	.14
13	.14	.20	.17	.17	.18	.13	.12	.10	.04	.04	1.9	.15
14	.14	.20	.17	.17	.18	.12	.12	.08	.04	.04	.50	.17
15	.14	.20	.17	.19	.17	.13	.11	.09	.04	.04	.22	.17
16	.14	.20	.16	.18	.17	.14	.10	.10	.05	.04	.14	.17
17	.13	.20	.18	.18	.17	.13	.11	.08	.05	.04	.12	.15
18	.14	.20	.16	.19	.17	.12	.10	.07	.04	.04	.11	.14
19	.14	.20	.16	.21	.18	.12	.10	.07	.05	.04	.10	.13
20	.15	.20	.17	.21	.16	.12	.10	.08	.05	.04	.10	.14
21	.19	.20	.18	.21	.17	.12	.13	.07	.04	.04	.09	.18
22	.20	.20	.20	.20	.15	.12	.19	.07	.04	.04	.08	.15
23	.20	.20	.20	.20	.17	.12	.13	.08	.04	.04	.08	.14
24	.19	.20	.19	.19	.17	.13	.14	.06	.04	.04	.08	.16
25	.17	.20	.19	.19	.18	.14	.24	.06	.11	.04	.08	.15
26	.17	.20	.19	.21	.19	.14	.16	.06	.07	.04	.08	.15
27	.37	.20	.20	.19	.17	.12	.12	.06	.04	.04	.08	.14
28	.30	.20	.20	.18	.17	.12	.12	.06	.04	10	.08	.14
29	.25	.22	.20	.20	---	.12	.12	.07	.04	.82	.08	.14
30	.19	.23	.19	.19	---	.12	.10	.08	.04	.10	.09	.14
31	.17	---	.19	.20	---	.12	---	.08	---	.08	.10	---
TOTAL	5.09	6.01	5.75	5.90	4.90	4.03	3.70	2.62	1.70	12.08	31.39	4.17
MEAN	.16	.20	.19	.19	.17	.13	.12	.085	.057	.39	1.01	.14
MAX	.37	.23	.21	.21	.20	.16	.24	.10	.14	10	11	.18
MIN	.12	.18	.16	.17	.15	.12	.10	.06	.04	.04	.08	.08
AC-FT	10	12	11	12	9.7	8.0	7.3	5.2	3.4	24	62	8.3

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 1997, BY WATER YEAR (WY)

	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	
MEAN	1.22	.17	.16	.18	.20	.18	.19	3.02	2.16	4.37	8.40	1.96																					
MAX	16.0	.35	.26	.43	.59	.40	.74	30.1	20.6	36.4	104	9.90																					
(WY)	1986	1973	1973	1973	1987	1973	1973	1981	1969	1977	1981	1972																					
MIN	.059	.067	.031	.064	.11	.072	.075	.072	.030	.039	.11	.041																					
(WY)	1992	1984	1984	1984	1992	1979	1979	1992	1968	1978	1991	1991																					

SUMMARY STATISTICS

	FOR 1996 CALENDAR YEAR	FOR 1997 WATER YEAR	WATER YEARS 1966 - 1997
ANNUAL TOTAL	294.52	87.34	
ANNUAL MEAN	.80	.24	1.86
HIGHEST ANNUAL MEAN			12.3
LOWEST ANNUAL MEAN			.11
HIGHEST DAILY MEAN	72 Jul 22	11 Aug 10	802 May 30 1981
LOWEST DAILY MEAN	^a .06 Jul 4	^b .04 Jun 13	^c .00 Jun 7 1968
ANNUAL SEVEN-DAY MINIMUM	.06 Jul 15	.04 Jun 27	^d .00 Jun 7 1968
INSTANTANEOUS PEAK FLOW		164 Jul 28	^e 6240 May 26 1967
INSTANTANEOUS PEAK STAGE		2.95 Jul 28	^f 9.40 May 26 1967
ANNUAL RUNOFF (AC-FT)	584	173	1350
10 PERCENT EXCEEDS	.25	.20	.40
50 PERCENT EXCEEDS	.19	.14	.15
90 PERCENT EXCEEDS	.10	.04	.07

a-Also occurred Jul 5-8, 12-13, 16-21, and Aug 13.

b-Also occurred Jun 14-15, 18, 21-24, and Jun 27 to Jul 27.

c-Also occurred Jun 8-13, 1968.

d-From rating curve extended above 65 ft³/s, on basis of slope-area measurement of peak flow.

f-From floodmarks. Maximum gage height, 9.98 ft, Aug 9, 1979, from floodmark.

07126200 VAN BREMER ARROYO NEAR MODEL, CO--Continued
WATER-QUALITY RECORDS

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

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: January 1983 to current year.

WATER TEMPERATURE: January 1983 to current year.

INSTRUMENTATION.--Water-quality monitor with satellite telemetry.

REMARKS.--Records for specific conductance are good except for May 3-13 and Aug. 9-20, which are fair. Records for water temperature are fair. Daily data that are not published are either missing or of unacceptable quality.

EXTREMES FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 8,860 microsiemens, May 13, 1987; minimum, 114 microsiemens, June 28, 1995.

WATER TEMPERATURE: Maximum, 34.0°C, June 15, 28, 1986; minimum, 0.0°C, many days during the winter in most years.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 2,240 microsiemens, Dec. 26; minimum, 383 microsiemens, July 28.

WATER TEMPERATURE: Maximum, 30.7°C, July 14, 26; minimum, 0.9°C, Dec. 17.

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM @ 25 DEG. C), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
				MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	1790	1740	1760	1910	1840	1860	2050	1930	2000	1940	1860	1900			
2	1790	1740	1760	1910	1840	1880	2010	1960	1990	1910	1860	1880			
3	1790	1690	1750	1910	1830	1870	2040	1940	1990	1900	1780	1840			
4	1740	1690	1710	1910	1830	1870	2070	1960	2010	1840	1760	1810			
5	1760	1700	1720	1930	1870	1900	2080	1990	2040	1840	1800	1820			
6	1760	1700	1720	1930	1850	1890	2080	2030	2060	1900	1780	1830			
7	1730	1690	1700	1910	1860	1880	2090	2020	2050	2020	1850	1920			
8	1720	1670	1690	1920	1850	1890	2060	1960	2020	2000	1890	1950			
9	1720	1640	1690	1930	1860	1900	2040	1970	2000	2010	1910	1960			
10	1720	1650	1690	1940	1860	1900	2010	1950	1980	2020	1940	2000			
11	1740	1670	1700	1950	1880	1910	1980	1900	1940	2100	2010	2060			
12	1740	1610	1710	1940	1890	1910	1940	1870	1910	2100	2010	2060			
13	1740	1630	1700	1950	1880	1920	1940	1880	1910	2090	2020	2060			
14	1750	1630	1710	1960	1900	1930	1950	1890	1920	2090	1990	2040			
15	1780	1690	1740	1950	1920	1930	1950	1870	1920	2050	1970	2020			
16	1870	1750	1800	1970	1920	1950	1970	1870	1930	2110	2020	2060			
17	1900	1780	1850	1970	1910	1940	2050	1930	1990	2110	2050	2080			
18	1930	1840	1890	1960	1890	1930	2210	2040	2140	2130	2010	2080			
19	1940	1890	1910	1960	1900	1930	2220	2060	2150	2120	2040	2080			
20	1950	1880	1920	1960	1900	1930	2180	2050	2110	2100	2010	2060			
21	1940	1810	1890	1950	1890	1920	2120	2050	2090	2040	1910	1990			
22	1970	1900	1930	1950	1900	1920	2170	2070	2130	1960	1870	1920			
23	1960	1900	1930	1960	1920	1940	2190	2060	2150	1920	1820	1870			
24	1960	1910	1920	1970	1910	1940	2220	2070	2150	1920	1840	1870			
25	1950	1880	1900	1980	1910	1950	2160	2090	2130	1940	1850	1900			
26	1950	1860	1920	1970	1930	1950	2240	2050	2140	1910	1860	1890			
27	1880	1700	1810	1980	1910	1950	2140	2050	2100	1920	1880	1890			
28	1840	1720	1780	2000	1920	1960	2130	2040	2090	1960	1800	1890			
29	1880	1790	1830	1990	1930	1960	2080	1950	2020	1910	1850	1880			
30	1870	1800	1830	1990	1920	1960	2010	1930	1980	1920	1850	1890			
31	1870	1820	1850	---	---	---	1990	1920	1950	1920	1860	1890			
MONTH	1970	1610	1800	2000	1830	1920	2240	1870	2030	2130	1760	1950			

07126200 VAN BREMER ARROYO NEAR MODEL, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	22.1	13.7	17.6	13.2	7.0	9.4	6.6	2.9	4.6	9.4	3.7	6.2
2	18.8	13.6	15.7	13.7	6.5	9.7	6.5	2.8	4.5	9.9	3.7	6.4
3	19.9	12.0	15.5	11.9	7.6	9.5	6.9	3.1	4.7	8.8	5.1	6.6
4	20.1	12.8	16.0	14.5	8.5	10.8	7.2	3.1	4.5	7.5	3.9	5.5
5	22.1	13.3	17.1	14.0	7.4	10.3	6.4	3.0	4.6	3.9	2.2	3.2
6	21.5	13.7	17.2	11.6	6.9	9.1	6.9	3.7	5.2	5.3	1.3	3.0
7	19.6	13.3	16.2	10.9	5.6	7.9	7.8	2.9	5.0	5.9	2.4	3.7
8	20.5	12.2	16.0	10.6	4.6	7.5	9.0	2.8	5.8	3.8	2.4	2.9
9	20.4	12.1	15.8	11.5	5.6	8.3	10.2	4.2	6.8	4.6	2.4	3.5
10	21.1	12.5	16.3	11.8	6.2	8.6	10.2	5.9	7.4	3.4	2.3	2.9
11	21.6	13.3	16.9	12.6	5.7	8.6	10.0	4.8	7.1	3.0	2.1	2.5
12	21.3	12.8	16.6	11.0	6.5	8.2	10.0	4.2	6.6	2.6	1.6	2.1
13	21.1	12.7	16.6	12.0	6.1	8.6	9.1	3.7	6.0	3.0	1.9	2.3
14	19.4	12.5	16.0	11.1	7.5	8.9	7.9	3.8	5.4	3.8	2.0	2.8
15	21.2	14.1	17.0	8.4	7.0	7.8	6.3	2.4	4.0	4.7	2.2	3.3
16	19.6	12.3	15.6	7.0	5.0	6.3	6.9	1.1	3.7	4.2	2.4	3.0
17	16.9	11.2	13.5	9.4	3.8	6.1	4.5	.9	2.7	4.6	2.4	3.3
18	16.6	8.4	12.3	9.9	5.2	7.4	5.0	2.2	3.2	6.1	2.4	3.9
19	16.0	10.9	12.9	12.3	6.3	9.1	4.7	2.3	3.3	7.4	2.8	4.6
20	15.9	10.2	12.5	12.9	7.4	9.6	4.2	2.3	3.2	7.8	2.9	4.9
21	10.7	7.0	8.5	11.9	6.7	9.1	4.4	2.8	3.5	8.2	3.1	4.8
22	12.0	4.5	8.0	12.3	7.7	9.8	4.7	2.7	3.7	6.1	1.9	3.9
23	14.6	6.6	10.1	9.3	5.7	7.4	5.2	2.5	3.7	7.8	2.6	4.9
24	15.7	7.8	11.3	8.9	4.3	6.2	4.8	2.2	3.5	7.5	2.6	4.6
25	14.0	8.7	11.0	9.2	3.7	6.1	4.3	3.0	3.7	7.7	2.5	4.8
26	11.1	5.9	8.6	6.1	4.3	5.3	5.0	1.8	3.5	9.6	4.1	6.3
27	8.2	4.3	6.2	8.1	3.3	5.4	7.3	3.4	5.0	5.8	2.7	3.7
28	13.1	5.1	8.7	7.9	3.4	5.6	8.0	3.0	5.0	8.4	2.3	4.7
29	11.5	5.7	8.4	8.9	5.1	6.6	7.9	2.8	5.0	6.9	4.0	5.3
30	14.0	6.7	9.8	6.3	3.1	4.5	8.0	2.9	5.2	9.8	2.5	5.6
31	9.3	7.7	8.5	---	---	---	9.5	4.3	6.3	11.1	4.7	7.2
MONTH	22.1	4.3	13.3	14.5	3.1	7.9	10.2	.9	4.7	11.1	1.3	4.3
DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	10.2	6.1	7.6	11.5	4.7	7.4	16.2	8.7	12.3	19.7	11.3	14.8
2	9.9	4.8	7.1	12.5	4.1	8.0	11.5	8.3	9.4	19.2	10.3	14.2
3	10.4	4.7	7.0	12.4	4.7	8.2	12.3	7.5	9.8	22.5	9.6	15.3
4	8.8	3.2	5.4	10.8	4.3	7.0	17.5	7.9	11.8	24.0	11.1	16.9
5	7.5	2.3	4.5	12.5	3.4	7.4	15.6	8.1	10.8	23.1	13.3	17.6
6	4.7	3.2	3.9	14.2	4.4	8.8	15.7	5.1	9.9	20.3	14.3	16.7
7	8.2	2.3	4.5	14.5	5.7	9.5	17.9	6.8	11.5	19.3	12.9	15.8
8	8.6	2.4	5.0	14.3	6.2	9.7	14.8	7.2	10.2	15.2	12.5	13.5
9	9.1	3.0	5.6	15.3	6.3	10.0	15.5	5.7	10.2	22.9	11.9	16.5
10	9.1	3.0	5.6	16.0	6.1	10.5	10.3	3.7	6.9	24.8	12.7	18.3
11	7.6	3.1	5.2	16.5	6.7	10.9	9.2	2.4	5.3	23.5	13.5	17.8
12	9.7	2.9	5.6	17.2	7.5	11.9	12.0	2.7	7.0	24.0	12.6	17.7
13	6.0	3.0	4.7	15.1	7.8	10.8	16.2	4.8	9.8	24.0	12.8	18.0
14	9.1	1.9	4.9	10.6	6.1	7.6	16.8	6.3	11.1	22.9	13.7	18.0
15	10.8	2.9	6.5	13.1	3.8	7.6	19.8	7.7	13.0	25.6	13.7	19.0
16	12.7	3.9	7.8	15.1	6.0	9.8	21.5	10.5	15.0	26.1	15.1	20.1
17	12.2	6.5	8.7	13.4	7.9	10.4	22.3	10.4	15.5	26.0	15.3	20.4
18	12.8	5.5	8.8	16.5	8.5	11.8	20.2	11.1	15.4	23.0	15.5	19.3
19	10.0	7.1	8.2	17.8	7.0	11.9	21.3	10.6	15.6	18.2	13.9	15.9
20	10.6	5.2	7.4	19.9	8.4	13.3	22.2	11.6	16.3	25.1	13.1	18.2
21	8.8	4.2	5.9	18.7	9.4	13.4	20.7	12.6	15.8	23.1	15.1	18.6
22	10.5	2.8	6.2	19.6	8.8	13.6	19.1	11.5	14.5	24.4	15.3	18.9
23	6.6	3.2	4.8	16.2	10.5	12.9	17.4	11.5	14.0	25.1	14.7	19.5
24	6.6	2.6	4.3	14.5	6.6	10.4	12.1	8.5	9.9	23.0	15.1	18.9
25	11.2	3.3	6.5	15.9	5.3	9.9	10.0	6.9	8.6	25.1	13.6	18.8
26	7.0	4.1	5.5	17.4	6.6	11.4	13.5	6.9	9.9	23.5	15.2	19.0
27	6.9	2.7	4.8	16.1	8.4	11.8	20.4	7.6	13.4	22.7	13.4	17.8
28	9.0	3.5	5.9	17.8	7.9	12.2	20.4	11.5	15.2	25.0	14.0	18.8
29	---	---	---	11.5	7.0	9.3	19.2	11.6	15.1	21.9	15.0	18.4
30	---	---	---	16.9	4.7	10.3	21.4	10.2	14.9	25.2	15.7	19.8
31	---	---	---	17.6	7.2	11.7	---	---	---	27.9	16.2	21.5
MONTH	12.8	1.9	6.0	19.9	3.4	10.3	22.3	2.4	11.9	27.9	9.6	17.9

07126200 VAN BREMER ARROYO NEAR MODEL, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	27.7	17.1	21.9	28.5	17.5	22.8	28.2	19.6	23.1	28.1	18.4	22.5
2	27.5	17.9	22.0	25.2	17.0	21.0	29.5	20.5	23.8	26.0	20.1	22.4
3	27.9	19.0	22.8	27.4	17.0	21.5	23.8	20.7	22.5	27.0	19.6	22.4
4	28.7	18.1	22.3	26.3	17.4	21.2	26.0	19.7	22.4	27.3	18.1	22.2
5	27.2	18.1	22.0	26.0	17.6	21.2	23.9	20.9	22.1	27.5	19.6	23.1
6	25.5	17.2	20.6	26.4	17.0	21.0	20.9	18.6	20.2	25.9	18.3	22.0
7	22.5	18.2	20.1	26.1	16.4	21.1	26.2	17.5	20.9	27.4	18.7	22.2
8	23.6	16.9	19.7	27.3	17.4	22.1	27.8	17.8	22.0	27.6	18.6	22.6
9	24.8	16.1	20.1	27.1	18.1	21.9	28.3	18.7	23.1	22.0	18.1	19.6
10	26.9	16.6	21.0	25.8	18.0	21.7	---	---	---	26.2	16.2	20.5
11	29.2	17.3	22.7	28.1	18.5	22.8	---	---	---	26.2	17.2	21.2
12	27.0	18.8	22.2	28.9	18.8	23.5	---	---	---	25.8	17.6	21.3
13	24.2	17.2	20.2	29.0	18.1	23.1	---	---	---	25.9	17.1	20.9
14	24.8	16.6	20.1	30.7	19.5	24.3	---	---	---	26.7	17.7	21.6
15	22.9	16.4	19.6	29.0	19.8	23.8	---	---	---	26.7	17.2	21.5
16	21.5	16.5	18.8	29.1	19.7	23.6	---	---	---	26.2	18.6	21.5
17	26.8	15.1	20.6	28.5	18.7	23.4	---	---	---	25.6	17.0	20.6
18	28.4	17.2	22.5	29.1	18.5	23.5	---	---	---	25.4	17.1	20.7
19	25.7	18.2	22.1	27.4	19.3	22.6	---	---	---	24.4	17.4	20.5
20	28.5	17.6	22.6	27.0	19.2	22.6	---	---	---	18.9	14.8	16.1
21	29.2	18.0	23.2	28.6	18.8	23.3	28.0	18.8	22.9	17.3	14.2	15.5
22	27.4	18.4	22.4	30.0	19.3	23.6	28.2	19.0	22.9	22.5	15.0	18.0
23	27.7	17.5	22.0	30.2	19.5	24.0	29.3	18.6	23.2	17.7	15.4	16.4
24	28.3	17.5	22.3	30.1	19.8	24.7	29.1	18.5	23.3	22.0	14.3	17.4
25	25.5	16.2	19.8	30.3	20.4	24.6	28.9	19.4	23.5	23.2	13.8	17.9
26	28.4	16.4	21.2	30.7	20.3	24.4	28.4	19.6	23.4	23.8	15.3	19.1
27	29.2	17.0	22.4	29.3	20.4	24.3	29.1	19.2	23.8	24.9	16.3	20.2
28	27.0	17.4	22.3	29.5	14.0	21.2	27.6	20.4	23.7	22.7	16.2	19.1
29	27.9	17.6	22.4	25.3	16.7	20.1	27.8	20.0	22.7	23.9	15.2	19.0
30	28.7	17.5	22.9	27.8	19.8	22.9	24.5	18.7	21.3	23.4	15.1	18.8
31	---	---	---	25.3	19.6	22.2	23.8	18.5	20.8	---	---	---
MONTH	29.2	15.1	21.5	30.7	14.0	22.7	---	---	---	28.1	13.8	20.2

**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. Elevation of gage is 4,960 ft above sea level, from topographic map.

REMARKS.--Records good. Records published for period of seasonal operation only (Oct. 1 to Nov. 6 and Apr. 18 to Sept. 30). Daily data that are not published are either missing or of unacceptable quality.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily rainfall during period of seasonal operation, 2.67 inches, May 25, 1996.

EXTREMES FOR CURRENT YEAR.--Maximum daily rainfall during period of seasonal operation, 2.12 inches, July 28.

PRECIPITATION (INCHES), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	---	---	---	---	---	.00	.00	.00	.16	---
2	.00	.00	---	---	---	---	---	.00	.09	.00	.02	---
3	.00	.00	---	---	---	---	---	.00	.00	.00	.00	---
4	.00	.01	---	---	---	---	---	.00	.11	.00	.00	e.05
5	.00	.00	---	---	---	---	---	.00	.00	.00	.23	.00
6	.00	e.00	---	---	---	---	---	.00	1.00	.00	.02	.45
7	.00	---	---	---	---	---	---	.00	.39	.00	.00	.00
8	.00	---	---	---	---	---	---	.02	.04	.00	.00	.00
9	.00	---	---	---	---	---	---	.00	.02	.00	1.25	.15
10	.00	---	---	---	---	---	---	.00	.21	.00	.08	.00
11	.00	---	---	---	---	---	---	.00	.00	.00	.07	.00
12	.00	---	---	---	---	---	---	.02	.00	.00	.00	.00
13	.00	---	---	---	---	---	---	.00	.00	.00	.23	.00
14	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
15	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
16	.00	---	---	---	---	---	---	.00	.02	.00	.00	.00
17	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
18	.00	---	---	---	---	---	e.00	.00	.00	.00	.01	.00
19	.00	---	---	---	---	---	.00	.17	.13	.00	.01	.00
20	.00	---	---	---	---	---	.00	.00	.00	.00	.00	.14
21	.09	---	---	---	---	---	.79	.00	.00	.00	e.00	.37
22	.01	---	---	---	---	---	.05	.02	.00	.00	---	.15
23	.00	---	---	---	---	---	.12	.01	.00	.05	---	.01
24	.00	---	---	---	---	---	.29	.00	.01	.00	---	.01
25	.00	---	---	---	---	---	.46	.00	.74	.00	---	.00
26	.07	---	---	---	---	---	.00	.00	.00	.00	---	.00
27	.51	---	---	---	---	---	.00	.00	.00	.30	---	.00
28	.21	---	---	---	---	---	.00	.00	.00	2.12	---	.00
29	.00	---	---	---	---	---	.00	.03	.00	.01	---	.00
30	.00	---	---	---	---	---	.00	.02	.00	.00	---	.00
31	.00	---	---	---	---	---	---	.00	---	.06	---	---
TOTAL	0.89	---	---	---	---	---	---	0.29	2.76	2.54	---	---

e--Estimated.

07126300 PURGATOIRE RIVER NEAR THATCHER, CO

LOCATION.--Lat 37°21'30", long 103°53'44", in 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 mi².

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.

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 flows greater than 1,600 ft³/s, which are poor. Diversions upstream from station for irrigation of about 30,000 acres. Peak flows regulated to some extent by Trinidad Dam, 52 mi upstream, since January 1975.

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 ft³/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	19	32	27	29	25	28	25	50	51	7.7	220	73
2	17	30	25	27	25	30	22	37	41	4.6	133	40
3	10	29	25	26	25	27	22	28	38	3.3	105	30
4	9.2	27	27	24	24	24	23	22	43	3.8	45	21
5	9.8	26	27	25	22	24	19	17	38	5.2	29	18
6	9.7	25	27	23	21	23	21	14	52	5.0	195	16
7	8.8	23	23	23	21	23	18	12	75	22	96	47
8	8.8	23	29	18	20	22	19	12	89	30	49	34
9	8.4	23	33	e18	24	22	16	13	86	28	35	18
10	9.0	26	33	e17	23	21	15	15	90	18	209	16
11	11	28	31	e16	22	20	15	13	265	10	86	20
12	11	28	28	e15	22	20	17	12	115	6.8	45	16
13	11	26	25	e14	22	20	39	12	80	4.7	37	14
14	11	27	24	e16	21	21	35	12	62	4.5	31	11
15	11	29	23	e18	23	35	34	13	57	2.9	28	9.2
16	11	27	19	e19	23	25	27	11	59	2.3	24	9.2
17	16	27	e16	e21	23	23	20	10	72	1.7	19	8.5
18	22	27	13	23	23	29	17	8.9	66	1.3	23	6.8
19	25	27	16	25	23	22	13	8.6	33	.92	46	7.3
20	23	29	18	27	23	21	10	8.9	45	.95	27	6.4
21	23	27	22	30	25	20	8.8	17	32	3.6	20	9.0
22	20	24	23	30	24	20	11	30	27	12	29	30
23	21	25	25	29	24	21	17	47	168	17	24	212
24	22	26	24	27	27	22	24	46	29	16	21	92
25	25	27	22	26	27	24	86	45	34	13	19	52
26	25	29	24	31	26	25	83	44	106	9.5	49	45
27	32	27	24	25	28	28	90	42	36	7.7	17	38
28	33	27	26	25	27	26	166	44	20	107	16	36
29	56	27	26	27	---	25	131	50	15	109	10	29
30	59	28	27	25	---	25	77	54	12	45	18	26
31	38	---	28	26	---	25	---	53	---	29	12	---
TOTAL	615.7	806	760	725	663	741	1120.8	801.4	1936	532.47	1717	990.4
MEAN	19.9	26.9	24.5	23.4	23.7	23.9	37.4	25.9	64.5	17.2	55.4	33.0
MAX	59	32	33	31	28	35	166	54	265	109	220	212
MIN	8.4	23	13	14	20	20	8.8	8.6	12	.92	10	6.4
AC-FT	1220	1600	1510	1440	1320	1470	2220	1590	3840	1060	3410	1960

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1976 - 1997, 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	
MEAN	32.4	29.8	28.1	27.3	29.2	33.3	83.2	131	106	87.0	141	63.1											
MAX	84.0	52.3	44.3	43.2	53.3	109	467	592	764	547	910	302											
(WY)	1986	1987	1987	1988	1987	1993	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 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1976 - 1997	
ANNUAL TOTAL	12562.2		11408.77			
ANNUAL MEAN	34.3		31.3		a66.2	
HIGHEST ANNUAL MEAN					181	
LOWEST ANNUAL MEAN					12.3	
HIGHEST DAILY MEAN	1100	Sep 7	265	Jun 11	10000	Jul 3 1981
LOWEST DAILY MEAN	2.0	Jul 4	.92	Jul 19	b.00	Jun 28 1976
ANNUAL SEVEN-DAY MINIMUM	3.1	Jun 28	2.0	Jul 15	.00	Jun 28 1976
INSTANTANEOUS PEAK FLOW			2540	Aug 1	c42400	Jul 3 1981
INSTANTANEOUS PEAK STAGE			7.80	Aug 1	22.00	Jul 3 1981
ANNUAL RUNOFF (AC-FT)	24920		22630		47960	
10 PERCENT EXCEEDS	40		52		108	
50 PERCENT EXCEEDS	24		24		29	
90 PERCENT EXCEEDS	8.6		9.9		6.0	

e-Estimated.

a-Average discharge for 10 years (water years 1967-76), 37.9 ft³/s; 27460 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 2100 ft³/s, on basis of two slope-area measurements of peak flow.

**07126300 PURGATOIRE RIVER NEAR THATCHER, CO--Continued
WATER-QUALITY RECORDS**

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

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: December 1982 to current year.

WATER TEMPERATURE: December 1982 to current year.

SUSPENDED SEDIMENT DISCHARGE: May 1983 to September 1992 (discontinued).

INSTRUMENTATION.--Water-quality monitor with satellite telemetry.

REMARKS.--Records for daily specific conductance are good except for July 28 to Sept. 4, which are fair. Records for daily water temperature are good. Daily data that are not published are either missing or of unacceptable quality.

EXTREMES FOR PERIOD OF RECORD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 7,030 microsiemens, July 30, 1994; minimum, 200 microsiemens, Aug. 1, 1997.

WATER TEMPERATURE: Maximum, 32.1°C, June 25, 1990; minimum 0.0°C, on many days during the winter months.

SEDIMENT CONCENTRATION: Maximum daily, 49,600 mg/L, June 9, 1986; minimum daily, 3 mg/L, Apr. 29, 1989.

SEDIMENT LOAD: Maximum daily, 250,000 tons, June 6, 1983; minimum daily, 0.00 tons, June 26 to July 4, 1990.

EXTREMES FOR CURRENT WATER YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 7,020 microsiemens, June 23; minimum, 200 microsiemens, Aug. 1.

WATER TEMPERATURE: Maximum, 29.7°C, July 26; minimum, 0.1°C, on many days during the winter months.

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM @ 25 DEG. C), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	3940	3740	3850	3590	3540	3560	3610	3560	3600	3570	3250	3420
2	3920	3770	3830	3700	3590	3640	3700	3600	3650	3510	3350	3430
3	3830	3780	3800	3750	3660	3720	3750	3610	3680	3520	3320	3410
4	3830	3800	3820	3660	3610	3640	3730	3550	3630	3450	3300	3380
5	4120	3820	3940	3610	3560	3580	3890	3610	3710	3470	3330	3410
6	4140	4110	4130	3560	3540	3550	4020	3600	3780	3670	3280	3440
7	4140	4100	4130	3550	3530	3540	3840	3650	3760	3540	3330	3450
8	4150	4100	4130	3560	3530	3550	4100	3740	3900	4000	3540	3660
9	4160	4100	4140	3560	3540	3550	3950	3660	3800	3820	3560	3680
10	4150	4100	4120	3550	3510	3530	3770	3720	3740	3760	3560	3640
11	4210	4120	4160	3520	3430	3490	3740	3560	3630	3750	3620	3710
12	4270	4210	4240	3430	3400	3420	3590	3410	3470	3900	3740	3850
13	4210	4080	4120	3420	3410	3410	3460	3410	3440	3980	3860	3930
14	4090	4000	4030	3440	3390	3410	3510	3460	3480	3920	3770	3860
15	4110	4020	4050	3460	3400	3430	3510	3480	3500	3780	3680	3740
16	4150	4100	4120	3420	3400	3420	3540	3460	3500	3690	3650	3680
17	4170	4140	4160	3420	3410	3410	3730	3500	3590	3680	3600	3650
18	4140	3920	4030	3460	3410	3420	3780	3610	3690	3600	3450	3530
19	3930	3880	3910	3540	3460	3490	4230	3650	3920	3470	3340	3420
20	3980	3930	3960	3560	3530	3540	4010	3770	3900	3340	3250	3300
21	3960	3800	3890	3560	3550	3560	3960	3890	3920	3310	3270	3280
22	3800	3470	3640	3570	3550	3560	4000	3900	3940	3290	3130	3200
23	3470	3180	3270	3580	3550	3560	3990	3850	3950	3300	3150	3230
24	3200	3170	3190	3610	3570	3590	3850	3660	3750	3490	3260	3380
25	3320	3200	3240	3600	3570	3580	3680	3570	3620	3550	3270	3440
26	3370	3310	3330	3590	3560	3570	3620	3510	3570	3540	3160	3370
27	3420	3260	3310	3580	3530	3560	3590	3450	3520	3370	3120	3290
28	3540	3420	3510	3570	3520	3540	3590	3540	3560	3530	3370	3450
29	3530	3190	3440	3590	3560	3570	3550	3450	3480	3640	3280	3390
30	3690	3170	3310	3590	3560	3570	3500	3370	3450	3290	3230	3260
31	3670	3470	3570	---	---	---	3410	3260	3350	3660	3260	3390
MONTH	4270	3170	3820	3750	3390	3530	4230	3260	3660	4000	3120	3490

07126300 PURGATOIRE RIVER NEAR THATCHER, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	18.7	15.0	16.7	8.4	6.0	7.0	2.3	.3	1.3	.8	.1	.4
2	17.2	14.7	15.7	8.8	5.8	7.2	2.3	.3	1.2	1.1	.1	.4
3	17.0	13.5	15.1	8.6	6.6	7.5	1.3	.1	.6	1.3	.2	.7
4	16.6	13.8	15.3	9.9	7.2	8.4	1.2	.1	.5	1.8	.3	.8
5	18.6	14.4	16.3	9.8	7.0	8.3	.7	.1	.4	.4	.1	.2
6	18.8	15.2	16.9	8.7	6.7	7.7	1.9	.4	1.1	.5	.1	.2
7	17.4	15.2	16.4	7.9	5.7	6.8	2.2	.3	1.1	.5	.1	.3
8	17.9	14.1	15.8	7.0	4.5	5.8	2.9	.3	1.5	.3	.1	.2
9	17.7	14.2	15.9	7.5	4.7	6.1	3.6	1.1	2.2	.3	.1	.2
10	18.0	14.4	16.1	7.6	5.1	6.3	4.4	1.9	3.0	.2	.1	.2
11	18.5	14.8	16.5	7.9	5.0	6.4	4.8	2.5	3.5	.3	.2	.2
12	18.6	14.7	16.5	7.4	5.3	6.1	4.5	2.4	3.4	.3	.2	.2
13	18.5	14.8	16.5	7.6	5.0	6.2	4.1	2.0	3.1	.3	.2	.2
14	17.6	14.6	16.1	7.6	6.0	6.8	3.6	1.8	2.6	.3	.1	.2
15	18.1	15.4	16.6	7.1	6.1	6.6	2.1	.5	1.2	.2	.1	.2
16	16.9	14.4	15.7	6.1	4.3	5.3	1.4	.1	.5	.2	.1	.2
17	15.3	12.7	13.9	5.6	3.4	4.5	.4	.1	.2	.2	.1	.2
18	13.7	10.5	12.1	6.1	3.9	5.0	.6	.2	.3	.3	.1	.2
19	13.4	11.3	12.3	7.7	4.6	6.1	.5	.2	.3	.4	.1	.2
20	13.1	10.8	11.9	8.4	5.5	6.8	.4	.1	.2	.4	.1	.2
21	11.0	7.4	8.7	8.3	5.7	7.0	.4	.2	.2	.5	.1	.2
22	9.1	5.5	7.2	8.8	6.3	7.6	.4	.1	.2	.4	.1	.2
23	10.0	6.4	8.1	8.1	5.5	6.8	.4	.1	.2	.5	.1	.2
24	10.7	7.4	9.0	6.0	4.1	5.0	.4	.1	.2	.6	.1	.2
25	10.4	8.2	9.2	5.4	3.1	4.2	.3	.1	.2	.5	.1	.2
26	9.0	6.4	7.6	4.1	3.0	3.5	.4	.1	.2	.8	.1	.3
27	6.6	4.3	5.3	4.0	2.3	3.0	.4	.1	.2	.2	.1	.2
28	8.4	4.5	6.4	3.4	1.5	2.6	.5	.1	.2	.8	.1	.4
29	8.0	5.9	7.1	4.5	2.5	3.4	.5	.1	.2	.9	.1	.4
30	8.9	6.2	7.4	3.5	1.5	2.5	.5	.1	.2	1.6	.1	.6
31	7.6	6.4	6.8	---	---	---	.7	.1	.3	2.4	.2	1.1
MONTH	18.8	4.3	12.6	9.9	1.5	5.9	4.8	.1	1.0	2.4	.1	.3
	FEBRUARY			MARCH			APRIL			MAY		
1	3.1	1.0	2.0	6.7	3.1	4.7	13.3	9.5	11.5	16.2	12.1	14.1
2	3.9	1.4	2.7	7.5	3.6	5.5	12.0	8.6	10.0	15.4	12.5	13.8
3	5.0	2.3	3.4	8.4	4.6	6.4	10.2	8.0	9.1	17.0	11.3	13.9
4	4.0	1.6	2.7	7.9	4.9	6.2	13.2	8.4	10.5	18.9	12.9	15.7
5	3.3	.9	2.1	7.9	3.9	5.8	12.0	9.1	10.4	20.0	15.3	17.4
6	2.2	1.0	1.6	9.2	4.7	6.8	12.0	7.5	9.6	18.4	15.6	16.9
7	2.7	.3	1.3	9.9	5.8	7.7	13.0	8.1	10.4	17.6	15.0	16.3
8	2.9	.2	1.5	10.0	6.3	8.1	11.5	8.6	10.0	16.1	13.5	14.5
9	3.1	.6	1.8	10.8	6.7	8.6	12.2	7.3	9.6	18.9	12.9	15.5
10	3.4	.5	1.9	11.4	6.9	9.1	10.1	4.7	7.4	20.9	14.7	17.6
11	3.2	1.2	2.2	12.3	7.8	9.9	5.7	2.8	4.1	20.7	16.0	18.1
12	4.0	.8	2.4	12.9	8.4	10.6	7.2	2.3	4.6	20.7	15.1	17.8
13	2.9	1.4	2.0	12.0	9.3	10.6	10.0	4.7	7.2	21.6	15.9	18.4
14	3.4	.1	1.6	9.5	6.9	8.0	11.1	6.4	8.8	21.3	16.8	18.8
15	4.8	1.0	2.8	8.8	5.1	6.9	13.7	7.9	10.7	23.1	16.5	19.5
16	5.9	2.1	4.0	10.4	5.9	8.0	16.4	11.0	13.4	23.9	18.3	20.9
17	7.2	4.1	5.6	10.4	7.9	9.2	17.6	12.1	14.6	24.4	18.7	21.4
18	8.0	4.6	6.4	12.4	8.5	10.3	17.2	13.2	15.2	22.7	19.6	21.1
19	7.5	6.1	6.6	13.5	8.5	10.9	18.0	12.8	15.3	19.9	16.5	17.6
20	7.5	5.0	6.1	14.9	9.8	12.2	19.1	14.3	16.5	21.8	15.5	18.4
21	5.9	4.2	4.9	15.2	11.2	13.1	18.3	15.3	16.6	20.9	17.2	19.0
22	6.2	2.8	4.5	15.5	11.1	13.2	16.5	13.0	14.7	20.3	17.3	19.0
23	5.0	2.1	3.6	14.1	12.0	13.0	15.7	13.0	14.3	21.5	17.6	19.6
24	3.1	1.1	2.1	13.0	8.9	11.5	13.8	9.9	11.6	20.9	17.7	19.3
25	5.3	1.5	3.2	11.6	7.1	9.2	10.0	8.2	9.1	20.9	16.7	18.8
26	3.8	2.2	3.1	13.0	8.0	10.3	9.1	6.8	8.0	21.2	17.4	19.0
27	3.3	1.1	2.3	13.0	9.0	10.9	12.6	7.2	9.8	19.9	16.1	18.0
28	5.1	2.2	3.5	13.8	9.4	11.5	14.2	11.0	12.4	21.1	16.5	18.6
29	---	---	---	12.0	7.8	9.8	14.5	12.2	13.6	20.3	17.6	18.9
30	---	---	---	12.2	6.5	9.1	16.3	12.3	14.0	21.4	17.7	19.5
31	---	---	---	13.4	8.4	10.7	---	---	---	23.6	18.2	20.8
MONTH	8.0	.1	3.1	15.5	3.1	9.3	19.1	2.3	11.1	24.4	11.3	18.0

ARKANSAS RIVER BASIN

07126300 PURGATOIRE RIVER NEAR THATCHER, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	24.0	19.8	22.0	26.5	21.1	23.5	27.2	19.8	23.3	23.8	20.8	22.4
2	24.4	20.5	22.3	25.4	20.9	23.0	26.4	20.5	23.7	24.3	21.6	22.6
3	25.0	20.9	22.8	23.8	20.4	22.1	25.6	22.3	24.1	24.3	21.1	22.7
4	25.7	17.3	22.1	24.8	20.7	22.6	27.2	23.1	25.0	25.0	20.2	22.6
5	25.3	19.5	22.4	24.9	19.9	22.1	25.0	22.7	23.7	25.8	21.9	23.8
6	23.4	20.3	21.8	25.0	19.1	21.7	22.7	19.6	21.2	25.2	21.8	23.5
7	21.1	19.0	20.1	23.9	19.0	21.7	22.8	18.9	20.5	24.5	21.4	22.9
8	21.0	18.3	19.5	24.7	20.2	22.5	24.4	19.6	21.9	25.0	21.0	22.9
9	21.4	17.9	19.6	25.4	20.8	23.0	25.3	21.1	22.9	23.2	20.2	21.2
10	21.6	18.5	20.0	24.6	20.7	22.5	23.1	20.2	21.9	23.9	18.8	21.0
11	21.5	18.1	19.7	26.1	20.5	23.1	24.1	20.1	21.8	24.1	20.0	21.9
12	22.2	18.0	19.9	26.9	21.9	24.2	25.3	21.2	23.1	23.9	20.2	21.9
13	22.2	19.1	20.7	27.7	21.3	24.3	26.3	22.1	24.0	24.4	19.8	22.1
14	22.3	19.1	20.6	29.3	22.8	25.5	25.9	22.0	23.9	25.0	20.5	22.5
15	21.6	18.7	20.1	27.5	23.5	25.4	26.5	21.1	23.8	25.2	20.4	22.6
16	20.7	18.7	19.6	29.1	23.4	25.6	26.4	21.6	24.0	25.0	21.1	22.7
17	22.0	17.5	19.7	28.1	22.8	25.4	25.8	22.3	23.7	24.4	20.1	22.1
18	24.0	19.1	21.4	27.3	22.6	24.9	25.6	21.6	23.4	23.4	20.0	21.8
19	24.0	20.3	22.4	26.4	23.1	24.7	25.9	21.5	23.6	23.7	20.2	21.7
20	25.5	20.9	23.1	25.9	22.7	24.3	26.7	22.0	24.0	21.2	16.5	17.9
21	26.1	20.7	23.3	27.3	22.4	24.9	26.3	21.6	24.0	17.2	15.5	16.3
22	26.4	21.9	24.0	27.9	22.7	25.0	26.7	22.3	24.3	19.1	15.6	17.2
23	23.3	7.8	13.2	28.2	22.9	24.9	27.3	22.0	24.5	17.6	14.1	15.9
24	21.9	15.5	18.6	28.0	21.7	24.6	27.4	22.4	24.7	16.4	13.3	14.8
25	23.0	17.4	20.1	29.0	23.6	26.1	27.1	22.7	24.8	18.2	14.3	16.1
26	23.7	17.8	21.0	29.7	24.1	26.3	27.0	23.0	25.0	19.9	15.9	17.7
27	24.2	19.0	21.5	29.0	24.0	26.2	27.5	22.6	25.0	21.4	17.7	19.4
28	24.5	19.2	22.1	27.9	20.5	24.2	27.1	23.6	25.4	20.9	18.1	19.3
29	25.3	20.4	22.9	24.6	21.7	22.9	26.8	22.8	24.5	21.0	17.2	18.9
30	26.4	21.0	23.6	25.3	21.9	23.3	24.1	21.9	22.9	21.2	17.3	19.2
31	---	---	---	25.1	21.5	23.2	23.4	21.4	22.4	---	---	---
MONTH	26.4	7.8	21.0	29.7	19.0	24.0	27.5	18.9	23.6	25.8	13.3	20.6
YEAR	29.7	.1	12.6									

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SEDI- MENT, SUS- PENDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)
OCT				
03...	1310	9.5	49	1.3
NOV				
06...	1025	24	106	6.9
DEC				
12...	1540	26	68	4.8
JAN				
31...	1415	23	50	3.1
MAR				
13...	1330	20	29	1.6
MAY				
01...	1315	48	913	118
JUN				
04...	1300	32	48	4.1
JUL				
17...	1255	1.5	29	0.12
SEP				
04...	1540	23	165	10
04...	1545	23	168	10

07126325 TAYLOR ARROYO BELOW ROCK CROSSING NEAR THATCHER, CO

LOCATION.--Lat 37°25'26", long 103°55'09", in SE¹/₄SE¹/₄ sec.17, T.30 S., R.58 W., Las Animas County, Hydrologic Unit 11020010, on left bank 1.6 mi southeast of Rock Crossing, 5 mi upstream from mouth, and 13.5 mi southeast of Thatcher.

DRAINAGE AREA.--48.4 mi².

WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder with satellite telemetry, concrete control, and crest-stage gage. Elevation of gage is 4,982 ft above sea level, from topographic map.

REMARKS.--No estimated daily discharges. Records good except those above 6 ft³/s, which are fair.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
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	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
4	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
5	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
6	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
7	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
8	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
9	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.03	.00
10	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	2.2	.00
11	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	4.4	.00
12	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	2.6	.00
13	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.11	.00
14	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02	.00
15	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
20	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
21	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
22	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
23	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
24	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
26	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
27	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
28	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
29	.00	.00	.00	.00	.00	.00	.00	.00	.00	3.5	.00	.00
30	.00	.00	.00	.00	.00	.00	.00	.00	.00	.93	.00	.00
31	.00	.00	.00	.00	.00	.00	.00	.00	.00	.02	.00	.00
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.45	9.36	0.00
MEAN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.14	.30	.000
MAX	.00	.00	.00	.00	.00	.00	.00	.00	.00	3.5	4.4	.00
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
AC-FT	.00	.00	.00	.00	.00	.00	.00	.00	.00	8.8	19	.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1983 - 1997, BY WATER YEAR (WY)

	1983	1984	1984	1984	1984	1984	1983	1984	1984	1984	1983	1988	1986
MEAN	.018	.000	.000	.000	.000	.000	.022	.52	.57	.71	.55	.028	
MAX	.14	.000	.000	.000	.000	.000	.33	7.09	3.78	7.60	2.72	.30	
(WY)	1987	1991	1984	1984	1984	1984	1983	1995	1995	1989	1987	1986	
MIN	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	
(WY)	1984	1984	1984	1984	1984	1984	1984	1983	1984	1983	1988	1983	

SUMMARY STATISTICS

	FOR 1996 CALENDAR YEAR	FOR 1997 WATER YEAR	WATER YEARS 1983 - 1997
ANNUAL TOTAL	13.84	13.81	
ANNUAL MEAN	.038	.038	.21
HIGHEST ANNUAL MEAN			a-.94 1995
LOWEST ANNUAL MEAN			a-.038 1996
HIGHEST DAILY MEAN			144 Jul 31 1989
LOWEST DAILY MEAN	b .00 Aug 28	b .00 Oct 1	b .00 Mar 18 1983
ANNUAL SEVEN-DAY MINIMUM	.00 Jan 1	.00 Oct 1	.00 Mar 18 1983
INSTANTANEOUS PEAK FLOW		c 63 Jul 28	d 2820 Jul 31 1989
INSTANTANEOUS PEAK STAGE		5.34 Jul 28	10.96 Jul 31 1989
ANNUAL RUNOFF (AC-FT)	27	27	156
10 PERCENT EXCEEDS	.00	.00	.00
50 PERCENT EXCEEDS	.00	.00	.00
90 PERCENT EXCEEDS	.00	.00	.00

a-Also occurred 1997 water year.

b-No flow most of the time.

c-From rating curve extended above 3.1 ft³/s on basis of area-velocity study.

d-From rating extended to peak flow on the basis of slope-area measurement.

07126325 TAYLOR ARROYO BELOW ROCK CROSSING NEAR THATCHER, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	JUNE			JULY			AUGUST			SEPTEMBER		
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	23.1	20.9	---	---	---	---
10	---	---	---	---	---	---	24.1	19.2	21.2	---	---	---
11	---	---	---	---	---	---	24.5	18.4	21.1	---	---	---
12	---	---	---	---	---	---	26.2	17.9	21.5	---	---	---
13	---	---	---	---	---	---	24.4	20.3	22.1	---	---	---
14	---	---	---	---	---	---	26.4	19.5	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	---	---	---
17	---	---	---	---	---	---	---	---	---	---	---	---
18	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	---	---	---	---	---	---	---	---
20	---	---	---	---	---	---	---	---	---	---	---	---
21	---	---	---	---	---	---	---	---	---	---	---	---
22	---	---	---	---	---	---	---	---	---	---	---	---
23	---	---	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	---	---	---	---	---	---	---
25	---	---	---	---	---	---	---	---	---	---	---	---
26	---	---	---	---	---	---	---	---	---	---	---	---
27	---	---	---	---	---	---	---	---	---	---	---	---
28	---	---	---	18.3	13.1	---	---	---	---	---	---	---
29	---	---	---	25.6	18.3	21.4	---	---	---	---	---	---
30	---	---	---	25.7	20.7	---	---	---	---	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

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	---	---	.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	---	---	0.00	---	---	0.00	---	---

07126325 TAYLOR ARROYO BELOW ROCK CROSSING NEAR THATCHER, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

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	.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	---	---	0.00	---	---	0.00	---	---
	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	---	---	0.00	---	---	0.00	---	---

07126325 TAYLOR ARROYO BELOW ROCK CROSSING NEAR THATCHER, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
	JULY			AUGUST			SEPTEMBER		
1	.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	---	---	.03	---	.01	.00	---	---
10	.00	---	---	2.2	348	1.8	.00	---	---
11	.00	---	---	4.4	446	23	.00	---	---
12	.00	---	---	2.6	734	5.4	.00	---	---
13	.00	---	---	.11	541	.18	.00	---	---
14	.00	---	---	.02	285	.01	.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	3.5	237	12	.00	---	---	.00	---	---
29	.93	501	1.9	.00	---	---	.00	---	---
30	.02	124	.01	.00	---	---	.00	---	---
31	.00	---	---	.00	---	---	---	---	---
TOTAL	4.45	---	---	9.36	---	---	0.00	---	---

07126485 PURGATOIRE RIVER AT ROCK CROSSING NEAR TIMPAS, CO

LOCATION.--Lat 37°37'10', long 103°35'32" in NE1/4SE1/4 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 mi².

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 Mar. 12 to July 14 and for discharges above 1,000 ft³/s, which are fair, and estimated daily discharges, which are poor. Diversions upstream from station for irrigation of about 30,000 acres. Peak flows are regulated to some extent by Trinidad Dam, 92 mi upstream.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24	46	32	33	32	33	25	73	52	14	38	17
2	20	39	33	33	32	32	25	52	51	12	626	54
3	19	35	29	32	32	34	25	40	43	9.4	105	40
4	17	33	29	32	31	32	23	31	37	7.1	112	29
5	13	32	25	29	30	30	24	24	583	6.0	81	23
6	11	31	28	26	30	28	23	22	291	4.6	45	21
7	12	30	33	e26	29	27	20	19	544	4.0	203	19
8	12	28	32	e24	28	27	21	18	139	3.8	90	33
9	11	27	34	e21	27	26	19	16	100	20	66	37
10	11	27	34	e20	27	26	20	16	86	23	213	23
11	11	28	35	e20	29	25	18	16	164	21	241	18
12	11	30	36	e18	28	24	17	17	178	14	431	18
13	12	31	34	e19	28	24	17	16	101	10	61	19
14	12	30	e32	e20	27	24	28	15	92	7.4	42	16
15	12	30	e29	e23	28	24	33	14	66	5.6	33	14
16	11	31	e25	e24	26	34	33	14	62	4.3	30	12
17	11	31	e20	e25	28	29	30	15	63	3.8	27	10
18	11	31	e16	e28	28	27	24	13	72	3.5	24	9.3
19	17	31	e18	e31	29	29	21	12	64	17	21	8.9
20	23	30	e21	e32	29	27	19	12	39	25	42	9.0
21	23	31	e24	e33	29	24	17	11	44	9.4	30	9.6
22	24	30	e26	e33	29	23	17	11	35	3.8	24	11
23	23	29	e27	e33	31	23	15	22	105	e1.9	25	15
24	21	29	e27	e32	32	24	17	43	73	e1.1	25	190
25	22	29	e26	e31	33	25	29	46	34	e11	22	74
26	22	31	e26	e30	34	25	76	44	34	12	21	50
27	32	31	e27	e30	33	25	84	43	90	12	41	44
28	33	31	e28	28	33	27	96	42	38	12	23	37
29	33	32	e28	e29	---	28	164	44	23	345	18	35
30	56	32	e30	e30	---	26	115	49	18	102	18	30
31	62	---	32	e30	---	25	---	53	---	53	16	---
TOTAL	632	936	876	855	832	837	1095	863	3321	778.7	2794	925.8
MEAN	20.4	31.2	28.3	27.6	29.7	27.0	36.5	27.8	111	25.1	90.1	30.9
MAX	62	46	36	33	34	34	164	73	583	345	626	190
MIN	11	27	16	18	26	23	15	11	18	1.1	16	8.9
AC-FT	1250	1860	1740	1700	1650	1660	2170	1710	6590	1540	5540	1840

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1983 - 1997, BY WATER YEAR (WY)

	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
MEAN	38.7	38.1	33.6	31.3	34.1	41.9	84.5	129	121	72.9	109	47.2			
MAX	74.3	52.8	42.9	41.4	56.0	104	330	585	836	186	167	98.6			
(WY)	1986	1987	1987	1984	1988	1993	1993	1987	1983	1992	1996	1993			
MIN	13.0	20.5	15.6	17.4	22.7	19.7	16.8	5.81	9.65	11.2	39.1	12.5			
(WY)	1990	1990	1991	1991	1991	1991	1989	1991	1990	1989	1985	1990			

SUMMARY STATISTICS

	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1983 - 1997	
ANNUAL TOTAL	18518.0		14745.5			
ANNUAL MEAN	50.6		40.4		60.6	
HIGHEST ANNUAL MEAN					123	
LOWEST ANNUAL MEAN					29.6	
HIGHEST DAILY MEAN	2210		626		3680	
LOWEST DAILY MEAN	e2.3		e1.1		a.00	
ANNUAL SEVEN-DAY MINIMUM	3.3		6.7		.00	
INSTANTANEOUS PEAK FLOW			2950		b11400	
INSTANTANEOUS PEAK STAGE			11.73		c17.90	
ANNUAL RUNOFF (AC-FT)	36730		29250		43920	
10 PERCENT EXCEEDS	59		63		116	
50 PERCENT EXCEEDS	28		28		35	
90 PERCENT EXCEEDS	11		12		14	

e-Estimated.

a-Also occurred Jul 1-9, 1990.

b-From rating curve extended above 4300 ft³/s, on basis of 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 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 to September 1997 (peak flows only).

INSTRUMENTATION.--Pumping sediment sampler since June 1997.

REMARKS.--Records for daily sediment during peak flows are good except for July 19, which is fair, and June 23-24, 26-27, July 9-10, and Aug. 5, 7, 11, which are poor. Daily sediment records are published for days when instantaneous discharge exceeds 100 ft³/s. Daily maximum and minimum specific conductance and daily mean water temperature data for July 1983 to September 1992 are available in district office.

EXTREMES FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 5,590 microsiemens, July 13, 1991; minimum, 202 microsiemens, Aug. 11, 1991.

WATER TEMPERATURE: Maximum, 36.8°C, June 27, 1990; minimum 0.0°C, on many days during the winter in most years.

SEDIMENT CONCENTRATIONS: Maximum daily, 54,900 mg/L, Aug. 16, 1986; minimum daily, 5 mg/L, Mar. 22, 1988, and Feb. 10, 1989.

SEDIMENT LOADS: Maximum daily, 160,000 tons, July 9, 1992; minimum daily, 0.0 tons (estimated), on several days during 1989 and 1990.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATIONS: Maximum daily mean for peak flows only, 5,290 mg/L, Aug. 2; minimum daily mean, 83 mg/L, July 19.

SEDIMENT LOADS: Maximum daily mean, 12,600 tons, Aug. 2; minimum daily mean, 15 tons (estimated), July 19.

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
OCT				
01...	1125	25	55	3.7
NOV				
07...	1120	30	50	4.1
DEC				
09...	1340	37	48	4.8
JAN				
28...	1355	40	30	3.2
MAR				
12...	1125	25	32	2.2
MAY				
02...	1655	47	525	67
JUN				
06...	1530	50	720	97
JUL				
14...	1220	7.3	40	0.79
29...	1545	232	3390	2120
29...	1550	232	3220	2020
30...	1005	115	943	293
AUG				
11...	1420	169	1300	593
19...	1140	22	78	4.6
SEP				
12...	1600	20	50	2.7
12...	1605	20	62	3.3
30...	1745	27	116	8.5

MISCELLANEOUS FIELD MEASUREMENTS, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

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 1996					JUL 1997				
01...	1125	25	3150	18.0	14...	1220	7.3	2240	28.5
NOV					29...	1545	232	1420	23.5
07...	1120	30	3630	7.5	29...	1550	232	1420	23.5
DEC					30...	1005	115	880	22.0
09...	1340	37	3530	5.0	AUG				
JAN 1997					11...	1420	169	1930	25.0
28...	1355	40	3160	2.5	19...	1140	22	2220	25.5
MAR					SEP				
12...	1125	25	3650	12.5	12...	1600	20	2130	26.0
MAY					12...	1605	20	2130	26.0
02...	1655	47	1610	16.0	30...	1745	27	1890	22.0
JUN									
06...	1530	50	441	18.0					

ARKANSAS RIVER BASIN

07126485 PURGATOIRE RIVER AT ROCK CROSSING NEAR TIMPAS, CO--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

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	24	---	---	46	---	---	32	---	---
2	20	---	---	39	---	---	33	---	---
3	19	---	---	35	---	---	29	---	---
4	17	---	---	33	---	---	29	---	---
5	13	---	---	32	---	---	25	---	---
6	11	---	---	31	---	---	28	---	---
7	12	---	---	30	---	---	33	---	---
8	12	---	---	28	---	---	32	---	---
9	11	---	---	27	---	---	34	---	---
10	11	---	---	27	---	---	34	---	---
11	11	---	---	28	---	---	35	---	---
12	11	---	---	30	---	---	36	---	---
13	12	---	---	31	---	---	34	---	---
14	12	---	---	30	---	---	e32	---	---
15	12	---	---	30	---	---	e29	---	---
16	11	---	---	31	---	---	e25	---	---
17	11	---	---	31	---	---	e20	---	---
18	11	---	---	31	---	---	e16	---	---
19	17	---	---	31	---	---	e18	---	---
20	23	---	---	30	---	---	e21	---	---
21	23	---	---	31	---	---	e24	---	---
22	24	---	---	30	---	---	e26	---	---
23	23	---	---	29	---	---	e27	---	---
24	21	---	---	29	---	---	e27	---	---
25	22	---	---	29	---	---	e26	---	---
26	22	---	---	31	---	---	e26	---	---
27	32	---	---	31	---	---	e27	---	---
28	33	---	---	31	---	---	e28	---	---
29	33	---	---	32	---	---	e28	---	---
30	56	---	---	32	---	---	e30	---	---
31	62	---	---	---	---	---	32	---	---
TOTAL	632	---	---	936	---	---	876	---	---
	JANUARY			FEBRUARY			MARCH		
1	33	---	---	32	---	---	33	---	---
2	33	---	---	32	---	---	32	---	---
3	32	---	---	32	---	---	34	---	---
4	32	---	---	31	---	---	32	---	---
5	29	---	---	30	---	---	30	---	---
6	26	---	---	30	---	---	28	---	---
7	e26	---	---	29	---	---	27	---	---
8	e24	---	---	28	---	---	27	---	---
9	e21	---	---	27	---	---	26	---	---
10	e20	---	---	27	---	---	26	---	---
11	e20	---	---	29	---	---	25	---	---
12	e18	---	---	28	---	---	24	---	---
13	e19	---	---	28	---	---	24	---	---
14	e20	---	---	27	---	---	24	---	---
15	e23	---	---	28	---	---	24	---	---
16	e24	---	---	26	---	---	34	---	---
17	e25	---	---	28	---	---	29	---	---
18	e28	---	---	28	---	---	27	---	---
19	e31	---	---	29	---	---	29	---	---
20	e32	---	---	29	---	---	27	---	---
21	e33	---	---	29	---	---	24	---	---
22	e33	---	---	29	---	---	23	---	---
23	e33	---	---	31	---	---	23	---	---
24	e32	---	---	32	---	---	24	---	---
25	e31	---	---	33	---	---	25	---	---
26	e30	---	---	34	---	---	25	---	---
27	e30	---	---	33	---	---	25	---	---
28	28	---	---	33	---	---	27	---	---
29	e29	---	---	---	---	---	28	---	---
30	e30	---	---	---	---	---	26	---	---
31	e30	---	---	---	---	---	25	---	---
TOTAL	855	---	---	832	---	---	837	---	---

e-Estimated.

07126485 PURGATOIRE RIVER AT ROCK CROSSING NEAR TIMPAS, CO--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

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	---	---	73	---	---	52	---	---
2	25	---	---	52	---	---	51	---	---
3	25	---	---	40	---	---	43	---	---
4	23	---	---	31	---	---	37	---	---
5	24	---	---	24	---	---	583	---	---
6	23	---	---	22	---	---	291	---	---
7	20	---	---	19	---	---	544	---	---
8	21	---	---	18	---	---	139	---	---
9	19	---	---	16	---	---	100	---	---
10	20	---	---	16	---	---	86	---	---
11	18	---	---	16	---	---	164	---	---
12	17	---	---	17	---	---	178	---	---
13	17	---	---	16	---	---	101	---	---
14	28	---	---	15	---	---	92	---	---
15	33	---	---	14	---	---	66	---	---
16	33	---	---	14	---	---	62	---	---
17	30	---	---	15	---	---	63	---	---
18	24	---	---	13	---	---	72	---	---
19	21	---	---	12	---	---	64	---	---
20	19	---	---	12	---	---	39	---	---
21	17	---	---	11	---	---	44	---	---
22	17	---	---	11	---	---	35	---	---
23	15	---	---	22	---	---	105	1610	1170
24	17	---	---	43	---	---	73	647	156
25	29	---	---	46	---	---	34	---	---
26	76	---	---	44	---	---	34	142	21
27	84	---	---	43	---	---	90	387	109
28	96	---	---	42	---	---	38	---	---
29	164	---	---	44	---	---	23	---	---
30	115	---	---	49	---	---	18	---	---
31	---	---	---	53	---	---	---	---	---
TOTAL	1095	---	---	863	---	---	3321	---	---
		JULY		AUGUST		SEPTEMBER			
1	14	---	---	38	---	---	17	---	---
2	12	---	---	626	5290	12600	54	---	---
3	9.4	---	---	105	1600	491	40	---	---
4	7.1	---	---	112	---	---	29	---	---
5	6.0	---	---	81	388	94	23	---	---
6	4.6	---	---	45	---	---	21	---	---
7	4.0	---	---	203	544	335	19	---	---
8	3.8	---	---	90	---	---	33	---	---
9	20	---	e15	66	---	---	37	---	---
10	23	---	e18	213	---	---	23	---	---
11	21	---	---	241	1890	1940	18	---	---
12	14	---	---	431	3570	8340	18	---	---
13	10	---	---	61	---	---	19	---	---
14	7.4	---	---	42	---	---	16	---	---
15	5.6	---	---	33	---	---	14	---	---
16	4.3	---	---	30	---	---	12	---	---
17	3.8	---	---	27	---	---	10	---	---
18	3.5	---	---	24	---	---	9.3	---	---
19	17	83	18	21	---	---	8.9	---	---
20	25	---	---	42	---	---	9.0	---	---
21	9.4	---	---	30	---	---	9.6	---	---
22	3.8	---	---	24	---	---	11	---	---
23	e1.9	---	---	25	---	---	15	---	---
24	e1.1	---	---	25	---	---	190	902	526
25	e11	---	---	22	---	---	74	---	---
26	12	---	---	21	---	---	50	---	---
27	12	---	---	41	---	---	44	---	---
28	12	---	---	23	---	---	37	---	---
29	345	3700	5500	18	---	---	35	---	---
30	102	1110	341	18	---	---	30	---	---
31	53	---	---	16	---	---	---	---	---
TOTAL	778.7	---	---	2794	---	---	925.8	---	---

e-Estimated.

07128500 PURGATOIRE RIVER NEAR LAS ANIMAS, CO

LOCATION.--Lat 38°02'02", long 103°12'00", in NE¼SW¼ 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 mi².

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. 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 good except for estimated daily discharges and Dec. 1 to Mar. 1, which are poor. Flow regulated to some extent since January 1975 by Trinidad Lake near Trinidad, upstream. Diversions for irrigation of about 36,000 acres upstream from station. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

EXTREMES OUTSIDE PERIOD OF RECORD.--Greatest flood since at least 1860 occurred Oct. 1, 1904, discharge not determined.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	50	92	35	37	37	33	42	42	26	10	45	25
2	50	95	37	36	32	32	18	54	28	8.3	76	20
3	61	84	35	35	33	32	14	32	26	8.4	260	13
4	59	80	35	35	32	31	9.0	12	26	6.2	87	29
5	61	79	32	31	34	30	8.4	11	66	5.9	78	26
6	62	80	34	32	33	30	9.1	10	247	6.1	107	22
7	65	77	29	26	35	29	8.8	11	287	7.6	94	31
8	66	72	30	25	33	22	9.6	14	302	6.6	132	41
9	58	72	32	27	34	21	8.8	13	134	9.6	89	31
10	64	70	35	24	33	16	43	14	85	7.9	108	41
11	64	71	36	e23	32	17	46	24	76	6.5	325	40
12	62	70	37	e22	32	15	25	20	143	5.5	1940	28
13	59	74	37	e23	32	16	20	15	180	5.7	314	22
14	e57	73	37	e24	32	14	13	9.9	118	5.6	115	18
15	e55	41	37	27	31	27	9.7	9.7	99	23	85	25
16	e54	38	32	27	32	59	6.1	7.7	81	28	91	29
17	e53	37	21	27	31	40	7.7	7.0	78	13	70	25
18	e52	36	e20	27	29	26	7.4	12	81	6.4	64	19
19	49	36	e20	31	28	25	7.8	13	84	5.9	52	13
20	52	34	e24	38	26	41	8.0	9.6	81	6.2	64	17
21	54	33	27	41	27	18	8.0	7.3	61	18	53	43
22	56	34	26	38	27	16	8.7	8.0	49	36	54	50
23	59	34	29	38	27	15	9.9	8.2	43	25	32	49
24	59	34	28	e37	e28	13	21	9.4	39	15	26	44
25	61	34	32	e37	31	13	34	12	72	11	22	97
26	53	33	32	e35	32	14	13	33	46	11	22	91
27	57	32	36	34	e31	13	14	31	33	12	27	65
28	64	38	39	36	35	39	17	30	44	12	28	61
29	73	37	37	e37	---	20	17	25	36	51	36	55
30	68	31	36	36	---	15	56	29	25	169	30	50
31	70	---	41	39	---	17	---	29	---	62	26	---
TOTAL	1827	1651	998	985	879	749	520.0	562.8	2696	604.4	4552	1120
MEAN	58.9	55.0	32.2	31.8	31.4	24.2	17.3	18.2	89.9	19.5	147	37.3
MAX	73	95	41	41	37	59	56	54	302	169	1940	97
MIN	49	31	20	22	26	13	6.1	7.0	25	5.5	22	13
AC-FT	3620	3270	1980	1950	1740	1490	1030	1120	5350	1200	9030	2220

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1978 - 1997, BY WATER YEAR (WY)

	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
MEAN	31.7	33.9	28.3	30.8	31.1	37.7	78.7	130	116	70.5	124	50.0								
MAX (WY)	82.6	59.1	41.9	48.0	56.2	125	418	614	725	263	761	225								
MIN (WY)	1.58	1.90	2.38	4.72	5.65	5.26	3.53	5.41	8.76	7.67	3.76	3.14								

SUMMARY STATISTICS

	FOR 1996 CALENDAR YEAR	FOR 1997 WATER YEAR	FOR WATER YEARS 1978 - 1997
ANNUAL TOTAL	27393.4	17144.2	
ANNUAL MEAN	74.8	47.0	a63.7
HIGHEST ANNUAL MEAN			166
LOWEST ANNUAL MEAN			22.7
HIGHEST DAILY MEAN	1840	1940	b3610
LOWEST DAILY MEAN	5.0	5.5	c1.2
ANNUAL SEVEN-DAY MINIMUM	6.7	6.8	c1.3
INSTANTANEOUS PEAK FLOW		2500	d6680
INSTANTANEOUS PEAK STAGE		9.64	f10.09
ANNUAL RUNOFF (AC-FT)	54330	34010	46180
10 PERCENT EXCEEDS	99	78	119
50 PERCENT EXCEEDS	37	32	28
90 PERCENT EXCEEDS	9.9	9.7	4.5

e-Estimated.
a-Average discharge for 37 years (water years 1923-31, 1949-76), 116 ft³/s; 84040 acre-ft/yr, prior to completion of Trinidad Reservoir.
b-Maximum daily discharge for period of record, 46300 ft³/s, May 20, 1955.
c-No flow at times in 1924-25, 1927, 1949, and 1974.
d-Maximum discharge and stage for period of record, 70000 ft³/s, May 20, 1955, gage height, 20.00 ft, from rating curve extended above 38000 ft³/s, at different datum.
f-Maximum gage height for statistical period, 10.21 ft, Aug 31, 1996.

07130500 ARKANSAS RIVER BELOW JOHN MARTIN RESERVOIR, CO

LOCATION.--Lat 38°03'59", long 102°55'55", in NW¼NE¼ sec.8, T.23 S., R.49 W., Bent County, Hydrologic Unit 11020009, on right bank 0.2 mi downstream from John Martin Dam, 2.6 mi upstream from Caddoa Creek, and 3.5 mi southeast of Hasty.

DRAINAGE AREA.--18,915 mi², of which 785 mi² is probably noncontributing.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 1938 to current year. Published as "at Caddoa" prior to October 1947. Statistical summary computed for 1949 to current year subsequent to completion of John Martin Reservoir.

REVISED RECORDS.--WSP 1241: 1942(M). WSP 1341: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry, and concrete control. Datum of gage is 3,737.40 ft above sea level. Prior to Feb. 22, 1940, at site 3 mi upstream at datum 22.83 ft higher. Feb. 22, 1940 to Feb. 4, 1943, at site 700 ft upstream, at datum 3.64 ft higher, Feb. 5, 1943 to Apr. 8, 1975, at site 1.5 mi downstream at datum approximately 27.5 ft lower.

REMARKS.--Records good except those for Dec. 1 to Mar. 1, which are poor. Storage diversions upstream from station for irrigation of about 438,000 acres and for flood control. Flow completely regulated by John Martin Dam (station 07130000) 0.2 mi upstream since Oct. 1948.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	112	82	3.7	3.8	3.8	2.8	874	639	545	1430	655	753
2	112	74	3.4	3.8	3.8	2.8	871	648	514	1520	1070	663
3	108	74	3.4	3.8	3.8	2.9	863	658	492	1580	1070	576
4	135	75	3.6	3.5	3.8	2.8	783	658	541	1560	644	598
5	158	64	3.7	3.4	3.8	2.8	720	644	590	1540	280	580
6	158	53	3.4	3.4	3.8	2.8	717	625	627	1540	100	564
7	156	53	3.7	3.7	3.8	2.8	730	598	649	1450	20	564
8	186	53	3.8	3.7	3.7	2.8	745	583	648	1370	150	541
9	211	53	3.8	3.7	3.4	2.8	753	594	602	1420	238	529
10	214	53	3.7	3.8	3.4	72	620	604	563	1450	238	533
11	214	53	3.8	3.8	3.4	123	442	605	542	1430	178	533
12	214	47	3.8	3.8	3.3	123	405	580	561	1420	62	540
13	212	30	3.8	e3.8	3.1	123	406	561	556	1410	19	544
14	213	12	3.8	e3.8	3.1	123	479	562	534	1430	16	544
15	225	3.4	3.8	e3.8	3.1	123	602	560	534	1450	16	570
16	236	3.4	3.8	e3.8	3.1	123	607	722	552	1440	16	591
17	238	3.4	e3.8	e3.8	3.0	104	618	972	568	1420	15	587
18	239	3.6	e3.8	e3.8	2.8	85	777	969	597	1390	15	575
19	239	3.4	e3.9	e3.8	2.8	101	1020	722	619	1380	83	551
20	238	3.6	e4.0	e3.7	2.9	135	1030	552	666	1370	255	541
21	249	3.8	4.1	3.6	2.8	367	1040	494	698	1350	309	539
22	263	3.7	4.1	3.1	2.8	686	1070	449	700	1310	276	487
23	266	3.7	4.1	3.1	2.8	689	1070	451	1090	1300	282	410
24	265	3.8	4.1	3.1	2.8	666	736	455	1470	1300	281	364
25	265	4.0	4.1	3.1	2.8	611	459	457	1490	1300	312	328
26	264	4.1	4.1	3.3	2.8	586	444	462	1070	1290	390	308
27	264	4.1	4.0	3.4	2.8	564	445	503	825	1290	459	296
28	251	3.8	3.8	3.4	2.8	554	458	556	843	1290	676	296
29	220	3.8	3.8	3.4	---	567	562	579	851	1190	788	260
30	210	3.8	3.8	3.7	---	568	633	582	929	295	758	256
31	162	---	3.8	3.8	---	754	---	543	---	16	756	---
TOTAL	6497	835.4	118.3	111.5	90.1	7872.3	20979	18587	21466	40931	10427	15021
MEAN	210	27.8	3.82	3.60	3.22	254	699	600	716	1320	336	501
MAX	266	82	4.1	3.8	3.8	754	1070	972	1490	1580	1070	753
MIN	108	3.4	3.4	3.1	2.8	2.8	405	449	492	16	15	256
AC-FT	12890	1660	235	221	179	15610	41610	36870	42580	81190	20680	29790

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1949 - 1997, BY WATER YEAR (WY)

	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
MEAN	198	24.3	11.9	6.62	14.1	40.3	424	439	540	694	565	322																	
MAX	565	217	281	173	477	410	1174	2576	2665	2895	2127	1007																	
(WY)	1949	1966	1966	1966	1966	1986	1987	1987	1995	1995	1965	1984																	
MIN	11.4	.85	.64	.62	.75	1.06	2.43	34.2	52.0	86.1	22.6	6.69																	
(WY)	1975	1977	1977	1977	1977	1980	1973	1975	1954	1963	1960	1974																	

SUMMARY STATISTICS FOR 1996 CALENDAR YEAR FOR 1997 WATER YEAR WATER YEARS 1949 - 1997

ANNUAL TOTAL	114629.9	142935.6	
ANNUAL MEAN	313	392	a275
HIGHEST ANNUAL MEAN			745
LOWEST ANNUAL MEAN			82.5
HIGHEST DAILY MEAN	1160	Jul 8	1580
LOWEST DAILY MEAN	b3.1	Feb 12	c2.8
ANNUAL SEVEN-DAY MINIMUM	3.2	Feb 9	2.8
INSTANTANEOUS PEAK FLOW			f1600
INSTANTANEOUS PEAK STAGE			4.79
ANNUAL RUNOFF (AC-FT)	227400	283500	199000
10 PERCENT EXCEEDS	907	1070	853
50 PERCENT EXCEEDS	170	260	50
90 PERCENT EXCEEDS	3.8	3.4	2.0

e-Estimated.

a-Average discharge for 5 years (water years 1939-43), 628 ft³/s, unadjusted; 455000 acre-ft/yr, during construction of John Martin Dam.

b-Also occurred Feb 13-15.

c-Also occurred Feb 19, 21-28, Mar 1-2, and 4-9.

d-No flow at times in 1945-47. Minimum daily prior to construction of John Martin Dam, 5 ft³/s, Jul 16, 1939.

f-Maximum discharge for period of record, 40000 ft³/s, Apr 24, 1942, gage height, 10.46 ft, site and datum then in use, from rating curve extended above 12000 ft³/s, on basis of flow-over-dam and critical-depth measurement of peak flow.

g-Maximum gage height for period of record, 10.62 ft, Jun 18, 1965, backwater from Caddoa Creek, site and datum then in use.

**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. Records for daily water temperature are good. Daily data that are not published are either missing or of unacceptable quality.

EXTREMES FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 3,540 microsiemens, Feb. 26, 1986; minimum, 1,060 microsiemens, Aug. 26 to Sept. 4, 1995.

WATER TEMPERATURE: Maximum, 27.9°C, June 10, 1989; minimum, 0.0°C, many days during winter months.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 2,520 microsiemens, Feb. 21-22, 25, 27; minimum, 1,700 microsiemens, Sept. 17, 24.

WATER TEMPERATURE: Maximum, 26.5°C, Aug. 13, 15; minimum, 1.0°C, Dec. 19.

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM @ 25 DEG. C), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
				MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	2010	1990	2000	2070	2040	2060	2250	2190	2230	2350	2290	2320			
2	2020	1990	2010	2070	2050	2060	2250	2210	2230	2340	2290	2310			
3	2080	2020	2050	2070	2040	2060	2310	2230	2260	2370	2280	2320			
4	2080	2010	2040	2060	2040	2050	2330	2270	2300	2380	2270	2330			
5	2020	2000	2010	2080	2040	2060	2350	2270	2310	2410	2380	2390			
6	2010	2000	2010	2110	2080	2100	2320	2280	2300	2430	2370	2400			
7	2040	2000	2010	2140	2110	2120	2330	2280	2310	2460	2380	2440			
8	2040	2010	2020	2120	2090	2110	2310	2270	2290	2480	2440	2460			
9	2020	2000	2010	2110	2090	2100	2300	2230	2270	2480	2420	2460			
10	2010	2000	2010	2110	2090	2100	2300	2240	2270	2470	2420	2440			
11	2010	1990	2010	2130	2100	2110	2310	2240	2280	2460	2420	2440			
12	2010	1990	2000	2150	2120	2130	2320	2260	2290	2440	2410	2430			
13	2010	1990	2000	2160	2130	2150	2330	2270	2310	2430	2390	2410			
14	2010	1990	2000	2190	2150	2170	2360	2310	2330	2450	2410	2430			
15	2010	1990	2000	2210	2170	2200	2400	2350	2380	2440	2400	2430			
16	2020	1990	2000	2260	2190	2210	2400	2340	2370	2440	2400	2420			
17	2010	2000	2000	2270	2200	2240	2380	2360	2370	2480	2410	2440			
18	2020	2000	2010	2250	2160	2210	2420	2380	2400	2490	2440	2470			
19	2020	2000	2010	2220	2150	2190	2420	2380	2400	2480	2450	2460			
20	2020	2000	2010	2190	2120	2160	2420	2350	2390	2480	2440	2460			
21	2030	2020	2020	2200	2150	2180	2380	2310	2340	2480	2400	2440			
22	2040	2020	2030	2220	2160	2190	2350	2300	2320	2460	2420	2440			
23	2040	2020	2030	2220	2170	2190	2340	2300	2320	2460	2380	2430			
24	2040	2030	2040	2240	2180	2210	2380	2330	2360	2460	2380	2430			
25	2040	2030	2030	2240	2170	2200	2390	2330	2350	2470	2420	2440			
26	2050	2030	2040	2230	2180	2200	2410	2380	2390	2480	2440	2460			
27	2040	2030	2030	2250	2200	2220	2380	2350	2370	2490	2430	2460			
28	2040	2030	2040	2270	2180	2230	2390	2350	2370	2490	2440	2460			
29	2050	2030	2040	2230	2190	2200	2380	2350	2370	2460	2380	2420			
30	2050	2030	2040	2250	2200	2220	2370	2330	2350	2490	2400	2440			
31	2050	2030	2040	---	---	---	2380	2320	2350	2430	2370	2400			
MONTH	2080	1990	2020	2270	2040	2150	2420	2190	2330	2490	2270	2420			

07130500 ARKANSAS RIVER BELOW JOHN MARTIN RESERVOIR, CO--Continued

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM @ 25 DEG. C), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	
													FEBRUARY
1	2450	2390	2420	2510	2450	2480	2330	2260	2290	2300	2260	2280	
2	2450	2380	2420	2500	2460	2470	2310	2290	2300	2260	2240	2250	
3	2440	2400	2420	2480	2450	2470	2290	2280	2280	2240	2220	2230	
4	2460	2420	2440	2490	2460	2480	2290	2280	2280	2230	2220	2230	
5	2450	2400	2430	2500	2460	2480	2300	2290	2290	2230	2220	2230	
6	2480	2430	2460	2500	2450	2470	2300	2300	2300	2250	2220	2230	
7	2480	2440	2460	2490	2420	2460	2300	2290	2300	2270	2240	2250	
8	2490	2440	2470	2470	2420	2450	2330	2290	2310	2330	2260	2290	
9	2470	2430	2450	2480	2430	2460	2320	2290	2310	2280	2240	2260	
10	2460	2430	2440	2500	2300	2410	2320	2300	2310	2290	2260	2270	
11	2470	2440	2450	2300	2280	2290	2320	2310	2310	2290	2260	2270	
12	2490	2440	2460	2280	2250	2270	2320	2310	2310	2320	2280	2290	
13	2490	2460	2470	2310	2240	2280	2320	2300	2310	2300	2280	2290	
14	2490	2440	2470	2310	2300	2310	2320	2300	2310	2290	2270	2280	
15	2490	2440	2460	2310	2300	2300	2310	2300	2310	2300	2270	2290	
16	2480	2440	2460	2310	2300	2300	2310	2300	2300	2320	2280	2300	
17	2480	2440	2460	2310	2300	2300	2310	2290	2300	2310	2280	2290	
18	2490	2450	2460	2310	2270	2300	2290	2290	2290	2310	2300	2310	
19	2490	2440	2460	2310	2280	2300	2300	2290	2290	2320	2280	2300	
20	2500	2450	2480	2310	2290	2300	2300	2290	2300	2310	2290	2300	
21	2520	2480	2500	2300	2260	2300	2310	2300	2310	2310	2300	2310	
22	2520	2480	2500	2290	2270	2280	2320	2310	2320	2320	2300	2310	
23	2510	2480	2490	2290	2280	2290	2320	2290	2310	2310	2300	2300	
24	2510	2470	2490	2280	2270	2280	2290	2290	2290	2340	2310	2320	
25	2520	2460	2480	2280	2270	2270	2290	2290	2290	2330	2310	2330	
26	2510	2480	2490	2280	2270	2270	2290	2290	2290	2330	2310	2320	
27	2520	2470	2500	2280	2250	2270	2290	2280	2290	2330	2310	2320	
28	2500	2470	2480	2270	2260	2270	2290	2280	2290	2330	2320	2330	
29	---	---	---	2270	2260	2270	2330	2290	2290	2330	2330	2330	
30	---	---	---	2270	2260	2270	2290	2290	2290	2330	2320	2330	
31	---	---	---	2270	2260	2270	---	---	---	2330	2330	2330	
MONTH	2520	2380	2460	2510	2240	2340	2330	2260	2300	2340	2220	2290	
		JUNE			JULY			AUGUST			SEPTEMBER		
1	2330	2330	2330	2310	2280	2300	1910	1850	1860	1810	1790	1800	
2	2350	2330	2340	2290	2250	2270	1850	1850	1850	1810	1790	1790	
3	2350	2330	2340	2290	2260	2270	---	---	---	1810	1770	1790	
4	2340	2330	2340	2270	2250	2270	---	---	---	1800	1770	1790	
5	2340	2330	2340	2260	2230	2250	---	---	---	1790	1760	1770	
6	2340	2330	2340	2250	2210	2230	1840	1830	1840	1820	1740	1770	
7	2350	2330	2340	2220	2170	2210	1850	1770	1820	1820	1750	1780	
8	2350	2340	2340	2220	2160	2180	1790	1780	1780	1800	1740	1780	
9	2350	2330	2350	2160	2140	2150	1830	1760	1800	1790	1720	1740	
10	2350	2340	2350	2160	2120	2140	1830	1760	1800	1770	1750	1760	
11	2360	2340	2350	2130	2060	2100	1860	1770	1810	1770	1720	1740	
12	2360	2330	2350	2070	2020	2050	1840	1800	1820	1740	1710	1730	
13	2360	2330	2350	2040	2010	2030	1860	1800	1830	1750	1720	1740	
14	2360	2350	2350	2040	2000	2020	1920	1830	1870	1750	1730	1740	
15	2370	2350	2350	2000	1980	1990	1900	1860	1880	1760	1710	1730	
16	2380	2340	2350	1990	1950	1970	1920	1870	1890	1760	1710	1730	
17	2360	2350	2350	1970	1940	1960	1900	1870	1880	1760	1700	1730	
18	2360	2350	2350	1950	1930	1930	1910	1880	1890	1750	1720	1740	
19	2360	2350	2350	1930	1890	1910	1910	1800	1860	1780	1710	1740	
20	2360	2350	2350	1920	1890	1900	1830	1780	1810	1740	1710	1730	
21	2350	2340	2350	1910	1880	1890	1840	1820	1830	1750	1730	1740	
22	2350	2340	2350	1900	1880	1880	1840	1830	1830	1780	1740	1750	
23	2350	2320	2340	1890	1880	1890	1830	1820	1830	1760	1730	1750	
24	2340	2320	2330	1890	1870	1880	1820	1810	1820	1750	1700	1730	
25	2330	2310	2320	1890	1870	1880	1830	1810	1820	1760	1740	1750	
26	2320	2300	2320	1880	1870	1880	1830	1800	1820	1760	1740	1750	
27	2320	2310	2320	1880	1870	1870	1820	1800	1810	1830	1760	1800	
28	2320	2300	2310	1870	1850	1860	1820	1800	1810	1830	1810	1820	
29	2320	2310	2310	1860	1850	1860	1810	1800	1800	1840	1820	1830	
30	2320	2300	2310	1870	1850	1860	1830	1790	1800	1840	1830	1840	
31	---	---	---	---	---	---	1850	1790	1810	---	---	---	
MONTH	2380	2300	2340	---	---	---	---	---	---	1840	1700	1760	

07130500 ARKANSAS RIVER BELOW JOHN MARTIN RESERVOIR, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	18.5	17.2	17.7	12.0	10.8	11.4	6.2	4.1	5.1	7.2	4.7	5.6
2	17.6	16.8	17.2	12.1	10.5	11.1	5.6	4.2	4.9	7.1	4.9	5.8
3	17.6	16.4	16.9	11.7	10.5	11.0	5.3	3.8	4.6	6.6	5.0	5.8
4	17.6	16.4	16.9	11.8	10.7	11.1	5.0	3.6	4.3	6.4	5.0	5.6
5	17.7	16.6	17.0	12.0	10.5	11.0	5.2	3.3	4.2	5.6	4.1	4.9
6	17.6	16.6	17.0	11.1	10.0	10.4	4.6	4.0	4.4	5.4	3.7	4.6
7	17.0	16.6	16.8	11.1	9.5	10.1	5.3	3.0	4.2	4.8	3.2	4.0
8	17.3	16.4	16.7	10.6	9.3	9.8	6.2	3.6	4.8	4.8	3.3	4.1
9	17.2	16.3	16.6	10.8	9.3	9.9	7.0	3.9	5.4	4.8	2.9	3.9
10	17.2	16.3	16.7	10.6	9.3	9.9	7.5	5.0	6.1	4.6	2.8	3.7
11	17.2	16.4	16.7	10.4	9.2	9.6	8.0	5.4	6.4	4.2	2.4	3.1
12	17.3	16.3	16.7	10.1	9.0	9.4	7.5	5.3	6.2	3.5	2.8	3.2
13	17.2	16.3	16.7	10.2	8.7	9.2	8.0	4.9	6.2	4.2	3.0	3.5
14	17.2	16.3	16.7	9.0	8.5	8.7	6.5	4.8	5.6	4.1	3.0	3.4
15	17.1	16.4	16.6	8.5	7.9	8.3	5.4	4.0	4.6	3.8	3.1	3.4
16	17.0	16.2	16.5	7.9	5.7	7.2	4.6	3.0	3.7	4.2	3.3	3.7
17	16.3	15.8	16.1	7.3	4.8	6.1	3.2	1.3	2.4	4.0	3.3	3.6
18	16.3	15.1	15.7	9.2	5.3	6.9	3.1	1.1	1.7	4.0	3.4	3.7
19	15.8	15.2	15.4	10.1	6.4	7.9	2.2	1.0	1.5	4.4	3.5	3.9
20	15.7	14.8	15.2	10.1	7.5	8.7	3.0	1.2	1.9	5.0	3.9	4.3
21	14.8	14.1	14.5	8.6	7.4	8.0	3.4	2.0	2.5	4.7	3.8	4.4
22	14.2	13.7	13.9	8.8	7.3	8.0	4.1	2.4	3.0	5.4	4.1	4.8
23	14.1	13.4	13.8	7.9	6.4	7.4	4.5	2.7	3.4	5.6	4.5	5.0
24	13.9	13.2	13.4	7.0	4.8	6.0	4.1	2.6	3.3	5.9	4.7	5.2
25	13.8	13.0	13.4	6.6	5.0	5.8	5.0	3.2	3.9	5.9	4.4	5.1
26	13.3	12.4	12.8	5.8	4.5	5.3	4.6	3.0	3.7	5.9	4.3	5.0
27	12.8	12.4	12.6	5.6	4.4	5.1	4.8	3.7	4.2	6.0	4.4	5.1
28	12.8	12.2	12.5	6.6	4.3	5.4	5.3	3.9	4.6	5.9	4.3	5.0
29	12.5	11.8	12.1	6.9	5.4	6.2	5.5	4.3	4.8	7.0	4.9	5.7
30	12.5	11.8	12.0	6.2	4.9	5.6	5.8	4.5	5.1	7.5	4.5	5.9
31	11.8	11.3	11.6	---	---	---	6.5	4.6	5.4	7.9	4.8	6.3
MONTH	18.5	11.3	15.3	12.1	4.3	8.4	8.0	1.0	4.3	7.9	2.4	4.6
	FEBRUARY			MARCH			APRIL			MAY		
1	8.2	5.8	6.9	9.1	4.0	6.1	8.0	7.6	7.8	10.9	8.9	9.7
2	7.8	5.8	6.8	10.0	4.2	6.7	7.8	7.6	7.7	10.9	10.1	10.6
3	8.1	5.6	6.7	10.2	4.5	7.0	8.0	7.7	7.8	11.0	10.5	10.7
4	7.3	4.5	5.9	8.2	4.7	6.5	8.5	7.7	8.1	10.9	10.4	10.6
5	6.0	4.3	5.4	10.3	4.7	7.1	8.3	7.8	8.0	11.0	10.5	10.7
6	5.1	3.8	4.6	12.0	5.1	8.1	8.2	7.6	7.9	11.2	10.4	10.7
7	5.1	3.0	3.9	13.3	5.3	8.9	8.1	7.6	7.8	11.6	10.7	11.0
8	6.2	2.9	4.3	13.2	6.5	9.5	7.6	7.4	7.5	11.2	10.8	11.0
9	6.6	4.2	5.0	12.4	6.9	9.4	7.8	7.3	7.5	11.7	11.0	11.3
10	6.4	3.4	4.9	8.5	4.9	6.8	7.5	7.0	7.3	11.7	11.0	11.3
11	5.2	3.3	4.4	5.7	4.4	5.0	7.1	6.6	6.9	11.9	11.1	11.5
12	5.6	3.4	4.4	5.8	4.5	5.0	6.8	6.3	6.5	13.2	11.5	12.4
13	4.7	3.3	3.9	4.8	4.0	4.4	7.0	6.2	6.5	12.8	12.1	12.4
14	7.1	2.9	4.7	4.8	3.8	4.1	7.0	6.2	6.5	12.9	12.3	12.5
15	7.0	3.0	5.1	4.9	3.6	4.2	7.1	6.2	6.6	13.2	12.4	12.6
16	8.9	4.3	6.3	4.8	3.8	4.3	6.9	6.3	6.5	13.1	12.4	12.6
17	8.7	5.2	6.8	5.6	4.1	4.7	7.0	6.3	6.6	12.9	12.4	12.6
18	10.9	5.4	7.6	6.3	4.4	5.1	7.1	6.4	6.7	13.1	12.4	12.7
19	10.0	7.2	8.4	6.5	4.4	5.3	7.0	6.5	6.7	13.5	12.7	13.2
20	8.6	5.2	7.1	6.8	5.1	5.8	7.0	6.5	6.7	13.6	12.8	13.1
21	7.2	5.1	6.4	6.7	5.2	5.7	7.1	6.6	6.8	13.8	12.9	13.2
22	8.7	4.0	6.1	6.3	5.2	5.9	9.2	7.0	8.1	14.1	12.9	13.6
23	6.5	3.4	4.5	6.1	5.6	5.8	7.9	7.4	7.6	14.6	13.7	14.1
24	5.9	3.3	4.6	7.1	6.1	6.5	8.0	7.2	7.4	14.8	13.9	14.3
25	8.5	3.2	5.6	7.1	6.4	6.8	8.3	8.0	8.2	15.1	14.4	14.7
26	5.2	3.5	4.2	7.6	6.7	7.1	8.5	7.9	8.2	15.1	14.2	14.6
27	7.2	2.5	4.7	7.9	6.8	7.3	9.4	8.2	8.8	15.0	14.2	14.6
28	7.1	3.7	5.5	8.1	7.4	7.7	9.5	8.7	9.0	15.7	14.7	15.3
29	---	---	---	7.7	7.3	7.5	9.4	8.9	9.1	15.7	15.1	15.4
30	---	---	---	7.9	7.4	7.6	9.6	8.9	9.1	15.6	14.9	15.2
31	---	---	---	8.3	7.4	7.8	---	---	---	16.0	14.9	15.4
MONTH	10.9	2.5	5.5	13.3	3.6	6.4	9.6	6.2	7.5	16.0	8.9	12.7

ARKANSAS RIVER BASIN

07130500 ARKANSAS RIVER BELOW JOHN MARTIN RESERVOIR, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	16.0	15.3	15.6	19.4	18.8	19.1	23.4	22.9	23.2	23.4	23.0	23.2
2	16.1	15.3	15.6	19.8	19.0	19.3	23.5	22.9	23.3	23.1	22.9	23.0
3	16.3	15.6	15.9	19.7	19.1	19.3	23.6	23.2	23.4	23.3	22.9	23.0
4	16.3	15.6	16.0	19.4	19.1	19.3	23.8	23.2	23.4	23.4	22.9	23.1
5	16.7	16.0	16.3	19.8	19.2	19.5	23.4	23.0	23.2	23.5	22.8	23.1
6	16.8	16.0	16.3	19.9	19.3	19.6	23.1	21.5	22.6	23.6	23.0	23.2
7	17.6	16.2	16.9	20.0	19.6	19.8	25.2	21.0	22.5	23.7	23.0	23.3
8	17.4	17.0	17.1	20.2	19.6	20.0	23.8	21.2	22.5	23.6	23.0	23.2
9	17.1	16.8	17.0	20.5	20.0	20.2	23.8	22.7	23.2	23.4	22.9	23.0
10	17.4	16.8	17.1	20.5	19.9	20.2	23.1	22.8	22.9	23.5	22.9	23.1
11	18.3	17.0	17.6	20.7	20.2	20.5	23.5	22.5	23.0	23.4	22.8	23.0
12	18.1	17.4	17.6	21.1	20.7	20.9	26.2	22.4	23.6	23.5	22.8	23.1
13	18.3	17.5	17.9	21.4	20.8	21.0	26.5	21.0	23.3	23.3	22.7	22.9
14	18.2	17.5	17.9	21.3	20.8	21.1	26.1	21.5	23.4	23.2	22.6	22.8
15	19.0	18.1	18.5	21.6	21.2	21.3	26.5	21.7	23.7	23.1	22.5	22.8
16	19.6	18.6	19.1	22.0	21.3	21.6	26.3	21.5	23.2	23.2	22.6	22.9
17	19.4	18.7	18.9	21.8	21.5	21.6	25.5	21.7	22.9	23.1	22.5	22.8
18	19.2	18.5	18.8	21.9	21.7	21.8	25.4	21.8	23.1	23.0	22.5	22.7
19	19.2	18.5	18.8	22.5	21.7	22.0	23.7	21.4	22.6	22.8	22.3	22.5
20	19.1	18.4	18.7	22.5	22.1	22.3	23.5	22.5	23.0	22.3	21.8	22.2
21	19.1	18.4	18.7	22.6	22.0	22.3	23.7	22.7	23.1	21.8	21.2	21.7
22	19.1	18.5	18.8	22.8	22.2	22.5	23.6	22.6	23.0	21.7	20.9	21.3
23	19.4	18.5	18.9	22.6	22.2	22.4	23.6	22.6	23.0	21.0	20.6	20.8
24	19.1	18.7	18.9	22.8	22.2	22.5	23.6	22.5	22.9	20.8	20.1	20.5
25	19.2	18.8	19.0	22.5	22.3	22.4	23.5	22.6	22.9	20.9	20.0	20.3
26	19.3	18.8	19.0	22.8	22.3	22.5	23.5	22.7	23.0	20.8	19.9	20.2
27	19.3	18.8	19.0	22.8	22.5	22.6	23.5	22.7	23.0	20.2	19.1	19.7
28	19.3	18.8	19.0	23.0	22.6	22.8	23.3	22.8	23.0	19.8	19.0	19.3
29	19.3	18.8	19.0	23.1	22.6	22.9	23.2	22.7	22.9	20.1	18.9	19.3
30	19.4	18.8	19.0	23.7	22.6	23.1	23.3	22.8	23.0	19.9	18.9	19.2
31	---	---	---	---	---	---	23.3	22.8	23.0	---	---	---
MONTH	19.6	15.3	17.9	---	---	---	26.5	21.0	23.1	23.7	18.9	22.0

07133000 ARKANSAS RIVER AT LAMAR, CO

LOCATION.--Lat 38°06'21", long 102°37'05", in NE¼SE¼ 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, and 1.3 mi north of courthouse in Lamar.

DRAINAGE AREA.--19,780 mi², of which 950 mi² 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. 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. 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 datum 4.00 ft lower. Prior to Mar. 18, 1987, at site 75 ft downstream at same datum.

REMARKS.--Records good except for estimated daily discharges, 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 and diversions for irrigation of about 487,000 acres, 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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27	41	65	63	60	52	340	21	27	329	222	283
2	27	38	67	64	58	48	341	22	54	540	784	235
3	28	35	63	66	61	49	332	21	41	680	1220	110
4	20	29	61	61	60	52	310	22	18	739	828	72
5	22	23	59	59	57	49	208	26	19	713	305	79
6	21	18	59	59	57	49	215	44	25	701	1730	68
7	22	20	58	58	59	46	214	44	61	710	488	69
8	23	28	58	67	56	44	240	30	77	582	215	82
9	26	42	60	64	59	43	262	27	98	548	106	37
10	25	44	62	e60	58	43	226	28	60	663	85	28
11	19	46	62	e62	55	68	50	26	41	657	93	24
12	15	63	58	e48	52	e25	24	30	24	652	1830	23
13	13	58	59	e49	49	e12	20	40	47	634	1190	24
14	13	55	59	e50	47	e9.0	18	33	23	650	505	26
15	13	69	58	e54	47	e11	25	34	18	712	199	23
16	13	92	59	e56	48	e8.0	28	42	18	718	160	24
17	12	86	e56	59	52	e7.0	15	379	20	697	125	27
18	12	81	e52	59	53	e6.0	16	422	16	681	113	37
19	15	75	e45	63	54	e5.7	293	396	17	697	70	43
20	16	72	e45	68	49	6.4	352	86	17	763	44	26
21	13	67	46	64	49	10	355	53	17	729	98	142
22	26	61	49	67	51	316	370	57	18	640	72	169
23	32	59	49	68	50	430	373	69	61	598	113	113
24	29	59	50	66	e49	464	438	68	603	589	127	54
25	28	60	48	65	50	427	87	67	677	602	71	33
26	28	61	52	65	50	377	40	59	582	706	42	20
27	29	59	54	63	e49	365	35	38	92	731	34	19
28	31	61	58	63	e51	338	29	23	66	731	54	19
29	31	64	61	63	---	350	23	31	58	955	241	18
30	23	64	63	62	---	352	34	45	57	1550	205	17
31	16	---	63	61	---	348	---	30	---	246	350	---
TOTAL	668	1630	1758	1896	1490	4410.1	5313	2313	2952	21143	11719	1944
MEAN	21.5	54.3	56.7	61.2	53.2	142	177	74.6	98.4	682	378	64.8
MAX	32	92	67	68	61	464	438	422	677	1550	1830	283
MIN	12	18	45	48	47	5.7	15	21	16	246	34	17
AC-FT	1320	3230	3490	3760	2960	8750	10540	4590	5860	41940	23240	3860

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1949 - 1997, BY WATER YEAR (WY)

	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	
MEAN	36.4	17.8	22.3	24.1	30.7	31.7	164	172	239	301	210	95.3																			
MAX	233	54.3	71.5	158	507	210	1089	2143	2087	2457	1547	689																			
(WY)	1949	1997	1966	1966	1966	1986	1987	1987	1987	1995	1965	1965																			
MIN	.84	1.81	.56	.47	.73	1.11	5.90	6.41	3.80	10.2	10.9	1.37																			
(WY)	1978	1978	1978	1978	1965	1965	1995	1963	1954	1964	1974	1974																			

SUMMARY STATISTICS FOR 1996 CALENDAR YEAR FOR 1997 WATER YEAR WATER YEARS 1949 - 1997

ANNUAL TOTAL	53532.7	57236.1	
ANNUAL MEAN	146	157	a ₁₁₂
HIGHEST ANNUAL MEAN			537
LOWEST ANNUAL MEAN			27.0
HIGHEST DAILY MEAN	3080	May 26	1830
LOWEST DAILY MEAN	c _{6.5}	Jan 11	e _{5.7}
ANNUAL SEVEN-DAY MINIMUM	6.6	Jan 10	f _{7.6}
INSTANTANEOUS PEAK FLOW			3820
INSTANTANEOUS PEAK STAGE			12.79
ANNUAL RUNOFF (AC-FT)	106200	113500	80780
10 PERCENT EXCEEDS	467	562	394
50 PERCENT EXCEEDS	58	58	22
90 PERCENT EXCEEDS	12	19	4.0

e-Estimated.
a-Average discharge for 30 years (water years 1914-43), 298 ft³/s; 215900 acre-ft/yr, prior to and during construction of John Martin Dam.
b-Maximum daily discharge for period of record, 87300 ft³/s, Jun 6, 1921.
c-Also occurred Jan 12, 14.
d-Minimum daily discharge for period of record, no flow at times in 1913-15.
f-From rating curve extended above 3300 ft³/s.
g-Maximum discharge and stage for period of record, 130000 ft³/s, Jun 5, 1921, gage height, 14.55 ft, datum then in use, from rating curve extended above 10000 ft³/s.
h-Datum then in use, from floodmarks.

07134100 BIG SANDY CREEK NEAR LAMAR, CO

LOCATION.--Lat 38°06'51", long 102°29'00", in SW¹/₄SW¹/₄ sec. 21, T.22 S., R.45 W., Prowers County, Hydrologic Unit 11020011, on right bank 35 ft upstream from State Highway 196, 950 ft upstream from mouth, and 7.5 mi east of Lamar.

DRAINAGE AREA.--3,248 mi².

PERIOD OF RECORD.-- February 1968 to September 1982, July 1995 to current year.

REVISED RECORDS.--WDR CO-71-1: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 3,545 ft above sea level, from topographic map.

REMARKS.--Records good except for estimated daily discharges and those above 100 ft³/s, 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 OUTSIDE PERIOD OF RECORD.--Flood of Aug. 21, 1965, reached a stage of 9.93 ft from floodmarks, discharge not determined.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	52	18	24	27	24	29	100	24	18	16	18	25
2	15	15	25	27	26	26	28	28	13	16	20	23
3	12	13	23	28	25	25	19	24	14	19	e32	21
4	13	12	22	25	22	24	18	25	13	16	e19	20
5	12	11	21	27	23	24	14	20	11	17	39	21
6	11	11	26	28	22	24	22	21	12	20	e327	20
7	11	10	27	26	20	24	18	24	16	15	e266	15
8	11	9.0	26	27	19	24	17	21	15	14	193	12
9	11	10	29	30	25	25	23	21	14	16	207	17
10	11	11	28	29	24	24	26	23	13	15	237	21
11	12	11	25	27	24	24	18	23	15	15	253	21
12	11	11	25	24	23	25	108	19	70	12	e251	16
13	11	11	24	25	19	25	88	17	109	11	e97	13
14	9.8	11	24	25	20	24	83	14	46	16	e161	13
15	31	12	22	24	24	24	39	11	28	13	72	15
16	22	12	20	24	23	24	17	12	19	15	46	17
17	13	12	17	24	24	24	14	15	62	14	38	16
18	11	11	17	21	24	23	14	22	27	13	36	14
19	35	12	17	23	24	24	16	26	17	16	35	13
20	95	12	17	25	24	20	16	21	18	26	32	7.4
21	78	11	19	27	23	25	18	13	13	25	29	25
22	121	11	22	24	23	50	19	17	11	20	28	24
23	97	12	24	27	23	72	19	17	9.4	16	27	23
24	23	11	23	29	20	49	31	16	9.9	15	25	20
25	18	11	21	25	28	64	38	19	11	15	23	109
26	16	11	22	25	30	85	28	18	11	18	22	75
27	14	11	21	21	29	89	26	12	13	17	21	23
28	14	11	24	21	31	73	19	12	14	17	21	19
29	13	12	25	25	---	67	15	14	17	47	22	17
30	31	17	25	22	---	68	19	12	16	e64	23	16
31	46	---	27	24	---	89	---	14	---	e36	25	---
TOTAL	880.8	353.0	712	786	666	1217	930	575	675.3	605	2645	691.4
MEAN	28.4	11.8	23.0	25.4	23.8	39.3	31.0	18.5	22.5	19.5	85.3	23.0
MAX	121	18	29	30	31	89	108	28	109	64	327	109
MIN	9.8	9.0	17	21	19	20	14	11	9.4	11	18	7.4
AC-FT	1750	700	1410	1560	1320	2410	1840	1140	1340	1200	5250	1370

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1968 - 1997, BY WATER YEAR (WY)

	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
MEAN	6.33	12.7	15.5	15.9	18.3	18.4	17.1	15.0	9.14	7.61	13.7	9.51
MAX	28.4	43.8	45.1	41.5	48.0	48.8	65.3	41.1	22.5	27.1	85.3	41.8
(WY)	1997	1971	1970	1996	1971	1974	1970	1973	1996	1996	1997	1976
MIN	.087	.41	.34	.50	2.23	2.10	.81	2.14	1.77	.21	.027	.084
(WY)	1979	1978	1978	1978	1978	1977	1978	1975	1976	1978	1976	1978

SUMMARY STATISTICS

	FOR 1996 CALENDAR YEAR	FOR 1997 WATER YEAR	WATER YEARS 1968 - 1997
ANNUAL TOTAL	11045.4	10736.5	
ANNUAL MEAN	30.2	29.4	13.5
HIGHEST ANNUAL MEAN			29.4
LOWEST ANNUAL MEAN			2.23
HIGHEST DAILY MEAN	333	Aug 20	619
LOWEST DAILY MEAN	^a 8.1	Apr 3	^b 7.4
ANNUAL SEVEN-DAY MINIMUM	9.1	Mar 30	10
INSTANTANEOUS PEAK FLOW			534
INSTANTANEOUS PEAK STAGE			6.60
ANNUAL RUNOFF (AC-FT)	21910	21300	9760
10 PERCENT EXCEEDS	50	46	34
50 PERCENT EXCEEDS	20	21	7.0
90 PERCENT EXCEEDS	11	12	.70

e-Estimated.
a-Also occurred Apr 4.
b-Also occurred Aug 14-18, 1976, and days during 1977, 1978, and 1979.
c-On basis of measurement of peak flow through culvert and over road.

07134180 ARKANSAS RIVER NEAR GRANADA, CO

LOCATION.--Lat 38°05'44", long 102°18'37", in SE¹/₄NE³/₄ sec.36, T.22 S., R.44 W., Prowers County, Hydrologic Unit 11020009, on left bank at upstream side at 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 mi².

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. Elevation of gage is 3,480 ft above sea level, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are fair. Flow regulated by John Martin Reservoir (station 07130000) 38 mi upstream since October 1948. Natural flow of stream affected by transmountain diversion, storage reservoirs, power developments, ground-water withdrawals and diversions for irrigation of about 500,000 acres, 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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	175	132	135	151	155	145	429	112	100	140	450	466
2	134	144	135	151	153	138	382	112	94	433	681	357
3	129	126	134	154	154	133	374	106	104	585	1040	316
4	118	140	134	153	150	135	367	105	97	702	1150	222
5	109	157	131	145	154	135	305	81	90	722	749	183
6	113	140	134	143	152	134	259	72	90	717	1440	170
7	112	129	134	144	155	131	259	89	101	720	2230	159
8	114	123	130	142	147	129	248	96	122	678	894	152
9	116	122	131	144	151	125	267	89	140	599	613	142
10	120	113	131	149	151	122	286	91	144	645	510	128
11	118	102	125	149	151	120	244	90	121	661	498	119
12	117	107	123	e140	150	144	212	90	116	655	921	109
13	114	119	121	e135	149	148	170	91	180	633	2330	100
14	113	119	124	e140	148	123	144	92	146	646	1260	96
15	105	120	115	142	147	134	127	88	111	664	718	85
16	115	160	114	140	140	136	95	87	94	691	509	86
17	108	158	111	140	141	132	85	143	89	697	401	85
18	107	154	112	143	141	116	81	365	91	669	357	88
19	85	150	e115	146	142	108	115	454	78	676	325	92
20	76	145	e130	146	142	101	299	313	80	784	285	97
21	136	140	144	153	134	101	370	144	83	750	255	164
22	152	141	143	152	136	171	401	116	87	689	281	269
23	193	135	143	154	136	472	426	122	94	640	234	227
24	132	131	141	153	135	550	500	105	268	618	240	182
25	116	129	140	149	141	572	402	112	596	597	226	184
26	148	128	138	147	147	479	218	114	690	667	187	208
27	166	130	145	144	146	419	162	109	389	701	169	137
28	156	129	146	145	150	409	136	96	191	723	148	124
29	146	127	147	150	---	437	119	86	149	891	207	119
30	144	127	149	151	---	411	115	84	129	1300	299	114
31	155	---	151	153	---	430	---	99	---	921	314	---
TOTAL	3942	3977	4106	4548	4098	7040	7597	3953	4864	21214	19921	4980
MEAN	127	133	132	147	146	227	253	128	162	684	643	166
MAX	193	160	151	154	155	572	500	454	690	1300	2330	466
MIN	76	102	111	135	134	101	81	72	78	140	148	85
AC-FT	7820	7890	8140	9020	8130	13960	15070	7840	9650	42080	39510	9880

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1981 - 1997, BY WATER YEAR (WY)

	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
MEAN	72.3	86.5	105	100	101	99.9	189	239	332	463	248	123					
MAX	184	149	157	147	146	249	1138	2072	2196	2144	643	430					
(WY)	1984	1987	1988	1997	1997	1987	1987	1987	1995	1997	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 1996 CALENDAR YEAR	FOR 1997 WATER YEAR	WATER YEARS 1981 - 1997
ANNUAL TOTAL	85745	90240	
ANNUAL MEAN	234	247	187
HIGHEST ANNUAL MEAN			597
LOWEST ANNUAL MEAN			59.3
HIGHEST DAILY MEAN	2900	May 27	2330
LOWEST DAILY MEAN	49	Mar 11	72
ANNUAL SEVEN-DAY MINIMUM	56	Feb 29	86
INSTANTANEOUS PEAK FLOW			3570
INSTANTANEOUS PEAK STAGE		11.67	Aug 13
ANNUAL RUNOFF (AC-FT)	170100	179000	135200
10 PERCENT EXCEEDS	524	636	458
50 PERCENT EXCEEDS	143	144	92
90 PERCENT EXCEEDS	90	96	6.9

e-Estimated.
a-Also occurred Aug 18-19, 1990.
b-From rating curve extended above 3500 ft³/s.
c-Maximum gage height, 12.38 ft, May 27, 1996.

07134990 WILD HORSE CREEK ABOVE HOLLY, CO

LOCATION. (REVISED)--Lat 38°03'24", long 102°08'16", in NE¹/₄NE¹/₄ 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 mi², approximately.

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 a site 1,050 ft upstream at datum 3.00 ft higher.

REMARKS.--Records fair except for the period Oct. 1 to Nov. 12, and 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.--Maximum discharge during period of seasonal operation, 1,270 ft³/s, May 26, 1996 from rating curve extended above 200 ft³/s on the basis of slope-area measurement of peak flow, gage height, 6.90 ft from flood mark, at site and datum then in use, maximum gage height 8.63 ft, Aug. 7, 1997, from flood mark; minimum daily, 3.1 ft³/s, Sept. 19, 1995.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period of seasonal operation, 874 ft³/s, Aug. 7, from rating curve extended above 200 ft³/s, on basis of slope-area measurement of peak flow, gage height, 8.63 ft from flood mark; minimum daily, 3.7 ft³/s, July 25.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	115	---	---	---	---	---	10	47	8.1	18	56
2	11	135	---	---	---	---	---	6.4	e44	7.4	6.0	23
3	13	135	---	---	---	---	---	22	e42	7.1	28	22
4	6.8	124	---	---	---	---	---	4.5	40	8.2	30	20
5	25	101	---	---	---	---	---	5.4	36	8.4	e27	18
6	48	59	---	---	---	---	---	6.1	22	9.9	e100	17
7	30	22	---	---	---	---	---	10	7.7	7.5	e400	15
8	24	31	---	---	---	---	---	5.6	9.4	5.9	41	14
9	20	46	---	---	---	---	---	6.6	7.9	5.0	30	14
10	33	34	---	---	---	---	---	7.5	6.9	4.8	58	14
11	38	22	---	---	---	---	---	16	6.4	4.9	265	12
12	29	18	---	---	---	---	---	12	11	6.4	216	13
13	33	---	---	---	---	---	---	8.9	9.2	5.5	105	11
14	43	---	---	---	---	---	---	5.7	10	5.1	168	10
15	55	---	---	---	---	---	---	4.8	7.8	7.8	63	12
16	112	---	---	---	---	---	---	4.5	5.3	4.6	69	12
17	126	---	---	---	---	---	---	5.1	9.4	7.1	346	12
18	89	---	---	---	---	---	---	5.8	9.5	4.3	141	10
19	123	---	---	---	---	---	---	7.7	6.6	7.2	116	8.5
20	223	---	---	---	---	---	---	6.2	5.4	23	97	11
21	118	---	---	---	---	---	---	5.7	5.0	7.4	88	57
22	21	---	---	---	---	---	---	15	5.3	4.4	81	85
23	18	---	---	---	---	---	---	17	4.9	3.9	80	75
24	18	---	---	---	---	---	---	6.9	6.7	3.8	97	78
25	16	---	---	---	---	---	---	62	16	3.7	89	127
26	42	---	---	---	---	---	---	58	12	3.9	68	61
27	86	---	---	---	---	---	---	48	6.4	4.6	52	60
28	120	---	---	---	---	---	---	28	5.9	7.9	52	124
29	109	---	---	---	---	---	---	11	33	5.3	47	55
30	113	---	---	---	---	---	---	12	28	8.6	49	67
31	111	---	---	---	---	---	---	39	---	45	69	---
TOTAL	1866.8	---	---	---	---	---	---	501.4	419.6	328.8	3122.0	1283.5
MEAN	60.2	---	---	---	---	---	---	16.2	14.0	10.6	101	42.8
MAX	223	---	---	---	---	---	---	62	47	49	400	186
MIN	6.8	---	---	---	---	---	---	4.5	4.9	3.7	6.0	8.5
AC-FT	3700	---	---	---	---	---	---	995	832	652	6190	2550

e-Estimated.

07135000 TWO BUTTE CREEK NEAR HOLLY, CO

LOCATION.--Lat 38°01'40", long 102°08'19", in SE¹/₄SE¹/₄ sec. 21, T.23 S., R.42 W., Prowers County, Hydrologic Unit 11020013, on right bank, 15 ft upstream from county road DD, 1.0 mi upstream from mouth, and 2.9 mi southwest of Holly.

DRAINAGE AREA.--817 mi².

PERIOD OF RECORD.--April 1942 to September 1946. June 1995 to current year (seasonal records only).

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 3,415 ft above sea level, from topographic map. Apr. 1942 to Sept. 1946 at site 0.5 mi upstream, at different datum.

REMARKS.--Records fair. Natural flow of stream affected by Two Butte Reservoir, (capacity, 40,000 acre-feet), from which most of creek is diverted for irrigation.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,800 ft³/s, May 2, 1944, from slope-area measurement of peak flow, gage height, 4.77 ft, at different site and datum, maximum gage height, 8.68 ft, May 26, 1996, from floodmarks, at current site and datum; minimum daily, no flow most of the time.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period of seasonal operation, 186 ft³/s, July 20 from rating curve extended above 9.0 ft³/s on the basis of slope-area measurement of peak flow, gage height, 5.80 ft; minimum daily, no flow most of the time.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
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	13	.00
6	.00	.00	---	---	---	---	.00	.00	.00	.00	8.2	.00
7	.00	.00	---	---	---	---	.00	.00	.00	.00	16	.00
8	.00	.00	---	---	---	---	.00	.00	.00	.00	.10	.00
9	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
10	.00	.00	---	---	---	---	.00	.00	.00	.00	.35	.00
11	.00	.00	---	---	---	---	.00	.00	.00	.00	31	.00
12	.00	.00	---	---	---	---	.00	.00	.00	.00	63	.00
13	.00	---	---	---	---	---	.00	.00	.00	.00	12	.00
14	.00	---	---	---	---	---	.00	.00	.00	.00	.08	.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	.00
19	.00	---	---	---	---	.00	.00	.00	.00	.00	.00	.00
20	.00	---	---	---	---	.00	.00	.00	.00	35	.00	.00
21	.00	---	---	---	---	.00	.00	.00	.00	1.1	.00	.00
22	.00	---	---	---	---	.00	.00	.04	.00	.00	.00	.00
23	.00	---	---	---	---	.00	.00	.00	.00	.35	.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	0.04	0.00	36.45	143.73	0.00
MEAN	.000	---	---	---	---	---	.000	.001	.000	1.18	4.64	.000
MAX	.00	---	---	---	---	---	.00	.04	.00	35	63	.00
MIN	.00	---	---	---	---	---	.00	.00	.00	.00	.00	.00
AC-FT	.00	---	---	---	---	---	.00	.08	.00	72	285	.00

07137000 FRONTIER DITCH NEAR COOLIDGE, KS

LOCATION.--Lat 38°02'18", long 102°02'19", in SW¹/₄SE¹/₄NE¹/₄ 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. 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 ft³/s, Aug. 1, 1975; no flow many days each year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	35	.00	32	35	31
2	.00	.00	.00	.00	.00	.00	.00	35	.00	32	31	31
3	.00	.00	.00	.00	.00	.00	.00	33	.00	33	30	31
4	.00	.00	.00	.00	.00	.00	.00	34	.00	33	23	31
5	.00	.00	.00	.00	.00	.00	.00	33	.00	32	.00	31
6	.00	.00	.00	.00	.00	.00	.00	34	.00	32	.00	31
7	.00	.00	.00	.00	.00	.00	.00	33	.00	30	.00	31
8	.00	.00	.00	.00	.00	.00	.00	33	12	29	.00	31
9	.00	.00	.00	.00	.00	.00	.00	33	31	29	.01	33
10	5.6	.00	.00	.00	.00	.00	.00	34	32	28	.01	37
11	28	.00	.00	.00	.00	.00	.00	34	31	28	.08	38
12	28	.00	.00	.00	.00	.00	.00	18	31	28	.00	39
13	28	.00	.00	.00	.00	.00	.00	23	31	27	.00	39
14	28	.00	.00	.00	.00	.00	.00	24	32	27	.00	39
15	29	.00	.00	.00	.00	.00	.00	33	32	27	.11	39
16	29	.00	.00	.00	.00	.00	.00	32	24	27	.00	39
17	14	.00	.00	.00	.00	.00	.00	7.2	.32	27	.00	39
18	.00	.00	.00	.00	.00	.00	.00	.00	.01	27	.00	39
19	.00	.00	.00	.00	.00	.00	.00	.00	.00	26	.00	40
20	.00	.00	.00	.00	.00	.00	.00	26	8.6	27	.00	39
21	.00	.00	.00	.00	.00	.00	15	33	29	23	2.2	22
22	.00	.00	.00	.00	.00	.00	.00	29	29	17	16	1.2
23	.00	.00	.00	.00	.00	.00	.00	.03	28	25	31	1.1
24	.00	.00	.00	.00	.00	.00	.06	.00	23	22	31	.77
25	.00	.00	.00	.00	.00	.00	.02	.00	23	29	31	.48
26	.00	.00	.00	.00	.00	.00	.00	.00	2.2	30	30	.32
27	.00	.00	.00	.00	.00	.00	.00	.00	.00	30	31	.16
28	.00	.00	.00	.00	.00	.00	22	.00	.00	29	31	.01
29	.00	.00	.00	.00	---	.00	35	.00	7.2	23	32	8.1
30	.00	.00	.00	.00	---	.00	35	.00	31	.00	31	40
31	.00	---	.00	.00	---	.00	---	.00	---	6.7	31	---
TOTAL	189.60	0.00	0.00	0.00	0.00	0.00	107.08	596.23	437.33	815.70	416.41	782.14
MEAN	6.12	.000	.000	.000	.000	.000	3.57	19.2	14.6	26.3	13.4	26.1
MAX	29	.00	.00	.00	.00	.00	35	35	32	33	35	40
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01
AC-FT	376	.00	.00	.00	.00	.00	212	1180	867	1620	826	1550
CAL YR 1996	TOTAL	2964.78	MEAN	8.10	MAX	48	MIN	.00	AC-FT	5880		
WTR YR 1997	TOTAL	3344.49	MEAN	9.16	MAX	40	MIN	.00	AC-FT	6630		

07137500 ARKANSAS RIVER NEAR COOLIDGE, KS

LOCATION.--Lat 38°01'34", long 102°00'41", in NW¹/₄NE¹/₄NW¹/₄ 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 mi², of which 1,708 mi² 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. Combined flow of river and Frontier Ditch (station 07137000) represents entire flow that enters Kansas. Flow regulated since 1943 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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	296	266	230	224	212	208	528	225	290	217	720	524
2	320	263	234	224	211	203	505	231	295	288	635	501
3	290	247	231	225	213	199	592	239	298	458	974	473
4	242	246	234	222	210	196	552	228	289	592	1330	400
5	223	236	235	215	205	198	490	209	264	666	1210	348
6	223	224	235	208	205	201	415	205	258	699	1800	324
7	228	211	236	207	207	201	396	216	269	716	2800	321
8	229	204	235	209	203	199	382	214	281	719	1900	312
9	232	205	236	210	202	191	406	220	286	671	1100	282
10	217	215	236	213	206	187	470	206	305	654	944	256
11	187	208	230	214	207	185	470	210	286	697	1150	233
12	180	201	224	210	206	190	523	246	285	691	1290	238
13	175	217	223	205	203	209	502	233	317	689	1970	241
14	168	230	226	200	198	211	440	211	320	694	2620	236
15	165	233	228	215	199	218	302	177	274	723	1410	242
16	177	243	230	208	198	219	246	168	257	733	979	234
17	204	250	233	204	200	211	223	188	277	735	1310	230
18	252	259	215	206	200	196	202	284	234	734	847	216
19	243	257	204	207	199	191	193	410	208	759	707	214
20	242	244	223	210	201	182	277	429	172	902	641	241
21	239	235	222	214	198	176	382	288	150	879	567	334
22	247	234	222	215	193	175	445	347	158	844	596	500
23	270	233	223	217	197	313	479	382	155	780	550	508
24	284	222	220	215	200	482	537	285	172	746	532	446
25	269	224	221	212	199	538	666	267	389	729	448	464
26	256	226	223	210	210	558	473	255	612	744	389	433
27	293	228	225	203	207	561	371	254	591	786	348	402
28	301	235	223	198	209	551	297	238	369	806	321	376
29	284	239	222	201	---	531	249	240	297	1010	351	421
30	321	234	222	206	---	534	228	252	247	1210	418	346
31	292	---	222	210	---	529	---	274	---	1520	439	---
MEAN	244	232	227	211	204	288	408	253	287	745	1010	343
MAX	321	266	236	225	213	561	666	429	612	1520	2800	524
MIN	165	201	204	198	193	175	193	168	150	217	321	214
AC-FT	14970	13820	13930	12970	11300	17740	24280	15530	17070	45800	62080	20420

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 1997, BY WATER YEAR (WY)

	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	
MEAN	122	108	114	113	125	117	204	284	456	341	316	182																
MAX	331	256	270	274	602	331	1221	2106	8221	2255	1979	1079																
(WY)	1985	1988	1966	1966	1966	1960	1987	1987	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 1996 CALENDAR YEAR	FOR 1997 WATER YEAR	WATER YEARS 1951 - 1997
ANNUAL MEAN	372	373	207
HIGHEST ANNUAL MEAN			1012
LOWEST ANNUAL MEAN			19.8
HIGHEST DAILY MEAN	3640	May 28	2800 Aug 7
LOWEST DAILY MEAN	e, a 150	Jan 19	150 Jun 21
ANNUAL SEVEN-DAY MINIMUM	159	Feb 29	178 Jun 18
INSTANTANEOUS PEAK FLOW			3480 Aug 14
INSTANTANEOUS PEAK STAGE			8.25 Aug 14
ANNUAL RUNOFF (AC-FT)	270400	269900	150000
10 PERCENT EXCEEDS	679	711	431
50 PERCENT EXCEEDS	267	239	120
90 PERCENT EXCEEDS	174	199	9.3

e-Estimated.
a-Also occurred Feb 3.

WESTERN GULF OF MEXICO BASIN
RIO GRANDE BASIN

08213500 RIO GRANDE AT THIRTYMILE BRIDGE, NEAR CREEDE, CO

LOCATION.--Lat 37°43'29", long 107°15'18", in SW¼NE¼ sec.13, T.40 N., R.4 W., Hinsdale County, Hydrologic Unit 13010001, on right bank 70 ft downstream from bridge, 500 ft upstream from Squaw Creek, 0.8 mi downstream from Rio Grande Reservoir, and 20 mi southwest of Creede.

DRAINAGE AREA.--163 mi².

PERIOD OF RECORD.--June 1909 to September 1923, May 1925 to current year. No winter records 1910, 1926. Monthly discharge only for some periods, published in WSP 1312.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 9,300 ft above sea level, from topographic map. See WSP 1712 or 1732 for history of changes prior to Oct. 1, 1934.

REMARKS.--Records good except for estimated daily discharges, which are fair. Flow regulated by Rio Grande Reservoir, capacity, 51,110 acre-ft, since 1912. Natural flow of stream affected by transmountain diversions from Colorado River basin to drainage area upstream from station through Weminuche Pass and Pine River-Weminuche Pass ditches. No known diversions 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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	70	e3.5	e4.0	e5.0	e6.0	e7.0	e7.7	361	1290	1420	988	320
2	70	e3.5	e4.0	e5.0	e6.0	e7.0	e7.7	339	1380	1310	969	311
3	90	e3.5	e4.0	e5.0	e6.0	e7.0	e7.7	327	1170	969	923	301
4	127	e3.5	e4.0	e5.0	e6.0	e7.0	e7.7	327	1180	1000	881	288
5	179	e3.5	e4.0	e5.0	e6.0	e7.0	e63	397	1210	1230	774	276
6	167	e3.5	e4.0	e5.0	e6.0	e7.0	e90	541	981	1140	714	224
7	148	e3.5	e4.0	e5.0	e6.0	e7.0	e80	682	1080	827	630	196
8	160	e3.5	e4.0	e5.0	e6.0	e7.0	e80	576	1080	921	577	192
9	167	e3.5	e4.0	e5.0	e6.0	e7.0	e67	514	1030	1080	545	184
10	170	e3.5	e4.0	e5.0	e6.0	e7.0	e65	414	847	1040	450	141
11	167	e3.5	e4.0	e5.0	e6.0	e7.0	e65	476	764	1010	422	127
12	133	e3.5	e4.0	e5.0	e6.5	e7.0	e50	e744	771	1130	443	131
13	95	e3.5	e4.0	e5.5	e6.5	e7.0	e50	765	778	1150	413	123
14	78	e3.5	e4.5	e5.5	e6.5	e7.5	e50	816	863	972	347	118
15	e78	e3.5	e4.5	e5.5	e6.5	e7.5	e40	856	919	984	308	124
16	78	e3.5	e4.5	e5.5	e6.5	e7.5	e40	918	979	1190	273	145
17	78	e3.5	e4.5	e5.5	e6.5	e7.5	e35	1130	949	1170	246	152
18	78	e3.5	e4.5	e5.5	e6.5	e7.5	58	1460	1060	1250	214	190
19	78	e3.5	e4.5	e5.5	e6.5	e7.5	88	938	994	1300	219	176
20	78	e3.5	e4.5	e5.5	e6.5	e7.5	147	906	1070	1330	208	158
21	78	e3.5	e4.5	e5.5	e6.5	e7.5	203	774	1420	1370	197	270
22	78	e3.5	e4.5	e5.5	e6.5	e7.5	294	648	1280	1210	184	374
23	78	e3.5	e4.5	e5.5	e6.5	e7.5	323	634	1130	1260	191	337
24	78	e3.5	e4.5	e5.5	e6.5	e7.5	268	813	948	1110	197	375
25	78	e3.5	e4.5	e5.5	e6.5	e7.5	246	624	1140	933	198	376
26	78	e3.5	e4.5	e5.5	e6.5	e7.5	246	572	1350	912	198	381
27	68	e3.5	e4.5	e5.5	e7.0	e7.5	383	487	1370	935	268	386
28	64	e3.5	e4.5	e6.0	e7.0	e7.7	390	433	1320	1040	289	381
29	62	e4.0	e5.0	e6.0	---	e7.7	450	483	1350	1130	267	367
30	e30	e4.0	e5.0	e6.0	---	e7.7	406	707	1380	1110	315	355
31	e3.5	---	e5.0	e6.0	---	e7.7	---	895	---	1040	328	---
TOTAL	2984.5	106.0	134.5	166.5	177.5	226.8	4307.8	20557	33083	34473	13176	7479
MEAN	96.3	3.53	4.34	5.37	6.34	7.32	144	663	1103	1112	425	249
MAX	179	4.0	5.0	6.0	7.0	7.7	450	1460	1420	1420	988	386
MIN	3.5	3.5	4.0	5.0	6.0	7.0	7.7	327	764	827	184	118
AC-FT	5920	210	267	330	352	450	8540	40770	65620	68380	26130	14830

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1909 - 1997, BY WATER YEAR (WY)

	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
MEAN	97.1	29.2	9.34	9.28	9.17	12.0	102	495	908	540	248	106																																																																													
MAX	648	280	116	89.0	81.0	88.6	368	907	1842	1246	612	467																																																																													
(WY)	1912	1917	1912	1912	1912	1916	1950	1958	1917	1986	1957	1909																																																																													
MIN	2.00	.39	.40	.40	.40	.40	5.63	75.0	139	54.2	40.4	25.8																																																																													
(WY)	1937	1993	1952	1952	1952	1952	1983	1938	1934	1934	1940	1956																																																																													

SUMMARY STATISTICS

	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1909 - 1997	
ANNUAL TOTAL	64074.0		116871.6			
ANNUAL MEAN	175		320		213	
HIGHEST ANNUAL MEAN					362	
LOWEST ANNUAL MEAN					77.7	
HIGHEST DAILY MEAN	1300		May 17		5720	
LOWEST DAILY MEAN	e,a 3.5		Oct 31		b .10	
ANNUAL SEVEN-DAY MINIMUM	3.5		Oct 31		c .21	
INSTANTANEOUS PEAK FLOW			1670		7500	
INSTANTANEOUS PEAK STAGE			4.07		7.03	
ANNUAL RUNOFF (AC-FT)	127100		231800		154200	
10 PERCENT EXCEEDS	759		1070		748	
50 PERCENT EXCEEDS	46		78		51	
90 PERCENT EXCEEDS	4.0		4.0		2.5	

e-Estimated.
a-Also occurred Nov 1-28.
b-Also occurred Nov 3-4, 1960.
c-Present site and datum, from rating curve extended above 1200 ft³/s.

08214500 NORTH CLEAR CREEK BELOW CONTINENTAL RESERVOIR, CO

LOCATION.--Lat 37°53'18", long 107°12'10", in NE¹/₄SW¹/₄ sec.21, T.42 N., R.3 W., Hinsdale County, Hydrologic Unit 13010001, on left bank 100 ft downstream from bridge, 1,000 ft downstream from Continental Reservoir, and 15 mi west of Creede.

DRAINAGE AREA.--51.7 mi².

PERIOD OF RECORD.--May 1929 to current year. Monthly discharge only for some periods, published in WSP 1312. Prior to October 1960, published as Clear Creek below Continental Reservoir.

REVISED RECORDS.--WSP 1008: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry, and concrete control. Elevation of gage is 10,200 ft above sea level, from topographic map. Prior to Oct. 2, 1951, at site 150 ft upstream, at different datum.

REMARKS.--Records good except for estimated daily discharges, which are fair. Flow regulated by Continental Reservoir, capacity, 26,720 acre-ft. No diversion 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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	.25	e.25	e.25	e.30	e.30	e.35	.25	190	189	43	26
2	12	.25	e.25	e.25	e.30	e.30	e.35	.25	256	185	43	26
3	14	.25	e.25	e.25	e.30	e.30	e.35	.25	261	174	42	26
4	19	.25	e.25	e.25	e.30	e.30	e.35	.29	231	177	37	26
5	26	.25	e.25	e.25	e.30	e.30	e.35	.34	230	185	35	26
6	27	.25	e.25	e.25	e.30	e.30	e.35	.35	142	187	35	26
7	29	.25	e.25	e.25	e.30	e.30	e.35	.35	73	185	36	26
8	29	.25	e.25	e.25	e.30	e.30	e.35	.35	56	184	36	24
9	22	.25	e.25	e.25	e.30	e.30	e.35	.35	122	188	36	23
10	17	e.25	e.25	e.25	e.30	e.30	e.35	.35	172	188	36	23
11	16	e.25	e.25	e.25	e.30	e.30	e.35	.35	173	189	36	23
12	15	e.25	e.25	e.25	e.30	e.30	e.35	.35	157	189	36	23
13	15	e.25	e.25	e.25	e.30	e.30	e.35	100	125	182	36	20
14	15	e.25	e.25	e.25	e.30	e.30	e.35	285	113	175	35	18
15	16	e.25	e.25	e.25	e.30	e.30	e.35	428	113	143	35	18
16	16	e.25	e.25	e.30	e.30	e.35	e.35	404	113	142	33	19
17	16	e.25	e.25	e.30	e.30	e.35	e.35	366	113	160	27	19
18	14	e.25	e.25	e.30	e.30	e.35	e.35	414	118	160	25	19
19	13	e.25	e.25	e.30	e.30	e.35	e.35	348	128	86	25	20
20	13	e.25	e.25	e.30	e.30	e.35	e.35	385	132	60	25	20
21	13	e.25	e.25	e.30	e.30	e.35	e.35	445	132	83	25	22
22	13	e.25	e.25	e.30	e.30	e.35	e.35	432	122	85	23	33
23	13	e.25	e.25	e.30	e.30	e.35	e.35	331	102	82	21	68
24	13	e.25	e.25	e.30	e.30	e.35	e.35	193	94	78	21	94
25	14	e.25	e.25	e.30	e.30	e.35	e.35	172	85	70	21	88
26	16	e.25	e.25	e.30	e.30	e.35	e.35	170	80	54	22	42
27	16	e.25	e.25	e.30	e.30	e.35	e.35	153	79	46	23	22
28	16	e.25	e.25	e.30	e.30	e.35	e.35	119	83	46	23	22
29	18	e.25	e.25	e.30	---	e.35	e.35	80	85	47	23	19
30	4.8	e.25	e.25	e.30	---	e.35	.25	89	144	45	23	15
31	.29	---	e.25	e.30	---	e.35	---	103	---	43	24	---
TOTAL	495.09	7.50	7.75	8.55	8.40	10.10	10.40	5020.83	4024	4007	941	876
MEAN	16.0	.25	.25	.28	.30	.33	.35	162	134	129	30.4	29.2
MAX	.29	.25	.25	.30	.30	.35	.35	445	261	189	43	94
MIN	.29	.25	.25	.25	.30	.30	.25	.25	56	43	21	15
AC-FT	982	15	15	17	17	20	21	9960	7980	7950	1870	1740

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1929 - 1997, BY WATER YEAR (WY)

MEAN	13.2	7.36	3.47	3.59	3.75	4.29	21.1	86.5	85.6	69.4	47.1	20.0
MAX (WY)	72.4	100	20.0	20.0	20.0	20.0	80.9	209	166	234	216	106
MIN (WY)	1979	1985	1942	1939	1939	1939	1985	1987	1987	1958	1948	1995
MAX (WY)	.20	.10	.11	.12	.13	.14	.19	11.3	13.0	11.6	2.78	4.59
MIN (WY)	1989	1989	1989	1989	1989	1989	1984	1994	1977	1963	1978	1946

SUMMARY STATISTICS	FOR 1996 CALENDAR YEAR	FOR 1997 WATER YEAR	WATER YEARS 1929 - 1997
ANNUAL TOTAL	10118.59	15416.62	
ANNUAL MEAN	27.6	42.2	30.5
HIGHEST ANNUAL MEAN			54.5
LOWEST ANNUAL MEAN			8.55
HIGHEST DAILY MEAN	257	445	445
LOWEST DAILY MEAN	a .25 Nov 1	b .25 May 21	c .00 Jun 22 1935
ANNUAL SEVEN-DAY MINIMUM	.25 Nov 1	.25 Nov 1	.05 Apr 23 1984
INSTANTANEOUS PEAK FLOW		514	514
INSTANTANEOUS PEAK STAGE		3.43	d 3.43
ANNUAL RUNOFF (AC-FT)	20070	30580	22090
10 PERCENT EXCEEDS	81	158	96
50 PERCENT EXCEEDS	12	.35	11
90 PERCENT EXCEEDS	.25	.25	.50

e-Estimated.
a-Also occurred Nov 2 to Dec 31, (estimated days, Nov 10 to Dec 31).
b-Also occurred Nov 2 to Jan 15, (estimated days, Nov 10 to Jan 15) and Apr 30 to May 3.
c-Also occurred Jan 23, 1935, and Sep 25-27, 1990.
d-Maximum gage height for period of record, 3.66 ft, occurred May 8, 1952.

08220000 RIO GRANDE NEAR DEL NORTE, CO

LOCATION.--Lat 37°41'22", long 106°27'38", in NW¹/₄ sec.29, T.40 N., R.5 E., Rio Grande County, Hydrologic Unit 13010001, on right bank 20 ft downstream from county highway bridge, 5.0 mi upstream from Pinos Creek, and 6.0 mi west of Del Norte.

DRAINAGE AREA.--1,320 mi², approximately.

PERIOD OF RECORD.--June 1889 to current year. Monthly discharge only for some periods, published in WSP 1312. Water-quality data available April 1993 to July 1996.

REVISED RECORDS.--WSP 763: Drainage area. WSP 1312: 1889, 1901, 1913-14.

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 7,980.25 ft above sea level. Prior to May 16, 1908, nonrecording gage at site 4 mi downstream at different datum. May 16, 1908 to Nov. 8, 1910, nonrecording gages on bridge at present site and datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. Small diversions upstream from station for irrigation. Flow regulated by Beaver Creek Reservoir since 1910, Santa Maria Reservoir since 1912, Rio Grande Reservoir since 1912, and Continental Reservoir since 1925, combined capacity, 126,100 acre-ft, and by several smaller reservoirs. Transmountain diversions to drainage area upstream from station from Colorado River basin (see elsewhere in this report).

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

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1873, that of Oct. 5, 1911, from information by local residents.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	245	265	e170	e180	e190	e170	540	1380	5800	3060	2070	885
2	242	212	e180	e170	e200	e170	497	1270	7090	2950	1870	843
3	283	224	e170	e180	e180	e180	455	1210	6160	2650	1780	834
4	554	253	e180	e170	e160	e170	458	1350	5990	2210	1730	790
5	555	254	e180	e160	e170	e170	422	1680	6070	2370	1850	788
6	549	250	e200	e150	e180	e190	404	2200	5590	2460	1750	736
7	596	213	e200	e150	e150	e200	494	2580	4940	2170	1870	689
8	581	e182	e200	e160	e160	e230	491	2660	5300	2050	1510	617
9	536	233	e200	e160	e160	e240	480	2390	4450	2210	1360	588
10	520	239	e240	e160	e170	e250	449	2220	4370	2200	1370	633
11	518	220	e240	e170	e160	e280	434	2110	4250	2120	1460	614
12	512	219	e220	e160	e160	e300	398	2550	4270	2210	1300	596
13	475	246	e210	e150	e170	e310	399	3200	4300	2280	1250	559
14	369	260	e210	e170	e150	309	380	3740	4080	2100	1140	545
15	308	266	e200	e160	e160	313	377	4120	4000	1960	1030	515
16	304	252	e200	e140	e160	353	394	4780	4110	1930	934	596
17	296	e182	e170	e140	e170	357	475	4980	3890	2170	907	575
18	275	e205	e170	e150	e170	347	587	5560	3840	2050	862	534
19	273	275	e170	e160	e170	374	708	5610	4170	2220	833	580
20	302	281	e170	e160	e170	433	893	4460	4040	2270	766	581
21	297	275	e190	e170	e160	512	1210	5170	4300	2310	740	1650
22	256	292	e200	e160	e160	573	1390	4870	4280	2130	730	3180
23	274	294	e180	e160	e170	620	1450	4560	3910	2000	728	2740
24	279	246	e160	e170	e170	632	1310	4310	3660	2200	749	2210
25	290	210	e170	e170	e160	537	1110	4250	3230	1710	717	2010
26	298	211	e160	e180	e170	486	1000	3540	3370	1580	797	1760
27	331	e185	e190	e180	e160	526	996	3300	3330	1840	754	1560
28	363	e178	e180	e170	e180	517	1320	3050	3120	1860	753	1430
29	362	e165	e170	e180	---	549	1320	3010	3070	2060	724	1340
30	359	e175	e180	e180	---	502	1460	3240	3050	2200	711	1240
31	348	---	e180	e190	---	514	---	4360	---	2440	775	---
TOTAL	11750	6962	5840	5110	4690	11314	22301	103710	132030	67970	35820	32218
MEAN	379	232	188	165	168	365	743	3345	4401	2193	1155	1074
MAX	596	294	240	190	200	632	1460	5610	7090	3060	2070	3180
MIN	242	165	160	140	150	170	377	1210	3050	1580	711	515
AC-FT	23310	13810	11580	10140	9300	22440	44230	205700	261900	134800	71050	63900

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1890 - 1997, BY WATER YEAR (WY)

	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
MEAN	480	284	206	189	197	272	769	2512	3171	1442	792	512																																																																																																
MAX	2451	804	420	340	300	646	1999	4449	6240	3451	1745	2001																																																																																																
(WY)	1912	1917	1926	1912	1928	1910	1895	1922	1921	1957	1957	1927																																																																																																
MIN	134	114	105	89.8	111	153	317	747	475	239	190	135																																																																																																
(WY)	1957	1957	1957	1977	1977	1965	1951	1977	1934	1934	1956	1956																																																																																																

SUMMARY STATISTICS

	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1890 - 1997	
ANNUAL TOTAL	200510		439715			
ANNUAL MEAN	548		1205		907	
HIGHEST ANNUAL MEAN					1482	
LOWEST ANNUAL MEAN					311	
HIGHEST DAILY MEAN	3380		7090		14000	
LOWEST DAILY MEAN	e140		e,a140		69	
ANNUAL SEVEN-DAY MINIMUM	159		153		76	
INSTANTANEOUS PEAK FLOW			7440		b,18000	
INSTANTANEOUS PEAK STAGE			5.33		6.80	
ANNUAL RUNOFF (AC-FT)	397700		872200		657400	
10 PERCENT EXCEEDS	1470		3690		2470	
50 PERCENT EXCEEDS	255		514		365	
90 PERCENT EXCEEDS	170		170		165	

e-Estimated.

a-Also occurred Jan 17.

b-From rating curve extended above 12900 ft³/s.

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 SE¹/₄SE¹/₄ 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 mi².

PERIOD OF RECORD.--August 1910 to September 1912, June 1914 to current year. Monthly discharge only for some periods, published in WSP 1312. Water-quality data available, April 1993 to September 1995.

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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27	34	e30	e30	e25	e24	44	51	195	90	96	84
2	29	28	e28	e30	e25	e24	46	49	244	84	78	80
3	28	33	e27	e31	e25	e25	41	44	250	77	75	65
4	43	42	e29	e28	e24	e28	46	44	228	74	86	61
5	42	37	e30	e27	e24	e30	42	58	228	67	109	76
6	36	36	e32	e23	e27	e28	28	68	234	65	112	70
7	33	19	e31	e22	e19	e29	30	75	247	68	135	76
8	31	20	e30	e24	e19	e29	38	76	280	67	124	63
9	30	31	e33	e25	e19	30	37	72	271	67	98	55
10	28	33	e35	e27	e21	31	36	75	233	67	103	55
11	30	28	e35	e24	e23	33	35	75	198	66	134	70
12	29	25	e34	e22	e22	35	26	86	176	70	111	81
13	29	30	e33	e24	e26	37	29	96	170	66	98	70
14	28	35	e30	e23	e23	39	35	103	171	66	92	67
15	28	37	e25	e17	e27	44	35	118	158	61	83	62
16	29	24	e28	e16	e25	49	32	130	161	58	75	66
17	30	14	e23	e16	e27	53	36	138	156	59	79	64
18	27	27	e22	e21	e28	56	43	156	144	60	80	56
19	28	40	e26	e23	e27	59	48	166	162	67	74	52
20	30	35	e28	e22	e26	67	51	163	159	81	73	54
21	29	32	e32	e22	e23	81	58	162	143	78	69	103
22	17	35	e34	e21	e21	82	64	233	135	72	63	143
23	21	36	e32	e22	e25	80	60	225	126	70	65	118
24	33	23	e29	e22	e25	70	57	180	123	73	63	95
25	32	21	e28	e21	e25	52	48	168	119	62	60	87
26	31	21	e30	e24	e24	38	44	162	115	58	65	84
27	33	e18	e29	e25	e23	41	41	146	112	84	103	86
28	38	e11	e29	e22	e27	37	42	135	110	106	65	84
29	37	e20	e28	e24	---	36	48	129	104	92	61	79
30	32	e24	e30	e23	---	32	52	133	96	99	61	77
31	33	---	e32	e25	---	36	---	160	---	105	69	---
TOTAL	951	849	922	726	675	1335	1272	3676	5248	2279	2659	2283
MEAN	30.7	28.3	29.7	23.4	24.1	43.1	42.4	119	175	73.5	85.8	76.1
MAX	43	42	35	31	28	82	64	233	280	106	135	143
MIN	17	11	22	16	19	24	26	44	96	58	60	52
AC-FT	1890	1680	1830	1440	1340	2650	2520	7290	10410	4520	5270	4530

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1910 - 1997, 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
MEAN	44.1	35.6	25.9	23.3	26.5	38.5	68.8	157	176	94.2	73.0	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 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1910 - 1997	
ANNUAL TOTAL	15056		22875			
ANNUAL MEAN	41.1		62.7		67.7	
HIGHEST ANNUAL MEAN					122	
LOWEST ANNUAL MEAN					28.0	
HIGHEST DAILY MEAN	b ₁₂₄		May 13		280	
LOWEST DAILY MEAN	e ₁₁		Nov 28		280	
ANNUAL SEVEN-DAY MINIMUM	18		Aug 12		20	
INSTANTANEOUS PEAK FLOW					293	
INSTANTANEOUS PEAK STAGE			3.00		Jun 7	
ANNUAL RUNOFF (AC-FT)	29860		45370		49070	
10 PERCENT EXCEEDS	73		135		148	
50 PERCENT EXCEEDS	32		42		41	
90 PERCENT EXCEEDS	24		23		21	

e-Estimated.

a-Water years 1983-1990 were published by Colorado Division of Water Resources.

b-Also occurred May 17.

c-Present datum, from rating curve extended above 83 ft³/s.

d-Maximum gage height, 3.94 ft, May 20, 1970.

08235250 ALAMOSA RIVER ABOVE WIGHTMAN FORK NEAR JASPER, CO

LOCATION.--Lat 37°24'09", long 106°31'17", in SE¹/₄SW¹/₄ sec.35, T.37 N., R.4 E., Rio Grande County, Hydrologic Unit 13010002, Rio Grande National Forest, on left bank 150 ft upstream from Wightman Fork, 1.9 mi downstream from Bitter Creek, 4.1 mi west of Jasper, and 4.2 mi southeast of Summitville.

DRAINAGE AREA.--37.8 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1995 to current year (seasonal records only).

GAGE.--Water-stage recorder with satellite telemetry, and crest-stage gage. Elevation of gage is 9,380 ft above sea level, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, and discharges above 500 ft³/s, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge during period of seasonal operation, 878 ft³/s, June 2, 1997, gage height, 5.32 ft, from rating curve extended above 457 ft³/s; minimum daily, 6.7 ft³/s, Aug. 19-20, 1996.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period of seasonal operation, 878 ft³/s, June 2, gage height, 5.32 ft, from rating curve extended above 457 ft³/s; minimum daily, 8.8 ft³/s (estimated), Oct. 2.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.9	---	---	---	---	---	30	57	510	190	e60	49
2	e8.8	---	---	---	---	---	27	50	e550	168	e63	54
3	---	---	---	---	---	---	25	52	e520	157	e60	60
4	---	---	---	---	---	---	e23	71	e514	147	e70	57
5	---	---	---	---	---	---	e21	106	e491	135	e105	56
6	---	---	---	---	---	---	e18	145	e416	127	81	54
7	---	---	---	---	---	---	e17	149	e406	117	87	47
8	---	---	---	---	---	---	e15	151	e400	104	70	42
9	---	---	---	---	---	---	e18	155	e311	99	60	52
10	---	---	---	---	---	---	17	141	e333	98	99	50
11	---	---	---	---	---	---	16	142	e393	99	81	44
12	---	---	---	---	---	---	15	159	e383	96	67	47
13	---	---	---	---	---	---	15	195	e350	93	61	41
14	---	---	---	---	---	---	15	237	e342	85	59	41
15	---	---	---	---	---	---	15	253	e339	81	53	38
16	---	---	---	---	---	---	17	259	e350	72	48	50
17	---	---	---	---	---	---	21	264	e311	66	44	37
18	---	---	---	---	---	e12	31	288	e369	65	54	34
19	---	---	---	---	---	13	49	287	e410	67	49	33
20	---	---	---	---	---	18	71	270	e385	68	42	35
21	---	---	---	---	---	25	82	284	e360	85	41	170
22	---	---	---	---	---	e28	87	261	e349	70	50	156
23	---	---	---	---	---	e30	81	258	e333	65	46	117
24	---	---	---	---	---	e32	65	248	e312	61	47	92
25	---	---	---	---	---	35	55	216	275	57	47	75
26	---	---	---	---	---	32	47	201	248	57	99	65
27	---	---	---	---	---	30	46	198	229	63	57	57
28	---	---	---	---	---	31	57	211	226	67	49	51
29	---	---	---	---	---	31	55	231	221	e60	44	46
30	---	---	---	---	---	30	56	276	214	67	49	41
31	---	---	---	---	---	31	---	341	---	78	52	---
TOTAL	---	---	---	---	---	---	1107	6156	10850	2864	1894	1791
MEAN	---	---	---	---	---	---	36.9	199	362	92.4	61.1	59.7
MAX	---	---	---	---	---	---	87	341	550	190	105	170
MIN	---	---	---	---	---	---	15	50	214	57	41	33
AC-FT	---	---	---	---	---	---	2200	12210	21520	5680	3760	3550

e-Estimated.

08235250 ALAMOSA RIVER ABOVE WIGHTMAN FORK NEAR JASPER, CO--Continued

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM @ 25 DEG. C), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	
													FEBRUARY
1	---	---	---	---	---	---	265	246	255	180	175	177	
2	---	---	---	---	---	---	260	247	255	197	172	184	
3	---	---	---	---	---	---	271	254	262	202	181	193	
4	---	---	---	---	---	---	259	249	254	190	149	177	
5	---	---	---	---	---	---	274	235	264	153	126	143	
6	---	---	---	---	---	---	315	228	264	129	112	122	
7	---	---	---	---	---	---	327	243	272	120	108	113	
8	---	---	---	---	---	---	351	271	295	116	101	109	
9	---	---	---	---	---	---	309	289	304	112	102	106	
10	---	---	---	---	---	---	313	302	306	122	112	117	
11	---	---	---	---	---	---	328	296	313	123	113	118	
12	---	---	---	---	---	---	393	271	306	119	96	111	
13	---	---	---	---	---	---	374	291	316	105	83	95	
14	---	---	---	---	---	---	444	304	336	95	74	85	
15	---	---	---	---	---	---	407	335	367	81	68	75	
16	---	---	---	---	---	---	410	348	375	75	69	72	
17	---	---	---	---	---	---	364	292	335	75	64	70	
18	---	---	---	500	357	461	292	245	267	72	64	67	
19	---	---	---	498	370	439	245	199	227	70	64	67	
20	---	---	---	448	350	416	199	163	183	74	64	69	
21	---	---	---	402	324	382	163	146	155	69	64	67	
22	---	---	---	365	289	333	149	140	144	73	67	69	
23	---	---	---	322	258	295	146	138	142	73	65	69	
24	---	---	---	296	247	263	157	146	152	74	66	70	
25	---	---	---	289	234	266	168	149	163	81	74	78	
26	---	---	---	309	239	281	186	168	177	87	81	84	
27	---	---	---	295	263	280	209	181	191	90	82	87	
28	---	---	---	295	260	276	185	175	179	88	74	84	
29	---	---	---	275	257	266	184	178	180	80	63	74	
30	---	---	---	320	234	261	194	172	182	70	53	63	
31	---	---	---	282	239	258	---	---	---	59	44	54	
MONTH	---	---	---	---	---	---	444	138	247	202	44	99	
		JUNE			JULY			AUGUST			SEPTEMBER		
1	55	41	49	64	52	59	---	---	---	131	112	123	
2	50	42	46	71	58	64	---	---	---	138	82	128	
3	52	42	47	70	59	64	---	---	---	174	89	119	
4	51	40	46	72	60	66	---	---	---	217	118	132	
5	50	42	46	73	63	68	96	85	89	136	119	129	
6	52	45	50	76	63	70	406	95	120	134	118	129	
7	55	47	52	76	64	71	123	97	109	142	132	137	
8	58	48	54	80	73	76	111	98	107	147	139	143	
9	64	58	62	82	74	78	117	105	113	147	109	133	
10	66	48	60	84	69	78	115	72	99	134	117	130	
11	59	44	52	81	69	75	105	86	100	154	133	139	
12	60	47	51	83	67	76	111	104	108	142	126	134	
13	58	49	54	84	67	75	120	106	112	146	137	143	
14	60	48	55	85	68	77	120	106	114	148	132	141	
15	58	49	54	94	69	80	124	111	119	184	146	150	
16	62	49	58	90	76	82	132	120	126	184	109	128	
17	66	57	62	97	77	87	140	124	132	148	138	142	
18	63	47	57	---	---	---	303	97	132	152	148	149	
19	58	49	53	---	---	---	135	110	126	157	147	152	
20	59	48	54	---	---	---	146	132	138	185	147	154	
21	61	51	55	---	---	---	151	124	140	214	73	102	
22	63	52	57	---	---	---	132	110	122	95	84	87	
23	64	53	58	---	---	---	300	118	135	92	87	90	
24	66	48	57	---	---	---	197	99	132	99	92	95	
25	58	50	54	---	---	---	180	111	131	104	99	101	
26	60	52	57	---	---	---	187	82	102	108	104	106	
27	63	54	59	---	---	---	120	110	116	114	108	111	
28	63	52	58	---	---	---	127	119	123	119	114	116	
29	63	51	57	---	---	---	133	126	129	124	119	121	
30	63	51	57	118	90	100	204	114	132	130	124	127	
31	---	---	---	118	91	97	133	115	127	---	---	---	
MONTH	66	40	54	---	---	---	---	---	---	217	73	126	

08235250 ALAMOSA RIVER ABOVE WIGHTMAN FORK NEAR JASPER, CO--Continued

pH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	5.2	5.1	5.2	---	---	---	---	---	---	---	---	---
2	5.2	5.1	5.2	---	---	---	---	---	---	---	---	---
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	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	4.1	3.9	4.0	5.1	5.0	5.0
2	---	---	---	---	---	---	4.1	4.1	4.1	5.2	4.9	5.0
3	---	---	---	---	---	---	4.1	4.0	4.1	5.0	4.7	4.9
4	---	---	---	---	---	---	4.2	4.1	4.1	5.1	4.6	4.9
5	---	---	---	---	---	---	4.2	4.1	4.1	5.3	4.8	5.1
6	---	---	---	---	---	---	4.3	4.1	4.2	5.7	5.0	5.3
7	---	---	---	---	---	---	4.4	4.0	4.3	5.9	5.5	5.8
8	---	---	---	---	---	---	4.2	3.9	4.0	6.2	5.8	6.0
9	---	---	---	---	---	---	4.0	3.9	3.9	6.3	6.0	6.3
10	---	---	---	---	---	---	3.9	3.9	3.9	6.3	6.0	6.2
11	---	---	---	---	---	---	3.9	3.7	3.8	6.2	5.9	6.1
12	---	---	---	---	---	---	4.1	3.7	3.9	6.2	5.6	6.0
13	---	---	---	---	---	---	4.0	3.7	3.9	6.4	5.5	6.1
14	---	---	---	---	---	---	4.0	3.6	3.8	6.7	5.9	6.4
15	---	---	---	---	---	---	3.7	3.4	3.6	6.6	5.9	6.5
16	---	---	---	---	---	---	3.6	3.4	3.5	6.7	6.5	6.7
17	---	---	---	---	---	---	3.8	3.6	3.7	6.8	6.5	6.7
18	---	---	---	3.8	3.5	3.6	4.0	3.8	3.9	6.8	6.7	6.8
19	---	---	---	3.7	3.4	3.6	4.2	3.8	4.0	6.9	6.8	6.9
20	---	---	---	3.7	3.5	3.5	4.5	4.1	4.3	6.9	6.9	6.9
21	---	---	---	3.7	3.5	3.6	4.9	4.4	4.7	6.9	6.9	6.9
22	---	---	---	3.7	3.6	3.7	5.2	4.7	5.1	7.0	6.9	6.9
23	---	---	---	3.9	3.7	3.8	5.4	5.2	5.3	6.9	6.9	6.9
24	---	---	---	4.1	3.8	4.0	5.4	5.2	5.3	6.9	6.9	6.9
25	---	---	---	4.3	3.8	4.0	5.4	5.1	5.2	6.9	6.8	6.8
26	---	---	---	4.0	3.8	3.9	5.1	4.9	5.1	6.8	6.7	6.7
27	---	---	---	4.0	3.8	3.9	5.0	4.6	4.9	6.8	6.7	6.7
28	---	---	---	3.9	3.8	3.9	5.1	4.8	4.9	6.9	6.8	6.8
29	---	---	---	4.1	3.8	4.0	4.9	4.8	4.9	6.9	6.8	6.9
30	---	---	---	4.3	3.9	4.1	5.0	4.8	4.9	6.9	6.6	6.8
31	---	---	---	4.1	3.9	4.0	---	---	---	6.9	6.0	6.7
MONTH	---	---	---	---	---	---	5.4	3.4	4.3	7.0	4.6	6.3

RIO GRANDE BASIN

08235250 ALAMOSA RIVER ABOVE WIGHTMAN FORK NEAR JASPER, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997												
DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	4.8	.0	1.4	3.1	.0	1.4
2	---	---	---	---	---	---	4.5	.0	1.6	7.5	.0	2.5
3	---	---	---	---	---	---	5.5	.0	1.9	9.7	.0	3.5
4	---	---	---	---	---	---	3.0	.0	1.0	9.3	.1	3.6
5	---	---	---	---	---	---	.2	.0	.0	7.5	.4	2.9
6	---	---	---	---	---	---	.9	.0	.1	6.4	.6	2.3
7	---	---	---	---	---	---	2.2	.0	.5	5.0	.6	2.1
8	---	---	---	---	---	---	4.5	.0	1.3	6.6	.5	2.4
9	---	---	---	---	---	---	3.7	.0	1.2	3.7	.0	1.5
10	---	---	---	---	---	---	2.5	.0	.6	6.7	.4	2.8
11	---	---	---	---	---	---	4.4	.0	1.0	6.7	.6	2.9
12	---	---	---	---	---	---	2.7	.0	.7	8.1	.9	3.2
13	---	---	---	---	---	---	5.2	.0	1.0	7.7	.6	2.8
14	---	---	---	---	---	---	5.9	.0	1.7	5.6	.8	2.5
15	---	---	---	---	---	---	7.6	.0	2.7	6.0	.8	2.5
16	---	---	---	---	---	---	8.7	.0	3.4	5.3	1.0	2.3
17	---	---	---	---	---	---	8.9	.0	2.9	6.8	1.1	2.7
18	---	---	---	.9	.0	---	6.6	.0	2.3	6.1	1.2	2.7
19	---	---	---	.8	.0	.2	7.3	.0	2.2	4.6	1.2	2.5
20	---	---	---	1.5	.0	.3	6.3	.0	1.9	5.9	1.4	3.0
21	---	---	---	1.8	.0	.3	5.5	.2	1.8	4.4	1.6	2.6
22	---	---	---	1.7	.0	.4	5.8	.0	1.8	5.3	1.8	3.0
23	---	---	---	3.4	.0	.8	2.9	.0	1.1	6.0	1.3	3.0
24	---	---	---	3.2	.0	.8	4.4	.0	1.1	4.4	1.4	2.5
25	---	---	---	5.0	.0	1.3	1.9	.0	.8	6.3	1.0	2.9
26	---	---	---	5.2	.0	1.3	6.3	.0	2.1	7.1	1.1	3.3
27	---	---	---	5.3	.0	1.5	9.9	.0	3.7	8.9	.4	3.7
28	---	---	---	6.0	.0	1.6	5.6	.7	2.7	7.9	1.2	3.8
29	---	---	---	5.9	.0	1.8	6.7	.5	2.5	8.5	1.5	4.0
30	---	---	---	4.8	.0	1.4	8.0	.0	2.9	8.1	1.9	3.7
31	---	---	---	4.1	.0	1.2	---	---	---	7.8	1.7	3.7
MONTH	---	---	---	---	---	---	9.9	.0	1.7	9.7	.0	2.8
	JUNE			JULY			AUGUST			SEPTEMBER		
1	7.8	1.8	3.7	12.3	3.0	6.7	---	6.9	---	13.8	8.3	10.8
2	7.6	1.6	3.5	13.1	2.2	6.9	---	---	---	14.2	7.5	10.5
3	8.2	1.6	3.9	13.3	3.0	7.4	---	---	---	12.4	7.3	9.8
4	8.4	1.9	4.0	13.2	2.9	7.2	---	---	---	13.3	7.6	10.4
5	7.4	1.8	3.8	11.5	3.2	6.8	13.6	---	---	12.4	6.6	9.8
6	5.5	1.9	3.5	13.1	3.1	7.5	11.4	6.6	9.3	12.6	7.4	10.1
7	6.5	2.8	4.0	9.7	4.0	6.5	12.3	7.6	9.7	13.1	6.5	9.9
8	4.4	2.3	3.2	10.4	3.5	6.6	14.3	6.6	10.4	13.5	6.8	10.3
9	5.2	1.8	3.3	9.6	3.7	6.9	13.8	6.5	10.3	10.8	8.0	9.5
10	9.3	2.9	4.9	12.5	3.9	8.0	---	8.7	---	13.6	6.7	9.7
11	9.5	2.1	4.7	10.3	6.2	8.0	---	---	---	13.1	6.2	9.5
12	9.3	1.8	4.7	13.9	4.3	8.7	13.1	---	---	14.2	6.7	10.0
13	7.9	2.3	4.6	14.7	3.9	8.9	13.0	6.6	9.9	11.3	5.6	8.8
14	9.7	2.2	4.9	15.2	4.4	9.5	11.8	5.9	8.9	12.9	6.1	9.3
15	9.8	2.1	4.9	13.9	5.2	9.7	15.2	5.0	9.7	12.6	5.7	8.8
16	8.1	1.6	4.5	11.8	5.7	8.9	15.1	6.5	10.7	12.7	6.2	9.3
17	8.5	2.4	5.2	10.9	5.8	8.5	14.9	6.7	10.6	12.1	5.4	8.6
18	11.4	2.9	6.0	9.4	5.5	7.9	12.8	8.6	10.3	14.4	8.3	10.4
19	9.6	2.9	5.5	11.0	6.1	8.6	13.3	5.9	9.6	13.7	7.2	9.9
20	10.9	2.5	5.7	13.6	7.1	10.1	15.0	7.0	10.9	10.9	7.2	8.9
21	11.3	2.4	5.8	11.6	7.3	9.4	13.8	7.7	10.7	8.6	5.3	6.6
22	11.6	2.8	6.2	9.8	6.2	8.2	12.0	8.3	10.2	8.5	4.8	6.4
23	11.8	3.1	6.3	12.1	6.6	9.6	14.5	7.0	9.8	9.4	3.7	6.1
24	11.8	2.8	6.3	15.4	6.2	10.9	12.7	6.2	9.4	9.6	2.9	6.3
25	11.1	2.9	6.1	13.5	6.8	10.5	12.7	8.1	10.2	10.8	3.7	7.3
26	9.0	3.1	5.6	12.0	7.4	9.8	16.3	8.8	12.0	11.7	5.9	8.3
27	11.2	3.0	6.3	13.3	7.8	10.6	15.2	7.5	11.5	12.3	5.4	8.7
28	12.3	3.3	6.8	12.1	8.4	10.5	15.5	7.7	11.5	11.1	4.0	7.7
29	12.8	3.3	6.9	11.9	---	---	14.6	8.5	11.2	11.7	4.8	8.1
30	12.9	3.2	7.1	13.1	8.5	10.5	14.2	8.8	11.1	10.8	4.1	7.5
31	---	---	---	13.9	8.2	10.6	13.5	8.6	10.7	---	---	---
MONTH	12.9	1.6	5.1	15.4	---	---	---	---	---	14.4	2.9	8.9

08235270 WIGHTMAN FORK BELOW CROPSEY CREEK AT SUMMITVILLE, CO

LOCATION.--Lat 37°25'45", long 106°35'03", in NW¹/₄NW¹/₄ sec.29, T.37 N., R.4 E., Rio Grande County, Hydrologic Unit 13010002, on left bank about 200 feet downstream from Cropsey Creek, and 0.25 mi east of Summitville.

DRAINAGE AREA.--4.44 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1995 to current year (seasonal records only).

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 11,120 ft above sea level, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Flow partially regulated by Summitville Mine.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge during period of seasonal operation, 175 ft³/s, June 1, 1997, gage height, 6.13 ft, from rating curve extended above 64 ft³/s; minimum daily discharge, 0.90 ft³/s, Aug. 19, 1996.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period of seasonal operation, 175 ft³/s, June 1, gage height, 6.13 ft, from rating curve extended above 64 ft³/s; minimum daily discharge, 1.7 ft³/s, Oct. 1, and estimated on Oct. 2 .

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.7	---	---	---	---	---	---	---	98	13	6.2	5.3
2	e1.7	---	---	---	---	---	---	---	83	12	6.5	6.2
3	---	---	---	---	---	---	---	---	79	11	6.0	6.8
4	---	---	---	---	---	---	---	---	78	11	7.9	6.2
5	---	---	---	---	---	---	---	---	62	10	9.9	5.4
6	---	---	---	---	---	---	---	---	51	10	10	5.3
7	---	---	---	---	---	---	---	---	52	9.4	12	5.1
8	---	---	---	---	---	---	---	---	43	8.6	9.3	5.0
9	---	---	---	---	---	---	---	---	35	8.3	4.9	5.4
10	---	---	---	---	---	---	---	---	38	9.5	11	5.1
11	---	---	---	---	---	---	---	---	37	9.9	10	5.0
12	---	---	---	---	---	---	---	---	35	8.6	6.5	5.0
13	---	---	---	---	---	---	---	---	33	8.0	4.5	4.9
14	---	---	---	---	---	---	---	---	32	7.3	4.2	4.6
15	---	---	---	---	---	---	---	---	30	7.7	3.8	4.4
16	---	---	---	---	---	---	---	e55	42	7.2	4.3	4.7
17	---	---	---	---	---	---	---	64	39	6.5	4.9	4.2
18	---	---	---	---	---	---	---	60	35	7.4	5.4	3.6
19	---	---	---	---	---	---	---	57	33	7.3	5.3	4.4
20	---	---	---	---	---	---	---	67	34	7.1	4.7	5.0
21	---	---	---	---	---	---	---	57	33	7.6	4.6	16
22	---	---	---	---	---	---	---	52	32	7.1	4.6	12
23	---	---	---	---	---	---	---	56	29	7.8	5.2	7.9
24	---	---	---	---	---	---	---	50	24	7.0	4.9	6.3
25	---	---	---	---	---	---	---	43	22	7.0	5.5	5.7
26	---	---	---	---	---	---	---	40	20	7.2	8.5	5.3
27	---	---	---	---	---	---	---	39	19	8.0	5.2	5.1
28	---	---	---	---	---	---	---	47	18	8.0	4.9	4.4
29	---	---	---	---	---	---	---	62	17	7.1	4.8	4.8
30	---	---	---	---	---	---	---	90	15	8.5	5.4	3.9
31	---	---	---	---	---	---	---	118	---	7.4	5.7	---
TOTAL	---	---	---	---	---	---	---	---	1198	262.5	196.6	173.0
MEAN	---	---	---	---	---	---	---	---	39.9	8.47	6.34	5.77
MAX	---	---	---	---	---	---	---	---	98	13	12	16
MIN	---	---	---	---	---	---	---	---	15	6.5	3.8	3.6
AC-FT	---	---	---	---	---	---	---	---	2380	521	390	343

e-Estimated.

08235270 WIGHTMAN FORK BELOW CROSEY CREEK AT SUMMITVILLE, CO--Continued

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM @ 25 DEG. C), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	1170	794	1040
17	---	---	---	---	---	---	---	---	---	915	449	668
18	---	---	---	---	---	---	---	---	---	635	223	377
19	---	---	---	---	---	---	---	---	---	823	234	570
20	---	---	---	---	---	---	---	---	---	931	503	740
21	---	---	---	---	---	---	---	---	---	727	366	530
22	---	---	---	---	---	---	---	---	---	543	485	521
23	---	---	---	---	---	---	---	---	---	624	461	536
24	---	---	---	---	---	---	---	---	---	761	494	605
25	---	---	---	---	---	---	---	---	---	885	761	850
26	---	---	---	---	---	---	---	---	---	1000	865	939
27	---	---	---	---	---	---	---	---	---	1060	643	894
28	---	---	---	---	---	---	---	---	---	809	557	691
29	---	---	---	---	---	---	---	---	---	700	387	558
30	---	---	---	---	---	---	---	---	---	687	452	573
31	---	---	---	---	---	---	---	---	---	941	453	700
MONTH	---	---	---	---	---	---	---	---	---	---	---	---
	JUNE			JULY			AUGUST			SEPTEMBER		
1	708	334	493	754	695	722	1390	1260	1330	1790	801	1500
2	610	392	523	829	498	747	1430	1240	1350	1850	906	1640
3	855	432	628	869	451	733	1380	1260	1320	1650	1140	1470
4	757	460	613	900	771	841	1320	878	1200	1690	1160	1530
5	675	486	570	898	417	768	1240	824	1080	1160	595	1030
6	---	---	---	932	809	874	1270	701	1110	1700	1060	1400
7	---	---	---	970	393	892	1780	757	1440	1810	1700	1750
8	---	---	---	992	602	847	1890	704	1510	1880	1770	1830
9	---	---	---	1010	593	868	1290	696	754	1880	1200	1700
10	---	---	---	1380	955	1180	1540	705	1130	1670	1420	1570
11	---	---	---	1390	1260	1340	1720	1490	1640	1720	1470	1650
12	---	390	---	1400	586	1030	1720	681	1040	1720	1560	1650
13	502	407	464	1080	926	1010	718	681	702	1740	1660	1710
14	516	401	463	1060	649	894	2370	693	752	1730	1550	1680
15	431	225	344	1170	991	1070	776	707	733	1730	755	1340
16	925	231	490	1190	494	1090	1610	724	1130	1500	1190	1410
17	1100	708	884	1250	771	1060	1720	1460	1640	1590	1490	1540
18	869	565	733	1320	1160	1230	1710	1270	1570	1660	763	1300
19	565	472	513	1310	1170	1220	1710	1400	1560	1750	1470	1640
20	567	475	516	1290	780	1160	1610	1540	1570	1660	1030	1580
21	640	567	610	1290	1140	1210	1650	1550	1590	1200	450	726
22	692	640	666	1320	1200	1270	1630	1530	1580	960	623	807
23	663	518	626	1480	1060	1310	1690	1120	1530	1170	885	1040
24	518	384	463	1490	1090	1190	1650	1450	1580	1340	1160	1250
25	706	487	564	1590	704	1320	1700	1220	1630	1410	1320	1360
26	812	645	729	1370	948	1240	1450	497	1010	1450	1390	1420
27	924	812	864	1270	1000	1140	1630	1430	1540	1530	1430	1470
28	978	794	901	1240	1010	1170	1750	1620	1680	1590	635	1340
29	1020	861	920	1330	1180	1260	1810	1720	1750	1640	635	1560
30	951	695	828	1280	994	1140	1820	1470	1730	1640	671	1270
31	---	---	---	1270	634	937	1740	801	1440	---	---	---
MONTH	---	---	---	1590	393	1060	2370	497	1340	1880	450	1440

08235270 WIGHTMAN FORK BELOW CROSEY CREEK AT SUMMITVILLE, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	---	---	---	---	---	---
2	---	---	---	---	---	---	---	---	---	---	---	---
3	---	---	---	---	---	---	---	---	---	---	---	---
4	---	---	---	---	---	---	---	---	---	---	---	---
5	---	---	---	---	---	---	---	---	---	---	---	---
6	---	---	---	---	---	---	---	---	---	---	---	---
7	---	---	---	---	---	---	---	---	---	---	---	---
8	---	---	---	---	---	---	---	---	---	---	---	---
9	---	---	---	---	---	---	---	---	---	---	---	---
10	---	---	---	---	---	---	---	---	---	---	---	---
11	---	---	---	---	---	---	---	---	---	---	---	---
12	---	---	---	---	---	---	---	---	---	---	---	---
13	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	---	---	---	---	---	---	---	---	---	---
15	---	---	---	---	---	---	---	---	---	---	---	---
16	---	---	---	---	---	---	---	---	---	1.1	.0	---
17	---	---	---	---	---	---	---	---	---	1.4	.0	.3
18	---	---	---	---	---	---	---	---	---	1.6	.0	.3
19	---	---	---	---	---	---	---	---	---	1.4	.0	.3
20	---	---	---	---	---	---	---	---	---	1.8	.0	.5
21	---	---	---	---	---	---	---	---	---	1.3	.0	.4
22	---	---	---	---	---	---	---	---	---	1.7	.1	.5
23	---	---	---	---	---	---	---	---	---	2.2	.0	.6
24	---	---	---	---	---	---	---	---	---	1.8	.0	.5
25	---	---	---	---	---	---	---	---	---	2.3	.0	.6
26	---	---	---	---	---	---	---	---	---	2.6	.0	.8
27	---	---	---	---	---	---	---	---	---	3.4	.0	1.1
28	---	---	---	---	---	---	---	---	---	2.5	.1	1.0
29	---	---	---	---	---	---	---	---	---	2.8	.3	.9
30	---	---	---	---	---	---	---	---	---	2.6	.3	1.0
31	---	---	---	---	---	---	---	---	---	2.9	.5	1.3
MONTH	---	---	---	---	---	---	---	---	---	---	---	---
	JUNE			JULY			AUGUST			SEPTEMBER		
1	3.2	.5	1.3	11.4	1.8	5.8	16.9	6.6	10.9	14.5	8.3	10.7
2	3.5	.7	1.8	12.2	1.6	6.3	13.0	6.8	9.6	16.1	7.6	10.3
3	5.5	1.2	2.8	13.1	2.2	6.8	12.8	7.7	9.8	14.5	7.1	9.6
4	6.5	1.6	3.5	12.9	2.3	6.9	12.3	8.0	9.7	15.1	7.2	10.5
5	5.3	2.2	3.4	11.2	3.0	6.7	12.9	7.8	9.6	14.9	6.9	10.3
6	4.8	1.7	3.1	12.8	2.5	7.0	12.7	5.7	8.5	14.2	7.4	10.2
7	5.6	2.3	3.4	8.8	3.6	5.9	14.1	6.7	9.5	16.8	6.6	11.1
8	4.2	1.8	2.8	10.2	2.9	6.3	14.2	6.5	10.2	17.4	7.1	11.2
9	3.9	1.6	2.8	10.8	3.4	6.5	14.7	4.2	8.8	13.3	8.0	10.2
10	6.0	2.4	3.7	11.9	3.5	7.8	13.5	6.4	8.9	17.4	7.2	10.9
11	7.5	1.2	3.9	10.1	5.8	7.8	12.7	6.9	9.4	15.6	7.4	10.3
12	7.8	1.1	3.9	14.8	5.0	8.7	16.0	5.0	9.9	16.6	7.1	10.7
13	7.0	1.8	4.1	15.1	3.5	8.5	16.6	4.4	9.1	14.0	6.5	9.4
14	8.4	1.4	4.3	16.8	3.8	9.3	15.4	3.8	8.0	15.6	6.7	10.1
15	9.2	.9	4.1	16.5	4.6	9.2	17.8	3.2	9.2	14.2	6.5	9.0
16	6.4	.3	3.2	11.5	4.9	8.3	16.9	3.8	9.3	14.8	6.7	9.6
17	8.9	3.0	5.4	10.8	4.9	7.6	15.8	6.1	9.9	14.0	4.6	8.5
18	11.0	2.9	6.0	8.5	4.7	6.5	14.8	7.3	9.6	15.4	7.2	10.0
19	10.1	2.7	5.6	13.0	5.1	8.4	16.5	5.8	9.8	15.0	6.8	9.9
20	10.4	2.2	5.8	11.8	6.0	8.8	17.0	6.3	10.6	11.5	5.1	8.7
21	11.0	2.8	6.3	13.3	6.6	8.8	16.4	6.9	10.2	7.0	2.1	4.8
22	10.9	3.7	6.8	10.4	5.7	8.0	14.9	7.5	9.9	8.2	3.2	5.3
23	11.3	4.1	6.9	10.8	5.9	8.4	16.1	6.6	9.7	11.2	3.0	6.3
24	11.6	2.6	6.3	16.1	5.4	10.4	13.6	6.2	9.7	13.4	3.4	7.2
25	11.2	2.4	6.4	15.2	6.5	10.5	13.4	7.5	10.1	13.6	3.6	7.8
26	8.4	3.3	5.6	13.9	6.3	9.2	17.7	7.9	11.6	13.3	5.8	8.2
27	10.5	3.2	6.4	15.1	6.9	10.1	18.2	7.3	11.9	14.8	5.3	9.0
28	11.0	3.5	6.5	13.5	7.6	9.6	17.6	7.8	11.8	14.0	4.1	7.9
29	11.8	3.4	6.9	11.2	7.5	9.1	16.5	8.7	11.3	14.3	5.1	8.5
30	11.9	3.7	7.0	13.0	7.5	9.7	13.8	8.7	10.4	14.0	3.9	7.9
31	---	---	---	14.6	7.0	10.1	14.5	8.2	10.4	---	---	---
MONTH	11.9	.3	4.7	16.8	1.6	8.2	18.2	3.2	9.9	17.4	2.1	9.1

08235290 WIGHTMAN FORK AT MOUTH NEAR JASPER, CO

LOCATION.--Lat 37°24'14", long 106°31'16", in SE¹/₄SW¹/₄ sec.35, T.37 N., R.4 E., Rio Grande County, Hydrologic Unit 13010002, on right bank 25 ft downstream from bridge on Forest Development Road No. 250, about 300 ft upstream from mouth of Alamosa River, and 4.3 mi southwest of Jasper.

DRAINAGE AREA.--16.1 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1995 to current year (seasonal records only).

GAGE.--Water-stage recorder with satellite telemetry, and crest-stage gage. Elevation of gage is 9,420 ft above sea level, from topographic map.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Flow partially regulated by releases from Summitville Mine upstream.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge during period of seasonal operation, 431 ft³/s, June 1, 1997, gage height, 5.47 ft, from rating curve extended above 300 ft³/s; minimum daily, 1.2 ft³/s, Aug. 19, 1996.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period of seasonal operation, 431 ft³/s, June 1, gage height, 5.47 ft; from rating curve extended above 300 ft³/s; minimum daily, 3.0 ft³/s (estimated), Oct. 2.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.1	---	---	---	---	---	e5.0	17	218	25	13	12
2	e3.0	---	---	---	---	---	e5.0	15	201	22	13	11
3	---	---	---	---	---	---	e6.0	15	179	20	12	15
4	---	---	---	---	---	---	e6.0	20	192	19	16	13
5	---	---	---	---	---	---	e5.0	34	160	18	25	11
6	---	---	---	---	---	---	e5.0	53	126	17	27	11
7	---	---	---	---	---	---	e4.0	54	124	16	33	9.6
8	---	---	---	---	---	---	e4.0	52	95	14	22	8.7
9	---	---	---	---	---	---	e5.0	50	74	14	13	9.5
10	---	---	---	---	---	---	e5.0	39	72	15	28	9.2
11	---	---	---	---	---	---	e6.0	41	77	16	24	8.2
12	---	---	---	---	---	---	e6.0	57	82	14	17	8.3
13	---	---	---	---	---	---	e5.0	91	77	13	12	7.7
14	---	---	---	---	---	---	e5.0	118	73	11	11	7.6
15	---	---	---	---	---	---	e7.0	141	71	11	9.7	6.6
16	---	---	---	---	---	---	e8.0	159	102	10	9.1	9.0
17	---	---	---	---	---	---	---	10	163	89	9.7	6.5
18	---	---	---	---	---	e4.0	14	179	76	11	11	5.5
19	---	---	---	---	---	e5.0	21	170	71	12	11	6.3
20	---	---	---	---	---	e5.0	29	173	68	12	9.3	6.7
21	---	---	---	---	---	e5.0	40	150	57	13	9.0	41
22	---	---	---	---	---	e5.0	42	133	51	12	10	33
23	---	---	---	---	---	e6.0	33	139	49	15	11	20
24	---	---	---	---	---	e7.0	23	120	40	12	12	15
25	---	---	---	---	---	e8.0	19	95	40	10	12	13
26	---	---	---	---	---	e12	14	87	37	11	25	12
27	---	---	---	---	---	e10	15	81	35	15	12	11
28	---	---	---	---	---	e9.0	18	97	33	18	9.8	9.9
29	---	---	---	---	---	e8.0	18	129	31	14	9.0	9.1
30	---	---	---	---	---	e7.0	17	200	28	20	11	8.5
31	---	---	---	---	---	e6.0	---	195	---	22	12	---
TOTAL	---	---	---	---	---	---	400.0	3067	2628	461.3	458.6	354.9
MEAN	---	---	---	---	---	---	13.3	98.9	87.6	14.9	14.8	11.8
MAX	---	---	---	---	---	---	42	200	218	25	33	41
MIN	---	---	---	---	---	---	4.0	15	28	9.3	9.0	5.5
AC-FT	---	---	---	---	---	---	793	6080	5210	915	910	704

e-Estimated.

08235290 WIGHTMAN FORK AT MOUTH NEAR JASPER, CO--Continued

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM @ 25 DEG. C), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	251	243	248	249	230	236
2	---	---	---	---	---	---	264	248	258	251	125	218
3	---	---	---	---	---	---	272	264	269	256	226	242
4	---	---	---	---	---	---	281	272	276	231	190	218
5	---	---	---	---	---	---	281	264	272	198	158	185
6	---	---	---	---	---	---	290	252	270	171	154	160
7	---	---	---	---	---	---	295	233	267	175	156	166
8	---	---	---	---	---	---	321	283	304	176	156	165
9	---	---	---	---	---	---	324	304	317	224	156	186
10	---	---	---	---	---	---	330	321	328	230	193	218
11	---	---	---	---	---	---	354	325	336	193	173	185
12	---	---	---	---	---	---	363	299	328	180	157	168
13	---	---	---	---	---	---	370	292	328	195	146	170
14	---	---	---	---	---	---	380	280	329	217	160	179
15	---	---	---	---	---	---	964	294	589	534	119	240
16	---	---	---	---	---	---	1180	683	1040	448	303	372
17	---	---	---	---	---	---	683	439	551	311	179	247
18	---	---	---	375	359	370	439	366	416	198	104	152
19	---	---	---	362	313	347	378	314	357	335	101	209
20	---	---	---	314	267	297	417	315	375	344	229	299
21	---	---	---	277	250	267	560	331	446	277	146	214
22	---	---	---	258	250	253	384	286	339	219	176	195
23	---	---	---	259	247	254	286	275	281	257	210	229
24	---	---	---	254	245	249	308	275	289	310	216	253
25	---	---	---	267	245	258	347	308	332	343	255	318
26	---	---	---	272	252	262	353	340	346	378	287	318
27	---	---	---	259	232	249	357	281	336	395	260	333
28	---	---	---	255	243	250	317	243	292	307	239	282
29	---	---	---	247	237	246	302	245	282	270	168	226
30	---	---	---	253	234	246	296	215	279	364	174	240
31	---	---	---	249	236	243	---	---	---	461	212	339
MONTH	---	---	---	---	---	---	1180	215	356	534	101	231
	JUNE			JULY			AUGUST			SEPTEMBER		
1	259	166	212	487	397	451	744	632	694	821	662	756
2	290	185	225	508	359	474	809	694	749	976	765	850
3	352	228	300	519	349	461	815	697	755	990	580	705
4	301	229	268	557	477	520	779	580	723	---	588	---
5	320	213	268	548	389	493	632	475	555	---	---	---
6	261	218	240	593	524	556	700	289	577	---	---	---
7	290	239	265	602	417	558	821	305	556	---	---	---
8	331	269	303	628	443	558	964	529	875	---	---	---
9	385	299	351	641	457	580	535	350	394	---	839	---
10	427	279	373	842	629	711	647	340	462	964	771	913
11	325	218	272	923	808	867	915	600	803	1040	956	1020
12	255	210	230	947	528	822	916	427	713	1050	958	1010
13	239	211	222	759	625	706	482	404	428	1100	1010	1070
14	253	211	235	729	554	662	770	393	431	1060	978	1030
15	236	166	209	798	687	742	414	397	406	1100	620	1030
16	455	161	272	799	507	747	814	406	461	970	550	833
17	578	362	457	799	603	729	875	787	824	1000	924	971
18	449	278	384	989	778	865	898	798	861	1040	604	949
19	300	253	279	903	854	880	939	775	859	1160	605	1030
20	408	272	334	907	682	849	954	887	925	1190	1030	1140
21	523	374	458	866	782	826	928	865	891	1090	312	550
22	582	510	538	915	778	851	922	704	842	514	333	421
23	570	355	498	948	591	860	962	635	839	561	435	506
24	389	261	330	834	693	767	847	476	749	704	561	630
25	352	278	305	1130	675	984	812	560	741	761	704	733
26	419	340	374	930	761	907	702	289	436	787	761	771
27	475	419	449	863	626	759	745	591	672	825	787	796
28	509	397	474	755	550	675	827	745	778	847	815	839
29	535	456	494	860	726	784	886	827	849	886	435	763
30	535	387	467	782	519	644	886	627	847	900	739	878
31	---	---	---	632	351	451	851	599	753	---	---	---
MONTH	582	161	336	1130	349	701	964	289	692	---	---	---

08235290 WIGHTMAN FORK AT MOUTH NEAR JASPER, CO--Continued

pH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	6.2	6.0	6.1	---	---	---	---	---	---	---	---	---
2	6.4	5.8	6.1	---	---	---	---	---	---	---	---	---
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	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	7.6	7.5	7.6	7.1	6.3	6.8
2	---	---	---	---	---	---	7.6	7.5	7.5	7.1	7.0	7.1
3	---	---	---	---	---	---	7.5	7.5	7.5	7.2	7.1	7.1
4	---	---	---	---	---	---	7.5	7.5	7.5	7.3	7.2	7.3
5	---	---	---	---	---	---	7.5	7.4	7.5	7.4	7.3	7.3
6	---	---	---	---	---	---	7.5	7.4	7.4	7.3	7.2	7.3
7	---	---	---	---	---	---	7.4	7.3	7.4	7.2	7.0	7.1
8	---	---	---	---	---	---	7.4	7.3	7.3	7.0	6.9	7.0
9	---	---	---	---	---	---	7.4	7.3	7.4	6.9	5.8	6.5
10	---	---	---	---	---	---	7.4	7.3	7.4	5.8	5.4	5.5
11	---	---	---	---	---	---	7.3	7.2	7.3	6.5	5.8	6.3
12	---	---	---	---	---	---	7.3	7.0	7.2	6.6	6.2	6.5
13	---	---	---	---	---	---	7.1	6.9	7.0	6.2	5.2	5.7
14	---	---	---	---	---	---	7.1	6.7	6.9	5.2	4.6	4.9
15	---	---	---	---	---	---	7.0	4.7	5.8	4.9	3.8	4.5
16	---	---	---	---	---	---	4.8	4.5	4.7	4.0	3.8	3.9
17	---	---	---	---	---	---	5.9	4.8	5.1	4.4	4.0	4.2
18	---	---	---	7.4	7.2	7.3	6.4	5.9	6.2	4.9	4.4	4.7
19	---	---	---	7.5	7.4	7.4	6.5	6.3	6.4	5.1	4.0	4.6
20	---	---	---	7.5	7.4	7.4	6.5	5.4	5.8	4.2	3.9	4.0
21	---	---	---	7.5	7.4	7.5	5.5	5.0	5.2	4.7	4.1	4.5
22	---	---	---	7.5	7.5	7.5	5.3	5.1	5.1	4.7	4.6	4.7
23	---	---	---	7.5	7.5	7.5	5.4	5.3	5.3	4.7	4.6	4.6
24	---	---	---	7.6	7.5	7.5	5.3	5.2	5.3	4.6	4.1	4.5
25	---	---	---	7.5	7.4	7.5	5.2	5.1	5.1	4.3	4.1	4.2
26	---	---	---	7.5	7.4	7.5	5.1	5.0	5.1	4.3	4.1	4.2
27	---	---	---	7.5	7.5	7.5	5.3	5.0	5.1	4.6	4.0	4.2
28	---	---	---	7.6	7.5	7.5	6.1	5.2	5.3	4.6	4.4	4.5
29	---	---	---	7.6	7.5	7.5	6.1	5.2	5.4	4.7	4.5	4.6
30	---	---	---	7.6	7.5	7.5	6.3	5.3	5.5	4.8	3.8	4.5
31	---	---	---	7.6	7.5	7.5	---	---	---	4.5	3.7	4.0
MONTH	---	---	---	---	---	---	7.6	4.5	6.3	7.4	3.7	5.4

RIO GRANDE BASIN

08235290 WIGHTMAN FORK AT MOUTH NEAR JASPER, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	2.6	.0	.9	2.1	.0	.9
2	---	---	---	---	---	---	2.4	.0	.9	5.9	.0	1.6
3	---	---	---	---	---	---	2.6	.1	1.1	7.8	.0	2.5
4	---	---	---	---	---	---	2.0	.0	.7	8.1	.0	2.7
5	---	---	---	---	---	---	.0	.0	.0	6.7	.5	2.4
6	---	---	---	---	---	---	.0	.0	.0	5.8	.8	1.9
7	---	---	---	---	---	---	.0	.0	.0	4.2	.7	1.8
8	---	---	---	---	---	---	.0	.0	.0	5.6	.6	2.0
9	---	---	---	---	---	---	1.5	.0	.5	2.5	.0	1.2
10	---	---	---	---	---	---	.7	.0	.2	6.6	.2	2.4
11	---	---	---	---	---	---	.5	.0	.1	5.4	.6	2.5
12	---	---	---	---	---	---	.0	.0	.0	6.6	.7	2.5
13	---	---	---	---	---	---	.0	.0	.0	6.0	.6	2.1
14	---	---	---	---	---	---	.1	.0	.0	4.7	.6	1.8
15	---	---	---	---	---	---	2.5	.0	.6	4.8	.8	1.8
16	---	---	---	---	---	---	2.8	.0	1.0	4.6	.9	2.0
17	---	---	---	---	---	---	4.0	.0	1.1	6.1	1.1	2.4
18	---	---	---	.3	.0	.0	3.8	.0	1.1	5.5	1.1	2.3
19	---	---	---	.3	.0	.0	4.4	.0	1.1	4.8	1.2	2.2
20	---	---	---	.0	.0	.0	4.7	.0	1.3	5.9	1.2	2.5
21	---	---	---	.0	.0	.0	4.5	.2	1.3	4.3	1.5	2.4
22	---	---	---	.0	.0	.0	4.1	.0	1.3	4.9	1.5	2.6
23	---	---	---	2.3	.0	.6	2.5	.0	1.0	4.9	1.1	2.4
24	---	---	---	1.9	.0	.6	4.0	.0	.8	4.2	1.2	2.3
25	---	---	---	2.3	.0	.5	1.1	.0	.2	6.2	.7	2.4
26	---	---	---	2.6	.0	.7	4.2	.0	1.2	6.6	.5	2.6
27	---	---	---	3.0	.0	.9	7.6	.0	2.4	7.6	.2	2.7
28	---	---	---	3.4	.0	1.1	3.6	.5	1.8	5.7	.9	2.8
29	---	---	---	2.9	.0	1.0	5.8	.5	2.0	7.4	1.4	3.2
30	---	---	---	2.7	.0	.7	6.6	.0	2.0	5.7	1.8	3.1
31	---	---	---	3.3	.0	.9	---	---	---	7.2	1.9	3.6
MONTH	---	---	---	---	---	---	7.6	.0	.8	8.1	.0	2.3
	JUNE			JULY			AUGUST			SEPTEMBER		
1	7.6	2.1	3.7	13.9	4.1	8.4	16.3	8.0	11.6	12.9	8.6	10.5
2	7.1	1.9	3.7	14.5	3.0	8.3	12.8	8.4	10.8	14.2	7.9	10.7
3	8.5	2.0	4.4	14.6	3.9	8.8	14.3	9.2	11.4	13.6	7.8	10.2
4	9.2	2.6	5.2	14.8	4.5	9.0	13.1	9.6	11.1	13.0	7.7	10.1
5	8.4	2.8	5.0	12.8	4.7	8.5	13.7	9.3	11.1	11.8	7.1	9.7
6	7.7	2.8	5.0	14.0	4.4	8.8	12.9	7.4	9.9	12.6	7.7	9.9
7	7.3	4.1	5.2	10.1	5.4	7.8	12.0	8.0	9.8	12.6	6.8	9.8
8	5.2	3.3	4.2	10.5	4.7	7.7	14.7	7.1	10.6	13.4	6.9	10.1
9	5.5	2.6	3.9	11.0	4.9	8.1	14.0	7.0	10.3	11.0	8.0	9.6
10	9.2	3.8	5.7	12.4	5.2	8.9	13.0	8.8	10.3	13.3	7.1	9.9
11	10.5	2.6	5.8	11.0	7.5	9.0	13.1	6.4	9.4	12.5	6.7	9.5
12	10.6	2.6	5.9	15.1	5.4	9.5	14.3	6.1	9.8	12.5	6.7	9.5
13	9.4	3.2	5.9	15.4	5.0	9.9	13.1	7.1	10.0	11.4	5.8	8.7
14	11.1	2.9	6.2	16.1	5.7	10.7	12.7	6.4	9.2	12.0	6.1	8.9
15	10.9	2.7	5.9	14.8	7.0	10.9	15.1	5.7	10.0	11.6	5.8	8.6
16	8.5	1.9	4.9	12.2	7.0	9.9	15.1	6.9	10.5	12.4	6.6	9.2
17	9.8	3.5	6.2	12.0	6.9	9.6	13.7	6.8	10.2	11.5	5.0	8.2
18	13.1	4.1	7.8	10.0	6.4	8.4	12.1	8.7	10.1	12.3	7.9	9.6
19	12.6	4.5	7.8	12.2	6.8	9.4	13.6	6.3	9.7	12.9	7.0	9.5
20	12.9	3.9	7.8	12.3	7.8	10.2	13.5	7.0	10.3	10.4	6.9	8.5
21	13.3	3.8	7.9	13.3	8.3	10.5	13.9	7.7	10.5	8.1	5.0	6.6
22	13.6	4.5	8.4	10.7	7.4	9.3	11.8	8.3	9.9	8.8	5.0	6.4
23	13.9	4.9	8.7	13.1	7.4	10.0	13.1	7.1	9.9	8.8	3.6	6.0
24	13.8	4.2	8.4	16.4	6.8	11.3	13.4	6.7	9.8	10.2	3.2	6.3
25	12.4	4.4	8.1	14.4	7.5	11.0	12.3	8.1	10.2	10.6	3.8	7.0
26	10.0	4.8	7.3	12.9	8.3	10.6	15.6	9.1	11.8	10.1	5.9	7.9
27	11.2	4.3	7.7	14.7	8.6	11.3	16.0	7.9	11.4	11.8	5.5	8.3
28	12.1	4.7	7.9	13.5	9.2	11.0	15.7	8.1	11.4	10.9	4.1	7.2
29	14.4	4.5	8.8	12.6	9.2	10.9	14.7	8.8	11.0	11.2	4.8	7.7
30	14.7	4.7	9.1	13.2	9.2	11.0	13.9	9.0	10.8	10.4	4.2	7.1
31	---	---	---	14.3	9.0	11.3	13.6	8.5	10.6	---	---	---
MONTH	14.7	1.9	6.4	16.4	3.0	9.7	16.3	5.7	10.4	14.2	3.2	8.7

08235350 ALAMOSA RIVER ABOVE JASPER, CO

LOCATION.--Lat 37°25'03", long 106°29'30", in SE¹/₄SE¹/₄ sec.25, T.37 N., R.4 E., Rio Grande County, Hydrologic Unit 13010002, on left bank 2.0 mi downstream from Wightman Fork, and 2.0 mi west of Jasper.

DRAINAGE AREA.--58.1 mi².

PERIOD OF RECORD.--July 1995 to current year (seasonal records only).

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

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 9,200 ft above sea level, from topographic map.

REMARKS.--Records fair except for the period, Mar. 18 to June 2, discharges above 600 ft³/s, and estimated daily discharges, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge during period of seasonal operation, 1,110 ft³/s, June 1, 1997; gage height, 5.75 ft, from rating curve extended above 580 ft³/s; minimum daily, 11 ft³/s, Aug. 19-20, 1996.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period of seasonal operation, 1,110 ft³/s, June 1; gage height, 5.75 ft, from rating curve extended above 580 ft³/s; minimum daily, 12 ft³/s (estimated), Oct. 3.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	14	---	---	---	---	---	e35	73	755	226	76	62
2	13	---	---	---	---	---	e34	67	770	196	79	62
3	e12	---	---	---	---	---	e33	70	733	180	75	75
4	---	---	---	---	---	---	e31	94	724	169	89	69
5	---	---	---	---	---	---	e28	142	692	153	133	67
6	---	---	---	---	---	---	e26	201	587	144	113	64
7	---	---	---	---	---	---	e24	214	564	134	129	57
8	---	---	---	---	---	---	e23	210	523	117	98	50
9	---	---	---	---	---	---	e25	215	408	111	78	60
10	---	---	---	---	---	---	e23	186	428	110	131	59
11	---	---	---	---	---	---	e23	191	491	112	112	52
12	---	---	---	---	---	---	e22	229	489	106	89	55
13	---	---	---	---	---	---	e21	286	456	102	78	48
14	---	---	---	---	---	---	22	367	442	95	74	49
15	---	---	---	---	---	---	24	402	437	89	66	43
16	---	---	---	---	---	---	28	429	475	83	59	58
17	---	---	---	---	---	---	36	441	420	76	56	42
18	---	---	---	---	---	e20	51	480	470	77	65	38
19	---	---	---	---	---	23	69	469	503	81	62	38
20	---	---	---	---	---	28	94	459	489	81	53	39
21	---	---	---	---	---	e32	119	442	464	100	51	200
22	---	---	---	---	---	e35	125	411	443	85	61	180
23	---	---	---	---	---	e38	112	416	425	81	59	138
24	---	---	---	---	---	e40	89	385	390	76	61	110
25	---	---	---	---	---	e43	71	326	351	70	61	94
26	---	---	---	---	---	e45	63	297	313	69	126	81
27	---	---	---	---	---	e43	60	291	284	80	73	71
28	---	---	---	---	---	e41	71	317	279	86	60	63
29	---	---	---	---	---	e39	68	388	271	74	55	56
30	---	---	---	---	---	e38	68	487	259	91	60	52
31	---	---	---	---	---	e37	---	577	---	106	66	---
TOTAL	---	---	---	---	---	---	1518	9562	14335	3360	2448	2132
MEAN	---	---	---	---	---	---	50.6	308	478	108	79.0	71.1
MAX	---	---	---	---	---	---	125	577	770	226	133	200
MIN	---	---	---	---	---	---	21	67	259	69	51	38
AC-FT	---	---	---	---	---	---	3010	18970	28430	6660	4860	4230

e-Estimated.

08235700 ALAMOSA RIVER BELOW CASTLEMAN GULCH NEAR JASPER, CO

LOCATION.--Lat 37°24'10", long 106°27'00", in SE¹/₄SE¹/₄ sec.32, T.37 N., R.5 E., Rio Grande County, Hydrologic Unit 13010002, on left bank at private bridge, 15 ft downstream from Castleman Gulch, and 1.2 mi southeast of Jasper.

DRAINAGE AREA.--76.3 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1995 to current year (seasonal records only).

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

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 9,040 ft above sea level, from topographic map.

REMARKS.--Records fair except for estimated daily discharges and those above 1,000 ft³/s, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge during period of seasonal operation, 1,230 ft³/s, June 1, 1997; gage height, 5.96 ft, from rating curve extended above 1,200 ft³/s; minimum daily, 12 ft³/s, Aug. 19-20, 1996.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period of seasonal operation, 1,230 ft³/s, June 1; gage height, 5.96 ft, from rating curve extended above 1,200 ft³/s; minimum daily, 17 ft³/s, Oct. 1-2.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	17	---	---	---	---	---	47	99	879	242	81	73
2	17	---	---	---	---	---	43	85	869	207	82	67
3	---	---	---	---	---	---	40	84	855	192	77	91
4	---	---	---	---	---	---	40	e109	837	179	94	80
5	---	---	---	---	---	---	36	e160	e790	163	154	83
6	---	---	---	---	---	---	34	e220	e660	152	131	77
7	---	---	---	---	---	---	33	e235	e610	143	161	69
8	---	---	---	---	---	---	31	e230	e560	124	114	60
9	---	---	---	---	---	---	30	e240	e432	117	87	68
10	---	---	---	---	---	---	28	e210	e454	116	146	66
11	---	---	---	---	---	---	27	e215	503	121	129	56
12	---	---	---	---	---	---	26	e250	525	113	98	60
13	---	---	---	---	---	---	26	340	493	109	84	51
14	---	---	---	---	---	---	26	426	475	102	79	53
15	---	---	---	---	---	---	27	482	473	97	70	45
16	---	---	---	---	---	---	34	500	527	91	61	61
17	---	---	---	---	---	---	41	527	440	84	57	44
18	---	---	---	---	---	31	58	556	493	82	65	39
19	---	---	---	---	---	38	78	589	531	89	69	38
20	---	---	---	---	---	38	108	562	520	87	55	39
21	---	---	---	---	---	41	e135	582	501	109	52	227
22	---	---	---	---	---	41	e140	543	483	94	64	221
23	---	---	---	---	---	44	125	556	458	89	61	163
24	---	---	---	---	---	47	106	516	415	81	62	125
25	---	---	---	---	---	51	87	412	369	74	66	103
26	---	---	---	---	---	55	77	358	334	70	144	90
27	---	---	---	---	---	54	78	349	299	87	82	82
28	---	---	---	---	---	53	99	370	294	96	69	74
29	---	---	---	---	---	51	98	451	286	78	61	68
30	---	---	---	---	---	50	96	583	272	98	65	62
31	---	---	---	---	---	49	---	758	---	118	78	---
TOTAL	---	---	---	---	---	---	1854	11597	15637	3604	2698	2435
MEAN	---	---	---	---	---	---	61.8	374	521	116	87.0	81.2
MAX	---	---	---	---	---	---	140	758	879	242	161	227
MIN	---	---	---	---	---	---	26	84	272	70	52	38
AC-FT	---	---	---	---	---	---	3680	23000	31020	7150	5350	4830

e-Estimated.

08235700 ALAMOSA RIVER BELOW CASTLEMAN GULCH NEAR JASPER, CO--Continued

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM @ 25 DEG. C), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	296	275	285	228	214	220
2	---	---	---	---	---	---	297	284	292	240	218	229
3	---	---	---	---	---	---	313	292	302	248	227	238
4	---	---	---	---	---	---	306	297	302	230	195	222
5	---	---	---	---	---	---	317	302	307	195	162	187
6	---	---	---	---	---	---	---	303	---	162	137	149
7	---	---	---	---	---	---	---	300	---	148	137	142
8	---	---	---	---	---	---	---	---	---	146	132	140
9	---	---	---	---	---	---	---	---	---	156	132	141
10	---	---	---	---	---	---	---	---	---	170	156	163
11	---	---	---	---	---	---	---	---	---	164	154	159
12	---	---	---	---	---	---	---	---	---	158	133	150
13	---	---	---	---	---	---	---	---	---	143	118	135
14	---	---	---	---	---	---	---	---	---	136	119	129
15	---	---	---	---	---	---	---	---	---	269	116	153
16	---	---	---	---	---	---	---	---	---	237	170	220
17	---	---	---	---	---	---	505	362	417	174	124	154
18	---	---	---	442	364	401	362	299	324	127	93	112
19	---	---	---	458	355	399	299	260	285	152	92	116
20	---	---	---	400	324	368	275	244	260	160	124	148
21	---	---	---	363	309	334	285	224	257	129	97	116
22	---	---	---	331	292	309	230	207	222	120	108	112
23	---	---	---	305	284	295	209	202	206	120	107	113
24	---	---	---	291	274	280	225	209	216	132	106	115
25	---	---	---	299	278	289	241	212	230	147	131	140
26	---	---	---	309	288	298	265	240	253	164	143	155
27	---	---	---	302	290	296	279	254	267	181	157	164
28	---	---	---	307	284	294	254	238	243	172	142	161
29	---	---	---	293	283	287	251	233	241	158	118	143
30	---	---	---	305	278	290	258	228	243	178	119	134
31	---	---	---	287	275	282	---	---	---	165	103	144
MONTH	---	---	---	---	---	---	---	---	---	269	92	155
	JUNE			JULY			AUGUST			SEPTEMBER		
1	114	79	101	138	116	128	261	194	244	308	266	289
2	101	83	92	148	121	138	268	233	252	323	203	311
3	132	96	112	153	115	136	268	237	255	320	189	261
4	131	92	109	159	115	145	288	251	264	317	257	277
5	119	89	102	161	129	147	258	188	217	274	222	255
6	106	90	100	169	134	157	359	221	246	282	257	270
7	119	101	111	170	145	159	340	214	261	298	278	289
8	123	101	115	180	150	167	364	307	342	313	298	306
9	141	119	133	186	150	172	307	207	224	317	267	305
10	161	102	141	219	154	188	284	197	214	278	261	271
11	121	87	107	231	197	214	320	228	285	298	263	287
12	102	80	93	240	154	212	333	193	290	292	260	279
13	101	81	92	201	150	182	195	182	191	331	291	305
14	103	84	95	199	158	183	226	181	192	308	281	297
15	97	76	88	210	157	191	202	182	193	318	284	304
16	158	78	108	222	174	206	217	197	203	284	189	253
17	185	125	159	225	173	209	294	217	277	296	277	288
18	144	90	124	267	191	227	315	233	288	312	277	300
19	107	91	98	245	208	226	299	233	273	333	247	297
20	125	92	105	239	184	226	316	297	309	342	330	336
21	135	101	116	221	177	202	323	303	314	330	143	218
22	143	111	126	247	195	214	317	263	288	186	156	171
23	137	97	122	305	219	237	362	265	295	189	165	178
24	114	90	103	242	219	233	362	263	299	202	181	194
25	113	94	106	298	216	257	354	221	278	222	202	214
26	128	108	117	267	220	252	306	175	209	234	221	230
27	142	110	130	288	221	247	263	185	246	248	234	243
28	145	115	132	292	192	249	285	262	276	264	248	257
29	146	110	131	263	239	250	303	285	296	277	203	251
30	141	120	128	283	227	250	346	301	308	290	275	285
31	---	---	---	239	178	201	330	255	288	---	---	---
MONTH	185	76	113	305	115	200	364	175	262	342	143	267

08235700 ALAMOSA RIVER BELOW CASTLEMAN GULCH NEAR JASPER, CO--Continued

pH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	5.6	5.4	5.5	---	---	---	---	---	---	---	---	---
2	5.6	5.4	5.5	---	---	---	---	---	---	---	---	---
3	5.5	5.4	5.4	---	---	---	---	---	---	---	---	---
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	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	5.1	4.9	5.0	6.2	5.7	6.1
2	---	---	---	---	---	---	5.2	5.0	5.1	6.1	5.9	6.0
3	---	---	---	---	---	---	5.2	4.9	5.1	6.1	5.7	5.9
4	---	---	---	---	---	---	5.1	5.0	5.1	6.2	5.6	6.0
5	---	---	---	---	---	---	5.2	5.1	5.1	6.6	5.7	6.2
6	---	---	---	---	---	---	5.2	4.9	5.1	6.7	5.9	6.3
7	---	---	---	---	---	---	5.2	4.8	5.0	6.6	6.1	6.5
8	---	---	---	---	---	---	5.1	4.8	5.0	6.7	6.4	6.6
9	---	---	---	---	---	---	5.0	4.9	5.0	6.6	6.2	6.5
10	---	---	---	---	---	---	5.1	5.0	5.0	6.5	6.2	6.4
11	---	---	---	---	---	---	5.1	4.8	5.0	6.6	6.4	6.5
12	---	---	---	---	---	---	5.0	4.7	4.9	6.6	6.0	6.5
13	---	---	---	---	---	---	5.0	4.7	4.9	6.4	5.5	6.1
14	---	---	---	---	---	---	4.9	4.5	4.8	5.7	5.4	5.6
15	---	---	---	---	---	---	4.9	4.7	4.9	6.0	4.6	5.5
16	---	---	---	---	---	---	4.9	4.5	4.7	5.0	4.6	4.8
17	---	---	---	---	---	---	5.0	4.3	4.6	5.4	5.0	5.2
18	---	---	---	4.5	3.8	4.2	5.0	4.7	4.9	6.2	5.2	5.8
19	---	---	---	4.4	3.9	4.2	5.1	4.8	4.9	6.6	5.2	5.9
20	---	---	---	4.4	4.0	4.2	5.2	4.8	5.0	5.4	5.1	5.2
21	---	---	---	4.5	4.0	4.3	5.2	4.9	5.1	6.4	5.4	5.8
22	---	---	---	4.6	4.2	4.5	5.4	5.1	5.3	6.3	6.0	6.2
23	---	---	---	4.8	4.5	4.7	5.7	5.4	5.6	6.2	5.9	6.1
24	---	---	---	5.0	4.7	4.9	5.6	5.5	5.6	6.1	5.5	6.0
25	---	---	---	5.0	4.9	5.0	5.5	5.3	5.4	5.5	5.3	5.4
26	---	---	---	5.0	4.8	4.9	5.4	5.2	5.3	5.4	5.3	5.4
27	---	---	---	5.0	4.8	4.9	5.3	5.1	5.2	5.4	5.2	5.3
28	---	---	---	5.0	4.8	4.9	5.4	5.1	5.3	5.6	5.4	5.5
29	---	---	---	5.0	4.9	5.0	5.6	5.3	5.5	5.9	5.5	5.6
30	---	---	---	5.0	4.8	4.9	5.8	5.5	5.6	6.2	4.9	5.8
31	---	---	---	5.0	4.9	5.0	---	---	---	5.4	4.9	5.1
MONTH	---	---	---	---	---	---	5.8	4.3	5.1	6.7	4.6	5.9

08235700 ALAMOSA RIVER BELOW CASTLEMAN GULCH NEAR JASPER, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	6.7	.0	2.7	4.1	.7	2.0
2	---	---	---	---	---	---	4.7	.0	2.2	9.6	.0	3.4
3	---	---	---	---	---	---	6.7	.4	3.0	11.7	.0	4.8
4	---	---	---	---	---	---	5.4	.3	2.3	11.7	.4	5.1
5	---	---	---	---	---	---	2.1	.0	.3	9.7	.8	4.4
6	---	---	---	---	---	---	2.4	.0	.6	8.4	1.0	3.6
7	---	---	---	---	---	---	4.8	.0	1.7	6.9	.9	3.2
8	---	---	---	---	---	---	7.7	.0	2.8	7.5	.6	3.5
9	---	---	---	---	---	---	4.9	.3	2.2	4.2	.5	2.0
10	---	---	---	---	---	---	3.9	.0	1.7	9.7	.5	4.0
11	---	---	---	---	---	---	6.8	.0	2.0	8.6	.8	4.1
12	---	---	---	---	---	---	5.5	.0	1.7	9.9	1.3	4.3
13	---	---	---	---	---	---	6.8	.0	2.4	10.0	.8	4.1
14	---	---	---	---	---	---	8.5	.0	3.3	7.1	1.0	3.4
15	---	---	---	---	---	---	9.6	.0	3.9	7.8	1.1	3.1
16	---	---	---	---	---	---	9.1	.2	4.6	6.4	1.3	3.0
17	---	---	---	---	.0	---	10.7	.0	4.5	9.0	1.3	3.7
18	---	---	---	4.8	.0	1.3	9.1	.0	4.0	7.6	1.4	3.5
19	---	---	---	4.3	.0	1.3	9.6	.0	3.7	5.5	1.5	3.1
20	---	---	---	4.7	.0	1.3	10.1	.0	3.5	8.2	1.6	3.9
21	---	---	---	4.5	.0	1.4	8.7	.4	3.1	5.8	2.0	3.4
22	---	---	---	4.9	.0	1.6	8.3	.0	2.9	6.1	2.3	3.7
23	---	---	---	5.7	.0	2.0	5.1	.0	1.9	7.0	1.4	3.6
24	---	---	---	4.4	.0	1.5	6.9	.0	1.6	5.9	1.6	3.3
25	---	---	---	6.2	.0	2.2	2.7	.0	1.1	7.1	1.0	3.6
26	---	---	---	6.5	.0	2.5	8.1	.0	3.0	8.4	1.3	4.2
27	---	---	---	7.0	.0	2.6	11.8	.0	5.0	7.9	.6	3.8
28	---	---	---	7.9	.0	2.9	7.5	1.2	3.9	8.1	1.4	4.3
29	---	---	---	7.1	.0	2.8	8.8	.7	3.7	9.9	1.8	4.7
30	---	---	---	6.9	.0	2.5	10.0	.0	4.0	8.3	2.3	4.4
31	---	---	---	6.4	.0	2.3	---	---	---	8.9	2.1	4.7
MONTH	---	---	---	---	---	---	11.8	.0	2.8	11.7	.0	3.7
	JUNE			JULY			AUGUST			SEPTEMBER		
1	9.8	2.2	4.8	13.4	3.8	8.5	16.0	8.1	12.1	14.3	9.1	11.5
2	9.0	2.0	4.5	13.9	2.7	8.4	12.9	8.8	11.2	15.2	8.2	11.4
3	10.0	2.0	5.1	14.2	3.6	8.9	15.7	9.3	12.0	12.4	8.1	10.5
4	10.5	2.5	5.3	14.4	3.7	8.9	13.6	9.6	11.3	14.0	8.3	11.1
5	8.3	2.4	4.9	12.6	4.0	8.3	15.2	9.6	11.8	13.5	7.5	10.7
6	7.5	2.5	4.7	12.7	4.0	8.7	13.5	7.7	10.5	14.0	8.3	10.9
7	7.6	3.8	5.1	10.6	4.9	7.8	13.1	8.3	10.4	14.6	7.3	10.9
8	5.8	2.9	4.1	11.5	4.5	7.8	15.4	7.2	11.3	15.0	7.6	11.2
9	6.4	2.3	4.1	10.5	4.8	8.1	14.0	7.5	10.9	11.6	8.8	10.4
10	10.8	3.7	6.1	11.7	5.1	8.8	14.0	9.5	11.1	13.4	7.3	10.5
11	11.2	2.5	6.0	11.0	7.3	9.2	13.4	6.3	9.8	14.6	7.1	10.5
12	11.0	2.3	5.9	15.4	5.1	9.9	15.2	6.3	10.7	16.0	7.5	11.2
13	9.2	3.0	5.8	15.9	4.7	10.3	14.7	7.5	11.1	13.4	6.5	9.8
14	11.4	2.8	6.2	16.5	5.4	11.1	13.1	6.9	10.2	15.2	7.0	10.7
15	10.7	2.6	6.0	14.6	6.7	11.0	16.6	5.9	10.9	13.2	6.4	9.8
16	8.9	2.3	5.4	11.9	6.8	10.1	17.1	7.6	11.9	14.8	7.0	10.7
17	9.6	3.0	6.2	12.2	6.9	10.0	16.3	7.6	11.6	14.6	6.1	9.8
18	13.0	3.7	7.4	10.5	6.5	8.7	13.6	9.6	11.2	15.9	8.0	11.4
19	12.0	3.6	7.1	12.0	7.0	9.6	15.4	6.8	10.8	15.1	7.3	11.0
20	12.7	3.2	7.2	13.3	8.0	10.8	15.6	7.7	11.5	11.4	7.5	9.5
21	13.1	3.0	7.2	13.1	8.4	10.8	14.9	8.3	11.5	9.1	6.5	7.5
22	13.5	3.4	7.6	10.3	7.1	9.1	12.9	9.0	10.8	10.1	5.3	7.3
23	13.5	3.7	7.8	13.3	7.4	10.1	15.4	7.6	10.9	9.5	4.2	6.9
24	13.4	3.4	7.6	17.6	7.0	12.1	13.6	7.0	10.5	11.3	3.4	7.1
25	12.6	3.6	7.4	14.4	7.9	11.6	13.3	8.8	11.0	12.0	4.5	8.2
26	9.1	3.9	6.7	12.3	8.6	10.6	17.3	9.4	12.9	12.2	6.6	9.0
27	11.6	3.7	7.3	14.9	8.4	11.4	17.9	8.5	12.8	13.9	6.1	9.8
28	13.6	3.9	8.1	13.9	9.3	11.3	17.8	8.7	12.9	13.0	5.1	8.8
29	14.0	3.9	8.6	13.4	9.3	11.1	15.4	9.3	12.1	13.3	5.7	9.2
30	14.1	3.9	8.8	14.5	9.7	11.5	14.6	9.5	11.8	13.0	5.2	8.9
31	---	---	---	15.4	9.2	11.9	14.8	9.4	11.5	---	---	---
MONTH	14.1	2.0	6.3	17.6	2.7	9.9	17.9	5.9	11.3	16.0	3.4	9.9

08236000 ALAMOSA RIVER ABOVE TERRACE RESERVOIR, CO--Continued

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM @ 25 DEG. C), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	274	265	271	221	206	211
2	---	---	---	---	---	---	278	270	274	226	212	220
3	---	---	---	---	---	---	284	278	280	230	218	224
4	---	---	---	---	---	---	287	283	285	221	200	214
5	---	---	---	---	---	---	294	283	286	200	170	183
6	---	---	---	---	---	---	308	294	301	170	136	145
7	---	---	---	---	---	---	319	286	294	138	129	133
8	---	---	---	---	---	---	313	286	297	137	129	132
9	---	---	---	---	---	---	305	295	300	137	125	129
10	---	---	---	---	---	---	307	302	304	151	137	144
11	---	---	---	---	---	---	314	300	306	149	141	145
12	---	---	---	---	---	---	326	298	310	144	134	140
13	---	---	---	---	---	---	327	300	311	140	122	132
14	---	---	---	---	---	---	331	305	315	135	119	128
15	---	---	---	---	---	---	332	310	320	253	108	135
16	---	---	---	---	---	---	433	324	379	232	172	219
17	---	---	---	---	---	---	466	354	410	172	110	151
18	---	---	---	---	---	---	357	305	323	133	101	121
19	---	---	---	325	304	314	305	261	282	148	100	115
20	---	---	---	319	282	307	261	218	230	144	122	138
21	---	---	---	304	263	289	218	203	210	122	98	113
22	---	---	---	280	260	271	217	211	214	109	103	105
23	---	---	---	284	260	273	214	211	213	114	102	107
24	---	---	---	292	278	284	216	209	212	122	104	111
25	---	---	---	295	276	284	214	209	212	148	122	138
26	---	---	---	300	279	288	222	212	217	164	145	154
27	---	---	---	301	283	291	230	220	225	180	157	168
28	---	---	---	301	283	291	232	229	230	160	145	154
29	---	---	---	297	279	287	232	223	228	147	120	139
30	---	---	---	302	278	289	233	219	226	164	116	126
31	---	---	---	287	273	281	---	---	---	162	112	148
MONTH	---	---	---	---	---	---	466	203	276	253	98	149
	JUNE			JULY			AUGUST			SEPTEMBER		
1	116	95	108	141	117	128	247	192	223	282	249	268
2	101	86	93	154	134	143	257	235	244	287	268	277
3	126	96	110	159	126	146	257	231	243	300	193	247
4	125	96	109	166	126	149	268	237	251	290	245	263
5	115	91	103	167	147	157	262	193	222	266	220	247
6	106	90	99	174	140	160	239	211	223	262	244	254
7	116	101	109	174	156	165	321	206	235	276	261	268
8	120	103	112	185	159	175	319	285	302	289	275	282
9	138	115	127	190	158	176	319	206	246	294	272	285
10	---	---	---	203	161	180	---	198	---	290	247	263
11	121	91	104	217	192	203	---	---	---	291	266	280
12	106	88	98	226	202	213	301	---	---	291	270	281
13	97	85	92	214	159	183	261	195	202	301	281	288
14	101	91	95	200	180	190	198	188	195	303	280	294
15	94	88	90	203	164	185	213	190	198	303	286	295
16	---	---	---	211	191	200	207	202	204	303	208	264
17	---	---	---	215	178	204	269	207	240	287	262	277
18	---	---	---	221	188	206	274	257	267	298	284	291
19	---	---	---	242	202	216	274	229	253	312	253	279
20	---	---	---	227	211	219	283	267	276	316	306	311
21	---	---	---	224	181	200	289	280	282	308	147	239
22	---	---	---	231	194	204	287	248	271	168	144	159
23	---	---	---	230	211	217	278	250	264	179	154	165
24	118	---	---	272	210	224	315	238	273	198	178	187
25	119	96	109	259	203	225	315	221	262	222	197	211
26	130	108	120	258	212	232	278	182	220	234	222	229
27	143	113	130	255	196	228	246	187	222	245	234	239
28	145	126	135	247	211	224	264	245	255	256	244	250
29	146	116	134	232	222	226	276	263	270	---	---	---
30	145	121	133	263	221	236	277	257	274	---	---	---
31	---	---	---	253	187	213	300	237	264	---	---	---
MONTH	---	---	---	272	117	194	---	---	---	---	---	---

08236000 ALAMOSA RIVER ABOVE TERRACE RESERVOIR, CO--Continued

pH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	6.8	6.7	6.8	---	---	---	---	---	---	---	---	---
2	6.8	6.8	6.8	---	---	---	---	---	---	---	---	---
3	6.8	6.8	6.8	---	---	---	---	---	---	---	---	---
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	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	6.7	6.4	6.6	7.2	7.1	7.2
2	---	---	---	---	---	---	6.7	6.6	6.7	7.2	7.1	7.2
3	---	---	---	---	---	---	6.8	6.6	6.8	7.2	7.1	7.2
4	---	---	---	---	---	---	6.8	6.7	6.7	7.4	7.1	7.2
5	---	---	---	---	---	---	6.7	6.6	6.7	7.4	7.1	7.2
6	---	---	---	---	---	---	6.8	6.6	6.7	7.3	6.9	7.2
7	---	---	---	---	---	---	6.9	6.5	6.7	7.3	7.0	7.1
8	---	---	---	---	---	---	6.8	6.5	6.7	7.1	7.0	7.0
9	---	---	---	---	---	---	6.8	6.6	6.7	7.1	7.0	7.0
10	---	---	---	---	---	---	6.8	6.7	6.8	7.0	6.9	7.0
11	---	---	---	---	---	---	6.8	6.7	6.7	7.0	6.9	7.0
12	---	---	---	---	---	---	6.9	6.6	6.7	7.0	6.9	7.0
13	---	---	---	---	---	---	7.0	6.5	6.7	7.0	6.1	6.9
14	---	---	---	---	---	---	6.9	6.7	6.8	6.6	6.1	6.4
15	---	---	---	---	---	---	6.9	6.6	6.8	6.5	5.1	6.2
16	---	---	---	---	---	---	6.7	5.3	5.8	5.2	5.0	5.0
17	---	---	---	---	---	---	5.8	5.3	5.4	5.8	5.2	5.5
18	---	---	---	---	---	---	6.3	5.7	5.9	6.3	5.6	6.1
19	---	---	---	6.3	5.4	5.7	6.4	6.0	6.2	6.6	5.9	6.4
20	---	---	---	5.6	5.3	5.5	6.3	6.0	6.1	5.9	5.6	5.8
21	---	---	---	5.8	5.4	5.6	6.2	6.1	6.1	6.4	5.7	6.1
22	---	---	---	5.9	5.7	5.7	6.1	6.0	6.1	6.4	6.3	6.4
23	---	---	---	5.9	5.8	5.8	---	---	---	6.4	6.3	6.4
24	---	---	---	6.1	5.9	6.0	---	---	---	6.4	6.3	6.3
25	---	---	---	6.2	6.0	6.1	---	---	---	6.3	5.9	6.0
26	---	---	---	6.3	6.1	6.2	---	---	---	5.9	5.7	5.8
27	---	---	---	6.4	6.2	6.3	---	---	---	6.2	5.6	5.8
28	---	---	---	6.4	6.2	6.3	---	---	---	6.5	6.1	6.3
29	---	---	---	6.5	6.3	6.4	---	---	---	6.5	5.9	6.3
30	---	---	---	6.6	6.4	6.5	7.1	7.0	7.0	6.7	5.3	6.4
31	---	---	---	6.5	6.4	6.5	---	---	---	5.7	5.2	5.3
MONTH	---	---	---	---	---	---	---	---	---	7.4	5.0	6.5

08236000 ALAMOSA RIVER ABOVE TERRACE RESERVOIR, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	7.7	---	---	5.9	---	---
2	---	---	---	---	---	---	4.6	.8	2.9	9.0	.0	4.2
3	---	---	---	---	---	---	7.4	---	---	11.2	.5	6.0
4	---	---	---	---	---	---	6.1	---	---	12.0	1.8	7.0
5	---	---	---	---	---	---	3.0	.0	1.0	10.4	1.9	6.1
6	---	---	---	---	---	---	---	.0	---	8.6	1.8	4.9
7	---	---	---	---	---	---	5.8	.0	2.2	7.6	1.5	4.2
8	---	---	---	---	---	---	7.8	.0	3.5	7.9	1.1	4.5
9	---	---	---	---	---	---	---	---	---	4.8	---	---
10	---	---	---	---	---	---	---	---	---	9.4	1.2	5.0
11	---	---	---	---	---	---	5.8	.0	2.1	8.7	1.9	5.2
12	---	---	---	---	---	---	---	.0	---	---	---	---
13	---	---	---	---	---	---	7.2	.0	3.0	10.4	---	---
14	---	---	---	---	---	---	8.8	.0	4.1	9.2	1.7	4.8
15	---	---	---	---	---	---	9.0	---	---	8.3	1.5	4.4
16	---	---	---	---	---	---	8.8	---	---	7.1	1.7	4.0
17	---	---	---	---	---	---	10.4	---	---	10.3	1.7	5.0
18	---	---	---	---	---	---	8.3	---	---	8.5	2.0	4.6
19	---	---	---	6.0	.0	---	8.9	---	---	6.7	2.1	4.1
20	---	---	---	6.1	.0	2.1	---	.6	---	9.1	2.0	4.8
21	---	---	---	5.8	.0	2.2	9.5	.9	5.1	6.8	2.6	4.3
22	---	---	---	5.8	.0	2.7	8.2	.2	3.9	7.0	2.9	4.6
23	---	---	---	6.2	.1	3.1	5.0	.2	2.9	7.9	1.9	4.7
24	---	---	---	5.1	.3	2.7	5.9	.0	2.4	7.9	2.1	4.4
25	---	---	---	5.5	.2	2.6	3.3	.0	1.2	8.5	1.6	4.8
26	---	---	---	6.6	.1	3.3	---	.1	---	9.9	2.3	5.5
27	---	---	---	6.6	1.0	3.8	10.9	---	---	---	1.1	---
28	---	---	---	---	.9	---	8.1	---	---	9.2	2.1	5.4
29	---	---	---	---	---	---	9.3	---	---	10.7	2.3	6.1
30	---	---	---	---	---	---	9.9	.4	5.1	9.5	3.0	5.6
31	---	---	---	---	---	---	---	---	---	10.1	2.6	6.0
MONTH	---	---	---	---	---	---	---	---	---	---	---	---
	JUNE			JULY			AUGUST			SEPTEMBER		
1	11.4	2.9	6.4	15.0	6.2	10.7	17.0	10.3	13.8	14.6	10.5	12.5
2	9.8	2.7	5.7	14.5	5.7	10.4	14.2	10.7	12.6	17.5	10.0	13.0
3	11.6	2.7	6.4	14.8	5.8	10.6	18.2	10.7	14.0	13.9	9.7	11.7
4	11.9	3.2	6.8	14.6	6.2	10.7	13.8	11.1	12.5	15.0	9.7	12.3
5	9.6	3.2	6.0	12.3	6.4	9.8	15.1	11.0	12.8	13.4	9.3	11.7
6	8.8	3.2	5.9	12.7	6.2	9.8	15.3	9.7	12.3	13.9	9.6	11.8
7	8.3	4.6	6.1	11.1	7.2	9.5	13.5	9.5	11.4	16.0	8.9	12.4
8	6.7	3.7	5.0	12.0	6.4	9.2	16.5	8.9	12.5	16.6	9.2	12.8
9	---	---	---	12.6	6.8	9.8	14.6	9.3	12.3	12.9	10.2	11.7
10	---	---	---	12.0	7.0	9.7	15.1	11.0	12.6	13.3	8.5	11.2
11	12.1	3.2	7.4	11.8	9.4	10.6	13.9	8.0	11.1	14.5	8.9	11.7
12	11.7	3.1	7.2	16.1	7.0	11.3	15.6	8.2	11.8	16.3	9.0	12.4
13	10.3	3.9	7.1	16.4	7.5	12.2	15.5	9.4	12.6	12.6	8.9	10.9
14	11.9	3.8	7.6	17.5	8.5	13.2	14.1	8.8	11.7	14.0	8.3	11.3
15	---	3.4	---	16.6	9.7	13.0	16.7	7.8	12.1	13.5	8.4	11.3
16	9.5	3.5	6.4	13.3	9.3	11.6	17.6	10.2	13.9	15.0	8.9	11.9
17	10.0	3.9	7.0	15.0	8.9	11.9	17.0	9.7	13.4	13.6	8.3	11.2
18	13.6	4.8	8.8	12.6	8.5	10.7	14.9	11.3	12.7	16.4	9.2	12.3
19	13.6	4.6	8.7	12.5	8.6	10.6	15.6	8.5	12.2	15.4	9.0	12.4
20	13.3	4.4	8.6	15.0	9.5	12.2	17.2	9.7	13.0	12.6	9.5	10.9
21	13.5	4.1	8.7	14.6	10.7	12.5	15.8	10.1	12.9	10.4	7.7	8.7
22	14.2	4.9	9.3	13.5	8.9	11.0	14.9	10.3	12.3	11.0	6.3	8.3
23	14.3	5.2	9.6	13.8	8.9	11.4	16.1	9.0	12.3	10.4	5.7	7.9
24	13.6	4.9	9.1	18.0	9.1	13.5	16.2	8.8	12.2	11.3	5.1	8.3
25	---	4.8	---	16.5	10.3	13.5	13.7	10.0	12.2	12.1	6.1	9.1
26	10.4	5.4	8.1	16.3	10.5	12.9	17.6	10.8	13.9	12.6	8.0	10.0
27	11.9	5.3	8.6	14.4	9.7	11.9	18.0	10.7	14.1	14.0	7.6	10.9
28	14.1	5.7	9.8	13.6	10.9	12.5	17.1	10.8	14.0	12.7	6.8	10.1
29	15.2	5.8	10.6	13.6	10.9	12.3	16.5	11.3	13.7	---	7.5	---
30	15.6	6.0	10.9	14.8	10.8	12.7	14.8	11.2	12.9	---	---	---
31	---	---	---	15.4	10.8	13.0	14.1	10.9	12.6	---	---	---
MONTH	---	---	---	18.0	5.7	11.4	18.2	7.8	12.7	---	---	---

08236500 ALAMOSA RIVER BELOW TERRACE RESERVOIR, CO--Continued

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM @ 25 DEG. C), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	356	346	351	306	304	305
2	---	---	---	---	---	---	358	354	357	305	302	303
3	---	---	---	---	---	---	360	354	357	304	302	303
4	---	---	---	---	---	---	359	355	358	303	298	300
5	---	---	---	---	---	---	359	355	357	299	295	297
6	---	---	---	---	---	---	361	355	358	295	291	294
7	---	---	---	---	---	---	383	355	372	293	285	289
8	---	---	---	---	---	---	382	378	380	286	261	275
9	---	---	---	---	---	---	381	379	380	266	244	255
10	---	---	---	---	---	---	382	377	379	265	234	256
11	---	---	---	---	---	---	378	374	377	266	232	249
12	---	---	---	---	---	---	375	367	371	245	231	239
13	---	---	---	---	---	---	371	362	367	244	230	236
14	---	---	---	---	---	---	363	347	357	231	214	225
15	---	---	---	---	---	---	348	338	341	219	179	202
16	---	---	---	---	---	---	340	337	338	199	181	191
17	---	---	---	---	---	---	339	337	337	206	195	200
18	---	---	---	346	318	334	338	336	337	201	170	195
19	---	---	---	348	314	333	338	336	337	177	148	169
20	---	---	---	349	320	334	337	336	336	160	149	154
21	---	---	---	345	320	334	336	332	335	165	155	160
22	---	---	---	340	320	332	333	331	332	160	147	156
23	---	---	---	342	327	336	331	330	331	155	147	152
24	---	---	---	345	326	336	330	327	328	151	141	147
25	---	---	---	347	341	344	328	326	327	152	140	145
26	---	---	---	349	345	347	327	318	325	151	147	149
27	---	---	---	350	347	348	325	320	324	167	150	157
28	---	---	---	349	345	348	324	311	318	168	164	166
29	---	---	---	349	346	348	313	305	308	168	162	165
30	---	---	---	350	346	348	307	306	306	163	154	161
31	---	---	---	350	346	348	---	---	---	158	152	155
MONTH	---	---	---	---	---	---	383	305	346	306	140	215
	JUNE			JULY			AUGUST			SEPTEMBER		
1	156	137	148	126	124	124	193	188	191	214	212	213
2	144	117	130	126	124	125	194	189	192	218	213	216
3	131	116	122	127	125	126	193	191	192	230	217	222
4	126	119	123	127	126	126	194	191	192	231	221	227
5	128	117	123	128	127	127	195	193	194	230	227	228
6	124	119	121	129	128	128	199	183	196	230	227	228
7	124	119	121	131	129	130	208	196	203	228	226	226
8	124	118	120	134	131	132	220	203	209	228	226	227
9	124	119	121	141	133	137	225	211	215	230	227	229
10	129	124	126	143	140	141	226	219	223	241	228	234
11	131	126	128	147	140	144	221	204	212	238	236	237
12	127	126	126	149	145	147	224	203	207	241	238	238
13	126	121	123	159	147	153	225	215	220	244	238	241
14	123	116	119	156	153	154	216	213	214	247	244	245
15	120	115	118	156	153	154	214	207	210	247	245	245
16	118	116	117	156	154	155	208	204	205	250	247	248
17	117	111	113	158	156	157	208	205	206	250	243	249
18	123	113	120	159	157	158	207	202	206	246	242	243
19	124	120	122	160	159	160	220	204	207	247	244	246
20	123	122	122	171	160	167	220	212	217	248	199	245
21	122	117	120	171	168	169	212	208	210	255	235	248
22	120	116	118	175	169	172	209	205	208	245	214	224
23	118	117	118	179	171	174	211	206	209	215	210	214
24	119	118	119	182	175	178	221	209	217	217	214	215
25	120	119	120	183	177	180	223	214	220	217	214	216
26	120	120	120	181	179	180	225	217	221	217	215	216
27	120	119	120	180	173	179	223	216	219	217	216	217
28	122	119	121	183	177	182	217	212	215	218	216	217
29	125	121	123	188	183	186	215	211	215	221	217	219
30	125	123	124	191	184	187	215	212	214	223	219	221
31	---	---	---	189	184	187	214	212	213	---	---	---
MONTH	156	111	122	191	124	155	226	183	209	255	199	230

08236500 ALAMOSA RIVER BELOW TERRACE RESERVOIR, CO--Continued

pH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
1	6.0	5.8	5.9	---	---	---	---	---	---	---	---	---
2	6.1	6.0	6.1	---	---	---	---	---	---	---	---	---
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	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	---	---	---	---	---	---	---	---	---	---	---	---
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	8.4	7.3	7.7	7.0	7.0	7.0
2	---	---	---	---	---	---	8.7	7.4	7.9	7.1	7.0	7.0
3	---	---	---	---	---	---	8.5	7.4	7.8	7.1	7.0	7.0
4	---	---	---	---	---	---	8.5	7.4	7.8	7.1	7.0	7.0
5	---	---	---	---	---	---	8.3	7.4	7.7	7.1	7.0	7.1
6	---	---	---	---	---	---	8.2	7.4	7.7	7.1	7.0	7.0
7	---	---	---	---	---	---	7.7	7.1	7.3	7.1	7.0	7.1
8	---	---	---	---	---	---	7.1	7.1	7.1	7.1	7.1	7.1
9	---	---	---	---	---	---	7.2	7.1	7.1	7.2	7.1	7.1
10	---	---	---	---	---	---	7.1	7.1	7.1	7.2	7.1	7.2
11	---	---	---	---	---	---	7.1	7.1	7.1	7.2	7.2	7.2
12	---	---	---	---	---	---	7.1	7.1	7.1	7.3	7.2	7.2
13	---	---	---	---	---	---	7.2	7.1	7.1	7.3	7.2	7.2
14	---	---	---	---	---	---	7.2	7.1	7.1	7.2	7.2	7.2
15	---	---	---	---	---	---	7.3	7.1	7.2	7.2	7.0	7.1
16	---	---	---	---	---	---	7.4	7.2	7.3	7.1	6.6	7.0
17	---	---	---	---	---	---	7.4	7.2	7.3	6.7	6.3	6.5
18	---	---	---	8.6	7.2	7.7	7.3	7.3	7.3	6.4	6.3	6.3
19	---	---	---	8.7	7.3	7.7	7.3	7.2	7.3	6.5	6.3	6.4
20	---	---	---	8.6	7.3	7.7	7.3	7.2	7.2	6.7	6.5	6.7
21	---	---	---	8.7	7.3	7.9	7.2	7.1	7.2	6.7	6.5	6.6
22	---	---	---	8.8	7.3	7.9	7.2	7.1	7.1	6.6	6.4	6.5
23	---	---	---	8.7	7.3	7.9	7.2	7.1	7.2	6.7	6.5	6.6
24	---	---	---	8.7	7.3	7.9	7.1	7.1	7.1	6.7	6.5	6.6
25	---	---	---	8.4	7.3	7.8	7.1	7.1	7.1	6.5	6.5	6.5
26	---	---	---	8.5	7.3	7.8	7.1	7.0	7.0	6.5	6.4	6.5
27	---	---	---	8.7	7.3	7.9	7.0	7.0	7.0	6.4	6.1	6.3
28	---	---	---	8.6	7.3	7.9	7.0	6.9	7.0	6.3	6.2	6.3
29	---	---	---	8.4	7.3	7.7	6.9	6.8	6.9	6.2	6.2	6.2
30	---	---	---	8.4	7.3	7.7	7.0	6.9	7.0	6.2	6.2	6.2
31	---	---	---	8.6	7.3	7.8	---	---	---	6.2	5.8	6.1
MONTH	---	---	---	---	---	---	8.7	6.8	7.3	7.3	5.8	6.8

08236500 ALAMOSA RIVER BELOW TERRACE RESERVOIR, CO--Continued

TEMPERATURE, WATER (DEG. C) WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	---	---	---	10.7	5.1	6.9	6.1	5.3	5.5
2	---	---	---	---	---	---	8.8	4.6	6.0	6.5	5.1	5.6
3	---	---	---	---	---	---	9.4	4.7	6.3	6.8	5.2	5.8
4	---	---	---	---	---	---	8.5	4.9	6.2	7.3	5.5	6.2
5	---	---	---	---	---	---	7.2	3.4	4.8	6.9	5.8	6.2
6	---	---	---	---	---	---	8.2	3.1	5.1	7.0	6.1	6.3
7	---	---	---	---	---	---	5.2	3.2	3.9	7.1	6.2	6.6
8	---	---	---	---	---	---	5.6	3.0	3.8	7.1	6.2	6.6
9	---	---	---	---	---	---	5.3	3.3	3.9	6.3	6.1	6.2
10	---	---	---	---	---	---	5.1	3.0	3.7	7.2	5.8	6.4
11	---	---	---	---	---	---	4.3	2.8	3.3	7.1	5.7	6.4
12	---	---	---	---	---	---	4.3	2.6	3.2	6.6	5.9	6.2
13	---	---	---	---	---	---	4.7	2.6	3.4	6.7	5.8	6.2
14	---	---	---	---	---	---	5.4	2.8	3.7	6.2	5.8	6.1
15	---	---	---	---	---	---	5.8	3.1	4.0	6.4	5.5	5.8
16	---	---	---	---	---	---	6.0	3.3	4.1	6.1	5.2	5.7
17	---	---	---	---	---	---	6.0	3.4	4.3	5.9	5.2	5.5
18	---	---	---	10.1	3.9	6.1	5.7	3.7	4.4	6.1	5.3	5.9
19	---	---	---	10.6	4.0	6.4	5.6	4.0	4.6	5.9	5.2	5.6
20	---	---	---	11.0	4.5	6.9	5.7	4.1	4.7	6.0	5.3	5.7
21	---	---	---	11.0	4.7	7.0	5.7	4.3	5.0	6.0	5.6	5.8
22	---	---	---	10.7	4.6	7.0	5.5	4.7	5.0	6.0	5.6	5.7
23	---	---	---	11.3	4.9	7.1	5.5	4.7	5.1	6.2	5.7	5.9
24	---	---	---	10.2	4.3	6.4	5.7	4.5	4.9	6.0	5.4	5.7
25	---	---	---	10.0	3.8	6.3	5.1	4.6	4.9	6.2	5.2	5.7
26	---	---	---	10.6	4.1	6.5	5.9	4.6	5.0	6.2	5.7	5.9
27	---	---	---	10.6	4.7	6.8	6.3	4.6	5.2	6.4	5.7	6.0
28	---	---	---	10.7	4.6	6.8	5.7	4.9	5.2	6.2	5.9	6.0
29	---	---	---	8.4	4.5	6.1	6.5	4.8	5.5	6.5	6.0	6.2
30	---	---	---	10.5	3.7	6.3	6.5	5.0	5.6	6.5	6.0	6.3
31	---	---	---	10.6	4.6	6.8	---	---	---	6.9	6.1	6.4
MONTH	---	---	---	---	---	---	10.7	2.6	4.7	7.3	5.1	6.0
	JUNE			JULY			AUGUST			SEPTEMBER		
1	6.7	5.9	6.3	10.2	9.4	9.7	14.4	13.0	13.4	14.6	13.5	13.9
2	6.7	5.9	6.3	10.4	9.5	9.8	14.6	13.1	13.4	15.1	13.5	14.0
3	6.8	6.0	6.5	10.6	9.5	9.9	14.8	13.1	13.5	15.1	13.6	14.0
4	6.9	6.2	6.6	10.7	9.7	10.1	14.2	13.0	13.4	14.9	13.5	13.9
5	7.1	6.4	6.7	10.7	9.8	10.1	14.4	13.2	13.5	14.8	13.3	13.7
6	7.1	6.6	6.9	10.8	9.9	10.3	14.4	13.1	13.5	14.6	13.3	13.8
7	7.3	6.9	7.1	11.1	10.1	10.4	13.9	13.2	13.4	14.7	13.3	13.8
8	7.6	7.1	7.3	11.3	10.3	10.6	14.4	12.9	13.5	14.8	13.2	13.7
9	7.3	6.9	7.1	11.4	10.5	10.8	14.4	12.8	13.3	14.3	13.3	13.6
10	7.4	6.8	7.0	11.6	10.6	11.0	14.2	12.9	13.3	14.6	13.1	13.6
11	7.5	6.8	7.2	11.4	10.8	11.1	14.2	12.7	13.2	14.6	12.9	13.4
12	7.5	7.1	7.3	11.8	10.7	11.1	14.0	12.6	13.1	14.7	13.0	13.5
13	7.6	7.1	7.4	11.9	10.7	11.2	14.2	12.7	13.1	14.7	12.9	13.4
14	7.7	7.3	7.5	12.1	10.8	11.3	13.9	12.8	13.1	14.3	12.8	13.3
15	7.9	7.4	7.6	12.2	11.0	11.4	14.2	12.7	13.2	14.0	12.7	13.3
16	8.1	7.6	7.8	12.2	11.1	11.5	14.2	12.7	13.2	13.9	12.7	13.1
17	8.1	7.7	7.8	12.4	11.2	11.7	14.0	12.7	13.2	14.1	12.5	13.0
18	8.4	7.8	8.0	12.5	11.4	11.8	14.2	12.9	13.2	13.8	12.6	13.0
19	8.5	7.9	8.2	12.4	11.7	12.0	14.7	12.7	13.3	14.3	12.6	13.1
20	8.6	8.1	8.4	12.9	11.8	12.1	14.3	12.6	13.2	13.5	12.6	12.9
21	8.7	8.3	8.4	12.9	12.0	12.3	14.6	12.8	13.3	13.4	12.1	12.8
22	8.9	8.3	8.6	13.1	12.0	12.4	14.6	13.0	13.3	12.6	11.0	11.8
23	9.1	8.5	8.7	13.2	12.3	12.6	14.7	12.9	13.4	12.3	10.5	11.2
24	9.2	8.6	8.9	13.3	12.3	12.7	14.6	12.9	13.4	12.3	10.2	10.9
25	9.4	8.9	9.1	13.6	12.4	12.8	14.4	13.0	13.5	12.2	10.2	10.9
26	9.7	9.1	9.3	13.8	12.4	12.8	14.4	13.2	13.6	11.9	10.4	11.0
27	9.9	9.2	9.5	13.7	12.1	12.9	14.4	13.2	13.7	12.7	10.5	11.2
28	10.0	9.3	9.6	13.5	12.7	12.9	14.5	13.3	13.7	12.5	10.3	11.1
29	10.1	9.4	9.6	14.0	12.8	13.1	14.6	13.4	13.7	12.1	10.6	11.2
30	10.2	9.4	9.7	13.7	12.9	13.1	14.7	13.4	13.7	12.4	10.9	11.3
31	---	---	---	14.0	12.8	13.2	14.8	13.4	13.8	---	---	---
MONTH	10.2	5.9	7.9	14.0	9.4	11.6	14.8	12.6	13.4	15.1	10.2	12.8

08240000 RIO GRANDE ABOVE MOUTH OF TRINCHERA CREEK, NEAR LASAUSES, CO

LOCATION.--Lat 37°18'58", long 105°44'32", in sec.35, T.36 N., R.11 E., Conejos County, Hydrologic Unit 13010002, on right bank 0.2 mi upstream from Trinchera Creek, 3.2 mi north of Lasauses, and 13 mi southeast of Alamosa.

DRAINAGE AREA.--5,740 mi², approximately, includes 2,940 mi² in closed basin in northern part of San Luis Valley, CO.

PERIOD OF RECORD.--May 1936 to current year. Water-quality data available, May 1993 to September 1996.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 7,500 ft above sea level, estimated from nearby level lines.

REMARKS.--Records good except for estimated daily discharges which are poor. Natural flow of stream affected by transmountain diversions, storage reservoirs, ground-water withdrawals and diversions for irrigation, and return flow from irrigated areas. Due to changes over the years, most of the flow from Trinchera Creek enters the Rio Grande above the 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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e35	98	e85	e285	e280	274	364	159	728	698	414	353
2	e35	132	e95	e310	e290	288	285	159	1020	692	373	400
3	e36	123	e105	e280	e245	283	258	161	1340	679	271	452
4	e38	113	e115	e255	e260	288	234	154	1740	609	287	424
5	e48	109	e150	e175	e280	277	211	154	2010	447	325	405
6	e44	96	e165	e195	e255	279	206	150	1850	405	327	388
7	e39	86	e175	e240	e250	277	196	171	1680	620	440	389
8	e39	80	e210	e245	e255	302	180	240	1630	501	564	369
9	e39	77	e240	e250	e250	314	186	194	1360	406	649	364
10	e39	77	e230	e260	e260	320	190	191	1320	351	653	365
11	e46	77	e225	e270	e265	345	194	164	1080	337	670	357
12	e48	80	e190	e265	e275	358	187	164	1010	327	672	382
13	e42	78	e165	e265	e240	384	176	153	957	332	643	359
14	e42	77	e135	e245	280	397	172	180	928	298	670	342
15	e41	77	e120	e245	281	429	165	208	833	285	669	332
16	41	79	e105	e250	281	442	170	354	763	249	587	313
17	e41	79	e65	e250	277	465	162	464	765	261	529	302
18	e41	75	e200	e255	280	475	164	580	866	232	499	329
19	41	77	e220	e240	286	483	185	667	789	291	479	308
20	43	79	e195	e250	285	469	191	884	860	275	450	285
21	49	78	e190	e245	262	476	201	990	903	281	423	340
22	65	79	e180	e245	282	503	178	657	819	293	401	422
23	48	81	e200	e240	296	495	305	882	789	260	402	785
24	51	83	e210	e245	301	530	220	863	631	241	391	1240
25	53	84	e220	e260	271	578	175	732	500	294	385	1750
26	56	85	e230	e255	279	555	182	705	422	354	387	1880
27	71	87	e230	e250	268	484	188	655	454	321	375	1700
28	60	88	e240	e250	294	457	179	514	563	309	410	1490
29	61	87	e255	e250	---	443	166	543	600	324	364	1260
30	62	e88	e260	e265	---	430	145	550	674	303	331	1070
31	78	---	e265	e280	---	409	---	580	---	337	326	---
TOTAL	1472	2609	5670	7815	7628	12509	6015	13222	29884	11612	14366	19155
MEAN	47.5	87.0	183	252	272	404	201	427	996	375	463	639
MAX	78	132	265	310	301	578	364	990	2010	698	672	1880
MIN	35	75	65	175	240	274	145	150	422	232	271	285
AC-FT	2920	5170	11250	15500	15130	24810	11930	26230	59270	23030	28490	37990

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1936 - 1997, BY WATER YEAR (WY)

MEAN	132	228	222	199	234	305	289	454	664	258	110	103
MAX (WY)	1113	1017	687	351	421	697	1497	3407	2746	1620	561	639
MIN (WY)	1942	1942	1942	1987	1986	1987	1987	1987	1948	1995	1957	1997
MIN (WY)	7.45	30.1	36.4	36.5	62.3	38.2	28.0	7.39	4.41	1.42	1.68	.85
(WY)	1957	1964	1957	1957	1957	1957	1957	1963	1964	1940	1940	1956

SUMMARY STATISTICS FOR 1996 CALENDAR YEAR FOR 1997 WATER YEAR WATER YEARS 1936 - 1997

ANNUAL TOTAL	47618	131957	
ANNUAL MEAN	130	362	268
HIGHEST ANNUAL MEAN			950
LOWEST ANNUAL MEAN			49.0
HIGHEST DAILY MEAN	443	Feb 23	5380
LOWEST DAILY MEAN	a,10	Aug 1	.40
ANNUAL SEVEN-DAY MINIMUM	12	Jul 27	.69
INSTANTANEOUS PEAK FLOW			c,5470
INSTANTANEOUS PEAK STAGE			9.50
ANNUAL RUNOFF (AC-FT)	94450	261700	194000
10 PERCENT EXCEEDS	340	714	498
50 PERCENT EXCEEDS	81	277	165
90 PERCENT EXCEEDS	25	77	25

e-Estimated.
a-Also occurred Aug 2.
b-Also occurred Oct 2.
c-From rating curve extended above 3600 ft³/s.

08244500 PLATORO RESERVOIR AT PLATORO, CO

LOCATION.--Lat 37°21'07", long 106°32'38", Conejos County, Hydrologic Unit 13010005, on right bank in valvehouse, 400 ft downstream from Platoro Dam on Conejos River and 0.7 mi west of Platoro.

DRAINAGE AREA.--40 mi², approximately.

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

REVISED RECORDS.--WDR CO-85-1: 1984.

GAGE.--Nonrecording gage. Datum of gage is 9,911.5 ft above sea level, (levels by U.S. Bureau of Reclamation); gage readings have been reduced to elevations above sea level. Prior to June 9, 1955, nonrecording gage at present site and datum. June 9, 1955 to Sept. 30, 1959, water-stage recorder in gate chamber at dam for elevations above 9,921.0 ft, at same datum.

REMARKS.--Reservoir is formed by an earth and rockfill dam and dikes. Dam completed Dec. 9, 1951; storage began Nov. 7, 1951. Capacity of reservoir (based on revised capacity table put in use Jan. 1, 1975), 59,570 acre-ft, between elevations 9,911.5 ft, sill of trashrack at outlet, and 10,034.0 ft, crest of spillway. No dead storage. Reservoir is used for irrigation and flood control. Figures given are usable contents.

COOPERATION.--Records provided by State of Colorado, Division of Water Resources.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 61,420 acre-ft, June 9, 11, 1958, elevation, 10,035.5 ft; no contents for long periods in 1952-56.

EXTREMES FOR CURRENT YEAR.--Maximum contents, about 46,730 acre-ft, June 23, elevation, 10,019.94 ft ; minimum contents, about 21,120 acre-ft, Oct. 27, elevation, 9,984.87 ft.

MONTHEND ELEVATION AND CONTENTS, AT 0800, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

Date	Elevation (feet)	Contents (acre-feet)	Change in contents (acre-feet)
Sept. 30	9,990.4	24,530	-
Oct. 31	9,984.9	21,140	-3,390
Nov. 30	9,985.7	21,590	+450
Dec. 31	9,986.1	21,850	+260
CAL YR 1996	-	-	-23,480
Jan. 31	9,986.7	22,200	+350
Feb. 28	9,987.1	22,470	+270
Mar. 31	9,988.2	23,160	+690
Apr. 30	9,989.0	23,660	+500
May 31	9,995.8	28,020	+4,360
June 30	10,018.7	45,680	+17,660
July 31	10,009.6	38,150	-7,530
Aug. 31	10,005.0	34,640	-3,510
Sept. 30	10,001.7	32,210	-2,430
WTR YR 1997	-	-	+7,680

08246500 CONEJOS RIVER NEAR MOGOTE, CO

LOCATION.--Lat 37°03'14", long 106°11'13", in SE¼SE¼ 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 mi².

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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	110	65	38	e52	e56	e46	206	373	2070	1140	382	321
2	108	58	e37	e52	e54	e50	185	323	2180	1040	389	288
3	109	65	e36	e54	e50	e52	168	311	1840	994	350	227
4	127	60	e39	e50	e50	e50	168	373	2000	916	369	262
5	142	61	e39	e50	e52	e50	150	540	2130	737	361	269
6	145	61	e41	e42	e48	e54	128	685	1860	585	422	230
7	144	52	e39	e40	e45	e60	129	765	1620	581	643	217
8	139	50	e42	e40	e46	e62	128	887	1660	498	525	209
9	136	57	e46	e42	e47	e64	127	908	1340	500	433	196
10	135	58	e52	e44	e47	e66	124	796	1160	489	464	217
11	118	58	e47	e44	e48	e70	126	810	1310	589	495	232
12	111	58	e46	e46	e49	e86	115	847	1250	546	449	222
13	104	62	e46	e46	e50	e100	121	1000	1250	509	411	194
14	99	62	e45	e44	e47	e110	113	1140	1360	481	389	196
15	88	61	e44	e42	e48	130	115	1260	1410	500	312	169
16	85	55	e44	e41	e50	134	127	1400	1330	476	285	186
17	102	44	e38	e43	e52	143	151	1450	1130	510	283	160
18	102	62	e36	e49	e49	136	195	1630	1160	595	249	149
19	91	67	e40	e52	e50	141	232	1670	1400	599	258	144
20	86	73	e44	e52	e49	172	313	1660	1430	560	232	151
21	76	71	e48	e50	e48	213	392	1730	1540	575	207	495
22	68	77	e52	e46	e46	236	438	1850	1640	600	208	565
23	87	79	e50	e49	e48	243	421	1850	1710	548	218	486
24	92	66	e50	e46	e50	243	418	1700	1660	462	221	447
25	103	55	e52	e48	e48	209	363	1290	1550	393	216	487
26	136	59	e54	e52	e49	188	281	1140	1470	365	279	481
27	187	66	e56	e52	e50	195	265	923	1400	347	252	374
28	133	51	e54	e49	e49	200	336	871	1240	418	323	340
29	107	66	e50	e50	---	210	358	972	1210	334	269	213
30	77	60	e52	e50	---	202	365	1210	1180	330	263	165
31	70	---	e54	e55	---	205	---	1650	---	392	330	---
TOTAL	3417	1839	1411	1472	1375	4120	6758	34014	45490	17609	10487	8292
MEAN	110	61.3	45.5	47.5	49.1	133	225	1097	1516	568	338	276
MAX	187	79	56	55	56	243	438	1850	2180	1140	643	565
MIN	68	44	36	40	45	46	113	311	1130	330	207	144
AC-FT	6780	3650	2800	2920	2730	8170	13400	67470	90230	34930	20800	16450

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1903 - 1997, BY WATER YEAR (WY)

	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
MEAN	116	95.5	51.8	48.0	51.8	80.0	320	1108	1302	482	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 1996 CALENDAR YEAR	FOR 1997 WATER YEAR	WATER YEARS 1903 - 1997
ANNUAL TOTAL	85749	136284	
ANNUAL MEAN	234	373	
HIGHEST ANNUAL MEAN			592
LOWEST ANNUAL MEAN			109
HIGHEST DAILY MEAN	1500	2180	4490
LOWEST DAILY MEAN	e, a 36	e, a 36	10
ANNUAL SEVEN-DAY MINIMUM	38	38	17
INSTANTANEOUS PEAK FLOW		2470	b 9000
INSTANTANEOUS PEAK STAGE		6.03	c 8.50
ANNUAL RUNOFF (AC-FT)	170100	270300	240000
10 PERCENT EXCEEDS	577	1240	1060
50 PERCENT EXCEEDS	113	150	97
90 PERCENT EXCEEDS	50	46	42

e-Estimated.
a-Also occurred Dec 18.
b-Present site and datum, from rating curve extended above 3100 ft³/s.
c-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 mi².

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 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	15	23	e16	e18	e21	e20	140	315	845	132	47	50
2	13	21	e16	e17	e19	e23	124	261	871	116	44	39
3	13	21	e15	e19	e17	e26	120	246	798	103	55	33
4	15	20	e17	e17	e17	e25	124	347	779	95	56	36
5	18	19	e17	e17	e19	e24	90	531	764	89	49	30
6	16	19	e20	e15	e17	e26	e84	667	648	83	50	28
7	15	18	e18	e14	e16	e29	85	749	574	78	98	26
8	14	21	e20	e14	e15	e32	80	824	621	73	115	25
9	13	22	e22	e15	e15	e36	80	804	493	69	102	25
10	14	20	e23	e16	e17	e42	72	731	471	68	69	28
11	14	20	e21	e16	e17	e45	68	803	459	64	83	36
12	13	19	e19	e17	e18	e47	62	859	455	59	59	29
13	13	19	e19	e17	e18	e48	64	1020	435	53	50	26
14	13	19	e18	e16	e17	e46	60	1090	402	49	44	25
15	13	18	e17	e15	e18	52	58	1130	383	45	41	23
16	12	16	e17	e15	e20	51	69	1090	397	43	37	26
17	14	e14	e14	e15	e22	55	92	1040	349	42	34	24
18	14	e20	e13	e16	e21	55	134	1100	317	40	38	22
19	13	24	e14	e17	e22	60	176	1100	340	43	44	21
20	16	23	e16	e17	e21	76	243	1030	333	49	35	24
21	17	23	e18	e17	e18	93	329	979	318	47	31	120
22	15	24	e20	e16	e16	109	386	928	291	57	30	122
23	17	24	e18	e18	e18	123	373	872	271	56	41	70
24	17	21	e17	e16	e19	128	318	838	251	48	38	53
25	18	e19	e19	e16	e18	110	244	767	224	39	33	45
26	14	e19	e21	e19	e19	99	208	699	199	35	39	41
27	14	e18	e22	e18	e20	103	203	628	189	36	36	38
28	19	e17	e21	e17	e20	113	257	628	168	56	29	35
29	20	e18	e20	e18	---	127	307	636	154	55	26	32
30	16	e18	e19	e18	---	124	315	688	143	45	28	30
31	23	---	e20	e19	---	137	---	773	---	49	40	---
TOTAL	471	597	567	515	515	2084	4965	24173	12942	1916	1521	1162
MEAN	15.2	19.9	18.3	16.6	18.4	67.2	166	780	431	61.8	49.1	38.7
MAX	23	24	23	19	22	137	386	1130	871	132	115	122
MIN	12	14	13	14	15	20	58	246	143	35	26	21
AC-FT	934	1180	1120	1020	1020	4130	9850	47950	25670	3800	3020	2300

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1915 - 1997, BY WATER YEAR (WY)

	MEAN	27.4	21.7	16.2	14.5	17.0	34.2	228	618	337	74.7	35.5	25.0
MAX (WY)	1987	1987	1987	1987	1987	1962	1971	1936	1952	1957	1957	1929	1927
MIN (WY)	10.1	11.1	5.00	5.00	7.50	13.9	65.9	96.8	25.2	13.2	11.9	7.53	1956
	1957	1957	1918	1918	1964	1977	1968	1977	1977	1934	1977	1956	

SUMMARY STATISTICS FOR 1996 CALENDAR YEAR FOR 1997 WATER YEAR WATER YEARS 1915 - 1997

ANNUAL TOTAL	22597	51428	
ANNUAL MEAN	61.7	141	121
HIGHEST ANNUAL MEAN			230
LOWEST ANNUAL MEAN			28.7
HIGHEST DAILY MEAN	589	Apr 27	2410
LOWEST DAILY MEAN	^a 12	Jan 18	^b 4.0
ANNUAL SEVEN-DAY MINIMUM	13	Jan 21	^c 4.4
INSTANTANEOUS PEAK FLOW			^c 3160
INSTANTANEOUS PEAK STAGE		5.78	^d 5.77
ANNUAL RUNOFF (AC-FT)	44820	102000	87750
10 PERCENT EXCEEDS	159	480	390
50 PERCENT EXCEEDS	21	33	25
90 PERCENT EXCEEDS	14	16	12

e-Estimated.

a-Also occurred Jan 21, 23-24, 26-27, Feb 3, Aug 12-15, 20-21, Sep 10-11, and Oct 16.

b-Minimum observed, 4.0 ft³/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.

c-Site and datum then in use, from rating curve extended above 1600 ft³/s.

d-Maximum gage height, 6.19 ft, May 22, 1993, present site and datum.

08251500 RIO GRANDE NEAR LOBATOS, CO

LOCATION.--Lat 37°04'43", long 105°45'23", in NE1/4NW1/4 sec.27, T.33 N., R.11 E., Conejos County, Hydrologic Unit 13010002, on right bank at highway bridge, 5.7 mi north of Colorado-New Mexico State line, 8 mi downstream from Culebra Creek, 11 mi east of Lobatos, and 14 mi east of Antonito.

DRAINAGE AREA.--7,700 mi², approximately, includes 2,940 mi² in closed basin in northern part of San Luis Valley, CO.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1899 to current year. Monthly discharge only for some periods, published in WSP 1312. Published as "at Cenicero" 1899-1901, and as "near Cenicero" 1902-4. Statistical summary computed for 1931 to current year.

REVISED RECORDS.--WSP 1312: 1919 (monthly runoff). WSP 210: Drainage area. WDR CO-78-1: 1976.

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 7,427.63 ft above sea level. Prior to 1910, nonrecording gages at same site and datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. Natural flow of stream affected by transmountain diversions, storage reservoirs, ground-water withdrawals and diversion for irrigation, and return flow from irrigated areas.

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

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1828, that of June 8, 1905.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	38	109	e95	e340	e360	374	733	444	1840	1170	424	443
2	38	141	e115	e355	e365	355	670	448	2400	1150	470	496
3	39	165	e125	e380	e380	368	591	405	2870	1110	355	522
4	41	150	e135	e360	e335	370	550	351	3220	981	302	524
5	53	141	e145	e330	e345	369	521	371	3470	822	354	490
6	49	133	e185	e250	e365	361	448	401	3460	608	385	494
7	44	121	e205	e260	e345	356	388	542	3150	748	421	492
8	44	108	e215	e290	e340	384	375	795	2920	749	656	476
9	44	102	e255	e300	e330	399	320	936	2820	591	850	449
10	44	99	e290	e315	e325	412	309	1170	2690	460	871	420
11	51	97	e300	e330	e335	430	285	971	2270	446	864	413
12	53	100	e300	e340	e345	463	278	1020	2070	558	856	427
13	47	103	e260	e340	e355	524	267	985	1890	514	825	445
14	47	102	e230	e340	e330	565	244	1170	1780	446	730	409
15	46	103	e190	e320	e345	587	237	1190	1660	404	727	376
16	46	105	e160	e310	e355	614	239	1390	1670	364	649	357
17	45	e100	e145	e310	e390	685	227	1610	1670	330	591	334
18	42	e95	e105	e310	377	763	218	1730	e1640	308	556	342
19	48	96	e235	e320	379	777	243	1880	1510	350	543	372
20	50	101	e260	e320	380	751	299	2160	1480	386	513	354
21	48	101	e240	e330	381	805	383	2450	1620	369	489	382
22	45	102	e240	e320	350	913	484	2140	1570	359	448	567
23	59	102	e240	e315	380	963	756	2230	1590	375	448	1010
24	54	105	e260	e310	369	982	803	2330	1480	339	454	1330
25	58	108	e265	e315	388	1010	608	2180	1240	299	432	1740
26	e67	109	e280	e330	368	976	499	1800	1040	360	432	2120
27	e80	e112	e290	e330	355	858	436	1520	975	339	436	2030
28	e85	e115	e295	e330	369	804	380	1170	1120	318	451	1730
29	e85	e120	e305	e330	---	782	390	1110	1150	336	458	1480
30	97	e125	e320	e330	---	775	403	1210	1210	349	421	1200
31	101	---	e325	e345	---	761	---	1370	---	344	405	---
TOTAL	1688	3370	7010	10005	10041	19536	12584	39479	59475	16282	16816	22224
MEAN	54.5	112	226	323	359	630	419	1274	1983	525	542	741
MAX	101	165	325	380	390	1010	803	2450	3470	1170	871	2120
MIN	38	95	95	250	325	355	218	351	975	299	302	334
AC-FT	3350	6680	13900	19840	19920	38750	24960	78310	118000	32300	33350	44080

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1931 - 1997, BY WATER YEAR (WY)

	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	
MEAN	173	311	284	261	313	419	533	1130	1254	445	160	129																
MAX	1401	1199	763	521	595	884	2326	4958	4470	2754	842	779																
(WY)	1942	1942	1942	1986	1986	1987	1985	1987	1941	1995	1957	1982																
MIN	12.9	59.6	61.7	75.7	102	66.0	32.3	42.9	19.8	1.28	3.21	1.91																
(WY)	1957	1955	1964	1957	1957	1957	1935	1963	1977	1951	1956	1956																

SUMMARY STATISTICS

	FOR 1996 CALENDAR YEAR		FOR 1997 WATER YEAR		WATER YEARS 1931 - 1997	
ANNUAL TOTAL	65657		218510			
ANNUAL MEAN	179		599		a 451	
HIGHEST ANNUAL MEAN					1264	
LOWEST ANNUAL MEAN					70.9	
HIGHEST DAILY MEAN	609	Feb 23	3470	Jun 5	b 9110	Jun 22 1949
LOWEST DAILY MEAN	c 15	Jul 31	d 38	Oct 1	f .00	Jul 16 1950
ANNUAL SEVEN-DAY MINIMUM	15	Jul 29	43	Oct 1	f .00	Jul 16 1950
INSTANTANEOUS PEAK FLOW			3610		g 11600	May 8 1952
INSTANTANEOUS PEAK STAGE			4.72		8.76	May 8 1952
ANNUAL RUNOFF (AC-FT)	130200		433400		326600	
10 PERCENT EXCEEDS	438		1510		970	
50 PERCENT EXCEEDS	115		371		242	
90 PERCENT EXCEEDS	30		100		40	

e-Estimated.

a-Average discharge for 31 years (water years 1900-30), 846 ft³/s; 612900 acre-ft/yr, includes period of extensive development for irrigation.

b-Maximum daily discharge for period of record, 13100 ft³/s, Jun 8, 1905.

c-Also occurred Aug 1-4.

d-Also occurred Oct 2.

f-No flow at times in 1950-51, 1956.

g-Maximum discharge and stage for period of record, 13200 ft³/s, Jun 8, 1905, gage height, 9.1 ft, from rating curve extended above 8000 ft³/s.

**08251500 RIO GRANDE NEAR LOBATOS, CO--Continued
WATER-QUALITY RECORDS**

PERIOD OF RECORD.--September 1969 to September 1993 (also see REMARKS). February 1996 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1975 to September 1981.

WATER TEMPERATURE: October 1975 to September 1981.

REMARKS.--Periodic water-quality data available Sept. 1969 to Sept. 1993 under the National Stream-Quality Accounting Network (NASQAN), and Apr. 1993 to Sept. 1996 under the Rio Grande National Water-Quality Assessment Program, for this site.

EXTREMES FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 1,040 microsiemens, Sept. 17-18, 1977; minimum, 89 microsiemens, May 9, 1979.

WATER TEMPERATURE: Maximum, 30.0°C, July 17, 1977; minimum, 0.0°C, many days.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	pH (STAND-ARD UNITS) (00400)	TEMPER-ATURE (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- ^a LINITY LAB (MG/L AS CACO3) (90410)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)
OCT 29...	1000	73	390	8.2	1.5	10.8	27	6.0	44	5.9	140	46
MAR 10...	1030	402	266	8.4	5.0	11.5	25	4.6	21	4.0	94	29
MAY 22...	1130	2150	135	7.7	12.0	7.8	13	2.5	8.7	2.6	48	12
JUN 16...	1245	1690	248	7.7	16.0	--	22	4.4	18	3.8	69	42
JUL 22...	1030	254	230	8.2	19.5	7.3	20	3.9	17	3.5	78	26
AUG 26...	1050	418	190	8.1	20.5	7.6	18	3.4	13	3.2	70	18

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 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)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO-GEN, AM-MONIA + ORGANIC DIS. TOTAL (MG/L AS N) (00623)	PHOS-PHORUS TOTAL (MG/L AS P) (00665)	PHOS-PHORUS DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) (00671)
OCT 29...	14	0.6	31	267	0.02	0.07	0.04	0.4	0.2	0.10	0.05	0.04
MAR 10...	6.9	0.4	26	179	<0.01	0.19	<0.015	0.4	<0.2	0.08	0.01	0.03
MAY 22...	2.2	0.15	21	105	<0.01	0.085	<0.015	0.54	<0.2	0.136	0.041	0.051
JUN 16...	4.6	0.26	20	177	<0.01	0.064	<0.015	0.52	0.28	0.107	0.057	0.054
JUL 22...	5.3	0.26	21	161	<0.01	<0.05	<0.015	0.48	<0.2	0.129	0.044	0.047
AUG 26...	3.6	0.21	23	131	<0.01	<0.05	<0.015	0.39	<0.2	0.115	0.035	0.045

DATE	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	ANTI-MONY, DIS-SOLVED (UG/L AS SB) (01095)	ARSENIC, DIS-SOLVED (UG/L AS AS) (01000)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (01010)	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)
OCT 29...	3.0	<1.0	2	37	<1	<1	1	<1	2.0
MAR 10...	--	--	--	--	--	--	--	--	--
MAY 22...	11	<1.0	1	22	<1	<1	<1	<1	1.5
JUN 16...	4.3	<1.0	2	30	<1	<1	<1	<1	1.9
JUL 22...	2.3	<1.0	2	23	<1	<1	<1	<1	1.1
AUG 26...	--	--	--	--	--	--	--	--	--

a-Lab total dissolved alkalinity, determined by fixed-endpoint titration method.

08251500 RIO GRANDE NEAR LOBATOS, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	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)
OCT 29...	39	<1	7	4	<1	<1	<1	1.0	3
MAR 10...	20	--	38	--	--	--	--	--	--
MAY 22...	71	<1	31	<1	<1	<1	<1	1.1	<1
JUN 16...	56	<1	20	1.0	<1	<1	<1	<1	<1
JUL 22...	24	<1	11	2.1	<1	<1	<1	<1	<1
AUG 26...	21	--	5.9	--	--	--	--	--	--

TRANSMOUNTAIN DIVERSIONS FROM COLORADO RIVER BASIN IN COLORADO

There are 24 tunnels or ditches, all of which are equipped with water-stage recorders and Parshall flumes or sharp-crested weirs. Records provided by Colorado Division of Water Resources. The locations and diversions of 7 selected diversions are given in the following list.

TO PLATTE RIVER BASIN

09013000 Alva B. Adams Tunnel diverts water from Grand Lake and Shadow Mountain Lake in NW¹/₄ sec.9, T.3 N., R.75 W., in Colorado River basin, to Lake Estes (Big Thompson River) in sec.30, T.5 N., R.72 W., in Platte River basin. For daily discharge, see elsewhere in this report.

DIVERSIONS, IN ACRE-FEET, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

Diversion	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
09013000	6,480	22,930	17,150	21,800	22,100	11,340	15,870	32,510	29,430	29,060	8,790	9,150
Water year 1997, 226,600												

09050590 Harold D. Roberts Tunnel diverts water from Dillon Reservoir (Blue River) in sec.18, T.5 S., R.77 W., in Blue River basin, to North Fork South Platte River (tributary to South Platte, River) in SW¹/₄SW¹/₄ sec.4, T.7 S., R.74 W., in Platte River basin. Figures include a small amount of ground-water inflow between Dillon Reservoir and east portal of tunnel.

DIVERSIONS, IN ACRE-FEET, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

Diversion	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
09050590	8,710	5,100	5,880	5,860	3,480	468	6,730	1,170	0	15,160	464	3,750
Water year 1997, 56,770												

TO ARKANSAS RIVER BASIN

09042000 Hoosier Pass Tunnel diverts water from tributaries of Blue River in Colorado River basin to Montgomery Reservoir (Middle Fork South Platte River) in sec.14, T.8 S., R.78 W., in Platte River basin; this water is again diverted to South Catamount Creek (tributary to Catamount Creek) in SE¹/₄ sec.14, T.13 S., R.69 W., in the Arkansas River basin. Collection conduits extending from the right bank of Crystal Creek (tributary to Spruce Creek) in sec.14, T.7 S., R.78 W., right bank of Spruce Creek in sec.23, T.7 S., R.78 W., right bank of McCullough Gulch in sec.26, T.7 S., R.78 W., right bank of Monte Cristo Creek in SW¹/₄NE¹/₄ sec.2, T.8 S., R.78 W., left bank of Bemrose Creek in SW¹/₄SW¹/₄ sec.6, T.8 S., R.77 W., and intercepting intermediate tributaries, transport diversions to north portal of the tunnel.

REVISIONS (WATER YEARS)--WDR CO-86-1, WDR CO-86-2: 1984, 1985.

DIVERSIONS, IN ACRE-FEET, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

Diversion	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
09042000	347	0	0	0	0	0	0	668	4,260	863	467	1,090
Water year 1997, 7,700												

09063700 Homestake Tunnel diverts water from Homestake Lake (Middle Fork Homestake Creek), in sec.17, T.8 S., R.81 W., in Eagle River basin, to Lake Fork in sec.9, T.9 S., R.81 W., in Arkansas River basin. Water is imported to Homestake Lake from tributaries of Homestake Creek by collection conduits that extend from right bank of French Creek in sec.28, T.7 S., R.81 W., and left bank of East Fork Homestake Creek in sec.9, T.8 S., R.81 W., and intercept intermediate tributaries.

DIVERSIONS, IN ACRE-FEET, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

Diversion	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
09063700	0	0	0	0	0	9,810	14,550	0	4,170	5,970	2,630	0
Water year 1997, 37,130												

**TRANSMOUNTAIN DIVERSIONS FROM COLORADO RIVER BASIN IN COLORADO--Continued
TO ARKANSAS RIVER BASIN--Continued**

09073000 Twin Lakes Tunnel diverts water from tributaries of Roaring Fork River between headgates (in sec.21, T.11 S., R.83 W., and sec.2, T.11 S., R.83 W.), and west portal of Twin Lakes Tunnel (in sec.24, T.11 S., R.83 W.), in Colorado River basin, to North Fork Lake Creek in sec.22, T.11 S., R.82 W., in Arkansas River basin.

DIVERSIONS, IN ACRE-FEET, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

Diversion	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
09073000	13	28	26	10	4.1	10	152	10,540	13,480	7,320	1,690	908
Water year 1997, 34,190												

09077160 Charles H. Boustead Tunnel diverts water from the main stem and tributaries of Fryingpan River (tributary to Roaring Fork River), in Colorado River basin, to Lake Fork in sec.10, T.9 S., R.81 W., in Arkansas River basin. Water is transported to west portal of tunnel (at lat 39°14'44", long 106°31'47"), by a series of collection conduits extending between headgates on right bank of Sawyer Creek at lat 39°15'58", long 106°38'19" and right bank of Fryingpan River at lat 39°14'40", long 106°31'49", and intercepting intermediate tributaries.

DIVERSIONS, IN ACRE-FEET, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

Diversion	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
09077160	113	133	154	154	146	184	186	12,890	48,150	13,570	3,560	146
Water year 1997, 79,380												

09077500 Busk-Ivanhoe Tunnel diverts water from Ivanhoe Lake (Ivanhoe Creek), tributary to Fryingpan River in sec.13, T.9 S., R.82 W., in Roaring Fork River basin, to Busk Creek (tributary to Lake Fork) in sec. 20, T.9 S., R.81 W., in Arkansas River basin.

DIVERSIONS, IN ACRE-FEET, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

Diversion	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.
09077500	110	82	55	48	39	43	78	453	3,200	324	103	107
Water year 1997, 4,640												

TRANSMOUNTAIN DIVERSIONS NO LONGER PUBLISHED

Following is a list of Transmountain Diversions no longer being published in this report. Diversions, in acre-feet, for these sites are available from the State of Colorado, Division of Water Resources.

TO PLATTE RIVER BASIN		TO ARKANSAS RIVER BASIN		TO RIO GRANDE BASIN	
09010000	Grand River Ditch	09061500	Columbine Ditch	09118200	Tarbell Ditch
09012000	Eureka Ditch	09062000	Ewing Ditch	09121000	Tabor Ditch
09021500	Berthoud Pass Ditch	09062500	Wurtz Ditch	09341000	Treasure Pass Ditch
09022500	Moffat Water Tunnel	09115000	Larkspur Ditch	09347000	Don LaFont Ditches 1 & 2
09046000	Boreas Pass Ditch			09348000	Williams Creek Squaw Pass Ditch
09047300	Vidler Tunnel			09351000	Pine River- Weminuche Pass Ditch
				09351500	Weminuche Pass

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES
MAXIMUM DISCHARGE AT CREST-STAGE PARTIAL-RECORD STATIONS

As the number of streams on which streamflow information is likely to be desired far exceeds the number of stream-gaging stations feasible to operate at one time, the Geological Survey collects limited streamflow data at sites other than stream-gaging stations. When limited streamflow data are collected on a systematic basis over a period of years for use in hydrologic analyses, the site at which the data are collected is called a partial-record station. Data collected at these partial-record stations are usable in low-flow or flood-flow analyses, depending on the type of data collected. In addition, discharge measurements are made at other sites not included in the partial-record program. These measurements are generally made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

Records collected at crest-stage partial-record stations are presented in the following table. Discharge measurements made at low-flow partial-record sites and at miscellaneous sites and for special studies are given in separate tables.

CREST-STAGE PARTIAL-RECORD STATIONS

The following table contains annual maximum discharge for crest-stage stations. A crest-stage gage is a device that will register the peak stage occurring between inspections of the gage. A stage-discharge relation for each gage is developed from discharge measurements made by indirect measurements of peak flow or by current meter. The date of the maximum discharge is not always certain but is usually determined by comparison with nearby continuous-record stations, weather records, or local inquiry. Only the maximum discharge for each water year is given. Information on some lower floods may have been obtained, but is not published herein. The years given in the period of record represent water years for which the annual maximum has been determined.

MAXIMUM DISCHARGE AT CREST-STAGE PARTIAL-RECORD STATIONS

Station name and number	Location and drainage area	Period of record	Water year 1997 maximum			Period of record maximum		
			Date	Gage height (ft)	Dis- charge (ft ³ /s)	Date	Gage height (ft)	Dis- charge (ft ³ /s)
PLATTE RIVER BASIN								
Lee Gulch at Littleton, CO (06709740)	Lat 39°35'47", long 105°00'57", in SW ¹ / ₄ SW ¹ / ₄ 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.	1980-97	7-27-97	12.10	190	^a 1983	16.00	444
Dutch Creek at Platte Canyon Drive, near Littleton, CO (06709910)	Lat 39°36'01", long 105°02'28", in NW ¹ / ₄ SE ¹ / ₄ 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.	1985-97	8-04-97	10.97	794	6-01-91	11.51	1,090
Littles Creek at Littleton, CO (06709995)	Lat 39°36'44", long 105°01'09", in SE ¹ / ₄ SE ¹ / ₄ sec.17, T.5 S., R.68 W., Arapahoe County, 50 ft upstream from Rapp St., and 150 ft south of W. Alamo St. in Littleton. REVISED RECORDS.--WD CO-89-1: 1988. Drainage area not determined.	1985-97	7-28-97	12.77	431	7-29-90	13.01	503
Weaver Creek near Lakewood, CO (06711305)	Lat 39°38'13", long 105°07'47", in NE ¹ / ₄ NE ¹ / ₄ 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.	1982-97	8-04-97	11.61	129	^a 1985	13.93	1,010
Little Dry Creek near Arapahoe Road, CO (06711515)	Lat 39°35'38", long 104°54'23", in NE ¹ / ₄ NE ¹ / ₄ 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). Drain- age area not determined.	1985-97	7-28-97	9.70	515	^a 1985	10.52	800

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES
MAXIMUM DISCHARGE AT CREST-STAGE PARTIAL-RECORD STATIONS--Continued

475

Station name and number	Location and drainage area	Period of record	Water year 1997 maximum			Period of record maximum		
			Date	Gage height (ft)	Dis- charge (ft ³ /s)	Date	Gage height (ft)	Dis- charge (ft ³ /s)
PLATTE RIVER BASIN- Continued								
Willow Creek at Dry Creek Road, near Englewood, CO (06711535)	Lat 39°34'49", long 104°54'42", in NW ¹ /4NE ¹ /4 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.	1985-97	7-28-97	10.48	1,390	^a 1985	14.28	3,470
Little Dry Creek above Englewood, CO (06711555)	Lat 39°38'57", long 104°58'42", in SE ¹ /4NE ¹ /4 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 Vil- lage. Drainage area not determined. Prior to April 2, 1992, gage was located at a site 300 ft upstream from the present location.	1982-97	7-28-97	7.43	460	^a 1983	15.64	1,060
Harvard Gulch at Colorado Blvd. at Denver, CO (06711570)	Lat 39°40'08", long 104°56'32", in SE ¹ /4SE ¹ /4 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.	1979-97	9-04-97	12.97	488	7-20-92	13.50	750
Harvard Gulch below University Blvd. at Denver, CO (06711572)	Lat 39°40'10", long 104°57'33", in SE ¹ /4SE ¹ /4 sec.26, T.4 S., R.68 W., Denver County, 200 ft, downstream from Uni- versity Blvd., and 600 ft north of East Yale Ave., in Denver. REVISED RECORDS.-- WDR-CO-92-1: 1989-91. Drainage area not determined.	1979-97	7-28-97	14.24	817	7-12-96	14.55	981
Harvard Gulch at Harvard Park at Denver, CO (06711575)	Lat 39°40'21", long 104°58'35", in NW ¹ /4SW ¹ /4 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.	1979-97	7-31-97	15.49	776	7-12-96	16.25	1,100
Sanderson Gulch tributary at Lake- wood, CO (06711600)	Lat 39°41'19", long 105°04'54", in NE ¹ /4NW ¹ /4 sec.23, T.4 S., R.68 W., Jefferson County, 300 ft upstream from S. Wad- sworth Blvd., 300 ft south of W. Florida Ave. in Lake- wood. Drainage area is 0.38 mi ² .	1969-97	7-28-97	13.82	134	6-06-77	4.91	422
Sanderson Gulch at Mouth at Navajo St. at Denver, CO (06711609)	Lat 39°41'33", long 105°00'12", in SW ¹ /4NE ¹ /4 sec.21, T.4 S. R.68 W., Denver County, 200 ft south of Louisiana Ave., at Navajo St. Drainage area not determined.	1985-97	7-28-97	12.08	679	7-28-97	12.08	679
Weir Gulch upstream from 1st Avenue, at Denver, CO (06711618)	Lat 39°43'03", long 105°02'30", in NW ¹ /4SE ¹ /4 sec.7, T.4 S., R.68 W., Denver County, 250 ft upstream from 1st Ave., in Denver. Drainage area not determined.	1985-97	7-28-97	11.17	312	8-01-91	11.91	523

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 1997 maximum		Period of record maximum			
			Date	Gage height (ft)	Dis- charge (ft ³ /s)	Date	Gage height (ft)	Dis- charge (ft ³ /s)
PLATTE RIVER BASIN- Continued								
Dry Gulch at Denver, CO (06711770)	Lat 39°44'03", long 105°02'20", in SW ¹ /4NE ¹ /4 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 Den- ver. Drainage area not determined.	1980-97	7-28-97	12.06	162	^a 1981	16.00	445
Lakewood Gulch at Denver, CO (06711780)	Lat 39°44'06", long 105°01'54", in SW ¹ /4NW ¹ /4 sec.5, T.4 S., R.68 W., Denver County, 2,000 ft downstream from con- fluence with Dry Gulch, near intersection of Knox Ct., and West 12th Ave., in Denver. Drainage	1980-97	8-11-97	14.41	988	8-11-97	14.41	988
Sloans Lake, south Tributary at Denver, CO (06711820)	Lat 39°44'44", long 105°03'28", in NW ¹ /4SE ¹ /4 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. Drain- age area not determined.	1985-97	7-28-97	5.37	100	6-01-91	4.00	451
Westerly Creek at Aurora, CO (06714260)	Lat 39°44'43", long 104°52'48", in NW ¹ /4SW ¹ /4 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. Drain- age area not determined.	1982-97	9-4-97	13.93	1,190	^a 1983	14.45	1,530
Lena Gulch at Upper Site, at Golden, CO (06719535)	Lat 39°43'21", long 105°11'46", in NE ¹ /4NW ¹ /4 sec.11, T.4 S., R.70 W., Jefferson County, 60 ft north of US 40, and 2,200 ft southwest of US 6, in Golden. Drainage area not determined.	1985-97	7-27-97	10.93	396	7-27-97	10.93	396
Lena Gulch at Lakewood, CO (06719560)	Lat 39°44'27", long 105°08'49", in SE ¹ /4SE ¹ /4 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 ² .	1974-79 1986-97	7-27-97	12.64	305	7-20-75	14.41	641
Hidden Lake Outflow at 65th Ave near Arvada, CO (06719775)	Lat 39°48'53", long 105°02'03", in SE ¹ /4SE ¹ /4 sec.6, T.3 S., R.68 W., Adams County, 30 ft downstream from 65th Ave. at Lowell Blvd. May 1985 to Aug. 1987 at site 200 ft downstream. Drainage area not determined.	1985-97	7-31-97	2.58	26	7-31-97	2.58	26
Little Dry Creek at Westminster, CO (06719840)	Lat 39°49'34", long 105°02'25", in NW ¹ /4NE ¹ /4 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.	1982-97	7-31-97	12.77	1,040	6-01-91	13.09	1,280

DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES
MAXIMUM DISCHARGE AT CREST-STAGE PARTIAL-RECORD STATIONS--Continued

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Station name and number	Location and drainage area	Period of record	Water year 1997 maximum			Period of record maximum		
			Date	Gage height (ft)	Dis- charge (ft ³ /s)	Date	Gage height (ft)	Dis- charge (ft ³ /s)
ARKANSAS RIVER BASIN								
B-Ditch Tributary blw Hwy 115 at Fort Carson, CO (07105770)	Lat 38°45'53", long 104°48'39", in NW ¹ /4NW ¹ /4 sec.8, T.15 S., R.66 W., El Paso County, 200 ft south of Academy Blvd., 0.2 mi downstream from Hwy 115, and 3.7 mi upstream from the mouth. Drainage area is 0.49 mi ² .(Discontinued 9- 30-97)	1993-97	6-10-97	6.48	244	6-10-97	6.48	244
Clover Ditch Tribu- tary at Hwy 115 at Fort Carson, CO (07105810)	Lat 38°45'07", long 104°48'41", in NW ¹ /4NW ¹ /4 sec.17, T.15 S., R.66 W., ElPaso County, 1.1 mi south of intersection of High- way 115 and Academy Boulevard near Colorado Springs. Drain- age area is 1.46 mi ² .(Discon- tinued 9-30-97)	1993-97	6-10-97	12.90	398	6-10-97	12.90	398
Big Arroyo near Thatcher, CO (07120620)	Lat 37°33'17", long 104°01'15", in NW ¹ /4NW ¹ /4 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. Drainage area is 15.5 mi ² .	1983-90 ^b 1991-97	8-11-97	5.78	1,780	8-11-97	5.78	1,780
Lockwood Canyon Creek near Thatcher, CO (07126390)	Lat 37°29'37", long 103°49'47", in SE ¹ /4NW ¹ /4 sec.30, T.29 S., R.57 W., Las Animas County, on right bank 0.6 mi downstream from Sharp Ranch, 5.3 mi upstream from mouth, and 16 mi southeast of Thatcher. Drain- age area is 41.4 mi ² .	1983-93 ^b 1993-97	8-11-97	4.50	23	5-22-87 ^c (revised)	10.39 (revised)	1,110 (revised)
Red Rock Canyon Creek at mouth, near Thatcher,CO (07126415)	Lat 37°30'54", long 103°43'25", in NW ¹ /4SE ¹ /4 sec.18, T.29 S., R.56 W., Las Animas County, on left bank 200 ft downstream from Welsh Canyon, 0.3 mi upstream from mouth, and 21 mi east of Thatcher. Drainage area is 48.8 mi ² .	1983-90 ^b 1991-97	8-05-97	6.36	78	5-22-87 (revised)	10.02 (revised)	1,510 (revised)
Chacuaco Creek at mouth, near Timpas, CO (07126470)	Lat 37°32'38", long 103°37'54", in SE ¹ /4SE ¹ /4 sec. 1, T.28 S, R.56W, Las Animas County, on right bank at Red Rocks Ranch, 1.5 mi upstream from mouth, 3.3 mi upstream from Bent Can- yon Creek, and 21 mi southeast of Timpas. Drainage area is 424 mi ² .	1983-92 ^b 1993-97	6-05-97	14.20	6,960	7-08-92	16.22	11,800
Bent Canyon Creek at mouth near Tim- pas, CO (07126480)	Lat 37°35'19", long 103°38'51", in SE ¹ /4SE ¹ /4 sec.23, T.28 S., R.65 W., Las Animas County, 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 is 56.2 mi ² .	1983-90 ^b 1991-97	8-11-97	11.61	2,200	8-21-84	12.56	2,640
Big Sandy Creek above Amity Canal Diversion, near Kornman, CO (07134000)	Lat 38°12'52", long 102°28'45", in NE ¹ /4NW ¹ /4 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 ² .	1941-46 ^b 1996-97	8-06-97	10.93	est 200	9-3-42 ^c	5.63	2,900

a-Month or day of occurrence is unknown or not exact.
b-Previously operated as a continuous-record gaging station.
c-At different datum.

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 1997.**ARKANSAS RIVER BASIN**

Station no	Station name	Location and drainage area	Date	Discharge (ft ³ /s)
07079195	East Fork Arkansas River at Highway 91, near Leadville, CO	Lat 39°17'09", long 106°16'45", Lake County, Hydrologic Unit 11020001, at culvert on State Highway 91, 1.6 mi north of Leadville. Drainage area is 35.0 mi ² .	10-04-96	17
			11-06-96	12
			12-03-96	12
			1-08-97	8.0
			2-05-97	6.8
			3-05-97	8.5
			4-02-97	7.8
			5-07-97	28
			6-04-97	310
			7-02-97	143
			8-06-97	73
			9-03-97	35

384533104495101 B-DITCH RAIN GAGE BELOW HWY 115, AT FORT CARSON, CO

LOCATION.--Lat 38°45'33, long 104°49'51", in NW¹/₄SW¹/₄ sec.7, T.15 S., R.66 W., El Paso County, Hydrologic Unit 11020003, approximately 1.0 mi west of intersection of Hwy 115 and Academy Blvd., near Colorado Springs.

DRAINAGE AREA.--0.49 mi² at B-Ditch Tributary below Hwy 115, at Fort Carson, CO (07105770).

PRECIPITATION RECORDS

PERIOD OF RECORD.--June 1993 to September 1997 (discontinued), seasonal records only.

GAGE.--Tipping-bucket rain gage and electronic data logger. Elevation of gage is 6,410 ft above sea level, from topographic map.

REMARKS.--Records good. Station is operated in conjunction with partial-record station 07105770, B-Ditch Tributary below Hwy 115, at Fort Carson, CO (published in "Crest-Stage Partial-Record Stations" section of this report). Records published for period of seasonal operation only (Oct. 1 to Nov. 20 and Mar. 20 to Sept. 30). Daily data that are not published are either missing or of unacceptable quality.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily rainfall, 3.33 inches, May 9, 1994.

EXTREMES FOR CURRENT YEAR.--Maximum daily rainfall, 2.41 inches, June 9 and 13.

PRECIPITATION (INCHES), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.01	---	---	---	---	.00	.07	.01	.00	.08	.00
2	.00	.00	---	---	---	---	.04	.00	.00	.00	.03	.02
3	.00	.00	---	---	---	---	.01	.00	.00	.00	.00	.06
4	.00	.00	---	---	---	---	.10	.00	.00	.00	1.67	.08
5	.00	.00	---	---	---	---	.00	.00	.21	.01	1.92	.00
6	.00	.00	---	---	---	---	.00	.01	1.66	.02	.26	.04
7	.00	.00	---	---	---	---	.00	.00	.18	.00	.00	.00
8	.00	.00	---	---	---	---	.00	.00	.06	.00	.00	.00
9	.00	.00	---	---	---	---	.00	.00	2.41	.00	.15	.00
10	.00	.00	---	---	---	---	.00	.00	.74	.00	.75	.00
11	.00	.00	---	---	---	---	.01	.17	.00	.02	.03	.11
12	.00	.00	---	---	---	---	.00	.09	.46	.00	.01	.00
13	.00	.00	---	---	---	---	.00	.00	2.41	.00	.08	.00
14	.00	.00	---	---	---	---	.00	.04	.15	.00	.00	.00
15	.00	.00	---	---	---	---	.01	.01	.43	.00	.00	.21
16	.00	.00	---	---	---	---	.03	.00	.00	.00	.01	.00
17	.00	.01	---	---	---	---	.00	.00	.00	.00	.39	.00
18	.00	.00	---	---	---	---	.00	.23	.09	.00	.02	.00
19	.00	.00	---	---	---	---	.00	.02	.00	.60	.12	.16
20	.05	.00	---	---	---	.00	.00	.00	.00	.15	.18	.04
21	.42	---	---	---	---	.00	.30	.04	.00	.00	.00	.00
22	.00	---	---	---	---	.00	.00	.28	.00	.00	.01	.10
23	.00	---	---	---	---	.04	1.08	.04	.00	.00	.00	.00
24	.00	---	---	---	---	.07	.72	.00	.00	.00	.00	.00
25	.00	---	---	---	---	.16	.12	.09	.08	.15	.47	.00
26	.00	---	---	---	---	.00	1.85	.00	.06	.03	.09	.01
27	.13	---	---	---	---	.00	.00	.00	.00	.24	.00	.00
28	.21	---	---	---	---	.00	.00	.02	.00	.66	.00	.00
29	e.27	---	---	---	---	.00	.02	.24	.00	1.00	.04	.00
30	.00	---	---	---	---	.00	.00	.01	.00	.17	.00	.00
31	.00	---	---	---	---	.00	---	.00	---	.06	.14	---
TOTAL	1.08	---	---	---	---	---	4.29	1.36	8.95	3.11	6.45	0.83

384519104483601 CLOVER DITCH TRIBUTARY RAIN GAGE AT HWY 115, AT FORT CARSON, CO

LOCATION.--Lat 38°45'19, long 104°48'36", in NW¹/₄SW¹/₄ sec.8, T.15 S., R.66 W., El Paso County, Hydrologic Unit 11020003, 3.2 mi south of intersection of Hwy 115 and Lake Avenue, near Colorado Springs.

DRAINAGE AREA.--1.46 mi² at Clover Ditch Tributary at Hwy 115, at Fort Carson, CO (07105810).

PRECIPITATION RECORDS

PERIOD OF RECORD.--June 1993 to September 1997 (discontinued), seasonal records only.

GAGE.--Tipping-bucket rain gage and electronic data logger. Elevation of gage is 5,950 ft above sea level, from topographic map.

REMARKS.--Records good. Station is operated in conjunction with partial-record station 07105810, Clover Ditch Tributary at Hwy 115 at Fort Carson, CO (published in "Crest-Stage Partial-Record Stations" section of this report). Records published for period of seasonal operation only (Oct. 1 to Nov. 20 and Mar. 20 to Sept. 30). Daily data that are not published are either missing or of unacceptable quality.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily rainfall, 3.07 inches, May 17, 1995.

EXTREMES FOR CURRENT YEAR.--Maximum daily rainfall, 2.34 inches, June 13.

PRECIPITATION (INCHES), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	---	---	---	---	.00	.00	.02	.00	.03	.02
2	.00	.00	---	---	---	---	.00	.00	.00	.00	.01	.00
3	.00	.00	---	---	---	---	.00	.00	.00	.00	.00	.00
4	.00	.00	---	---	---	---	.07	.00	.00	.00	.94	.18
5	.00	.00	---	---	---	---	.00	.00	.55	.01	1.53	.00
6	.00	.00	---	---	---	---	.00	.00	1.60	.12	.24	.01
7	.00	.00	---	---	---	---	.00	.00	.23	.00	.00	.00
8	.00	.00	---	---	---	---	.00	.00	.10	.00	.02	.00
9	.00	.00	---	---	---	---	.00	.00	1.85	.00	.15	.00
10	.00	.00	---	---	---	---	.00	.00	.93	.00	.62	.00
11	.01	.00	---	---	---	---	.00	.12	.00	.02	.02	.11
12	.00	.00	---	---	---	---	.00	.08	.45	.00	.13	.00
13	.00	.00	---	---	---	---	.00	.00	2.34	.00	.07	.02
14	.00	.00	---	---	---	---	.00	.03	.11	.00	.00	.00
15	.00	.00	---	---	---	---	.00	.01	.39	.00	.00	.00
16	.00	.00	---	---	---	---	.02	.00	.00	.00	.01	.00
17	.00	.00	---	---	---	---	.00	.00	.00	.00	.51	.00
18	.00	.00	---	---	---	---	.00	.23	.05	.00	.02	.00
19	.00	.00	---	---	---	---	.00	.00	.00	.54	.08	.26
20	.08	.00	---	---	---	.00	.00	.00	.00	.05	.21	.07
21	.00	---	---	---	---	.00	.20	.00	.00	.00	.00	.06
22	.00	---	---	---	---	.00	.00	.25	.00	.00	.01	.13
23	.00	---	---	---	---	.00	.64	.01	.00	.00	.00	.00
24	.00	---	---	---	---	.28	1.59	.00	.00	.00	.00	.00
25	.00	---	---	---	---	.06	.63	.06	.03	.17	.48	.00
26	.00	---	---	---	---	.00	.49	.00	.00	.01	.08	.00
27	.00	---	---	---	---	.00	.00	.00	.00	.27	.00	.00
28	.00	---	---	---	---	.00	.00	.00	.00	.64	.00	.00
29	.01	---	---	---	---	.00	.00	.25	.00	.93	.07	.00
30	.00	---	---	---	---	.00	.00	.01	.00	.11	.00	.00
31	.00	---	---	---	---	.00	---	.00	---	.02	.11	---
TOTAL	0.10	---	---	---	---	---	3.64	1.05	8.65	2.89	5.34	0.86

373125104001601 BIG ARROYO HILLS RAIN GAGE AT PIPELINE ROAD, NEAR HOUGHTON, CO

LOCATION (REVISED).--Lat 37°31'25, long 104°00'16", in SE¼ NE¼ sec.16, T.29 S., R.59 W., Las Animas County, Hydrologic Unit 11020010, on Pinon Canyon Maneuver Site, approximately 100 ft west of Pipeline Road, 200 ft north of Military Supply Road 1, 4.9 mi south of Houghton, 5.9 mi southeast of Thatcher, and 35 mi northeast of Trinidad.

PRECIPITATION RECORDS

PERIOD OF RECORD.--June 1993 to current year (seasonal records only).

GAGE.--Tipping-bucket rain gage and electronic data logger. Elevation of gage is 5,560 ft above sea level, from topographic map.

REMARKS.--Records good. Records published for period of seasonal record only (Oct. 1-31 and Apr. 11 to Sept. 30). Daily data are not published when either missing or of unacceptable quality.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily rainfall during period of seasonal operation, 1.87 inches, May 5, 1995.

EXTREMES FOR CURRENT YEAR.--Maximum daily rainfall during period of seasonal operation, 1.21 inches, Aug. 11.

PRECIPITATION (INCHES), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	---	---	---	---	---	---	.00	.00	.00	.03	.06
2	.00	---	---	---	---	---	---	.00	.00	.00	.22	.00
3	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
4	.00	---	---	---	---	---	---	.00	.00	.17	.00	.00
5	.00	---	---	---	---	---	---	.00	.00	.00	1.03	.00
6	.00	---	---	---	---	---	---	.00	.60	.02	.05	.20
7	.00	---	---	---	---	---	---	.00	.20	.04	.00	.00
8	.00	---	---	---	---	---	---	.03	.00	.00	.00	.00
9	.00	---	---	---	---	---	---	.00	.00	.00	.67	.00
10	.00	---	---	---	---	---	---	.00	.26	.00	.26	.00
11	.00	---	---	---	---	---	e.00	.00	.00	.10	1.21	.03
12	.00	---	---	---	---	---	.04	.08	.00	.00	.00	.00
13	.00	---	---	---	---	---	.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	.08	.00	.00	.00
17	.00	---	---	---	---	---	.00	.00	.00	.00	.00	.00
18	.00	---	---	---	---	---	.00	.03	.00	.00	.08	.00
19	.00	---	---	---	---	---	.00	.16	.00	.04	.00	.00
20	.00	---	---	---	---	---	.00	.01	.00	.12	.00	.27
21	.03	---	---	---	---	---	.48	.00	.00	.00	.01	.22
22	.03	---	---	---	---	---	.14	.00	.09	.00	.00	.10
23	.00	---	---	---	---	---	.16	.00	.00	.00	.00	.00
24	.00	---	---	---	---	---	.16	.00	.00	.00	.00	.00
25	.00	---	---	---	---	---	.36	.00	.00	.03	.00	.00
26	.00	---	---	---	---	---	.00	.00	.02	.26	.00	.00
27	.13	---	---	---	---	---	.00	.00	.00	.05	.00	.00
28	.00	---	---	---	---	---	.17	.00	.00	.85	.00	.00
29	.00	---	---	---	---	---	.00	.00	.00	.04	.01	.00
30	.00	---	---	---	---	---	.00	.00	.00	.00	.00	.00
31	e.00	---	---	---	---	---	---	.00	---	.00	.01	---
TOTAL	0.19	---	---	---	---	---	---	0.31	1.25	1.72	3.58	0.88

e-Estimated.

372721103595601 TAYLOR ARROYO RAIN GAGE AT PIPELINE, NEAR SIMPSON, CO

LOCATION.--Lat 37°27'21", long 103°59'56", in SE¹/₄SW¹/₄ sec.3, T.30 S., R.59 W., Las Animas County, Hydrologic Unit 11020010, on Pinon Canyon Manuever 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 current year.

GAGE.--Weighing-bucket rain gage and tipping-bucket rain gage and electronic data logger. Elevation of gage is 5,220 ft above sea level, from topographic map.

REMARKS.--Records good. Daily data are not published when either missing or of unacceptable quality.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily rainfall, 2.63 inches, May 5, 1995.

EXTREMES FOR CURRENT YEAR.--Maximum daily rainfall, 0.94 inch, Aug. 9.

PRECIPITATION (INCHES), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
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	.06	.06
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.08	.00
3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
4	.04	.00	.00	.00	.00	.01	.07	.00	.05	.15	.00	.00
5	.00	.00	.00	.01	.00	.00	.07	.00	.01	.00	.31	.00
6	.00	.00	.00	.07	.13	.00	.00	.00	.52	.00	.03	.41
7	.00	.01	.00	.00	.01	.00	.00	.02	.24	.00	.00	.00
8	.00	.00	.00	.03	.00	.00	.00	.00	.01	.00	.00	.00
9	.00	.00	.00	.01	.00	.00	.00	.00	.00	.00	.94	.00
10	.00	.00	.00	.00	.00	.00	.14	.00	.10	.00	.17	.00
11	.00	.00	.00	.01	.00	.00	.08	.00	.00	.04	.32	.00
12	.00	.00	.00	.02	.00	.00	.00	.06	.00	.00	.00	.00
13	.00	.00	.00	.00	.13	.00	.00	.00	.02	.00	.00	.00
14	.00	.00	.00	.15	.00	.00	.00	.00	.00	.00	.00	.00
15	.01	.00	.00	.05	.00	.00	.00	.00	.00	.00	.00	.00
16	.00	.00	.09	.00	.00	.00	e.00	.00	.16	.00	.00	.00
17	.00	.00	.02	.00	.00	.00	---	.00	.00	.00	.00	.00
18	.00	.00	.01	.00	.00	.00	---	.00	.00	.00	.09	.00
19	.00	.00	.00	.00	.04	.00	---	.16	.00	.72	.00	.00
20	.00	.00	.00	.00	.02	.00	---	.06	.00	.00	.00	.27
21	.02	.00	.00	.00	.04	.00	---	.00	.00	.00	.07	.31
22	.01	.00	.00	.00	.01	.00	---	.01	.06	.00	.00	.20
23	.00	.07	.00	.00	.16	.00	---	.00	.00	.00	.00	.02
24	.00	.03	.00	.00	.09	.11	---	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	.01	.01	---	.00	.00	.00	.00	.00
26	.00	.06	.00	.00	.07	.00	---	.00	.27	.04	.00	.00
27	.29	.00	.00	.00	.00	.00	---	.00	.01	.03	.00	.00
28	.09	.00	.00	.00	.00	.00	---	.00	.00	.80	.01	.00
29	.00	.01	.00	.05	---	.00	e.00	.00	.00	.01	.00	.00
30	.00	.11	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.02	---
TOTAL	0.46	0.29	0.12	0.40	0.71	0.13	---	0.31	1.45	1.79	2.10	1.27

e-Estimated.

372756103513001 LOCKWOOD CANYON RAIN GAGE, NEAR ROCK CROSSING, CO

LOCATION.--Lat 37°27'56", long 103°51'30", in NW¹/₄ NW¹/₄ sec.19, T.30 S., R.58 W., Las Animas County, Hydrologic Unit 11020010, on Pinon Canyon Maneuver Site, approximately 100 ft north of Military Supply Road 4 (revised), 5.8 mi east of Rock Crossing, 13.0 mi southeast of Houghton, and 40 mi southwest of La Junta.

PRECIPITATION RECORDS

PERIOD OF RECORD.--May 1993 to current year (seasonal records only).

GAGE.--Tipping-bucket rain gage and electronic data logger. Elevation of gage is 5,030 ft above sea level, from topographic map.

REMARKS.--Records good. Records published for period of seasonal operation only (Oct. 1-31 and Apr. 11 to Sept. 30). Daily data that are not published are either missing or of unacceptable quality.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily rainfall, 2.36 inches, May 25, 1996.

EXTREMES FOR CURRENT YEAR.--Maximum daily rainfall, 1.17 inches, July 28.

PRECIPITATION (INCHES), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	---	---	---	---	---	---	.00	.00	.00	.05	.00
2	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
3	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
4	.00	---	---	---	---	---	---	.00	.30	.14	.00	.00
5	.00	---	---	---	---	---	---	.00	.07	.00	.40	.00
6	.00	---	---	---	---	---	---	.00	.67	.01	.02	.23
7	.00	---	---	---	---	---	---	.02	.39	.00	.00	.00
8	.00	---	---	---	---	---	---	.00	.12	.00	.00	.00
9	.00	---	---	---	---	---	---	.00	.00	.00	.32	.00
10	.00	---	---	---	---	---	---	.00	.07	.00	.27	.00
11	.00	---	---	---	---	---	e.00	.00	.00	.04	.68	.00
12	.00	---	---	---	---	---	.02	.11	.00	.00	.00	.00
13	.00	---	---	---	---	---	.00	.00	.04	.00	.00	.00
14	.00	---	---	---	---	---	.00	.00	.00	.00	.00	.00
15	.00	---	---	---	---	---	.00	.00	.01	.04	.00	.00
16	.00	---	---	---	---	---	.00	.00	.04	.00	.00	.00
17	.00	---	---	---	---	---	.00	.00	.00	.00	.00	.00
18	.00	---	---	---	---	---	.00	.00	.00	.00	.01	.00
19	.00	---	---	---	---	---	.00	.18	.00	.42	.00	.00
20	.00	---	---	---	---	---	.00	.01	.00	.00	.00	.15
21	.04	---	---	---	---	---	.54	.01	.00	.00	.00	.31
22	.00	---	---	---	---	---	.02	.10	.08	.00	.00	.12
23	.00	---	---	---	---	---	.14	.00	.00	.03	.00	.03
24	.00	---	---	---	---	---	.20	.00	.00	.00	.00	.00
25	.00	---	---	---	---	---	.22	.00	.03	.00	.00	.00
26	.00	---	---	---	---	---	.00	.00	.28	.23	.00	.00
27	.33	---	---	---	---	---	.00	.00	.00	.03	.00	.00
28	.01	---	---	---	---	---	.10	.00	.00	1.17	.00	.00
29	.00	---	---	---	---	---	.01	.00	.00	.01	.00	.00
30	.00	---	---	---	---	---	.00	.02	.00	.00	.00	.00
31	e.00	---	---	---	---	---	---	.00	---	.00	.01	---
TOTAL	0.38	---	---	---	---	---	---	0.45	2.10	2.12	1.76	0.84

e-Estimated.

373315103493101 RED ROCK CANYON RAIN GAGE, AT RED ROCK ROAD, CO

LOCATION.--Lat 37°33'15", long 103°49'31", in NE¹/₄NE¹/₄ sec.6, T.29 S., R.57 W., Las Animas County, Hydrologic Unit 11020010, on Pinon Canyon Maneuver Site, approximately 150 ft west of Red Rock Road, 0.4 mi south of Military Supply Road 1 (revised), 12.2 mi southeast of Houghton, and 33 mi southwest of La Junta.

PRECIPITATION RECORDS

PERIOD OF RECORD.--October 1993 to current year. Site was part of a hydrologic study 1985-92, data published elsewhere.

GAGE.--Weighing- or tipping-bucket rain gage. Elevation of gage is 4,860 ft above sea level, from topographic map.

REMARKS.--Records good. Daily data are not published when either missing or of unacceptable quality.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily rainfall, 2.75 inches, July 19, 1993.

EXTREMES FOR CURRENT YEAR.--Maximum daily rainfall, 1.58 inches, Aug. 5.

PRECIPITATION (INCHES), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.01	.00	.00	.05	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.01	.06
3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
4	.00	.04	.00	.00	.00	.03	.03	.00	.00	.17	.00	.00
5	.00	.00	.00	.00	.00	.00	.07	.00	.00	.00	1.58	.00
6	.00	.00	.00	.02	.11	.00	.00	.00	.47	.01	.04	.05
7	.00	.00	.00	.01	.03	.00	.00	.02	.42	.00	.00	.00
8	.00	.00	.00	.05	.00	.00	.00	.01	.04	.08	.00	.00
9	.00	.00	.00	.03	.00	.00	.00	.00	.00	.00	.28	.00
10	.00	.00	.00	.00	.00	.00	.07	.00	.08	.00	.20	.00
11	.00	.00	.00	.02	.00	.00	.06	.00	.00	.02	.76	.05
12	.00	.00	.00	.06	.00	.00	.01	.00	.00	.00	.00	.00
13	.00	.00	.00	.00	.10	.00	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.15	.00	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.05	.00	.00	.00	.00	.27	.01	.00	.00
16	.00	.00	.26	.00	.00	.00	.00	.00	.00	.00	.00	.00
17	.00	.00	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.09	.00	.00	.00	.00	.00	.01	.00
19	.00	.00	.00	.00	.04	.00	.00	.16	.00	.65	.00	.00
20	.00	.00	.00	.00	.05	.00	.00	.01	.00	.01	.00	.25
21	.02	.00	.00	.00	.03	.00	.45	.00	.00	.00	.00	.26
22	.00	.00	.00	.00	.00	.00	.02	.01	.00	.00	.00	.08
23	.00	.04	.00	.00	.20	.00	.16	.00	.00	.00	.00	.00
24	.00	.00	.00	.00	.17	.10	.30	.00	.00	.00	.00	.00
25	.00	.01	.00	.00	.01	.13	.18	.00	.07	.00	.00	.00
26	.00	.04	.00	.00	.13	.00	.00	.00	.01	.08	.00	.00
27	.38	.00	.00	.00	.00	.00	.00	.00	.00	.02	.00	.00
28	.06	.01	.00	.01	.00	.00	.00	.00	.00	1.01	.00	.00
29	.00	.02	.00	.03	---	.00	.05	.00	.00	.01	.01	.00
30	.00	.15	.00	.00	---	.00	.00	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	0.46	0.31	0.28	0.43	0.96	0.26	1.40	0.22	1.36	2.07	2.94	0.75

WTR YR 1997 TOTAL 11.44

373622103490001 STAGE CANYON RAIN GAGE AT RED ROCK ROAD, CO

LOCATION (REVISED).--Lat 37°36'22", long 103°49'00", in NE¹/₄SW¹/₄ sec.17, T.28 S., R.57 W., Las Animas County, Hydrologic Unit 11020010, on Pinon Canyon Maneuver Site, approximately 80 ft east of Red Rock Road, 3.2 mi north of Military Supply Road 1, 12.5 mi east of Houghton, and 30 mi southwest of La Junta.

PRECIPITATION RECORDS

PERIOD OF RECORD.--June 1993 to current year (seasonal records only).

GAGE.--Tipping-bucket rain gage and electronic data logger. Elevation of gage is 4,940 ft above sea level, from topographic map.

REMARKS.--Records good. Records published for period of seasonal operation only (Oct. 1-30 and Apr. 9 to Sept. 30). Daily data that are not published during this period are either missing or of unacceptable quality

EXTREMES FOR PERIOD OF RECORD.--Maximum daily rainfall during period of seasonal operation, 2.42 inches, May 25, 1996.

EXTREMES FOR CURRENT YEAR.--Maximum daily rainfall during period of seasonal operation, 2.01 inches, Aug. 5.

PRECIPITATION (INCHES), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	---	---	---	---	---	---	.00	.00	.00	.07	.00
2	.00	---	---	---	---	---	---	.00	.00	.00	.01	.00
3	.00	---	---	---	---	---	---	.00	.00	.00	.00	.00
4	.00	---	---	---	---	---	---	.00	.00	.02	.01	.00
5	.00	---	---	---	---	---	---	.00	.00	.00	2.01	.00
6	.00	---	---	---	---	---	---	.00	.51	.00	.09	.05
7	.00	---	---	---	---	---	---	.03	.43	.00	.00	.00
8	.00	---	---	---	---	---	---	.00	.02	.00	.00	.00
9	.00	---	---	---	---	---	e.00	.00	.00	.00	.25	.00
10	.00	---	---	---	---	---	.00	.00	.03	.00	.19	.00
11	.00	---	---	---	---	---	.00	.00	.00	.02	1.39	.01
12	.00	---	---	---	---	---	.08	.00	.00	.00	.00	.00
13	.00	---	---	---	---	---	.00	.00	.00	.00	.00	.00
14	.00	---	---	---	---	---	.00	.00	.00	.00	.00	.00
15	.00	---	---	---	---	---	.00	.00	.24	.00	.00	.00
16	.00	---	---	---	---	---	.00	.00	.01	.00	.00	.00
17	.00	---	---	---	---	---	.00	.00	.00	.00	.00	.00
18	.00	---	---	---	---	---	.00	.02	.00	.00	.07	.00
19	.00	---	---	---	---	---	.00	.14	.00	.40	.01	.00
20	.00	---	---	---	---	---	.00	.00	.00	.01	.00	.44
21	.01	---	---	---	---	---	.49	.00	.00	.00	.01	.27
22	.00	---	---	---	---	---	.03	.03	.00	.00	.00	.04
23	.00	---	---	---	---	---	.19	.00	.00	.00	.00	.00
24	.00	---	---	---	---	---	.60	.00	.04	.00	.00	.00
25	.00	---	---	---	---	---	.13	.00	.06	.00	.00	.00
26	.02	---	---	---	---	---	.00	.00	.05	.02	.00	.00
27	.31	---	---	---	---	---	.00	.00	.00	.01	.00	.00
28	.01	---	---	---	---	---	.05	.00	.00	1.17	.00	.00
29	.00	---	---	---	---	---	.04	.00	.00	.00	.01	.00
30	e.00	---	---	---	---	---	.00	.02	.00	.00	.00	.00
31	---	---	---	---	---	---	---	.00	---	.00	.00	---
TOTAL	---	---	---	---	---	---	---	0.24	1.39	1.65	4.12	0.81

e-Estimated.

3723210355201 BEAR SPRINGS HILLS RAIN GAGE NEAR HOUGHTON, CO

LOCATION.--Lat 37°32'32", long 103°55'52", in SW¹/₄SW¹/₄ 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 3 (revised), 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 current year. Site was part of a hydrologic study 1985-92, data published elsewhere.

GAGE.--Weighing- or tipping-bucket rain gage with electronic data logger. Elevation of gage is 5,200 ft above sea level, from topographic map.

REMARKS.--Records good except Oct. 1-30, which are fair, and Apr. 16 to July 15, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily rainfall (revised), 2.82 inches, May 3, 1987.

EXTREMES FOR CURRENT YEAR.--Maximum daily rainfall, 1.30 inches, June 6.

PRECIPITATION (INCHES), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
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	.04	.09
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.04
3	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
4	.00	.02	.00	.00	.00	.04	.09	.00	.00	.35	.00	.00
5	.00	.00	.00	.00	.00	.00	.08	.00	.00	.00	.96	.00
6	.00	.00	.00	.07	.17	.00	.00	.00	1.30	.10	.06	.05
7	.00	.00	.00	.01	.01	.00	.00	.02	.48	.00	.00	.00
8	.00	.00	.00	.07	.00	.00	.00	.00	.13	.00	.00	.00
9	.00	.00	.00	.02	.00	.00	.00	.00	.00	.00	.82	.00
10	.00	.00	.00	.02	.00	.00	.18	.00	.10	.00	.11	.00
11	.00	.00	.00	.02	.00	.00	.11	.00	.00	.08	.86	.01
12	.00	.00	.00	.06	.00	.00	.00	.10	.00	.00	.00	.00
13	.00	.00	.00	.00	.15	.00	.00	.00	.01	.00	.00	.00
14	.00	.00	.00	.09	.00	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.02	.00	.00	.00	.00	.00	.00	.00	.00
16	.00	.00	.27	.03	.00	.00	.00	.00	.04	.00	.00	.00
17	.00	.00	.02	.00	.00	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.06	.00	.00	.03	.00	.00	.05	.00
19	.00	.00	.00	.00	.03	.00	.00	.18	.00	.06	.00	.00
20	.00	.00	.00	.00	.09	.00	.00	.02	.00	.10	.00	.29
21	.02	.00	.00	.00	.05	.00	.56	.00	.00	.00	.01	.22
22	.00	.00	.00	.00	.00	.00	.16	.00	.04	.00	.00	.08
23	.00	.06	.00	.00	.22	.00	.23	.00	.00	.00	.00	.00
24	.00	.01	.00	.00	.13	.26	.34	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	.00	.08	.29	.00	.01	.01	.00	.00
26	.00	.04	.00	.00	.12	.00	.00	.00	.21	.06	.00	.00
27	.23	.00	.00	.00	.02	.00	.00	.00	.00	.01	.00	.00
28	.00	.01	.00	.00	.00	.00	.07	.00	.00	.83	.00	.00
29	.00	.03	.00	.00	---	.00	.00	.00	.00	.01	.00	.00
30	.00	.16	.00	.00	---	.00	.00	.01	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.01	---
TOTAL	0.25	0.33	0.29	0.41	1.05	0.38	2.11	0.36	2.32	1.61	2.92	0.78

WTR YR 1997 TOTAL 12.81

373823103465601 BENT CANYON RAIN GAGE ABOVE STAGE CANYON NEAR DELHI, CO

LOCATION (REVISED).--Lat 37°38'23", long 103°46'56", in SW¼NW¼ sec.3, T.28 S., R.57 W., Las Animas County, Hydrologic Unit 11020010, on Pinon Canyon Maneuver 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 current year. Site was part of a hydrologic study 1985-92, data published elsewhere.

GAGE.--Weighing- or tipping-bucket rain gage and electronic data logger. Elevation of gage is 4,860 ft above sea level, from topographic map.

REMARKS.--Records good. Daily data are not published when either missing or of unacceptable quality.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily rainfall (revised), 2.55 inches, May 3, 1987.

EXTREMES FOR CURRENT YEAR.--Maximum daily rainfall, 2.02 inches, Aug. 11.

PRECIPITATION (INCHES), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
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	.05	.00
2	.00	.00	.02	.00	.00	.00	.00	.00	.00	.00	.04	.00
3	.00	.01	.00	.01	.00	.00	.00	.00	.00	.00	.00	.00
4	.00	.06	.00	.00	.00	.03	.02	.00	.00	.19	.01	.00
5	.00	.00	.00	.00	.00	.00	.16	.00	.00	.00	1.45	.00
6	.00	.00	.00	.03	.16	.00	.00	.00	.34	.00	.11	.13
7	.00	.00	.00	.01	.05	.00	.00	.01	.36	.00	.00	.00
8	.00	.00	.00	.06	.00	.00	.00	.00	.00	.00	.00	.00
9	.00	.00	.00	.01	.00	.00	.00	.00	.00	.00	.21	.00
10	.00	.00	.00	.01	.00	.00	.10	.00	.01	.00	.44	.00
11	.00	.00	.00	.04	.00	.00	.08	.00	.00	.02	2.02	.13
12	.00	.00	.00	.05	.00	.00	.00	.01	.00	.00	.01	.00
13	.00	.00	.00	.00	.08	.00	.00	.00	.00	.00	.00	.00
14	.01	.00	.01	.14	.00	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	.02	.03	.00	.00	.00	.00	.53	.00	.00	.00
16	.00	.00	.33	.02	.00	.00	.00	.00	.01	.00	.00	.00
17	.00	.00	.03	.00	.00	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.05	.00	.00	.02	.00	.00	.22	.00
19	.00	.00	.00	.00	.04	.00	.00	.16	.00	.44	.00	.00
20	.00	.00	.00	.03	.06	.00	.00	.00	.00	.01	.00	.39
21	.02	.00	.00	.01	.07	.00	.51	.00	.00	.01	.00	.28
22	.00	.00	.00	.00	.00	.00	.02	.02	.00	.00	.00	.03
23	.00	.05	.00	.00	.21	.00	.17	.00	.00	.00	.00	.01
24	.00	.00	.00	.00	.15	.17	.62	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	.00	.12	.10	.00	.01	.08	.00	.00
26	.01	.03	.00	.00	.18	.00	.00	.00	.07	.00	.00	.00
27	.32	.00	.00	.00	.02	.00	.00	.00	.00	.02	.00	.00
28	.28	.00	.00	.00	.00	.00	.02	.00	.00	1.04	.00	.00
29	.00	.00	.00	.00	---	.00	.08	.00	.00	.08	.08	.00
30	.00	.19	.00	.00	---	.00	.01	.00	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	0.64	0.34	0.41	0.45	1.07	0.32	1.89	0.22	1.33	1.89	4.64	0.97

WTR YR 1997 TOTAL 14.17

3737061033901 IRON CANYON RAIN GAGE, NEAR ROURKE RANCH, CO

LOCATION (REVISED).--Lat 37°37'06", long 103°39'01", in SE¹/₄SE¹/₄ sec.11, T.28 S., R.56 W., Las Animas County, Hydrologic Unit 11020010, on Pinon Canyon Maneuver Site, approximately 0.2 mi west of Rourke Road, 1.8 mi north of Rourke Ranch, 15.2 mi southeast of Ayer, and 27 mi southwest of La Junta.

PRECIPITATION RECORDS

PERIOD OF RECORD.--June 1993 to current year (seasonal records only).

GAGE.--Tipping-bucket rain gage and electronic data logger. Elevation of gage is 4,680 ft above sea level, from topographic map.

REMARKS.--Records good. Records published for period of seasonal record only (Oct. 1-30 and Apr. 9 to Sept. 30). Daily data that are not published during this period are either missing or of unacceptable quality.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily rainfall during period of seasonal operation, 2.68 inches, May 17, 1995.

EXTREMES FOR CURRENT YEAR.--Maximum daily rainfall during period of seasonal operation, 1.67 inches, Aug. 5.

PRECIPITATION (INCHES), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	---	---	---	---	---	---	.00	.00	---	.05	.00
2	.00	---	---	---	---	---	---	.00	.00	---	.00	.00
3	.00	---	---	---	---	---	---	.00	.00	---	.00	.00
4	.00	---	---	---	---	---	---	.00	.00	---	.29	.00
5	.00	---	---	---	---	---	---	.00	.00	---	1.67	.00
6	.00	---	---	---	---	---	---	.00	e.00	---	.04	.34
7	.00	---	---	---	---	---	---	.03	---	---	.00	.00
8	.00	---	---	---	---	---	---	.00	---	---	.00	.00
9	.00	---	---	---	---	---	e.00	.00	---	---	.46	.00
10	.00	---	---	---	---	---	.00	.00	---	---	.38	.00
11	.00	---	---	---	---	---	.00	.00	---	---	.80	.03
12	.00	---	---	---	---	---	.00	.01	---	---	.00	.00
13	.00	---	---	---	---	---	.00	.00	---	---	.00	.00
14	.00	---	---	---	---	---	.00	.00	---	e.00	.00	.00
15	.00	---	---	---	---	---	.00	.00	---	e.00	.00	.00
16	.00	---	---	---	---	---	.00	.00	---	.00	.00	.00
17	.00	---	---	---	---	---	.00	.00	---	.00	.00	.00
18	.00	---	---	---	---	---	.00	.00	---	.00	.07	.00
19	.00	---	---	---	---	---	.00	.11	---	.17	.00	.00
20	.00	---	---	---	---	---	.00	.00	---	.02	.00	.29
21	.00	---	---	---	---	---	.46	.00	---	.00	.00	.37
22	.00	---	---	---	---	---	.00	.19	---	.00	.00	.01
23	.00	---	---	---	---	---	.11	.00	---	.00	.00	.00
24	.00	---	---	---	---	---	.43	.00	---	.00	.00	.00
25	.00	---	---	---	---	---	.10	.00	---	.02	.00	.00
26	.15	---	---	---	---	---	.00	.00	---	.00	.00	.00
27	.37	---	---	---	---	---	.00	.01	---	.12	.00	.00
28	.02	---	---	---	---	---	.04	.00	---	.50	.00	.00
29	.00	---	---	---	---	---	.17	.00	---	.03	.00	.00
30	e.00	---	---	---	---	---	.01	.00	---	.00	.00	.20
31	---	---	---	---	---	---	---	.00	---	.00	.00	---
TOTAL	---	---	---	---	---	---	---	0.35	---	---	3.76	1.24

e-Estimated.

372959104092201 CANTONMENT RAIN GAGE NEAR CEMETERY, AT SIMPSON, CO

LOCATION.--Lat 37°29'59", long 104°09'22", in SE¹/₄SE¹/₄ 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 (revised), 0.1 mi east of Simpson Cemetery, 0.4 mi east of Highway 350, and 32 mi northeast of Trinidad.

PRECIPITATION RECORDS

PERIOD OF RECORD.--July 1993 to current year.

GAGE.--Weighing- or tipping-bucket rain gage and electronic data logger. Elevation of gage is 5,630 ft above sea level, from topographic map.

REMARKS.--Records good. Daily data are not published when either missing or of unacceptable quality.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily rainfall, 1.41 inches, Sept. 9, 1995.

EXTREMES FOR CURRENT YEAR.--Maximum daily rainfall, 1.09 inches, Aug. 1.

PRECIPITATION (INCHES), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
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	1.09	.00
2	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	.00	.00	.00	.12	.00	.00	.00
4	.00	.08	.00	.00	.00	.00	.03	.00	.07	.01	.07	.00
5	.00	.00	.00	.09	.00	.00	.08	.00	.00	.00	.35	.00
6	.00	.00	.01	.08	.17	.00	.00	.00	.44	.00	.13	.03
7	.00	.00	.02	.01	.00	.00	.00	.03	.14	.00	.00	.00
8	.00	.00	.00	.06	.00	.00	.00	.01	.05	.00	.00	.00
9	.00	.00	.00	.02	.00	.00	.00	.00	.01	.00	.58	.00
10	.00	.00	.00	.00	.00	.00	.55	.00	.18	.00	.16	.00
11	.00	.00	.00	.04	.00	.00	.11	.01	.00	.13	.87	.12
12	.00	.00	.00	.07	.01	.00	.00	.05	.00	.00	.00	.00
13	.00	.00	.00	.01	.22	.00	.00	.00	.00	.00	.00	.00
14	.00	.00	.00	.16	.00	.00	.00	.00	.00	.00	.00	.00
15	.00	.00	.00	.04	.00	.00	.00	.00	.00	.00	.00	.00
16	.00	.01	.30	.01	.00	.00	.00	.00	.14	.00	.00	.00
17	.00	.03	.06	.00	.00	.00	.00	.00	.00	.00	.00	.00
18	.00	.00	.00	.00	.02	.00	.00	.03	.00	.00	.06	.00
19	.00	.00	.00	.00	.00	.00	.00	.15	.00	.09	.00	.00
20	.00	.00	.00	.00	.11	.00	.00	.00	.00	.00	.00	.24
21	.07	.00	.00	.00	.03	.00	.29	.00	.00	.00	.38	.20
22	.02	.00	.00	.00	.00	.00	.07	.02	.09	.00	.00	.10
23	.00	.11	.00	.00	.21	.00	.09	.02	.00	.00	.00	.01
24	.00	.00	.00	.00	.16	.26	.41	.00	.00	.00	.00	.00
25	.00	.00	.00	.00	.00	.00	.36	.00	.00	.00	.00	.00
26	.00	.04	.00	.00	.10	.00	.00	.00	.18	.03	.00	.00
27	.26	.00	.00	.00	.00	.00	.00	.00	.00	.01	.00	.00
28	.07	.00	.00	.00	.00	.00	.00	.00	.00	.85	.00	.00
29	.00	.04	.00	.03	---	.00	.00	.00	.00	.12	.01	.00
30	.00	.21	.00	.00	---	.00	.00	.03	.00	.00	.00	.00
31	.00	---	.00	.00	---	.00	---	.00	---	.01	.01	---
TOTAL	0.42	0.52	0.39	0.62	1.03	0.26	1.99	0.35	1.42	1.25	3.71	0.70
CAL YR 1996	TOTAL 10.86											
WTR YR 1997	TOTAL 12.66											

SUPPLEMENTAL WATER-QUALITY DATA FOR GAGING STATIONS

MISCELLANEOUS STATION ANALYSES

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)
06614800 MICHIGAN RIVER NEAR CAMERON PASS, CO (LAT 40 29 46N LONG 105 51 52W)									
OCT 1996					MAY 1997				
02...	1015	1.9	46	3.5	14...	1300	2.4	42	0.5
NOV					JUN				
13...	1510	0.72	53	1.5	10...	1535	20	40	1.0
JAN 1997					JUL				
07...	1440	0.44	60	0.5	09...	1530	11	59	7.0
MAR					AUG				
06...	1415	0.33	54	1.5	28...	1050	2.8	49	8.5
APR									
23...	1435	0.42	49	1.0					
06697100 TARRYALL CREEK BELOW PARK GULCH NEAR COMO, CO (LAT 39 16 54N LONG 105 47 11W)									
APR 1997					JUL 1997				
17...	1130	7.8	270	9.5	25...	0850	29	199	12.5
MAY					AUG				
21...	0910	53	193	5.5	13...	1120	32	196	10.5
JUN					SEP				
10...	0920	144	234	7.5	18...	0750	16	213	9.0
06699005 TARRYALL CREEK BELOW ROCK CREEK NEAR JEFFERSON, CO (LAT 39 17 13N LONG 105 41 43W)									
OCT 1996					JUN 1997				
18...	1255	22	160	2.5	13...	1007	328	171	9.0
NOV					JUL				
13...	1215	22	157	0.5	10...	1108	115	143	12.5
DEC					AUG				
03...	1315	10	166	0.0	06...	1351	142	154	13.5
APR 1997					SEP				
07...	1215	18	203	1.0	05...	1143	110	220	14.0
MAY									
13...	0940	89	166	7.5					
06709000 PLUM CREEK NEAR SEDALIA, CO (LAT 39 26 18N LONG 104 58 57W)									
OCT 1996					MAY 1997				
03...	1225	2.2	395	18.5	16...	1238	38	270	21.5
03...	1237	2.2	395	18.5	JUN				
NOV					12...	1528	58	251	22.0
19...	1140	8.3	457	9.5	JUL				
JAN 1997					08...	1151	3.3	348	24.5
07...	1400	8.5	465	0.0	AUG				
MAR					15...	1246	32	306	24.5
05...	1310	11	492	7.5	SEP				
APR					10...	0950	11	384	18.5
18...	1420	16	374	16.0					
06709530 PLUM CREEK AT TITAN RD NEAR LOUVIERS, CO (LAT 39 30 27N LONG 105 01 23W)									
NOV 1996					JUN 1997				
08...	1420	2.1	557	8.5	11...	1235	58	278	22.0
DEC					19...	1028	40	303	21.5
13...	1130	6.2	491	4.5	26...	1440	16	312	27.0
JAN 1997					JUL				
07...	1520	1.5	510	0.5	01...	1422	2.0	347	25.5
MAR					AUG				
05...	1510	9.3	483	8.0	15...	1054	28	325	20.0
APR					SEP				
23...	1310	17	403	18.5	10...	1212	7.1	394	24.0
MAY									
12...	1300	53	80	18.5					
06710247 SOUTH PLATTE RIVER BELOW UNION AVE, AT ENGLEWOOD, CO (LAT 39 37 58N LONG 105 00 54W)									
OCT 1996					JUN 1997				
03...	1515	12	670	19.5	02...	1306	366	485	20.0
JAN 1997					JUL				
15...	1535	14	1170	0.0	02...	1415	432	313	21.0
MAR					AUG				
18...	1000	46	571	7.5	08...	1348	805	430	23.0
APR					08...	1530	703	406	23.0
14...	1500	63	577	11.0	SEP				
MAY					04...	1200	88	554	22.5
19...	1122	174	750	14.0					

MISCELLANEOUS STATION ANALYSES--Continued

DATE	TIME	DIS-CHARGE, CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	DATE	TIME	DIS-CHARGE, CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)
06710385 BEAR CREEK ABOVE EVERGREEN, CO (LAT 39 37 58N LONG 105 19 59W)									
NOV 1996					JUN 1997				
12...	1033	11	65	0.5	02...	1108	109	46	10.5
DEC					JUL				
04...	1303	13	75	0.0	11...	1240	64	53	12.0
FEB 1997					25...	0945	47	54	13.5
21...	1242	10	81	0.0	AUG				
APR					21...	1008	76	62	11.0
15...	1200	19	256	2.5	SEP				
MAY					08...	1336	67	67	13.0
06...	1045	79	77	6.0					
06710605 BEAR CREEK ABOVE BEAR CREEK LAKE NEAR MORRISON, CO (LAT 39 39 08N LONG 105 10 23W)									
OCT 1996					JUN 1997				
23...	1430	20	234	6.0	23...	1345	186	101	20.0
JAN 1997					JUL				
14...	1440	18	291	0.0	22...	1118	33	126	17.0
FEB					AUG				
20...	1145	17	437	2.0	21...	1120	75	128	15.0
APR					SEP				
03...	1547	2.3	773	14.0	08...	1436	67	130	17.0
MAY									
05...	1453	118	190	13.0					
06711545 LITTLE DRY CREEK AT GREENWOOD VILLAGE, CO (LAT 39 37 02N LONG 104 57 08W)									
OCT 1996					JUN 1997				
25...	1024	3.5	1060	6.0	02...	1250	3.7	750	20.0
DEC					JUL				
09...	1507	3.6	1860	5.5	15...	1055	6.3	418	19.0
JAN 1997					29...	1020	23	772	19.0
14...	1315	2.0	1970	0.5	AUG				
FEB					21...	1430	5.7	1520	21.5
20...	1025	3.8	1380	2.5	SEP				
APR					11...	1115	4.7	1070	17.5
01...	1015	2.8	1770	10.0					
MAY									
05...	1250	3.8	1650	17.0					
06712000 CHERRY CREEK NEAR FRANKTOWN, CO (LAT 39 21 21N LONG 104 45 46W)									
OCT 1996					JUN 1997				
24...	1225	3.3	220	7.5	30...	1152	2.4	200	21.0
DEC					JUL				
09...	1215	4.5	218	2.0	21...	1145	1.4	198	20.5
MAR 1997					AUG				
11...	1104	10	192	5.0	27...	1205	9.7	218	19.0
APR					SEP				
16...	1056	7.4	226	8.5	11...	1330	3.6	208	21.0
MAY									
28...	1144	3.0	200	16.5					
393109104464500 CHERRY CREEK NEAR PARKER, CO (LAT 39 31 09N LONG 104 46 45W)									
OCT 1996					MAY 1997				
24...	1150	2.3	647	15.0	20...	1250	3.3	636	17.5
DEC					JUN				
09...	1408	1.1	627	9.5	04...	1102	2.3	668	17.0
JAN 1997					30...	1318	2.2	623	20.0
15...	1325	1.5	673	7.5	JUL				
FEB					21...	1240	3.0	643	20.5
14...	1119	3.1	646	7.5	31...	1005	2.5	661	19.0
MAR					AUG				
03...	1155	10	533	5.5	12...	1000	42	266	15.5
APR					21...	1255	5.1	555	19.5
01...	0940	5.7	502	7.5	SEP				
16...	1200	7.0	495	9.0	11...	1426	3.9	622	21.0
06713000 CHERRY CREEK BELOW CHERRY CREEK LAKE, CO (LAT 39 39 12N LONG 104 51 41W)									
FEB 1997					AUG 1997				
28...	1140	20	1060	4.0	14...	1350	35	820	17.0
APR									
03...	1430	7.3	1040	10.5					

SUPPLEMENTAL WATER-QUALITY DATA FOR GAGING STATIONS

MISCELLANEOUS STATION ANALYSES--Continued

DATE	TIME	DIS- CHARGE, CUBIC FEET PER SECOND (00061)	SPE- INST. CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	DATE	TIME	DIS- CHARGE, CUBIC FEET PER SECOND (00061)	SPE- INST. CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)
06713300 CHERRY CREEK AT GLENDALE, CO (LAT 39 42 22N LONG 104 56 13W)									
OCT 1996					MAY 1997				
10...	1030	15	1220	16.5	12...	1212	13	1170	20.0
16...	1510	10	1440	15.5	14...	1330	289	1100	15.0
NOV					14...	1355	340	1050	15.0
12...	1222	6.8	1510	8.0	JUN				
DEC					16...	1411	18	730	16.0
09...	1032	5.5	550	6.0	JUL				
JAN 1997					15...	1206	15	1130	23.5
14...	1212	4.4	1400	3.0	30...	1325	37	750	24.5
FEB					AUG				
14...	1020	4.1	1800	4.5	14...	1450	40	720	18.0
MAR					SEP				
11...	0906	20	1160	5.5	09...	1250	18	1170	21.0
APR									
10...	1300	29	1150	5.0					
25...	1200	109	558	8.0					
06713500 CHERRY CREEK AT DENVER, CO (LAT 39 44 58N LONG 105 00 08W)									
OCT 1996					MAY 1997				
25...	1210	19	982	11.0	12...	1120	14	1120	17.0
NOV					14...	1600	447	1040	13.0
20...	1112	11	1280	12.5	JUL				
FEB 1997					09...	1310	22	1000	22.0
13...	1330	9.3	1350	10.0	AUG				
APR					08...	1204	57	970	22.0
01...	1400	8.7	1230	14.0	26...	1125	67	956	21.5
25...	1100	124	611	8.0	SEP				
					16...	1235	23	1080	21.5
06714215 SOUTH PLATTE RIVER AT 64TH AVE. COMMERCE CITY, CO (LAT 39 48 44N LONG 104 57 28W)									
OCT 1996					MAY 1997				
23...	1140	13	1320	12.0	21...	1032	16	1090	18.0
DEC					JUN				
11...	0958	9.7	1300	7.0	25...	1010	315	396	18.0
FEB 1997					AUG				
12...	1122	16	1650	7.0	20...	1027	115	653	19.0
MAR					SEP				
25...	1120	9.5	1480	10.0	16...	1315	186	787	20.0
APR									
28...	1135	20	688	8.5					
394839104570300 SAND CREEK AT MOUTH NEAR COMMERCE CITY, CO (LAT 39 48 39N LONG 104 57 03W)									
OCT 1996					MAY 1997				
17...	1119	18	1510	8.0	21...	1145	60	777	18.0
DEC					JUL				
11...	1052	17	1690	7.0	09...	1030	165	554	19.0
FEB 1997					AUG				
12...	1105	19	1820	5.0	18...	1250	146	682	20.5
MAR					26...	1040	176	365	19.5
25...	1300	27	1510	10.5	SEP				
APR					18...	1325	146	386	20.0
28...	1250	68	550	9.0					
394308105413800 CLEAR CREEK ABOVE GEORGETOWN RESERVOIR NEAR GEORGETOWN, CO (LAT 39 43 08N LONG 105 41 38W)									
JUL 1997					SEP 1997				
03...	1150	335	71	7.0	19...	1030	56	111	9.5
AUG									
08...	0738	154	85	7.0					
394359105411900 CLEAR CREEK BELOW GEORGETOWN RESERVOIR NEAR GEORGETOWN, CO (LAT 39 43 59N LONG 105 41 19W)									
JUL 1997					SEP 1997				
08...	1300	278	97	9.0	19...	0940	57	111	10.5

MISCELLANEOUS STATION ANALYSES--Continued

DATE	TIME	DIS-CHARGE, CUBIC FEET PER SECOND (00061)	SPE-INST. CIFIC CON-DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	DATE	TIME	DIS-CHARGE, CUBIC FEET PER SECOND (00061)	SPE-INST. CIFIC CON-DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)
06715000 CLEAR CREEK ABOVE WEST FORK CLEAR CREEK NEAR EMPIRE, CO (LAT 39 45 07N LONG 105 39 41W)									
OCT 1996					JUN 1997				
03...	0930	53	133	8.0	05...	1010	513	73	7.0
NOV					JUL				
06...	0805	26	145	0.5	09...	0746	262	76	8.0
APR 1997					AUG				
09...	0852	22	243	1.5	07...	0820	182	87	9.0
MAY					SEP				
07...	0728	61	262	8.0	04...	0905	96	110	12.5
06716100 WEST FORK CLEAR CREEK ABOVE MOUTH NEAR EMPIRE, CO (LAT 39 45 32N LONG 105 39 34W)									
OCT 1996					JUN 1997				
03...	1035	32	230	7.0	11...	0750	475	88	4.0
JAN 1997					JUL				
15...	0950	14	281	0.0	09...	1040	258	90	7.5
APR					AUG				
09...	0954	17	395	1.0	07...	0923	115	115	7.5
MAY					SEP				
07...	0831	50	316	4.0	04...	1020	54	187	11.5
06716500 CLEAR CREEK NEAR LAWSON, CO (LAT 39 45 57N LONG 105 37 32W)									
OCT 1996					JUN 1997				
03...	1150	78	175	8.0	11...	0940	923	74	4.0
NOV					JUL				
06...	1035	45	195	0.5	09...	1111	508	83	9.0
MAR 1997					AUG				
10...	1145	23	324	2.0	07...	1018	293	101	9.5
APR					SEP				
09...	1033	37	309	2.0	04...	1115	140	141	13.0
MAY									
07...	1000	115	286	7.0					
06717400 CHICAGO CREEK BELOW DEVILS CANYON NEAR IDAHO SPRINGS, CO (LAT 39 42 58N LONG 105 34 15W)									
OCT 1996					JUN 1997				
03...	1312	9.8	66	8.0	12...	0937	119	42	--
NOV					AUG				
05...	1340	11	62	1.0	07...	1220	38	58	9.5
JAN 1997					SEP				
15...	1100	5.5	34	0.0	04...	1315	18	61	11.5
MAR									
10...	1320	5.0	75	1.5					
MAY									
06...	1243	21	79	6.0					
06718300 CLEAR CREEK ABOVE JOHNSON GULCH NEAR IDAHO SPRINGS, CO (LAT 39 44 47N LONG 105 26 08W)									
OCT 1996					MAY 1997				
04...	0720	124	180	7.0	07...	1241	198	255	9.0
NOV					JUL				
06...	1210	59	228	1.5	11...	0844	635	93	9.0
MAR 1997					AUG				
07...	1035	38	336	0.0	07...	1345	452	107	13.0
11...	1315	46	319	5.5	SEP				
13...	1300	46	326	3.0	04...	1340	248	61	11.5
25...	0940	46	309	0.0					
APR									
04...	1102	70	300	4.5					
29...	1315	117	293	6.5					
06718550 NORTH CLEAR CREEK ABOVE MOUTH NEAR BLACKHAWK, CO (LAT 39 44 56N LONG 105 23 57W)									
OCT 1996					MAY 1997				
04...	0840	4.6	441	7.5	06...	1353	39	269	10.5
NOV					30...	1034	78	114	--
05...	1400	3.1	478	6.5	JUL				
MAR 1997					11...	1110	19	225	13.0
10...	1440	3.9	542	6.0	AUG				
APR					07...	1358	16	265	18.0
09...	1336	7.0	435	8.5	SEP				
					04...	1500	6.9	329	18.5

SUPPLEMENTAL WATER-QUALITY DATA FOR GAGING STATIONS

MISCELLANEOUS STATION ANALYSES--Continued

DATE	TIME	DIS- CHARGE, CUBIC FEET PER SECOND (00061)	SPE- INST. CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	DATE	TIME	DIS- CHARGE, CUBIC FEET PER SECOND (00061)	SPE- INST. CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)
06719505 CLEAR CREEK AT GOLDEN, CO (LAT 39 45 11N LONG 105 14 05W)									
OCT 1996					MAY 1997				
17...	1457	73	211	4.0	21...	1300	584	129	9.0
NOV					JUN				
12...	1454	52	260	3.5	13...	1345	1440	98	9.0
JAN 1997					JUL				
07...	1127	31	389	0.0	03...	1410	788	95	12.5
MAR					AUG				
04...	1110	41	404	0.5	08...	1045	380	120	12.0
APR					SEP				
01...	1440	72	330	6.5	04...	1105	205	149	15.0
06720820 BIG DRY CREEK AT WESTMINSTER, CO (LAT 39 54 20N LONG 105 02 04W)									
NOV 1996					MAY 1997				
20...	1250	2.0	1750	8.0	05...	1625	7.8	1050	20.5
JAN 1997					JUN				
02...	1117	1.5	1720	3.5	05...	1031	54	343	13.0
FEB					JUL				
05...	1450	1.3	1930	3.5	07...	1537	83	287	18.5
MAR					AUG				
07...	1355	1.3	1990	9.0	11...	1200	11	937	19.5
APR					SEP				
09...	1400	2.6	1360	8.5	05...	1223	22	534	20.5
06720990 BIG DRY CREEK AT MOUTH NEAR FORT LUPTON, CO (LAT 40 04 09N LONG 104 49 52W)									
OCT 1996					MAY 1997				
17...	1330	13	1500	10.5	01...	1210	30	1290	12.5
NOV					JUN				
25...	1205	22	1310	7.0	03...	1435	51	744	21.5
JAN 1997					JUL				
15...	1215	--	1380	0.5	02...	1020	20	670	16.5
22...	1018	23	--	--	AUG				
FEB					19...	1510	46	1150	21.0
27...	1120	24	1460	3.0	SEP				
MAR					08...	1045	71	988	19.0
18...	1130	20	1430	11.0					
APR									
08...	1153	60	1130	6.0					
06721500 NORTH ST. VRAIN CREEK NEAR ALLENS PARK, CO (LAT 40 13 08N LONG 105 31 40W)									
OCT 1996					MAY 1997				
22...	1110	22	21	0.0	12...	1118	65	22	4.5
NOV					JUN				
12...	1017	13	22	1.5	04...	1859	472	--	--
JAN 1997					JUL				
13...	1245	9.5	27	0.0	11...	1155	159	13	9.0
MAR					SEP				
10...	1050	13	27	0.0	08...	1620	45	16	14.0
APR									
08...	1055	13	25	2.0					
06725450 ST. VRAIN CREEK BELOW LONGMONT, CO (LAT 40 09 29N LONG 105 00 53W)									
OCT 1996					JUN 1997				
08...	1135	63	1420	14.5	12...	1036	1530	154	11.0
NOV					JUL				
14...	1420	51	1380	7.0	16...	1435	177	1160	23.0
JAN 1997					AUG				
10...	1335	42	1400	1.0	19...	1241	116	959	19.0
MAR					SEP				
07...	1240	36	1650	10.0	12...	1245	117	1160	21.5
APR					30...	1030	165	908	17.5
08...	1538	57	1010	6.5					
MAY									
02...	1230	334	550	8.5					

MISCELLANEOUS STATION ANALYSES--Continued

DATE	TIME	DIS- CHARGE, CUBIC FEET PER SECOND (00061)	SPE- INST. CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	DATE	TIME	DIS- CHARGE, CUBIC FEET PER SECOND (00061)	SPE- INST. CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)
06730200 BOULDER CREEK AT NORTH 75TH STREET NEAR BOULDER, CO (LAT 40 03 06N LONG 105 10 42W)									
OCT 1996					MAY 1997				
08...	1410	101	679	18.0	16...	1110	147	585	15.0
NOV					JUN				
14...	1110	37	465	17.0	25...	1140	782	267	14.5
FEB 1997					JUL				
12...	1405	35	862	13.0	22...	1324	208	597	22.0
MAR					AUG				
26...	1215	58	764	4.5	20...	1455	67	773	21.5
APR					SEP				
30...	1340	280	578	11.5	12...	1002	108	720	21.5
06730400 COAL CREEK NEAR LOUISVILLE, CO (LAT 39 58 34N LONG 105 07 00W)									
JUL 1997					SEP 1997				
03...	1110	8.3	229	16.5	08...	1220	2.0	933	19.5
28...	1244	2.2	600	18.0					
AUG									
07...	1137	9.5	502	19.0					
20...	1151	4.6	823	19.0					
06730500 BOULDER CREEK AT MOUTH, NEAR LONGMONT, CO (LAT 40 09 08N LONG 105 00 52W)									
OCT 1996					MAY 1997				
08...	1245	102	588	15.0	01...	1415	340	485	10.0
NOV					JUN				
14...	1350	53	657	6.0	11...	1405	1060	189	14.5
JAN 1997					JUL				
10...	1144	55	519	0.0	16...	1100	4.4	780	22.5
MAR					AUG				
07...	1050	62	618	7.0	18...	1515	12	844	25.5
APR					SEP				
08...	1244	70	690	5.5	12...	1120	22	612	21.5
06746095 JOE WRIGHT CREEK ABOVE JOE WRIGHT RESERVOIR, CO (LAT 40 32 24N LONG 105 52 56W)									
OCT 1996					MAY 1997				
01...	1715	8.7	54	6.5	14...	1515	8.5	57	0.0
NOV					JUN				
14...	1230	2.2	63	0.5	11...	0945	96	35	2.5
JAN 1997					JUL				
08...	1100	1.4	72	0.0	09...	1330	46	44	9.0
MAR					AUG				
07...	1000	0.40	79	0.0	27...	1525	11	53	14.5
APR									
24...	1040	1.2	79	0.0					
06746110 JOE WRIGHT CREEK BELOW JOE WRIGHT RESERVOIR, CO (LAT 40 33 43N LONG 105 52 09W)									
OCT 1996					APR 1997				
02...	1134	0.94	44	3.0	24...	1210	4.5	61	1.5
NOV					JUN				
14...	1230	2.0	46	1.0	11...	1140	18	47	5.0
JAN 1997					18...	1155	102	44	4.0
08...	1300	1.9	45	1.0	AUG				
MAR					27...	1320	77	35	8.0
07...	1205	1.9	53	1.5					
07079195 EAST FORK ARKANSAS RIVER AT HWY 91 NEAR LEADVILLE, CO (LAT 39 17 09N LONG 106 16 45W)									
OCT 1996					APR 1997				
04...	0750	17	184	3.0	02...	0935	7.8	207	1.5
NOV					MAY				
06...	0825	12	190	0.0	07...	0915	28	194	3.5
DEC					JUN				
03...	1345	12	204	0.0	04...	1100	310	100	5.5
JAN 1997					JUL				
08...	1400	8.0	158	0.0	02...	0930	143	112	5.0
FEB					AUG				
05...	1315	6.8	204	0.0	06...	0840	73	120	7.5
MAR					SEP				
05...	1525	8.5	202	0.0	03...	1000	35	152	10.0

SUPPLEMENTAL WATER-QUALITY DATA FOR GAGING STATIONS

MISCELLANEOUS STATION ANALYSES--Continued

DATE	TIME	DIS- CHARGE, CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	DATE	TIME	DIS- CHARGE, CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)
07079300 EAST FORK ARKANSAS RIVER AT US HWY 24, NEAR LEADVILLE, CO (LAT 39 16 21N LONG 106 18 21W)									
NOV 1996					MAY 1997				
06...	0900	17	313	1.0	07...	1100	30	263	7.0
DEC					JUN				
03...	1245	23	347	0.0	04...	1700	517	117	10.0
JAN 1997					JUL				
08...	1230	7.7	303	0.0	02...	1115	164	127	7.0
FEB					AUG				
05...	1410	13	360	0.5	06...	1100	81	155	8.0
MAR					SEP				
05...	1430	12	350	1.5	03...	1300	35	190	13.0
APR									
02...	1045	12	345	3.5					
07081200 ARKANSAS RIVER NEAR LEADVILLE, CO (LAT 39 15 26N LONG 106 20 35W)									
OCT 1996					APR 1997				
03...	1200	34	200	8.5	02...	1215	23	238	4.5
NOV					MAY				
06...	1055	29	231	1.5	07...	1420	143	123	5.5
DEC					JUN				
03...	1100	18	230	0.0	05...	1115	944	74	6.5
JAN 1997					JUL				
08...	1100	15	216	0.0	02...	1200	257	97	10.0
FEB					AUG				
05...	1630	18	266	0.0	06...	1500	190	107	10.0
MAR					SEP				
06...	1015	13	236	0.0	03...	1500	61	158	17.0
07083000 HALFMOON CREEK NEAR MALTA, CO (LAT 39 10 20N LONG 106 23 19W)									
OCT 1996					MAY 1997				
04...	0725	20	83	2.5	29...	1515	54	70	8.5
NOV					JUN				
05...	1230	20	85	0.0	03...	1530	175	54	9.5
DEC					JUL				
03...	0905	6.2	93	0.0	02...	1330	132	52	10.0
FEB 1997					AUG				
06...	0925	4.7	96	0.0	06...	1300	62	59	8.0
MAR					SEP				
06...	1230	4.8	99	0.0	09...	1445	27	77	11.0
APR									
02...	1605	6.7	91	2.0					
30...	1530	11	86	8.0					
07091200 ARKANSAS RIVER NEAR NATHROP, CO (LAT 38 39 08N LONG 106 03 02W)									
OCT 1996					JUL 1997				
03...	0830	403	177	10.0	01...	0950	2680	83	11.5
APR 1997					AUG				
01...	1150	499	126	7.0	08...	0840	1420	113	13.0
15...	1530	349	152	11.0	SEP				
MAY					02...	1620	585	155	18.0
08...	1130	543	155	10.5					
JUN									
03...	1230	3820	84	10.0					
07093775 BADGER CREEK, LOWER STATION, NEAR HOWARD, CO (LAT 38 28 02N LONG 105 51 34W)									
OCT 1996					JUL 1997				
01...	1230	5.4	1070	17.5	03...	1300	5.6	1000	25.0
MAY 1997					AUG				
06...	1230	8.1	958	16.5	12...	1330	5.6	964	26.0
JUN					SEP				
06...	1015	7.8	976	14.5	02...	1300	4.8	980	25.0
07094500 ARKANSAS RIVER AT PARKDALE, CO (LAT 38 29 14N LONG 105 22 23W)									
OCT 1996					JUL 1997				
01...	1200	447	300	14.0	01...	1200	3020	130	15.0
MAR 1997					24...	0915	1640	160	17.0
21...	1100	646	214	10.0	AUG				
MAY					22...	0940	1070	222	17.0
14...	0950	1170	183	13.0	SEP				
JUN					18...	1025	504	270	16.5
04...	1230	4330	120	14.0					
11...	1530	3900	120	14.0					

MISCELLANEOUS STATION ANALYSES--Continued

DATE	TIME	DIS-CHARGE, CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	DATE	TIME	DIS-CHARGE, CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)
07096250 FOURMILE CREEK BELOW CRIPPLE CREEK NEAR VICTOR, CO (LAT 38 39 52N LONG 105 13 37W)									
OCT 1996					JUN 1997				
10...	1205	15	305	12.0	12...	1435	60	272	16.0
NOV					JUL				
22...	1230	8.6	360	6.5	17...	1215	14	350	20.0
JAN 1997					AUG				
31...	1140	4.1	407	2.5	27...	1230	18	315	20.5
MAR					SEP				
14...	1245	5.8	350	4.0	26...	1055	10	290	14.0
MAY									
27...	1415	29	310	15.0					
07096500 FOURMILE CREEK NEAR CANON CITY, CO (LAT 38 26 11N LONG 105 11 27W)									
NOV 1996					JUN 1997				
12...	1210	37	710	8.0	09...	1230	93	690	15.5
FEB 1997					JUL				
03...	1230	13	1260	9.0	15...	1320	16	1020	22.0
MAR					31...	1340	35	950	22.0
20...	1305	3.2	1750	18.0	SEP				
APR					09...	1345	13	1320	19.0
21...	1525	6.4	1600	15.5					
MAY									
13...	1225	25	1020	16.5					
07099050 BEAVER CREEK ABOVE UPPER BEAVER CEMETERY NEAR PENROSE, CO (LAT 38 33 42N LONG 105 01 17W)									
OCT 1996					JUN 1997				
03...	1215	26	86	11.0	09...	1500	202	76	14.0
NOV					24...	1150	150	77	16.0
21...	1335	13	86	6.0	JUL				
MAR 1997					15...	1545	29	90	22.0
12...	1415	7.0	99	9.0	AUG				
APR					05...	1545	133	85	17.0
21...	1335	22	100	9.5	SEP				
28...	1520	54	118	8.5	15...	1320	43	86	17.0
MAY									
13...	1610	99	100	12.0					
07099060 BEAVER CREEK ABOVE HIGHWAY 115 NEAR PENROSE, CO (LAT 38 29 21N LONG 104 59 49W)									
OCT 1996					MAY 1997				
03...	1530	0.02	190	19.5	15...	1405	63	102	13.5
NOV					JUN				
12...	1550	3.4	165	5.0	30...	1515	33	97	20.0
21...	1100	0.03	190	8.0	JUL				
MAR 1997					31...	1205	41	96	18.0
11...	1340	0.13	370	13.0	SEP				
APR					09...	1540	5.5	111	17.5
28...	1245	92	142	9.0					
07099215 TURKEY CREEK NEAR FOUNTAIN, CO (LAT 38 36 42N LONG 104 53 39W)									
OCT 1996					JUN 1997				
01...	1005	0.39	200	11.5	05...	1000	3.5	120	12.0
04...	0905	0.97	230	13.0	09...	1335	14	115	10.0
NOV					18...	1335	21	155	14.0
06...	0945	0.15	325	3.0	JUL				
JAN 1997					08...	0950	3.0	140	14.5
03...	1300	0.06	300	7.5	30...	1030	5.8	195	16.5
MAR					AUG				
20...	1000	0.15	250	10.0	27...	0900	4.9	185	14.0
APR									
29...	1045	12	200	6.5					
07099230 TURKEY CREEK ABOVE TELLER RESERVOIR NEAR STONE CITY, CO (LAT 38 27 54N LONG 104 49 33W)									
OCT 1996					JUN 1997				
29...	1115	0.16	960	9.5	06...	1125	15	640	14.5
DEC					20...	1145	39	400	17.0
20...	0935	0.42	970	4.0	AUG				
FEB 1997					11...	1340	15	520	20.0
13...	1430	0.92	970	7.5	SEP				
APR					02...	1235	3.1	710	17.0
01...	1215	0.88	950	9.5					
MAY									
02...	1315	15	480	11.0					

SUPPLEMENTAL WATER-QUALITY DATA FOR GAGING STATIONS

MISCELLANEOUS STATION ANALYSES--Continued

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)
07099233 TELLER RESERVOIR NEAR STONE CITY, CO (LAT 38 26 33N LONG 104 49 31W)									
JUN 1997					AUG 1997				
06...	1325	78	680	22.5	12...	1430	11	490	25.0
25...	1310	5.4	370	25.0					
07099235 TURKEY CREEK NEAR STONE CITY, CO (LAT 38 26 22N LONG 104 49 34W)									
OCT 1996					MAY 1997				
29...	1245	0.11	1260	9.0	05...	1120	0.09	1420	13.5
DEC					19...	1400	2.1	930	15.5
13...	1400	0.08	1320	8.0	JUN				
JAN 1997					06...	1430	17	800	20.5
30...	1115	0.04	1420	4.5	JUL				
MAR					18...	1220	0.46	740	23.0
06...	1220	0.07	1450	8.0	AUG				
APR					12...	1545	2.0	630	22.0
01...	1345	0.02	1480	10.5	SEP				
					24...	1310	1.3	670	17.0
07103703 CAMP CREEK AT GARDEN OF THE GODS, CO (LAT 38 52 37N LONG 104 52 20W)									
APR 1997					JUN 1997				
24...	0950	0.00	295	1.5	02...	1640	2.4	185	11.0
25...	1850	0.05	222	2.0	JUL				
26...	1345	0.09	221	3.0	10...	0920	0.13	257	12.0
27...	1520	0.29	225	10.0	AUG				
MAY					13...	0820	0.70	297	12.5
02...	1230	7.5	252	8.0					
08...	1410	14	140	8.5					
07103797 WEST MONUMENT CREEK BELOW RAMPART RESERVOIR, CO (LAT 38 58 30N LONG 104 57 18W)									
OCT 1996					APR 1997				
08...	1240	3.3	78	10.5	22...	1330	4.2	73	15.0
NOV					MAY				
08...	1130	4.7	77	6.0	15...	1130	5.7	80	6.5
DEC					JUL				
10...	1100	1.1	80	3.5	01...	1100	4.9	88	9.0
JAN 1997					AUG				
21...	1030	4.3	72	2.0	12...	1100	6.6	85	6.0
FEB					SEP				
10...	1030	5.3	68	2.5	15...	1100	7.4	68	8.5
MAR									
17...	1100	3.8	74	3.0					
07103800 WEST MONUMENT CREEK AT AIR FORCE ACADEMY, CO (LAT 38 58 14N LONG 104 54 08W)									
OCT 1996					APR 1997				
08...	1305	4.4	84	9.5	21...	1530	0.94	95	4.5
NOV					MAY				
20...	1320	0.74	99	4.0	13...	1540	8.6	73	5.5
DEC					JUN				
06...	1040	0.58	96	1.0	09...	1235	68	72	8.5
JAN 1997					JUL				
24...	1430	0.12	98	0.0	14...	1615	2.1	91	14.5
FEB					AUG				
27...	1340	0.33	95	0.5	07...	1335	1.6	99	12.5
MAR					SEP				
17...	1510	5.3	76	4.0	18...	1145	0.93	109	12.0
07103980 COTTONWOOD CREEK AT WOODMEN ROAD NEAR COLORADO SPRINGS, CO (LAT 38 56 22N LONG 104 44 26W)									
OCT 1996					MAY 1997				
09...	1415	0.79	603	18.5	13...	0840	0.90	586	10.0
NOV					JUN				
13...	0800	0.58	670	5.0	03...	1505	0.47	590	25.5
DEC					06...	1205	0.84	545	25.0
06...	1145	0.65	601	1.5	JUL				
JAN 1997					14...	1225	0.50	576	27.0
23...	1515	1.0	622	1.5	29...	1235	0.60	514	19.0
FEB					AUG				
20...	1355	1.3	612	5.5	05...	1535	3.1	348	18.5
21...	1420	3.1	785	5.0	SEP				
MAR					15...	1230	0.52	568	25.5
18...	1405	0.59	538	15.5					
APR									
23...	1600	0.56	616	10.5					

MISCELLANEOUS STATION ANALYSES--Continued

DATE	TIME	DIS-CHARGE, CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	DATE	TIME	DIS-CHARGE, CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)
07103990 COTTONWOOD CREEK AT MOUTH, AT PIKEVIEW, CO (LAT 38 55 41N LONG 104 38 35W)									
OCT 1996					APR 1997				
09...	1545	5.3	700	17.5	25...	1500	56	278	6.5
NOV					MAY				
13...	0845	4.5	655	5.5	13...	1105	5.8	568	19.0
DEC					JUN				
06...	1305	4.3	728	1.5	06...	0955	5.0	565	18.5
JAN 1997					JUL				
24...	1145	5.0	697	0.0	10...	1455	5.2	639	29.5
FEB					29...	1050	6.8	581	18.0
27...	1500	6.2	670	5.5	SEP				
MAR					05...	1110	5.9	642	26.0
19...	1345	4.3	660	18.5					
07105000 BEAR CREEK NEAR COLORADO SPRINGS, CO (LAT 38 49 21N LONG 104 53 17W)									
OCT 1996					MAY 1997				
02...	1410	2.9	100	8.5	06...	1130	9.6	93	5.5
NOV					JUN				
08...	1340	1.8	92	2.0	10...	1700	63	110	8.5
DEC					13...	1330	27	100	8.0
16...	1400	1.6	91	0.0	JUL				
JAN 1997					08...	1000	6.1	83	10.0
21...	1230	1.2	91	1.5	21...	1300	5.3	81	13.0
FEB					AUG				
10...	1300	1.3	79	0.5	12...	1345	8.3	80	11.5
MAR					SEP				
17...	1330	1.3	89	4.0	24...	1530	3.4	85	12.5
APR									
02...	1215	1.4	85	1.5					
07105490 CHEYENNE CREEK AT EVANS AVE AT COLORADO SPRINGS, CO (LAT 38 47 26N LONG 104 51 49W)									
OCT 1996					MAY 1997				
02...	1525	9.9	73	10.0	06...	1305	57	92	6.5
NOV					15...	1345	36	87	9.0
08...	1445	3.7	119	4.0	JUN				
DEC					03...	1235	30	84	12.0
16...	1500	4.7	114	0.0	10...	1515	437	91	8.5
JAN 1997					13...	1215	172	89	9.0
21...	1330	2.3	119	0.5	JUL				
FEB					01...	1430	31	83	11.0
10...	1400	3.0	111	2.0	21...	1445	20	105	14.0
MAR					AUG				
17...	1430	3.6	79	5.5	12...	1530	46	101	13.5
APR					SEP				
22...	1515	6.2	90	7.0	24...	1245	9.2	105	14.0
07105900 JIMMY CAMP CREEK AT FOUNTAIN, CO (LAT 38 41 04N LONG 104 41 17W)									
OCT 1996					JUN 1997				
03...	1045	2.2	2100	14.5	03...	1230	2.2	2720	23.5
NOV					30...	1405	1.6	2510	28.5
05...	0915	1.8	3060	8.5	JUL				
JAN 1997					08...	1350	2.0	2720	22.5
02...	1400	1.8	3020	14.0	30...	1815	4.0	1880	21.5
MAR					SEP				
18...	1425	1.6	2670	18.5	24...	1305	1.7	2380	22.5
MAY									
01...	1025	2.5	2080	12.5					
07105920 LITTLE FOUNTAIN CREEK ABOVE KEATON RESERVOIR, NEAR FORT CARSON, CO (LAT 38 40 54N LONG 104 51 29W)									
OCT 1996					JUN 1997				
01...	1040	1.9	135	9.0	04...	1310	8.2	88	12.5
NOV					09...	1005	27	71	8.0
06...	1155	0.81	120	2.5	18...	1050	46	88	9.0
JAN 1997					JUL				
03...	1100	1.1	118	1.5	30...	1115	28	66	14.0
APR					AUG				
29...	1305	14	94	6.0	27...	1055	7.9	99	15.0

SUPPLEMENTAL WATER-QUALITY DATA FOR GAGING STATIONS

MISCELLANEOUS STATION ANALYSES--Continued

DATE	TIME	DIS- CHARGE, CUBIC FEET PER SECOND (00061)	SPE- INST. CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	DATE	TIME	DIS- CHARGE, CUBIC FEET PER SECOND (00061)	SPE- INST. CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)
07105928 LITTLE FOUNTAIN CREEK NEAR FORT CARSON, CO (LAT 38 40 49N LONG 104 51 08W)									
OCT 1996					APR 1997				
01...	1155	1.6	285	12.5	29...	1425	14	105	6.0
NOV					JUN				
06...	1325	0.58	295	5.5	05...	1405	11	161	12.0
JAN 1997					18...	1220	45	90	10.0
03...	1200	0.59	154	4.0	JUL				
MAR					10...	1050	0.48	260	15.0
20...	1355	1.6	140	7.0	30...	1320	23	84	16.0
07105945 ROCK CREEK ABOVE FORT CARSON RESERVATION, CO (LAT 38 42 26N LONG 104 50 47W)									
OCT 1996					JUN 1997				
02...	1000	1.3	105	9.0	06...	1315	3.8	126	13.5
NOV					24...	1415	13	124	13.5
05...	1355	0.52	115	6.0	JUL				
JAN 1997					10...	1330	3.1	153	16.5
03...	0930	0.55	162	3.0	17...	1330	1.7	163	17.0
MAR					30...	1545	5.7	136	16.0
19...	1320	0.55	142	7.0	AUG				
APR					05...	1040	9.3	148	14.0
30...	1350	22	125	5.5					
07105950 ROCK CREEK NEAR FORT CARSON, CO (LAT 38 41 49N LONG 104 49 39W)									
OCT 1996					JUN 1997				
02...	0905	0.01	205	12.0	05...	1255	3.2	180	12.0
NOV					18...	1615	28	128	13.5
07...	1215	0.11	238	10.0	JUL				
APR 1997					10...	1600	2.1	168	16.0
30...	1110	26	105	5.5	30...	1645	3.4	167	16.5
					AUG				
					05...	1225	7.0	152	15.0
07108900 ST. CHARLES RIVER AT VINELAND, CO (LAT 38 14 44N LONG 104 29 09W)									
OCT 1996					APR 1997				
01...	1645	15	1960	21.0	09...	1315	14	1760	13.0
NOV					MAY				
13...	1320	19	1990	11.5	05...	1515	144	527	17.5
DEC					JUN				
11...	1545	19	1800	9.0	19...	1300	42	1260	24.5
JAN 1997					JUL				
21...	1505	16	2020	6.5	09...	1515	15	1770	27.0
FEB					23...	1535	9.8	1760	30.5
27...	1545	14	1860	6.5	SEP				
MAR					04...	1645	15	2100	24.5
20...	1315	19	1450	17.0					
07110400 CHICO CREEK NEAR PUEBLO CHEMICAL DEPOT, CO (LAT 38 21 40N LONG 104 23 15W)									
APR 1997					JUL 1997				
28...	1340	3.8	1900	23.0	02...	1015	0.02	1440	21.5
MAY					30...	1300	236	391	21.0
02...	1545	1.1	1840	17.0	31...	1535	10	--	29.0
05...	1515	0.68	1790	21.5	AUG				
13...	1200	0.51	1680	22.0	06...	1125	107	491	18.5
30...	1100	0.26	1600	21.5	22...	1105	0.07	1370	26.0
JUN					SEP				
09...	0835	25	1100	16.0	10...	1040	0.03	1420	21.5
09...	1450	12	1420	20.0					
17...	1210	0.47	1510	27.5					
23...	1045	0.05	1590	24.5					
26...	1145	48	678	20.5					
07116500 HUERFANO RIVER NEAR BOONE, CO (LAT 38 13 30N LONG 104 15 37W)									
OCT 1996					APR 1997				
01...	1500	3.8	3340	27.5	09...	1130	4.6	5070	14.5
23...	1430	3.2	4850	17.5	MAY				
NOV					02...	1345	81	1570	14.0
13...	1545	27	1410	11.0	27...	1345	72	1530	19.0
DEC					JUN				
11...	1400	18	2820	10.0	09...	1415	163	1040	19.0
JAN 1997					18...	1625	15	3010	32.0
28...	1015	4.4	4850	0.5	JUL				
FEB					09...	1340	0.81	5380	30.5
18...	1630	5.2	4920	14.0	23...	1720	0.61	4700	32.0
MAR					SEP				
12...	1245	4.6	5080	20.5	03...	1825	2.5	3440	25.5

MISCELLANEOUS STATION ANALYSES--Continued

DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	DATE	TIME	DIS-CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE-CIFIC CON-DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)
07119500 APISHAPA RIVER NEAR FOWLER, CO (LAT 38 05 28N LONG 103 58 52W)									
OCT 1996					APR 1997				
01...	1230	12	1830	18.5	08...	1225	12	1220	7.5
22...	1300	22	1660	7.5	22...	1115	13	1130	11.5
NOV					MAY				
13...	1030	12	1870	6.5	13...	1130	8.4	1600	17.5
DEC					JUN				
10...	1430	3.9	2840	11.0	18...	1415	18	1170	23.5
31...	1425	3.9	2870	11.0	JUL				
JAN 1997					09...	1015	11	1470	19.0
27...	1400	3.2	3090	5.0	23...	1315	9.0	1630	26.0
FEB					AUG				
18...	1445	2.8	2920	13.0	19...	1315	21	1440	23.0
MAR					SEP				
12...	1045	3.0	2950	9.5	04...	1440	13	1740	25.5
21...	1205	17	1140	13.0					
07121500 TIMPAS CREEK AT MOUTH NEAR SWINK, CO (LAT 38 00 11N LONG 103 39 20W)									
OCT 1996					MAY 1997				
09...	0910	105	1790	13.0	13...	1400	57	1940	19.0
23...	0940	124	1800	6.0	27...	1745	66	1770	19.0
NOV					JUN				
12...	1545	116	1690	8.5	11...	1645	164	1140	23.5
DEC					JUL				
11...	1000	22	2890	9.0	01...	1515	55	1920	24.0
JAN 1997					23...	1045	69	1860	21.0
24...	1515	18	3000	5.5	AUG				
FEB					05...	1500	300	1140	22.5
04...	1415	15	2910	10.0	08...	1025	171	1330	20.0
25...	1500	15	2950	11.0	20...	1445	63	1720	24.0
MAR					SEP				
11...	1630	76	1550	13.0	03...	1145	71	1990	20.0
APR					16...	1800	55	2250	21.5
08...	1700	43	1880	11.5					
29...	1210	75	1560	16.0					
07124200 PURGATOIRE RIVER AT MADRID, CO (LAT 37 07 46N LONG 104 38 20W)									
OCT 1996					JUN 1997				
03...	0825	22	353	9.0	02...	1015	379	193	11.5
NOV					06...	0755	444	180	10.0
08...	1130	23	389	3.5	16...	1710	366	203	13.0
DEC					JUL				
11...	1200	19	398	5.0	01...	1205	171	228	17.5
JAN 1997					18...	0855	63	299	15.0
30...	1600	21	447	0.0	AUG				
MAR					01...	1220	132	293	22.5
14...	1100	22	390	2.5	12...	0900	172	286	15.5
APR					20...	0905	84	295	16.5
30...	1550	117	293	17.0	SEP				
					02...	1255	59	343	22.0
07124410 PURGATOIRE RIVER BELOW TRINIDAD LAKE, CO (LAT 37 08 37N LONG 104 32 49W)									
NOV 1996					JUN 1997				
08...	1345	0.37	370	6.5	02...	1200	304	293	13.5
DEC					04...	0855	273	297	13.5
11...	1440	0.28	377	3.5	05...	0730	256	297	14.0
JAN 1997					05...	1915	284	300	14.5
31...	0950	0.60	447	4.5	17...	0830	212	246	14.5
MAR					JUL				
14...	0930	0.09	400	4.5	18...	1130	154	262	19.0
MAY					AUG				
02...	0915	8.8	396	9.5	01...	0920	151	278	19.0
14...	1230	197	390	11.5	12...	1045	4.7	259	18.5
					SEP				
					02...	1505	233	284	19.0
07128500 PURGATOIRE RIVER NEAR LAS ANIMAS, CO (LAT 38 02 02N LONG 103 12 00W)									
OCT 1996					APR 1997				
10...	1425	67	2910	18.0	08...	1500	10	4750	10.0
NOV					MAY				
13...	1600	74	2940	7.0	08...	1400	14	4000	17.0
19...	1300	35	4020	9.5	JUN				
DEC					06...	0945	230	1550	20.5
12...	1200	37	4070	6.0	JUL				
JAN 1997					02...	1040	8.2	3980	21.5
21...	1225	41	3900	0.5	AUG				
FEB					05...	1600	90	1190	23.0
11...	1430	30	3840	4.5	SEP				
MAR					17...	1115	28	2590	19.5
13...	1430	16	4360	10.5					

SUPPLEMENTAL WATER-QUALITY DATA FOR GAGING STATIONS

MISCELLANEOUS STATION ANALYSES--Continued

DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)	DATE	TIME	DIS- CHARGE, INST. CUBIC FEET PER SECOND (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	TEMPER- ATURE WATER (DEG C) (00010)
07133000 ARKANSAS RIVER AT LAMAR, CO (LAT 38 06 21N LONG 102 37 05W)									
OCT 1996					APR 1997				
10...	1030	26	3160	14.5	16...	1405	36	2860	18.5
NOV					MAY				
13...	1305	59	3600	9.5	21...	1150	60	2920	19.0
DEC					JUN				
16...	1420	60	4120	4.5	19...	1030	18	3280	22.0
JAN 1997					JUL				
22...	1245	67	4270	7.0	16...	0830	733	2140	20.0
FEB					AUG				
21...	1100	50	4280	6.0	12...	1445	3250	432	20.0
MAR					SEP				
19...	0945	5.9	3930	9.5	23...	1645	112	2850	18.0
07134100 BIG SANDY CREEK NEAR LAMAR, CO (LAT 38 06 51N LONG 102 29 00W)									
OCT 1996					APR 1997				
10...	0740	11	4600	11.5	16...	1045	17	3800	11.5
NOV					MAY				
13...	1055	11	4480	7.0	21...	1015	13	4420	14.5
DEC					JUN				
16...	1530	24	4580	3.0	19...	0715	17	3990	18.0
JAN 1997					JUL				
22...	1040	25	4350	1.0	16...	0630	18	4100	18.0
FEB					AUG				
20...	1430	23	4300	9.5	26...	1700	21	4190	26.0
MAR					SEP				
18...	1705	25	4400	14.0	23...	1445	23	4270	16.5
07134180 ARKANSAS RIVER NEAR GRANADA, CO (LAT 38 05 44N LONG 102 18 37W)									
OCT 1996					APR 1997				
09...	1500	118	3830	19.0	16...	0905	90	3910	11.0
NOV					MAY				
13...	0915	118	3880	5.5	21...	0800	149	3370	15.0
DEC					JUN				
17...	0905	110	4210	0.0	18...	1605	84	3750	27.0
JAN 1997					JUL				
22...	0815	152	4200	3.5	16...	1645	691	2280	25.5
FEB					AUG				
20...	1630	140	4170	11.0	13...	1330	3470	812	22.5
MAR					SEP				
18...	1535	114	4070	15.0	24...	1210	183	3460	15.5
07134990 WILD HORSE CREEK ABOVE HOLLY, CO (LAT 38 03 24N LONG 102 08 16W)									
OCT 1996					JUN 1997				
09...	1315	22	3750	16.0	18...	1430	9.0	3600	26.0
NOV					JUL				
12...	1445	20	4060	7.0	16...	1430	7.1	3260	29.0
APR 1997					AUG				
29...	1720	11	3700	21.5	07...	1300	81	2190	20.5
MAY					SEP				
20...	1615	6.9	3730	23.5	24...	1005	102	3160	14.0
07135000 TWO BUTTE CREEK NEAR HOLLY, CO (LAT 38 01 41N LONG 102 08 21W)									
AUG 1997					AUG 1997				
07...	1130	7.6	211	19.0	13...	0915	9.0	167	21.0
08217500 RIO GRANDE AT WAGON WHEEL GAP, CO (LAT 37 46 01N LONG 106 49 51W)									
OCT 1996					APR 1997				
03...	1750	282	85	10.0	17...	0940	275	97	6.0
NOV					JUN				
08...	1210	114	104	0.5	02...	1545	4200	47	9.5
DEC					JUL				
13...	1210	110	103	0.5	16...	1625	1600	50	13.5
JAN 1997					AUG				
24...	1145	109	105	0.0	28...	0940	652	71	14.0
MAR									
19...	1205	155	100	1.0					

KIT CARSON COUNTY

391730102422000 SC00904706CAC

LOCATION.--Lat 39°17'30", long 102°41'59", in SW¹/₄NE¹/₄SW¹/₄ sec.6, T.9 S., R.47 W., Kit Carson County,
Hydrologic Unit 10250003, 2.3 mi east of Interstate Highway 70 interchange to Vona, Colo.

AQUIFER.--High Plains Aquifer.

WELL CHARACTERISTICS.--Drilled, unused well, diameter 16 in., depth 160 ft.

INSTRUMENTATION.--Water-level recorder; intermittent measurements with chalked steel tape.

DATUM.--Elevation of land-surface datum is 4475 ft above sea level, from topographic map. Measuring point: top of ¹/₄-in. diameter hole in steel plate that covers well casing, 1.00 ft above land-surface datum.

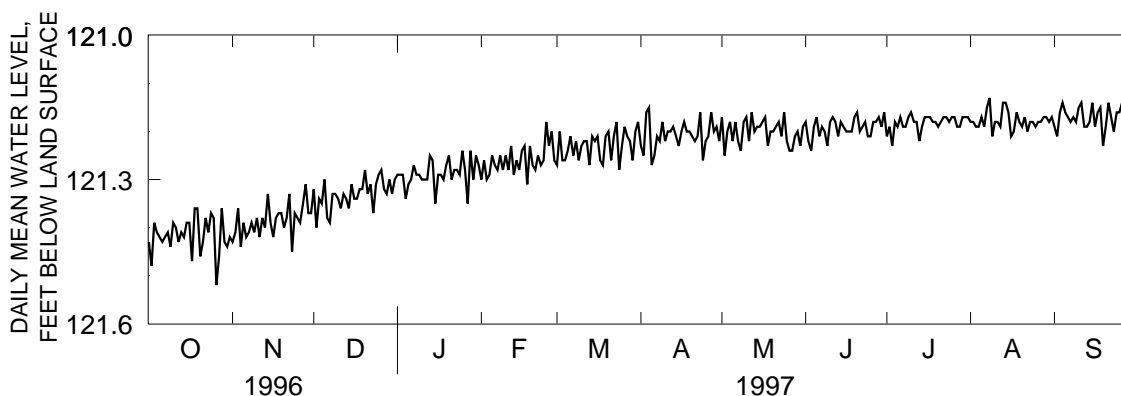
REMARKS.--Daily record is good.

PERIOD OF RECORD.--Daily record from September 1988 to current year. Intermittent measurements made from December 1968.

EXTREMES FOR PERIOD OF RECORD.--Highest water level 121.08 ft below land-surface datum, Aug. 13, 1997, and Sept. 15, 1997;
lowest, 125.56 ft below land-surface datum, Jan. 20, 1976.

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	121.43	121.43	121.32	121.29	121.30	121.27	121.23	121.17	121.18	121.21	121.18	121.19
2	121.48	121.41	121.40	121.29	121.26	121.20	121.25	121.25	121.22	121.19	121.18	121.21
3	121.39	121.36	121.34	121.29	121.30	121.26	121.16	121.20	121.24	121.23	121.19	121.16
4	121.41	121.44	121.35	121.34	121.29	121.26	121.15	121.18	121.19	121.18	121.19	121.14
5	121.42	121.39	121.30	121.31	121.25	121.24	121.27	121.22	121.17	121.19	121.17	121.16
6	121.43	121.42	121.38	121.30	121.27	121.21	121.25	121.18	121.21	121.17	121.19	121.17
7	121.42	121.41	121.39	121.27	121.28	121.25	121.21	121.22	121.19	121.19	121.15	121.18
8	121.41	121.39	121.33	121.29	121.25	121.22	121.22	121.24	121.20	121.19	121.13	121.17
9	121.44	121.41	121.33	121.29	121.28	121.26	121.18	121.18	121.23	121.17	121.21	121.18
10	121.39	121.38	121.34	121.30	121.25	121.23	121.22	121.17	121.18	121.16	121.18	121.15
11	121.40	121.42	121.36	121.30	121.28	121.22	121.20	121.22	121.17	121.18	121.18	121.14
12	121.43	121.38	121.33	121.30	121.23	121.22	121.20	121.16	121.18	121.18	121.19	121.19
13	121.41	121.40	121.34	121.25	121.29	121.27	121.19	121.20	121.21	121.22	121.14	121.19
14	121.42	121.33	121.36	121.26	121.26	121.21	121.21	121.19	121.18	121.19	121.14	121.18
15	121.39	121.39	121.31	121.35	121.28	121.22	121.23	121.19	121.19	121.17	121.16	121.14
16	121.39	121.42	121.34	121.29	121.24	121.21	121.20	121.18	121.20	121.17	121.21	121.19
17	121.47	121.38	121.34	121.29	121.23	121.26	121.18	121.17	121.20	121.17	121.20	121.16
18	121.36	121.37	121.32	121.30	121.31	121.27	121.20	121.23	121.20	121.18	121.16	121.15
19	121.36	121.37	121.32	121.27	121.23	121.21	121.20	121.20	121.17	121.18	121.18	121.23
20	121.46	121.40	121.28	121.25	121.27	121.20	121.21	121.20	121.16	121.19	121.19	121.19
21	121.43	121.38	121.33	121.30	121.28	121.26	121.22	121.19	121.20	121.18	121.17	121.14
22	121.38	121.33	121.31	121.28	121.25	121.21	121.21	121.18	121.19	121.17	121.20	121.17
23	121.41	121.45	121.37	121.28	121.27	121.18	121.16	121.21	121.18	121.17	121.18	121.20
24	121.37	121.37	121.31	121.29	121.26	121.28	121.26	121.16	121.21	121.18	121.18	121.16
25	121.38	121.38	121.29	121.24	121.18	121.23	121.22	121.22	121.21	121.17	121.19	121.16
26	121.52	121.39	121.28	121.28	121.23	121.19	121.21	121.24	121.18	121.17	121.18	121.14
27	121.46	121.35	121.32	121.35	121.20	121.21	121.16	121.24	121.18	121.19	121.18	121.19
28	121.36	121.31	121.33	121.24	121.26	121.22	121.20	121.21	121.17	121.19	121.17	121.17
29	121.43	121.37	121.30	121.30	---	121.26	121.19	121.20	121.19	121.17	121.17	121.17
30	121.44	121.37	121.33	121.25	---	121.20	121.22	121.23	121.16	121.17	121.18	121.17
31	121.42	---	121.30	121.27	---	121.18	---	121.19	---	121.17	121.17	---
MEAN	121.42	121.39	121.33	121.29	121.26	121.23	121.21	121.20	121.19	121.18	121.18	121.17
MAX	121.52	121.45	121.40	121.35	121.31	121.28	121.27	121.25	121.24	121.23	121.21	121.23
MIN	121.36	121.31	121.28	121.24	121.18	121.18	121.15	121.16	121.16	121.16	121.13	121.14



QUALITY OF GROUND WATER

EL PASO COUNTY

384056104415601 - SC01606505CCB - FOUNTAIN NO. 3

LOCATION.--Lat 38°40'56", long 104°41'56" in NW¹/₄SW¹/₄SW¹/₄ 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., 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 1996 TO SEPTEMBER 1997

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	pH (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)
MAR 12...	0925	1150	7.2	12.5	<0.01	2.5	<0.015	0.01
SEP 09...	0915	1200	7.3	13.0	<0.01	3.2	<0.015	<0.01

384108104420701 - SC01606506DAA - FOUNTAIN NO. 2

LOCATION.--Lat 38°41'08", long 104°42'07", NE¹/₄NE¹/₄SE¹/₄ 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., depth 57 ft, screened 42 to 57 ft.

DATUM.--Elevation of land-surface datum is 5,550 ft above sea level, from topographic map.

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	pH (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)
MAR 12...	0945	1280	7.4	13.0	<0.01	3.1	0.020	0.02
SEP 09...	0945	1280	7.2	12.5	<0.01	2.3	<0.015	<0.01

384407104434801 - SC01506624BAD1 - WIDEFIELD NO. 4

LOCATION.--Lat 38°44'07", long 104°43'48", in SE¹/₄NE¹/₄NE¹/₄ sec.24, T.15 S., R.66 W., El Paso County, Hydrologic Unit 11020003.

AQUIFER.--Widfield 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 5,680.7 ft above sea level.

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	pH (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 26...	0955	641	7.2	12.5	<0.01	5.8	<0.015	0.02
SEP 09...	1015	630	7.2	13.5	<0.01	5.4	<0.015	<0.01

QUALITY OF GROUND WATER

EL PASO COUNTY--Continued

384433104440702 - SC01506613CBD2 - U-14

LOCATION.--Lat 38°44'33", long 104°44'07", in SW¹/₄NW¹/₄SE¹/₄ 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.

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET) (72019)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	pH (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)
MAR 07...	1340	31.90	623	7.1	13.5	0.01	5.2	<0.015	0.02
SEP 08...	1430	32.68	663	7.2	13.5	<0.01	4.6	<0.015	<0.01

384458104442601 - SC01506614AAD - SECURITY NO. 2

LOCATION.--Lat 38°44'58", long 104°44'26", in SE¹/₄NE¹/₄NE¹/₄ 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 5,717 ft above sea level.

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	pH (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 26...	1035	551	7.1	12.5	<0.01	8.4	<0.015	0.01
SEP 09...	1115	480	7.2	13.5	<0.01	7.7	<0.015	<0.01

384535104450801 - SC01506611BCD2 - VENETUCCI NO. 3

LOCATION.--Lat 38°45'35", long 104°45'08", in SE¹/₄SW¹/₄NW¹/₄ 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 5,750.0 ft above sea level.

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	pH (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)
SEP 09...	1045	434	7.2	13.5	<0.01	7.3	<0.015	0.05

QUALITY OF GROUND WATER

EL PASO COUNTY--Continued

384604104451502 - SC01506602CCC2 - U-9

LOCATION.--Lat 38°46'04", long 104°45'15", in SW¹/₄SW¹/₄SW¹/₄ 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 5,774 ft above sea level.

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET) (72019)	SPE-CIFIC CONDUCTANCE (US/CM) (00095)	pH (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	NITROGEN, NITRITE 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)	PHOSPHORUS, ORTHO, DIS-SOLVED (MG/L AS P) (00671)
MAR 07...	0945	34.04	460	7.2	13.5	<0.01	7.5	<0.015	0.06
AUG 18...	1330	34.35	459	7.2	14.0	--	6.8	0.006	--

384610104453501 - SC01506603DDB - SECURITY NO. 14

LOCATION.--Lat 38°46'10", long 104°45'35", in NW¹/₄SE¹/₄SE¹/₄ 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.

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	SPE-CIFIC CONDUCTANCE (US/CM) (00095)	pH (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	NITROGEN, NITRITE 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)	PHOSPHORUS, ORTHO, DIS-SOLVED (MG/L AS P) (00671)
FEB 26...	1110	624	7.3	13.0	<0.01	8.2	<0.015	0.04
AUG 22...	1330	623	7.1	14.0	--	6.8	<0.015	--

384617104455901 - SC01506603CAD - STRATMOOR HILLS NO. 4

LOCATION.--Lat 38°46'17", long 104°45'59", in SE¹/₄NE¹/₄SW¹/₄ 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 16 in., depth 49 ft, screened 29 to 49 ft.

DATUM.--Elevation of land-surface datum is 5,775.4 ft above sea level.

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	SPE-CIFIC CONDUCTANCE (US/CM)	pH WATER WHOLE FIELD (STANDARD UNITS)	TEMPERATURE WATER (DEG C)	NITROGEN, NITRITE SOLVED (MG/L AS N)	NITROGEN, NO2+NO3 DIS-SOLVED (MG/L AS N)	NITROGEN, AMMONIA DIS-SOLVED (MG/L AS N)	PHOSPHORUS, ORTHO, DIS-SOLVED (MG/L AS P)
FEB 26...	1315	714	7.4	13.5	<0.01	11	<0.015	0.02
SEP 09...	1300	708	7.4	13.5	<0.01	7.5	<0.015	<0.01

EL PASO COUNTY--Continued

384628104450801 - SC01506602BDC - TH-23

LOCATION.--Lat 38°46'28", long 104°45'08", in NW¹/₄SE¹/₄SW¹/₄ sec.2, T.15 S., R.66 W., El Paso County, Hydrologic Unit 1102003.

AQUIFER.--Widefield aquifer of Fountain Creek Alluvium.

WELL CHARACTERISTICS.--Monitor well, diameter 2 in., depth 89 ft, screened 73 to 88 ft.

DATUM.--Elevation of land-surface datum is 5,849 ft above sea level.

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET) (72019)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	pH (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)
MAR 07...	1115	71.53	631	7.1	14.0	0.01	6.6	<0.015	0.16
AUG 18...	1515	70.86	585	7.2	14.5	--	5.7	<0.015	--

384639104461401 - SC01506603BAC1 - MARS GAS

LOCATION.--Lat 38°46'39", long 104°46'14", in SW¹/₄NE¹/₄NW¹/₄ sec.3, T.15 S., R.66 W., El Paso County, Hydrologic Unit 1102003.

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 1996 TO SEPTEMBER 1997

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	pH (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 26...	1205	1120	7.1	11.5	<0.01	7.1	<0.015	0.01
SEP 09...	1145	1370	7.1	14.0	<0.01	11	<0.015	<0.01

384653104451901 - SC01506602BBB - TH-18

LOCATION.--Lat 38°46'53", long 104°45'19", in NW¹/₄NW¹/₄NW¹/₄ 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 5,890 ft above sea level.

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET) (72019)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	pH (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)
MAR 07...	1230	89.57	488	7.0	14.5	0.02	9.7	<0.015	0.07
AUG 18...	1645	89.14	488	7.1	15.0	--	10	<0.015	--

QUALITY OF GROUND WATER

EL PASO COUNTY--Continued

384718104463701 - SC01406633DAA - BARNES WELL

LOCATION.--Lat 38°47'18", long 104°46'37", in NE¹/₄NE¹/₄SE¹/₄ 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 1996 TO SEPTEMBER 1997

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	pH (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 26...	1245	1300	7.2	11.0	<0.01	13	<0.015	0.01
AUG 20...	1145	2290	7.2	13.5	--	7.6	<0.015	--

385323104224001 - SC01306230ACC1 - I WELL

LOCATION.--Lat 38°53'23", long 104°22'40", in SW¹/₄SW¹/₄NE¹/₄ sec.30, T.13 S., R.62 W., El Paso County, Hydrologic Unit 11020004.

AQUIFER.--Black Squirrel Alluvial Aquifer.

WELL CHARACTERISTICS.--Public-supply well, diameter 16 in., depth 176 ft, screened 116 to 176 ft.

DATUM.--Elevation of land-surface datum is 6,160 ft above sea level, from topographic map

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1996 TO SEPTEMBER 1997

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	pH (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 26...	1445	399	7.3	12.0	<0.01	8.7	<0.015	0.04
SEP 09...	1400	400	7.2	12.0	<0.01	7.9	<0.015	0.02

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CONVERSION FACTORS AND VERTICAL DATUM

Multiply	By	To obtain
Length		
inch (in.)	2.54×10^1	millimeter
	2.54×10^{-2}	meter
foot (ft)	3.048×10^{-1}	meter
mile (mi)	1.609×10^0	kilometer
Area		
acre	4.047×10^3	square meter
	4.047×10^{-1}	square hectometer
	4.047×10^{-3}	square kilometer
square mile (mi ²)	2.590×10^0	square kilometer
Volume		
gallon (gal)	3.785×10^0	liter
	3.785×10^0	cubic decimeter
	3.785×10^{-3}	cubic meter
million gallons (Mgal)	3.785×10^3	cubic meter
	3.785×10^{-3}	cubic hectometer
cubic foot (ft ³)	2.832×10^1	cubic decimeter
	2.832×10^{-2}	cubic meter
cubic-foot-per-second day [(ft ³ /s) d]	2.447×10^3	cubic meter
	2.447×10^{-3}	cubic hectometer
acre-foot (acre-ft)	1.233×10^3	cubic meter
	1.233×10^{-3}	cubic hectometer
	1.233×10^{-6}	cubic kilometer
Flow		
cubic foot per second (ft ³ /s)	2.832×10^1	liter per second
	2.832×10^1	cubic decimeter per second
	2.832×10^{-2}	cubic meter per second
gallon per minute (gal/min)	6.309×10^{-2}	liter per second
	6.309×10^{-2}	cubic decimeter per second
	6.309×10^{-5}	cubic meter per second
million gallons per day (Mgal/d)	4.381×10^1	cubic decimeter per second
	4.381×10^{-2}	cubic meter per second
Mass		
ton (short)	9.072×10^{-1}	megagram or metric ton

Sea level: In this report “sea level” refers to the National Geodetic Vertical Datum of 1929 (NGVD of 1929)—a geodetic datum derived from a general adjustment for the first-order level nets of both the United States and Canada, formerly called Sea Level Datum of 1929.