

# Water Resources Data Colorado Water Year 1996

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-96-1

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

UNITED STATES DEPARTMENT OF THE INTERIOR

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U. S. GEOLOGICAL SURVEY

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Lakewood, CO 80225

1997

**CALENDAR FOR WATER YEAR 1996**

**1995**

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

**1996**

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

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

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

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

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

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

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

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## INTRODUCTION

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

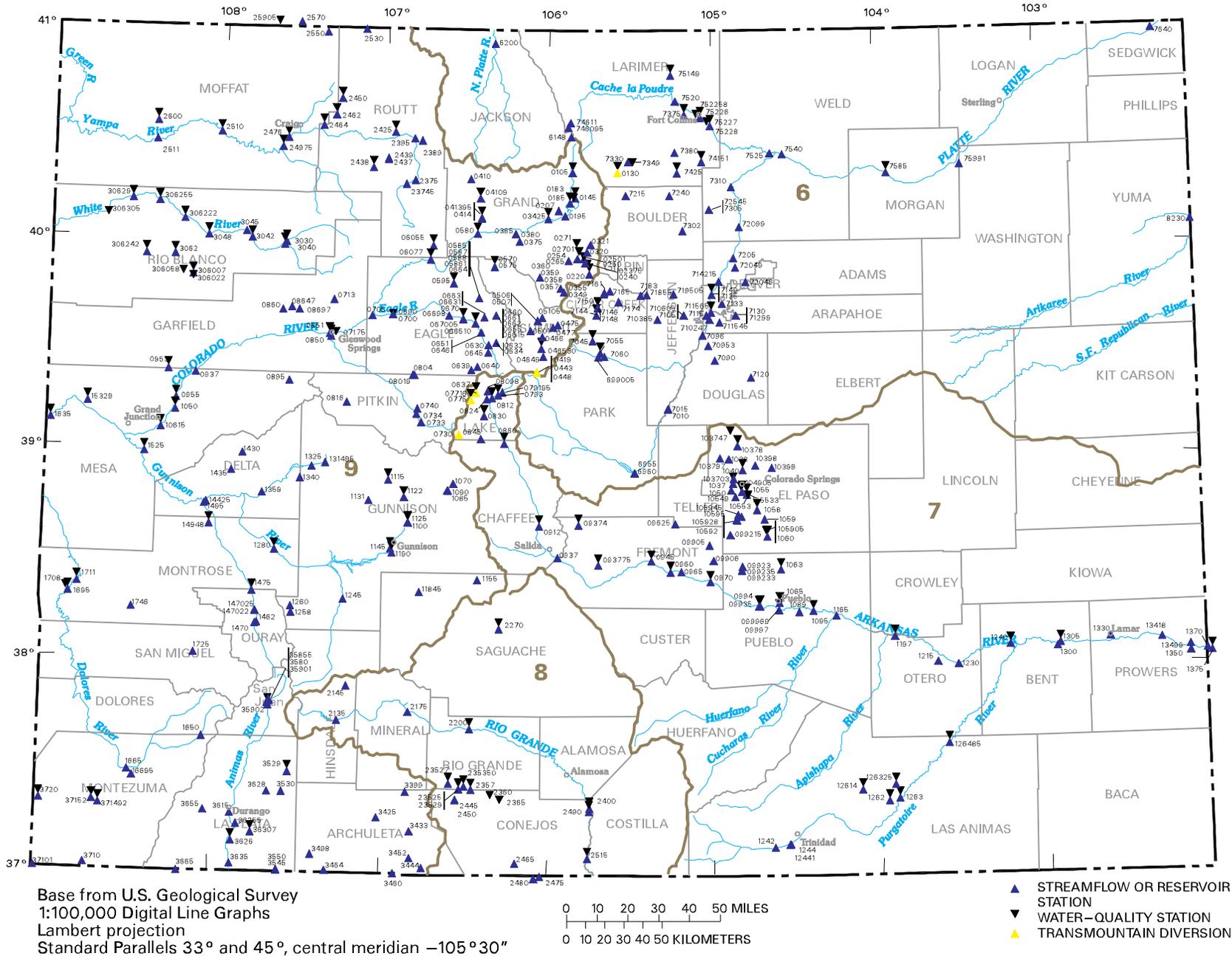
This report (Volume 1 of two volumes) includes records on both surface and ground water in the State, east of the Continental Divide. Specifically, it contains: (1) discharge records for 146 surface-water stations, and peak discharges for 29 partial-record surface-water stations; (2) stage and contents for 12 lakes and reservoirs; (3) water-quality data for 62 surface-water stations, 4 reservoirs, 14 wells, and miscellaneous surface-water-quality data for 68 gaged sites, 1 miscellaneous site, and meteorological data for 19 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-96-1." 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.



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

- ▲ STREAMFLOW OR RESERVOIR STATION
- ▼ WATER-QUALITY STATION
- ▲ TRANSMOUNTAIN DIVERSION

Figure 1.--Map showing locations of lakes and surface-water stations and surface-water-quality 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 Black Hawk.  
City of Boulder.  
City of Colorado Springs.  
City of Englewood.  
City of Fort Collins.  
City of Glendale.  
City of Greenwood Village.  
City of Gunnison.  
City of Lakewood.  
City of Longmont.  
City of Loveland.  
City of Pueblo.  
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.  
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.  
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 Blanco Water Conservancy District.  
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 Breckenridge.  
Town of Crested Butte.  
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 1996 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 29 percent less than normal in the Kansas Drainage Basin, 38 percent less than normal in the Arkansas Drainage Basin, and 53 percent less than normal in the Rio Grande Drainage Basin. Precipitation was 10 percent greater than normal in the Platte Drainage Basin. For April-September, precipitation was 15 percent less than normal in the Rio Grande Drainage Basin. Precipitation was 7 percent greater than normal in the Platte Drainage Basin, 22 percent greater than normal in the Arkansas Drainage Basin, and 34 percent greater than normal in the Kansas 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 1996 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 1996 and departures-from-normal precipitation (1961-90), in inches**

| National Weather Service<br>division | October-March |                          | April-September |                          | Water year 1996 |                          |
|--------------------------------------|---------------|--------------------------|-----------------|--------------------------|-----------------|--------------------------|
|                                      | Precipitation | Departure<br>from normal | Precipitation   | Departure<br>from normal | Precipitation   | Departure<br>from normal |
| Arkansas Drainage Basin              | 2.51          | -1.53                    | 12.92           | 2.35                     | 15.43           | 0.82                     |
| Kansas Drainage Basin                | 2.40          | -.96                     | 17.79           | 4.54                     | 20.19           | 3.58                     |
| Platte Drainage Basin                | 4.94          | .44                      | 12.01           | .74                      | 16.95           | 1.18                     |
| Rio Grande Drainage Basin            | 2.56          | -2.84                    | 6.59            | -1.17                    | 9.15            | -4.01                    |

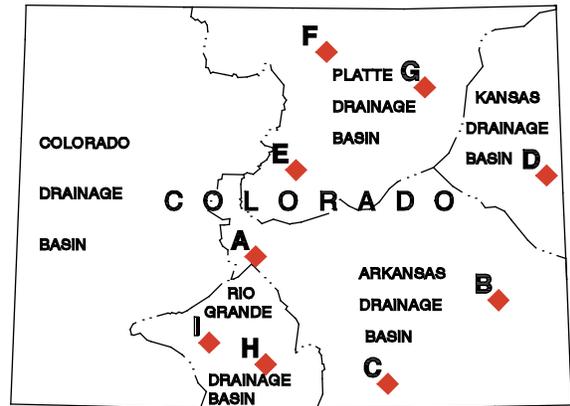
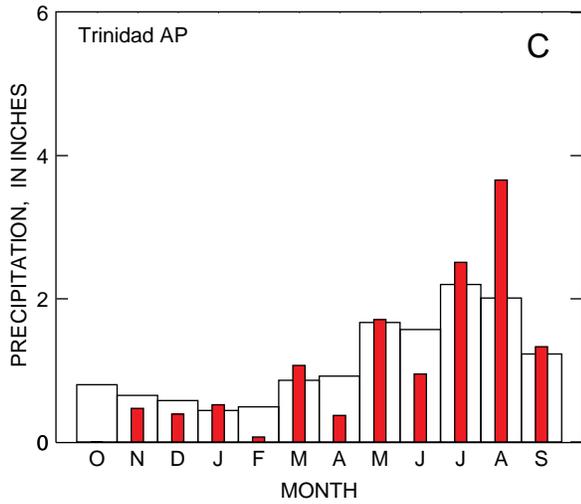
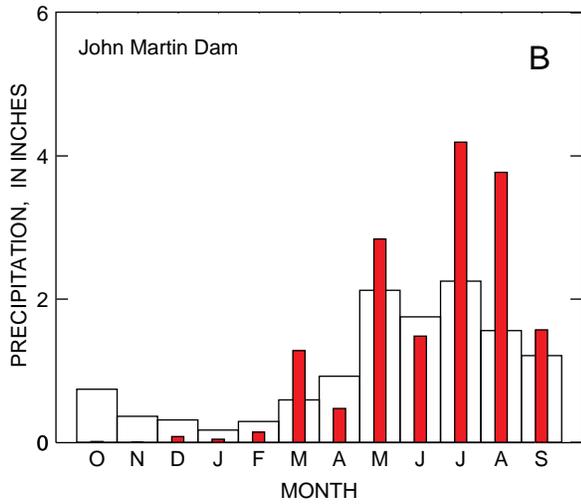
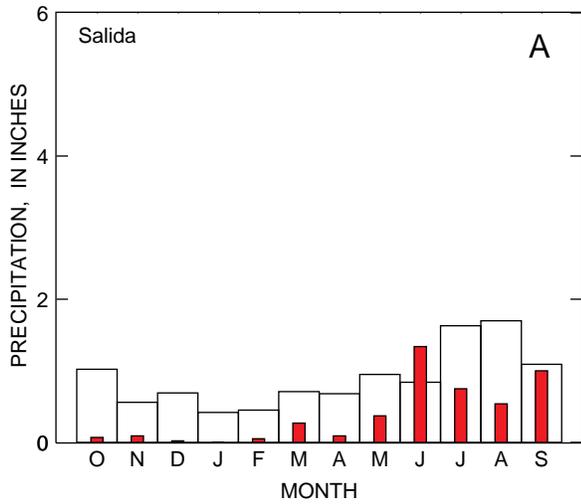
**Streamflow**

Monthly mean discharges during water year 1996 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 1996, 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), has been operated seasonally (April-September) since water year 1995.

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 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 1996 monthly mean discharges did not follow the general 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 1996 mean discharge at gaging station 06701500, South Platte River below Cheesman Lake, was 42 percent greater than the long-term mean. The water year 1996 mean discharge at gaging station 06706000, North Fork South Platte River below Geneva Creek, at Grant, was seven percent less than the long-term mean. The water year 1996 mean discharge at gaging station 06758500, South Platte River near Weldona, was seven percent less than the long-term mean.

In the Arkansas River Basin, the graph for gaging station 07094500, Arkansas River at Parkdale (fig. 4, site D), had a general 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 1996 monthly mean discharges did not follow the general 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 1996 mean discharge at gaging station 07094500, Arkansas River at Parkdale, was seven percent greater than the long-term mean. The water year 1996 mean discharge at gaging station 07126300, Purgatoire River near Thatcher, was 38 percent less than the long-term mean; the April to September 1996 mean discharge at this site was notably less (55 percent) than the long-term mean for the same period. The water year 1996 mean discharge at gaging station 07133000, Arkansas River at Lamar, was 25 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 trend similar to that of the long-term mean monthly discharges, although the highest water year 1996 monthly mean discharge occurred earlier than normal. The graph for gaging station 08251500, Rio Grande near Lobatos (fig. 4, site H), indicates that 1996 monthly mean discharges did not follow the general 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 1996 mean discharge at gaging station 08217500, Rio Grande at Wagon Wheel Gap, was 26 percent less than the long-term mean. The water year 1996 mean discharge at gaging station 08251500, Rio Grande near Lobatos, was 66 percent less than the long-term mean; the April through September 1996 mean discharge at this site was notably less (89 percent) than the long-term mean for the same period.



EXPLANATION

□ Normal monthly precipitation for reference period

■ Monthly precipitation for water year 1996

◆ WEATHER STATION--Letter identifies sites on index map for which data are shown on graphs

Figure 3.--Comparison of monthly precipitation for water year 1996 to normal monthly precipitation for the reference period 1961-90.

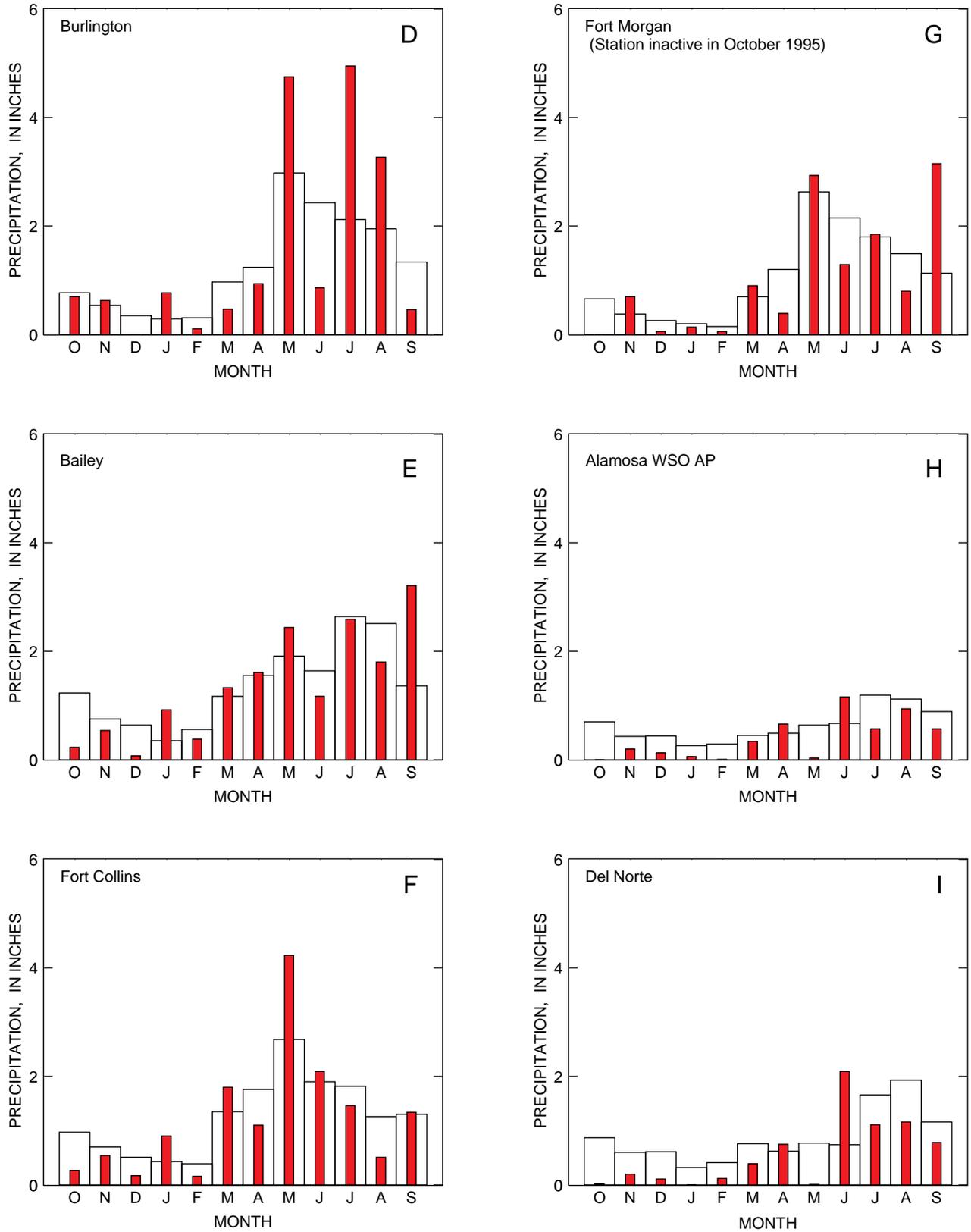
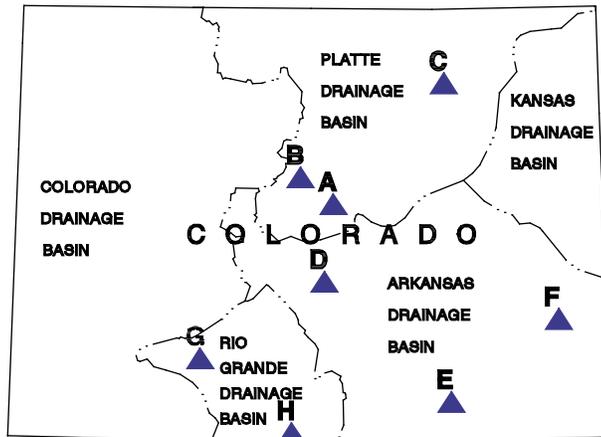
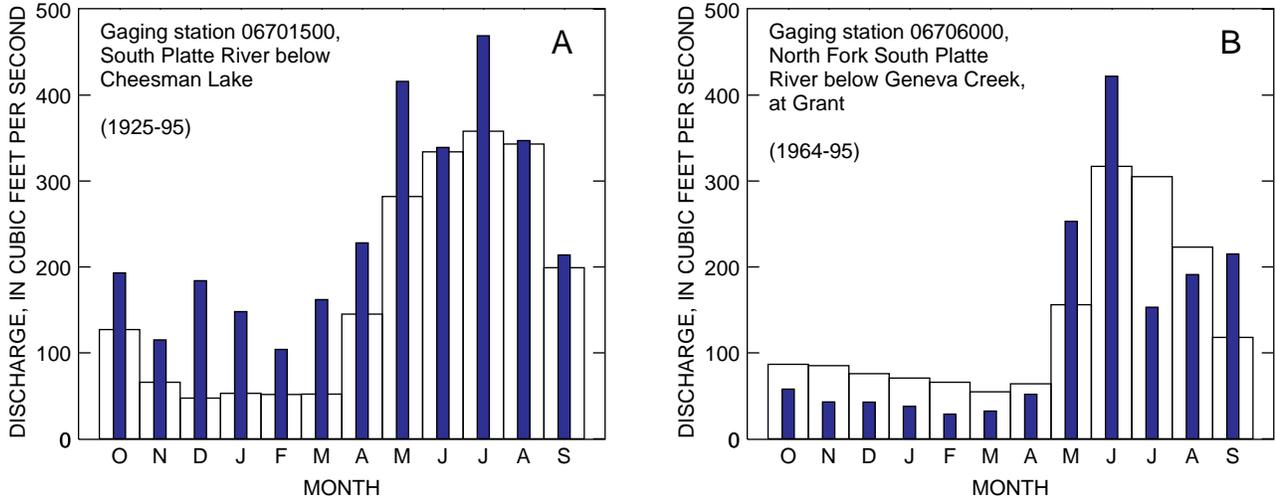


Figure 3.--Comparison of monthly precipitation for water year 1996 to normal monthly precipitation for the reference period 1961-90--Continued.



EXPLANATION

- Mean monthly discharge for reference period
- Monthly mean discharge for water year 1996

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

(1925-95) REFERENCE PERIOD

**Figure 4.**--Comparison of monthly discharges for water year 1996 to mean monthly discharges for the reference periods indicated on the individual graphs.

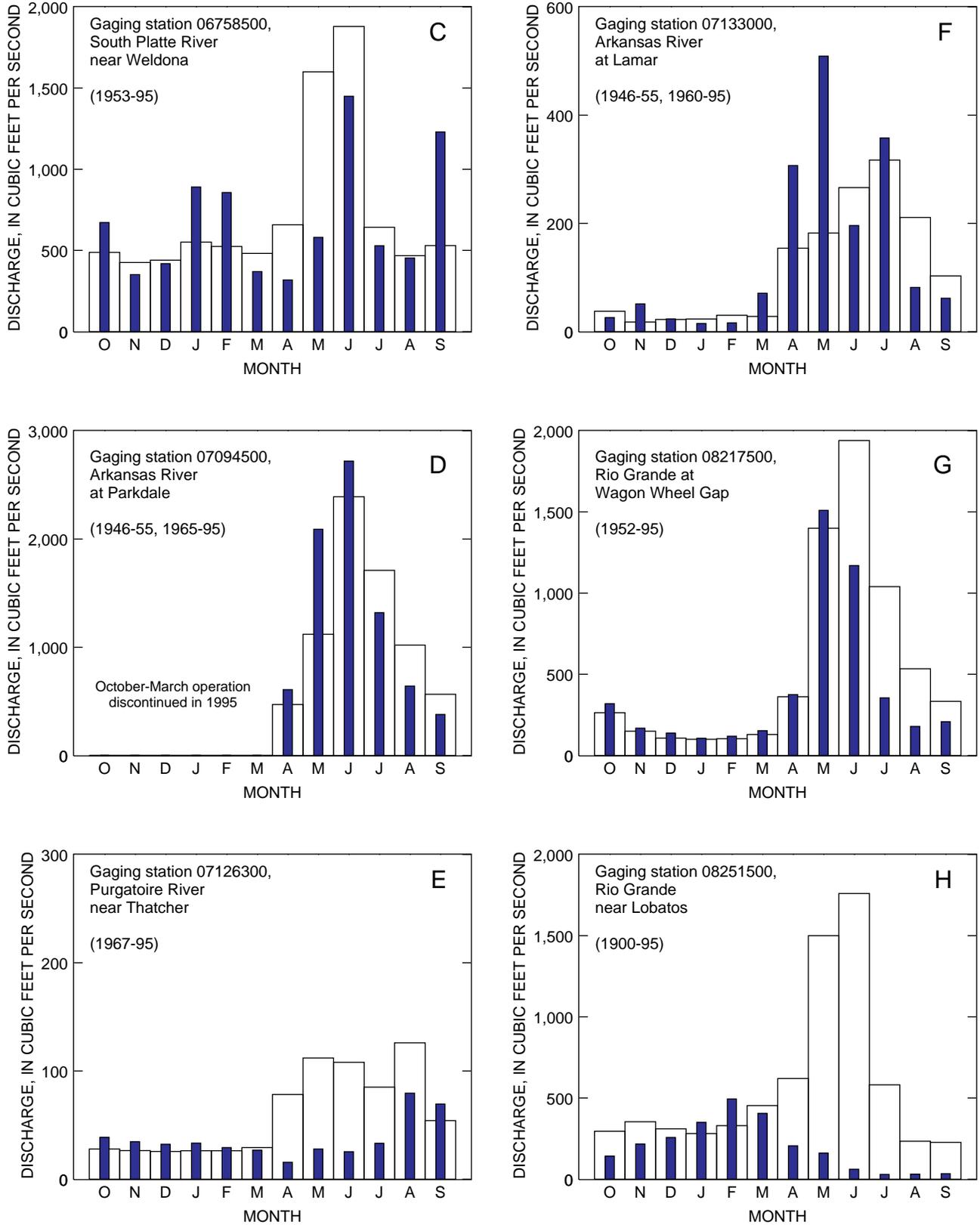


Figure 4.--Comparison of monthly discharges for water year 1996 to mean monthly discharges for the reference periods indicated on the individual graphs--Continued.

Peak discharges during water year 1996 and for the period of record (through previous water year) for selected streamflow-gaging stations are listed in table 2. No discharge extremes occurred this water year at these gaging stations. The water year 1996 peak discharges at gaging stations 06706000, North Fork South Platte River below Geneva Creek, at Grant; 06752500, Cache La Poudre River near Greeley; 07106500, Fountain Creek at Pueblo; and 07109500, Arkansas River near Avondale, were greater than the 75th percentile. The water year 1996 peak discharges at gaging stations 07124000, Arkansas River at Las Animas; 08246500, Conejos River near Mogote; and 08251500, Rio Grande near Lobatos, were less than the 25th percentile. Water year 1996 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 1996 and for the period of record at selected gaging stations**

[mi<sup>2</sup>, square miles; ft<sup>3</sup>/s, cubic feet per second; WY, water year]

| Gaging-station identification |  | Drainage area (mi <sup>2</sup> ) | Period of record (water years)           | Water year 1996 |                                     | Period of record |                                     | Remarks on WY 1996 peak discharge |
|-------------------------------|--|----------------------------------|--|-----------------|-------------------------------------|------------------|-------------------------------------|-----------------------------------|
| Station number                | Station name   |                                  |  | Date            | Peak discharge (ft <sup>3</sup> /s) | Date             | Peak discharge (ft <sup>3</sup> /s) |                                   |
| 06620000                      | North Platte River near Northgate                          | 1,431                            | 1904, 1915-95                            | 4/11            | 3,880                               | 6/11/23          | 6,720                               | Less than 75th percentile         |
| 06696000                      | South Platte River near Lake George                        | 963                              | 1930-95                                  | 5/26            | 418                                 | 4/28/70          | 3,000                               | Less than median                  |
| 06701500                      | South Platte River below Cheesman Lake                     | 1,752                            | 1926-95                                  | 7/17            | 719                                 | 4/29/70          | 4,640                               | Greater than 25th percentile      |
| 06706000                      | North Fork South Platte River below Geneva Creek, at Grant | 127                              | 1964-95                                  | 6/5             | 750                                 | 6/18/95          | 1,160                               | Greater than 75th percentile      |
| 06752500                      | Cache la Poudre River near Greeley                         | 1,877                            | 1903, 1916-17, 1919, 1924-95             | 6/17            | 2,110                               | 6/14/83          | 6,360                               | Greater than 75th percentile      |
| 06758500                      | South Platte River near Weldona                            | 13,245                           | 1953-95                                  | 5/28            | 4,510                               | 5/8/73           | 26,800                              | Greater than median               |
| 07094500                      | Arkansas River at Parkdale                                 | 2,548                            | 1946-55, 1965-95                         | 6/14            | 4,440                               | 6/18/95          | 6,830                               | Greater than median               |
| 07106500                      | Fountain Creek at Pueblo                                   | 926                              | 1921-22, 1924-25, 1935, 1941-65, 1971-95 | 7/9             | 12,100                              | 6/17/65          | 47,000                              | Greater than 75th percentile      |
| 07109500                      | Arkansas River near Avondale                               | 6,327                            | 1939-51, 1965-95                         | 7/10            | 11,600                              | 6/18/65          | 50,000                              | Greater than 75th percentile      |
| 07124000                      | Arkansas River at Las Animas                               | 14,417                           | 1939-95                                  | 7/14            | 2,320                               | 5/20/55          | 44,000                              | Less than 25th percentile         |
| 07126300                      | Purgatoire River near Thatcher                             | 1,791                            | 1965-95                                  | 9/6             | 7,540                               | 6/18/65          | 47,700                              | Less than 75th percentile         |
| 07128500                      | Purgatoire River near Las Animas                           | 3,318                            | 1922-31, 1949-95                         | 8/31            | 2,830                               | 5/20/55          | 70,000                              | Greater than 25th percentile      |
| 07133000                      | Arkansas River at Lamar                                    | 19,780                           | 1913, 1915, 1919-55, 1960-95             | 5/27            | 5,030                               | 6/5/21           | 130,000                             | Less than 75th percentile         |
| 08220000                      | Rio Grande near Del Norte                                  | 1,320                            | 1890-1995                                | 5/17            | 3,760                               | 10/5/11          | 18,000                              | Greater than 25th percentile      |
| 08240000                      | Rio Grande above mouth of Trinchera Creek, near Lasausas   | 5,740                            | 1936-62, 1964-80, 1982-95                | 2/19            | 526                                 | 6/21/49          | 5,470                               | Greater than 25th percentile      |
| 08246500                      | Conejos River near Mogote                                  | 282                              | 1903-05, 1912-95                         | 5/15            | 1,680                               | 10/5/11          | 9,000                               | Less than 25th percentile         |
| 08251500                      | Rio Grande near Lobatos                                    | 7,700                            | 1900-95                                  | 2/20            | 650                                 | 6/8/05           | 13,200                              | Less than 25th percentile         |

<sup>1</sup>Period since imported water began flowing past this gaging station.

### Chemical Quality of Streamflow

To determine if substantial changes occurred during water year 1996 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 1996 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 1996 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 1996 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 five of the six gaging stations, 06741510, Big Thompson River at Loveland; 06752280, Cache la Poudre River above Box Elder Creek, near Timnath; 07094500, Arkansas River at Parkdale; 07128500, Purgatoire River near Las Animas; and 08217500, Rio Grande at Wagon Wheel Gap, the tests indicate that the mean specific conductance for water year 1996 and the mean specific conductance for the reference period are not statistically different. For gaging station 07133000, Arkansas River at Lamar, the mean specific conductance for water year 1996 is statistically different from the mean for the reference period. Examination of the plot of monthly mean discharges shows much greater than normal flows (1949-96 period) were observed during March, April, and May 1996. Discharge and specific conductance are inversely related at this site, therefore mean specific conductance for water year 1996 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 1996 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 1996      |       |                    | 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                            | 11                   | 1,132 | 565                | 121              | 994   | 506                | 1986-95                             | 0.90  | 1.98      | A          |
| 06752280                      | Cache la Poudre River above Box Elder Creek, near Timnath | 11                   | 1,119 | 836                | 111              | 1,532 | 720                | 1986-95                             | -1.39 | 1.98      | A          |
| 07094500                      | Arkansas River at Parkdale                                | 6                    | 193   | 82                 | 135              | 247   | 68                 | 1987-95                             | -1.54 | 1.98      | A          |
| 07128500                      | Purgatoire River near Las Animas                          | 19                   | 3,141 | 1,131              | 172              | 2,993 | 1,057              | 1986-95                             | 0.48  | 1.98      | A          |
| 07133000                      | Arkansas River at Lamar                                   | 11                   | 2,795 | 955                | 119              | 3,438 | 898                | 1987-95                             | -2.19 | 1.98      | R          |
| 08217500                      | Rio Grande at Wagon Wheel Gap                             | 8                    | 83    | 22                 | 76               | 92    | 23                 | 1987-95                             | -1.16 | 1.99      | A          |

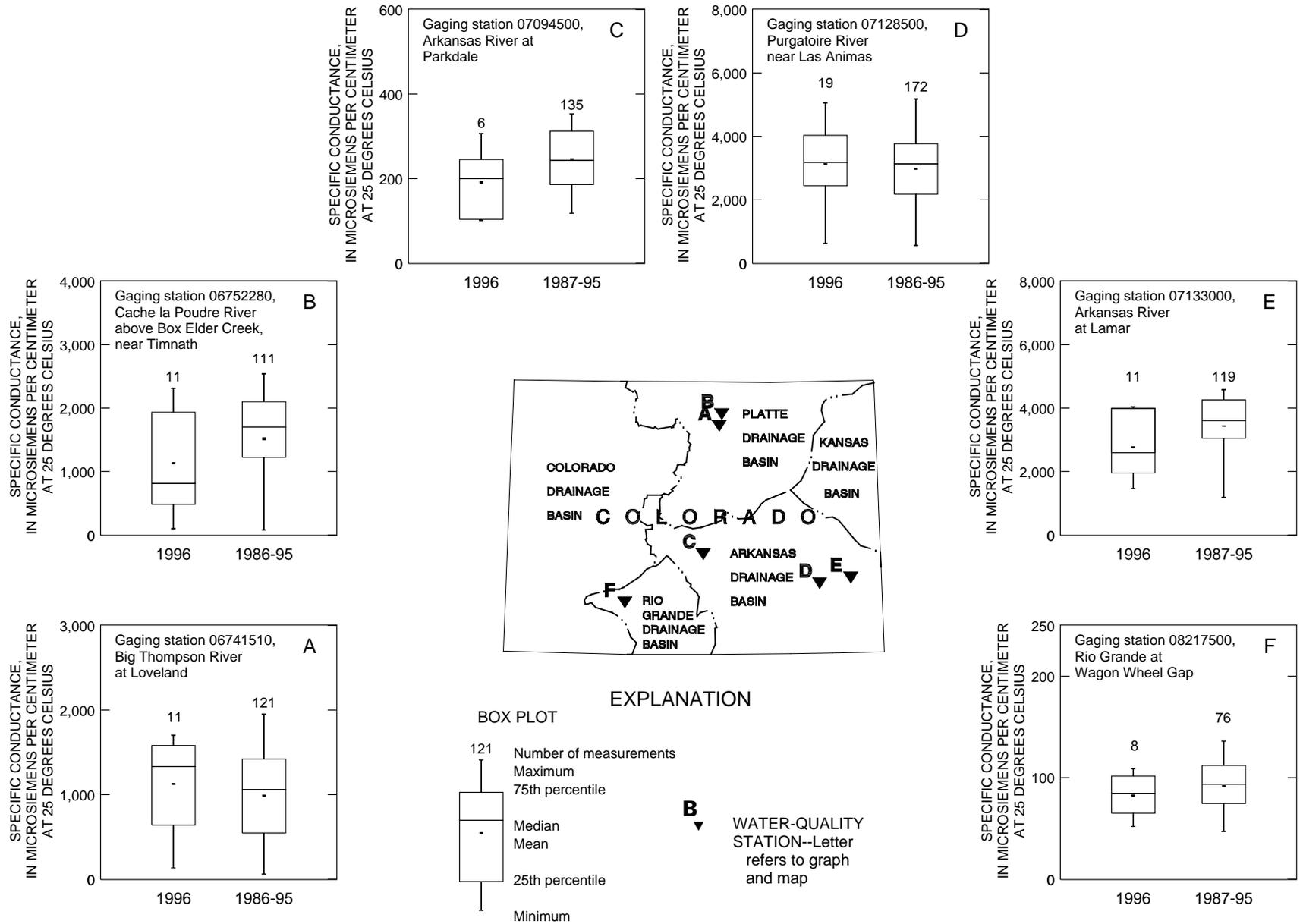


Figure 5.--Comparison of range and distribution of specific conductance measured during water year 1996 to long-term values.

## SPECIAL NETWORKS AND PROGRAMS

Hydrologic Bench-Mark Network is a network of 53 small 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 the activities of man.

National Stream Quality Accounting Network (NASQAN) is a nationwide data-collection network designed by the U.S. Geological Survey to meet many of the information needs of government agencies and other groups involved in natural or regional water-quality planning and management. The 142 sites in NASQAN are generally located at the downstream ends of hydrologic accounting units designated by the U.S. Geological Survey Office of Water Data Coordination in consultation with the Water Resources Council. The objectives of NASQAN are (1) to obtain information on the quality and quantity of water moving within and from the United States through a systematic and uniform process of data collection, summarization, analysis, and reporting such that the data may be used for, (2) description of the areal variability of water quality in the Nation's rivers through analysis of data from this and other programs, (3) detection of changes or trends with time in the pattern of occurrence of water-quality characteristics, and (4) providing a nationally consistent data base useful for water-quality assessment and hydrologic research.

National Trends Network (NTN) is a 150-station network for sampling atmospheric deposition in the United States. The purpose of the network is to determine the variability, both in location and in time, of the composition of wet atmospheric deposition, which includes snow, rain, sleet and hail. The core from which the NTN was built was the already-existing deposition-monitoring network of the National Atmospheric Deposition Program (NADP).

National Water-Quality Assessment Program (NAWQA) is a nationwide program that was implemented full-scale by the U.S. Geological Survey in 1991. The long term goals of the NAWQA program are to describe the status and trends in the quality of a large, representative part of the Nation's surface-water, and ground-water resources and to provide a sound, scientific understanding of the primary natural and human factors affecting the quality of these resources. The principle building blocks of the NAWQA program are the study-unit investigations on which national-level assessments are based. Study unit-investigations are comprehensive and include information on water, sediment, biota, and aquatic and terrestrial habitats within its boundaries. Of the 60 study unit-investigations that comprise the NAWQA program, portions of three are located in Colorado; the South Platte River, Rio Grande Valley, and Upper Colorado River Basins. Selected water-quality data for one surface-water monitoring site within the South Platte River Basin NAWQA and four surface-water monitoring sites within the Rio Grande Valley Basin NAWQA are included in volume one of this report.

## EXPLANATION OF THE RECORDS

The surface-water and ground-water records published in this report are for the 1996 water year that began on October 1, 1995, and ended September 30, 1996. 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, and water-quality data for surface and ground water. The locations of the stations where the surface-water data were collected are shown in figures 1 and 2. The following sections of the introductory text are presented to provide users with a more detailed explanation of how the hydrologic data published in this report were collected, analyzed, computed, and arranged for presentation.

### Station Identification Numbers

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

### Downstream Order System

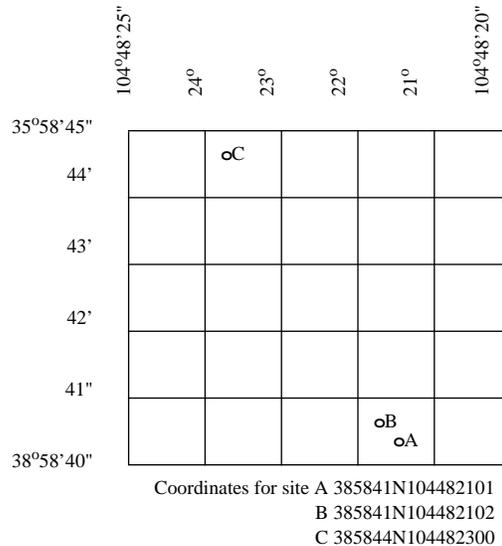
Since October 1, 1950, the order of listing hydrologic-station records in Survey reports is in a downstream direction along the main stream. All stations on a tributary entering upstream from a mainstream station are listed before that station. A station on a tributary that enters between two mainstream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

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

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Latitude-Longitude System

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



System for numbering wells, springs, and miscellaneous sites.

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

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

The 36-mi<sup>2</sup> area described by the township and range designation is subdivided into 1-mi<sup>2</sup> areas called sections. The sections are numbered sequentially. The third number of the well location designates the section. The section, which contains 640 acres, is subdivided into quarter sections. The 160-acre area is designated by the first letter following the section: A indicates the northeast quarter, B the northwest, C the southwest, and D the southeast. The quarter section is subdivided into quarter-quarter sections. The 40-acre area is designated in the same manner by the second letter following the section. The 10-acre area is designated in the same manner by the third letter following the section. If more than one well is located within the 10-acre tract, the wells are numbered sequentially in the order in which they were originally inventoried. If this number is necessary, it will follow the three-letter designation.

Records of Stage and Water Discharge

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

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

## Data Collection and Computation

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

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

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

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

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

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

For some gaging stations there are periods when no gage-height record is obtained, or the recorded gage height is so faulty that it cannot be used to compute daily discharge or contents. This happens when the recorder stops or otherwise fails to operate properly, intakes are plugged, the float is frozen in the well, or for various other reasons. For such periods, the daily discharges are estimated from the recorded range in stage, previous or following record, discharge measurements, weather records, and comparison with other station records from the same or nearby basins. Likewise, daily contents may be estimated from operator's logs, previous or following record, inflow-outflow studies, and other information. Information explaining how estimated daily-discharge values are identified in station records is included in the next two sections. "Data Presentation" (REMARKS paragraph) and "Identifying Estimated Daily Discharge."

## Data Presentation

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

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

Station manuscript

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

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

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

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

**REVISED RECORDS.**--Because of new information, published records occasionally are found to be incorrect, and revisions are printed in later reports. Listed under this heading are all the reports in which revisions have been published for the station and the water years to which the revisions apply. If a revision did not include daily, monthly, or annual figures of discharge, that fact is noted after the year dates as follows: "(M)" means that only the instantaneous maximum discharge was revised; "(m)" that only the instantaneous minimum was revised; and "(P)" that only peak discharges were revised. If the drainage area has been revised, the report in which the most recently revised figure was first published is given.

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

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

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

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

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

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

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

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

### Data table of daily mean values

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

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

### Statistics of monthly mean data

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

### Summary statistics

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

#### Identifying Estimated Daily Discharge

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

#### Accuracy of the Records

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

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

Daily mean discharges in this report are given to the nearest hundredth of a cubic foot per second for daily values less than 1 ft<sup>3</sup>/s; to the nearest tenth between 1.0 and 10 ft<sup>3</sup>/s; to whole numbers between 10 and 1,000 ft<sup>3</sup>/s; and to 3 significant figures for more than 1,000 ft<sup>3</sup>/s. The number of significant figures used is based solely on the magnitude of the discharge value. The same rounding rules apply to discharges listed for partial-record stations and miscellaneous sites.

Discharge at many stations, as indicated by the monthly mean, may not reflect natural runoff due to the effects of diversion, consumption, regulation by storage, increase or decrease in evaporation due to artificial causes, or to other factors. Evaporation from a reservoir is not included in the adjustments for changes in reservoir contents, unless it is so stated. Even at those stations where adjustments are made, large errors in computed runoff may occur if adjustments or losses are large in comparison with the observed discharge.

#### Other Records Available

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

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

### Records of Surface-Water Quality

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

In March 1989 the National Water-Quality Laboratory discovered a bias in the turbidimetric method for sulfate analysis, indicating that values below 75 mg/L have a median positive bias of 2 mg/L above the true value for the period between 1982 and 1989. 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 uS/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, WATSTORE, and subsequently by monthly transfer of update transactions to the U.S. Environmental Protection Agency's STORET system. Because the usual volume of updates makes it impractical to document individual changes in the State data-report series or elsewhere, potential users of U.S. Geological Survey water-quality data are encouraged to obtain all required data from the appropriate computer file to 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 WATSTORE DATA

The U.S. Geological Survey is the principal Federal water-data agency and, as such, collects and disseminates about 70 percent of the water data currently being used by numerous State, local, private, and other Federal agencies to develop and manage our water resources. As part of the Geological Survey's program of releasing water data to the public, a large-scale computerized system has been developed for the storage and retrieval of water data collected through its activities. The National Water Data Storage and Retrieval System (WATSTORE) was established in 1972 to provide an effective and efficient means for the processing and maintenance of water-data collected through the activities of the U.S. Geological Survey and to facilitate release of the data to the public. A variety of useful products ranging from data tables to complex statistical analyses such as Log Pearson Type III, can be produced using WATSTORE. The system resides on the central computer facilities of the U.S. Geological Survey at its National Center in Reston, Virginia, and consists of related files and data bases.

- \* Station Header File - Contains descriptive information on more than 440,000 sites throughout the United States and its territories where the U.S. Geological Survey collects or has collected data.
- \* Daily Values File - Contains more than 220 million daily values of stream flows, stages, reservoir contents, water temperatures, specific conductances, sediment concentrations, sediment discharges, and ground-water levels.
- \* Peak Flow File - Contains approximately 500,000 maximum (peak) streamflow and gage-height values at surface-water sites.
- \* Water Quality File - Contains approximately 2 million analyses of water samples that describe the chemical, physical, biological, and radio-chemical characteristics of both surface and ground water.
- \* Ground-Water Site Inventory Data Base - Contains inventory data for more than 900,000 wells, springs, and other sources of ground water. The data includes site location, geohydrologic characteristics, well-construction history, and one-time field measurements such as water temperature.

In 1976, the U.S. Geological Survey opened WATSTORE to the public for direct access. The signing of a Memorandum of Agreement with the Survey is required to obtain direct access to WATSTORE. The system can be accessed either synchronously or asynchronously. The requester will be expected to pay all computer costs he/she incurs. Direct access may be obtained by contacting:

U.S. Geological Survey  
National Water Data Exchange  
421 USGS National Center  
Reston, VA 20192

In addition to data retrieval by direct access to WATSTORE, data are available in various machine-readable formats on magnetic tape or 5-1/4 inch floppy disk. 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's 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.

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°C ± 1.0°C on M-Endo medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

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

Fecal streptococcal bacteria are bacteria found also in the intestine of warmblooded 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°C ± 1.0°C on KF-streptococcus medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

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<sup>3</sup>), and periphyton and benthic organisms in grams per square meter (g/m<sup>2</sup>).

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 ( $\text{ft}^3/\text{s}$ ) 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 ( $\text{ft}^3/\text{s}/\text{mi}^2$ ) is the average number of cubic feet of water flowing per second from each square mile of area drained, assuming 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  $\mu\text{m}$  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 ( $\text{CaCO}_3$ ).

Hydrologic Bench-Mark Network is a network of 53 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 the activities of man.

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 (lsd) is a datum plane that is approximately at land surface at each groundwater 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 (ug/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 (UG/L, ug/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) is a nationwide data-collection network designed by the U.S. Geological Survey to meet many of the information needs of government agencies and other groups involved in natural or regional water-quality planning and management. The 142 sites in NASQAN are generally located at the downstream ends of hydrologic accounting units designated by the U.S. Geological Survey Office of Water Data Coordination in consultation with the Water Resources Council. The objectives of NASQAN are (1) to obtain information on the quality and quantity of water moving within and from the United States through a systematic and uniform process of data collection, summarization, analysis, and reporting such that the data may be used for, (2) description of the areal variability of water quality in the Nation's rivers through analysis of data from this and other programs, (3) detection of changes or trends with time in the pattern of occurrence of water-quality characteristics, and (4) providing a nationally consistent data base useful for water-quality assessment and hydrologic research.

National Trends Network (NTN) is a 150-station network for sampling atmospheric deposition in the United States. The purpose of the network is to determine the variability, both in location and in time, of the composition of atmospheric deposition, which includes snow, rain, dust particles, aerosols, and gases. The core from which the NTN was built was the already-existing deposition-monitoring network of the National Atmospheric Deposition Program (NADP).

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<sup>2</sup>), acre, or hectare. Periphyton, benthic organisms, and macrophytes are expressed in these terms.

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

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, WATSTORE, to uniquely identify a specific constituent. The codes used in WATSTORE 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 ( $1 \times 10^{-12}$ ) of the amount of radioactivity represented by a curie (Ci). A curie is the amount of radioactivity that yields  $3.7 \times 10^{10}$  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 mg C/(m<sup>2</sup>.time) for periphyton and macrophytes and mg C/(m<sup>3</sup>.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 mg O/(m<sup>2</sup>.time) for periphyton and macrophytes and mg O/(m<sup>3</sup>.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 (ft<sup>3</sup>/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 Q<sub>10</sub>) 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 emerged 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 U.S.G.S. 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 planimetered. All areas shown are those for the stage when the planimetered 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 um 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 um 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 hierarchical scheme beginning with Kingdom and ending with Species at the base. The higher the classification level, the fewer features the organisms have in common. For example, the taxonomy of a particular mayfly, Hexagenia limbata, is the following:

|              |                          |
|--------------|--------------------------|
| Kingdom..... | Animal                   |
| Phylum.....  | Arthropoda               |
| Class.....   | Insecta                  |
| Order.....   | Ephemeroptera            |
| Family.....  | Ephemeridae              |
| Genus.....   | <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, 1996  
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WATER RESOURCES DATA - COLORADO, 1996  
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<br>(sq mi) | Period of record<br>(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,<br>1923,<br>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,<br>1931-45               |
| Roaring Fork near Walden, CO                            | 06612500       | 79.1                     | 1904-05,<br>1923-47               |
| North Platte River near Walden, CO                      | 06613000       | 469                      | 1904-05,<br>1923-47               |
| North Fork North Platte River near Walden, CO           | 06614000       | 160                      | 1923-28,<br>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,<br>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,<br>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,<br>1929-31,<br>1937-47   |
| Laramie River near Glendevey, CO                        | 06657500       | 101                      | 1904-05,<br>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,<br>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,<br>1978-86               |
| Tarryall Creek near Jefferson, CO                       | 06698500       | 183                      | 1910-11,<br>1912-17<br>1977-81    |
| Rock Creek near Jefferson, CO                           | 06699000       | 45.5                     | 1986-90                           |
| Tarryall Creek near Lake George, CO                     | 06699500       | 236                      | 1910-12,<br>1916,<br>1925-55      |
| South Platte River above Cheesman Lake, CO              | 06700000       | 1,628                    | 1899-1901,<br>1924-43             |
| Goose Creek above Cheesman Lake, CO                     | 06700500       | 86.6                     | 1899,<br>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,<br>1913-82               |
| South Platte River at South Platte, CO                  | 06707500       | 2,579                    | 1887-92,<br>1895-97,<br>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<br>(sq mi) | Period of record<br>(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,<br>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,<br>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                           |
| Big Dry Creek at Westminster, CO                                | 06720820       | 43.8                     | 1987-95                           |
| South Platte River at Fort Lupton, CO                           | 06721000       | 5,010                    | 1906,<br>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,<br>1928-31<br>1954-73    |
| Middle Saint Vrain Creek near Raymond, CO                       | 06722900       | 16.8                     | 1956-58                           |
| Middle Saint Vrain Creek near Allens Park, CO                   | 06723000       | 28.0                     | 1925-30, <sup>a</sup>             |
| South Saint Vrain Creek above Lyons, CO                         | 06723400       | 81.4                     | 1971-80                           |
| Lefthand Creek near Boulder, CO                                 | 06724500       | 52.0                     | 1929-31,<br>1947-53,<br>1976-80   |
| Lefthand Creek at Mouth at Longmont, CO                         | 06725000       | 72.0                     | 1927-42,<br>1953-55,<br>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                           |
| Foumille Creek at Orodell, CO                                   | 06727500       | 24.1                     | 1947-53,<br>1983-95               |
| South Boulder Creek near Rollinsville, CO                       | 06729000       | 42.7                     | 1910-18,<br>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,<br>1951-55<br>1978-90    |
| Boulder Brook near Estes Park, CO                               | 06731800       | 3.83                     | 1968-70                           |
| Glacier Creek near Estes Park, CO                               | 06732000       | 20.8                     | 1941-57,<br>1968-70               |
| Beaver Brook near Estes Park, CO                                | 06732300       | 1.49                     | 1968-70                           |
| Fall River at Estes Park, CO                                    | 06732500       | 39.8                     | 1945-53, <sup>a</sup>             |
| 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,<br>1947-61               |

WATER RESOURCES DATA - COLORADO, 1996  
DISCONTINUED SURFACE-WATER DISCHARGE OR STAGE ONLY STATIONS (Continued)

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| Station name  | Station number | Drainage area<br>(sq mi) | Period of record<br>(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,<br>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,<br>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,<br>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,<br>1951-57,<br>1962-64   |
| South Fork Republican River near Idalia, CO             | 06825000       | 1,300                    | 1950-71,<br>1972-81               |
| Landsman Creek near Hale, CO                            | 06825500       | 268                      | 1950-76,<br>1977-81               |
| Bonny Reservoir near Hale, CO                           | 06826000       | 1,820                    | 1950-95                           |
| South Fork Republican River near Hale, CO               | 06826500       | 1,825                    | 1946-48,<br>1951-86               |
| Leadville Mine Drainage Tunnel at Leadville, CO         | 07079200       | --                       | 1990-93                           |
| East Fork Arkansas River near Leadville, CO             | 07079500       | 50.0                     | 1890-1903,<br>1910-24             |
| Tennessee Creek near Leadville, CO                      | 07081000       | 48.0                     | 1890-1903,<br>1910-1924           |
| Arkansas River near Leadville, CO                       | 07081200       | 97.2                     | 1967-83                           |
| 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,<br>1976-84               |
| Arkansas River below Empire Gulch, near Malta, CO       | 07083710       | 237                      | 1990-93                           |
| Arkansas River at Buena Vista, CO                       | 07087200       | 611                      | 1964-80,<br>1986-93               |
| Cottonwood Creek below Hot Springs near Buena Vista, CO | 07089000       | 65.0                     | 1910-23,<br>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,<br>1949-56, <sup>a</sup>    |
| Arkansas River at Salida, CO                            | 07091500       | 1,218                    | 1895-97,<br>1901-03,<br>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,<br>1929-40               |
| South Colony Creek near Westcliffe, CO                  | 07094600       | 6.03                     | 1974-78                           |
| Middle Taylor Creek near Westcliffe, CO                 | 07094900       | 3.19                     | 1974-78,<br>1984-85               |

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

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| Station name  | Station number | Drainage area<br>(sq mi) | Period of record<br>(water years)        |
|---|----------------|--------------------------|--|
| 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                                  |
| Turkey Creek above Teller Reservoir near Stone City, CO       | 07099230       | 62.3                     | 1978-88                                  |
| Turkey Creek near Stone City, CO                              | 07099235       | 71.5                     | 1978-83,<br>1987                         |
| Arkansas River near Pueblo, CO                                | 07099500       | 4,686                    | 1885-87,<br>1889,<br>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,<br>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,<br>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,<br>1923-25,<br>1938-41,<br>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,<br>1904-06,<br>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,<br>1978-81                      |
| Apishapa River near White Rock, CO                            | 07119000       | 737                      | 1942-47                                  |
| Big Arroyo near Thatcher, CO                                  | 07120620       | 15.5                     | 1983-90 <sup>a</sup>                     |
| Timpas Creek near Rocky Ford, CO                              | 07121000       | 451                      | 1922-27,<br>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,<br>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                                  |

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| Station name  | Station number | Drainage area<br>(sq mi) | Period of record<br>(water years)           |
|---|----------------|--------------------------|---|
| Purgatoire River at Trinidad, CO                                  | 07124500       | 795                      | 1895-99,<br>1905-12,<br>1915-60,<br>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,<br>1924-28,<br>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 <sup>a</sup>                        |
| Red Rock Canyon Creek at Mouth, near Thatcher, CO                 | 07126415       | 48.8                     | 1983-90 <sup>a</sup>                        |
| Chacuaco Creek at Mouth, near Timpas, CO                          | 07126470       | 424                      | 1983-92 <sup>a</sup>                        |
| Bent Canyon Creek at Mouth near Timpas, CO                        | 07126480       | 56.2                     | 1983-90 <sup>a</sup>                        |
| Purgatoire River at Highland Dam near Las Animas, CO              | 07128000       | 3,376                    | 1898,<br>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,<br>1901-02,<br>1907-53                |
| Wild Horse Creek at Holly, CO                                     | 07136000       | 270                      | 1922-35,<br>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,<br>1939-52                         |
| Goose Creek at Wagonwheel Gap, CO                                 | 08218500       | 90.0                     | 1954-91                                     |
| Pinos Creek near Del Norte, CO                                    | 08220500       | 53.0                     | 1919-24,<br>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,<br>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,<br>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,<br>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,<br>1914-27,<br>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,<br>1919-23,<br>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 Ft Garland, CO           | 08240500       | 45.0                     | 1923-82                                     |
| Trinchera Creek above Mountain Home Reservoir near Ft Garland, CO | 08241000       | 61.0                     | 1923-55                                     |
| Sangre De Cristo Creek near Ft Garland, CO                        | 08241500       | 190                      | 1916,<br>1923-30,<br>1931-82                |
| Ute Creek near Ft Garland, CO                                     | 08242500       | 32.0                     | 1916,<br>1923-82                            |

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| Station name  | Station number | Drainage area<br>(sq mi) | Period of record<br>(water years) |
|---|----------------|--------------------------|-----------------------------------|
| 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, 1996  
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<br>(sq mi) | Type of record                | Period of<br>record<br>(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.<br>S.C.                 | 1970-86<br>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.<br>Temp., S.C. | 1981<br>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,<br>1960-62,<br>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<br>(Chan. 2)     | 06763990       | --                       | Temp.<br>S.C.                 | 1967-73<br>1971-73                   |
| North Fork Republican River near Wray, CO            | 06822000       | 1,019                    | Temp., Sed.                   | 1962-63                              |
| 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 <sup>a</sup>                 |
| Arkansas River near La Junta, CO                     | 07122000       | --                       | Temp., S.C.                   | 1966-68                              |
| Horse Creek near Las Animas, CO                      | 07123675       | 1,403                    | Temp., S.C.                   | 1987-93                              |
| Middle Fork Purgatoire River at Stonewall, CO        | 07124050       | 52.1                     | Temp., S.C.<br>Sed.           | 1978-81<br>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.<br>Sed.           | 1979-81<br>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.<br>Sed.           | 1983-86<br>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 <sup>a</sup>                 |
| Chacuaco Creek at Mouth near Timpas, CO              | 07126470       | 424                      | Temp., S.C., Sed.             | 1983-92                              |
| Bent Canyon Creek at Mouth near Timpas, CO           | 07126480       | 56.2                     | Temp., S.C.                   | 1983-90 <sup>a</sup>                 |
| Purgatoire River at Rock Crossing near Timpas, CO    | 07126485       | 2,635                    | Temp., S.C., Sed.             | 1983-92                              |
| Purgatoire River at Highland Dam near Las Animas, CO | 07128000       | 3,376                    | S.C.                          | 1967-68                              |
| 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<br>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**

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

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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 S1/2 sec.12, T.6 N., R.76 W. (unsurveyed), Jackson County, Hydrologic Unit 10180001, on right bank 500 ft upstream from Michigan ditch, 2.2 mi southeast of Cameron Pass, 8 mi east of Gould, and 27 mi southeast of Walden.

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

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

GAGE.--Water-stage recorder. Elevation of gage is 10,390 ft above sea level, from topographic map.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

| DAY   | OCT  | NOV  | DEC   | JAN   | FEB   | MAR   | APR   | MAY    | JUN   | JUL   | AUG  | SEP  |
|-------|------|------|-------|-------|-------|-------|-------|--------|-------|-------|------|------|
| 1     | 1.6  | e1.2 | e1.1  | e.61  | e.54  | e.43  | e.43  | e.84   | 5.9   | 17    | 3.0  | 1.2  |
| 2     | 1.4  | e1.2 | e1.1  | e.60  | e.53  | e.42  | e.43  | e.82   | 6.3   | 16    | 3.1  | 1.2  |
| 3     | 1.3  | e1.1 | e1.1  | e.58  | e.52  | e.42  | e.43  | e.90   | 7.5   | 16    | 3.3  | 1.1  |
| 4     | 1.3  | e1.1 | e1.1  | e.57  | e.50  | e.42  | e.43  | e1.0   | 9.2   | 15    | 3.1  | 1.1  |
| 5     | 1.1  | e1.1 | e1.1  | e.56  | e.48  | e.42  | e.43  | e1.1   | 13    | 16    | 2.8  | 1.1  |
| 6     | 1.4  | e1.1 | e1.1  | e.55  | e.47  | e.42  | e.45  | e1.3   | 15    | 15    | 2.5  | 1.4  |
| 7     | 2.0  | e1.1 | e1.1  | e.54  | e.46  | e.42  | e.47  | e1.5   | 17    | 13    | 2.3  | 1.3  |
| 8     | 1.4  | e1.1 | e1.0  | e.54  | e.45  | e.42  | e.50  | e1.8   | 19    | 12    | 2.2  | 1.1  |
| 9     | 1.2  | e1.1 | e1.0  | e.54  | e.45  | e.42  | e.52  | e2.0   | 21    | 10    | 2.1  | 1.1  |
| 10    | 1.2  | e1.1 | e1.0  | e.54  | e.45  | e.42  | e.56  | 2.1    | 43    | 9.3   | 2.0  | 1.0  |
| 11    | 1.3  | e1.1 | e.96  | e.54  | e.45  | e.42  | e.59  | 2.6    | 51    | 9.1   | 1.9  | 1.0  |
| 12    | 1.3  | e1.1 | e.92  | e.54  | e.45  | e.42  | e.62  | 3.5    | 50    | 8.7   | 1.8  | 1.4  |
| 13    | 1.3  | e1.1 | e.90  | e.54  | e.45  | e.42  | e.62  | 4.2    | 48    | 8.2   | 1.7  | 1.6  |
| 14    | 1.1  | e1.1 | e.90  | e.54  | e.45  | e.42  | e.63  | 5.0    | 33    | 7.9   | 1.7  | 1.5  |
| 15    | 1.1  | e1.1 | e.90  | e.54  | e.45  | e.42  | e.63  | 5.8    | 27    | 7.2   | 1.7  | 1.3  |
| 16    | 1.1  | e1.1 | e.90  | e.54  | e.45  | e.42  | e.64  | 7.2    | 30    | 6.7   | 1.6  | 1.3  |
| 17    | 1.1  | e1.1 | e.88  | e.54  | e.45  | e.42  | e.66  | 7.8    | 28    | 6.9   | 1.5  | 1.3  |
| 18    | e1.2 | e1.1 | e.86  | e.54  | e.45  | e.42  | e.68  | 8.4    | 30    | 7.8   | 1.5  | 1.3  |
| 19    | e1.2 | e1.1 | e.85  | e.54  | e.45  | e.42  | e.71  | 8.2    | 30    | 7.0   | 1.7  | 1.3  |
| 20    | e1.2 | e1.1 | e.82  | e.54  | e.45  | e.42  | e.73  | 7.4    | 28    | 6.1   | 1.5  | 1.4  |
| 21    | e1.2 | e1.1 | e.80  | e.54  | e.45  | e.42  | e.74  | 7.8    | 42    | 5.5   | 1.5  | 1.3  |
| 22    | e1.2 | e1.1 | e.78  | e.54  | e.45  | e.42  | e.74  | 9.5    | 46    | 5.0   | 1.4  | 1.6  |
| 23    | e1.2 | e1.1 | e.76  | e.54  | e.45  | e.42  | e.76  | 10     | 31    | 4.5   | 1.4  | 1.8  |
| 24    | e1.2 | e1.1 | e.74  | e.54  | e.45  | e.42  | e.80  | 10     | 28    | 4.3   | 1.3  | 2.3  |
| 25    | e1.2 | e1.1 | e.73  | e.54  | e.45  | e.42  | e.90  | 11     | 25    | 3.9   | 1.3  | 2.2  |
| 26    | e1.2 | e1.1 | e.72  | e.54  | e.44  | e.41  | e.92  | 10     | 24    | 3.5   | 1.2  | 1.9  |
| 27    | e1.2 | e1.1 | e.70  | e.54  | e.44  | e.40  | e.88  | 8.7    | 25    | 3.3   | 1.3  | 1.8  |
| 28    | e1.2 | e1.1 | e.68  | e.54  | e.43  | e.42  | e.86  | 8.3    | 22    | 3.2   | 1.6  | 1.8  |
| 29    | e1.2 | e1.1 | e.66  | e.54  | e.43  | e.43  | e.85  | 7.0    | 19    | 4.1   | 1.7  | 2.0  |
| 30    | e1.2 | e1.1 | e.64  | e.54  | ---   | e.43  | e.84  | 6.3    | 19    | 3.7   | 1.4  | 2.2  |
| 31    | e1.2 | ---  | e.62  | e.54  | ---   | e.43  | ---   | 5.9    | ---   | 3.3   | 1.3  | ---  |
| TOTAL | 39.0 | 33.2 | 27.42 | 16.97 | 13.34 | 13.03 | 19.45 | 167.96 | 792.9 | 259.2 | 58.4 | 43.9 |
| MEAN  | 1.26 | 1.11 | .88   | .55   | .46   | .42   | .65   | 5.42   | 26.4  | 8.36  | 1.88 | 1.46 |
| MAX   | 2.0  | 1.2  | 1.1   | .61   | .54   | .43   | .92   | 11     | 51    | 17    | 3.3  | 2.3  |
| MIN   | 1.1  | 1.1  | .62   | .54   | .43   | .40   | .43   | .82    | 5.9   | 3.2   | 1.2  | 1.0  |
| AC-FT | 77   | 66   | 54    | 34    | 26    | 26    | 39    | 333    | 1570  | 514   | 116  | 87   |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1974 - 1996, BY WATER YEAR (WY)

|      | 1974 | 1975 | 1976 | 1977 | 1978 | 1979 | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 |  |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|--|
| MEAN | .82  | .55  | .43  | .35  | .31  | .33  | .41  | 3.79 | 16.6 | 9.44 | 2.76 | 1.31 |      |      |      |      |      |      |      |      |      |      |      |  |
| MAX  | 1.94 | 1.11 | .88  | .57  | .55  | .86  | .80  | 9.50 | 27.1 | 24.8 | 6.83 | 3.32 |      |      |      |      |      |      |      |      |      |      |      |  |
| (WY) | 1983 | 1996 | 1996 | 1988 | 1986 | 1986 | 1994 | 1974 | 1990 | 1995 | 1983 | 1984 |      |      |      |      |      |      |      |      |      |      |      |  |
| 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 1995 CALENDAR YEAR FOR 1996 WATER YEAR WATER YEARS 1974 - 1996

|                          |            |                         |                           |      |
|--------------------------|------------|-------------------------|---------------------------|------|
| ANNUAL TOTAL             | 1663.94    | 1484.77                 |                           |      |
| ANNUAL MEAN              | 4.56       | 4.06                    | 3.10                      |      |
| HIGHEST ANNUAL MEAN      |            |                         | 4.61                      | 1983 |
| LOWEST ANNUAL MEAN       |            |                         | 1.97                      | 1977 |
| HIGHEST DAILY MEAN       | 69 Jul 14  | 51 Jun 11               | 69 Jul 14                 | 1995 |
| LOWEST DAILY MEAN        | .22 Feb 14 | e.40 Mar 27             | .08 Nov 16                | 1989 |
| ANNUAL SEVEN-DAY MINIMUM | .23 Feb 10 | .42 Mar 21              | .14 Jan 9                 | 1979 |
| INSTANTANEOUS PEAK FLOW  |            | a <sub>103</sub> Jun 10 | a,b <sub>115</sub> Jul 12 | 1995 |
| INSTANTANEOUS PEAK STAGE |            | 3.66 Jun 10             | b <sub>3.69</sub> Jul 12  | 1995 |
| ANNUAL RUNOFF (AC-FT)    | 3300       | 2950                    | 2250                      |      |
| 10 PERCENT EXCEEDS       | 14         | 10                      | 10                        |      |
| 50 PERCENT EXCEEDS       | 1.1        | 1.1                     | .59                       |      |
| 90 PERCENT EXCEEDS       | .25        | .43                     | .25                       |      |

e-Estimated.  
a-From rating curve extended above 82 ft<sup>3</sup>/s.  
b-Also occurred Jul 13, 1995.





## 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 mi<sup>2</sup>.

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

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 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

| DAY   | OCT  | NOV  | DEC  | JAN  | FEB  | MAR  | APR  | MAY  | JUN   | JUL  | AUG  | SEP  |
|-------|------|------|------|------|------|------|------|------|-------|------|------|------|
| 1     | 39   | 22   | e14  | e12  | e12  | e14  | e17  | 40   | 124   | 127  | 50   | 28   |
| 2     | 37   | 19   | e14  | e12  | e12  | e14  | e17  | 41   | 121   | 113  | 47   | 27   |
| 3     | 35   | 18   | e14  | e12  | e12  | e14  | e17  | 37   | 120   | 105  | 46   | 27   |
| 4     | 33   | 15   | e14  | e12  | e12  | e14  | e17  | 42   | 138   | 105  | 45   | 26   |
| 5     | 35   | e15  | e14  | e12  | e12  | e14  | e17  | 45   | 160   | 110  | 45   | 26   |
| 6     | 30   | e15  | e14  | e12  | e12  | e14  | e17  | 48   | 206   | 96   | 42   | 28   |
| 7     | 37   | e15  | e14  | e12  | e12  | e14  | e17  | 49   | 237   | 87   | 40   | 38   |
| 8     | 36   | e15  | e14  | e12  | e12  | e14  | e17  | 50   | 239   | 81   | 42   | 30   |
| 9     | 34   | e15  | e14  | e12  | e12  | e14  | e17  | 60   | 247   | 95   | 40   | 27   |
| 10    | 33   | e15  | e14  | e12  | e12  | e14  | e18  | 63   | 265   | 104  | 37   | 27   |
| 11    | 32   | e15  | e14  | e12  | e12  | e14  | e19  | 64   | 260   | 77   | 35   | 25   |
| 12    | 32   | e15  | e14  | e12  | e13  | e15  | e20  | 73   | 261   | 65   | 33   | 26   |
| 13    | 33   | e15  | e14  | e12  | e13  | e15  | e21  | 85   | 274   | 65   | 32   | 27   |
| 14    | 35   | e14  | e14  | e12  | e13  | e16  | 22   | 78   | 287   | 58   | 32   | 26   |
| 15    | 34   | e14  | e14  | e12  | e13  | e16  | 24   | 92   | 309   | 56   | 33   | 29   |
| 16    | 34   | e14  | e14  | e12  | e13  | e16  | 31   | 105  | 383   | 59   | 32   | 27   |
| 17    | 35   | e14  | e14  | e12  | e14  | e16  | 34   | 140  | 270   | 60   | 32   | 25   |
| 18    | 36   | e14  | e14  | e12  | e14  | e16  | 39   | 154  | 243   | 107  | 31   | 25   |
| 19    | 36   | e14  | e13  | e12  | e14  | e16  | 37   | 143  | 220   | 128  | 31   | 28   |
| 20    | 31   | e14  | e13  | e12  | e14  | e16  | 30   | 167  | 204   | 82   | 34   | 32   |
| 21    | 32   | e14  | e13  | e12  | e14  | e16  | 29   | 165  | 196   | 66   | 35   | 28   |
| 22    | 34   | e14  | e13  | e12  | e14  | e17  | 31   | 159  | 252   | 57   | 37   | 26   |
| 23    | 31   | e14  | e13  | e12  | e14  | e17  | 29   | 171  | 254   | 53   | 36   | 28   |
| 24    | 31   | e14  | e12  | e12  | e14  | e17  | 42   | 160  | 202   | 51   | 34   | 33   |
| 25    | 35   | e14  | e12  | e12  | e14  | e17  | 54   | 176  | 180   | 51   | 31   | 34   |
| 26    | 26   | e14  | e12  | e12  | e14  | e17  | 46   | 274  | 162   | 51   | 29   | 32   |
| 27    | 23   | e14  | e12  | e11  | e14  | e17  | 48   | 266  | 167   | 51   | 31   | 31   |
| 28    | 24   | e14  | e12  | e12  | e14  | e17  | 44   | 229  | 156   | 50   | 39   | 28   |
| 29    | 25   | e14  | e12  | e12  | e14  | e17  | 35   | 185  | 156   | 54   | 44   | 28   |
| 30    | 24   | e14  | e12  | e12  | ---  | e17  | 36   | 157  | 142   | 75   | 35   | 29   |
| 31    | 23   | ---  | e12  | e12  | ---  | e17  | ---  | 133  | ---   | 54   | 31   | ---  |
| TOTAL | 995  | 447  | 413  | 371  | 379  | 482  | 842  | 3651 | 6435  | 2393 | 1141 | 851  |
| MEAN  | 32.1 | 14.9 | 13.3 | 12.0 | 13.1 | 15.5 | 28.1 | 118  | 214   | 77.2 | 36.8 | 28.4 |
| MAX   | 39   | 22   | 14   | 12   | 14   | 17   | 54   | 274  | 383   | 128  | 50   | 38   |
| MIN   | 23   | 14   | 12   | 11   | 12   | 14   | 17   | 37   | 120   | 50   | 29   | 25   |
| AC-FT | 1970 | 887  | 819  | 736  | 752  | 956  | 1670 | 7240 | 12760 | 4750 | 2260 | 1690 |

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1983 - 1996, BY WATER YEAR (WY)

|      |      |      |      |      |      |      |      |      |      |      |      |      |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 28.0 | 17.3 | 11.0 | 8.03 | 9.10 | 12.8 | 34.5 | 80.7 | 173  | 118  | 74.3 | 39.2 |
| 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 | 1995 | 1995 | 1984 | 1983 |
| MIN  | 13.8 | 12.2 | 5.48 | 3.02 | 5.00 | 7.82 | 17.6 | 39.4 | 76.5 | 37.4 | 26.7 | 17.8 |
| (WY) | 1993 | 1995 | 1988 | 1988 | 1992 | 1992 | 1984 | 1986 | 1992 | 1994 | 1994 | 1992 |

## SUMMARY STATISTICS

## FOR 1995 CALENDAR YEAR

## FOR 1996 WATER YEAR

## WATER YEARS 1983 - 1996

|                          |                  |        |                  |
|--------------------------|------------------|--------|------------------|
| ANNUAL TOTAL             | 39312.2          | 18400  |                  |
| ANNUAL MEAN              | 108              | 50.3   | 49.5             |
| HIGHEST ANNUAL MEAN      |                  |        | 106              |
| LOWEST ANNUAL MEAN       |                  |        | 27.1             |
| HIGHEST DAILY MEAN       | 797              | Jun 30 | 797              |
| LOWEST DAILY MEAN        | <sup>e</sup> 8.8 | Feb 14 | <sup>a</sup> 3.0 |
| ANNUAL SEVEN-DAY MINIMUM | 9.0              | Feb 8  | 3.0              |
| INSTANTANEOUS PEAK FLOW  |                  |        | 422              |
| INSTANTANEOUS PEAK STAGE |                  |        | 4.74             |
| ANNUAL RUNOFF (AC-FT)    | 77980            | 36500  | 35850            |
| 10 PERCENT EXCEEDS       | 371              | 155    | 129              |
| 50 PERCENT EXCEEDS       | 33               | 27     | 25               |
| 90 PERCENT EXCEEDS       | 9.0              | 12     | 8.0              |

e-Estimated.

a-Also occurred Jan 4-29, 1988.

b-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 N<sup>1</sup>/<sub>2</sub>SW<sup>1</sup>/<sub>4</sub> 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 mi<sup>2</sup>. 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, 102,900 acre-ft, May 26, elevation, 8,598.48 ft; minimum observed, 99,110 acre-ft, Oct. 24, elevation, 8,597.39 ft.

06701000 CHEESMAN LAKE.--Lat 39°12'26", long 105°16'18", in NW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> 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 mi<sup>2</sup>. 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, 78,720 acre-ft, July 3, gage height, 211.61 ft; minimum observed, 59,780 acre-ft, Sept. 11, gage height, 188.02 ft.

MONTHEND ELEVATION AND CONTENTS AT 0800, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| Date                                 | Elevation<br>*(feet) | Contents<br>(acre-feet) | Change in<br>contents<br>(acre-feet) | Gage<br>height<br>(feet) | Contents<br>(acre-feet) | Change in<br>contents<br>(acre-feet) |
|--------------------------------------|----------------------|-------------------------|--------------------------------------|--------------------------|-------------------------|--------------------------------------|
| 06695500 ELEVENMILE CANYON RESERVOIR |                      |                         |                                      | 06701000 CHEESMAN LAKE   |                         |                                      |
| Sept. 30.....                        | 8,597.78             | 100,400                 | -                                    | 209.91                   | 77,250                  | -                                    |
| Oct. 31.....                         | 8,597.55             | 99,660                  | -740                                 | 209.73                   | 77,100                  | -150                                 |
| Nov. 30.....                         | 8,597.53             | 99,590                  | -70                                  | 210.09                   | 77,410                  | +310                                 |
| Dec. 31.....                         | 8,597.64             | 99,970                  | +380                                 | 205.83                   | 73,780                  | -3,630                               |
| CAL YR 1995....                      | -                    | -                       | +930                                 | -                        | -                       | +20,040                              |
| Jan. 31.....                         | 8,597.54             | 99,620                  | -350                                 | 203.78                   | 72,080                  | -1,700                               |
| Feb. 29.....                         | 8,597.51             | 99,520                  | -100                                 | 204.15                   | 72,390                  | +310                                 |
| Mar. 31.....                         | 8,597.48             | 99,420                  | -100                                 | 200.85                   | 69,690                  | -2,700                               |
| Apr. 30.....                         | 8,597.77             | 100,400                 | +980                                 | 201.89                   | 70,530                  | +840                                 |
| May 31.....                          | 8,598.20             | 101,900                 | +1,500                               | 203.45                   | 71,810                  | +1,280                               |
| June 30.....                         | 8,597.93             | 101,000                 | -900                                 | 211.47                   | 78,600                  | +6,790                               |
| July 31.....                         | 8,597.96             | 101,100                 | +100                                 | 200.94                   | 69,760                  | -8,840                               |
| Aug. 31.....                         | 8,597.94             | 101,000                 | -100                                 | 192.34                   | 63,010                  | -6,750                               |
| Sept. 30.....                        | 8,597.62             | 99,900                  | -1,100                               | 190.05                   | 61,280                  | -1,730                               |
| WTR YR 1996....                      | -                    | -                       | -500                                 | -                        | -                       | -15,970                              |

a-Above sea level.



**06704500 DUCK CREEK NEAR GRANT, CO**

LOCATION (REVISED).--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 mi<sup>2</sup>.

**WATER-DISCHARGE RECORDS**

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

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 10,000 ft 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 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

| DAY   | OCT  | NOV  | DEC  | JAN  | FEB   | MAR   | APR  | MAY   | JUN  | JUL  | AUG   | SEP  |
|-------|------|------|------|------|-------|-------|------|-------|------|------|-------|------|
| 1     | 3.7  | 2.7  | 2.0  | e1.3 | e1.2  | e.96  | 1.1  | 2.0   | 19   | 21   | 15    | 1.1  |
| 2     | 3.6  | 2.4  | 1.9  | e1.3 | e1.2  | e.98  | 1.2  | 2.5   | 19   | 21   | 17    | 1.1  |
| 3     | 3.4  | 2.2  | 1.8  | e1.3 | e1.2  | e.98  | 1.2  | 3.0   | 19   | 20   | 18    | 1.1  |
| 4     | 3.7  | 2.5  | 1.8  | e1.3 | e1.2  | e.98  | 1.1  | 3.3   | 19   | 20   | 11    | 1.0  |
| 5     | 3.4  | 2.3  | 1.8  | e1.3 | e1.1  | e.98  | 1.1  | 3.8   | 20   | 19   | 6.7   | 1.0  |
| 6     | 3.5  | 2.3  | 1.9  | e1.2 | e1.1  | e.98  | 1.1  | 3.8   | 21   | 19   | 3.1   | 1.2  |
| 7     | 3.4  | 2.3  | 1.9  | e1.3 | e1.0  | e.98  | 1.1  | 4.0   | 22   | 18   | 2.8   | 1.3  |
| 8     | 3.2  | 2.3  | 1.8  | e1.3 | e1.1  | e.98  | 1.7  | 4.4   | 23   | 17   | 2.5   | 1.1  |
| 9     | 3.2  | 2.4  | 1.9  | e1.2 | e1.0  | e.98  | 2.3  | 4.7   | 24   | 18   | 2.3   | 1.1  |
| 10    | 3.2  | 2.4  | 1.8  | e1.2 | e1.0  | e.98  | 2.2  | 5.0   | 25   | 17   | 2.0   | 1.1  |
| 11    | 3.2  | 2.5  | 1.7  | e1.1 | e1.0  | .92   | 1.7  | 5.3   | 26   | 16   | 1.9   | 1.1  |
| 12    | 3.3  | 2.4  | 1.7  | e1.1 | e1.0  | .91   | 1.4  | 5.9   | 26   | 15   | 1.6   | 1.3  |
| 13    | 3.3  | 2.4  | 1.7  | e1.1 | 1.2   | .87   | 1.4  | 6.4   | 27   | 15   | 1.4   | 1.4  |
| 14    | 3.2  | 2.3  | 1.7  | e1.1 | 1.2   | .84   | 1.3  | 6.8   | 27   | 14   | 1.3   | 1.2  |
| 15    | 3.1  | 2.2  | 1.6  | e1.2 | 1.1   | .81   | 1.4  | 7.4   | 29   | 14   | 1.3   | 1.3  |
| 16    | 3.0  | 2.3  | 1.7  | e1.2 | 1.1   | .82   | 1.5  | 8.4   | 27   | 13   | 1.3   | 1.2  |
| 17    | 2.9  | 2.2  | e1.5 | e1.2 | .99   | .85   | 1.8  | 9.2   | 27   | 19   | 1.3   | 1.2  |
| 18    | 2.8  | 2.2  | e1.3 | e1.0 | .99   | .86   | 1.5  | 9.8   | 27   | 28   | 1.3   | 1.3  |
| 19    | 2.8  | 2.2  | e1.1 | e1.1 | .99   | .85   | 1.3  | 12    | 27   | 27   | 1.2   | 1.4  |
| 20    | 2.8  | 2.1  | e1.2 | e1.1 | .99   | .88   | 1.3  | 13    | 26   | 26   | 1.2   | 1.4  |
| 21    | 2.7  | 2.1  | e1.3 | e1.1 | 1.0   | .92   | 1.2  | 14    | 27   | 26   | 1.7   | 1.4  |
| 22    | 2.8  | 2.1  | e1.3 | e1.1 | .96   | .86   | 1.2  | 16    | 27   | 26   | 1.8   | 1.3  |
| 23    | 2.9  | 2.1  | e1.3 | e1.1 | .92   | .87   | 1.5  | 18    | 26   | 24   | 1.8   | 1.4  |
| 24    | 2.8  | 2.1  | e1.4 | e1.1 | .90   | .86   | 2.5  | 19    | 25   | 23   | 1.6   | 2.2  |
| 25    | 2.7  | 2.0  | e1.3 | e1.1 | e.94  | .88   | 2.4  | 21    | 25   | 22   | 1.4   | 1.7  |
| 26    | 2.7  | 2.1  | e1.2 | e1.1 | e.98  | .94   | 2.3  | 22    | 24   | 21   | 1.3   | 1.8  |
| 27    | 2.7  | 1.9  | e1.2 | e1.2 | e.88  | .95   | 2.0  | 22    | 23   | 19   | 1.2   | 1.7  |
| 28    | 2.7  | e1.7 | e1.3 | e1.2 | e.90  | .89   | 1.6  | 22    | 23   | 18   | 1.3   | 1.7  |
| 29    | 2.6  | e2.0 | e1.3 | e1.2 | e.96  | .92   | 1.7  | 22    | 22   | 17   | 1.3   | 1.7  |
| 30    | 2.6  | 2.2  | e1.4 | e1.2 | ---   | .91   | 1.6  | 21    | 22   | 16   | 1.4   | 1.6  |
| 31    | 2.6  | ---  | e1.3 | e1.2 | ---   | .95   | ---  | 19    | ---  | 15   | 1.1   | ---  |
| TOTAL | 94.5 | 66.9 | 48.1 | 36.5 | 30.10 | 28.34 | 46.7 | 336.7 | 724  | 604  | 110.1 | 40.4 |
| MEAN  | 3.05 | 2.23 | 1.55 | 1.18 | 1.04  | .91   | 1.56 | 10.9  | 24.1 | 19.5 | 3.55  | 1.35 |
| MAX   | 3.7  | 2.7  | 2.0  | 1.3  | 1.2   | .98   | 2.5  | 22    | 29   | 28   | 18    | 2.2  |
| MIN   | 2.6  | 1.7  | 1.1  | 1.0  | .88   | .81   | 1.1  | 2.0   | 19   | 13   | 1.1   | 1.0  |
| AC-FT | 187  | 133  | 95   | 72   | 60    | 56    | 93   | 668   | 1440 | 1200 | 218   | 80   |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 1996, BY WATER YEAR (WY)

|      | 1995 | 1996 | 1996 | 1996 | 1996 | 1996 | 1996 | 1996 | 1996 | 1996 | 1996 | 1996 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 2.10 | 1.66 | 1.10 | .87  | 1.80 | .85  | 1.31 | 7.14 | 29.3 | 23.6 | 7.31 | 3.26 |
| MAX  | 3.05 | 2.23 | 1.55 | 1.18 | 1.04 | .91  | 1.56 | 10.9 | 34.4 | 27.7 | 11.1 | 5.18 |
| (WY) | 1996 | 1996 | 1996 | 1996 | 1996 | 1996 | 1996 | 1996 | 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 1995 CALENDAR YEAR

FOR 1996 WATER YEAR

WATER YEARS 1995 - 1996

|                          |         |         |      |             |
|--------------------------|---------|---------|------|-------------|
| ANNUAL TOTAL             | 2795.60 | 2166.34 |      |             |
| ANNUAL MEAN              | 7.66    | 5.92    | 6.62 |             |
| HIGHEST ANNUAL MEAN      |         |         | 7.33 | 1995        |
| LOWEST ANNUAL MEAN       |         |         | 5.92 | 1996        |
| HIGHEST DAILY MEAN       | 78      | Jun 20  | 78   | Jun 20 1995 |
| LOWEST DAILY MEAN        | a.46    | Feb 12  | a.46 | Feb 12 1995 |
| ANNUAL SEVEN-DAY MINIMUM | .48     | Feb 11  | .48  | Feb 11 1995 |
| INSTANTANEOUS PEAK FLOW  |         |         | 32   | Jun 15 1995 |
| INSTANTANEOUS PEAK STAGE |         |         | 1.39 | Jun 15 1995 |
| ANNUAL RUNOFF (AC-FT)    | 5550    | 4300    | 4800 |             |
| 10 PERCENT EXCEEDS       | 24      | 21      | 22   |             |
| 50 PERCENT EXCEEDS       | 2.3     | 1.8     | 1.4  |             |
| 90 PERCENT EXCEEDS       | .58     | .98     | .64  |             |

e-Estimated.

a-Also occurred Feb 13, 1995.

## 06704500 DUCK CREEK NEAR GRANT, CO--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--May 1995 to current year (seasonal record).

INSTRUMENTATION.--Water-quality monitor since May 1995.

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

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 59 microsiemens, Sept. 12-17; minimum, 33 microsiemens July 18, 21-23.

WATER TEMPERATURE: Maximum, 15.3°C, July 21, and Aug. 1; minimum, 0.0°C, on many days in Nov., Dec., Jan., and Apr.

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM @ 25 DEG. C), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DAY   | MAX     | MIN | MEAN | MAX      | MIN | MEAN | MAX      | MIN | MEAN | MAX     | MIN | MEAN |
|-------|---------|-----|------|----------|-----|------|----------|-----|------|---------|-----|------|
|       | OCTOBER |     |      | NOVEMBER |     |      | DECEMBER |     |      | JANUARY |     |      |
| 1     | 47      | 46  | 47   | 48       | 47  | 48   | 48       | 47  | 47   | 48      | 47  | 47   |
| 2     | 47      | 46  | 47   | 49       | 47  | 48   | 47       | 47  | 47   | 47      | 47  | 47   |
| 3     | 47      | 46  | 47   | 51       | 48  | 50   | 47       | 47  | 47   | 48      | 47  | 47   |
| 4     | 47      | 45  | 46   | 50       | 48  | 49   | 48       | 47  | 47   | 47      | 47  | 47   |
| 5     | 46      | 45  | 46   | 50       | 48  | 49   | 47       | 47  | 47   | 47      | 47  | 47   |
| 6     | 46      | 46  | 46   | 49       | 48  | 48   | 47       | 46  | 46   | 47      | 46  | 47   |
| 7     | 46      | 45  | 46   | 48       | 48  | 48   | 46       | 46  | 46   | 47      | 46  | 47   |
| 8     | 47      | 46  | 46   | 48       | 48  | 48   | 47       | 46  | 46   | 47      | 46  | 46   |
| 9     | 47      | 46  | 46   | 48       | 47  | 48   | 47       | 46  | 46   | 47      | 46  | 47   |
| 10    | 47      | 46  | 47   | 48       | 47  | 47   | 47       | 46  | 47   | 47      | 46  | 47   |
| 11    | 48      | 47  | 47   | 50       | 47  | 49   | 47       | 46  | 47   | 47      | 46  | 46   |
| 12    | 48      | 47  | 47   | 48       | 47  | 47   | 47       | 46  | 47   | 47      | 47  | 47   |
| 13    | 48      | 47  | 47   | 47       | 47  | 47   | 47       | 46  | 47   | 48      | 46  | 47   |
| 14    | 48      | 47  | 47   | 47       | 47  | 47   | 47       | 46  | 47   | 47      | 46  | 47   |
| 15    | 48      | 47  | 48   | 48       | 47  | 47   | 48       | 46  | 47   | 47      | 46  | 46   |
| 16    | 49      | 47  | 48   | 48       | 47  | 47   | 47       | 47  | 47   | 47      | 46  | 46   |
| 17    | 49      | 48  | 48   | 48       | 47  | 47   | 48       | 47  | 47   | 47      | 46  | 46   |
| 18    | 49      | 48  | 48   | 48       | 48  | 48   | 48       | 47  | 47   | 47      | 46  | 46   |
| 19    | 48      | 47  | 47   | 48       | 47  | 48   | 49       | 47  | 48   | 47      | 46  | 47   |
| 20    | 48      | 47  | 47   | 48       | 47  | 47   | 49       | 48  | 48   | 47      | 46  | 47   |
| 21    | 48      | 47  | 47   | 48       | 47  | 47   | 48       | 48  | 48   | 47      | 46  | 47   |
| 22    | 48      | 46  | 47   | 48       | 47  | 47   | 48       | 47  | 48   | 47      | 46  | 47   |
| 23    | 48      | 46  | 47   | 48       | 47  | 47   | 48       | 47  | 48   | 47      | 46  | 46   |
| 24    | 48      | 47  | 47   | 49       | 46  | 48   | 48       | 47  | 48   | ---     | --- | ---  |
| 25    | 47      | 47  | 47   | 48       | 47  | 48   | 48       | 47  | 48   | ---     | --- | ---  |
| 26    | 47      | 47  | 47   | 48       | 47  | 48   | 48       | 47  | 48   | ---     | --- | ---  |
| 27    | 47      | 47  | 47   | 48       | 47  | 48   | 48       | 48  | 48   | ---     | --- | ---  |
| 28    | 48      | 47  | 47   | 50       | 48  | 49   | 48       | 47  | 48   | ---     | --- | ---  |
| 29    | 48      | 47  | 47   | 48       | 47  | 47   | 48       | 48  | 48   | ---     | --- | ---  |
| 30    | 48      | 47  | 48   | 48       | 47  | 47   | 48       | 47  | 48   | ---     | --- | ---  |
| 31    | 48      | 48  | 48   | ---      | --- | ---  | 48       | 47  | 47   | ---     | --- | ---  |
| MONTH | 49      | 45  | 47   | 51       | 46  | 48   | 49       | 46  | 47   | ---     | --- | ---  |

06704500 DUCK CREEK NEAR GRANT, CO--Continued

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM @ 25 DEG. C), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DAY   | MAX | MIN | MEAN |
|-------|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|------|
|       |     |     |      |     |     |      |     |     |      |     |     |      |
| 1     | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  | 51  | 49  | 50   |
| 2     | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  | 50  | 48  | 49   |
| 3     | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  | 50  | 48  | 49   |
| 4     | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  | 50  | 48  | 48   |
| 5     | --- | --- | ---  | --- | --- | ---  | 50  | 49  | 49   | 50  | 48  | 49   |
| 6     | --- | --- | ---  | --- | --- | ---  | 49  | 49  | 49   | 52  | 49  | 50   |
| 7     | --- | --- | ---  | --- | --- | ---  | 50  | 49  | 49   | 53  | 51  | 52   |
| 8     | --- | --- | ---  | --- | --- | ---  | 49  | 47  | 48   | 54  | 52  | 53   |
| 9     | --- | --- | ---  | --- | --- | ---  | 50  | 47  | 48   | 54  | 52  | 53   |
| 10    | --- | --- | ---  | --- | --- | ---  | 50  | 47  | 48   | 54  | 53  | 53   |
| 11    | --- | --- | ---  | --- | --- | ---  | 50  | 49  | 50   | 55  | 53  | 54   |
| 12    | --- | --- | ---  | --- | --- | ---  | 50  | 49  | 50   | 55  | 53  | 54   |
| 13    | --- | --- | ---  | --- | --- | ---  | 50  | 49  | 50   | 54  | 53  | 53   |
| 14    | --- | --- | ---  | --- | --- | ---  | 50  | 50  | 50   | 54  | 52  | 53   |
| 15    | --- | --- | ---  | --- | --- | ---  | 50  | 50  | 50   | 53  | 51  | 52   |
| 16    | --- | --- | ---  | --- | --- | ---  | 50  | 49  | 50   | 53  | 50  | 51   |
| 17    | --- | --- | ---  | --- | --- | ---  | 50  | 49  | 50   | 51  | 49  | 50   |
| 18    | --- | --- | ---  | --- | --- | ---  | 50  | 49  | 49   | 50  | 48  | 49   |
| 19    | --- | --- | ---  | --- | --- | ---  | 51  | 48  | 50   | 49  | 47  | 48   |
| 20    | --- | --- | ---  | --- | --- | ---  | 51  | 48  | 50   | 47  | 45  | 46   |
| 21    | --- | --- | ---  | --- | --- | ---  | 51  | 50  | 50   | 47  | 46  | 46   |
| 22    | --- | --- | ---  | --- | --- | ---  | 50  | 50  | 50   | 46  | 45  | 46   |
| 23    | --- | --- | ---  | --- | --- | ---  | 50  | 48  | 50   | 46  | 44  | 45   |
| 24    | --- | --- | ---  | --- | --- | ---  | 50  | 45  | 48   | 45  | 43  | 44   |
| 25    | --- | --- | ---  | --- | --- | ---  | 50  | 45  | 48   | 44  | 43  | 43   |
| 26    | --- | --- | ---  | --- | --- | ---  | 50  | 48  | 49   | 43  | 41  | 42   |
| 27    | --- | --- | ---  | --- | --- | ---  | 50  | 48  | 49   | 43  | 42  | 42   |
| 28    | --- | --- | ---  | --- | --- | ---  | 51  | 49  | 50   | 43  | 42  | 43   |
| 29    | --- | --- | ---  | --- | --- | ---  | 52  | 50  | 51   | 44  | 43  | 43   |
| 30    | --- | --- | ---  | --- | --- | ---  | 51  | 50  | 50   | 44  | 43  | 43   |
| 31    | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  | 44  | 42  | 43   |
| MONTH | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  | 55  | 41  | 48   |
|       |     |     |      |     |     |      |     |     |      |     |     |      |
| DAY   | MAX | MIN | MEAN |
|       |     |     |      |     |     |      |     |     |      |     |     |      |
| 1     | 44  | 42  | 43   | 39  | 38  | 39   | 36  | 35  | 36   | 56  | 55  | 55   |
| 2     | 44  | 42  | 43   | 39  | 38  | 39   | 36  | 35  | 35   | 57  | 55  | 56   |
| 3     | 44  | 42  | 43   | 39  | 38  | 39   | 36  | 34  | 35   | 57  | 56  | 57   |
| 4     | 44  | 42  | 43   | 39  | 38  | 39   | 38  | 36  | 37   | 57  | 56  | 57   |
| 5     | 43  | 41  | 42   | 39  | 38  | 39   | 44  | 38  | 40   | 57  | 56  | 57   |
| 6     | 42  | 40  | 41   | 39  | 38  | 39   | 48  | 44  | 46   | 58  | 51  | 57   |
| 7     | 42  | 40  | 41   | 39  | 38  | 39   | 48  | 47  | 48   | 58  | 57  | 57   |
| 8     | 42  | 40  | 41   | 39  | 38  | 39   | 49  | 48  | 49   | 58  | 57  | 57   |
| 9     | 41  | 39  | 40   | 39  | 38  | 39   | 50  | 49  | 49   | 57  | 57  | 57   |
| 10    | 40  | 39  | 39   | 40  | 39  | 39   | 50  | 49  | 50   | 58  | 57  | 57   |
| 11    | 40  | 39  | 39   | 40  | 39  | 39   | 51  | 50  | 50   | 57  | 56  | 57   |
| 12    | 39  | 38  | 39   | 40  | 37  | 38   | 52  | 50  | 51   | 59  | 56  | 58   |
| 13    | 39  | 38  | 39   | 38  | 37  | 38   | 53  | 52  | 52   | 59  | 59  | 59   |
| 14    | 39  | 38  | 38   | 38  | 37  | 38   | 53  | 52  | 53   | 59  | 58  | 58   |
| 15    | 39  | 38  | 39   | 38  | 37  | 38   | 53  | 53  | 53   | 59  | 58  | 59   |
| 16    | 40  | 38  | 39   | 38  | 37  | 38   | 54  | 53  | 53   | 59  | 58  | 59   |
| 17    | 39  | 38  | 39   | 38  | 34  | 37   | 54  | 53  | 53   | 59  | 58  | 58   |
| 18    | 39  | 38  | 38   | 35  | 33  | 34   | 54  | 53  | 54   | 58  | 54  | 57   |
| 19    | 39  | 38  | 38   | 35  | 34  | 34   | 54  | 53  | 54   | 58  | 56  | 57   |
| 20    | 39  | 38  | 39   | 35  | 34  | 34   | 54  | 54  | 54   | 58  | 57  | 57   |
| 21    | 39  | 38  | 38   | 35  | 33  | 34   | 55  | 53  | 54   | 58  | 57  | 57   |
| 22    | 39  | 38  | 38   | 35  | 33  | 34   | 55  | 53  | 54   | 58  | 57  | 57   |
| 23    | 39  | 38  | 38   | 35  | 33  | 34   | 55  | 54  | 55   | 58  | 57  | 58   |
| 24    | 39  | 38  | 38   | 35  | 34  | 34   | 55  | 54  | 55   | 58  | 57  | 57   |
| 25    | 39  | 38  | 38   | 35  | 34  | 34   | 55  | 55  | 55   | 57  | 57  | 57   |
| 26    | 39  | 38  | 38   | 35  | 34  | 34   | 56  | 55  | 55   | 57  | 56  | 56   |
| 27    | 39  | 38  | 38   | 35  | 34  | 35   | 56  | 55  | 55   | 56  | 55  | 56   |
| 28    | 39  | 38  | 38   | 35  | 34  | 35   | 56  | 55  | 56   | 57  | 56  | 56   |
| 29    | 39  | 38  | 38   | 36  | 35  | 35   | 56  | 55  | 56   | 57  | 56  | 56   |
| 30    | 39  | 38  | 39   | 36  | 35  | 35   | 57  | 55  | 56   | 57  | 56  | 57   |
| 31    | --- | --- | ---  | 36  | 35  | 35   | 56  | 55  | 56   | --- | --- | ---  |
| MONTH | 44  | 38  | 39   | 40  | 33  | 37   | 57  | 34  | 50   | 59  | 51  | 57   |

## PLATTE RIVER BASIN

## 06704500 DUCK CREEK NEAR GRANT, CO--Continued

TEMPERATURE, WATER (DEG. C) WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DAY   | MAX      | MIN | MEAN | MAX      | MIN | MEAN | MAX      | MIN | MEAN | MAX     | MIN | MEAN |
|-------|----------|-----|------|----------|-----|------|----------|-----|------|---------|-----|------|
|       | OCTOBER  |     |      | NOVEMBER |     |      | DECEMBER |     |      | JANUARY |     |      |
| 1     | 6.0      | 2.9 | 4.4  | 4.2      | 1.8 | 2.9  | 2.5      | .8  | 1.3  | 1.3     | .2  | .7   |
| 2     | 6.8      | 3.1 | 4.8  | 2.9      | .6  | 1.6  | 2.2      | .7  | 1.2  | .7      | .0  | .3   |
| 3     | 7.1      | 2.9 | 4.9  | 3.0      | .3  | 1.3  | 2.1      | .7  | 1.1  | 1.1     | .4  | .9   |
| 4     | 5.1      | 3.2 | 4.3  | 2.9      | .4  | 1.3  | 2.0      | .8  | 1.3  | 1.5     | .6  | 1.0  |
| 5     | 4.7      | 2.0 | 3.2  | 3.3      | .6  | 1.6  | 2.1      | 1.0 | 1.4  | 1.6     | .3  | .9   |
| 6     | 5.0      | .9  | 2.8  | 2.9      | .8  | 1.6  | 1.7      | .0  | 1.0  | 1.0     | .0  | .4   |
| 7     | 5.7      | 1.5 | 3.4  | 2.7      | 1.0 | 1.6  | 2.2      | .4  | 1.1  | 1.7     | .7  | 1.0  |
| 8     | 5.9      | 1.9 | 3.9  | 2.9      | 1.0 | 1.7  | 1.3      | .1  | .6   | 1.7     | .7  | 1.0  |
| 9     | 5.8      | 2.0 | 3.8  | 3.0      | 1.2 | 1.8  | 1.3      | .4  | .7   | 2.1     | .9  | 1.2  |
| 10    | 6.5      | 2.2 | 4.1  | 1.5      | .1  | .9   | 1.7      | .6  | 1.1  | 1.8     | .6  | 1.2  |
| 11    | 7.0      | 2.6 | 4.6  | 2.6      | .0  | 1.1  | 2.1      | .8  | 1.2  | 1.8     | .3  | 1.0  |
| 12    | 6.6      | 3.2 | 4.8  | 1.9      | .6  | 1.3  | 2.1      | 1.0 | 1.5  | 2.4     | .7  | 1.2  |
| 13    | 5.5      | 2.2 | 4.1  | 3.2      | 1.0 | 1.8  | 2.2      | 1.1 | 1.6  | 2.3     | .6  | 1.3  |
| 14    | 5.7      | 2.0 | 3.7  | 2.7      | 1.2 | 1.8  | 1.7      | .2  | .8   | 2.3     | .8  | 1.3  |
| 15    | 6.5      | 2.1 | 4.1  | 3.0      | .7  | 1.5  | 1.9      | .1  | .6   | 2.2     | .5  | 1.2  |
| 16    | 6.6      | 2.5 | 4.4  | 3.0      | .8  | 1.7  | 1.8      | .2  | .8   | 2.3     | 1.0 | 1.4  |
| 17    | 6.3      | 2.8 | 4.5  | 3.0      | .8  | 1.6  | 1.4      | .0  | .5   | 2.0     | .2  | 1.1  |
| 18    | 6.1      | 2.6 | 4.3  | 2.9      | 1.0 | 1.7  | 1.4      | .0  | .4   | .7      | .0  | .1   |
| 19    | 5.2      | 2.6 | 3.8  | 2.6      | .9  | 1.5  | 1.3      | .0  | .3   | 1.1     | .1  | .6   |
| 20    | 5.0      | 1.7 | 3.1  | 2.7      | .9  | 1.5  | 1.3      | .0  | .3   | 1.1     | .1  | .5   |
| 21    | 5.2      | 1.8 | 3.4  | 2.7      | .7  | 1.4  | 1.2      | .0  | .4   | 1.5     | .2  | .7   |
| 22    | 3.8      | 1.2 | 2.4  | 2.3      | 1.0 | 1.5  | .9       | .0  | .2   | 1.8     | .4  | .9   |
| 23    | 3.2      | .8  | 1.6  | 2.4      | .7  | 1.3  | 1.1      | .0  | .3   | 1.0     | .1  | .4   |
| 24    | 3.6      | .8  | 2.0  | 2.4      | .7  | 1.3  | 1.2      | .0  | .5   | ---     | --- | ---  |
| 25    | 4.1      | 1.1 | 2.3  | 2.4      | .9  | 1.5  | 1.4      | .1  | .5   | ---     | --- | ---  |
| 26    | 3.4      | 1.2 | 2.2  | 2.3      | 1.0 | 1.4  | 1.4      | .0  | .4   | ---     | --- | ---  |
| 27    | 3.6      | 1.0 | 2.2  | 1.1      | .1  | .7   | 1.4      | .0  | .5   | ---     | --- | ---  |
| 28    | 4.2      | 1.4 | 2.5  | 1.2      | .0  | .5   | 1.4      | .1  | .7   | ---     | --- | ---  |
| 29    | 4.1      | 1.8 | 2.9  | 1.6      | .6  | 1.0  | 1.3      | .3  | .7   | ---     | --- | ---  |
| 30    | 4.4      | 1.9 | 3.0  | 2.1      | .9  | 1.3  | 1.6      | .3  | .8   | ---     | --- | ---  |
| 31    | 4.1      | 1.9 | 2.9  | ---      | --- | ---  | 1.6      | .6  | .9   | ---     | --- | ---  |
| MONTH | 7.1      | .8  | 3.5  | 4.2      | .0  | 1.5  | 2.5      | .0  | .8   | ---     | --- | ---  |
|       | FEBRUARY |     |      | MARCH    |     |      | APRIL    |     |      | MAY     |     |      |
| 1     | ---      | --- | ---  | ---      | --- | ---  | ---      | --- | ---  | 6.3     | .6  | 2.4  |
| 2     | ---      | --- | ---  | ---      | --- | ---  | ---      | --- | ---  | 6.5     | 1.0 | 2.8  |
| 3     | ---      | --- | ---  | ---      | --- | ---  | ---      | --- | ---  | 7.2     | 1.2 | 3.3  |
| 4     | ---      | --- | ---  | ---      | --- | ---  | ---      | --- | ---  | 7.1     | .8  | 3.4  |
| 5     | ---      | --- | ---  | ---      | --- | ---  | 4.5      | .0  | 1.2  | 7.7     | 1.4 | 4.2  |
| 6     | ---      | --- | ---  | ---      | --- | ---  | 5.1      | .0  | 1.4  | 7.6     | 1.6 | 4.7  |
| 7     | ---      | --- | ---  | ---      | --- | ---  | 2.6      | .6  | 1.5  | 7.9     | 2.1 | 5.1  |
| 8     | ---      | --- | ---  | ---      | --- | ---  | 4.5      | .2  | 1.6  | 9.2     | 2.2 | 5.9  |
| 9     | ---      | --- | ---  | ---      | --- | ---  | 3.8      | .2  | 1.1  | 9.5     | 2.7 | 6.2  |
| 10    | ---      | --- | ---  | ---      | --- | ---  | 3.4      | .1  | 1.1  | 8.9     | 4.1 | 6.5  |
| 11    | ---      | --- | ---  | ---      | --- | ---  | 2.0      | .3  | 1.0  | 10.2    | 2.9 | 6.7  |
| 12    | ---      | --- | ---  | ---      | --- | ---  | 4.0      | .1  | 1.4  | 10.5    | 3.4 | 7.0  |
| 13    | ---      | --- | ---  | ---      | --- | ---  | 1.4      | .0  | .6   | 9.2     | 3.2 | 6.5  |
| 14    | ---      | --- | ---  | ---      | --- | ---  | 3.8      | .0  | 1.0  | 9.4     | 3.0 | 6.3  |
| 15    | ---      | --- | ---  | ---      | --- | ---  | 5.4      | .0  | 1.4  | 10.9    | 2.7 | 6.8  |
| 16    | ---      | --- | ---  | ---      | --- | ---  | 4.7      | .0  | 1.4  | 12.0    | 3.4 | 7.6  |
| 17    | ---      | --- | ---  | ---      | --- | ---  | 5.0      | .2  | 1.5  | 11.1    | 3.8 | 7.2  |
| 18    | ---      | --- | ---  | ---      | --- | ---  | 2.6      | .0  | .7   | 11.0    | 2.7 | 6.9  |
| 19    | ---      | --- | ---  | ---      | --- | ---  | 2.3      | .0  | .7   | 12.0    | 3.6 | 7.5  |
| 20    | ---      | --- | ---  | ---      | --- | ---  | 2.4      | .0  | .7   | 7.5     | 3.0 | 5.0  |
| 21    | ---      | --- | ---  | ---      | --- | ---  | 4.3      | .0  | 1.2  | 10.4    | 2.8 | 6.3  |
| 22    | ---      | --- | ---  | ---      | --- | ---  | 4.3      | .0  | 1.0  | 11.6    | 2.9 | 6.9  |
| 23    | ---      | --- | ---  | ---      | --- | ---  | 5.4      | .2  | 1.6  | 10.7    | 3.6 | 6.5  |
| 24    | ---      | --- | ---  | ---      | --- | ---  | 5.5      | .7  | 1.8  | 8.7     | 4.0 | 5.8  |
| 25    | ---      | --- | ---  | ---      | --- | ---  | 4.1      | .0  | 1.4  | 5.2     | 2.8 | 4.2  |
| 26    | ---      | --- | ---  | ---      | --- | ---  | 5.6      | .2  | 2.0  | 4.2     | .9  | 2.4  |
| 27    | ---      | --- | ---  | ---      | --- | ---  | 4.2      | .7  | 1.7  | 4.7     | 2.3 | 3.2  |
| 28    | ---      | --- | ---  | ---      | --- | ---  | 1.6      | .0  | .5   | 7.2     | 2.6 | 4.3  |
| 29    | ---      | --- | ---  | ---      | --- | ---  | 4.1      | .0  | 1.2  | 9.7     | 2.0 | 5.3  |
| 30    | ---      | --- | ---  | ---      | --- | ---  | 3.9      | .4  | 1.7  | 8.5     | 2.6 | 5.4  |
| 31    | ---      | --- | ---  | ---      | --- | ---  | ---      | --- | ---  | 9.9     | 2.2 | 5.5  |
| MONTH | ---      | --- | ---  | ---      | --- | ---  | ---      | --- | ---  | 12.0    | .6  | 5.4  |

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

TEMPERATURE, WATER (DEG. C) WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DAY   | MAX  | MIN | MEAN | MAX  | MIN  | MEAN | MAX  | MIN | MEAN | MAX  | MIN | MEAN |
|-------|------|-----|------|------|------|------|------|-----|------|------|-----|------|
|       |      |     |      |      |      |      |      |     |      |      |     |      |
| 1     | 9.6  | 3.1 | 5.7  | 13.2 | 4.7  | 8.4  | 15.3 | 8.3 | 11.4 | 11.0 | 4.5 | 7.3  |
| 2     | 11.4 | 2.2 | 6.3  | 11.7 | 5.0  | 7.8  | 14.1 | 8.6 | 11.2 | 10.2 | 5.3 | 7.4  |
| 3     | 12.2 | 2.6 | 6.8  | 10.0 | 5.2  | 7.5  | 14.0 | 9.1 | 11.1 | 11.4 | 4.7 | 7.3  |
| 4     | 10.7 | 3.1 | 6.5  | 11.7 | 5.2  | 7.9  | 12.9 | 8.1 | 10.2 | 10.0 | 4.8 | 7.1  |
| 5     | 12.4 | 3.4 | 7.2  | 12.2 | 5.8  | 8.6  | 13.5 | 6.2 | 9.8  | 11.0 | 4.8 | 7.2  |
| 6     | 12.1 | 3.7 | 7.2  | 12.9 | 5.7  | 8.7  | 13.1 | 6.3 | 9.7  | 7.6  | 6.0 | 6.8  |
| 7     | 12.4 | 2.8 | 7.0  | 13.5 | 5.5  | 8.9  | 11.5 | 7.3 | 9.1  | 10.8 | 5.0 | 7.1  |
| 8     | 12.8 | 3.0 | 7.2  | 11.0 | 5.7  | 8.1  | 10.0 | 6.0 | 8.2  | 10.2 | 4.2 | 6.6  |
| 9     | 11.3 | 4.0 | 7.2  | 10.2 | 6.3  | 8.0  | 11.6 | 6.5 | 8.8  | 9.2  | 4.3 | 6.4  |
| 10    | 10.8 | 3.8 | 6.7  | 12.7 | 5.8  | 8.8  | 11.6 | 6.0 | 8.6  | 9.1  | 4.4 | 6.4  |
| 11    | 11.4 | 3.5 | 6.8  | 13.6 | 5.5  | 8.9  | 11.6 | 5.8 | 8.6  | 8.3  | 4.5 | 6.3  |
| 12    | 8.6  | 3.5 | 5.8  | 12.6 | 6.2  | 9.0  | 13.1 | 6.2 | 9.1  | 10.5 | 5.6 | 7.5  |
| 13    | 11.1 | 3.8 | 6.6  | 13.3 | 7.1  | 9.5  | 10.3 | 6.0 | 8.1  | 9.5  | 6.2 | 7.8  |
| 14    | 6.8  | 4.0 | 5.5  | 13.8 | 6.4  | 9.4  | 11.0 | 6.0 | 8.2  | 8.4  | 4.9 | 6.5  |
| 15    | 5.7  | 4.2 | 5.2  | 11.6 | 5.9  | 8.6  | 11.5 | 6.0 | 8.4  | 10.1 | 5.5 | 7.1  |
| 16    | 12.1 | 3.3 | 6.8  | 13.1 | 6.6  | 9.4  | 11.1 | 6.0 | 8.1  | 10.0 | 4.3 | 6.6  |
| 17    | 11.6 | 3.5 | 6.7  | 13.8 | 7.1  | 10.0 | 12.9 | 5.5 | 8.3  | 7.7  | 4.7 | 5.8  |
| 18    | 11.9 | 3.3 | 6.9  | 12.1 | 8.9  | 10.3 | 11.7 | 6.2 | 8.4  | 7.4  | 2.5 | 5.0  |
| 19    | 11.4 | 3.2 | 6.8  | 14.4 | 8.2  | 10.7 | 9.6  | 6.5 | 7.9  | 7.0  | 2.5 | 4.6  |
| 20    | 11.9 | 4.0 | 7.2  | 13.6 | 8.5  | 10.8 | 11.1 | 5.7 | 8.0  | 8.0  | 4.1 | 5.5  |
| 21    | 9.1  | 4.7 | 6.8  | 15.3 | 8.5  | 11.2 | 10.4 | 6.5 | 8.3  | 9.0  | 4.1 | 5.9  |
| 22    | 10.5 | 5.2 | 7.0  | 14.9 | 8.3  | 11.1 | 11.1 | 7.2 | 8.8  | 7.9  | 4.2 | 5.9  |
| 23    | 11.8 | 3.3 | 6.9  | 15.2 | 9.5  | 11.8 | 9.9  | 6.3 | 8.2  | 7.3  | 5.0 | 6.0  |
| 24    | 12.3 | 4.2 | 7.5  | 14.5 | 8.6  | 11.4 | 10.2 | 5.9 | 7.9  | 9.5  | 5.2 | 6.7  |
| 25    | 11.2 | 4.0 | 6.8  | 13.9 | 10.2 | 11.7 | 10.6 | 5.5 | 7.7  | 7.6  | 4.6 | 5.9  |
| 26    | 12.2 | 4.1 | 7.5  | 13.8 | 8.6  | 10.8 | 11.2 | 5.9 | 8.0  | 5.4  | 3.4 | 4.2  |
| 27    | 9.8  | 5.4 | 7.2  | 13.5 | 8.2  | 10.7 | 9.3  | 6.5 | 7.7  | 5.8  | 1.8 | 3.8  |
| 28    | 9.5  | 5.2 | 7.0  | 13.9 | 8.8  | 10.9 | 9.2  | 5.5 | 7.4  | 8.3  | 3.5 | 5.4  |
| 29    | 12.3 | 4.1 | 7.5  | 11.8 | 9.8  | 10.7 | 10.1 | 5.5 | 7.7  | 8.7  | 3.6 | 5.7  |
| 30    | 11.8 | 5.6 | 8.1  | 14.6 | 8.4  | 11.0 | 12.3 | 5.7 | 8.2  | 8.4  | 3.9 | 5.8  |
| 31    | ---  | --- | ---  | 15.1 | 7.8  | 11.0 | 11.3 | 4.7 | 7.5  | ---  | --- | ---  |
| MONTH | 12.8 | 2.2 | 6.8  | 15.3 | 4.7  | 9.7  | 15.3 | 4.7 | 8.7  | 11.4 | 1.8 | 6.3  |

## PLATTE RIVER BASIN

## 06704500 DUCK CREEK NEAR GRANT, CO--Continued

## PRECIPITATION RECORDS

PERIOD OF RECORD.--July 1995 to current year (seasonal records only).

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

REMARKS.--Records poor.

ESTREMES FOR PERIOD OF RECORD.--Maximum daily rainfall, 0.59 in., May 28, and July 18, 1996.

EXTREMES FOR CURRENT YEAR.--Maximum daily rainfall, 0.59 in., May 28, and July 18.

PRECIPITATION INCHES, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY SUM VALUES

| DAY   | OCT  | NOV | DEC | JAN | FEB | MAR | APR  | MAY  | JUN  | JUL  | AUG  | SEP  |
|-------|------|-----|-----|-----|-----|-----|------|------|------|------|------|------|
| 1     | .00  | --- | --- | --- | --- | --- | .00  | .04  | .00  | .00  | .00  | .00  |
| 2     | .00  | --- | --- | --- | --- | --- | .00  | .00  | .00  | .00  | .00  | .00  |
| 3     | .00  | --- | --- | --- | --- | --- | .00  | .00  | .01  | .09  | .06  | .00  |
| 4     | .00  | --- | --- | --- | --- | --- | .00  | .00  | .00  | .02  | .00  | .00  |
| 5     | .00  | --- | --- | --- | --- | --- | .00  | .00  | .05  | .00  | .00  | .00  |
| 6     | .04  | --- | --- | --- | --- | --- | .18  | .00  | .00  | .00  | .00  | .39  |
| 7     | .08  | --- | --- | --- | --- | --- | .08  | .00  | .00  | .00  | .01  | .00  |
| 8     | .00  | --- | --- | --- | --- | --- | .00  | .00  | .00  | .00  | .03  | .00  |
| 9     | .00  | --- | --- | --- | --- | --- | .00  | .00  | .00  | .46  | .00  | .06  |
| 10    | .00  | --- | --- | --- | --- | --- | .04  | .00  | .00  | .01  | .00  | .03  |
| 11    | .00  | --- | --- | --- | --- | --- | .04  | .00  | .00  | .00  | .00  | .16  |
| 12    | .14  | --- | --- | --- | --- | --- | .00  | .00  | .14  | .00  | .00  | .36  |
| 13    | .00  | --- | --- | --- | --- | --- | .00  | .00  | .05  | .00  | .00  | .00  |
| 14    | .00  | --- | --- | --- | --- | --- | .00  | .00  | .00  | .00  | .00  | .10  |
| 15    | .00  | --- | --- | --- | --- | --- | .22  | .00  | .37  | .01  | .02  | .01  |
| 16    | .00  | --- | --- | --- | --- | --- | .01  | .00  | .00  | .00  | .00  | .00  |
| 17    | .00  | --- | --- | --- | --- | --- | .00  | .00  | .00  | .00  | .00  | .02  |
| 18    | .00  | --- | --- | --- | --- | --- | .08  | .00  | .00  | .59  | .00  | .00  |
| 19    | .00  | --- | --- | --- | --- | --- | .02  | .00  | .00  | .01  | .02  | .01  |
| 20    | .00  | --- | --- | --- | --- | --- | .00  | .00  | .00  | .00  | .05  | .07  |
| 21    | .00  | --- | --- | --- | --- | --- | .03  | .00  | .16  | .00  | .20  | .24  |
| 22    | .00  | --- | --- | --- | --- | --- | .01  | .00  | .22  | .00  | .04  | .07  |
| 23    | .00  | --- | --- | --- | --- | --- | .00  | .00  | .00  | .00  | .20  | .18  |
| 24    | .01  | --- | --- | --- | --- | --- | .00  | .01  | .00  | .00  | .00  | .28  |
| 25    | .00  | --- | --- | --- | --- | --- | .16  | .13  | .00  | .01  | .00  | .04  |
| 26    | .00  | --- | --- | --- | --- | --- | .00  | .01  | .08  | .00  | .00  | .00  |
| 27    | .00  | --- | --- | --- | --- | --- | .03  | .42  | .01  | .00  | .04  | .01  |
| 28    | .00  | --- | --- | --- | --- | --- | .00  | .59  | .07  | .09  | .01  | .15  |
| 29    | .00  | --- | --- | --- | --- | --- | .05  | .05  | .00  | .10  | .01  | .00  |
| 30    | .00  | --- | --- | --- | --- | --- | .00  | .00  | .00  | .00  | .00  | .00  |
| 31    | .00  | --- | --- | --- | --- | --- | ---  | .00  | ---  | .00  | .00  | ---  |
| TOTAL | 0.27 | --- | --- | --- | --- | --- | 0.95 | 1.25 | 1.16 | 1.39 | 0.69 | 2.18 |

**06705500 GENEVA CREEK AT GRANT, CO**

LOCATION.--Lat 39°28'20", long 105°40'54" (revised), 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 mi<sup>2</sup>.

**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 current year.

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 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

| DAY   | OCT  | NOV  | DEC  | JAN  | FEB  | MAR  | APR  | MAY  | JUN   | JUL  | AUG  | SEP  |
|-------|------|------|------|------|------|------|------|------|-------|------|------|------|
| 1     | 38   | 25   | e20  | e14  | e13  | e13  | e16  | 22   | 144   | 179  | 56   | 23   |
| 2     | 37   | e21  | e21  | e14  | e13  | e13  | e18  | 28   | 146   | 170  | 57   | 22   |
| 3     | 35   | e17  | e28  | e14  | e13  | e13  | e18  | 32   | 161   | 164  | 60   | 22   |
| 4     | 37   | e20  | e23  | e14  | e13  | e13  | e16  | 39   | 182   | 165  | 53   | 21   |
| 5     | 35   | e20  | e17  | e14  | e12  | e13  | e15  | 47   | 210   | 169  | 44   | 21   |
| 6     | 36   | e20  | e18  | e13  | e12  | e13  | e16  | 53   | 242   | 160  | 37   | 28   |
| 7     | 36   | e21  | e19  | e14  | e11  | e13  | e17  | 58   | 235   | 149  | 37   | 29   |
| 8     | 36   | e21  | e22  | e14  | e12  | e13  | e20  | 70   | 242   | 140  | 38   | 24   |
| 9     | 34   | e22  | e28  | e13  | e11  | e13  | e22  | 84   | 257   | 134  | 36   | 22   |
| 10    | 33   | e21  | e27  | e13  | e11  | e13  | e24  | 93   | 269   | 143  | 33   | 23   |
| 11    | 33   | e20  | e26  | e12  | e11  | e12  | 25   | 103  | 263   | 123  | 31   | 22   |
| 12    | 32   | e24  | e24  | e12  | e11  | e12  | 20   | 133  | 262   | 117  | 30   | 25   |
| 13    | 34   | e24  | e17  | e12  | e12  | e12  | 19   | 147  | 255   | 111  | 28   | 29   |
| 14    | 31   | 23   | e18  | e12  | e12  | e12  | 17   | 157  | 254   | 104  | 28   | 26   |
| 15    | 31   | 22   | e20  | e13  | e12  | e12  | 17   | 169  | 266   | 99   | 28   | 28   |
| 16    | 31   | 22   | e25  | e13  | e11  | e12  | 20   | 210  | 258   | 96   | 27   | 25   |
| 17    | 29   | 22   | e21  | e13  | e12  | e12  | 22   | 238  | 245   | 96   | 27   | 24   |
| 18    | 28   | 21   | e16  | e11  | e12  | e12  | 21   | 236  | 241   | 113  | 27   | 25   |
| 19    | 27   | 21   | e12  | e12  | e11  | e11  | 18   | 257  | 231   | 110  | 27   | 28   |
| 20    | 26   | 21   | e13  | e12  | e12  | e12  | 17   | 238  | 230   | 101  | 27   | 28   |
| 21    | 27   | 21   | e14  | e12  | e12  | e13  | 16   | 197  | 243   | 94   | 28   | 27   |
| 22    | 27   | 20   | e14  | e12  | e12  | e14  | 16   | 215  | 282   | 89   | 34   | 28   |
| 23    | e21  | 20   | e14  | e12  | e11  | e14  | 17   | 225  | 243   | 85   | 34   | 29   |
| 24    | e25  | 20   | e15  | e12  | e10  | e13  | 26   | 202  | 223   | 81   | 33   | 38   |
| 25    | e26  | 20   | e14  | e12  | e11  | e14  | 30   | 191  | 212   | 79   | 28   | 35   |
| 26    | 26   | 20   | e13  | e12  | e12  | e14  | 26   | 178  | 204   | 75   | 26   | 33   |
| 27    | 26   | 18   | e13  | e13  | e11  | e14  | 27   | 160  | 213   | 71   | 27   | 29   |
| 28    | 25   | e16  | e14  | e13  | e12  | e12  | 21   | 156  | 204   | 69   | 31   | 30   |
| 29    | 26   | e18  | e14  | e13  | e12  | e13  | 21   | 161  | 193   | 72   | 29   | 32   |
| 30    | 25   | e20  | e15  | e13  | ---  | e16  | 20   | 158  | 184   | 66   | 26   | 31   |
| 31    | 25   | ---  | e14  | e13  | ---  | e15  | ---  | 147  | ---   | 61   | 24   | ---  |
| TOTAL | 938  | 621  | 569  | 396  | 340  | 401  | 598  | 4404 | 6794  | 3485 | 1051 | 807  |
| MEAN  | 30.3 | 20.7 | 18.4 | 12.8 | 11.7 | 12.9 | 19.9 | 142  | 226   | 112  | 33.9 | 26.9 |
| MAX   | 38   | 25   | 28   | 14   | 13   | 16   | 30   | 257  | 282   | 179  | 60   | 38   |
| MIN   | 21   | 16   | 12   | 11   | 10   | 11   | 15   | 22   | 144   | 61   | 24   | 21   |
| AC-FT | 1860 | 1230 | 1130 | 785  | 674  | 795  | 1190 | 8740 | 13480 | 6910 | 2080 | 1600 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 1996, BY WATER YEAR (WY)

|      | 1995 | 1996 | 1995 | 1996 | 1995 | 1996 | 1995 | 1996 | 1995 | 1996 | 1995 | 1996 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 25.0 | 18.1 | 15.8 | 11.2 | 10.2 | 12.1 | 16.2 | 88.6 | 310  | 210  | 71.0 | 38.2 |
| MAX  | 30.3 | 20.7 | 18.4 | 12.8 | 11.7 | 12.9 | 19.9 | 142  | 394  | 307  | 108  | 49.6 |
| (WY) | 1996 | 1996 | 1996 | 1996 | 1996 | 1996 | 1996 | 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 1995 CALENDAR YEAR

FOR 1996 WATER YEAR

WATER YEARS 1995 - 1996

|                          |         |        |         |
|--------------------------|---------|--------|---------|
| ANNUAL TOTAL             | 30641.6 | 20404  |         |
| ANNUAL MEAN              | 83.9    | 55.7   | 69.0    |
| HIGHEST ANNUAL MEAN      |         |        | 82.2    |
| LOWEST ANNUAL MEAN       |         |        | 55.7    |
| HIGHEST DAILY MEAN       | a,746   | Jun 17 | a,746   |
| LOWEST DAILY MEAN        | e,b,7.4 | Jan 30 | e,b,7.4 |
| ANNUAL SEVEN-DAY MINIMUM | 7.7     | Jan 27 | 7.7     |
| INSTANTANEOUS PEAK FLOW  |         |        | 1070    |
| INSTANTANEOUS PEAK STAGE |         |        | 7.24    |
| ANNUAL RUNOFF (AC-FT)    | 60780   | 40470  | 49950   |
| 10 PERCENT EXCEEDS       | 296     | 183    | 204     |
| 50 PERCENT EXCEEDS       | 22      | 24     | 21      |
| 90 PERCENT EXCEEDS       | 9.0     | 12     | 11      |

e-Estimated.

a-Also occurred Jun 18, 1995.

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



06705500 GENEVA CREEK AT GRANT, CO--Continued

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM @ 25 DEG. C), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

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

## PLATTE RIVER BASIN

## 06705500 GENEVA CREEK AT GRANT, CO--Continued

TEMPERATURE, WATER (DEG. C) WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DAY   | MAX      | MIN | MEAN | MAX      | MIN | MEAN | MAX      | MIN | MEAN | MAX     | MIN | MEAN |
|-------|----------|-----|------|----------|-----|------|----------|-----|------|---------|-----|------|
|       | OCTOBER  |     |      | NOVEMBER |     |      | DECEMBER |     |      | JANUARY |     |      |
| 1     | 4.9      | 1.7 | 3.5  | ---      | --- | ---  | ---      | --- | ---  | ---     | --- | ---  |
| 2     | 5.7      | 1.9 | 3.8  | ---      | --- | ---  | ---      | --- | ---  | ---     | --- | ---  |
| 3     | 6.1      | 2.4 | 4.4  | ---      | --- | ---  | ---      | --- | ---  | ---     | --- | ---  |
| 4     | 5.2      | 2.4 | 3.7  | ---      | --- | ---  | ---      | --- | ---  | ---     | --- | ---  |
| 5     | 3.2      | .5  | 1.8  | ---      | --- | ---  | ---      | --- | ---  | ---     | --- | ---  |
| 6     | 3.0      | .0  | 1.2  | ---      | --- | ---  | ---      | --- | ---  | ---     | --- | ---  |
| 7     | 4.1      | .0  | 2.0  | ---      | --- | ---  | ---      | --- | ---  | ---     | --- | ---  |
| 8     | 4.3      | 1.3 | 2.9  | ---      | --- | ---  | ---      | --- | ---  | ---     | --- | ---  |
| 9     | 4.3      | .5  | 2.6  | ---      | --- | ---  | ---      | --- | ---  | ---     | --- | ---  |
| 10    | 5.2      | .9  | 3.2  | ---      | --- | ---  | ---      | --- | ---  | ---     | --- | ---  |
| 11    | 5.8      | 1.6 | 4.0  | ---      | --- | ---  | ---      | --- | ---  | ---     | --- | ---  |
| 12    | 5.7      | 2.1 | 4.2  | ---      | --- | ---  | ---      | --- | ---  | ---     | --- | ---  |
| 13    | 5.3      | 1.9 | 3.1  | ---      | --- | ---  | ---      | --- | ---  | ---     | --- | ---  |
| 14    | 4.3      | .2  | 2.3  | ---      | --- | ---  | ---      | --- | ---  | ---     | --- | ---  |
| 15    | 5.1      | .9  | 3.2  | ---      | --- | ---  | ---      | --- | ---  | ---     | --- | ---  |
| 16    | 5.1      | 1.5 | 3.6  | ---      | --- | ---  | ---      | --- | ---  | ---     | --- | ---  |
| 17    | 5.3      | 1.8 | 3.7  | ---      | --- | ---  | ---      | --- | ---  | ---     | --- | ---  |
| 18    | 5.0      | 1.5 | 3.5  | ---      | --- | ---  | ---      | --- | ---  | ---     | --- | ---  |
| 19    | 4.4      | 1.6 | 2.8  | ---      | --- | ---  | ---      | --- | ---  | ---     | --- | ---  |
| 20    | 3.5      | .0  | 1.5  | ---      | --- | ---  | ---      | --- | ---  | ---     | --- | ---  |
| 21    | 3.9      | .0  | 2.0  | ---      | --- | ---  | ---      | --- | ---  | ---     | --- | ---  |
| 22    | 3.4      | .0  | 1.3  | ---      | --- | ---  | ---      | --- | ---  | ---     | --- | ---  |
| 23    | ---      | --- | ---  | ---      | --- | ---  | ---      | --- | ---  | ---     | --- | ---  |
| 24    | ---      | --- | ---  | ---      | --- | ---  | ---      | --- | ---  | ---     | --- | ---  |
| 25    | 1.8      | .0  | .5   | ---      | --- | ---  | ---      | --- | ---  | ---     | --- | ---  |
| 26    | 2.2      | .0  | 1.0  | ---      | --- | ---  | ---      | --- | ---  | ---     | --- | ---  |
| 27    | 1.7      | .0  | .7   | ---      | --- | ---  | ---      | --- | ---  | ---     | --- | ---  |
| 28    | ---      | --- | ---  | ---      | --- | ---  | ---      | --- | ---  | ---     | --- | ---  |
| 29    | ---      | --- | ---  | ---      | --- | ---  | ---      | --- | ---  | ---     | --- | ---  |
| 30    | ---      | --- | ---  | ---      | --- | ---  | ---      | --- | ---  | ---     | --- | ---  |
| 31    | ---      | --- | ---  | ---      | --- | ---  | ---      | --- | ---  | ---     | --- | ---  |
| MONTH | ---      | --- | ---  | ---      | --- | ---  | ---      | --- | ---  | ---     | --- | ---  |
|       | FEBRUARY |     |      | MARCH    |     |      | APRIL    |     |      | MAY     |     |      |
| 1     | ---      | --- | ---  | ---      | --- | ---  | ---      | --- | ---  | 8.5     | 1.9 | 4.5  |
| 2     | ---      | --- | ---  | ---      | --- | ---  | ---      | --- | ---  | 8.9     | 2.5 | 5.4  |
| 3     | ---      | --- | ---  | ---      | --- | ---  | ---      | --- | ---  | 10.0    | 2.5 | 5.9  |
| 4     | ---      | --- | ---  | ---      | --- | ---  | ---      | --- | ---  | 9.1     | 1.8 | 5.5  |
| 5     | ---      | --- | ---  | ---      | --- | ---  | 3.2      | .3  | 1.5  | 9.9     | 2.2 | 5.9  |
| 6     | ---      | --- | ---  | ---      | --- | ---  | 3.5      | .3  | 1.8  | 8.5     | 1.7 | 5.3  |
| 7     | ---      | --- | ---  | ---      | --- | ---  | 2.7      | 1.0 | 1.9  | 8.8     | 1.8 | 5.4  |
| 8     | ---      | --- | ---  | ---      | --- | ---  | 3.5      | .9  | 2.1  | 9.8     | 1.7 | 5.7  |
| 9     | ---      | --- | ---  | ---      | --- | ---  | 5.1      | .5  | 2.4  | 9.0     | 2.0 | 5.6  |
| 10    | ---      | --- | ---  | ---      | --- | ---  | 4.1      | .6  | 2.3  | 8.6     | 3.0 | 5.6  |
| 11    | ---      | --- | ---  | ---      | --- | ---  | 3.9      | .9  | 2.3  | 10.1    | 2.1 | 5.7  |
| 12    | ---      | --- | ---  | ---      | --- | ---  | 4.1      | .6  | 2.2  | 9.6     | 2.3 | 5.5  |
| 13    | ---      | --- | ---  | ---      | --- | ---  | 2.8      | .3  | 1.1  | 8.3     | 2.1 | 5.0  |
| 14    | ---      | --- | ---  | ---      | --- | ---  | 2.9      | .3  | 1.0  | 8.3     | 2.0 | 5.0  |
| 15    | ---      | --- | ---  | ---      | --- | ---  | 4.8      | .3  | 1.9  | 9.7     | 1.9 | 5.4  |
| 16    | ---      | --- | ---  | ---      | --- | ---  | 5.8      | .3  | 2.8  | 10.3    | 2.5 | 5.8  |
| 17    | ---      | --- | ---  | ---      | --- | ---  | 5.8      | .6  | 2.9  | 9.4     | 3.1 | 5.5  |
| 18    | ---      | --- | ---  | ---      | --- | ---  | 2.6      | .3  | 1.4  | 9.8     | 2.1 | 5.5  |
| 19    | ---      | --- | ---  | ---      | --- | ---  | 3.3      | .3  | 1.1  | 10.2    | 3.0 | 6.0  |
| 20    | ---      | --- | ---  | ---      | --- | ---  | 2.1      | .3  | .8   | 7.3     | 2.6 | 4.7  |
| 21    | ---      | --- | ---  | ---      | --- | ---  | 4.4      | .3  | 1.6  | 9.6     | 2.6 | 5.8  |
| 22    | ---      | --- | ---  | ---      | --- | ---  | 4.1      | .3  | 1.7  | 10.5    | 2.6 | 6.3  |
| 23    | ---      | --- | ---  | ---      | --- | ---  | 4.8      | .3  | 2.4  | 9.6     | 3.4 | 6.2  |
| 24    | ---      | --- | ---  | ---      | --- | ---  | 7.4      | 2.1 | 4.4  | 8.2     | 3.9 | 5.7  |
| 25    | ---      | --- | ---  | ---      | --- | ---  | 6.5      | 1.6 | 3.7  | 5.5     | 3.1 | 4.1  |
| 26    | ---      | --- | ---  | ---      | --- | ---  | 7.8      | 1.0 | 4.1  | 3.7     | .6  | 2.1  |
| 27    | ---      | --- | ---  | ---      | --- | ---  | 6.6      | 2.1 | 4.0  | 5.0     | 1.8 | 3.3  |
| 28    | ---      | --- | ---  | ---      | --- | ---  | 3.4      | .3  | 1.1  | 7.1     | 2.3 | 4.3  |
| 29    | ---      | --- | ---  | ---      | --- | ---  | 3.9      | .3  | 1.5  | 9.6     | 1.8 | 5.5  |
| 30    | ---      | --- | ---  | ---      | --- | ---  | 6.5      | .3  | 3.2  | 8.4     | 2.6 | 5.6  |
| 31    | ---      | --- | ---  | ---      | --- | ---  | ---      | --- | ---  | 9.1     | 2.1 | 5.5  |
| MONTH | ---      | --- | ---  | ---      | --- | ---  | ---      | --- | ---  | 10.5    | .6  | 5.3  |

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

TEMPERATURE, WATER (DEG. C) WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DAY   | MAX  | MIN | MEAN | JUNE |      |      | JULY |     |      | AUGUST |     |      | SEPTEMBER |     |      |
|-------|------|-----|------|------|------|------|------|-----|------|--------|-----|------|-----------|-----|------|
|       |      |     |      | MAX  | MIN  | MEAN | MAX  | MIN | MEAN | MAX    | MIN | MEAN | MAX       | MIN | MEAN |
| 1     | 9.1  | 3.1 | 6.2  | 14.0 | 5.8  | 9.9  | 14.8 | 8.0 | 11.8 | 11.0   | 6.6 | 9.2  |           |     |      |
| 2     | 10.7 | 2.3 | 6.5  | 12.1 | 6.1  | 9.3  | 14.1 | 8.8 | 11.8 | 11.3   | 7.5 | 9.5  |           |     |      |
| 3     | 11.6 | 2.8 | 7.2  | 11.5 | 6.2  | 9.1  | 13.9 | 8.9 | 11.4 | 12.3   | 6.9 | 9.7  |           |     |      |
| 4     | 10.4 | 3.3 | 6.8  | 12.6 | 6.1  | 9.5  | 13.6 | 8.0 | 10.8 | 12.6   | 7.3 | 10.0 |           |     |      |
| 5     | 11.8 | 3.5 | 7.4  | 13.9 | 7.0  | 10.5 | 13.6 | 6.5 | 10.3 | 11.9   | 7.6 | 10.0 |           |     |      |
| 6     | 11.5 | 3.8 | 7.4  | 14.1 | 7.2  | 10.8 | 13.4 | 7.2 | 10.7 | 10.7   | 8.2 | 9.4  |           |     |      |
| 7     | 11.9 | 2.8 | 7.3  | 14.5 | 6.6  | 10.6 | 12.1 | 8.2 | 10.5 | 10.6   | 5.5 | 8.0  |           |     |      |
| 8     | 12.5 | 3.1 | 7.6  | 12.3 | 6.9  | 9.7  | 11.4 | 6.9 | 9.5  | 10.7   | 5.3 | 8.1  |           |     |      |
| 9     | 11.8 | 4.2 | 7.9  | 11.3 | 7.7  | 9.7  | 12.1 | 7.3 | 9.9  | 10.0   | 5.8 | 8.2  |           |     |      |
| 10    | 10.7 | 4.0 | 7.2  | 14.2 | 7.2  | 10.6 | 11.9 | 6.6 | 9.6  | 10.4   | 6.0 | 8.5  |           |     |      |
| 11    | 11.2 | 3.6 | 7.3  | 14.5 | 6.6  | 10.8 | 12.7 | 6.2 | 9.9  | 9.4    | 6.2 | 8.2  |           |     |      |
| 12    | 8.9  | 3.7 | 6.5  | 13.9 | 7.9  | 11.1 | 13.8 | 7.4 | 10.8 | 10.6   | 7.3 | 9.1  |           |     |      |
| 13    | 10.9 | 3.9 | 7.2  | 14.6 | 9.0  | 11.8 | 12.2 | 7.9 | 10.4 | 10.3   | 8.4 | 9.3  |           |     |      |
| 14    | 7.8  | 4.5 | 6.3  | 14.8 | 8.3  | 11.6 | 12.4 | 8.3 | 10.5 | 8.6    | 5.8 | 7.5  |           |     |      |
| 15    | 6.6  | 5.0 | 5.9  | 12.7 | 7.8  | 10.7 | 13.6 | 8.1 | 11.0 | 10.2   | 6.5 | 8.3  |           |     |      |
| 16    | 12.3 | 3.4 | 7.3  | 14.1 | 8.3  | 11.1 | 13.3 | 8.3 | 10.8 | 10.2   | 5.1 | 7.8  |           |     |      |
| 17    | 12.2 | 4.0 | 7.7  | 14.7 | 8.9  | 12.0 | 12.6 | 7.5 | 10.4 | 8.7    | 5.7 | 7.2  |           |     |      |
| 18    | 12.4 | 3.7 | 7.9  | 13.6 | 9.6  | 11.2 | 12.4 | 8.1 | 10.6 | 6.9    | 3.2 | 5.4  |           |     |      |
| 19    | 12.3 | 3.6 | 8.0  | 14.1 | 7.6  | 11.0 | 11.6 | 9.2 | 10.6 | 5.1    | 1.4 | 3.2  |           |     |      |
| 20    | 12.6 | 4.9 | 8.7  | 13.6 | 8.3  | 11.2 | 12.2 | 7.9 | 10.3 | 5.5    | 3.1 | 4.4  |           |     |      |
| 21    | 10.4 | 5.9 | 8.2  | 15.4 | 8.1  | 11.9 | 11.9 | 9.1 | 10.6 | 8.0    | 3.4 | 5.6  |           |     |      |
| 22    | 11.1 | 6.2 | 8.3  | 15.2 | 7.5  | 11.7 | 11.7 | 8.7 | 10.4 | 8.1    | 4.0 | 6.4  |           |     |      |
| 23    | 12.1 | 3.7 | 7.8  | 15.7 | 9.1  | 12.5 | 12.0 | 8.0 | 10.0 | 8.1    | 5.3 | 6.7  |           |     |      |
| 24    | 13.0 | 5.0 | 8.8  | 14.7 | 8.1  | 11.7 | 11.9 | 6.9 | 9.6  | 9.3    | 5.3 | 7.2  |           |     |      |
| 25    | 12.0 | 4.9 | 8.3  | 13.9 | 10.1 | 12.0 | 13.0 | 7.2 | 10.1 | 7.2    | 4.3 | 5.6  |           |     |      |
| 26    | 13.0 | 4.9 | 8.8  | 13.4 | 7.7  | 10.8 | 13.0 | 8.6 | 10.9 | 5.1    | 1.9 | 3.0  |           |     |      |
| 27    | 11.2 | 6.8 | 8.8  | 13.1 | 7.5  | 10.5 | 11.6 | 9.3 | 10.4 | 3.3    | .0  | 1.7  |           |     |      |
| 28    | 10.4 | 6.3 | 8.4  | 13.4 | 8.3  | 11.0 | 11.3 | 7.1 | 9.3  | 6.5    | 1.7 | 4.1  |           |     |      |
| 29    | 12.7 | 4.6 | 8.5  | 11.8 | 9.9  | 10.9 | 11.7 | 7.4 | 9.7  | 7.1    | 2.5 | 5.1  |           |     |      |
| 30    | 13.0 | 7.0 | 9.7  | 14.1 | 7.9  | 11.0 | 12.2 | 8.4 | 10.4 | 6.9    | 3.4 | 5.6  |           |     |      |
| 31    | ---  | --- | ---  | 14.5 | 7.5  | 11.3 | 12.3 | 7.0 | 9.8  | ---    | --- | ---  |           |     |      |
| MONTH | 13.0 | 2.3 | 7.7  | 15.7 | 5.8  | 10.9 | 14.8 | 6.2 | 10.4 | 12.6   | .0  | 7.1  |           |     |      |

## PLATTE RIVER BASIN

## 06705500 GENEVA CREEK AT GRANT, CO--Continued

## PRECIPITATION RECORDS

PERIOD OF RECORD.--May 1995 to current year (seasonal records only).

GAGE.--Tipping bucket rain gage (no wind vanes 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 in., May 18, 1995.

EXTREMES FOR CURRENT YEAR.--Maximum daily rainfall, 0.51 in., May 26.

PRECIPITATION INCHES, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY SUM VALUES

| DAY   | OCT  | NOV | DEC | JAN | FEB | MAR | APR  | MAY  | JUN  | JUL  | AUG  | SEP  |
|-------|------|-----|-----|-----|-----|-----|------|------|------|------|------|------|
| 1     | .00  | --- | --- | --- | --- | --- | .00  | .01  | .00  | .08  | .00  | .00  |
| 2     | .00  | --- | --- | --- | --- | --- | .00  | .00  | .00  | .00  | .00  | .00  |
| 3     | .00  | --- | --- | --- | --- | --- | .00  | .00  | .00  | .01  | .00  | .00  |
| 4     | .01  | --- | --- | --- | --- | --- | .00  | .00  | .00  | .00  | .00  | .00  |
| 5     | .00  | --- | --- | --- | --- | --- | .02  | .00  | .01  | .00  | .00  | .00  |
| 6     | .00  | --- | --- | --- | --- | --- | .16  | .00  | .00  | .00  | .00  | .45  |
| 7     | .00  | --- | --- | --- | --- | --- | .19  | .00  | .00  | .00  | .00  | .00  |
| 8     | .00  | --- | --- | --- | --- | --- | .00  | .00  | .00  | .00  | .02  | .00  |
| 9     | .00  | --- | --- | --- | --- | --- | .00  | .00  | .00  | .14  | .00  | .00  |
| 10    | .00  | --- | --- | --- | --- | --- | .01  | .00  | .00  | .01  | .00  | .00  |
| 11    | .00  | --- | --- | --- | --- | --- | .00  | .00  | .00  | .00  | .00  | .00  |
| 12    | .07  | --- | --- | --- | --- | --- | .00  | .00  | .05  | .00  | .00  | .31  |
| 13    | .00  | --- | --- | --- | --- | --- | .01  | .00  | .00  | .00  | .00  | .00  |
| 14    | .00  | --- | --- | --- | --- | --- | .00  | .00  | .00  | .00  | .04  | .15  |
| 15    | .00  | --- | --- | --- | --- | --- | .00  | .00  | .30  | .01  | .00  | .02  |
| 16    | .00  | --- | --- | --- | --- | --- | .00  | .00  | .00  | .00  | .00  | .00  |
| 17    | .00  | --- | --- | --- | --- | --- | .00  | .00  | .00  | .00  | .00  | .00  |
| 18    | .00  | --- | --- | --- | --- | --- | .03  | .00  | .00  | .45  | .00  | .03  |
| 19    | .00  | --- | --- | --- | --- | --- | .00  | .00  | .00  | .04  | .01  | .11  |
| 20    | .00  | --- | --- | --- | --- | --- | .00  | .00  | .00  | .00  | .00  | .00  |
| 21    | .00  | --- | --- | --- | --- | --- | .01  | .00  | .08  | .00  | .17  | .00  |
| 22    | .00  | --- | --- | --- | --- | --- | .02  | .00  | .07  | .00  | .10  | .00  |
| 23    | .00  | --- | --- | --- | --- | --- | .00  | .00  | .00  | .00  | .01  | .07  |
| 24    | .00  | --- | --- | --- | --- | --- | .00  | .02  | .00  | .00  | .00  | .06  |
| 25    | .00  | --- | --- | --- | --- | --- | .01  | .14  | .00  | .00  | .00  | .00  |
| 26    | .00  | --- | --- | --- | --- | --- | .00  | .51  | .05  | .01  | .00  | .00  |
| 27    | .00  | --- | --- | --- | --- | --- | .00  | .02  | .00  | .00  | .23  | .01  |
| 28    | .00  | --- | --- | --- | --- | --- | .00  | .05  | .04  | .27  | .01  | .39  |
| 29    | .00  | --- | --- | --- | --- | --- | .05  | .00  | .00  | .15  | .00  | .00  |
| 30    | .00  | --- | --- | --- | --- | --- | .00  | .00  | .00  | .00  | .00  | .00  |
| 31    | .00  | --- | --- | --- | --- | --- | ---  | .00  | ---  | .00  | .00  | ---  |
| TOTAL | 0.08 | --- | --- | --- | --- | --- | 0.51 | 0.75 | 0.60 | 1.17 | 0.59 | 1.60 |



## PLATTE RIVER BASIN

## 393040105340400 DEER CREEK NEAR BAILEY, CO

LOCATION.--Lat 39°30'40", long 105°34'04", in SW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub>, 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.--Not determined.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--February to September 1996.

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

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

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period February to September, 44 ft<sup>3</sup>/s, June 15, 1996 at 1700, gage height, 1.17 ft; minimum daily 2.5 ft<sup>3</sup>/s, Feb. 8.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

| DAY   | OCT | NOV | DEC | JAN | FEB  | MAR  | APR   | MAY   | JUN  | JUL  | AUG   | SEP   |
|-------|-----|-----|-----|-----|------|------|-------|-------|------|------|-------|-------|
| 1     | --- | --- | --- | --- | e2.9 | e3.1 | e3.6  | e5.0  | 19   | 24   | 11    | 6.1   |
| 2     | --- | --- | --- | --- | e2.6 | e3.0 | e3.9  | e6.0  | 20   | 23   | 11    | 5.9   |
| 3     | --- | --- | --- | --- | e2.8 | e3.0 | e4.0  | 8.0   | 22   | 23   | 11    | 5.8   |
| 4     | --- | --- | --- | --- | e2.8 | e2.9 | e4.2  | 9.4   | 24   | 22   | 10    | 5.6   |
| 5     | --- | --- | --- | --- | e3.0 | e2.9 | e4.6  | 11    | 26   | 21   | 9.7   | 5.4   |
| 6     | --- | --- | --- | --- | e2.7 | e2.9 | e4.5  | 11    | 27   | 20   | 9.3   | 7.7   |
| 7     | --- | --- | --- | --- | e2.6 | e2.9 | e4.6  | 12    | 27   | 19   | 9.5   | 6.8   |
| 8     | --- | --- | --- | --- | e2.5 | e2.9 | e4.7  | 14    | 28   | 19   | 9.2   | 5.8   |
| 9     | --- | --- | --- | --- | e2.6 | e3.0 | e4.9  | 13    | 28   | 20   | 9.0   | 5.6   |
| 10    | --- | --- | --- | --- | e2.6 | e3.0 | e5.2  | 13    | 28   | 21   | 8.6   | 5.5   |
| 11    | --- | --- | --- | --- | e2.6 | e3.0 | e5.6  | 15    | 28   | 17   | 8.3   | 5.4   |
| 12    | --- | --- | --- | --- | e2.6 | e3.0 | e6.4  | 17    | 28   | 16   | 7.9   | 6.9   |
| 13    | --- | --- | --- | --- | e2.6 | e3.0 | e6.0  | 19    | 29   | 15   | 7.8   | 6.6   |
| 14    | --- | --- | --- | --- | e2.6 | e3.1 | e5.4  | 20    | 28   | 14   | 7.9   | 6.3   |
| 15    | --- | --- | --- | --- | e2.6 | e3.0 | e5.2  | 22    | 31   | 14   | 7.7   | 8.0   |
| 16    | --- | --- | --- | --- | e2.6 | e3.2 | e5.0  | e25   | 30   | 14   | 7.6   | 6.1   |
| 17    | --- | --- | --- | --- | e2.6 | e3.0 | e4.9  | e28   | 29   | 14   | 7.4   | 5.7   |
| 18    | --- | --- | --- | --- | e2.8 | e2.9 | e4.8  | 29    | 29   | 18   | 7.1   | 5.9   |
| 19    | --- | --- | --- | --- | e2.7 | e2.9 | e4.5  | 31    | 28   | 17   | 7.5   | 6.0   |
| 20    | --- | --- | --- | --- | e2.7 | e3.0 | e4.3  | 29    | 28   | 14   | 7.2   | 5.9   |
| 21    | --- | --- | --- | --- | e2.8 | e3.0 | e4.1  | 26    | 28   | 13   | 8.4   | 5.7   |
| 22    | --- | --- | --- | --- | e2.7 | e3.1 | e4.0  | 29    | 31   | 12   | 8.9   | 5.5   |
| 23    | --- | --- | --- | --- | e2.8 | e3.2 | e3.8  | 29    | 29   | 13   | 9.7   | 5.8   |
| 24    | --- | --- | --- | --- | e2.8 | e3.3 | e4.0  | 26    | 28   | 14   | 8.0   | 7.0   |
| 25    | --- | --- | --- | --- | e2.9 | e3.0 | e4.5  | 27    | 27   | 14   | 7.2   | 6.1   |
| 26    | --- | --- | --- | --- | e2.9 | e3.0 | e4.7  | 24    | 27   | 14   | 6.9   | 5.9   |
| 27    | --- | --- | --- | --- | e2.9 | e3.0 | e5.4  | 23    | 26   | 13   | 7.5   | 5.9   |
| 28    | --- | --- | --- | --- | e3.0 | e3.2 | e5.2  | 22    | 26   | 13   | 8.6   | 6.4   |
| 29    | --- | --- | --- | --- | e3.0 | e3.4 | e5.2  | 22    | 25   | 14   | 7.7   | 6.4   |
| 30    | --- | --- | --- | --- | ---  | e3.5 | e5.2  | 23    | 25   | 13   | 7.0   | 5.9   |
| 31    | --- | --- | --- | --- | ---  | e3.5 | ---   | 21    | ---  | 12   | 6.5   | ---   |
| TOTAL | --- | --- | --- | --- | 79.3 | 94.9 | 142.4 | 609.4 | 809  | 510  | 261.1 | 183.6 |
| MEAN  | --- | --- | --- | --- | 2.73 | 3.06 | 4.75  | 19.7  | 27.0 | 16.5 | 8.42  | 6.12  |
| MAX   | --- | --- | --- | --- | 3.0  | 3.5  | 6.4   | 31    | 31   | 24   | 11    | 8.0   |
| MIN   | --- | --- | --- | --- | 2.5  | 2.9  | 3.6   | 5.0   | 19   | 12   | 6.5   | 5.4   |
| AC-FT | --- | --- | --- | --- | 157  | 188  | 282   | 1210  | 1600 | 1010 | 518   | 364   |

e-Estimated.



## PLATTE RIVER BASIN

## 393040105340400 DEER CREEK NEAR BAILEY, CO--Continued

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM @ 25 DEG. C), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DAY   | MAX | MIN | MEAN |
|-------|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|------|
|       |     |     |      |     |     |      |     |     |      |     |     |      |
| 1     | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| 2     | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| 3     | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| 4     | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| 5     | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| 6     | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| 7     | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| 8     | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| 9     | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| 10    | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| 11    | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| 12    | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| 13    | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| 14    | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| 15    | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| 16    | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| 17    | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| 18    | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  | 34  | 28  | 32   |
| 19    | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  | 31  | 29  | 30   |
| 20    | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  | 33  | 28  | 31   |
| 21    | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  | 35  | 32  | 34   |
| 22    | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  | 34  | 29  | 32   |
| 23    | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  | 32  | 29  | 31   |
| 24    | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  | 34  | 31  | 33   |
| 25    | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  | 35  | 34  | 34   |
| 26    | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  | 35  | 33  | 34   |
| 27    | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  | 35  | 35  | 35   |
| 28    | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  | 36  | 35  | 36   |
| 29    | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  | 36  | 35  | 36   |
| 30    | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  | 35  | 34  | 35   |
| 31    | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  | 36  | 34  | 35   |
| MONTH | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| DAY   | MAX | MIN | MEAN |
|       |     |     |      |     |     |      |     |     |      |     |     |      |
| 1     | 36  | 34  | 35   | 30  | 30  | 30   | 37  | 36  | 36   | 40  | 39  | 40   |
| 2     | 36  | 33  | 35   | 31  | 30  | 30   | 37  | 36  | 37   | 40  | 40  | 40   |
| 3     | 35  | 31  | 34   | 31  | 30  | 30   | 37  | 36  | 36   | 41  | 40  | 40   |
| 4     | 33  | 31  | 32   | 31  | 30  | 31   | 37  | 36  | 36   | 41  | 40  | 40   |
| 5     | 33  | 28  | 31   | 31  | 31  | 31   | 38  | 36  | 37   | 41  | 40  | 40   |
| 6     | 31  | 28  | 29   | 32  | 31  | 31   | 38  | 37  | 37   | 41  | 39  | 40   |
| 7     | 30  | 27  | 29   | 32  | 31  | 31   | 38  | 36  | 37   | 41  | 40  | 41   |
| 8     | 30  | 27  | 28   | 32  | 31  | 31   | 38  | 37  | 37   | 41  | 40  | 41   |
| 9     | 29  | 27  | 28   | 32  | 31  | 32   | 38  | 37  | 37   | 41  | 40  | 41   |
| 10    | 29  | 27  | 28   | 33  | 32  | 32   | 38  | 37  | 37   | 41  | 40  | 41   |
| 11    | 29  | 27  | 28   | 33  | 32  | 32   | 38  | 37  | 38   | 41  | 40  | 40   |
| 12    | 29  | 27  | 28   | 34  | 32  | 33   | 39  | 38  | 38   | 42  | 35  | 41   |
| 13    | 29  | 27  | 28   | 35  | 33  | 34   | 39  | 38  | 38   | 42  | 41  | 41   |
| 14    | 29  | 27  | 28   | 35  | 34  | 34   | 39  | 38  | 38   | 41  | 39  | 41   |
| 15    | 29  | 28  | 29   | 35  | 34  | 34   | 39  | 38  | 38   | 42  | 40  | 41   |
| 16    | 30  | 28  | 29   | 35  | 34  | 35   | 39  | 38  | 39   | 42  | 41  | 42   |
| 17    | 29  | 27  | 28   | 35  | 34  | 35   | 39  | 38  | 39   | 42  | 41  | 41   |
| 18    | 28  | 27  | 28   | 36  | 33  | 35   | 39  | 38  | 39   | 41  | 40  | 41   |
| 19    | 28  | 27  | 28   | 35  | 33  | 34   | 40  | 38  | 39   | 41  | 40  | 40   |
| 20    | 28  | 27  | 28   | 35  | 34  | 34   | 40  | 39  | 39   | 40  | 40  | 40   |
| 21    | 28  | 27  | 28   | 35  | 34  | 34   | 40  | 38  | 39   | 41  | 40  | 40   |
| 22    | 28  | 27  | 28   | 35  | 34  | 34   | 40  | 38  | 39   | 41  | 40  | 41   |
| 23    | 28  | 28  | 28   | 35  | 35  | 35   | 40  | 36  | 39   | 41  | 40  | 41   |
| 24    | 29  | 28  | 28   | 35  | 34  | 35   | 40  | 39  | 40   | 42  | 41  | 41   |
| 25    | 29  | 28  | 28   | 36  | 35  | 35   | 40  | 39  | 40   | 41  | 40  | 41   |
| 26    | 29  | 28  | 29   | 36  | 34  | 35   | 40  | 39  | 39   | 40  | 39  | 40   |
| 27    | 29  | 28  | 29   | 36  | 35  | 35   | 40  | 38  | 39   | 42  | 39  | 40   |
| 28    | 29  | 29  | 29   | 36  | 35  | 35   | 41  | 39  | 40   | 41  | 40  | 40   |
| 29    | 30  | 29  | 29   | 36  | 35  | 36   | 41  | 40  | 40   | 41  | 40  | 41   |
| 30    | 30  | 30  | 30   | 36  | 35  | 36   | 41  | 40  | 40   | 42  | 41  | 41   |
| 31    | --- | --- | ---  | 37  | 36  | 36   | 40  | 39  | 40   | --- | --- | ---  |
| MONTH | 36  | 27  | 29   | 37  | 30  | 33   | 41  | 36  | 38   | 42  | 35  | 41   |



## PLATTE RIVER BASIN

## 393040105340400 DEER CREEK NEAR BAILEY, CO--Continued

TEMPERATURE, WATER (DEG. C) WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DAY   | MAX | MIN | MEAN |
|-------|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|------|
|       |     |     |      |     |     |      |     |     |      |     |     |      |
| 1     | 5.5 | 1.7 | 3.3  | 7.8 | 4.2 | 6.0  | 9.6 | 5.2 | 7.4  | 8.2 | 4.5 | 6.4  |
| 2     | 6.3 | 1.2 | 3.4  | 8.2 | 4.3 | 6.1  | 9.2 | 5.8 | 7.6  | 8.0 | 5.7 | 6.8  |
| 3     | 7.0 | 1.5 | 4.0  | 7.4 | 4.7 | 6.1  | 8.8 | 5.8 | 7.2  | 8.1 | 4.9 | 6.6  |
| 4     | 6.0 | 2.2 | 4.0  | 7.6 | 4.8 | 6.2  | 9.4 | 5.6 | 7.3  | 8.6 | 5.4 | 7.0  |
| 5     | 7.1 | 2.2 | 4.4  | 9.5 | 5.1 | 7.1  | 9.0 | 4.4 | 6.8  | 8.7 | 5.7 | 7.2  |
| 6     | 7.0 | 2.7 | 4.5  | 9.1 | 5.3 | 7.1  | 9.0 | 4.7 | 6.9  | 7.2 | 5.2 | 6.4  |
| 7     | 7.4 | 1.9 | 4.3  | 9.6 | 5.2 | 7.2  | 7.2 | 5.0 | 6.3  | 6.8 | 3.8 | 5.3  |
| 8     | 7.5 | 2.0 | 4.5  | 7.6 | 5.0 | 6.3  | 8.5 | 4.7 | 6.5  | 6.6 | 3.4 | 5.1  |
| 9     | 7.2 | 2.9 | 4.9  | 7.2 | 5.3 | 6.4  | 8.0 | 5.1 | 6.5  | 7.1 | 3.9 | 5.6  |
| 10    | 6.1 | 3.1 | 4.6  | 9.2 | 5.3 | 7.0  | 7.1 | 4.1 | 5.8  | 7.0 | 4.6 | 5.8  |
| 11    | 7.6 | 2.9 | 4.9  | 9.7 | 5.0 | 7.3  | 8.2 | 3.8 | 6.1  | 7.2 | 4.3 | 5.8  |
| 12    | 5.6 | 3.1 | 4.4  | 9.0 | 5.7 | 7.4  | 9.1 | 5.0 | 7.0  | 6.4 | 2.6 | 5.7  |
| 13    | 6.9 | 3.3 | 4.9  | 9.5 | 6.1 | 7.5  | 8.0 | 5.3 | 6.7  | 6.8 | 5.1 | 5.9  |
| 14    | 5.8 | 3.5 | 4.7  | 9.9 | 5.6 | 7.5  | 7.9 | 6.0 | 6.9  | 6.1 | 3.9 | 5.1  |
| 15    | 4.8 | 3.6 | 4.4  | 8.6 | 5.2 | 7.0  | 8.5 | 5.7 | 7.1  | 6.2 | 4.2 | 5.2  |
| 16    | 7.8 | 3.0 | 5.0  | 8.4 | 6.0 | 7.2  | 7.9 | 5.3 | 6.8  | 6.6 | 3.3 | 5.0  |
| 17    | 7.3 | 3.5 | 5.2  | 9.7 | 6.1 | 7.8  | 8.6 | 4.9 | 6.8  | 5.4 | 4.0 | 4.6  |
| 18    | 7.7 | 2.9 | 5.1  | 8.1 | 6.5 | 7.2  | 8.8 | 6.0 | 7.4  | 4.1 | 2.1 | 3.3  |
| 19    | 7.9 | 2.8 | 5.2  | 8.8 | 5.5 | 7.1  | 7.5 | 6.0 | 6.7  | 3.1 | .6  | 1.9  |
| 20    | 8.4 | 3.9 | 5.9  | 8.5 | 5.8 | 7.2  | 8.6 | 5.7 | 7.2  | 3.7 | 1.4 | 2.4  |
| 21    | 7.0 | 4.5 | 5.7  | 9.8 | 5.5 | 7.5  | 8.6 | 6.7 | 7.4  | 5.4 | 1.8 | 3.4  |
| 22    | 8.0 | 4.7 | 5.8  | 9.4 | 5.0 | 7.3  | 8.2 | 6.1 | 7.0  | 5.9 | 2.3 | 4.1  |
| 23    | 8.0 | 3.0 | 5.3  | 9.5 | 6.0 | 7.7  | 7.8 | 5.3 | 6.5  | 5.6 | 3.2 | 4.4  |
| 24    | 8.4 | 3.9 | 5.8  | 8.5 | 5.1 | 7.0  | 8.4 | 5.0 | 6.7  | 6.2 | 3.5 | 4.6  |
| 25    | 7.6 | 3.8 | 5.6  | 8.1 | 6.3 | 7.2  | 8.9 | 5.0 | 6.9  | 5.1 | 2.0 | 3.7  |
| 26    | 9.0 | 4.0 | 6.1  | 8.0 | 5.1 | 6.5  | 7.9 | 6.1 | 7.1  | 2.0 | .0  | .8   |
| 27    | 7.4 | 5.5 | 6.3  | 8.3 | 4.9 | 6.6  | 7.7 | 6.3 | 6.9  | 1.0 | .0  | .4   |
| 28    | 7.5 | 4.8 | 6.0  | 8.4 | 5.8 | 7.1  | 7.3 | 5.4 | 6.4  | 3.5 | .4  | 1.8  |
| 29    | 7.9 | 3.7 | 5.7  | 7.1 | 6.3 | 6.6  | 8.3 | 5.4 | 6.8  | 4.7 | 1.2 | 2.9  |
| 30    | 7.0 | 4.9 | 6.1  | 8.5 | 5.3 | 6.7  | 8.1 | 5.6 | 6.8  | 5.3 | 2.2 | 3.7  |
| 31    | --- | --- | ---  | 8.5 | 4.7 | 6.7  | 8.3 | 4.8 | 6.5  | --- | --- | ---  |
| MONTH | 9.0 | 1.2 | 5.0  | 9.9 | 4.2 | 7.0  | 9.6 | 3.8 | 6.8  | 8.7 | .0  | 4.6  |

393040105340400 DEER CREEK NEAR BAILEY, CO--Continued

PRECIPITATION RECORDS

PERIOD OF RECORD.--July to September 1996.

GAGE.--Tipping bucket rain gage (no wind vanes 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, 1.55 in., Sept. 12, 1996.

EXTREMES FOR CURRENT YEAR.--Maximum daily rainfall, 1.55 in., Sept. 12.

PRECIPITATION INCHES, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY SUM VALUES

| DAY   | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG  | SEP  |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|
| 1     | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | .00  | .00  |
| 2     | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | .00  | .00  |
| 3     | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | .02  | .00  |
| 4     | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | .00  | .00  |
| 5     | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | .00  | .00  |
| 6     | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | .00  | .79  |
| 7     | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | .14  | .00  |
| 8     | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | .00  | .00  |
| 9     | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | .00  | .00  |
| 10    | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | .00  | .00  |
| 11    | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | .00  | .09  |
| 12    | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | .00  | 1.55 |
| 13    | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | .00  | .02  |
| 14    | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | .03  | .34  |
| 15    | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | .09  | .02  |
| 16    | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | .00  | .00  |
| 17    | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | .00  | .02  |
| 18    | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | .03  | .10  |
| 19    | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | .50  | .07  |
| 20    | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | .00  | .00  |
| 21    | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | .93  | .00  |
| 22    | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | .13  | .06  |
| 23    | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | .89  | .25  |
| 24    | --- | --- | --- | --- | --- | --- | --- | --- | --- | .00 | .01  | .15  |
| 25    | --- | --- | --- | --- | --- | --- | --- | --- | --- | .01 | .02  | .00  |
| 26    | --- | --- | --- | --- | --- | --- | --- | --- | --- | .21 | .00  | .00  |
| 27    | --- | --- | --- | --- | --- | --- | --- | --- | --- | .02 | .24  | .02  |
| 28    | --- | --- | --- | --- | --- | --- | --- | --- | --- | .10 | .53  | .48  |
| 29    | --- | --- | --- | --- | --- | --- | --- | --- | --- | .17 | .01  | .00  |
| 30    | --- | --- | --- | --- | --- | --- | --- | --- | --- | .01 | .00  | .00  |
| 31    | --- | --- | --- | --- | --- | --- | --- | --- | --- | .00 | .00  | ---  |
| TOTAL | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 3.57 | 3.96 |



**06709530 PLUM CREEK AT TITAN ROAD NEAR LOUVIERS, CO**

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

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

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

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

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

REMARKS.--Gage was removed from site Oct. 1 to July 10 due to bridge construction. 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 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

| DAY   | OCT   | NOV   | DEC   | JAN   | FEB   | MAR   | APR  | MAY   | JUN   | JUL  | AUG  | SEP  |
|-------|-------|-------|-------|-------|-------|-------|------|-------|-------|------|------|------|
| 1     | e3.7  | e14   | e7.0  | e4.3  | e7.4  | e7.0  | e12  | e24   | e20   | e1.0 | .00  | .00  |
| 2     | e14   | e14   | e6.8  | e4.3  | e7.4  | e7.0  | e12  | e23   | e18   | e.30 | .00  | .00  |
| 3     | e13   | e15   | e6.4  | e4.7  | e7.4  | e7.0  | e13  | e22   | e17   | e.00 | .00  | .00  |
| 4     | e9.6  | e16   | e6.2  | e4.9  | e7.4  | e7.0  | e13  | e21   | e17   | e.00 | .00  | .00  |
| 5     | e4.5  | e13   | e6.0  | e5.2  | e7.4  | e7.4  | e14  | e21   | e16   | e.00 | .00  | .00  |
| 6     | e2.9  | e16   | e5.8  | e5.4  | e7.6  | e8.2  | e14  | e22   | e14   | e.00 | .00  | .00  |
| 7     | e2.0  | e15   | e5.4  | e5.6  | e8.0  | e9.2  | e15  | e19   | e12   | e.00 | .00  | .00  |
| 8     | e2.5  | e14   | e5.2  | e6.0  | e8.0  | e11   | e16  | e18   | e10   | e.00 | .00  | .00  |
| 9     | e4.2  | e12   | e5.0  | e6.4  | e8.8  | e12   | e16  | e18   | e8.6  | e.00 | .00  | .00  |
| 10    | e4.7  | e14   | e4.5  | e7.0  | e8.8  | e13   | e17  | e17   | e7.2  | e.00 | .00  | .00  |
| 11    | e2.6  | e15   | e4.3  | e7.6  | e8.2  | e15   | e16  | e16   | e5.8  | .00  | .00  | .00  |
| 12    | e2.6  | e16   | e4.2  | e8.2  | e8.0  | e17   | e15  | e14   | e5.4  | .00  | .00  | .00  |
| 13    | e2.5  | e15   | e4.0  | e8.2  | e7.6  | e17   | e18  | e13   | e8.0  | .00  | .00  | .00  |
| 14    | e2.8  | e14   | e3.8  | e8.2  | e7.2  | e17   | e26  | e12   | e16   | .00  | .00  | .00  |
| 15    | e3.2  | e13   | e3.6  | e8.2  | e7.0  | e15   | e23  | e11   | e21   | .00  | .00  | .00  |
| 16    | e3.1  | e12   | e3.5  | e8.2  | e7.0  | e14   | e23  | e7.8  | e15   | .00  | .00  | .00  |
| 17    | e3.0  | e10   | e3.3  | e8.2  | e7.0  | e13   | e23  | e4.7  | e11   | .00  | .00  | .00  |
| 18    | e3.3  | e9.2  | e3.2  | e8.0  | e7.0  | e13   | e23  | e3.2  | e8.2  | .00  | .00  | .00  |
| 19    | e2.9  | e8.0  | e2.9  | e7.4  | e7.0  | e12   | e23  | e2.3  | e5.8  | .00  | .00  | .00  |
| 20    | e2.5  | e9.4  | e2.8  | e7.4  | e7.0  | e12   | e22  | e2.2  | e5.0  | .00  | .00  | .00  |
| 21    | e6.0  | e11   | e3.0  | e7.4  | e7.0  | e11   | e21  | e2.2  | e7.2  | .00  | .00  | .00  |
| 22    | e11   | e13   | e3.2  | e7.4  | e7.0  | e11   | e20  | e2.2  | e13   | .00  | .00  | .00  |
| 23    | e13   | e12   | e3.5  | e7.4  | e7.0  | e11   | e19  | e2.2  | e9.4  | .00  | .00  | .00  |
| 24    | e17   | e11   | e3.7  | e7.4  | e7.0  | e10   | e18  | e2.0  | e7.6  | .00  | .00  | .00  |
| 25    | e19   | e11   | e3.9  | e7.4  | e7.0  | e10   | e25  | e30   | e4.8  | .00  | .00  | .00  |
| 26    | e16   | e10   | e4.1  | e7.4  | e7.0  | e12   | e22  | e28   | e5.0  | .00  | .00  | .00  |
| 27    | e13   | e9.6  | e4.2  | e7.4  | e7.0  | e10   | e20  | e25   | e4.6  | .00  | .00  | .00  |
| 28    | e18   | e8.8  | e4.2  | e7.4  | e7.0  | e10   | e22  | e23   | e4.6  | .00  | .00  | .00  |
| 29    | e14   | e8.0  | e4.2  | e7.4  | e7.0  | e10   | e23  | e22   | e5.4  | .00  | .00  | .00  |
| 30    | e12   | e7.8  | e4.2  | e7.4  | ---   | e11   | e24  | e21   | e4.1  | .00  | .00  | .00  |
| 31    | e13   | ---   | e4.2  | e7.4  | ---   | e11   | ---  | e20   | ---   | .00  | .00  | ---  |
| TOTAL | 241.6 | 366.8 | 136.3 | 214.8 | 214.2 | 350.8 | 568  | 468.8 | 306.7 | 1.30 | 0.00 | 0.00 |
| MEAN  | 7.79  | 12.2  | 4.40  | 6.93  | 7.39  | 11.3  | 18.9 | 15.1  | 10.2  | .042 | .000 | .000 |
| MAX   | 19    | 16    | 7.0   | 8.2   | 8.8   | 17    | 26   | 30    | 21    | 1.0  | .00  | .00  |
| MIN   | 2.0   | 7.8   | 2.8   | 4.3   | 7.0   | 7.0   | 12   | 2.0   | 4.1   | .00  | .00  | .00  |
| AC-FT | 479   | 728   | 270   | 426   | 425   | 696   | 1130 | 930   | 608   | 2.6  | .00  | .00  |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984 - 1996, BY WATER YEAR (WY)

|      | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 13.1 | 17.4 | 13.9 | 13.3 | 16.7 | 27.7 | 63.0 | 161  | 49.2 | 16.8 | 12.0 | 5.78 |      |
| 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 1995 CALENDAR YEAR FOR 1996 WATER YEAR WATER YEARS 1984 - 1996

|                          |          |         |                |
|--------------------------|----------|---------|----------------|
| ANNUAL TOTAL             | 13888.21 | 2869.30 |                |
| ANNUAL MEAN              | 38.0     | 7.84    | 28.6           |
| HIGHEST ANNUAL MEAN      |          |         | 68.3           |
| LOWEST ANNUAL MEAN       |          |         | 7.84           |
| HIGHEST DAILY MEAN       | 596      | May 26  | e30            |
| LOWEST DAILY MEAN        | *e.00    | Aug 13  | a.00           |
| ANNUAL SEVEN-DAY MINIMUM | .05      | Aug 12  | .00            |
| INSTANTANEOUS PEAK FLOW  |          |         | Not determined |
| INSTANTANEOUS PEAK STAGE |          |         | Not determined |
| ANNUAL RUNOFF (AC-FT)    | 27550    | 5690    | c2850          |
| 10 PERCENT EXCEEDS       | 98       | 18      | 70             |
| 50 PERCENT EXCEEDS       | 8.8      | 7.0     | 14             |
| 90 PERCENT EXCEEDS       | 2.5      | .00     | .00            |

e-Estimated.  
\*-Also occurred Aug 14-18.  
a-No flow many days.  
b-No flow many days, most years.  
c-From rating curve extended above 450 ft<sup>3</sup>/s.

## PLATTE RIVER BASIN

**06709600 CHATFIELD LAKE NEAR LITTLETON, CO**

LOCATION.--Lat 39°33'26", long 105°03'27", in NW<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> 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 mi<sup>2</sup>.

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, 27,540 acre-ft, June 23, elevation, 5,432.34 ft; minimum, 16,650 acre-ft, Dec. 18, elevation, 5,423.63 ft.

## MONTHEND ELEVATION AND CONTENTS AT 0800, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| Date                  | Elevation<br>(feet) | Contents<br>(acre-feet) | Change in<br>contents<br>(acre-feet) |
|-----------------------|---------------------|-------------------------|--------------------------------------|
| Sept. 30. . . . .     | 5,427.22            | 20,740                  | -                                    |
| Oct. 31. . . . .      | 5,427.64            | 21,260                  | +520                                 |
| Nov. 30. . . . .      | 5,425.76            | 19,010                  | -2,250                               |
| Dec. 31. . . . .      | 5,424.64            | 17,780                  | -1,230                               |
| CAL YR 1995 . . . . . | -                   | -                       | -5,950                               |
| Jan. 31. . . . .      | 5,426.88            | 20,330                  | +2,550                               |
| Feb. 29. . . . .      | 5,428.05            | 21,760                  | +1,430                               |
| Mar. 31. . . . .      | 5,430.02            | 24,310                  | +2,550                               |
| Apr. 30. . . . .      | 5,427.29            | 20,830                  | -3,480                               |
| May 31. . . . .       | 5,429.78            | 24,000                  | +3,170                               |
| June 30. . . . .      | 5,431.60            | 26,490                  | +2,490                               |
| July 31. . . . .      | 5,427.86            | 21,530                  | -4,960                               |
| Aug. 31. . . . .      | 5,427.39            | 20,960                  | -570                                 |
| Sept. 30. . . . .     | 5,428.56            | 22,410                  | +1,450                               |
| WTR YR 1996. . . . .  | -                   | -                       | +1,670                               |

**06710245 SOUTH PLATTE RIVER AT UNION AVENUE, AT ENGLEWOOD, CO**

LOCATION.--Lat 39°37'52", long 105°00'50", in NW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec.9, T.5 S., R.68 W., Arapahoe County, Hydrologic Unit 10190002, on right bank 280 ft downstream from Big Dry Creek, 285 ft upstream from Union Avenue bridge in Englewood, and 7.5 mi downstream from Chatfield Dam.

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

PERIOD OF RECORD.--April 1989 to February 1996 (discontinued).

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 5,300 ft above sea level, from topographic map.

REMARKS.--No estimated daily discharges. Records fair except for discharges less than 50 ft<sup>3</sup>/s or greater than 300 ft<sup>3</sup>/s, which are poor. Flow regulated by Chatfield Reservoir (station 06709600) 7.1 mi upstream. One measurement of specific conductance and water temperature was obtained and is published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,840 ft<sup>3</sup>/s, July 6, 1995, gage height, 8.35 ft.; minimum daily 9.7 ft<sup>3</sup>/s, Feb. 18, 1991.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 176 ft<sup>3</sup>/s at 1400 Dec. 2, gage height, 4.84 ft; minimum daily, 23 ft<sup>3</sup>/s, Oct. 17-19.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

| DAY   | OCT  | NOV  | DEC  | JAN  | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|------|------|-----|-----|-----|-----|-----|-----|-----|-----|
| 1     | 46   | 39   | 67   | 29   | 32  | --- | --- | --- | --- | --- | --- | --- |
| 2     | 45   | 86   | 171  | 29   | 33  | --- | --- | --- | --- | --- | --- | --- |
| 3     | 39   | 165  | 173  | 31   | 32  | --- | --- | --- | --- | --- | --- | --- |
| 4     | 53   | 163  | 165  | 30   | 32  | --- | --- | --- | --- | --- | --- | --- |
| 5     | 34   | 162  | 148  | 30   | 32  | --- | --- | --- | --- | --- | --- | --- |
| 6     | 32   | 155  | 149  | 31   | --- | --- | --- | --- | --- | --- | --- | --- |
| 7     | 131  | 124  | 151  | 28   | --- | --- | --- | --- | --- | --- | --- | --- |
| 8     | 36   | 121  | 140  | 29   | --- | --- | --- | --- | --- | --- | --- | --- |
| 9     | 29   | 113  | 116  | 28   | --- | --- | --- | --- | --- | --- | --- | --- |
| 10    | 26   | 118  | 115  | 28   | --- | --- | --- | --- | --- | --- | --- | --- |
| 11    | 25   | 112  | 105  | 29   | --- | --- | --- | --- | --- | --- | --- | --- |
| 12    | 25   | 110  | 77   | 28   | --- | --- | --- | --- | --- | --- | --- | --- |
| 13    | 26   | 111  | 86   | 29   | --- | --- | --- | --- | --- | --- | --- | --- |
| 14    | 24   | 105  | 125  | 30   | --- | --- | --- | --- | --- | --- | --- | --- |
| 15    | 25   | 105  | 125  | 30   | --- | --- | --- | --- | --- | --- | --- | --- |
| 16    | 24   | 138  | 125  | 30   | --- | --- | --- | --- | --- | --- | --- | --- |
| 17    | 23   | 149  | 125  | 30   | --- | --- | --- | --- | --- | --- | --- | --- |
| 18    | 23   | 151  | 110  | 31   | --- | --- | --- | --- | --- | --- | --- | --- |
| 19    | 23   | 149  | 38   | 31   | --- | --- | --- | --- | --- | --- | --- | --- |
| 20    | 24   | 141  | 30   | 30   | --- | --- | --- | --- | --- | --- | --- | --- |
| 21    | 24   | 146  | 30   | 30   | --- | --- | --- | --- | --- | --- | --- | --- |
| 22    | 55   | 140  | 30   | 31   | --- | --- | --- | --- | --- | --- | --- | --- |
| 23    | 64   | 129  | 30   | 30   | --- | --- | --- | --- | --- | --- | --- | --- |
| 24    | 46   | 129  | 30   | 30   | --- | --- | --- | --- | --- | --- | --- | --- |
| 25    | 41   | 127  | 30   | 31   | --- | --- | --- | --- | --- | --- | --- | --- |
| 26    | 37   | 126  | 30   | 32   | --- | --- | --- | --- | --- | --- | --- | --- |
| 27    | 35   | 109  | 30   | 31   | --- | --- | --- | --- | --- | --- | --- | --- |
| 28    | 35   | 44   | 30   | 30   | --- | --- | --- | --- | --- | --- | --- | --- |
| 29    | 35   | 39   | 29   | 31   | --- | --- | --- | --- | --- | --- | --- | --- |
| 30    | 35   | 39   | 29   | 33   | --- | --- | --- | --- | --- | --- | --- | --- |
| 31    | 35   | ---  | 29   | 32   | --- | --- | --- | --- | --- | --- | --- | --- |
| TOTAL | 1155 | 3545 | 2668 | 932  | --- | --- | --- | --- | --- | --- | --- | --- |
| MEAN  | 37.3 | 118  | 86.1 | 30.1 | --- | --- | --- | --- | --- | --- | --- | --- |
| MAX   | 131  | 165  | 173  | 33   | --- | --- | --- | --- | --- | --- | --- | --- |
| MIN   | 23   | 39   | 29   | 28   | --- | --- | --- | --- | --- | --- | --- | --- |
| AC-FT | 2290 | 7030 | 5290 | 1850 | --- | --- | --- | --- | --- | --- | --- | --- |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 1996, BY WATER YEAR (WY)

|      | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 |
|------|------|------|------|------|------|------|------|------|
| MEAN | 43.0 | 77.5 | 47.1 | 37.4 | 42.6 | 65.2 | 139  | 256  |
| MAX  | 80.7 | 125  | 113  | 64.3 | 73.7 | 133  | 203  | 667  |
| (WY) | 1991 | 1991 | 1990 | 1992 | 1992 | 1992 | 1995 | 1995 |
| MIN  | 23.8 | 27.0 | 15.6 | 15.9 | 11.5 | 32.3 | 84.3 | 114  |
| (WY) | 1992 | 1990 | 1992 | 1991 | 1991 | 1991 | 1990 | 1991 |

**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, 800 ft downstream from Union Avenue bridge in Englewood, and 7.7 mi downstream from Chatfield Dam.

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

PERIOD OF RECORD.--February 1996 to September 1996.

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

REMARKS.--Records fair except for estimated daily discharges, which are poor. Flow regulated by Chatfield Reservoir (station 06709600) 7.7 mi upstream. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 517 ft<sup>3</sup>/s at 1530 May 26, gage height, 12.88 ft; minimum daily, 3.3 ft<sup>3</sup>/s, Apr. 24.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

| DAY   | OCT | NOV | DEC | JAN | FEB  | MAR   | APR    | MAY  | JUN   | JUL   | AUG  | SEP  |
|-------|-----|-----|-----|-----|------|-------|--------|------|-------|-------|------|------|
| 1     | --- | --- | --- | --- | ---  | 22    | 8.2    | 62   | 116   | 207   | 98   | 110  |
| 2     | --- | --- | --- | --- | ---  | 139   | 5.7    | 57   | 106   | 257   | 107  | 78   |
| 3     | --- | --- | --- | --- | ---  | 17    | 37     | 16   | 145   | 249   | 114  | 67   |
| 4     | --- | --- | --- | --- | ---  | 13    | 37     | 19   | 299   | 178   | 102  | 67   |
| 5     | --- | --- | --- | --- | ---  | 9.8   | 49     | 22   | 235   | 203   | 97   | 57   |
| 6     | --- | --- | --- | --- | ---  | 7.1   | 14     | 36   | 103   | 230   | 98   | 39   |
| 7     | --- | --- | --- | --- | e5.1 | 13    | 7.1    | 160  | 72    | 207   | 95   | 37   |
| 8     | --- | --- | --- | --- | 9.0  | 10    | 14     | 219  | 66    | 212   | 83   | 25   |
| 9     | --- | --- | --- | --- | 4.2  | 7.4   | 13     | 164  | 77    | 193   | 80   | 17   |
| 10    | --- | --- | --- | --- | 35   | 7.8   | 107    | 153  | 109   | 174   | 88   | 31   |
| 11    | --- | --- | --- | --- | 42   | 5.6   | 205    | 130  | 106   | 235   | 85   | 108  |
| 12    | --- | --- | --- | --- | e56  | 16    | 284    | 125  | 151   | 320   | 88   | 203  |
| 13    | --- | --- | --- | --- | e69  | 38    | 296    | 128  | 222   | 354   | 89   | 155  |
| 14    | --- | --- | --- | --- | 97   | 149   | 295    | 94   | 205   | 370   | 94   | 167  |
| 15    | --- | --- | --- | --- | 48   | 70    | 271    | 62   | 180   | 294   | 100  | 171  |
| 16    | --- | --- | --- | --- | 44   | 34    | 239    | 63   | 244   | 217   | 102  | 136  |
| 17    | --- | --- | --- | --- | 8.6  | 28    | 191    | 98   | 311   | 86    | 113  | 51   |
| 18    | --- | --- | --- | --- | 11   | 35    | 100    | 194  | 313   | 96    | 105  | 94   |
| 19    | --- | --- | --- | --- | 4.4  | 27    | 84     | 201  | 309   | 94    | 97   | 222  |
| 20    | --- | --- | --- | --- | 7.6  | 27    | 25     | 197  | 270   | 168   | 70   | 119  |
| 21    | --- | --- | --- | --- | 13   | 23    | 14     | 213  | 153   | 266   | 77   | 45   |
| 22    | --- | --- | --- | --- | 12   | 18    | 17     | 250  | 87    | 289   | 144  | 39   |
| 23    | --- | --- | --- | --- | 8.0  | 12    | 17     | 298  | 194   | 262   | 176  | 37   |
| 24    | --- | --- | --- | --- | 11   | 28    | 3.3    | 272  | 416   | 202   | 180  | 42   |
| 25    | --- | --- | --- | --- | 8.8  | 14    | 36     | 282  | 374   | 189   | 167  | 47   |
| 26    | --- | --- | --- | --- | 18   | 12    | 122    | 347  | 265   | 136   | 79   | 62   |
| 27    | --- | --- | --- | --- | 13   | 10    | 174    | 119  | 254   | 146   | 129  | 75   |
| 28    | --- | --- | --- | --- | 14   | 10    | 185    | 162  | 308   | 171   | 133  | 46   |
| 29    | --- | --- | --- | --- | 11   | 13    | 168    | 230  | 269   | 200   | 82   | 42   |
| 30    | --- | --- | --- | --- | ---  | 12    | 97     | 310  | 194   | 221   | 124  | 34   |
| 31    | --- | --- | --- | --- | ---  | 11    | ---    | 211  | ---   | 167   | 121  | ---  |
| TOTAL | --- | --- | --- | --- | ---  | 838.7 | 3115.3 | 4894 | 6153  | 6593  | 3317 | 2423 |
| MEAN  | --- | --- | --- | --- | ---  | 27.1  | 104    | 158  | 205   | 213   | 107  | 80.8 |
| MAX   | --- | --- | --- | --- | ---  | 149   | 296    | 347  | 416   | 370   | 180  | 222  |
| MIN   | --- | --- | --- | --- | ---  | 5.6   | 3.3    | 16   | 66    | 86    | 70   | 17   |
| AC-FT | --- | --- | --- | --- | ---  | 1660  | 6180   | 9710 | 12200 | 13080 | 6580 | 4810 |

e-Estimated.

**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 mi<sup>2</sup>.

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 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

| DAY   | OCT  | NOV  | DEC  | JAN  | FEB  | MAR  | APR  | MAY  | JUN  | JUL  | AUG  | SEP  |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1     | 35   | 26   | e25  | e21  | e18  | e17  | e20  | 26   | 77   | 51   | 31   | e17  |
| 2     | 33   | 16   | e25  | e20  | e18  | e18  | e20  | 29   | 74   | 49   | 31   | e18  |
| 3     | 33   | 20   | e25  | e20  | e18  | e18  | e20  | 34   | 73   | 48   | e30  | e16  |
| 4     | 33   | 32   | e26  | e20  | e19  | e19  | e20  | 39   | 76   | 47   | e30  | e15  |
| 5     | 31   | 35   | e26  | e19  | e18  | e16  | e20  | 45   | 76   | 50   | e30  | 16   |
| 6     | 30   | 31   | e25  | e19  | e18  | e15  | e22  | 49   | 81   | 50   | e31  | 19   |
| 7     | 33   | 33   | e26  | e19  | e17  | e16  | e24  | 46   | 77   | 46   | e32  | 29   |
| 8     | 32   | e30  | e25  | e19  | e18  | e17  | e26  | 48   | 74   | 44   | e35  | 20   |
| 9     | 31   | e26  | e25  | e18  | e18  | e17  | e28  | 53   | 72   | 46   | e40  | 17   |
| 10    | 30   | e25  | e26  | e18  | e18  | e17  | 30   | 51   | 73   | 57   | e30  | 17   |
| 11    | 30   | e24  | e26  | e18  | e18  | e18  | 29   | 47   | 70   | 44   | e25  | 17   |
| 12    | 30   | e26  | e25  | e18  | e18  | e18  | 24   | 50   | 71   | 41   | e27  | 24   |
| 13    | 30   | e27  | e24  | e18  | e18  | e17  | 24   | 53   | 73   | 41   | e28  | 28   |
| 14    | 29   | e27  | e23  | e18  | e18  | e17  | 19   | 55   | 71   | 39   | e25  | 25   |
| 15    | 30   | e28  | e27  | e18  | e18  | e18  | 20   | 53   | 79   | 37   | e18  | 40   |
| 16    | 28   | e27  | e25  | e19  | e19  | e18  | 22   | 53   | 90   | 37   | e20  | 28   |
| 17    | 28   | e26  | e25  | e19  | e19  | e19  | 24   | 58   | 74   | 35   | e20  | 24   |
| 18    | 27   | e25  | e24  | e19  | e18  | e18  | 25   | 54   | 69   | 35   | e20  | 29   |
| 19    | 26   | e25  | e24  | e20  | e19  | e18  | 22   | 54   | 64   | 44   | e20  | 29   |
| 20    | 23   | e25  | e24  | e20  | e19  | e19  | 18   | 54   | 62   | 38   | e21  | 28   |
| 21    | 27   | e25  | e24  | e19  | e18  | e20  | 18   | 45   | 63   | 34   | e22  | 25   |
| 22    | 28   | e25  | e24  | e18  | e18  | e21  | 18   | 44   | 73   | 32   | e25  | 24   |
| 23    | 21   | e25  | e24  | e18  | e18  | e20  | 17   | 48   | 68   | 34   | e30  | 23   |
| 24    | 23   | e25  | e24  | e18  | e18  | e19  | 23   | 50   | 61   | 34   | e35  | 27   |
| 25    | 29   | e25  | e23  | e18  | e19  | e19  | 37   | 78   | 60   | 34   | e30  | 26   |
| 26    | 29   | e24  | e22  | e18  | e18  | e20  | 28   | 83   | 57   | 34   | e25  | 28   |
| 27    | 27   | e23  | e22  | e18  | e18  | e20  | 32   | 73   | 60   | 37   | e24  | 29   |
| 28    | 26   | e27  | e22  | e18  | e19  | e20  | 32   | 71   | 57   | 35   | e26  | 31   |
| 29    | 28   | e26  | e22  | e18  | e18  | e20  | 23   | 71   | 57   | 39   | e30  | 36   |
| 30    | 28   | e25  | e21  | e18  | ---  | e20  | 26   | 79   | 54   | 43   | e25  | 34   |
| 31    | 27   | ---  | e20  | e18  | ---  | e20  | ---  | 79   | ---  | 34   | e17  | ---  |
| TOTAL | 895  | 784  | 749  | 579  | 528  | 569  | 711  | 1672 | 2086 | 1269 | 833  | 739  |
| MEAN  | 28.9 | 26.1 | 24.2 | 18.7 | 18.2 | 18.4 | 23.7 | 53.9 | 69.5 | 40.9 | 26.9 | 24.6 |
| MAX   | 35   | 35   | 27   | 21   | 19   | 21   | 37   | 83   | 90   | 57   | 40   | 40   |
| MIN   | 21   | 16   | 20   | 18   | 17   | 15   | 17   | 26   | 54   | 32   | 17   | 15   |
| AC-FT | 1780 | 1560 | 1490 | 1150 | 1050 | 1130 | 1410 | 3320 | 4140 | 2520 | 1650 | 1470 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1985 - 1996, BY WATER YEAR (WY)

|      | 1985 | 1985 | 1985 | 1985 | 1985 | 1985 | 1985 | 1985 | 1985 | 1985 | 1985 | 1985 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 29.6 | 24.5 | 17.0 | 13.9 | 12.9 | 15.9 | 35.8 | 88.8 | 101  | 60.1 | 44.6 | 32.1 |
| MAX  | 85.1 | 56.2 | 32.8 | 18.7 | 18.2 | 26.7 | 89.7 | 230  | 280  | 134  | 87.3 | 50.1 |
| (WY) | 1985 | 1985 | 1985 | 1996 | 1996 | 1992 | 1987 | 1987 | 1995 | 1995 | 1991 | 1991 |
| 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 1995 CALENDAR YEAR FOR 1996 WATER YEAR WATER YEARS 1985 - 1996

|                          |         |       |       |
|--------------------------|---------|-------|-------|
| ANNUAL TOTAL             | 24519.8 | 11414 |       |
| ANNUAL MEAN              | 67.2    | 31.2  | 39.8  |
| HIGHEST ANNUAL MEAN      |         |       | 63.8  |
| LOWEST ANNUAL MEAN       |         |       | 22.5  |
| HIGHEST DAILY MEAN       | 421     | 90    | 421   |
| LOWEST DAILY MEAN        | 7.8     | a15   | 7.8   |
| ANNUAL SEVEN-DAY MINIMUM | 8.0     | 17    | 8.0   |
| INSTANTANEOUS PEAK FLOW  |         | 111   | 573   |
| INSTANTANEOUS PEAK STAGE |         | b2.75 | 5.39  |
| ANNUAL RUNOFF (AC-FT)    | 48640   | 22640 | 28850 |
| 10 PERCENT EXCEEDS       | 210     | 57    | 81    |
| 50 PERCENT EXCEEDS       | 28      | 25    | 25    |
| 90 PERCENT EXCEEDS       | 10      | 18    | 11    |

e-Estimated.  
a-Also occurred Sep 4.  
b-Maximum gage height 3.25 ft, Aug 30, backwater from beaver dam.



**06710605 BEAR CREEK ABOVE BEAR CREEK LAKE NEAR MORRISON, CO**

LOCATION.--Lat 39°39'08", long 105°10'23", in NW¼NE¼ sec.1, T.5 S. R.70 W., Jefferson County, Hydrologic Unit 10190002, on right bank, 0.9 mi downstream from Strain Gulch, 1.0 mi east of Morrison, and 1.1 mi downstream from Mt. Vernon Creek.

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

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

GAGE.--Water-stage recorder. 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 fair 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 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

| DAY   | OCT  | NOV  | DEC  | JAN  | FEB   | MAR   | APR  | MAY  | JUN  | JUL   | AUG   | SEP   |
|-------|------|------|------|------|-------|-------|------|------|------|-------|-------|-------|
| 1     | 23   | 21   | 37   | 29   | e19   | 20    | 23   | 27   | 110  | 50    | 8.3   | 7.6   |
| 2     | 22   | 19   | 33   | 31   | e19   | 21    | 20   | 31   | 103  | 42    | 6.8   | 6.1   |
| 3     | 25   | 16   | 33   | 31   | e19   | 19    | 18   | 37   | 102  | 37    | 7.5   | 4.0   |
| 4     | 29   | 18   | 31   | 31   | e19   | 20    | 19   | 42   | 103  | 35    | 7.8   | 3.5   |
| 5     | 30   | 25   | 38   | 28   | e17   | 20    | 16   | 44   | 101  | 41    | 7.8   | 5.4   |
| 6     | 27   | 31   | 36   | 29   | e10   | 24    | 18   | 50   | 104  | 41    | 7.2   | 5.8   |
| 7     | 30   | 30   | 30   | 29   | e9.0  | 23    | 28   | 49   | 99   | 38    | 7.8   | 20    |
| 8     | 28   | 33   | 33   | 27   | e10   | 18    | 26   | 45   | 94   | 35    | 10    | 11    |
| 9     | 27   | 31   | 35   | 26   | e16   | 18    | 32   | 52   | 89   | 37    | 12    | 9.7   |
| 10    | 27   | 34   | 36   | 26   | 30    | 19    | 38   | 56   | 88   | 57    | 10    | 8.9   |
| 11    | 31   | 28   | 42   | 27   | 25    | 20    | 40   | 52   | 86   | 45    | 8.5   | 16    |
| 12    | 35   | 39   | 37   | 26   | 24    | 22    | 36   | 53   | 82   | 37    | 8.6   | 10    |
| 13    | 33   | 35   | 38   | 28   | 24    | 21    | 37   | 56   | 83   | 36    | 8.2   | 12    |
| 14    | 31   | 36   | 32   | 27   | 25    | 25    | 34   | 57   | 81   | 31    | 7.5   | 11    |
| 15    | 28   | 31   | 24   | 27   | 25    | 21    | 28   | 56   | 88   | 30    | 6.1   | 20    |
| 16    | 27   | 31   | 20   | 28   | 23    | 24    | 34   | 54   | 111  | 30    | 4.9   | 14    |
| 17    | 23   | 33   | 29   | 27   | 25    | 15    | 35   | 58   | 89   | 22    | 5.0   | 10    |
| 18    | 24   | 30   | 30   | e27  | 27    | 3.2   | 36   | 54   | 78   | 9.1   | 4.9   | 20    |
| 19    | 22   | 33   | 26   | e27  | 25    | 5.2   | 45   | 52   | 68   | 14    | 5.2   | 29    |
| 20    | 21   | 28   | 25   | e27  | 24    | 8.9   | 32   | 53   | 62   | 12    | 7.5   | 14    |
| 21    | 23   | 28   | 25   | e27  | 28    | 15    | 35   | 44   | 62   | 8.7   | 8.3   | 12    |
| 22    | 24   | 29   | 26   | 27   | 31    | 14    | 32   | 40   | 71   | 3.6   | 10    | 11    |
| 23    | 23   | 28   | 30   | 31   | 24    | 18    | 23   | 41   | 71   | 1.4   | 23    | 10    |
| 24    | 19   | 25   | 30   | 29   | 23    | 17    | 26   | 45   | 61   | 1.6   | 25    | 12    |
| 25    | 30   | 31   | 28   | 27   | 24    | 13    | 37   | 91   | 54   | 6.4   | 13    | 12    |
| 26    | 30   | 30   | 28   | 27   | 23    | 19    | 33   | 159  | 51   | 12    | 8.2   | 21    |
| 27    | 26   | 32   | 30   | 27   | 18    | 19    | 33   | 138  | 54   | 11    | 6.7   | 29    |
| 28    | 20   | 28   | 28   | 26   | 19    | 22    | 37   | 124  | 54   | 11    | 14    | 21    |
| 29    | 20   | 32   | 27   | e22  | 20    | 24    | 25   | 111  | 54   | 11    | 18    | 19    |
| 30    | 21   | 43   | 27   | e19  | ---   | 24    | 31   | 109  | 52   | 22    | 15    | 17    |
| 31    | 21   | ---  | 26   | e19  | ---   | 21    | ---  | 114  | ---  | 13    | 11    | ---   |
| TOTAL | 800  | 888  | 950  | 839  | 625.0 | 573.3 | 907  | 1994 | 2405 | 780.8 | 303.8 | 402.0 |
| MEAN  | 25.8 | 29.6 | 30.6 | 27.1 | 21.6  | 18.5  | 30.2 | 64.3 | 80.2 | 25.2  | 9.80  | 13.4  |
| MAX   | 35   | 43   | 42   | 31   | 31    | 25    | 45   | 159  | 111  | 57    | 25    | 29    |
| MIN   | 19   | 16   | 20   | 19   | 9.0   | 3.2   | 16   | 27   | 51   | 1.4   | 4.9   | 3.5   |
| AC-FT | 1590 | 1760 | 1880 | 1660 | 1240  | 1140  | 1800 | 3960 | 4770 | 1550  | 603   | 797   |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 1996, BY WATER YEAR (WY)

|      |      |      |      |      |      |      |      |      |      |      |      |      |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 13.2 | 15.9 | 17.5 | 14.9 | 15.0 | 19.3 | 45.4 | 116  | 114  | 44.5 | 25.0 | 16.6 |
| MAX  | 25.8 | 32.1 | 30.6 | 27.1 | 23.4 | 44.8 | 158  | 377  | 512  | 216  | 66.8 | 33.0 |
| (WY) | 1996 | 1987 | 1996 | 1996 | 1987 | 1987 | 1987 | 1987 | 1995 | 1995 | 1991 | 1991 |
| 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 1995 CALENDAR YEAR

FOR 1996 WATER YEAR

WATER YEARS 1987 - 1996

|                          |                  |         |                 |
|--------------------------|------------------|---------|-----------------|
| ANNUAL TOTAL             | 37062.60         | 11467.9 |                 |
| ANNUAL MEAN              | 102              | 31.3    | 38.2            |
| HIGHEST ANNUAL MEAN      |                  |         | 96.1            |
| LOWEST ANNUAL MEAN       |                  |         | 10.4            |
| HIGHEST DAILY MEAN       | 684              | Jun 18  | 684 Jun 18 1995 |
| LOWEST DAILY MEAN        | <sup>a</sup> .10 | Feb 23  | .10 Feb 23 1995 |
| ANNUAL SEVEN-DAY MINIMUM | .16              | Feb 22  | .16 Feb 22 1995 |
| INSTANTANEOUS PEAK FLOW  |                  | 244     | 841 Jun 9 1995  |
| INSTANTANEOUS PEAK STAGE |                  | 5.27    | 6.45 Jun 9 1995 |
| ANNUAL RUNOFF (AC-FT)    | 73510            | 22750   | 27660           |
| 10 PERCENT EXCEEDS       | 396              | 56      | 71              |
| 50 PERCENT EXCEEDS       | 30               | 27      | 18              |
| 90 PERCENT EXCEEDS       | .26              | 9.1     | 3.4             |

e-Estimated.  
a-Also occurred Feb 24.

## 06711500 BEAR CREEK AT MOUTH, AT SHERIDAN, CO

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

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

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

REVISED RECORDS.--WSP 1730: Drainage area.

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

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

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

| DAY   | OCT  | NOV  | DEC  | JAN  | FEB  | MAR  | APR  | MAY  | JUN  | JUL   | AUG   | SEP   |
|-------|------|------|------|------|------|------|------|------|------|-------|-------|-------|
| 1     | 32   | 27   | 39   | 25   | 22   | 23   | 29   | 23   | 124  | 37    | 14    | 13    |
| 2     | 30   | 27   | 36   | 23   | 22   | 26   | 28   | 22   | 115  | 32    | 11    | 10    |
| 3     | 29   | 25   | 34   | e27  | 22   | 26   | 26   | 24   | 108  | 26    | 9.7   | 8.5   |
| 4     | 36   | 23   | 32   | 29   | 21   | 26   | 33   | 26   | 106  | 24    | 8.7   | 7.8   |
| 5     | 37   | 25   | 33   | e28  | 20   | 26   | 34   | 33   | 100  | 23    | 9.0   | 7.5   |
| 6     | 37   | 31   | 36   | e25  | 24   | 26   | 28   | 40   | 95   | 28    | 7.4   | 13    |
| 7     | 35   | 33   | 34   | e25  | 25   | 23   | 29   | 43   | 90   | 27    | 6.4   | 14    |
| 8     | 37   | 36   | 29   | e28  | 26   | 23   | 32   | 40   | 85   | 25    | 6.9   | 16    |
| 9     | 34   | 35   | 25   | 29   | 27   | 24   | 32   | 42   | 81   | 33    | 8.0   | 14    |
| 10    | 33   | 37   | 22   | 28   | 28   | 26   | 34   | 47   | 78   | 39    | 12    | 11    |
| 11    | 32   | 36   | 32   | 26   | 26   | 27   | 36   | 43   | 76   | 44    | 14    | 13    |
| 12    | 37   | 35   | 37   | 26   | 25   | 27   | 37   | 40   | 72   | 79    | 14    | 34    |
| 13    | 38   | 40   | 35   | 27   | 24   | 31   | 40   | 44   | 71   | 43    | 14    | 27    |
| 14    | 38   | 40   | 34   | 27   | 24   | 49   | 39   | 49   | 71   | 32    | 14    | 31    |
| 15    | 36   | 37   | 28   | 27   | 24   | 35   | 34   | 46   | 99   | 28    | 14    | 33    |
| 16    | 35   | 36   | 23   | 28   | 24   | 29   | 32   | 39   | 117  | 24    | 15    | 35    |
| 17    | 31   | 36   | 24   | e29  | 24   | 31   | 31   | 39   | 106  | 21    | 13    | 39    |
| 18    | 28   | 36   | 28   | e27  | 25   | 33   | 30   | 41   | 82   | 16    | 13    | 62    |
| 19    | 28   | 35   | 24   | e25  | 26   | 23   | 31   | 38   | 69   | 12    | 12    | 82    |
| 20    | 27   | 36   | 20   | 26   | 25   | 20   | 28   | 37   | 59   | 12    | 7.7   | 38    |
| 21    | 27   | 32   | 19   | e26  | 27   | 22   | 25   | 37   | 71   | 11    | 7.4   | 29    |
| 22    | 34   | 28   | 20   | e25  | 30   | 29   | 25   | 31   | 69   | 10    | 16    | 27    |
| 23    | 35   | 30   | e20  | e24  | 29   | 34   | 24   | 29   | 70   | 8.6   | 18    | 26    |
| 24    | 29   | 30   | e21  | e23  | 26   | 40   | 21   | 35   | 65   | 7.8   | 20    | 25    |
| 25    | 30   | 30   | 21   | e22  | 26   | 34   | 23   | 114  | 52   | 8.1   | 19    | 25    |
| 26    | 32   | 31   | 23   | e22  | 25   | 25   | 29   | 295  | 47   | 7.3   | 60    | 36    |
| 27    | 32   | 41   | e23  | e22  | 23   | 29   | 27   | 214  | 45   | 8.3   | 35    | 74    |
| 28    | 31   | 33   | e22  | e22  | 21   | 29   | 31   | 149  | 46   | 8.5   | 20    | 83    |
| 29    | 28   | 30   | 23   | e23  | 21   | 30   | 29   | 140  | 43   | 11    | 18    | 78    |
| 30    | 25   | 38   | 24   | e24  | ---  | 32   | 25   | 137  | 39   | 12    | 18    | 85    |
| 31    | 26   | ---  | 25   | e24  | ---  | 30   | ---  | 133  | ---  | 15    | 16    | ---   |
| TOTAL | 999  | 989  | 846  | 792  | 712  | 888  | 902  | 2070 | 2351 | 712.6 | 471.2 | 996.8 |
| MEAN  | 32.2 | 33.0 | 27.3 | 25.5 | 24.6 | 28.6 | 30.1 | 66.8 | 78.4 | 23.0  | 15.2  | 33.2  |
| MAX   | 38   | 41   | 39   | 29   | 30   | 49   | 40   | 295  | 124  | 79    | 60    | 85    |
| MIN   | 25   | 23   | 19   | 22   | 20   | 20   | 21   | 22   | 39   | 7.3   | 6.4   | 7.5   |
| AC-FT | 1980 | 1960 | 1680 | 1570 | 1410 | 1760 | 1790 | 4110 | 4660 | 1410  | 935   | 1980  |

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1927 - 1996, BY WATER YEAR (WY)

|      | 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 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 22.0 | 22.6 | 21.4 | 19.6 | 19.0 | 22.1 | 51.2 | 149  | 103  | 36.6 | 36.1 | 24.1 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| MAX  | 151  | 99.8 | 61.3 | 46.3 | 43.5 | 94.4 | 394  | 859  | 630  | 238  | 255  | 256  |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| (WY) | 1985 | 1985 | 1985 | 1970 | 1942 | 1960 | 1942 | 1973 | 1949 | 1983 | 1984 | 1938 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| MIN  | 1.52 | 3.53 | 8.21 | 3.85 | 5.09 | 5.35 | 3.33 | 1.16 | 1.67 | 1.77 | 3.05 | 1.82 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| (WY) | 1955 | 1955 | 1951 | 1945 | 1945 | 1935 | 1935 | 1963 | 1966 | 1963 | 1954 | 1956 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |

## SUMMARY STATISTICS

## FOR 1995 CALENDAR YEAR

## FOR 1996 WATER YEAR

## WATER YEARS 1927 - 1996

|                          |         |         |      |
|--------------------------|---------|---------|------|
| ANNUAL TOTAL             | 46932.7 | 12729.6 |      |
| ANNUAL MEAN              | 129     | 34.8    | 44.3 |
| HIGHEST ANNUAL MEAN      |         |         | 157  |
| LOWEST ANNUAL MEAN       |         |         | 6.53 |
| HIGHEST DAILY MEAN       | 942     | Jun 4   | 4020 |
| LOWEST DAILY MEAN        | 4.4     | Mar 22  | 6.4  |
| ANNUAL SEVEN-DAY MINIMUM | 5.3     | Mar 9   | 8.0  |
| INSTANTANEOUS PEAK FLOW  |         |         | 838  |
| INSTANTANEOUS PEAK STAGE |         |         | 4.97 |
| ANNUAL RUNOFF (AC-FT)    | 93090   | 25250   | 8150 |
| 10 PERCENT EXCEEDS       | 542     | 63      | 91   |
| 50 PERCENT EXCEEDS       | 34      | 28      | 16   |
| 90 PERCENT EXCEEDS       | 8.2     | 14      | 6.0  |

e-Estimated.

a-Present datum, from floodmarks, from rating curve extended above 3400 ft<sup>3</sup>/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 mi<sup>2</sup>.

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

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 5,427 ft above sea level, from topographic map.

REMARKS.--Records good 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" of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

| DAY   | OCT   | NOV   | DEC  | JAN  | FEB  | MAR   | APR   | MAY   | JUN   | JUL   | AUG   | SEP   |
|-------|-------|-------|------|------|------|-------|-------|-------|-------|-------|-------|-------|
| 1     | 7.7   | 3.8   | 3.2  | e2.7 | e1.9 | e1.8  | 3.0   | 2.4   | 7.6   | 4.6   | 6.1   | 3.3   |
| 2     | 4.7   | 3.9   | 3.1  | e2.6 | e1.8 | e1.8  | 2.7   | 2.4   | 6.1   | 5.1   | 2.3   | 2.8   |
| 3     | 4.2   | 3.8   | 3.0  | e2.5 | e1.8 | e1.9  | 2.8   | 2.5   | 5.6   | 4.6   | 2.7   | 2.7   |
| 4     | 17    | 3.4   | 3.0  | e2.2 | e1.8 | 2.6   | 8.8   | 2.7   | 6.4   | 4.3   | 2.4   | 2.5   |
| 5     | 6.4   | 3.4   | 2.8  | 2.1  | e2.2 | 3.3   | 18    | 2.6   | 6.5   | 4.6   | 2.1   | 4.8   |
| 6     | 4.3   | 3.4   | 2.8  | 2.2  | e2.5 | 2.7   | 4.6   | 3.2   | 7.9   | 6.8   | 1.7   | 12    |
| 7     | 4.2   | 3.2   | e2.7 | 3.0  | e2.7 | 2.9   | 3.2   | 2.9   | 6.3   | 5.2   | 11    | 7.6   |
| 8     | 4.3   | 3.1   | e2.5 | 6.5  | 3.0  | 2.5   | 2.9   | 3.3   | 5.8   | 4.4   | 10    | 4.7   |
| 9     | 4.1   | 3.2   | e2.2 | 4.2  | 4.5  | 2.4   | 2.9   | 31    | 6.7   | 8.1   | 3.3   | 3.6   |
| 10    | 3.9   | 7.1   | e2.4 | 3.1  | 2.6  | 2.5   | 2.7   | 41    | 6.7   | 18    | 3.1   | 3.6   |
| 11    | 4.0   | 5.0   | e2.5 | 2.7  | 2.4  | 2.8   | 3.2   | 4.4   | 5.8   | 6.3   | 2.3   | 10    |
| 12    | 3.6   | 3.9   | e2.5 | 2.7  | 2.7  | 3.1   | 2.9   | 3.3   | 5.9   | 15    | 2.0   | 28    |
| 13    | 3.2   | 3.4   | e2.5 | 2.5  | 2.3  | 8.2   | 11    | 3.1   | 6.9   | 97    | 3.2   | 6.2   |
| 14    | 3.5   | 3.3   | e2.5 | 2.5  | 2.2  | 61    | 7.7   | 7.2   | 6.3   | 5.6   | 14    | 5.5   |
| 15    | 3.4   | 3.2   | e2.6 | 2.5  | 2.3  | 13    | 3.7   | 3.4   | 69    | 4.4   | 3.7   | 5.8   |
| 16    | 3.4   | 3.2   | e2.7 | 2.6  | 2.1  | 7.6   | 3.2   | 2.7   | 18    | 4.4   | 5.2   | 4.3   |
| 17    | 3.3   | 3.2   | e2.7 | 2.9  | 2.1  | 4.8   | 2.9   | 2.5   | 13    | 4.5   | 2.8   | 12    |
| 18    | 3.6   | 3.1   | e2.7 | 2.6  | e2.1 | 4.6   | 2.9   | 2.3   | 7.0   | 4.0   | 2.3   | 46    |
| 19    | 3.2   | 3.0   | e2.7 | 3.3  | e2.1 | 4.2   | 3.1   | 2.2   | 5.6   | 6.1   | 2.4   | 107   |
| 20    | 3.3   | 3.0   | e2.7 | 3.6  | e2.1 | 3.1   | 12    | 2.4   | 5.1   | 5.1   | 2.4   | 8.4   |
| 21    | 3.5   | 3.0   | e2.7 | 3.0  | e2.1 | 2.9   | 13    | 8.1   | 16    | 2.8   | 2.9   | 5.6   |
| 22    | 9.7   | 3.1   | e2.8 | 2.8  | e2.1 | 3.0   | 5.8   | 3.3   | 12    | 2.4   | 55    | 4.7   |
| 23    | 16    | 3.0   | e2.8 | 2.6  | e2.1 | 3.2   | 4.5   | 3.2   | 6.8   | 2.1   | 21    | 4.0   |
| 24    | 7.5   | 3.0   | e2.8 | 2.4  | e2.1 | 10    | 4.4   | 4.3   | 5.6   | 6.8   | 6.6   | 3.9   |
| 25    | 4.5   | 3.0   | e2.8 | 2.2  | e2.1 | 4.1   | 2.8   | 49    | 4.7   | 25    | 2.8   | 3.9   |
| 26    | 4.0   | 3.1   | e2.8 | e1.9 | e2.0 | 3.4   | 3.2   | 216   | 4.4   | 3.7   | 2.2   | 14    |
| 27    | 3.6   | e3.2  | e2.8 | e1.8 | e1.9 | 3.1   | 2.6   | 25    | 4.5   | 2.7   | 5.3   | 30    |
| 28    | 3.4   | e3.2  | e2.8 | e1.9 | e1.8 | 2.7   | 4.0   | 12    | 5.6   | 2.5   | 4.6   | 10    |
| 29    | 3.6   | e3.2  | e2.9 | e2.0 | e1.8 | 2.8   | 3.3   | 11    | 6.2   | 2.8   | 5.1   | 5.8   |
| 30    | 3.3   | e3.2  | e2.8 | e2.0 | ---  | 2.8   | 2.7   | 7.6   | 4.5   | 2.8   | 4.4   | 4.6   |
| 31    | 3.4   | ---   | e2.7 | e2.0 | ---  | 5.4   | ---   | 7.0   | ---   | 3.3   | 5.9   | ---   |
| TOTAL | 157.8 | 103.6 | 84.5 | 83.6 | 65.2 | 180.2 | 150.5 | 474.0 | 278.5 | 275.0 | 200.8 | 367.3 |
| MEAN  | 5.09  | 3.45  | 2.73 | 2.70 | 2.25 | 5.81  | 5.02  | 15.3  | 9.28  | 8.87  | 6.48  | 12.2  |
| MAX   | 17    | 7.1   | 3.2  | 6.5  | 4.5  | 61    | 18    | 216   | 69    | 97    | 55    | 107   |
| MIN   | 3.2   | 3.0   | 2.2  | 1.8  | 1.8  | 1.8   | 2.6   | 2.2   | 4.4   | 2.1   | 1.7   | 2.5   |
| AC-FT | 313   | 205   | 168  | 166  | 129  | 357   | 299   | 940   | 552   | 545   | 398   | 729   |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 1996, BY WATER YEAR (WY)

|      | 1994 | 1995 | 1996 | 1994 | 1995 | 1996 | 1994 | 1995 | 1996 | 1994 | 1995 | 1996 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 4.43 | 3.39 | 2.38 | 2.46 | 2.32 | 4.36 | 8.25 | 22.6 | 17.1 | 6.74 | 6.03 | 8.51 |
| MAX  | 5.09 | 3.45 | 2.73 | 2.70 | 2.40 | 5.81 | 11.5 | 30.0 | 24.8 | 9.09 | 7.44 | 12.2 |
| (WY) | 1996 | 1996 | 1996 | 1996 | 1995 | 1996 | 1995 | 1995 | 1995 | 1995 | 1995 | 1996 |
| MIN  | 3.77 | 3.33 | 2.04 | 2.22 | 2.25 | 2.90 | 5.02 | 15.3 | 9.28 | 2.27 | 4.17 | 2.52 |
| (WY) | 1995 | 1995 | 1995 | 1995 | 1996 | 1995 | 1996 | 1996 | 1996 | 1994 | 1994 | 1994 |

SUMMARY STATISTICS FOR 1995 CALENDAR YEAR FOR 1996 WATER YEAR WATER YEARS 1994 - 1996

|                          |        |        |      |
|--------------------------|--------|--------|------|
| ANNUAL TOTAL             | 3426.5 | 2421.0 |      |
| ANNUAL MEAN              | 9.39   | 6.61   | 7.91 |
| HIGHEST ANNUAL MEAN      |        |        | 9.21 |
| LOWEST ANNUAL MEAN       |        |        | 6.61 |
| HIGHEST DAILY MEAN       | 287    | May 17 | 216  |
| LOWEST DAILY MEAN        | a1.4   | Feb 12 | 1.7  |
| ANNUAL SEVEN-DAY MINIMUM | 1.6    | Feb 7  | 1.9  |
| INSTANTANEOUS PEAK FLOW  |        |        | 457  |
| INSTANTANEOUS PEAK STAGE |        |        | 8.65 |
| ANNUAL RUNOFF (AC-FT)    | 6800   | 4800   | 5730 |
| 10 PERCENT EXCEEDS       | 16     | 10     | 12   |
| 50 PERCENT EXCEEDS       | 4.2    | 3.2    | 3.2  |
| 90 PERCENT EXCEEDS       | 1.9    | 2.2    | 1.8  |

e-Estimated.  
a-Also occurred Feb 13, 1995.

## 06711565 SOUTH PLATTE RIVER AT ENGLEWOOD, CO

LOCATION.--Lat 39°39'54", long 105°00'13", in NW¼NE¼ sec.33, T.4 S., R.68 W., Arapahoe County, Hydrologic Unit 10190002, on right bank, 0.3 mi downstream from Dartmouth Ave bridge at Englewood, and 1.4 mi downstream from Bear Creek.

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

## WATER-DISCHARGE RECORDS

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

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

REMARKS.--No estimated daily discharges. Records fair. Natural flow of stream affected by transmountain diversions, storage and flood control reservoirs, power developments, diversions for irrigation and municipal use, and return flow from irrigated areas. 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 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

| DAY   | OCT  | NOV   | DEC  | JAN  | FEB  | MAR  | APR   | MAY   | JUN   | JUL   | AUG  | SEP  |
|-------|------|-------|------|------|------|------|-------|-------|-------|-------|------|------|
| 1     | 91   | 69    | 108  | 52   | 45   | 46   | 48    | 146   | 224   | 242   | 137  | 145  |
| 2     | 86   | 114   | 312  | 51   | 49   | 240  | 43    | 128   | 207   | 273   | 140  | 112  |
| 3     | 85   | 209   | 310  | 65   | 54   | 65   | 69    | 60    | 221   | 271   | 143  | 95   |
| 4     | 146  | 209   | 305  | 80   | 49   | 52   | 98    | 65    | 340   | 212   | 130  | 94   |
| 5     | 124  | 212   | 276  | 83   | 47   | 48   | 150   | 78    | 298   | 224   | 124  | 86   |
| 6     | 102  | 219   | 278  | 61   | 41   | 47   | 63    | 99    | 197   | 254   | 123  | 80   |
| 7     | 202  | 191   | 276  | 62   | 42   | 49   | 50    | 268   | 168   | 239   | 122  | 69   |
| 8     | 127  | 191   | 262  | 86   | 49   | 45   | 57    | 348   | 159   | 239   | 114  | 61   |
| 9     | 99   | 193   | 208  | 75   | 46   | 45   | 56    | 308   | 166   | 244   | 102  | 50   |
| 10    | 92   | 198   | 202  | 64   | 77   | 47   | 202   | 329   | 194   | 237   | 115  | 57   |
| 11    | 83   | 196   | 206  | 54   | 92   | 45   | 314   | 256   | 188   | 273   | 112  | 147  |
| 12    | 83   | 195   | 171  | 53   | 105  | 51   | 394   | 241   | 223   | 395   | 115  | 255  |
| 13    | 83   | 196   | 172  | 51   | 200  | 87   | 419   | 246   | 289   | 456   | 115  | 197  |
| 14    | 90   | 198   | 232  | 51   | 192  | 323  | 418   | 216   | 289   | 419   | 131  | 209  |
| 15    | 86   | 187   | 229  | 55   | 103  | 188  | 385   | 170   | 339   | 305   | 130  | 217  |
| 16    | 76   | 232   | 225  | 52   | 94   | 103  | 352   | 169   | 359   | 248   | 139  | 192  |
| 17    | 70   | 256   | 227  | 54   | 49   | 82   | 311   | 196   | 405   | 130   | 145  | 113  |
| 18    | 63   | 260   | 220  | 55   | 48   | 94   | 207   | 314   | 393   | 137   | 138  | 229  |
| 19    | 72   | 256   | 93   | 65   | 44   | 66   | 189   | 319   | 388   | 126   | 126  | 416  |
| 20    | 71   | 246   | 60   | 50   | 46   | 62   | 92    | 316   | 366   | 189   | 88   | 187  |
| 21    | 68   | 257   | 49   | 49   | 58   | 54   | 70    | 334   | 285   | 262   | 93   | 98   |
| 22    | 114  | 248   | 53   | 46   | 58   | 64   | 62    | 357   | 216   | 282   | 200  | 85   |
| 23    | 149  | 225   | 51   | 54   | 52   | 61   | 63    | 408   | 311   | 264   | 228  | 81   |
| 24    | 97   | 227   | 65   | 57   | 50   | 107  | 43    | 384   | 563   | 218   | 206  | 87   |
| 25    | 86   | 224   | 46   | 44   | 50   | 75   | 80    | 513   | 486   | 225   | 191  | 89   |
| 26    | 87   | 225   | 47   | 57   | 53   | 51   | 226   | 900   | 313   | 163   | 136  | 129  |
| 27    | 85   | 240   | 47   | 54   | 51   | 51   | 288   | 313   | 298   | 169   | 174  | 186  |
| 28    | 74   | 123   | 52   | 43   | 48   | 50   | 309   | 271   | 340   | 190   | 164  | 154  |
| 29    | 70   | 84    | 50   | 42   | 46   | 56   | 289   | 312   | 306   | 215   | 114  | 141  |
| 30    | 65   | 97    | 49   | 42   | ---  | 56   | 200   | 384   | 236   | 230   | 156  | 138  |
| 31    | 67   | ---   | 47   | 51   | ---  | 55   | ---   | 298   | ---   | 198   | 156  | ---  |
| TOTAL | 2893 | 5977  | 4928 | 1758 | 1938 | 2465 | 5547  | 8746  | 8767  | 7529  | 4307 | 4199 |
| MEAN  | 93.3 | 199   | 159  | 56.7 | 66.8 | 79.5 | 185   | 282   | 292   | 243   | 139  | 140  |
| MAX   | 202  | 260   | 312  | 86   | 200  | 323  | 419   | 900   | 563   | 456   | 228  | 416  |
| MIN   | 63   | 69    | 46   | 42   | 41   | 45   | 43    | 60    | 159   | 126   | 88   | 50   |
| AC-FT | 5740 | 11860 | 9770 | 3490 | 3840 | 4890 | 11000 | 17350 | 17390 | 14930 | 8540 | 8330 |

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1983 - 1996, BY WATER YEAR (WY)

|      | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 160  | 177  | 99.7 | 81.3 | 86.6 | 138  | 388  | 903  | 778  | 587  | 415  | 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 1995 CALENDAR YEAR FOR 1996 WATER YEAR WATER YEARS 1983 - 1996

|                          |        |        |  |  |  |      |        |  |  |                   |        |      |      |  |
|--------------------------|--------|--------|--|--|--|------|--------|--|--|-------------------|--------|------|------|--|
| ANNUAL TOTAL             | 225071 | 59054  |  |  |  |      |        |  |  |                   |        |      |      |  |
| ANNUAL MEAN              | 617    | 161    |  |  |  |      |        |  |  | 301               |        |      |      |  |
| HIGHEST ANNUAL MEAN      |        |        |  |  |  |      |        |  |  | 692               |        |      | 1984 |  |
| LOWEST ANNUAL MEAN       |        |        |  |  |  |      |        |  |  | 124               |        |      | 1993 |  |
| HIGHEST DAILY MEAN       | 4010   | Jun 28 |  |  |  | 900  | May 26 |  |  | 4010              | Jun 28 | 1995 |      |  |
| LOWEST DAILY MEAN        | 30     | Mar 1  |  |  |  | 41   | Feb 6  |  |  | <sup>a</sup> 20   | Sep 13 | 1994 |      |  |
| ANNUAL SEVEN-DAY MINIMUM | 37     | Feb 24 |  |  |  | 47   | Jan 27 |  |  | 24                | Sep 13 | 1994 |      |  |
| INSTANTANEOUS PEAK FLOW  |        |        |  |  |  | 1550 | May 26 |  |  | <sup>b</sup> 9710 | Jun 4  | 1995 |      |  |
| INSTANTANEOUS PEAK STAGE |        |        |  |  |  | 3.71 | May 26 |  |  | 7.21              | Jun 4  | 1995 |      |  |
| ANNUAL RUNOFF (AC-FT)    | 446400 | 117100 |  |  |  |      |        |  |  | 218000            |        |      |      |  |
| 10 PERCENT EXCEEDS       | 2370   | 312    |  |  |  |      |        |  |  | 786               |        |      |      |  |
| 50 PERCENT EXCEEDS       | 191    | 130    |  |  |  |      |        |  |  | 141               |        |      |      |  |
| 90 PERCENT EXCEEDS       | 49     | 49     |  |  |  |      |        |  |  | 48                |        |      |      |  |

a-Also occurred Sep 18, 1994.

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

**06711565 SOUTH PLATTE RIVER AT ENGLEWOOD, CO--Continued**

**WATER-QUALITY RECORDS**

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

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: March 1985 to current year.

pH: March 1985 to current year.

WATER TEMPERATURE: March 1985 to current year.

DISSOLVED OXYGEN: March 1985 to current year.

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

REMARKS.--Water temperature record is good. Specific conductance, pH, and dissolved oxygen are poor.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum mean, 995 microsiemens, Jan. 31, 1990; minimum mean, 223 microsiemens, May 16, 1987.  
pH: Maximum, 9.9 units, Jul. 14-15, 18, 1987, Jun. 8 and 11, 1993; minimum, 6.4 units, Oct. 18, 1989.

WATER TEMPERATURE: Maximum, 29.0°C, Aug. 17, 1986, July 30, 1987; minimum, 0.0°C, freezing point on many days during winter months.

DISSOLVED OXYGEN: Maximum, 19.0 mg/L, Feb. 7 and 9, 1995; minimum, 3.4 mg/L, Jul. 31, 1987.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum 996 microsiemens, Jan. 28 and Mar. 13; minimum, 250 microsiemens Aug. 22.  
pH: Maximum 9.2 units Nov. 22-24, Jun. 11 and Aug. 5; minimum, 7.2 units, Mar 19 and Sept. 19.

WATER TEMPERATURE: Maximum, 25.0°C, Aug. 17; minimum, 0.0°C, on many days during winter months.

DISSOLVED OXYGEN: Maximum 16.9 mg/L, Oct. 17; minimum, 4.6 mg/L, Sept. 4.

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM @ 25 DEG. C), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DAY   | MAX | MIN | MEAN |
|-------|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|------|
|       |     |     |      |     |     |      |     |     |      |     |     |      |
| 1     | 722 | 587 | 670  | 819 | 788 | 803  | 694 | 570 | 677  | 844 | 784 | 810  |
| 2     | 759 | 722 | 742  | 812 | 672 | 765  | 570 | 456 | 477  | 924 | 740 | 810  |
| 3     | 773 | 744 | 760  | 672 | 542 | 582  | 480 | 455 | 468  | --- | --- | ---  |
| 4     | 883 | 553 | 706  | 579 | 541 | 557  | 491 | 459 | 473  | --- | --- | ---  |
| 5     | 697 | 670 | 685  | 575 | 532 | 551  | 504 | 468 | 488  | 867 | 787 | 824  |
| 6     | 723 | 692 | 702  | 553 | 517 | 538  | 496 | 469 | 485  | 890 | 782 | 839  |
| 7     | 752 | 547 | 612  | 566 | 540 | 553  | 502 | 464 | 484  | 994 | 808 | 891  |
| 8     | 688 | 580 | 646  | 568 | 538 | 550  | 518 | 465 | 486  | --- | --- | ---  |
| 9     | 715 | 688 | 699  | 559 | 542 | 552  | 542 | 502 | 520  | 982 | 815 | 889  |
| 10    | 724 | 693 | 707  | 652 | 541 | 612  | 549 | 522 | 539  | 844 | 792 | 821  |
| 11    | 731 | 698 | 720  | 644 | 541 | 575  | 584 | 524 | 547  | 832 | 795 | 816  |
| 12    | 728 | 665 | 689  | 576 | 538 | 557  | 599 | 569 | 587  | 839 | 782 | 808  |
| 13    | 690 | 661 | 677  | 562 | 540 | 552  | 609 | 537 | 583  | 812 | 749 | 794  |
| 14    | 696 | 677 | 687  | 558 | 538 | 547  | 541 | 485 | 505  | 807 | 741 | 789  |
| 15    | 702 | 690 | 695  | 573 | 536 | 558  | 530 | 484 | 505  | 816 | 767 | 798  |
| 16    | 716 | 690 | 702  | 537 | 488 | 515  | 541 | 504 | 519  | 819 | 792 | 802  |
| 17    | 743 | 716 | 726  | 503 | 474 | 490  | 551 | 516 | 528  | 803 | 762 | 791  |
| 18    | 789 | 741 | 757  | 504 | 440 | 482  | 592 | 498 | 531  | 947 | 728 | 843  |
| 19    | 789 | 732 | 759  | 508 | 471 | 491  | 721 | 592 | 673  | --- | --- | ---  |
| 20    | 760 | 733 | 750  | 509 | 448 | 491  | 821 | 699 | 764  | 969 | 892 | 941  |
| 21    | 768 | 747 | 760  | 509 | 475 | 496  | 866 | 748 | 809  | 926 | 842 | 881  |
| 22    | 776 | 552 | 716  | 512 | 467 | 493  | 868 | 819 | 844  | 869 | 782 | 841  |
| 23    | 780 | 691 | 732  | 516 | 477 | 499  | 884 | 778 | 840  | 866 | 807 | 840  |
| 24    | 780 | 741 | 758  | 521 | 469 | 498  | 847 | 795 | 825  | 870 | 819 | 843  |
| 25    | 782 | 724 | 756  | 516 | 484 | 497  | 868 | 740 | 806  | 839 | 781 | 814  |
| 26    | 743 | 722 | 732  | 524 | 494 | 507  | 858 | 740 | 799  | 928 | 793 | 869  |
| 27    | 740 | 724 | 734  | 655 | 513 | 576  | 843 | 742 | 795  | 959 | 862 | 920  |
| 28    | 747 | 725 | 738  | 719 | 644 | 696  | 870 | 763 | 819  | 996 | 834 | 914  |
| 29    | 797 | 747 | 768  | 729 | 698 | 715  | 852 | 795 | 820  | 959 | 772 | 859  |
| 30    | 799 | 757 | 775  | 732 | 685 | 706  | 840 | 746 | 798  | 876 | 797 | 843  |
| 31    | 800 | 777 | 791  | --- | --- | ---  | 822 | 767 | 798  | 903 | 797 | 849  |
| MONTH | 883 | 547 | 721  | 819 | 440 | 567  | 884 | 455 | 638  | --- | --- | ---  |





## PLATTE RIVER BASIN

## 06711565 SOUTH PLATTE RIVER AT ENGLEWOOD, CO--Continued

pH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DAY   | MAX | MIN | MEAN |
|-------|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|------|
|       |     |     |      |     |     |      |     |     |      |     |     |      |
| 1     | 8.3 | 7.7 | 8.0  | 8.4 | 7.4 | 7.8  | 9.1 | 7.7 | 8.3  | 8.4 | 7.4 | 7.8  |
| 2     | 8.4 | 7.7 | 8.0  | 8.8 | 7.5 | 8.2  | 9.1 | 7.7 | 8.4  | 8.4 | 7.4 | 7.8  |
| 3     | 8.7 | 7.7 | 8.1  | 8.7 | 7.6 | 8.1  | 9.0 | 7.7 | 8.3  | 8.3 | 7.3 | 7.8  |
| 4     | --- | --- | ---  | 8.7 | 7.5 | 8.1  | 9.1 | 7.9 | 8.5  | 8.4 | 7.3 | 7.8  |
| 5     | 8.7 | 7.8 | 8.1  | 8.6 | 7.7 | 8.1  | 9.2 | 8.0 | 8.5  | 8.5 | 7.3 | 7.8  |
| 6     | 8.8 | 7.6 | 8.1  | 8.6 | 7.6 | 8.1  | --- | --- | ---  | 7.9 | 7.5 | 7.6  |
| 7     | 8.8 | 7.6 | 8.2  | 8.3 | 7.9 | 8.1  | --- | --- | ---  | 8.0 | 7.5 | 7.7  |
| 8     | 8.8 | 7.6 | 8.3  | 8.7 | 7.2 | 8.3  | --- | --- | ---  | 8.0 | 7.6 | 7.8  |
| 9     | 8.8 | 7.6 | 8.3  | 8.6 | 7.5 | 8.0  | --- | --- | ---  | 7.8 | 7.3 | 7.6  |
| 10    | 9.1 | 7.6 | 8.4  | 8.5 | 7.5 | 8.2  | --- | --- | ---  | 7.8 | 7.3 | 7.6  |
| 11    | 9.2 | 7.5 | 8.3  | 8.9 | 7.9 | 8.4  | --- | --- | ---  | 8.6 | 7.3 | 7.7  |
| 12    | 8.9 | 7.6 | 8.2  | 8.5 | 8.1 | 8.3  | --- | --- | ---  | 8.1 | 7.3 | 7.6  |
| 13    | 8.6 | 7.8 | 8.1  | 8.7 | 7.7 | 8.3  | --- | --- | ---  | 8.2 | 7.4 | 7.7  |
| 14    | 9.0 | 7.7 | 8.2  | 8.5 | 8.0 | 8.3  | --- | --- | ---  | 8.4 | 7.4 | 7.8  |
| 15    | 7.9 | 7.5 | 7.7  | 8.4 | 8.1 | 8.2  | --- | --- | ---  | 8.4 | 7.4 | 7.8  |
| 16    | 8.8 | 7.7 | 8.1  | 8.5 | 7.5 | 8.0  | --- | --- | ---  | 8.8 | 7.4 | 8.0  |
| 17    | 8.7 | 7.7 | 8.0  | 8.2 | 7.4 | 7.7  | --- | --- | ---  | 8.2 | 7.5 | 7.9  |
| 18    | 8.7 | 7.6 | 8.1  | 8.1 | 7.5 | 7.7  | --- | --- | ---  | 8.5 | 7.4 | 7.9  |
| 19    | 8.8 | 7.6 | 8.1  | 8.4 | 7.5 | 7.9  | --- | --- | ---  | 8.1 | 7.2 | 7.7  |
| 20    | 8.8 | 7.6 | 8.1  | 8.5 | 7.5 | 8.1  | --- | --- | ---  | 8.5 | 7.8 | 8.1  |
| 21    | 8.5 | 7.5 | 7.9  | 8.3 | 7.8 | 8.1  | --- | --- | ---  | 8.3 | 7.6 | 7.9  |
| 22    | 8.2 | 7.4 | 7.8  | --- | --- | ---  | 8.6 | 7.8 | 8.1  | 8.2 | 7.6 | 7.9  |
| 23    | 8.7 | 7.5 | 7.8  | --- | --- | ---  | 8.6 | 7.7 | 8.2  | 8.2 | 7.6 | 7.9  |
| 24    | 8.4 | 7.6 | 7.9  | --- | --- | ---  | 8.6 | 7.7 | 8.1  | 8.3 | 7.6 | 7.9  |
| 25    | 8.5 | 7.7 | 8.0  | --- | --- | ---  | 8.5 | 7.8 | 8.0  | 8.3 | 7.5 | 7.9  |
| 26    | 8.6 | 7.6 | 8.0  | --- | --- | ---  | --- | --- | ---  | 8.4 | 7.5 | 7.9  |
| 27    | 8.6 | 7.5 | 7.9  | --- | --- | ---  | --- | --- | ---  | 8.4 | 7.5 | 7.9  |
| 28    | 8.4 | 7.4 | 7.9  | --- | --- | ---  | 8.1 | 7.6 | 7.8  | 8.5 | 7.5 | 7.9  |
| 29    | 8.6 | 7.3 | 7.8  | 9.0 | 7.8 | 8.2  | 8.2 | 7.5 | 7.7  | 8.5 | 7.5 | 7.9  |
| 30    | 8.5 | 7.3 | 7.9  | 9.0 | 8.0 | 8.5  | 8.3 | 7.5 | 7.8  | 8.4 | 7.5 | 7.8  |
| 31    | --- | --- | ---  | 8.9 | 7.8 | 8.4  | 8.4 | 7.5 | 7.9  | --- | --- | ---  |
| MONTH | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  | 8.8 | 7.2 | 7.8  |

TEMPERATURE, WATER (DEG. C) WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DAY   | MAX  | MIN  | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|------|------|------|-----|-----|------|-----|-----|------|-----|-----|------|
|       |      |      |      |     |     |      |     |     |      |     |     |      |
| 1     | 15.1 | 10.8 | 13.0 | 7.9 | 4.3 | 6.6  | 8.6 | 5.3 | 6.9  | 2.9 | 1.2 | 2.2  |
| 2     | 15.9 | 11.0 | 13.4 | 4.8 | 2.0 | 3.9  | 7.7 | 4.2 | 6.0  | 2.8 | .2  | 1.4  |
| 3     | 16.6 | 11.2 | 13.7 | 7.8 | 2.4 | 5.5  | 7.1 | 4.1 | 5.5  | 3.8 | 1.0 | 2.3  |
| 4     | 13.6 | 11.1 | 12.2 | 7.5 | 4.2 | 5.9  | 7.3 | 4.0 | 5.5  | 2.8 | .0  | 1.3  |
| 5     | 11.4 | 8.9  | 10.2 | 9.0 | 4.1 | 6.6  | 6.6 | 4.3 | 5.6  | 1.3 | .0  | .4   |
| 6     | 13.0 | 7.0  | 10.0 | 8.2 | 4.7 | 6.7  | 6.4 | 4.0 | 5.1  | 1.2 | .0  | .3   |
| 7     | 14.6 | 8.8  | 11.8 | 8.4 | 5.5 | 7.0  | 6.1 | 2.0 | 4.5  | 2.6 | .0  | 1.1  |
| 8     | 14.7 | 9.8  | 12.1 | 8.7 | 5.4 | 7.2  | 4.7 | 1.4 | 3.2  | 3.9 | .5  | 2.2  |
| 9     | 12.8 | 9.5  | 11.2 | 9.6 | 5.6 | 7.6  | 3.3 | .1  | 1.8  | 4.1 | 1.4 | 2.7  |
| 10    | 15.3 | 9.6  | 12.3 | 7.9 | 4.4 | 5.9  | 4.1 | 1.9 | 3.1  | 5.4 | 1.7 | 3.4  |
| 11    | 16.0 | 10.4 | 13.2 | 6.8 | 2.0 | 4.7  | 6.3 | 3.4 | 4.8  | 4.7 | 1.4 | 3.0  |
| 12    | 15.4 | 11.3 | 13.3 | 9.5 | 6.1 | 7.8  | 6.0 | 3.7 | 5.0  | 5.8 | 1.9 | 3.7  |
| 13    | 14.2 | 10.4 | 12.1 | 7.9 | 6.2 | 7.0  | 6.9 | 4.4 | 5.6  | 6.2 | 2.1 | 4.1  |
| 14    | 13.8 | 8.4  | 11.0 | 8.7 | 4.9 | 6.9  | 5.7 | 2.9 | 4.4  | 6.2 | 2.0 | 4.2  |
| 15    | 15.0 | 9.4  | 12.0 | 8.9 | 5.2 | 7.2  | 5.1 | 1.6 | 3.5  | 5.9 | 2.1 | 4.0  |
| 16    | 15.4 | 10.4 | 12.6 | 9.1 | 5.1 | 7.4  | 4.3 | 2.6 | 3.5  | 6.5 | 2.7 | 4.6  |
| 17    | 15.1 | 10.3 | 12.4 | 9.2 | 5.5 | 7.4  | 3.4 | 2.5 | 2.8  | 4.7 | .0  | 2.5  |
| 18    | 15.3 | 10.1 | 12.4 | 8.8 | 5.1 | 7.0  | 3.6 | 2.3 | 3.0  | .9  | .0  | .2   |
| 19    | 13.4 | 10.1 | 11.6 | 8.7 | 5.4 | 7.0  | 3.1 | .4  | 1.8  | 1.6 | .0  | .6   |
| 20    | 12.6 | 7.4  | 10.0 | 7.7 | 5.0 | 6.5  | 3.2 | .3  | 1.7  | 3.2 | .1  | 1.4  |
| 21    | 13.7 | 8.8  | 11.1 | 8.0 | 4.6 | 6.4  | 2.9 | .7  | 1.7  | 3.9 | .0  | 1.8  |
| 22    | 11.4 | 5.7  | 8.9  | 7.6 | 5.5 | 6.6  | 3.2 | 1.2 | 2.0  | 2.1 | .0  | .8   |
| 23    | 9.9  | 5.1  | 6.9  | 8.2 | 5.0 | 6.6  | 2.5 | .0  | 1.1  | 1.8 | .0  | .6   |
| 24    | 10.5 | 5.5  | 8.0  | 7.6 | 4.4 | 6.1  | 2.8 | .0  | 1.1  | 2.6 | .0  | 1.0  |
| 25    | 11.4 | 6.9  | 9.1  | 8.6 | 5.6 | 7.1  | 3.6 | .1  | 1.7  | 1.6 | .0  | .9   |
| 26    | 11.8 | 7.1  | 9.7  | 8.2 | 5.0 | 6.7  | 3.5 | .3  | 1.7  | .5  | .0  | .1   |
| 27    | 11.5 | 7.7  | 9.4  | 6.0 | 3.8 | 4.9  | 2.7 | .0  | 1.3  | .9  | .0  | .3   |
| 28    | 10.7 | 6.8  | 8.7  | 4.3 | 2.3 | 3.4  | 2.6 | .0  | 1.3  | 2.7 | .1  | 1.0  |
| 29    | 10.2 | 7.0  | 8.7  | 7.2 | 3.5 | 5.2  | 4.0 | 1.1 | 2.2  | 3.6 | .0  | 1.6  |
| 30    | 10.6 | 7.0  | 8.5  | 7.7 | 5.3 | 6.6  | 3.4 | 1.0 | 2.1  | 1.2 | .0  | .3   |
| 31    | 9.5  | 7.0  | 7.9  | --- | --- | ---  | 3.5 | 2.0 | 2.6  | .4  | .0  | .1   |
| MONTH | 16.6 | 5.1  | 10.9 | 9.6 | 2.0 | 6.4  | 8.6 | .0  | 3.3  | 6.5 | .0  | 1.7  |



## PLATTE RIVER BASIN

## 06711565 SOUTH PLATTE RIVER AT ENGLEWOOD, CO--Continued

OXYGEN, DISSOLVED (MG/L), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DAY   | MAX      | MIN  | MEAN | MAX      | MIN | MEAN | MAX      | MIN | MEAN | MAX     | MIN  | MEAN |
|-------|----------|------|------|----------|-----|------|----------|-----|------|---------|------|------|
|       | OCTOBER  |      |      | NOVEMBER |     |      | DECEMBER |     |      | JANUARY |      |      |
| 1     | 12.0     | 6.7  | 8.5  | 11.4     | 7.0 | 8.7  | 13.8     | 8.2 | 10.0 | ---     | ---  | ---  |
| 2     | 12.9     | 6.5  | 8.8  | 13.6     | 8.6 | 10.4 | 11.8     | 8.5 | 9.8  | ---     | ---  | ---  |
| 3     | 13.6     | 6.2  | 8.7  | 12.1     | 8.5 | 9.9  | 12.4     | 9.0 | 10.2 | ---     | ---  | ---  |
| 4     | 10.6     | 6.0  | 7.7  | 12.0     | 8.4 | 9.7  | 12.4     | 9.1 | 10.2 | ---     | ---  | ---  |
| 5     | 11.3     | 6.7  | 8.4  | 12.3     | 8.0 | 9.6  | 13.3     | 9.1 | 10.6 | ---     | ---  | ---  |
| 6     | 12.3     | 6.6  | 8.7  | 12.3     | 7.9 | 9.4  | 13.3     | 9.4 | 10.7 | ---     | ---  | ---  |
| 7     | 11.1     | 6.3  | 8.1  | 12.9     | 7.9 | 9.6  | 13.0     | 9.0 | 10.6 | ---     | ---  | ---  |
| 8     | 12.5     | 6.3  | 8.4  | 12.9     | 7.8 | 9.6  | 13.3     | 9.0 | 10.6 | 11.6    | 8.3  | 9.6  |
| 9     | 12.6     | 6.2  | 8.5  | 13.0     | 7.5 | 9.4  | 13.4     | 9.4 | 10.9 | 11.4    | 9.6  | 10.2 |
| 10    | 13.6     | 6.1  | 8.6  | 12.5     | 7.4 | 9.3  | 12.7     | 8.9 | 10.3 | 11.5    | 9.7  | 10.2 |
| 11    | 13.8     | 5.7  | 8.5  | 12.3     | 8.0 | 9.9  | 13.3     | 8.3 | 10.1 | 11.9    | 9.7  | 10.5 |
| 12    | 13.4     | 5.6  | 8.2  | 13.4     | 7.6 | 9.5  | 12.9     | 8.3 | 9.8  | 11.9    | 9.8  | 10.6 |
| 13    | 13.4     | 5.7  | 8.4  | ---      | --- | ---  | 13.1     | 8.2 | 9.7  | 12.0    | 9.7  | 10.5 |
| 14    | 13.5     | 6.1  | 8.6  | 13.9     | 8.0 | 9.9  | 12.7     | 8.4 | 9.9  | 12.3    | 9.7  | 10.7 |
| 15    | 13.8     | 5.8  | 8.5  | 14.3     | 8.0 | 10.0 | 12.9     | 8.7 | 10.2 | 12.8    | 9.9  | 10.9 |
| 16    | 13.7     | 5.7  | 8.3  | 13.5     | 8.0 | 9.8  | 12.9     | 8.7 | 10.0 | 12.0    | 9.1  | 10.5 |
| 17    | 16.9     | 5.6  | 9.6  | 13.2     | 8.0 | 9.7  | ---      | --- | ---  | 11.5    | 9.0  | 10.1 |
| 18    | 16.6     | 7.0  | 10.2 | 13.1     | 8.2 | 9.8  | ---      | --- | ---  | 12.3    | 10.7 | 11.3 |
| 19    | 16.3     | 6.8  | 10.2 | 13.4     | 8.3 | 9.9  | ---      | --- | ---  | 11.8    | 10.4 | 10.9 |
| 20    | 15.8     | 7.6  | 10.3 | 13.5     | 8.4 | 10.1 | ---      | --- | ---  | 12.1    | 10.4 | 11.0 |
| 21    | 15.9     | 7.0  | 10.0 | 13.8     | 8.3 | 10.1 | ---      | --- | ---  | 12.0    | 10.0 | 10.9 |
| 22    | 10.9     | 6.8  | 8.6  | 13.4     | 8.4 | 10.0 | ---      | --- | ---  | 11.8    | 10.0 | 10.8 |
| 23    | 12.6     | 8.2  | 9.7  | 14.3     | 8.5 | 10.3 | ---      | --- | ---  | 12.2    | 10.6 | 11.1 |
| 24    | 14.1     | 7.9  | 10.0 | 14.4     | 8.4 | 10.5 | ---      | --- | ---  | 12.1    | 10.2 | 10.9 |
| 25    | 14.6     | 7.5  | 9.9  | 14.2     | 8.3 | 10.3 | ---      | --- | ---  | 11.7    | 10.1 | 10.8 |
| 26    | 14.4     | 7.1  | 9.6  | 13.9     | 8.3 | 10.0 | ---      | --- | ---  | 12.0    | 10.4 | 11.0 |
| 27    | 14.9     | 7.1  | 9.8  | 12.3     | 8.4 | 9.9  | ---      | --- | ---  | 11.9    | 10.4 | 11.0 |
| 28    | 15.4     | 7.3  | 10.1 | 14.0     | 8.9 | 10.4 | ---      | --- | ---  | 11.7    | 9.9  | 10.7 |
| 29    | 15.8     | 7.2  | 10.3 | 14.2     | 8.4 | 10.2 | ---      | --- | ---  | 11.7    | 9.9  | 10.6 |
| 30    | 15.8     | 7.2  | 10.3 | 13.7     | 8.1 | 9.8  | ---      | --- | ---  | 11.9    | 9.9  | 10.8 |
| 31    | 15.8     | 7.3  | 10.0 | ---      | --- | ---  | ---      | --- | ---  | 11.8    | 10.1 | 10.8 |
| MONTH | 16.9     | 5.6  | 9.1  | ---      | --- | ---  | ---      | --- | ---  | ---     | ---  | ---  |
|       | FEBRUARY |      |      | MARCH    |     |      | APRIL    |     |      | MAY     |      |      |
| 1     | 11.8     | 10.1 | 10.8 | 13.7     | 9.3 | 11.0 | ---      | --- | ---  | ---     | ---  | ---  |
| 2     | 11.6     | 9.9  | 10.7 | 11.9     | 9.1 | 10.5 | ---      | --- | ---  | ---     | ---  | ---  |
| 3     | 11.7     | 9.9  | 10.6 | 13.2     | 8.6 | 10.5 | ---      | --- | ---  | ---     | ---  | ---  |
| 4     | 11.6     | 10.1 | 10.7 | 13.5     | 8.4 | 10.3 | ---      | --- | ---  | ---     | ---  | ---  |
| 5     | 11.6     | 9.3  | 10.5 | 13.4     | 8.3 | 10.2 | ---      | --- | ---  | ---     | ---  | ---  |
| 6     | 12.1     | 9.0  | 9.9  | 13.4     | 8.3 | 10.6 | ---      | --- | ---  | ---     | ---  | ---  |
| 7     | 11.1     | 8.7  | 9.6  | 13.4     | 9.4 | 11.0 | ---      | --- | ---  | ---     | ---  | ---  |
| 8     | 11.5     | 8.6  | 9.6  | 13.1     | 8.5 | 10.6 | ---      | --- | ---  | ---     | ---  | ---  |
| 9     | 11.6     | 8.4  | 9.7  | 13.1     | 7.6 | 10.0 | ---      | --- | ---  | ---     | ---  | ---  |
| 10    | 12.1     | 8.3  | 10.0 | 13.3     | 7.2 | 9.7  | ---      | --- | ---  | ---     | ---  | ---  |
| 11    | 12.5     | 9.6  | 10.8 | 13.0     | 6.8 | 9.3  | ---      | --- | ---  | ---     | ---  | ---  |
| 12    | 12.6     | 9.6  | 10.8 | 12.6     | 7.0 | 9.3  | ---      | --- | ---  | ---     | ---  | ---  |
| 13    | 12.0     | 9.3  | 10.6 | 12.9     | 7.4 | 9.1  | ---      | --- | ---  | ---     | ---  | ---  |
| 14    | 12.3     | 9.0  | 10.4 | 10.0     | 8.2 | 9.4  | ---      | --- | ---  | ---     | ---  | ---  |
| 15    | ---      | ---  | ---  | 10.6     | 7.4 | 9.3  | ---      | --- | ---  | ---     | ---  | ---  |
| 16    | ---      | ---  | ---  | 11.4     | 7.4 | 8.9  | ---      | --- | ---  | ---     | ---  | ---  |
| 17    | ---      | ---  | ---  | 10.9     | 6.8 | 8.8  | ---      | --- | ---  | ---     | ---  | ---  |
| 18    | ---      | ---  | ---  | 11.0     | 8.4 | 9.4  | ---      | --- | ---  | ---     | ---  | ---  |
| 19    | ---      | ---  | ---  | 12.1     | 7.6 | 9.7  | ---      | --- | ---  | ---     | ---  | ---  |
| 20    | ---      | ---  | ---  | 11.5     | 7.0 | 9.0  | ---      | --- | ---  | ---     | ---  | ---  |
| 21    | ---      | ---  | ---  | 12.3     | 6.7 | 8.8  | ---      | --- | ---  | ---     | ---  | ---  |
| 22    | 14.0     | 7.7  | 10.0 | 11.8     | 6.7 | 8.7  | ---      | --- | ---  | ---     | ---  | ---  |
| 23    | 14.2     | 8.4  | 10.6 | 11.5     | 6.8 | 8.4  | ---      | --- | ---  | ---     | ---  | ---  |
| 24    | 14.3     | 8.4  | 10.7 | 11.1     | 6.8 | 9.3  | ---      | --- | ---  | ---     | ---  | ---  |
| 25    | 14.3     | 8.3  | 10.4 | 12.0     | 8.4 | 10.0 | ---      | --- | ---  | ---     | ---  | ---  |
| 26    | 13.3     | 8.3  | 10.4 | 11.5     | 6.9 | 9.4  | ---      | --- | ---  | ---     | ---  | ---  |
| 27    | 14.1     | 9.2  | 11.2 | 12.1     | 6.7 | 9.1  | ---      | --- | ---  | ---     | ---  | ---  |
| 28    | 13.9     | 10.2 | 11.6 | 11.8     | 6.3 | 8.7  | ---      | --- | ---  | ---     | ---  | ---  |
| 29    | 13.5     | 9.7  | 11.3 | 12.6     | 6.3 | 8.7  | ---      | --- | ---  | ---     | ---  | ---  |
| 30    | ---      | ---  | ---  | 12.6     | 6.5 | 8.7  | ---      | --- | ---  | ---     | ---  | ---  |
| 31    | ---      | ---  | ---  | 12.9     | 6.2 | 8.9  | ---      | --- | ---  | 8.6     | 7.6  | 8.0  |
| MONTH | ---      | ---  | ---  | 13.7     | 6.2 | 9.5  | ---      | --- | ---  | ---     | ---  | ---  |

**06711565 SOUTH PLATTE RIVER AT ENGLEWOOD, CO--Continued**

OXYGEN, DISSOLVED (MG/L), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DAY   | MAX  | MIN | MEAN | JUNE |     |      | JULY |     |      | AUGUST |     |      | SEPTEMBER |     |      |
|-------|------|-----|------|------|-----|------|------|-----|------|--------|-----|------|-----------|-----|------|
|       |      |     |      | MAX  | MIN | MEAN | MAX  | MIN | MEAN | MAX    | MIN | MEAN | MAX       | MIN | MEAN |
| 1     | 8.7  | 7.4 | 8.0  | 9.7  | 6.3 | 7.6  | 10.5 | 5.3 | 7.4  | 8.1    | 5.1 | 6.3  |           |     |      |
| 2     | 8.8  | 7.2 | 8.0  | 8.8  | 5.9 | 7.7  | 10.8 | 5.1 | 7.2  | 8.1    | 4.9 | 6.3  |           |     |      |
| 3     | 8.8  | 7.1 | 7.8  | 8.6  | 5.7 | 6.9  | 10.6 | 5.3 | 7.4  | 8.3    | 4.7 | 6.1  |           |     |      |
| 4     | ---  | --- | ---  | 8.9  | 5.5 | 6.7  | 11.2 | 5.1 | 7.7  | 10.2   | 4.6 | 6.8  |           |     |      |
| 5     | 9.2  | 7.2 | 8.1  | 8.3  | 5.5 | 6.6  | 12.3 | 5.0 | 7.9  | 10.9   | 5.4 | 7.4  |           |     |      |
| 6     | 10.0 | 7.2 | 8.3  | 8.3  | 5.7 | 6.7  | 14.7 | 4.9 | 8.5  | ---    | --- | ---  |           |     |      |
| 7     | 10.2 | 7.1 | 8.3  | 8.7  | 5.2 | 6.9  | 14.6 | 5.5 | 8.6  | ---    | --- | ---  |           |     |      |
| 8     | 10.6 | 6.8 | 8.2  | 7.8  | 5.2 | 6.7  | ---  | --- | ---  | ---    | --- | ---  |           |     |      |
| 9     | 11.0 | 6.7 | 8.2  | 7.4  | 6.3 | 7.0  | ---  | --- | ---  | ---    | --- | ---  |           |     |      |
| 10    | 10.9 | 6.7 | 8.4  | 9.1  | 5.5 | 7.0  | ---  | --- | ---  | ---    | --- | ---  |           |     |      |
| 11    | 11.6 | 6.6 | 8.5  | 8.6  | 5.8 | 6.9  | ---  | --- | ---  | ---    | --- | ---  |           |     |      |
| 12    | 11.3 | 6.5 | 8.0  | 7.8  | 5.9 | 6.9  | ---  | --- | ---  | ---    | --- | ---  |           |     |      |
| 13    | 9.9  | 6.8 | 7.9  | 7.5  | 6.1 | 6.9  | ---  | --- | ---  | ---    | --- | ---  |           |     |      |
| 14    | 9.8  | 6.4 | 7.9  | 7.6  | 6.2 | 7.0  | ---  | --- | ---  | ---    | --- | ---  |           |     |      |
| 15    | 8.2  | 6.2 | 7.0  | 7.2  | 6.0 | 6.8  | ---  | --- | ---  | ---    | --- | ---  |           |     |      |
| 16    | 9.4  | 7.0 | 8.0  | 7.1  | 5.7 | 6.5  | ---  | --- | ---  | ---    | --- | ---  |           |     |      |
| 17    | 9.2  | 7.0 | 8.0  | 7.9  | 5.5 | 6.5  | ---  | --- | ---  | ---    | --- | ---  |           |     |      |
| 18    | 9.2  | 6.8 | 7.9  | 7.7  | 5.4 | 6.2  | ---  | --- | ---  | ---    | --- | ---  |           |     |      |
| 19    | 9.3  | 6.9 | 7.9  | 8.1  | 5.0 | 6.4  | 9.6  | 5.8 | ---  | ---    | --- | ---  |           |     |      |
| 20    | 9.4  | 6.3 | 7.7  | 8.2  | 5.0 | 6.5  | 8.9  | 5.3 | 6.5  | 8.3    | 5.6 | 7.0  |           |     |      |
| 21    | 9.7  | 6.3 | 7.4  | 8.1  | 5.7 | 6.5  | 7.6  | 5.1 | 6.2  | 8.0    | 5.2 | 6.4  |           |     |      |
| 22    | 9.6  | 6.2 | 7.1  | 8.5  | 5.8 | 6.9  | 7.9  | 5.1 | 6.4  | 8.7    | 5.0 | 6.2  |           |     |      |
| 23    | 9.9  | 6.2 | 7.5  | 8.7  | 6.4 | 7.7  | 7.8  | 6.4 | 7.0  | 9.4    | 4.8 | 6.4  |           |     |      |
| 24    | 8.2  | 6.4 | 7.2  | 9.7  | 6.4 | 7.5  | 8.5  | 6.5 | 7.4  | 10.0   | 5.2 | 6.8  |           |     |      |
| 25    | 8.2  | 6.5 | 7.3  | 9.1  | 6.6 | 7.8  | 8.4  | 5.3 | 7.1  | 10.3   | 5.0 | 6.8  |           |     |      |
| 26    | 8.5  | 6.1 | 7.2  | 8.7  | 6.8 | 7.8  | ---  | --- | ---  | 9.9    | 5.6 | 7.4  |           |     |      |
| 27    | 8.6  | 6.2 | 7.1  | 8.6  | 6.1 | 7.5  | ---  | --- | ---  | 10.0   | 6.3 | 7.6  |           |     |      |
| 28    | 8.7  | 6.4 | 7.2  | 8.3  | 6.4 | 7.4  | 8.0  | 5.8 | 6.9  | 9.5    | 5.6 | 7.1  |           |     |      |
| 29    | 8.8  | 6.3 | 7.5  | 9.1  | 6.4 | 7.2  | 7.0  | 5.6 | 6.2  | 9.4    | 5.2 | 6.8  |           |     |      |
| 30    | 9.1  | 6.3 | 7.5  | 9.5  | 5.9 | 7.5  | 8.2  | 6.1 | 6.9  | 9.6    | 5.0 | 6.5  |           |     |      |
| 31    | ---  | --- | ---  | 9.5  | 5.7 | 7.4  | 8.5  | 5.4 | 6.9  | ---    | --- | ---  |           |     |      |
| MONTH | ---  | --- | ---  | 9.7  | 5.0 | 7.0  | ---  | --- | ---  | ---    | --- | ---  |           |     |      |



**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 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 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

| DAY   | OCT   | NOV   | DEC   | JAN   | FEB   | MAR   | APR   | MAY   | JUN   | JUL   | AUG   | SEP  |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|
| 1     | 1.7   | 9.8   | 8.2   | 12    | 14    | 5.9   | 9.4   | 7.6   | 7.4   | 3.2   | 1.7   | 1.7  |
| 2     | 1.8   | 9.7   | 8.4   | 10    | 13    | 6.1   | 8.7   | 7.4   | 5.0   | 2.9   | 2.8   | 1.7  |
| 3     | 1.6   | 8.2   | 8.9   | 12    | 13    | 5.7   | 11    | e7.0  | 3.9   | 3.0   | 1.7   | 1.8  |
| 4     | 2.6   | 9.5   | 8.7   | 11    | 12    | 5.7   | 12    | e5.6  | 3.4   | 3.1   | 1.4   | 1.9  |
| 5     | 2.5   | 8.1   | 9.7   | 8.2   | 15    | 5.3   | 13    | e4.8  | 3.2   | 3.2   | 1.3   | 1.9  |
| 6     | 2.5   | 8.0   | 9.1   | 8.1   | 18    | 6.8   | 11    | e4.4  | 3.0   | 3.1   | 1.5   | 1.9  |
| 7     | 2.4   | 8.1   | 9.5   | 8.8   | 16    | 6.8   | 11    | e5.0  | 2.9   | 3.2   | 1.7   | 2.0  |
| 8     | 2.6   | 8.4   | 8.6   | 9.6   | 7.5   | 7.6   | 9.2   | e5.6  | 2.8   | 3.3   | 1.3   | 1.9  |
| 9     | 2.4   | 8.2   | 6.2   | 8.9   | 8.1   | 7.8   | 8.6   | e7.0  | 2.8   | 3.3   | 1.2   | 2.0  |
| 10    | 1.9   | 12    | 9.0   | 10    | 8.3   | 7.7   | 8.9   | e6.0  | 2.9   | e20   | 1.2   | 2.0  |
| 11    | 1.8   | 13    | 9.7   | 9.7   | 8.8   | 8.8   | 9.9   | e4.5  | 3.1   | e7.0  | 1.3   | 1.9  |
| 12    | 1.4   | 7.9   | 8.3   | 9.2   | 9.2   | 9.8   | 8.7   | e3.5  | 3.1   | e4.0  | 1.3   | 2.2  |
| 13    | 2.0   | 7.5   | 8.7   | 9.6   | 10    | 11    | 11    | e3.0  | 3.0   | e3.0  | 1.3   | 1.7  |
| 14    | 1.8   | 8.8   | 9.3   | 3.1   | 12    | 14    | 13    | e2.2  | 3.1   | e3.0  | 1.4   | 1.6  |
| 15    | 1.6   | 8.7   | 6.8   | 3.3   | 14    | 13    | 10    | e2.3  | 7.0   | e3.1  | 1.4   | 1.4  |
| 16    | 1.5   | 8.7   | 7.1   | 3.8   | 12    | 16    | 12    | e2.5  | 5.6   | 3.3   | 1.4   | 1.6  |
| 17    | 1.7   | 8.7   | 5.9   | 3.9   | 12    | 15    | 20    | 2.2   | 7.6   | 3.3   | 1.4   | 1.5  |
| 18    | 1.7   | 9.8   | 5.6   | 3.0   | 13    | 13    | 17    | 2.2   | 8.0   | 2.9   | 1.4   | 1.8  |
| 19    | 1.9   | 9.6   | 3.9   | 3.0   | 12    | 11    | 14    | 2.1   | 4.6   | 3.1   | 1.3   | 3.7  |
| 20    | 1.9   | 8.1   | 4.1   | 3.7   | 11    | 11    | 14    | 2.1   | 3.5   | 3.3   | 1.3   | 1.8  |
| 21    | 2.7   | 8.8   | 4.0   | 3.9   | 11    | 11    | 12    | 1.9   | 3.8   | 3.4   | e1.3  | 1.7  |
| 22    | 4.0   | 8.4   | 5.1   | 4.1   | 11    | 12    | 11    | 1.8   | 6.3   | 3.4   | e1.5  | 1.5  |
| 23    | 6.9   | 8.3   | 9.4   | 11    | 11    | 14    | 9.6   | 2.0   | 4.8   | 3.2   | e80   | 1.5  |
| 24    | 7.9   | 8.2   | 12    | 12    | 9.3   | 16    | 8.1   | 2.1   | 3.4   | 2.8   | 7.6   | 1.7  |
| 25    | 7.8   | 8.5   | 14    | 14    | 8.0   | 14    | 7.8   | 2.3   | 3.2   | 2.1   | 2.1   | 1.9  |
| 26    | 7.3   | 9.0   | 13    | 12    | 9.5   | 12    | 7.6   | 17    | 3.1   | 2.0   | 1.7   | 1.5  |
| 27    | 7.8   | 9.3   | 12    | 11    | 6.3   | 13    | 7.6   | 20    | 2.9   | 2.0   | 1.8   | 2.0  |
| 28    | 9.6   | 8.4   | 13    | 14    | 5.3   | 13    | 8.3   | 12    | 3.0   | 2.0   | 1.7   | 1.5  |
| 29    | 9.8   | 8.4   | 13    | 14    | 4.9   | 12    | 8.8   | 11    | 3.2   | 1.8   | 1.7   | 1.9  |
| 30    | 9.5   | 7.4   | 13    | 14    | ---   | 11    | 7.8   | 10    | 3.2   | 1.7   | 1.7   | 1.7  |
| 31    | 9.8   | ---   | 14    | 13    | ---   | 11    | ---   | 8.3   | ---   | 1.7   | 1.6   | ---  |
| TOTAL | 122.4 | 265.5 | 278.2 | 273.9 | 315.2 | 327.0 | 321.0 | 175.4 | 122.8 | 110.4 | 132.0 | 54.9 |
| MEAN  | 3.95  | 8.85  | 8.97  | 8.84  | 10.9  | 10.5  | 10.7  | 5.66  | 4.09  | 3.56  | 4.26  | 1.83 |
| MAX   | 9.8   | 13    | 14    | 14    | 18    | 16    | 20    | 20    | 8.0   | 20    | 80    | 3.7  |
| MIN   | 1.4   | 7.4   | 3.9   | 3.0   | 4.9   | 5.3   | 7.6   | 1.8   | 2.8   | 1.7   | 1.2   | 1.4  |
| AC-FT | 243   | 527   | 552   | 543   | 625   | 649   | 637   | 348   | 244   | 219   | 262   | 109  |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 1996, BY WATER YEAR (WY)

|      | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 2.21 | 3.70 | 4.31 | 5.48 | 10.2 | 17.3 | 14.7 | 10.7 | 11.3 | 4.91 | 2.48 | 1.33 |
| MAX  | 3.95 | 8.85 | 8.97 | 8.84 | 14.1 | 42.8 | 21.7 | 26.8 | 33.5 | 14.0 | 4.26 | 1.83 |
| (WY) | 1996 | 1996 | 1996 | 1996 | 1993 | 1992 | 1993 | 1995 | 1995 | 1995 | 1996 | 1996 |
| MIN  | 1.26 | .79  | .76  | 1.51 | 1.74 | 3.82 | 9.93 | 5.23 | 1.87 | 1.04 | .58  | .73  |
| (WY) | 1992 | 1995 | 1995 | 1995 | 1995 | 1995 | 1994 | 1992 | 1994 | 1994 | 1994 | 1994 |

SUMMARY STATISTICS

FOR 1995 CALENDAR YEAR

FOR 1996 WATER YEAR

WATER YEARS 1992 - 1996

|                          |         |        |  |  |  |      |                |  |      |        |        |      |
|--------------------------|---------|--------|--|--|--|------|----------------|--|------|--------|--------|------|
| ANNUAL TOTAL             | 3605.01 | 2498.7 |  |  |  |      |                |  |      |        |        |      |
| ANNUAL MEAN              | 9.88    | 6.83   |  |  |  |      |                |  |      | 7.36   |        |      |
| HIGHEST ANNUAL MEAN      |         |        |  |  |  |      |                |  |      | 8.92   |        | 1992 |
| LOWEST ANNUAL MEAN       |         |        |  |  |  |      |                |  |      | 5.36   |        | 1994 |
| HIGHEST DAILY MEAN       | 229     | Jun 29 |  |  |  | e80  | Aug 23         |  | 229  | Jun 29 | 1995   |      |
| LOWEST DAILY MEAN        | .66     | Sep 4  |  |  |  | a1.2 | Aug 9          |  | b.43 | Aug 24 | 1994   |      |
| ANNUAL SEVEN-DAY MINIMUM | .72     | Aug 30 |  |  |  | 1.3  | Aug 8          |  | d.45 | Aug 21 | 1994   |      |
| INSTANTANEOUS PEAK FLOW  |         |        |  |  |  | c    | Not determined |  | d    | 457    | Jun 29 | 1995 |
| INSTANTANEOUS PEAK STAGE |         |        |  |  |  | c    | Not determined |  |      | 7.17   | Jun 29 | 1995 |
| ANNUAL RUNOFF (AC-FT)    | 7150    | 4960   |  |  |  |      |                |  |      | 5330   |        |      |
| 10 PERCENT EXCEEDS       | 18      | 13     |  |  |  |      |                |  |      | 15     |        |      |
| 50 PERCENT EXCEEDS       | 5.2     | 6.8    |  |  |  |      |                |  |      | 3.8    |        |      |
| 90 PERCENT EXCEEDS       | 1.1     | 1.7    |  |  |  |      |                |  |      | 1.0    |        |      |

e-Estimated.  
a-Also occurred Aug 10.  
b-Also occurred Aug 25, 1994.  
c-Probably occurred on Aug 23.  
d-From rating curve extended above 140 ft<sup>3</sup>/s.

**06712990 CHERRY CREEK LAKE NEAR DENVER, CO**

LOCATION.--Lat 39°39'03", long 104°51'13", in NW<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> 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 mi<sup>2</sup>.

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, 13,600 acre-ft, May 29, elevation, 5,550.93 ft; minimum, 12,430 acre-ft, Sept. 10-11, elevation, 5,549.55 ft.

## MONTHEND ELEVATION AND CONTENTS AT 0800, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| Date                 | Elevation<br>(feet) | Contents<br>(acre-feet) | Change in<br>contents<br>(acre-feet) |
|----------------------|---------------------|-------------------------|--------------------------------------|
| Sept. 30. . . . .    | 5,550.11            | 12,900                  | -                                    |
| Oct. 31. . . . .     | 5,550.21            | 12,980                  | +80                                  |
| Nov. 30. . . . .     | 5,550.42            | 13,160                  | +180                                 |
| Dec. 31. . . . .     | 5,550.20            | 12,980                  | -180                                 |
| CAL YR 1995. . . . . | -                   | -                       | +1,040                               |
| Jan. 31. . . . .     | 5,550.31            | 13,070                  | +90                                  |
| Feb. 29. . . . .     | 5,550.50            | 13,230                  | +160                                 |
| Mar. 31. . . . .     | 5,550.72            | 13,420                  | +190                                 |
| Apr. 30. . . . .     | 5,550.57            | 13,290                  | -130                                 |
| May 31. . . . .      | 5,550.92            | 13,590                  | +300                                 |
| June 30. . . . .     | 5,550.20            | 12,980                  | -610                                 |
| July 31. . . . .     | 5,549.92            | 12,740                  | -240                                 |
| Aug. 31. . . . .     | 5,549.64            | 12,510                  | -230                                 |
| Sept. 30. . . . .    | 5,549.58            | 12,460                  | -50                                  |
| WTR YR 1996. . . . . | -                   | -                       | -440                                 |



## 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 5 miles downstream from Cherry Creek Reservoir.

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

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

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

REMARKS.--Records poor. Flow regulated by Cherry Creek Lake (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.

REVISIONS.--The maximum discharge for the water year 1995 has been revised to 643 ft<sup>3</sup>/s, May 17, 1995, gage height, 6.76 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

| DAY   | OCT   | NOV   | DEC   | JAN  | FEB   | MAR  | APR  | MAY  | JUN  | JUL   | AUG   | SEP  |
|-------|-------|-------|-------|------|-------|------|------|------|------|-------|-------|------|
| 1     | 15    | e13   | 8.7   | 13   | 10    | 21   | 22   | 14   | 32   | 30    | 12    | e20  |
| 2     | 13    | 12    | 9.8   | 14   | 10    | 22   | 22   | 14   | 33   | 29    | 10    | e20  |
| 3     | 12    | 12    | 10    | e14  | 10    | 19   | 27   | 14   | 33   | 35    | 8.7   | e20  |
| 4     | 19    | 12    | 11    | 15   | 11    | 20   | 28   | 14   | 37   | 38    | 8.4   | e20  |
| 5     | 12    | 12    | 12    | 14   | 11    | 19   | 22   | 14   | 44   | 37    | 7.8   | e30  |
| 6     | 11    | 12    | 12    | 14   | 11    | 18   | 21   | 12   | 44   | 38    | 7.6   | e40  |
| 7     | 11    | 11    | 12    | 14   | 9.0   | 18   | 21   | 11   | 45   | 39    | 7.2   | e28  |
| 8     | 11    | 10    | 12    | 20   | 8.1   | 19   | 21   | e38  | 45   | 34    | 8.2   | e24  |
| 9     | 10    | 9.3   | 12    | 17   | 7.6   | 19   | 21   | e33  | 46   | 50    | 7.6   | e18  |
| 10    | 9.6   | 12    | 12    | 16   | 6.9   | 19   | 22   | 34   | 48   | 65    | 7.4   | e18  |
| 11    | 10    | 9.1   | 13    | 15   | 6.5   | 20   | 21   | 15   | 48   | 31    | 7.2   | e35  |
| 12    | 12    | 9.1   | 13    | 14   | 6.2   | 20   | 28   | 11   | 48   | 29    | 6.9   | e25  |
| 13    | 11    | 8.9   | 13    | 13   | 6.2   | 27   | 22   | 10   | 48   | 115   | 10    | e24  |
| 14    | 9.9   | 8.5   | 13    | 12   | 6.5   | 56   | 20   | 10   | 31   | 30    | 9.3   | e24  |
| 15    | 9.6   | 8.6   | 14    | 12   | 6.5   | 31   | 20   | 12   | 121  | 21    | 10    | e23  |
| 16    | 9.1   | 9.1   | 14    | 12   | 8.5   | 21   | 20   | 13   | 69   | 19    | 11    | e21  |
| 17    | 8.5   | 9.1   | 13    | 12   | 9.6   | 21   | 20   | 12   | 45   | 19    | 9.5   | e22  |
| 18    | 8.2   | 8.4   | 13    | 12   | 9.4   | 19   | 18   | 12   | 41   | 23    | 9.2   | e25  |
| 19    | 7.6   | 7.9   | 13    | 14   | 9.6   | 21   | 15   | 12   | 27   | 34    | 9.8   | e60  |
| 20    | 8.1   | 7.6   | 14    | 12   | 10    | 23   | 23   | 12   | 25   | 33    | 9.1   | e45  |
| 21    | 7.3   | 7.7   | 14    | 12   | 12    | 23   | 19   | 19   | 56   | 14    | 9.5   | e35  |
| 22    | 9.6   | 8.1   | 13    | 12   | 11    | 23   | 18   | 14   | 41   | 14    | 37    | e30  |
| 23    | e20   | 7.8   | 12    | 12   | 10    | 28   | 17   | 39   | 32   | 11    | 91    | e25  |
| 24    | e14   | 8.1   | 12    | 12   | 15    | 26   | 16   | 25   | 30   | 11    | 29    | e23  |
| 25    | e11   | 8.2   | 12    | 12   | 15    | 25   | 16   | 89   | 33   | 13    | e20   | e25  |
| 26    | e11   | 8.2   | 13    | 11   | 15    | 25   | 16   | 194  | 28   | 9.7   | e17   | e30  |
| 27    | e10   | e8.8  | 12    | 12   | 16    | 25   | 15   | 59   | 27   | 8.8   | e19   | e45  |
| 28    | e10   | 9.0   | 12    | 12   | 16    | 24   | 14   | 29   | 30   | 9.8   | e18   | e30  |
| 29    | e11   | 9.0   | 12    | 11   | 17    | 23   | 14   | 30   | 31   | 9.7   | e21   | e27  |
| 30    | e11   | 8.7   | 13    | 11   | ---   | 23   | 14   | 26   | 30   | 9.0   | e21   | e22  |
| 31    | e12   | ---   | 12    | 11   | ---   | 23   | ---  | 27   | ---  | 9.0   | e22   | ---  |
| TOTAL | 344.5 | 285.2 | 381.5 | 407  | 300.6 | 721  | 593  | 868  | 1248 | 868.0 | 481.4 | 834  |
| MEAN  | 11.1  | 9.51  | 12.3  | 13.1 | 10.4  | 23.3 | 19.8 | 28.0 | 41.6 | 28.0  | 15.5  | 27.8 |
| MAX   | 20    | 13    | 14    | 20   | 17    | 56   | 28   | 194  | 121  | 115   | 91    | 60   |
| MIN   | 7.3   | 7.6   | 8.7   | 11   | 6.2   | 18   | 14   | 10   | 25   | 8.8   | 6.9   | 18   |
| AC-FT | 683   | 566   | 757   | 807  | 596   | 1430 | 1180 | 1720 | 2480 | 1720  | 955   | 1650 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1985 - 1996, BY WATER YEAR (WY)

|      | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 12.6 | 9.97 | 9.74 | 11.5 | 17.3 | 29.7 | 36.6 | 37.5 | 38.5 | 24.3 | 23.2 | 19.6 |
| MAX  | 38.0 | 22.2 | 29.8 | 45.7 | 53.2 | 75.2 | 74.5 | 88.5 | 85.3 | 55.9 | 42.9 | 43.0 |
| (WY) | 1986 | 1988 | 1988 | 1985 | 1988 | 1985 | 1986 | 1995 | 1995 | 1995 | 1991 | 1995 |
| MIN  | 4.65 | 4.42 | 1.94 | 3.01 | 3.46 | 4.41 | 9.81 | 16.2 | 13.7 | 5.71 | 8.41 | 3.90 |
| (WY) | 1995 | 1995 | 1995 | 1995 | 1990 | 1995 | 1991 | 1993 | 1990 | 1994 | 1986 | 1994 |

SUMMARY STATISTICS

|                          | FOR 1995 CALENDAR YEAR |        | FOR 1996 WATER YEAR |        | WATER YEARS 1985 - 1996 |             |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|-------------|
| ANNUAL TOTAL             | 11333.4                |        | 7332.2              |        |                         |             |
| ANNUAL MEAN              | 31.1                   |        | 20.0                |        | 21.5                    |             |
| HIGHEST ANNUAL MEAN      |                        |        |                     |        | 36.2                    |             |
| LOWEST ANNUAL MEAN       |                        |        |                     |        | 10.9                    |             |
| HIGHEST DAILY MEAN       | 461                    | May 17 | 194                 | May 26 | 461                     | May 17 1995 |
| LOWEST DAILY MEAN        | 1.9                    | Jan 4  | a6.2                | Feb 12 | 1.1                     | Apr 1 1991  |
| ANNUAL SEVEN-DAY MINIMUM | 2.3                    | Jan 1  | 6.6                 | Feb 9  | 1.6                     | Sep 29 1993 |
| INSTANTANEOUS PEAK FLOW  |                        |        | 401                 | May 26 | 1970                    | Jul 20 1986 |
| INSTANTANEOUS PEAK STAGE |                        |        | 5.50                | May 26 | b6.74                   | Jul 20 1986 |
| ANNUAL RUNOFF (AC-FT)    | 22480                  |        | 14540               |        | 15560                   |             |
| 10 PERCENT EXCEEDS       | 78                     |        | 35                  |        | 57                      |             |
| 50 PERCENT EXCEEDS       | 13                     |        | 14                  |        | 12                      |             |
| 90 PERCENT EXCEEDS       | 3.1                    |        | 8.7                 |        | 3.9                     |             |

e-Estimated.

a-Also occurred Feb 13.

b-Maximum gage height, 7.54 ft, Jun 8, 1987.





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

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

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

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

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

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

REMARKS.--No estimated daily discharges. Records fair. Natural flow of stream affected by transmountain diversions, storage and flood-control reservoirs, power developments, diversions for irrigation and municipal use, and return flow from irrigated areas. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

| DAY   | OCT  | NOV   | DEC   | JAN    | FEB   | MAR   | APR    | MAY  | JUN  | JUL  | AUG  | SEP    |
|-------|------|-------|-------|--------|-------|-------|--------|------|------|------|------|--------|
| 1     | 75   | 101   | 84    | 11     | 101   | 12    | 5.6    | 121  | 20   | 18   | 81   | 166    |
| 2     | 74   | 31    | 14    | 12     | 101   | 13    | 5.6    | 107  | 20   | 19   | 77   | 128    |
| 3     | 61   | 28    | 15    | 11     | 98    | 14    | 5.9    | 87   | 18   | 61   | 87   | 106    |
| 4     | 92   | 24    | 12    | 10     | 104   | 14    | 15     | 81   | 60   | 100  | 76   | 96     |
| 5     | 30   | 20    | 16    | 8.8    | 114   | 9.6   | 116    | 85   | 18   | 102  | 70   | 94     |
| 6     | 21   | 16    | 18    | 9.8    | 49    | 9.0   | 30     | 88   | 17   | 144  | 69   | 151    |
| 7     | 30   | 12    | 21    | 12     | 12    | 12    | 10     | 144  | 18   | 132  | 65   | 104    |
| 8     | 29   | 8.9   | 11    | 19     | 13    | 14    | 8.0    | 276  | 18   | 126  | 71   | 73     |
| 9     | 20   | 26    | 12    | 27     | 17    | 12    | 7.3    | 284  | 15   | 222  | 51   | 65     |
| 10    | 20   | 27    | 16    | 26     | 17    | 11    | 17     | 378  | 15   | 124  | 58   | 33     |
| 11    | 22   | 23    | 18    | 25     | 16    | 8.6   | 27     | 207  | 15   | 22   | 59   | 100    |
| 12    | 23   | 16    | 18    | 32     | 14    | 12    | 105    | 182  | 17   | 78   | 60   | 443    |
| 13    | 20   | 9.9   | 16    | 30     | 13    | 21    | 216    | 188  | 201  | 487  | 61   | 32     |
| 14    | 20   | 6.3   | 16    | 37     | 9.6   | 420   | 173    | 172  | 103  | 129  | 76   | 42     |
| 15    | 17   | 13    | 15    | 37     | 20    | 41    | 73     | 122  | 291  | 24   | 70   | 57     |
| 16    | 16   | 8.2   | 12    | 41     | 15    | 12    | 21     | 114  | 66   | 68   | 99   | 11     |
| 17    | 14   | 6.3   | 10    | 35     | 12    | 9.6   | 17     | 69   | 46   | 80   | 80   | 26     |
| 18    | 14   | 7.0   | 11    | 55     | 8.1   | 15    | 8.8    | 24   | 19   | 80   | 74   | 175    |
| 19    | 14   | 8.7   | 11    | 119    | 7.3   | 15    | 12     | 12   | 17   | 77   | 77   | 890    |
| 20    | 12   | 9.2   | 9.5   | 123    | 8.6   | 7.6   | 7.9    | 15   | 15   | 213  | 44   | 87     |
| 21    | 11   | 8.0   | 8.6   | 119    | 8.6   | 7.9   | 6.9    | 14   | 178  | 218  | 40   | 12     |
| 22    | 126  | 8.3   | 9.4   | 113    | 10    | 11    | 6.8    | 15   | 37   | 253  | 415  | 8.1    |
| 23    | 222  | 9.4   | 11    | 107    | 8.0   | 10    | 5.6    | 53   | 40   | 227  | 521  | 6.3    |
| 24    | 60   | 9.3   | 9.1   | 107    | 8.7   | 49    | 21     | 59   | 123  | 156  | 283  | 6.5    |
| 25    | 47   | 8.6   | 17    | 105    | 8.3   | 27    | 55     | 386  | 98   | 177  | 265  | 6.8    |
| 26    | 45   | 7.0   | 16    | 103    | 10    | 12    | 143    | 1330 | 23   | 99   | 182  | 13     |
| 27    | 47   | 8.1   | 6.9   | 107    | 11    | 13    | 222    | 255  | 21   | 98   | 376  | 99     |
| 28    | 44   | 58    | 8.3   | 112    | 11    | 13    | 268    | 34   | 38   | 128  | 222  | 14     |
| 29    | 36   | 120   | 8.3   | 111    | 12    | 11    | 258    | 31   | 22   | 171  | 127  | 10     |
| 30    | 38   | 136   | 10    | 105    | ---   | 9.2   | 178    | 45   | 20   | 180  | 176  | 7.9    |
| 31    | 48   | ---   | 11    | 100    | ---   | 7.4   | ---    | 21   | ---  | 157  | 175  | ---    |
| TOTAL | 1348 | 774.2 | 471.1 | 1869.6 | 837.2 | 852.9 | 2045.4 | 4999 | 1609 | 4170 | 4187 | 3062.6 |
| MEAN  | 43.5 | 25.8  | 15.2  | 60.3   | 28.9  | 27.5  | 68.2   | 161  | 53.6 | 135  | 135  | 102    |
| MAX   | 222  | 136   | 84    | 123    | 114   | 420   | 268    | 1330 | 291  | 487  | 521  | 890    |
| MIN   | 11   | 6.3   | 6.9   | 8.8    | 7.3   | 7.4   | 5.6    | 12   | 15   | 18   | 40   | 6.3    |
| AC-FT | 2670 | 1540  | 934   | 3710   | 1660  | 1690  | 4060   | 9920 | 3190 | 8270 | 8300 | 6070   |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1982 - 1996, BY WATER YEAR (WY)

|      | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 119  | 109  | 62.9 | 84.9 | 75.8 | 124  | 318  | 798  | 583  | 501  | 392  | 141  | 141  | 141  | 141  |
| MAX  | 1286 | 927  | 199  | 235  | 325  | 305  | 1335 | 2675 | 2560 | 2130 | 1410 | 755  | 755  | 755  | 755  |
| (WY) | 1985 | 1985 | 1986 | 1984 | 1984 | 1984 | 1984 | 1987 | 1995 | 1995 | 1984 | 1984 | 1984 | 1984 | 1984 |
| MIN  | 10.0 | 9.00 | 8.79 | 11.2 | 8.57 | 6.81 | 21.0 | 75.1 | 47.3 | 42.5 | 125  | 20.1 | 20.1 | 20.1 | 20.1 |
| (WY) | 1989 | 1989 | 1991 | 1995 | 1982 | 1995 | 1991 | 1986 | 1990 | 1994 | 1994 | 1992 | 1992 | 1992 | 1992 |

SUMMARY STATISTICS

|                          | FOR 1995 CALENDAR YEAR | FOR 1996 WATER YEAR | WATER YEARS 1982 - 1996 |
|--------------------------|------------------------|---------------------|-------------------------|
| ANNUAL TOTAL             | 202403.7               | 26226.0             |                         |
| ANNUAL MEAN              | 555                    | 71.7                | 288                     |
| HIGHEST ANNUAL MEAN      |                        |                     | 825                     |
| LOWEST ANNUAL MEAN       |                        |                     | 50.5                    |
| HIGHEST DAILY MEAN       | 3970                   | May 17              | 4110                    |
| LOWEST DAILY MEAN        | 2.1                    | Mar 14              | 2.1                     |
| ANNUAL SEVEN-DAY MINIMUM | 3.7                    | Mar 11              | 3.7                     |
| INSTANTANEOUS PEAK FLOW  |                        |                     | 14300                   |
| INSTANTANEOUS PEAK STAGE |                        |                     | 8.09                    |
| ANNUAL RUNOFF (AC-FT)    | 401500                 | 52020               | 208600                  |
| 10 PERCENT EXCEEDS       | 2440                   | 176                 | 672                     |
| 50 PERCENT EXCEEDS       | 36                     | 26                  | 66                      |
| 90 PERCENT EXCEEDS       | 6.2                    | 8.6                 | 8.9                     |

a-Also occurred Apr 2, and 23.

## PLATTE RIVER BASIN

## 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 ditch and Sand Creek in northeast corner of Metro Sewer Plant.

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

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 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

| DAY   | OCT  | NOV  | DEC  | JAN  | FEB  | MAR  | APR  | MAY    | JUN    | JUL    | AUG  | SEP    |
|-------|------|------|------|------|------|------|------|--------|--------|--------|------|--------|
| 1     | 140  | 31   | 50   | 17   | 12   | 16   | 18   | 17     | 96     | 5.5    | 132  | 42     |
| 2     | 117  | 26   | 53   | 15   | 11   | 15   | 16   | 16     | 63     | 6.0    | 150  | 33     |
| 3     | 84   | 25   | 52   | 19   | 10   | 15   | 17   | 20     | 57     | 6.1    | 133  | 44     |
| 4     | 87   | 26   | 52   | 16   | 13   | 15   | 17   | 25     | 54     | 4.0    | 126  | 47     |
| 5     | 40   | 26   | 49   | 13   | 21   | 15   | 41   | 26     | 36     | 11     | 121  | 29     |
| 6     | 31   | 25   | 49   | 14   | 22   | 13   | 28   | 25     | 31     | 40     | 128  | 73     |
| 7     | 31   | 25   | 51   | 15   | 19   | 13   | 22   | 33     | 25     | 43     | 132  | 37     |
| 8     | 25   | 25   | 50   | 32   | 18   | 14   | 17   | 36     | 30     | 34     | 118  | 17     |
| 9     | 23   | 24   | 43   | 49   | 17   | 16   | 16   | 45     | 18     | 85     | 128  | 15     |
| 10    | 20   | 35   | 51   | 24   | 17   | 15   | 15   | 80     | 17     | 215    | 141  | 9.0    |
| 11    | 22   | 35   | 50   | 20   | 16   | 16   | 19   | 43     | 13     | 90     | 134  | 6.9    |
| 12    | 17   | 30   | 49   | 19   | 19   | 16   | 21   | 32     | 12     | 66     | 101  | 93     |
| 13    | 18   | 29   | 47   | 18   | 18   | 19   | 34   | 28     | 33     | 110    | 64   | 58     |
| 14    | 20   | 29   | 47   | 19   | 17   | 118  | 37   | 26     | 18     | 60     | 66   | 56     |
| 15    | 21   | 29   | 29   | 18   | 16   | 63   | 27   | 23     | 208    | 47     | 97   | 42     |
| 16    | 21   | 32   | 25   | 17   | 16   | 39   | 24   | 23     | 72     | 52     | 87   | 14     |
| 17    | 21   | 30   | 22   | 14   | 15   | 27   | 24   | 38     | 33     | 153    | 77   | 20     |
| 18    | 18   | 30   | 21   | 12   | 14   | 27   | 21   | 31     | 9.8    | 152    | 72   | 69     |
| 19    | 19   | 28   | 20   | 16   | 15   | 27   | 18   | 12     | 10     | 149    | 72   | 385    |
| 20    | 17   | 27   | 17   | 18   | 15   | 25   | 17   | 9.3    | 9.3    | 161    | 93   | 69     |
| 21    | 17   | 27   | 17   | 14   | 27   | 23   | 17   | 20     | 61     | 123    | 111  | 32     |
| 22    | 25   | 26   | 18   | 11   | 18   | 21   | 34   | 34     | 30     | 123    | 179  | 25     |
| 23    | 65   | 40   | 16   | 12   | 16   | 19   | 58   | 52     | 15     | 128    | 166  | 22     |
| 24    | 104  | 45   | 16   | 14   | 16   | 35   | 61   | 40     | 10     | 135    | 61   | 16     |
| 25    | 95   | 46   | 17   | 11   | 14   | 27   | 45   | 100    | 11     | 151    | 49   | 15     |
| 26    | 91   | 46   | 17   | 11   | 14   | 24   | 21   | e500   | 10     | 142    | 39   | 14     |
| 27    | 85   | 59   | 17   | 12   | 12   | 23   | 16   | 303    | 6.0    | 131    | 21   | 45     |
| 28    | 84   | 50   | 16   | 14   | 12   | 23   | 17   | 147    | 7.2    | 125    | 42   | 52     |
| 29    | 85   | 53   | 16   | 13   | 14   | 21   | 19   | 143    | 15     | 125    | 76   | 71     |
| 30    | 86   | 52   | 16   | 10   | ---  | 20   | 19   | 104    | 6.8    | 125    | 77   | 72     |
| 31    | 75   | ---  | 17   | 11   | ---  | 18   | ---  | 95     | ---    | 134    | 63   | ---    |
| TOTAL | 1604 | 1011 | 1010 | 518  | 464  | 778  | 756  | 2126.3 | 1017.1 | 2931.6 | 3056 | 1522.9 |
| MEAN  | 51.7 | 33.7 | 32.6 | 16.7 | 16.0 | 25.1 | 25.2 | 68.6   | 33.9   | 94.6   | 98.6 | 50.8   |
| MAX   | 140  | 59   | 53   | 49   | 27   | 118  | 61   | 500    | 208    | 215    | 179  | 385    |
| MIN   | 17   | 24   | 16   | 10   | 10   | 13   | 15   | 9.3    | 6.0    | 4.0    | 21   | 6.9    |
| AC-FT | 3180 | 2010 | 2000 | 1030 | 920  | 1540 | 1500 | 4220   | 2020   | 5810   | 6060 | 3020   |

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 1996, BY WATER YEAR (WY)

|          | 1992 | 1993 | 1994 | 1995 | 1996 |
|----------|------|------|------|------|------|
| MEAN     | 31.5 | 23.2 | 19.7 | 14.9 | 17.4 |
| MAX (WY) | 51.7 | 33.7 | 32.6 | 16.7 | 21.7 |
| MIN (WY) | 17.8 | 16.8 | 13.3 | 12.9 | 14.6 |
| MEAN     | 1992 | 1993 | 1994 | 1995 | 1996 |
| MAX (WY) | 1996 | 1996 | 1996 | 1993 | 1992 |
| MIN (WY) | 1993 | 1995 | 1995 | 1995 | 1995 |

## SUMMARY STATISTICS

## FOR 1995 CALENDAR YEAR

## FOR 1996 WATER YEAR

## WATER YEARS 1992 - 1996

|                          |         |         |        |
|--------------------------|---------|---------|--------|
| ANNUAL TOTAL             | 26934.4 | 16794.9 |        |
| ANNUAL MEAN              | 73.8    | 45.9    | 47.9   |
| HIGHEST ANNUAL MEAN      |         |         | 68.6   |
| LOWEST ANNUAL MEAN       |         |         | 35.5   |
| HIGHEST DAILY MEAN       | 786     | May 17  | e500   |
| LOWEST DAILY MEAN        | 6.8     | Feb 27  | 4.0    |
| ANNUAL SEVEN-DAY MINIMUM | 9.4     | Mar 19  | 7.2    |
| INSTANTANEOUS PEAK FLOW  |         |         | 1230   |
| INSTANTANEOUS PEAK STAGE |         | a7.83   | Sep 19 |
| ANNUAL RUNOFF (AC-FT)    | 53420   | 33310   | 34720  |
| 10 PERCENT EXCEEDS       | 159     | 118     | 111    |
| 50 PERCENT EXCEEDS       | 48      | 26      | 27     |
| 90 PERCENT EXCEEDS       | 11      | 13      | 13     |

e-Estimated.

a-Maximum gage height, 9.15 ft, May 26, backwater from South Platte River.

b-Maximum gage height, 10.41 ft, Aug 24, 1992, backwater from South Platte River.

**394115105525600 CLEAR CREEK NEAR LOVELAND PASS, CO**

LOCATION.--Lat 39°41'15", long 105°52'56", in NW<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec.22, T.4 S., R.76 W., Clear Creek County, Hydrologic Unit 10190004, on left bank 0.25 mi downstream from Loveland Valley Ski Area lower parking lot and 2.0 mi north of Loveland Pass.

DRAINAGE AREA.--5.86 mi<sup>2</sup>.

PERIOD OF RECORD.--Seasonal record May 1995 to September 1996 (discontinued).

GAGE.--Water-stage recorder. Elevation of gage is 10,615 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 PERIOD OF RECORD.--Maximum discharge during period of seasonal operation, 314 ft<sup>3</sup>/s, July 8, 1995, gage height, 1.66 ft; maximum gage height, 1.80 ft, June 6, 1996; minimum daily discharge 1.4 ft<sup>3</sup>/s, May 1 and 5, 1995.

EXTREMES FOR CURRENT PERIOD.--Maximum discharge during period of seasonal operation, 104 ft<sup>3</sup>/s, June 22, at 0815, gage height, 1.71 ft; maximum gage height, 1.80 ft, June 6 at 1815; minimum daily, 1.8 ft<sup>3</sup>/s, April 19 and 20.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

| DAY   | OCT | NOV | DEC | JAN | FEB | MAR | APR  | MAY   | JUN  | JUL  | AUG   | SEP   |
|-------|-----|-----|-----|-----|-----|-----|------|-------|------|------|-------|-------|
| 1     | --- | --- | --- | --- | --- | --- | e2.0 | 3.1   | 21   | 63   | 14    | 5.3   |
| 2     | --- | --- | --- | --- | --- | --- | e2.1 | 3.2   | 23   | 58   | 13    | 5.1   |
| 3     | --- | --- | --- | --- | --- | --- | e2.0 | 3.6   | 27   | 61   | 13    | 4.9   |
| 4     | --- | --- | --- | --- | --- | --- | e1.9 | 5.1   | 32   | 60   | 13    | 4.8   |
| 5     | --- | --- | --- | --- | --- | --- | e2.0 | 7.8   | 41   | 60   | 12    | 4.8   |
| 6     | --- | --- | --- | --- | --- | --- | e2.0 | 10    | 47   | 58   | 11    | 5.6   |
| 7     | --- | --- | --- | --- | --- | --- | e2.1 | 12    | 44   | 54   | 11    | 4.9   |
| 8     | --- | --- | --- | --- | --- | --- | e2.2 | 14    | 53   | 46   | 10    | 4.6   |
| 9     | --- | --- | --- | --- | --- | --- | e2.4 | 15    | 63   | 40   | 9.6   | 4.6   |
| 10    | --- | --- | --- | --- | --- | --- | e2.6 | 15    | 69   | 41   | 9.1   | 4.4   |
| 11    | --- | --- | --- | --- | --- | --- | e2.3 | 16    | 78   | 37   | 8.6   | 4.3   |
| 12    | --- | --- | --- | --- | --- | --- | e2.1 | 21    | 78   | 34   | 8.3   | 5.5   |
| 13    | --- | --- | --- | --- | --- | --- | e2.0 | 25    | 77   | 33   | 8.2   | 5.6   |
| 14    | --- | --- | --- | --- | --- | --- | e1.9 | 27    | 72   | 30   | 8.1   | 4.9   |
| 15    | --- | --- | --- | --- | --- | --- | e2.0 | 28    | 74   | 28   | 7.9   | 5.0   |
| 16    | --- | --- | --- | --- | --- | --- | e2.1 | 36    | 75   | 26   | 7.6   | 4.3   |
| 17    | --- | --- | --- | --- | --- | --- | 2.3  | 38    | 74   | 26   | 7.4   | 4.3   |
| 18    | --- | --- | --- | --- | --- | --- | 2.2  | 38    | 72   | 27   | 7.3   | 4.5   |
| 19    | --- | --- | --- | --- | --- | --- | 1.8  | 46    | 69   | 25   | 7.7   | 4.8   |
| 20    | --- | --- | --- | --- | --- | --- | 1.8  | 43    | 72   | 23   | 7.4   | 4.6   |
| 21    | --- | --- | --- | --- | --- | --- | 2.4  | 36    | 79   | 21   | 6.8   | 5.1   |
| 22    | --- | --- | --- | --- | --- | --- | 2.4  | 40    | 85   | 19   | 8.8   | 5.5   |
| 23    | --- | --- | --- | --- | --- | --- | 3.0  | 41    | 85   | 18   | 7.6   | 5.7   |
| 24    | --- | --- | --- | --- | --- | --- | 4.2  | 37    | 82   | 17   | 6.9   | 7.3   |
| 25    | --- | --- | --- | --- | --- | --- | 4.4  | 34    | 74   | 16   | 6.5   | 5.5   |
| 26    | --- | --- | --- | --- | --- | --- | 4.0  | 28    | 70   | 15   | 6.6   | 4.2   |
| 27    | --- | --- | --- | --- | --- | --- | 3.8  | 24    | 73   | 14   | 6.1   | 3.7   |
| 28    | --- | --- | --- | --- | --- | --- | 3.2  | 21    | 71   | 13   | 6.2   | 5.5   |
| 29    | --- | --- | --- | --- | --- | --- | 3.1  | 22    | 66   | 13   | 5.9   | 5.7   |
| 30    | --- | --- | --- | --- | --- | --- | 3.0  | 22    | 65   | 14   | 5.6   | 5.5   |
| 31    | --- | --- | --- | --- | --- | --- | ---  | 21    | ---  | 14   | 5.4   | ---   |
| TOTAL | --- | --- | --- | --- | --- | --- | 75.3 | 732.8 | 1911 | 1004 | 266.6 | 150.5 |
| MEAN  | --- | --- | --- | --- | --- | --- | 2.51 | 23.6  | 63.7 | 32.4 | 8.60  | 5.02  |
| MAX   | --- | --- | --- | --- | --- | --- | 4.4  | 46    | 85   | 63   | 14    | 7.3   |
| MIN   | --- | --- | --- | --- | --- | --- | 1.8  | 3.1   | 21   | 13   | 5.4   | 3.7   |
| AC-FT | --- | --- | --- | --- | --- | --- | 149  | 1450  | 3790 | 1990 | 529   | 299   |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 1996, BY WATER YEAR (WY)

|      | 1995 | 1996 | 1995 | 1996 | 1995 | 1996 | 1995 | 1996 | 1995 | 1996 |
|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | ---  | ---  | ---  | ---  | 2.51 | 13.8 | 61.4 | 51.8 | 14.1 | 7.38 |
| MAX  | ---  | ---  | ---  | ---  | 2.51 | 23.6 | 63.7 | 71.2 | 19.6 | 9.75 |
| (WY) | ---  | ---  | ---  | ---  | 1996 | 1996 | 1996 | 1995 | 1995 | 1995 |
| MIN  | ---  | ---  | ---  | ---  | 2.51 | 4.05 | 59.1 | 32.4 | 8.60 | 5.02 |
| (WY) | ---  | ---  | ---  | ---  | 1996 | 1995 | 1995 | 1996 | 1996 | 1996 |

e-Estimated.

**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.--Not determined.

**WATER-DISCHARGE RECORDS**

PERIOD OF RECORD.--May to September 1996.

GAGE.--Water-stage recorder. 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.

EXTREMES FOR CURRENT PERIOD.--Maximum daily discharge during period May to September, 19 ft<sup>3</sup>/s, May 19, 1996, during period of estimated record. Maximum recorded discharge, 16 ft<sup>3</sup>/s, June 15, at 1800, gage height 7.70 ft; minimum daily, 0.44 ft<sup>3</sup>/s, Sept. 4 and 5.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

| DAY   | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY   | JUN   | JUL  | AUG   | SEP   |
|-------|-----|-----|-----|-----|-----|-----|-----|-------|-------|------|-------|-------|
| 1     | --- | --- | --- | --- | --- | --- | --- | e1.4  | 6.5   | 3.3  | 1.0   | .46   |
| 2     | --- | --- | --- | --- | --- | --- | --- | e1.6  | 6.9   | 3.1  | .96   | .45   |
| 3     | --- | --- | --- | --- | --- | --- | --- | e1.9  | 7.7   | 3.1  | 1.0   | .45   |
| 4     | --- | --- | --- | --- | --- | --- | --- | e2.3  | 7.0   | 3.7  | .97   | .44   |
| 5     | --- | --- | --- | --- | --- | --- | --- | e3.0  | 8.0   | 3.6  | .89   | .44   |
| 6     | --- | --- | --- | --- | --- | --- | --- | e4.0  | 7.9   | 3.1  | .83   | .69   |
| 7     | --- | --- | --- | --- | --- | --- | --- | e4.2  | 6.9   | 2.9  | .86   | .57   |
| 8     | --- | --- | --- | --- | --- | --- | --- | e5.0  | 6.5   | 2.8  | .87   | .51   |
| 9     | --- | --- | --- | --- | --- | --- | --- | e4.6  | 6.1   | 2.8  | .80   | .49   |
| 10    | --- | --- | --- | --- | --- | --- | --- | e5.0  | 5.8   | 3.0  | .75   | .49   |
| 11    | --- | --- | --- | --- | --- | --- | --- | e5.8  | 5.5   | 2.6  | .72   | .48   |
| 12    | --- | --- | --- | --- | --- | --- | --- | e6.6  | 5.3   | 2.5  | .68   | .55   |
| 13    | --- | --- | --- | --- | --- | --- | --- | e7.4  | 5.2   | 2.4  | .64   | .61   |
| 14    | --- | --- | --- | --- | --- | --- | --- | e8.6  | 4.9   | 2.2  | .66   | .56   |
| 15    | --- | --- | --- | --- | --- | --- | --- | e9.8  | 7.5   | 2.1  | .63   | .70   |
| 16    | --- | --- | --- | --- | --- | --- | --- | e11   | 6.0   | 2.1  | .62   | .60   |
| 17    | --- | --- | --- | --- | --- | --- | --- | e12   | 5.2   | 1.9  | .58   | .57   |
| 18    | --- | --- | --- | --- | --- | --- | --- | e13   | 4.7   | 2.2  | .53   | .63   |
| 19    | --- | --- | --- | --- | --- | --- | --- | e19   | 4.5   | 2.2  | .51   | .77   |
| 20    | --- | --- | --- | --- | --- | --- | --- | e17   | 4.3   | 2.0  | .51   | .72   |
| 21    | --- | --- | --- | --- | --- | --- | --- | e16   | 4.4   | 1.8  | .65   | .75   |
| 22    | --- | --- | --- | --- | --- | --- | --- | e18   | 5.4   | 1.6  | .63   | .75   |
| 23    | --- | --- | --- | --- | --- | --- | --- | e17   | 4.4   | 1.5  | .70   | .78   |
| 24    | --- | --- | --- | --- | --- | --- | --- | e13   | 4.1   | 1.4  | .61   | 1.1   |
| 25    | --- | --- | --- | --- | --- | --- | --- | e14   | 3.8   | 1.4  | .54   | .97   |
| 26    | --- | --- | --- | --- | --- | --- | --- | e11   | 3.8   | 1.4  | .52   | 1.1   |
| 27    | --- | --- | --- | --- | --- | --- | --- | e10   | 4.0   | 1.3  | .56   | 1.1   |
| 28    | --- | --- | --- | --- | --- | --- | --- | e9.8  | 3.9   | 1.3  | .57   | 1.1   |
| 29    | --- | --- | --- | --- | --- | --- | --- | e9.4  | 3.8   | 1.6  | .54   | 1.3   |
| 30    | --- | --- | --- | --- | --- | --- | --- | e10   | 3.5   | 1.4  | .50   | 1.1   |
| 31    | --- | --- | --- | --- | --- | --- | --- | e8.8  | ---   | 1.2  | .48   | ---   |
| TOTAL | --- | --- | --- | --- | --- | --- | --- | 280.2 | 163.5 | 69.5 | 21.31 | 21.23 |
| MEAN  | --- | --- | --- | --- | --- | --- | --- | 9.04  | 5.45  | 2.24 | .69   | .71   |
| MAX   | --- | --- | --- | --- | --- | --- | --- | 19    | 8.0   | 3.7  | 1.0   | 1.3   |
| MIN   | --- | --- | --- | --- | --- | --- | --- | 1.4   | 3.5   | 1.2  | .48   | .44   |
| AC-FT | --- | --- | --- | --- | --- | --- | --- | 556   | 324   | 138  | 42    | 42    |

e-Estimated.



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

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM @ 25 DEG. C), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| 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    | ---      | --- | ---  | ---   | --- | ---  | ---    | --- | ---  | ---       | --- | ---  |
| 22    | ---      | --- | ---  | ---   | --- | ---  | ---    | --- | ---  | ---       | --- | ---  |
| 23    | ---      | --- | ---  | ---   | --- | ---  | ---    | --- | ---  | ---       | --- | ---  |
| 24    | ---      | --- | ---  | ---   | --- | ---  | ---    | --- | ---  | ---       | --- | ---  |
| 25    | ---      | --- | ---  | ---   | --- | ---  | ---    | --- | ---  | ---       | --- | ---  |
| 26    | ---      | --- | ---  | ---   | --- | ---  | ---    | --- | ---  | ---       | --- | ---  |
| 27    | ---      | --- | ---  | ---   | --- | ---  | ---    | --- | ---  | ---       | --- | ---  |
| 28    | ---      | --- | ---  | ---   | --- | ---  | ---    | --- | ---  | ---       | --- | ---  |
| 29    | ---      | --- | ---  | ---   | --- | ---  | ---    | --- | ---  | ---       | --- | ---  |
| 30    | ---      | --- | ---  | ---   | --- | ---  | ---    | --- | ---  | ---       | --- | ---  |
| 31    | ---      | --- | ---  | ---   | --- | ---  | ---    | --- | ---  | ---       | --- | ---  |
| MONTH | ---      | --- | ---  | ---   | --- | ---  | ---    | --- | ---  | ---       | --- | ---  |
|       | JUNE     |     |      | JULY  |     |      | AUGUST |     |      | SEPTEMBER |     |      |
| 1     | 56       | 48  | 53   | 96    | 88  | 92   | 125    | 106 | 114  | 160       | 146 | 152  |
| 2     | 57       | 47  | 52   | 98    | 91  | 94   | 124    | 113 | 118  | 159       | 150 | 155  |
| 3     | 56       | 44  | 51   | 96    | 93  | 94   | 122    | 107 | 113  | 161       | 148 | 155  |
| 4     | 55       | 46  | 52   | 99    | 69  | 87   | 123    | 110 | 115  | 162       | 151 | 157  |
| 5     | 57       | 42  | 51   | 91    | 74  | 84   | 131    | 112 | 120  | 163       | 152 | 158  |
| 6     | 53       | 45  | 49   | 96    | 88  | 92   | 134    | 117 | 125  | ---       | --- | ---  |
| 7     | 55       | 46  | 51   | 100   | 90  | 95   | 132    | 118 | 122  | ---       | --- | ---  |
| 8     | 58       | 49  | 53   | 99    | 94  | 96   | 121    | 116 | 118  | 143       | 133 | 137  |
| 9     | 60       | 51  | 56   | 101   | 94  | 96   | 133    | 118 | 123  | 144       | 139 | 142  |
| 10    | 61       | 54  | 58   | 101   | 87  | 92   | 139    | 124 | 130  | 145       | 137 | 141  |
| 11    | 64       | 57  | 60   | 104   | 93  | 98   | 144    | 126 | 134  | 146       | 140 | 143  |
| 12    | 65       | 59  | 62   | 103   | 98  | 101  | 150    | 130 | 139  | 146       | 107 | 138  |
| 13    | 66       | 60  | 63   | 105   | 97  | 101  | 149    | 136 | 143  | 128       | 107 | 120  |
| 14    | 68       | 61  | 65   | 109   | 100 | 104  | 148    | 136 | 140  | 131       | 117 | 125  |
| 15    | 68       | 48  | 61   | 109   | 101 | 105  | 148    | 134 | 138  | 119       | 109 | 113  |
| 16    | 68       | 53  | 64   | 109   | 101 | 104  | 150    | 136 | 142  | 126       | 112 | 119  |
| 17    | 74       | 67  | 70   | 114   | 104 | 109  | 150    | 139 | 143  | 126       | 116 | 124  |
| 18    | 78       | 71  | 75   | 112   | 89  | 102  | 154    | 136 | 142  | 121       | 96  | 115  |
| 19    | 81       | 76  | 79   | 105   | 93  | 99   | 154    | 143 | 148  | 112       | 92  | 103  |
| 20    | 84       | 79  | 81   | 110   | 99  | 103  | 150    | 140 | 144  | 109       | 99  | 104  |
| 21    | 84       | 68  | 80   | 115   | 103 | 108  | 244    | 96  | 133  | 110       | 97  | 103  |
| 22    | 72       | 66  | 69   | 117   | 106 | 111  | 130    | 108 | 123  | 107       | 98  | 102  |
| 23    | 83       | 72  | 77   | 120   | 107 | 113  | 133    | 101 | 121  | 106       | 97  | 103  |
| 24    | 86       | 80  | 82   | 117   | 109 | 113  | 136    | 113 | 124  | 102       | 85  | 93   |
| 25    | 89       | 82  | 85   | 116   | 109 | 112  | 144    | 129 | 135  | 98        | 87  | 93   |
| 26    | 91       | 78  | 86   | 114   | 105 | 111  | 144    | 138 | 140  | 96        | 88  | 90   |
| 27    | 86       | 78  | 82   | 116   | 107 | 111  | 159    | 118 | 136  | 111       | 85  | 97   |
| 28    | 87       | 79  | 83   | 115   | 106 | 110  | 134    | 119 | 128  | 103       | 73  | 92   |
| 29    | 89       | 80  | 84   | 109   | 95  | 101  | 142    | 126 | 133  | 87        | 74  | 80   |
| 30    | 93       | 86  | 89   | 116   | 102 | 107  | 147    | 137 | 141  | 91        | 77  | 84   |
| 31    | ---      | --- | ---  | 115   | 108 | 111  | 155    | 140 | 146  | ---       | --- | ---  |
| MONTH | 93       | 42  | 67   | 120   | 69  | 102  | 244    | 96  | 131  | ---       | --- | ---  |



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

TEMPERATURE, WATER (DEG. C) WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DAY   | MAX  | MIN | MEAN |
|-------|------|-----|------|------|-----|------|------|-----|------|------|-----|------|
|       |      |     |      |      |     |      |      |     |      |      |     |      |
| 1     | 5.2  | .8  | 2.6  | 12.9 | 4.5 | 8.1  | 12.8 | 4.6 | 8.3  | 10.6 | 2.9 | 6.2  |
| 2     | 6.3  | .2  | 3.1  | 11.5 | 4.8 | 7.9  | 12.0 | 5.4 | 8.3  | 9.1  | 4.2 | 6.3  |
| 3     | 7.1  | .7  | 3.8  | 8.9  | 5.2 | 7.2  | 12.0 | 5.4 | 8.1  | 10.5 | 3.3 | 6.3  |
| 4     | 6.0  | 1.6 | 3.7  | 11.9 | 4.8 | 7.6  | 11.9 | 5.4 | 7.8  | 10.1 | 3.6 | 6.5  |
| 5     | 8.2  | 1.9 | 4.5  | 12.3 | 5.8 | 8.6  | 12.8 | 3.8 | 7.3  | 10.8 | 3.9 | 6.8  |
| 6     | 7.9  | 1.4 | 4.6  | 14.0 | 5.6 | 8.9  | 13.0 | 3.8 | 7.7  | 6.9  | 4.8 | 6.2  |
| 7     | 8.8  | 1.1 | 5.0  | 14.0 | 5.5 | 8.9  | 9.5  | 4.7 | 7.0  | 8.4  | 2.6 | 5.0  |
| 8     | 9.8  | 1.9 | 5.5  | 11.5 | 5.6 | 8.3  | 8.6  | 3.6 | 6.2  | 9.3  | 1.8 | 5.0  |
| 9     | 9.1  | 2.9 | 5.5  | 10.4 | 6.0 | 8.2  | 10.7 | 4.1 | 7.0  | 7.8  | 2.4 | 5.1  |
| 10    | 8.4  | 2.8 | 5.2  | 13.2 | 5.8 | 8.6  | 10.9 | 3.0 | 6.4  | 8.1  | 2.4 | 5.1  |
| 11    | 10.0 | 2.6 | 5.5  | 13.8 | 5.1 | 8.6  | 12.2 | 2.6 | 6.8  | 8.4  | 2.4 | 5.3  |
| 12    | 7.7  | 2.6 | 4.9  | 11.7 | 5.9 | 8.7  | 12.2 | 3.7 | 7.3  | 8.9  | 4.3 | 6.2  |
| 13    | 8.9  | 3.0 | 5.5  | 11.9 | 6.6 | 8.6  | 9.6  | 3.9 | 6.7  | 8.2  | 4.6 | 6.2  |
| 14    | 6.5  | 3.5 | 5.0  | 13.8 | 5.7 | 8.9  | 9.2  | 4.7 | 7.0  | 6.8  | 2.4 | 4.3  |
| 15    | 5.0  | 3.4 | 4.4  | 13.5 | 5.3 | 8.7  | 11.0 | 4.4 | 7.4  | 8.4  | 2.8 | 4.8  |
| 16    | 10.2 | 2.2 | 5.5  | 11.3 | 6.7 | 8.8  | 10.9 | 4.5 | 7.2  | 8.2  | 1.5 | 4.5  |
| 17    | 11.0 | 3.1 | 6.4  | 13.2 | 6.8 | 9.6  | 9.6  | 3.6 | 6.5  | 4.7  | 2.2 | 3.2  |
| 18    | 11.1 | 2.9 | 6.4  | 10.8 | 7.0 | 8.7  | 11.8 | 4.7 | 7.5  | 4.3  | .0  | 1.6  |
| 19    | 11.4 | 3.1 | 6.6  | 13.9 | 5.7 | 9.0  | 9.9  | 5.6 | 7.4  | 1.9  | .0  | .6   |
| 20    | 12.0 | 3.8 | 7.0  | 13.1 | 5.9 | 9.3  | 9.8  | 4.5 | 6.9  | 4.3  | .1  | 1.6  |
| 21    | 8.7  | 4.7 | 6.5  | 14.5 | 5.6 | 9.2  | 9.8  | 5.8 | 7.2  | 6.5  | .4  | 2.8  |
| 22    | 9.5  | 4.8 | 6.7  | 13.7 | 4.7 | 8.3  | 10.1 | 5.1 | 7.0  | 7.0  | 1.8 | 3.9  |
| 23    | 11.2 | 2.8 | 6.5  | 14.1 | 5.7 | 8.9  | 8.2  | 4.1 | 6.3  | 5.2  | 2.2 | 3.5  |
| 24    | 10.6 | 4.2 | 7.0  | 12.2 | 4.8 | 8.2  | 11.6 | 3.7 | 7.0  | 7.4  | 1.6 | 3.7  |
| 25    | 11.5 | 3.5 | 6.7  | 11.5 | 6.3 | 8.5  | 11.8 | 3.6 | 7.0  | 5.5  | .7  | 2.9  |
| 26    | 12.8 | 4.0 | 7.4  | 10.2 | 4.8 | 7.3  | 8.1  | 4.7 | 6.5  | .7   | .0  | .0   |
| 27    | 9.7  | 5.9 | 7.6  | 12.2 | 4.3 | 7.5  | 8.1  | 5.1 | 6.3  | .1   | .0  | .0   |
| 28    | 9.5  | 5.3 | 7.1  | 11.6 | 5.4 | 8.0  | 8.3  | 3.8 | 6.0  | 3.0  | .0  | 1.0  |
| 29    | 12.0 | 3.8 | 7.2  | 8.7  | 7.0 | 8.0  | 11.7 | 3.8 | 7.1  | 5.7  | .0  | 2.0  |
| 30    | 11.5 | 5.7 | 8.1  | 14.0 | 5.2 | 8.4  | 11.1 | 4.4 | 7.3  | 6.5  | .3  | 2.8  |
| 31    | ---  | --- | ---  | 11.7 | 4.5 | 7.8  | 10.4 | 3.5 | 6.3  | ---  | --- | ---  |
| MONTH | 12.8 | .2  | 5.7  | 14.5 | 4.3 | 8.4  | 13.0 | 2.6 | 7.1  | 10.8 | .0  | 4.0  |

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

PRECIPITATION RECORDS

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

GAGE.--Tipping bucket rain gage (no wind vanes 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, 0.52 in., Sept. 6, 1996.

EXTREMES FOR CURRENT YEAR.--Maximum daily rainfall, 0.52 in., Sept. 6.

PRECIPITATION INCHES, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY SUM VALUES

| DAY   | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG  | SEP  |
|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|
| 1     | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | .00  | .00  |
| 2     | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | .00  | .00  |
| 3     | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | .11  | .00  |
| 4     | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | .00  | .00  |
| 5     | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | .00  | .00  |
| 6     | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | .00  | .52  |
| 7     | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | .12  | .01  |
| 8     | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | .02  | .00  |
| 9     | --- | --- | --- | --- | --- | --- | --- | --- | --- | .13 | .00  | .00  |
| 10    | --- | --- | --- | --- | --- | --- | --- | --- | --- | .01 | .00  | .01  |
| 11    | --- | --- | --- | --- | --- | --- | --- | --- | --- | .01 | .00  | .01  |
| 12    | --- | --- | --- | --- | --- | --- | --- | --- | --- | .00 | .00  | .28  |
| 13    | --- | --- | --- | --- | --- | --- | --- | --- | --- | .00 | .00  | .02  |
| 14    | --- | --- | --- | --- | --- | --- | --- | --- | --- | .00 | .00  | .13  |
| 15    | --- | --- | --- | --- | --- | --- | --- | --- | --- | .02 | .01  | .33  |
| 16    | --- | --- | --- | --- | --- | --- | --- | --- | --- | .00 | .00  | .00  |
| 17    | --- | --- | --- | --- | --- | --- | --- | --- | --- | .00 | .06  | .00  |
| 18    | --- | --- | --- | --- | --- | --- | --- | --- | --- | .17 | .00  | .12  |
| 19    | --- | --- | --- | --- | --- | --- | --- | --- | --- | .03 | .02  | .00  |
| 20    | --- | --- | --- | --- | --- | --- | --- | --- | --- | .00 | .07  | .06  |
| 21    | --- | --- | --- | --- | --- | --- | --- | --- | --- | .00 | .25  | .31  |
| 22    | --- | --- | --- | --- | --- | --- | --- | --- | --- | .00 | .06  | .08  |
| 23    | --- | --- | --- | --- | --- | --- | --- | --- | --- | .00 | .14  | .20  |
| 24    | --- | --- | --- | --- | --- | --- | --- | --- | --- | .00 | .00  | .35  |
| 25    | --- | --- | --- | --- | --- | --- | --- | --- | --- | .00 | .00  | .06  |
| 26    | --- | --- | --- | --- | --- | --- | --- | --- | --- | .03 | .00  | .00  |
| 27    | --- | --- | --- | --- | --- | --- | --- | --- | --- | .01 | .13  | .00  |
| 28    | --- | --- | --- | --- | --- | --- | --- | --- | --- | .16 | .06  | .29  |
| 29    | --- | --- | --- | --- | --- | --- | --- | --- | --- | .10 | .00  | .19  |
| 30    | --- | --- | --- | --- | --- | --- | --- | --- | --- | .01 | .00  | .07  |
| 31    | --- | --- | --- | --- | --- | --- | --- | --- | --- | .01 | .00  | ---  |
| TOTAL | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | 1.05 | 3.04 |

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

LOCATION.--Lat 39°39'09", long 105°42'25", in SE<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec.31, T.4 S., R.74 W., Clear Creek County, Hydrologic Unit 10190004, on left bank at security fence, 6.5 mi south of Georgetown.

DRAINAGE AREA.--11.8 mi<sup>2</sup>.

**WATER-DISCHARGE RECORDS**

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

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 10,100 ft above sea level, from topographic map.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

| DAY   | OCT   | NOV   | DEC   | JAN   | FEB  | MAR  | APR   | MAY   | JUN  | JUL  | AUG   | SEP   |
|-------|-------|-------|-------|-------|------|------|-------|-------|------|------|-------|-------|
| 1     | 9.6   | 6.6   | 4.4   | e3.7  | e3.1 | e2.7 | e3.4  | 4.1   | 26   | 30   | 16    | 7.1   |
| 2     | e9.5  | 6.8   | 4.7   | e3.7  | e3.1 | e2.8 | e3.4  | 5.2   | 25   | e30  | 16    | 6.9   |
| 3     | e9.4  | 6.4   | 4.7   | e3.7  | e3.2 | e2.7 | e3.5  | 7.6   | 26   | e30  | 16    | 6.8   |
| 4     | e9.7  | 5.3   | 4.7   | e3.7  | e3.2 | e2.7 | e3.6  | 11    | 27   | e30  | 15    | 6.7   |
| 5     | 9.2   | 5.9   | 4.9   | e3.7  | e3.3 | e2.6 | e3.7  | 13    | 28   | e31  | 15    | 6.6   |
| 6     | 9.8   | 6.1   | 5.0   | e3.5  | e3.2 | e2.6 | e3.7  | 14    | 30   | e30  | 15    | 8.4   |
| 7     | 9.2   | 5.6   | 5.1   | e3.5  | e3.0 | e2.6 | e3.7  | 17    | 30   | e30  | 15    | 7.1   |
| 8     | 9.0   | 5.9   | 4.9   | e3.5  | e2.9 | e2.6 | e3.7  | 18    | 30   | e30  | 14    | 6.6   |
| 9     | 8.9   | 5.7   | 5.3   | e3.5  | e3.0 | e2.6 | e4.0  | 19    | 30   | 29   | 14    | 6.4   |
| 10    | 8.7   | e5.6  | 5.2   | e3.5  | e2.9 | e2.6 | e4.3  | 20    | 31   | 28   | 13    | 6.2   |
| 11    | 8.6   | e5.8  | 5.1   | e3.4  | e2.9 | e2.5 | e4.5  | 22    | 30   | 27   | 13    | 5.9   |
| 12    | 8.6   | e5.8  | 4.9   | e3.4  | e2.9 | 2.7  | e4.0  | 25    | 30   | 26   | 12    | 6.4   |
| 13    | 8.6   | 5.6   | 4.8   | e3.4  | e2.9 | 3.0  | 3.6   | 29    | 30   | 25   | 12    | 6.6   |
| 14    | 8.4   | 5.4   | e4.7  | e3.5  | e2.9 | 3.1  | 3.4   | 30    | 30   | 25   | 12    | 6.3   |
| 15    | 8.4   | 5.4   | e4.5  | e3.4  | e2.9 | 3.1  | e3.3  | 32    | 30   | 25   | 12    | 7.0   |
| 16    | 8.3   | 5.4   | e4.7  | e3.4  | e2.9 | 3.0  | e3.5  | 34    | 31   | 24   | 11    | 6.4   |
| 17    | 8.1   | 5.4   | e4.4  | e3.4  | e2.9 | e3.1 | e3.5  | 36    | 31   | 24   | 11    | 7.0   |
| 18    | 8.0   | 5.3   | e4.1  | e3.3  | e3.0 | e3.0 | e3.6  | 34    | 31   | 24   | 10    | 7.5   |
| 19    | 7.9   | 5.3   | e4.1  | e3.3  | e2.9 | e2.9 | e3.6  | 34    | 31   | 25   | 10    | 8.0   |
| 20    | 7.9   | 5.2   | e4.1  | e3.3  | e2.9 | e2.9 | e3.5  | 33    | 30   | 24   | 9.5   | 7.5   |
| 21    | 7.7   | 5.2   | e4.1  | e3.2  | e3.0 | e3.0 | e3.5  | 32    | 30   | 23   | 10    | 7.3   |
| 22    | 7.6   | 5.1   | e4.1  | e3.2  | e2.9 | e3.2 | e3.4  | 32    | 30   | 22   | 9.8   | 7.0   |
| 23    | e7.3  | 5.0   | e4.1  | e3.2  | e2.8 | e3.2 | e3.5  | 31    | 30   | 21   | 9.6   | 7.7   |
| 24    | e7.2  | 5.1   | e4.1  | e3.2  | e2.8 | e3.2 | e3.9  | 30    | 30   | 20   | 9.2   | 10    |
| 25    | 7.2   | 5.0   | e4.1  | e3.1  | e2.8 | e3.0 | e4.1  | 29    | 30   | 20   | 8.8   | 7.9   |
| 26    | 6.9   | 4.9   | e3.9  | e3.1  | e2.8 | e3.0 | e3.9  | 28    | 30   | 19   | 8.5   | 7.8   |
| 27    | 6.9   | 4.1   | e3.9  | e3.1  | e2.7 | e3.1 | e4.1  | 26    | 30   | 18   | 8.7   | 6.9   |
| 28    | 6.8   | e4.3  | e3.9  | e3.1  | e2.8 | e3.1 | e4.1  | 26    | 30   | 17   | 8.5   | 8.0   |
| 29    | 6.8   | e4.6  | e3.9  | e3.1  | e2.8 | e3.3 | e4.1  | 27    | 29   | 18   | 7.9   | 8.6   |
| 30    | 6.8   | e4.6  | e3.9  | e3.1  | ---  | e3.3 | e4.1  | 27    | 30   | 16   | 7.5   | 8.0   |
| 31    | 6.7   | ---   | e3.9  | e3.1  | ---  | e3.3 | ---   | 26    | ---  | 16   | 7.2   | ---   |
| TOTAL | 253.7 | 162.4 | 138.2 | 104.3 | 85.4 | 90.5 | 112.2 | 751.9 | 886  | 757  | 357.2 | 216.6 |
| MEAN  | 8.18  | 5.41  | 4.46  | 3.36  | 2.94 | 2.92 | 3.74  | 24.3  | 29.5 | 24.4 | 11.5  | 7.22  |
| MAX   | 9.8   | 6.8   | 5.3   | 3.7   | 3.3  | 3.3  | 4.5   | 36    | 31   | 31   | 16    | 10    |
| MIN   | 6.7   | 4.1   | 3.9   | 3.1   | 2.7  | 2.5  | 3.3   | 4.1   | 25   | 16   | 7.2   | 5.9   |
| AC-FT | 503   | 322   | 274   | 207   | 169  | 180  | 223   | 1490  | 1760 | 1500 | 709   | 430   |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 1996, BY WATER YEAR (WY)

|      | 1994 | 1995 | 1996 | 1995 | 1996 | 1995 | 1996 | 1995 | 1996 | 1995 | 1996 | 1995 | 1996 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 6.75 | 4.85 | 3.73 | 2.61 | 2.39 | 2.47 | 2.86 | 15.4 | 46.8 | 40.3 | 17.5 | 10.1 |      |
| MAX  | 8.18 | 5.41 | 4.46 | 3.36 | 2.94 | 2.92 | 3.74 | 24.3 | 64.2 | 56.1 | 23.4 | 12.9 |      |
| (WY) | 1996 | 1996 | 1996 | 1996 | 1996 | 1996 | 1996 | 1996 | 1995 | 1995 | 1995 | 1995 | 1995 |
| MIN  | 5.33 | 4.29 | 3.01 | 1.85 | 1.81 | 2.02 | 1.98 | 6.58 | 29.5 | 24.4 | 11.5 | 7.22 |      |
| (WY) | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1996 | 1996 | 1996 | 1996 | 1996 |

## SUMMARY STATISTICS

## FOR 1995 CALENDAR YEAR

## FOR 1996 WATER YEAR

## WATER YEARS 1994 - 1996

|                          |        |        |  |  |  |       |        |  |  |                  |        |      |      |
|--------------------------|--------|--------|--|--|--|-------|--------|--|--|------------------|--------|------|------|
| ANNUAL TOTAL             | 5766.4 | 3915.4 |  |  |  |       |        |  |  |                  |        |      |      |
| ANNUAL MEAN              | 15.8   | 10.7   |  |  |  |       |        |  |  | 13.0             |        |      |      |
| HIGHEST ANNUAL MEAN      |        |        |  |  |  |       |        |  |  | 15.3             |        |      | 1995 |
| LOWEST ANNUAL MEAN       |        |        |  |  |  |       |        |  |  | 10.7             |        |      | 1996 |
| HIGHEST DAILY MEAN       | 107    | Jun 18 |  |  |  | 36    | May 17 |  |  | 107              | Jun 18 | 1995 |      |
| LOWEST DAILY MEAN        | a 1.6  | Feb 4  |  |  |  | e 2.5 | Mar 11 |  |  | a 1.6            | Feb 4  | 1995 |      |
| ANNUAL SEVEN-DAY MINIMUM | 1.6    | Feb 4  |  |  |  | 2.6   | Mar 5  |  |  | b 1.6            | Feb 4  | 1995 |      |
| INSTANTANEOUS PEAK FLOW  |        |        |  |  |  | 42    | May 19 |  |  | b Not determined |        |      |      |
| INSTANTANEOUS PEAK STAGE |        |        |  |  |  | 1.29  | May 19 |  |  | 3.43             | Jun 19 | 1995 |      |
| ANNUAL RUNOFF (AC-FT)    | 11440  | 7770   |  |  |  | 9430  |        |  |  |                  |        |      |      |
| 10 PERCENT EXCEEDS       | 58     | 30     |  |  |  | 31    |        |  |  |                  |        |      |      |
| 50 PERCENT EXCEEDS       | 5.4    | 6.2    |  |  |  | 5.2   |        |  |  |                  |        |      |      |
| 90 PERCENT EXCEEDS       | 1.8    | 3.0    |  |  |  | 1.9   |        |  |  |                  |        |      |      |

e-Estimated.

a-Also occurred Feb 5-13, 1995

b-Probably occurred Jun 19, 1995.



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

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM @ 25 DEG. C), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DAY   | FEBRUARY |     |      | MARCH |     |      | APRIL  |     |      | MAY       |     |      |
|-------|----------|-----|------|-------|-----|------|--------|-----|------|-----------|-----|------|
|       | MAX      | MIN | MEAN | MAX   | MIN | MEAN | MAX    | MIN | MEAN | MAX       | MIN | MEAN |
| 1     | ---      | --- | ---  | ---   | --- | ---  | ---    | --- | ---  | 97        | 91  | 94   |
| 2     | ---      | --- | ---  | ---   | --- | ---  | ---    | --- | ---  | 96        | 88  | 92   |
| 3     | ---      | --- | ---  | ---   | --- | ---  | ---    | --- | ---  | 95        | 84  | 90   |
| 4     | ---      | --- | ---  | ---   | --- | ---  | ---    | --- | ---  | 92        | 82  | 88   |
| 5     | ---      | --- | ---  | ---   | --- | ---  | ---    | --- | ---  | 90        | 80  | 85   |
| 6     | ---      | --- | ---  | ---   | --- | ---  | ---    | --- | ---  | 87        | 79  | 83   |
| 7     | ---      | --- | ---  | ---   | --- | ---  | ---    | --- | ---  | 84        | 77  | 81   |
| 8     | ---      | --- | ---  | ---   | --- | ---  | ---    | --- | ---  | 82        | 75  | 79   |
| 9     | ---      | --- | ---  | ---   | --- | ---  | ---    | --- | ---  | 77        | 71  | 75   |
| 10    | ---      | --- | ---  | ---   | --- | ---  | ---    | --- | ---  | 76        | 71  | 73   |
| 11    | ---      | --- | ---  | ---   | --- | ---  | ---    | --- | ---  | 77        | 67  | 73   |
| 12    | ---      | --- | ---  | ---   | --- | ---  | ---    | --- | ---  | 71        | 61  | 66   |
| 13    | ---      | --- | ---  | ---   | --- | ---  | ---    | --- | ---  | 74        | 60  | 63   |
| 14    | ---      | --- | ---  | ---   | --- | ---  | ---    | --- | ---  | 67        | 59  | 63   |
| 15    | ---      | --- | ---  | ---   | --- | ---  | ---    | --- | ---  | 66        | 54  | 61   |
| 16    | ---      | --- | ---  | ---   | --- | ---  | ---    | --- | ---  | 61        | 49  | 55   |
| 17    | ---      | --- | ---  | ---   | --- | ---  | ---    | --- | ---  | 58        | 49  | 54   |
| 18    | ---      | --- | ---  | ---   | --- | ---  | ---    | --- | ---  | 60        | 49  | 55   |
| 19    | ---      | --- | ---  | ---   | --- | ---  | 94     | 87  | 90   | 59        | 47  | 53   |
| 20    | ---      | --- | ---  | ---   | --- | ---  | 96     | 88  | 92   | 58        | 49  | 55   |
| 21    | ---      | --- | ---  | ---   | --- | ---  | 94     | 89  | 91   | 63        | 54  | 58   |
| 22    | ---      | --- | ---  | ---   | --- | ---  | 99     | 88  | 91   | 62        | 53  | 58   |
| 23    | ---      | --- | ---  | ---   | --- | ---  | 94     | 85  | 88   | 61        | 54  | 58   |
| 24    | ---      | --- | ---  | ---   | --- | ---  | 92     | 80  | 87   | 63        | 58  | 60   |
| 25    | ---      | --- | ---  | ---   | --- | ---  | 95     | 84  | 90   | 64        | 59  | 63   |
| 26    | ---      | --- | ---  | ---   | --- | ---  | 96     | 90  | 93   | 67        | 63  | 65   |
| 27    | ---      | --- | ---  | ---   | --- | ---  | 95     | 91  | 93   | 70        | 67  | 69   |
| 28    | ---      | --- | ---  | ---   | --- | ---  | 97     | 80  | 91   | 73        | 69  | 70   |
| 29    | ---      | --- | ---  | ---   | --- | ---  | ---    | --- | ---  | 75        | 64  | 70   |
| 30    | ---      | --- | ---  | ---   | --- | ---  | 96     | 93  | 94   | 70        | 64  | 68   |
| 31    | ---      | --- | ---  | ---   | --- | ---  | ---    | --- | ---  | 72        | 67  | 69   |
| MONTH | ---      | --- | ---  | ---   | --- | ---  | ---    | --- | ---  | 97        | 47  | 69   |
|       |          |     |      |       |     |      |        |     |      |           |     |      |
| DAY   | JUNE     |     |      | JULY  |     |      | AUGUST |     |      | SEPTEMBER |     |      |
|       | MAX      | MIN | MEAN | MAX   | MIN | MEAN | MAX    | MIN | MEAN | MAX       | MIN | MEAN |
| 1     | 72       | 67  | 69   | 54    | 52  | 52   | 59     | 55  | 55   | 67        | 65  | 66   |
| 2     | 72       | 65  | 69   | ---   | --- | ---  | 56     | 55  | 55   | 67        | 66  | 67   |
| 3     | 71       | 63  | 67   | ---   | --- | ---  | 56     | 55  | 56   | 68        | 66  | 67   |
| 4     | 68       | 63  | 66   | ---   | --- | ---  | 56     | 55  | 56   | 68        | 66  | 67   |
| 5     | 68       | 59  | 64   | ---   | --- | ---  | 57     | 55  | 56   | 68        | 67  | 67   |
| 6     | 64       | 59  | 61   | ---   | --- | ---  | 57     | 55  | 56   | 73        | 65  | 69   |
| 7     | 64       | 59  | 62   | ---   | --- | ---  | 58     | 56  | 56   | 71        | 69  | 70   |
| 8     | 64       | 60  | 62   | ---   | --- | ---  | 58     | 56  | 57   | 71        | 68  | 69   |
| 9     | 64       | 60  | 62   | 52    | 51  | 52   | 58     | 57  | 57   | 70        | 69  | 70   |
| 10    | 63       | 60  | 61   | 53    | 51  | 52   | 58     | 57  | 57   | 71        | 69  | 70   |
| 11    | 64       | 60  | 62   | 52    | 51  | 52   | 59     | 57  | 58   | 71        | 70  | 70   |
| 12    | 63       | 60  | 62   | 53    | 52  | 52   | 59     | 57  | 58   | 71        | 69  | 70   |
| 13    | 63       | 61  | 62   | 53    | 52  | 52   | 59     | 58  | 58   | 73        | 70  | 72   |
| 14    | 62       | 60  | 61   | 53    | 52  | 52   | 59     | 58  | 59   | 72        | 69  | 71   |
| 15    | 63       | 58  | 61   | 53    | 52  | 52   | 60     | 58  | 59   | 74        | 69  | 73   |
| 16    | 62       | 58  | 61   | 53    | 52  | 53   | 60     | 58  | 59   | 74        | 72  | 72   |
| 17    | 62       | 60  | 61   | 53    | 52  | 53   | 60     | 59  | 60   | 72        | 70  | 71   |
| 18    | 61       | 59  | 60   | 54    | 53  | 53   | 61     | 60  | 60   | 71        | 66  | 70   |
| 19    | 60       | 58  | 59   | 54    | 53  | 54   | 61     | 60  | 61   | 72        | 67  | 70   |
| 20    | 60       | 58  | 59   | 54    | 53  | 54   | 62     | 61  | 61   | 72        | 69  | 70   |
| 21    | 58       | 56  | 58   | 55    | 53  | 54   | 67     | 61  | 63   | 72        | 70  | 71   |
| 22    | 57       | 55  | 56   | 54    | 53  | 54   | 65     | 63  | 63   | 72        | 71  | 71   |
| 23    | 56       | 55  | 56   | 55    | 54  | 54   | 65     | 63  | 63   | 71        | 70  | 71   |
| 24    | 56       | 55  | 55   | 55    | 54  | 54   | 65     | 63  | 64   | 74        | 70  | 72   |
| 25    | 55       | 54  | 55   | 55    | 54  | 55   | 65     | 64  | 64   | 73        | 71  | 71   |
| 26    | 55       | 54  | 54   | 55    | 54  | 54   | 65     | 64  | 64   | 71        | 68  | 69   |
| 27    | 55       | 53  | 54   | 54    | 54  | 54   | 66     | 64  | 64   | 71        | 65  | 69   |
| 28    | 54       | 53  | 53   | 55    | 54  | 54   | 66     | 65  | 65   | 71        | 69  | 70   |
| 29    | 54       | 53  | 53   | 57    | 54  | 55   | 67     | 65  | 66   | 71        | 69  | 70   |
| 30    | 54       | 53  | 53   | 56    | 55  | 55   | 67     | 65  | 66   | 72        | 69  | 70   |
| 31    | ---      | --- | ---  | 55    | 54  | 55   | 67     | 65  | 66   | ---       | --- | ---  |
| MONTH | 72       | 53  | 60   | ---   | --- | ---  | 67     | 55  | 60   | 74        | 65  | 70   |

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

TEMPERATURE, WATER (DEG. C) WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DAY   | MAX      | MIN | MEAN | MAX      | MIN | MEAN | MAX      | MIN | MEAN | MAX     | MIN | MEAN |
|-------|----------|-----|------|----------|-----|------|----------|-----|------|---------|-----|------|
|       | OCTOBER  |     |      | NOVEMBER |     |      | DECEMBER |     |      | JANUARY |     |      |
| 1     | 6.0      | 1.6 | 3.5  | 3.7      | --- | ---  | ---      | --- | ---  | ---     | --- | ---  |
| 2     | ---      | --- | ---  | ---      | --- | ---  | ---      | --- | ---  | ---     | --- | ---  |
| 3     | ---      | --- | ---  | ---      | --- | ---  | ---      | --- | ---  | ---     | --- | ---  |
| 4     | ---      | --- | ---  | ---      | --- | ---  | ---      | --- | ---  | ---     | --- | ---  |
| 5     | 5.0      | .2  | 1.8  | ---      | --- | ---  | ---      | --- | ---  | ---     | --- | ---  |
| 6     | 5.5      | .0  | 1.6  | ---      | --- | ---  | ---      | --- | ---  | ---     | --- | ---  |
| 7     | 6.6      | .4  | 2.8  | ---      | --- | ---  | ---      | --- | ---  | ---     | --- | ---  |
| 8     | 6.0      | .2  | 2.7  | ---      | --- | ---  | ---      | --- | ---  | ---     | --- | ---  |
| 9     | 5.8      | .5  | 2.7  | ---      | --- | ---  | ---      | --- | ---  | ---     | --- | ---  |
| 10    | 7.2      | 1.1 | 3.5  | ---      | --- | ---  | ---      | --- | ---  | ---     | --- | ---  |
| 11    | 7.8      | 1.3 | 3.9  | ---      | --- | ---  | ---      | --- | ---  | ---     | --- | ---  |
| 12    | 6.2      | 2.1 | 3.8  | ---      | --- | ---  | ---      | --- | ---  | ---     | --- | ---  |
| 13    | 5.0      | .0  | 2.3  | 1.1      | .0  | .5   | ---      | --- | ---  | ---     | --- | ---  |
| 14    | 6.2      | .1  | 2.5  | 2.1      | .2  | 1.1  | ---      | --- | ---  | ---     | --- | ---  |
| 15    | 7.1      | .9  | 3.4  | 1.4      | .0  | .5   | ---      | --- | ---  | ---     | --- | ---  |
| 16    | 7.0      | 1.1 | 3.6  | 1.6      | .0  | .7   | ---      | --- | ---  | ---     | --- | ---  |
| 17    | 6.6      | 1.1 | 3.3  | 1.1      | .0  | .5   | ---      | --- | ---  | ---     | --- | ---  |
| 18    | 6.5      | 1.3 | 3.4  | 1.6      | .0  | .6   | ---      | --- | ---  | ---     | --- | ---  |
| 19    | 4.4      | .6  | 2.2  | 1.5      | .0  | .5   | ---      | --- | ---  | ---     | --- | ---  |
| 20    | 4.9      | .0  | 1.7  | 1.7      | .0  | .7   | ---      | --- | ---  | ---     | --- | ---  |
| 21    | 5.5      | .3  | 2.5  | 1.3      | .0  | .4   | ---      | --- | ---  | ---     | --- | ---  |
| 22    | 2.6      | .0  | 1.0  | .4       | .0  | .1   | ---      | --- | ---  | ---     | --- | ---  |
| 23    | .0       | .0  | .0   | 1.1      | .0  | .2   | ---      | --- | ---  | ---     | --- | ---  |
| 24    | 1.2      | .0  | .2   | .6       | .0  | .2   | ---      | --- | ---  | ---     | --- | ---  |
| 25    | 2.5      | .0  | .8   | 1.7      | .0  | .5   | ---      | --- | ---  | ---     | --- | ---  |
| 26    | 1.9      | .0  | .7   | .7       | .0  | .1   | ---      | --- | ---  | ---     | --- | ---  |
| 27    | 2.1      | .0  | .6   | ---      | --- | ---  | ---      | --- | ---  | ---     | --- | ---  |
| 28    | 3.8      | .0  | 1.4  | ---      | --- | ---  | ---      | --- | ---  | ---     | --- | ---  |
| 29    | 4.8      | .6  | 2.1  | ---      | --- | ---  | ---      | --- | ---  | ---     | --- | ---  |
| 30    | 4.1      | 1.0 | 2.3  | ---      | --- | ---  | ---      | --- | ---  | ---     | --- | ---  |
| 31    | 4.1      | 1.0 | 2.2  | ---      | --- | ---  | ---      | --- | ---  | ---     | --- | ---  |
| MONTH | ---      | --- | ---  | ---      | --- | ---  | ---      | --- | ---  | ---     | --- | ---  |
|       | FEBRUARY |     |      | MARCH    |     |      | APRIL    |     |      | MAY     |     |      |
| 1     | ---      | --- | ---  | ---      | --- | ---  | ---      | --- | ---  | 5.9     | .3  | 2.3  |
| 2     | ---      | --- | ---  | ---      | --- | ---  | ---      | --- | ---  | 5.5     | .8  | 2.7  |
| 3     | ---      | --- | ---  | ---      | --- | ---  | ---      | --- | ---  | 5.5     | 1.0 | 2.8  |
| 4     | ---      | --- | ---  | ---      | --- | ---  | ---      | --- | ---  | 6.6     | .2  | 2.7  |
| 5     | ---      | --- | ---  | ---      | --- | ---  | ---      | --- | ---  | 7.1     | .1  | 2.7  |
| 6     | ---      | --- | ---  | ---      | --- | ---  | ---      | --- | ---  | 6.9     | .0  | 2.7  |
| 7     | ---      | --- | ---  | ---      | --- | ---  | ---      | --- | ---  | 7.2     | .0  | 2.5  |
| 8     | ---      | --- | ---  | ---      | --- | ---  | ---      | --- | ---  | 7.7     | .0  | 2.7  |
| 9     | ---      | --- | ---  | ---      | --- | ---  | ---      | --- | ---  | 7.6     | .2  | 2.8  |
| 10    | ---      | --- | ---  | ---      | --- | ---  | ---      | --- | ---  | 6.9     | .3  | 2.7  |
| 11    | ---      | --- | ---  | ---      | --- | ---  | ---      | --- | ---  | 8.2     | .3  | 2.9  |
| 12    | ---      | --- | ---  | ---      | --- | ---  | ---      | --- | ---  | 8.1     | .6  | 3.0  |
| 13    | ---      | --- | ---  | ---      | --- | ---  | ---      | --- | ---  | 7.7     | .4  | 2.6  |
| 14    | ---      | --- | ---  | ---      | --- | ---  | ---      | --- | ---  | 7.1     | .5  | 2.8  |
| 15    | ---      | --- | ---  | ---      | --- | ---  | ---      | --- | ---  | 8.2     | .5  | 3.1  |
| 16    | ---      | --- | ---  | ---      | --- | ---  | ---      | --- | ---  | 8.4     | .9  | 3.4  |
| 17    | ---      | --- | ---  | ---      | --- | ---  | ---      | --- | ---  | 7.7     | 1.3 | 3.2  |
| 18    | ---      | --- | ---  | ---      | --- | ---  | ---      | --- | ---  | 8.5     | 1.1 | 3.5  |
| 19    | ---      | --- | ---  | ---      | --- | ---  | ---      | --- | ---  | 8.5     | 1.5 | 3.8  |
| 20    | ---      | --- | ---  | ---      | --- | ---  | ---      | --- | ---  | 7.3     | 1.2 | 3.3  |
| 21    | ---      | --- | ---  | ---      | --- | ---  | 1.3      | .0  | .3   | 9.3     | 1.2 | 4.1  |
| 22    | ---      | --- | ---  | ---      | --- | ---  | 1.6      | .0  | .3   | 9.0     | 1.3 | 4.3  |
| 23    | ---      | --- | ---  | ---      | --- | ---  | 3.2      | .0  | .9   | 7.5     | 1.8 | 3.9  |
| 24    | ---      | --- | ---  | ---      | --- | ---  | 3.9      | .4  | 1.6  | 7.5     | 2.1 | 4.0  |
| 25    | ---      | --- | ---  | ---      | --- | ---  | 4.3      | .0  | 1.6  | 3.2     | .9  | 2.5  |
| 26    | ---      | --- | ---  | ---      | --- | ---  | 4.4      | .0  | 1.6  | 2.6     | .0  | 1.0  |
| 27    | ---      | --- | ---  | ---      | --- | ---  | 4.5      | .5  | 1.9  | 4.1     | .6  | 2.2  |
| 28    | ---      | --- | ---  | ---      | --- | ---  | 1.0      | .0  | .1   | 6.7     | .6  | 2.8  |
| 29    | ---      | --- | ---  | ---      | --- | ---  | ---      | --- | ---  | 9.9     | .7  | 4.1  |
| 30    | ---      | --- | ---  | ---      | --- | ---  | ---      | --- | ---  | 7.8     | 1.3 | 4.2  |
| 31    | ---      | --- | ---  | ---      | --- | ---  | ---      | --- | ---  | 8.5     | 1.0 | 4.2  |
| MONTH | ---      | --- | ---  | ---      | --- | ---  | ---      | --- | ---  | 9.9     | .0  | 3.1  |

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

TEMPERATURE, WATER (DEG. C) WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DAY   | MAX  | MIN | MEAN |
|-------|------|-----|------|------|-----|------|------|-----|------|------|-----|------|
|       |      |     |      |      |     |      |      |     |      |      |     |      |
| 1     | 8.9  | 1.9 | 4.6  | 12.0 | 4.4 | 7.4  | 14.4 | 5.4 | 9.0  | 12.0 | 4.4 | 7.9  |
| 2     | 10.5 | 1.2 | 5.0  | ---  | --- | ---  | 13.1 | 6.3 | 9.0  | 11.8 | 5.7 | 8.2  |
| 3     | 11.1 | 1.7 | 5.5  | ---  | --- | ---  | 12.9 | 6.2 | 8.7  | 12.6 | 4.9 | 8.3  |
| 4     | 8.6  | 2.6 | 5.3  | ---  | --- | ---  | 13.4 | 6.3 | 8.7  | 12.6 | 5.3 | 8.5  |
| 5     | 11.4 | 2.8 | 6.0  | ---  | --- | ---  | 14.0 | 5.0 | 8.5  | 11.4 | 5.5 | 8.2  |
| 6     | 10.5 | 2.5 | 5.7  | ---  | --- | ---  | 14.3 | 5.2 | 8.8  | 8.2  | 6.4 | 7.5  |
| 7     | 11.0 | 1.6 | 5.7  | ---  | --- | ---  | 11.1 | 5.6 | 7.8  | 11.5 | 4.0 | 6.9  |
| 8     | 11.7 | 2.1 | 6.0  | ---  | --- | ---  | 10.9 | 5.0 | 7.6  | 11.9 | 3.4 | 7.0  |
| 9     | 10.4 | 3.1 | 6.0  | ---  | --- | ---  | 12.1 | 5.5 | 8.4  | 10.0 | 4.0 | 6.8  |
| 10    | 9.1  | 3.0 | 5.7  | 12.3 | 5.4 | 8.0  | 12.1 | 4.5 | 7.7  | 9.6  | 4.2 | 6.8  |
| 11    | 11.0 | 2.8 | 6.0  | 13.0 | 5.0 | 8.1  | 13.6 | 4.2 | 8.2  | 9.6  | 4.2 | 7.0  |
| 12    | 8.2  | 2.8 | 5.3  | 11.3 | 5.6 | 8.1  | 14.4 | 5.2 | 8.9  | 11.3 | 5.6 | 7.8  |
| 13    | 9.7  | 3.2 | 5.6  | 11.5 | 6.1 | 8.0  | 11.0 | 5.4 | 8.1  | 9.3  | 5.8 | 7.4  |
| 14    | 7.0  | 3.5 | 5.2  | 13.0 | 5.4 | 8.4  | 11.1 | 6.1 | 8.4  | 8.7  | 4.0 | 6.2  |
| 15    | 5.4  | 3.8 | 4.8  | 11.9 | 5.3 | 8.0  | 13.3 | 5.9 | 9.0  | 10.7 | 4.5 | 6.8  |
| 16    | 11.5 | 2.8 | 6.1  | 11.0 | 6.4 | 8.2  | 13.4 | 5.8 | 8.8  | 10.7 | 3.1 | 6.4  |
| 17    | 11.1 | 3.3 | 6.6  | 12.7 | 6.5 | 9.0  | 12.0 | 5.2 | 8.1  | 6.2  | 3.6 | 4.8  |
| 18    | 11.5 | 3.1 | 6.5  | 10.2 | 6.5 | 8.0  | 13.6 | 5.9 | 9.1  | 6.8  | 1.5 | 3.8  |
| 19    | 11.5 | 3.3 | 6.7  | 12.4 | 5.6 | 8.4  | 10.9 | 6.6 | 8.4  | 6.7  | .4  | 2.8  |
| 20    | 11.5 | 4.0 | 7.0  | 13.3 | 5.8 | 8.9  | 12.9 | 6.0 | 8.6  | 7.4  | 1.7 | 4.0  |
| 21    | 8.8  | 4.8 | 6.6  | 14.0 | 5.6 | 8.9  | 10.4 | 6.9 | 8.4  | 9.4  | 2.0 | 5.0  |
| 22    | 9.8  | 4.8 | 6.5  | 13.5 | 5.1 | 8.4  | 11.2 | 6.1 | 8.1  | 9.4  | 3.4 | 5.8  |
| 23    | 11.1 | 3.1 | 6.4  | 13.9 | 6.0 | 8.9  | 10.3 | 5.5 | 7.8  | 7.4  | 3.9 | 5.4  |
| 24    | 11.1 | 4.3 | 6.9  | 12.3 | 5.1 | 8.2  | 12.9 | 5.1 | 8.4  | 9.1  | 3.7 | 5.7  |
| 25    | 10.9 | 3.8 | 6.6  | 11.5 | 6.4 | 8.3  | 13.8 | 5.0 | 8.7  | 7.0  | 2.9 | 4.7  |
| 26    | 11.5 | 4.3 | 7.1  | 10.7 | 5.4 | 7.6  | 11.2 | 6.0 | 8.1  | 3.0  | .4  | 1.5  |
| 27    | 9.5  | 5.5 | 7.0  | 12.3 | 5.3 | 8.0  | 10.1 | 6.1 | 7.7  | 3.5  | .0  | 1.1  |
| 28    | 9.0  | 5.0 | 6.7  | 11.5 | 6.2 | 8.4  | 11.4 | 5.4 | 7.8  | 7.8  | .9  | 3.8  |
| 29    | 11.1 | 3.8 | 6.8  | ---  | --- | ---  | 12.7 | 5.4 | 8.6  | 8.6  | 1.1 | 4.2  |
| 30    | 11.5 | 5.3 | 7.6  | 13.6 | 5.8 | 8.7  | 11.3 | 5.5 | 8.3  | 9.3  | 1.9 | 5.0  |
| 31    | ---  | --- | ---  | 12.0 | 5.5 | 8.3  | 13.1 | 4.8 | 8.2  | ---  | --- | ---  |
| MONTH | 11.7 | 1.2 | 6.1  | ---  | --- | ---  | 14.4 | 4.2 | 8.4  | 12.6 | .0  | 5.8  |

**06714600 SOUTH CLEAR CREEK ABOVE LEAVENWORTH CREEK NEAR GEORGETOWN, CO**

LOCATION.--Lat 39°41'13", long 105°41'56", in NE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec.20, T.4 S., R.74 W., Clear Creek County, Hydrologic Unit 10190004, on right bank 240 ft upstream from the confluence of Leavenworth Creek, and 3.1 mi south of Georgetown.

DRAINAGE AREA.--16.0 mi<sup>2</sup>.

**WATER-DISCHARGE RECORDS**

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

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

REMARKS.--Records fair except for estimated daily discharges, which are poor. Flow is entirely regulated by Lower Cabin Creek Reservoir.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

| DAY   | OCT  | NOV   | DEC   | JAN   | FEB   | MAR   | APR   | MAY   | JUN  | JUL  | AUG   | SEP   |
|-------|------|-------|-------|-------|-------|-------|-------|-------|------|------|-------|-------|
| 1     | 16   | 12    | 8.6   | 8.3   | 4.0   | 5.1   | 10    | 6.7   | 28   | 51   | 14    | 11    |
| 2     | 16   | 7.8   | 8.6   | 8.1   | 3.9   | 5.0   | 10    | 6.9   | 29   | 50   | 19    | 11    |
| 3     | 16   | 7.3   | 8.6   | 8.2   | 3.9   | 5.0   | 12    | 7.2   | 27   | 50   | 18    | 11    |
| 4     | 15   | 7.1   | 8.6   | 8.2   | 3.9   | 4.9   | 19    | 7.8   | 31   | 52   | 18    | 11    |
| 5     | 15   | 7.0   | 8.6   | 8.1   | 3.6   | 5.0   | 18    | 8.5   | 31   | 50   | 20    | 11    |
| 6     | 15   | 6.9   | 8.6   | 7.9   | 3.4   | 5.0   | 18    | 9.2   | 38   | 49   | 20    | 10    |
| 7     | 15   | 6.9   | 8.6   | 8.0   | 3.5   | 5.7   | 17    | 9.8   | 43   | 50   | 20    | 14    |
| 8     | 15   | 7.2   | 8.6   | 8.1   | 3.5   | 5.9   | 16    | 11    | 45   | 49   | 20    | 11    |
| 9     | 15   | 8.6   | 8.6   | 8.0   | 3.5   | 5.9   | 15    | 13    | 46   | 49   | 20    | 8.9   |
| 10    | 15   | 8.6   | 8.6   | 8.0   | 3.5   | 5.9   | 15    | 18    | 45   | 49   | 18    | 12    |
| 11    | 15   | 8.6   | 8.6   | 7.9   | 3.6   | 5.9   | 14    | 19    | 47   | 49   | 19    | 8.2   |
| 12    | 15   | 8.6   | 8.5   | 7.9   | 3.7   | 5.9   | 13    | 19    | 50   | 50   | 18    | 7.9   |
| 13    | 15   | 8.6   | 8.6   | 7.8   | 3.7   | 6.1   | 12    | 21    | 52   | 48   | 17    | 7.6   |
| 14    | 15   | 8.6   | 8.5   | 7.8   | 3.7   | 6.6   | 11    | 21    | 52   | 48   | 17    | 8.0   |
| 15    | 14   | 8.6   | 8.4   | 7.8   | 3.7   | 6.5   | 11    | 28    | 54   | 45   | 17    | 7.7   |
| 16    | 14   | 8.6   | 8.4   | 7.7   | 3.7   | 6.5   | 10    | 33    | 52   | 40   | 15    | 7.2   |
| 17    | 14   | 8.6   | 8.4   | 7.4   | 3.7   | 6.5   | 10    | 37    | 55   | 38   | 14    | 7.4   |
| 18    | 14   | 8.7   | 8.2   | 6.3   | 3.8   | 6.4   | 9.7   | 38    | 55   | 36   | 15    | 12    |
| 19    | 14   | 8.7   | 8.4   | 6.3   | 3.9   | 6.3   | 9.2   | 42    | 57   | 34   | 15    | 9.9   |
| 20    | 14   | 8.7   | 8.4   | 6.3   | 3.9   | 6.4   | 8.5   | 40    | 58   | 32   | 14    | 9.3   |
| 21    | 14   | 8.7   | 8.4   | 6.0   | 4.0   | 7.9   | 7.6   | 45    | 58   | 30   | 15    | 11    |
| 22    | 14   | 8.7   | 8.4   | 5.7   | 5.1   | 8.1   | 7.4   | 43    | 60   | 28   | 15    | 9.9   |
| 23    | 14   | 8.7   | 8.4   | 5.4   | 5.3   | 8.1   | 7.2   | 43    | 56   | 30   | 16    | 10    |
| 24    | 14   | 8.6   | 8.3   | 5.2   | 5.3   | 8.1   | 7.2   | 40    | 52   | 35   | 14    | 11    |
| 25    | 14   | 8.6   | 8.1   | 5.2   | 5.4   | 7.9   | 7.2   | 37    | 56   | 35   | 15    | 11    |
| 26    | 13   | 8.6   | 8.1   | 5.1   | 5.6   | 7.9   | 7.2   | 36    | 51   | 31   | 11    | 11    |
| 27    | 13   | 8.6   | 8.0   | 5.1   | e5.6  | 8.2   | 7.1   | 36    | 53   | 22   | 9.4   | 11    |
| 28    | 13   | 8.6   | 8.1   | 5.1   | e5.3  | 10    | 7.1   | 37    | 54   | 22   | 11    | 12    |
| 29    | 13   | 8.6   | 8.2   | 5.1   | e5.1  | 10    | 6.9   | 35    | 54   | 24   | 11    | 12    |
| 30    | 13   | 8.6   | 8.3   | 5.1   | ---   | 10    | 6.8   | 33    | 53   | 19   | 12    | 12    |
| 31    | 13   | ---   | 8.4   | 5.0   | ---   | 11    | ---   | 29    | ---  | 13   | 9.9   | ---   |
| TOTAL | 445  | 252.0 | 261.1 | 212.1 | 120.8 | 213.7 | 330.1 | 810.1 | 1442 | 1208 | 487.3 | 307.0 |
| MEAN  | 14.4 | 8.40  | 8.42  | 6.84  | 4.17  | 6.89  | 11.0  | 26.1  | 48.1 | 39.0 | 15.7  | 10.2  |
| MAX   | 16   | 12    | 8.6   | 8.3   | 5.6   | 11    | 19    | 45    | 60   | 52   | 20    | 14    |
| MIN   | 13   | 6.9   | 8.0   | 5.0   | 3.4   | 4.9   | 6.8   | 6.7   | 27   | 13   | 9.4   | 7.2   |
| AC-FT | 883  | 500   | 518   | 421   | 240   | 424   | 655   | 1610  | 2860 | 2400 | 967   | 609   |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 1996, BY WATER YEAR (WY)

|      | 1994 | 1995 | 1996 | 1994 | 1995 | 1996 | 1994 | 1995 | 1996 | 1994 | 1995 | 1996 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 10.9 | 7.24 | 6.34 | 5.36 | 4.02 | 9.27 | 8.97 | 17.1 | 59.3 | 58.3 | 25.1 | 14.4 |
| MAX  | 14.4 | 8.40 | 8.42 | 6.84 | 4.17 | 11.7 | 11.0 | 26.1 | 70.6 | 77.5 | 34.4 | 18.6 |
| (WY) | 1996 | 1996 | 1996 | 1996 | 1996 | 1995 | 1996 | 1996 | 1995 | 1995 | 1995 | 1995 |
| MIN  | 7.35 | 6.07 | 4.25 | 3.87 | 3.87 | 6.89 | 6.94 | 8.13 | 48.1 | 39.0 | 15.7 | 10.2 |
| (WY) | 1995 | 1995 | 1995 | 1995 | 1995 | 1996 | 1995 | 1995 | 1996 | 1996 | 1996 | 1996 |

SUMMARY STATISTICS

FOR 1995 CALENDAR YEAR

FOR 1996 WATER YEAR

WATER YEARS 1994 - 1996

|                          |        |        |       |
|--------------------------|--------|--------|-------|
| ANNUAL TOTAL             | 8153.2 | 6089.2 |       |
| ANNUAL MEAN              | 22.3   | 16.6   | 18.9  |
| HIGHEST ANNUAL MEAN      |        |        | 21.2  |
| LOWEST ANNUAL MEAN       |        |        | 16.6  |
| HIGHEST DAILY MEAN       | 147    | 60     | 147   |
| LOWEST DAILY MEAN        | 3.6    | 3.4    | 3.4   |
| ANNUAL SEVEN-DAY MINIMUM | 3.7    | 3.5    | 3.5   |
| INSTANTANEOUS PEAK FLOW  |        | 64     | 215   |
| INSTANTANEOUS PEAK STAGE |        | 5.05   | a5.96 |
| ANNUAL RUNOFF (AC-FT)    | 16170  | 12080  | 13700 |
| 10 PERCENT EXCEEDS       | 70     | 45     | 49    |
| 50 PERCENT EXCEEDS       | 11     | 10     | 9.3   |
| 90 PERCENT EXCEEDS       | 3.9    | 5.2    | 4.0   |

e-Estimated.

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 current year.

INSTRUMENTATION.--Water-quality monitor since May 1995.

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

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 117 microsiemens, Aug 3; minimum, 66 microsiemens June 22.

WATER TEMPERATURE: Maximum, 13.9°C, July 24; minimum, 0.1°C, on Feb 23.

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM @ 25 DEG. C), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DAY   | MAX | MIN | MEAN |
|-------|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|------|
|       |     |     |      |     |     |      |     |     |      |     |     |      |
| 1     | 89  | 88  | 88   | 97  | 93  | 94   | 97  | 97  | 97   | 98  | 97  | 97   |
| 2     | --- | --- | ---  | 99  | 97  | 98   | 97  | 97  | 97   | 98  | 97  | 97   |
| 3     | --- | --- | ---  | 100 | 99  | 99   | 97  | 97  | 97   | 98  | 97  | 98   |
| 4     | --- | --- | ---  | 100 | 99  | 100  | 97  | 96  | 97   | 98  | 97  | 98   |
| 5     | --- | --- | ---  | 100 | 100 | 100  | 98  | 96  | 97   | 98  | 98  | 98   |
| 6     | --- | --- | ---  | 100 | 99  | 100  | 98  | 96  | 97   | 99  | 98  | 98   |
| 7     | --- | --- | ---  | 100 | 100 | 100  | 98  | 96  | 97   | 99  | 98  | 99   |
| 8     | --- | --- | ---  | 100 | 98  | 100  | 97  | 97  | 97   | 99  | 99  | 99   |
| 9     | --- | --- | ---  | 98  | 96  | 97   | 97  | 97  | 97   | 100 | 99  | 100  |
| 10    | --- | --- | ---  | 97  | 95  | 96   | 98  | 97  | 97   | 100 | 99  | 100  |
| 11    | --- | --- | ---  | 97  | 96  | 97   | 98  | 97  | 98   | 100 | 99  | 100  |
| 12    | --- | --- | ---  | 97  | 96  | 97   | 98  | 97  | 98   | 101 | 100 | 100  |
| 13    | --- | --- | ---  | 97  | 96  | 97   | 98  | 97  | 98   | 101 | 100 | 100  |
| 14    | 93  | 92  | 92   | 97  | 96  | 97   | 98  | 97  | 98   | 101 | 100 | 100  |
| 15    | 93  | 92  | 93   | 97  | 96  | 97   | 98  | 97  | 98   | 101 | 100 | 101  |
| 16    | 93  | 93  | 93   | 97  | 96  | 97   | 98  | 98  | 98   | 101 | 101 | 101  |
| 17    | 94  | 93  | 93   | 97  | 96  | 97   | 98  | 97  | 98   | 102 | 99  | 101  |
| 18    | 94  | 93  | 93   | 97  | 96  | 97   | 98  | 97  | 97   | 101 | 98  | 99   |
| 19    | 94  | 93  | 93   | 97  | 96  | 97   | 98  | 97  | 97   | 99  | 97  | 98   |
| 20    | 94  | 93  | 94   | 97  | 96  | 97   | 98  | 97  | 97   | 100 | 96  | 98   |
| 21    | 94  | 94  | 94   | 97  | 96  | 97   | 98  | 97  | 97   | 100 | 94  | 98   |
| 22    | 94  | 92  | 93   | 97  | 96  | 97   | 97  | 97  | 97   | 99  | 95  | 98   |
| 23    | 94  | 93  | 93   | 97  | 96  | 97   | 97  | 97  | 97   | 100 | 95  | 98   |
| 24    | 94  | 93  | 93   | 97  | 97  | 97   | 97  | 97  | 97   | --- | --- | ---  |
| 25    | 94  | 93  | 93   | 97  | 97  | 97   | 98  | 97  | 97   | --- | --- | ---  |
| 26    | 94  | 93  | 93   | 97  | 96  | 97   | 98  | 97  | 97   | --- | --- | ---  |
| 27    | 94  | 93  | 93   | 97  | 95  | 96   | 98  | 97  | 97   | --- | --- | ---  |
| 28    | 94  | 93  | 94   | 97  | 96  | 96   | 98  | 97  | 97   | --- | --- | ---  |
| 29    | 95  | 94  | 94   | 97  | 97  | 97   | 98  | 97  | 97   | --- | --- | ---  |
| 30    | 94  | 94  | 94   | 97  | 97  | 97   | 98  | 97  | 97   | --- | --- | ---  |
| 31    | 94  | 94  | 94   | --- | --- | ---  | 98  | 96  | 97   | --- | --- | ---  |
| MONTH | --- | --- | ---  | 100 | 93  | 97   | 98  | 96  | 97   | --- | --- | ---  |

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

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM @ 25 DEG. C), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DAY   | FEBRUARY |     |      | MARCH |     |      | APRIL  |     |      | MAY       |     |      |
|-------|----------|-----|------|-------|-----|------|--------|-----|------|-----------|-----|------|
|       | MAX      | MIN | MEAN | MAX   | MIN | MEAN | MAX    | MIN | MEAN | MAX       | MIN | MEAN |
| 1     | ---      | --- | ---  | 107   | 106 | 107  | 102    | 101 | 102  | 110       | 107 | 109  |
| 2     | ---      | --- | ---  | 107   | 106 | 106  | 102    | 102 | 102  | 110       | 108 | 109  |
| 3     | ---      | --- | ---  | 107   | 106 | 106  | 103    | 99  | 101  | 109       | 106 | 107  |
| 4     | ---      | --- | ---  | 107   | 106 | 107  | 100    | 99  | 99   | 111       | 105 | 106  |
| 5     | ---      | --- | ---  | 107   | 106 | 107  | 100    | 99  | 100  | 108       | 105 | 107  |
| 6     | ---      | --- | ---  | 107   | 106 | 106  | 101    | 99  | 100  | 107       | 105 | 106  |
| 7     | ---      | --- | ---  | 106   | 105 | 105  | 102    | 100 | 101  | 105       | 102 | 104  |
| 8     | 111      | 110 | 110  | 106   | 105 | 105  | 103    | 101 | 102  | 104       | 101 | 102  |
| 9     | 111      | 110 | 111  | 106   | 104 | 105  | 103    | 102 | 102  | 103       | 97  | 101  |
| 10    | 111      | 111 | 111  | 106   | 105 | 105  | 105    | 102 | 104  | 100       | 95  | 97   |
| 11    | 112      | 110 | 111  | 107   | 105 | 105  | 104    | 103 | 104  | 97        | 94  | 96   |
| 12    | 111      | 110 | 111  | 106   | 105 | 105  | 106    | 103 | 105  | 97        | 94  | 96   |
| 13    | 112      | 110 | 111  | 106   | 102 | 105  | 104    | 102 | 103  | 95        | 93  | 94   |
| 14    | 112      | 111 | 111  | 104   | 102 | 104  | 104    | 102 | 103  | 95        | 93  | 94   |
| 15    | 111      | 110 | 111  | 105   | 104 | 104  | 105    | 103 | 104  | 94        | 91  | 92   |
| 16    | 112      | 111 | 111  | 105   | 104 | 104  | 106    | 103 | 105  | 92        | 89  | 91   |
| 17    | 112      | 111 | 111  | 104   | 103 | 104  | 107    | 104 | 105  | 90        | 89  | 89   |
| 18    | 112      | 108 | 110  | 104   | 103 | 104  | 107    | 104 | 106  | 89        | 86  | 88   |
| 19    | 111      | 110 | 111  | 105   | 104 | 104  | 105    | 104 | 104  | 89        | 83  | 87   |
| 20    | 111      | 107 | 110  | 105   | 104 | 104  | 105    | 104 | 105  | 86        | 84  | 85   |
| 21    | 111      | 107 | 110  | 104   | 102 | 103  | 107    | 105 | 106  | 87        | 83  | 85   |
| 22    | 109      | 107 | 108  | 103   | 102 | 102  | 108    | 106 | 106  | 85        | 82  | 83   |
| 23    | 108      | 106 | 107  | 104   | 102 | 103  | 108    | 106 | 107  | 84        | 82  | 83   |
| 24    | 108      | 106 | 107  | 102   | 101 | 102  | 109    | 106 | 108  | 84        | 83  | 84   |
| 25    | 108      | 106 | 107  | 103   | 102 | 102  | 111    | 108 | 109  | 85        | 84  | 85   |
| 26    | 108      | 105 | 107  | 103   | 102 | 102  | 111    | 109 | 109  | 85        | 83  | 85   |
| 27    | 108      | 106 | 107  | 103   | 101 | 102  | 111    | 109 | 110  | 87        | 85  | 86   |
| 28    | 108      | 106 | 107  | 101   | 100 | 101  | 109    | 107 | 108  | 87        | 84  | 86   |
| 29    | ---      | --- | ---  | 101   | 100 | 101  | 109    | 108 | 108  | 87        | 86  | 86   |
| 30    | ---      | --- | ---  | 101   | 101 | 101  | 108    | 106 | 108  | 88        | 86  | 86   |
| 31    | ---      | --- | ---  | 102   | 101 | 101  | ---    | --- | ---  | 88        | 86  | 87   |
| MONTH | ---      | --- | ---  | 107   | 100 | 104  | 111    | 99  | 105  | 111       | 82  | 93   |
|       |          |     |      |       |     |      |        |     |      |           |     |      |
| DAY   | JUNE     |     |      | JULY  |     |      | AUGUST |     |      | SEPTEMBER |     |      |
|       | MAX      | MIN | MEAN | MAX   | MIN | MEAN | MAX    | MIN | MEAN | MAX       | MIN | MEAN |
| 1     | 88       | 85  | 87   | 72    | 70  | 71   | 104    | 86  | 92   | 105       | 104 | 105  |
| 2     | 89       | 87  | 87   | 71    | 71  | 71   | 116    | 104 | 111  | 104       | 104 | 104  |
| 3     | 89       | 86  | 88   | 73    | 71  | 72   | 117    | 112 | 115  | 104       | 104 | 104  |
| 4     | 88       | 86  | 87   | 73    | 70  | 72   | 114    | 111 | 113  | 104       | 104 | 104  |
| 5     | 88       | 83  | 86   | 73    | 71  | 72   | 112    | 110 | 111  | 105       | 104 | 104  |
| 6     | 84       | 80  | 83   | 73    | 72  | 72   | 111    | 108 | 109  | 105       | 103 | 105  |
| 7     | 83       | 78  | 81   | 73    | 72  | 72   | 108    | 106 | 108  | 104       | 103 | 104  |
| 8     | 82       | 76  | 79   | 73    | 72  | 73   | 107    | 106 | 106  | 106       | 103 | 104  |
| 9     | 80       | 75  | 77   | 73    | 72  | 73   | 106    | 105 | 105  | 107       | 105 | 106  |
| 10    | 78       | 72  | 76   | 72    | 72  | 72   | 105    | 104 | 105  | 105       | 104 | 104  |
| 11    | 77       | 71  | 74   | 72    | 71  | 72   | 104    | 103 | 104  | 107       | 104 | 106  |
| 12    | 76       | 70  | 74   | 73    | 71  | 72   | 104    | 103 | 104  | 107       | 101 | 106  |
| 13    | 75       | 69  | 72   | 73    | 72  | 72   | 104    | 103 | 103  | 108       | 107 | 107  |
| 14    | 75       | 70  | 73   | 73    | 72  | 73   | 103    | 103 | 103  | 109       | 104 | 107  |
| 15    | 75       | 70  | 73   | 74    | 72  | 73   | 103    | 103 | 103  | 109       | 108 | 108  |
| 16    | 76       | 73  | 74   | 74    | 72  | 74   | 104    | 103 | 103  | 109       | 107 | 108  |
| 17    | 75       | 72  | 74   | 75    | 73  | 74   | 104    | 103 | 104  | 108       | 106 | 107  |
| 18    | 76       | 71  | 74   | 76    | 74  | 75   | 104    | 103 | 103  | 107       | 97  | 101  |
| 19    | 75       | 71  | 74   | 77    | 75  | 76   | 103    | 102 | 103  | 99        | 98  | 98   |
| 20    | 76       | 72  | 74   | 78    | 76  | 77   | 104    | 103 | 103  | 98        | 96  | 98   |
| 21    | 74       | 70  | 73   | 79    | 77  | 78   | 103    | 102 | 103  | 96        | 95  | 95   |
| 22    | 72       | 66  | 71   | 81    | 77  | 79   | 103    | 102 | 103  | 95        | 94  | 95   |
| 23    | 74       | 71  | 73   | 80    | 77  | 79   | 103    | 102 | 102  | 95        | 93  | 94   |
| 24    | 76       | 71  | 74   | 78    | 77  | 78   | 103    | 102 | 102  | 93        | 92  | 93   |
| 25    | 74       | 72  | 73   | 78    | 76  | 77   | 102    | 102 | 102  | 93        | 91  | 92   |
| 26    | 74       | 71  | 73   | 80    | 76  | 78   | 104    | 102 | 103  | 92        | 90  | 91   |
| 27    | 73       | 71  | 72   | 82    | 79  | 80   | 105    | 104 | 105  | 91        | 88  | 91   |
| 28    | 73       | 69  | 72   | 82    | 80  | 81   | 105    | 104 | 105  | 92        | 91  | 91   |
| 29    | 73       | 71  | 72   | 81    | 78  | 80   | 105    | 104 | 105  | 91        | 90  | 91   |
| 30    | 72       | 70  | 71   | 85    | 79  | 82   | 104    | 104 | 104  | 91        | 90  | 91   |
| 31    | ---      | --- | ---  | 90    | 83  | 86   | 105    | 104 | 105  | ---       | --- | ---  |
| MONTH | 89       | 66  | 76   | 90    | 70  | 75   | 117    | 86  | 105  | 109       | 88  | 100  |

## PLATTE RIVER BASIN

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

TEMPERATURE, WATER (DEG. C) WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DAY   | MAX      | MIN | MEAN | MAX      | MIN | MEAN | MAX      | MIN | MEAN | MAX     | MIN | MEAN |
|-------|----------|-----|------|----------|-----|------|----------|-----|------|---------|-----|------|
|       | OCTOBER  |     |      | NOVEMBER |     |      | DECEMBER |     |      | JANUARY |     |      |
| 1     | 8.5      | 7.1 | 7.5  | 5.4      | 3.2 | 4.4  | 3.6      | 2.5 | 2.8  | 2.1     | 1.6 | 1.8  |
| 2     | 8.7      | 7.0 | 7.5  | 4.3      | 2.6 | 3.3  | 3.2      | 2.3 | 2.5  | 1.9     | 1.2 | 1.6  |
| 3     | 8.7      | 6.8 | 7.4  | 4.5      | 2.5 | 3.2  | 3.0      | 2.0 | 2.3  | 2.4     | 1.7 | 2.1  |
| 4     | 7.6      | 6.0 | 6.9  | 4.4      | 2.8 | 3.3  | 3.3      | 2.2 | 2.6  | 2.5     | 1.1 | 2.0  |
| 5     | 7.4      | 5.9 | 6.4  | 4.7      | 3.0 | 3.6  | 3.2      | 1.8 | 2.7  | 2.3     | 1.3 | 1.9  |
| 6     | 7.8      | 5.5 | 6.3  | 4.8      | 3.4 | 3.8  | 3.3      | 2.2 | 2.7  | 2.0     | 1.0 | 1.5  |
| 7     | 7.9      | 5.9 | 6.5  | 4.7      | 3.3 | 3.7  | 3.0      | 2.0 | 2.4  | 2.7     | 1.8 | 2.1  |
| 8     | 7.6      | 5.7 | 6.4  | 5.0      | 3.2 | 3.7  | 2.3      | 1.4 | 1.8  | 2.6     | 1.9 | 2.1  |
| 9     | 7.4      | 5.9 | 6.4  | 4.4      | 3.0 | 3.8  | 2.5      | 1.7 | 2.0  | 2.8     | 1.9 | 2.2  |
| 10    | 7.9      | 5.9 | 6.5  | 3.6      | 1.3 | 2.8  | 3.1      | 2.1 | 2.4  | 2.5     | 1.7 | 2.1  |
| 11    | 8.0      | 5.9 | 6.5  | 4.1      | 1.6 | 3.2  | 3.2      | 2.2 | 2.6  | 3.0     | 1.6 | 2.1  |
| 12    | 7.9      | 6.1 | 6.7  | 4.0      | 3.3 | 3.6  | 3.5      | 2.5 | 2.9  | 2.9     | 1.8 | 2.1  |
| 13    | 6.8      | 5.2 | 5.8  | 4.2      | 3.4 | 3.6  | 3.2      | 1.9 | 2.8  | 3.0     | 1.9 | 2.1  |
| 14    | 7.4      | 5.5 | 6.0  | 4.8      | 3.1 | 3.6  | 2.8      | 1.6 | 2.1  | 2.8     | 1.7 | 2.0  |
| 15    | 7.6      | 5.7 | 6.2  | 4.3      | 2.8 | 3.2  | 2.8      | 1.5 | 2.0  | 2.8     | 1.7 | 2.1  |
| 16    | 7.4      | 5.5 | 6.2  | 4.2      | 2.7 | 3.3  | 2.9      | 1.8 | 2.2  | 2.7     | 1.9 | 2.1  |
| 17    | 7.3      | 5.5 | 6.1  | 4.0      | 2.5 | 3.0  | 2.7      | 1.4 | 1.9  | 2.4     | 1.1 | 1.9  |
| 18    | 7.2      | 5.5 | 6.0  | 4.2      | 2.7 | 3.1  | 2.2      | 1.2 | 1.5  | 1.5     | .2  | .8   |
| 19    | 6.5      | 5.0 | 5.5  | 4.0      | 2.7 | 3.0  | 2.2      | 1.2 | 1.5  | 1.7     | 1.1 | 1.5  |
| 20    | 6.7      | 4.9 | 5.4  | 3.9      | 2.7 | 3.0  | 2.1      | 1.1 | 1.4  | 1.5     | .8  | 1.1  |
| 21    | 6.8      | 5.2 | 5.7  | 3.8      | 2.5 | 2.9  | 2.2      | 1.1 | 1.4  | 2.4     | 1.0 | 1.7  |
| 22    | 5.7      | 4.3 | 5.1  | 3.5      | 2.5 | 2.9  | 2.0      | 1.1 | 1.4  | 2.3     | 1.3 | 1.7  |
| 23    | 5.4      | 4.0 | 4.4  | 3.6      | 2.3 | 2.7  | 2.0      | 1.0 | 1.3  | 1.6     | .7  | 1.0  |
| 24    | 5.7      | 4.1 | 4.6  | 3.9      | 2.3 | 2.9  | 2.3      | 1.4 | 1.7  | 1.9     | .8  | 1.5  |
| 25    | 5.8      | 4.3 | 4.8  | 3.8      | 2.8 | 3.0  | 2.4      | 1.4 | 1.7  | 1.7     | .9  | 1.4  |
| 26    | 5.5      | 4.3 | 4.7  | 3.6      | 2.4 | 2.9  | 2.4      | 1.5 | 1.7  | 1.5     | .8  | 1.1  |
| 27    | 5.3      | 4.1 | 4.5  | 2.4      | 1.5 | 2.0  | 2.4      | 1.5 | 1.7  | 2.5     | .8  | 1.6  |
| 28    | 5.8      | 4.4 | 4.8  | 2.3      | 1.3 | 1.8  | 2.5      | 1.5 | 1.9  | 1.9     | 1.3 | 1.6  |
| 29    | 5.4      | 4.6 | 4.9  | 3.2      | 2.1 | 2.6  | 2.4      | 1.6 | 1.8  | 2.5     | 1.4 | 1.8  |
| 30    | 5.5      | 4.4 | 4.8  | 3.3      | 2.5 | 2.8  | 2.5      | 1.5 | 2.0  | 2.2     | 1.4 | 1.8  |
| 31    | 5.9      | 4.5 | 4.9  | ---      | --- | ---  | 2.5      | 1.1 | 1.9  | 2.5     | .9  | 1.8  |
| MONTH | 8.7      | 4.0 | 5.9  | 5.4      | 1.3 | 3.2  | 3.6      | 1.0 | 2.1  | 3.0     | .2  | 1.7  |
| DAY   | MAX      | MIN | MEAN | MAX      | MIN | MEAN | MAX      | MIN | MEAN | MAX     | MIN | MEAN |
|       | FEBRUARY |     |      | MARCH    |     |      | APRIL    |     |      | MAY     |     |      |
| 1     | ---      | --- | ---  | 2.5      | .3  | 1.1  | 4.2      | 1.7 | 2.4  | 6.2     | 2.4 | 3.5  |
| 2     | ---      | --- | ---  | 2.9      | .3  | 1.3  | 4.4      | 1.8 | 2.5  | 5.7     | 2.6 | 3.5  |
| 3     | ---      | --- | ---  | 3.4      | .3  | 1.8  | 3.5      | 1.4 | 2.2  | 6.2     | 2.7 | 3.7  |
| 4     | ---      | --- | ---  | 3.3      | 1.8 | 2.2  | 2.4      | 1.2 | 1.6  | 6.5     | 2.4 | 3.7  |
| 5     | ---      | --- | ---  | 3.3      | 1.6 | 2.2  | 3.3      | 1.1 | 1.9  | 6.6     | 2.5 | 3.8  |
| 6     | ---      | --- | ---  | 3.1      | 1.1 | 1.8  | 3.6      | 1.4 | 2.1  | 6.0     | 2.5 | 3.7  |
| 7     | ---      | --- | ---  | 3.3      | .6  | 1.7  | 3.4      | 1.8 | 2.4  | 6.5     | 2.5 | 3.8  |
| 8     | 4.0      | 2.0 | 2.4  | 2.9      | 1.3 | 2.0  | 4.2      | 2.0 | 2.6  | 6.5     | 2.7 | 3.9  |
| 9     | 3.7      | 1.9 | 2.5  | 4.2      | 1.7 | 2.4  | 4.5      | 1.9 | 2.6  | 6.7     | 3.0 | 3.9  |
| 10    | 4.4      | 1.1 | 2.3  | 3.5      | 1.9 | 2.5  | 4.0      | 2.0 | 2.6  | 5.7     | 2.9 | 3.9  |
| 11    | 3.4      | .7  | 1.5  | 4.2      | 1.9 | 2.5  | 4.2      | 2.1 | 2.5  | 6.4     | 3.3 | 4.3  |
| 12    | 3.6      | .8  | 1.6  | 3.7      | 1.8 | 2.4  | 3.8      | 1.7 | 2.4  | 6.5     | 3.7 | 4.6  |
| 13    | 4.1      | 1.0 | 2.1  | 4.0      | 1.0 | 2.3  | 2.5      | 1.5 | 2.0  | 6.7     | 3.9 | 4.6  |
| 14    | 4.2      | 1.6 | 2.4  | 3.0      | 1.0 | 2.2  | 3.3      | 1.5 | 2.0  | 6.4     | 4.1 | 4.8  |
| 15    | 3.7      | 1.0 | 1.8  | 4.2      | 1.2 | 2.3  | 4.6      | 1.3 | 2.4  | 6.9     | 4.3 | 5.2  |
| 16    | 4.1      | 1.4 | 2.1  | 4.1      | 1.8 | 2.4  | 4.7      | 1.7 | 2.6  | 7.4     | 5.1 | 5.9  |
| 17    | 4.1      | 1.5 | 2.3  | 2.4      | 1.4 | 1.8  | 4.9      | 1.7 | 2.7  | 7.3     | 5.4 | 6.0  |
| 18    | 3.5      | 1.0 | 2.1  | 2.1      | 1.2 | 1.6  | 3.6      | 1.5 | 2.2  | 7.5     | 5.5 | 6.1  |
| 19    | 3.2      | 1.4 | 2.2  | 3.7      | 1.2 | 1.9  | 3.3      | 1.0 | 1.8  | 7.7     | 5.8 | 6.3  |
| 20    | 3.2      | .6  | 2.3  | 4.1      | 1.1 | 2.1  | 3.8      | 1.1 | 1.9  | 7.1     | 5.6 | 6.1  |
| 21    | 3.2      | .6  | 2.6  | 4.0      | 1.8 | 2.4  | 4.6      | 1.4 | 2.4  | 7.8     | 5.9 | 6.6  |
| 22    | 3.6      | 1.4 | 2.5  | 3.8      | 1.9 | 2.4  | 4.4      | 1.2 | 2.2  | 8.3     | 6.3 | 7.1  |
| 23    | 2.9      | .1  | 1.3  | 4.3      | 1.5 | 2.4  | 5.7      | 1.6 | 2.9  | 8.5     | 7.0 | 7.5  |
| 24    | 3.7      | 1.2 | 2.0  | 2.7      | .8  | 1.6  | 6.3      | 2.4 | 3.5  | 7.4     | 7.0 | 7.1  |
| 25    | 3.8      | 1.3 | 2.0  | 2.8      | .8  | 1.6  | 5.4      | 1.8 | 3.0  | 7.0     | 5.8 | 6.7  |
| 26    | 2.1      | .9  | 1.5  | 3.6      | .9  | 1.8  | 5.7      | 2.0 | 3.1  | 6.4     | 5.1 | 5.9  |
| 27    | 2.2      | .8  | 1.3  | 3.8      | 1.1 | 2.0  | 5.3      | 2.1 | 3.0  | 6.8     | 5.7 | 6.0  |
| 28    | 2.8      | .3  | 1.1  | 3.5      | 1.4 | 2.1  | 2.4      | 1.2 | 1.8  | 6.5     | 5.1 | 5.9  |
| 29    | ---      | --- | ---  | 3.8      | 1.5 | 2.2  | 5.1      | 1.2 | 2.4  | 7.7     | 5.6 | 6.4  |
| 30    | ---      | --- | ---  | 3.8      | 1.6 | 2.2  | 3.8      | 1.8 | 2.7  | 7.8     | 6.2 | 6.8  |
| 31    | ---      | --- | ---  | 4.0      | 1.6 | 2.4  | ---      | --- | ---  | 8.0     | 6.1 | 6.7  |
| MONTH | ---      | --- | ---  | 4.3      | .3  | 2.1  | 6.3      | 1.0 | 2.4  | 8.5     | 2.4 | 5.3  |

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

TEMPERATURE, WATER (DEG. C) WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DAY   | MAX  | MIN  | MEAN |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|
|       |      |      |      |      |      |      |      |      |      |      |      |      |
| 1     | 7.9  | 6.1  | 6.8  | 12.1 | 10.3 | 11.0 | 13.0 | 10.1 | 11.2 | 12.2 | 9.9  | 10.5 |
| 2     | 8.5  | 6.2  | 7.0  | 12.1 | 10.5 | 11.1 | 10.1 | 7.7  | 9.1  | 11.9 | 10.0 | 10.6 |
| 3     | 9.1  | 6.6  | 7.4  | 12.1 | 10.7 | 11.1 | 9.0  | 7.2  | 7.6  | 12.0 | 9.9  | 10.6 |
| 4     | 9.1  | 7.0  | 7.7  | 12.2 | 10.8 | 11.1 | 9.0  | 7.1  | 7.6  | 12.2 | 10.0 | 10.6 |
| 5     | 9.7  | 7.1  | 7.9  | 12.2 | 10.8 | 11.3 | 9.3  | 7.3  | 8.0  | 11.1 | 10.1 | 10.5 |
| 6     | 9.3  | 7.0  | 7.8  | 12.7 | 10.9 | 11.4 | 9.9  | 7.8  | 8.6  | 10.7 | 9.9  | 10.3 |
| 7     | 9.6  | 7.2  | 8.0  | 12.7 | 11.1 | 11.6 | 10.1 | 8.4  | 9.0  | 11.8 | 9.7  | 10.3 |
| 8     | 10.1 | 7.5  | 8.3  | 12.6 | 11.3 | 11.8 | 10.5 | 8.9  | 9.4  | 12.0 | 9.7  | 10.4 |
| 9     | 9.9  | 7.5  | 8.2  | 12.5 | 11.5 | 11.8 | 11.1 | 9.3  | 9.9  | 11.7 | 9.3  | 10.2 |
| 10    | 9.7  | 7.5  | 8.1  | 12.8 | 11.3 | 11.7 | 11.2 | 9.4  | 10.0 | 12.0 | 9.9  | 10.5 |
| 11    | 9.9  | 7.5  | 8.2  | 12.8 | 11.4 | 11.9 | 11.5 | 9.6  | 10.2 | 12.0 | 9.6  | 10.3 |
| 12    | 9.3  | 7.6  | 8.1  | 12.9 | 11.5 | 12.0 | 11.9 | 9.9  | 10.5 | 11.7 | 9.5  | 10.1 |
| 13    | 9.9  | 7.7  | 8.4  | 13.1 | 11.7 | 12.2 | 11.4 | 9.9  | 10.4 | 11.4 | 9.4  | 10.0 |
| 14    | 9.3  | 7.9  | 8.6  | 13.3 | 11.7 | 12.4 | 11.3 | 10.1 | 10.5 | 11.2 | 9.2  | 9.8  |
| 15    | 8.7  | 7.6  | 8.3  | 13.6 | 12.0 | 12.5 | 12.0 | 10.1 | 10.7 | 11.7 | 9.2  | 10.0 |
| 16    | 10.1 | 7.5  | 8.5  | 13.2 | 12.1 | 12.5 | 11.8 | 10.1 | 10.6 | 11.9 | 8.8  | 9.8  |
| 17    | 10.1 | 8.2  | 8.9  | 13.3 | 12.1 | 12.5 | 12.1 | 9.9  | 10.5 | 10.1 | 9.0  | 9.4  |
| 18    | 10.5 | 8.3  | 9.2  | 13.2 | 12.1 | 12.4 | 12.0 | 10.0 | 10.6 | 10.4 | 7.3  | 9.2  |
| 19    | 10.6 | 8.7  | 9.5  | 13.3 | 11.9 | 12.3 | 11.3 | 10.2 | 10.5 | 10.0 | 8.1  | 8.7  |
| 20    | 11.1 | 9.0  | 9.8  | 13.4 | 11.9 | 12.4 | 12.2 | 10.1 | 10.7 | 10.4 | 8.4  | 8.9  |
| 21    | 10.4 | 9.1  | 9.7  | 13.7 | 11.8 | 12.4 | 11.9 | 10.4 | 10.7 | 10.7 | 8.3  | 9.1  |
| 22    | 10.8 | 8.7  | 9.4  | 13.7 | 11.7 | 12.3 | 11.6 | 10.3 | 10.6 | 10.7 | 8.6  | 9.1  |
| 23    | 11.0 | 8.6  | 9.6  | 13.7 | 11.6 | 12.4 | 12.0 | 10.3 | 10.7 | 10.5 | 8.4  | 8.9  |
| 24    | 11.4 | 9.3  | 10.1 | 13.9 | 11.9 | 12.6 | 12.2 | 10.2 | 10.8 | 10.1 | 8.2  | 8.8  |
| 25    | 11.3 | 9.5  | 10.1 | 13.6 | 12.2 | 12.6 | 12.3 | 10.3 | 10.9 | 9.5  | 7.0  | 8.3  |
| 26    | 11.6 | 9.6  | 10.2 | 13.6 | 11.8 | 12.3 | 12.3 | 10.2 | 10.8 | 8.1  | 6.2  | 7.1  |
| 27    | 11.1 | 10.0 | 10.4 | 13.4 | 11.5 | 12.1 | 11.4 | 10.1 | 10.6 | 8.0  | 5.2  | 6.9  |
| 28    | 10.9 | 9.7  | 10.2 | 13.3 | 11.7 | 12.2 | 12.2 | 10.1 | 10.6 | 9.3  | 7.1  | 7.7  |
| 29    | 11.5 | 9.5  | 10.3 | 12.3 | 11.7 | 12.1 | 11.9 | 10.1 | 10.6 | 9.4  | 7.0  | 7.7  |
| 30    | 11.8 | 10.2 | 10.7 | 13.7 | 11.1 | 12.0 | 11.6 | 10.1 | 10.5 | 9.6  | 7.1  | 7.9  |
| 31    | ---  | ---  | ---  | 13.7 | 10.9 | 11.7 | 12.1 | 9.8  | 10.5 | ---  | ---  | ---  |
| MONTH | 11.8 | 6.1  | 8.8  | 13.9 | 10.3 | 12.0 | 13.0 | 7.1  | 10.1 | 12.2 | 5.2  | 9.4  |

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

PERIOD OF RECORD.--May 1995 to August 1996 (discontinued).

GAGE.--Tipping bucket rain gage (no wind vanes 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, 0.76 in., May 27, 1996.

EXTREMES FOR CURRENT YEAR.--Maximum daily rainfall, 0.76 in., May 27.

PRECIPITATION INCHES, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY SUM VALUES

| DAY   | OCT  | NOV | DEC | JAN | FEB | MAR | APR  | MAY  | JUN  | JUL  | AUG | SEP |
|-------|------|-----|-----|-----|-----|-----|------|------|------|------|-----|-----|
| 1     | .00  | --- | --- | --- | --- | --- | .00  | .13  | .01  | .00  | .00 | --- |
| 2     | .00  | --- | --- | --- | --- | --- | .00  | .04  | .00  | .18  | .00 | --- |
| 3     | .00  | --- | --- | --- | --- | --- | .00  | .00  | .00  | .00  | .00 | --- |
| 4     | .01  | --- | --- | --- | --- | --- | .00  | .00  | .00  | .09  | .00 | --- |
| 5     | .00  | --- | --- | --- | --- | --- | .15  | .00  | .03  | .00  | .00 | --- |
| 6     | .16  | --- | --- | --- | --- | --- | .25  | .00  | .00  | .00  | .00 | --- |
| 7     | .11  | --- | --- | --- | --- | --- | .03  | .00  | .00  | .00  | .00 | --- |
| 8     | .00  | --- | --- | --- | --- | --- | .00  | .00  | .00  | .00  | --- | --- |
| 9     | .00  | --- | --- | --- | --- | --- | .00  | .00  | .00  | .06  | --- | --- |
| 10    | .00  | --- | --- | --- | --- | --- | .04  | .00  | .00  | .00  | --- | --- |
| 11    | .00  | --- | --- | --- | --- | --- | .01  | .00  | .00  | .00  | --- | --- |
| 12    | .28  | --- | --- | --- | --- | --- | .00  | .00  | .51  | .00  | --- | --- |
| 13    | .01  | --- | --- | --- | --- | --- | .00  | .00  | .04  | .00  | --- | --- |
| 14    | .00  | --- | --- | --- | --- | --- | .05  | .00  | .00  | .00  | --- | --- |
| 15    | .00  | --- | --- | --- | --- | --- | .11  | .00  | .56  | .00  | --- | --- |
| 16    | .00  | --- | --- | --- | --- | --- | .00  | .00  | .00  | .00  | --- | --- |
| 17    | .00  | --- | --- | --- | --- | --- | .00  | .00  | .00  | .00  | --- | --- |
| 18    | .00  | --- | --- | --- | --- | --- | .08  | .00  | .00  | .21  | --- | --- |
| 19    | .00  | --- | --- | --- | --- | --- | .02  | .00  | .00  | .00  | --- | --- |
| 20    | .00  | --- | --- | --- | --- | --- | .01  | .00  | .01  | .00  | --- | --- |
| 21    | .00  | --- | --- | --- | --- | --- | .11  | .00  | .07  | .00  | --- | --- |
| 22    | .00  | --- | --- | --- | --- | --- | .06  | .00  | .15  | .00  | --- | --- |
| 23    | .00  | --- | --- | --- | --- | --- | .00  | .00  | .00  | .00  | --- | --- |
| 24    | .02  | --- | --- | --- | --- | --- | .00  | .02  | .00  | .00  | --- | --- |
| 25    | .01  | --- | --- | --- | --- | --- | .13  | .17  | .00  | .03  | --- | --- |
| 26    | .00  | --- | --- | --- | --- | --- | .00  | .13  | .06  | .00  | --- | --- |
| 27    | .00  | --- | --- | --- | --- | --- | .03  | .76  | .00  | .00  | --- | --- |
| 28    | .00  | --- | --- | --- | --- | --- | .00  | .42  | .16  | .00  | --- | --- |
| 29    | .00  | --- | --- | --- | --- | --- | .15  | .01  | .00  | .00  | --- | --- |
| 30    | .00  | --- | --- | --- | --- | --- | .00  | .00  | .00  | .00  | --- | --- |
| 31    | .01  | --- | --- | --- | --- | --- | ---  | .00  | ---  | .00  | --- | --- |
| TOTAL | 0.61 | --- | --- | --- | --- | --- | 1.23 | 1.68 | 1.60 | 0.57 | --- | --- |

**06714800 LEAVENWORTH CREEK AT MOUTH NEAR GEORGETOWN, CO**

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

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

**WATER-DISCHARGE RECORDS**

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

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 9,320 ft above sea level, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are poor. Vidler tunnel (transmountain diversion) imports water from Peru Creek. There is seasonal diversion into Green Lake.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

| DAY   | OCT   | NOV   | DEC  | JAN  | FEB  | MAR  | APR  | MAY   | JUN  | JUL  | AUG   | SEP   |
|-------|-------|-------|------|------|------|------|------|-------|------|------|-------|-------|
| 1     | 8.1   | e5.6  | e3.3 | e1.9 | e1.9 | e1.5 | 1.9  | 2.5   | 33   | 58   | 18    | 5.8   |
| 2     | 8.1   | e5.5  | 3.1  | e1.9 | e1.7 | e1.4 | 1.8  | 2.6   | 33   | 55   | 17    | 5.7   |
| 3     | 8.0   | e5.5  | 3.0  | e1.9 | e1.7 | e1.4 | 1.8  | 3.0   | 38   | 51   | 19    | 5.5   |
| 4     | 8.1   | e5.5  | 3.0  | e1.9 | e1.7 | e1.5 | 1.7  | 3.9   | 44   | 53   | 18    | 5.3   |
| 5     | 7.6   | e5.5  | 3.0  | e1.9 | e1.8 | e1.5 | 1.7  | 5.6   | 50   | 57   | 15    | 5.3   |
| 6     | 8.3   | e5.2  | 3.1  | e1.9 | e1.8 | e1.5 | 1.8  | 7.4   | 59   | 53   | 15    | 6.7   |
| 7     | 7.9   | e5.2  | 3.0  | e2.0 | e1.8 | e1.5 | 1.8  | 9.0   | 62   | 48   | 15    | 6.2   |
| 8     | 7.8   | e5.2  | e2.9 | e2.1 | e1.9 | e1.5 | 2.0  | 11    | 67   | 43   | 16    | 5.5   |
| 9     | 7.5   | e4.7  | e2.7 | e2.1 | e1.9 | e1.3 | 2.6  | 12    | 79   | 40   | 14    | 5.3   |
| 10    | 7.4   | e4.7  | e2.7 | e2.1 | e2.0 | e1.4 | 3.0  | 13    | 82   | 41   | 13    | 5.3   |
| 11    | 7.4   | e4.7  | e2.8 | e1.9 | e1.8 | e1.5 | 2.7  | 15    | 83   | 37   | 12    | 5.1   |
| 12    | 7.5   | e4.5  | e2.8 | e2.0 | e1.7 | e1.5 | 2.4  | 19    | 79   | 35   | 11    | 6.0   |
| 13    | e7.4  | e4.4  | e2.7 | e2.3 | e1.7 | e1.6 | 2.3  | 22    | 77   | 34   | 11    | 6.2   |
| 14    | e7.7  | e4.4  | e2.6 | e2.2 | e1.9 | e1.6 | 2.1  | 26    | 72   | 33   | 11    | 5.9   |
| 15    | e8.0  | e4.2  | e2.7 | e2.2 | e1.8 | e1.5 | 2.2  | 33    | 73   | 31   | 10    | 7.5   |
| 16    | e7.8  | e4.2  | e2.6 | e2.1 | e1.7 | e1.5 | 2.2  | 43    | 67   | 29   | 10    | 6.3   |
| 17    | e7.1  | e4.1  | e2.5 | e2.0 | e1.7 | e1.6 | 2.3  | 50    | 65   | 28   | 10    | 5.7   |
| 18    | e6.9  | e4.0  | e2.4 | e1.9 | e1.8 | e1.5 | 2.2  | 54    | 64   | 34   | 10    | 5.9   |
| 19    | e6.6  | e3.7  | e2.4 | e1.8 | e1.7 | e1.5 | 2.1  | 62    | 61   | 33   | 9.8   | 6.4   |
| 20    | e7.2  | e3.7  | e2.4 | e1.8 | e1.7 | e1.6 | 2.1  | 58    | 62   | 32   | 9.8   | 6.1   |
| 21    | e6.4  | e3.7  | e2.3 | e1.8 | e1.7 | e1.7 | 2.0  | 52    | 72   | 29   | 9.4   | 6.6   |
| 22    | e6.1  | e3.9  | e2.2 | e1.9 | e1.7 | e1.9 | 2.0  | 55    | 83   | 27   | 8.3   | 6.7   |
| 23    | e6.9  | e3.8  | e2.1 | e1.8 | e1.7 | e1.9 | 2.0  | 54    | 65   | 25   | 7.9   | 6.8   |
| 24    | e8.4  | e3.7  | e2.2 | e1.8 | e1.6 | e1.8 | 2.7  | 43    | 59   | 25   | 7.6   | 8.5   |
| 25    | e8.0  | e3.6  | e2.2 | e1.8 | e1.6 | e1.7 | 3.4  | 39    | 58   | 24   | 7.1   | 7.6   |
| 26    | e7.6  | e3.5  | e2.3 | e1.8 | e1.6 | e1.7 | 2.9  | 34    | 59   | 23   | 6.9   | 6.6   |
| 27    | e6.7  | e3.5  | e2.3 | e1.7 | e1.6 | e1.7 | 2.9  | 30    | 60   | 22   | 7.4   | 6.0   |
| 28    | e6.8  | e3.5  | e2.3 | e1.8 | e1.6 | e1.8 | 2.7  | 28    | 62   | 21   | 7.5   | 6.6   |
| 29    | e6.3  | e3.4  | e2.1 | e1.8 | e1.6 | e1.8 | 2.7  | 31    | 58   | 23   | 6.8   | 7.6   |
| 30    | e5.9  | e3.3  | e2.0 | e1.8 | ---  | e1.8 | 2.5  | 33    | 58   | 20   | 6.4   | 7.6   |
| 31    | e5.8  | ---   | e1.9 | e1.8 | ---  | 1.9  | ---  | 32    | ---  | 19   | 6.0   | ---   |
| TOTAL | 227.3 | 130.4 | 79.6 | 59.7 | 50.4 | 49.6 | 68.5 | 883.0 | 1884 | 1083 | 345.9 | 188.3 |
| MEAN  | 7.33  | 4.35  | 2.57 | 1.93 | 1.74 | 1.60 | 2.28 | 28.5  | 62.8 | 34.9 | 11.2  | 6.28  |
| MAX   | 8.4   | 5.6   | 3.3  | 2.3  | 2.0  | 1.9  | 3.4  | 62    | 83   | 58   | 19    | 8.5   |
| MIN   | 5.8   | 3.3   | 1.9  | 1.7  | 1.6  | 1.3  | 1.7  | 2.5   | 33   | 19   | 6.0   | 5.1   |
| AC-FT | 451   | 259   | 158  | 118  | 100  | 98   | 136  | 1750  | 3740 | 2150 | 686   | 373   |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 1996, BY WATER YEAR (WY)

|      | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 6.53 | 3.81 | 2.33 | 1.77 | 1.55 | 1.51 | 1.95 | 16.8 | 66.9 | 58.3 | 18.4 | 8.57 |
| MAX  | 7.33 | 4.35 | 2.57 | 1.93 | 1.74 | 1.60 | 2.28 | 28.5 | 71.1 | 81.7 | 25.7 | 10.9 |
| (WY) | 1996 | 1996 | 1996 | 1996 | 1996 | 1996 | 1996 | 1996 | 1995 | 1995 | 1995 | 1995 |
| MIN  | 5.73 | 3.28 | 2.08 | 1.62 | 1.35 | 1.42 | 1.61 | 5.10 | 62.8 | 34.9 | 11.2 | 6.28 |
| (WY) | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1996 | 1996 | 1996 | 1996 |

SUMMARY STATISTICS

FOR 1995 CALENDAR YEAR

FOR 1996 WATER YEAR

WATER YEARS 1994 - 1996

|                          |                  |        |                   |        |
|--------------------------|------------------|--------|-------------------|--------|
| ANNUAL TOTAL             | 6563.4           | 5049.7 |                   |        |
| ANNUAL MEAN              | 18.0             | 13.8   | 15.8              |        |
| HIGHEST ANNUAL MEAN      |                  |        | 17.7              | 1995   |
| LOWEST ANNUAL MEAN       |                  |        | 13.8              | 1996   |
| HIGHEST DAILY MEAN       | 125              | Jun 21 | <sup>a</sup> 83   | Jun 11 |
| LOWEST DAILY MEAN        | <sup>b</sup> 1.2 | Feb 12 | <sup>e</sup> 1.3  | Mar 9  |
| ANNUAL SEVEN-DAY MINIMUM | 1.3              | Feb 11 | 1.5               | Mar 3  |
| INSTANTANEOUS PEAK FLOW  |                  |        | <sup>c</sup> 100  | Jun 9  |
| INSTANTANEOUS PEAK STAGE |                  |        | <sup>c</sup> 4.68 | Jun 9  |
| ANNUAL RUNOFF (AC-FT)    | 13020            | 10020  | 11410             |        |
| 10 PERCENT EXCEEDS       | 78               | 51     | 55                |        |
| 50 PERCENT EXCEEDS       | 4.4              | 5.3    | 4.2               |        |
| 90 PERCENT EXCEEDS       | 1.4              | 1.7    | 1.5               |        |

e-Estimated.  
a-Also occurred Jun 22.  
b-Also occurred Mar 13,1995.  
c-Also occurred Jun 10, 12.  
d-Maximum gage height, 5.69 ft, Jun 17, 1995.



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

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM @ 25 DEG. C), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DAY   | MAX | MIN | MEAN | FEBRUARY |     |      | MARCH |     |      | APRIL  |     |      | MAY       |     |      |
|-------|-----|-----|------|----------|-----|------|-------|-----|------|--------|-----|------|-----------|-----|------|
|       |     |     |      | MAX      | MIN | MEAN | MAX   | MIN | MEAN | MAX    | MIN | MEAN | MAX       | MIN | MEAN |
| 1     | --- | --- | ---  | ---      | --- | ---  | ---   | --- | ---  | 130    | 124 | 128  |           |     |      |
| 2     | --- | --- | ---  | ---      | --- | ---  | ---   | --- | ---  | 128    | 124 | 126  |           |     |      |
| 3     | --- | --- | ---  | ---      | --- | ---  | ---   | --- | ---  | 127    | 117 | 123  |           |     |      |
| 4     | --- | --- | ---  | ---      | --- | ---  | ---   | --- | ---  | 121    | 103 | 115  |           |     |      |
| 5     | --- | --- | ---  | ---      | --- | ---  | ---   | --- | ---  | 111    | 95  | 105  |           |     |      |
| 6     | --- | --- | ---  | ---      | --- | ---  | ---   | --- | ---  | 103    | 91  | 98   |           |     |      |
| 7     | --- | --- | ---  | ---      | --- | ---  | ---   | --- | ---  | 97     | 85  | 92   |           |     |      |
| 8     | --- | --- | ---  | ---      | --- | ---  | ---   | --- | ---  | 139    | 129 | 135  |           |     |      |
| 9     | --- | --- | ---  | ---      | --- | ---  | ---   | --- | ---  | 133    | 125 | 130  |           |     |      |
| 10    | --- | --- | ---  | ---      | --- | ---  | ---   | --- | ---  | 130    | 126 | 128  |           |     |      |
| 11    | --- | --- | ---  | ---      | --- | ---  | ---   | --- | ---  | 132    | 130 | 131  |           |     |      |
| 12    | --- | --- | ---  | ---      | --- | ---  | ---   | --- | ---  | 134    | 132 | 133  |           |     |      |
| 13    | --- | --- | ---  | ---      | --- | ---  | ---   | --- | ---  | 135    | 132 | 134  |           |     |      |
| 14    | --- | --- | ---  | ---      | --- | ---  | ---   | --- | ---  | 137    | 135 | 136  |           |     |      |
| 15    | --- | --- | ---  | ---      | --- | ---  | ---   | --- | ---  | 142    | 128 | 135  |           |     |      |
| 16    | --- | --- | ---  | ---      | --- | ---  | ---   | --- | ---  | 136    | 132 | 134  |           |     |      |
| 17    | --- | --- | ---  | ---      | --- | ---  | ---   | --- | ---  | 135    | 130 | 133  |           |     |      |
| 18    | --- | --- | ---  | ---      | --- | ---  | ---   | --- | ---  | 134    | 131 | 132  |           |     |      |
| 19    | --- | --- | ---  | ---      | --- | ---  | ---   | --- | ---  | 137    | 132 | 133  |           |     |      |
| 20    | --- | --- | ---  | ---      | --- | ---  | ---   | --- | ---  | 141    | 128 | 135  |           |     |      |
| 21    | --- | --- | ---  | ---      | --- | ---  | ---   | --- | ---  | 137    | 133 | 136  |           |     |      |
| 22    | --- | --- | ---  | ---      | --- | ---  | ---   | --- | ---  | 139    | 132 | 137  |           |     |      |
| 23    | --- | --- | ---  | ---      | --- | ---  | ---   | --- | ---  | 138    | 131 | 135  |           |     |      |
| 24    | --- | --- | ---  | ---      | --- | ---  | ---   | --- | ---  | 133    | 118 | 128  |           |     |      |
| 25    | --- | --- | ---  | ---      | --- | ---  | ---   | --- | ---  | 126    | 116 | 121  |           |     |      |
| 26    | --- | --- | ---  | ---      | --- | ---  | ---   | --- | ---  | 128    | 123 | 126  |           |     |      |
| 27    | --- | --- | ---  | ---      | --- | ---  | ---   | --- | ---  | 126    | 123 | 125  |           |     |      |
| 28    | --- | --- | ---  | ---      | --- | ---  | ---   | --- | ---  | 129    | 125 | 126  |           |     |      |
| 29    | --- | --- | ---  | ---      | --- | ---  | ---   | --- | ---  | 135    | 122 | 128  |           |     |      |
| 30    | --- | --- | ---  | ---      | --- | ---  | ---   | --- | ---  | 129    | 126 | 128  |           |     |      |
| 31    | --- | --- | ---  | ---      | --- | ---  | ---   | --- | ---  | 62     | 61  | 61   |           |     |      |
| MONTH | --- | --- | ---  | ---      | --- | ---  | ---   | --- | ---  | 130    | 49  | 74   |           |     |      |
|       |     |     |      |          |     |      |       |     |      |        |     |      |           |     |      |
| DAY   | MAX | MIN | MEAN | JUNE     |     |      | JULY  |     |      | AUGUST |     |      | SEPTEMBER |     |      |
|       |     |     |      | MAX      | MIN | MEAN | MAX   | MIN | MEAN | MAX    | MIN | MEAN | MAX       | MIN | MEAN |
| 1     | 62  | 60  | 61   | 46       | 43  | 44   | 70    | 68  | 69   | 91     | 88  | 89   |           |     |      |
| 2     | 62  | 59  | 61   | 46       | 43  | 45   | 70    | 69  | 69   | 90     | 87  | 88   |           |     |      |
| 3     | 61  | 57  | 59   | 47       | 45  | 46   | 72    | 68  | 70   | 91     | 88  | 89   |           |     |      |
| 4     | 58  | 55  | 57   | 49       | 44  | 47   | 73    | 71  | 72   | 92     | 89  | 90   |           |     |      |
| 5     | 57  | 49  | 54   | 48       | 44  | 47   | 75    | 70  | 72   | 92     | 89  | 90   |           |     |      |
| 6     | 53  | 48  | 50   | 48       | 45  | 46   | 76    | 74  | 75   | 93     | 86  | 89   |           |     |      |
| 7     | 52  | 46  | 49   | 48       | 45  | 47   | 76    | 75  | 75   | 96     | 93  | 95   |           |     |      |
| 8     | 49  | 42  | 46   | 49       | 45  | 48   | 84    | 71  | 77   | 95     | 93  | 94   |           |     |      |
| 9     | 46  | 40  | 43   | 50       | 48  | 49   | 84    | 78  | 80   | 95     | 92  | 93   |           |     |      |
| 10    | 44  | 39  | 41   | 53       | 49  | 51   | 79    | 68  | 76   | 96     | 93  | 95   |           |     |      |
| 11    | 42  | 39  | 40   | 53       | 50  | 52   | 79    | 76  | 78   | 96     | 94  | 95   |           |     |      |
| 12    | 42  | 39  | 41   | 53       | 50  | 52   | 80    | 77  | 78   | 95     | 84  | 92   |           |     |      |
| 13    | 42  | 39  | 41   | 54       | 51  | 52   | 79    | 77  | 78   | 96     | 90  | 94   |           |     |      |
| 14    | 44  | 39  | 41   | 55       | 52  | 53   | 80    | 78  | 79   | 97     | 89  | 95   |           |     |      |
| 15    | 45  | 44  | 44   | 55       | 52  | 54   | 81    | 79  | 80   | 100    | 90  | 94   |           |     |      |
| 16    | 46  | 41  | 44   | 56       | 54  | 55   | 81    | 79  | 80   | 99     | 97  | 98   |           |     |      |
| 17    | 44  | 40  | 42   | 57       | 54  | 56   | 82    | 79  | 80   | 99     | 95  | 96   |           |     |      |
| 18    | 44  | 40  | 41   | 59       | 57  | 58   | 84    | 81  | 83   | 97     | 90  | 95   |           |     |      |
| 19    | 43  | 40  | 41   | 60       | 59  | 59   | 83    | 81  | 81   | 99     | 92  | 95   |           |     |      |
| 20    | 43  | 40  | 41   | 60       | 59  | 60   | 84    | 81  | 82   | 100    | 95  | 98   |           |     |      |
| 21    | 42  | 39  | 41   | 61       | 59  | 60   | 85    | 83  | 84   | 101    | 96  | 100  |           |     |      |
| 22    | 42  | 39  | 40   | 62       | 60  | 61   | 84    | 83  | 83   | 100    | 97  | 98   |           |     |      |
| 23    | 43  | 39  | 41   | 63       | 61  | 62   | 83    | 80  | 82   | 99     | 95  | 97   |           |     |      |
| 24    | 44  | 41  | 42   | 63       | 62  | 62   | 82    | 80  | 81   | 103    | 97  | 99   |           |     |      |
| 25    | 45  | 42  | 43   | 64       | 63  | 63   | 83    | 80  | 81   | 102    | 97  | 100  |           |     |      |
| 26    | 46  | 42  | 44   | 65       | 64  | 64   | 84    | 80  | 82   | 100    | 95  | 98   |           |     |      |
| 27    | 46  | 42  | 44   | 66       | 65  | 65   | 87    | 81  | 83   | 109    | 94  | 101  |           |     |      |
| 28    | 45  | 43  | 44   | 67       | 66  | 67   | 90    | 87  | 89   | 102    | 95  | 98   |           |     |      |
| 29    | 45  | 42  | 43   | 71       | 66  | 69   | 90    | 88  | 89   | 105    | 98  | 103  |           |     |      |
| 30    | 45  | 42  | 44   | 71       | 69  | 70   | 91    | 89  | 90   | 104    | 99  | 100  |           |     |      |
| 31    | --- | --- | ---  | 69       | 68  | 69   | 91    | 88  | 89   | ---    | --- | ---  |           |     |      |
| MONTH | 62  | 39  | 45   | 71       | 43  | 56   | 91    | 68  | 80   | 109    | 84  | 95   |           |     |      |

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

TEMPERATURE, WATER (DEG. C) WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DAY   | OCTOBER  |     |      | NOVEMBER |     |      | DECEMBER |     |      | JANUARY |     |      |
|-------|----------|-----|------|----------|-----|------|----------|-----|------|---------|-----|------|
|       | MAX      | MIN | MEAN | MAX      | MIN | MEAN | MAX      | MIN | MEAN | MAX     | MIN | MEAN |
| 1     | 3.2      | 1.2 | 2.2  | 1.5      | .0  | .6   | ---      | --- | ---  | ---     | --- | ---  |
| 2     | ---      | --- | ---  | .3       | .0  | .0   | ---      | --- | ---  | ---     | --- | ---  |
| 3     | 3.8      | 1.2 | 2.6  | .3       | .0  | .0   | ---      | --- | ---  | ---     | --- | ---  |
| 4     | 3.0      | .1  | 1.3  | .2       | .0  | .0   | ---      | --- | ---  | ---     | --- | ---  |
| 5     | .8       | .0  | .2   | .2       | .0  | .0   | ---      | --- | ---  | ---     | --- | ---  |
| 6     | .4       | .0  | .1   | .3       | .0  | .0   | ---      | --- | ---  | ---     | --- | ---  |
| 7     | 1.6      | .0  | .7   | .4       | .0  | .0   | ---      | --- | ---  | ---     | --- | ---  |
| 8     | 2.0      | .0  | 1.1  | .7       | .0  | .2   | ---      | --- | ---  | ---     | --- | ---  |
| 9     | 2.1      | .2  | 1.0  | .7       | .0  | .3   | ---      | --- | ---  | ---     | --- | ---  |
| 10    | 3.0      | .3  | 1.7  | .2       | .0  | .0   | ---      | --- | ---  | ---     | --- | ---  |
| 11    | 3.5      | .6  | 2.2  | .4       | .0  | .2   | ---      | --- | ---  | ---     | --- | ---  |
| 12    | 4.6      | 1.8 | 3.0  | .8       | .4  | .6   | ---      | --- | ---  | ---     | --- | ---  |
| 13    | 2.7      | .0  | .8   | 1.0      | .5  | .7   | ---      | --- | ---  | ---     | --- | ---  |
| 14    | 2.0      | .0  | .9   | 1.4      | .4  | .8   | ---      | --- | ---  | ---     | --- | ---  |
| 15    | 3.2      | .5  | 1.9  | 1.1      | .2  | .5   | ---      | --- | ---  | ---     | --- | ---  |
| 16    | 3.3      | .5  | 2.1  | 1.3      | .2  | .6   | ---      | --- | ---  | ---     | --- | ---  |
| 17    | 3.2      | .8  | 2.1  | 1.1      | .2  | .5   | ---      | --- | ---  | ---     | --- | ---  |
| 18    | 3.4      | .6  | 2.1  | 1.4      | .3  | .6   | ---      | --- | ---  | ---     | --- | ---  |
| 19    | 2.5      | .0  | 1.1  | 1.3      | .4  | .6   | ---      | --- | ---  | ---     | --- | ---  |
| 20    | 1.1      | .0  | .4   | 1.3      | .3  | .7   | ---      | --- | ---  | ---     | --- | ---  |
| 21    | 2.2      | .1  | 1.1  | 1.2      | .2  | .5   | ---      | --- | ---  | ---     | --- | ---  |
| 22    | 1.4      | .0  | .4   | 1.1      | .4  | .6   | ---      | --- | ---  | ---     | --- | ---  |
| 23    | .6       | .0  | .0   | 1.0      | .1  | .5   | ---      | --- | ---  | ---     | --- | ---  |
| 24    | .5       | .0  | .1   | 1.2      | .1  | .6   | ---      | --- | ---  | ---     | --- | ---  |
| 25    | .5       | .0  | .1   | 1.3      | .5  | .7   | ---      | --- | ---  | ---     | --- | ---  |
| 26    | .3       | .0  | .0   | 1.2      | .3  | .6   | ---      | --- | ---  | ---     | --- | ---  |
| 27    | .6       | .0  | .1   | .3       | .0  | .1   | ---      | --- | ---  | ---     | --- | ---  |
| 28    | 1.1      | .0  | .3   | ---      | --- | ---  | ---      | --- | ---  | ---     | --- | ---  |
| 29    | 1.2      | .3  | .6   | ---      | --- | ---  | ---      | --- | ---  | ---     | --- | ---  |
| 30    | 1.6      | .1  | .7   | ---      | --- | ---  | ---      | --- | ---  | ---     | --- | ---  |
| 31    | 2.1      | .6  | 1.1  | ---      | --- | ---  | ---      | --- | ---  | ---     | --- | ---  |
| MONTH | ---      | --- | ---  | ---      | --- | ---  | ---      | --- | ---  | ---     | --- | ---  |
|       | FEBRUARY |     |      | MARCH    |     |      | APRIL    |     |      | MAY     |     |      |
| 1     | ---      | --- | ---  | ---      | --- | ---  | ---      | --- | ---  | 5.1     | .5  | 2.1  |
| 2     | ---      | --- | ---  | ---      | --- | ---  | ---      | --- | ---  | 4.7     | 1.0 | 2.3  |
| 3     | ---      | --- | ---  | ---      | --- | ---  | ---      | --- | ---  | 5.3     | 1.1 | 2.6  |
| 4     | ---      | --- | ---  | ---      | --- | ---  | ---      | --- | ---  | 6.0     | .5  | 2.5  |
| 5     | ---      | --- | ---  | ---      | --- | ---  | 2.2      | .0  | .6   | 5.6     | .3  | 2.2  |
| 6     | ---      | --- | ---  | ---      | --- | ---  | 2.8      | .0  | .9   | 4.9     | .3  | 1.9  |
| 7     | ---      | --- | ---  | ---      | --- | ---  | 2.5      | .4  | 1.1  | 5.2     | .2  | 1.9  |
| 8     | ---      | --- | ---  | ---      | --- | ---  | 3.3      | .6  | 1.4  | 5.3     | .3  | 2.0  |
| 9     | ---      | --- | ---  | ---      | --- | ---  | 3.5      | .3  | 1.3  | 5.1     | .7  | 2.1  |
| 10    | ---      | --- | ---  | ---      | --- | ---  | 2.6      | .3  | 1.1  | 4.8     | .4  | 2.0  |
| 11    | ---      | --- | ---  | ---      | --- | ---  | 3.2      | .4  | 1.1  | 5.9     | .6  | 2.3  |
| 12    | ---      | --- | ---  | ---      | --- | ---  | 2.7      | .0  | 1.0  | 6.0     | 1.0 | 2.4  |
| 13    | ---      | --- | ---  | ---      | --- | ---  | .8       | .0  | .4   | 6.1     | .7  | 2.3  |
| 14    | ---      | --- | ---  | ---      | --- | ---  | 1.7      | .0  | .4   | 5.1     | .8  | 2.2  |
| 15    | ---      | --- | ---  | ---      | --- | ---  | 3.0      | .0  | .9   | 6.0     | .6  | 2.4  |
| 16    | ---      | --- | ---  | ---      | --- | ---  | 3.6      | .0  | 1.3  | 5.7     | 1.0 | 2.5  |
| 17    | ---      | --- | ---  | ---      | --- | ---  | 3.8      | .3  | 1.4  | 4.8     | 1.2 | 2.4  |
| 18    | ---      | --- | ---  | ---      | --- | ---  | 2.2      | .0  | .6   | 5.4     | 1.0 | 2.5  |
| 19    | ---      | --- | ---  | ---      | --- | ---  | .9       | .0  | .1   | 5.4     | 1.5 | 2.7  |
| 20    | ---      | --- | ---  | ---      | --- | ---  | .8       | .0  | .1   | 4.1     | 1.1 | 2.2  |
| 21    | ---      | --- | ---  | ---      | --- | ---  | 2.5      | .0  | .7   | 5.9     | .8  | 2.7  |
| 22    | ---      | --- | ---  | ---      | --- | ---  | 2.4      | .0  | .6   | 6.0     | 1.0 | 2.8  |
| 23    | ---      | --- | ---  | ---      | --- | ---  | 4.0      | .0  | 1.4  | 5.3     | 1.5 | 2.8  |
| 24    | ---      | --- | ---  | ---      | --- | ---  | 4.9      | .8  | 2.1  | 3.1     | 1.7 | 2.3  |
| 25    | ---      | --- | ---  | ---      | --- | ---  | 3.5      | .0  | 1.3  | 2.2     | .9  | 1.8  |
| 26    | ---      | --- | ---  | ---      | --- | ---  | 4.3      | .1  | 1.6  | 1.4     | .0  | .6   |
| 27    | ---      | --- | ---  | ---      | --- | ---  | 3.8      | .5  | 1.5  | 3.0     | .6  | 1.6  |
| 28    | ---      | --- | ---  | ---      | --- | ---  | .6       | .0  | .0   | 3.9     | .4  | 1.8  |
| 29    | ---      | --- | ---  | ---      | --- | ---  | 1.3      | .0  | .4   | 7.4     | .8  | 3.1  |
| 30    | ---      | --- | ---  | ---      | --- | ---  | 2.0      | .0  | .9   | 6.1     | 1.1 | 3.1  |
| 31    | ---      | --- | ---  | ---      | --- | ---  | ---      | --- | ---  | 6.3     | .8  | 3.1  |
| MONTH | ---      | --- | ---  | ---      | --- | ---  | ---      | --- | ---  | 7.4     | .0  | 2.3  |

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

TEMPERATURE, WATER (DEG. C) WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DAY   | MAX | MIN | MEAN | JUNE |     |      | JULY |     |      | AUGUST |     |      | SEPTEMBER |     |      |
|-------|-----|-----|------|------|-----|------|------|-----|------|--------|-----|------|-----------|-----|------|
|       |     |     |      | MAX  | MIN | MEAN | MAX  | MIN | MEAN | MAX    | MIN | MEAN | MAX       | MIN | MEAN |
| 1     | 6.7 | 1.3 | 3.3  | 10.7 | 4.0 | 7.1  | 11.9 | 5.6 | 8.7  | 9.5    | 5.4 | 7.5  |           |     |      |
| 2     | 7.4 | .9  | 3.5  | 9.5  | 4.4 | 6.7  | 11.7 | 6.5 | 9.1  | 9.2    | 6.1 | 7.7  |           |     |      |
| 3     | 7.7 | 1.3 | 3.8  | 8.4  | 4.6 | 6.5  | 11.0 | 6.8 | 8.7  | 9.4    | 5.5 | 7.7  |           |     |      |
| 4     | 6.9 | 1.9 | 3.7  | 10.0 | 4.5 | 6.9  | 11.2 | 6.4 | 8.5  | 10.0   | 6.0 | 8.1  |           |     |      |
| 5     | 7.9 | 2.1 | 4.0  | 11.0 | 5.3 | 7.8  | 11.1 | 5.1 | 7.9  | 8.5    | 6.4 | 7.7  |           |     |      |
| 6     | 6.9 | 1.7 | 3.6  | 11.3 | 5.1 | 7.8  | 11.5 | 5.3 | 8.4  | 7.6    | 6.4 | 7.2  |           |     |      |
| 7     | 7.3 | 1.0 | 3.6  | 11.6 | 5.1 | 7.9  | 9.8  | 5.8 | 8.0  | 8.0    | 4.4 | 6.3  |           |     |      |
| 8     | 7.7 | 1.6 | 3.9  | 10.5 | 5.4 | 7.7  | 9.3  | 5.1 | 7.3  | 8.2    | 4.1 | 6.3  |           |     |      |
| 9     | 7.3 | 2.3 | 3.9  | 8.7  | 5.6 | 7.2  | 10.1 | 5.6 | 7.8  | 7.7    | 4.8 | 6.4  |           |     |      |
| 10    | 6.6 | 2.2 | 3.9  | 11.1 | 5.3 | 7.8  | 9.6  | 4.7 | 7.3  | 8.4    | 4.8 | 6.7  |           |     |      |
| 11    | 7.4 | 2.0 | 4.1  | 11.7 | 5.2 | 8.1  | 10.5 | 4.3 | 7.5  | 7.8    | 4.9 | 6.6  |           |     |      |
| 12    | 5.7 | 2.1 | 3.7  | 11.0 | 5.3 | 8.1  | 10.9 | 5.4 | 8.2  | 8.7    | 5.8 | 6.8  |           |     |      |
| 13    | 7.3 | 2.3 | 4.2  | 10.7 | 5.6 | 8.0  | 9.9  | 5.9 | 8.0  | 7.7    | 5.0 | 6.4  |           |     |      |
| 14    | 5.5 | 2.6 | 4.0  | 11.6 | 5.6 | 8.3  | 9.9  | 6.1 | 8.2  | 6.8    | 4.2 | 5.7  |           |     |      |
| 15    | 4.2 | 2.8 | 3.6  | 10.5 | 5.0 | 7.7  | 11.0 | 6.3 | 8.8  | 7.3    | 4.4 | 5.9  |           |     |      |
| 16    | 8.3 | 2.2 | 4.6  | 10.6 | 6.6 | 8.3  | 10.6 | 6.5 | 8.5  | 7.5    | 3.2 | 5.6  |           |     |      |
| 17    | 7.7 | 2.5 | 4.8  | 12.1 | 6.5 | 9.0  | 10.0 | 5.3 | 7.9  | 6.4    | 4.1 | 4.9  |           |     |      |
| 18    | 8.6 | 2.4 | 4.9  | 9.3  | 6.6 | 8.0  | 11.0 | 6.4 | 8.7  | 4.2    | 1.3 | 3.0  |           |     |      |
| 19    | 9.0 | 2.5 | 5.3  | 11.3 | 5.7 | 8.3  | 9.4  | 7.2 | 8.4  | 2.8    | .2  | 1.4  |           |     |      |
| 20    | 9.1 | 3.0 | 5.6  | 11.0 | 5.9 | 8.5  | 10.8 | 6.0 | 8.4  | 4.0    | 1.2 | 2.6  |           |     |      |
| 21    | 7.5 | 4.1 | 5.6  | 12.1 | 5.4 | 8.5  | 10.2 | 7.4 | 8.9  | 5.8    | 2.0 | 4.0  |           |     |      |
| 22    | 8.4 | 4.0 | 5.5  | 11.8 | 5.0 | 8.2  | 9.1  | 7.0 | 8.3  | 6.2    | 3.2 | 4.8  |           |     |      |
| 23    | 8.9 | 2.5 | 5.4  | 11.8 | 5.1 | 8.3  | 9.4  | 6.2 | 8.0  | 6.3    | 3.7 | 4.9  |           |     |      |
| 24    | 9.3 | 3.2 | 5.9  | 11.6 | 5.2 | 8.4  | 9.9  | 5.7 | 8.0  | 6.4    | 3.5 | 4.8  |           |     |      |
| 25    | 9.3 | 3.2 | 5.7  | 10.6 | 6.1 | 8.2  | 9.7  | 5.8 | 8.1  | 5.1    | 1.8 | 3.8  |           |     |      |
| 26    | 9.9 | 3.8 | 6.4  | 10.5 | 5.3 | 7.6  | 9.8  | 6.5 | 8.2  | 1.8    | .0  | .5   |           |     |      |
| 27    | 8.7 | 5.1 | 6.5  | 10.6 | 5.0 | 7.6  | 8.8  | 6.1 | 7.5  | .5     | .0  | .1   |           |     |      |
| 28    | 8.4 | 4.5 | 6.1  | 10.5 | 6.1 | 8.2  | 9.3  | 5.8 | 7.6  | 3.0    | .1  | 1.6  |           |     |      |
| 29    | 9.8 | 3.4 | 6.3  | 8.9  | 7.4 | 8.1  | 9.5  | 6.0 | 8.0  | 4.8    | .9  | 2.9  |           |     |      |
| 30    | 9.5 | 4.6 | 6.9  | 11.8 | 5.7 | 8.5  | 9.4  | 6.2 | 8.1  | 5.5    | 1.5 | 3.5  |           |     |      |
| 31    | --- | --- | ---  | 11.4 | 5.7 | 8.5  | 9.5  | 5.6 | 7.7  | ---    | --- | ---  |           |     |      |
| MONTH | 9.9 | .9  | 4.7  | 12.1 | 4.0 | 7.9  | 11.9 | 4.3 | 8.2  | 10.0   | .0  | 5.0  |           |     |      |

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

## PRECIPITATION RECORDS

PERIOD OF RECORD.--May 1995 to current year (seasonal records only).

GAGE.--Tipping bucket rain gage (no wind vanes used) with satellite telemetry. Elevation of gage is 9,320 ft above sea level, from topographic map.

REMARKS.--Records poor. .

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

EXTREMES FOR CURRENT YEAR.--Maximum daily rainfall, 1.04 in., May 27.

PRECIPITATION INCHES, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY SUM VALUES

| DAY   | OCT  | NOV | DEC | JAN | FEB | MAR | APR  | MAY  | JUN  | JUL  | AUG  | SEP  |
|-------|------|-----|-----|-----|-----|-----|------|------|------|------|------|------|
| 1     | .00  | --- | --- | --- | --- | --- | .00  | .00  | .02  | .00  | .00  | .00  |
| 2     | .00  | --- | --- | --- | --- | --- | .00  | .00  | .00  | .00  | .01  | .00  |
| 3     | .00  | --- | --- | --- | --- | --- | .00  | .00  | .00  | .00  | .30  | .00  |
| 4     | .06  | --- | --- | --- | --- | --- | .11  | .00  | .00  | .15  | .00  | .00  |
| 5     | .00  | --- | --- | --- | --- | --- | .00  | .00  | .04  | .02  | .00  | .00  |
| 6     | .00  | --- | --- | --- | --- | --- | .00  | .00  | .00  | .00  | .00  | .41  |
| 7     | .00  | --- | --- | --- | --- | --- | .00  | .01  | .00  | .00  | .15  | .00  |
| 8     | .00  | --- | --- | --- | --- | --- | .00  | .00  | .00  | .00  | .04  | .00  |
| 9     | .00  | --- | --- | --- | --- | --- | .00  | .00  | .00  | .11  | .00  | .00  |
| 10    | .00  | --- | --- | --- | --- | --- | .00  | .00  | .00  | .01  | .00  | .00  |
| 11    | .00  | --- | --- | --- | --- | --- | .00  | .00  | .00  | .00  | .00  | .01  |
| 12    | .00  | --- | --- | --- | --- | --- | .00  | .00  | .53  | .00  | .00  | .43  |
| 13    | .00  | --- | --- | --- | --- | --- | .00  | .00  | .05  | .00  | .00  | .03  |
| 14    | .00  | --- | --- | --- | --- | --- | .00  | .00  | .00  | .00  | .02  | .48  |
| 15    | .00  | --- | --- | --- | --- | --- | .00  | .00  | .78  | .01  | .00  | .02  |
| 16    | .00  | --- | --- | --- | --- | --- | .00  | .00  | .00  | .00  | .00  | .00  |
| 17    | .00  | --- | --- | --- | --- | --- | .00  | .00  | .00  | .00  | .04  | .09  |
| 18    | .00  | --- | --- | --- | --- | --- | .00  | .00  | .00  | .13  | .00  | .03  |
| 19    | .00  | --- | --- | --- | --- | --- | .00  | .00  | .00  | .01  | .11  | .39  |
| 20    | .00  | --- | --- | --- | --- | --- | .00  | .00  | .04  | .00  | .01  | .08  |
| 21    | .00  | --- | --- | --- | --- | --- | .00  | .00  | .08  | .00  | .11  | .00  |
| 22    | .00  | --- | --- | --- | --- | --- | .00  | .00  | .13  | .00  | .10  | .01  |
| 23    | .00  | --- | --- | --- | --- | --- | .00  | .00  | .00  | .00  | .05  | .06  |
| 24    | .00  | --- | --- | --- | --- | --- | .00  | .14  | .00  | .00  | .00  | .19  |
| 25    | .00  | --- | --- | --- | --- | --- | .00  | .38  | .00  | .00  | .00  | .10  |
| 26    | .00  | --- | --- | --- | --- | --- | .00  | .01  | .07  | .06  | .00  | .02  |
| 27    | .00  | --- | --- | --- | --- | --- | .00  | 1.04 | .00  | .00  | .10  | .00  |
| 28    | .00  | --- | --- | --- | --- | --- | .00  | .35  | .18  | .01  | .08  | .00  |
| 29    | .00  | --- | --- | --- | --- | --- | .00  | .02  | .00  | .14  | .00  | .00  |
| 30    | .00  | --- | --- | --- | --- | --- | .00  | .00  | .00  | .01  | .00  | .00  |
| 31    | .00  | --- | --- | --- | --- | --- | ---  | .00  | ---  | .03  | .00  | ---  |
| TOTAL | 0.06 | --- | --- | --- | --- | --- | 0.11 | 1.95 | 1.92 | 0.69 | 1.12 | 2.35 |

**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, and 2.1 mi west of Lawson.

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

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 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 his report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

| DAY   | OCT  | NOV  | DEC  | JAN  | FEB  | MAR  | APR  | MAY   | JUN   | JUL   | AUG  | SEP  |
|-------|------|------|------|------|------|------|------|-------|-------|-------|------|------|
| 1     | 57   | 37   | 26   | e25  | e17  | 18   | 25   | 28    | 195   | 387   | 113  | 52   |
| 2     | 54   | 28   | 25   | e24  | e16  | 18   | 28   | 28    | 198   | 375   | 117  | 50   |
| 3     | 52   | 23   | 25   | e24  | e16  | 17   | 28   | 29    | 212   | 362   | 117  | 50   |
| 4     | 55   | 25   | 25   | e23  | e15  | 17   | 34   | 34    | 244   | 372   | 116  | 48   |
| 5     | 50   | 26   | 27   | e24  | e16  | 16   | 34   | 48    | 285   | 385   | 108  | 48   |
| 6     | 50   | 29   | 26   | e23  | e16  | 16   | 34   | 66    | 360   | 372   | 103  | 52   |
| 7     | 52   | 29   | 25   | e22  | e17  | 19   | 34   | 79    | 384   | 354   | 104  | 55   |
| 8     | 52   | 25   | 27   | e21  | e17  | 17   | 34   | 92    | 410   | 333   | 104  | 49   |
| 9     | 49   | 29   | 24   | e19  | e16  | 17   | 40   | 112   | 452   | 306   | 100  | 43   |
| 10    | 48   | 30   | 25   | e19  | e15  | 18   | 46   | 121   | 477   | 306   | 93   | 47   |
| 11    | 50   | 30   | 25   | e20  | e14  | 19   | 43   | 124   | 489   | 289   | 89   | 43   |
| 12    | 51   | 30   | 25   | e20  | e15  | 19   | 38   | 152   | 482   | 279   | 86   | 46   |
| 13    | 50   | 30   | 24   | e20  | 16   | 19   | 36   | 182   | 478   | 264   | 82   | 54   |
| 14    | 46   | 28   | 21   | e20  | 17   | 19   | 33   | 194   | 483   | 252   | 81   | 50   |
| 15    | 47   | 29   | 23   | e19  | 17   | 19   | 30   | 222   | 473   | 239   | 79   | 54   |
| 16    | 47   | 28   | 25   | e18  | 17   | 19   | 31   | 267   | 466   | 223   | 77   | 48   |
| 17    | 45   | 27   | 25   | e17  | 17   | 19   | 32   | 306   | 477   | 218   | 74   | 45   |
| 18    | 44   | 28   | 24   | e16  | 18   | 19   | 32   | 304   | 474   | 224   | 73   | 49   |
| 19    | 42   | 28   | e25  | e16  | 17   | 18   | 30   | 341   | 471   | 215   | 74   | 50   |
| 20    | 39   | 28   | e25  | e17  | 17   | 18   | 27   | 345   | 482   | 201   | 76   | 48   |
| 21    | 41   | 28   | e26  | e17  | 18   | 19   | 26   | 303   | 531   | 190   | 72   | 48   |
| 22    | 42   | 28   | e25  | e17  | 17   | 21   | 25   | 308   | 609   | 179   | 73   | 51   |
| 23    | 34   | 27   | e26  | e17  | 18   | 21   | 26   | 316   | 512   | 170   | 77   | 51   |
| 24    | 36   | 27   | e26  | e18  | 17   | 23   | 29   | 290   | 460   | 170   | 70   | 58   |
| 25    | 40   | 28   | e25  | e18  | 17   | 21   | 33   | 278   | 432   | 165   | 66   | 56   |
| 26    | 39   | 26   | e26  | e17  | 18   | 21   | 32   | 254   | 410   | 153   | 61   | 53   |
| 27    | 37   | 26   | e25  | e17  | 18   | 20   | 33   | 224   | 421   | 140   | 59   | 49   |
| 28    | 37   | 27   | e24  | e16  | 18   | 23   | 31   | 208   | 431   | 135   | 62   | 50   |
| 29    | 38   | 28   | e24  | e17  | 18   | 24   | 29   | 201   | 410   | 141   | 59   | 55   |
| 30    | 39   | 28   | e24  | e17  | ---  | 25   | 29   | 207   | 398   | 133   | 57   | 55   |
| 31    | 38   | ---  | e23  | e17  | ---  | 25   | ---  | 199   | ---   | 120   | 53   | ---  |
| TOTAL | 1401 | 840  | 771  | 595  | 485  | 604  | 962  | 5862  | 12606 | 7652  | 2575 | 1507 |
| MEAN  | 45.2 | 28.0 | 24.9 | 19.2 | 16.7 | 19.5 | 32.1 | 189   | 420   | 247   | 83.1 | 50.2 |
| MAX   | 57   | 37   | 27   | 25   | 18   | 25   | 46   | 345   | 609   | 387   | 117  | 58   |
| MIN   | 34   | 23   | 21   | 16   | 14   | 16   | 25   | 28    | 195   | 120   | 53   | 43   |
| AC-FT | 2780 | 1670 | 1530 | 1180 | 962  | 1200 | 1910 | 11630 | 25000 | 15180 | 5110 | 2990 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 1996, BY WATER YEAR (WY)

|      | 1994 | 1995 | 1996 | 1995 | 1996 | 1996 | 1995 | 1996 | 1995 | 1996 | 1995 | 1996 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 36.5 | 23.7 | 20.1 | 16.0 | 15.8 | 20.3 | 26.1 | 119  | 459  | 401  | 140  | 63.5 |
| 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 | 1995 | 1995 | 1995 | 1995 |
| MIN  | 27.9 | 19.3 | 15.4 | 12.8 | 14.8 | 19.5 | 20.2 | 48.6 | 420  | 247  | 83.1 | 50.2 |
| (WY) | 1995 | 1995 | 1995 | 1995 | 1995 | 1996 | 1995 | 1995 | 1996 | 1996 | 1996 | 1996 |

| SUMMARY STATISTICS       | FOR 1995 CALENDAR YEAR | FOR 1996 WATER YEAR | FOR 1995 CALENDAR YEAR | FOR 1996 WATER YEAR | FOR 1995 CALENDAR YEAR | FOR 1996 WATER YEAR |
|--------------------------|------------------------|---------------------|------------------------|---------------------|------------------------|---------------------|
| ANNUAL TOTAL             | 47112                  | 35860               | 47112                  | 35860               | 47112                  | 35860               |
| ANNUAL MEAN              | 129                    | 98.0                | 129                    | 98.0                | 129                    | 98.0                |
| HIGHEST ANNUAL MEAN      |                        |                     |                        |                     | 126                    | 1995                |
| LOWEST ANNUAL MEAN       |                        |                     |                        |                     | 98.0                   | 1996                |
| HIGHEST DAILY MEAN       | 886                    | Jun 22              | 609                    | Jun 22              | 886                    | Jun 22 1995         |
| LOWEST DAILY MEAN        | 11                     | Jan 16              | e14                    | Feb 11              | 11                     | Jan 16 1995         |
| ANNUAL SEVEN-DAY MINIMUM | 12                     | Jan 14              | 16                     | Feb 6               | 12                     | Jan 14 1995         |
| INSTANTANEOUS PEAK FLOW  |                        |                     | 650                    | Jun 22              | 1030                   | Jun 17 1995         |
| INSTANTANEOUS PEAK STAGE |                        |                     | 5.87                   | Jun 22              | 6.63                   | Jun 17 1995         |
| ANNUAL RUNOFF (AC-FT)    | 93450                  | 71130               | 93450                  | 71130               | 93450                  | 71130               |
| 10 PERCENT EXCEEDS       | 471                    | 310                 | 471                    | 310                 | 471                    | 310                 |
| 50 PERCENT EXCEEDS       | 28                     | 36                  | 28                     | 36                  | 28                     | 36                  |
| 90 PERCENT EXCEEDS       | 14                     | 17                  | 14                     | 17                  | 14                     | 17                  |

e-Estimated.

**06716100 WEST FORK CLEAR CREEK ABOVE MOUTH NEAR EMPIRE, CO**

LOCATION.--Lat 39°45'32", long 105°39'34", in NE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec.27, T.3 S., R.74 W., Clear Creek County, Hydrologic Unit 10190004, on left bank, 60 ft downstream from frontage road bridge and 1.2 mi east of Empire.

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

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

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

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

| DAY   | OCT  | NOV  | DEC  | JAN  | FEB  | MAR  | APR  | MAY   | JUN   | JUL   | AUG  | SEP  |
|-------|------|------|------|------|------|------|------|-------|-------|-------|------|------|
| 1     | 38   | 32   | 26   | e18  | e14  | e11  | 20   | 29    | 207   | 310   | 76   | 40   |
| 2     | 37   | 30   | 25   | e18  | e13  | e11  | 21   | 29    | 201   | 297   | 72   | 39   |
| 3     | 35   | e30  | 24   | e18  | e13  | e11  | 21   | 30    | 211   | 281   | 72   | 37   |
| 4     | 37   | e29  | 25   | e17  | e14  | e10  | 21   | 34    | 241   | 284   | 70   | 37   |
| 5     | 35   | 28   | 25   | e17  | e14  | e11  | 21   | 42    | 283   | 287   | 67   | 36   |
| 6     | 35   | 31   | 24   | e17  | e15  | e11  | 22   | 53    | 330   | 284   | 63   | 39   |
| 7     | 35   | 32   | 23   | e17  | e14  | e12  | 22   | 65    | 363   | 275   | 62   | 37   |
| 8     | 35   | 31   | 24   | e17  | e14  | e13  | 24   | 78    | 390   | 263   | 62   | 36   |
| 9     | 34   | 31   | 23   | e17  | e13  | e14  | 28   | 99    | 423   | 248   | 61   | 34   |
| 10    | 33   | 31   | 21   | e17  | e13  | e14  | 32   | 109   | 450   | 235   | 58   | 33   |
| 11    | 34   | 31   | 21   | e17  | e12  | e14  | 33   | 115   | 468   | 220   | 56   | 33   |
| 12    | 35   | 32   | 21   | e17  | e12  | e15  | 31   | 146   | 454   | 212   | 53   | 38   |
| 13    | 36   | 32   | 21   | e16  | e12  | e15  | 30   | 181   | 457   | 204   | 52   | 41   |
| 14    | 34   | 31   | 20   | e16  | e13  | e15  | 27   | 218   | 452   | 194   | 51   | 38   |
| 15    | 34   | 30   | 22   | e16  | e12  | e16  | 26   | 243   | 459   | 181   | 50   | 41   |
| 16    | 33   | 34   | e20  | e16  | e13  | e16  | 27   | 279   | 441   | 167   | 49   | 37   |
| 17    | 33   | 33   | e20  | e16  | e12  | e16  | 26   | 289   | 438   | 162   | 47   | 34   |
| 18    | 32   | 29   | e20  | e15  | e12  | e16  | 27   | 292   | 441   | 172   | 47   | 35   |
| 19    | 32   | 28   | e20  | e15  | e12  | e16  | 26   | 317   | 436   | 160   | 53   | 37   |
| 20    | 31   | 27   | e20  | e16  | e12  | e16  | 25   | 335   | 444   | 149   | 53   | 37   |
| 21    | 31   | 27   | e19  | e16  | e12  | e17  | 25   | 302   | 461   | 136   | 49   | 37   |
| 22    | 32   | 27   | e19  | e16  | e12  | 18   | 24   | 303   | 514   | 126   | 51   | 38   |
| 23    | 30   | 26   | e19  | e16  | e12  | 18   | 24   | 320   | 463   | 118   | 51   | 37   |
| 24    | 31   | 26   | e19  | e15  | e11  | 18   | 27   | 316   | 425   | 110   | 47   | 38   |
| 25    | 32   | 26   | e19  | e16  | e11  | 21   | 32   | 322   | 399   | 105   | 45   | 37   |
| 26    | 32   | 26   | e19  | e16  | e11  | 21   | 30   | 298   | 373   | 98    | 43   | 38   |
| 27    | 32   | 25   | e18  | e16  | e11  | 20   | 31   | 271   | 368   | 93    | 46   | 37   |
| 28    | 31   | 25   | e18  | e15  | e11  | 18   | 31   | 242   | 363   | 89    | 44   | 38   |
| 29    | 32   | 24   | e18  | e15  | e11  | 18   | 30   | 226   | 341   | 92    | 43   | 39   |
| 30    | 32   | 26   | e18  | e15  | ---  | 18   | 29   | 221   | 330   | 88    | 42   | 38   |
| 31    | 31   | ---  | e18  | e14  | ---  | 19   | ---  | 212   | ---   | 80    | 41   | ---  |
| TOTAL | 1034 | 870  | 649  | 503  | 361  | 479  | 793  | 6016  | 11626 | 5720  | 1676 | 1116 |
| MEAN  | 33.4 | 29.0 | 20.9 | 16.2 | 12.4 | 15.5 | 26.4 | 194   | 388   | 185   | 54.1 | 37.2 |
| MAX   | 38   | 34   | 26   | 18   | 15   | 21   | 33   | 335   | 514   | 310   | 76   | 41   |
| MIN   | 30   | 24   | 18   | 14   | 11   | 10   | 20   | 29    | 201   | 80    | 41   | 33   |
| AC-FT | 2050 | 1730 | 1290 | 998  | 716  | 950  | 1570 | 11930 | 23060 | 11350 | 3320 | 2210 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 1996, BY WATER YEAR (WY)

|      | 1994 | 1995 | 1996 | 1995 | 1996 | 1995 | 1996 | 1995 | 1996 | 1995 | 1996 |      |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 27.7 | 22.4 | 15.7 | 13.1 | 11.8 | 14.1 | 20.8 | 121  | 389  | 290  | 98.3 | 45.9 |
| MAX  | 33.4 | 29.0 | 20.9 | 16.2 | 12.4 | 15.5 | 26.4 | 194  | 391  | 395  | 143  | 54.7 |
| (WY) | 1996 | 1996 | 1996 | 1996 | 1996 | 1996 | 1996 | 1996 | 1995 | 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 1995 CALENDAR YEAR | FOR 1996 WATER YEAR | FOR 1995 CALENDAR YEAR | FOR 1996 WATER YEAR | FOR 1995 CALENDAR YEAR | FOR 1996 WATER YEAR |
|--------------------------|------------------------|---------------------|------------------------|---------------------|------------------------|---------------------|
| ANNUAL TOTAL             | 35525.5                | 30843               |                        |                     |                        |                     |
| ANNUAL MEAN              | 97.3                   | 84.3                |                        |                     |                        |                     |
| HIGHEST ANNUAL MEAN      |                        |                     |                        |                     | 89.3                   |                     |
| LOWEST ANNUAL MEAN       |                        |                     |                        |                     | 94.4                   | 1995                |
| HIGHEST DAILY MEAN       | 720                    | Jun 18              | 514                    | Jun 22              | 84.3                   | 1996                |
| LOWEST DAILY MEAN        | a9.5                   | Jan 16              | e10                    | Mar 4               | 9.5                    | Jan 16 1995         |
| ANNUAL SEVEN-DAY MINIMUM | 9.6                    | Jan 14              | 11                     | Feb 27              | 9.6                    | Jan 14 1995         |
| INSTANTANEOUS PEAK FLOW  |                        |                     | 560                    | Jun 22              | b774                   | Jun 18 1995         |
| INSTANTANEOUS PEAK STAGE |                        |                     | 6.24                   | Jun 22              | 6.67                   | Jun 18 1995         |
| ANNUAL RUNOFF (AC-FT)    | 70460                  | 61180               |                        |                     |                        |                     |
| 10 PERCENT EXCEEDS       | 352                    | 290                 |                        |                     |                        |                     |
| 50 PERCENT EXCEEDS       | 30                     | 32                  |                        |                     |                        |                     |
| 90 PERCENT EXCEEDS       | 11                     | 14                  |                        |                     |                        |                     |

e-Estimated.

a-Also occurred Jan 17-20.

b-Also occurred Jun 20.



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

LOCATION (REVISED).--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 5.8 mi southwest of Idaho Springs.

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

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

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 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 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

| DAY   | OCT   | NOV   | DEC   | JAN   | FEB   | MAR   | APR   | MAY  | JUN  | JUL  | AUG   | SEP   |
|-------|-------|-------|-------|-------|-------|-------|-------|------|------|------|-------|-------|
| 1     | 12    | e6.2  | e6.8  | e6.0  | e5.0  | e5.0  | e6.7  | e11  | 52   | 34   | 11    | 7.1   |
| 2     | 12    | e5.8  | e6.7  | e6.0  | e5.0  | e5.4  | e7.7  | e13  | 51   | 33   | 11    | 7.0   |
| 3     | 12    | e5.6  | e6.6  | e6.0  | e4.9  | e5.8  | e7.9  | e16  | 49   | 32   | 11    | 6.8   |
| 4     | 12    | e5.3  | e6.6  | e6.0  | e4.8  | e5.4  | e8.1  | e18  | 49   | 32   | 11    | 6.8   |
| 5     | 12    | e5.0  | e6.7  | e6.0  | e4.9  | e4.9  | e8.2  | e21  | 50   | 30   | 10    | 6.7   |
| 6     | 11    | e6.0  | e6.7  | e5.9  | e5.0  | e4.4  | e8.3  | e23  | 48   | 23   | 9.8   | 9.7   |
| 7     | 11    | e7.8  | e6.6  | e5.9  | e5.1  | e4.5  | e9.7  | e25  | 43   | 22   | 11    | 9.9   |
| 8     | 11    | e7.8  | e6.5  | e5.8  | e5.0  | e4.6  | e12   | e26  | 43   | 22   | 12    | 7.9   |
| 9     | 11    | e7.7  | e6.5  | e5.8  | e4.8  | e4.5  | e14   | e27  | 43   | 22   | 11    | 7.6   |
| 10    | 11    | e7.8  | e6.6  | e5.7  | e4.5  | e4.5  | e15   | e28  | 43   | 23   | 9.8   | 7.4   |
| 11    | 11    | e7.9  | e6.6  | e5.6  | e4.3  | e4.5  | e14   | e29  | 42   | 20   | 9.4   | 7.4   |
| 12    | 11    | e7.8  | e6.6  | e5.5  | e4.2  | e4.4  | e12   | e30  | 43   | 20   | 9.0   | 8.8   |
| 13    | 11    | e7.8  | e6.5  | e5.5  | e4.1  | e4.4  | e11   | e32  | 44   | 19   | 8.8   | 11    |
| 14    | 10    | e7.7  | e6.4  | e5.3  | e4.0  | e4.5  | e9.4  | e34  | 41   | 18   | 9.0   | 9.3   |
| 15    | 10    | e7.8  | e6.3  | e5.1  | e4.1  | e4.6  | e9.4  | 35   | 49   | 17   | 9.4   | 13    |
| 16    | 10    | e7.9  | e6.3  | e5.0  | e4.2  | e4.6  | e9.3  | 40   | 48   | 17   | 9.1   | 9.9   |
| 17    | 10    | e7.8  | e6.3  | e5.1  | e4.3  | e4.7  | e10   | 43   | 41   | 16   | 8.7   | 9.1   |
| 18    | 9.9   | e7.8  | e6.3  | e5.0  | e4.4  | e4.7  | e10   | 40   | 39   | 17   | 8.2   | 9.9   |
| 19    | 9.5   | e7.7  | e6.2  | e5.1  | e4.5  | e4.8  | e9.4  | 44   | 37   | 17   | 8.2   | 11    |
| 20    | 9.5   | e7.7  | e6.2  | e5.0  | e4.4  | e4.8  | e11   | 42   | 36   | 16   | 8.1   | 10    |
| 21    | 9.9   | e7.6  | e6.2  | e5.1  | e4.5  | e4.9  | e8.9  | 43   | 37   | 14   | 8.1   | 10    |
| 22    | 10    | e7.4  | e6.2  | e5.1  | e4.5  | e5.6  | e7.2  | 44   | 46   | 13   | 8.9   | 11    |
| 23    | e7.8  | e7.2  | e6.2  | e5.1  | e4.4  | e6.3  | e7.4  | 43   | 46   | 13   | 9.0   | 10    |
| 24    | e9.8  | e7.0  | e6.2  | e5.1  | e4.4  | e6.6  | e11   | 42   | 44   | 13   | 9.1   | 11    |
| 25    | e8.0  | e6.9  | e6.1  | e5.1  | e4.3  | e6.4  | e13   | 47   | 42   | 13   | 7.9   | 11    |
| 26    | e6.1  | e6.8  | e6.1  | e5.1  | e4.4  | e5.9  | e11   | 44   | 41   | 13   | 7.7   | 11    |
| 27    | e6.1  | e6.7  | e6.1  | e5.2  | e4.3  | e3.7  | e12   | 40   | 41   | 13   | 8.3   | 11    |
| 28    | e6.0  | e6.5  | e6.1  | e5.2  | e4.2  | e4.2  | e11   | 46   | 38   | 12   | 8.8   | 12    |
| 29    | e6.3  | e6.6  | e6.0  | e5.1  | e4.6  | e5.1  | e11   | 52   | 38   | 13   | 8.5   | 13    |
| 30    | e6.4  | e6.7  | e6.0  | e5.1  | ---   | e5.3  | e9.8  | 55   | 35   | 14   | 7.9   | 13    |
| 31    | e6.2  | ---   | e6.0  | e5.0  | ---   | e5.8  | ---   | 53   | ---  | 12   | 7.5   | ---   |
| TOTAL | 299.5 | 212.3 | 197.2 | 167.5 | 131.1 | 154.8 | 305.4 | 1086 | 1299 | 593  | 287.2 | 289.3 |
| MEAN  | 9.66  | 7.08  | 6.36  | 5.40  | 4.52  | 4.99  | 10.2  | 35.0 | 43.3 | 19.1 | 9.26  | 9.64  |
| MAX   | 12    | 7.9   | 6.8   | 6.0   | 5.1   | 6.6   | 15    | 55   | 52   | 34   | 12    | 13    |
| MIN   | 6.0   | 5.0   | 6.0   | 5.0   | 4.0   | 3.7   | 6.7   | 11   | 35   | 12   | 7.5   | 6.7   |
| AC-FT | 594   | 421   | 391   | 332   | 260   | 307   | 606   | 2150 | 2580 | 1180 | 570   | 574   |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 1996, BY WATER YEAR (WY)

|      | 1995 | 1996 | 1996 | 1995 | 1996 | 1996 | 1995 | 1996 | 1996 | 1996 | 1996 | 1996 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 8.68 | 5.85 | 5.23 | 4.76 | 3.99 | 4.41 | 8.52 | 36.0 | 115  | 59.7 | 18.9 | 12.6 |
| MAX  | 9.66 | 7.08 | 6.36 | 5.40 | 4.52 | 4.99 | 10.2 | 36.9 | 186  | 100  | 28.6 | 15.5 |
| (WY) | 1996 | 1996 | 1996 | 1996 | 1996 | 1996 | 1996 | 1995 | 1995 | 1995 | 1995 | 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 1995 CALENDAR YEAR

## FOR 1996 WATER YEAR

## WATER YEARS 1995 - 1996

|                          |                  |        |                  |
|--------------------------|------------------|--------|------------------|
| ANNUAL TOTAL             | 12441.8          | 5022.3 |                  |
| ANNUAL MEAN              | 34.1             | 13.7   | 23.6             |
| HIGHEST ANNUAL MEAN      |                  |        | 33.5             |
| LOWEST ANNUAL MEAN       |                  |        | 13.7             |
| HIGHEST DAILY MEAN       | e <sup>275</sup> | Jun 19 | 275              |
| LOWEST DAILY MEAN        | e <sup>3.1</sup> | Feb 18 | e <sup>3.7</sup> |
| ANNUAL SEVEN-DAY MINIMUM | 3.2              | Feb 15 | 4.2              |
| INSTANTANEOUS PEAK FLOW  |                  |        | 70               |
| INSTANTANEOUS PEAK STAGE |                  |        | 5.99             |
| ANNUAL RUNOFF (AC-FT)    | 24680            | 9960   | 17100            |
| 10 PERCENT EXCEEDS       | 112              | 40     | 53               |
| 50 PERCENT EXCEEDS       | 7.9              | 8.2    | 7.8              |
| 90 PERCENT EXCEEDS       | 3.7              | 4.8    | 4.0              |

e-Estimated.

a-Probably occurred June 19, 1995.

**06718300 CLEAR CREEK ABOVE JOHNSON GULCH NEAR IDAHO SPRINGS, CO**

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

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

PERIOD OF RECORD.--October 1994 to present.

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 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

| DAY   | OCT  | NOV  | DEC  | JAN  | FEB  | MAR  | APR  | MAY   | JUN   | JUL   | AUG   | SEP  |
|-------|------|------|------|------|------|------|------|-------|-------|-------|-------|------|
| 1     | 142  | 91   | 70   | e56  | e49  | 46   | 62   | 88    | 614   | 982   | 252   | 142  |
| 2     | 135  | 82   | 70   | e56  | e48  | 46   | 67   | 91    | 608   | 955   | 248   | 142  |
| 3     | 127  | 72   | 67   | e56  | e46  | 47   | 68   | 95    | 629   | 916   | 248   | 136  |
| 4     | 132  | 73   | 68   | e57  | e45  | 49   | 72   | 109   | 704   | 878   | 245   | 130  |
| 5     | 127  | 79   | 70   | e57  | e47  | 45   | 73   | 138   | 804   | 846   | 231   | 128  |
| 6     | 121  | 80   | 69   | e58  | e50  | 42   | 74   | 179   | 972   | 821   | 223   | 152  |
| 7     | 127  | 79   | 66   | e57  | e49  | 45   | 76   | 230   | 1010  | 783   | 226   | 151  |
| 8     | 126  | 75   | 62   | e56  | e48  | 50   | 79   | 295   | 1060  | 753   | 226   | 139  |
| 9     | 121  | 78   | e62  | e56  | e46  | 45   | 92   | 350   | 1160  | 700   | 218   | 130  |
| 10    | 119  | 81   | e61  | e57  | e44  | 45   | 106  | 372   | 1220  | 672   | 203   | 131  |
| 11    | 120  | 74   | e61  | e58  | e45  | 46   | 110  | 370   | 1260  | 634   | 197   | 128  |
| 12    | 135  | 81   | e60  | e59  | e46  | 47   | 98   | 430   | 1260  | 614   | 190   | 132  |
| 13    | 138  | 81   | e60  | e57  | e45  | 46   | 95   | 500   | 1220  | 578   | 187   | 156  |
| 14    | 126  | 79   | e58  | e56  | e45  | 48   | 87   | 551   | 1240  | 549   | 185   | 149  |
| 15    | 128  | 77   | 56   | e57  | e46  | 46   | 82   | 614   | 1220  | 520   | 183   | 164  |
| 16    | 126  | 80   | e58  | e56  | 43   | 47   | 85   | 759   | 1220  | 484   | 181   | 142  |
| 17    | 122  | 79   | e58  | e56  | 45   | 47   | 87   | 859   | 1210  | 471   | 181   | 133  |
| 18    | 124  | 75   | e59  | e55  | 49   | 48   | 87   | 836   | 1190  | 489   | 178   | 143  |
| 19    | 126  | 73   | e59  | e53  | 45   | 45   | 87   | 908   | 1180  | 473   | 185   | 144  |
| 20    | 117  | 73   | e58  | e51  | 44   | 45   | 79   | 933   | 1180  | 439   | 196   | 136  |
| 21    | 106  | 72   | e58  | e52  | 48   | 50   | 79   | 839   | 1260  | 413   | 179   | 132  |
| 22    | 104  | 72   | e58  | e53  | 46   | 53   | 75   | 843   | 1380  | 389   | 185   | 137  |
| 23    | 90   | 69   | e57  | e54  | 43   | 54   | 76   | 868   | 1300  | 367   | 196   | 136  |
| 24    | 94   | 69   | e58  | e52  | 46   | 55   | 88   | 837   | 1200  | 358   | 183   | 143  |
| 25    | 100  | 73   | e58  | e52  | 45   | 54   | 101  | 854   | 1140  | 352   | 168   | 143  |
| 26    | 99   | 69   | e58  | e52  | 45   | 55   | 94   | 799   | 1090  | 347   | 160   | 140  |
| 27    | 94   | 69   | e57  | e51  | 47   | 52   | 99   | 702   | 1090  | 327   | 160   | 136  |
| 28    | 93   | 68   | e57  | e51  | 47   | 55   | 95   | 653   | 1090  | 309   | 163   | 135  |
| 29    | 93   | 72   | e58  | e51  | 47   | 57   | 91   | 637   | 1050  | 315   | 158   | 143  |
| 30    | 95   | 72   | e57  | e50  | ---  | 60   | 91   | 649   | 1010  | 287   | 153   | 143  |
| 31    | 91   | ---  | e56  | e50  | ---  | 61   | ---  | 626   | ---   | 260   | 147   | ---  |
| TOTAL | 3598 | 2267 | 1884 | 1692 | 1339 | 1531 | 2555 | 17014 | 32571 | 17281 | 6035  | 4196 |
| MEAN  | 116  | 75.6 | 60.8 | 54.6 | 46.2 | 49.4 | 85.2 | 549   | 1086  | 557   | 195   | 140  |
| MAX   | 142  | 91   | 70   | 59   | 50   | 61   | 110  | 933   | 1380  | 982   | 252   | 164  |
| MIN   | 90   | 68   | 56   | 50   | 43   | 42   | 62   | 88    | 608   | 260   | 147   | 128  |
| AC-FT | 7140 | 4500 | 3740 | 3360 | 2660 | 3040 | 5070 | 33750 | 64600 | 34280 | 11970 | 8320 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 1996, BY WATER YEAR (WY)

|      | 1995 | 1996 | 1996 | 1996 | 1996 | 1996 | 1996 | 1996 | 1996 | 1996 | 1996 | 1996 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 90.5 | 62.6 | 52.0 | 44.4 | 38.5 | 46.2 | 67.5 | 385  | 1206 | 978  | 318  | 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 | 1996 | 1996 | 1996 | 1996 |
| 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 1995 CALENDAR YEAR FOR 1996 WATER YEAR WATER YEARS 1995 - 1996

|                          |                 |        |                   |             |
|--------------------------|-----------------|--------|-------------------|-------------|
| ANNUAL TOTAL             | 121796          | 91963  |                   |             |
| ANNUAL MEAN              | 334             | 251    | 288               |             |
| HIGHEST ANNUAL MEAN      |                 |        | 326               | 1995        |
| LOWEST ANNUAL MEAN       |                 |        | 251               | 1996        |
| HIGHEST DAILY MEAN       | 2080            | Jun 22 | 2080              | Jun 22 1995 |
| LOWEST DAILY MEAN        | <sup>a</sup> 27 | Feb 16 | <sup>a</sup> 27   | Feb 16 1995 |
| ANNUAL SEVEN-DAY MINIMUM | 27              | Feb 13 | 27                | Feb 13 1995 |
| INSTANTANEOUS PEAK FLOW  |                 |        | 2250              | Jun 21 1995 |
| INSTANTANEOUS PEAK STAGE |                 |        | <sup>b</sup> 7.46 | Jun 21 1995 |
| ANNUAL RUNOFF (AC-FT)    | 241600          | 182400 | 209000            |             |
| 10 PERCENT EXCEEDS       | 1270            | 840    | 969               |             |
| 50 PERCENT EXCEEDS       | 80              | 94     | 78                |             |
| 90 PERCENT EXCEEDS       | 33              | 47     | 41                |             |

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 NE¼SW¼ 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 and 6.5 mi southeast of Blackhawk.

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

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

GAGE.--Water-stage recorder. Elevation of gage is 6,910 ft above sea level, from topographic map.

REMARKS.--Records 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 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

| DAY   | OCT   | NOV   | DEC   | JAN   | FEB  | MAR   | APR   | MAY  | JUN  | JUL   | AUG   | SEP   |
|-------|-------|-------|-------|-------|------|-------|-------|------|------|-------|-------|-------|
| 1     | 6.6   | 4.7   | 4.7   | e4.0  | e3.3 | e3.3  | 8.0   | 21   | 83   | 26    | 6.3   | 3.0   |
| 2     | 6.1   | 3.6   | 4.4   | e4.0  | e3.2 | e3.4  | 8.8   | 23   | 84   | 25    | 5.7   | 2.8   |
| 3     | 5.9   | 3.5   | 4.1   | e4.0  | e3.1 | e3.5  | 8.8   | 26   | 81   | 23    | 5.7   | 2.4   |
| 4     | 6.2   | 4.0   | 4.1   | e4.0  | e3.0 | e3.6  | 9.1   | 31   | 78   | 21    | 5.6   | 2.4   |
| 5     | 5.8   | 4.3   | 4.2   | e4.0  | e2.9 | e3.7  | 8.7   | 41   | 82   | 23    | 5.1   | 2.5   |
| 6     | 5.7   | 4.3   | 4.2   | e3.9  | e3.0 | e3.6  | 9.3   | 50   | 85   | 22    | 4.6   | 4.0   |
| 7     | 6.1   | 4.1   | 3.9   | e3.8  | e3.0 | e3.5  | 10    | 57   | 83   | 20    | 4.7   | 4.2   |
| 8     | 6.2   | 4.1   | e4.1  | e3.7  | e2.9 | e3.4  | 12    | 64   | 81   | 19    | 4.8   | 3.0   |
| 9     | 5.9   | 4.4   | e4.1  | e3.5  | e2.8 | e3.4  | 15    | 70   | 80   | 19    | 4.8   | 2.7   |
| 10    | 5.7   | 4.4   | e4.0  | e3.5  | e2.7 | e3.5  | e18   | 72   | 78   | 18    | 4.7   | 2.6   |
| 11    | 5.4   | 3.9   | e3.9  | e3.7  | e2.6 | e3.6  | 18    | 73   | 76   | e16   | 4.5   | 2.4   |
| 12    | 5.4   | 4.8   | e4.0  | e3.6  | e2.7 | e3.7  | 16    | 79   | 73   | e14   | 4.1   | 3.2   |
| 13    | 5.9   | 4.9   | e3.9  | e3.6  | e2.7 | e3.8  | 16    | 87   | 72   | 14    | 3.7   | 3.0   |
| 14    | 5.5   | 4.8   | e3.6  | e3.5  | e2.7 | e4.0  | 15    | 93   | 68   | 12    | 3.7   | 4.1   |
| 15    | 5.6   | 4.6   | e3.8  | e3.5  | e2.7 | e4.2  | 14    | 98   | 78   | 12    | 4.0   | 10    |
| 16    | 5.4   | 4.4   | e4.0  | e3.5  | e2.7 | e4.3  | 15    | 105  | 70   | 12    | 4.1   | 4.2   |
| 17    | 5.2   | 4.4   | e4.0  | e3.4  | e2.7 | e4.5  | 16    | 111  | 60   | 11    | 4.0   | 4.0   |
| 18    | 5.1   | 4.4   | e4.0  | e3.3  | e2.8 | e4.7  | 16    | 114  | 56   | 10    | 3.9   | 6.9   |
| 19    | 4.8   | 4.4   | e4.0  | e3.4  | e2.9 | e4.8  | 16    | 116  | 52   | 10    | 3.9   | 8.2   |
| 20    | 4.4   | 4.2   | e4.0  | e3.4  | e2.9 | e4.9  | 15    | 112  | 50   | 9.0   | 5.1   | 5.8   |
| 21    | 4.6   | 3.8   | e4.0  | e3.5  | e2.9 | e5.1  | 15    | 103  | 50   | 8.3   | 4.2   | 4.8   |
| 22    | 5.0   | 4.1   | e4.0  | e3.6  | e2.8 | e5.3  | 15    | 95   | 50   | 7.5   | 4.0   | 4.9   |
| 23    | 4.1   | 4.0   | e4.0  | e3.7  | e3.0 | 5.5   | 15    | 90   | 43   | 7.0   | 4.6   | 4.5   |
| 24    | 3.8   | 4.0   | e4.0  | e3.6  | e2.9 | 5.5   | 17    | 88   | 39   | 6.7   | 4.4   | 4.6   |
| 25    | 4.9   | 4.3   | e4.0  | e3.5  | e2.8 | 5.8   | 23    | 106  | 37   | 6.7   | 3.8   | 4.4   |
| 26    | 5.2   | 4.2   | e4.0  | e3.4  | e2.9 | 6.6   | 21    | 100  | 35   | 6.8   | 3.4   | 5.4   |
| 27    | 5.2   | 3.6   | e4.0  | e3.4  | e3.0 | 6.1   | 22    | 88   | 34   | 6.4   | 3.3   | 5.2   |
| 28    | 4.8   | 3.4   | e4.0  | e3.4  | e3.0 | 5.7   | 23    | 80   | 33   | 5.8   | 3.7   | 5.1   |
| 29    | 4.8   | 4.9   | e4.0  | e3.4  | e3.2 | 6.6   | 22    | 81   | 31   | 8.0   | 3.3   | 5.7   |
| 30    | 4.8   | 5.0   | e4.0  | e3.3  | ---  | 6.9   | 22    | 78   | 28   | 8.6   | 3.3   | 5.5   |
| 31    | 4.8   | ---   | e4.0  | e3.3  | ---  | 7.4   | ---   | 78   | ---  | 6.5   | 3.3   | ---   |
| TOTAL | 164.9 | 127.5 | 125.0 | 111.4 | 83.8 | 143.9 | 459.7 | 2430 | 1850 | 414.3 | 134.3 | 131.5 |
| MEAN  | 5.32  | 4.25  | 4.03  | 3.59  | 2.89 | 4.64  | 15.3  | 78.4 | 61.7 | 13.4  | 4.33  | 4.38  |
| MAX   | 6.6   | 5.0   | 4.7   | 4.0   | 3.3  | 7.4   | 23    | 116  | 85   | 26    | 6.3   | 10    |
| MIN   | 3.8   | 3.4   | 3.6   | 3.3   | 2.6  | 3.3   | 8.0   | 21   | 28   | 5.8   | 3.3   | 2.4   |
| AC-FT | 327   | 253   | 248   | 221   | 166  | 285   | 912   | 4820 | 3670 | 822   | 266   | 261   |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 1996, BY WATER YEAR (WY)

|      | 1994 | 1995 | 1996 | 1994 | 1995 | 1996 | 1994 | 1995 | 1996 | 1994 | 1995 | 1996 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 4.20 | 3.46 | 2.86 | 2.45 | 2.15 | 3.42 | 11.5 | 95.4 | 145  | 31.6 | 7.32 | 5.51 |
| MAX  | 5.32 | 4.25 | 4.03 | 3.59 | 2.89 | 4.64 | 15.3 | 112  | 228  | 49.7 | 10.3 | 6.64 |
| (WY) | 1996 | 1996 | 1996 | 1996 | 1996 | 1996 | 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 1995 CALENDAR YEAR

## FOR 1996 WATER YEAR

## WATER YEARS 1994 - 1996

|                          |  |         |     |        |        |  |      |        |  |       |        |      |
|--------------------------|--|---------|-----|--------|--------|--|------|--------|--|-------|--------|------|
| ANNUAL TOTAL             |  | 13182.8 |     | 6176.3 |        |  |      |        |  |       |        |      |
| ANNUAL MEAN              |  | 36.1    |     | 16.9   |        |  |      |        |  | 26.2  |        |      |
| HIGHEST ANNUAL MEAN      |  |         |     |        |        |  |      |        |  | 35.6  |        | 1995 |
| LOWEST ANNUAL MEAN       |  |         |     |        |        |  |      |        |  | 16.9  |        | 1996 |
| HIGHEST DAILY MEAN       |  |         |     | 415    | May 31 |  | 116  | May 19 |  | 415   | May 31 | 1995 |
| LOWEST DAILY MEAN        |  |         |     | e1.2   | Jan 18 |  | a2.4 | Sep 3  |  | 1.2   | Jan 18 | 1995 |
| ANNUAL SEVEN-DAY MINIMUM |  |         |     | 1.3    | Jan 12 |  | 2.7  | Feb 10 |  | 1.3   | Jan 12 | 1995 |
| INSTANTANEOUS PEAK FLOW  |  |         |     |        |        |  | 128  | May 18 |  | b759  | Jun 2  | 1995 |
| INSTANTANEOUS PEAK STAGE |  |         |     |        |        |  | 5.05 | May 18 |  | 5.87  | Jun 2  | 1995 |
| ANNUAL RUNOFF (AC-FT)    |  | 26150   |     | 12250  |        |  |      |        |  | 19000 |        |      |
| 10 PERCENT EXCEEDS       |  |         | 130 |        |        |  | 71   |        |  | 78    |        |      |
| 50 PERCENT EXCEEDS       |  |         | 5.4 |        |        |  | 4.8  |        |  | 4.4   |        |      |
| 90 PERCENT EXCEEDS       |  |         | 1.4 |        |        |  | 3.2  |        |  | 1.5   |        |      |

e-Estimated.

a-Also occurred Sep 4, 11.

b-From rating curve extended above 300 ft<sup>3</sup>/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 mi<sup>2</sup>.

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

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 5,695 ft above sea level, from topographic map.

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 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

| DAY   | OCT  | NOV  | DEC  | JAN  | FEB  | MAR  | APR  | MAY   | JUN   | JUL   | AUG  | SEP  |
|-------|------|------|------|------|------|------|------|-------|-------|-------|------|------|
| 1     | e107 | 79   | 60   | e34  | e40  | e40  | 69   | 81    | 541   | 819   | 189  | 124  |
| 2     | e100 | 71   | 59   | e34  | e40  | e42  | 73   | 96    | 533   | 783   | 181  | 123  |
| 3     | e92  | 58   | 55   | e34  | e40  | e45  | 78   | 100   | 540   | 718   | 179  | 115  |
| 4     | e97  | 63   | 55   | e34  | e40  | e48  | 81   | 116   | 604   | 702   | 180  | 107  |
| 5     | e92  | 69   | 56   | e34  | e40  | 50   | 82   | 148   | 686   | 757   | 166  | 105  |
| 6     | e86  | 70   | 55   | e34  | e40  | 44   | 82   | 174   | 881   | 728   | 157  | 132  |
| 7     | e92  | 67   | 53   | e34  | e40  | e45  | 87   | 200   | 932   | 676   | 166  | 140  |
| 8     | e91  | 64   | 50   | e35  | e40  | e46  | 88   | 262   | 990   | 637   | 170  | 124  |
| 9     | e86  | 64   | 46   | e36  | e40  | e48  | 103  | 302   | 1100  | 583   | 162  | 114  |
| 10    | e84  | 69   | e46  | e36  | e40  | 49   | 124  | 323   | 1160  | 559   | 149  | 110  |
| 11    | e85  | 58   | e45  | e36  | e41  | 48   | 132  | 326   | 1180  | 516   | 140  | 108  |
| 12    | e100 | 72   | e44  | e36  | e41  | 50   | 119  | 370   | 1170  | 494   | 143  | 116  |
| 13    | e103 | 70   | e43  | e36  | e42  | 49   | 116  | 443   | 1130  | 463   | 143  | 140  |
| 14    | e91  | 69   | e42  | e36  | 48   | 53   | 101  | 499   | 1170  | 436   | 153  | 131  |
| 15    | e93  | 66   | 41   | e36  | 47   | 50   | 89   | 550   | 1140  | 414   | 161  | 171  |
| 16    | e91  | 66   | e40  | e36  | 46   | 51   | 94   | 679   | 1150  | 380   | 161  | 127  |
| 17    | e87  | 67   | e38  | e36  | 43   | 51   | 95   | 815   | 1110  | 364   | 166  | 116  |
| 18    | e79  | 65   | e36  | e36  | 48   | 48   | 87   | 782   | 1090  | 382   | 162  | 126  |
| 19    | 83   | 61   | e33  | e37  | 45   | 48   | 79   | 851   | 1080  | 386   | 164  | 138  |
| 20    | 78   | 61   | 30   | e38  | 43   | 50   | 68   | 886   | 1090  | 353   | 183  | 129  |
| 21    | 64   | 61   | e31  | e38  | 47   | 53   | 71   | 766   | 1160  | 330   | 163  | 119  |
| 22    | 61   | 61   | e31  | e38  | 46   | 57   | 62   | 763   | 1290  | 312   | 163  | 123  |
| 23    | 55   | 59   | e31  | e38  | 42   | 58   | 56   | 784   | 1200  | 289   | 179  | 123  |
| 24    | 52   | 58   | e31  | e38  | 43   | 61   | 63   | 755   | 1070  | 281   | 168  | 122  |
| 25    | 63   | 60   | e31  | e38  | 44   | e50  | 75   | 825   | 1010  | 273   | 150  | 110  |
| 26    | 63   | 61   | e32  | e38  | 43   | e58  | 77   | 796   | 932   | 271   | 142  | 111  |
| 27    | 55   | 59   | e32  | e38  | 43   | e60  | 77   | 661   | 950   | 253   | 139  | 103  |
| 28    | 55   | 51   | e33  | e38  | 40   | 58   | 80   | 592   | 947   | 237   | 152  | 96   |
| 29    | 55   | 58   | e33  | e38  | 35   | 64   | 74   | 568   | 908   | 244   | 142  | 107  |
| 30    | 57   | 62   | e34  | e40  | ---  | 65   | 74   | 573   | 855   | 230   | 139  | 108  |
| 31    | 64   | ---  | e34  | e40  | ---  | 66   | ---  | 550   | ---   | 199   | 133  | ---  |
| TOTAL | 2461 | 1919 | 1280 | 1130 | 1227 | 1605 | 2556 | 15636 | 29599 | 14069 | 4945 | 3618 |
| MEAN  | 79.4 | 64.0 | 41.3 | 36.5 | 42.3 | 51.8 | 85.2 | 504   | 987   | 454   | 160  | 121  |
| MAX   | 107  | 79   | 60   | 40   | 48   | 66   | 132  | 886   | 1290  | 819   | 189  | 171  |
| MIN   | 52   | 51   | 30   | 34   | 35   | 40   | 56   | 81    | 533   | 199   | 133  | 96   |
| AC-FT | 4880 | 3810 | 2540 | 2240 | 2430 | 3180 | 5070 | 31010 | 58710 | 27910 | 9810 | 7180 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 1996, 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 |  |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|--|
| MEAN | 83.1 | 60.7 | 48.2 | 42.0 | 40.9 | 42.2 | 71.0 | 301  | 779  | 478  | 203  | 124  |      |      |      |      |      |      |      |      |      |      |  |
| 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 1995 CALENDAR YEAR |        | FOR 1996 WATER YEAR |        | WATER YEARS 1975 - 1996 |             |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|-------------|
| ANNUAL TOTAL             | 118295                 |        | 80045               |        |                         |             |
| ANNUAL MEAN              | 324                    |        | 219                 |        | 190                     |             |
| HIGHEST ANNUAL MEAN      |                        |        |                     |        | 321                     |             |
| LOWEST ANNUAL MEAN       |                        |        |                     |        | 109                     |             |
| HIGHEST DAILY MEAN       | 2300                   | Jun 17 | 1290                | Jun 22 | 2300                    | Jun 17 1995 |
| LOWEST DAILY MEAN        | 23                     | Feb 9  | 30                  | Dec 20 | 18                      | Dec 2 1981  |
| ANNUAL SEVEN-DAY MINIMUM | 24                     | Feb 7  | 31                  | Dec 20 | 24                      | Feb 6 1986  |
| INSTANTANEOUS PEAK FLOW  |                        |        | a <sub>1</sub> 1370 | Jun 15 | 2370                    | Jul 10 1983 |
| INSTANTANEOUS PEAK STAGE |                        |        | a <sub>7.32</sub>   | Jun 15 | b <sub>6.44</sub>       | Jul 10 1983 |
| ANNUAL RUNOFF (AC-FT)    | 234600                 |        | 158800              |        | 137500                  |             |
| 10 PERCENT EXCEEDS       | 1170                   |        | 759                 |        | 537                     |             |
| 50 PERCENT EXCEEDS       | 69                     |        | 82                  |        | 76                      |             |
| 90 PERCENT EXCEEDS       | 27                     |        | 38                  |        | 36                      |             |

e-Estimated.  
a-Also occurred Jun 23.  
b-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 mi<sup>2</sup>.

PERIOD OF RECORD.--May 1926 to current year. Prior to October 1933, monthly discharge only, published in WSP 1310. 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.--Records good. 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 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

| DAY   | OCT   | NOV   | DEC   | JAN   | FEB   | MAR   | APR   | MAY   | JUN   | JUL   | AUG   | SEP   |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1     | 521   | 381   | 584   | 209   | 406   | 288   | 200   | 250   | 419   | 613   | 401   | 411   |
| 2     | 423   | 245   | 439   | 244   | 401   | 281   | 110   | 245   | 449   | 590   | 335   | 388   |
| 3     | 372   | 251   | 360   | 306   | 404   | 288   | 152   | 227   | 448   | 575   | 341   | 367   |
| 4     | 434   | 304   | 346   | 316   | 422   | 268   | e130  | 214   | 447   | 627   | 324   | 352   |
| 5     | 313   | 319   | 335   | 287   | 451   | 254   | 409   | 224   | 427   | 605   | 330   | 317   |
| 6     | 266   | 335   | 330   | 285   | 404   | 262   | 281   | 280   | 517   | 739   | 324   | 396   |
| 7     | 268   | 328   | 349   | 289   | 340   | 250   | 218   | 343   | 563   | 712   | 341   | 420   |
| 8     | 267   | 326   | 338   | 334   | 329   | 237   | 196   | 626   | 595   | 692   | 379   | 324   |
| 9     | 257   | 333   | 303   | 392   | 289   | 229   | e121  | 645   | 650   | 687   | 344   | 298   |
| 10    | 324   | 360   | 335   | 334   | 233   | 217   | e105  | 1190  | 724   | 1240  | 357   | 258   |
| 11    | 304   | 358   | 349   | 306   | 220   | 188   | e122  | 623   | 748   | 545   | 361   | 214   |
| 12    | 281   | 350   | 323   | 321   | 227   | 155   | 221   | 502   | 777   | 445   | 339   | 1080  |
| 13    | 273   | 351   | 300   | 312   | 221   | 89    | 431   | 556   | 911   | 1320  | 294   | 436   |
| 14    | 308   | 316   | 302   | 309   | 216   | 929   | 558   | 562   | 1030  | 563   | 306   | 317   |
| 15    | 303   | 310   | 257   | 314   | 220   | 382   | 299   | 486   | 1480  | 390   | 337   | 423   |
| 16    | 276   | 311   | 243   | 316   | 252   | 239   | 225   | 512   | 1590  | 303   | 426   | 307   |
| 17    | 271   | 320   | 230   | 308   | 301   | 209   | 186   | 681   | 1170  | 410   | 351   | 290   |
| 18    | 266   | 315   | 239   | 317   | 291   | 204   | 174   | 570   | 1060  | 454   | 320   | 552   |
| 19    | 266   | 308   | 246   | 416   | 305   | 201   | 155   | 567   | 979   | 481   | 327   | 2320  |
| 20    | 271   | 325   | 230   | 453   | 296   | 182   | e102  | 648   | 954   | 591   | 322   | 592   |
| 21    | 252   | 317   | 229   | 440   | 310   | 189   | e143  | 527   | 1200  | 441   | 316   | 386   |
| 22    | 319   | 315   | 225   | 432   | 276   | 196   | 207   | 495   | 1230  | 462   | 672   | 307   |
| 23    | 638   | 338   | 211   | 411   | 288   | 168   | 209   | 676   | 1240  | 468   | 1180  | 299   |
| 24    | 484   | 323   | 206   | 409   | 295   | 302   | 195   | 647   | 1050  | 461   | 633   | 281   |
| 25    | 428   | 345   | 195   | 409   | 290   | 297   | 173   | 1350  | 934   | 525   | 473   | 285   |
| 26    | 416   | 346   | 200   | 398   | 287   | 243   | 243   | 3600  | 760   | 438   | 418   | 397   |
| 27    | 402   | 390   | 215   | 412   | 287   | e232  | 334   | 1270  | 748   | 421   | 985   | 530   |
| 28    | 441   | 396   | 207   | 435   | 285   | 223   | 420   | 443   | 761   | 440   | 500   | 367   |
| 29    | 467   | 533   | 210   | 431   | 289   | 218   | 429   | 432   | 777   | 552   | 453   | 333   |
| 30    | 428   | 644   | 196   | 412   | ---   | 227   | 319   | 405   | 655   | 556   | 446   | 333   |
| 31    | 422   | ---   | 201   | 402   | ---   | 225   | ---   | 397   | ---   | 498   | 434   | ---   |
| TOTAL | 10961 | 10393 | 8733  | 10959 | 8835  | 7872  | 7067  | 20193 | 25293 | 17844 | 13369 | 13580 |
| MEAN  | 354   | 346   | 282   | 354   | 305   | 254   | 236   | 651   | 843   | 576   | 431   | 453   |
| MAX   | 638   | 644   | 584   | 453   | 451   | 929   | 558   | 3600  | 1590  | 1320  | 1180  | 2320  |
| MIN   | 252   | 245   | 195   | 209   | 216   | 89    | 102   | 214   | 419   | 303   | 294   | 214   |
| AC-FT | 21740 | 20610 | 17320 | 21740 | 17520 | 15610 | 14020 | 40050 | 50170 | 35390 | 26520 | 26940 |

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1976 - 1996, 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 |  |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|--|
| MEAN | 342  | 324  | 290  | 311  | 317  | 367  | 505  | 1134 | 1263 | 837  | 616  | 379  |      |      |      |      |      |      |      |      |      |  |
| 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 1995 CALENDAR YEAR |  | FOR 1996 WATER YEAR |  | WATER YEARS 1976 - 1996 |  |
|--------------------------|------------------------|--|---------------------|--|-------------------------|--|
| ANNUAL TOTAL             | 391852                 |  | 155099              |  |                         |  |
| ANNUAL MEAN              | 1074                   |  | 424                 |  | a 558                   |  |
| HIGHEST ANNUAL MEAN      |                        |  |                     |  | 1379                    |  |
| LOWEST ANNUAL MEAN       |                        |  |                     |  | 252                     |  |
| HIGHEST DAILY MEAN       | 6500                   |  | 3600                |  | b 6500                  |  |
| LOWEST DAILY MEAN        | 55                     |  | 89                  |  | c 27                    |  |
| ANNUAL SEVEN-DAY MINIMUM | 74                     |  | 168                 |  | d 69                    |  |
| INSTANTANEOUS PEAK FLOW  |                        |  | 7560                |  | e 12300                 |  |
| INSTANTANEOUS PEAK STAGE |                        |  | 8.22                |  | f 7.58                  |  |
| ANNUAL RUNOFF (AC-FT)    | 777200                 |  | 307600              |  | 404400                  |  |
| 10 PERCENT EXCEEDS       | 4330                   |  | 677                 |  | 1050                    |  |
| 50 PERCENT EXCEEDS       | 335                    |  | 335                 |  | 330                     |  |
| 90 PERCENT EXCEEDS       | 182                    |  | 213                 |  | 176                     |  |

e-Estimated.

a-Average discharge for 48 years (water years 1927-74), 366 ft<sup>3</sup>/s; 265200 acre-ft/yr, prior to completion of Chatfield Dam.

b-Maximum daily discharge for period of record, 13200 ft<sup>3</sup>/s, May 7, 1973.

c-Minimum daily discharge for period of record, 4.4 ft<sup>3</sup>/s, Apr 1, 1950.

d-Maximum discharge and stage for period of record, 33000 ft<sup>3</sup>/s, May 6, 1973, gage height, 11.67 ft, from rating curve extended above 7200 ft<sup>3</sup>/s, partly on basis of flow-over-road measurement of peak flow; maximum gage height, 12.93 ft, Jun 17, 1965, site and datum then in use.

f-Maximum gage height for statistical period, 9.91 ft, May 17, 1995.

**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 mi<sup>2</sup>.

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

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

REMARKS.--Records 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 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

| DAY   | OCT  | NOV  | DEC  | JAN  | FEB  | MAR  | APR    | MAY    | JUN  | JUL    | AUG  | SEP  |
|-------|------|------|------|------|------|------|--------|--------|------|--------|------|------|
| 1     | 77   | 14   | 25   | e19  | e19  | e34  | e64    | 9.3    | 70   | 24     | 65   | 51   |
| 2     | 62   | 14   | 24   | e20  | e19  | e35  | e66    | 9.7    | 63   | 17     | 46   | 51   |
| 3     | 56   | 17   | 25   | e20  | e19  | e36  | e72    | 15     | 53   | 11     | 33   | 46   |
| 4     | 40   | 19   | 24   | e20  | e19  | e36  | 68     | 12     | 44   | 9.3    | 37   | 46   |
| 5     | 32   | 19   | 23   | e20  | e19  | e36  | 79     | 11     | 50   | 9.2    | 43   | 48   |
| 6     | 26   | 19   | 23   | e20  | e19  | e36  | 87     | 13     | 47   | 15     | 39   | 48   |
| 7     | 23   | 21   | 22   | e21  | e20  | e36  | 77     | 15     | 42   | 71     | 35   | e47  |
| 8     | 24   | 24   | 21   | e22  | e21  | e38  | 69     | 21     | 35   | 57     | 35   | e45  |
| 9     | 27   | 24   | 23   | e22  | e22  | e38  | 47     | 38     | 33   | 47     | 44   | e43  |
| 10    | 30   | 24   | 26   | e22  | e23  | e38  | 29     | 76     | 35   | 177    | 46   | e42  |
| 11    | 26   | 26   | 23   | e22  | e25  | e38  | 22     | 34     | 27   | 106    | 45   | e40  |
| 12    | 26   | 26   | 23   | e22  | e25  | e38  | 19     | 22     | 21   | 56     | 40   | 82   |
| 13    | 26   | 26   | 22   | e22  | e25  | e38  | 51     | 20     | 26   | 111    | 37   | 88   |
| 14    | 28   | 26   | 20   | e22  | e26  | e40  | 85     | 21     | 26   | 100    | 40   | 47   |
| 15    | 30   | 26   | 20   | e22  | e27  | e41  | 73     | 18     | 33   | 52     | 58   | 56   |
| 16    | 27   | 26   | 21   | e21  | e28  | e41  | 57     | 23     | 84   | 33     | 47   | 61   |
| 17    | 26   | 25   | 23   | e20  | e28  | e41  | 40     | 31     | 69   | 27     | 37   | 45   |
| 18    | 26   | 26   | 23   | e20  | e28  | e41  | 36     | 20     | 52   | 21     | 31   | 50   |
| 19    | 26   | 26   | e19  | e20  | e31  | e42  | 30     | 16     | 34   | 17     | 24   | 154  |
| 20    | 27   | 26   | e19  | e20  | e32  | e45  | 22     | 21     | 24   | 19     | 28   | 111  |
| 21    | 24   | 27   | e19  | e20  | e32  | e47  | 25     | 15     | 21   | 12     | 33   | 90   |
| 22    | 25   | 27   | e19  | e20  | e32  | e49  | 31     | 15     | 42   | 8.8    | 31   | 85   |
| 23    | 34   | 26   | e19  | e20  | e32  | e50  | 29     | 17     | 75   | 9.0    | 50   | 83   |
| 24    | 34   | 26   | e19  | e19  | e33  | e50  | 22     | 27     | 79   | 10     | 48   | 81   |
| 25    | 29   | 26   | e19  | e19  | e34  | e52  | 18     | 101    | 58   | 9.3    | 40   | 82   |
| 26    | 27   | 25   | e19  | e19  | e34  | e55  | 13     | 208    | 39   | 25     | 39   | 88   |
| 27    | 29   | 26   | e19  | e19  | e34  | e58  | 9.4    | 262    | 24   | 34     | 71   | 79   |
| 28    | 26   | 34   | e19  | e19  | e34  | e60  | 10     | 120    | 24   | 39     | 75   | 77   |
| 29    | 30   | 28   | e19  | e19  | e34  | e61  | 9.5    | 108    | 44   | 81     | 54   | 67   |
| 30    | 25   | 26   | e19  | e19  | ---  | e62  | 15     | 98     | 38   | 81     | 54   | 65   |
| 31    | 16   | ---  | e19  | e19  | ---  | e62  | ---    | 87     | ---  | 78     | 50   | ---  |
| TOTAL | 964  | 725  | 658  | 629  | 774  | 1374 | 1274.9 | 1504.0 | 1312 | 1366.6 | 1355 | 1998 |
| MEAN  | 31.1 | 24.2 | 21.2 | 20.3 | 26.7 | 44.3 | 42.5   | 48.5   | 43.7 | 44.1   | 43.7 | 66.6 |
| MAX   | 77   | 34   | 26   | 22   | 34   | 62   | 87     | 262    | 84   | 177    | 75   | 154  |
| MIN   | 16   | 14   | 19   | 19   | 19   | 34   | 9.4    | 9.3    | 21   | 8.8    | 24   | 40   |
| AC-FT | 1910 | 1440 | 1310 | 1250 | 1540 | 2730 | 2530   | 2980   | 2600 | 2710   | 2690 | 3960 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 1996, BY WATER YEAR (WY)

|      | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 40.1 | 28.2 | 22.0 | 19.8 | 20.4 | 34.2 | 48.5 | 57.5 | 68.1 | 54.1 | 41.2 | 52.4 |
| MAX  | 64.3 | 29.9 | 23.5 | 22.6 | 26.7 | 50.1 | 58.6 | 85.5 | 117  | 111  | 51.5 | 67.0 |
| (WY) | 1995 | 1992 | 1992 | 1992 | 1996 | 1992 | 1995 | 1994 | 1995 | 1995 | 1992 | 1993 |
| MIN  | 30.2 | 24.2 | 19.6 | 14.0 | 12.0 | 18.4 | 39.2 | 26.4 | 35.8 | 30.9 | 27.4 | 27.1 |
| (WY) | 1992 | 1996 | 1994 | 1995 | 1995 | 1993 | 1993 | 1993 | 1993 | 1994 | 1994 | 1994 |

SUMMARY STATISTICS

FOR 1995 CALENDAR YEAR

FOR 1996 WATER YEAR

WATER YEARS 1992 - 1996

|                          |                    |         |       |
|--------------------------|--------------------|---------|-------|
| ANNUAL TOTAL             | 18175.1            | 13934.5 |       |
| ANNUAL MEAN              | 49.8               | 38.1    | 40.6  |
| HIGHEST ANNUAL MEAN      |                    |         | 53.2  |
| LOWEST ANNUAL MEAN       |                    |         | 35.1  |
| HIGHEST DAILY MEAN       | e <sup>e</sup> 270 | Jun 9   | 262   |
| LOWEST DAILY MEAN        | 1.9                | Mar 17  | 8.8   |
| ANNUAL SEVEN-DAY MINIMUM | 6.4                | Feb 9   | 11    |
| INSTANTANEOUS PEAK FLOW  |                    |         | 312   |
| INSTANTANEOUS PEAK STAGE |                    |         | 8.06  |
| ANNUAL RUNOFF (AC-FT)    | 36050              | 27640   | 29400 |
| 10 PERCENT EXCEEDS       | 108                | 74      | 78    |
| 50 PERCENT EXCEEDS       | 30                 | 28      | 28    |
| 90 PERCENT EXCEEDS       | 12                 | 19      | 16    |

e-Estimated.

a-Maximum gage height, 8.32 ft, Jun 9, 1995.



**06724000 ST. VRAIN CREEK AT LYONS, CO**

LOCATION.--Lat 40°13'05", long 105°15'34", in NW¼NW¼ 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 mi<sup>2</sup>.

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 ft<sup>3</sup>/s. For discussions of these floods, see WSP 997.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

| DAY   | OCT  | NOV  | DEC  | JAN  | FEB  | MAR  | APR  | MAY   | JUN   | JUL   | AUG  | SEP  |
|-------|------|------|------|------|------|------|------|-------|-------|-------|------|------|
| 1     | 54   | 39   | 30   | 22   | 21   | 25   | 60   | 82    | 484   | 418   | 172  | 68   |
| 2     | 49   | 34   | 29   | 20   | 21   | 25   | 66   | 91    | 438   | 431   | 163  | 70   |
| 3     | 44   | 32   | 27   | 20   | 21   | 26   | 74   | 90    | 440   | 414   | 171  | 55   |
| 4     | 45   | 35   | 25   | 19   | 21   | 27   | 80   | 101   | 488   | 419   | 172  | 43   |
| 5     | 46   | 33   | 25   | 19   | 21   | 26   | 80   | 117   | 591   | 415   | 158  | 43   |
| 6     | 41   | 35   | 27   | 18   | 21   | 22   | 88   | 137   | 729   | 448   | 139  | 52   |
| 7     | 47   | 33   | 26   | 22   | 23   | 25   | 96   | 160   | 678   | 476   | 132  | 67   |
| 8     | 45   | 29   | 20   | 22   | 25   | 28   | 104  | 177   | 667   | 410   | 127  | 76   |
| 9     | 38   | 27   | 15   | 20   | 23   | 26   | 125  | 192   | 675   | 369   | 128  | 66   |
| 10    | 41   | 30   | 33   | 20   | 22   | 28   | 140  | 196   | 676   | 318   | 128  | 71   |
| 11    | 36   | 27   | 34   | 20   | 18   | 24   | 131  | 195   | 659   | 277   | 121  | 76   |
| 12    | 38   | 32   | 28   | 20   | 18   | 26   | 100  | 214   | 681   | 276   | 110  | 65   |
| 13    | 45   | 33   | 27   | 21   | 19   | 24   | 97   | 237   | 711   | 260   | 97   | 63   |
| 14    | 45   | 34   | 24   | 20   | 20   | 26   | 89   | 246   | 685   | 245   | 93   | 61   |
| 15    | 44   | 31   | 22   | 21   | 21   | 24   | 84   | 231   | 709   | 250   | 97   | 61   |
| 16    | 45   | 29   | 24   | 20   | 19   | 25   | 81   | 293   | 783   | 240   | 96   | 57   |
| 17    | 49   | 28   | 27   | 19   | 20   | 27   | 82   | 514   | 784   | 224   | 91   | 57   |
| 18    | 48   | 27   | 24   | 17   | 23   | 26   | 80   | 490   | 746   | 244   | 85   | 67   |
| 19    | 42   | 28   | 18   | 21   | 23   | 24   | 82   | 505   | 668   | 273   | 96   | 84   |
| 20    | 40   | 27   | 18   | 21   | 23   | 25   | 78   | 497   | 634   | 262   | 106  | 68   |
| 21    | 36   | 26   | 18   | 22   | 24   | 26   | 74   | 427   | 701   | 239   | 91   | 62   |
| 22    | 38   | 26   | 23   | 21   | 25   | 27   | 70   | 395   | 856   | 216   | 90   | 58   |
| 23    | 37   | 25   | 20   | 19   | 24   | 33   | 51   | 449   | 686   | 202   | 89   | 60   |
| 24    | 34   | 24   | 25   | 20   | 25   | 36   | 44   | 524   | 604   | 190   | 90   | 94   |
| 25    | 32   | 26   | 26   | 20   | 24   | 29   | 75   | 801   | 578   | 182   | 88   | 113  |
| 26    | 30   | 24   | 22   | 18   | 23   | 37   | 95   | 934   | 520   | 172   | 84   | 133  |
| 27    | 31   | 25   | 18   | 21   | 23   | 36   | 91   | 929   | 510   | 161   | 78   | 123  |
| 28    | 27   | 21   | 18   | 21   | 20   | 37   | 91   | 716   | 493   | 153   | 70   | 106  |
| 29    | 30   | 28   | 18   | 20   | 22   | 44   | 86   | 613   | 443   | 185   | 70   | 111  |
| 30    | 31   | 31   | 21   | 19   | ---  | 51   | 77   | 583   | 423   | 221   | 74   | 114  |
| 31    | 37   | ---  | 22   | 20   | ---  | 59   | ---  | 534   | ---   | 191   | 70   | ---  |
| TOTAL | 1245 | 879  | 734  | 623  | 633  | 924  | 2571 | 11670 | 18740 | 8781  | 3376 | 2244 |
| MEAN  | 40.2 | 29.3 | 23.7 | 20.1 | 21.8 | 29.8 | 85.7 | 376   | 625   | 283   | 109  | 74.8 |
| MAX   | 54   | 39   | 34   | 22   | 25   | 59   | 140  | 934   | 856   | 476   | 172  | 133  |
| MIN   | 27   | 21   | 15   | 17   | 18   | 22   | 44   | 82    | 423   | 153   | 70   | 43   |
| AC-FT | 2470 | 1740 | 1460 | 1240 | 1260 | 1830 | 5100 | 23150 | 37170 | 17420 | 6700 | 4450 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1896 - 1996, BY WATER YEAR (WY)

|      | 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 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 38.5 | 24.1 | 16.9 | 13.8 | 13.3 | 19.5 | 89.8 | 295  | 524  | 292  | 134  | 67.1 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 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 1995 CALENDAR YEAR | FOR 1996 WATER YEAR | WATER YEARS 1896 - 1996 |
|--------------------------|------------------------|---------------------|-------------------------|
| ANNUAL TOTAL             | 78787                  | 52420               |                         |
| ANNUAL MEAN              | 216                    | 143                 | 128                     |
| HIGHEST ANNUAL MEAN      |                        |                     | 222                     |
| LOWEST ANNUAL MEAN       |                        |                     | 46.3                    |
| HIGHEST DAILY MEAN       | 1900                   | May 30              | 2120                    |
| LOWEST DAILY MEAN        | 13                     | Jan 21              | a .00                   |
| ANNUAL SEVEN-DAY MINIMUM | 15                     | Jan 20              | .31                     |
| INSTANTANEOUS PEAK FLOW  |                        |                     | 10500                   |
| INSTANTANEOUS PEAK STAGE |                        |                     | 9.06                    |
| ANNUAL RUNOFF (AC-FT)    | 156300                 | 104000              | 92430                   |
| 10 PERCENT EXCEEDS       | 818                    | 489                 | 381                     |
| 50 PERCENT EXCEEDS       | 36                     | 50                  | 39                      |
| 90 PERCENT EXCEEDS       | 17                     | 21                  | 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 mi<sup>2</sup>.

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

GAGE.--Water-stage recorder. 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 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

| DAY   | OCT  | NOV  | DEC  | JAN  | FEB  | MAR  | APR  | MAY  | JUN   | JUL   | AUG  | SEP  |
|-------|------|------|------|------|------|------|------|------|-------|-------|------|------|
| 1     | 84   | 56   | 51   | e38  | e47  | e48  | e40  | 33   | 314   | 287   | 177  | 107  |
| 2     | 80   | 57   | 47   | e38  | e47  | e50  | 38   | 36   | 296   | 259   | 174  | 109  |
| 3     | 82   | 45   | 42   | e38  | e44  | e50  | 37   | 32   | 271   | 247   | 172  | 109  |
| 4     | 82   | 41   | e42  | e38  | e40  | e47  | 47   | 32   | 289   | 226   | 171  | 106  |
| 5     | 73   | 39   | e42  | e38  | e43  | e42  | 61   | 31   | 345   | 213   | 167  | 101  |
| 6     | 67   | 37   | e42  | e38  | e48  | e42  | 39   | 46   | 525   | 223   | 162  | 107  |
| 7     | 71   | 35   | e42  | e38  | e56  | e42  | 36   | 83   | 478   | 218   | 157  | 110  |
| 8     | 71   | 39   | e42  | e39  | e56  | e42  | 35   | 46   | 447   | 222   | 154  | 103  |
| 9     | 71   | 36   | e38  | e40  | e52  | e42  | 37   | 34   | 464   | 275   | 156  | 97   |
| 10    | 70   | 38   | e40  | e40  | e50  | e42  | 44   | 42   | 438   | 328   | 152  | 93   |
| 11    | 63   | 34   | e42  | e40  | e45  | e42  | 64   | 36   | 361   | 261   | 149  | 93   |
| 12    | 62   | 32   | e44  | e40  | e45  | e45  | 35   | e28  | 307   | 249   | 157  | 102  |
| 13    | 60   | 37   | e44  | e40  | e45  | e50  | 33   | e48  | 345   | 265   | 156  | 104  |
| 14    | 58   | 39   | e40  | e40  | e45  | e62  | 32   | e70  | 379   | 227   | 155  | 112  |
| 15    | 59   | 38   | e38  | e40  | e45  | e54  | 32   | e150 | 437   | 217   | 161  | 152  |
| 16    | 65   | 34   | e38  | e40  | e45  | e50  | 32   | e140 | 570   | 207   | 164  | 110  |
| 17    | 68   | 30   | e38  | e40  | e45  | e46  | 31   | e110 | 571   | 198   | 150  | 102  |
| 18    | 68   | 32   | e38  | e40  | e45  | e46  | 31   | e135 | 539   | 198   | 147  | 125  |
| 19    | 63   | 29   | e38  | e40  | e45  | e45  | 32   | e180 | 456   | 196   | 148  | 167  |
| 20    | 66   | 46   | e38  | e40  | e45  | e45  | 34   | e280 | 360   | 190   | 151  | 110  |
| 21    | 64   | 44   | e38  | e40  | e45  | e40  | 33   | e250 | 442   | 183   | 118  | 96   |
| 22    | 54   | 37   | e38  | e40  | e45  | e42  | 35   | e220 | 868   | 186   | 110  | 90   |
| 23    | 67   | 48   | e37  | e40  | e45  | e47  | 34   | e240 | 751   | 182   | 123  | 85   |
| 24    | 72   | 48   | e35  | e40  | e45  | e54  | 34   | e260 | 561   | 177   | 138  | 89   |
| 25    | 72   | 46   | e35  | e40  | e45  | e48  | 30   | e280 | 511   | 172   | 139  | 93   |
| 26    | 81   | 45   | e37  | e40  | e45  | e43  | 28   | e300 | 463   | 174   | 123  | 109  |
| 27    | 75   | 55   | e38  | e40  | e45  | e42  | 28   | e320 | 373   | 174   | 109  | 108  |
| 28    | 70   | 49   | e38  | e40  | e45  | e42  | 28   | e340 | 396   | 218   | 112  | 92   |
| 29    | 44   | 49   | e38  | e40  | e46  | e42  | 29   | e380 | 355   | 230   | 113  | 83   |
| 30    | 49   | 55   | e38  | e40  | ---  | e41  | 29   | e387 | 303   | 198   | 111  | 77   |
| 31    | 58   | ---  | e38  | e44  | ---  | e41  | ---  | 320  | ---   | 186   | 108  | ---  |
| TOTAL | 2089 | 1250 | 1236 | 1229 | 1339 | 1414 | 1078 | 4889 | 13215 | 6786  | 4484 | 3141 |
| MEAN  | 67.4 | 41.7 | 39.9 | 39.6 | 46.2 | 45.6 | 35.9 | 158  | 440   | 219   | 145  | 105  |
| MAX   | 84   | 57   | 51   | 44   | 56   | 62   | 64   | 387  | 868   | 328   | 177  | 167  |
| MIN   | 44   | 29   | 35   | 38   | 40   | 40   | 28   | 28   | 271   | 172   | 108  | 77   |
| AC-FT | 4140 | 2480 | 2450 | 2440 | 2660 | 2800 | 2140 | 9700 | 26210 | 13460 | 8890 | 6230 |

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1976 - 1996, 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 |  |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|--|
| MEAN | 68.0 | 57.3 | 50.4 | 45.1 | 45.1 | 50.2 | 75.9 | 234  | 348  | 175  | 148  | 101  |      |      |      |      |      |      |      |      |      |  |
| 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 1995 CALENDAR YEAR | FOR 1996 WATER YEAR | WATER YEARS 1976 - 1996 |
|--------------------------|------------------------|---------------------|-------------------------|
| ANNUAL TOTAL             | 92753                  | 42150               |                         |
| ANNUAL MEAN              | 254                    | 115                 | 116                     |
| HIGHEST ANNUAL MEAN      |                        |                     | 257                     |
| LOWEST ANNUAL MEAN       |                        |                     | 54.8                    |
| HIGHEST DAILY MEAN       | 2580                   | May 30              | 2580                    |
| LOWEST DAILY MEAN        | 29                     | Nov 19              | 20                      |
| ANNUAL SEVEN-DAY MINIMUM | 34                     | Nov 13              | 22                      |
| INSTANTANEOUS PEAK FLOW  |                        | 1210                | 2960                    |
| INSTANTANEOUS PEAK STAGE |                        | b                   | c                       |
| ANNUAL RUNOFF (AC-FT)    | 184000                 | 83600               | 84390                   |
| 10 PERCENT EXCEEDS       | 986                    | 288                 | 198                     |
| 50 PERCENT EXCEEDS       | 62                     | 50                  | 66                      |
| 90 PERCENT EXCEEDS       | 41                     | 36                  | 35                      |

e-Estimated.

a-Also occurred Apr 27-28, and May 12.

b-Maximum recorded gage height; gage height may have been higher during period of estimated record in May.

c-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 SE¼NW¼ sec.13, T.1 N., R.70 W., Boulder County, Hydrologic Unit 1019005, on left bank, 50 ft upstream from bridge on North 75th Street, 0.2 mi downstream from Boulder feeder ditch, and 6 mi northeast of Boulder.

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

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

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

REMARKS.--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 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

| DAY   | OCT  | NOV  | DEC  | JAN  | FEB  | MAR  | APR  | MAY   | JUN   | JUL   | AUG  | SEP  |
|-------|------|------|------|------|------|------|------|-------|-------|-------|------|------|
| 1     | 76   | 79   | 72   | 61   | 64   | 64   | 69   | 61    | 168   | 373   | 113  | 81   |
| 2     | 78   | 64   | 53   | 58   | 65   | 59   | 68   | 55    | 138   | 339   | 115  | 67   |
| 3     | 85   | 51   | 48   | 67   | 50   | 61   | 58   | 63    | 133   | 274   | 113  | 65   |
| 4     | 75   | 49   | 49   | 67   | 47   | 53   | 67   | 69    | 134   | 271   | 115  | 72   |
| 5     | 76   | 54   | 49   | 62   | 59   | 53   | 76   | 87    | 134   | 289   | 125  | 87   |
| 6     | 74   | 55   | 50   | 60   | 73   | 52   | 71   | 119   | 142   | 316   | 118  | 102  |
| 7     | 61   | 51   | 51   | 62   | 78   | 50   | 70   | 159   | 135   | 314   | 119  | 111  |
| 8     | 66   | 66   | 50   | 66   | 75   | 47   | 72   | 206   | 136   | 287   | 144  | 101  |
| 9     | 70   | 74   | 42   | 68   | 75   | 50   | 88   | 237   | 146   | 335   | 185  | 91   |
| 10    | 73   | 72   | 48   | 71   | 64   | 52   | 108  | 229   | 143   | 413   | 204  | 79   |
| 11    | 71   | 74   | 50   | 67   | 57   | 51   | 114  | 174   | 132   | 313   | 201  | 69   |
| 12    | 65   | 71   | 52   | 55   | 62   | 47   | 111  | 165   | 173   | 265   | 194  | 83   |
| 13    | 78   | 73   | 54   | 69   | 62   | 55   | 108  | 203   | 170   | 242   | 196  | 84   |
| 14    | 72   | 64   | 47   | 63   | 63   | 93   | 102  | 259   | 195   | 194   | 201  | 130  |
| 15    | 67   | 56   | 46   | 57   | 64   | 65   | 95   | 308   | 482   | 185   | 214  | 110  |
| 16    | 70   | 53   | 46   | 56   | 61   | 62   | 94   | 281   | 543   | 162   | 212  | 73   |
| 17    | 66   | 50   | 45   | 68   | 59   | 59   | 94   | 270   | 510   | 161   | 196  | 71   |
| 18    | 63   | 56   | 49   | 61   | 59   | 54   | 80   | 320   | 458   | 186   | 168  | 112  |
| 19    | 74   | 51   | 45   | 54   | 68   | 54   | 70   | 394   | 424   | 181   | 170  | 148  |
| 20    | 79   | 53   | 46   | 48   | 66   | 53   | 68   | 453   | 447   | 168   | 179  | 82   |
| 21    | 69   | 49   | 46   | 51   | 64   | 53   | 71   | 402   | 509   | 150   | 176  | 70   |
| 22    | 90   | 46   | 46   | 62   | 61   | 45   | 74   | 355   | 754   | 147   | 178  | 61   |
| 23    | 79   | 43   | 44   | 56   | 56   | 55   | 83   | 375   | 597   | 150   | 175  | 63   |
| 24    | 65   | 46   | 48   | 59   | 53   | 77   | 132  | 389   | 476   | 139   | 170  | 72   |
| 25    | 62   | 46   | 38   | 57   | 52   | 60   | 130  | 670   | 430   | 131   | 163  | 84   |
| 26    | 69   | 46   | 50   | 54   | 56   | 64   | 114  | 707   | 394   | 131   | 158  | 110  |
| 27    | 76   | 62   | 38   | 49   | 58   | 60   | 138  | 550   | 413   | 128   | 153  | 114  |
| 28    | 63   | 51   | 49   | 54   | 50   | 61   | 109  | 410   | 436   | 121   | 163  | 100  |
| 29    | 62   | 53   | 59   | 52   | 57   | 62   | 98   | 314   | 397   | 139   | 160  | 90   |
| 30    | 63   | 49   | 57   | 45   | ---  | 64   | 74   | 251   | 375   | 132   | 137  | 94   |
| 31    | 60   | ---  | 60   | 64   | ---  | 63   | ---  | 204   | ---   | 115   | 112  | ---  |
| TOTAL | 2197 | 1707 | 1527 | 1843 | 1778 | 1798 | 2706 | 8739  | 9724  | 6751  | 5027 | 2676 |
| MEAN  | 70.9 | 56.9 | 49.3 | 59.5 | 61.3 | 58.0 | 90.2 | 282   | 324   | 218   | 162  | 89.2 |
| MAX   | 90   | 79   | 72   | 71   | 78   | 93   | 138  | 707   | 754   | 413   | 214  | 148  |
| MIN   | 60   | 43   | 38   | 45   | 47   | 45   | 58   | 55    | 132   | 115   | 112  | 61   |
| AC-FT | 4360 | 3390 | 3030 | 3660 | 3530 | 3570 | 5370 | 17330 | 19290 | 13390 | 9970 | 5310 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 1996, BY WATER YEAR (WY)

|      |      |      |      |      |      |      |      |      |      |      |      |      |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 44.4 | 53.1 | 49.7 | 48.3 | 47.4 | 51.1 | 76.5 | 192  | 272  | 232  | 133  | 74.0 |
| MAX  | 70.9 | 78.8 | 74.9 | 68.3 | 61.3 | 76.8 | 145  | 465  | 868  | 492  | 170  | 111  |
| (WY) | 1996 | 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 1995 CALENDAR YEAR

FOR 1996 WATER YEAR

WATER YEARS 1987 - 1996

|                          |        |        |                 |        |
|--------------------------|--------|--------|-----------------|--------|
| ANNUAL TOTAL             | 73622  | 46473  |                 |        |
| ANNUAL MEAN              | 202    | 127    |                 | 106    |
| HIGHEST ANNUAL MEAN      |        |        |                 | 198    |
| LOWEST ANNUAL MEAN       |        |        |                 | 85.5   |
| HIGHEST DAILY MEAN       | 1420   | Jun 18 | 754             | Jun 22 |
| LOWEST DAILY MEAN        | 26     | Jan 1  | <sup>a</sup> 38 | Dec 25 |
| ANNUAL SEVEN-DAY MINIMUM | 30     | Mar 24 | 44              | Dec 21 |
| INSTANTANEOUS PEAK FLOW  |        |        | 1000            | May 26 |
| INSTANTANEOUS PEAK STAGE |        |        | 6.97            | May 26 |
| ANNUAL RUNOFF (AC-FT)    | 146000 |        | 92180           | 77060  |
| 10 PERCENT EXCEEDS       | 639    |        | 295             | 217    |
| 50 PERCENT EXCEEDS       | 69     |        | 72              | 61     |
| 90 PERCENT EXCEEDS       | 35     |        | 50              | 35     |

a-Also occurred Dec 27.

**06730500 BOULDER CREEK AT MOUTH NEAR LONGMONT, CO**

LOCATION.--Lat 40°09'08", long 105°00'52", in NW¼SW¼ sec.9, T.2 N., R.68 W., Weld County, Hydrologic Unit 10190005, on left bank 0.6 mi upstream from mouth, 1.0 mi downstream from State Highway 254, and 4.8 mi southeast of Longmont.

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

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

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

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

| DAY   | OCT  | NOV  | DEC  | JAN  | FEB  | MAR  | APR  | MAY    | JUN   | JUL    | AUG   | SEP    |
|-------|------|------|------|------|------|------|------|--------|-------|--------|-------|--------|
| 1     | e75  | 66   | 84   | 73   | e72  | e76  | e80  | 11     | 203   | 325    | 15    | 5.8    |
| 2     | e65  | 54   | 74   | 81   | e72  | e74  | e80  | 11     | 166   | 257    | 9.1   | 6.1    |
| 3     | e56  | 46   | 67   | 73   | e70  | e74  | 72   | 8.2    | 141   | 185    | 6.8   | 7.1    |
| 4     | 43   | 47   | 69   | 77   | e62  | e66  | 72   | 8.2    | 137   | 143    | 6.7   | 7.0    |
| 5     | 79   | 48   | 75   | 80   | e66  | e65  | 92   | 8.9    | 127   | 122    | 6.5   | 8.4    |
| 6     | 94   | 44   | 71   | e83  | e74  | e64  | 99   | 11     | 122   | 126    | 5.3   | 9.8    |
| 7     | 76   | 43   | 69   | e82  | e86  | e58  | 87   | 23     | 98    | 124    | 4.9   | 21     |
| 8     | 79   | 59   | 69   | e80  | e86  | e58  | 83   | 9.7    | 95    | 112    | 4.7   | 19     |
| 9     | 86   | 63   | 78   | e78  | e84  | e58  | 92   | 11     | 91    | 108    | 4.2   | 14     |
| 10    | 93   | 70   | 68   | e67  | e80  | e58  | 112  | 64     | 83    | 377    | 5.4   | 13     |
| 11    | 98   | 77   | 66   | e70  | e72  | e58  | 114  | 26     | 64    | 213    | 5.1   | 14     |
| 12    | 88   | 53   | 61   | e68  | e74  | e58  | 117  | 11     | 70    | 167    | 4.8   | 30     |
| 13    | 93   | 41   | 67   | e67  | e74  | e80  | 113  | 12     | 75    | 215    | 4.0   | 60     |
| 14    | 92   | 42   | 60   | e66  | e74  | e110 | 111  | 28     | 67    | 128    | 4.0   | 66     |
| 15    | 91   | 39   | 67   | e64  | e74  | e76  | 103  | 71     | 335   | 102    | 4.9   | 118    |
| 16    | 94   | 42   | 61   | e64  | e74  | e68  | 100  | 60     | 527   | 79     | 5.3   | 52     |
| 17    | 91   | 55   | 69   | e63  | e72  | e64  | 96   | 15     | 515   | 58     | 4.8   | 36     |
| 18    | 72   | 39   | 69   | e62  | e70  | e63  | 89   | 34     | 433   | 60     | 5.7   | 67     |
| 19    | 69   | 42   | 54   | e61  | e74  | e62  | 76   | 111    | 388   | 53     | 6.5   | 231    |
| 20    | 64   | 69   | 69   | e61  | e76  | e62  | 73   | 197    | 421   | 40     | 6.7   | 88     |
| 21    | 54   | 67   | 65   | e61  | e74  | e56  | 76   | 181    | 449   | 22     | 9.5   | 60     |
| 22    | 64   | 69   | 74   | e61  | e74  | e50  | 66   | 161    | 842   | 13     | 10    | 52     |
| 23    | 60   | 71   | 76   | e61  | e72  | e58  | 47   | 166    | 656   | 10     | 9.3   | 47     |
| 24    | 54   | 67   | 74   | e61  | e72  | e84  | 81   | 164    | 427   | 9.3    | 8.4   | 50     |
| 25    | 52   | 68   | e78  | e61  | e68  | e66  | 82   | 686    | 387   | 8.6    | 7.1   | 57     |
| 26    | 56   | 68   | e80  | e61  | e68  | e64  | 56   | 807    | 370   | 8.1    | 6.3   | 89     |
| 27    | 55   | 81   | e82  | e61  | e72  | e66  | 72   | 776    | 379   | 8.0    | 6.3   | 106    |
| 28    | 52   | 77   | e84  | e61  | e72  | e67  | 44   | 464    | 398   | 9.2    | 6.0   | 101    |
| 29    | 51   | 83   | e88  | e61  | e66  | e72  | 34   | 395    | 383   | 13     | 6.0   | 93     |
| 30    | 53   | 82   | 88   | e61  | ---  | e76  | 15   | 325    | 337   | 24     | 6.4   | 98     |
| 31    | 58   | ---  | 93   | e64  | ---  | e78  | ---  | 250    | ---   | 19     | 6.3   | ---    |
| TOTAL | 2207 | 1772 | 2249 | 2094 | 2124 | 2089 | 2434 | 5106.0 | 8786  | 3138.2 | 202.0 | 1626.2 |
| MEAN  | 71.2 | 59.1 | 72.5 | 67.5 | 73.2 | 67.4 | 81.1 | 165    | 293   | 101    | 6.52  | 54.2   |
| MAX   | 98   | 83   | 93   | 83   | 86   | 110  | 117  | 807    | 842   | 377    | 15    | 231    |
| MIN   | 43   | 39   | 54   | 61   | 62   | 50   | 15   | 8.2    | 64    | 8.0    | 4.0   | 5.8    |
| AC-FT | 4380 | 3510 | 4460 | 4150 | 4210 | 4140 | 4830 | 10130  | 17430 | 6220   | 401   | 3230   |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1927 - 1996, BY WATER YEAR (WY)

|      | 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 |  |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|--|
| MEAN | 31.6 | 40.1 | 46.6 | 50.2 | 49.4 | 50.1 | 92.8 | 177  | 187  | 47.2 | 21.0 | 24.1 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |  |
| MAX  | 127  | 99.8 | 93.8 | 104  | 120  | 148  | 581  | 1101 | 976  | 367  | 143  | 440  |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |  |
| (WY) | 1985 | 1994 | 1939 | 1980 | 1980 | 1983 | 1942 | 1942 | 1947 | 1983 | 1979 | 1938 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |  |
| MIN  | .70  | .48  | 1.16 | 2.94 | 2.75 | 2.58 | 1.15 | 1.06 | 1.22 | 1.09 | .55  | .54  |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |  |
| (WY) | 1955 | 1955 | 1940 | 1935 | 1935 | 1935 | 1954 | 1955 | 1954 | 1954 | 1954 | 1954 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |  |

SUMMARY STATISTICS

FOR 1995 CALENDAR YEAR

FOR 1996 WATER YEAR

WATER YEARS 1927 - 1996

|                          |         |         |       |
|--------------------------|---------|---------|-------|
| ANNUAL TOTAL             | 65688.6 | 33827.4 |       |
| ANNUAL MEAN              | 180     | 92.4    | 68.4  |
| HIGHEST ANNUAL MEAN      |         |         | 220   |
| LOWEST ANNUAL MEAN       |         |         | 3.93  |
| HIGHEST DAILY MEAN       | 1500    | May 30  | 842   |
| LOWEST DAILY MEAN        | 1.9     | Aug 12  | 4.0   |
| ANNUAL SEVEN-DAY MINIMUM | 4.5     | Aug 12  | 4.6   |
| INSTANTANEOUS PEAK FLOW  |         |         | 1400  |
| INSTANTANEOUS PEAK STAGE |         |         | 4.51  |
| ANNUAL RUNOFF (AC-FT)    | 130300  | 67100   | 49540 |
| 10 PERCENT EXCEEDS       | 678     | 165     | 128   |
| 50 PERCENT EXCEEDS       | 58      | 68      | 32    |
| 90 PERCENT EXCEEDS       | 9.2     | 8.8     | 2.0   |

e-Estimated.

a-Also occurred Aug 14.

b-No flow at times many years.

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



**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 mi<sup>2</sup> (determined by the National Park Service).

**WATER-DISCHARGE RECORDS**

PERIOD OF RECORD.--September 1995 to September 1996.

GAGE.--Water-stage recorder. Elevation of gage is 8,005 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.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

| DAY   | OCT   | NOV   | DEC   | JAN   | FEB   | MAR   | APR   | MAY  | JUN   | JUL  | AUG  | SEP  |
|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|------|------|------|
| 1     | 23    | e10   | e8.6  | e4.6  | e3.7  | e3.5  | e6.6  | 16   | 146   | 179  | 76   | 29   |
| 2     | 21    | e9.6  | e8.8  | e4.5  | e3.5  | e3.5  | e7.4  | 17   | 152   | 174  | 77   | 27   |
| 3     | 19    | e9.0  | e9.6  | e4.4  | e3.6  | e3.5  | e7.8  | 17   | 183   | 173  | 87   | 25   |
| 4     | 21    | e9.6  | e10   | e4.3  | e4.5  | e3.4  | e7.8  | 19   | 249   | 171  | 78   | 25   |
| 5     | 19    | e10   | e8.6  | e4.2  | e4.7  | e3.7  | e8.0  | 28   | 326   | 179  | 67   | 26   |
| 6     | 19    | e11   | e8.2  | e4.1  | e5.0  | e3.5  | e8.8  | 41   | 378   | 200  | 60   | 39   |
| 7     | 19    | e12   | e7.8  | e4.2  | e5.1  | e3.4  | e9.2  | 49   | 339   | 211  | 55   | 37   |
| 8     | 18    | 11    | e7.6  | e4.7  | e5.0  | e3.4  | e10   | 62   | 350   | 173  | 52   | 31   |
| 9     | 17    | 10    | e7.4  | e4.5  | e5.0  | e3.6  | e15   | 75   | 371   | 151  | 52   | 27   |
| 10    | 16    | 9.9   | e7.2  | e4.1  | e4.9  | e4.0  | 22    | 79   | 410   | 133  | 49   | 25   |
| 11    | 16    | e11   | e7.1  | e4.0  | e4.8  | e4.5  | 25    | 78   | 406   | 128  | 46   | 24   |
| 12    | 18    | 11    | e7.2  | e3.9  | e4.6  | e4.2  | 22    | 100  | 370   | 125  | 43   | 24   |
| 13    | 19    | 12    | e6.8  | e4.0  | e4.5  | e4.0  | 20    | 127  | 349   | 118  | 42   | 28   |
| 14    | 16    | 11    | e6.7  | e4.1  | e4.3  | e4.0  | 17    | 144  | 324   | 114  | 42   | 30   |
| 15    | 16    | 10    | e6.6  | e4.0  | e4.6  | e4.0  | 16    | 170  | 318   | 105  | 42   | 29   |
| 16    | 16    | 10    | e6.5  | e3.9  | e4.9  | e3.9  | 16    | 223  | 309   | 104  | 44   | 26   |
| 17    | 15    | 9.5   | e6.4  | e3.6  | e4.8  | e3.9  | 17    | 290  | 314   | 110  | 42   | 27   |
| 18    | 14    | 9.2   | e6.2  | e3.9  | e4.5  | e3.9  | e16   | 260  | 295   | 117  | 42   | 25   |
| 19    | 13    | 9.0   | e6.0  | e4.2  | e4.4  | e3.9  | 16    | 318  | 284   | 108  | 43   | 26   |
| 20    | 10    | 8.9   | e5.8  | e4.0  | e4.3  | e4.1  | 17    | 274  | 280   | 102  | 40   | 25   |
| 21    | 12    | 8.9   | e5.4  | e4.1  | e4.4  | e4.3  | 15    | 201  | 331   | 94   | 39   | 24   |
| 22    | 12    | 8.6   | e5.5  | e3.9  | e4.5  | e4.6  | 13    | 193  | 402   | 86   | 39   | 25   |
| 23    | e10   | 8.4   | e5.6  | e3.7  | e4.3  | e4.7  | 13    | 222  | 298   | 79   | 39   | 28   |
| 24    | e11   | e8.0  | e5.5  | e3.7  | e4.3  | e4.8  | 14    | 214  | 246   | 74   | 37   | 41   |
| 25    | e10   | 8.4   | e5.5  | e3.6  | e4.0  | e4.2  | 23    | 252  | 235   | 71   | 36   | 39   |
| 26    | 11    | 8.3   | e5.3  | e3.6  | e3.7  | e4.5  | 22    | 219  | 227   | 68   | 36   | 35   |
| 27    | 11    | e8.0  | e5.2  | e3.9  | e3.4  | e4.9  | 20    | 167  | 229   | 65   | 36   | 30   |
| 28    | e9.9  | e8.0  | e5.0  | e4.0  | e3.5  | e5.1  | 18    | 137  | 210   | 62   | 35   | 29   |
| 29    | 10    | e8.8  | e4.9  | e4.2  | e3.5  | e5.4  | 17    | 124  | 187   | 96   | 37   | 30   |
| 30    | 10    | e9.0  | e4.8  | e3.9  | ---   | e5.8  | 16    | 146  | 186   | 103  | 34   | 30   |
| 31    | e10   | ---   | e4.6  | e3.8  | ---   | e6.2  | ---   | 151  | ---   | 84   | 31   | ---  |
| TOTAL | 461.9 | 288.1 | 206.4 | 125.6 | 126.3 | 130.4 | 455.6 | 4413 | 8704  | 3757 | 1478 | 866  |
| MEAN  | 14.9  | 9.60  | 6.66  | 4.05  | 4.36  | 4.21  | 15.2  | 142  | 290   | 121  | 47.7 | 28.9 |
| MAX   | 23    | 12    | 10    | 4.7   | 5.1   | 6.2   | 25    | 318  | 410   | 211  | 87   | 41   |
| MIN   | 9.9   | 8.0   | 4.6   | 3.6   | 3.4   | 3.4   | 6.6   | 16   | 146   | 62   | 31   | 24   |
| AC-FT | 916   | 571   | 409   | 249   | 251   | 259   | 904   | 8750 | 17260 | 7450 | 2930 | 1720 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 1996, BY WATER YEAR (WY)

|      | 1995 | 1996 | 1996 | 1996 | 1996 | 1996 | 1996 | 1996 | 1996 | 1996 | 1996 | 1996 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 14.9 | 9.60 | 6.66 | 4.05 | 4.36 | 4.21 | 15.2 | 142  | 290  | 121  | 47.7 | 30.7 |
| MAX  | 14.9 | 9.60 | 6.66 | 4.05 | 4.36 | 4.21 | 15.2 | 142  | 290  | 121  | 47.7 | 32.6 |
| (WY) | 1996 | 1996 | 1996 | 1996 | 1996 | 1996 | 1996 | 1996 | 1996 | 1996 | 1996 | 1996 |
| MIN  | 14.9 | 9.60 | 6.66 | 4.05 | 4.36 | 4.21 | 15.2 | 142  | 290  | 121  | 47.7 | 28.9 |
| (WY) | 1996 | 1996 | 1996 | 1996 | 1996 | 1996 | 1996 | 1996 | 1996 | 1996 | 1996 | 1996 |

## SUMMARY STATISTICS

## FOR 1996 WATER YEAR

|                          |                         |
|--------------------------|-------------------------|
| ANNUAL TOTAL             | 21012.3                 |
| ANNUAL MEAN              | 57.4                    |
| HIGHEST DAILY MEAN       | 410 Jun 10              |
| LOWEST DAILY MEAN        | <sup>a</sup> 3.4 Feb 27 |
| ANNUAL SEVEN-DAY MINIMUM | 3.5 Feb 27              |
| INSTANTANEOUS PEAK FLOW  | 510 Jun 11              |
| INSTANTANEOUS PEAK STAGE | 6.22 Jun 11             |
| ANNUAL RUNOFF (AC-FT)    | 41680                   |
| 10 PERCENT EXCEEDS       | 200                     |
| 50 PERCENT EXCEEDS       | 16                      |
| 90 PERCENT EXCEEDS       | 4.0                     |

e-Estimated.

a-Also occurred Mar 4, 7, and 8.

402114105350101 BIG THOMPSON RIVER BELOW MORAINÉ 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 1995 TO SEPTEMBER 1996

| DATE      | TIME | DIS-CHARGE, INST. CUBIC FEET PER SECOND | SPE-CIFIC CON-DUCT-ANCE (US/CM) | PH FIELD (STAND-ARD UNITS) | TEMPER-ATURE WATER (DEG C) | OXYGEN, DIS-SOLVED (MG/L) | BICAR- <sup>a</sup> BONATE WATER FIELD MG/L AS HCO3 | ALKA- <sup>b</sup> LINITY WAT DIS TOT IT FIELD MG/L AS CACO3 |
|-----------|------|---|---------------------------------|----------------------------|----------------------------|---------------------------|---|--|
| OCT 04... | 1230 | 23                                      | 20                              | 7.0                        | 5.5                        | 9.4                       | 6   | 5  |
| NOV 07... | 1030 | 17                                      | 24                              | 6.8                        | 0.0                        | 10.7                      | --  | --   |
| DEC 14... | 1510 | 6.5                                     | 27                              | 6.8                        | 0.0                        | 12.0                      | 7   | 5  |
| JAN 11... | 1400 | 3.9                                     | 27                              | 6.7                        | 0.0                        | 10.7                      | 8   | 7  |
| FEB 05... | 1625 | 4.4                                     | 27                              | 6.7                        | 0.0                        | 10.0                      | 8   | 7  |
| MAR 08... | 1105 | 3.4                                     | 31                              | 6.6                        | 0.0                        | 10.4                      | 12  | 10   |
| APR 10... | 1240 | 22                                      | 32                              | 6.8                        | 6.0                        | 9.6                       | 9   | 7  |
| MAY 14... | 1400 | 130                                     | 22                              | 6.4                        | 8.0                        | 8.9                       | 5   | 4  |
| 23...     | 1140 | 219                                     | 22                              | 6.7                        | 5.5                        | 9.7                       | 4   | 3  |
| JUN 17... | 1300 | 292                                     | 14                              | 6.7                        | 8.5                        | 8.8                       | 4   | 3  |
| JUL 15... | 1250 | 105                                     | 12                              | 6.7                        | 12.5                       | 8.4                       | 4   | 3  |
| AUG 20... | 0915 | 39                                      | 14                              | 7.0                        | 9.5                        | 9.0                       | 5   | 4  |
| SEP 11... | 1225 | 23                                      | 15                              | 6.6                        | 12.0                       | 8.3                       | 6   | 5  |

| DATE      | NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) | NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) | NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) | NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) | NITRO-GEN, AM-MONIA + ORGANIC DIS. TOTAL (MG/L AS N) | PHOS-PHORUS TOTAL (MG/L AS P) | PHOS-PHORUS DIS-SOLVED (MG/L AS P) | PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) |
|-----------|---|---|---|---|--|-------------------------------|------------------------------------|---|
| OCT 04... | <0.01                                     | 0.11                                      | <0.01                                     | <0.20   | <0.20  | 0.02                          | 0.02                               | <0.01                                     |
| NOV 07... | <0.01                                     | 0.13                                      | <0.01                                     | <0.20   | <0.20  | 0.02                          | 0.02                               | <0.01                                     |
| DEC 14... | <0.01                                     | 0.15                                      | <0.01                                     | <0.20   | <0.20  | <0.01                         | <0.01                              | <0.01                                     |
| JAN 11... | <0.01                                     | 0.17                                      | <0.01                                     | <0.20   | <0.20  | <0.01                         | <0.01                              | <0.01                                     |
| FEB 05... | <0.01                                     | 0.18                                      | <0.01                                     | <0.20   | <0.20  | 0.01                          | 0.01                               | 0.01                                      |
| MAR 08... | <0.01                                     | 0.08                                      | <0.01                                     | <0.20   | <0.20  | 0.03                          | <0.01                              | 0.01                                      |
| APR 10... | <0.01                                     | 0.13                                      | <0.01                                     | 0.20  | <0.20  | <0.01                         | <0.01                              | <0.01                                     |
| MAY 14... | <0.01                                     | 0.12                                      | 0.02                                      | 0.30  | 0.20   | 0.02                          | <0.01                              | <0.01                                     |
| 23...     | <0.01                                     | 0.06                                      | 0.02                                      | 0.20  | 0.20   | 0.02                          | 0.02                               | <0.01                                     |
| JUN 17... | <0.01                                     | 0.08                                      | 0.02                                      | <0.20   | <0.20  | <0.01                         | <0.01                              | <0.01                                     |
| JUL 15... | <0.01                                     | 0.11                                      | 0.03                                      | <0.20   | <0.20  | <0.01                         | <0.01                              | <0.01                                     |
| AUG 20... | <0.01                                     | 0.09                                      | <0.01                                     | <0.20   | <0.20  | 0.02                          | <0.01                              | <0.01                                     |
| SEP 11... | <0.01                                     | 0.12                                      | <0.01                                     | <0.20   | <0.20  | <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.

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DATE      | TIME | DIS-CHARGE, INST. CUBIC FEET PER SECOND | SEDI-MENT, SUS-PENDED (MG/L) | SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) |
|-----------|------|---|------------------------------|---|
| MAY 23... | 1140 | 219                                     | 10                           | 5.9                                       |
| JUN 17... | 1300 | 279                                     | 6                            | 4.8                                       |



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 current year.

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 1995 TO SEPTEMBER 1996

| DATE      | TIME | DIS-CHARGE, INST. CUBIC FEET PER SECOND | SPE-CIFIC CON-DUCT-ANCE (US/CM) | PH (STAND-ARD UNITS) | TEMPER-ATURE WATER (DEG C) | OXYGEN, DIS-SOLVED (MG/L) | HARD-NESS, TOTAL AS (MG/L CACO3) | CALCIUM DIS-SOLVED (MG/L AS CA) | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) | SODIUM, DIS-SOLVED (MG/L AS NA) |
|-----------|------|---|---------------------------------|----------------------|----------------------------|---------------------------|----------------------------------|---------------------------------|-------------------------------------|---------------------------------|
| NOV 27... | 1610 | 206                                     | 45                              | 7.8                  | 3.5                        | 9.9                       | 17                               | 5.0                             | 0.99                                | 2.0                             |
| MAR 25... | 1530 | 112                                     | 60                              | 7.4                  | 3.0                        | 10.5                      | 22                               | 6.6                             | 1.4                                 | 2.6                             |
| JUL 08... | 1051 | 549                                     | 18                              | 7.7                  | 13.5                       | 7.9                       | 6                                | 1.9                             | 0.40                                | 0.9                             |

| DATE      | SODIUM AD-SORP-TION RATIO | POTAS-SIUM, DIS-SOLVED (MG/L AS K) | ALKA-LINITY LAB (MG/L AS CACO3) | SULFATE DIS-SOLVED (MG/L AS SO4) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) | SILICA, DIS-SOLVED (MG/L AS SIO2) | SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) | SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) | SOLIDS, DIS-SOLVED (TONS PER AC-FT) |
|-----------|---------------------------|------------------------------------|---------------------------------|----------------------------------|------------------------------------|-----------------------------------|-----------------------------------|---|---|-------------------------------------|
| NOV 27... | 0.2                       | 0.5                                | 18                              | 1.4                              | 0.8                                | 0.1                               | 5.5                               | 28  | 28  | 0.04                                |
| MAR 25... | 0.2                       | 0.6                                | 24                              | 2.8                              | 1.3                                | 0.2                               | 6.3                               | 40  | 37  | 0.05                                |
| JUL 08... | 0.2                       | 0.3                                | 7.5                             | 0.90                             | 0.3                                | 0.1                               | 3.6                               | 18  | 14  | 0.02                                |

| DATE      | SOLIDS, DIS-SOLVED (TONS PER DAY) | NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) | NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) | NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) | NITRO-GEN, ORGANIC (MG/L AS N) | NITRO-GEN, AM-MONIA + ORGANIC (MG/L AS N) | PHOS-PHORUS TOTAL (MG/L AS P) | PHOS-PHORUS DIS-SOLVED (MG/L AS P) | PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) |
|-----------|-----------------------------------|---|---|---|--------------------------------|---|-------------------------------|------------------------------------|---|
| NOV 27... | 15.6                              | <0.01                                     | 0.10                                      | 0.03                                      | 0.17                           | 0.20                                      | 0.02                          | <0.01                              | <0.01                                     |
| MAR 25... | 12.1                              | <0.01                                     | 0.08                                      | <0.02                                     | 0.30                           | 0.30                                      | 0.03                          | <0.01                              | <0.01                                     |
| JUL 08... | 26.7                              | <0.01                                     | 0.10                                      | 0.05                                      | --                             | <0.20                                     | <0.01                         | <0.01                              | <0.01                                     |

| DATE      | BARIIUM, DIS-SOLVED (UG/L AS BA) | BERYL-LIUM, DIS-SOLVED (UG/L AS BE) | BORON, DIS-SOLVED (UG/L AS B) | CADMIUM DIS-SOLVED (UG/L AS CD) | CHRO-MIUM, DIS-SOLVED (UG/L AS CR) | COBALT, DIS-SOLVED (UG/L AS CO) | COPPER, DIS-SOLVED (UG/L AS CU) | IRON, DIS-SOLVED (UG/L AS FE) | LEAD, DIS-SOLVED (UG/L AS PB) |
|-----------|----------------------------------|-------------------------------------|-------------------------------|---------------------------------|------------------------------------|---------------------------------|---------------------------------|-------------------------------|-------------------------------|
| NOV 27... | 6                                | <0.5                                | <10                           | <1                              | <5                                 | <3                              | <10                             | 49                            | <10                           |
| MAR 25... | 6                                | <0.5                                | <10                           | <1                              | <5                                 | <3                              | <10                             | 82                            | <10                           |
| JUL 08... | 4                                | <0.5                                | <4                            | <1                              | <5                                 | <3                              | <10                             | 82                            | <10                           |

| DATE      | LITHIUM DIS-SOLVED (UG/L AS LI) | MANGA-NESE, DIS-SOLVED (UG/L AS MN) | MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) | MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) | NICKEL, DIS-SOLVED (UG/L AS NI) | SILVER, DIS-SOLVED (UG/L AS AG) | STRON-TIUM, DIS-SOLVED (UG/L AS SR) | VANA-DIUM, DIS-SOLVED (UG/L AS V) | ZINC, DIS-SOLVED (UG/L AS ZN) |
|-----------|---------------------------------|-------------------------------------|---|--------------------------------------|---------------------------------|---------------------------------|-------------------------------------|-----------------------------------|-------------------------------|
| NOV 27... | <4                              | 3                                   | --  | <10                                  | <10                             | <1                              | 28                                  | <6                                | <3                            |
| MAR 25... | <4                              | 2                                   | --  | <10                                  | <10                             | <1                              | 36                                  | <6                                | <3                            |
| JUL 08... | <4                              | 6                                   | 10  | <10                                  | <10                             | <1                              | 10                                  | <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, 147,100 acre-ft, June 25, elevation, 5,428.68 ft; minimum, observed, 101,200 acre-ft, Oct. 31, elevation, 5,403.81 ft.

MONTHEND ELEVATION AND CONTENTS AT 0800, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| Date                  | Elevation<br>(feet) | Contents<br>(acre-feet) | Change in<br>contents<br>(acre-feet) |
|-----------------------|---------------------|-------------------------|--------------------------------------|
| Sept. 30 . . . . .    | 5,405.61            | 104,200                 | -                                    |
| Oct. 31 . . . . .     | 5,403.81            | 101,200                 | -3,000                               |
| Nov. 30 . . . . .     | 5,409.44            | 110,800                 | +9,600                               |
| Dec. 31 . . . . .     | 5,413.50            | 118,100                 | +7,300                               |
| CAL YR 1995 . . . . . | -                   | -                       | +26,280                              |
| Jan. 31 . . . . .     | 5,419.69            | 129,500                 | +11,400                              |
| Feb. 29 . . . . .     | 5,425.54            | 140,800                 | +11,300                              |
| Mar. 31 . . . . .     | 5,427.79            | 145,300                 | +4,500                               |
| Apr. 30 . . . . .     | 5,424.23            | 138,200                 | -7,100                               |
| May 31 . . . . .      | 5,418.66            | 127,500                 | -10,700                              |
| June 30 . . . . .     | 5,428.57            | 146,800                 | +19,300                              |
| July 31 . . . . .     | 5,422.38            | 134,600                 | -12,200                              |
| Aug. 31 . . . . .     | 5,416.67            | 123,800                 | -10,800                              |
| Sept. 30 . . . . .    | 5,411.97            | 115,300                 | -8,500                               |
| WTR YR 1996 . . . . . | -                   | -                       | +11,100                              |

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 1995 TO SEPTEMBER 1996

| DATE  | TIME | SAM-<br>PLING<br>DEPTH<br>(FEET) | SPE-<br>CIFIC<br>CON-<br>DUCT-<br>ANCE<br>(US/CM) | PH<br>(STAND-<br>ARD<br>UNITS) | TEMPER-<br>ATURE<br>WATER<br>(DEG C) | OXYGEN,<br>DIS-<br>SOLVED<br>(MG/L) |
|-------|------|----------------------------------|---|--------------------------------|--------------------------------------|-------------------------------------|
| OCT   |      |                                  |   |                                |                                      |                                     |
| 12... | 1650 | 0.1                              | 63  | 7.8                            | 14.5                                 | 7.8                                 |
| 12... | 1651 | 5.0                              | 63  | 7.8                            | 14.5                                 | 7.8                                 |
| 12... | 1652 | 10                               | 63  | 7.8                            | 14.5                                 | 7.7                                 |
| 12... | 1653 | 15                               | 63  | 7.8                            | 14.0                                 | 7.7                                 |
| 12... | 1654 | 20                               | 63  | 7.8                            | 14.0                                 | 7.6                                 |
| 12... | 1655 | 25                               | 63  | 7.7                            | 14.0                                 | 7.6                                 |
| 12... | 1656 | 30                               | 63  | 7.7                            | 14.0                                 | 7.6                                 |
| 12... | 1657 | 40                               | 63  | 7.7                            | 14.0                                 | 7.5                                 |
| 12... | 1658 | 50                               | 63  | 7.5                            | 13.5                                 | 6.5                                 |
| 12... | 1659 | 60                               | 63  | 7.5                            | 13.5                                 | 6.5                                 |
| 12... | 1700 | 70                               | 63  | 7.4                            | 13.5                                 | 6.4                                 |
| 12... | 1701 | 80                               | 65  | 7.3                            | 12.5                                 | 4.3                                 |
| 12... | 1702 | 90                               | 68  | 7.2                            | 10.5                                 | 3.6                                 |
| 12... | 1703 | 100                              | 69  | 7.1                            | 10.0                                 | 2.8                                 |
| MAY   |      |                                  |   |                                |                                      |                                     |
| 14... | 1105 | 0.1                              | 64  | 7.8                            | 13.0                                 | 9.1                                 |
| 14... | 1106 | 5.0                              | 64  | 7.8                            | 13.0                                 | 8.9                                 |
| 14... | 1107 | 10                               | 64  | 7.8                            | 12.5                                 | 8.8                                 |
| 14... | 1108 | 15                               | 64  | 7.8                            | 11.5                                 | 8.8                                 |
| 14... | 1109 | 20                               | 64  | 7.8                            | 11.0                                 | 8.7                                 |
| 14... | 1110 | 25                               | 64  | 7.7                            | 9.0                                  | 9.0                                 |
| 14... | 1111 | 30                               | 63  | 7.7                            | 8.0                                  | 9.1                                 |
| 14... | 1112 | 40                               | 63  | 7.7                            | 7.5                                  | 9.1                                 |
| 14... | 1114 | 50                               | 62  | 7.6                            | 7.0                                  | 9.0                                 |
| 14... | 1115 | 70                               | 63  | 7.6                            | 6.5                                  | 9.1                                 |
| 14... | 1116 | 80                               | 63  | 7.6                            | 6.5                                  | 9.1                                 |
| 14... | 1117 | 90                               | 63  | 7.6                            | 6.5                                  | 9.1                                 |
| 14... | 1118 | 100                              | 63  | 7.6                            | 6.5                                  | 9.1                                 |
| 14... | 1119 | 110                              | 63  | 7.6                            | 6.5                                  | 9.1                                 |
| 14... | 1120 | 120                              | 63  | 7.6                            | 6.0                                  | 9.1                                 |
| 14... | 1121 | 130                              | 63  | 7.6                            | 6.0                                  | 9.0                                 |
| 14... | 1122 | 140                              | 63  | 7.5                            | 6.0                                  | 8.9                                 |
| 14... | 1123 | 150                              | 63  | 7.5                            | 6.0                                  | 8.8                                 |
| 14... | 1124 | 160                              | 63  | 7.5                            | 6.0                                  | 8.8                                 |
| AUG   |      |                                  |   |                                |                                      |                                     |
| 15... | 1045 | 0.1                              | 50  | 7.5                            | 22.0                                 | 7.0                                 |
| 15... | 1046 | 5.0                              | 50  | 7.4                            | 22.0                                 | 7.1                                 |
| 15... | 1047 | 10                               | 50  | 7.4                            | 22.0                                 | 7.1                                 |
| 15... | 1048 | 15                               | 50  | 7.3                            | 21.5                                 | 6.9                                 |
| 15... | 1049 | 20                               | 49  | 7.3                            | 21.0                                 | 6.7                                 |
| 15... | 1050 | 25                               | 47  | 7.2                            | 20.5                                 | 6.9                                 |
| 15... | 1051 | 30                               | 44  | 7.2                            | 19.5                                 | 6.5                                 |
| 15... | 1052 | 40                               | 45  | 7.2                            | 17.0                                 | 5.4                                 |
| 15... | 1053 | 50                               | 50  | 7.2                            | 14.0                                 | 5.8                                 |
| 15... | 1054 | 60                               | 54  | 7.1                            | 12.0                                 | 6.2                                 |
| 15... | 1055 | 70                               | 57  | 7.1                            | 10.5                                 | 6.5                                 |
| 15... | 1056 | 80                               | 58  | 7.1                            | 10.0                                 | 6.4                                 |
| 15... | 1057 | 90                               | 59  | 7.1                            | 10.0                                 | 6.4                                 |
| 15... | 1058 | 100                              | 60  | 7.0                            | 9.5                                  | 6.4                                 |
| 15... | 1059 | 110                              | 60  | 7.0                            | 9.0                                  | 6.4                                 |
| 15... | 1100 | 120                              | 62  | 7.0                            | 8.5                                  | 6.5                                 |
| 15... | 1101 | 130                              | 62  | 7.0                            | 8.5                                  | 6.6                                 |
| 15... | 1102 | 140                              | 63  | 7.0                            | 8.0                                  | 6.9                                 |
| 15... | 1103 | 150                              | 63  | 6.9                            | 8.0                                  | 6.9                                 |

06737500 HORSETOOTH RESERVOIR NEAR FORT COLLINS, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DATE  | TIME | SAMPLING DEPTH (FEET) | SPECIFIC CONDUCTANCE (US/CM) | PH (STANDARD UNITS) | TEMPERATURE WATER (DEG C) | TRANSPARANCY (SECCHI DISK) (IN) | OXYGEN, DIS-SOLVED (MG/L) | COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML) | HARDNESS TOTAL (MG/L AS CACO3) | CALCIUM DIS-SOLVED (MG/L AS CA) | MAGNESIUM, DIS-SOLVED (MG/L AS MG) |
|-------|------|-----------------------|------------------------------|---------------------|---------------------------|---------------------------------|---------------------------|---|--------------------------------|---------------------------------|------------------------------------|
| OCT   |      |                       |                              |                     |                           |                                 |                           |   |                                |                                 |                                    |
| 12... | 1630 | 100                   | 69                           | 7.1                 | 10.0                      | --                              | 2.8                       | --  | 28                             | 8.8                             | 1.5                                |
| 12... | 1645 | 0.1                   | 63                           | 7.8                 | 14.5                      | 132                             | 7.8                       | K1  | 27                             | 8.3                             | 1.4                                |
| MAY   |      |                       |                              |                     |                           |                                 |                           |   |                                |                                 |                                    |
| 14... | 1145 | 0.1                   | 64                           | 7.8                 | 13.0                      | 99.0                            | 9.1                       | <1  | 27                             | 8.6                             | 1.4                                |
| 14... | 1200 | 160                   | 63                           | 7.5                 | 6.0                       | --                              | 8.8                       | --  | 27                             | 8.6                             | 1.4                                |
| AUG   |      |                       |                              |                     |                           |                                 |                           |   |                                |                                 |                                    |
| 15... | 1115 | 0.1                   | 50                           | 7.5                 | 22.0                      | 111                             | 7.0                       | <1  | 19                             | 6.1                             | 1.0                                |
| 15... | 1130 | 150                   | 63                           | 6.9                 | 8.0                       | --                              | 6.9                       | --  | 27                             | 8.4                             | 1.4                                |

| DATE  | SODIUM, DIS-SOLVED (MG/L AS NA) | SODIUM ADSORPTION RATIO | POTASSIUM, DIS-SOLVED (MG/L AS K) | ALKALINITY LAB (MG/L AS CACO3) | 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 DIS-SOLVED (MG/L) | SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L) | NITROGEN, NITRITE DIS-SOLVED (MG/L AS N) |
|-------|---------------------------------|-------------------------|-----------------------------------|--------------------------------|----------------------------------|-----------------------------------|----------------------------------|-----------------------------------|---|--|--|
| OCT   |                                 |                         |                                   |                                |                                  |                                   |                                  |                                   |   |  |  |
| 12... | 2.3                             | 0.2                     | 0.7                               | 30                             | --                               | --                                | --                               | 4.2                               | --  | --   | <0.01                                    |
| 12... | 2.2                             | 0.2                     | 0.6                               | 29                             | --                               | --                                | --                               | 3.0                               | --  | --   | <0.01                                    |
| MAY   |                                 |                         |                                   |                                |                                  |                                   |                                  |                                   |   |  |  |
| 14... | 2.4                             | 0.2                     | 0.7                               | 29                             | --                               | --                                | --                               | 3.6                               | --  | --   | <0.01                                    |
| 14... | 2.3                             | 0.2                     | 0.7                               | 29                             | --                               | --                                | --                               | 3.7                               | --  | --   | <0.01                                    |
| AUG   |                                 |                         |                                   |                                |                                  |                                   |                                  |                                   |   |  |  |
| 15... | 1.8                             | 0.2                     | 0.6                               | 22                             | 2.4                              | 0.7                               | 0.1                              | 2.1                               | 22  | 28   | 0.01                                     |
| 15... | 2.3                             | 0.2                     | 0.7                               | 27                             | 3.2                              | 0.9                               | 0.1                              | 4.2                               | 32  | 38   | <0.01                                    |

| DATE  | NITROGEN, NO2+NO3 DIS-SOLVED (MG/L AS N) | NITROGEN, AMMONIA DIS-SOLVED (MG/L AS N) | NITROGEN, MONIA + 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) | CHLOROPHYTON PLANKTON CHROMO FLUOROM (UG/L) | CHLOROPHYTON PLANKTON CHROMO FLUOROM (UG/L) | CARBON, ORGANIC DIS-SOLVED (MG/L AS C) | CARBON, ORGANIC SUSPENDED TOTAL (MG/L AS C) |
|-------|--|--|---|------------------------------|------------------------------------|---|---|---|--|---|
| OCT   |  |  |   |                              |                                    |   |   |   |  |   |
| 12... | 0.14                                     | <0.02                                    | <0.20                                       | <0.01                        | <0.01                              | 0.01                                      | --  | --  | --                                     | --  |
| 12... | <0.05                                    | <0.02                                    | <0.20                                       | <0.01                        | <0.01                              | <0.01                                     | 5.3   | <0.1  | --                                     | --  |
| MAY   |  |  |   |                              |                                    |   |   |   |  |   |
| 14... | <0.05                                    | 0.02                                     | 0.20  | 0.05                         | <0.01                              | <0.01                                     | 0.9   | <0.1  | --                                     | --  |
| 14... | <0.05                                    | 0.04                                     | <0.20                                       | 0.04                         | <0.01                              | <0.01                                     | --  | --  | --                                     | --  |
| AUG   |  |  |   |                              |                                    |   |   |   |  |   |
| 15... | 0.06                                     | 0.03                                     | 0.30  | <0.01                        | <0.01                              | <0.01                                     | 1.6   | <0.1  | --                                     | --  |
| 15... | 0.16                                     | 0.02                                     | 0.30  | <0.01                        | <0.01                              | 0.02                                      | --  | --  | 3.2                                    | <0.1  |

| 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) |
|-------|------|---------------------------------|------------------------------------|-------------------------------|----------------------------------|-----------------------------------|---------------------------------|---------------------------------|-------------------------------|
| OCT   |      |                                 |                                    |                               |                                  |                                   |                                 |                                 |                               |
| 12... | 1630 |                                 | 16                                 | <0.5                          | <10                              | <1                                | <5                              | <3                              | <10                           |
| 12... | 1645 |                                 | 19                                 | <0.5                          | <10                              | <1                                | <5                              | <3                              | <10                           |
| MAY   |      |                                 |                                    |                               |                                  |                                   |                                 |                                 |                               |
| 14... | 1145 |                                 | 19                                 | <0.5                          | <10                              | <1                                | <5                              | <3                              | <10                           |
| 14... | 1200 |                                 | 19                                 | <0.5                          | <10                              | <1                                | <5                              | <3                              | <10                           |
| AUG   |      |                                 |                                    |                               |                                  |                                   |                                 |                                 |                               |
| 15... | 1115 |                                 | 16                                 | 1                             | <4                               | 2                                 | <5                              | <3                              | <10                           |
| 15... | 1130 |                                 | 17                                 | 2                             | 8                                | <1                                | <5                              | <3                              | <10                           |

| DATE  | LEAD, DIS-SOLVED (UG/L AS PB) | LITHIUM, DIS-SOLVED (UG/L AS LI) | 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   |                               |                                  |                                    |                                     |                                 |                                 |                                    |                                  |                               |
| 12... | <10                           | <4                               | 3                                  | <10                                 | <10                             | <0.2                            | 40                                 | <6                               | 12                            |
| 12... | <10                           | <4                               | <1                                 | 10                                  | 10                              | <0.2                            | 36                                 | <6                               | 9                             |
| MAY   |                               |                                  |                                    |                                     |                                 |                                 |                                    |                                  |                               |
| 14... | <10                           | <4                               | 3                                  | <10                                 | <10                             | <0.2                            | 40                                 | <6                               | 9                             |
| 14... | <10                           | <4                               | 16                                 | <10                                 | <10                             | <0.2                            | 40                                 | <6                               | 5                             |
| AUG   |                               |                                  |                                    |                                     |                                 |                                 |                                    |                                  |                               |
| 15... | <10                           | <4                               | <1                                 | <10                                 | <10                             | <0.2                            | 28                                 | <6                               | 4                             |
| 15... | <10                           | <4                               | <1                                 | <10                                 | <10                             | <0.2                            | 39                                 | <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 1995 TO SEPTEMBER 1996

| DATE  | TIME | SAM-<br>PLING<br>DEPTH<br>(FEET) | SPE-<br>CIFIC<br>CON-<br>DUCT-<br>ANCE<br>(US/CM) | PH<br>(STAND-<br>ARD<br>UNITS) | TEMPER-<br>ATURE<br>WATER<br>(DEG C) | OXYGEN,<br>DIS-<br>SOLVED<br>(MG/L) |
|-------|------|----------------------------------|---|--------------------------------|--------------------------------------|-------------------------------------|
| OCT   |      |                                  |   |                                |                                      |                                     |
| 12... | 1345 | 0.1                              | 64  | 7.7                            | 14.0                                 | 7.9                                 |
| 12... | 1346 | 5.0                              | 64  | 7.7                            | 14.0                                 | 7.4                                 |
| 12... | 1347 | 10                               | 64  | 7.6                            | 13.5                                 | 7.2                                 |
| 12... | 1348 | 15                               | 64  | 7.6                            | 13.5                                 | 7.0                                 |
| 12... | 1349 | 20                               | 64  | 7.6                            | 13.5                                 | 7.1                                 |
| 12... | 1350 | 25                               | 64  | 7.6                            | 13.5                                 | 7.0                                 |
| 12... | 1351 | 30                               | 64  | 7.6                            | 13.5                                 | 7.0                                 |
| 12... | 1352 | 40                               | 64  | 7.6                            | 13.5                                 | 7.0                                 |
| 12... | 1353 | 50                               | 64  | 7.6                            | 13.5                                 | 7.0                                 |
| 12... | 1354 | 60                               | 64  | 7.5                            | 13.5                                 | 7.0                                 |
| 12... | 1355 | 70                               | 64  | 7.5                            | 13.5                                 | 7.0                                 |
| 12... | 1356 | 80                               | 70  | 7.2                            | 9.5                                  | 2.4                                 |
| 12... | 1357 | 90                               | 70  | 7.1                            | 8.5                                  | 2.4                                 |
| 12... | 1358 | 100                              | 70  | 7.0                            | 8.0                                  | 1.4                                 |
| MAY   |      |                                  |   |                                |                                      |                                     |
| 14... | 0945 | 0.1                              | 60  | 7.8                            | 12.0                                 | 9.1                                 |
| 14... | 0946 | 5.0                              | 60  | 7.8                            | 11.5                                 | 8.9                                 |
| 14... | 0947 | 10                               | 60  | 8.8                            | 10.5                                 | 8.8                                 |
| 14... | 0948 | 15                               | 60  | 8.8                            | 10.0                                 | 8.7                                 |
| 14... | 0949 | 20                               | 60  | 7.7                            | 9.5                                  | 8.8                                 |
| 14... | 0950 | 25                               | 63  | 7.7                            | 8.5                                  | 8.8                                 |
| 14... | 0951 | 30                               | 63  | 7.7                            | 8.5                                  | 8.8                                 |
| 14... | 0952 | 40                               | 63  | 7.7                            | 8.0                                  | 8.9                                 |
| 14... | 0953 | 50                               | 63  | 7.7                            | 8.0                                  | 8.8                                 |
| 14... | 0954 | 60                               | 62  | 7.6                            | 7.0                                  | 9.1                                 |
| 14... | 0955 | 70                               | 62  | 7.6                            | 6.5                                  | 9.1                                 |
| 14... | 0956 | 80                               | 62  | 7.6                            | 6.5                                  | 9.1                                 |
| 14... | 0957 | 90                               | 62  | 7.6                            | 6.5                                  | 9.1                                 |
| 14... | 0958 | 100                              | 62  | 7.6                            | 6.5                                  | 9.1                                 |
| 14... | 0959 | 110                              | 62  | 7.6                            | 6.5                                  | 9.1                                 |
| AUG   |      |                                  |   |                                |                                      |                                     |
| 15... | 1145 | 0.1                              | 50  | 7.4                            | 22.0                                 | 7.0                                 |
| 15... | 1146 | 5.0                              | 50  | 7.4                            | 21.5                                 | 6.8                                 |
| 15... | 1147 | 10                               | 50  | 7.4                            | 21.5                                 | 6.7                                 |
| 15... | 1148 | 15                               | 50  | 7.4                            | 21.5                                 | 6.7                                 |
| 15... | 1149 | 20                               | 50  | 7.3                            | 21.5                                 | 6.6                                 |
| 15... | 1150 | 25                               | 46  | 7.2                            | 20.5                                 | 6.5                                 |
| 15... | 1151 | 30                               | 43  | 7.1                            | 19.0                                 | 6.4                                 |
| 15... | 1152 | 40                               | 43  | 7.0                            | 17.5                                 | 5.9                                 |
| 15... | 1153 | 50                               | 46  | 6.9                            | 16.0                                 | 5.4                                 |
| 15... | 1154 | 60                               | 52  | 6.9                            | 12.5                                 | 6.2                                 |
| 15... | 1155 | 70                               | 56  | 6.9                            | 11.0                                 | 6.4                                 |
| 15... | 1156 | 80                               | 58  | 6.9                            | 10.0                                 | 6.4                                 |
| 15... | 1157 | 90                               | 60  | 6.9                            | 9.5                                  | 6.5                                 |
| 15... | 1158 | 100                              | 62  | 6.9                            | 8.5                                  | 6.3                                 |

| DATE  | TIME | SAM-<br>PLING<br>DEPTH<br>(FEET) | SPE-<br>CIFIC<br>CON-<br>DUCT-<br>ANCE<br>(US/CM) | PH<br>WATER<br>FIELD<br>(STAND-<br>ARD<br>UNITS) | TEMPER-<br>ATURE<br>WATER<br>(DEG C) | TRANS-<br>PAR-<br>ENCY<br>(SECCHI<br>DISK)<br>(IN) | OXYGEN,<br>DIS-<br>SOLVED<br>(MG/L) | COLI-<br>FORM,<br>FECAL,<br>0.7<br>UM-MF<br>(COLS./<br>100 ML) | HARD-<br>NESS<br>TOTAL<br>(MG/L<br>AS<br>CACO3) | CALCIUM<br>DIS-<br>SOLVED<br>(MG/L<br>AS CA) | MAGNE-<br>SIUM,<br>DIS-<br>SOLVED<br>(MG/L<br>AS MG) |
|-------|------|----------------------------------|---|--|--------------------------------------|--|-------------------------------------|--|---|--|--|
| OCT   |      |                                  |   |  |                                      |  |                                     |  |   |  |  |
| 12... | 1415 | 0.1                              | 64  | 7.7  | 14.0                                 | 120  | 7.9                                 | K1   | 26  | 8.1  | 1.3  |
| 12... | 1430 | 100                              | 70  | 7.0  | 8.0                                  | --   | 1.4                                 | --   | 27  | 8.5  | 1.4  |
| MAY   |      |                                  |   |  |                                      |  |                                     |  |   |  |  |
| 14... | 1015 | 0.1                              | 60  | 7.8  | 12.0                                 | 90.0   | 9.1                                 | <1   | 25  | 7.9  | 1.3  |
| 14... | 1030 | 110                              | 62  | 7.6  | 6.5                                  | --   | 9.1                                 | --   | 27  | 8.3  | 1.4  |
| AUG   |      |                                  |   |  |                                      |  |                                     |  |   |  |  |
| 15... | 1215 | 0.1                              | 50  | 7.4  | 22.0                                 | 109  | 7.0                                 | <1   | 19  | 6.0  | 1.0  |
| 15... | 1230 | 100                              | 62  | 6.9  | 8.5                                  | --   | 6.3                                 | --   | 25  | 8.0  | 1.3  |

K-Based on non-ideal colony count.

PLATTE RIVER BASIN

403147105083800 HORSETOOTH RESERVOIR NEAR FORT COLLINS, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DATE      | SODIUM, DIS-SOLVED (MG/L AS NA) | SODIUM AD-SORPTION RATIO | POTASSIUM, DIS-SOLVED (MG/L AS K) | ALKALINITY LAB (MG/L AS CACO3) | 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 DIS-SOLVED (MG/L) | SOLIDS, SUM OF CONSTITUENTS, DIS-SOLVED (MG/L) | NITROGEN, NITRITE DIS-SOLVED (MG/L AS N) |
|-----------|---------------------------------|--------------------------|-----------------------------------|--------------------------------|----------------------------------|-----------------------------------|----------------------------------|-----------------------------------|---|--|--|
| OCT 12... | 2.1                             | 0.2                      | 0.60                              | 29                             | --                               | --                                | --                               | 3.0                               | --  | --   | <0.01                                    |
| 12...     | 2.2                             | 0.2                      | 0.70                              | 29                             | --                               | --                                | --                               | 3.0                               | --  | --   | <0.01                                    |
| MAY 14... | 2.3                             | 0.2                      | 0.70                              | 27                             | --                               | --                                | --                               | 4.2                               | --  | --   | <0.01                                    |
| 14...     | 2.3                             | 0.2                      | 0.60                              | 29                             | --                               | --                                | --                               | 4.0                               | --  | --   | <0.01                                    |
| AUG 15... | 1.8                             | 0.2                      | 0.60                              | 21                             | 2.3                              | 0.7                               | 0.1                              | 2.3                               | 20  | 28   | 0.01                                     |
| 15...     | 2.2                             | 0.2                      | 0.70                              | 26                             | 3.0                              | 0.8                               | 0.1                              | 4.1                               | 30  | 37   | 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) | CHLOROPHYTON, CHROMOFLUOROM (UG/L) | CHLOROPHYTON, CHROMOFLUOROM (UG/L) | CARBON, ORGANIC DIS-SOLVED (MG/L AS C) | CARBON, ORGANIC SUSPENDED TOTAL (MG/L AS C) |
|-----------|--|--|---|------------------------------|------------------------------------|---|------------------------------------|------------------------------------|--|---|
| OCT 12... | <0.05                                    | <0.02                                    | <0.20   | <0.01                        | <0.01                              | <0.01                                     | 6.1                                | <0.1                               | --                                     | --  |
| 12...     | <0.05                                    | <0.02                                    | <0.20   | 0.01                         | <0.01                              | <0.01                                     | --                                 | --                                 | --                                     | --  |
| MAY 14... | <0.05                                    | <0.02                                    | <0.20   | 0.05                         | <0.01                              | <0.01                                     | 10                                 | <0.1                               | --                                     | --  |
| 14...     | <0.05                                    | 0.02                                     | <0.20   | 0.03                         | 0.02                               | <0.01                                     | --                                 | --                                 | --                                     | --  |
| AUG 15... | 0.06                                     | 0.03                                     | 0.20  | <0.01                        | <0.01                              | <0.01                                     | 1.5                                | <0.1                               | --                                     | --  |
| 15...     | 0.16                                     | 0.02                                     | <0.20   | <0.01                        | <0.01                              | 0.02                                      | --                                 | --                                 | 3.2                                    | <0.1  |

| 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) |
|-----------|------|---------------------------------|------------------------------------|-------------------------------|----------------------------------|-----------------------------------|---------------------------------|---------------------------------|-------------------------------|
| OCT 12... | 1415 | 19                              | <0.5                               | <10                           | <1                               | <5                                | <3                              | <10                             | 9                             |
| 12...     | 1430 | 20                              | <0.5                               | 10                            | <1                               | <5                                | <3                              | <10                             | <3                            |
| MAY 14... | 1015 | 16                              | <0.5                               | <10                           | <1                               | <5                                | <3                              | <10                             | 22                            |
| 14...     | 1030 | 18                              | <0.5                               | <10                           | <1                               | <5                                | <3                              | <10                             | 23                            |
| AUG 15... | 1215 | 16                              | 1                                  | <4                            | 5                                | <5                                | <3                              | <10                             | 35                            |
| 15...     | 1230 | 16                              | 1                                  | 6                             | <1                               | <5                                | <3                              | <10                             | 22                            |

| DATE      | LEAD, DIS-SOLVED (UG/L AS PB) | LITHIUM, DIS-SOLVED (UG/L AS LI) | 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 12... | <10                           | <4                               | <1                                 | <10                                 | <10                             | <0.2                            | 35                                 | <6                               | 14                            |
| 12...     | <10                           | <4                               | <1                                 | <10                                 | 10                              | <0.2                            | 36                                 | <6                               | 14                            |
| MAY 14... | <10                           | <4                               | 3                                  | <10                                 | <10                             | <0.2                            | 38                                 | <6                               | 7                             |
| 14...     | <10                           | <4                               | 3                                  | <10                                 | <10                             | <0.2                            | 40                                 | <6                               | <3                            |
| AUG 15... | <10                           | <4                               | 2                                  | 10                                  | <10                             | <0.2                            | 28                                 | <6                               | 12                            |
| 15...     | <10                           | <4                               | <1                                 | <10                                 | <10                             | <0.2                            | 37                                 | <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 mi<sup>2</sup>.

PERIOD OF RECORD.--August 1887 to September 1892, May 1895 to September 1903, October 1926 to September 1933 (no winter records prior to October 1932, except water years 1927-28), April 1938 to September 1949, March 1951 to current year. Monthly discharge only for some periods, published in WSP 1310. Published as Big Thompson Creek at Arkins 1887-92, Big Thompson Creek near Arkins 1901-3, and as Thompson River at mouth of canyon, near Drake 1927-30, 1938-47.

REVISED RECORDS.--WSP 1310: 1891, 1927. WSP 1730: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry. 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, 204,700 acre-ft diverted during current year; and Dille tunnel since Apr. 20, 1959, 57,360 acre-ft, diverted during current year, and returned to the river just downstream from this station.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 31,200 ft<sup>3</sup>/s, July 31, 1976, gage height, 19.86 ft, from floodmarks, from slope-area measurements of peak flow; no flow at times in 1976 (all flow above station diverted through Olympus and Dille tunnels after flood of July 31, 1976), 1979-80 (all flow above station diverted through Dille tunnel).

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 814 ft<sup>3</sup>/s, July 2, gage height, 4.00 ft; minimum daily, 15 ft<sup>3</sup>/s, Dec. 9.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

| DAY   | OCT  | NOV  | DEC  | JAN  | FEB  | MAR  | APR  | MAY   | JUN   | JUL   | AUG  | SEP  |
|-------|------|------|------|------|------|------|------|-------|-------|-------|------|------|
| 1     | 44   | 48   | 37   | e31  | e31  | 30   | 32   | 215   | 139   | 316   | 104  | 50   |
| 2     | 35   | 33   | 34   | e31  | e30  | 29   | 36   | 306   | 116   | 302   | 56   | 48   |
| 3     | 59   | 36   | 33   | e26  | e29  | 30   | 37   | 400   | 104   | 259   | 47   | 49   |
| 4     | 71   | 39   | 34   | e27  | e26  | 30   | 46   | 557   | 142   | 323   | 41   | 50   |
| 5     | 69   | 41   | 33   | e27  | e25  | 30   | 51   | 608   | 404   | 335   | 38   | 61   |
| 6     | 66   | 39   | 38   | e25  | e28  | 31   | 44   | 630   | 452   | 324   | 37   | 55   |
| 7     | 72   | 36   | 33   | e24  | e28  | 32   | 50   | 266   | 655   | 353   | 37   | 88   |
| 8     | 69   | 44   | 30   | e22  | e29  | 32   | 52   | 185   | 529   | 393   | 37   | 60   |
| 9     | 67   | 28   | 15   | e23  | e30  | 33   | 57   | 92    | 498   | 335   | 37   | 43   |
| 10    | 68   | 36   | 38   | e22  | e30  | 32   | 54   | 102   | 539   | 285   | 37   | 87   |
| 11    | 65   | 35   | 51   | e22  | e30  | 30   | 45   | 116   | 604   | 233   | 37   | 100  |
| 12    | 64   | 38   | 41   | e24  | e30  | 30   | 42   | 114   | 579   | 359   | 37   | 95   |
| 13    | 67   | 38   | 36   | e26  | e26  | 31   | 46   | 152   | 527   | 379   | 45   | 94   |
| 14    | 72   | 38   | 33   | e26  | e25  | 33   | 43   | 174   | 483   | 353   | 49   | 103  |
| 15    | 73   | 39   | 26   | e26  | e25  | 32   | 43   | 224   | 454   | 114   | 52   | 93   |
| 16    | 71   | 35   | 33   | e26  | e28  | 31   | 55   | 528   | 442   | 41    | 47   | 67   |
| 17    | 72   | 37   | 34   | e26  | e25  | 29   | 68   | 549   | 413   | 49    | 45   | 58   |
| 18    | 73   | 35   | 33   | e30  | e25  | 29   | 67   | 604   | 451   | 54    | 46   | 62   |
| 19    | 70   | 35   | 31   | e27  | e26  | 30   | 68   | 555   | 291   | 49    | 47   | 68   |
| 20    | 71   | 36   | 30   | e28  | e25  | 29   | 66   | 601   | 297   | 47    | 49   | 105  |
| 21    | 64   | 35   | 36   | e27  | e25  | 31   | 69   | 585   | 309   | 31    | 48   | 120  |
| 22    | 67   | 36   | 44   | e28  | e26  | 30   | 68   | 272   | 446   | 35    | 45   | 122  |
| 23    | 68   | 36   | 35   | e28  | 26   | 31   | 61   | 203   | 513   | 37    | 46   | 117  |
| 24    | 59   | 36   | 41   | e28  | 28   | 34   | 58   | 270   | 439   | 36    | 43   | 109  |
| 25    | 57   | 36   | 59   | e27  | 28   | 31   | 101  | 356   | 304   | 36    | 41   | 118  |
| 26    | 64   | 35   | 62   | e29  | 28   | 36   | 104  | 474   | 237   | 37    | 50   | 136  |
| 27    | 63   | 36   | e35  | e31  | 28   | 34   | 78   | 410   | 232   | 38    | 52   | 136  |
| 28    | 63   | 36   | e33  | e28  | 28   | 32   | 83   | 273   | 230   | 31    | 49   | 117  |
| 29    | 59   | 40   | e31  | e30  | 28   | 35   | 71   | 185   | 257   | 29    | 47   | 103  |
| 30    | 58   | 39   | e30  | e28  | ---  | 35   | 53   | 131   | 235   | 105   | 44   | 106  |
| 31    | 55   | ---  | e31  | e30  | ---  | 33   | ---  | 145   | ---   | 73    | 42   | ---  |
| TOTAL | 1995 | 1111 | 1110 | 833  | 796  | 975  | 1748 | 10282 | 11321 | 5391  | 1432 | 2620 |
| MEAN  | 64.4 | 37.0 | 35.8 | 26.9 | 27.4 | 31.5 | 58.3 | 332   | 377   | 174   | 46.2 | 87.3 |
| MAX   | 73   | 48   | 62   | 31   | 31   | 36   | 104  | 630   | 655   | 393   | 104  | 136  |
| MIN   | 35   | 28   | 15   | 22   | 25   | 29   | 32   | 92    | 104   | 29    | 37   | 43   |
| AC-FT | 3960 | 2200 | 2200 | 1650 | 1580 | 1930 | 3470 | 20390 | 22460 | 10690 | 2840 | 5200 |

CAL YR 1995 TOTAL 56945 MEAN 156 MAX 2070 MIN 15 AC-FT 113000  
WTR YR 1996 TOTAL 39614 MEAN 108 MAX 655 MIN 15 AC-FT 78570

e-Estimated.

**06741510 BIG THOMPSON RIVER AT LOVELAND, CO**

LOCATION.--Lat 40°22'43", long 105°03'38", in SE<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec.24, T.5 N., R.69 W., Larimer County, Hydrologic Unit 10190006, on right bank 690 ft downstream from county road bridge C-13, 1.7 mi south of sugar refinery in Loveland, and 1.9 mi downstream from Farmers Ditch diversion.

DRAINAGE AREA.--535 mi<sup>2</sup>.

**WATER-DISCHARGE RECORDS**

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

GAGE.--Water-stage recorder. 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 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

| DAY   | OCT  | NOV   | DEC   | JAN  | FEB   | MAR  | APR   | MAY    | JUN    | JUL  | AUG  | SEP   |
|-------|------|-------|-------|------|-------|------|-------|--------|--------|------|------|-------|
| 1     | 12   | 15    | 6.9   | 2.3  | e2.8  | 2.0  | 2.0   | 35     | 3.1    | 130  | 65   | 27    |
| 2     | 15   | 14    | 7.0   | e2.3 | e3.0  | 2.0  | 1.9   | 36     | 6.3    | 137  | 59   | 25    |
| 3     | 15   | 14    | 7.1   | e2.4 | e4.9  | 2.0  | 1.9   | 68     | 7.6    | 126  | 66   | 27    |
| 4     | 15   | 16    | 6.9   | 2.5  | e7.0  | 2.0  | 2.2   | 112    | 11     | 150  | 65   | 24    |
| 5     | 13   | 16    | 8.0   | 2.5  | 7.4   | 2.0  | 2.9   | 153    | 24     | 152  | 53   | 20    |
| 6     | 14   | 16    | 7.0   | 3.0  | 7.8   | 2.0  | 2.3   | 192    | 30     | 139  | 59   | 20    |
| 7     | 14   | 17    | 3.9   | 2.9  | 8.3   | 2.1  | 2.2   | 176    | 27     | 151  | 74   | 15    |
| 8     | 13   | 16    | 3.4   | 3.2  | 7.5   | 2.0  | 2.1   | 189    | 12     | 154  | 81   | 15    |
| 9     | 13   | 16    | 2.8   | 3.4  | 6.5   | 2.0  | 2.2   | 133    | 29     | 166  | 80   | 16    |
| 10    | 14   | 17    | 2.5   | 2.3  | 3.2   | 1.8  | 2.5   | 88     | 54     | 187  | 72   | 20    |
| 11    | 14   | 16    | 2.5   | 2.3  | 2.3   | 1.8  | 2.6   | 85     | 60     | 155  | 61   | 16    |
| 12    | 13   | 15    | 2.8   | 2.5  | 2.3   | 1.8  | 2.7   | 86     | 51     | 113  | 54   | 12    |
| 13    | 13   | 15    | 2.4   | 2.3  | 3.4   | 2.6  | 2.7   | 82     | 46     | 72   | 54   | 16    |
| 14    | 14   | 14    | 2.4   | 2.1  | 2.6   | 5.8  | 2.5   | 87     | 64     | 87   | 57   | 25    |
| 15    | 14   | 10    | 2.3   | 2.1  | 2.5   | 2.5  | 3.9   | 104    | 89     | 96   | 53   | 23    |
| 16    | 13   | 10    | 2.3   | 2.5  | 2.5   | 2.2  | 8.5   | 180    | 179    | 90   | 51   | 16    |
| 17    | 13   | 10    | 2.3   | 3.6  | 2.5   | 2.1  | 8.2   | 146    | 225    | 62   | 48   | 17    |
| 18    | 13   | 10    | 2.3   | 2.7  | 2.2   | 2.1  | 8.2   | 107    | 277    | 58   | 43   | 17    |
| 19    | 13   | 9.9   | e2.3  | 2.6  | 2.1   | 2.1  | 7.6   | 98     | 204    | 64   | 41   | 12    |
| 20    | 14   | 9.6   | e2.4  | 2.4  | 2.5   | 2.1  | 7.8   | 117    | 166    | 59   | 47   | 7.9   |
| 21    | 14   | 9.7   | 2.4   | 2.2  | 3.6   | 2.1  | 7.8   | 139    | 145    | 55   | 50   | 13    |
| 22    | 14   | 9.9   | 2.2   | e2.3 | 2.3   | 2.1  | 6.2   | 149    | 233    | 55   | 49   | 9.1   |
| 23    | 14   | 9.6   | 2.1   | e2.4 | 2.3   | 2.2  | 2.8   | 177    | 321    | 69   | 60   | 16    |
| 24    | 14   | 9.0   | 2.2   | e2.4 | 2.3   | 2.8  | 2.6   | 160    | 298    | 60   | 55   | 24    |
| 25    | 14   | 7.8   | 2.3   | e2.6 | 2.3   | 2.4  | 13    | 130    | 206    | 56   | 48   | 23    |
| 26    | 13   | 7.2   | 2.3   | e2.8 | 2.3   | 2.0  | 16    | 99     | 153    | 48   | 47   | 28    |
| 27    | 14   | 7.2   | 2.6   | e2.8 | 2.3   | 2.0  | 9.0   | 58     | 142    | 46   | 48   | 26    |
| 28    | 14   | 7.2   | 5.5   | e2.9 | 2.2   | 1.9  | 25    | 25     | 134    | 53   | 35   | 23    |
| 29    | 14   | 7.5   | 2.6   | e2.8 | e2.1  | 1.8  | 45    | 6.5    | 134    | 58   | 25   | 19    |
| 30    | 14   | 6.7   | 2.3   | e2.9 | ---   | 1.8  | 40    | 5.4    | 135    | 56   | 23   | 15    |
| 31    | 14   | ---   | 2.3   | e2.9 | ---   | 1.9  | ---   | 2.5    | ---    | 69   | 27   | ---   |
| TOTAL | 425  | 358.3 | 108.3 | 80.9 | 105.0 | 68.0 | 244.3 | 3225.4 | 3466.0 | 2973 | 1650 | 567.0 |
| MEAN  | 13.7 | 11.9  | 3.49  | 2.61 | 3.62  | 2.19 | 8.14  | 104    | 116    | 95.9 | 53.2 | 18.9  |
| MAX   | 15   | 17    | 8.0   | 3.6  | 8.3   | 5.8  | 45    | 192    | 321    | 187  | 81   | 28    |
| MIN   | 12   | 6.7   | 2.1   | 2.1  | 2.1   | 1.8  | 1.9   | 2.5    | 3.1    | 46   | 23   | 7.9   |
| AC-FT | 843  | 711   | 215   | 160  | 208   | 135  | 485   | 6400   | 6870   | 5900 | 3270 | 1120  |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1979 - 1996, BY WATER YEAR (WY)

|      | 1979 | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 28.1 | 22.2 | 9.92 | 12.9 | 11.6 | 11.4 | 41.1 | 251  | 296  | 129  | 83.6 | 36.6 |
| 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 | 44.3 | 16.6 |
| (WY) | 1988 | 1982 | 1993 | 1994 | 1993 | 1996 | 1981 | 1981 | 1982 | 1987 | 1995 | 1990 |

SUMMARY STATISTICS FOR 1995 CALENDAR YEAR FOR 1996 WATER YEAR WATER YEARS 1979 - 1996

|                          |             |             |                    |
|--------------------------|-------------|-------------|--------------------|
| ANNUAL TOTAL             | 60204.3     | 13271.2     |                    |
| ANNUAL MEAN              | 165         | 36.3        | 78.1               |
| HIGHEST ANNUAL MEAN      |             |             | 321 1980           |
| LOWEST ANNUAL MEAN       |             |             | 28.4 1990          |
| HIGHEST DAILY MEAN       | 3520 May 30 | 321 Jun 23  | 4240 May 1 1980    |
| LOWEST DAILY MEAN        | 2.1 Dec 23  | a1.8 Mar 10 | .80 May 11 1981    |
| ANNUAL SEVEN-DAY MINIMUM | 2.3 Dec 18  | 1.9 Mar 28  | .89 May 10 1981    |
| INSTANTANEOUS PEAK FLOW  |             | 368 Jun 23  | 6970 Apr 30 1980   |
| INSTANTANEOUS PEAK STAGE |             | 3.56 Jun 23 | b10.10 Apr 30 1980 |
| ANNUAL RUNOFF (AC-FT)    | 119400      | 26320       | 56580              |
| 10 PERCENT EXCEEDS       | 671         | 130         | 139                |
| 50 PERCENT EXCEEDS       | 10          | 13          | 16                 |
| 90 PERCENT EXCEEDS       | 4.2         | 2.2         | 3.2                |

e-Estimated.  
a-Also occurred Mar 11-12, 29-30.  
b-From high-water mark.

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 1995 TO SEPTEMBER 1996

| DATE      | TIME | DIS-CHARGE, INST. CUBIC FEET PER SECOND | SPE-CIFIC CON-DUCT-ANCE (US/CM) | PH (STAND-ARD UNITS) | TEMPER-ATURE WATER (DEG C) | OXYGEN, DIS-SOLVED (MG/L) | HARD-NESS TOTAL (MG/L AS CACO3) | CALCIUM DIS-SOLVED (MG/L AS CA) | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) | SODIUM, DIS-SOLVED (MG/L AS NA) | ALKA-LINITY LAB (MG/L AS CACO3) |
|-----------|------|---|---------------------------------|----------------------|----------------------------|---------------------------|---------------------------------|---------------------------------|-------------------------------------|---------------------------------|---------------------------------|
| OCT 24... | 0928 | 13                                      | 1200                            | 8.2                  | 5.5                        | --                        | 620                             | 170                             | 48                                  | --                              | 197                             |
| NOV 28... | 1021 | 7.2                                     | 1330                            | 8.3                  | 3.0                        | 11.5                      | 650                             | 170                             | 55                                  | --                              | 200                             |
| JAN 09... | 1050 | 3.6                                     | 1700                            | 8.0                  | 0.5                        | 11.4                      | 850                             | 200                             | 86                                  | --                              | 225                             |
| FEB 12... | 1441 | 2.2                                     | 1600                            | 8.4                  | 5.0                        | 10.5                      | 730                             | 170                             | 74                                  | 87                              | 211                             |
| MAR 26... | 1019 | 2.2                                     | 1530                            | 8.0                  | 2.5                        | 12.9                      | 640                             | 140                             | 71                                  | --                              | 190                             |
| APR 15... | 1020 | 2.6                                     | 1580                            | 8.2                  | 8.0                        | 10.9                      | 720                             | 170                             | 71                                  | --                              | 197                             |
| MAY 20... | 1347 | 121                                     | 135                             | 8.0                  | 13.0                       | 9.5                       | 51                              | 14                              | 3.9                                 | --                              | 26                              |
| JUN 03... | 1040 | 6.8                                     | 1350                            | 8.2                  | 17.5                       | 10.6                      | 540                             | 110                             | 64                                  | --                              | 135                             |
| JUL 11... | 1059 | 161                                     | 159                             | 7.9                  | 16.5                       | 8.2                       | 58                              | 15                              | 4.9                                 | 5.6                             | 26                              |
| AUG 12... | 1036 | 57                                      | 639                             | 8.5                  | 19.5                       | 9.2                       | 260                             | 56                              | 28                                  | --                              | 82                              |
| SEP 17... | 1350 | 15                                      | 1220                            | 8.5                  | 17.5                       | 10.0                      | 530                             | 110                             | 63                                  | --                              | 142                             |

| DATE      | SULFATE DIS-SOLVED (MG/L AS SO4) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) | SILICA, DIS-SOLVED (MG/L AS SIO2) | SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) | NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) | NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) | NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) | PHOS-PHORUS DIS-SOLVED (MG/L AS P) | PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) |
|-----------|----------------------------------|------------------------------------|-----------------------------------|-----------------------------------|---|---|---|---|------------------------------------|---|
| OCT 24... | --                               | --                                 | --                                | --                                | --  | 0.01                                      | 0.61                                      | <0.02                                     | <0.01                              | <0.01                                     |
| NOV 28... | --                               | --                                 | --                                | --                                | --  | 0.01                                      | 0.74                                      | 0.02                                      | <0.01                              | <0.01                                     |
| JAN 09... | --                               | --                                 | --                                | --                                | --  | 0.01                                      | 0.91                                      | 0.08                                      | 0.02                               | <0.01                                     |
| FEB 12... | 650                              | 24                                 | 0.4                               | 7.6                               | 1210  | 0.01                                      | 0.84                                      | 0.05                                      | 0.01                               | 0.02                                      |
| MAR 26... | --                               | --                                 | --                                | --                                | --  | <0.01                                     | 0.62                                      | <0.02                                     | 0.02                               | <0.01                                     |
| APR 15... | --                               | --                                 | --                                | --                                | --  | <0.01                                     | 0.44                                      | <0.02                                     | <0.01                              | <0.01                                     |
| MAY 20... | --                               | --                                 | --                                | --                                | --  | <0.01                                     | 0.14                                      | <0.02                                     | 0.02                               | <0.01                                     |
| JUN 03... | --                               | --                                 | --                                | --                                | --  | <0.01                                     | 0.13                                      | 0.05                                      | 0.03                               | <0.01                                     |
| JUL 11... | 40                               | 1.6                                | 0.2                               | 5.9                               | 96  | <0.01                                     | 0.08                                      | 0.05                                      | <0.01                              | 0.01                                      |
| AUG 12... | --                               | --                                 | --                                | --                                | --  | 0.01                                      | 0.03                                      | 0.03                                      | <0.01                              | <0.01                                     |
| SEP 17... | --                               | --                                 | --                                | --                                | --  | 0.01                                      | 0.08                                      | 0.04                                      | <0.01                              | <0.01                                     |

## PLATTE RIVER BASIN

## 06741510 BIG THOMPSON RIVER AT LOVELAND, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DATE         | ALUM-<br>INUM,<br>DIS-<br>SOLVED<br>(UG/L<br>AS AL) | ARSENIC<br>DIS-<br>SOLVED<br>(UG/L<br>AS AS) | CADMIUM<br>TOTAL<br>RECOV-<br>ERABLE<br>(UG/L<br>AS CD) | CADMIUM<br>DIS-<br>SOLVED<br>(UG/L<br>AS CD) | CHRO-<br>MIUM,<br>TOTAL<br>RECOV-<br>ERABLE<br>(UG/L<br>AS CR) | CHRO-<br>MIUM,<br>DIS-<br>SOLVED<br>(UG/L<br>AS CR) | COPPER,<br>TOTAL<br>RECOV-<br>ERABLE<br>(UG/L<br>AS CU) | COPPER,<br>DIS-<br>SOLVED<br>(UG/L<br>AS CU) | IRON,<br>TOTAL<br>RECOV-<br>ERABLE<br>(UG/L<br>AS FE) | LEAD,<br>TOTAL<br>RECOV-<br>ERABLE<br>(UG/L<br>AS PB) |
|--------------|---|--|---|--|--|---|---|--|---|---|
| OCT<br>24... | --  | --   | <1  | --   | --   | --  | <1  | <1   | 90  | <1  |
| NOV<br>28... | --  | --   | <1  | --   | --   | --  | <1  | <1   | 160   | <1  |
| JAN<br>09... | --  | --   | <1  | --   | --   | --  | 1   | <1   | 80  | <1  |
| FEB<br>12... | <10   | <1   | <1  | <1   | <1   | <1  | <1  | <1   | 160   | <1  |
| MAR<br>26... | --  | --   | <1  | --   | --   | --  | 1   | 1  | 120   | <1  |
| APR<br>15... | --  | --   | <1  | --   | --   | --  | 2   | 1  | 110   | <1  |
| MAY<br>20... | --  | --   | <1  | --   | --   | --  | 3   | 2  | 510   | <1  |
| JUN<br>03... | --  | --   | <1  | --   | --   | --  | 2   | 1  | 90  | <1  |
| JUL<br>11... | 20  | <1   | <1  | <1   | <1   | <1  | 2   | 1  | 380   | <1  |
| AUG<br>12... | --  | --   | <1  | --   | --   | --  | 2   | 3  | 370   | <1  |
| SEP<br>17... | --  | --   | <1  | --   | --   | --  | <1  | <1   | 220   | <1  |

| DATE         | LEAD,<br>DIS-<br>SOLVED<br>(UG/L<br>AS PB) | MANGA-<br>NESE,<br>TOTAL<br>RECOV-<br>ERABLE<br>(UG/L<br>AS MN) | MERCURY<br>TOTAL<br>RECOV-<br>ERABLE<br>(UG/L<br>AS HG) | MERCURY<br>DIS-<br>SOLVED<br>(UG/L<br>AS HG) | NICKEL,<br>DIS-<br>SOLVED<br>(UG/L<br>AS NI) | SELE-<br>NIUM,<br>DIS-<br>SOLVED<br>(UG/L<br>AS SE) | SILVER,<br>TOTAL<br>RECOV-<br>ERABLE<br>(UG/L<br>AS AG) | SILVER,<br>DIS-<br>SOLVED<br>(UG/L<br>AS AG) | ZINC,<br>DIS-<br>SOLVED<br>(UG/L<br>AS ZN) |
|--------------|--|---|---|--|--|---|---|--|--|
| OCT<br>24... | --   | --  | --  | --   | --   | --  | <1  | <0.2   | --   |
| NOV<br>28... | --   | --  | --  | --   | --   | --  | <1  | <0.2   | --   |
| JAN<br>09... | --   | --  | --  | --   | --   | --  | <1  | <0.2   | --   |
| FEB<br>12... | <1   | 70  | <0.1  | <0.1   | <1   | 11  | --  | <0.2   | <10  |
| MAR<br>26... | --   | --  | --  | --   | --   | --  | <1  | --   | --   |
| APR<br>15... | --   | --  | --  | --   | --   | --  | <1  | <0.2   | --   |
| MAY<br>20... | --   | --  | --  | --   | --   | --  | <1  | <0.2   | --   |
| JUN<br>03... | --   | --  | --  | --   | --   | --  | <1  | <0.2   | --   |
| JUL<br>11... | <1   | 30  | <0.1  | <0.1   | <1   | <1  | <1  | <0.2   | <3   |
| AUG<br>12... | --   | --  | --  | --   | --   | --  | <1  | <0.2   | --   |
| SEP<br>17... | --   | --  | --  | --   | --   | --  | <1  | <0.2   | --   |

**06742500 CARTER LAKE NEAR BERTHOUD, CO**

LOCATION.--Lat 40°19'28", long 105°12'41", in SE<sup>1</sup>/<sub>4</sub> sec.10, T.4 N., R.70 W., Larimer County, Hydrologic Unit 10190006, in hoist house 293 ft from right abutment of Carter Lake Dam on Dry Creek, 7.0 mi west of Berthoud, and 8.9 mi upstream from mouth. Water-quality sampling site near center of reservoir.

**RESERVOIR ELEVATIONS AND CONTENTS RECORDS**

PERIOD OF RECORD.--March 1954 to current year.

GAGE.--Nonrecording gage read at irregular intervals from 1 to 13 days. Datum of gage is 5,763.00 ft above sea level, (levels by U.S. Bureau of Reclamation); gage readings have been reduced to elevations above sea level.

REMARKS.--Reservoir is formed by an earth and rockfill dam and dikes enlarging the natural basin of Carter Lake. Storage began in February 1954. Usable capacity, 113,500 acre-ft between elevations 5,618.00 ft, trashrack sill at outlet, and 5,763.00 ft, maximum water surface, 6 ft below crest of dam. Dead storage, 3,306 acre-ft. Figures given represent usable contents. Water diverted from Colorado River basin through Alva B. Adams tunnel is pumped from Flatiron Reservoir into Carter Lake for supplemental irrigation supply to Little Thompson River and St. Vrain and Boulder Creek basins. Water above elevation 5,620 ft may be released for return to Flatiron Reservoir where pump turbines can operate in reverse to generate power and water can be used for irrigation in Big Thompson or Cache la Poudre River basins.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 109,100 acre-ft, Apr. 27-29, 1971, elevation, 5,759.12 ft; minimum observed since appreciable storage was attained, 960 acre-ft, Oct. 25, 1954, elevation, 5,621.40 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 81,870 acre-ft, Dec. 13, elevation, 5,734.25 ft; minimum contents, 40,730 acre-ft, Sept. 3, elevation, 5,690.38 ft.

MONTHEND ELEVATION AND CONTENTS AT 0800, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| Date                 | Elevation<br>(feet) | Contents<br>(acre-feet) | Change in<br>contents<br>(acre-feet) |
|----------------------|---------------------|-------------------------|--------------------------------------|
| Sept. 30. . . . .    | 5,723.75            | 71,160                  | -                                    |
| Oct. 31. . . . .     | 5,728.99            | 76,450                  | +5,290                               |
| Nov. 30. . . . .     | 5,729.62            | 77,090                  | +640                                 |
| Dec. 31. . . . .     | 5,733.16            | 80,740                  | +3,650                               |
| CAL YR 1995. . . . . | -                   | -                       | +1,930                               |
| Jan. 31. . . . .     | 5,732.49            | 80,040                  | -700                                 |
| Feb. 29. . . . .     | 5,731.95            | 79,490                  | -550                                 |
| Mar. 31. . . . .     | 5,731.11            | 78,620                  | -870                                 |
| Apr. 30. . . . .     | 5,729.38            | 76,850                  | -1,770                               |
| May 31. . . . .      | 5,722.25            | 69,670                  | -7,180                               |
| June 30. . . . .     | 5,719.50            | 66,980                  | -2,690                               |
| July 31. . . . .     | 5,711.86            | 59,650                  | -7,330                               |
| Aug. 31. . . . .     | 5,692.10            | 42,150                  | -17,500                              |
| Sept. 30. . . . .    | 5,695.46            | 44,980                  | +2,830                               |
| WTR YR 1996. . . . . | -                   | -                       | -26,180                              |

## PLATTE RIVER BASIN

## 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 1995 TO SEPTEMBER 1996

| DATE  | TIME | SAM-<br>PLING<br>DEPTH<br>(FEET) | SPE-<br>CIFIC<br>CON-<br>DUCT-<br>ANCE<br>(US/CM) | PH<br>(STAND-<br>ARD<br>UNITS) | TEMPER-<br>ATURE<br>WATER<br>(DEG C) | OXYGEN,<br>DIS-<br>SOLVED<br>(MG/L) |
|-------|------|----------------------------------|---|--------------------------------|--------------------------------------|-------------------------------------|
| OCT   |      |                                  |   |                                |                                      |                                     |
| 13... | 1000 | 0.1                              | 71  | 7.8                            | 12.5                                 | 7.6                                 |
| 13... | 1001 | 5.0                              | 71  | 7.8                            | 12.5                                 | 7.5                                 |
| 13... | 1002 | 10                               | 71  | 7.8                            | 12.5                                 | 7.4                                 |
| 13... | 1003 | 15                               | 71  | 7.8                            | 12.5                                 | 7.5                                 |
| 13... | 1004 | 20                               | 71  | 7.8                            | 12.5                                 | 7.5                                 |
| 13... | 1005 | 25                               | 71  | 7.8                            | 12.5                                 | 7.4                                 |
| 13... | 1006 | 30                               | 71  | 7.8                            | 12.5                                 | 7.3                                 |
| 13... | 1007 | 40                               | 71  | 7.7                            | 12.5                                 | 7.3                                 |
| 13... | 1008 | 50                               | 62  | 7.3                            | 9.0                                  | 4.8                                 |
| 13... | 1009 | 60                               | 60  | 7.3                            | 8.5                                  | 4.6                                 |
| 13... | 1010 | 70                               | 59  | 7.2                            | 8.0                                  | 4.4                                 |
| 13... | 1011 | 80                               | 59  | 7.1                            | 8.0                                  | 4.4                                 |
| 13... | 1012 | 90                               | 59  | 7.1                            | 8.0                                  | 4.2                                 |
| 13... | 1013 | 100                              | 59  | 7.1                            | 7.5                                  | 4.0                                 |
| 13... | 1014 | 110                              | 59  | 7.0                            | 7.5                                  | 3.9                                 |
| 13... | 1015 | 120                              | 60  | 7.0                            | 7.5                                  | 3.8                                 |
| MAY   |      |                                  |   |                                |                                      |                                     |
| 15... | 0945 | 0.1                              | 69  | 8.0                            | 13.5                                 | 9.1                                 |
| 15... | 0946 | 5.0                              | 69  | 8.0                            | 13.0                                 | 9.1                                 |
| 15... | 0947 | 10                               | 69  | 8.0                            | 12.5                                 | 9.1                                 |
| 15... | 0948 | 15                               | 69  | 8.1                            | 10.0                                 | 9.1                                 |
| 15... | 0949 | 20                               | 68  | 8.1                            | 9.0                                  | 9.7                                 |
| 15... | 0950 | 25                               | 67  | 8.0                            | 8.0                                  | 9.7                                 |
| 15... | 0951 | 30                               | 67  | 7.9                            | 7.5                                  | 9.6                                 |
| 15... | 0952 | 40                               | 67  | 7.9                            | 7.0                                  | 9.4                                 |
| 15... | 0953 | 50                               | 67  | 7.8                            | 6.5                                  | 9.3                                 |
| 15... | 0954 | 60                               | 67  | 7.8                            | 6.5                                  | 9.2                                 |
| 15... | 0955 | 70                               | 67  | 7.7                            | 6.5                                  | 9.1                                 |
| 15... | 0956 | 80                               | 67  | 7.7                            | 6.5                                  | 9.1                                 |
| 15... | 0957 | 90                               | 67  | 7.7                            | 6.0                                  | 9.0                                 |
| 15... | 0958 | 100                              | 67  | 7.7                            | 6.0                                  | 8.9                                 |
| 15... | 0959 | 110                              | 67  | 7.6                            | 6.0                                  | 8.9                                 |
| 15... | 1000 | 120                              | 67  | 7.6                            | 6.0                                  | 8.9                                 |
| AUG   |      |                                  |   |                                |                                      |                                     |
| 20... | 1030 | 0.1                              | 82  | 8.1                            | 21.5                                 | 6.9                                 |
| 20... | 1031 | 5.0                              | 82  | 8.1                            | 21.0                                 | 6.9                                 |
| 20... | 1032 | 10                               | 82  | 8.1                            | 21.0                                 | 7.1                                 |
| 20... | 1033 | 15                               | 82  | 8.1                            | 21.0                                 | 7.0                                 |
| 20... | 1034 | 20                               | 82  | 8.1                            | 21.0                                 | 7.0                                 |
| 20... | 1035 | 25                               | 82  | 8.0                            | 20.0                                 | 6.8                                 |
| 20... | 1036 | 30                               | 74  | 7.7                            | 14.0                                 | 7.4                                 |
| 20... | 1037 | 40                               | 72  | 7.6                            | 10.0                                 | 7.0                                 |
| 20... | 1038 | 50                               | 70  | 7.5                            | 8.5                                  | 6.8                                 |
| 20... | 1039 | 60                               | 70  | 7.4                            | 7.5                                  | 6.7                                 |
| 20... | 1040 | 70                               | 70  | 7.4                            | 7.5                                  | 6.4                                 |
| 20... | 1041 | 80                               | 70  | 7.3                            | 7.5                                  | 6.2                                 |
| 20... | 1042 | 90                               | 70  | 7.3                            | 7.0                                  | 6.1                                 |

06742500 CARTER LAKE NEAR BERTHOUD, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DATE  | TIME | SAMPLING DEPTH (FEET) | SPECIFIC CONDUCTANCE (US/CM) | PH (STANDARD UNITS) | TEMPERATURE WATER (DEG C) | TRANSPARANCY (SECCHI DISK (IN)) | OXYGEN, DIS-SOLVED (MG/L) | COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML) | HARDNESS TOTAL (MG/L AS CaCO3) | CALCIUM DIS-SOLVED (MG/L AS Ca) | MAGNESIUM, DIS-SOLVED (MG/L AS Mg) |
|-------|------|-----------------------|------------------------------|---------------------|---------------------------|---------------------------------|---------------------------|---|--------------------------------|---------------------------------|------------------------------------|
| OCT   |      |                       |                              |                     |                           |                                 |                           |   |                                |                                 |                                    |
| 13... | 1020 | 0.1                   | 71                           | 7.8                 | 12.5                      | 130                             | 7.6                       | <1  | 30                             | 9.8                             | 1.3                                |
| 13... | 1030 | 120                   | 60                           | 7.0                 | 7.5                       | --                              | 3.8                       | --  | 24                             | 7.8                             | 1.2                                |
| MAY   |      |                       |                              |                     |                           |                                 |                           |   |                                |                                 |                                    |
| 15... | 1015 | 0.1                   | 69                           | 8.0                 | 13.5                      | 142                             | 9.1                       | <1  | 30                             | 9.9                             | 1.3                                |
| 15... | 1030 | 120                   | 67                           | 7.6                 | 6.0                       | --                              | 8.9                       | --  | 30                             | 9.8                             | 1.3                                |
| AUG   |      |                       |                              |                     |                           |                                 |                           |   |                                |                                 |                                    |
| 20... | 1100 | 0.1                   | 82                           | 8.1                 | 21.5                      | 102                             | 6.9                       | K1  | 33                             | 11                              | 1.3                                |
| 20... | 1115 | 90                    | 70                           | 7.3                 | 7.0                       | --                              | 6.1                       | --  | 30                             | 9.8                             | 1.3                                |

| DATE  | SODIUM, DIS-SOLVED (MG/L AS Na) | SODIUM, ADSORPTION RATIO | POTASSIUM, DIS-SOLVED (MG/L AS K) | ALKALINITY LAB AS (MG/L CaCO3) | 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 DIS-SOLVED (MG/L) | SOLIDS, SUM OF TUENTS, DIS-SOLVED (MG/L) | NITROGEN, NITRITE DIS-SOLVED (MG/L AS N) |
|-------|---------------------------------|--------------------------|-----------------------------------|--------------------------------|----------------------------------|-----------------------------------|----------------------------------|-----------------------------------|---|--|--|
| OCT   |                                 |                          |                                   |                                |                                  |                                   |                                  |                                   |   |  |  |
| 13... | 2.2                             | 0.2                      | 0.8                               | 33                             | --                               | --                                | --                               | 2.6                               | --  | --                                       | <0.01                                    |
| 13... | 2.1                             | 0.2                      | 0.7                               | 28                             | --                               | --                                | --                               | 4.6                               | --  | --                                       | <0.01                                    |
| MAY   |                                 |                          |                                   |                                |                                  |                                   |                                  |                                   |   |  |  |
| 15... | 2.2                             | 0.2                      | 0.7                               | 32                             | --                               | --                                | --                               | 2.8                               | --  | --                                       | <0.01                                    |
| 15... | 2.2                             | 0.2                      | 0.6                               | 32                             | --                               | --                                | --                               | 3.0                               | --  | --                                       | <0.01                                    |
| AUG   |                                 |                          |                                   |                                |                                  |                                   |                                  |                                   |   |  |  |
| 20... | 2.3                             | 0.2                      | 0.7                               | 37                             | 3.1                              | 0.7                               | 0.2                              | 2.5                               | 46  | 44                                       | <0.01                                    |
| 20... | 2.2                             | 0.2                      | 0.7                               | 32                             | 3.1                              | 0.7                               | 0.2                              | 3.3                               | 40  | 41                                       | <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) | CHLOROPHYTON, CHROMO FLUOROM (UG/L) | CHLOROPHYTON, CHROMO FLUOROM (UG/L) | CARBON, ORGANIC DIS-SOLVED (MG/L AS C) | CARBON, SUSPENDED TOTAL (MG/L AS C) |
|-------|--|--|---|------------------------------|------------------------------------|---|-------------------------------------|-------------------------------------|--|-------------------------------------|
| OCT   |  |  |   |                              |                                    |   |                                     |                                     |  |                                     |
| 13... | <0.05                                    | <0.02                                    | <0.20   | <0.01                        | 0.02                               | <0.01                                     | 1.7                                 | <0.1                                | --                                     | --                                  |
| 13... | 0.08                                     | <0.02                                    | <0.20   | <0.01                        | <0.01                              | <0.01                                     | --                                  | --                                  | --                                     | --                                  |
| MAY   |  |  |   |                              |                                    |   |                                     |                                     |  |                                     |
| 15... | <0.05                                    | 0.04                                     | <0.20   | 0.04                         | <0.01                              | <0.01                                     | 0.8                                 | <0.1                                | --                                     | --                                  |
| 15... | 0.06                                     | 0.04                                     | <0.20   | 0.03                         | <0.01                              | <0.01                                     | --                                  | --                                  | --                                     | --                                  |
| AUG   |  |  |   |                              |                                    |   |                                     |                                     |  |                                     |
| 20... | <0.05                                    | <0.02                                    | <0.20   | 0.04                         | <0.01                              | <0.01                                     | 0.9                                 | <0.1                                | --                                     | --                                  |
| 20... | 0.05                                     | 0.02                                     | <0.20   | <0.01                        | <0.01                              | <0.01                                     | --                                  | --                                  | 3.0                                    | <0.1                                |

| 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) |
|-------|------|---------------------------------|------------------------------------|-------------------------------|----------------------------------|-----------------------------------|---------------------------------|---------------------------------|-------------------------------|
| OCT   |      |                                 |                                    |                               |                                  |                                   |                                 |                                 |                               |
| 13... | 1020 | 24                              | <0.5                               | 10                            | <1                               | <5                                | 4                               | <10                             | <3                            |
| 13... | 1030 | 14                              | <0.5                               | <10                           | <1                               | <5                                | <3                              | <10                             | 16                            |
| MAY   |      |                                 |                                    |                               |                                  |                                   |                                 |                                 |                               |
| 15... | 1015 | 24                              | <0.5                               | 10                            | <1                               | <5                                | <3                              | <10                             | <3                            |
| 15... | 1030 | 24                              | <0.5                               | <10                           | <1                               | <5                                | <3                              | <10                             | <3                            |
| AUG   |      |                                 |                                    |                               |                                  |                                   |                                 |                                 |                               |
| 20... | 1100 | 32                              | <0.5                               | 4                             | <1                               | <5                                | <3                              | <10                             | 7                             |
| 20... | 1115 | 24                              | <0.5                               | 5                             | <1                               | <5                                | <3                              | <10                             | <3                            |

| DATE  | LEAD, DIS-SOLVED (UG/L AS Pb) | LITHIUM, DIS-SOLVED (UG/L AS Li) | 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   |                               |                                  |                                    |                                     |                                 |                                 |                                    |                                  |                               |
| 13... | <10                           | <4                               | <1                                 | <10                                 | <10                             | <0.2                            | 41                                 | <6                               | 16                            |
| 13... | <10                           | <4                               | 4                                  | <10                                 | <10                             | <0.2                            | 36                                 | <6                               | 16                            |
| MAY   |                               |                                  |                                    |                                     |                                 |                                 |                                    |                                  |                               |
| 15... | <10                           | <4                               | <1                                 | <10                                 | <10                             | <0.2                            | 41                                 | <6                               | 7                             |
| 15... | <10                           | <4                               | <1                                 | <10                                 | <10                             | <0.2                            | 42                                 | <6                               | 4                             |
| AUG   |                               |                                  |                                    |                                     |                                 |                                 |                                    |                                  |                               |
| 20... | <10                           | <4                               | <1                                 | <10                                 | <10                             | <0.2                            | 43                                 | <6                               | 6                             |
| 20... | <10                           | <4                               | 3                                  | <10                                 | <10                             | <0.2                            | 41                                 | <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 SE<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec.26, T.7 N., R.76 W., Larimer County, Hydrologic Unit 10190007, on left bank 150 ft downstream from unnamed tributary and Colorado Highway 14 culvert crossing, 1.5 mi northeast of Cameron Pass, 1.5 mi southwest of Joe Wright Dam, and 8 mi east of Gould.

DRAINAGE AREA.--3.01 mi<sup>2</sup>.

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

GAGE.--Water-stage recorder. Elevation of gage is 9,990 ft above sea level, from topographic map. Prior to Aug. 7, 1989, at datum 3.40 ft, higher.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

| DAY   | OCT   | NOV  | DEC  | JAN  | FEB  | MAR  | APR  | MAY   | JUN  | JUL  | AUG   | SEP   |
|-------|-------|------|------|------|------|------|------|-------|------|------|-------|-------|
| 1     | 6.2   | e2.9 | e2.2 | e1.6 | e1.6 | e1.2 | e1.1 | e2.4  | e35  | 39   | 9.5   | 5.4   |
| 2     | 5.5   | e2.8 | e2.2 | e1.6 | e1.6 | e1.2 | e1.0 | e2.5  | e45  | 36   | 9.8   | 5.3   |
| 3     | 5.0   | e2.8 | e2.2 | e1.6 | e1.5 | e1.2 | e1.1 | e2.8  | e55  | 34   | 10    | 5.0   |
| 4     | 4.6   | e2.7 | e2.2 | e1.6 | e1.5 | e1.2 | e1.2 | e3.0  | e66  | 32   | 9.3   | 4.9   |
| 5     | 4.7   | e2.6 | e2.2 | e1.6 | e1.4 | e1.2 | e1.2 | e3.5  | 75   | 32   | 8.5   | 4.9   |
| 6     | 5.0   | e2.5 | e2.2 | e1.6 | e1.4 | e1.2 | e1.3 | e4.2  | 90   | 30   | 7.8   | 5.8   |
| 7     | 5.7   | e2.5 | e2.2 | e1.6 | e1.4 | e1.2 | e1.4 | e5.0  | 97   | 28   | 7.4   | 5.1   |
| 8     | 5.2   | e2.4 | e2.1 | e1.6 | e1.4 | e1.2 | e1.5 | e6.0  | 103  | 26   | 7.1   | 4.7   |
| 9     | 4.8   | e2.4 | e2.0 | e1.6 | e1.3 | e1.2 | e1.6 | e7.0  | 112  | 25   | 7.1   | 4.6   |
| 10    | 4.9   | e2.3 | e2.0 | e1.6 | e1.3 | e1.2 | e1.6 | e9.5  | 125  | 23   | 6.5   | 4.4   |
| 11    | 5.4   | e2.3 | e1.9 | e1.6 | e1.3 | e1.2 | e1.7 | e12   | 133  | 23   | 6.1   | 4.3   |
| 12    | 5.8   | e2.2 | e1.9 | e1.6 | e1.3 | e1.2 | e1.8 | e15   | 81   | 23   | 5.8   | 5.3   |
| 13    | e5.6  | e2.2 | e1.8 | e1.6 | e1.3 | e1.2 | e1.8 | e17   | 64   | 21   | 6.9   | 5.5   |
| 14    | e5.2  | e2.2 | e1.8 | e1.6 | e1.3 | e1.2 | e1.8 | e20   | 61   | 20   | 8.3   | 5.2   |
| 15    | 4.9   | e2.2 | e1.8 | e1.6 | e1.3 | e1.2 | e1.8 | e23   | 64   | 22   | 8.3   | 4.9   |
| 16    | 4.8   | e2.2 | e1.8 | e1.6 | e1.3 | e1.2 | e1.9 | e25   | 61   | 28   | 7.9   | 4.8   |
| 17    | 4.6   | e2.2 | e1.8 | e1.6 | e1.3 | e1.2 | e1.9 | e27   | 58   | 29   | 7.6   | 5.0   |
| 18    | 4.5   | e2.2 | e1.8 | e1.6 | e1.3 | e1.2 | e2.0 | e26   | 58   | 31   | 7.7   | 5.1   |
| 19    | e3.8  | e2.2 | e1.8 | e1.6 | e1.3 | e1.2 | e2.0 | e24   | 58   | 27   | 7.9   | 5.2   |
| 20    | e3.6  | e2.2 | e1.7 | e1.6 | e1.3 | e1.2 | e2.1 | e23   | 58   | 25   | 7.4   | 5.2   |
| 21    | e3.4  | e2.2 | e1.7 | e1.6 | e1.3 | e1.2 | e2.2 | e26   | 72   | 23   | 7.0   | 5.4   |
| 22    | e3.2  | e2.2 | e1.7 | e1.6 | e1.3 | e1.2 | e2.2 | e29   | 72   | 22   | 7.0   | 6.3   |
| 23    | e3.1  | e2.2 | e1.6 | e1.6 | e1.3 | e1.2 | e2.3 | e30   | 59   | 20   | 6.8   | 6.8   |
| 24    | e3.0  | e2.2 | e1.6 | e1.6 | e1.3 | e1.2 | e2.4 | e33   | 49   | 19   | 6.5   | 7.6   |
| 25    | e3.0  | e2.2 | e1.6 | e1.6 | e1.3 | e1.2 | e2.6 | e34   | 52   | 18   | 6.1   | 7.8   |
| 26    | e3.0  | e2.2 | e1.6 | e1.6 | e1.3 | e1.2 | e2.6 | e31   | 54   | 17   | 6.0   | 7.1   |
| 27    | e3.0  | e2.2 | e1.6 | e1.6 | e1.3 | e1.1 | e2.6 | e29   | 53   | 16   | 6.2   | 7.1   |
| 28    | e3.0  | e2.2 | e1.6 | e1.6 | e1.3 | e1.1 | e2.5 | e26   | 48   | 15   | 7.1   | 6.8   |
| 29    | e3.0  | e2.2 | e1.6 | e1.6 | e1.2 | e1.1 | e2.5 | e24   | 43   | 20   | 6.9   | 7.8   |
| 30    | e3.0  | e2.2 | e1.6 | e1.6 | ---  | e1.1 | e2.5 | e22   | 41   | 15   | 6.1   | 8.3   |
| 31    | e3.0  | ---  | e1.6 | e1.6 | ---  | e1.1 | ---  | e25   | ---  | 10   | 5.7   | ---   |
| TOTAL | 133.5 | 70.0 | 57.4 | 49.6 | 39.0 | 36.7 | 56.2 | 566.9 | 2042 | 749  | 228.3 | 171.6 |
| MEAN  | 4.31  | 2.33 | 1.85 | 1.60 | 1.34 | 1.18 | 1.87 | 18.3  | 68.1 | 24.2 | 7.36  | 5.72  |
| MAX   | 6.2   | 2.9  | 2.2  | 1.6  | 1.6  | 1.2  | 2.6  | 34    | 133  | 39   | 10    | 8.3   |
| MIN   | 3.0   | 2.2  | 1.6  | 1.6  | 1.2  | 1.1  | 1.0  | 2.4   | 35   | 10   | 5.7   | 4.3   |
| AC-FT | 265   | 139  | 114  | 98   | 77   | 73   | 111  | 1120  | 4050 | 1490 | 453   | 340   |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1979 - 1996, BY WATER YEAR (WY)

|      | 1979 | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 2.29 | 1.30 | .87  | .70  | .63  | .65  | 1.09 | 13.3 | 50.8 | 26.7 | 7.90 | 3.72 |      |      |      |      |      |      |
| MAX  | 4.96 | 3.20 | 1.85 | 1.60 | 1.34 | 1.50 | 3.39 | 34.6 | 88.5 | 90.8 | 21.5 | 7.30 |      |      |      |      |      |      |
| (WY) | 1994 | 1991 | 1996 | 1996 | 1996 | 1994 | 1994 | 1994 | 1988 | 1995 | 1995 | 1993 |      |      |      |      |      |      |
| 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 1995 CALENDAR YEAR

## FOR 1996 WATER YEAR

## WATER YEARS 1979 - 1996

|                          |         |        |      |
|--------------------------|---------|--------|------|
| ANNUAL TOTAL             | 6310.51 | 4200.2 |      |
| ANNUAL MEAN              | 17.3    | 11.5   | 9.17 |
| HIGHEST ANNUAL MEAN      |         |        | 16.9 |
| LOWEST ANNUAL MEAN       |         |        | 5.40 |
| HIGHEST DAILY MEAN       | 150     | Jul 11 | 150  |
| LOWEST DAILY MEAN        | e.43    | Mar 4  | a.20 |
| ANNUAL SEVEN-DAY MINIMUM | .44     | Feb 27 | .20  |
| INSTANTANEOUS PEAK FLOW  |         |        | 151  |
| INSTANTANEOUS PEAK STAGE |         |        | b.72 |
| ANNUAL RUNOFF (AC-FT)    | 12520   | 8330   | c.60 |
| 10 PERCENT EXCEEDS       | 62      | 32     | 29   |
| 50 PERCENT EXCEEDS       | 2.2     | 2.8    | 1.4  |
| 90 PERCENT EXCEEDS       | .52     | 1.2    | .45  |

e-Estimated.

a-Also occurred Jan 31 to Apr 4, 1979, and Feb 9 to Apr 9, 1981.

b-Maximum recorded gage height, 8.34 ft, May 17, 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 mi<sup>2</sup>.

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

GAGE.--Water-stage recorder. Elevation of gage is 9,710 ft above sea level, from topographic map. Prior to Aug. 7, 1989, at datum 0.50 ft, higher.

REMARKS.--Records good except for estimated daily discharges, which are poor. Flow regulated by Joe Wright Reservoir, 2000 ft upstream. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

| DAY   | OCT    | NOV   | DEC   | JAN   | FEB   | MAR   | APR   | MAY    | JUN    | JUL  | AUG    | SEP  |
|-------|--------|-------|-------|-------|-------|-------|-------|--------|--------|------|--------|------|
| 1     | 65     | e.80  | e.46  | e.45  | e.44  | e.45  | e.45  | e.80   | 8.1    | 62   | 29     | 1.2  |
| 2     | 66     | e.80  | e.46  | e.45  | e.43  | e.45  | e.45  | e.80   | 8.3    | 60   | 29     | 1.2  |
| 3     | 64     | e.76  | e.45  | e.45  | e.45  | e.45  | e.45  | e.78   | 9.2    | 58   | 28     | 1.2  |
| 4     | 58     | e.72  | e.45  | e.45  | e.45  | e.45  | e.45  | e.90   | 9.7    | 53   | 53     | 1.2  |
| 5     | 59     | e.68  | e.45  | e.45  | e.45  | e.45  | e.45  | e1.0   | 29     | 42   | 102    | 1.2  |
| 6     | 64     | e.66  | e.45  | e.45  | e.45  | e.45  | e.45  | e1.1   | 108    | 34   | 106    | 1.2  |
| 7     | 65     | e.63  | e.45  | e.45  | e.45  | e.45  | e.45  | e1.3   | 118    | 32   | 131    | 1.3  |
| 8     | 64     | e.61  | e.45  | e.45  | e.45  | e.45  | e.46  | e1.5   | 115    | 33   | 140    | 1.3  |
| 9     | 62     | e.60  | e.45  | e.45  | e.45  | e.45  | e.49  | e1.7   | 109    | 34   | 135    | 1.3  |
| 10    | 43     | e.60  | e.45  | e.45  | e.45  | e.45  | e.52  | e1.9   | 106    | 35   | 124    | 1.2  |
| 11    | 1.1    | e.60  | e.45  | e.45  | e.45  | e.45  | e.55  | 2.3    | 116    | 35   | 126    | 1.1  |
| 12    | 1.4    | e.60  | e.45  | e.45  | e.45  | e.45  | e.58  | 3.1    | 136    | 35   | 113    | 1.2  |
| 13    | 1.5    | e.60  | e.45  | e.45  | e.45  | e.45  | e.60  | 3.6    | 153    | 29   | 99     | 1.1  |
| 14    | 1.4    | e.60  | e.45  | e.45  | e.45  | e.45  | e.60  | 4.4    | 165    | 17   | 93     | 1.1  |
| 15    | 1.0    | e.58  | e.45  | e.45  | e.45  | e.45  | e.60  | 5.0    | 152    | 16   | 99     | 1.1  |
| 16    | .99    | e.56  | e.45  | e.45  | e.45  | e.45  | e.60  | 6.4    | 146    | 26   | 120    | 1.1  |
| 17    | .99    | e.55  | e.45  | e.45  | e.45  | e.45  | e.62  | 7.6    | 142    | 42   | 134    | 1.1  |
| 18    | e.98   | e.54  | e.45  | e.45  | e.45  | e.45  | e.64  | 8.0    | 123    | 52   | 132    | 1.1  |
| 19    | e.94   | e.53  | e.45  | e.45  | e.45  | e.45  | e.67  | 6.8    | 104    | 39   | 129    | 1.0  |
| 20    | e.93   | e.52  | e.45  | e.45  | e.45  | e.45  | e.68  | 5.6    | 110    | 35   | 122    | 1.0  |
| 21    | e.92   | e.52  | e.45  | e.45  | e.45  | e.45  | e.70  | 6.2    | 131    | 30   | 111    | 1.1  |
| 22    | e.91   | e.51  | e.45  | e.45  | e.45  | e.45  | e.70  | 7.2    | 166    | 27   | 111    | 1.2  |
| 23    | e.90   | e.50  | e.45  | e.45  | e.45  | e.45  | e.70  | 7.3    | 189    | 30   | 58     | 1.2  |
| 24    | e.90   | e.50  | e.45  | e.45  | e.45  | e.45  | e.74  | 8.2    | 159    | 34   | 56     | 1.1  |
| 25    | e.90   | e.50  | e.45  | e.45  | e.45  | e.45  | e.82  | 8.7    | 106    | 35   | 50     | 1.5  |
| 26    | e.90   | e.50  | e.45  | e.45  | e.45  | e.45  | e.90  | 7.8    | 69     | 32   | 49     | 1.2  |
| 27    | e.88   | e.50  | e.45  | e.45  | e.45  | e.45  | e.88  | 6.7    | 54     | 24   | 49     | 1.2  |
| 28    | e.86   | e.50  | e.45  | e.45  | e.45  | e.45  | e.86  | 6.7    | 50     | 21   | 48     | 1.2  |
| 29    | e.84   | e.48  | e.45  | e.45  | e.45  | e.45  | e.84  | 7.1    | 57     | 24   | 37     | 1.3  |
| 30    | e.82   | e.48  | e.45  | e.45  | ---   | e.45  | e.82  | 7.5    | 63     | 28   | 1.3    | 1.3  |
| 31    | e.80   | ---   | e.45  | e.45  | ---   | e.45  | ---   | 7.8    | ---    | 30   | 1.2    | ---  |
| TOTAL | 630.86 | 17.53 | 13.97 | 13.95 | 13.02 | 13.95 | 18.72 | 145.78 | 3011.3 | 1084 | 2615.5 | 35.5 |
| MEAN  | 20.4   | .58   | .45   | .45   | .45   | .45   | .62   | 4.70   | 100    | 35.0 | 84.4   | 1.18 |
| MAX   | 66     | .80   | .46   | .45   | .45   | .45   | .90   | 8.7    | 189    | 62   | 140    | 1.5  |
| MIN   | .80    | .48   | .45   | .45   | .43   | .45   | .45   | .78    | 8.1    | 16   | 1.2    | 1.0  |
| AC-FT | 1250   | 35    | 28    | 28    | 26    | 28    | 37    | 289    | 5970   | 2150 | 5190   | 70   |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1979 - 1996, BY WATER YEAR (WY)

|      | 1979 | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 4.31 | .99  | .61  | .52  | .46  | .44  | .53  | 10.0 | 62.4 | 38.1 | 30.6 | 28.2 |      |      |      |      |      |      |
| MAX  | 20.8 | 3.01 | 1.96 | 1.40 | 1.30 | 1.38 | .79  | 32.1 | 100  | 90.8 | 84.7 | 61.8 |      |      |      |      |      |      |
| (WY) | 1995 | 1982 | 1983 | 1983 | 1983 | 1983 | 1994 | 1988 | 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 1995 CALENDAR YEAR

FOR 1996 WATER YEAR

WATER YEARS 1979 - 1996

|                          |         |         |       |
|--------------------------|---------|---------|-------|
| ANNUAL TOTAL             | 7574.43 | 7614.08 |       |
| ANNUAL MEAN              | 20.8    | 20.8    | 14.8  |
| HIGHEST ANNUAL MEAN      |         |         | 23.9  |
| LOWEST ANNUAL MEAN       |         |         | 3.69  |
| HIGHEST DAILY MEAN       | 144     | 189     | 245   |
| LOWEST DAILY MEAN        | .21     | e.43    | a.17  |
| ANNUAL SEVEN-DAY MINIMUM | .22     | .45     | .18   |
| INSTANTANEOUS PEAK FLOW  |         | 206     | 284   |
| INSTANTANEOUS PEAK STAGE |         | 2.41    | 2.71  |
| ANNUAL RUNOFF (AC-FT)    | 15020   | 15100   | 10710 |
| 10 PERCENT EXCEEDS       | 68      | 99      | 55    |
| 50 PERCENT EXCEEDS       | .60     | .83     | .96   |
| 90 PERCENT EXCEEDS       | .22     | .45     | .32   |

e-Estimated.

a-Also occurred Apr 4, 1991.

**06751490 NORTH FORK CACHE LA POUDE 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 (revised) downstream from bridge on Colorado State Highway 200, 2.0 mi west of Livermore, and 2.9 mi downstream from Stonewall Creek.

DRAINAGE AREA.--539 mi<sup>2</sup>.

**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 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

| DAY   | OCT  | NOV  | DEC   | JAN   | FEB  | MAR  | APR  | MAY   | JUN   | JUL  | AUG   | SEP   |
|-------|------|------|-------|-------|------|------|------|-------|-------|------|-------|-------|
| 1     | 14   | 12   | 11    | e9.1  | e66  | e38  | 23   | 36    | 357   | 70   | 10    | 7.3   |
| 2     | 14   | e13  | 11    | e9.1  | e66  | e38  | 24   | 31    | 345   | 41   | 10    | 7.3   |
| 3     | 14   | e13  | 11    | e9.2  | e66  | e38  | 23   | 24    | 334   | 27   | 9.8   | 7.1   |
| 4     | 13   | e15  | 10    | e9.3  | e66  | e38  | 24   | 21    | 316   | 25   | 8.5   | 7.3   |
| 5     | 12   | e15  | 10    | e9.3  | e66  | e38  | 24   | 17    | 302   | 23   | 7.8   | 7.5   |
| 6     | 12   | 17   | 10    | e9.3  | e66  | e38  | 28   | 15    | 274   | 22   | 6.9   | 8.2   |
| 7     | 12   | 15   | 10    | e9.3  | e66  | e34  | 32   | 21    | 249   | 21   | 6.7   | 8.6   |
| 8     | 12   | 13   | 9.2   | e9.4  | e66  | e37  | 37   | 34    | 238   | 19   | 6.3   | 7.9   |
| 9     | 12   | 12   | e10   | e9.4  | e66  | e43  | 38   | 45    | 233   | 19   | 6.2   | 7.4   |
| 10    | 12   | e11  | 10    | e9.4  | e66  | 44   | 39   | 70    | 219   | 27   | 6.3   | 7.7   |
| 11    | 12   | 11   | 11    | e9.4  | e66  | 46   | 43   | 77    | 205   | 22   | 5.8   | 8.1   |
| 12    | 12   | 12   | 11    | e9.4  | e66  | 48   | 58   | 75    | 192   | 19   | 5.8   | 8.6   |
| 13    | 11   | 13   | 11    | e9.4  | e49  | 51   | 74   | 99    | 193   | 18   | 5.9   | 8.8   |
| 14    | 11   | 13   | 10    | e14   | e35  | 56   | 71   | 124   | 183   | 16   | 6.4   | 8.7   |
| 15    | 11   | 13   | 9.4   | e29   | e32  | 53   | 68   | 151   | 193   | 16   | 6.0   | 8.4   |
| 16    | 11   | 13   | 9.8   | e33   | e30  | 54   | 74   | 183   | 285   | 16   | 6.3   | 8.3   |
| 17    | 11   | 13   | 10    | e30   | e32  | 53   | 76   | 205   | 236   | 15   | 7.3   | 8.9   |
| 18    | 11   | 13   | e10   | e30   | e33  | 49   | 72   | 224   | 192   | 14   | 6.9   | 10    |
| 19    | 11   | 13   | e10   | e30   | e33  | 44   | 84   | 238   | 156   | 14   | 6.6   | 12    |
| 20    | 11   | 12   | e10   | e34   | e33  | 40   | 99   | 244   | 135   | 15   | 6.7   | 11    |
| 21    | 11   | 11   | e10   | e38   | e35  | 52   | 98   | 220   | 115   | 13   | 6.6   | 11    |
| 22    | 11   | 11   | e10   | e41   | e35  | 47   | 97   | 195   | 143   | 12   | 7.7   | 11    |
| 23    | 11   | 11   | e10   | e41   | e35  | 16   | 94   | 214   | 153   | 11   | 7.4   | 11    |
| 24    | 11   | 11   | e9.6  | e42   | e35  | 15   | 93   | 258   | 129   | 11   | 7.5   | 11    |
| 25    | 12   | 11   | e9.4  | e45   | e38  | e30  | 109  | 332   | 105   | 11   | 7.1   | 30    |
| 26    | 12   | 11   | e9.2  | e47   | e38  | e55  | 119  | 454   | 97    | 11   | 6.6   | 46    |
| 27    | 11   | 11   | e9.1  | e50   | e38  | 33   | 100  | 614   | 95    | 11   | 7.2   | 45    |
| 28    | 12   | 10   | e9.1  | e53   | e38  | 18   | 95   | 534   | 95    | 11   | 7.9   | 12    |
| 29    | 12   | 11   | e8.9  | e56   | e38  | 19   | 75   | 479   | 96    | 12   | 8.0   | 8.1   |
| 30    | 12   | 11   | e8.9  | e59   | ---  | 20   | 49   | 435   | 83    | 11   | 8.2   | 7.1   |
| 31    | 12   | ---  | e9.0  | e62   | ---  | 21   | ---  | 392   | ---   | 11   | 7.6   | ---   |
| TOTAL | 366  | 371  | 307.6 | 855.0 | 1399 | 1206 | 1940 | 6061  | 5948  | 584  | 224.0 | 361.3 |
| MEAN  | 11.8 | 12.4 | 9.92  | 27.6  | 48.2 | 38.9 | 64.7 | 196   | 198   | 18.8 | 7.23  | 12.0  |
| MAX   | 14   | 17   | 11    | 62    | 66   | 56   | 119  | 614   | 357   | 70   | 10    | 46    |
| MIN   | 11   | 10   | 8.9   | 9.1   | 30   | 15   | 23   | 15    | 83    | 11   | 5.8   | 7.1   |
| AC-FT | 726  | 736  | 610   | 1700  | 2770 | 2390 | 3850 | 12020 | 11800 | 1160 | 444   | 717   |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 1996, BY WATER YEAR (WY)

|      | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 |      |      |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 9.96 | 10.4 | 7.96 | 8.65 | 11.6 | 18.3 | 52.7 | 129  | 218  | 33.1 | 16.3 | 9.49 |
| MAX  | 17.8 | 14.7 | 11.6 | 27.6 | 48.2 | 55.5 | 244  | 365  | 857  | 133  | 52.5 | 20.3 |
| (WY) | 1991 | 1987 | 1994 | 1996 | 1996 | 1990 | 1990 | 1995 | 1995 | 1995 | 1991 | 1991 |
| 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 1995 CALENDAR YEAR

## FOR 1996 WATER YEAR

## WATER YEARS 1987 - 1996

|                          |         |         |       |
|--------------------------|---------|---------|-------|
| ANNUAL TOTAL             | 43469.1 | 19622.9 |       |
| ANNUAL MEAN              | 119     | 53.6    | 43.7  |
| HIGHEST ANNUAL MEAN      |         |         | 118   |
| LOWEST ANNUAL MEAN       |         |         | 8.06  |
| HIGHEST DAILY MEAN       | 1910    | May 30  | 1910  |
| LOWEST DAILY MEAN        | e3.8    | Jan 4   | a5.8  |
| ANNUAL SEVEN-DAY MINIMUM | 3.9     | Jan 1   | 6.1   |
| INSTANTANEOUS PEAK FLOW  |         |         | 651   |
| INSTANTANEOUS PEAK STAGE |         |         | 10.10 |
| ANNUAL RUNOFF (AC-FT)    | 86220   | 38920   | 31690 |
| 10 PERCENT EXCEEDS       | 444     | 152     | 84    |
| 50 PERCENT EXCEEDS       | 11      | 16      | 10    |
| 90 PERCENT EXCEEDS       | 4.2     | 8.1     | 4.7   |

e-Estimated.

a-Also occurred Aug 12.

b-Also occurred Sep 3, 1988, and Apr 27, 1989.

06751490 NORTH FORK CACHE LA POUDE RIVER AT LIVERMORE, CO--Continued

WATER-QUALITY RECORDS

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DATE      | TIME | DIS-CHARGE, CUBIC FEET PER SECOND | SPE-CIFIC CON-DUCT-ANCE (US/CM) | PH (STAND-ARD UNITS) | TEMPER-ATURE WATER (DEG C) | OXYGEN, DIS-SOLVED (MG/L) | HARD-NESS TOTAL (MG/L AS CACO3) | CALCIUM DIS-SOLVED (MG/L AS CA) | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) | SODIUM, DIS-SOLVED (MG/L AS NA) | SODIUM PERCENT |
|-----------|------|-----------------------------------|---------------------------------|----------------------|----------------------------|---------------------------|---------------------------------|---------------------------------|-------------------------------------|---------------------------------|----------------|
| OCT 25... | 1033 | 12                                | 405                             | 8.8                  | 3.0                        | 10.6                      | 180                             | 50                              | 13                                  | 14                              | 14             |
| NOV 29... | 1120 | 12                                | 362                             | 8.6                  | 3.0                        | 11.6                      | 160                             | 44                              | 12                                  | 14                              | 16             |
| JAN 10... | 1130 | 9.4                               | 349                             | 8.3                  | 0.0                        | 12.4                      | 150                             | 43                              | 11                                  | 14                              | 16             |
| FEB 13... | 1049 | 57                                | 197                             | 8.6                  | 0.0                        | 11.7                      | 83                              | 25                              | 5.0                                 | 6.8                             | 15             |
| MAR 27... | 1052 | 39                                | 200                             | 8.2                  | 2.0                        | 11.7                      | 82                              | 24                              | 5.4                                 | 7.1                             | 16             |
| APR 16... | 1019 | 75                                | 171                             | 8.6                  | 6.5                        | 10.6                      | 70                              | 21                              | 4.3                                 | 7.2                             | 18             |
| MAY 21... | 1018 | 232                               | 111                             | 8.0                  | 11.5                       | 8.0                       | 44                              | 13                              | 2.7                                 | 4.5                             | 18             |
| JUN 04... | 1047 | 315                               | 97                              | 8.1                  | 13.0                       | 8.8                       | 35                              | 10                              | 2.3                                 | 4.1                             | 20             |
| JUL 09... | 0925 | 16                                | 382                             | 8.4                  | 17.0                       | 7.6                       | 170                             | 49                              | 12                                  | 13                              | 14             |
| AUG 14... | 1005 | 6.5                               | 422                             | 8.3                  | 17.5                       | 8.6                       | 190                             | 52                              | 14                                  | 14                              | 14             |
| SEP 19... | 1004 | 12                                | 423                             | 8.5                  | 9.0                        | 11.5                      | 190                             | 52                              | 15                                  | 12                              | 12             |

| DATE      | SODIUM AD-SORPTION RATIO | POTAS-SIUM, DIS-SOLVED (MG/L AS K) | ALKA-LINITY LAB (MG/L AS CACO3) | SULFATE DIS-SOLVED (MG/L AS SO4) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) | SILICA, DIS-SOLVED (MG/L AS SIO2) | SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) | SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) | SOLIDS, DIS-SOLVED (TONS PER AC-FT) |
|-----------|--------------------------|------------------------------------|---------------------------------|----------------------------------|------------------------------------|-----------------------------------|-----------------------------------|---|---|-------------------------------------|
| OCT 25... | 0.5                      | 1.9                                | 188                             | 12                               | 9.4                                | 1.1                               | 16                                | 244   | 231   | 0.33                                |
| NOV 29... | 0.5                      | 1.4                                | 165                             | 13                               | 9.8                                | 1.2                               | 13                                | 206   | 208   | 0.28                                |
| JAN 10... | 0.5                      | 1.5                                | 154                             | 14                               | 10                                 | 1.3                               | 13                                | 206   | 201   | 0.28                                |
| FEB 13... | 0.3                      | 1.2                                | 84                              | 9.8                              | 3.7                                | 1.1                               | 13                                | 116   | 117   | 0.16                                |
| MAR 27... | 0.3                      | 1.2                                | 85                              | 10                               | 4.1                                | 1.0                               | 13                                | 120   | 118   | 0.16                                |
| APR 16... | 0.4                      | 1.1                                | 69                              | 8.6                              | 4.2                                | 0.90                              | 13                                | 102   | 102   | 0.14                                |
| MAY 21... | 0.3                      | 1.0                                | 46                              | 4.7                              | 2.1                                | 0.50                              | 13                                | 78  | 70  | 0.11                                |
| JUN 04... | 0.3                      | 0.70                               | 41                              | 4.0                              | 1.7                                | 0.50                              | 13                                | 104   | 62  | 0.14                                |
| JUL 09... | 0.4                      | 1.7                                | 181                             | 10                               | 7.1                                | 1.2                               | 10                                | 218   | 213   | 0.30                                |
| AUG 14... | 0.4                      | 2.0                                | 206                             | 13                               | 6.9                                | 1.1                               | 14                                | 246   | 242   | 0.33                                |
| SEP 19... | 0.4                      | 2.0                                | 205                             | 13                               | 7.1                                | 1.1                               | 14                                | 118   | 240   | 0.16                                |

## PLATTE RIVER BASIN

## 06751490 NORTH FORK CACHE LA POUDE RIVER AT LIVERMORE, CO--Continued

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DATE      | SOLIDS,<br>DIS-<br>SOLVED<br>(TONS<br>PER<br>DAY) | NITRO-<br>GEN,<br>NITRITE<br>DIS-<br>SOLVED<br>(MG/L<br>AS N) | NITRO-<br>GEN,<br>NO2+NO3<br>DIS-<br>SOLVED<br>(MG/L<br>AS N) | NITRO-<br>GEN,<br>AMMONIA<br>DIS-<br>SOLVED<br>(MG/L<br>AS N) | NITRO-<br>GEN,<br>ORGANIC<br>TOTAL<br>(MG/L<br>AS N) | NITRO-<br>GEN,AM-<br>MONIA +<br>ORGANIC<br>TOTAL<br>(MG/L<br>AS N) | NITRO-<br>GEN,<br>TOTAL<br>(MG/L<br>AS N) | PHOS-<br>PHORUS<br>TOTAL<br>(MG/L<br>AS P) | PHOS-<br>PHORUS<br>DIS-<br>SOLVED<br>(MG/L<br>AS P) | PHOS-<br>PHORUS<br>ORTHO,<br>DIS-<br>SOLVED<br>(MG/L<br>AS P) |
|-----------|---|---|---|---|--|--|---|--|---|---|
| OCT 25... | 7.71  | <0.01   | <0.05   | <0.02   | --   | <0.20  | --  | <0.01                                      | <0.01   | <0.01   |
| NOV 29... | 6.51  | <0.01   | <0.05   | <0.02   | --   | <0.20  | --  | <0.01                                      | <0.01   | <0.01   |
| JAN 10... | 5.22  | <0.01   | 0.19  | <0.02   | --   | <0.20  | --  | 0.01                                       | <0.01   | <0.01   |
| FEB 13... | 17.9  | <0.01   | 0.25  | <0.02   | 0.20   | 0.20   | 0.45                                      | 0.03                                       | <0.01   | <0.01   |
| MAR 27... | 12.5  | <0.01   | 0.20  | <0.02   | 0.20   | 0.20   | 0.40                                      | 0.02                                       | 0.02  | <0.01   |
| APR 16... | 20.7  | <0.01   | 0.11  | <0.02   | 0.30   | 0.30   | 0.41                                      | 0.02                                       | <0.01   | <0.01   |
| MAY 21... | 48.9  | <0.01   | 0.06  | <0.02   | 0.40   | 0.40   | 0.46                                      | 0.02                                       | <0.01   | <0.01   |
| JUN 04... | 88.5  | <0.01   | 0.09  | 0.02  | 0.28   | 0.30   | 0.39                                      | 0.03                                       | 0.03  | <0.01   |
| JUL 09... | 9.18  | <0.01   | <0.05   | 0.03  | --   | <0.20  | --  | <0.01                                      | <0.01   | <0.01   |
| AUG 14... | 4.34  | 0.01  | 0.07  | 0.03  | 0.37   | 0.40   | 0.47                                      | 0.02                                       | <0.01   | 0.02  |
| SEP 19... | 3.92  | <0.01   | 0.08  | 0.02  | 0.18   | 0.20   | 0.28                                      | 0.01                                       | <0.01   | <0.01   |

| DATE      | BARIUM,<br>DIS-<br>SOLVED<br>(UG/L<br>AS BA) | BERYL-<br>LIUM,<br>DIS-<br>SOLVED<br>(UG/L<br>AS BE) | BORON,<br>DIS-<br>SOLVED<br>(UG/L<br>AS B) | CADMIUM<br>DIS-<br>SOLVED<br>(UG/L<br>AS CD) | CHRO-<br>MIUM,<br>DIS-<br>SOLVED<br>(UG/L<br>AS CR) | COBALT,<br>DIS-<br>SOLVED<br>(UG/L<br>AS CO) | COPPER,<br>DIS-<br>SOLVED<br>(UG/L<br>AS CU) | IRON,<br>DIS-<br>SOLVED<br>(UG/L<br>AS FE) | LEAD,<br>DIS-<br>SOLVED<br>(UG/L<br>AS PB) |
|-----------|--|--|--|--|---|--|--|--|--|
| OCT 25... | 120  | <0.5   | 40   | <1   | <5  | <3   | <10  | 23   | <10  |
| NOV 29... | 100  | <0.5   | 50   | <1   | <5  | <3   | <10  | 54   | <10  |
| JAN 10... | 100  | <0.5   | 30   | 1  | <5  | <3   | <10  | 24   | <10  |
| FEB 13... | 52   | <0.5   | 30   | <1   | <5  | <3   | <10  | 15   | <10  |
| MAR 27... | 50   | <0.5   | 20   | <1   | <5  | <3   | <10  | 40   | <10  |
| APR 16... | 47   | <0.5   | --   | <1   | <5  | <3   | <10  | 55   | <10  |
| MAY 21... | 32   | <0.5   | 10   | <1   | <5  | <3   | <10  | 120  | <10  |
| JUN 04... | 28   | <0.5   | 10   | <1   | <5  | <3   | <10  | 140  | <10  |
| JUL 09... | 110  | <0.5   | 50   | <1   | <5  | <3   | <10  | 53   | <10  |
| AUG 14... | 130  | 1  | 50   | <1   | <5  | 4  | <10  | 38   | <10  |
| SEP 19... | 120  | <0.5   | 40   | <1   | <5  | 3  | <10  | 26   | 10   |

06751490 NORTH FORK CACHE LA POUFRE RIVER AT LIVERMORE, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DATE         | LITHIUM<br>DIS-<br>SOLVED<br>(UG/L<br>AS LI) | MANGA-<br>NESE,<br>DIS-<br>SOLVED<br>(UG/L<br>AS MN) | MOLYB-<br>DENUM,<br>DIS-<br>SOLVED<br>(UG/L<br>AS MO) | NICKEL,<br>DIS-<br>SOLVED<br>(UG/L<br>AS NI) | SILVER,<br>DIS-<br>SOLVED<br>(UG/L<br>AS AG) | STRON-<br>TIUM,<br>DIS-<br>SOLVED<br>(UG/L<br>AS SR) | VANA-<br>DIUM,<br>DIS-<br>SOLVED<br>(UG/L<br>AS V) | ZINC,<br>DIS-<br>SOLVED<br>(UG/L<br>AS ZN) |
|--------------|--|--|---|--|--|--|--|--|
| OCT<br>25... | 14   | 11   | 20  | <10  | <1   | 320  | <6   | 8  |
| NOV<br>29... | 14   | 8  | <10   | <10  | <1   | 280  | <6   | <3   |
| JAN<br>10... | 12   | 7  | <10   | <10  | <1   | 270  | <6   | <3   |
| FEB<br>13... | 5  | 5  | <10   | <10  | <1   | 120  | <6   | 4  |
| MAR<br>27... | 5  | 7  | <10   | <10  | <1   | 120  | <6   | 3  |
| APR<br>16... | 6  | 10   | <10   | <10  | <1   | 110  | <6   | <3   |
| MAY<br>21... | <4   | 8  | <10   | <10  | <1   | 72   | <6   | 11   |
| JUN<br>04... | <4   | 8  | <10   | <10  | <1   | 61   | <6   | <3   |
| JUL<br>09... | 9  | 20   | 10  | <10  | <1   | 300  | <6   | <3   |
| AUG<br>14... | 14   | 16   | <10   | <10  | <1   | 350  | <6   | 11   |
| SEP<br>19... | 15   | 11   | <10   | <10  | <1   | 320  | <6   | <3   |

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DATE         | TIME | DIS-<br>CHARGE,<br>INST.<br>CUBIC<br>FEET<br>PER<br>SECOND | SEDI-<br>MENT,<br>DIS-<br>CHARGE,<br>SUS-<br>PENDEDED<br>(MG/L) | SEDI-<br>MENT,<br>DIS-<br>CHARGE,<br>SUS-<br>PENDEDED<br>(T/DAY) |
|--------------|------|--|---|--|
| OCT<br>25... | 1055 | 12   | 44  | 1.4  |
| NOV<br>29... | 1100 | 12   | 34  | 1.1  |
| JAN<br>10... | 1117 | 9.4  | 16  | 0.41   |
| FEB<br>13... | 1030 | 70   | 15  | 2.8  |
| MAR<br>27... | 1034 | 39   | 4   | 0.42   |
| APR<br>16... | 1005 | 75   | 13  | 2.6  |
| MAY<br>21... | 1205 | 232  | 18  | 11   |
| JUN<br>04... | 1040 | 315  | 16  | 13   |
| JUL<br>09... | 1059 | 16   | 5   | 0.22   |
| AUG<br>14... | 0944 | 6.8  | 19  | 0.35   |
| SEP<br>19... | 0948 | 12   | 10  | 0.33   |

**06752000 CACHE LA POUVRE RIVER AT MOUTH OF CANYON, NEAR FORT COLLINS, CO**

LOCATION.--Lat 40°39'52", long 105°13'26", in NW¼ sec.15, T.8 N., R.70 W., Larimer County, Hydrologic Unit 10190007, on left bank at mouth of canyon, 0.5 mi downstream from headgate of Poudre Valley Canal, 1.2 mi upstream from Lewstone Creek, and 9.3 mi northwest of courthouse in Fort Collins.

DRAINAGE AREA.--1,056 mi<sup>2</sup>.

PERIOD OF RECORD.--Streamflow records, June to August 1881, May to July 1883, October 1883 to current year. Monthly discharge only for some periods, published in WSP 1310. Records for March 23 to April 30 and July 4 to August 20, 1883, published in WSP 9, have been found to be unreliable and should not be used. Prior to 1902, published as Cache la Poudre Creek or River at or near Fort Collins. Water-quality data available, June 1962 to October 1965, October 1971 to September 1982, and April 1993 to September 1995.

REVISED RECORDS.--WSP 1310: 1885-87, 1889, 1892, 1894-96, 1934. WSP 1730: 1960, drainage area. See also PERIOD OF RECORD.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 5,220 ft above sea level, from topographic map.

REMARKS.--Records good except for estimated daily discharges, which are fair. Natural flow of stream affected by transbasin and transmountain diversions (see elsewhere in this report), diversions upstream from station for irrigation of about 50,000 acres, most of which is downstream from station, 86,020 acre-ft diverted during current year, and diversions for municipal use, 15,000 acre-ft diverted 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 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

| DAY   | OCT  | NOV  | DEC  | JAN  | FEB  | MAR  | APR  | MAY   | JUN    | JUL   | AUG   | SEP  |
|-------|------|------|------|------|------|------|------|-------|--------|-------|-------|------|
| 1     | 89   | 89   | 65   | e37  | e58  | 76   | 55   | 161   | 978    | 1140  | 611   | 147  |
| 2     | 81   | 63   | 59   | e37  | e65  | 74   | 46   | 177   | 954    | 1010  | 574   | 104  |
| 3     | 78   | e64  | 56   | e50  | e67  | 80   | 45   | 151   | 1070   | 986   | 567   | 88   |
| 4     | 79   | e76  | 48   | e43  | e70  | 76   | 45   | 159   | 1240   | 915   | 536   | 90   |
| 5     | 83   | e75  | 55   | e40  | e77  | 79   | 42   | 205   | 1550   | 909   | 502   | 85   |
| 6     | 81   | e67  | 60   | e51  | e73  | 72   | 48   | 253   | 1920   | 859   | 485   | 85   |
| 7     | 71   | e60  | 57   | e30  | e77  | 68   | 51   | 319   | 1850   | 840   | 483   | 126  |
| 8     | 76   | e66  | 53   | e51  | e78  | 74   | 70   | 295   | 1850   | 710   | 469   | 169  |
| 9     | 83   | 69   | 67   | e42  | e76  | 81   | 92   | 372   | 1850   | 640   | 463   | 190  |
| 10    | 74   | 72   | 56   | e44  | e72  | 79   | 109  | 413   | 2050   | 531   | 468   | 201  |
| 11    | 66   | 57   | 80   | e41  | e65  | 81   | 127  | 477   | 2190   | 493   | 444   | 213  |
| 12    | 63   | 63   | 60   | e42  | e60  | 83   | 138  | 618   | 2240   | 523   | 431   | 198  |
| 13    | 73   | 74   | 59   | e61  | e63  | 83   | 136  | 824   | 2300   | 681   | 414   | 178  |
| 14    | 71   | 57   | 42   | e52  | 77   | 89   | 167  | 959   | 2130   | 653   | 403   | 126  |
| 15    | 55   | 53   | 29   | e56  | 75   | 77   | 195  | 1140  | 2120   | 554   | 401   | 108  |
| 16    | 60   | 55   | 29   | e56  | 76   | 81   | 193  | 1420  | 2360   | 458   | 384   | 99   |
| 17    | 61   | 62   | 37   | e53  | 79   | 80   | 194  | 1720  | 2140   | 453   | 336   | 95   |
| 18    | 60   | 59   | 44   | e41  | 81   | 85   | 194  | 1410  | 1950   | 606   | 319   | 75   |
| 19    | 56   | 57   | 44   | e23  | 80   | 97   | 189  | 1780  | 1900   | 862   | 333   | 71   |
| 20    | 59   | 56   | 39   | e55  | 80   | 105  | 184  | 1630  | 1840   | 730   | 323   | 60   |
| 21    | 47   | 53   | 52   | e54  | 81   | 106  | 195  | 1360  | 1880   | 641   | 324   | 67   |
| 22    | 50   | 49   | 57   | e68  | 82   | 75   | 196  | 1340  | 2350   | 593   | 318   | 76   |
| 23    | 56   | 56   | e24  | e44  | 76   | 81   | 160  | 1680  | 2160   | 629   | 333   | 129  |
| 24    | 42   | 53   | e24  | e62  | 67   | 84   | 139  | 1480  | 1820   | 641   | 315   | 125  |
| 25    | 43   | 52   | e21  | e57  | 78   | 60   | 192  | 1640  | 1490   | 591   | 302   | 109  |
| 26    | 54   | 53   | e23  | e51  | 74   | 52   | 255  | 1660  | 1280   | 600   | 303   | 134  |
| 27    | 50   | 57   | e23  | e47  | 66   | 72   | 253  | 1260  | 1440   | 586   | 304   | 111  |
| 28    | 43   | 41   | e26  | e55  | 66   | 68   | 246  | 1010  | 1600   | 594   | 347   | 72   |
| 29    | 48   | 36   | e22  | e64  | e68  | 67   | 215  | 986   | 1440   | 652   | 338   | 73   |
| 30    | 50   | 72   | e21  | e59  | ---  | 69   | 163  | 1110  | 1340   | 690   | 267   | 83   |
| 31    | 47   | ---  | e23  | e41  | ---  | 68   | ---  | 1220  | ---    | 641   | 200   | ---  |
| TOTAL | 1949 | 1816 | 1355 | 1507 | 2107 | 2422 | 4334 | 29229 | 53282  | 21411 | 12297 | 3487 |
| MEAN  | 62.9 | 60.5 | 43.7 | 48.6 | 72.7 | 78.1 | 144  | 943   | 1776   | 691   | 397   | 116  |
| MAX   | 89   | 89   | 80   | 68   | 82   | 106  | 255  | 1780  | 2360   | 1140  | 611   | 213  |
| MIN   | 42   | 36   | 21   | 23   | 58   | 52   | 42   | 151   | 954    | 453   | 200   | 60   |
| AC-FT | 3870 | 3600 | 2690 | 2990 | 4180 | 4800 | 8600 | 57980 | 105700 | 42470 | 24390 | 6920 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1881 - 1996, BY WATER YEAR (WY)

|      | 1881 | 1882 | 1883 | 1884 | 1885 | 1886 | 1887 | 1888 | 1889 | 1890 | 1891 | 1892 | 1893 | 1894 | 1895 | 1896 | 1897 | 1898 | 1899 | 1900 | 1901 | 1902 | 1903 | 1904 | 1905 | 1906 | 1907 | 1908 | 1909 | 1910 | 1911 | 1912 | 1913 | 1914 | 1915 | 1916 | 1917 | 1918 | 1919 | 1920 | 1921 | 1922 | 1923 | 1924 | 1925 | 1926 | 1927 | 1928 | 1929 | 1930 | 1931 | 1932 | 1933 | 1934 | 1935 | 1936 | 1937 | 1938 | 1939 | 1940 | 1941 | 1942 | 1943 | 1944 | 1945 | 1946 | 1947 | 1948 | 1949 | 1950 | 1951 | 1952 | 1953 | 1954 | 1955 | 1956 | 1957 | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 | 1970 | 1971 | 1972 | 1973 | 1974 | 1975 | 1976 | 1977 | 1978 | 1979 | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 90.5 | 60.8 | 44.4 | 40.4 | 42.8 | 53.0 | 149  | 931  | 1843 | 791  | 328  | 165  |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| MAX  | 270  | 148  | 125  | 158  | 138  | 149  | 743  | 2807 | 4811 | 2225 | 792  | 443  |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| (WY) | 1943 | 1916 | 1984 | 1984 | 1984 | 1980 | 1900 | 1900 | 1884 | 1983 | 1884 | 1938 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| MIN  | 21.7 | 8.14 | 12.6 | 9.00 | 10.2 | 10.6 | 19.5 | 204  | 442  | 158  | 61.2 | 37.3 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| (WY) | 1995 | 1939 | 1965 | 1930 | 1967 | 1939 | 1991 | 1977 | 1934 | 1966 | 1954 | 1962 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |

SUMMARY STATISTICS

|                          | FOR 1995 CALENDAR YEAR |        | FOR 1996 WATER YEAR |        | WATER YEARS 1881 - 1996 |             |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|-------------|
| ANNUAL TOTAL             | 157971                 |        | 135196              |        |                         |             |
| ANNUAL MEAN              | 433                    |        | 369                 |        |                         |             |
| HIGHEST ANNUAL MEAN      |                        |        |                     |        | 891                     | 1983        |
| LOWEST ANNUAL MEAN       |                        |        |                     |        | 129                     | 1977        |
| HIGHEST DAILY MEAN       | 4000                   | Jun 18 | 2360                | Jun 16 | 7550                    | Jun 16 1923 |
| LOWEST DAILY MEAN        | 16                     | Mar 30 | e, a 21             | Dec 25 | b 1.6                   | Nov 20 1948 |
| ANNUAL SEVEN-DAY MINIMUM | 19                     | Jan 19 | 23                  | Dec 25 | c 3.9                   | Nov 7 1938  |
| INSTANTANEOUS PEAK FLOW  |                        |        | 2830                | Jun 13 | c 21000                 | Jun 9 1891  |
| INSTANTANEOUS PEAK STAGE |                        |        | 5.73                | Jun 13 |                         |             |
| ANNUAL RUNOFF (AC-FT)    | 313300                 |        | 268200              |        |                         |             |
| 10 PERCENT EXCEEDS       | 1780                   |        | 1300                |        | 1200                    |             |
| 50 PERCENT EXCEEDS       | 59                     |        | 81                  |        | 90                      |             |
| 90 PERCENT EXCEEDS       | 22                     |        | 45                  |        | 24                      |             |

e-Estimated.

a-Also occurred Dec 30.

b-Also occurred Nov 28, 1948, caused by diversion of Poudre Valley Canal, 0.5 mi upstream.

c-Maximum discharge determined, caused by failure of Chambers Lake Dam, from reports of State Engineers Office. A greater discharge, but not determined, occurred May 20, 1904.

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 NE<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec.3, T.7 N., R.69 W., Larimer County, Hydrologic Unit 10190007, at Shields Street bridge, 0.8 mi downstream from Larimer-Weld Canal, and 1.0 mi northwest of Fort Collins.

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DATE      | TIME | DIS-CHARGE, INST. CUBIC FEET PER SECOND | SPE-CIFIC CON-DUCT-ANCE (US/CM) | PH (STAND-ARD UNITS) | TEMPER-ATURE WATER (DEG C) | OXYGEN, DIS-SOLVED (MG/L) | HARD-NESS TOTAL (MG/L AS CACO3) | CALCIUM DIS-SOLVED (MG/L AS CA) | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) | SODIUM, DIS-SOLVED (MG/L AS NA) | ALKA-LINITY LAB (MG/L AS CACO3) |
|-----------|------|---|---------------------------------|----------------------|----------------------------|---------------------------|---------------------------------|---------------------------------|-------------------------------------|---------------------------------|---------------------------------|
| OCT 25... | 1300 | 3.3                                     | 419                             | 8.7                  | 10.0                       | 10.6                      | 200                             | 56                              | 14                                  | --                              | 161                             |
| NOV 29... | 1427 | 18                                      | 353                             | 8.5                  | 6.5                        | 12.4                      | 170                             | 50                              | 12                                  | --                              | 131                             |
| JAN 10... | 1507 | 45                                      | 282                             | 8.1                  | 2.0                        | 11.9                      | 130                             | 37                              | 8.9                                 | 8.5                             | 100                             |
| FEB 13... | 1411 | 57                                      | 322                             | 8.7                  | 4.5                        | 12.0                      | 140                             | 41                              | 10                                  | --                              | 125                             |
| MAR 27... | 1352 | 56                                      | 245                             | 8.2                  | 6.5                        | 10.6                      | 110                             | 33                              | 7.2                                 | --                              | 90                              |
| APR 16... | 1300 | 12                                      | 202                             | 8.9                  | 13.5                       | 11.2                      | 86                              | 25                              | 5.8                                 | --                              | 78                              |
| MAY 21... | 1429 | 344                                     | 53                              | 7.9                  | 12.0                       | 10.0                      | 21                              | 6.2                             | 1.3                                 | --                              | 20                              |
| JUN 27... | 1244 | 631                                     | 48                              | 8.0                  | 14.5                       | 9.6                       | 18                              | 5.4                             | 1.2                                 | --                              | 19                              |
| JUL 09... | 1307 | 509                                     | 64                              | 8.0                  | 12.5                       | 9.1                       | 25                              | 7.4                             | 1.5                                 | 2.1                             | 26                              |
| AUG 14... | 1326 | 60                                      | 113                             | 8.4                  | 18.5                       | 8.2                       | 42                              | 12                              | 3.0                                 | --                              | 43                              |
| SEP 19... | 1252 | 26                                      | 284                             | 8.8                  | 14.5                       | 10.8                      | 130                             | 38                              | 8.3                                 | --                              | 93                              |

| DATE      | SULFATE DIS-SOLVED (MG/L AS SO4) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) | SILICA, DIS-SOLVED (MG/L AS SIO2) | SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) | NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) | NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) | NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) | PHOS-PHORUS DIS-SOLVED (MG/L AS P) | PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) |
|-----------|----------------------------------|------------------------------------|-----------------------------------|-----------------------------------|---|---|---|---|------------------------------------|---|
| OCT 25... | --                               | --                                 | --                                | --                                | --  | 0.01                                      | 0.79                                      | <0.02                                     | <0.01                              | <0.01                                     |
| NOV 29... | --                               | --                                 | --                                | --                                | --  | 0.02                                      | 0.58                                      | <0.02                                     | <0.01                              | <0.01                                     |
| JAN 10... | 35                               | 3.8                                | 0.4                               | 10                                | 172   | <0.01                                     | 0.22                                      | <0.02                                     | <0.01                              | <0.01                                     |
| FEB 13... | --                               | --                                 | --                                | --                                | --  | <0.01                                     | 0.27                                      | <0.02                                     | <0.01                              | <0.01                                     |
| MAR 27... | --                               | --                                 | --                                | --                                | --  | <0.01                                     | 0.11                                      | <0.02                                     | 0.01                               | <0.01                                     |
| APR 16... | --                               | --                                 | --                                | --                                | --  | <0.01                                     | 0.18                                      | <0.02                                     | <0.01                              | <0.01                                     |
| MAY 21... | --                               | --                                 | --                                | --                                | --  | <0.01                                     | 0.02                                      | <0.02                                     | <0.01                              | <0.01                                     |
| JUN 27... | --                               | --                                 | --                                | --                                | --  | <0.01                                     | 0.02                                      | 0.02                                      | 0.03                               | <0.01                                     |
| JUL 09... | 3.6                              | 0.8                                | 0.2                               | 5.3                               | 46  | <0.01                                     | 0.03                                      | 0.05                                      | <0.01                              | <0.01                                     |
| AUG 14... | --                               | --                                 | --                                | --                                | --  | 0.01                                      | 0.05                                      | 0.02                                      | <0.01                              | 0.01                                      |
| SEP 19... | --                               | --                                 | --                                | --                                | --  | 0.03                                      | 0.32                                      | 0.10                                      | 0.03                               | 0.04                                      |

## PLATTE RIVER BASIN

## 06752258 CACHE LA POWDRE RIVER AT SHIELDS STREET, AT FORT COLLINS, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DATE         | ALUM-<br>INUM,<br>DIS-<br>SOLVED<br>(UG/L<br>AS AL) | ARSENIC<br>DIS-<br>SOLVED<br>(UG/L<br>AS AS) | CADMIUM<br>DIS-<br>SOLVED<br>(UG/L<br>AS CD) | CHRO-<br>MIUM,<br>DIS-<br>SOLVED<br>(UG/L<br>AS CR) | COPPER,<br>DIS-<br>SOLVED<br>(UG/L<br>AS CU) | IRON,<br>TOTAL<br>RECOV-<br>ERABLE<br>(UG/L<br>AS FE) | LEAD,<br>DIS-<br>SOLVED<br>(UG/L<br>AS PB) |
|--------------|---|--|--|---|--|---|--|
| OCT<br>25... | --  | --   | --   | --  | <1   | 90  | --   |
| NOV<br>29... | --  | --   | --   | --  | <1   | 90  | --   |
| JAN<br>10... | <10   | <1   | <1   | <1  | <1   | 80  | <1   |
| FEB<br>13... | --  | --   | --   | --  | <1   | 70  | --   |
| MAR<br>27... | --  | --   | --   | --  | <1   | 110   | --   |
| APR<br>16... | --  | --   | --   | --  | 1  | 170   | --   |
| MAY<br>21... | --  | --   | --   | --  | 2  | 1000  | --   |
| JUN<br>27... | --  | --   | --   | --  | <1   | 440   | --   |
| JUL<br>09... | 20  | <1   | <1   | <1  | 2  | 210   | <1   |
| AUG<br>14... | --  | --   | --   | --  | 1  | 120   | --   |
| SEP<br>19... | --  | --   | --   | --  | <1   | 380   | --   |

| DATE         | MANGA-<br>NESE,<br>TOTAL<br>RECOV-<br>ERABLE<br>(UG/L<br>AS MN) | MERCURY<br>DIS-<br>SOLVED<br>(UG/L<br>AS HG) | NICKEL,<br>DIS-<br>SOLVED<br>(UG/L<br>AS NI) | SELE-<br>NIUM,<br>DIS-<br>SOLVED<br>(UG/L<br>AS SE) | SILVER,<br>DIS-<br>SOLVED<br>(UG/L<br>AS AG) | ZINC,<br>DIS-<br>SOLVED<br>(UG/L<br>AS ZN) |
|--------------|---|--|--|---|--|--|
| OCT<br>25... | --  | --   | --   | --  | <0.2   | --   |
| NOV<br>29... | --  | --   | --   | --  | <0.2   | --   |
| JAN<br>10... | 20  | <0.1   | <1   | <1  | <0.2   | <10  |
| FEB<br>13... | --  | --   | --   | --  | <0.2   | --   |
| MAR<br>27... | --  | --   | --   | --  | <0.2   | --   |
| APR<br>16... | --  | --   | --   | --  | <0.2   | --   |
| MAY<br>21... | --  | --   | --   | --  | <0.2   | --   |
| JUN<br>27... | --  | --   | --   | --  | <0.2   | --   |
| JUL<br>09... | 10  | <0.1   | <1   | <1  | <0.2   | <3   |
| AUG<br>14... | --  | --   | --   | --  | <0.2   | --   |
| SEP<br>19... | --  | --   | --   | --  | <0.2   | --   |

**06752260 CACHE LA POUVRE RIVER AT FORT COLLINS, CO**

LOCATION.--Lat 40°35'21", long 105°04'09", in SE<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec.12, T.7 N., R.69 W., Larimer County, Hydrologic Unit 10190007, on left bank 200 ft upstream from Lincoln Street Bridge in Fort Collins.

DRAINAGE AREA.--1,127 mi<sup>2</sup>.

**WATER-DISCHARGE RECORDS**

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

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 4,940 ft above sea level, from topographic map. Prior to 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.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Natural flow of stream affected by transmountain and transbasin diversions, storage reservoirs, power developments, diversion for municipal supply, diversions upstream from station for irrigation, and return flow from irrigated areas.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

| DAY   | OCT   | NOV   | DEC    | JAN  | FEB  | MAR  | APR    | MAY   | JUN   | JUL   | AUG  | SEP    |
|-------|-------|-------|--------|------|------|------|--------|-------|-------|-------|------|--------|
| 1     | 4.4   | 3.4   | 1.9    | 42   | 66   | 71   | 52     | 217   | 807   | 249   | 67   | 50     |
| 2     | 4.3   | 1.6   | 1.5    | 43   | 66   | 76   | 41     | 185   | 808   | 288   | 86   | 59     |
| 3     | 4.8   | 4.0   | .82    | 53   | 69   | 76   | 68     | 215   | 868   | 441   | 76   | 22     |
| 4     | 4.1   | 6.5   | .82    | 45   | 76   | 74   | 43     | 172   | 863   | 430   | 50   | 24     |
| 5     | 3.2   | 6.6   | .82    | 45   | 77   | 75   | 52     | 190   | 1130  | 477   | 31   | 27     |
| 6     | 3.5   | 15    | 1.5    | 50   | 79   | 69   | 48     | 201   | e1700 | 478   | 35   | 13     |
| 7     | 4.2   | 3.0   | 1.5    | 39   | 82   | 60   | 65     | 271   | 1920  | 451   | 60   | 12     |
| 8     | 4.6   | .91   | .81    | 50   | 82   | 64   | 76     | 257   | 1870  | 366   | 49   | 33     |
| 9     | 4.9   | .78   | .79    | 45   | 79   | 71   | 96     | 149   | 1590  | 356   | 59   | 50     |
| 10    | 5.1   | 5.4   | .78    | 47   | 76   | 74   | 109    | 227   | 1330  | 279   | 63   | 21     |
| 11    | 4.5   | 4.4   | .79    | 43   | 69   | 77   | 121    | 308   | 1370  | e200  | 56   | 62     |
| 12    | 4.4   | .77   | .83    | 43   | 66   | 78   | 112    | 321   | 1420  | e250  | 47   | 65     |
| 13    | 3.7   | 3.9   | 5.5    | 61   | 71   | 80   | 119    | 319   | 1440  | e450  | 45   | 40     |
| 14    | 1.9   | 2.2   | 19     | 51   | 77   | 102  | 154    | 220   | 1400  | e780  | 39   | 61     |
| 15    | .78   | .81   | 27     | 57   | 77   | 80   | 129    | 297   | 1870  | e580  | 38   | 74     |
| 16    | .75   | .78   | 18     | 57   | 72   | 71   | 47     | 378   | 2080  | e250  | 100  | 49     |
| 17    | 1.0   | .76   | 16     | 48   | 80   | 76   | 6.7    | 884   | 1510  | e140  | 64   | 28     |
| 18    | .75   | .74   | 16     | 42   | 78   | 74   | 5.8    | 665   | 1180  | e74   | 17   | 13     |
| 19    | .76   | .77   | 25     | 35   | 79   | 90   | 4.9    | 642   | 874   | e250  | 44   | e30    |
| 20    | .78   | .80   | 17     | 56   | 78   | 95   | 7.8    | 319   | 702   | e170  | 55   | e18    |
| 21    | 3.4   | .80   | 17     | 58   | 83   | 108  | 76     | 253   | 705   | e90   | 61   | e9.0   |
| 22    | 4.1   | 1.4   | 16     | 65   | 84   | 85   | 59     | 324   | 1140  | e27   | 58   | e11    |
| 23    | 4.3   | .84   | 18     | 50   | 77   | 66   | 34     | 617   | 1040  | e45   | 64   | e23    |
| 24    | 4.3   | .83   | 38     | 62   | 65   | 76   | 45     | 678   | 740   | e92   | 36   | e150   |
| 25    | 4.2   | .83   | 40     | 55   | 70   | 59   | 53     | 1010  | 567   | e60   | 24   | 62     |
| 26    | 4.8   | .82   | 36     | 56   | 78   | 43   | 131    | 1020  | 321   | 50    | 22   | 80     |
| 27    | 5.6   | 1.3   | 42     | 49   | 65   | 60   | 49     | 749   | 416   | 49    | 24   | 65     |
| 28    | 2.0   | .84   | 49     | 60   | 55   | 62   | 58     | 514   | 500   | 37    | 50   | 30     |
| 29    | 1.1   | .84   | 45     | 63   | 69   | 69   | 78     | 476   | 371   | 62    | 50   | 20     |
| 30    | 1.6   | .91   | 37     | 58   | ---  | 63   | 137    | 555   | 311   | 91    | 87   | 27     |
| 31    | 1.1   | ---   | 36     | 45   | ---  | 62   | ---    | 893   | ---   | 87    | 83   | ---    |
| TOTAL | 98.92 | 72.53 | 530.36 | 1573 | 2145 | 2286 | 2077.2 | 13526 | 32843 | 7649  | 1640 | 1228.0 |
| MEAN  | 3.19  | 2.42  | 17.1   | 50.7 | 74.0 | 73.7 | 69.2   | 436   | 1095  | 247   | 52.9 | 40.9   |
| MAX   | 5.6   | 15    | 49     | 65   | 84   | 108  | 154    | 1020  | 2080  | 780   | 100  | 150    |
| MIN   | .75   | .74   | .78    | 35   | 55   | 43   | 4.9    | 149   | 311   | 27    | 17   | 9.0    |
| AC-FT | 196   | 144   | 1050   | 3120 | 4250 | 4530 | 4120   | 26830 | 65140 | 15170 | 3250 | 2440   |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 1996, 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 |  |  |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|--|--|
| MEAN | 19.9 | 21.1 | 19.6 | 27.2 | 29.2 | 32.7 | 107  | 441  | 942  | 259  | 62.3 | 27.2 |      |      |      |      |      |      |      |      |      |      |  |  |
| MAX  | 94.1 | 122  | 97.3 | 123  | 135  | 136  | 652  | 2720 | 4771 | 1450 | 290  | 105  |      |      |      |      |      |      |      |      |      |      |  |  |
| (WY) | 1985 | 1985 | 1985 | 1984 | 1984 | 1980 | 1983 | 1980 | 1983 | 1983 | 1983 | 1983 |      |      |      |      |      |      |      |      |      |      |  |  |
| 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 1995 CALENDAR YEAR FOR 1996 WATER YEAR WATER YEARS 1975 - 1996

|                          |          |          |        |        |        |        |      |        |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |      |
|--------------------------|----------|----------|--------|--------|--------|--------|------|--------|------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|------|
| ANNUAL TOTAL             | 93614.21 | 65669.01 |        |        |        |        |      |        |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |      |
| ANNUAL MEAN              | 256      | 179      | 168    |        |        |        |      |        |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |      |
| HIGHEST ANNUAL MEAN      |          |          | 779    |        |        |        |      |        |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1983 |
| LOWEST ANNUAL MEAN       |          |          | 41.8   |        |        |        |      |        |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1977 |
| HIGHEST DAILY MEAN       | 3500     | Jun 18   | 2080   | Jun 16 | 6080   | Jun 21 | 1983 |        |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |      |
| LOWEST DAILY MEAN        | .74      | Nov 18   | .74    | Nov 18 | a      | Aug 18 | 1987 |        |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |      |
| ANNUAL SEVEN-DAY MINIMUM | .78      | Nov 15   | .78    | Nov 15 | b      | Mar 24 | 1988 |        |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |      |
| INSTANTANEOUS PEAK FLOW  |          |          | 2670   | Jun 16 | b      | Jun 21 | 1983 |        |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |      |
| INSTANTANEOUS PEAK STAGE |          |          | c      | 8.25   | Jun 16 | d      | 8.31 | Jun 21 | 1983 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |      |
| ANNUAL RUNOFF (AC-FT)    | 185700   | 130300   | 121900 |        |        |        |      |        |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |      |
| 10 PERCENT EXCEEDS       | 1170     | 559      | 353    |        |        |        |      |        |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |      |
| 50 PERCENT EXCEEDS       | 5.9      | 59       | 19     |        |        |        |      |        |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |      |
| 90 PERCENT EXCEEDS       | 1.3      | 1.5      | 2.7    |        |        |        |      |        |      |  |  |  |  |  |  |  |  |  |  |  |  |  |  |      |

e-Estimated.  
a-Also occurred Aug 19, Sep 4, 18-19, 1987, and many days in 1988.  
b-Site and datum then in use.  
c-Maximum gage height, 8.43 ft, Jun 6, backwater from debris.  
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.--Temperature, specific conductance are rated fair, and pH is rated poor.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum,759 microsiemens, Oct. 22; minimum, 35 microsiemens, Jun. 22.

pH: Maximum, 9.1 units, Apr. 12, 16, 24-25; minimum, 6.9 units, Dec. 14.

WATER TEMPERATURE: Maximum, 23.8°C Aug. 23; minimum 0.0°C Jan. 12 and Mar. 1

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DATE      | TIME | DIS-CHARGE, INST. CUBIC FEET PER SECOND | SPE-CIFIC CON-DUCT-ANCE (US/CM) | PH (STAND-ARD UNITS) | TEMPER-ATURE WATER (DEG C) | OXYGEN, DIS-SOLVED (MG/L) | HARD-NESS TOTAL (MG/L AS CAC03) | CALCIUM DIS-SOLVED (MG/L AS CA) | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) | SODIUM, DIS-SOLVED (MG/L AS NA) | ALKA-LINITY LAB (MG/L AS CAC03) |
|-----------|------|---|---------------------------------|----------------------|----------------------------|---------------------------|---------------------------------|---------------------------------|-------------------------------------|---------------------------------|---------------------------------|
| OCT 26... | 1022 | 4.1                                     | 579                             | 8.1                  | 6.0                        | 9.0                       | 250                             | 69                              | 20                                  | --                              | 203                             |
| NOV 30... | 0923 | 0.83                                    | 786                             | 8.1                  | 7.5                        | 9.7                       | 350                             | 95                              | 28                                  | --                              | 281                             |
| JAN 11... | 0900 | 54                                      | 310                             | 8.0                  | 0.5                        | 13.2                      | 140                             | 39                              | 9.5                                 | 9.9                             | 109                             |
| FEB 14... | 1049 | 76                                      | 334                             | 8.0                  | 2.5                        | 12.9                      | 150                             | 43                              | 10                                  | --                              | 129                             |
| MAR 28... | 1053 | 65                                      | 270                             | 8.2                  | 5.5                        | 11.5                      | 120                             | 33                              | 8.5                                 | --                              | 97                              |
| APR 17... | 0830 | 7.5                                     | 362                             | 8.1                  | 10.0                       | 10.2                      | 150                             | 43                              | 11                                  | --                              | 118                             |
| MAY 23... | 0923 | 651                                     | 56                              | 8.0                  | 10.0                       | 9.6                       | 22                              | 6.5                             | 1.4                                 | --                              | 22                              |
| JUN 05... | 1156 | 1270                                    | 55                              | 7.9                  | 12.5                       | 9.0                       | 21                              | 6.2                             | 1.4                                 | --                              | 21                              |
| JUL 10... | 1541 | 196                                     | 88                              | 8.1                  | 14.0                       | 9.1                       | 34                              | 10                              | 2.2                                 | 2.9                             | 33                              |
| AUG 13... | 0937 | 41                                      | 131                             | 8.0                  | 16.0                       | 8.6                       | 49                              | 14                              | 3.4                                 | --                              | 49                              |
| SEP 18... | 0849 | 13                                      | 257                             | 8.0                  | 13.5                       | 8.4                       | 110                             | 31                              | 7.7                                 | --                              | 95                              |

| DATE      | SULFATE DIS-SOLVED (MG/L AS SO4) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) | SILICA, DIS-SOLVED (MG/L AS SIO2) | SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) | NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) | NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) | NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) | PHOS-PHORUS, DIS-SOLVED (MG/L AS P) | PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P) |
|-----------|----------------------------------|------------------------------------|-----------------------------------|-----------------------------------|---|---|---|---|-------------------------------------|--|
| OCT 26... | --                               | --                                 | --                                | --                                | --  | 0.01                                      | 0.86                                      | <0.02                                     | <0.01                               | <0.01                                      |
| NOV 30... | --                               | --                                 | --                                | --                                | --  | 0.02                                      | 1.8                                       | <0.02                                     | 0.01                                | <0.01                                      |
| JAN 11... | 40                               | 4.7                                | 0.4                               | 10                                | 190   | <0.01                                     | 0.27                                      | <0.02                                     | 0.03                                | <0.01                                      |
| FEB 14... | --                               | --                                 | --                                | --                                | --  | <0.01                                     | 0.24                                      | <0.02                                     | <0.01                               | <0.01                                      |
| MAR 28... | --                               | --                                 | --                                | --                                | --  | <0.01                                     | 0.13                                      | <0.02                                     | <0.01                               | <0.01                                      |
| APR 17... | --                               | --                                 | --                                | --                                | --  | <0.01                                     | 0.24                                      | <0.02                                     | <0.01                               | <0.01                                      |
| MAY 23... | --                               | --                                 | --                                | --                                | --  | <0.01                                     | 0.04                                      | 0.02                                      | 0.01                                | <0.01                                      |
| JUN 05... | --                               | --                                 | --                                | --                                | --  | <0.01                                     | 0.02                                      | 0.02                                      | 0.02                                | <0.01                                      |
| JUL 10... | 6.9                              | 1.2                                | 0.2                               | 5.6                               | 52  | <0.01                                     | 0.05                                      | 0.05                                      | <0.01                               | <0.01                                      |
| AUG 13... | --                               | --                                 | --                                | --                                | --  | 0.01                                      | 0.07                                      | 0.02                                      | <0.01                               | <0.01                                      |
| SEP 18... | --                               | --                                 | --                                | --                                | --  | 0.05                                      | 1.6                                       | 0.08                                      | 0.04                                | 0.05                                       |

06752260 CACHE LA POUDBRE RIVER AT FORT COLLINS, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DATE      | ALUM-<br>INUM,<br>DIS-<br>SOLVED<br>(UG/L<br>AS AL) | ARSENIC<br>DIS-<br>SOLVED<br>(UG/L<br>AS AS) | CADMIUM<br>DIS-<br>SOLVED<br>(UG/L<br>AS CD) | CHRO-<br>MIUM,<br>DIS-<br>SOLVED<br>(UG/L<br>AS CR) | COPPER,<br>DIS-<br>SOLVED<br>(UG/L<br>AS CU) | IRON,<br>TOTAL<br>RECOV-<br>ERABLE<br>(UG/L<br>AS FE) | LEAD,<br>DIS-<br>SOLVED<br>(UG/L<br>AS PB) |
|-----------|---|--|--|---|--|---|--|
| OCT 26... | --  | --   | --   | --  | <1   | 250   | --   |
| NOV 30... | --  | --   | --   | --  | <1   | 90  | --   |
| JAN 11... | 20  | <1   | <1   | <1  | <1   | 100   | <1   |
| FEB 14... | --  | --   | --   | --  | <1   | 100   | --   |
| MAR 28... | --  | --   | --   | --  | <1   | 110   | --   |
| APR 17... | --  | --   | --   | --  | 2  | 190   | --   |
| MAY 23... | --  | --   | --   | --  | 1  | 1500  | --   |
| JUN 05... | --  | --   | --   | --  | --   | --  | --   |
| JUN 05... | --  | --   | --   | --  | 1  | 1400  | --   |
| JUL 10... | 40  | <1   | <1   | <1  | 2  | 280   | <1   |
| AUG 13... | --  | --   | --   | --  | 1  | 140   | --   |
| SEP 18... | --  | --   | --   | --  | 3  | 770   | --   |

| DATE      | MANGA-<br>NESE,<br>TOTAL<br>RECOV-<br>ERABLE<br>(UG/L<br>AS MN) | MERCURY<br>DIS-<br>SOLVED<br>(UG/L<br>AS HG) | NICKEL,<br>DIS-<br>SOLVED<br>(UG/L<br>AS NI) | SELE-<br>NIUM,<br>DIS-<br>SOLVED<br>(UG/L<br>AS SE) | SILVER,<br>DIS-<br>SOLVED<br>(UG/L<br>AS AG) | ZINC,<br>DIS-<br>SOLVED<br>(UG/L<br>AS ZN) |
|-----------|---|--|--|---|--|--|
| OCT 26... | --  | --   | --   | --  | <0.2   | --   |
| NOV 30... | --  | --   | --   | --  | <0.2   | --   |
| JAN 11... | 20  | <0.1   | <1   | <1  | <0.2   | <10  |
| FEB 14... | --  | --   | --   | --  | <0.2   | --   |
| MAR 28... | --  | --   | --   | --  | <0.2   | --   |
| APR 17... | --  | --   | --   | --  | <0.2   | --   |
| MAY 23... | --  | --   | --   | --  | <0.2   | --   |
| JUN 05... | --  | --   | --   | --  | --   | --   |
| JUN 05... | --  | --   | --   | --  | <0.2   | --   |
| JUL 10... | 20  | <0.1   | <1   | <1  | <0.2   | 7  |
| AUG 13... | --  | --   | --   | --  | <0.2   | --   |
| SEP 18... | --  | --   | --   | --  | <0.2   | --   |

## PLATTE RIVER BASIN

## 06752260 CACHE LA POUDDRE RIVER AT FORT COLLINS, CO--Continued

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM @ 25 DEG. C), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DAY   | MAX      | MIN | MEAN | MAX      | MIN | MEAN | MAX      | MIN | MEAN | MAX     | MIN | MEAN |
|-------|----------|-----|------|----------|-----|------|----------|-----|------|---------|-----|------|
|       | OCTOBER  |     |      | NOVEMBER |     |      | DECEMBER |     |      | JANUARY |     |      |
| 1     | 513      | 478 | 500  | ---      | --- | ---  | ---      | --- | ---  | 353     | 335 | 345  |
| 2     | 531      | 483 | 512  | ---      | --- | ---  | ---      | --- | ---  | 352     | 331 | 340  |
| 3     | 529      | 470 | 506  | ---      | --- | ---  | ---      | --- | ---  | 338     | 309 | 321  |
| 4     | 499      | 402 | 468  | ---      | --- | ---  | ---      | --- | ---  | 320     | 306 | 313  |
| 5     | 518      | 488 | 509  | ---      | --- | ---  | ---      | --- | ---  | 330     | 306 | 319  |
| 6     | 567      | 515 | 540  | ---      | --- | ---  | ---      | --- | ---  | 355     | 322 | 338  |
| 7     | 565      | 522 | 547  | ---      | --- | ---  | ---      | --- | ---  | 366     | 317 | 344  |
| 8     | 565      | 521 | 544  | ---      | --- | ---  | ---      | --- | ---  | 343     | 289 | 306  |
| 9     | 558      | 523 | 541  | ---      | --- | ---  | ---      | --- | ---  | 303     | 279 | 293  |
| 10    | 554      | 512 | 539  | ---      | --- | ---  | ---      | --- | ---  | 298     | 275 | 286  |
| 11    | 559      | 521 | 542  | ---      | --- | ---  | ---      | --- | ---  | 299     | 275 | 289  |
| 12    | 561      | 529 | 548  | ---      | --- | ---  | ---      | --- | ---  | 313     | 293 | 301  |
| 13    | ---      | --- | ---  | ---      | --- | ---  | ---      | --- | ---  | 295     | 264 | 277  |
| 14    | ---      | --- | ---  | ---      | --- | ---  | ---      | --- | ---  | 306     | 270 | 287  |
| 15    | ---      | --- | ---  | ---      | --- | ---  | ---      | --- | ---  | 293     | 274 | 282  |
| 16    | ---      | --- | ---  | ---      | --- | ---  | ---      | --- | ---  | 288     | 274 | 282  |
| 17    | ---      | --- | ---  | ---      | --- | ---  | ---      | --- | ---  | 305     | 276 | 284  |
| 18    | ---      | --- | ---  | ---      | --- | ---  | ---      | --- | ---  | 346     | 274 | 301  |
| 19    | ---      | --- | ---  | ---      | --- | ---  | ---      | --- | ---  | 398     | 323 | 372  |
| 20    | ---      | --- | ---  | ---      | --- | ---  | ---      | --- | ---  | 323     | 287 | 301  |
| 21    | ---      | --- | ---  | ---      | --- | ---  | ---      | --- | ---  | 316     | 285 | 305  |
| 22    | 759      | 632 | 681  | ---      | --- | ---  | ---      | --- | ---  | 303     | 285 | 296  |
| 23    | 655      | 614 | 639  | ---      | --- | ---  | ---      | --- | ---  | 336     | 303 | 322  |
| 24    | 652      | 594 | 631  | ---      | --- | ---  | ---      | --- | ---  | 364     | 287 | 314  |
| 25    | 636      | 575 | 617  | ---      | --- | ---  | 419      | 377 | 397  | 314     | 296 | 305  |
| 26    | ---      | --- | ---  | ---      | --- | ---  | 396      | 364 | 377  | 339     | 309 | 328  |
| 27    | ---      | --- | ---  | ---      | --- | ---  | 412      | 355 | 381  | 340     | 320 | 332  |
| 28    | ---      | --- | ---  | ---      | --- | ---  | 370      | 342 | 358  | 335     | 296 | 314  |
| 29    | ---      | --- | ---  | ---      | --- | ---  | 413      | 345 | 363  | 314     | 298 | 307  |
| 30    | ---      | --- | ---  | ---      | --- | ---  | 379      | 351 | 362  | 325     | 301 | 314  |
| 31    | ---      | --- | ---  | ---      | --- | ---  | 389      | 350 | 363  | 342     | 322 | 332  |
| MONTH | ---      | --- | ---  | ---      | --- | ---  | ---      | --- | ---  | 398     | 264 | 311  |
|       | FEBRUARY |     |      | MARCH    |     |      | APRIL    |     |      | MAY     |     |      |
| 1     | 326      | 307 | 318  | 315      | 264 | 281  | 272      | 246 | 255  | 94      | 87  | 90   |
| 2     | 329      | 295 | 318  | 308      | 250 | 281  | 283      | 236 | 258  | 94      | 86  | 91   |
| 3     | 337      | 319 | 329  | 322      | 250 | 259  | 240      | 204 | 218  | 89      | 86  | 87   |
| 4     | 333      | 306 | 323  | 273      | 254 | 263  | 270      | 227 | 250  | 89      | 87  | 88   |
| 5     | ---      | --- | ---  | 307      | 255 | 268  | 275      | 258 | 266  | 87      | 82  | 84   |
| 6     | ---      | --- | ---  | 273      | 252 | 261  | 291      | 273 | 280  | 83      | 79  | 81   |
| 7     | ---      | --- | ---  | 304      | 261 | 275  | 279      | 241 | 265  | 80      | 76  | 78   |
| 8     | ---      | --- | ---  | 325      | 267 | 293  | 249      | 220 | 236  | 103     | 74  | 79   |
| 9     | ---      | --- | ---  | 318      | 248 | 264  | ---      | --- | ---  | 106     | 95  | 100  |
| 10    | ---      | --- | ---  | 256      | 241 | 248  | ---      | --- | ---  | 97      | 87  | 91   |
| 11    | ---      | --- | ---  | 261      | 237 | 251  | 233      | 206 | 220  | 106     | 96  | 100  |
| 12    | ---      | --- | ---  | 247      | 232 | 238  | 216      | 195 | 204  | 107     | 83  | 97   |
| 13    | ---      | --- | ---  | 247      | 224 | 239  | 222      | 196 | 211  | 122     | 82  | 97   |
| 14    | ---      | --- | ---  | 243      | 225 | 235  | 196      | 140 | 152  | 125     | 76  | 98   |
| 15    | ---      | --- | ---  | 261      | 242 | 251  | 169      | 148 | 161  | 86      | 52  | 65   |
| 16    | 317      | 296 | 305  | 276      | 256 | 266  | 294      | 157 | 206  | 88      | 45  | 60   |
| 17    | 315      | 280 | 295  | 269      | 249 | 259  | 404      | 294 | 345  | 91      | 43  | 53   |
| 18    | 295      | 274 | 283  | 268      | 254 | 261  | 430      | 404 | 419  | 58      | 43  | 49   |
| 19    | 289      | 267 | 275  | 258      | 240 | 248  | 450      | 402 | 435  | 57      | 39  | 45   |
| 20    | 297      | 262 | 274  | 288      | 242 | 254  | 464      | 412 | 451  | 84      | 42  | 55   |
| 21    | 289      | 264 | 275  | 262      | 231 | 249  | 412      | 159 | 187  | 72      | 53  | 62   |
| 22    | 274      | 256 | 266  | 257      | 231 | 244  | 189      | 157 | 170  | 69      | 53  | 60   |
| 23    | 281      | 261 | 269  | 273      | 247 | 265  | 224      | 151 | 195  | ---     | --- | ---  |
| 24    | 285      | 275 | 279  | 342      | 249 | 268  | 188      | 138 | 163  | ---     | --- | ---  |
| 25    | 289      | 254 | 273  | 317      | 234 | 279  | 227      | 116 | 183  | 60      | 50  | 54   |
| 26    | 271      | 252 | 261  | 344      | 274 | 299  | 135      | 110 | 115  | 66      | 52  | 58   |
| 27    | 278      | 259 | 268  | 413      | 269 | 310  | 191      | 135 | 155  | 72      | 64  | 67   |
| 28    | 307      | 278 | 290  | 290      | 240 | 267  | 201      | 119 | 168  | 76      | 68  | 71   |
| 29    | 346      | 272 | 294  | 267      | 237 | 256  | 137      | 116 | 126  | 92      | 71  | 81   |
| 30    | ---      | --- | ---  | 257      | 234 | 242  | 189      | 89  | 131  | 90      | 77  | 83   |
| 31    | ---      | --- | ---  | 274      | 252 | 263  | ---      | --- | ---  | 82      | 69  | 73   |
| MONTH | ---      | --- | ---  | 413      | 224 | 262  | ---      | --- | ---  | ---     | --- | ---  |

06752260 CACHE LA POUDDRE RIVER AT FORT COLLINS, CO--Continued

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM @ 25 DEG. C), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DAY   | MAX | MIN | MEAN |
|-------|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|------|
|       |     |     |      |     |     |      |     |     |      |     |     |      |
| 1     | 81  | 71  | 75   | 71  | 59  | 64   | --- | --- | ---  | 205 | 158 | 176  |
| 2     | 77  | 69  | 72   | 78  | 57  | 69   | --- | --- | ---  | 228 | 121 | 190  |
| 3     | 75  | 62  | 67   | 68  | 61  | 64   | --- | --- | ---  | 174 | 131 | 157  |
| 4     | 73  | 57  | 63   | 65  | 59  | 62   | --- | --- | ---  | 236 | 147 | 172  |
| 5     | 66  | 49  | 55   | 64  | 58  | 60   | --- | --- | ---  | 166 | 113 | 138  |
| 6     | 56  | 43  | 47   | 64  | 59  | 61   | --- | --- | ---  | 272 | 146 | 203  |
| 7     | 51  | 44  | 47   | 66  | 59  | 62   | 129 | 104 | 113  | 336 | 272 | 308  |
| 8     | 51  | 45  | 47   | 68  | 61  | 65   | 134 | 111 | 121  | 365 | 123 | 317  |
| 9     | 53  | 44  | 47   | 72  | 65  | 68   | 131 | 111 | 120  | 156 | 120 | 136  |
| 10    | 53  | 42  | 46   | --- | --- | ---  | 146 | 114 | 132  | 230 | 127 | 171  |
| 11    | 49  | 41  | 44   | --- | --- | ---  | 162 | 121 | 143  | 139 | 113 | 124  |
| 12    | 46  | 39  | 43   | --- | --- | ---  | 126 | 103 | 116  | 130 | 113 | 122  |
| 13    | 46  | 40  | 42   | --- | --- | ---  | 127 | 101 | 114  | 204 | 120 | 175  |
| 14    | 43  | 37  | 39   | --- | --- | ---  | 137 | 115 | 125  | 244 | 180 | 216  |
| 15    | 43  | 40  | 42   | --- | --- | ---  | 142 | 115 | 129  | 187 | 174 | 180  |
| 16    | 48  | 38  | 42   | --- | --- | ---  | 138 | 96  | 116  | 205 | 182 | 194  |
| 17    | 48  | 43  | 45   | --- | --- | ---  | 225 | 96  | 141  | 240 | 192 | 211  |
| 18    | 49  | 43  | 45   | --- | --- | ---  | 301 | 146 | 258  | 286 | 203 | 264  |
| 19    | 49  | 43  | 45   | --- | --- | ---  | 149 | 102 | 121  | 322 | 204 | 298  |
| 20    | 53  | 45  | 48   | --- | --- | ---  | 118 | 100 | 108  | 348 | 312 | 336  |
| 21    | 54  | 46  | 50   | --- | --- | ---  | 119 | 100 | 108  | 360 | 335 | 351  |
| 22    | 54  | 35  | 38   | --- | --- | ---  | 121 | 102 | 111  | 364 | 348 | 357  |
| 23    | 47  | 39  | 43   | --- | --- | ---  | 130 | 89  | 110  | 348 | 223 | 307  |
| 24    | 53  | 46  | 48   | --- | --- | ---  | 234 | 130 | 195  | 223 | 144 | 163  |
| 25    | 62  | 51  | 54   | --- | --- | ---  | 264 | 215 | 237  | 229 | 174 | 207  |
| 26    | 73  | 55  | 62   | --- | --- | ---  | 284 | 142 | 208  | 204 | 171 | 185  |
| 27    | 63  | 51  | 55   | --- | --- | ---  | 185 | 136 | 167  | 204 | 159 | 185  |
| 28    | 55  | 47  | 51   | --- | --- | ---  | 146 | 108 | 121  | 274 | 197 | 233  |
| 29    | 60  | 53  | 56   | --- | --- | ---  | 130 | 101 | 114  | 317 | 270 | 300  |
| 30    | 64  | 55  | 59   | --- | --- | ---  | 151 | 84  | 115  | 311 | 263 | 289  |
| 31    | --- | --- | ---  | --- | --- | ---  | 167 | 125 | 147  | --- | --- | ---  |
| MONTH | 81  | 35  | 51   | --- | --- | ---  | --- | --- | ---  | 365 | 113 | 222  |

pH (STANDARD UNITS), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DAY   | MAX | MIN | MEAN |
|-------|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|------|
|       |     |     |      |     |     |      |     |     |      |     |     |      |
| 1     | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  | 7.8 | 7.6 | 7.7  |
| 2     | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  | 7.8 | 7.6 | 7.7  |
| 3     | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  | 7.8 | 7.6 | 7.7  |
| 4     | --- | --- | ---  | 8.0 | 7.9 | 8.0  | --- | --- | ---  | 7.8 | 7.7 | 7.7  |
| 5     | --- | --- | ---  | 8.0 | 7.7 | 7.9  | --- | --- | ---  | 7.8 | 7.6 | 7.7  |
| 6     | --- | --- | ---  | 8.1 | 7.7 | 8.0  | --- | --- | ---  | 7.8 | 7.6 | 7.7  |
| 7     | --- | --- | ---  | 8.0 | --- | ---  | --- | --- | ---  | 7.8 | 7.7 | 7.7  |
| 8     | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  | 7.9 | 7.6 | 7.7  |
| 9     | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  | 7.9 | 7.7 | 7.8  |
| 10    | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  | 8.0 | 7.8 | 7.8  |
| 11    | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  | 7.9 | 7.7 | 7.8  |
| 12    | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  | 7.8 | 7.6 | 7.7  |
| 13    | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  | 7.8 | 7.6 | 7.7  |
| 14    | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  | 7.8 | 7.5 | 7.6  |
| 15    | --- | --- | ---  | --- | --- | ---  | 7.7 | 7.5 | 7.6  | 7.8 | 7.6 | 7.7  |
| 16    | --- | --- | ---  | --- | --- | ---  | 7.6 | 7.5 | 7.6  | 7.9 | 7.6 | 7.7  |
| 17    | --- | --- | ---  | --- | --- | ---  | 7.8 | 7.6 | 7.7  | 7.8 | 7.5 | 7.7  |
| 18    | --- | --- | ---  | --- | --- | ---  | 7.7 | 7.6 | 7.7  | 7.6 | 7.4 | 7.5  |
| 19    | --- | --- | ---  | --- | --- | ---  | 7.8 | 7.6 | 7.7  | 7.7 | 7.4 | 7.5  |
| 20    | --- | --- | ---  | --- | --- | ---  | 7.7 | 7.5 | 7.6  | 7.8 | 7.4 | 7.6  |
| 21    | --- | --- | ---  | --- | --- | ---  | 7.8 | 7.6 | 7.7  | 7.9 | 7.4 | 7.6  |
| 22    | --- | --- | ---  | --- | --- | ---  | 7.8 | 7.7 | 7.7  | 7.8 | 7.6 | 7.7  |
| 23    | --- | --- | ---  | --- | --- | ---  | 7.7 | 7.6 | 7.7  | 7.8 | 7.6 | 7.7  |
| 24    | --- | --- | ---  | --- | --- | ---  | 7.8 | 7.5 | 7.6  | 7.8 | 7.5 | 7.7  |
| 25    | --- | --- | ---  | --- | --- | ---  | 7.8 | 7.6 | 7.7  | 7.7 | 7.6 | 7.6  |
| 26    | --- | --- | ---  | --- | --- | ---  | 7.8 | 7.2 | 7.7  | 7.7 | 7.5 | 7.6  |
| 27    | --- | --- | ---  | --- | --- | ---  | 7.8 | 7.5 | 7.6  | 7.7 | 7.5 | 7.6  |
| 28    | --- | --- | ---  | --- | --- | ---  | 7.7 | 7.6 | 7.6  | 7.8 | 7.5 | 7.6  |
| 29    | --- | --- | ---  | --- | --- | ---  | 7.8 | 7.5 | 7.7  | 7.8 | 7.6 | 7.7  |
| 30    | --- | --- | ---  | --- | --- | ---  | 7.7 | 7.2 | 7.6  | 7.7 | 7.5 | 7.6  |
| 31    | --- | --- | ---  | --- | --- | ---  | 7.8 | 7.6 | 7.7  | 7.6 | 7.5 | 7.6  |
| MONTH | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  | 8.0 | 7.4 | 7.7  |





## 06752260 CACHE LA POUDDRE RIVER AT FORT COLLINS, CO--Continued

TEMPERATURE, WATER (DEG. C) WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DAY   | MAX  | MIN  | MEAN |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|
|       |      |      |      |      |      |      |      |      |      |      |      |      |
| 1     | 14.7 | 10.7 | 12.4 | 17.8 | 14.1 | 15.8 | 22.9 | 17.1 | 20.1 | 20.4 | 16.3 | 18.7 |
| 2     | 14.8 | 10.4 | 12.3 | 17.1 | 13.5 | 15.0 | 22.6 | 17.6 | 20.3 | 20.0 | 17.1 | 18.4 |
| 3     | 14.8 | 10.8 | 12.6 | 15.4 | 12.3 | 13.7 | 21.5 | 17.5 | 19.7 | 19.4 | 15.1 | 17.5 |
| 4     | 13.9 | 11.0 | 12.4 | 15.6 | 11.9 | 13.4 | 21.9 | 16.6 | 19.2 | 20.1 | 15.8 | 18.1 |
| 5     | 13.9 | 10.9 | 12.3 | 15.4 | 12.2 | 13.5 | 22.2 | 15.9 | 19.1 | 20.0 | 14.9 | 17.5 |
| 6     | 13.1 | 11.0 | 11.9 | 16.1 | 11.8 | 13.7 | 21.7 | 16.6 | 19.2 | 18.2 | 16.3 | 17.3 |
| 7     | 13.1 | 10.1 | 11.5 | 15.9 | 12.0 | 13.8 | 20.4 | 14.5 | 17.8 | 21.0 | 15.5 | 17.7 |
| 8     | 13.4 | 10.7 | 11.7 | 14.0 | 12.2 | 12.9 | 21.1 | 15.6 | 18.5 | 20.6 | 15.5 | 17.8 |
| 9     | 12.8 | 10.5 | 11.4 | 12.6 | 11.7 | 12.1 | 20.6 | 16.8 | 18.9 | 18.4 | 12.6 | 15.6 |
| 10    | 12.8 | 11.0 | 11.7 | ---  | ---  | ---  | 21.5 | 16.6 | 19.2 | 19.4 | 15.1 | 17.5 |
| 11    | 12.7 | 10.9 | 11.5 | ---  | ---  | ---  | 22.2 | 16.3 | 19.6 | 17.9 | 13.4 | 15.4 |
| 12    | 12.9 | 10.7 | 11.6 | ---  | ---  | ---  | 20.8 | 15.3 | 18.6 | 16.0 | 13.6 | 14.5 |
| 13    | 12.5 | 10.6 | 11.6 | ---  | ---  | ---  | 19.9 | 15.0 | 17.8 | 17.0 | 14.4 | 15.7 |
| 14    | 13.9 | 10.9 | 12.0 | ---  | ---  | ---  | 19.4 | 15.5 | 17.6 | 17.3 | 15.8 | 16.5 |
| 15    | 12.0 | 9.9  | 10.8 | ---  | ---  | ---  | 19.0 | 15.3 | 17.4 | 18.4 | 14.9 | 16.9 |
| 16    | 12.8 | 9.4  | 11.0 | ---  | ---  | ---  | 20.4 | 15.0 | 17.8 | 18.1 | 15.4 | 17.0 |
| 17    | 14.0 | 11.6 | 12.6 | 22.3 | 17.0 | 19.6 | 21.7 | 15.1 | 18.1 | 17.3 | 14.8 | 16.3 |
| 18    | 14.5 | 11.4 | 12.8 | 20.5 | 17.6 | 19.1 | 23.1 | 17.1 | 19.5 | 17.4 | 12.3 | 14.5 |
| 19    | 15.0 | 11.8 | 13.2 | 21.0 | 15.4 | 18.3 | 18.6 | 15.4 | 17.0 | 15.1 | 11.4 | 13.1 |
| 20    | 14.6 | 12.4 | 13.3 | 22.5 | 16.9 | 19.5 | 18.2 | 13.5 | 16.0 | 15.5 | 11.7 | 13.2 |
| 21    | 14.1 | 12.5 | 13.2 | 22.9 | 16.6 | 19.8 | 16.7 | 13.7 | 15.4 | 16.0 | 11.2 | 13.8 |
| 22    | 12.6 | 11.3 | 12.0 | 22.2 | 16.9 | 19.8 | 17.8 | 13.9 | 15.8 | 16.0 | 12.4 | 14.4 |
| 23    | 14.7 | 11.5 | 13.0 | 20.5 | 16.5 | 18.6 | 19.0 | 14.0 | 16.6 | 15.8 | 12.4 | 14.1 |
| 24    | 15.8 | 12.7 | 14.1 | 20.4 | 14.5 | 17.5 | 21.8 | 16.7 | 19.2 | 14.8 | 11.9 | 13.4 |
| 25    | 17.3 | 13.7 | 15.2 | 19.9 | 16.4 | 18.2 | 23.8 | 18.9 | 20.9 | 13.8 | 10.8 | 12.7 |
| 26    | 18.2 | 13.1 | 15.5 | 20.4 | 15.3 | 17.8 | 22.3 | 18.7 | 20.2 | 10.8 | 9.0  | 9.8  |
| 27    | 16.0 | 14.1 | 15.0 | 21.2 | 15.4 | 18.5 | 20.0 | 17.5 | 18.6 | 10.8 | 6.8  | 9.1  |
| 28    | 15.5 | 12.9 | 13.9 | 21.2 | 16.6 | 18.7 | 17.6 | 14.3 | 15.7 | 14.5 | 9.9  | 12.2 |
| 29    | 16.6 | 12.2 | 14.3 | 19.2 | 16.5 | 17.7 | 18.2 | 13.6 | 15.8 | 16.2 | 10.8 | 13.7 |
| 30    | 17.9 | 13.6 | 15.7 | 20.2 | 15.4 | 17.8 | 18.6 | 14.7 | 16.6 | 16.5 | 11.9 | 14.4 |
| 31    | ---  | ---  | ---  | 22.4 | 15.8 | 19.0 | 20.4 | 15.5 | 18.2 | ---  | ---  | ---  |
| MONTH | 18.2 | 9.4  | 12.7 | ---  | ---  | ---  | 23.8 | 13.5 | 18.2 | 21.0 | 6.8  | 15.2 |

06752270 CACHE LA POUFRE RIVER BELOW FORT COLLINS, CO

WATER-QUALITY RECORDS

LOCATION.--Lat 40°34'01", long 105°01'36", in NW<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec.20, T.7 N., R.68 W., Larimer County, Hydrologic Unit 10190007, 1.4 mi west of Interstate 25 on Prospect Street in Fort Collins.

DRAINAGE AREA.--1,240 mi<sup>2</sup>.

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DATE      | TIME | DIS-CHARGE, INST. CUBIC FEET PER SECOND | SPE-CIFIC CON-DUCT-ANCE (US/CM) | PH (STAND-ARD UNITS) | TEMPER-ATURE WATER (DEG C) | OXYGEN, DIS-SOLVED (MG/L) | HARD-NESS TOTAL (MG/L AS CACO3) | CALCIUM DIS-SOLVED (MG/L AS CA) | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) | SODIUM, DIS-SOLVED (MG/L AS NA) | ALKA-LINITY LAB (MG/L AS CACO3) |
|-----------|------|---|---------------------------------|----------------------|----------------------------|---------------------------|---------------------------------|---------------------------------|-------------------------------------|---------------------------------|---------------------------------|
| OCT 24... | 1505 | 16                                      | 754                             | 8.2                  | 9.0                        | 10.9                      | 360                             | 94                              | 31                                  | --                              | 279                             |
| NOV 28... | 1402 | 5.8                                     | 835                             | 8.3                  | 4.0                        | 12.3                      | 420                             | 110                             | 35                                  | --                              | 261                             |
| JAN 09... | 1456 | 4.9                                     | 850                             | 7.9                  | 3.5                        | 13.6                      | 410                             | 110                             | 33                                  | 35                              | 278                             |
| FEB 14... | 0833 | 82                                      | 379                             | 8.5                  | 2.0                        | 11.7                      | 170                             | 47                              | 12                                  | --                              | 136                             |
| MAR 26... | 1408 | 43                                      | 365                             | 8.4                  | 8.0                        | 12.7                      | 150                             | 41                              | 11                                  | --                              | 116                             |
| APR 15... | 1425 | 142                                     | 187                             | 9.0                  | 10.5                       | 11.3                      | 82                              | 24                              | 5.3                                 | --                              | 71                              |
| MAY 22... | 1151 | 363                                     | 85                              | 7.9                  | 11.5                       | 9.3                       | 34                              | 9.9                             | 2.3                                 | --                              | 32                              |
| JUN 03... | 1441 | 823                                     | 84                              | 8.1                  | 15.0                       | 8.9                       | 32                              | 9.2                             | 2.1                                 | --                              | 30                              |
| JUL 08... | 1636 | 360                                     | 96                              | 8.8                  | 15.0                       | 9.2                       | 38                              | 11                              | 2.5                                 | 3.3                             | 34                              |
| AUG 12... | 1501 | 57                                      | 288                             | 9.1                  | 23.5                       | 9.4                       | 110                             | 31                              | 8.6                                 | --                              | 87                              |
| SEP 18... | 1340 | 34                                      | 486                             | 8.8                  | 18.0                       | 13.2                      | 200                             | 55                              | 16                                  | --                              | 142                             |

| DATE      | SULFATE DIS-SOLVED (MG/L AS SO4) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) | SILICA, DIS-SOLVED (MG/L AS SIO2) | SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) | NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) | NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) | NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) | PHOS-PHORUS, DIS-SOLVED (MG/L AS P) | PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P) |
|-----------|----------------------------------|------------------------------------|-----------------------------------|-----------------------------------|---|---|---|---|-------------------------------------|--|
| OCT 24... | --                               | --                                 | --                                | --                                | --  | 0.03                                      | 1.7                                       | <0.02                                     | <0.01                               | <0.01                                      |
| NOV 28... | --                               | --                                 | --                                | --                                | --  | 0.03                                      | 2.2                                       | 0.04                                      | <0.01                               | <0.01                                      |
| JAN 09... | 140                              | 26                                 | 0.7                               | 12                                | 504   | 0.02                                      | 2.4                                       | 0.05                                      | <0.01                               | <0.01                                      |
| FEB 14... | --                               | --                                 | --                                | --                                | --  | <0.01                                     | 0.35                                      | <0.02                                     | <0.01                               | <0.01                                      |
| MAR 26... | --                               | --                                 | --                                | --                                | --  | <0.01                                     | 0.23                                      | <0.02                                     | 0.02                                | <0.01                                      |
| APR 15... | --                               | --                                 | --                                | --                                | --  | <0.01                                     | 0.05                                      | <0.02                                     | <0.01                               | <0.01                                      |
| MAY 22... | --                               | --                                 | --                                | --                                | --  | <0.01                                     | 0.08                                      | 0.02                                      | <0.01                               | <0.01                                      |
| JUN 03... | --                               | --                                 | --                                | --                                | --  | 0.01                                      | 0.06                                      | 0.03                                      | 0.02                                | 0.02                                       |
| JUL 08... | 9.6                              | 1.4                                | 0.2                               | 5.6                               | 40  | <0.01                                     | 0.10                                      | 0.04                                      | <0.01                               | 0.02                                       |
| AUG 12... | --                               | --                                 | --                                | --                                | --  | 0.02                                      | 0.74                                      | 0.03                                      | 0.12                                | 0.14                                       |
| SEP 18... | --                               | --                                 | --                                | --                                | --  | 0.10                                      | 1.8                                       | 0.02                                      | 0.17                                | 0.21                                       |

## PLATTE RIVER BASIN

## 06752270 CACHE LA POUVRE RIVER BELOW FORT COLLINS, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DATE         | ALUM-<br>INUM,<br>DIS-<br>SOLVED<br>(UG/L<br>AS AL) | ARSENIC<br>DIS-<br>SOLVED<br>(UG/L<br>AS AS) | CADMIUM<br>DIS-<br>SOLVED<br>(UG/L<br>AS CD) | CHRO-<br>MIUM,<br>DIS-<br>SOLVED<br>(UG/L<br>AS CR) | COPPER,<br>DIS-<br>SOLVED<br>(UG/L<br>AS CU) | IRON,<br>TOTAL<br>RECOV-<br>ERABLE<br>(UG/L<br>AS FE) | LEAD,<br>DIS-<br>SOLVED<br>(UG/L<br>AS PB) |
|--------------|---|--|--|---|--|---|--|
| OCT<br>24... | --  | --   | --   | --  | 1  | 250   | --   |
| NOV<br>28... | --  | --   | --   | --  | <1   | 290   | --   |
| JAN<br>09... | 10  | <1   | <1   | <1  | <1   | 200   | <1   |
| FEB<br>14... | --  | --   | --   | --  | <1   | 190   | --   |
| MAR<br>26... | --  | --   | --   | --  | <1   | 150   | --   |
| APR<br>15... | --  | --   | --   | --  | 1  | 310   | --   |
| MAY<br>22... | --  | --   | --   | --  | 2  | 620   | --   |
| JUN<br>03... | --  | --   | --   | --  | 1  | 540   | --   |
| JUL<br>08... | 20  | <1   | <1   | <1  | 2  | 170   | <1   |
| AUG<br>12... | --  | --   | --   | --  | 1  | 110   | --   |
| SEP<br>18... | --  | --   | --   | --  | 1  | 170   | --   |

| DATE         | MANGA-<br>NESE,<br>TOTAL<br>RECOV-<br>ERABLE<br>(UG/L<br>AS MN) | MERCURY<br>DIS-<br>SOLVED<br>(UG/L<br>AS HG) | NICKEL,<br>DIS-<br>SOLVED<br>(UG/L<br>AS NI) | SELE-<br>NIUM,<br>DIS-<br>SOLVED<br>(UG/L<br>AS SE) | SILVER,<br>DIS-<br>SOLVED<br>(UG/L<br>AS AG) | ZINC,<br>DIS-<br>SOLVED<br>(UG/L<br>AS ZN) |
|--------------|---|--|--|---|--|--|
| OCT<br>24... | --  | --   | --   | --  | <0.2   | --   |
| NOV<br>28... | --  | --   | --   | --  | <0.2   | --   |
| JAN<br>09... | 40  | <0.1   | <1   | 4   | <0.2   | 10   |
| FEB<br>14... | --  | --   | --   | --  | <0.2   | --   |
| MAR<br>26... | --  | --   | --   | --  | <0.2   | --   |
| APR<br>15... | --  | --   | --   | --  | <0.2   | --   |
| MAY<br>22... | --  | --   | --   | --  | <0.2   | --   |
| JUN<br>03... | --  | --   | --   | --  | <0.2   | --   |
| JUL<br>08... | <10   | <0.1   | <1   | <1  | <0.2   | <3   |
| AUG<br>12... | --  | --   | --   | --  | <0.2   | --   |
| SEP<br>18... | --  | --   | --   | --  | <0.2   | --   |

**06752280 CACHE LA POUFRE 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 mi<sup>2</sup>.

**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.--No estimated daily discharges. Records good. 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 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

| DAY   | OCT   | NOV   | DEC   | JAN   | FEB  | MAR   | APR    | MAY   | JUN   | JUL   | AUG   | SEP   |
|-------|-------|-------|-------|-------|------|-------|--------|-------|-------|-------|-------|-------|
| 1     | 5.8   | 4.3   | 4.6   | 4.8   | 30   | 37    | 36     | 158   | 571   | 172   | 31    | 30    |
| 2     | 5.7   | 4.3   | 4.6   | 5.1   | 23   | 5.0   | 25     | 118   | 535   | 172   | 44    | 32    |
| 3     | 5.4   | 5.9   | 4.9   | 5.0   | 23   | 5.0   | 46     | 153   | 594   | 307   | 43    | 14    |
| 4     | 5.8   | 6.8   | 4.1   | 5.3   | 23   | 14    | 29     | 110   | 611   | 297   | 31    | 7.4   |
| 5     | 5.0   | 5.1   | 4.5   | 5.1   | 24   | 46    | 37     | 123   | 889   | 335   | 12    | 8.3   |
| 6     | 4.9   | 4.6   | 5.6   | 5.0   | 30   | 44    | 31     | 130   | 1370  | 366   | 7.6   | 6.0   |
| 7     | 5.0   | 5.0   | 5.9   | 5.0   | 39   | 39    | 41     | 174   | 1420  | 331   | 25    | 4.4   |
| 8     | 5.0   | 4.8   | 3.9   | 5.1   | 45   | 39    | 48     | 202   | 1480  | 263   | 17    | 6.3   |
| 9     | 4.5   | 4.3   | 3.5   | 5.2   | 48   | 42    | 62     | 81    | 1280  | 246   | 19    | 31    |
| 10    | 3.9   | 4.6   | 4.2   | 5.1   | 43   | 46    | 79     | 133   | 1020  | 227   | 29    | 6.4   |
| 11    | 3.4   | 4.7   | 4.6   | 5.2   | 39   | 48    | 99     | 215   | 1100  | 123   | 17    | 27    |
| 12    | 3.6   | 5.0   | 4.9   | 5.2   | 43   | 50    | 95     | 217   | 1160  | 280   | 24    | 42    |
| 13    | 5.0   | 5.3   | 4.8   | 5.1   | 53   | 57    | 95     | 218   | 1250  | 451   | 14    | 22    |
| 14    | 5.3   | 5.0   | 5.6   | 5.4   | 53   | 110   | 147    | 122   | 1170  | 563   | 14    | 36    |
| 15    | 4.6   | 5.8   | 8.1   | 8.7   | 52   | 39    | 118    | 171   | 1650  | 253   | 15    | 60    |
| 16    | 4.1   | 6.5   | 4.5   | 7.1   | 49   | 11    | 59     | 172   | 2140  | 139   | 53    | 36    |
| 17    | 4.4   | 7.1   | 4.0   | 16    | 55   | 8.8   | 7.2    | 779   | 1560  | 66    | 65    | 21    |
| 18    | 4.8   | 4.3   | 4.2   | 27    | 54   | 7.1   | 5.1    | 613   | 1220  | 41    | 5.3   | 8.8   |
| 19    | 3.6   | 4.8   | 4.2   | 5.9   | 55   | 12    | 4.7    | 559   | 840   | 189   | 17    | 26    |
| 20    | 3.5   | 4.6   | 4.2   | 15    | 51   | 13    | 3.5    | 218   | 622   | 143   | 27    | 7.9   |
| 21    | 4.0   | 4.6   | 4.2   | 36    | 57   | 18    | 48     | 102   | 620   | 59    | 32    | 7.0   |
| 22    | 4.1   | 4.3   | 4.2   | 44    | 56   | 15    | 49     | 165   | 1170  | 18    | 35    | 8.2   |
| 23    | 4.0   | 4.2   | 4.2   | 26    | 53   | 7.6   | 26     | 446   | 1090  | 39    | 44    | 16    |
| 24    | 3.8   | 4.4   | 4.4   | 36    | 46   | 12    | 29     | 519   | 661   | 69    | 21    | 63    |
| 25    | 3.7   | 4.2   | 4.5   | 38    | 45   | 21    | 19     | 975   | 513   | 11    | 16    | 35    |
| 26    | 3.6   | 4.4   | 4.6   | 35    | 52   | 30    | 92     | 947   | 273   | 16    | 7.9   | 44    |
| 27    | 3.6   | 5.0   | 4.6   | 27    | 43   | 38    | 24     | 649   | 321   | 18    | 6.2   | 40    |
| 28    | 4.1   | 5.3   | 4.6   | 34    | 35   | 41    | 19     | 327   | 395   | 16    | 20    | 17    |
| 29    | 4.6   | 5.1   | 4.6   | 37    | 40   | 43    | 34     | 259   | 272   | 30    | 21    | 5.8   |
| 30    | 4.6   | 4.6   | 4.6   | 42    | ---  | 43    | 67     | 314   | 216   | 47    | 48    | 6.7   |
| 31    | 4.5   | ---   | 4.6   | 39    | ---  | 40    | ---    | 672   | ---   | 54    | 55    | ---   |
| TOTAL | 137.9 | 148.9 | 144.0 | 545.3 | 1259 | 981.5 | 1474.5 | 10041 | 28013 | 5341  | 816.0 | 675.2 |
| MEAN  | 4.45  | 4.96  | 4.65  | 17.6  | 43.4 | 31.7  | 49.1   | 324   | 934   | 172   | 26.3  | 22.5  |
| MAX   | 5.8   | 7.1   | 8.1   | 44    | 57   | 110   | 147    | 975   | 2140  | 563   | 65    | 63    |
| MIN   | 3.4   | 4.2   | 3.5   | 4.8   | 23   | 5.0   | 3.5    | 81    | 216   | 11    | 5.3   | 4.4   |
| AC-FT | 274   | 295   | 286   | 1080  | 2500 | 1950  | 2920   | 19920 | 55560 | 10590 | 1620  | 1340  |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 - 1996, BY WATER YEAR (WY)

|      | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 13.6 | 23.0 | 20.8 | 24.5 | 27.2 | 32.9 | 119  | 441  | 931  | 233  | 38.5 | 24.0 |      |      |      |      |      |
| MAX  | 55.0 | 122  | 114  | 139  | 156  | 159  | 633  | 2729 | 4430 | 1288 | 248  | 121  |      |      |      |      |      |
| (WY) | 1985 | 1985 | 1985 | 1984 | 1984 | 1980 | 1980 | 1980 | 1983 | 1983 | 1983 | 1983 |      |      |      |      |      |
| 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 1995 CALENDAR YEAR FOR 1996 WATER YEAR WATER YEARS 1980 - 1996

|                          |                  |         |                   |             |
|--------------------------|------------------|---------|-------------------|-------------|
| ANNUAL TOTAL             | 94248.6          | 49577.3 |                   |             |
| ANNUAL MEAN              | 258              | 135     |                   |             |
| HIGHEST ANNUAL MEAN      |                  |         | 700               | 1983        |
| LOWEST ANNUAL MEAN       |                  |         | 19.4              | 1989        |
| HIGHEST DAILY MEAN       | 3390             | Jun 18  | 2140              | Jun 16      |
| LOWEST DAILY MEAN        | <sup>a</sup> 2.1 | Apr 9   | 3.4               | Oct 11      |
| ANNUAL SEVEN-DAY MINIMUM | 2.3              | Apr 9   | 3.8               | Oct 19      |
| INSTANTANEOUS PEAK FLOW  |                  |         | 2570              | Jun 16      |
| INSTANTANEOUS PEAK STAGE |                  |         | 9.08              | Jun 16      |
| ANNUAL RUNOFF (AC-FT)    | 186900           | 98340   | <sup>b</sup> 8.02 | Jun 21 1983 |
| 10 PERCENT EXCEEDS       | 1190             | 410     | 307               |             |
| 50 PERCENT EXCEEDS       | 7.0              | 28      | 8.7               |             |
| 90 PERCENT EXCEEDS       | 3.4              | 4.4     | 4.0               |             |

a-Also occurred Apr 11, 15.

b-Maximum gage height, 10.25 ft, Jun 18, 1995.

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 1995 TO SEPTEMBER 1996

| DATE      | TIME | DIS-CHARGE, INST. CUBIC FEET PER SECOND | SPE-CIFIC CON-DUCT-ANCE (US/CM) | PH (STAND-ARD UNITS) | TEMPER-ATURE WATER (DEG C) | OXYGEN, DIS-SOLVED (MG/L) | HARD-NESS TOTAL (MG/L AS CACO3) | CALCIUM DIS-SOLVED (MG/L AS CA) | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) | SODIUM, DIS-SOLVED (MG/L AS NA) | ALKA-LINITY LAB (MG/L AS CACO3) |
|-----------|------|---|---------------------------------|----------------------|----------------------------|---------------------------|---------------------------------|---------------------------------|-------------------------------------|---------------------------------|---------------------------------|
| OCT 26... | 1406 | 3.6                                     | 2310                            | 8.0                  | 9.5                        | 11.0                      | 1300                            | 330                             | 110                                 | --                              | 223                             |
| NOV 30... | 1224 | 4.6                                     | 2180                            | 7.9                  | 4.5                        | 11.0                      | 1200                            | 310                             | 98                                  | --                              | 246                             |
| JAN 11... | 1402 | 4.9                                     | 1930                            | 7.3                  | 3.0                        | 12.0                      | 1000                            | 270                             | 86                                  | 83                              | 233                             |
| FEB 15... | 0858 | 53                                      | 500                             | 8.5                  | 2.0                        | 11.6                      | 220                             | 60                              | 17                                  | --                              | 140                             |
| MAR 28... | 1421 | 44                                      | 545                             | 8.6                  | 10.5                       | 10.9                      | 230                             | 60                              | 19                                  | --                              | 120                             |
| APR 17... | 1307 | 6.6                                     | 1560                            | 8.1                  | 15.5                       | 9.6                       | 760                             | 200                             | 63                                  | --                              | 170                             |
| MAY 22... | 0858 | 202                                     | 99                              | 8.0                  | 10.5                       | 9.3                       | 38                              | 11                              | 2.6                                 | --                              | 34                              |
| JUN 04... | 1350 | 760                                     | 147                             | 7.9                  | 14.0                       | 8.5                       | 54                              | 15                              | 4.1                                 | --                              | 32                              |
| JUL 10... | 1820 | 125                                     | 483                             | 8.4                  | 19.0                       | 9.3                       | 200                             | 52                              | 16                                  | 17                              | 70                              |
| AUG 15... | 0938 | 16                                      | 812                             | 8.0                  | 18.0                       | 8.0                       | 340                             | 88                              | 29                                  | --                              | 119                             |
| SEP 20... | 0921 | 7.6                                     | 1750                            | 8.2                  | 12.5                       | 8.9                       | 850                             | 220                             | 74                                  | --                              | 184                             |

| DATE      | SULFATE DIS-SOLVED (MG/L AS SO4) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) | SILICA, DIS-SOLVED (MG/L AS SIO2) | SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) | NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) | NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) | NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) | PHOS-PHORUS, DIS-SOLVED (MG/L AS P) | PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P) |
|-----------|----------------------------------|------------------------------------|-----------------------------------|-----------------------------------|---|---|---|---|-------------------------------------|--|
| OCT 26... | --                               | --                                 | --                                | --                                | --  | 0.03                                      | 1.9                                       | 0.07                                      | <0.01                               | <0.01                                      |
| NOV 30... | --                               | --                                 | --                                | --                                | --  | 0.04                                      | 2.6                                       | 0.13                                      | <0.01                               | <0.01                                      |
| JAN 11... | 880                              | 21                                 | 1.1                               | 12                                | 1570  | 0.02                                      | 2.4                                       | 0.12                                      | <0.01                               | <0.01                                      |
| FEB 15... | --                               | --                                 | --                                | --                                | --  | <0.01                                     | 0.4                                       | <0.02                                     | <0.01                               | <0.01                                      |
| MAR 28... | --                               | --                                 | --                                | --                                | --  | <0.01                                     | 0.28                                      | <0.02                                     | 0.01                                | <0.01                                      |
| APR 17... | --                               | --                                 | --                                | --                                | --  | 0.02                                      | 1.0                                       | 0.08                                      | <0.01                               | <0.01                                      |
| MAY 22... | --                               | --                                 | --                                | --                                | --  | <0.01                                     | 0.09                                      | 0.02                                      | 0.01                                | <0.01                                      |
| JUN 04... | --                               | --                                 | --                                | --                                | --  | 0.01                                      | 0.08                                      | 0.03                                      | 0.02                                | <0.01                                      |
| JUL 10... | 160                              | 4.5                                | 0.4                               | 6.6                               | 314   | 0.01                                      | 0.35                                      | 0.04                                      | <0.01                               | 0.01                                       |
| AUG 15... | --                               | --                                 | --                                | --                                | --  | 0.05                                      | 0.96                                      | 0.05                                      | 0.08                                | 0.09                                       |
| SEP 20... | --                               | --                                 | --                                | --                                | --  | <0.01                                     | 0.04                                      | 0.02                                      | <0.01                               | <0.01                                      |

06752280 CACHE LA POUFRE RIVER ABOVE BOX ELDER CREEK NEAR TIMNATH, CO--Continued

WATER-QUALITY DATA WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DATE      | ALUM-<br>INUM,<br>DIS-<br>SOLVED<br>(UG/L<br>AS AL) | ARSENIC<br>DIS-<br>SOLVED<br>(UG/L<br>AS AS) | CADMIUM<br>DIS-<br>SOLVED<br>(UG/L<br>AS CD) | CHRO-<br>MIUM,<br>DIS-<br>SOLVED<br>(UG/L<br>AS CR) | COPPER,<br>DIS-<br>SOLVED<br>(UG/L<br>AS CU) | IRON,<br>TOTAL<br>RECOV-<br>ERABLE<br>(UG/L<br>AS FE) | LEAD,<br>DIS-<br>SOLVED<br>(UG/L<br>AS PB) |
|-----------|---|--|--|---|--|---|--|
| OCT 26... | --  | --   | --   | --  | <1   | 240   | --   |
| NOV 30... | --  | --   | --   | --  | <1   | 160   | --   |
| JAN 11... | <10   | <1   | <1   | <1  | <1   | 160   | <1   |
| FEB 15... | --  | --   | --   | --  | <1   | 180   | --   |
| MAR 28... | --  | --   | --   | --  | <1   | 160   | --   |
| APR 17... | --  | --   | --   | --  | <1   | 390   | --   |
| MAY 22... | --  | --   | --   | --  | 2  | 1000  | --   |
| JUN 04... | --  | --   | --   | --  | 1  | 690   | --   |
| JUL 10... | 10  | <1   | <1   | <1  | 2  | 370   | <1   |
| AUG 15... | --  | --   | --   | --  | <1   | 240   | --   |
| SEP 20... | --  | --   | --   | --  | <1   | 300   | --   |

| DATE      | MANGA-<br>NESE,<br>TOTAL<br>RECOV-<br>ERABLE<br>(UG/L<br>AS MN) | MERCURY<br>DIS-<br>SOLVED<br>(UG/L<br>AS HG) | NICKEL,<br>DIS-<br>SOLVED<br>(UG/L<br>AS NI) | SELE-<br>NIUM,<br>DIS-<br>SOLVED<br>(UG/L<br>AS SE) | SILVER,<br>DIS-<br>SOLVED<br>(UG/L<br>AS AG) | ZINC,<br>DIS-<br>SOLVED<br>(UG/L<br>AS ZN) |
|-----------|---|--|--|---|--|--|
| OCT 26... | --  | --   | --   | --  | <0.2   | --   |
| NOV 30... | --  | --   | --   | --  | <0.2   | --   |
| JAN 11... | 40  | <0.1   | <1   | 9   | <0.2   | 10   |
| FEB 15... | --  | --   | --   | --  | <0.2   | --   |
| MAR 28... | --  | --   | --   | --  | <0.2   | --   |
| APR 17... | --  | --   | --   | --  | <0.2   | --   |
| MAY 22... | --  | --   | --   | --  | <0.2   | --   |
| JUN 04... | --  | --   | --   | --  | <0.2   | --   |
| JUL 10... | 40  | <0.1   | <1   | 1   | <0.2   | 7  |
| AUG 15... | --  | --   | --   | --  | <0.2   | --   |
| SEP 20... | --  | --   | --   | --  | <0.2   | --   |



**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 mi<sup>2</sup>.

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" 1901-3. Statistical summary computed for 1976 to current year. Water-quality data available, 1950-53, and April 1993 to September 1995.

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 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

| DAY   | OCT   | NOV   | DEC   | JAN   | FEB   | MAR   | APR   | MAY   | JUN    | JUL   | AUG   | SEP   |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|-------|-------|-------|
| 1     | 1710  | 1120  | 854   | 738   | 820   | 891   | 730   | 273   | 2520   | 1210  | 817   | 984   |
| 2     | 1420  | 1090  | 916   | 723   | 815   | 888   | 732   | 356   | 2260   | 933   | 683   | 867   |
| 3     | 1230  | 947   | 855   | 772   | e800  | 866   | 680   | 310   | 2180   | e758  | 586   | 817   |
| 4     | 1130  | 801   | 781   | 811   | e825  | 862   | 592   | 276   | 2070   | 629   | 515   | 730   |
| 5     | 1110  | 714   | 743   | 821   | e850  | 787   | 533   | 218   | 2080   | 645   | 457   | 670   |
| 6     | 1110  | 688   | 858   | 785   | e875  | 732   | 659   | 218   | 2450   | 535   | 428   | 642   |
| 7     | 1100  | 698   | 898   | 806   | 994   | 729   | 652   | 233   | 2820   | 848   | 360   | 701   |
| 8     | 1120  | 676   | 921   | 822   | 943   | 722   | 655   | 229   | 2820   | 875   | 361   | 770   |
| 9     | 1090  | 669   | 868   | 853   | 939   | 723   | 615   | 281   | 2850   | 804   | 350   | 710   |
| 10    | 1050  | 678   | 884   | 899   | 924   | 710   | 565   | 255   | 2490   | 1690  | 356   | 696   |
| 11    | 1020  | 680   | 915   | 908   | 819   | 711   | 565   | 555   | 2360   | 2130  | 362   | 674   |
| 12    | 993   | 703   | 917   | 904   | 808   | 691   | 601   | 494   | 2340   | e1320 | 370   | 778   |
| 13    | 956   | 702   | 897   | 869   | 817   | 688   | 559   | 404   | 2470   | e1300 | 354   | 1180  |
| 14    | 913   | 721   | 889   | 900   | 827   | 804   | 650   | 320   | 2570   | 2620  | 378   | 1130  |
| 15    | 985   | 698   | 890   | 866   | 709   | 1320  | 690   | 298   | 2940   | 1970  | 425   | 1150  |
| 16    | 936   | 666   | 876   | 846   | 658   | 1140  | 448   | 286   | 4140   | 1250  | 513   | 1190  |
| 17    | 901   | 633   | 808   | 810   | 646   | 894   | 379   | 305   | 4870   | 893   | 475   | 1070  |
| 18    | 871   | 643   | 790   | 713   | 684   | 809   | 304   | 522   | 4080   | 639   | 434   | 1050  |
| 19    | 840   | 647   | 779   | 771   | 706   | 790   | 283   | 453   | 3360   | 611   | e406  | 1930  |
| 20    | 824   | 663   | 773   | 840   | 677   | 801   | 282   | 439   | 2540   | 615   | e450  | 2990  |
| 21    | 810   | 693   | 769   | 869   | 674   | 744   | 267   | 545   | 2180   | 556   | 484   | 1830  |
| 22    | 797   | 703   | 764   | 898   | 682   | 699   | 268   | 520   | 2890   | 440   | 459   | 1480  |
| 23    | 952   | 682   | 751   | 864   | 659   | 665   | 254   | 483   | 4350   | 470   | 501   | 1280  |
| 24    | 1210  | 682   | 732   | 866   | 728   | 683   | 208   | 686   | 3750   | e530  | 806   | 1220  |
| 25    | 1150  | 680   | 741   | 902   | 767   | 741   | 177   | 1510  | 2940   | 446   | 672   | 1220  |
| 26    | 1090  | 680   | 738   | 816   | 831   | 817   | 173   | 4710  | 2290   | 442   | 506   | 1240  |
| 27    | 1030  | 672   | 722   | 836   | 868   | 767   | 152   | 8350  | 1610   | 404   | 469   | 1370  |
| 28    | 1040  | 715   | 711   | 875   | 825   | 748   | 143   | 4930  | 1300   | 383   | 826   | 1520  |
| 29    | 1060  | 747   | 728   | 882   | 841   | 733   | 182   | 3080  | 1590   | 738   | 799   | 1370  |
| 30    | 1040  | 800   | 741   | 873   | ---   | 726   | 201   | 2700  | 1430   | 1000  | 1120  | 1250  |
| 31    | 1130  | ---   | 741   | 824   | ---   | 704   | ---   | 2620  | ---    | 871   | 1040  | ---   |
| TOTAL | 32618 | 21891 | 25250 | 25962 | 23011 | 24585 | 13199 | 36859 | 80540  | 28555 | 16762 | 34509 |
| MEAN  | 1052  | 730   | 815   | 837   | 793   | 793   | 440   | 1189  | 2685   | 921   | 541   | 1150  |
| MAX   | 1710  | 1120  | 921   | 908   | 994   | 1320  | 732   | 8350  | 4870   | 2620  | 1120  | 2990  |
| MIN   | 797   | 633   | 711   | 713   | 646   | 665   | 143   | 218   | 1300   | 383   | 350   | 642   |
| AC-FT | 64700 | 43420 | 50080 | 51500 | 45640 | 48760 | 26180 | 73110 | 159800 | 56640 | 33250 | 68450 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1976 - 1996, 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 |  |
|------|------|------|------|------|------|------|------|-------|-------|------|------|------|------|------|------|------|------|------|------|------|------|--|
| MEAN | 859  | 913  | 842  | 819  | 852  | 963  | 1090 | 2521  | 3253  | 1118 | 762  | 803  |      |      |      |      |      |      |      |      |      |  |
| MAX  | 3388 | 2585 | 1337 | 1434 | 1641 | 1852 | 3894 | 13060 | 14520 | 5784 | 2783 | 2079 |      |      |      |      |      |      |      |      |      |  |
| (WY) | 1985 | 1985 | 1985 | 1984 | 1984 | 1983 | 1983 | 1980  | 1983  | 1983 | 1984 | 1984 |      |      |      |      |      |      |      |      |      |  |
| MIN  | 415  | 488  | 568  | 503  | 540  | 473  | 144  | 251   | 113   | 183  | 304  | 259  |      |      |      |      |      |      |      |      |      |  |
| (WY) | 1978 | 1978 | 1982 | 1982 | 1978 | 1982 | 1982 | 1977  | 1977  | 1994 | 1981 | 1977 |      |      |      |      |      |      |      |      |      |  |

SUMMARY STATISTICS

FOR 1995 CALENDAR YEAR

FOR 1996 WATER YEAR

WATER YEARS 1976 - 1996

|                          |         |        |        |
|--------------------------|---------|--------|--------|
| ANNUAL TOTAL             | 885221  | 363741 |        |
| ANNUAL MEAN              | 2425    | 994    | a1233  |
| HIGHEST ANNUAL MEAN      |         |        | 3631   |
| LOWEST ANNUAL MEAN       |         |        | 456    |
| HIGHEST DAILY MEAN       | 21500   | May 31 | b21500 |
| LOWEST DAILY MEAN        | 149     | Apr 25 | c61    |
| ANNUAL SEVEN-DAY MINIMUM | 202     | Apr 20 | d63    |
| INSTANTANEOUS PEAK FLOW  |         |        | 10500  |
| INSTANTANEOUS PEAK STAGE |         |        | 8.53   |
| ANNUAL RUNOFF (AC-FT)    | 1756000 | 721500 | 893000 |
| 10 PERCENT EXCEEDS       | 9320    | 1940   | 2060   |
| 50 PERCENT EXCEEDS       | 721     | 798    | 758    |
| 90 PERCENT EXCEEDS       | 380     | 382    | 310    |

e-Estimated.

a-Average discharge for 71 years (water years 1902-03, 1906-74), 777 ft<sup>3</sup>/s; 562900 acre-ft/yr, prior to completion of Chatfield Dam.

b-Maximum daily discharge for period of record, 31000 ft<sup>3</sup>/s, Jun 7, 1921.

c-Minimum daily discharge for period of record, 28 ft<sup>3</sup>/s, Apr 30, 1955.

d-Maximum discharge and stage for period of record, 31500 ft<sup>3</sup>/s, May 8, 1973, gage height, 11.73 ft.

**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 mi<sup>2</sup>.

**WATER-DISCHARGE RECORDS**

PERIOD OF RECORD.--October 1952 to current year. Statistical summary computed for 1976 to current year.

REVISED RECORDS.--WSP 1710: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 4,307.80 ft above sea level.

REMARKS.--Records good except for estimated daily discharges, and those above 1,620 ft<sup>3</sup>/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 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

| DAY   | OCT   | NOV   | DEC   | JAN   | FEB   | MAR   | APR   | MAY   | JUN   | JUL   | AUG   | SEP   |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1     | 1300  | 519   | 466   | 682   | 878   | 838   | 306   | 162   | 1000  | 440   | 872   | 937   |
| 2     | 1440  | 307   | 490   | 683   | 826   | 748   | 230   | 149   | 993   | 414   | 838   | 891   |
| 3     | 1230  | 277   | 477   | 738   | e850  | 702   | 158   | 173   | 848   | 237   | 578   | 786   |
| 4     | 1140  | 229   | 372   | 787   | e850  | 689   | 182   | 131   | 869   | 481   | 379   | 675   |
| 5     | 1090  | 190   | 310   | 802   | e900  | 678   | 176   | 131   | 804   | 396   | 350   | 627   |
| 6     | 1020  | 154   | 291   | 734   | e1000 | 637   | 163   | 157   | 810   | 307   | 297   | 673   |
| 7     | 849   | 131   | 303   | 706   | e1100 | 618   | 166   | 200   | 1010  | 287   | 331   | 832   |
| 8     | 756   | 134   | 315   | 940   | e1300 | 620   | 177   | 273   | 1320  | 621   | 309   | 898   |
| 9     | 683   | 132   | 374   | 949   | 1210  | 646   | 169   | 297   | 1380  | 734   | 266   | 1020  |
| 10    | 653   | 306   | 424   | 903   | 1090  | 499   | 452   | 324   | 1410  | 838   | 239   | 998   |
| 11    | 631   | 367   | 428   | 931   | 1020  | 341   | 512   | 319   | 1080  | 1740  | 283   | 950   |
| 12    | 590   | 410   | 366   | 909   | 930   | 225   | 538   | 409   | 1190  | 980   | 276   | 953   |
| 13    | 565   | 446   | 323   | 895   | 925   | 215   | 589   | 338   | 1190  | 537   | 373   | 1070  |
| 14    | 542   | 433   | 317   | 890   | 938   | 239   | 588   | 272   | 1300  | 762   | 332   | 1450  |
| 15    | 539   | 434   | 310   | 895   | 932   | 228   | 637   | 198   | 1440  | 1240  | 325   | 1390  |
| 16    | 538   | 430   | 303   | 907   | 858   | 280   | 544   | 174   | 1910  | 768   | 369   | 1390  |
| 17    | 509   | 424   | 340   | 893   | 763   | 280   | 485   | 197   | 3200  | 381   | 418   | 1400  |
| 18    | 479   | 357   | 431   | 802   | 705   | 220   | 440   | 225   | 3280  | 284   | 453   | 1350  |
| 19    | 454   | 374   | 436   | 797   | 662   | 122   | 374   | 337   | 2590  | 351   | 437   | 1550  |
| 20    | 431   | 376   | 435   | 976   | 614   | 121   | 347   | 359   | 1880  | 292   | 425   | 2460  |
| 21    | 419   | 305   | 440   | 1030  | 597   | 130   | 343   | 358   | 1310  | 288   | 448   | 2490  |
| 22    | 426   | 378   | 461   | 1030  | 616   | 116   | 337   | 453   | 1060  | 258   | 492   | 2000  |
| 23    | 468   | 427   | 507   | 1040  | 623   | 104   | 301   | 454   | 1840  | 300   | 518   | 1560  |
| 24    | 499   | 427   | 520   | 1020  | 639   | 140   | 281   | 479   | 2680  | 329   | 482   | 1290  |
| 25    | 571   | 429   | 497   | 1000  | 684   | 193   | 235   | 494   | 2250  | 443   | 450   | 1240  |
| 26    | 531   | 428   | 491   | 970   | 803   | 245   | 207   | 693   | 1730  | 351   | 383   | 1250  |
| 27    | 499   | 422   | 485   | 862   | 856   | 361   | 178   | 2530  | 1190  | 322   | 394   | 1320  |
| 28    | 477   | 426   | 470   | 918   | 853   | 292   | 136   | 3840  | 640   | 324   | 393   | 1170  |
| 29    | 501   | 429   | 464   | 1010  | 843   | 268   | 132   | 1780  | 593   | 340   | 589   | 1230  |
| 30    | 510   | 442   | 522   | 984   | ---   | 338   | 155   | 1030  | 786   | 610   | 734   | 1110  |
| 31    | 506   | ---   | 636   | 924   | ---   | 348   | ---   | 1050  | ---   | 756   | 1020  | ---   |
| TOTAL | 20846 | 10543 | 13004 | 27607 | 24865 | 11481 | 9538  | 17986 | 43583 | 16411 | 14053 | 36960 |
| MEAN  | 672   | 351   | 419   | 891   | 857   | 370   | 318   | 580   | 1453  | 529   | 453   | 1232  |
| MAX   | 1440  | 519   | 636   | 1040  | 1300  | 838   | 637   | 3840  | 3280  | 1740  | 1020  | 2490  |
| MIN   | 419   | 131   | 291   | 682   | 597   | 104   | 132   | 131   | 593   | 237   | 239   | 627   |
| AC-FT | 41350 | 20910 | 25790 | 54760 | 49320 | 22770 | 18920 | 35680 | 86450 | 32550 | 27870 | 73310 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1976 - 1996, 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 |  |
|------|------|------|------|------|------|------|------|-------|-------|------|------|------|------|------|------|------|------|------|------|------|------|--|
| MEAN | 533  | 494  | 577  | 717  | 674  | 543  | 807  | 1827  | 2393  | 853  | 597  | 666  |      |      |      |      |      |      |      |      |      |  |
| 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 1995 CALENDAR YEAR

FOR 1996 WATER YEAR

WATER YEARS 1976 - 1996

|                          |         |        |            |
|--------------------------|---------|--------|------------|
| ANNUAL TOTAL             | 720978  | 246877 |            |
| ANNUAL MEAN              | 1975    | 675    | a 889      |
| HIGHEST ANNUAL MEAN      |         |        | 2995       |
| LOWEST ANNUAL MEAN       |         |        | 231        |
| HIGHEST DAILY MEAN       | e 16300 | Jun 11 | b, e 16300 |
| LOWEST DAILY MEAN        | 35      | Jan 1  | 35         |
| ANNUAL SEVEN-DAY MINIMUM | 54      | Apr 24 | 44         |
| INSTANTANEOUS PEAK FLOW  |         |        | c 16700    |
| INSTANTANEOUS PEAK STAGE |         |        | 6.08       |
| ANNUAL RUNOFF (AC-FT)    | 1430000 | 489700 | 644300     |
| 10 PERCENT EXCEEDS       | 8490    | 1240   | 1580       |
| 50 PERCENT EXCEEDS       | 431     | 508    | 452        |
| 90 PERCENT EXCEEDS       | 174     | 223    | 159        |

e-Estimated.

a-Average discharge for 22 years (water years 1953-74), 572 ft<sup>3</sup>/s; 414400 acre-ft/yr, prior to completion of Chatfield Dam.

b-Maximum daily discharge for period of record, 20800 ft<sup>3</sup>/s, May 9, 1973.

c-Maximum discharge and stage for period of record, 26800 ft<sup>3</sup>/s, May 8, 1973, gage height, 11.68 ft, from rating curve extended above 16000 ft<sup>3</sup>/s.

06758500 SOUTH PLATTE RIVER NEAR WELDONA, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 1967 to September 1968, October 1971 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DATE      | TIME | DIS-CHARGE, INST. CUBIC FEET PER SECOND | SPE-CIFIC CON-DUCT-ANCE (US/CM) | PH (STAND-ARD UNITS) | TEMPER-ATURE WATER (DEG C) | OXYGEN, DIS-SOLVED (MG/L) | COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML) | STREP-TOCOCCI, FECAL, KF AGAR (COLS. PER 100 ML) | HARD-NESS TOTAL (MG/L AS CACO3) | CALCIUM DIS-SOLVED (MG/L AS CA) |
|-----------|------|---|---------------------------------|----------------------|----------------------------|---------------------------|--|--|---------------------------------|---------------------------------|
| NOV 22... | 1032 | 438                                     | 1610                            | 8.4                  | 7.5                        | 12.4                      | K72  | --   | 550                             | 130                             |
| MAR 19... | 1142 | 113                                     | 1720                            | 8.2                  | 5.5                        | 11.2                      | K2   | K10  | 570                             | 140                             |
| MAY 03... | 1054 | 188                                     | 1550                            | 8.5                  | 15.5                       | 13.0                      | K27  | 52   | 540                             | 130                             |
| SEP 25... | 1321 | 1130                                    | 1410                            | 8.4                  | 15.5                       | 10.0                      | >1200                                      | --   | 490                             | 120                             |

| DATE      | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) | SODIUM, DIS-SOLVED (MG/L AS NA) | SODIUM AD-SORP-TION RATIO | POTAS-SIUM, DIS-SOLVED (MG/L AS K) | ALKA-LINITY LAB (MG/L AS CACO3) | SULFATE SOLVED (MG/L AS SO4) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) | SILICA, DIS-SOLVED (MG/L AS SIO2) | SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) |
|-----------|-------------------------------------|---------------------------------|---------------------------|------------------------------------|---------------------------------|------------------------------|------------------------------------|-----------------------------------|-----------------------------------|---|
| NOV 22... | 54                                  | 140                             | 3                         | 7.8                                | 248                             | 490                          | 71                                 | 0.9                               | 11                                | 1110  |
| MAR 19... | 54                                  | 140                             | 3                         | 7.6                                | 251                             | 550                          | 78                                 | 0.9                               | 14                                | 1210  |
| MAY 03... | 51                                  | 130                             | 2                         | 7.7                                | 229                             | 500                          | 66                                 | 1.0                               | 8.5                               | 1100  |
| SEP 25... | 47                                  | 110                             | 2                         | 7.9                                | 228                             | 410                          | 61                                 | 1.1                               | 13                                | 978   |

| DATE      | SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) | SOLIDS, DIS-SOLVED (TONS PER AC-FT) | SOLIDS, DIS-SOLVED (TONS PER DAY) | NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) | NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) | NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) | NITRO-GEN, AM-MONIA DIS-SOLVED (MG/L AS N) | PHOS-PHORUS TOTAL (MG/L AS P) | PHOS-PHORUS DIS-SOLVED (MG/L AS P) | PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) |
|-----------|---|-------------------------------------|-----------------------------------|---|---|---|--|-------------------------------|------------------------------------|---|
| NOV 22... | 1080  | 1.51                                | 1310                              | 0.03                                      | 0.80  | 5.0                                       | 0.16                                       | 0.37                          | 0.26                               | 0.25                                      |
| MAR 19... | 1160  | 1.65                                | 369                               | 0.03                                      | 0.40  | 5.1                                       | 0.03                                       | 0.26                          | 0.25                               | 0.22                                      |
| MAY 03... | 1050  | 1.50                                | 558                               | 0.06                                      | 0.80  | 4.1                                       | 0.02                                       | 0.23                          | 0.14                               | 0.15                                      |
| SEP 25... | 935   | 1.33                                | 2980                              | <0.01                                     | 0.80  | 5.8                                       | 0.04                                       | 0.44                          | 0.36                               | 0.39                                      |

| DATE      | BARIUM, DIS-SOLVED (UG/L AS BA) | BERYL-LIUM, DIS-SOLVED (UG/L AS BE) | BORON, DIS-SOLVED (UG/L AS B) | CADMIUM, DIS-SOLVED (UG/L AS CD) | CHRO-MIUM, DIS-SOLVED (UG/L AS CR) | COBALT, DIS-SOLVED (UG/L AS CO) | COPPER, DIS-SOLVED (UG/L AS CU) | IRON, DIS-SOLVED (UG/L AS FE) | LEAD, DIS-SOLVED (UG/L AS PB) |
|-----------|---------------------------------|-------------------------------------|-------------------------------|----------------------------------|------------------------------------|---------------------------------|---------------------------------|-------------------------------|-------------------------------|
| NOV 22... | 55                              | <0.5                                | 290                           | <1                               | <5                                 | <3                              | <10                             | 5                             | <10                           |
| MAR 19... | 53                              | <0.5                                | 90                            | <1                               | <5                                 | <3                              | <10                             | <3                            | 10                            |
| MAY 03... | 46                              | <0.5                                | 260                           | <1                               | <5                                 | <3                              | <10                             | <3                            | <10                           |
| SEP 25... | 49                              | <0.5                                | 260                           | <1                               | <5                                 | <3                              | <10                             | 13                            | <10                           |

| DATE      | LITHIUM, DIS-SOLVED (UG/L AS LI) | MANGA-NESE, DIS-SOLVED (UG/L AS MN) | MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) | NICKEL, DIS-SOLVED (UG/L AS NI) | SELE-NIUM, DIS-SOLVED (UG/L AS SE) | SILVER, DIS-SOLVED (UG/L AS AG) | STRON-TIUM, DIS-SOLVED (UG/L AS SR) | VANA-DIUM, DIS-SOLVED (UG/L AS V) | ZINC, DIS-SOLVED (UG/L AS ZN) |
|-----------|----------------------------------|-------------------------------------|--------------------------------------|---------------------------------|------------------------------------|---------------------------------|-------------------------------------|-----------------------------------|-------------------------------|
| NOV 22... | 35                               | 17                                  | <10                                  | <10                             | 3                                  | <1                              | 1500                                | <6                                | 9                             |
| MAR 19... | 37                               | 33                                  | <10                                  | <10                             | 8                                  | <1                              | 1600                                | <6                                | 4                             |
| MAY 03... | 36                               | 13                                  | <10                                  | <10                             | 4                                  | <1                              | 1500                                | <6                                | 9                             |
| SEP 25... | 30                               | 6                                   | <10                                  | <10                             | 3                                  | <1                              | 1300                                | <6                                | 5                             |

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 SW<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec.33, T.5 N., R.55 W., Morgan County, Hydrologic Unit 10190012, on left bank 0.7 mi downstream from North Sterling Canal, 1.3 mi downstream from Beaver Creek, and 4.3 mi northeast of Snyder.

DRAINAGE AREA.--16,852 mi<sup>2</sup> (Area at downstream site used prior to October 1987).

PERIOD OF RECORD.--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 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

| DAY   | OCT   | NOV  | DEC   | JAN   | FEB   | MAR   | APR  | MAY   | JUN   | JUL   | AUG   | SEP   |
|-------|-------|------|-------|-------|-------|-------|------|-------|-------|-------|-------|-------|
| 1     | 1740  | 134  | 97    | 550   | 624   | 885   | 337  | 141   | 542   | 84    | e590  | e625  |
| 2     | 2000  | 104  | 112   | 582   | 614   | 863   | 315  | 146   | 493   | 66    | 618   | e740  |
| 3     | 1850  | 60   | 125   | e630  | 552   | 794   | 262  | 134   | 430   | e215  | 510   | 723   |
| 4     | 1760  | 53   | 98    | e720  | 488   | 765   | 211  | 136   | 426   | e300  | 403   | 638   |
| 5     | 1670  | 50   | 48    | 859   | 506   | 760   | 212  | 135   | 391   | e430  | 324   | 564   |
| 6     | 1670  | 48   | 39    | 679   | 926   | e750  | 181  | 125   | 328   | 329   | 309   | 548   |
| 7     | 1540  | 47   | 93    | 546   | 1240  | e710  | 167  | 175   | 344   | 302   | 284   | 701   |
| 8     | 1230  | 43   | 241   | 815   | 1610  | e700  | 160  | 249   | 555   | 284   | e245  | 789   |
| 9     | 1080  | 44   | 195   | 1030  | 1660  | e690  | 102  | 294   | 697   | e480  | e210  | 885   |
| 10    | 943   | 46   | e235  | 912   | 1510  | e710  | 56   | 282   | 715   | 585   | 197   | 945   |
| 11    | 906   | 68   | e280  | 860   | 1240  | e570  | e75  | 280   | 641   | 667   | 181   | 910   |
| 12    | 833   | 79   | e330  | 776   | 1070  | e410  | 58   | 288   | 518   | 1100  | 179   | 930   |
| 13    | 782   | 76   | 258   | 795   | 890   | e320  | 79   | 335   | 568   | 446   | e200  | 883   |
| 14    | 798   | 89   | 159   | 787   | 850   | e310  | 131  | 266   | 565   | e420  | 220   | 1100  |
| 15    | 765   | 91   | 67    | 775   | 779   | e330  | 131  | 197   | 644   | e810  | 226   | 1390  |
| 16    | 775   | 92   | 64    | 758   | 706   | e320  | 110  | 152   | 951   | 710   | e240  | 1440  |
| 17    | 443   | 85   | 63    | 773   | 661   | e380  | 41   | 124   | 1710  | 396   | 262   | 1530  |
| 18    | 194   | 62   | 77    | 923   | 457   | e380  | 65   | 160   | 2680  | 212   | e290  | 1540  |
| 19    | 141   | 57   | 102   | 947   | 365   | e330  | 121  | e220  | 2240  | e200  | e330  | 1710  |
| 20    | e100  | 65   | 107   | 996   | 351   | e240  | 153  | e310  | 1600  | 229   | e340  | 1940  |
| 21    | e100  | 61   | 113   | 1050  | 349   | e230  | 195  | 263   | 1020  | 212   | e345  | 2910  |
| 22    | e100  | 57   | e270  | 1040  | 354   | e260  | 241  | 282   | 651   | e175  | e355  | 2400  |
| 23    | e105  | 62   | 322   | 1020  | 339   | 260   | 252  | 348   | 720   | 179   | e355  | 2170  |
| 24    | e115  | 85   | 384   | 1020  | 557   | 257   | 235  | 335   | 1790  | 197   | e355  | 1730  |
| 25    | 145   | 90   | 428   | 903   | 733   | e250  | 199  | 252   | 1860  | 212   | e285  | 1660  |
| 26    | 154   | 93   | 454   | 603   | e790  | e320  | 183  | e180  | 1300  | e310  | e235  | 1580  |
| 27    | 160   | e90  | 465   | 585   | 852   | e340  | 150  | 487   | 836   | 324   | 231   | 1610  |
| 28    | 162   | e85  | 455   | 619   | 867   | 380   | 136  | 2590  | 362   | e285  | e250  | 1570  |
| 29    | 174   | 84   | 460   | 738   | 890   | 332   | 135  | 2010  | 92    | e245  | e325  | 1450  |
| 30    | e150  | 88   | 472   | 720   | ---   | 351   | 133  | 842   | 66    | 251   | e420  | 1340  |
| 31    | e125  | ---  | 499   | 539   | ---   | 381   | ---  | 575   | ---   | e385  | e500  | ---   |
| TOTAL | 22710 | 2188 | 7112  | 24550 | 22830 | 14578 | 4826 | 12313 | 25735 | 11040 | 9814  | 38951 |
| MEAN  | 733   | 72.9 | 229   | 792   | 787   | 470   | 161  | 397   | 858   | 356   | 317   | 1298  |
| MAX   | 2000  | 134  | 499   | 1050  | 1660  | 885   | 337  | 2590  | 2680  | 1100  | 618   | 2910  |
| MIN   | 100   | 43   | 39    | 539   | 339   | 230   | 41   | 124   | 66    | 66    | 179   | 548   |
| AC-FT | 45050 | 4340 | 14110 | 48690 | 45280 | 28920 | 9570 | 24420 | 51050 | 21900 | 19470 | 77260 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 1996, BY WATER YEAR (WY)

|      | 1993 | 1994 | 1995 | 1996 |
|------|------|------|------|------|
| MEAN | 269  | 116  | 315  | 556  |
| MAX  | 733  | 274  | 700  | 812  |
| (WY) | 1996 | 1994 | 1993 | 1996 |
| MIN  | 58.8 | 22.7 | 60.4 | 145  |
| (WY) | 1995 | 1995 | 1995 | 1995 |

| SUMMARY STATISTICS       | FOR 1995 CALENDAR YEAR | FOR 1996 WATER YEAR | WATER YEARS 1993 - 1996 |
|--------------------------|------------------------|---------------------|-------------------------|
| ANNUAL TOTAL             | 656621.3               | 196647              |                         |
| ANNUAL MEAN              | 1799                   | 537                 | 761                     |
| HIGHEST ANNUAL MEAN      |                        |                     | 1723                    |
| LOWEST ANNUAL MEAN       |                        |                     | 308                     |
| HIGHEST DAILY MEAN       | 15800                  | Jun 12              | 15800                   |
| LOWEST DAILY MEAN        | 5.0                    | Jan 1               | 3.7                     |
| ANNUAL SEVEN-DAY MINIMUM | 14                     | Jan 29              | 4.0                     |
| INSTANTANEOUS PEAK FLOW  |                        |                     | 3290                    |
| INSTANTANEOUS PEAK STAGE |                        |                     | 4.56                    |
| ANNUAL RUNOFF (AC-FT)    | 1302000                | 390000              | 551200                  |
| 10 PERCENT EXCEEDS       | 8130                   | 1240                | 1070                    |
| 50 PERCENT EXCEEDS       | 287                    | 346                 | 299                     |
| 90 PERCENT EXCEEDS       | 36                     | 87                  | 41                      |

e-Estimated.

a-Also occurred Dec 31, 1994.

**06764000 SOUTH PLATTE RIVER AT JULESBURG, CO**

LOCATION.--Lat 40°58'46", long 102°15'15", in NW¼NE¼ and NE¼SE¼ (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, and on right bank of channel 2, 5 ft downstream 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 mi<sup>2</sup>.

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.--Two 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.

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 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

| DAY   | OCT   | NOV   | DEC   | JAN   | FEB   | MAR   | APR   | MAY   | JUN   | JUL  | AUG  | SEP   |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|-------|
| 1     | 1190  | e286  | 452   | e675  | e711  | 1010  | 516   | 96    | 931   | 349  | e40  | 1100  |
| 2     | 1160  | e290  | 446   | e659  | e688  | 966   | e403  | 98    | 714   | e286 | e48  | 929   |
| 3     | 1200  | e326  | 426   | e608  | e690  | 1060  | 328   | 93    | 695   | e190 | e63  | 962   |
| 4     | 1380  | e401  | 428   | e559  | e668  | 1070  | 305   | 92    | 685   | e117 | e77  | 1030  |
| 5     | 1370  | e443  | 439   | e518  | e637  | 1030  | e409  | 88    | 636   | e103 | e90  | 1040  |
| 6     | 1280  | e443  | 433   | e487  | e613  | e1030 | 438   | 90    | 571   | e92  | e100 | 995   |
| 7     | 1190  | e408  | 447   | e439  | e725  | e1000 | 448   | 97    | 507   | e83  | e75  | 997   |
| 8     | 1130  | e407  | e455  | e486  | e901  | 984   | 433   | 103   | 460   | e74  | e60  | 921   |
| 9     | 1080  | 412   | e490  | e571  | e1240 | 986   | 396   | 176   | 432   | e67  | e55  | 913   |
| 10    | 967   | 406   | e536  | e646  | e1520 | 885   | 368   | 161   | 433   | e64  | e49  | 966   |
| 11    | 897   | 392   | e548  | e658  | e1380 | 912   | 367   | 154   | 509   | e61  | e44  | 1000  |
| 12    | 856   | 382   | e559  | e684  | e1230 | 849   | 334   | 159   | 539   | e59  | e46  | 1060  |
| 13    | 842   | 395   | e584  | e756  | e1130 | 728   | 302   | 164   | 498   | e68  | e48  | 1020  |
| 14    | 832   | 428   | e558  | e769  | e1190 | 692   | 290   | 149   | e380  | e70  | e49  | 996   |
| 15    | 889   | 425   | e522  | e795  | e1110 | 704   | 272   | 123   | e337  | e76  | e87  | 1020  |
| 16    | 922   | 428   | e495  | e737  | e1050 | 720   | 290   | 129   | e356  | e79  | e102 | 1190  |
| 17    | 854   | 418   | e466  | e589  | 1030  | 727   | 274   | 119   | 414   | e91  | 74   | e1420 |
| 18    | 715   | 428   | e462  | e254  | 1020  | 684   | 218   | 113   | 609   | e95  | 64   | e1840 |
| 19    | 589   | 435   | e459  | e304  | 994   | 691   | 191   | 105   | e1280 | e113 | 95   | 2300  |
| 20    | 434   | 427   | e482  | e406  | 846   | 648   | 184   | 105   | e1780 | e109 | 90   | 2820  |
| 21    | 363   | 422   | e480  | e663  | 719   | 584   | 163   | 99    | e1710 | e75  | 76   | 2160  |
| 22    | 312   | 437   | e504  | e931  | 716   | 392   | 148   | 96    | e1590 | e68  | 114  | 2380  |
| 23    | 287   | 437   | e529  | e1050 | 702   | 337   | 160   | 100   | e1290 | e65  | 133  | 2850  |
| 24    | 304   | 436   | e554  | e1010 | 664   | e368  | 141   | 225   | e981  | e70  | 154  | 2630  |
| 25    | 291   | 442   | e556  | e959  | 598   | e380  | 121   | 146   | e918  | e66  | 161  | 2410  |
| 26    | 282   | 452   | e583  | e902  | 655   | e450  | 112   | 175   | e1290 | e56  | 162  | 2150  |
| 27    | 282   | 444   | e607  | e811  | 895   | 643   | 104   | 312   | e1350 | e53  | 157  | 1930  |
| 28    | 294   | 429   | e632  | e761  | 967   | 556   | 102   | 306   | e1160 | e46  | 123  | 1690  |
| 29    | e294  | e457  | e632  | e739  | 1020  | e509  | 104   | 388   | 866   | e48  | 194  | 1630  |
| 30    | e290  | e452  | e633  | e712  | ---   | e513  | 97    | 1510  | 520   | e48  | 613  | 1540  |
| 31    | e302  | ---   | e664  | e707  | ---   | 515   | ---   | e1430 | ---   | e44  | 1760 | ---   |
| TOTAL | 23078 | 12388 | 16061 | 20845 | 26309 | 22623 | 8018  | 7201  | 24441 | 2885 | 5003 | 45889 |
| MEAN  | 744   | 413   | 518   | 672   | 907   | 730   | 267   | 232   | 815   | 93.1 | 161  | 1530  |
| MAX   | 1380  | 457   | 664   | 1050  | 1520  | 1070  | 516   | 1510  | 1780  | 349  | 1760 | 2850  |
| MIN   | 282   | 286   | 426   | 254   | 598   | 337   | 97    | 88    | 337   | 44   | 40   | 913   |
| AC-FT | 45780 | 24570 | 31860 | 41350 | 52180 | 44870 | 15900 | 14280 | 48480 | 5720 | 9920 | 91020 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1902 - 1996, BY WATER YEAR (WY)

|      | 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 |
|------|------|------|------|------|------|------|------|------|-------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 294  | 347  | 404  | 513  | 604  | 555  | 553  | 1061 | 1462  | 310  | 153  | 240  |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| MAX  | 2427 | 2358 | 1371 | 1566 | 1864 | 2200 | 2808 | 9922 | 12200 | 5059 | 1346 | 1964 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| (WY) | 1985 | 1985 | 1985 | 1970 | 1930 | 1939 | 1983 | 1980 | 1983  | 1983 | 1983 | 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 1995 CALENDAR YEAR |        | FOR 1996 WATER YEAR |             | WATER YEARS 1902 - 1996 |                   |
|--------------------------|------------------------|--------|---------------------|-------------|-------------------------|-------------------|
| ANNUAL TOTAL             | 622035                 |        | 214741              |             |                         |                   |
| ANNUAL MEAN              | 1704                   |        | 587                 |             | 545                     |                   |
| HIGHEST ANNUAL MEAN      |                        |        |                     |             | 2882                    |                   |
| LOWEST ANNUAL MEAN       |                        |        |                     |             | 76.3                    |                   |
| HIGHEST DAILY MEAN       | 14000                  | Jun 14 | 2850                | Sep 23      | 30800                   | Jun 16 1921       |
| LOWEST DAILY MEAN        | 56                     | Sep 5  | e40                 | Aug 1       | a                       | .00 Aug 18 1902   |
| ANNUAL SEVEN-DAY MINIMUM | 60                     | Sep 2  | 47                  | Jul 27      | .00                     | Jul 25 1903       |
| INSTANTANEOUS PEAK FLOW  |                        |        | 3140                | Sep 20      | 37600                   | Jun 20 1965       |
| INSTANTANEOUS PEAK STAGE |                        |        | b                   | 5.96 Sep 20 | c                       | 10.44 Jun 20 1965 |
| ANNUAL RUNOFF (AC-FT)    | 1234000                |        | 425900              |             | 394600                  |                   |
| 10 PERCENT EXCEEDS       | 7090                   |        | 1170                |             | 1130                    |                   |
| 50 PERCENT EXCEEDS       | 332                    |        | 458                 |             | 225                     |                   |
| 90 PERCENT EXCEEDS       | 113                    |        | 86                  |             | 28                      |                   |

e-Estimated.

a-Also occurred Aug 19-20, 1902, and Jul 25 to Aug 7, 1903.

b-For stage recorded on channel no. 2.

c-From floodmarks in gage well.



**07079300 EAST FORK ARKANSAS RIVER AT HIGHWAY 24 NEAR LEADVILLE, CO**

LOCATION.--Lat 39°16'21", long 106°18'21", in NW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec. 14, T.9 S., R.80 W., Lake County, Hydrologic Unit 11020001, on right bank 20 ft downstream from U.S. Highway 24, 0.35 mi downstream from Leadville Mine Drainage Tunnel, 1.5 mi northwest of Leadville, and 2.2 mi upstream from mouth of Tennessee Creek.

DRAINAGE AREA.--49.9 mi<sup>2</sup>.

**WATER-DISCHARGE RECORDS**

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

GAGE.--Water-stage recorder. 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).

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

| DAY   | OCT  | NOV  | DEC  | JAN  | FEB  | MAR  | APR  | MAY   | JUN   | JUL  | AUG  | SEP  |
|-------|------|------|------|------|------|------|------|-------|-------|------|------|------|
| 1     | 26   | 20   | 18   | e13  | 11   | e11  | 12   | 34    | 311   | 176  | 44   | 23   |
| 2     | 25   | 19   | e18  | e13  | e11  | 11   | 12   | 40    | 341   | 176  | 42   | 22   |
| 3     | 24   | e20  | e17  | e14  | e11  | e11  | 12   | 47    | 402   | 182  | 43   | 22   |
| 4     | 25   | e21  | e17  | 14   | e10  | 10   | 12   | 60    | 490   | 177  | 42   | 21   |
| 5     | 25   | e20  | 16   | 14   | 10   | 11   | 12   | 74    | 491   | 173  | 39   | 22   |
| 6     | 26   | e19  | 16   | e14  | 10   | 11   | 13   | 82    | 594   | 167  | 37   | 24   |
| 7     | 27   | 18   | e16  | 13   | e10  | e11  | 13   | 94    | 651   | 160  | 36   | 24   |
| 8     | 28   | 19   | e16  | e13  | e10  | e11  | 15   | 115   | 624   | 151  | 36   | 23   |
| 9     | 27   | 19   | e16  | e14  | e10  | 11   | 17   | 136   | 670   | 138  | 35   | 22   |
| 10    | 26   | 20   | e16  | 13   | 11   | 11   | 17   | 155   | 645   | 127  | 33   | 21   |
| 11    | 25   | e20  | e17  | e13  | e11  | 11   | 17   | 165   | 584   | 126  | 31   | 21   |
| 12    | 26   | 19   | 16   | e13  | e11  | 10   | 17   | 206   | 553   | 117  | 30   | 22   |
| 13    | 24   | 19   | 16   | e13  | e11  | 10   | 17   | 216   | 510   | 105  | 29   | 23   |
| 14    | 23   | 18   | e17  | e13  | 10   | 10   | 17   | 233   | 486   | 98   | 29   | 23   |
| 15    | 23   | 18   | e16  | e13  | e11  | 11   | 17   | 271   | 480   | 93   | 29   | 25   |
| 16    | 23   | 18   | e15  | 13   | e11  | 11   | 18   | 295   | 453   | 89   | 30   | 24   |
| 17    | 22   | 18   | e15  | 14   | e11  | 11   | 19   | 252   | 413   | 86   | 29   | 22   |
| 18    | 22   | 18   | e15  | e14  | 11   | 12   | 19   | 248   | 376   | 86   | 29   | 22   |
| 19    | 22   | 18   | e14  | e14  | 11   | e12  | 20   | 253   | 351   | 76   | 30   | 23   |
| 20    | 20   | 17   | e14  | 14   | 11   | e12  | 21   | 272   | 334   | 69   | 30   | 23   |
| 21    | 20   | 17   | e14  | e13  | 12   | e12  | 19   | 283   | 338   | 64   | 29   | 24   |
| 22    | 21   | 16   | e14  | 12   | 11   | 11   | 20   | 280   | 381   | 61   | 30   | 24   |
| 23    | 20   | 16   | e14  | e12  | e11  | 11   | 21   | 287   | 287   | 57   | 31   | 25   |
| 24    | 21   | e16  | e14  | e12  | e11  | 11   | 26   | 294   | 234   | 55   | 29   | 26   |
| 25    | 20   | e16  | e15  | 12   | e11  | 11   | 31   | 313   | 200   | 53   | 28   | 26   |
| 26    | 20   | 16   | e15  | e12  | 11   | e11  | 32   | 302   | 184   | 52   | 27   | 25   |
| 27    | 20   | 17   | e15  | e12  | e11  | e11  | 35   | 252   | 196   | 50   | 26   | 24   |
| 28    | 20   | e17  | e15  | 11   | e11  | 11   | 32   | 273   | 193   | 49   | 27   | 24   |
| 29    | 20   | 16   | 14   | 13   | e11  | 11   | 30   | 269   | 180   | 54   | 26   | 23   |
| 30    | 20   | e17  | e14  | e12  | ---  | 11   | 32   | 275   | 178   | 56   | 24   | 22   |
| 31    | 20   | ---  | 13   | e12  | ---  | 11   | ---  | 286   | ---   | 48   | 23   | ---  |
| TOTAL | 711  | 542  | 478  | 402  | 313  | 341  | 595  | 6362  | 12130 | 3171 | 983  | 695  |
| MEAN  | 22.9 | 18.1 | 15.4 | 13.0 | 10.8 | 11.0 | 19.8 | 205   | 404   | 102  | 31.7 | 23.2 |
| MAX   | 28   | 21   | 18   | 14   | 12   | 12   | 35   | 313   | 670   | 182  | 44   | 26   |
| MIN   | 20   | 16   | 13   | 11   | 10   | 10   | 12   | 34    | 178   | 48   | 23   | 21   |
| AC-FT | 1410 | 1080 | 948  | 797  | 621  | 676  | 1180 | 12620 | 24060 | 6290 | 1950 | 1380 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 1996, BY WATER YEAR (WY)

|      | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 |
|------|------|------|------|------|------|------|------|
| MEAN | 18.1 | 13.7 | 11.5 | 10.6 | 9.65 | 9.83 | 13.5 |
| MAX  | 22.9 | 18.1 | 15.4 | 13.0 | 11.0 | 11.0 | 19.8 |
| (WY) | 1996 | 1996 | 1996 | 1996 | 1991 | 1996 | 1996 |
| MIN  | 15.1 | 10.8 | 10.1 | 9.17 | 7.10 | 8.74 | 10.5 |
| (WY) | 1995 | 1992 | 1992 | 1995 | 1993 | 1995 | 1992 |

SUMMARY STATISTICS FOR 1995 CALENDAR YEAR FOR 1996 WATER YEAR WATER YEARS 1990 - 1996

|                          |                  |        |                 |
|--------------------------|------------------|--------|-----------------|
| ANNUAL TOTAL             | 25716.2          | 26723  |                 |
| ANNUAL MEAN              | 70.5             | 73.0   | 49.8            |
| HIGHEST ANNUAL MEAN      |                  |        | 73.0            |
| LOWEST ANNUAL MEAN       |                  |        | 34.5            |
| HIGHEST DAILY MEAN       | 611              | Jun 24 | 670             |
| LOWEST DAILY MEAN        | <sup>a</sup> 6.5 | Feb 15 | <sup>b</sup> 10 |
| ANNUAL SEVEN-DAY MINIMUM | 7.1              | Feb 11 | 10              |
| INSTANTANEOUS PEAK FLOW  |                  |        | 816             |
| INSTANTANEOUS PEAK STAGE |                  |        | 4.08            |
| ANNUAL RUNOFF (AC-FT)    | 51010            | 53010  | 36070           |
| 10 PERCENT EXCEEDS       | 224              | 258    | 144             |
| 50 PERCENT EXCEEDS       | 19               | 21     | 18              |
| 90 PERCENT EXCEEDS       | 9.0              | 11     | 9.4             |

e-Estimated.  
a-Also occurred Feb 17, 1995.  
b-Also occurred Feb 5-9, 14, and Mar 4, 12-14.

**07079300 EAST FORK ARKANSAS RIVER AT HIGHWAY 24 NEAR LEADVILLE, CO--Continued****WATER-QUALITY RECORDS**

PERIOD OF RECORD.--May 1990 to September 1996 (discontinued).

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: May 1990 to September 1996 (discontinued).

WATER TEMPERATURE: May 1990 to September 1996 (discontinued).

pH: May 1990 to September 1996 (discontinued).

INSTRUMENTATION: Water-quality monitor.

REMARKS.--Records for specific conductance are poor. Records for water temperature are good except Aug. 19 to Sept. 30, which are poor. Records for pH are poor. Daily data that are not published are either missing or of unacceptable quality.

EXTREMES FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 1,010 microsiemens, Sept. 21, 1993; minimum, 66 microsiemens, June 12, 1993.

WATER TEMPERATURE: Maximum, 18.3°C, Aug. 16, 1993; minimum, 0.0°C, many days.

pH: Maximum, 8.9 units, Mar. 17-18, 1992; minimum, 7.1 units, June 28, 1993.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 393 microsiemens, Mar. 21; minimum, 73 microsiemens, June 17.

WATER TEMPERATURE: Maximum, 17.4°C, Aug. 17; minimum, 0.1°C, many days.

pH: Maximum, 8.6 units, Dec. 8, 16, 18; minimum, 7.5 units, Oct. 1, and Apr. 29.

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM @ 25 DEG. C), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

| DAY   | MAX     | MIN | MEAN | MAX      | MIN | MEAN | MAX      | MIN | MEAN | MAX     | MIN | MEAN |
|-------|---------|-----|------|----------|-----|------|----------|-----|------|---------|-----|------|
|       | OCTOBER |     |      | NOVEMBER |     |      | DECEMBER |     |      | JANUARY |     |      |
| 1     | 243     | 230 | 236  | 279      | 264 | 271  | 301      | 279 | 290  | 319     | 296 | 310  |
| 2     | 245     | 233 | 239  | 282      | 266 | 276  | 309      | 281 | 294  | 317     | 291 | 304  |
| 3     | 251     | 234 | 241  | 281      | 267 | 274  | 307      | 281 | 295  | 312     | 295 | 303  |
| 4     | 251     | 233 | 241  | 288      | 264 | 273  | 311      | 285 | 298  | 317     | 296 | 307  |
| 5     | 270     | 236 | 247  | 290      | 264 | 274  | 303      | 289 | 296  | 318     | 295 | 310  |
| 6     | 275     | 237 | 251  | 295      | 264 | 279  | 303      | 279 | 295  | 332     | 290 | 311  |
| 7     | 256     | 237 | 244  | 291      | 273 | 281  | 303      | 281 | 296  | 326     | 298 | 310  |
| 8     | 250     | 239 | 242  | 293      | 269 | 284  | 315      | 277 | 296  | 326     | 293 | 309  |
| 9     | 250     | 238 | 242  | 295      | 271 | 280  | 319      | 282 | 301  | ---     | --- | ---  |
| 10    | 250     | 239 | 244  | 294      | 268 | 280  | 315      | 287 | 297  | 327     | 295 | 311  |
| 11    | 254     | 241 | 247  | 297      | 267 | 288  | 320      | 281 | 296  | 337     | 289 | 313  |
| 12    | 253     | 241 | 246  | 287      | 273 | 279  | 311      | 292 | 301  | 334     | 299 | 315  |
| 13    | 261     | 240 | 250  | 287      | 273 | 279  | 307      | 293 | 300  | 332     | 305 | 315  |
| 14    | 270     | 252 | 259  | 291      | 273 | 282  | 306      | 292 | 300  | 332     | 310 | 320  |
| 15    | 270     | 253 | 260  | 297      | 269 | 286  | 311      | 292 | 300  | 336     | 309 | 320  |
| 16    | 267     | 254 | 261  | 294      | 271 | 288  | 306      | 285 | 295  | 331     | 314 | 323  |
| 17    | 268     | 255 | 260  | 295      | 274 | 290  | 309      | 282 | 290  | 332     | 311 | 321  |
| 18    | 274     | 254 | 262  | 298      | 279 | 289  | 309      | 281 | 292  | 334     | 315 | 325  |
| 19    | 269     | 253 | 261  | 295      | 279 | 290  | ---      | --- | ---  | 330     | 303 | 315  |
| 20    | 273     | 257 | 264  | 300      | 280 | 290  | 309      | 279 | 290  | 334     | 300 | 311  |
| 21    | 274     | 256 | 266  | 302      | 283 | 292  | 309      | 280 | 295  | 334     | 319 | 328  |
| 22    | 270     | 258 | 264  | 304      | 284 | 293  | 307      | 277 | 292  | 338     | 323 | 328  |
| 23    | 286     | 257 | 272  | 304      | 280 | 295  | 303      | 282 | 290  | 337     | 319 | 327  |
| 24    | 289     | 259 | 279  | 300      | 277 | 289  | ---      | --- | ---  | 337     | 315 | 326  |
| 25    | 280     | 256 | 270  | 305      | 286 | 292  | ---      | --- | ---  | 340     | 307 | 320  |
| 26    | 276     | 254 | 266  | 308      | 284 | 295  | ---      | --- | ---  | ---     | --- | ---  |
| 27    | 294     | 267 | 283  | 308      | 281 | 296  | ---      | --- | ---  | ---     | --- | ---  |
| 28    | 292     | 268 | 280  | 301      | 276 | 282  | ---      | --- | ---  | ---     | --- | ---  |
| 29    | 285     | 267 | 274  | 305      | 275 | 291  | 326      | 303 | 317  | ---     | --- | ---  |
| 30    | 279     | 265 | 271  | 307      | 282 | 292  | 324      | 309 | 315  | 353     | 297 | 323  |
| 31    | 284     | 267 | 273  | ---      | --- | ---  | 322      | 303 | 312  | 357     | 328 | 344  |
| MONTH | 294     | 230 | 258  | 308      | 264 | 285  | ---      | --- | ---  | ---     | --- | ---  |



## 07079300 EAST FORK ARKANSAS RIVER AT HIGHWAY 24 NEAR LEADVILLE, CO--Continued

pH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DAY   | MAX      | MIN | MEAN | MAX      | MIN | MEAN | MAX      | MIN | MEAN | MAX     | MIN | MEAN |
|-------|----------|-----|------|----------|-----|------|----------|-----|------|---------|-----|------|
|       | OCTOBER  |     |      | NOVEMBER |     |      | DECEMBER |     |      | JANUARY |     |      |
| 1     | 8.0      | 7.5 | 7.7  | ---      | --- | ---  | 8.4      | 8.2 | 8.3  | 7.9     | 7.7 | 7.8  |
| 2     | ---      | --- | ---  | ---      | --- | ---  | 8.4      | 8.2 | 8.3  | 7.9     | 7.6 | 7.7  |
| 3     | ---      | --- | ---  | 8.4      | 8.0 | 8.2  | 8.5      | 8.2 | 8.3  | 7.9     | 7.7 | 7.8  |
| 4     | ---      | --- | ---  | 8.3      | 8.1 | 8.2  | 8.4      | 8.2 | 8.3  | 8.1     | 7.7 | 7.9  |
| 5     | ---      | --- | ---  | 8.3      | 8.0 | 8.2  | 8.4      | 8.2 | 8.3  | 8.0     | 7.7 | 7.8  |
| 6     | ---      | --- | ---  | 8.3      | 7.9 | 8.1  | 8.4      | 8.3 | 8.3  | 7.9     | 7.6 | 7.7  |
| 7     | ---      | --- | ---  | 8.3      | 8.2 | 8.3  | 8.5      | 8.1 | 8.3  | 8.1     | 7.7 | 7.8  |
| 8     | ---      | --- | ---  | 8.3      | 8.2 | 8.2  | 8.6      | 8.2 | 8.3  | 8.0     | 7.7 | 7.8  |
| 9     | ---      | --- | ---  | 8.3      | 8.1 | 8.2  | 8.4      | 8.2 | 8.3  | 7.9     | 7.7 | 7.8  |
| 10    | ---      | --- | ---  | 8.3      | 7.9 | 8.1  | 8.4      | 8.2 | 8.3  | 7.9     | 7.7 | 7.8  |
| 11    | ---      | --- | ---  | 8.3      | 8.2 | 8.2  | 8.5      | 8.2 | 8.3  | 8.2     | 7.6 | 7.9  |
| 12    | ---      | --- | ---  | 8.3      | 8.2 | 8.3  | 8.4      | 8.3 | 8.3  | 8.4     | 7.9 | 8.1  |
| 13    | 8.3      | 8.0 | 8.2  | 8.3      | 8.2 | 8.2  | 8.4      | 8.3 | 8.3  | 8.3     | 8.1 | 8.2  |
| 14    | 8.3      | 8.1 | 8.2  | 8.3      | 8.2 | 8.2  | 8.5      | 8.2 | 8.3  | 8.4     | 8.3 | 8.3  |
| 15    | 8.4      | 8.2 | 8.3  | 8.3      | 8.2 | 8.2  | 8.5      | 8.1 | 8.3  | 8.5     | 8.2 | 8.3  |
| 16    | 8.4      | 8.2 | 8.3  | 8.3      | 8.2 | 8.2  | 8.6      | 8.2 | 8.3  | 8.5     | 8.3 | 8.4  |
| 17    | 8.4      | 8.2 | 8.3  | 8.2      | 8.0 | 8.1  | 8.5      | 8.2 | 8.3  | 8.5     | 8.3 | 8.4  |
| 18    | 8.4      | 8.2 | 8.3  | 8.1      | 7.9 | 8.0  | 8.6      | 8.1 | 8.3  | 8.5     | 8.3 | 8.4  |
| 19    | 8.5      | 8.2 | 8.3  | ---      | --- | ---  | 8.5      | 8.1 | 8.3  | 8.5     | 8.3 | 8.4  |
| 20    | 8.4      | 8.2 | 8.3  | ---      | --- | ---  | 8.5      | 8.2 | 8.3  | 8.5     | 8.3 | 8.4  |
| 21    | 8.5      | 8.2 | 8.3  | ---      | --- | ---  | 8.4      | 8.1 | 8.2  | 8.5     | 8.2 | 8.3  |
| 22    | 8.4      | 8.2 | 8.3  | ---      | --- | ---  | 8.4      | 8.1 | 8.2  | 8.5     | 8.3 | 8.4  |
| 23    | 8.4      | 8.2 | 8.3  | ---      | --- | ---  | 8.3      | 8.1 | 8.1  | 8.5     | 8.3 | 8.4  |
| 24    | 8.4      | 8.2 | 8.3  | ---      | --- | ---  | 8.1      | 7.9 | 8.0  | 8.4     | 8.2 | 8.3  |
| 25    | 8.4      | 8.2 | 8.3  | ---      | --- | ---  | 8.1      | 7.9 | 8.1  | 8.4     | 8.3 | 8.3  |
| 26    | 8.3      | 8.1 | 8.2  | ---      | --- | ---  | 8.2      | 7.9 | 8.0  | 8.4     | 8.2 | 8.3  |
| 27    | 8.4      | 8.2 | 8.3  | ---      | --- | ---  | 8.0      | 7.9 | 7.9  | 8.4     | 8.2 | 8.3  |
| 28    | 8.4      | 8.2 | 8.3  | ---      | --- | ---  | 7.9      | 7.8 | 7.8  | 8.4     | 8.2 | 8.3  |
| 29    | 8.2      | 7.9 | 8.1  | ---      | --- | ---  | 7.9      | 7.8 | 7.9  | 8.4     | 8.2 | 8.3  |
| 30    | 8.3      | 7.8 | 8.0  | ---      | --- | ---  | 8.0      | 7.8 | 7.8  | 8.3     | 8.2 | 8.2  |
| 31    | ---      | --- | ---  | ---      | --- | ---  | 7.9      | 7.8 | 7.8  | 8.3     | 8.2 | 8.2  |
| MONTH | ---      | --- | ---  | ---      | --- | ---  | 8.6      | 7.8 | 8.2  | 8.5     | 7.6 | 8.1  |
| DAY   | MAX      | MIN | MEAN | MAX      | MIN | MEAN | MAX      | MIN | MEAN | MAX     | MIN | MEAN |
|       | FEBRUARY |     |      | MARCH    |     |      | APRIL    |     |      | MAY     |     |      |
| 1     | 8.3      | 8.2 | 8.2  | 8.4      | 8.1 | 8.2  | 8.3      | 7.9 | 8.1  | 8.3     | 7.9 | 8.1  |
| 2     | 8.3      | 8.1 | 8.2  | 8.4      | 8.0 | 8.2  | 8.2      | 7.9 | 8.0  | 8.3     | 7.9 | 8.1  |
| 3     | 8.1      | 8.0 | 8.0  | 8.3      | 7.9 | 8.1  | 8.2      | 7.9 | 8.0  | 8.3     | 7.9 | 8.0  |
| 4     | 8.1      | 7.9 | 8.0  | 8.4      | 8.0 | 8.2  | 8.1      | 7.8 | 7.9  | 8.3     | 7.9 | 8.0  |
| 5     | 8.2      | 8.1 | 8.1  | 8.3      | 8.0 | 8.1  | 8.2      | 7.8 | 7.9  | 8.2     | 7.8 | 8.0  |
| 6     | 8.3      | 8.1 | 8.1  | 8.4      | 7.9 | 8.1  | 8.1      | 7.7 | 7.9  | 8.2     | 7.8 | 8.0  |
| 7     | 8.3      | 8.0 | 8.1  | 8.3      | 7.7 | 8.0  | 8.1      | 7.8 | 7.9  | 8.2     | 7.8 | 8.0  |
| 8     | 8.3      | 8.0 | 8.1  | 8.4      | 7.8 | 8.1  | 8.1      | 7.8 | 7.9  | 8.2     | 7.8 | 7.9  |
| 9     | 8.4      | 8.0 | 8.2  | 8.4      | 7.9 | 8.2  | 8.1      | 7.7 | 7.9  | 8.2     | 7.8 | 7.9  |
| 10    | 8.4      | 8.2 | 8.3  | 8.3      | 7.9 | 8.2  | 8.0      | 7.7 | 7.8  | 8.1     | 7.8 | 7.9  |
| 11    | 8.4      | 8.3 | 8.4  | 8.2      | 8.0 | 8.1  | 8.0      | 7.6 | 7.8  | 8.0     | 7.8 | 7.9  |
| 12    | 8.4      | 8.3 | 8.4  | 8.1      | 7.8 | 8.0  | 8.0      | 7.6 | 7.8  | 7.8     | 7.7 | 7.8  |
| 13    | 8.4      | 8.3 | 8.4  | 8.0      | 7.8 | 7.9  | 7.8      | 7.6 | 7.7  | 7.9     | 7.7 | 7.8  |
| 14    | 8.4      | 8.3 | 8.4  | 8.0      | 7.8 | 7.8  | 8.0      | 7.6 | 7.7  | ---     | --- | ---  |
| 15    | 8.4      | 8.2 | 8.4  | 8.0      | 7.8 | 7.9  | 8.0      | 7.6 | 7.8  | ---     | --- | ---  |
| 16    | 8.5      | 8.2 | 8.4  | 8.1      | 7.9 | 8.0  | 8.2      | 7.6 | 7.9  | ---     | --- | ---  |
| 17    | 8.5      | 8.3 | 8.4  | 8.1      | 7.9 | 7.9  | 8.0      | 7.6 | 7.8  | ---     | --- | ---  |
| 18    | 8.5      | 8.4 | 8.5  | 8.1      | 7.8 | 7.9  | 8.2      | 7.9 | 8.0  | ---     | --- | ---  |
| 19    | 8.5      | 8.4 | 8.5  | 8.2      | 7.7 | 7.9  | 8.1      | 7.9 | 8.0  | ---     | --- | ---  |
| 20    | 8.5      | 8.4 | 8.4  | 8.1      | 7.8 | 7.9  | 8.2      | 7.9 | 8.0  | ---     | --- | ---  |
| 21    | 8.5      | 8.3 | 8.4  | 8.2      | 7.8 | 7.9  | 8.2      | 8.0 | 8.1  | 8.0     | 7.8 | 7.9  |
| 22    | 8.5      | 8.4 | 8.4  | 8.2      | 7.9 | 8.0  | 8.2      | 8.0 | 8.1  | 8.0     | 7.8 | 7.9  |
| 23    | 8.5      | 8.3 | 8.4  | 8.3      | 7.9 | 8.1  | 8.3      | 8.0 | 8.1  | 8.0     | 7.8 | 7.9  |
| 24    | 8.5      | 8.3 | 8.4  | 8.3      | 8.0 | 8.1  | 8.4      | 7.9 | 8.1  | 8.0     | 7.8 | 7.9  |
| 25    | 8.5      | 8.3 | 8.4  | 8.3      | 7.9 | 8.0  | 8.4      | 7.9 | 8.0  | 7.9     | 7.8 | 7.9  |
| 26    | 8.5      | 8.3 | 8.4  | 8.2      | 7.8 | 8.0  | 8.4      | 7.9 | 8.1  | 7.9     | 7.8 | 7.9  |
| 27    | 8.5      | 8.1 | 8.3  | 8.2      | 7.8 | 8.0  | 8.4      | 7.9 | 8.0  | 8.0     | 7.8 | 7.9  |
| 28    | 8.5      | 8.1 | 8.3  | 8.3      | 7.9 | 8.0  | 8.2      | 7.6 | 7.9  | 8.0     | 7.9 | 7.9  |
| 29    | 8.5      | 8.0 | 8.2  | 8.3      | 7.9 | 8.0  | 8.3      | 7.5 | 7.9  | 8.1     | 7.9 | 8.0  |
| 30    | ---      | --- | ---  | 8.3      | 7.9 | 8.1  | 8.5      | 7.9 | 8.1  | 8.2     | 7.9 | 8.1  |
| 31    | ---      | --- | ---  | 8.2      | 8.0 | 8.1  | ---      | --- | ---  | 8.2     | 8.0 | 8.1  |
| MONTH | 8.5      | 7.9 | 8.3  | 8.4      | 7.7 | 8.0  | 8.5      | 7.5 | 7.9  | ---     | --- | ---  |

07079300 EAST FORK ARKANSAS RIVER AT HIGHWAY 24 NEAR LEADVILLE, CO--Continued

pH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DAY   | MAX | MIN | MEAN |
|-------|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|------|
|       |     |     |      |     |     |      |     |     |      |     |     |      |
| 1     | 8.2 | 8.0 | 8.1  | 7.8 | 7.6 | 7.7  | --- | --- | ---  | --- | --- | ---  |
| 2     | 8.2 | 8.0 | 8.1  | 8.0 | 7.6 | 7.8  | --- | --- | ---  | --- | --- | ---  |
| 3     | 8.1 | 7.9 | 8.0  | 8.0 | 7.8 | 7.9  | --- | --- | ---  | --- | --- | ---  |
| 4     | 8.1 | 7.9 | 8.0  | 7.9 | 7.8 | 7.9  | --- | --- | ---  | --- | --- | ---  |
| 5     | 8.0 | 7.7 | 7.9  | 7.9 | 7.8 | 7.9  | --- | --- | ---  | --- | --- | ---  |
| 6     | 7.9 | 7.7 | 7.8  | 8.0 | 7.9 | 7.9  | --- | --- | ---  | --- | --- | ---  |
| 7     | --- | --- | ---  | 7.9 | 7.8 | 7.9  | --- | --- | ---  | --- | --- | ---  |
| 8     | --- | --- | ---  | 8.0 | 7.8 | 7.9  | --- | --- | ---  | --- | --- | ---  |
| 9     | --- | --- | ---  | 8.0 | 7.9 | 8.0  | --- | --- | ---  | --- | --- | ---  |
| 10    | --- | --- | ---  | 8.1 | 7.9 | 8.0  | --- | --- | ---  | --- | --- | ---  |
| 11    | --- | --- | ---  | 8.1 | 7.9 | 8.0  | --- | --- | ---  | --- | --- | ---  |
| 12    | --- | --- | ---  | 8.1 | 8.0 | 8.0  | --- | --- | ---  | --- | --- | ---  |
| 13    | --- | --- | ---  | 8.1 | 7.9 | 8.0  | --- | --- | ---  | --- | --- | ---  |
| 14    | --- | --- | ---  | 8.1 | 7.9 | 8.0  | --- | --- | ---  | --- | --- | ---  |
| 15    | --- | --- | ---  | 8.1 | 7.9 | 8.0  | --- | --- | ---  | --- | --- | ---  |
| 16    | --- | --- | ---  | 8.1 | 7.9 | 8.0  | --- | --- | ---  | --- | --- | ---  |
| 17    | --- | --- | ---  | 8.1 | 7.8 | 8.0  | --- | --- | ---  | --- | --- | ---  |
| 18    | --- | --- | ---  | 8.2 | 8.0 | 8.0  | --- | --- | ---  | --- | --- | ---  |
| 19    | --- | --- | ---  | 8.1 | 7.9 | 8.0  | --- | --- | ---  | --- | --- | ---  |
| 20    | --- | --- | ---  | 8.1 | 7.9 | 8.0  | --- | --- | ---  | --- | --- | ---  |
| 21    | --- | --- | ---  | 8.1 | 8.0 | 8.1  | --- | --- | ---  | --- | --- | ---  |
| 22    | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| 23    | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| 24    | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| 25    | 8.0 | 7.6 | 7.8  | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| 26    | 7.9 | 7.6 | 7.7  | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| 27    | 7.8 | 7.6 | 7.7  | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| 28    | 7.8 | 7.6 | 7.7  | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| 29    | 7.8 | 7.6 | 7.7  | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| 30    | 8.0 | 7.6 | 7.8  | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| 31    | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| MONTH | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |

TEMPERATURE, WATER (DEG.C), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DAY   | MAX  | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|------|-----|------|-----|-----|------|-----|-----|------|-----|-----|------|
|       |      |     |      |     |     |      |     |     |      |     |     |      |
| 1     | 8.3  | 2.4 | 5.1  | 6.1 | 2.0 | 3.7  | 2.6 | .1  | .9   | .9  | .3  | .4   |
| 2     | 9.1  | 2.4 | 5.6  | 4.0 | .2  | 1.8  | 2.2 | .1  | .7   | .9  | .2  | .4   |
| 3     | 10.1 | 3.0 | 6.3  | 2.4 | .2  | .8   | 1.8 | .1  | .5   | .5  | .2  | .3   |
| 4     | 6.3  | 1.9 | 4.2  | 1.9 | .2  | .7   | 1.7 | .2  | .8   | 1.4 | .2  | .7   |
| 5     | 5.7  | .6  | 2.8  | 2.7 | .2  | .9   | 2.7 | .4  | 1.2  | 1.1 | .2  | .5   |
| 6     | 6.3  | .3  | 3.0  | 3.6 | .2  | 1.4  | 2.4 | .2  | .9   | .5  | .2  | .3   |
| 7     | 8.4  | .5  | 4.1  | 2.2 | .6  | 1.3  | 1.4 | .2  | .6   | 1.9 | .3  | .7   |
| 8     | 8.8  | 2.2 | 5.1  | 4.1 | .2  | 1.7  | 1.7 | .2  | .5   | 1.8 | .2  | .6   |
| 9     | 7.6  | 1.3 | 4.4  | 2.8 | .5  | 1.3  | 1.3 | .2  | .5   | 1.9 | .2  | .7   |
| 10    | 9.4  | 2.0 | 5.4  | .7  | .1  | .3   | 2.0 | .2  | .6   | 1.1 | .2  | .6   |
| 11    | 10.0 | 2.5 | 5.9  | 1.4 | .2  | .5   | 1.9 | .1  | .6   | 1.8 | .2  | .6   |
| 12    | 6.7  | 2.8 | 4.9  | 1.5 | .5  | .9   | 2.6 | .3  | 1.2  | 2.3 | .2  | .8   |
| 13    | 7.9  | 1.9 | 4.6  | 2.2 | .7  | 1.3  | 1.7 | .2  | 1.1  | 2.3 | .3  | .9   |
| 14    | 8.3  | .9  | 4.3  | 4.4 | .5  | 2.1  | 1.9 | .2  | .5   | 2.1 | .2  | .7   |
| 15    | 9.2  | 1.7 | 5.2  | 4.7 | .2  | 2.0  | .5  | .1  | .3   | 1.8 | .2  | .8   |
| 16    | 8.7  | 2.2 | 5.2  | 3.4 | .2  | 1.7  | 1.3 | .2  | .5   | 2.7 | .5  | 1.2  |
| 17    | 8.8  | 2.1 | 5.2  | 4.8 | .4  | 2.3  | 1.9 | .2  | .5   | 1.5 | .2  | .9   |
| 18    | 8.9  | 2.0 | 5.2  | 3.2 | .2  | 1.3  | 1.4 | .1  | .4   | .7  | .2  | .3   |
| 19    | 7.9  | 2.4 | 4.7  | 3.7 | .1  | 1.5  | .6  | .2  | .3   | .9  | .2  | .4   |
| 20    | 6.8  | .4  | 3.4  | 4.0 | .2  | 1.7  | .4  | .2  | .3   | 1.2 | .3  | .5   |
| 21    | 7.5  | .8  | 4.0  | 3.1 | .2  | 1.3  | 1.2 | .2  | .4   | .8  | .2  | .4   |
| 22    | 4.8  | 1.0 | 3.0  | 2.8 | .4  | 1.5  | .4  | .2  | .3   | 1.7 | .3  | .8   |
| 23    | 4.3  | .3  | 1.6  | 3.1 | .2  | 1.2  | .4  | .2  | .3   | .9  | .2  | .4   |
| 24    | 4.6  | .3  | 1.8  | 2.3 | .1  | .8   | .5  | .1  | .3   | .6  | .2  | .4   |
| 25    | 5.4  | .3  | 2.4  | 2.9 | .2  | 1.1  | 1.3 | .1  | .4   | .9  | .2  | .5   |
| 26    | 3.5  | 1.3 | 2.3  | 1.4 | .1  | .6   | 1.4 | .2  | .4   | .3  | .3  | .3   |
| 27    | 5.1  | .2  | 2.3  | 1.0 | .1  | .4   | 1.3 | .1  | .4   | .4  | .2  | .3   |
| 28    | 5.0  | .4  | 2.4  | .6  | .2  | .4   | 1.4 | .2  | .5   | .3  | .2  | .2   |
| 29    | 7.4  | .6  | 3.7  | 1.7 | .2  | .9   | 1.5 | .3  | .6   | .3  | .2  | .2   |
| 30    | 5.9  | 2.2 | 4.1  | 2.5 | .2  | 1.0  | 1.2 | .3  | .7   | .2  | .2  | .2   |
| 31    | 5.4  | 1.9 | 3.7  | --- | --- | ---  | 1.3 | .2  | .6   | 1.0 | .2  | .5   |
| MONTH | 10.1 | .2  | 4.1  | 6.1 | .1  | 1.3  | 2.7 | .1  | .6   | 2.7 | .2  | .5   |



**07080980 ST. KEVIN GULCH ABOVE TEMPLE GULCH, NEAR LEADVILLE, CO**

LOCATION.--Lat 39°17'29", long 106°22'07", in SE<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec.6, T.9 S., R.80 W., Lake County, Hydrologic Unit 11020001, on left bank 0.15 mi upstream from fork in access road, 0.85 mi upstream from mouth, 2.7 mi from turn-off from Mountain View Drive, and 6.1 mi northwest of Leadville.

DRAINAGE AREA.--1.84 mi<sup>2</sup>.

PERIOD OF RECORD.--April 1993 to September 1996, seasonal records only, (discontinued).

GAGE.--Water-stage recorder. Elevation of gage is 9,900 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.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge during period of seasonal operation, 41 ft<sup>3</sup>/s, May 20, 1996, gage height, 4.75 ft, from flood mark; minimum daily, 0.25 ft<sup>3</sup>/s, Sept. 28 and Oct. 6-7, 1994.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period of seasonal operation, 41 ft<sup>3</sup>/s, May 20, gage height, 4.75 ft, from flood mark; minimum daily, 0.36 ft<sup>3</sup>/s, Sept. 1-3.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

| DAY   | OCT   | NOV | DEC | JAN | FEB | MAR | APR | MAY  | JUN   | JUL   | AUG   | SEP   |
|-------|-------|-----|-----|-----|-----|-----|-----|------|-------|-------|-------|-------|
| 1     | .62   | --- | --- | --- | --- | --- | --- | ---  | e11   | e3.3  | e.84  | e.36  |
| 2     | .56   | --- | --- | --- | --- | --- | --- | ---  | e11   | e3.0  | e.80  | e.36  |
| 3     | .51   | --- | --- | --- | --- | --- | --- | ---  | e12   | e2.9  | e.75  | .36   |
| 4     | .52   | --- | --- | --- | --- | --- | --- | ---  | e12   | e2.8  | e.70  | .65   |
| 5     | .52   | --- | --- | --- | --- | --- | --- | ---  | e13   | e2.4  | e.68  | 1.1   |
| 6     | 1.8   | --- | --- | --- | --- | --- | --- | ---  | e13   | e2.2  | e.66  | .72   |
| 7     | .73   | --- | --- | --- | --- | --- | --- | ---  | e13   | e1.8  | e.64  | .53   |
| 8     | .55   | --- | --- | --- | --- | --- | --- | ---  | e12   | e1.6  | e.62  | .45   |
| 9     | .54   | --- | --- | --- | --- | --- | --- | e7.0 | e11   | e1.5  | e.56  | .42   |
| 10    | .54   | --- | --- | --- | --- | --- | --- | e7.5 | e11   | e1.4  | e.54  | .40   |
| 11    | .53   | --- | --- | --- | --- | --- | --- | e8.4 | e10   | 1.4   | e.54  | .40   |
| 12    | .53   | --- | --- | --- | --- | --- | --- | e11  | e10   | 1.3   | e.53  | .41   |
| 13    | .56   | --- | --- | --- | --- | --- | --- | e13  | e9.0  | 1.2   | e.53  | .46   |
| 14    | .78   | --- | --- | --- | --- | --- | --- | e14  | e7.8  | 1.2   | e.52  | .45   |
| 15    | .52   | --- | --- | --- | --- | --- | --- | e17  | e7.0  | 1.2   | e.52  | .54   |
| 16    | .48   | --- | --- | --- | --- | --- | --- | e25  | e6.4  | 1.2   | e.51  | .45   |
| 17    | .48   | --- | --- | --- | --- | --- | --- | e30  | e6.0  | 1.1   | e.50  | .42   |
| 18    | .48   | --- | --- | --- | --- | --- | --- | e25  | e5.8  | 1.2   | e.49  | .42   |
| 19    | .48   | --- | --- | --- | --- | --- | --- | e29  | e5.8  | 1.2   | e.48  | .48   |
| 20    | e.48  | --- | --- | --- | --- | --- | --- | e35  | e6.0  | 1.0   | .51   | e.54  |
| 21    | e.48  | --- | --- | --- | --- | --- | --- | e27  | e6.0  | .74   | .48   | e.54  |
| 22    | e.48  | --- | --- | --- | --- | --- | --- | e29  | e5.8  | .54   | .47   | e.48  |
| 23    | e.47  | --- | --- | --- | --- | --- | --- | e30  | e5.6  | .76   | .46   | e.94  |
| 24    | e.47  | --- | --- | --- | --- | --- | --- | e26  | e5.2  | e.80  | .44   | e.54  |
| 25    | .47   | --- | --- | --- | --- | --- | --- | e21  | e4.8  | e.82  | .42   | e.48  |
| 26    | .44   | --- | --- | --- | --- | --- | --- | e18  | e4.8  | e.88  | .48   | e.48  |
| 27    | .42   | --- | --- | --- | --- | --- | --- | e16  | e4.8  | e1.0  | .49   | e.48  |
| 28    | .42   | --- | --- | --- | --- | --- | --- | e13  | e4.8  | e2.0  | e.46  | e.54  |
| 29    | .43   | --- | --- | --- | --- | --- | --- | e10  | e4.5  | e1.5  | e.42  | e.60  |
| 30    | .42   | --- | --- | --- | --- | --- | --- | e10  | e3.6  | e1.0  | e.39  | e.60  |
| 31    | .42   | --- | --- | --- | --- | --- | --- | e11  | ---   | e.90  | e.37  | ---   |
| TOTAL | 17.13 | --- | --- | --- | --- | --- | --- | ---  | 242.7 | 45.84 | 16.80 | 15.60 |
| MEAN  | .55   | --- | --- | --- | --- | --- | --- | ---  | 8.09  | 1.48  | .54   | .52   |
| MAX   | 1.8   | --- | --- | --- | --- | --- | --- | ---  | 13    | 3.3   | .84   | 1.1   |
| MIN   | .42   | --- | --- | --- | --- | --- | --- | ---  | 3.6   | .54   | .37   | .36   |
| AC-FT | 34    | --- | --- | --- | --- | --- | --- | ---  | 481   | 91    | 33    | 31    |

e-Estimated.

## 07081200 ARKANSAS RIVER NEAR LEADVILLE, CO

LOCATION.--Lat 39°15'26", long 106°20'35", in NW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> 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 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1967 to September 1983. April 1990 to current year.

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.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

| DAY   | OCT  | NOV  | DEC  | JAN  | FEB  | MAR  | APR  | MAY   | JUN   | JUL  | AUG  | SEP  |
|-------|------|------|------|------|------|------|------|-------|-------|------|------|------|
| 1     | 44   | 34   | e21  | e19  | e18  | e20  | 22   | 66    | 321   | 264  | 64   | 32   |
| 2     | 40   | 32   | e21  | e19  | e19  | e20  | 24   | 78    | 356   | 246  | 60   | 31   |
| 3     | 38   | e33  | e22  | e20  | e19  | e20  | 25   | 103   | 426   | 222  | 62   | 30   |
| 4     | 40   | e33  | e22  | e19  | e19  | e19  | 24   | 137   | 532   | 218  | 62   | 29   |
| 5     | 40   | e34  | e21  | e20  | e19  | e20  | 24   | 191   | 629   | 218  | 57   | 30   |
| 6     | 40   | e36  | e20  | e20  | e19  | e20  | 25   | 251   | 782   | 215  | 55   | 37   |
| 7     | 43   | e35  | e19  | e19  | e20  | e19  | 26   | 295   | 741   | 202  | 53   | 37   |
| 8     | 44   | 35   | 19   | e19  | e21  | e20  | 29   | 333   | 717   | 190  | 53   | 34   |
| 9     | 41   | 37   | 19   | e19  | e21  | e20  | 32   | 361   | 745   | 167  | 50   | 31   |
| 10    | 39   | 33   | 19   | e18  | e20  | e20  | 36   | 338   | 733   | 153  | 48   | 30   |
| 11    | 38   | 37   | 19   | e18  | e20  | e20  | 40   | 339   | 625   | 151  | 43   | 32   |
| 12    | 40   | 33   | 18   | e18  | e20  | e20  | 39   | 394   | 631   | 142  | 42   | 31   |
| 13    | 40   | 32   | 17   | e18  | e20  | e19  | 42   | 449   | 574   | 132  | 41   | 33   |
| 14    | 37   | 30   | e18  | e18  | e19  | e19  | 38   | 464   | 582   | 122  | 41   | 34   |
| 15    | 35   | 28   | e18  | e19  | e21  | e20  | 37   | 486   | 565   | 116  | 41   | 35   |
| 16    | 36   | 27   | e18  | e19  | e21  | e20  | 37   | 580   | 518   | 113  | 42   | 33   |
| 17    | 35   | 26   | e18  | e20  | e21  | e20  | 39   | 723   | 490   | 109  | 41   | 30   |
| 18    | 34   | 25   | e18  | e20  | e20  | e21  | 40   | 650   | 469   | 113  | 40   | 29   |
| 19    | 33   | 23   | e17  | e20  | e20  | e21  | 36   | 697   | 445   | 108  | 41   | 31   |
| 20    | 33   | 23   | e17  | e19  | e20  | e21  | 39   | 780   | 425   | 97   | 41   | 32   |
| 21    | 32   | 22   | e17  | e20  | e21  | e21  | 36   | 639   | 496   | 90   | 41   | 32   |
| 22    | 33   | 23   | e17  | e19  | e20  | e20  | 34   | 598   | 559   | 83   | 40   | 32   |
| 23    | 31   | e22  | e17  | e19  | e20  | e20  | 36   | 673   | 469   | 78   | 41   | 35   |
| 24    | 29   | e21  | e17  | e19  | e20  | e20  | 47   | 542   | 377   | 75   | 39   | 35   |
| 25    | 31   | e21  | e18  | e19  | e20  | e20  | 57   | 528   | 344   | 73   | 37   | 36   |
| 26    | 32   | e22  | e18  | e19  | e20  | e20  | 58   | 503   | 309   | 70   | 37   | 36   |
| 27    | 32   | e22  | e19  | e19  | e20  | e20  | 62   | 396   | 335   | 68   | 37   | 36   |
| 28    | 32   | e21  | e19  | e19  | e21  | e20  | 58   | 321   | 331   | 67   | 36   | 34   |
| 29    | 32   | e21  | e18  | e18  | e20  | e20  | 56   | 275   | 303   | 72   | 36   | 33   |
| 30    | 32   | e22  | e19  | e18  | ---  | e20  | 58   | 283   | 272   | 79   | 34   | 33   |
| 31    | 32   | ---  | e18  | e18  | ---  | e20  | ---  | 290   | ---   | 68   | 33   | ---  |
| TOTAL | 1118 | 843  | 578  | 588  | 579  | 620  | 1156 | 12763 | 15101 | 4121 | 1388 | 983  |
| MEAN  | 36.1 | 28.1 | 18.6 | 19.0 | 20.0 | 20.0 | 38.5 | 412   | 503   | 133  | 44.8 | 32.8 |
| MAX   | 44   | 37   | 22   | 20   | 21   | 21   | 62   | 780   | 782   | 264  | 64   | 37   |
| MIN   | 29   | 21   | 17   | 18   | 18   | 19   | 22   | 66    | 272   | 67   | 33   | 29   |
| AC-FT | 2220 | 1670 | 1150 | 1170 | 1150 | 1230 | 2290 | 25320 | 29950 | 8170 | 2750 | 1950 |

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1968 - 1996, BY WATER YEAR (WY)

|      | 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 |  |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|--|
| MEAN | 26.2 | 20.8 | 16.2 | 14.5 | 14.1 | 14.8 | 29.1 | 166  | 346  | 138  | 58.5 | 33.9 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |  |
| MAX  | 38.3 | 28.9 | 21.7 | 19.0 | 20.5 | 20.8 | 52.9 | 412  | 634  | 382  | 130  | 55.8 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |  |
| (WY) | 1971 | 1971 | 1983 | 1996 | 1973 | 1971 | 1989 | 1996 | 1980 | 1995 | 1983 | 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 1995 CALENDAR YEAR |  | FOR 1996 WATER YEAR |  | WATER YEARS 1968 - 1996 |  |
|--------------------------|------------------------|--|---------------------|--|-------------------------|--|
| ANNUAL TOTAL             | 40309                  |  | 39838               |  |                         |  |
| ANNUAL MEAN              | 110                    |  | 109                 |  | 74.3                    |  |
| HIGHEST ANNUAL MEAN      |                        |  |                     |  | 109                     |  |
| LOWEST ANNUAL MEAN       |                        |  |                     |  | 32.4                    |  |
| HIGHEST DAILY MEAN       | 1010                   |  | 782                 |  | 1010                    |  |
| LOWEST DAILY MEAN        | a <sub>10</sub>        |  | b <sub>17</sub>     |  | c <sub>7.0</sub>        |  |
| ANNUAL SEVEN-DAY MINIMUM | 11                     |  | 17                  |  | d <sub>7.0</sub>        |  |
| INSTANTANEOUS PEAK FLOW  |                        |  | d <sub>883</sub>    |  | d <sub>1280</sub>       |  |
| INSTANTANEOUS PEAK STAGE |                        |  | 3.99                |  | 4.38                    |  |
| ANNUAL RUNOFF (AC-FT)    | 79950                  |  | 79020               |  | 53800                   |  |
| 10 PERCENT EXCEEDS       | 383                    |  | 395                 |  | 217                     |  |
| 50 PERCENT EXCEEDS       | 32                     |  | 33                  |  | 26                      |  |
| 90 PERCENT EXCEEDS       | 13                     |  | 19                  |  | 13                      |  |

e-Estimated.

a-Also occurred Feb 12-14, 17-19.

b-Also occurred Dec 19-24.

c-Also occurred Feb 4-20, 1978.

d-From rating curve extended above 730 ft<sup>3</sup>/s.

**07081200 ARKANSAS RIVER NEAR LEADVILLE, CO--Continued**

**WATER-QUALITY RECORDS**

PERIOD OF RECORD.--May 1990 to September 1996 (discontinued).

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: May 1990 to September 1996 (discontinued).

WATER TEMPERATURE: May 1990 to September 1996 (discontinued).

pH: May 1990 to September 1996 (discontinued).

INSTRUMENTATION.--Water-quality monitor with satellite telemetry.

REMARKS.--Records for daily specific conductance are good except Nov. 8 to Apr. 17 and June 25 to July 23, which are fair. Records for water temperature are good. Records for daily pH are good except Jan. 12 to Apr. 17 and Sept. 11, which are fair. Daily data that are not published are either missing or of unacceptable quality.

EXTREMES FOR PERIOD OF RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 384 microsiemens, Sept. 12, 1993; minimum, 47 microsiemens, May 21, 1993.

WATER TEMPERATURE: Maximum, 19.3°C, Aug. 11, 1994; minimum, 0.0°C, many days.

pH: Maximum, 8.7 units, several days 1991 and 1992, July 20-22, 1996; minimum, 6.2 units, June 11, 1990 and Sept. 8-10, 16, 1996.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 316 microsiemens, Mar. 20, 26; minimum, 72 microsiemens, June 6-7, 9-10.

WATER TEMPERATURE: Maximum, 17.5°C, July 24; minimum, 0.0°C, on many days.

pH: Maximum, 8.7 units, July 20-22; minimum, 6.2 units, Sept. 8-10, 16.

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM @ 25 DEG.C), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

| DAY   | MAX     | MIN | MEAN | MAX      | MIN | MEAN | MAX      | MIN | MEAN | MAX     | MIN | MEAN |
|-------|---------|-----|------|----------|-----|------|----------|-----|------|---------|-----|------|
|       | OCTOBER |     |      | NOVEMBER |     |      | DECEMBER |     |      | JANUARY |     |      |
| 1     | 175     | 168 | 172  | 192      | 184 | 188  | 216      | 185 | 203  | 228     | 219 | 225  |
| 2     | 181     | 174 | 178  | 207      | 181 | 191  | 228      | 187 | 203  | 227     | 213 | 222  |
| 3     | 183     | 179 | 182  | 233      | 161 | 192  | 233      | 185 | 205  | 228     | 222 | 224  |
| 4     | 185     | 172 | 179  | 217      | 176 | 192  | 224      | 204 | 211  | 229     | 222 | 225  |
| 5     | 184     | 172 | 175  | 228      | 175 | 192  | 219      | 196 | 209  | 225     | 220 | 222  |
| 6     | 196     | 175 | 183  | 223      | 185 | 197  | 215      | 200 | 206  | 228     | 206 | 218  |
| 7     | 182     | 173 | 175  | 199      | 193 | 196  | 248      | 174 | 198  | 221     | 215 | 219  |
| 8     | 177     | 171 | 173  | 234      | 168 | 194  | 223      | 193 | 206  | 222     | 209 | 216  |
| 9     | 180     | 175 | 177  | 202      | 173 | 187  | 220      | 193 | 210  | 223     | 205 | 214  |
| 10    | 183     | 179 | 181  | 202      | 186 | 194  | 233      | 191 | 208  | 228     | 216 | 222  |
| 11    | 184     | 175 | 182  | 219      | 179 | 194  | 239      | 196 | 209  | 232     | 202 | 216  |
| 12    | 178     | 171 | 175  | 200      | 192 | 197  | 222      | 208 | 212  | 230     | 204 | 217  |
| 13    | 172     | 167 | 169  | 199      | 192 | 196  | 210      | 206 | 208  | 230     | 208 | 219  |
| 14    | 182     | 171 | 176  | 199      | 194 | 196  | 237      | 182 | 204  | 234     | 197 | 217  |
| 15    | 182     | 180 | 181  | 219      | 185 | 199  | 269      | 166 | 199  | 240     | 200 | 218  |
| 16    | 185     | 180 | 183  | 223      | 185 | 201  | 235      | 196 | 211  | 222     | 217 | 220  |
| 17    | 188     | 179 | 185  | 231      | 187 | 201  | 232      | 197 | 213  | 222     | 208 | 218  |
| 18    | 192     | 186 | 189  | 221      | 187 | 203  | 240      | 194 | 213  | 243     | 192 | 207  |
| 19    | 194     | 190 | 192  | 227      | 188 | 203  | 244      | 206 | 220  | 231     | 189 | 215  |
| 20    | 204     | 185 | 195  | 226      | 188 | 204  | 234      | 200 | 218  | 224     | 212 | 221  |
| 21    | 199     | 194 | 197  | 221      | 186 | 204  | 235      | 218 | 224  | 241     | 186 | 216  |
| 22    | 200     | 193 | 196  | 226      | 187 | 205  | 237      | 219 | 227  | 226     | 185 | 219  |
| 23    | 211     | 191 | 199  | 223      | 193 | 206  | 237      | 225 | 231  | 236     | 192 | 220  |
| 24    | 215     | 178 | 195  | 252      | 166 | 201  | 245      | 217 | 229  | 235     | 221 | 225  |
| 25    | 200     | 172 | 183  | 241      | 189 | 206  | 246      | 224 | 236  | 222     | 186 | 215  |
| 26    | 184     | 179 | 182  | 226      | 192 | 208  | 239      | 225 | 232  | 204     | 169 | 189  |
| 27    | 227     | 169 | 190  | 214      | 191 | 204  | 241      | 232 | 235  | 212     | 197 | 204  |
| 28    | 201     | 182 | 190  | 236      | 188 | 203  | 239      | 229 | 236  | 210     | 194 | 200  |
| 29    | 194     | 186 | 188  | 207      | 187 | 202  | 242      | 233 | 238  | 210     | 200 | 204  |
| 30    | 196     | 188 | 190  | 217      | 199 | 205  | 236      | 230 | 233  | 234     | 199 | 207  |
| 31    | 212     | 183 | 191  | ---      | --- | ---  | 231      | 226 | 229  | 240     | 229 | 234  |
| MONTH | 227     | 167 | 184  | 252      | 161 | 199  | 269      | 166 | 217  | 243     | 169 | 216  |



07081200 ARKANSAS RIVER NEAR LEADVILLE, CO--Continued

pH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DAY   | MAX      | MIN | MEAN | MAX      | MIN | MEAN | MAX      | MIN | MEAN | MAX     | MIN | MEAN |
|-------|----------|-----|------|----------|-----|------|----------|-----|------|---------|-----|------|
|       | OCTOBER  |     |      | NOVEMBER |     |      | DECEMBER |     |      | JANUARY |     |      |
| 1     | 8.2      | 8.0 | 8.1  | 8.0      | 7.9 | 8.0  | 7.9      | 7.8 | 7.9  | 7.8     | 7.7 | 7.8  |
| 2     | 8.2      | 8.0 | 8.1  | 8.0      | 7.8 | 8.0  | 8.0      | 7.7 | 7.9  | 7.8     | 7.7 | 7.7  |
| 3     | 8.2      | 8.0 | 8.1  | 8.0      | 7.7 | 7.9  | 8.0      | 7.7 | 7.9  | 7.8     | 7.7 | 7.8  |
| 4     | 8.2      | 8.0 | 8.1  | 8.0      | 7.7 | 7.9  | 8.0      | 7.9 | 7.9  | 7.8     | 7.8 | 7.8  |
| 5     | 8.2      | 8.0 | 8.1  | 8.0      | 7.7 | 7.9  | 8.0      | 7.9 | 7.9  | 7.8     | 7.7 | 7.8  |
| 6     | 8.1      | 8.0 | 8.0  | 8.0      | 7.8 | 7.9  | 8.0      | 7.9 | 7.9  | 7.8     | 7.7 | 7.7  |
| 7     | 8.2      | 7.9 | 8.0  | 8.0      | 7.9 | 8.0  | 7.9      | 7.7 | 7.9  | 7.8     | 7.8 | 7.8  |
| 8     | 8.2      | 8.0 | 8.0  | 8.0      | 7.8 | 7.9  | 7.9      | 7.7 | 7.9  | 7.8     | 7.7 | 7.8  |
| 9     | 8.2      | 8.0 | 8.1  | 8.0      | 7.9 | 8.0  | 7.9      | 7.7 | 7.9  | 7.8     | 7.8 | 7.8  |
| 10    | 8.2      | 8.0 | 8.1  | 8.0      | 7.9 | 8.0  | 7.9      | 7.8 | 7.8  | 7.9     | 7.8 | 7.8  |
| 11    | 8.2      | 8.0 | 8.1  | 7.9      | 7.8 | 7.9  | 7.9      | 7.7 | 7.8  | 7.9     | 7.8 | 7.9  |
| 12    | 8.2      | 8.0 | 8.1  | 8.0      | 7.9 | 7.9  | 7.9      | 7.9 | 7.9  | 7.9     | 7.8 | 7.8  |
| 13    | 8.1      | 8.0 | 8.0  | 8.0      | 7.9 | 7.9  | 7.9      | 7.9 | 7.9  | 7.9     | 7.8 | 7.8  |
| 14    | 8.1      | 7.9 | 8.0  | 8.0      | 7.9 | 7.9  | 7.9      | 7.7 | 7.9  | 7.9     | 7.8 | 7.9  |
| 15    | 8.1      | 7.9 | 8.0  | 8.0      | 7.8 | 7.9  | 7.9      | 7.7 | 7.8  | 7.9     | 7.8 | 7.9  |
| 16    | 8.1      | 7.9 | 8.0  | 8.0      | 7.8 | 8.0  | 7.9      | 7.8 | 7.8  | 7.9     | 7.9 | 7.9  |
| 17    | 8.1      | 7.9 | 8.0  | 8.0      | 7.9 | 8.0  | 7.9      | 7.7 | 7.8  | 8.0     | 7.9 | 7.9  |
| 18    | 8.1      | 7.9 | 8.0  | 8.0      | 7.8 | 8.0  | 7.9      | 7.7 | 7.8  | 8.0     | 7.8 | 7.9  |
| 19    | 8.1      | 7.9 | 8.0  | 8.0      | 7.8 | 8.0  | 7.9      | 7.7 | 7.8  | 8.0     | 7.9 | 7.9  |
| 20    | 8.0      | 7.7 | 8.0  | 8.0      | 7.8 | 8.0  | 7.8      | 7.6 | 7.7  | 8.0     | 7.8 | 7.9  |
| 21    | 8.1      | 7.9 | 8.0  | 8.0      | 7.8 | 8.0  | 7.8      | 7.7 | 7.7  | 7.9     | 7.8 | 7.9  |
| 22    | 8.1      | 8.0 | 8.0  | 8.0      | 7.9 | 8.0  | 7.8      | 7.6 | 7.7  | 8.0     | 7.9 | 7.9  |
| 23    | 8.0      | 7.8 | 8.0  | 8.0      | 7.9 | 8.0  | 7.8      | 7.6 | 7.7  | 8.0     | 7.9 | 8.0  |
| 24    | 8.1      | 7.8 | 8.0  | 8.0      | 7.7 | 7.9  | 7.8      | 7.6 | 7.7  | 8.0     | 7.9 | 7.9  |
| 25    | 8.1      | 7.8 | 8.0  | 8.0      | 7.7 | 7.9  | 7.8      | 7.6 | 7.7  | 7.9     | 7.9 | 7.9  |
| 26    | 8.1      | 8.0 | 8.0  | 8.0      | 7.9 | 8.0  | 7.8      | 7.6 | 7.7  | 8.0     | 7.8 | 7.9  |
| 27    | 8.1      | 7.8 | 8.0  | 8.0      | 7.9 | 7.9  | 7.8      | 7.6 | 7.7  | 8.0     | 7.8 | 7.9  |
| 28    | 8.1      | 7.9 | 8.0  | 8.0      | 7.8 | 7.9  | 7.8      | 7.6 | 7.7  | 8.0     | 7.9 | 7.9  |
| 29    | 8.1      | 8.0 | 8.0  | 7.9      | 7.8 | 7.9  | 7.8      | 7.7 | 7.8  | 8.0     | 7.9 | 7.9  |
| 30    | 8.1      | 8.0 | 8.0  | 7.9      | 7.7 | 7.9  | 7.8      | 7.7 | 7.8  | 8.0     | 7.9 | 7.9  |
| 31    | 8.1      | 7.9 | 8.0  | ---      | --- | ---  | 7.8      | 7.7 | 7.8  | 7.9     | 7.9 | 7.9  |
| MONTH | 8.2      | 7.7 | 8.0  | 8.0      | 7.7 | 7.9  | 8.0      | 7.6 | 7.8  | 8.0     | 7.7 | 7.9  |
| DAY   | MAX      | MIN | MEAN | MAX      | MIN | MEAN | MAX      | MIN | MEAN | MAX     | MIN | MEAN |
|       | FEBRUARY |     |      | MARCH    |     |      | APRIL    |     |      | MAY     |     |      |
| 1     | 8.0      | 7.9 | 7.9  | 7.9      | 7.7 | 7.8  | 8.0      | 7.9 | 7.9  | 8.2     | 8.0 | 8.1  |
| 2     | 8.0      | 7.8 | 7.9  | 7.8      | 7.6 | 7.8  | 8.0      | 7.9 | 7.9  | 8.1     | 7.9 | 8.0  |
| 3     | 8.0      | 7.8 | 7.9  | 7.8      | 7.4 | 7.7  | 8.0      | 7.9 | 7.9  | 8.0     | 7.8 | 7.9  |
| 4     | 7.9      | 7.8 | 7.9  | 7.8      | 7.6 | 7.7  | 8.1      | 7.9 | 8.1  | 7.9     | 7.6 | 7.7  |
| 5     | 8.0      | 7.9 | 7.9  | 7.8      | 7.7 | 7.7  | 8.1      | 8.0 | 8.1  | 7.7     | 7.6 | 7.6  |
| 6     | 8.0      | 7.9 | 8.0  | 7.9      | 7.7 | 7.8  | 8.1      | 8.0 | 8.1  | 7.7     | 7.5 | 7.6  |
| 7     | 8.0      | 7.9 | 8.0  | 7.8      | 7.5 | 7.7  | 8.1      | 8.0 | 8.1  | 7.7     | 7.4 | 7.5  |
| 8     | 8.0      | 7.9 | 8.0  | 7.9      | 7.6 | 7.7  | 8.1      | 8.0 | 8.0  | 7.7     | 7.4 | 7.5  |
| 9     | 8.1      | 7.9 | 8.0  | 7.8      | 7.5 | 7.7  | 8.1      | 8.0 | 8.0  | 7.6     | 7.3 | 7.5  |
| 10    | 8.1      | 7.9 | 8.0  | 7.8      | 7.5 | 7.6  | 8.0      | 8.0 | 8.0  | 7.6     | 7.3 | 7.5  |
| 11    | 8.0      | 7.8 | 7.9  | 7.8      | 7.6 | 7.7  | 8.0      | 7.9 | 7.9  | 7.5     | 7.4 | 7.4  |
| 12    | 8.0      | 7.8 | 7.9  | 7.8      | 7.6 | 7.7  | 8.0      | 7.9 | 7.9  | 7.6     | 7.5 | 7.6  |
| 13    | 8.0      | 7.8 | 7.9  | 7.8      | 7.7 | 7.8  | 8.2      | 8.0 | 8.1  | 7.7     | 7.6 | 7.6  |
| 14    | 8.0      | 7.8 | 8.0  | 7.9      | 7.7 | 7.8  | 8.2      | 8.0 | 8.1  | 7.7     | 7.6 | 7.6  |
| 15    | 8.1      | 7.9 | 8.0  | 7.9      | 7.7 | 7.8  | 8.2      | 8.0 | 8.1  | 7.7     | 7.5 | 7.6  |
| 16    | 8.1      | 7.8 | 8.0  | 7.9      | 7.7 | 7.8  | 8.3      | 8.1 | 8.2  | 7.7     | 7.4 | 7.6  |
| 17    | 8.1      | 7.9 | 8.0  | 7.9      | 7.7 | 7.8  | 8.3      | 8.2 | 8.2  | 7.6     | 7.4 | 7.5  |
| 18    | 8.0      | 7.9 | 7.9  | 8.0      | 7.7 | 7.9  | 8.3      | 8.2 | 8.2  | 7.6     | 7.1 | 7.4  |
| 19    | 8.0      | 7.9 | 7.9  | 8.0      | 7.8 | 7.9  | 8.4      | 8.2 | 8.2  | 7.4     | 7.2 | 7.3  |
| 20    | 8.0      | 7.8 | 7.9  | 7.9      | 7.5 | 7.8  | 8.3      | 8.1 | 8.2  | 7.5     | 7.3 | 7.4  |
| 21    | 7.9      | 7.8 | 7.9  | 7.9      | 7.7 | 7.8  | 8.3      | 8.2 | 8.3  | 7.7     | 7.5 | 7.6  |
| 22    | 8.0      | 7.8 | 7.9  | 7.9      | 7.7 | 7.8  | 8.3      | 8.2 | 8.3  | 7.7     | 7.5 | 7.6  |
| 23    | 8.0      | 7.8 | 7.9  | 7.9      | 7.8 | 7.8  | 8.4      | 8.2 | 8.3  | 7.6     | 7.4 | 7.5  |
| 24    | 7.9      | 7.7 | 7.8  | 7.9      | 7.8 | 7.8  | 8.3      | 8.1 | 8.2  | 7.9     | 7.5 | 7.7  |
| 25    | 7.9      | 7.5 | 7.7  | 8.0      | 7.8 | 7.8  | 8.2      | 8.1 | 8.1  | 7.9     | 7.8 | 7.8  |
| 26    | 7.9      | 7.7 | 7.8  | 8.0      | 7.7 | 7.9  | 8.2      | 8.1 | 8.1  | 7.9     | 7.6 | 7.7  |
| 27    | 7.9      | 7.7 | 7.8  | 8.0      | 7.7 | 7.9  | 8.2      | 8.1 | 8.1  | 7.8     | 7.6 | 7.7  |
| 28    | 7.8      | 7.6 | 7.7  | 8.0      | 7.9 | 7.9  | 8.2      | 8.1 | 8.2  | 7.7     | 7.6 | 7.6  |
| 29    | 7.9      | 7.6 | 7.7  | 8.0      | 7.9 | 8.0  | 8.2      | 8.0 | 8.1  | 7.8     | 7.7 | 7.8  |
| 30    | ---      | --- | ---  | 8.1      | 7.9 | 8.0  | 8.2      | 8.0 | 8.1  | 7.8     | 7.7 | 7.8  |
| 31    | ---      | --- | ---  | 8.0      | 7.9 | 8.0  | ---      | --- | ---  | 7.8     | 7.7 | 7.8  |
| MONTH | 8.1      | 7.5 | 7.9  | 8.1      | 7.4 | 7.8  | 8.4      | 7.9 | 8.1  | 8.2     | 7.1 | 7.6  |

## ARKANSAS RIVER BASIN

## 07081200 ARKANSAS RIVER NEAR LEADVILLE, CO--Continued

pH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DAY   | MAX | MIN | MEAN |
|-------|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|------|
|       |     |     |      |     |     |      |     |     |      |     |     |      |
| 1     | 7.7 | 7.6 | 7.6  | 8.2 | 8.1 | 8.1  | 8.1 | 7.5 | 7.8  | 7.2 | 6.3 | 6.7  |
| 2     | 7.7 | 7.5 | 7.6  | 8.3 | 8.1 | 8.2  | 8.2 | 7.5 | 7.8  | 7.3 | 6.3 | 6.8  |
| 3     | 7.7 | 7.5 | 7.6  | 8.3 | 8.1 | 8.2  | 8.2 | 7.6 | 7.9  | 7.4 | 6.3 | 6.8  |
| 4     | 7.6 | 7.3 | 7.4  | 8.3 | 8.1 | 8.2  | 8.1 | 7.5 | 7.8  | 7.4 | 6.4 | 6.9  |
| 5     | 7.5 | 7.2 | 7.4  | 8.3 | 8.1 | 8.2  | 8.2 | 7.5 | 7.9  | 7.3 | 6.5 | 6.9  |
| 6     | 7.9 | 7.3 | 7.5  | 8.3 | 8.1 | 8.2  | 8.4 | 7.6 | 7.9  | 7.2 | 6.6 | 6.9  |
| 7     | 7.6 | 7.2 | 7.4  | 8.3 | 8.1 | 8.2  | 8.2 | 7.6 | 7.9  | 7.2 | 6.3 | 6.7  |
| 8     | 7.7 | 7.2 | 7.6  | 8.3 | 8.1 | 8.2  | 8.3 | 7.5 | 7.9  | 7.3 | 6.2 | 6.7  |
| 9     | 7.7 | 7.3 | 7.5  | 8.4 | 8.2 | 8.3  | 8.2 | 7.5 | 7.9  | 7.1 | 6.2 | 6.6  |
| 10    | 7.6 | 7.4 | 7.5  | 8.5 | 8.2 | 8.4  | 8.3 | 7.6 | 8.0  | 7.3 | 6.2 | 6.7  |
| 11    | 7.5 | 7.3 | 7.4  | 8.5 | 8.2 | 8.3  | 8.4 | 7.6 | 8.0  | 7.0 | 6.3 | 6.6  |
| 12    | 7.5 | 7.3 | 7.4  | 8.5 | 8.2 | 8.4  | 8.4 | 7.6 | 8.0  | 7.3 | 6.4 | 6.8  |
| 13    | 7.7 | 7.4 | 7.5  | 8.5 | 8.3 | 8.4  | 8.2 | 7.5 | 7.9  | 7.2 | 6.5 | 6.9  |
| 14    | 7.7 | 7.5 | 7.7  | 8.6 | 8.3 | 8.4  | 8.2 | 7.5 | 7.8  | 7.1 | 6.3 | 6.7  |
| 15    | 7.6 | 7.5 | 7.5  | 8.6 | 8.4 | 8.5  | 8.2 | 7.5 | 7.9  | 7.1 | 6.5 | 6.9  |
| 16    | 7.7 | 7.3 | 7.5  | 8.6 | 8.4 | 8.5  | 8.3 | 7.7 | 8.0  | 7.2 | 6.2 | 6.7  |
| 17    | 7.5 | 7.3 | 7.4  | 8.6 | 8.4 | 8.5  | 8.2 | 7.5 | 7.9  | 7.5 | 6.4 | 6.9  |
| 18    | 7.6 | 7.4 | 7.5  | 8.6 | 8.4 | 8.5  | 8.1 | 7.5 | 7.8  | 7.3 | 6.5 | 6.9  |
| 19    | 7.6 | 7.4 | 7.5  | 8.6 | 8.3 | 8.5  | 8.0 | 7.0 | 7.4  | 7.5 | 6.7 | 7.0  |
| 20    | 7.6 | 7.5 | 7.5  | 8.7 | 8.4 | 8.5  | 7.4 | 6.6 | 7.1  | 7.3 | 6.8 | 7.0  |
| 21    | 7.6 | 7.5 | 7.5  | 8.7 | 8.4 | 8.5  | 7.5 | 6.4 | 7.0  | 7.6 | 6.6 | 7.1  |
| 22    | 7.6 | 7.5 | 7.6  | 8.7 | 8.4 | 8.5  | 7.5 | 6.4 | 6.9  | 7.6 | 6.7 | 7.2  |
| 23    | 7.7 | 7.6 | 7.7  | 8.5 | 7.6 | 8.2  | 7.4 | 6.4 | 6.9  | 7.7 | 7.0 | 7.3  |
| 24    | 7.9 | 7.7 | 7.8  | 8.1 | 7.4 | 7.8  | 7.4 | 6.4 | 6.9  | 7.8 | 6.9 | 7.4  |
| 25    | 8.2 | 7.8 | 8.0  | 8.1 | 7.5 | 7.8  | 7.4 | 6.4 | 6.8  | 7.7 | 6.9 | 7.3  |
| 26    | 8.2 | 8.1 | 8.1  | 8.1 | 7.4 | 7.7  | 7.3 | 6.3 | 6.8  | 7.5 | 6.8 | 7.1  |
| 27    | 8.2 | 8.0 | 8.1  | 8.1 | 7.4 | 7.7  | 7.4 | 6.3 | 6.8  | 7.5 | 6.7 | 7.1  |
| 28    | 8.2 | 8.0 | 8.1  | 8.0 | 7.4 | 7.7  | 7.4 | 6.5 | 6.9  | 7.7 | 6.8 | 7.3  |
| 29    | 8.2 | 8.0 | 8.1  | 8.1 | 7.7 | 7.8  | 7.4 | 6.3 | 6.8  | 7.8 | 6.8 | 7.3  |
| 30    | 8.3 | 8.1 | 8.2  | 8.1 | 7.6 | 7.8  | 7.4 | 6.4 | 6.8  | 7.9 | 6.9 | 7.4  |
| 31    | --- | --- | ---  | 8.1 | 7.5 | 7.8  | 7.3 | 6.3 | 6.8  | --- | --- | ---  |
| MONTH | 8.3 | 7.2 | 7.6  | 8.7 | 7.4 | 8.2  | 8.4 | 6.3 | 7.5  | 7.9 | 6.2 | 7.0  |
| YEAR  | 8.7 | 6.2 | 7.8  |     |     |      |     |     |      |     |     |      |

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DAY   | MAX  | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|------|-----|------|-----|-----|------|-----|-----|------|-----|-----|------|
|       |      |     |      |     |     |      |     |     |      |     |     |      |
| 1     | 8.1  | 2.5 | 5.2  | 5.4 | 1.9 | 3.2  | 1.4 | .1  | .5   | .4  | .0  | .1   |
| 2     | 8.9  | 2.8 | 5.5  | 3.3 | .1  | 1.2  | 1.1 | .1  | .4   | .6  | .0  | .2   |
| 3     | 10.1 | 3.5 | 6.5  | 1.2 | .0  | .5   | 1.0 | .0  | .3   | .6  | .1  | .3   |
| 4     | 6.4  | 2.6 | 4.5  | 1.3 | .0  | .4   | 1.0 | .1  | .5   | .8  | .1  | .4   |
| 5     | 5.1  | 1.0 | 2.9  | 1.3 | .0  | .5   | 1.4 | .2  | .6   | .7  | .0  | .3   |
| 6     | 6.7  | .3  | 3.0  | 2.1 | .1  | 1.0  | 1.3 | .0  | .5   | .7  | .0  | .2   |
| 7     | 8.0  | .7  | 4.1  | 3.3 | .2  | 1.4  | 1.0 | .1  | .3   | .9  | .1  | .3   |
| 8     | 8.4  | 2.5 | 5.1  | 4.1 | .2  | 1.6  | 1.0 | .0  | .3   | .9  | .1  | .3   |
| 9     | 7.4  | 1.6 | 4.4  | 2.4 | .3  | 1.0  | .8  | .0  | .3   | .9  | .1  | .3   |
| 10    | 9.0  | 2.2 | 5.3  | .5  | .1  | .2   | 1.0 | .0  | .3   | .6  | .1  | .3   |
| 11    | 9.5  | 2.5 | 5.8  | 1.2 | .0  | .4   | 1.2 | .0  | .4   | .8  | .0  | .3   |
| 12    | 7.1  | 3.1 | 5.1  | 1.0 | .3  | .7   | 1.0 | .1  | .5   | .9  | .0  | .3   |
| 13    | 7.5  | 2.2 | 4.6  | 1.4 | .4  | .9   | .9  | .1  | .5   | .9  | .0  | .3   |
| 14    | 7.9  | 1.1 | 4.3  | 4.1 | .4  | 1.9  | 1.0 | .0  | .3   | .9  | .0  | .2   |
| 15    | 8.7  | 1.8 | 5.0  | 3.4 | .1  | 1.4  | .4  | .0  | .1   | .9  | .0  | .3   |
| 16    | 8.5  | 2.3 | 5.1  | 2.7 | .1  | 1.2  | .8  | .0  | .2   | 1.1 | .2  | .5   |
| 17    | 8.5  | 2.2 | 5.1  | 3.9 | .1  | 1.6  | 1.0 | .0  | .2   | .7  | .1  | .3   |
| 18    | 8.4  | 2.0 | 5.0  | 2.5 | .1  | .9   | 1.2 | .0  | .3   | .6  | .0  | .2   |
| 19    | 7.3  | 2.6 | 4.6  | 2.8 | .1  | 1.0  | 1.0 | .0  | .2   | .5  | .1  | .2   |
| 20    | 6.7  | .5  | 3.2  | 3.0 | .1  | 1.2  | .8  | .0  | .2   | .8  | .0  | .3   |
| 21    | 7.5  | .4  | 3.7  | 2.3 | .1  | .9   | .8  | .0  | .2   | .2  | .0  | .1   |
| 22    | 4.6  | .6  | 3.0  | 2.7 | .3  | 1.1  | .6  | .0  | .2   | .6  | .0  | .3   |
| 23    | 3.7  | .2  | 1.3  | 2.8 | .1  | 1.0  | .6  | .0  | .1   | .5  | .0  | .2   |
| 24    | 4.4  | .1  | 1.6  | 1.3 | .1  | .6   | .8  | .0  | .2   | .5  | .1  | .2   |
| 25    | 5.5  | .2  | 2.2  | 2.0 | .2  | .8   | .9  | .0  | .2   | .5  | .1  | .2   |
| 26    | 3.3  | 1.0 | 2.1  | .9  | .1  | .4   | .9  | .0  | .2   | .4  | .0  | .1   |
| 27    | 4.7  | .2  | 2.2  | .9  | .0  | .3   | .9  | .0  | .2   | .4  | .0  | .2   |
| 28    | 5.0  | .4  | 2.4  | .7  | .1  | .3   | .8  | .0  | .2   | .5  | .1  | .2   |
| 29    | 6.8  | .4  | 3.4  | 1.2 | .1  | .5   | .8  | .1  | .3   | .8  | .2  | .4   |
| 30    | 6.6  | 2.0 | 3.9  | 1.2 | .1  | .5   | .6  | .0  | .3   | .4  | .1  | .2   |
| 31    | 5.6  | 2.0 | 3.7  | --- | --- | ---  | .7  | .1  | .3   | .5  | .1  | .3   |
| MONTH | 10.1 | .1  | 4.0  | 5.4 | .0  | 1.0  | 1.4 | .0  | .3   | 1.1 | .0  | .3   |

07081200 ARKANSAS RIVER NEAR LEADVILLE, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DAY   | MAX      | MIN | MEAN | MAX   | MIN | MEAN | MAX    | MIN | MEAN | MAX       | MIN | MEAN |
|-------|----------|-----|------|-------|-----|------|--------|-----|------|-----------|-----|------|
|       | FEBRUARY |     |      | MARCH |     |      | APRIL  |     |      | MAY       |     |      |
| 1     | .9       | .0  | .3   | 1.0   | .0  | .3   | 3.7    | .2  | 1.8  | 6.9       | 1.7 | 3.6  |
| 2     | .5       | .0  | .1   | 1.1   | .0  | .4   | 3.4    | .4  | 1.7  | 8.1       | 1.2 | 4.2  |
| 3     | .3       | .0  | .1   | 1.0   | .0  | .3   | 3.8    | .8  | 2.0  | 6.8       | 1.7 | 3.7  |
| 4     | .3       | .0  | .2   | 1.3   | .0  | .4   | 2.8    | 1.1 | 1.8  | 6.7       | .8  | 3.2  |
| 5     | 1.0      | .1  | .4   | 1.1   | .1  | .4   | 4.2    | .8  | 2.2  | 6.4       | .8  | 2.9  |
| 6     | 1.0      | .1  | .4   | 1.0   | .0  | .4   | 4.4    | .4  | 2.2  | 5.7       | .7  | 2.5  |
| 7     | 1.1      | .1  | .4   | .8    | .0  | .2   | 3.7    | .8  | 2.1  | 6.7       | .6  | 2.8  |
| 8     | 1.4      | .1  | .5   | 1.5   | .0  | .4   | 4.8    | 1.3 | 2.7  | 8.2       | .7  | 3.5  |
| 9     | 1.2      | .0  | .4   | 1.9   | .0  | .6   | 5.2    | 1.1 | 2.9  | 9.4       | .6  | 4.0  |
| 10    | .9       | .0  | .3   | 1.7   | .0  | .8   | 4.4    | 1.0 | 2.6  | 9.8       | .6  | 4.5  |
| 11    | .7       | .1  | .2   | 1.9   | .0  | .8   | 4.1    | 1.2 | 2.2  | 11.3      | .8  | 5.5  |
| 12    | .8       | .0  | .2   | 2.2   | .1  | 1.0  | 4.7    | .9  | 2.5  | 11.1      | 1.1 | 5.8  |
| 13    | 1.0      | .0  | .2   | 2.1   | .2  | 1.0  | 2.0    | .2  | 1.2  | 10.4      | 1.3 | 5.5  |
| 14    | 1.5      | .0  | .5   | 1.8   | .1  | .8   | 3.3    | .1  | 1.0  | 9.4       | 1.2 | 5.3  |
| 15    | 1.2      | .0  | .5   | 1.9   | .0  | .7   | 3.9    | .0  | 1.7  | 11.9      | 1.5 | 6.2  |
| 16    | 1.1      | .0  | .3   | 2.3   | .1  | 1.2  | 5.1    | .4  | 2.8  | 12.6      | 2.0 | 7.0  |
| 17    | 1.2      | .0  | .5   | 1.2   | .0  | .5   | 6.1    | 1.4 | 3.1  | 9.7       | 2.8 | 5.9  |
| 18    | 1.0      | .1  | .6   | 1.2   | .0  | .3   | 3.6    | .5  | 1.7  | 11.0      | 2.1 | 6.4  |
| 19    | .9       | .0  | .5   | 1.2   | .0  | .4   | 2.7    | .0  | .9   | 12.3      | 3.9 | 7.5  |
| 20    | .7       | .1  | .4   | 1.4   | .0  | .5   | 2.3    | .0  | .8   | 10.0      | 2.8 | 6.1  |
| 21    | .7       | .1  | .4   | 2.5   | .0  | 1.1  | 5.8    | .1  | 2.3  | 11.3      | 2.2 | 6.6  |
| 22    | 1.3      | .2  | .6   | 2.8   | .0  | 1.3  | 5.6    | .0  | 2.3  | 11.8      | 2.9 | 7.0  |
| 23    | 1.0      | .0  | .3   | 2.6   | .6  | 1.4  | 8.9    | .7  | 4.4  | 9.5       | 3.3 | 6.2  |
| 24    | .8       | .0  | .2   | 1.5   | .2  | .8   | 9.4    | 2.4 | 5.4  | 8.3       | 3.0 | 5.8  |
| 25    | 1.0      | .0  | .3   | 1.6   | .0  | .7   | 7.6    | 1.4 | 4.3  | 6.6       | 3.7 | 5.0  |
| 26    | 1.0      | .0  | .3   | 1.3   | .0  | .4   | 7.6    | .9  | 4.1  | 5.8       | 2.0 | 3.7  |
| 27    | .7       | .0  | .2   | 1.6   | .0  | .7   | 7.1    | 1.3 | 3.9  | 5.9       | 2.2 | 4.0  |
| 28    | .3       | .0  | .1   | 2.8   | .0  | 1.4  | 2.5    | .1  | 1.3  | 8.4       | 2.3 | 5.0  |
| 29    | .5       | .0  | .1   | 3.2   | .3  | 1.6  | 6.4    | .0  | 2.4  | 11.4      | 2.8 | 7.0  |
| 30    | ---      | --- | ---  | 3.8   | .7  | 2.0  | 8.0    | .9  | 3.7  | 10.5      | 4.3 | 7.4  |
| 31    | ---      | --- | ---  | 3.7   | .5  | 1.7  | ---    | --- | ---  | 11.0      | 3.3 | 7.1  |
| MONTH | 1.5      | .0  | .3   | 3.8   | .0  | .8   | 9.4    | .0  | 2.5  | 12.6      | .6  | 5.2  |
|       | JUNE     |     |      | JULY  |     |      | AUGUST |     |      | SEPTEMBER |     |      |
| 1     | 11.9     | 4.3 | 7.9  | 13.3  | 7.9 | 10.6 | 16.7   | 8.2 | 12.5 | 13.1      | 6.6 | 10.1 |
| 2     | 12.3     | 3.5 | 7.8  | 13.3  | 7.8 | 10.7 | 17.0   | 9.4 | 13.2 | 14.2      | 7.2 | 10.4 |
| 3     | 12.6     | 3.9 | 8.1  | 13.4  | 7.8 | 10.7 | 15.6   | 9.5 | 12.4 | 14.5      | 6.5 | 10.7 |
| 4     | 11.7     | 4.0 | 7.7  | 11.8  | 7.9 | 10.2 | 14.9   | 9.0 | 11.7 | 13.9      | 7.1 | 10.8 |
| 5     | 11.8     | 4.2 | 7.7  | 13.7  | 8.2 | 10.8 | 16.8   | 7.1 | 11.7 | 12.7      | 7.2 | 10.0 |
| 6     | 12.2     | 4.2 | 7.9  | 15.1  | 8.5 | 11.8 | 16.0   | 7.7 | 12.0 | 10.8      | 8.0 | 9.3  |
| 7     | 12.5     | 3.7 | 7.9  | 16.0  | 8.2 | 12.0 | 14.1   | 8.7 | 11.5 | 13.1      | 6.1 | 9.3  |
| 8     | 12.2     | 4.4 | 8.2  | 12.2  | 8.7 | 10.7 | 14.4   | 7.4 | 10.9 | 13.2      | 5.4 | 9.0  |
| 9     | 10.8     | 5.0 | 8.0  | 13.2  | 8.7 | 10.6 | 14.4   | 7.8 | 11.2 | 11.4      | 5.3 | 8.6  |
| 10    | 8.6      | 4.8 | 6.9  | 15.1  | 9.2 | 12.0 | 15.5   | 7.0 | 11.1 | 13.2      | 5.7 | 9.4  |
| 11    | 10.7     | 4.0 | 7.3  | 15.9  | 8.4 | 12.0 | 16.0   | 6.9 | 11.4 | ---       | 6.5 | ---  |
| 12    | 9.4      | 4.6 | 7.3  | 16.4  | 8.5 | 12.3 | 16.6   | 7.7 | 12.0 | 12.0      | 7.8 | 9.9  |
| 13    | 10.5     | 5.0 | 7.9  | 16.3  | 9.3 | 12.5 | 15.2   | 7.7 | 11.3 | 11.9      | 8.2 | 9.8  |
| 14    | 9.0      | 6.0 | 7.5  | 16.6  | 8.1 | 12.2 | 14.9   | 7.9 | 11.3 | 10.9      | 6.0 | 8.3  |
| 15    | 7.5      | 5.7 | 6.4  | 14.9  | 9.4 | 12.0 | 15.2   | 8.0 | 11.5 | 10.3      | 6.8 | 8.4  |
| 16    | 11.7     | 4.3 | 7.7  | 15.1  | 9.1 | 11.8 | 17.1   | 7.8 | 12.1 | 12.6      | 4.6 | 8.5  |
| 17    | 12.0     | 5.4 | 8.5  | 16.8  | 9.5 | 12.9 | 17.3   | 7.7 | 12.2 | 10.9      | 6.6 | 8.6  |
| 18    | 13.1     | 5.2 | 9.1  | 13.4  | 9.9 | 11.6 | 15.0   | 8.8 | 11.6 | 8.7       | 4.2 | 6.1  |
| 19    | 13.2     | 5.4 | 9.3  | 16.7  | 8.0 | 12.2 | 14.8   | 8.0 | 11.3 | 10.0      | 3.4 | 6.0  |
| 20    | 13.1     | 6.3 | 9.8  | 17.3  | 9.5 | 13.2 | 15.2   | 7.7 | 11.4 | 8.1       | 4.2 | 6.0  |
| 21    | 11.8     | 7.4 | 9.6  | 17.3  | 8.6 | 12.9 | 14.9   | 9.2 | 12.0 | 11.4      | 3.4 | 7.3  |
| 22    | 11.5     | 7.4 | 9.4  | 16.6  | 8.5 | 12.7 | 14.2   | 8.0 | 11.1 | 10.9      | 4.9 | 7.9  |
| 23    | 12.9     | 5.5 | 9.1  | 17.3  | 9.2 | 13.0 | 14.5   | 7.5 | 10.8 | 10.3      | 5.8 | 8.1  |
| 24    | 13.3     | 6.1 | 9.7  | 17.5  | 8.4 | 12.9 | 15.3   | 8.4 | 11.5 | 10.9      | 5.9 | 8.2  |
| 25    | 12.5     | 6.6 | 9.6  | 15.6  | 9.5 | 12.4 | 14.7   | 8.1 | 11.3 | 9.5       | 5.0 | 7.2  |
| 26    | 12.7     | 6.8 | 9.6  | 14.9  | 8.4 | 11.7 | 11.9   | 7.9 | 10.3 | 6.6       | 2.8 | 4.7  |
| 27    | 12.1     | 7.8 | 9.7  | 15.5  | 9.0 | 12.0 | 14.3   | 8.0 | 10.8 | 6.9       | .5  | 3.6  |
| 28    | 11.2     | 7.4 | 9.4  | 13.9  | 8.4 | 11.4 | 13.8   | 8.7 | 11.2 | 10.6      | 3.0 | 6.6  |
| 29    | 14.4     | 6.0 | 10.0 | 13.8  | 9.4 | 11.4 | 15.7   | 7.2 | 11.2 | 11.4      | 3.7 | 7.4  |
| 30    | 14.4     | 8.2 | 11.2 | 16.0  | 8.2 | 11.7 | 15.4   | 7.8 | 11.2 | 11.1      | 4.4 | 7.6  |
| 31    | ---      | --- | ---  | 16.7  | 8.2 | 12.3 | 15.4   | 6.8 | 11.0 | ---       | --- | ---  |
| MONTH | 14.4     | 3.5 | 8.5  | 17.5  | 7.8 | 11.8 | 17.3   | 6.8 | 11.5 | ---       | .5  | ---  |

**07082400 TURQUOISE LAKE NEAR LEADVILLE, CO**

LOCATION.--Lat 39°15'10", long 106°22'26", in SW<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> 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 mi<sup>2</sup>.

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 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, 128,810 acre-ft, July 4-6, elevation, 9,869.07 ft; minimum, 113,280 acre-ft, Sept. 30, elevation, 9,860.21 ft.

MONTHEND ELEVATION AND CONTENTS, AT 0800, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| Date                 | Elevation<br>(feet) | Contents<br>(acre-feet) | Change in<br>contents<br>(acre-feet) |
|----------------------|---------------------|-------------------------|--------------------------------------|
| Sept. 30. . . . .    | 9,868.45            | 127,700                 | -                                    |
| Oct. 31. . . . .     | 9,867.78            | 126,510                 | -1,190                               |
| Nov. 30. . . . .     | 9,867.13            | 125,360                 | -1,150                               |
| Dec. 31. . . . .     | 9,865.35            | 122,220                 | -3,140                               |
| CAL YR 1995. . . . . | -                   | -                       | +32,070                              |
| Jan. 31. . . . .     | 9,862.85            | 117,850                 | -4,370                               |
| Feb. 29. . . . .     | 9,861.46            | 115,440                 | -2,410                               |
| Mar. 31. . . . .     | 9,863.55            | 119,070                 | +3,630                               |
| Apr. 30. . . . .     | 9,868.14            | 127,150                 | +8,080                               |
| May 31. . . . .      | 9,861.72            | 115,890                 | -11,260                              |
| June 30. . . . .     | 9,868.81            | 128,340                 | +12,450                              |
| July 31. . . . .     | 9,868.41            | 127,630                 | -710                                 |
| Aug. 31. . . . .     | 9,864.68            | 121,040                 | -6,590                               |
| Sept. 30. . . . .    | 9,860.21            | 113,280                 | -7,760                               |
| WTR YR 1996. . . . . | -                   | -                       | -14,420                              |



ARKANSAS RIVER BASIN

07083000 HALFMOON CREEK NEAR MALTA, CO--Continued  
(Hydrologic Bench-Mark station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.-- November 1966 to March 1996 (discontinued).

PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: May 1967 to September 1982.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURES: Maximum, 26.0°C, Aug. 16, 1980; minimum, 0.0°C, on many days during winter months.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DATE      | TIME | DIS-CHARGE, INST. CUBIC FEET PER SECOND | SPE-CIFIC CON-DUCT-ANCE (US/CM) | PH (STAND-ARD UNITS) | TEMPER-ATURE WATER (DEG C) | TUR-BID-ITY (NTU) | OXYGEN, DIS-SOLVED (MG/L) | COLI-FORM, FECAL, UM-MF (COLS. / 100 ML) | STREP-TOCOCCI, FECAL, KF AGAR (COLS. / 100 ML) |
|-----------|------|---|---------------------------------|----------------------|----------------------------|-------------------|---------------------------|--|--|
| NOV 07... | 1000 | 13                                      | 87                              | 7.8                  | 0.0                        | 0.2               | 11.7                      | <1                                       | <1   |
| FEB 08... | 1245 | 4.4                                     | 92                              | --                   | 0.0                        | 0.1               | 10.3                      | <2                                       | K2   |

| DATE      | HARD-NESS TOTAL (MG/L AS CACO3) | CALCIUM DIS-SOLVED (MG/L AS CA) | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) | SODIUM, DIS-SOLVED (MG/L AS NA) | SODIUM PERCENT | SODIUM AD-SORP-TION RATIO | POTAS-SIUM, DIS-SOLVED (MG/L AS K) | BICAR-BONATE WATER DIS IT (MG/L AS HCO3) |
|-----------|---------------------------------|---------------------------------|-------------------------------------|---------------------------------|----------------|---------------------------|------------------------------------|--|
| NOV 07... | 38                              | 9.2                             | 3.6                                 | 1.3                             | 7              | 0.1                       | 0.6                                | 45                                       |
| FEB 08... | 41                              | 10                              | 3.8                                 | 1.6                             | 8              | 0.1                       | 0.7                                | --                                       |

| DATE      | ALKA-lINITY WAT TOT FIELD (MG/L AS CACO3) | SULFATE DIS-SOLVED (MG/L AS SO4) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) | SILICA, DIS-SOLVED (MG/L AS SIO2) | SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) | SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) | SOLIDS, DIS-SOLVED (TONS PER DAY) |
|-----------|---|----------------------------------|------------------------------------|-----------------------------------|-----------------------------------|---|---|-----------------------------------|
| NOV 07... | 37  | 4.8                              | 0.2                                | 0.1                               | 5.6                               | 52  | 48  | 1.83                              |
| FEB 08... | --  | 4.1                              | 0.2                                | 0.1                               | 6.4                               | 45  | 53  | 0.53                              |

| DATE      | NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) | NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) | NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) | NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) | PHOS-PHORUS TOTAL (MG/L AS P) | PHOS-PHORUS DIS-SOLVED (MG/L AS P) | PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) |
|-----------|---|---|---|---|-------------------------------|------------------------------------|---|
| NOV 07... | <0.01                                     | 0.12                                      | <0.015                                    | <0.2  | <0.01                         | <0.01                              | <0.01                                     |
| FEB 08... | <0.01                                     | 0.14                                      | <0.015                                    | <0.2  | <0.01                         | <0.01                              | <0.01                                     |

| DATE      | ALUM-INUM, DIS-SOLVED (UG/L AS AL) | BARIUM, DIS-SOLVED (UG/L AS BA) | COBALT, DIS-SOLVED (UG/L AS CO) | IRON, DIS-SOLVED (UG/L AS FE) | LITHIUM DIS-SOLVED (UG/L AS LI) | MANGA-NESE, DIS-SOLVED (UG/L AS MN) | MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) | NICKEL, DIS-SOLVED (UG/L AS NI) | SELE-NIUM, DIS-SOLVED (UG/L AS SE) | SILVER, DIS-SOLVED (UG/L AS AG) | STRON-TIUM, DIS-SOLVED (UG/L AS SR) | VANA-DIUM, DIS-SOLVED (UG/L AS V) |
|-----------|------------------------------------|---------------------------------|---------------------------------|-------------------------------|---------------------------------|-------------------------------------|--------------------------------------|---------------------------------|------------------------------------|---------------------------------|-------------------------------------|-----------------------------------|
| NOV 07... | 20                                 | 20                              | <3                              | 29                            | 5                               | 7                                   | <10                                  | <1                              | <1                                 | <1                              | 67                                  | <6                                |
| FEB 08... | <10                                | 21                              | <3                              | 16                            | <4                              | 5                                   | <10                                  | <1                              | <1                                 | <1                              | 78                                  | <6                                |

a-Field dissolved bicarbonate, determined by incremental titration method.  
b-Field total dissolved alkalinity, determined by incremental titration method.  
K-Based on non-ideal colony count.

**07083000 HALFMOON CREEK NEAR MALTA, CO--Continued  
(Hydrologic Bench-Mark station)**

MISCELLANEOUS FIELD MEASUREMENTS, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DATE     | TIME | DIS-CHARGE,<br>INST.<br>CUBIC<br>FEET<br>PER<br>SECOND | SPE-CIFIC<br>CON-<br>DUCT-<br>ANCE<br>(US/CM) | TEMPER-<br>ATURE<br>WATER<br>(DEG C) | DATE     | TIME | DIS-CHARGE,<br>INST.<br>CUBIC<br>FEET<br>PER<br>SECOND | SPE-CIFIC<br>CON-<br>DUCT-<br>ANCE<br>(US/CM) | TEMPER-<br>ATURE<br>WATER<br>(DEG C) |
|----------|------|--|---|--------------------------------------|----------|------|--|---|--------------------------------------|
| OCT 1995 |      |  |   |                                      | MAY 1996 |      |  |   |                                      |
| 13...    | 1640 | 21   | 78  | 5.5                                  | 09...    | 1525 | 46   | 65  | 8.5                                  |
| NOV      |      |  |   |                                      | JUL      |      |  |   |                                      |
| 08...    | 0905 | 8.2  | 89  | 0.0                                  | 23...    | 1400 | 55   | 58  | 13.0                                 |
| DEC      |      |  |   |                                      | AUG      |      |  |   |                                      |
| 07...    | 1355 | 12   | 91  | 0.0                                  | 20...    | 0840 | 26   | 73  | 6.5                                  |
| APR 1996 |      |  |   |                                      | SEP      |      |  |   |                                      |
| 17...    | 1435 | 8.2  | 90  | 0.5                                  | 16...    | 1425 | 20   | 77  | 11.0                                 |

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DATE  | TIME | DIS-CHARGE,<br>INST.<br>CUBIC<br>FEET<br>PER<br>SECOND | SEDI-<br>MENT,<br>DIS-<br>CHARGE,<br>SUS-<br>PENDE<br>(MG/L) | SEDI-<br>MENT,<br>DIS-<br>CHARGE,<br>SUS-<br>PENDE<br>(T/DAY) |
|-------|------|--|--|---|
| NOV   |      |  |  |   |
| 07... | 1000 | 13   | 2  | 0.07  |

CROSS-SECTION DATA, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

| DATE  | TIME | SAMPLE<br>LOC-<br>ATION,<br>CROSS<br>SECTION<br>(FT FM<br>L BANK) | TEMPER-<br>ATURE<br>WATER<br>(DEG C) | SPE-CIFIC<br>CON-<br>DUCT-<br>ANCE<br>(US/CM) | PH<br>WATER<br>WHOLE<br>FIELD<br>(STAND-<br>ARD<br>UNITS) | OXYGEN,<br>DIS-<br>SOLVED<br>(MG/L) |
|-------|------|---|--------------------------------------|---|---|-------------------------------------|
| NOV   |      |   |                                      |   |   |                                     |
| 18... | 1246 | 27.4  | 0.0                                  | --  | 7.9   | 9.7                                 |
| 18... | 1247 | 29.2  | 0.0                                  | --  | 7.9   | 9.8                                 |
| 18... | 1248 | 30.7  | 0.0                                  | --  | 8.0   | 9.8                                 |
| 18... | 1249 | 32.3  | 0.0                                  | --  | 8.0   | 9.8                                 |
| 18... | 1250 | 33.9  | 0.0                                  | --  | 8.0   | 9.8                                 |
| JUN   |      |   |                                      |   |   |                                     |
| 30... | 1245 | 11.4  | 3.5                                  | 49  | 7.6   | 10.1                                |
| 30... | 1246 | 16.1  | 3.5                                  | 48  | 7.5   | 10.1                                |
| 30... | 1247 | 19.8  | 3.5                                  | 49  | 7.5   | 10.1                                |
| 30... | 1248 | 23.5  | 3.5                                  | 48  | 7.5   | 10.1                                |
| 30... | 1249 | 27.5  | 3.5                                  | 48  | 7.5   | 10.1                                |





## 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 Dec. 7 to Apr. 16, 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, 249 microsiemens, Jan. 16, 1996; minimum, 72 microsiemens, several days in 1995-96.

WATER TEMPERATURE: Maximum, 18.7°C, Aug. 17, 1994; minimum, 0.0°C, many days during the winter.

## EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 249 microsiemens, Jan. 16; minimum, 72 microsiemens, several days.

WATER TEMPERATURE: Maximum, 17.9°C, Aug. 24; minimum, 0.0°C, many days during the winter.

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM @ 25 DEG. C), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DAY   | OCTOBER |     |      | NOVEMBER |     |      | DECEMBER |     |      | JANUARY |     |      |
|-------|---------|-----|------|----------|-----|------|----------|-----|------|---------|-----|------|
|       | MAX     | MIN | MEAN | MAX      | MIN | MEAN | MAX      | MIN | MEAN | MAX     | MIN | MEAN |
| 1     | 173     | 168 | 171  | 192      | 190 | 191  | 207      | 196 | 202  | 187     | 184 | 186  |
| 2     | 174     | 163 | 169  | 196      | 185 | 190  | 208      | 200 | 204  | 190     | 187 | 188  |
| 3     | 163     | 161 | 162  | 201      | 183 | 188  | 211      | 199 | 205  | 196     | 190 | 193  |
| 4     | 163     | 159 | 161  | 205      | 185 | 191  | 214      | 200 | 207  | 203     | 196 | 200  |
| 5     | 168     | 162 | 164  | 208      | 183 | 190  | 212      | 201 | 206  | 207     | 200 | 205  |
| 6     | 181     | 159 | 167  | 191      | 174 | 185  | 211      | 205 | 206  | 211     | 206 | 209  |
| 7     | 181     | 168 | 174  | 174      | 167 | 172  | 217      | 194 | 206  | 220     | 210 | 215  |
| 8     | 173     | 168 | 171  | 198      | 168 | 178  | 217      | 203 | 209  | 229     | 220 | 225  |
| 9     | 173     | 167 | 169  | 194      | 180 | 186  | 211      | 190 | 202  | 239     | 218 | 229  |
| 10    | 173     | 164 | 169  | 191      | 182 | 185  | 199      | 184 | 193  | 221     | 212 | 216  |
| 11    | 165     | 161 | 163  | 199      | 180 | 192  | 198      | 183 | 191  | 212     | 208 | 210  |
| 12    | 164     | 159 | 162  | 196      | 186 | 192  | 204      | 186 | 197  | 209     | 206 | 208  |
| 13    | 179     | 160 | 170  | 195      | 187 | 192  | 207      | 196 | 202  | 213     | 206 | 208  |
| 14    | 187     | 175 | 180  | 210      | 186 | 193  | 205      | 195 | 199  | 216     | 206 | 208  |
| 15    | 184     | 177 | 180  | 219      | 202 | 208  | 215      | 189 | 205  | 241     | 216 | 228  |
| 16    | 182     | 177 | 180  | 223      | 200 | 207  | 210      | 184 | 200  | 249     | 237 | 243  |
| 17    | 182     | 178 | 180  | 218      | 199 | 207  | 197      | 179 | 188  | 243     | 226 | 236  |
| 18    | 185     | 177 | 181  | 227      | 200 | 208  | 192      | 182 | 187  | 228     | 206 | 215  |
| 19    | 184     | 180 | 182  | 220      | 195 | 204  | 193      | 184 | 188  | 208     | 202 | 205  |
| 20    | 197     | 180 | 184  | 216      | 195 | 200  | 203      | 189 | 195  | 204     | 198 | 202  |
| 21    | 199     | 188 | 192  | 214      | 194 | 199  | 202      | 192 | 198  | 199     | 189 | 196  |
| 22    | 193     | 188 | 191  | 210      | 194 | 199  | 203      | 192 | 198  | 193     | 189 | 191  |
| 23    | 209     | 189 | 195  | 204      | 187 | 195  | 205      | 194 | 202  | 200     | 190 | 194  |
| 24    | 209     | 194 | 199  | 202      | 187 | 192  | 196      | 187 | 193  | 200     | 196 | 198  |
| 25    | 209     | 188 | 195  | 201      | 185 | 191  | 190      | 182 | 188  | 202     | 197 | 199  |
| 26    | 200     | 185 | 195  | 196      | 185 | 188  | 188      | 177 | 182  | 203     | 196 | 200  |
| 27    | 204     | 189 | 193  | 194      | 186 | 189  | 188      | 177 | 182  | 202     | 189 | 197  |
| 28    | 202     | 187 | 194  | 202      | 192 | 197  | 189      | 179 | 182  | 192     | 188 | 189  |
| 29    | 199     | 185 | 193  | 201      | 192 | 196  | 195      | 187 | 190  | 190     | 185 | 188  |
| 30    | 197     | 189 | 193  | 206      | 197 | 200  | 198      | 192 | 194  | 193     | 187 | 190  |
| 31    | 199     | 189 | 193  | ---      | --- | ---  | 199      | 186 | 192  | 196     | 192 | 194  |
| MONTH | 209     | 159 | 180  | 227      | 167 | 193  | 217      | 177 | 197  | 249     | 184 | 205  |



## ARKANSAS RIVER BASIN

## 07086000 ARKANSAS RIVER AT GRANITE, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DAY   | MAX      | MIN | MEAN | MAX      | MIN | MEAN | MAX      | MIN | MEAN | MAX     | MIN | MEAN |
|-------|----------|-----|------|----------|-----|------|----------|-----|------|---------|-----|------|
|       | OCTOBER  |     |      | NOVEMBER |     |      | DECEMBER |     |      | JANUARY |     |      |
| 1     | 10.5     | 4.9 | 7.6  | 6.9      | 3.4 | 4.8  | 3.4      | .0  | 1.6  | .1      | .0  | .0   |
| 2     | 11.0     | 4.8 | 7.8  | 3.9      | .3  | 2.2  | 2.8      | .0  | 1.2  | .1      | .0  | .0   |
| 3     | 11.6     | 5.6 | 8.4  | 2.9      | .0  | .9   | 2.5      | .0  | .8   | .0      | .0  | .0   |
| 4     | 8.5      | 4.9 | 6.8  | 2.9      | .0  | 1.0  | 2.3      | .0  | 1.0  | .3      | .0  | .1   |
| 5     | 7.3      | 3.1 | 4.9  | 4.1      | .0  | 1.6  | 3.0      | 1.1 | 2.0  | .5      | .0  | .1   |
| 6     | 8.7      | 2.0 | 5.2  | 4.6      | .0  | 2.2  | 3.9      | .8  | 2.2  | .1      | .0  | .0   |
| 7     | 9.4      | 2.4 | 5.9  | 6.1      | 1.6 | 3.3  | 1.1      | .0  | .4   | .1      | .0  | .0   |
| 8     | 9.7      | 4.0 | 6.7  | 5.2      | 1.2 | 3.0  | 1.3      | .0  | .3   | .3      | .0  | .1   |
| 9     | 8.8      | 3.2 | 6.0  | 3.9      | 1.3 | 2.4  | 1.5      | .0  | .3   | .8      | .0  | .2   |
| 10    | 10.5     | 3.9 | 7.0  | 1.7      | .0  | .6   | 1.6      | .0  | .4   | .6      | .0  | .1   |
| 11    | 11.0     | 4.4 | 7.6  | 1.2      | .0  | .4   | 1.8      | .0  | .5   | .0      | .0  | .0   |
| 12    | 10.2     | 5.0 | 7.6  | 2.8      | .3  | 1.6  | 2.6      | .0  | 1.0  | .7      | .0  | .1   |
| 13    | 8.8      | 4.7 | 6.7  | 4.1      | 1.8 | 2.8  | 2.1      | 1.1 | 1.5  | 1.1     | .0  | .2   |
| 14    | 8.9      | 2.5 | 5.6  | 5.9      | 1.5 | 3.5  | 1.1      | .0  | .4   | .8      | .0  | .1   |
| 15    | 10.0     | 3.1 | 6.5  | 4.8      | .1  | 2.7  | .1       | .0  | .0   | .8      | .0  | .1   |
| 16    | 9.7      | 3.4 | 6.5  | 4.4      | .0  | 2.4  | .0       | .0  | .0   | 2.0     | .0  | .5   |
| 17    | 9.8      | 3.7 | 6.7  | 4.8      | .5  | 2.8  | .2       | .0  | .0   | 1.2     | .0  | .3   |
| 18    | 9.8      | 3.3 | 6.5  | 3.9      | .0  | 1.9  | .2       | .0  | .0   | .0      | .0  | .0   |
| 19    | 8.6      | 4.1 | 6.1  | 3.7      | .0  | 1.9  | .1       | .0  | .0   | .0      | .0  | .0   |
| 20    | 7.7      | 1.6 | 4.6  | 4.0      | .0  | 2.0  | .1       | .0  | .0   | .1      | .0  | .0   |
| 21    | 8.2      | 1.7 | 5.0  | 3.5      | .0  | 1.7  | .0       | .0  | .0   | .1      | .0  | .0   |
| 22    | 6.2      | 1.1 | 4.1  | 2.9      | .2  | 1.5  | .1       | .0  | .0   | .1      | .0  | .0   |
| 23    | 4.0      | .0  | 1.6  | 3.5      | .0  | 1.6  | .1       | .0  | .0   | .1      | .0  | .0   |
| 24    | 5.1      | .0  | 2.2  | 3.5      | .0  | 1.5  | .1       | .0  | .0   | .0      | .0  | .0   |
| 25    | 5.8      | .0  | 3.0  | 3.7      | .0  | 1.9  | .1       | .0  | .0   | .2      | .0  | .0   |
| 26    | 6.3      | 1.2 | 3.5  | 2.5      | .1  | 1.3  | .1       | .0  | .0   | .0      | .0  | .0   |
| 27    | 5.4      | .5  | 3.2  | 1.5      | .0  | .2   | .1       | .0  | .1   | .1      | .0  | .0   |
| 28    | 6.9      | .9  | 3.6  | .1       | .0  | .0   | .1       | .0  | .1   | .1      | .0  | .0   |
| 29    | 7.1      | 1.3 | 4.3  | 1.0      | .0  | .3   | .1       | .0  | .1   | .3      | .0  | .1   |
| 30    | 7.1      | 2.4 | 4.9  | 2.2      | .0  | .8   | .1       | .0  | .0   | .3      | .0  | .1   |
| 31    | 7.0      | 2.8 | 4.7  | ---      | --- | ---  | .2       | .0  | .0   | 1.2     | .1  | .4   |
| MONTH | 11.6     | .0  | 5.5  | 6.9      | .0  | 1.8  | 3.9      | .0  | .4   | 2.0     | .0  | .1   |
|       | FEBRUARY |     |      | MARCH    |     |      | APRIL    |     |      | MAY     |     |      |
| 1     | 1.2      | .0  | .2   | .2       | .0  | .0   | 8.3      | .1  | 3.7  | 7.3     | 3.0 | 4.9  |
| 2     | .1       | .0  | .0   | .6       | .0  | .1   | 7.8      | .8  | 3.7  | 8.3     | 3.1 | 5.6  |
| 3     | .0       | .0  | .0   | 2.1      | .0  | .5   | 7.6      | 1.5 | 4.0  | 8.4     | 3.4 | 5.9  |
| 4     | .0       | .0  | .0   | 3.1      | .0  | 1.0  | 4.8      | 1.4 | 2.9  | 8.9     | 2.7 | 5.7  |
| 5     | .8       | .0  | .2   | 3.0      | .0  | .9   | 8.1      | 1.1 | 4.0  | 9.3     | 2.8 | 6.0  |
| 6     | 2.0      | .0  | .5   | 2.8      | .0  | .6   | 7.9      | .7  | 3.9  | 8.6     | 2.8 | 5.8  |
| 7     | 2.6      | .0  | .8   | 1.2      | .0  | .2   | 8.0      | 1.4 | 4.1  | 8.1     | 3.0 | 5.5  |
| 8     | 2.7      | .0  | .7   | 3.2      | .0  | .6   | 9.1      | 2.2 | 4.8  | 8.8     | 3.2 | 6.1  |
| 9     | 3.1      | .0  | .8   | 5.0      | .0  | 1.3  | 8.2      | 1.5 | 4.5  | 8.4     | 3.8 | 6.4  |
| 10    | 2.1      | .0  | .5   | 4.2      | .0  | 1.2  | 6.1      | 1.6 | 3.9  | 8.3     | 4.5 | 6.7  |
| 11    | 1.9      | .0  | .4   | 4.8      | .0  | 1.3  | 6.1      | 2.2 | 3.9  | 9.2     | 5.0 | 7.2  |
| 12    | 2.0      | .0  | .4   | 3.7      | .0  | 1.2  | 8.1      | 1.7 | 4.4  | 9.9     | 5.4 | 7.7  |
| 13    | 2.4      | .0  | .5   | 2.8      | .0  | 1.0  | 4.6      | 1.6 | 2.8  | 9.9     | 5.4 | 7.8  |
| 14    | 3.4      | .0  | .8   | 3.3      | .0  | 1.1  | 4.9      | 1.1 | 2.6  | 9.4     | 6.0 | 7.8  |
| 15    | 3.3      | .0  | .8   | 4.6      | .0  | 1.4  | 6.8      | 1.4 | 3.9  | 9.9     | 5.9 | 8.0  |
| 16    | 3.4      | .0  | .7   | 4.0      | .2  | 1.4  | 7.0      | 1.9 | 4.4  | 10.7    | 6.6 | 8.7  |
| 17    | 3.8      | .0  | 1.0  | 2.1      | .0  | .8   | 6.6      | 2.4 | 4.2  | 9.5     | 7.1 | 8.4  |
| 18    | 2.7      | .0  | .7   | 2.9      | .0  | .6   | 4.6      | 1.9 | 3.0  | 10.0    | 6.0 | 8.1  |
| 19    | 2.4      | .0  | .8   | 3.3      | .0  | .7   | 6.0      | .1  | 2.7  | 10.8    | 6.9 | 8.8  |
| 20    | 1.7      | .3  | .8   | 4.7      | .0  | 1.1  | 4.6      | 1.0 | 2.8  | 10.4    | 6.6 | 8.4  |
| 21    | 1.3      | .0  | .6   | 4.9      | .0  | 1.5  | 6.0      | 1.5 | 3.6  | 10.4    | 6.1 | 8.3  |
| 22    | 2.0      | .0  | .7   | 4.8      | .0  | 2.0  | 6.0      | 1.6 | 3.6  | 11.1    | 6.5 | 8.8  |
| 23    | 2.1      | .0  | .5   | 5.9      | .9  | 2.8  | 7.8      | 2.0 | 4.5  | 10.4    | 6.4 | 8.3  |
| 24    | 1.9      | .0  | .5   | 3.8      | .2  | 1.5  | 8.3      | 3.0 | 5.5  | 8.4     | 6.1 | 7.4  |
| 25    | 3.0      | .0  | .7   | 3.6      | .0  | 1.3  | 6.9      | 3.3 | 4.8  | 7.4     | 5.6 | 6.5  |
| 26    | 1.9      | .0  | .3   | 5.2      | .0  | 1.9  | 7.7      | 2.4 | 4.9  | 6.4     | 4.8 | 5.5  |
| 27    | 1.7      | .0  | .3   | 5.9      | .0  | 2.3  | 7.0      | 3.2 | 4.8  | 7.7     | 3.4 | 5.3  |
| 28    | .5       | .0  | .1   | 7.0      | .2  | 3.2  | 4.0      | 1.9 | 2.8  | 8.7     | 4.9 | 6.7  |
| 29    | .3       | .0  | .0   | 8.2      | 1.1 | 3.7  | 5.9      | 1.3 | 3.4  | 10.7    | 5.4 | 8.1  |
| 30    | ---      | --- | ---  | 7.5      | .6  | 3.6  | 7.2      | 2.6 | 4.6  | 12.1    | 6.2 | 9.0  |
| 31    | ---      | --- | ---  | 8.3      | .5  | 3.7  | ---      | --- | ---  | 11.4    | 5.7 | 8.4  |
| MONTH | 3.8      | .0  | .5   | 8.3      | .0  | 1.4  | 9.1      | .1  | 3.9  | 12.1    | 2.7 | 7.2  |



## 07091200 ARKANSAS RIVER NEAR NATHROP, CO

LOCATION.--Lat 38°39'08", long 106°03'02", in SE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec.23, T.51 N., R.8 E., Chaffee County, Hydrologic Unit 11020001, on right bank 300 ft upstream from end of Chaffee County Road 194 in Browns Canyon, 3.7 mi downstream from Browns Creek, 6.7 mi south of Nathrop, and 9 mi north of Salida.

DRAINAGE AREA.--1,060 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1964 to September 1982. April 1989 to September 1993. October 1993 to current year (seasonal records only). Water-quality data available April 1989 to September 1993.

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.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,540 ft<sup>3</sup>/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 ft<sup>3</sup>/s, Feb. 25-27, 1977.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period of seasonal operation, 4,000 ft<sup>3</sup>/s at 1100 May 20, gage height, 7.90 ft; minimum daily discharge, 287 ft<sup>3</sup>/s, Sept. 11.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

| DAY   | OCT | NOV | DEC | JAN | FEB | MAR | APR   | MAY    | JUN    | JUL   | AUG   | SEP   |
|-------|-----|-----|-----|-----|-----|-----|-------|--------|--------|-------|-------|-------|
| 1     | --- | --- | --- | --- | --- | --- | e350  | 861    | 1280   | 1830  | 706   | 311   |
| 2     | --- | --- | --- | --- | --- | --- | e360  | 866    | 1330   | 1660  | 700   | 309   |
| 3     | --- | --- | --- | --- | --- | --- | e390  | 855    | 1500   | 1450  | 722   | 306   |
| 4     | --- | --- | --- | --- | --- | --- | e410  | 846    | 1980   | 1670  | 731   | 294   |
| 5     | --- | --- | --- | --- | --- | --- | e430  | 897    | 2540   | 1760  | 713   | 290   |
| 6     | --- | --- | --- | --- | --- | --- | e450  | 1000   | 3030   | 1900  | 710   | 294   |
| 7     | --- | --- | --- | --- | --- | --- | e470  | 1240   | 3170   | 1860  | 715   | 313   |
| 8     | --- | --- | --- | --- | --- | --- | e490  | 1340   | 3460   | 1810  | 718   | 304   |
| 9     | --- | --- | --- | --- | --- | --- | 531   | 1450   | 3500   | 1790  | 717   | 296   |
| 10    | --- | --- | --- | --- | --- | --- | 535   | 1680   | 3530   | 1460  | 765   | 290   |
| 11    | --- | --- | --- | --- | --- | --- | 527   | 1670   | 3450   | 1360  | 732   | 287   |
| 12    | --- | --- | --- | --- | --- | --- | 504   | 1770   | 3300   | 1270  | 695   | 303   |
| 13    | --- | --- | --- | --- | --- | --- | 543   | 2030   | 2920   | 1180  | 692   | 317   |
| 14    | --- | --- | --- | --- | --- | --- | 562   | 2610   | 2940   | 1140  | 699   | 324   |
| 15    | --- | --- | --- | --- | --- | --- | 558   | 2560   | 2940   | 1060  | 698   | 341   |
| 16    | --- | --- | --- | --- | --- | --- | 567   | 2840   | 2840   | 1010  | 691   | 329   |
| 17    | --- | --- | --- | --- | --- | --- | 577   | 3440   | 2720   | 969   | e630  | 320   |
| 18    | --- | --- | --- | --- | --- | --- | 540   | 3590   | 2610   | 1040  | e580  | 316   |
| 19    | --- | --- | --- | --- | --- | --- | 505   | 3630   | 2520   | 1050  | e480  | 330   |
| 20    | --- | --- | --- | --- | --- | --- | 642   | 3850   | 2280   | 1010  | e440  | 360   |
| 21    | --- | --- | --- | --- | --- | --- | 655   | 3690   | 2650   | 982   | e390  | 336   |
| 22    | --- | --- | --- | --- | --- | --- | 643   | 3450   | 3130   | 951   | e371  | 323   |
| 23    | --- | --- | --- | --- | --- | --- | 667   | 3190   | 3000   | 909   | e376  | 330   |
| 24    | --- | --- | --- | --- | --- | --- | 709   | 2580   | 2700   | 871   | e370  | 347   |
| 25    | --- | --- | --- | --- | --- | --- | 800   | 2240   | 2620   | 844   | e360  | 397   |
| 26    | --- | --- | --- | --- | --- | --- | 860   | 2180   | 2510   | 782   | e350  | 396   |
| 27    | --- | --- | --- | --- | --- | --- | 952   | 1400   | 2480   | 722   | 343   | 405   |
| 28    | --- | --- | --- | --- | --- | --- | 916   | 1510   | 2220   | 720   | 339   | 411   |
| 29    | --- | --- | --- | --- | --- | --- | 862   | 1480   | 2050   | 774   | 340   | 407   |
| 30    | --- | --- | --- | --- | --- | --- | 874   | 1300   | 1970   | 778   | 329   | 404   |
| 31    | --- | --- | --- | --- | --- | --- | ---   | 1260   | ---    | 727   | 319   | ---   |
| TOTAL | --- | --- | --- | --- | --- | --- | 17879 | 63305  | 79170  | 37339 | 17421 | 9990  |
| MEAN  | --- | --- | --- | --- | --- | --- | 596   | 2042   | 2639   | 1204  | 562   | 333   |
| MAX   | --- | --- | --- | --- | --- | --- | 952   | 3850   | 3530   | 1900  | 765   | 411   |
| MIN   | --- | --- | --- | --- | --- | --- | 350   | 846    | 1280   | 720   | 319   | 287   |
| AC-FT | --- | --- | --- | --- | --- | --- | 35460 | 125600 | 157000 | 74060 | 34550 | 19820 |

e-Estimated.



## ARKANSAS RIVER BASIN

## 07091200 ARKANSAS RIVER NEAR NATHROP, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DAY   | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN | MAX  | MIN    | MEAN | MAX  | MIN       | MEAN |          |
|-------|------|------|------|------|------|------|------|--------|------|------|-----------|------|----------|
|       |      |      |      |      |      |      |      |        |      |      |           |      | FEBRUARY |
| 1     | ---  | ---  | ---  | ---  | ---  | ---  | ---  | ---    | ---  | 9.4  | 5.7       | 7.6  |          |
| 2     | ---  | ---  | ---  | ---  | ---  | ---  | ---  | ---    | ---  | 10.1 | 6.1       | 8.0  |          |
| 3     | ---  | ---  | ---  | ---  | ---  | ---  | ---  | ---    | ---  | 11.4 | 6.4       | 8.9  |          |
| 4     | ---  | ---  | ---  | ---  | ---  | ---  | ---  | ---    | ---  | 11.2 | 6.7       | 9.0  |          |
| 5     | ---  | ---  | ---  | ---  | ---  | ---  | ---  | ---    | ---  | 10.8 | 7.5       | 9.3  |          |
| 6     | ---  | ---  | ---  | ---  | ---  | ---  | ---  | ---    | ---  | 10.9 | 7.9       | 9.4  |          |
| 7     | ---  | ---  | ---  | ---  | ---  | ---  | ---  | ---    | ---  | 10.1 | 7.5       | 9.0  |          |
| 8     | ---  | ---  | ---  | ---  | ---  | ---  | ---  | ---    | ---  | 10.3 | 7.5       | 9.0  |          |
| 9     | ---  | ---  | ---  | ---  | ---  | ---  | ---  | ---    | ---  | 10.3 | 8.0       | 9.2  |          |
| 10    | ---  | ---  | ---  | ---  | ---  | ---  | ---  | ---    | ---  | 10.2 | 8.3       | 9.3  |          |
| 11    | ---  | ---  | ---  | ---  | ---  | ---  | ---  | ---    | ---  | 10.7 | 8.1       | 9.4  |          |
| 12    | ---  | ---  | ---  | ---  | ---  | ---  | ---  | ---    | ---  | 11.0 | 8.7       | 9.9  |          |
| 13    | ---  | ---  | ---  | ---  | ---  | ---  | ---  | ---    | ---  | 11.0 | 9.1       | 10.1 |          |
| 14    | ---  | ---  | ---  | ---  | ---  | ---  | ---  | ---    | ---  | 10.6 | 9.2       | 9.9  |          |
| 15    | ---  | ---  | ---  | ---  | ---  | ---  | ---  | ---    | ---  | 10.5 | 8.8       | 9.7  |          |
| 16    | ---  | ---  | ---  | ---  | ---  | ---  | ---  | ---    | ---  | 11.1 | 9.3       | 10.2 |          |
| 17    | ---  | ---  | ---  | ---  | ---  | ---  | ---  | ---    | ---  | 10.9 | 9.7       | 10.3 |          |
| 18    | ---  | ---  | ---  | ---  | ---  | ---  | ---  | ---    | ---  | 10.6 | 9.2       | 9.8  |          |
| 19    | ---  | ---  | ---  | ---  | ---  | ---  | ---  | ---    | ---  | 10.8 | 9.5       | 10.1 |          |
| 20    | ---  | ---  | ---  | ---  | ---  | ---  | ---  | ---    | ---  | 10.8 | 9.6       | 10.1 |          |
| 21    | ---  | ---  | ---  | ---  | ---  | ---  | ---  | ---    | ---  | 10.3 | 9.4       | 9.8  |          |
| 22    | ---  | ---  | ---  | ---  | ---  | ---  | ---  | ---    | ---  | 10.4 | 9.5       | 9.9  |          |
| 23    | ---  | ---  | ---  | ---  | ---  | ---  | ---  | ---    | ---  | 10.5 | 9.6       | 10.0 |          |
| 24    | ---  | ---  | ---  | ---  | ---  | ---  | ---  | ---    | ---  | 10.1 | 9.3       | 9.6  |          |
| 25    | ---  | ---  | ---  | ---  | ---  | ---  | ---  | ---    | ---  | 9.4  | 8.7       | 9.1  |          |
| 26    | ---  | ---  | ---  | ---  | ---  | ---  | 9.7  | 6.4    | 7.6  | 8.7  | 8.3       | 8.4  |          |
| 27    | ---  | ---  | ---  | ---  | ---  | ---  | 9.4  | 6.3    | 8.0  | 8.9  | 7.8       | 8.2  |          |
| 28    | ---  | ---  | ---  | ---  | ---  | ---  | 7.4  | 3.6    | 5.0  | 9.1  | 8.4       | 8.6  |          |
| 29    | ---  | ---  | ---  | ---  | ---  | ---  | 7.8  | 2.2    | 4.9  | 10.0 | 8.7       | 9.2  |          |
| 30    | ---  | ---  | ---  | ---  | ---  | ---  | 9.2  | 4.7    | 7.0  | 10.9 | 9.8       | 10.2 |          |
| 31    | ---  | ---  | ---  | ---  | ---  | ---  | ---  | ---    | ---  | 10.9 | 10.1      | 10.5 |          |
| MONTH | ---  | ---  | ---  | ---  | ---  | ---  | ---  | ---    | ---  | 11.4 | 5.7       | 9.4  |          |
|       |      | JUNE |      |      | JULY |      |      | AUGUST |      |      | SEPTEMBER |      |          |
| 1     | 11.3 | 10.2 | 10.6 | 12.7 | 12.1 | 12.4 | 15.0 | 14.5   | 14.8 | ---  | ---       | ---  |          |
| 2     | 11.3 | 10.3 | 10.8 | 13.1 | 12.4 | 12.7 | 15.1 | 14.8   | 15.0 | ---  | ---       | ---  |          |
| 3     | 11.4 | 10.5 | 10.9 | 13.2 | 12.5 | 12.8 | 15.1 | 14.7   | 14.9 | ---  | ---       | ---  |          |
| 4     | 11.3 | 10.5 | 10.9 | 13.2 | 12.9 | 13.1 | 14.9 | 14.5   | 14.7 | ---  | ---       | ---  |          |
| 5     | 11.4 | 10.6 | 11.0 | 13.3 | 13.0 | 13.1 | 14.8 | 14.3   | 14.5 | ---  | ---       | ---  |          |
| 6     | 11.4 | 10.5 | 11.0 | 13.7 | 13.1 | 13.3 | 14.6 | 14.1   | 14.3 | ---  | ---       | ---  |          |
| 7     | 11.3 | 10.5 | 10.9 | 13.8 | 13.3 | 13.6 | 14.7 | 14.3   | 14.5 | ---  | ---       | ---  |          |
| 8     | 11.4 | 10.7 | 11.1 | 13.8 | 13.5 | 13.7 | 14.7 | 14.3   | 14.5 | ---  | ---       | ---  |          |
| 9     | 11.5 | 10.9 | 11.2 | 13.6 | 13.0 | 13.2 | 14.7 | 14.3   | 14.4 | ---  | ---       | ---  |          |
| 10    | 11.4 | 10.7 | 11.0 | 13.9 | 13.0 | 13.3 | 14.5 | 14.1   | 14.3 | ---  | ---       | ---  |          |
| 11    | 11.0 | 10.4 | 10.7 | 14.0 | 13.4 | 13.7 | 14.7 | 14.2   | 14.4 | ---  | ---       | ---  |          |
| 12    | 11.0 | 10.6 | 10.7 | 14.0 | 13.5 | 13.8 | 15.2 | 14.2   | 14.6 | ---  | ---       | ---  |          |
| 13    | 10.8 | 10.4 | 10.6 | 14.0 | 13.5 | 13.7 | 15.4 | 14.7   | 15.0 | ---  | ---       | ---  |          |
| 14    | 10.7 | 10.5 | 10.6 | 14.3 | 13.5 | 13.9 | 15.4 | 15.0   | 15.2 | ---  | ---       | ---  |          |
| 15    | 10.7 | 10.2 | 10.4 | 14.3 | 13.8 | 14.0 | 15.3 | 14.8   | 15.1 | ---  | ---       | ---  |          |
| 16    | 10.4 | 9.7  | 9.9  | 14.1 | 13.5 | 13.8 | 15.4 | 14.7   | 15.0 | ---  | ---       | ---  |          |
| 17    | 10.8 | 10.3 | 10.5 | 14.5 | 13.6 | 14.0 | 15.4 | 14.6   | 15.0 | ---  | ---       | ---  |          |
| 18    | 11.1 | 10.5 | 10.8 | 14.5 | 14.2 | 14.4 | 15.3 | 14.6   | 15.0 | ---  | ---       | ---  |          |
| 19    | 11.4 | 10.7 | 11.0 | 14.5 | 13.6 | 14.0 | 15.2 | 14.5   | 14.8 | ---  | ---       | ---  |          |
| 20    | 12.0 | 11.4 | 11.6 | 15.1 | 14.3 | 14.6 | 15.2 | 14.6   | 14.9 | ---  | ---       | ---  |          |
| 21    | 12.1 | 11.6 | 11.9 | 15.1 | 14.3 | 14.7 | 16.2 | 14.9   | 15.4 | ---  | ---       | ---  |          |
| 22    | 11.7 | 11.1 | 11.4 | 15.0 | 14.2 | 14.6 | 15.4 | 13.6   | 14.6 | ---  | ---       | ---  |          |
| 23    | 11.5 | 10.8 | 11.2 | 15.3 | 14.5 | 14.8 | ---  | ---    | ---  | ---  | ---       | ---  |          |
| 24    | 11.7 | 11.2 | 11.4 | 15.3 | 14.5 | 14.9 | ---  | ---    | ---  | ---  | ---       | ---  |          |
| 25    | 11.8 | 11.3 | 11.6 | 15.1 | 14.8 | 15.0 | ---  | ---    | ---  | ---  | ---       | ---  |          |
| 26    | 11.9 | 11.4 | 11.6 | 15.0 | 14.2 | 14.5 | ---  | ---    | ---  | ---  | ---       | ---  |          |
| 27    | 11.9 | 11.6 | 11.7 | 15.0 | 14.3 | 14.6 | ---  | ---    | ---  | ---  | ---       | ---  |          |
| 28    | 11.8 | 11.4 | 11.6 | 15.1 | 14.6 | 14.8 | ---  | ---    | ---  | ---  | ---       | ---  |          |
| 29    | 12.0 | 11.3 | 11.6 | 14.8 | 14.3 | 14.5 | ---  | ---    | ---  | ---  | ---       | ---  |          |
| 30    | 12.5 | 11.8 | 12.1 | 15.0 | 14.3 | 14.6 | ---  | ---    | ---  | ---  | ---       | ---  |          |
| 31    | ---  | ---  | ---  | 15.0 | 14.6 | 14.8 | ---  | ---    | ---  | ---  | ---       | ---  |          |
| MONTH | 12.5 | 9.7  | 11.1 | 15.3 | 12.1 | 14.0 | ---  | ---    | ---  | ---  | ---       | ---  |          |



**07093740 BADGER CREEK, UPPER STATION, NEAR HOWARD, CO**

LOCATION.--Lat 38°39'32", long 105°48'48", in SE<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec.13, T.51 N., R.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 mi<sup>2</sup>.

**WATER-DISCHARGE RECORDS**

PERIOD OF RECORD.--December 1980 to September 1986, October 1986 to October 1988 (seasonal only), at site 0.2 mi downstream. March 1989 to June 1994, at site 0.1 mi downstream (seasonal only). Not equivalent because of seepage at previous site. July 1994 to current year (seasonal only).

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 8,790 ft above sea level, from topographic map. Prior to October 28, 1988 at site 0.2 mi downstream, at different datum. Prior to July 1, 1994, at site 0.1 mi downstream, at different datum. Prior 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 ft<sup>3</sup>/s and above 10 ft<sup>3</sup>/s, which are poor.

AVERAGE DISCHARGE.--5 years (water years 1981-86), 5.89 ft<sup>3</sup>/s; 4,270 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,360 ft<sup>3</sup>/s, Aug. 14, 1983, 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, 368 ft<sup>3</sup>/s, Sept. 12, gage height, 4.06 ft; minimum daily, 0.21 ft<sup>3</sup>/s, June 7.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

| DAY   | OCT   | NOV | DEC | JAN | FEB | MAR | APR   | MAY   | JUN   | JUL   | AUG   | SEP   |
|-------|-------|-----|-----|-----|-----|-----|-------|-------|-------|-------|-------|-------|
| 1     | 1.0   | --- | --- | --- | --- | --- | e1.6  | e.75  | .90   | .86   | .68   | .93   |
| 2     | 1.0   | --- | --- | --- | --- | --- | e1.6  | e.75  | .70   | .66   | .47   | .84   |
| 3     | .99   | --- | --- | --- | --- | --- | e1.6  | .78   | .54   | .51   | .40   | .74   |
| 4     | 1.0   | --- | --- | --- | --- | --- | e1.5  | 2.2   | .52   | .50   | .49   | .60   |
| 5     | 1.3   | --- | --- | --- | --- | --- | e1.5  | 1.3   | .34   | .50   | .42   | .45   |
| 6     | 1.7   | --- | --- | --- | --- | --- | e1.5  | 1.5   | .23   | .30   | .30   | .78   |
| 7     | 1.4   | --- | --- | --- | --- | --- | e1.5  | 1.0   | .21   | e.30  | .44   | .81   |
| 8     | 1.1   | --- | --- | --- | --- | --- | e1.5  | 1.8   | .22   | .81   | 1.3   | .60   |
| 9     | 1.3   | --- | --- | --- | --- | --- | e1.5  | 1.2   | .27   | 2.8   | .72   | .52   |
| 10    | 1.3   | --- | --- | --- | --- | --- | e1.4  | 1.1   | .53   | 2.6   | .58   | .52   |
| 11    | 1.1   | --- | --- | --- | --- | --- | e1.4  | .90   | .58   | 1.2   | .49   | .57   |
| 12    | 1.1   | --- | --- | --- | --- | --- | e1.4  | .75   | .66   | .90   | .39   | 23    |
| 13    | 1.2   | --- | --- | --- | --- | --- | e1.4  | .77   | .92   | .81   | .35   | 2.6   |
| 14    | 1.4   | --- | --- | --- | --- | --- | e1.3  | .75   | 1.1   | .61   | .30   | 1.2   |
| 15    | 1.2   | --- | --- | --- | --- | --- | e1.3  | .76   | 3.6   | .41   | .30   | 2.0   |
| 16    | 1.1   | --- | --- | --- | --- | --- | e1.3  | .77   | 4.1   | .72   | .30   | 1.1   |
| 17    | 1.1   | --- | --- | --- | --- | --- | e1.2  | .65   | 2.3   | .45   | 5.6   | .91   |
| 18    | 1.2   | --- | --- | --- | --- | --- | e1.2  | .61   | 1.6   | .33   | 1.8   | 1.1   |
| 19    | 1.0   | --- | --- | --- | --- | --- | e1.2  | .69   | 1.1   | e.30  | .64   | 1.1   |
| 20    | 2.2   | --- | --- | --- | --- | --- | e1.1  | .55   | .81   | e.32  | .69   | 1.0   |
| 21    | 1.7   | --- | --- | --- | --- | --- | e1.1  | .71   | .74   | e.30  | .64   | 1.0   |
| 22    | 1.3   | --- | --- | --- | --- | --- | e1.1  | .87   | 2.1   | e.30  | .75   | .92   |
| 23    | 2.3   | --- | --- | --- | --- | --- | .91   | .81   | 1.8   | e.33  | .93   | .90   |
| 24    | 2.0   | --- | --- | --- | --- | --- | .91   | 1.0   | 1.2   | e.32  | .84   | .96   |
| 25    | 1.9   | --- | --- | --- | --- | --- | .63   | 2.0   | .89   | e.40  | .78   | .93   |
| 26    | 1.4   | --- | --- | --- | --- | --- | e.60  | 4.4   | .74   | .86   | .74   | .92   |
| 27    | 1.2   | --- | --- | --- | --- | --- | e.65  | 2.4   | .73   | .54   | 8.2   | .89   |
| 28    | 1.7   | --- | --- | --- | --- | --- | e.65  | 1.6   | .81   | .26   | 7.9   | .87   |
| 29    | 1.4   | --- | --- | --- | --- | --- | e.70  | 1.5   | 1.1   | 1.4   | 1.4   | .86   |
| 30    | 1.3   | --- | --- | --- | --- | --- | e.70  | 1.4   | .91   | 2.6   | 1.1   | .76   |
| 31    | 1.2   | --- | --- | --- | --- | --- | ---   | 1.2   | ---   | 1.3   | .98   | ---   |
| TOTAL | 42.09 | --- | --- | --- | --- | --- | 35.95 | 37.47 | 32.25 | 24.50 | 40.92 | 50.38 |
| MEAN  | 1.36  | --- | --- | --- | --- | --- | 1.20  | 1.21  | 1.07  | .79   | 1.32  | 1.68  |
| MAX   | 2.3   | --- | --- | --- | --- | --- | 1.6   | 4.4   | 4.1   | 2.8   | 8.2   | 23    |
| MIN   | .99   | --- | --- | --- | --- | --- | .60   | .55   | .21   | .26   | .30   | .45   |
| AC-FT | 83    | --- | --- | --- | --- | --- | 71    | 74    | 64    | 49    | 81    | 100   |

e-Estimated.



## 07093740 BADGER CREEK, UPPER STATION, NEAR HOWARD, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DAY   | MAX      | MIN | MEAN | MAX   | MIN | MEAN | MAX    | MIN  | MEAN | MAX       | MIN | MEAN |
|-------|----------|-----|------|-------|-----|------|--------|------|------|-----------|-----|------|
|       | FEBRUARY |     |      | MARCH |     |      | APRIL  |      |      | MAY       |     |      |
| 1     | ---      | --- | ---  | ---   | --- | ---  | 10.5   | .2   | 4.2  | 20.3      | .5  | 8.1  |
| 2     | ---      | --- | ---  | ---   | --- | ---  | 8.3    | .2   | 3.3  | 18.7      | .3  | 7.2  |
| 3     | ---      | --- | ---  | ---   | --- | ---  | 6.6    | .2   | 2.5  | 17.2      | 1.0 | 7.1  |
| 4     | ---      | --- | ---  | ---   | --- | ---  | 6.0    | .3   | 2.3  | ---       | --- | ---  |
| 5     | ---      | --- | ---  | ---   | --- | ---  | 12.7   | .2   | 4.8  | ---       | --- | ---  |
| 6     | ---      | --- | ---  | ---   | --- | ---  | 12.7   | .2   | 4.9  | ---       | --- | ---  |
| 7     | ---      | --- | ---  | ---   | --- | ---  | 10.1   | .2   | 4.3  | ---       | --- | ---  |
| 8     | ---      | --- | ---  | ---   | --- | ---  | 12.7   | .2   | 5.9  | ---       | --- | ---  |
| 9     | ---      | --- | ---  | ---   | --- | ---  | 14.5   | .3   | 6.4  | ---       | --- | ---  |
| 10    | ---      | --- | ---  | ---   | --- | ---  | 10.6   | .4   | 5.3  | ---       | --- | ---  |
| 11    | ---      | --- | ---  | ---   | --- | ---  | 11.5   | .4   | 5.5  | ---       | --- | ---  |
| 12    | ---      | --- | ---  | ---   | --- | ---  | 15.1   | .3   | 6.2  | ---       | --- | ---  |
| 13    | ---      | --- | ---  | ---   | --- | ---  | 6.4    | .3   | 2.8  | ---       | --- | ---  |
| 14    | ---      | --- | ---  | ---   | --- | ---  | 11.1   | .3   | 3.8  | ---       | --- | ---  |
| 15    | ---      | --- | ---  | ---   | --- | ---  | 15.9   | .3   | 5.8  | ---       | --- | ---  |
| 16    | ---      | --- | ---  | ---   | --- | ---  | 16.2   | .3   | 6.9  | ---       | --- | ---  |
| 17    | ---      | --- | ---  | ---   | --- | ---  | 15.2   | .7   | 6.9  | ---       | --- | ---  |
| 18    | ---      | --- | ---  | ---   | --- | ---  | 10.2   | .4   | 5.0  | ---       | --- | ---  |
| 19    | ---      | --- | ---  | ---   | --- | ---  | 13.5   | .4   | 4.7  | ---       | --- | ---  |
| 20    | ---      | --- | ---  | ---   | --- | ---  | 7.2    | .4   | 2.6  | ---       | --- | ---  |
| 21    | ---      | --- | ---  | ---   | --- | ---  | 10.8   | .3   | 4.2  | ---       | --- | ---  |
| 22    | ---      | --- | ---  | ---   | --- | ---  | 13.2   | .4   | 4.9  | ---       | --- | ---  |
| 23    | ---      | --- | ---  | ---   | --- | ---  | 19.1   | .2   | 7.1  | ---       | --- | ---  |
| 24    | ---      | --- | ---  | ---   | --- | ---  | 20.7   | 1.6  | 9.1  | ---       | --- | ---  |
| 25    | ---      | --- | ---  | ---   | --- | ---  | 17.1   | 3.0  | 8.3  | ---       | --- | ---  |
| 26    | ---      | --- | ---  | ---   | --- | ---  | 19.4   | .2   | 8.2  | ---       | --- | ---  |
| 27    | ---      | --- | ---  | ---   | --- | ---  | 18.0   | .7   | 7.5  | ---       | --- | ---  |
| 28    | ---      | --- | ---  | ---   | --- | ---  | 5.5    | .2   | 2.0  | ---       | --- | ---  |
| 29    | ---      | --- | ---  | ---   | --- | ---  | 13.5   | .2   | 4.2  | ---       | --- | ---  |
| 30    | ---      | --- | ---  | ---   | --- | ---  | 18.7   | .0   | 7.1  | ---       | --- | ---  |
| 31    | ---      | --- | ---  | ---   | --- | ---  | ---    | ---  | ---  | ---       | --- | ---  |
| MONTH | ---      | --- | ---  | ---   | --- | ---  | 20.7   | .0   | 5.2  | ---       | --- | ---  |
|       | JUNE     |     |      | JULY  |     |      | AUGUST |      |      | SEPTEMBER |     |      |
| 1     | ---      | --- | ---  | ---   | --- | ---  | 24.9   | ---  | ---  | 21.2      | 8.7 | 13.7 |
| 2     | ---      | --- | ---  | ---   | --- | ---  | 25.3   | 9.6  | 16.0 | 17.8      | 7.4 | 11.7 |
| 3     | ---      | --- | ---  | ---   | --- | ---  | 25.0   | 9.7  | 15.9 | 23.9      | 6.3 | 13.8 |
| 4     | ---      | --- | ---  | ---   | --- | ---  | 25.5   | 8.4  | 15.4 | 23.3      | 7.0 | 13.6 |
| 5     | ---      | --- | ---  | ---   | --- | ---  | 26.7   | 5.8  | 15.1 | 21.3      | 6.4 | 13.1 |
| 6     | ---      | --- | ---  | ---   | --- | ---  | 28.1   | 6.0  | 15.7 | 15.7      | 9.4 | 11.8 |
| 7     | ---      | --- | ---  | ---   | --- | ---  | 27.7   | 9.2  | 15.8 | 19.5      | 7.0 | 12.0 |
| 8     | ---      | --- | ---  | ---   | --- | ---  | 21.1   | 7.5  | 13.4 | 19.2      | 4.9 | 11.9 |
| 9     | ---      | --- | ---  | ---   | --- | ---  | 23.1   | 8.3  | 15.1 | 18.8      | 5.8 | 11.5 |
| 10    | ---      | --- | ---  | ---   | --- | ---  | 24.2   | 7.6  | 15.2 | 20.0      | 6.4 | 12.4 |
| 11    | ---      | --- | ---  | ---   | --- | ---  | 27.2   | 6.7  | 15.7 | 17.4      | 6.5 | 11.1 |
| 12    | ---      | --- | ---  | ---   | --- | ---  | 29.4   | 7.6  | 17.0 | 13.9      | 8.0 | 10.2 |
| 13    | ---      | --- | ---  | ---   | --- | ---  | 25.8   | 8.3  | 16.6 | 15.2      | 7.9 | 11.2 |
| 14    | ---      | --- | ---  | ---   | --- | ---  | 24.3   | 9.1  | 16.0 | 12.8      | 7.5 | 10.2 |
| 15    | ---      | --- | ---  | ---   | --- | ---  | 23.4   | 9.1  | 15.5 | 16.8      | 7.9 | 11.9 |
| 16    | ---      | --- | ---  | ---   | --- | ---  | 25.3   | 9.0  | 16.0 | 17.8      | 8.7 | 12.5 |
| 17    | ---      | --- | ---  | ---   | --- | ---  | 27.1   | 5.0  | 14.0 | 13.2      | 7.3 | 9.8  |
| 18    | ---      | --- | ---  | ---   | --- | ---  | 20.1   | 8.1  | 13.4 | 11.0      | 5.4 | 7.9  |
| 19    | ---      | --- | ---  | ---   | --- | ---  | 21.2   | 10.2 | 15.0 | 13.0      | 2.5 | 7.1  |
| 20    | ---      | --- | ---  | ---   | --- | ---  | 22.7   | 10.1 | 15.7 | 16.4      | 3.4 | 9.0  |
| 21    | ---      | --- | ---  | ---   | --- | ---  | 22.8   | 12.8 | 16.5 | 17.1      | 3.0 | 9.3  |
| 22    | ---      | --- | ---  | ---   | --- | ---  | 18.3   | 12.9 | 15.0 | 16.2      | 3.7 | 9.6  |
| 23    | ---      | --- | ---  | ---   | --- | ---  | 22.0   | 11.4 | 15.6 | 14.4      | 4.9 | 9.4  |
| 24    | ---      | --- | ---  | ---   | --- | ---  | 26.3   | 11.9 | 17.5 | 17.0      | 7.0 | 11.1 |
| 25    | ---      | --- | ---  | ---   | --- | ---  | 26.3   | 11.5 | 17.5 | 12.8      | 4.3 | 8.2  |
| 26    | ---      | --- | ---  | ---   | --- | ---  | 22.5   | 12.1 | 16.0 | 8.6       | 3.3 | 5.4  |
| 27    | ---      | --- | ---  | ---   | --- | ---  | 19.2   | 10.7 | 14.2 | 11.9      | .3  | 5.3  |
| 28    | ---      | --- | ---  | ---   | --- | ---  | 19.6   | 9.4  | 13.6 | 15.7      | 1.0 | 7.3  |
| 29    | ---      | --- | ---  | ---   | --- | ---  | 19.4   | 8.7  | 14.1 | 16.3      | 2.1 | 8.5  |
| 30    | ---      | --- | ---  | ---   | --- | ---  | 23.2   | 10.9 | 15.9 | 16.7      | 2.7 | 8.9  |
| 31    | ---      | --- | ---  | ---   | --- | ---  | 25.8   | 11.2 | 16.4 | ---       | --- | ---  |
| MONTH | ---      | --- | ---  | ---   | --- | ---  | 29.4   | ---  | ---  | 23.9      | .3  | 10.3 |

## 07093740 BADGER CREEK, UPPER STATION, NEAR HOWARD, CO--Continued

## SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DATE  | TIME | DIS-<br>CHARGE,<br>INST.<br>CUBIC<br>FEET<br>PER<br>SECOND | SEDI-<br>MENT,<br>SUS-<br>PENDEDED<br>(MG/L) | SEDI-<br>MENT,<br>DIS-<br>CHARGE,<br>SUS-<br>PENDEDED<br>(T/DAY) |
|-------|------|--|--|--|
| APR   |      |  |  |  |
| 02... | 1045 | 0.60   | 92   | 0.15   |
| 22... | 1130 | 1.1  | 122  | 0.36   |
| 22... | 1345 | 0.90   | 125  | 0.30   |
| MAY   |      |  |  |  |
| 03... | 1035 | 0.80   | 38   | 0.08   |

## SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

| DATE  | TIME | DIS-<br>CHARGE,<br>INST.<br>CUBIC<br>FEET<br>PER<br>SECOND | SEDI-<br>MENT,<br>SUS-<br>PENDEDED<br>(MG/L) | SEDI-<br>MENT,<br>DIS-<br>CHARGE,<br>SUS-<br>PENDEDED<br>(T/DAY) |
|-------|------|--|--|--|
| OCT   |      |  |  |  |
| 12... | 1100 | 0.92   | 15   | 0.04   |
| APR   |      |  |  |  |
| 03... | 1040 | 1.8  | 95   | 0.46   |
| 17... | 1120 | 1.3  | 223  | 0.78   |
| MAY   |      |  |  |  |
| 11... | 1010 | 5.0  | 174  | 2.3  |
| 22... | 1020 | 6.3  | 160  | 2.7  |
| JUN   |      |  |  |  |
| 02... | 0720 | 5.5  | 65   | 0.97   |
| 15... | 1500 | 1.8  | 101  | 0.49   |
| JUL   |      |  |  |  |
| 05... | 1415 | 2.4  | 99   | 0.64   |
| 17... | 1350 | 0.91   | 253  | 0.62   |
| 31... | 1535 | 0.34   | 118  | 0.11   |
| AUG   |      |  |  |  |
| 14... | 1145 | 0.45   | 71   | 0.09   |
| SEP   |      |  |  |  |
| 12... | 1310 | 0.91   | 35   | 0.09   |
| 26... | 1340 | 0.91   | 34   | 0.08   |



07093740 BADGER CREEK, UPPER STATION, NEAR HOWARD, CO--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| 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     | e1.6                 | ---                        | e.37                          | e.75                 | ---                        | e.08                          | .90                  | ---                        | ---                           |
| 2     | e1.6                 | 92                         | e.40                          | e.75                 | ---                        | e.08                          | .70                  | ---                        | ---                           |
| 3     | e1.6                 | 130                        | e.56                          | .78                  | 37                         | .08                           | .54                  | ---                        | ---                           |
| 4     | e1.5                 | ---                        | e.73                          | 2.2                  | ---                        | e1.5                          | .52                  | ---                        | ---                           |
| 5     | e1.5                 | ---                        | e.83                          | 1.3                  | ---                        | e.53                          | .34                  | ---                        | ---                           |
| 6     | e1.5                 | 210                        | e.85                          | 1.5                  | ---                        | e.61                          | .23                  | ---                        | ---                           |
| 7     | e1.5                 | ---                        | e.83                          | 1.0                  | ---                        | e.27                          | .21                  | ---                        | ---                           |
| 8     | e1.5                 | ---                        | e.85                          | 1.8                  | ---                        | e.73                          | .22                  | ---                        | ---                           |
| 9     | e1.5                 | 214                        | e.87                          | 1.2                  | ---                        | e.32                          | .27                  | ---                        | ---                           |
| 10    | e1.4                 | 210                        | e.79                          | 1.1                  | ---                        | e.30                          | .53                  | ---                        | ---                           |
| 11    | e1.4                 | ---                        | e.80                          | .90                  | ---                        | e.24                          | .58                  | ---                        | ---                           |
| 12    | e1.4                 | 204                        | e.77                          | .75                  | ---                        | e.16                          | .66                  | ---                        | ---                           |
| 13    | e1.4                 | 180                        | e.68                          | .77                  | ---                        | e.17                          | .92                  | ---                        | ---                           |
| 14    | e1.3                 | 204                        | e.72                          | .75                  | ---                        | e.16                          | 1.1                  | ---                        | ---                           |
| 15    | e1.3                 | 180                        | e.63                          | .76                  | ---                        | e.16                          | 3.6                  | ---                        | ---                           |
| 16    | e1.3                 | ---                        | e.56                          | .77                  | ---                        | e.17                          | 4.1                  | ---                        | ---                           |
| 17    | e1.2                 | 160                        | e.52                          | .65                  | ---                        | e.09                          | 2.3                  | ---                        | ---                           |
| 18    | e1.2                 | 180                        | e.58                          | .61                  | ---                        | e.08                          | 1.6                  | ---                        | ---                           |
| 19    | e1.2                 | 125                        | e.40                          | .69                  | ---                        | e.09                          | 1.1                  | ---                        | ---                           |
| 20    | e1.1                 | ---                        | e.39                          | .55                  | ---                        | e.07                          | .81                  | ---                        | ---                           |
| 21    | e1.1                 | ---                        | e.36                          | .71                  | ---                        | e.10                          | .74                  | ---                        | ---                           |
| 22    | e1.1                 | 122                        | e.36                          | .87                  | ---                        | e.19                          | 2.1                  | ---                        | ---                           |
| 23    | .91                  | ---                        | e.25                          | .81                  | ---                        | e.17                          | 1.8                  | ---                        | ---                           |
| 24    | .91                  | ---                        | e.25                          | 1.0                  | ---                        | e.40                          | 1.2                  | ---                        | ---                           |
| 25    | .63                  | ---                        | e.14                          | 2.0                  | ---                        | e1.4                          | .89                  | ---                        | ---                           |
| 26    | e.60                 | ---                        | e.08                          | 4.4                  | ---                        | e3.6                          | .74                  | ---                        | ---                           |
| 27    | e.65                 | ---                        | e.09                          | 2.4                  | ---                        | e1.6                          | .73                  | ---                        | ---                           |
| 28    | e.65                 | ---                        | e.09                          | 1.6                  | ---                        | e.65                          | .81                  | ---                        | ---                           |
| 29    | e.70                 | ---                        | e.09                          | 1.5                  | ---                        | e.40                          | 1.1                  | ---                        | ---                           |
| 30    | e.70                 | ---                        | e.09                          | 1.4                  | ---                        | e.38                          | .91                  | ---                        | ---                           |
| 31    | ---                  | ---                        | ---                           | 1.2                  | ---                        | e.32                          | ---                  | ---                        | ---                           |
| TOTAL | 35.95                | ---                        | 14.93                         | 37.47                | ---                        | 15.10                         | 32.25                | ---                        | ---                           |
|       |                      | JULY                       |                               | AUGUST               |                            | SEPTEMBER                     |                      |                            |                               |
| 1     | .86                  | ---                        | ---                           | .68                  | ---                        | ---                           | .93                  | ---                        | ---                           |
| 2     | .66                  | ---                        | ---                           | .47                  | ---                        | ---                           | .84                  | ---                        | ---                           |
| 3     | .51                  | ---                        | ---                           | .40                  | ---                        | ---                           | .74                  | ---                        | ---                           |
| 4     | .50                  | ---                        | ---                           | .49                  | ---                        | ---                           | .60                  | ---                        | ---                           |
| 5     | .50                  | ---                        | ---                           | .42                  | ---                        | ---                           | .45                  | ---                        | ---                           |
| 6     | .30                  | ---                        | ---                           | .30                  | ---                        | ---                           | .78                  | ---                        | ---                           |
| 7     | e.30                 | ---                        | ---                           | .44                  | ---                        | ---                           | .81                  | ---                        | ---                           |
| 8     | .81                  | ---                        | ---                           | 1.3                  | ---                        | ---                           | .60                  | ---                        | ---                           |
| 9     | 2.8                  | ---                        | ---                           | .72                  | ---                        | ---                           | .52                  | ---                        | ---                           |
| 10    | 2.6                  | ---                        | ---                           | .58                  | ---                        | ---                           | .52                  | ---                        | ---                           |
| 11    | 1.2                  | ---                        | ---                           | .49                  | ---                        | ---                           | .57                  | ---                        | ---                           |
| 12    | .90                  | ---                        | ---                           | .39                  | ---                        | ---                           | 23                   | ---                        | ---                           |
| 13    | .81                  | ---                        | ---                           | .35                  | ---                        | ---                           | 2.6                  | ---                        | ---                           |
| 14    | .61                  | ---                        | ---                           | .30                  | ---                        | ---                           | 1.2                  | ---                        | ---                           |
| 15    | .41                  | ---                        | ---                           | .30                  | ---                        | ---                           | 2.0                  | ---                        | ---                           |
| 16    | .72                  | ---                        | ---                           | .30                  | ---                        | ---                           | 1.1                  | ---                        | ---                           |
| 17    | .45                  | ---                        | ---                           | 5.6                  | ---                        | ---                           | .91                  | ---                        | ---                           |
| 18    | .33                  | ---                        | ---                           | 1.8                  | ---                        | ---                           | 1.1                  | ---                        | ---                           |
| 19    | e.30                 | ---                        | ---                           | .64                  | ---                        | ---                           | 1.1                  | ---                        | ---                           |
| 20    | e.32                 | ---                        | ---                           | .69                  | ---                        | ---                           | 1.0                  | ---                        | ---                           |
| 21    | e.30                 | ---                        | ---                           | .64                  | ---                        | ---                           | 1.0                  | ---                        | ---                           |
| 22    | e.30                 | ---                        | ---                           | .75                  | ---                        | ---                           | .92                  | ---                        | ---                           |
| 23    | e.33                 | ---                        | ---                           | .93                  | ---                        | ---                           | .90                  | ---                        | ---                           |
| 24    | e.32                 | ---                        | ---                           | .84                  | ---                        | ---                           | .96                  | ---                        | ---                           |
| 25    | e.40                 | ---                        | ---                           | .78                  | ---                        | ---                           | .93                  | ---                        | ---                           |
| 26    | .86                  | ---                        | ---                           | .74                  | ---                        | ---                           | .92                  | ---                        | ---                           |
| 27    | .54                  | ---                        | ---                           | 8.2                  | ---                        | ---                           | .89                  | ---                        | ---                           |
| 28    | .26                  | ---                        | ---                           | 7.9                  | ---                        | ---                           | .87                  | ---                        | ---                           |
| 29    | 1.4                  | ---                        | ---                           | 1.4                  | ---                        | ---                           | .86                  | ---                        | ---                           |
| 30    | 2.6                  | ---                        | ---                           | 1.1                  | ---                        | ---                           | .76                  | ---                        | ---                           |
| 31    | 1.3                  | ---                        | ---                           | .98                  | ---                        | ---                           | ---                  | ---                        | ---                           |
| TOTAL | 24.50                | ---                        | ---                           | 40.92                | ---                        | ---                           | 50.38                | ---                        | ---                           |

e-Estimated.

07093740 BADGER CREEK, UPPER STATION, NEAR HOWARD, CO--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

| DAY   | MEAN               | MEAN                    | SEDIMENT                | MEAN               | MEAN                    | SEDIMENT                | MEAN               | MEAN                    | SEDIMENT                |
|-------|--------------------|-------------------------|-------------------------|--------------------|-------------------------|-------------------------|--------------------|-------------------------|-------------------------|
|       | DISCHARGE<br>(CFS) | CONCENTRATION<br>(MG/L) | DISCHARGE<br>(TONS/DAY) | DISCHARGE<br>(CFS) | CONCENTRATION<br>(MG/L) | DISCHARGE<br>(TONS/DAY) | DISCHARGE<br>(CFS) | CONCENTRATION<br>(MG/L) | DISCHARGE<br>(TONS/DAY) |
|       | OCTOBER            |                         |                         | NOVEMBER           |                         |                         | DECEMBER           |                         |                         |
| 1     | .66                | 17                      | .03                     | ---                | ---                     | ---                     | ---                | ---                     | ---                     |
| 2     | .74                | ---                     | e.03                    | ---                | ---                     | ---                     | ---                | ---                     | ---                     |
| 3     | .78                | 15                      | .03                     | ---                | ---                     | ---                     | ---                | ---                     | ---                     |
| 4     | .73                | 13                      | .03                     | ---                | ---                     | ---                     | ---                | ---                     | ---                     |
| 5     | .82                | 14                      | .03                     | ---                | ---                     | ---                     | ---                | ---                     | ---                     |
| 6     | 1.0                | 16                      | .04                     | ---                | ---                     | ---                     | ---                | ---                     | ---                     |
| 7     | .98                | ---                     | e.04                    | ---                | ---                     | ---                     | ---                | ---                     | ---                     |
| 8     | 1.0                | 13                      | .04                     | ---                | ---                     | ---                     | ---                | ---                     | ---                     |
| 9     | 1.0                | 16                      | .04                     | ---                | ---                     | ---                     | ---                | ---                     | ---                     |
| 10    | .97                | ---                     | e.04                    | ---                | ---                     | ---                     | ---                | ---                     | ---                     |
| 11    | .91                | 17                      | .04                     | ---                | ---                     | ---                     | ---                | ---                     | ---                     |
| 12    | .91                | 15                      | .04                     | ---                | ---                     | ---                     | ---                | ---                     | ---                     |
| 13    | .91                | 13                      | .03                     | ---                | ---                     | ---                     | ---                | ---                     | ---                     |
| 14    | .91                | 16                      | .04                     | ---                | ---                     | ---                     | ---                | ---                     | ---                     |
| 15    | 1.0                | 16                      | .04                     | ---                | ---                     | ---                     | ---                | ---                     | ---                     |
| 16    | 1.1                | 19                      | .06                     | ---                | ---                     | ---                     | ---                | ---                     | ---                     |
| 17    | .93                | ---                     | e.05                    | ---                | ---                     | ---                     | ---                | ---                     | ---                     |
| 18    | .90                | ---                     | e.04                    | ---                | ---                     | ---                     | ---                | ---                     | ---                     |
| 19    | .91                | 18                      | .04                     | ---                | ---                     | ---                     | ---                | ---                     | ---                     |
| 20    | .86                | 32                      | .08                     | ---                | ---                     | ---                     | ---                | ---                     | ---                     |
| 21    | .84                | 27                      | .06                     | ---                | ---                     | ---                     | ---                | ---                     | ---                     |
| 22    | .69                | ---                     | e.04                    | ---                | ---                     | ---                     | ---                | ---                     | ---                     |
| 23    | .64                | ---                     | e.04                    | ---                | ---                     | ---                     | ---                | ---                     | ---                     |
| 24    | .65                | 25                      | .04                     | ---                | ---                     | ---                     | ---                | ---                     | ---                     |
| 25    | .58                | 27                      | .04                     | ---                | ---                     | ---                     | ---                | ---                     | ---                     |
| 26    | .55                | 27                      | .04                     | ---                | ---                     | ---                     | ---                | ---                     | ---                     |
| 27    | .53                | ---                     | e.04                    | ---                | ---                     | ---                     | ---                | ---                     | ---                     |
| 28    | .49                | ---                     | e.04                    | ---                | ---                     | ---                     | ---                | ---                     | ---                     |
| 29    | .44                | 33                      | .04                     | ---                | ---                     | ---                     | ---                | ---                     | ---                     |
| 30    | .50                | 28                      | .03                     | ---                | ---                     | ---                     | ---                | ---                     | ---                     |
| 31    | .42                | ---                     | e.03                    | ---                | ---                     | ---                     | ---                | ---                     | ---                     |
| TOTAL | 24.35              | ---                     | 1.25                    | ---                | ---                     | ---                     | ---                | ---                     | ---                     |
|       | JANUARY            |                         |                         | FEBRUARY           |                         |                         | MARCH              |                         |                         |
| 1     | ---                | ---                     | ---                     | ---                | ---                     | ---                     | ---                | ---                     | ---                     |
| 2     | ---                | ---                     | ---                     | ---                | ---                     | ---                     | ---                | ---                     | ---                     |
| 3     | ---                | ---                     | ---                     | ---                | ---                     | ---                     | ---                | ---                     | ---                     |
| 4     | ---                | ---                     | ---                     | ---                | ---                     | ---                     | ---                | ---                     | ---                     |
| 5     | ---                | ---                     | ---                     | ---                | ---                     | ---                     | ---                | ---                     | ---                     |
| 6     | ---                | ---                     | ---                     | ---                | ---                     | ---                     | ---                | ---                     | ---                     |
| 7     | ---                | ---                     | ---                     | ---                | ---                     | ---                     | ---                | ---                     | ---                     |
| 8     | ---                | ---                     | ---                     | ---                | ---                     | ---                     | ---                | ---                     | ---                     |
| 9     | ---                | ---                     | ---                     | ---                | ---                     | ---                     | ---                | ---                     | ---                     |
| 10    | ---                | ---                     | ---                     | ---                | ---                     | ---                     | ---                | ---                     | ---                     |
| 11    | ---                | ---                     | ---                     | ---                | ---                     | ---                     | ---                | ---                     | ---                     |
| 12    | ---                | ---                     | ---                     | ---                | ---                     | ---                     | ---                | ---                     | ---                     |
| 13    | ---                | ---                     | ---                     | ---                | ---                     | ---                     | ---                | ---                     | ---                     |
| 14    | ---                | ---                     | ---                     | ---                | ---                     | ---                     | ---                | ---                     | ---                     |
| 15    | ---                | ---                     | ---                     | ---                | ---                     | ---                     | ---                | ---                     | ---                     |
| 16    | ---                | ---                     | ---                     | ---                | ---                     | ---                     | ---                | ---                     | ---                     |
| 17    | ---                | ---                     | ---                     | ---                | ---                     | ---                     | ---                | ---                     | ---                     |
| 18    | ---                | ---                     | ---                     | ---                | ---                     | ---                     | ---                | ---                     | ---                     |
| 19    | ---                | ---                     | ---                     | ---                | ---                     | ---                     | ---                | ---                     | ---                     |
| 20    | ---                | ---                     | ---                     | ---                | ---                     | ---                     | ---                | ---                     | ---                     |
| 21    | ---                | ---                     | ---                     | ---                | ---                     | ---                     | ---                | ---                     | ---                     |
| 22    | ---                | ---                     | ---                     | ---                | ---                     | ---                     | ---                | ---                     | ---                     |
| 23    | ---                | ---                     | ---                     | ---                | ---                     | ---                     | ---                | ---                     | ---                     |
| 24    | ---                | ---                     | ---                     | ---                | ---                     | ---                     | ---                | ---                     | ---                     |
| 25    | ---                | ---                     | ---                     | ---                | ---                     | ---                     | ---                | ---                     | ---                     |
| 26    | ---                | ---                     | ---                     | ---                | ---                     | ---                     | ---                | ---                     | ---                     |
| 27    | ---                | ---                     | ---                     | ---                | ---                     | ---                     | ---                | ---                     | ---                     |
| 28    | ---                | ---                     | ---                     | ---                | ---                     | ---                     | ---                | ---                     | ---                     |
| 29    | ---                | ---                     | ---                     | ---                | ---                     | ---                     | ---                | ---                     | ---                     |
| 30    | ---                | ---                     | ---                     | ---                | ---                     | ---                     | ---                | ---                     | ---                     |
| 31    | ---                | ---                     | ---                     | ---                | ---                     | ---                     | ---                | ---                     | ---                     |
| TOTAL | ---                | ---                     | ---                     | ---                | ---                     | ---                     | ---                | ---                     | ---                     |

e-Estimated.

07093740 BADGER CREEK, UPPER STATION, NEAR HOWARD, CO--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

| 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     | 1.8                  | ---                        | e.42                          | 2.2                  | ---                        | e1.5                          | 5.5                  | ---                        | e1.0                          |       |
| 2     | 1.6                  | ---                        | e.37                          | 2.3                  | 230                        | e1.4                          | 5.5                  | 68                         | e.97                          |       |
| 3     | 1.4                  | 87                         | e.32                          | 2.5                  | 195                        | e1.3                          | 6.0                  | 110                        | e1.7                          |       |
| 4     | 1.5                  | 163                        | e.66                          | 3.0                  | ---                        | e1.5                          | 6.0                  | 140                        | e2.2                          |       |
| 5     | 1.6                  | 132                        | e.57                          | 3.5                  | ---                        | e1.7                          | 5.5                  | 100                        | e1.4                          |       |
| 6     | 1.6                  | 109                        | e.47                          | 3.5                  | ---                        | e1.7                          | 5.0                  | 93                         | e1.2                          |       |
| 7     | 1.6                  | 248                        | e1.1                          | 3.5                  | ---                        | e1.7                          | 5.0                  | 92                         | e1.2                          |       |
| 8     | 1.7                  | 229                        | e1.0                          | 3.5                  | ---                        | e1.7                          | 5.5                  | 95                         | e1.4                          |       |
| 9     | 1.7                  | 96                         | e.44                          | 4.0                  | ---                        | e1.9                          | 5.0                  | 120                        | e1.6                          |       |
| 10    | 1.7                  | 104                        | e.48                          | 4.5                  | ---                        | e2.1                          | 4.5                  | 105                        | e1.2                          |       |
| 11    | 1.8                  | 497                        | e2.4                          | 5.0                  | 200                        | e2.6                          | 3.5                  | 105                        | e.96                          |       |
| 12    | 1.6                  | 557                        | e2.4                          | 5.3                  | 160                        | e2.2                          | 3.0                  | 120                        | e.94                          |       |
| 13    | 1.8                  | 247                        | e1.2                          | 5.2                  | 200                        | e2.7                          | 2.5                  | 86                         | e.56                          |       |
| 14    | 1.8                  | 199                        | e.96                          | 5.8                  | 450                        | e6.8                          | 2.0                  | 80                         | e.42                          |       |
| 15    | 1.5                  | ---                        | e.91                          | 5.8                  | 500                        | e7.5                          | 1.8                  | 160                        | e.75                          |       |
| 16    | 1.8                  | ---                        | e1.1                          | 6.0                  | 2500                       | e39                           | 2.0                  | 157                        | e.84                          |       |
| 17    | 1.6                  | 240                        | e1.0                          | 6.2                  | 300                        | e4.8                          | 2.1                  | ---                        | e.79                          |       |
| 18    | 1.8                  | 156                        | e.76                          | 6.4                  | ---                        | e4.5                          | 1.9                  | ---                        | e.64                          |       |
| 19    | 1.8                  | ---                        | e1.0                          | 6.4                  | ---                        | e4.0                          | 1.8                  | ---                        | e.56                          |       |
| 20    | 1.8                  | 323                        | e1.5                          | 6.4                  | ---                        | e3.3                          | 1.8                  | 105                        | e.49                          |       |
| 21    | 1.8                  | 196                        | e.95                          | 6.4                  | ---                        | e3.0                          | 2.0                  | 98                         | .52                           |       |
| 22    | 1.6                  | ---                        | e.71                          | 6.3                  | 120                        | e2.0                          | 1.9                  | 89                         | .45                           |       |
| 23    | 1.6                  | 161                        | e.71                          | 5.7                  | 115                        | e1.7                          | 1.6                  | 82                         | .36                           |       |
| 24    | 1.6                  | 159                        | e.71                          | 5.5                  | 90                         | e1.3                          | 1.6                  | 88                         | .39                           |       |
| 25    | 1.8                  | ---                        | e.83                          | 6.0                  | 70                         | e1.1                          | 1.7                  | 81                         | .37                           |       |
| 26    | 1.8                  | 239                        | e1.2                          | 5.5                  | 120                        | e1.7                          | 1.8                  | 76                         | .37                           |       |
| 27    | 1.9                  | 194                        | e1.0                          | 5.0                  | 80                         | e1.0                          | 1.8                  | 73                         | .35                           |       |
| 28    | 1.8                  | 291                        | e1.4                          | 5.5                  | 90                         | e1.3                          | 1.8                  | 72                         | .35                           |       |
| 29    | 1.8                  | 249                        | e1.2                          | 6.0                  | 110                        | e1.7                          | 2.5                  | 142                        | .97                           |       |
| 30    | 2.0                  | 193                        | e1.0                          | 6.5                  | 100                        | e1.7                          | 2.8                  | 260                        | 2.0                           |       |
| 31    | ---                  | ---                        | ---                           | 6.0                  | 80                         | e1.2                          | ---                  | ---                        | ---                           |       |
| TOTAL | 51.2                 | ---                        | 28.77                         | 155.4                | ---                        | 111.6                         | 95.4                 | ---                        | 26.95                         |       |
|       |                      | JULY                       |                               |                      | AUGUST                     |                               |                      | SEPTEMBER                  |                               |       |
| 1     | 2.9                  | 216                        | 1.7                           | .31                  | 93                         | .08                           | .51                  | 81                         | .11                           |       |
| 2     | 2.9                  | ---                        | e1.4                          | .23                  | 72                         | .04                           | .53                  | 98                         | .14                           |       |
| 3     | 2.7                  | ---                        | e1.1                          | .22                  | 96                         | .06                           | .61                  | 120                        | .20                           |       |
| 4     | 2.6                  | ---                        | e.85                          | .25                  | 73                         | .05                           | .56                  | 63                         | .10                           |       |
| 5     | 2.3                  | 106                        | .66                           | .29                  | 60                         | .05                           | .52                  | 74                         | .10                           |       |
| 6     | 2.2                  | 129                        | .78                           | .24                  | 44                         | .06                           | .45                  | 103                        | .12                           |       |
| 7     | 1.9                  | 121                        | .62                           | .25                  | 57                         | .04                           | .72                  | 64                         | .13                           |       |
| 8     | 1.8                  | 109                        | .52                           | .26                  | 70                         | .03                           | .91                  | 96                         | .24                           |       |
| 9     | 1.6                  | 125                        | .54                           | .26                  | 90                         | .04                           | .91                  | 77                         | .19                           |       |
| 10    | 1.5                  | 116                        | .46                           | .32                  | 112                        | .06                           | .93                  | 54                         | .14                           |       |
| 11    | 1.2                  | 96                         | .33                           | .31                  | 104                        | .07                           | .98                  | 49                         | .13                           |       |
| 12    | 1.0                  | 112                        | .30                           | .33                  | 75                         | .10                           | .87                  | 34                         | .08                           |       |
| 13    | .90                  | 118                        | .29                           | .42                  | 74                         | .12                           | .82                  | 53                         | .12                           |       |
| 14    | .87                  | 75                         | .18                           | .40                  | 77                         | .08                           | .82                  | 54                         | .12                           |       |
| 15    | 1.0                  | 80                         | .22                           | .34                  | ---                        | e.06                          | .82                  | 57                         | .12                           |       |
| 16    | .91                  | 98                         | .24                           | .34                  | ---                        | e.06                          | .78                  | 38                         | .08                           |       |
| 17    | .86                  | 155                        | .37                           | .31                  | ---                        | e.05                          | .81                  | 36                         | .08                           |       |
| 18    | .88                  | 184                        | .44                           | .23                  | ---                        | e.03                          | .82                  | 36                         | .08                           |       |
| 19    | .82                  | 150                        | .33                           | .25                  | ---                        | e.03                          | .86                  | 39                         | .09                           |       |
| 20    | .77                  | 124                        | .26                           | .34                  | ---                        | e.06                          | .91                  | 39                         | .10                           |       |
| 21    | .58                  | 112                        | .18                           | .43                  | ---                        | e.08                          | .91                  | 37                         | .09                           |       |
| 22    | .58                  | 142                        | .22                           | .46                  | ---                        | e.09                          | .91                  | 51                         | .13                           |       |
| 23    | .54                  | 113                        | .16                           | .45                  | ---                        | e.09                          | .98                  | 36                         | .09                           |       |
| 24    | .52                  | 100                        | .14                           | .50                  | ---                        | e.09                          | .91                  | ---                        | e.08                          |       |
| 25    | .47                  | 139                        | .18                           | .63                  | ---                        | e.13                          | .91                  | ---                        | e.08                          |       |
| 26    | .39                  | 113                        | .12                           | 1.0                  | ---                        | e.54                          | .91                  | 34                         | .08                           |       |
| 27    | .35                  | ---                        | e.13                          | .60                  | ---                        | e.21                          | .91                  | ---                        | e.08                          |       |
| 28    | .33                  | ---                        | e.10                          | .59                  | 116                        | .18                           | .97                  | ---                        | e.09                          |       |
| 29    | .33                  | ---                        | e.11                          | .65                  | 107                        | .19                           | 1.0                  | ---                        | e.10                          |       |
| 30    | .33                  | ---                        | e.11                          | .65                  | 128                        | .22                           | 1.0                  | ---                        | e.10                          |       |
| 31    | .34                  | 130                        | e.12                          | .58                  | 111                        | .18                           | ---                  | ---                        | ---                           |       |
| TOTAL | 36.37                | ---                        | 13.16                         | 12.44                | ---                        | 3.17                          | 24.55                | ---                        | 3.39                          |       |

e-Estimated.

## 07093775 BADGER CREEK, LOWER STATION, NEAR HOWARD, CO

LOCATION.--Lat 38°28'02", long 105°51'34", in SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec.27, T.49 N., R.10 E., Fremont County, Hydrologic Unit 11020001, on left bank 660 ft upstream from Denver and Rio Grande Railroad bridge, 960 ft upstream from mouth, and 1.9 mi northwest of Howard.

DRAINAGE AREA.--211 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

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

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 Aug. 20-27, Sept. 6-30, which are fair, and July 8, July 18 to Aug. 9, Aug. 28 to Sept. 5, and estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

| DAY   | OCT   | NOV   | DEC   | JAN   | FEB   | MAR   | APR   | MAY   | JUN   | JUL   | AUG   | SEP   |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1     | 6.6   | 8.3   | 8.7   | e5.6  | e5.8  | e6.6  | 8.6   | 7.3   | 6.3   | 5.5   | 5.4   | 5.1   |
| 2     | 6.6   | 8.3   | 8.6   | e5.4  | e5.6  | e6.8  | 9.0   | 7.2   | 6.0   | 5.2   | 5.1   | 5.0   |
| 3     | 6.6   | e8.2  | 8.3   | e5.6  | e5.6  | e7.0  | 9.5   | 7.1   | 5.8   | 5.0   | 4.9   | 4.8   |
| 4     | 6.6   | 8.2   | 8.5   | 6.3   | e5.6  | 7.0   | 9.6   | 7.1   | 5.7   | 5.0   | 4.7   | 4.5   |
| 5     | 6.6   | 8.4   | 8.7   | e6.4  | e6.0  | 7.0   | 9.7   | 7.1   | 5.6   | 5.0   | 4.6   | 4.5   |
| 6     | 7.0   | 8.6   | 8.7   | e6.2  | e6.0  | 7.2   | 9.0   | 7.1   | 5.4   | 4.9   | 4.6   | 11    |
| 7     | 7.4   | 8.6   | 8.5   | e6.0  | e5.7  | e7.3  | 9.3   | 7.0   | 5.4   | 4.7   | 4.7   | 5.2   |
| 8     | 7.4   | 8.3   | 8.5   | e6.0  | 5.6   | 7.5   | 9.4   | 6.9   | 5.3   | 122   | 8.9   | 5.0   |
| 9     | 7.4   | 8.5   | e8.5  | e5.8  | 5.8   | e7.5  | 9.8   | 7.0   | 5.4   | e10   | 6.5   | 5.1   |
| 10    | 7.4   | 9.0   | e8.4  | 5.8   | 5.5   | 7.7   | 10    | 6.9   | 5.7   | e6.2  | 5.7   | 5.0   |
| 11    | 7.6   | 8.5   | 8.4   | e5.8  | e5.6  | 7.8   | 9.9   | 6.8   | 5.8   | e5.6  | e5.2  | 5.0   |
| 12    | 7.4   | 9.2   | 8.6   | e5.6  | e5.6  | e7.9  | 9.5   | 6.7   | 5.7   | e5.3  | e5.0  | 5.6   |
| 13    | 7.4   | 9.2   | 8.7   | e5.6  | e5.8  | e8.0  | 9.9   | 6.8   | 6.0   | e5.0  | e5.2  | 8.6   |
| 14    | 7.4   | 9.2   | 8.5   | e5.4  | e6.0  | e8.2  | 9.2   | 6.5   | 6.7   | e4.9  | e4.9  | 5.6   |
| 15    | 7.4   | 9.0   | e8.2  | e5.4  | e6.0  | 8.7   | 9.2   | 6.5   | 7.3   | e4.8  | e5.0  | 5.9   |
| 16    | 7.4   | 8.2   | e8.0  | 5.4   | e6.3  | e8.5  | 9.2   | 6.3   | 7.9   | e4.7  | e5.0  | 5.7   |
| 17    | 7.4   | 8.3   | e7.8  | 5.4   | e6.6  | e8.4  | 9.5   | 6.3   | 7.0   | e4.7  | e4.9  | 5.7   |
| 18    | 7.4   | 8.4   | e7.7  | e5.6  | 7.0   | e8.2  | 9.3   | 6.3   | 6.1   | 5.4   | e4.8  | 6.2   |
| 19    | 7.4   | 8.5   | e7.5  | e5.5  | 6.7   | e8.1  | 9.2   | 6.2   | 5.4   | 5.2   | e4.9  | 6.3   |
| 20    | 7.7   | 8.5   | e7.0  | e5.4  | 6.2   | e8.4  | 8.8   | 6.2   | 5.0   | 5.0   | e4.9  | 6.1   |
| 21    | 8.3   | 8.6   | e6.8  | e5.4  | 7.0   | 8.7   | 8.7   | 6.2   | 5.6   | 4.8   | 4.7   | 5.8   |
| 22    | 8.3   | 8.8   | e6.5  | e5.2  | 7.0   | 9.0   | 9.1   | 6.0   | 6.4   | 4.5   | 5.0   | 5.4   |
| 23    | 8.4   | 8.6   | e6.2  | e5.2  | e7.0  | 9.3   | 8.6   | 5.7   | 6.4   | 4.5   | 5.3   | 5.2   |
| 24    | 8.4   | 8.6   | e6.0  | e5.4  | e7.2  | 9.3   | 8.9   | 6.1   | 5.7   | 4.4   | 4.9   | 5.5   |
| 25    | 8.3   | 8.5   | e6.2  | e5.4  | 7.2   | e8.8  | 8.6   | 6.8   | 5.4   | 4.5   | 4.6   | 5.7   |
| 26    | 8.4   | 8.7   | e5.9  | e5.4  | 7.3   | e8.8  | 8.3   | 8.4   | 5.3   | 4.5   | 4.7   | 5.9   |
| 27    | 8.3   | 8.5   | e5.8  | e5.2  | e7.0  | e8.7  | 7.5   | 8.0   | 5.4   | 4.4   | 5.4   | 5.9   |
| 28    | 8.3   | 8.6   | e5.6  | e5.4  | e6.8  | 8.6   | 7.6   | 7.5   | 5.7   | 4.5   | 6.2   | 5.9   |
| 29    | 8.3   | 8.5   | e5.8  | e5.8  | e6.7  | 8.5   | 7.5   | 7.2   | 5.7   | 6.1   | 5.3   | 5.8   |
| 30    | 8.3   | 8.8   | e5.8  | e6.0  | ---   | 8.4   | 7.4   | 6.7   | 5.5   | 5.7   | 5.1   | 5.8   |
| 31    | 8.3   | ---   | 5.8   | e6.0  | ---   | 8.5   | ---   | 6.6   | ---   | 5.9   | 5.3   | ---   |
| TOTAL | 235.7 | 257.6 | 232.2 | 174.6 | 182.2 | 250.4 | 269.8 | 210.5 | 176.6 | 277.9 | 161.4 | 172.8 |
| MEAN  | 7.60  | 8.59  | 7.49  | 5.63  | 6.28  | 8.08  | 8.99  | 6.79  | 5.89  | 8.96  | 5.21  | 5.76  |
| MAX   | 8.4   | 9.2   | 8.7   | 6.4   | 7.3   | 9.3   | 10    | 8.4   | 7.9   | 122   | 8.9   | 11    |
| MIN   | 6.6   | 8.2   | 5.6   | 5.2   | 5.5   | 6.6   | 7.4   | 5.7   | 5.0   | 4.4   | 4.6   | 4.5   |
| AC-FT | 468   | 511   | 461   | 346   | 361   | 497   | 535   | 418   | 350   | 551   | 320   | 343   |

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1981 - 1996, BY WATER YEAR (WY)

|      | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 6.99 | 7.32 | 5.79 | 5.38 | 5.71 | 8.57 | 16.7 | 16.2 | 11.1 | 8.49 | 8.25 | 5.85 |      |      |      |      |
| MAX  | 10.6 | 11.2 | 9.13 | 8.78 | 11.2 | 17.3 | 57.1 | 58.1 | 25.2 | 16.3 | 13.2 | 8.97 |      |      |      |      |
| (WY) | 1988 | 1988 | 1988 | 1986 | 1986 | 1986 | 1987 | 1987 | 1995 | 1995 | 1984 | 1987 |      |      |      |      |
| MIN  | 3.78 | 5.37 | 3.50 | 3.44 | 3.61 | 4.79 | 5.69 | 6.63 | 4.97 | 5.06 | 5.00 | 2.46 |      |      |      |      |
| (WY) | 1982 | 1982 | 1983 | 1982 | 1982 | 1982 | 1982 | 1981 | 1981 | 1993 | 1993 | 1981 |      |      |      |      |

## SUMMARY STATISTICS

## FOR 1995 CALENDAR YEAR

## FOR 1996 WATER YEAR

## WATER YEARS 1981 - 1996

|                          |        |        |  |  |  |        |        |  |  |        |        |      |  |  |  |      |
|--------------------------|--------|--------|--|--|--|--------|--------|--|--|--------|--------|------|--|--|--|------|
| ANNUAL TOTAL             | 4086.4 | 2601.7 |  |  |  |        |        |  |  |        |        |      |  |  |  |      |
| ANNUAL MEAN              | 11.2   | 7.11   |  |  |  |        |        |  |  | 9.06   |        |      |  |  |  |      |
| HIGHEST ANNUAL MEAN      |        |        |  |  |  |        |        |  |  | 18.5   |        |      |  |  |  | 1987 |
| LOWEST ANNUAL MEAN       |        |        |  |  |  |        |        |  |  | 5.31   |        |      |  |  |  | 1982 |
| HIGHEST DAILY MEAN       | 33     | May 30 |  |  |  | 122    | Jul 8  |  |  | 153    | Apr 19 | 1987 |  |  |  |      |
| LOWEST DAILY MEAN        | e3.0   | Jan 7  |  |  |  | a4.4   | Jul 24 |  |  | .56    | Feb 4  | 1982 |  |  |  |      |
| ANNUAL SEVEN-DAY MINIMUM | 3.1    | Jan 1  |  |  |  | b4.5   | Jul 22 |  |  | .73    | Sep 11 | 1981 |  |  |  |      |
| INSTANTANEOUS PEAK FLOW  |        |        |  |  |  | b2990  | Jul 8  |  |  | b2990  | Jul 8  | 1996 |  |  |  |      |
| INSTANTANEOUS PEAK STAGE |        |        |  |  |  | c10.73 | Jul 8  |  |  | c10.73 | Jul 8  | 1996 |  |  |  |      |
| ANNUAL RUNOFF (AC-FT)    | 8110   | 5160   |  |  |  |        |        |  |  | 6570   |        |      |  |  |  |      |
| 10 PERCENT EXCEEDS       | 24     | 8.8    |  |  |  |        |        |  |  | 14     |        |      |  |  |  |      |
| 50 PERCENT EXCEEDS       | 8.5    | 6.6    |  |  |  |        |        |  |  | 6.9    |        |      |  |  |  |      |
| 90 PERCENT EXCEEDS       | 5.4    | 5.0    |  |  |  |        |        |  |  | 4.5    |        |      |  |  |  |      |

e-Estimated.

a-Also occurred Jul 27.

b-From rating curve extended above 160 ft<sup>3</sup>/s on the basis of slope-area measurement of peak flow.

c-From floodmarks.

**07093775 BADGER CREEK, LOWER STATION, NEAR HOWARD, CO--Continued**

**WATER-QUALITY RECORDS**

PERIOD OF RECORD.--February 1981 to current year (seasonal record only). Water temperature record March 1995 to current year .

PERIOD OF DAILY RECORD.--Suspended sediment discharge May 1981 to September 1996 (seasonal record only, discontinued).  
Daily water temperature record March 1995 to current year.

INSTRUMENTATION.--Pumping sediment sampler since May 1981. Water temperature probe with satellite telemetry since March 1995.

REMARKS.--Records for daily water temperature are fair, except for Oct. 1 to June 18, which are poor. Daily data not published are either missing or of unacceptable quality. Records for daily suspended sediment in October and September are fair, except for estimated daily sediment values, which are poor. Records for daily suspended sediment April to August are poor.

**EXTREMES FOR PERIOD OF DAILY RECORD.--**

WATER TEMPERATURE: Maximum, 27.9°C, July 3, 1996; minimum, 0.0°C, Feb. 5-7, 11-12, 1996.

SEDIMENT CONCENTRATIONS: Maximum daily mean, 18,200 mg/L, Apr. 18, 1987; minimum daily mean, 1 mg/L, Sept. 22, 1981, many days in water year 1986, Oct. 16, 1986, Oct. 19, 1988, and Oct. 3, 1989.

SEDIMENT LOADS: Maximum daily mean, 31,500 tons/day (estimated), July 28, 1984; minimum daily mean, no load Sept 12-30, 1981.

**EXTREMES FOR 1995 WATER YEAR.--**

SEDIMENT CONCENTRATIONS: Maximum daily mean during period of seasonal operation, 575 mg/L, Aug. 24; minimum daily mean, 1 mg/L, Oct. 14.

SEDIMENT LOADS: Maximum daily mean during period of seasonal operation, 27 tons/day (estimated), May 20; minimum daily mean, 0.02 tons/day, Oct. 14.

**EXTREMES FOR CURRENT YEAR.--**

WATER TEMPERATURE: Maximum, 27.9°C, July 3; minimum 0.0°C, Feb. 5-7, 11-12.

WATER TEMPERATURE, (DEG. C), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DAY   | OCTOBER |     |      | NOVEMBER |     |      | DECEMBER |     |      | JANUARY |     |      |
|-------|---------|-----|------|----------|-----|------|----------|-----|------|---------|-----|------|
|       | MAX     | MIN | MEAN | MAX      | MIN | MEAN | MAX      | MIN | MEAN | MAX     | MIN | MEAN |
| 1     | 14.6    | 5.0 | 9.2  | 12.1     | 5.2 | 7.5  | 9.9      | 2.2 | 4.6  | 3.7     | 1.3 | 1.5  |
| 2     | 16.6    | 4.2 | 8.9  | 9.9      | 3.2 | 5.2  | 9.3      | 2.6 | 4.3  | 1.3     | 1.2 | 1.3  |
| 3     | 17.2    | 4.2 | 9.2  | 9.9      | 2.3 | 4.4  | 7.9      | 1.9 | 3.6  | 3.1     | 1.0 | 1.4  |
| 4     | 13.5    | 4.9 | 8.1  | 10.5     | 2.3 | 5.1  | 7.2      | 2.2 | 3.8  | 5.2     | 1.2 | 2.2  |
| 5     | 13.4    | 3.1 | 6.8  | 10.6     | 2.7 | 5.3  | 8.7      | 2.9 | 4.8  | 6.7     | 1.2 | 2.2  |
| 6     | 14.7    | 2.2 | 6.8  | 8.1      | 3.6 | 5.3  | 8.7      | 2.6 | 4.9  | 1.3     | 1.1 | 1.2  |
| 7     | 15.3    | 3.2 | 7.6  | 11.2     | 3.5 | 6.1  | 4.7      | 1.8 | 2.8  | 5.3     | 1.1 | 2.0  |
| 8     | 16.0    | 4.0 | 8.2  | 10.5     | 3.1 | 5.8  | 6.5      | 1.8 | 2.9  | 6.8     | 1.1 | 2.4  |
| 9     | 14.4    | 3.7 | 7.7  | 10.6     | 4.0 | 6.5  | 5.8      | 1.7 | 2.4  | 8.1     | 1.1 | 2.7  |
| 10    | 15.8    | 3.6 | 8.3  | 7.5      | 3.1 | 5.4  | 7.2      | 1.8 | 3.2  | 7.5     | 1.0 | 2.6  |
| 11    | 17.2    | 4.2 | 8.9  | 11.4     | 2.6 | 5.4  | 7.2      | 1.7 | 3.5  | 7.5     | 1.0 | 2.6  |
| 12    | 15.7    | 4.7 | 8.9  | 9.9      | 3.9 | 6.4  | 7.2      | 2.0 | 4.2  | 8.3     | 1.0 | 2.9  |
| 13    | 14.3    | 5.2 | 8.6  | 12.2     | 4.5 | 7.1  | 8.0      | 2.3 | 4.4  | 8.3     | .9  | 3.1  |
| 14    | 14.9    | 3.3 | 7.5  | 12.8     | 3.9 | 6.8  | 6.5      | 2.0 | 3.4  | 8.3     | .9  | 2.8  |
| 15    | 15.7    | 4.2 | 8.3  | 11.3     | 3.4 | 6.0  | 5.8      | 1.3 | 2.4  | 6.9     | .8  | 2.4  |
| 16    | 14.9    | 4.7 | 8.3  | 10.0     | 3.0 | 5.8  | 5.2      | 1.3 | 2.5  | 8.4     | .9  | 3.3  |
| 17    | 15.7    | 4.7 | 8.5  | 10.6     | 2.9 | 5.5  | 5.8      | 1.7 | 2.5  | 5.5     | .9  | 3.1  |
| 18    | 14.9    | 4.2 | 8.2  | 9.8      | 2.1 | 4.9  | 4.5      | 1.3 | 2.0  | 2.3     | .8  | .9   |
| 19    | 14.2    | 4.7 | 7.8  | 9.1      | 2.5 | 4.8  | 2.5      | 1.2 | 1.6  | 3.1     | .7  | 1.0  |
| 20    | 13.4    | 2.8 | 6.6  | 8.5      | 2.1 | 4.2  | 2.1      | 1.2 | 1.6  | 4.6     | .7  | 1.1  |
| 21    | 12.6    | 3.3 | 6.9  | 7.9      | 2.1 | 4.1  | 2.0      | 1.2 | 1.5  | 3.8     | .6  | 1.0  |
| 22    | 7.5     | 3.7 | 5.0  | 7.9      | 2.4 | 4.4  | 3.3      | 1.5 | 1.7  | 5.4     | .6  | 1.2  |
| 23    | 10.0    | 2.3 | 5.0  | 8.6      | 2.0 | 4.0  | 1.5      | 1.2 | 1.5  | 3.1     | .5  | .8   |
| 24    | 10.5    | 2.3 | 5.7  | 9.9      | 2.0 | 4.4  | 1.5      | 1.2 | 1.5  | 3.2     | .5  | .9   |
| 25    | 12.1    | 2.8 | 6.3  | 9.2      | 2.0 | 4.5  | 1.7      | 1.2 | 1.5  | 4.1     | .5  | 1.4  |
| 26    | 12.8    | 4.2 | 7.3  | 6.7      | 3.2 | 4.3  | 3.1      | 1.1 | 1.6  | .5      | .4  | .5   |
| 27    | 12.6    | 4.2 | 7.1  | 5.5      | 1.9 | 2.8  | 1.7      | 1.1 | 1.4  | .7      | .4  | .5   |
| 28    | 11.3    | 3.3 | 6.5  | 6.6      | 1.9 | 2.8  | 1.6      | 1.1 | 1.4  | 3.2     | .4  | .7   |
| 29    | 10.0    | 4.2 | 6.5  | 8.6      | 1.9 | 3.7  | 3.8      | 1.1 | 1.7  | 7.0     | .4  | 1.6  |
| 30    | 13.4    | 3.7 | 7.1  | 8.6      | 2.2 | 4.4  | 3.7      | 1.1 | 1.8  | 8.5     | .3  | 3.1  |
| 31    | 11.3    | 4.7 | 7.6  | ---      | --- | ---  | 5.2      | 1.3 | 2.3  | 5.5     | .2  | 1.2  |
| MONTH | 17.2    | 2.2 | 7.5  | 12.8     | 1.9 | 5.1  | 9.9      | 1.1 | 2.7  | 8.5     | .2  | 1.8  |

## 07093775 BADGER CREEK, LOWER STATION, NEAR HOWARD, CO--Continued

WATER TEMPERATURE, (DEG. C), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DAY   | MAX      | MIN  | MEAN | MAX   | MIN  | MEAN | MAX    | MIN  | MEAN | MAX       | MIN  | MEAN |
|-------|----------|------|------|-------|------|------|--------|------|------|-----------|------|------|
|       | FEBRUARY |      |      | MARCH |      |      | APRIL  |      |      | MAY       |      |      |
| 1     | .2       | .2   | .2   | 8.8   | .2   | 2.0  | 25.1   | 7.2  | 12.2 | 18.0      | 3.8  | 9.7  |
| 2     | .7       | .1   | .2   | 13.3  | .2   | 3.6  | 16.2   | 4.0  | 8.9  | 19.0      | 4.3  | 10.5 |
| 3     | .8       | .1   | .1   | 11.8  | .9   | 5.2  | 11.6   | 4.6  | 7.4  | 18.4      | 4.5  | 10.7 |
| 4     | .2       | .1   | .1   | 13.3  | 1.6  | 5.4  | 8.0    | 2.5  | 4.6  | 21.1      | 4.6  | 11.5 |
| 5     | 6.3      | .0   | 1.9  | 11.7  | 3.0  | 5.6  | 16.2   | 2.5  | 7.2  | 22.2      | 5.9  | 12.4 |
| 6     | 8.6      | .0   | 2.5  | 9.6   | 1.7  | 3.9  | 19.0   | 2.5  | 8.8  | 21.9      | 6.1  | 12.9 |
| 7     | 10.1     | .0   | 4.0  | 11.7  | .3   | 3.7  | 13.1   | 4.0  | 8.1  | 22.4      | 7.1  | 13.3 |
| 8     | 9.9      | .8   | 3.9  | 13.2  | 1.0  | 4.9  | 19.8   | 4.6  | 10.9 | 22.2      | 5.0  | 12.4 |
| 9     | 12.9     | .8   | 5.4  | 14.6  | 1.7  | 7.4  | 16.9   | 4.6  | 10.0 | 18.4      | 5.7  | 11.4 |
| 10    | 9.4      | 1.7  | 4.8  | 12.4  | 1.7  | 6.4  | 13.9   | 4.6  | 8.9  | 22.3      | 8.1  | 13.3 |
| 11    | 10.0     | .0   | 3.3  | 16.0  | 1.7  | 7.2  | 17.7   | 4.6  | 9.8  | 23.4      | 5.6  | 13.1 |
| 12    | 11.5     | .0   | 3.3  | 13.9  | 3.9  | 7.3  | 18.2   | 4.0  | 9.2  | 23.0      | 6.3  | 13.6 |
| 13    | 12.8     | .1   | 5.3  | 10.8  | 3.1  | 6.4  | 8.7    | 4.0  | 6.4  | 22.1      | 7.6  | 14.0 |
| 14    | 12.0     | .8   | 5.9  | 7.4   | 3.1  | 4.9  | 12.4   | 2.5  | 6.2  | 22.6      | 7.3  | 13.7 |
| 15    | 13.0     | 1.6  | 5.3  | 15.4  | 2.4  | 7.5  | 19.0   | 1.6  | 8.1  | 23.6      | 6.8  | 14.0 |
| 16    | 13.0     | .1   | 4.4  | 15.4  | 2.4  | 7.1  | 17.5   | 3.2  | 9.1  | 23.8      | 7.9  | 14.5 |
| 17    | 14.4     | 1.6  | 6.5  | 9.4   | 2.4  | 5.2  | 16.9   | 4.6  | 9.1  | 23.8      | 9.1  | 14.9 |
| 18    | 11.3     | 2.3  | 5.1  | 12.5  | 1.7  | 4.0  | 13.9   | 4.0  | 8.1  | 24.6      | 7.9  | 14.8 |
| 19    | 7.5      | 1.6  | 4.0  | 18.4  | .6   | 5.5  | 16.7   | 1.6  | 7.1  | 22.4      | 9.3  | 14.7 |
| 20    | 14.2     | 3.1  | 6.8  | 15.2  | 1.0  | 7.9  | 9.2    | 1.9  | 5.3  | 23.8      | 9.0  | 14.7 |
| 21    | 11.2     | 4.5  | 7.2  | 17.5  | 1.7  | 9.2  | 11.9   | 1.9  | 6.1  | 23.8      | 7.5  | 14.1 |
| 22    | 9.7      | 2.3  | 5.5  | 18.4  | 3.9  | 10.6 | 14.7   | 3.9  | 7.8  | 23.8      | 7.6  | 14.5 |
| 23    | 9.7      | .1   | 3.0  | 17.5  | 4.5  | 9.9  | 19.0   | 2.5  | 9.5  | 21.0      | 8.1  | 13.1 |
| 24    | 11.2     | .2   | 3.7  | 13.1  | 2.4  | 5.8  | 18.8   | 6.0  | 11.9 | 14.8      | 8.8  | 11.8 |
| 25    | 11.2     | .2   | 4.4  | 7.2   | 1.0  | 3.2  | 18.8   | 7.1  | 11.4 | 12.8      | 9.7  | 10.9 |
| 26    | 6.6      | .2   | 2.4  | 13.9  | .9   | 5.4  | 17.1   | 4.5  | 9.6  | 13.5      | 8.4  | 10.3 |
| 27    | 7.3      | .2   | 1.5  | 16.2  | 1.0  | 7.4  | 18.8   | 5.0  | 10.1 | 20.0      | 7.2  | 12.5 |
| 28    | 4.5      | .2   | .9   | 21.5  | 2.4  | 10.0 | 7.1    | 2.2  | 4.8  | 17.9      | 9.3  | 12.5 |
| 29    | 6.7      | .2   | 1.4  | 20.0  | 6.0  | 11.0 | 16.0   | 1.2  | 7.0  | 24.3      | 9.2  | 14.6 |
| 30    | ---      | ---  | ---  | 24.5  | 4.5  | 11.2 | 18.7   | 2.8  | 9.3  | 23.2      | 10.2 | 14.8 |
| 31    | ---      | ---  | ---  | 23.5  | 2.5  | 11.6 | ---    | ---  | ---  | 19.5      | 8.1  | 13.2 |
| MONTH | 14.4     | .0   | 3.6  | 24.5  | .2   | 6.7  | 25.1   | 1.2  | 8.4  | 24.6      | 3.8  | 13.0 |
|       | JUNE     |      |      | JULY  |      |      | AUGUST |      |      | SEPTEMBER |      |      |
| 1     | 25.1     | 10.1 | 15.7 | 26.6  | 11.4 | 17.8 | 20.6   | 16.3 | 18.5 | 19.6      | 13.6 | 16.4 |
| 2     | 25.9     | 8.5  | 15.6 | 25.3  | 11.4 | 16.9 | 19.9   | 16.9 | 18.5 | 18.2      | 12.8 | 15.3 |
| 3     | 25.9     | 9.7  | 16.5 | 27.9  | 10.8 | 17.6 | 18.9   | 16.9 | 18.0 | 21.0      | 12.1 | 15.8 |
| 4     | 24.0     | 10.3 | 16.7 | 26.8  | 12.5 | 17.6 | 19.0   | 16.0 | 17.5 | 21.1      | 12.6 | 16.3 |
| 5     | 26.1     | 10.4 | 16.9 | 25.7  | 12.4 | 17.8 | 19.5   | 14.9 | 17.1 | 19.9      | 12.9 | 16.0 |
| 6     | ---      | ---  | ---  | 26.6  | 12.8 | 18.5 | 19.6   | 15.3 | 17.4 | 18.3      | 9.3  | 14.4 |
| 7     | ---      | ---  | ---  | 25.9  | 12.0 | 18.0 | 19.4   | 16.1 | 17.7 | 18.2      | 11.9 | 14.3 |
| 8     | ---      | ---  | ---  | 22.3  | 11.2 | 15.5 | 19.0   | 15.8 | 17.1 | 17.8      | 12.0 | 14.9 |
| 9     | ---      | ---  | ---  | 24.8  | 12.9 | 16.5 | 19.6   | 15.0 | 17.0 | 17.0      | 12.4 | 14.8 |
| 10    | ---      | ---  | ---  | ---   | ---  | ---  | 19.4   | 15.5 | 17.6 | 18.1      | 12.7 | 15.2 |
| 11    | ---      | ---  | ---  | ---   | ---  | ---  | 20.2   | 15.1 | 17.6 | 17.4      | 13.1 | 15.3 |
| 12    | ---      | ---  | ---  | ---   | ---  | ---  | 20.7   | 15.7 | 18.1 | 17.3      | 14.5 | 15.8 |
| 13    | ---      | ---  | ---  | ---   | ---  | ---  | 20.3   | 16.2 | 18.4 | 16.5      | 13.5 | 14.9 |
| 14    | ---      | ---  | ---  | ---   | ---  | ---  | 19.9   | 16.6 | 18.5 | 15.2      | 12.6 | 14.0 |
| 15    | ---      | ---  | ---  | ---   | ---  | ---  | 19.3   | 16.4 | 18.1 | 17.8      | 12.5 | 14.6 |
| 16    | ---      | ---  | ---  | ---   | ---  | ---  | 20.5   | 16.2 | 18.2 | 16.4      | 12.3 | 14.4 |
| 17    | ---      | ---  | ---  | 26.8  | 12.7 | 18.2 | 20.4   | 15.8 | 18.1 | 15.2      | 12.2 | 13.6 |
| 18    | 25.2     | ---  | ---  | 24.1  | 14.7 | 18.6 | 19.2   | 16.0 | 17.6 | 12.9      | 10.5 | 11.6 |
| 19    | 25.7     | 8.2  | 15.9 | 26.0  | 12.6 | 18.0 | 19.2   | 16.2 | 17.7 | 13.0      | 7.8  | 10.2 |
| 20    | 25.9     | 11.3 | 17.1 | 25.6  | 14.0 | 18.9 | 23.3   | 14.6 | 18.3 | 14.6      | 7.8  | 10.7 |
| 21    | 22.3     | 11.7 | 15.4 | 26.6  | 13.5 | 18.9 | 22.9   | 12.8 | 16.3 | 15.0      | 8.2  | 11.2 |
| 22    | 23.9     | 12.4 | 16.1 | 26.2  | 13.1 | 18.7 | 21.3   | 13.8 | 16.1 | 15.3      | 9.5  | 12.1 |
| 23    | 25.2     | 9.2  | 16.0 | 27.4  | 14.4 | 19.4 | 23.4   | 13.3 | 16.9 | 15.3      | 10.6 | 12.8 |
| 24    | 25.7     | 11.1 | 16.8 | 25.9  | 13.7 | 18.5 | 23.0   | 14.2 | 17.4 | 16.6      | 11.6 | 13.6 |
| 25    | 22.8     | 10.5 | 15.0 | 25.0  | 15.1 | 18.3 | 22.0   | 13.9 | 17.5 | 18.5      | 9.1  | 12.7 |
| 26    | 25.2     | 10.7 | 16.4 | 23.8  | 12.8 | 17.7 | 21.5   | 15.0 | 17.7 | 17.0      | 6.9  | 9.6  |
| 27    | 18.8     | 13.7 | 15.7 | 24.0  | 13.3 | 17.7 | 18.0   | 14.6 | 16.3 | 17.5      | 4.5  | 9.3  |
| 28    | 22.9     | 11.9 | 15.6 | 22.8  | 13.4 | 17.4 | 18.6   | 12.9 | 15.6 | 20.7      | 4.9  | 10.9 |
| 29    | 25.5     | 10.1 | 16.4 | 22.1  | 14.9 | 18.0 | 18.6   | 12.9 | 15.7 | 21.2      | 6.4  | 12.0 |
| 30    | 24.9     | 11.4 | 16.9 | 20.3  | 16.2 | 18.2 | 21.1   | 14.6 | 17.3 | 21.6      | 7.1  | 12.5 |
| 31    | ---      | ---  | ---  | 20.5  | 17.3 | 19.0 | 21.2   | 13.9 | 17.2 | ---       | ---  | ---  |
| MONTH | ---      | ---  | ---  | ---   | ---  | ---  | 23.4   | 12.8 | 17.5 | 21.6      | 4.5  | 13.5 |



## ARKANSAS RIVER BASIN

## 07093775 BADGER CREEK, LOWER STATION, NEAR HOWARD, CO--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

| DAY   | MEAN<br>DISCHARGE<br>(CFS) | MEAN<br>CONCEN-<br>TRATION<br>(MG/L) | SEDIMENT<br>DISCHARGE<br>(TONS/DAY) | MEAN<br>DISCHARGE<br>(CFS) | MEAN<br>CONCEN-<br>TRATION<br>(MG/L) | SEDIMENT<br>DISCHARGE<br>(TONS/DAY) | MEAN<br>DISCHARGE<br>(CFS) | MEAN<br>CONCEN-<br>TRATION<br>(MG/L) | SEDIMENT<br>DISCHARGE<br>(TONS/DAY) |       |
|-------|----------------------------|--------------------------------------|-------------------------------------|----------------------------|--------------------------------------|-------------------------------------|----------------------------|--------------------------------------|-------------------------------------|-------|
|       |                            |                                      |                                     |                            |                                      |                                     |                            |                                      |                                     | APRIL |
| 1     | 8.9                        | 38                                   | .90                                 | 13                         | ---                                  | e1.5                                | 29                         | ---                                  | e3.0                                |       |
| 2     | 8.7                        | 33                                   | .77                                 | 14                         | 49                                   | 1.8                                 | 28                         | 28                                   | 2.2                                 |       |
| 3     | 8.9                        | ---                                  | e.79                                | 15                         | ---                                  | e1.9                                | 29                         | ---                                  | e3.4                                |       |
| 4     | 9.3                        | 30                                   | .75                                 | 15                         | ---                                  | e1.9                                | 31                         | ---                                  | e4.5                                |       |
| 5     | 10                         | 29                                   | .82                                 | 16                         | ---                                  | e2.1                                | 31                         | ---                                  | e4.9                                |       |
| 6     | 9.9                        | 35                                   | .94                                 | 17                         | ---                                  | e2.1                                | 30                         | ---                                  | e4.5                                |       |
| 7     | 11                         | 36                                   | 1.1                                 | 17                         | ---                                  | e2.1                                | 29                         | ---                                  | e3.8                                |       |
| 8     | 11                         | 37                                   | 1.1                                 | 17                         | ---                                  | e2.0                                | 29                         | ---                                  | e3.5                                |       |
| 9     | 12                         | 27                                   | .85                                 | 17                         | ---                                  | e2.0                                | 31                         | ---                                  | e4.6                                |       |
| 10    | 11                         | 29                                   | .81                                 | 17                         | ---                                  | e2.0                                | 30                         | ---                                  | e4.9                                |       |
| 11    | 10                         | 26                                   | .70                                 | 18                         | ---                                  | e2.1                                | 28                         | ---                                  | e4.2                                |       |
| 12    | 9.7                        | 20                                   | .52                                 | 18                         | 42                                   | 2.1                                 | 27                         | ---                                  | e3.6                                |       |
| 13    | 11                         | 26                                   | .78                                 | 19                         | 33                                   | 1.7                                 | 26                         | 47                                   | 3.2                                 |       |
| 14    | 13                         | 31                                   | 1.1                                 | 18                         | 17                                   | .83                                 | 24                         | 40                                   | 2.6                                 |       |
| 15    | 12                         | 26                                   | .83                                 | 20                         | 27                                   | 1.5                                 | 24                         | 43                                   | 2.8                                 |       |
| 16    | 11                         | 25                                   | .74                                 | 23                         | 29                                   | 1.8                                 | 24                         | 39                                   | 2.5                                 |       |
| 17    | 12                         | 22                                   | .68                                 | 29                         | 141                                  | 12                                  | 24                         | 43                                   | 2.8                                 |       |
| 18    | 11                         | 24                                   | .74                                 | 27                         | 226                                  | 17                                  | 28                         | ---                                  | e5.0                                |       |
| 19    | 13                         | ---                                  | e.83                                | 30                         | 270                                  | 22                                  | 25                         | ---                                  | e3.8                                |       |
| 20    | 12                         | ---                                  | e.77                                | 31                         | ---                                  | e27                                 | 23                         | 43                                   | 2.7                                 |       |
| 21    | 13                         | ---                                  | e.78                                | 29                         | ---                                  | e22                                 | 22                         | 42                                   | 2.5                                 |       |
| 22    | 13                         | ---                                  | e.75                                | 28                         | ---                                  | e19                                 | 21                         | 43                                   | 2.4                                 |       |
| 23    | 12                         | ---                                  | e.68                                | 29                         | ---                                  | e18                                 | 20                         | 28                                   | 1.6                                 |       |
| 24    | 12                         | ---                                  | e.67                                | 28                         | 208                                  | 15                                  | 21                         | 25                                   | 1.4                                 |       |
| 25    | 12                         | ---                                  | e.65                                | 28                         | ---                                  | e14                                 | 20                         | 30                                   | 1.6                                 |       |
| 26    | 13                         | ---                                  | e.70                                | 29                         | ---                                  | e11                                 | 19                         | 37                                   | 1.9                                 |       |
| 27    | 13                         | ---                                  | e.75                                | 26                         | ---                                  | e8.2                                | 19                         | 45                                   | 2.3                                 |       |
| 28    | 13                         | ---                                  | e.76                                | 25                         | 91                                   | 6.2                                 | 18                         | 46                                   | 2.3                                 |       |
| 29    | 12                         | ---                                  | e.78                                | 29                         | 103                                  | 8.2                                 | 21                         | 44                                   | 2.5                                 |       |
| 30    | 13                         | ---                                  | e.89                                | 33                         | 246                                  | 22                                  | 26                         | 51                                   | 3.5                                 |       |
| 31    | ---                        | ---                                  | ---                                 | 32                         | 92                                   | 8.0                                 | ---                        | ---                                  | ---                                 |       |
| TOTAL | 341.4                      | ---                                  | 23.93                               | 707                        | ---                                  | 259.03                              | 757                        | ---                                  | 94.5                                |       |
|       |                            | JULY                                 |                                     |                            | AUGUST                               |                                     |                            | SEPTEMBER                            |                                     |       |
| 1     | 28                         | 41                                   | 3.1                                 | 9.8                        | ---                                  | e.13                                | 6.2                        | ---                                  | e.23                                |       |
| 2     | 26                         | 46                                   | 3.2                                 | 9.2                        | ---                                  | e.12                                | 6.2                        | ---                                  | e.22                                |       |
| 3     | 23                         | 43                                   | 2.6                                 | 8.9                        | ---                                  | e.12                                | 6.2                        | ---                                  | e.22                                |       |
| 4     | 21                         | 17                                   | .99                                 | 8.4                        | ---                                  | e.11                                | 6.1                        | ---                                  | e.20                                |       |
| 5     | 20                         | 19                                   | .99                                 | 8.8                        | ---                                  | e.12                                | 5.7                        | ---                                  | e.18                                |       |
| 6     | 18                         | 17                                   | .85                                 | 8.7                        | ---                                  | e.12                                | 5.8                        | ---                                  | e.20                                |       |
| 7     | 18                         | 19                                   | .94                                 | 8.7                        | ---                                  | e.12                                | 6.6                        | ---                                  | e.27                                |       |
| 8     | 18                         | 16                                   | .79                                 | 8.8                        | ---                                  | e.12                                | 7.7                        | ---                                  | e3.5                                |       |
| 9     | 17                         | 35                                   | 1.6                                 | 8.6                        | ---                                  | e.12                                | 7.6                        | ---                                  | e.37                                |       |
| 10    | 16                         | 37                                   | 1.6                                 | 8.3                        | ---                                  | e.11                                | 7.5                        | ---                                  | e.32                                |       |
| 11    | 16                         | 22                                   | .97                                 | 8.4                        | ---                                  | e.11                                | 6.7                        | ---                                  | e.32                                |       |
| 12    | 15                         | 20                                   | .85                                 | 8.3                        | ---                                  | e.11                                | 6.4                        | 23                                   | .40                                 |       |
| 13    | 15                         | 19                                   | .80                                 | 8.3                        | ---                                  | e.11                                | 6.2                        | 42                                   | .71                                 |       |
| 14    | 16                         | 26                                   | 1.1                                 | 8.4                        | 27                                   | .61                                 | 6.2                        | 28                                   | .47                                 |       |
| 15    | 17                         | 15                                   | .70                                 | 8.7                        | 54                                   | 1.2                                 | 6.2                        | 27                                   | .46                                 |       |
| 16    | 17                         | 17                                   | .79                                 | 7.9                        | 78                                   | 1.7                                 | 6.1                        | 25                                   | .42                                 |       |
| 17    | 17                         | 19                                   | .88                                 | 7.7                        | 24                                   | .50                                 | 5.4                        | 19                                   | .27                                 |       |
| 18    | 18                         | 17                                   | .86                                 | 7.4                        | 19                                   | .38                                 | 5.4                        | 16                                   | .24                                 |       |
| 19    | 17                         | 9.0                                  | .41                                 | 7.0                        | 21                                   | .41                                 | 5.4                        | 14                                   | .21                                 |       |
| 20    | 16                         | 10                                   | .46                                 | 7.0                        | 15                                   | .28                                 | 5.4                        | 14                                   | .21                                 |       |
| 21    | 15                         | 9.0                                  | .38                                 | 7.0                        | 14                                   | .27                                 | 5.4                        | 12                                   | .17                                 |       |
| 22    | 15                         | 6.0                                  | .24                                 | 7.8                        | 17                                   | .36                                 | 5.8                        | 18                                   | .28                                 |       |
| 23    | 15                         | 8.0                                  | .33                                 | 8.8                        | 22                                   | .52                                 | 6.2                        | 24                                   | .41                                 |       |
| 24    | 15                         | 7.0                                  | .28                                 | 8.1                        | 575                                  | 13                                  | 6.2                        | 18                                   | .31                                 |       |
| 25    | 13                         | 4.0                                  | .16                                 | 9.7                        | 468                                  | 12                                  | 6.2                        | 26                                   | .43                                 |       |
| 26    | 12                         | 4.0                                  | .13                                 | 8.8                        | 121                                  | 2.9                                 | 6.2                        | 29                                   | .49                                 |       |
| 27    | 11                         | 3.0                                  | .09                                 | 10                         | 65                                   | 1.8                                 | 6.2                        | 19                                   | .32                                 |       |
| 28    | 11                         | 4.0                                  | .11                                 | 8.5                        | 48                                   | 1.1                                 | 6.2                        | ---                                  | e.25                                |       |
| 29    | 9.6                        | 4.0                                  | .10                                 | 7.3                        | ---                                  | e.49                                | 6.2                        | ---                                  | e.25                                |       |
| 30    | 9.2                        | ---                                  | e.10                                | 6.8                        | ---                                  | e.29                                | 6.5                        | ---                                  | e.25                                |       |
| 31    | 9.3                        | ---                                  | e.10                                | 6.5                        | ---                                  | e.26                                | ---                        | ---                                  | ---                                 |       |
| TOTAL | 504.1                      | ---                                  | 26.50                               | 256.6                      | ---                                  | 39.59                               | 186.1                      | ---                                  | 12.58                               |       |

e-Estimated.

**07093775 BADGER CREEK, LOWER STATION, NEAR HOWARD, CO--Continued**

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

| DATE  | TIME | DIS-<br>CHARGE,<br>INST.<br>CUBIC<br>FEET<br>PER<br>SECOND | SEDI-<br>MENT,<br>SUS-<br>PENDED<br>(MG/L) | SEDI-<br>MENT,<br>DIS-<br>CHARGE,<br>SUS-<br>PENDED<br>(T/DAY) |
|-------|------|--|--|--|
| OCT   |      |  |  |  |
| 12... | 1430 | 5.2  | 3  | 0.04   |
| APR   |      |  |  |  |
| 05... | 0915 | 11   | 28   | 0.83   |
| 18... | 0820 | 11   | 25   | 0.74   |
| MAY   |      |  |  |  |
| 02... | 1500 | 15   | 49   | 2.0  |
| 12... | 1300 | 18   | 42   | 2.0  |
| 30... | 1315 | 34   | 131  | 12   |
| JUN   |      |  |  |  |
| 20... | 1520 | 24   | 39   | 2.5  |
| JUL   |      |  |  |  |
| 06... | 0830 | 17   | 16   | 0.73   |
| 18... | 0745 | 18   | 21   | 1.0  |
| AUG   |      |  |  |  |
| 14... | 0905 | 8.3  | 4  | 0.09   |
| SEP   |      |  |  |  |
| 12... | 1105 | 6.6  | 16   | 0.29   |
| 27... | 0900 | 6.2  | 11   | 0.18   |

## 07094500 ARKANSAS RIVER AT PARKDALE, CO

LOCATION.--Lat 38°29'14", long 105°22'23", in NE¼NW¼ sec.18, T.18 S., R.71 W., Fremont County, Hydrologic Unit 11020001, on left bank at Parkdale, 100 ft upstream from Bumback Gulch, 300 ft upstream from bridge on U.S. Highway 50, and 0.9 mi upstream from Copper Gulch.

DRAINAGE AREA.--2,548 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1945 to September 1955, October 1964 to September 1994, April 1995 to current year (seasonal 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 fair. 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 ft<sup>3</sup>/s, June 18, 1995, gage height 8.82 ft; minimum daily, 199 ft<sup>3</sup>/s, Mar. 17, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period of seasonal operation, 4,440 at 1830 June 14, gage height, 7.25 ft; minimum daily, 326 ft<sup>3</sup>/s, Sept. 5, 11.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

| DAY   | OCT   | NOV | DEC | JAN | FEB | MAR | APR   | MAY    | JUN    | JUL   | AUG   | SEP   |
|-------|-------|-----|-----|-----|-----|-----|-------|--------|--------|-------|-------|-------|
| 1     | 692   | --- | --- | --- | --- | --- | 368   | 848    | 1290   | 1970  | 823   | 353   |
| 2     | 666   | --- | --- | --- | --- | --- | 366   | 843    | 1290   | 1820  | 815   | 346   |
| 3     | 654   | --- | --- | --- | --- | --- | 374   | 859    | 1370   | 1620  | 796   | 341   |
| 4     | 653   | --- | --- | --- | --- | --- | 414   | 819    | 1650   | 1670  | 821   | 335   |
| 5     | 661   | --- | --- | --- | --- | --- | 433   | 847    | 2170   | 1740  | 805   | 326   |
| 6     | 665   | --- | --- | --- | --- | --- | 437   | 925    | 2880   | 1890  | 773   | 348   |
| 7     | 662   | --- | --- | --- | --- | --- | 442   | 1090   | 3190   | 1890  | 788   | 381   |
| 8     | 663   | --- | --- | --- | --- | --- | 467   | 1250   | 3530   | 1890  | 804   | 353   |
| 9     | 661   | --- | --- | --- | --- | --- | 503   | 1340   | 3670   | 1890  | 819   | 340   |
| 10    | 648   | --- | --- | --- | --- | --- | 598   | 1510   | 3720   | 1720  | 829   | 332   |
| 11    | 640   | --- | --- | --- | --- | --- | 606   | 1610   | 3710   | 1510  | 847   | 326   |
| 12    | 648   | --- | --- | --- | --- | --- | 598   | 1640   | 3610   | 1400  | 763   | 328   |
| 13    | 655   | --- | --- | --- | --- | --- | 571   | 1790   | 3150   | 1340  | 721   | 363   |
| 14    | 659   | --- | --- | --- | --- | --- | 601   | 2350   | 3110   | 1270  | 758   | 368   |
| 15    | 623   | --- | --- | --- | --- | --- | 618   | 2500   | 3130   | 1220  | 773   | 391   |
| 16    | 616   | --- | --- | --- | --- | --- | 595   | 2650   | 3120   | 1140  | 741   | 405   |
| 17    | 607   | --- | --- | --- | --- | --- | 590   | 3440   | 2870   | 1120  | e680  | 386   |
| 18    | 593   | --- | --- | --- | --- | --- | 601   | 3890   | 2660   | 1110  | e640  | 372   |
| 19    | 583   | --- | --- | --- | --- | --- | 563   | 3890   | 2620   | 1160  | e600  | 368   |
| 20    | 577   | --- | --- | --- | --- | --- | 541   | 4130   | 2280   | 1130  | e575  | 381   |
| 21    | 592   | --- | --- | --- | --- | --- | 679   | 4050   | 2420   | 1100  | 538   | 414   |
| 22    | 577   | --- | --- | --- | --- | --- | 700   | 3800   | 3220   | 1070  | 463   | 387   |
| 23    | 574   | --- | --- | --- | --- | --- | 690   | 3500   | 3440   | 1040  | 448   | 371   |
| 24    | 549   | --- | --- | --- | --- | --- | 704   | 2960   | 2900   | 991   | 436   | 384   |
| 25    | 546   | --- | --- | --- | --- | --- | 755   | 2290   | 2690   | 970   | 398   | 408   |
| 26    | 564   | --- | --- | --- | --- | --- | 858   | 2310   | 2620   | 927   | 378   | 444   |
| 27    | 552   | --- | --- | --- | --- | --- | 910   | 1800   | 2570   | 870   | 423   | 450   |
| 28    | 555   | --- | --- | --- | --- | 374 | 918   | 1440   | 2390   | 829   | 435   | 457   |
| 29    | 554   | --- | --- | --- | --- | 379 | 889   | 1590   | 2190   | 847   | 407   | 463   |
| 30    | 557   | --- | --- | --- | --- | 363 | 851   | 1390   | 2060   | 939   | 392   | 454   |
| 31    | 553   | --- | --- | --- | --- | 353 | ---   | 1300   | ---    | 856   | 369   | ---   |
| TOTAL | 18999 | --- | --- | --- | --- | --- | 18240 | 64651  | 81520  | 40939 | 19858 | 11375 |
| MEAN  | 613   | --- | --- | --- | --- | --- | 608   | 2086   | 2717   | 1321  | 641   | 379   |
| MAX   | 692   | --- | --- | --- | --- | --- | 918   | 4130   | 3720   | 1970  | 847   | 463   |
| MIN   | 546   | --- | --- | --- | --- | --- | 366   | 819    | 1290   | 829   | 369   | 326   |
| AC-FT | 37680 | --- | --- | --- | --- | --- | 36180 | 128200 | 161700 | 81200 | 39390 | 22560 |

e--Estimated.



## ARKANSAS RIVER BASIN

## 07094500 ARKANSAS RIVER AT PARKDALE, CO--Continued

WATER TEMPERATURE, (DEG. C), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DAY   | MAX      | MIN  | MEAN | MAX   | MIN  | MEAN | MAX    | MIN  | MEAN | MAX       | MIN  | MEAN |
|-------|----------|------|------|-------|------|------|--------|------|------|-----------|------|------|
|       | FEBRUARY |      |      | MARCH |      |      | APRIL  |      |      | MAY       |      |      |
| 1     | ---      | ---  | ---  | ---   | ---  | ---  | ---    | ---  | ---  | 13.3      | 9.3  | 11.0 |
| 2     | ---      | ---  | ---  | ---   | ---  | ---  | ---    | ---  | ---  | 14.1      | 10.1 | 11.8 |
| 3     | ---      | ---  | ---  | ---   | ---  | ---  | ---    | ---  | ---  | 14.9      | 10.9 | 12.5 |
| 4     | ---      | ---  | ---  | ---   | ---  | ---  | ---    | ---  | ---  | 15.7      | 10.9 | 13.4 |
| 5     | ---      | ---  | ---  | ---   | ---  | ---  | ---    | ---  | ---  | 15.7      | 12.5 | 14.1 |
| 6     | ---      | ---  | ---  | ---   | ---  | ---  | ---    | ---  | ---  | 16.5      | 12.5 | 14.6 |
| 7     | ---      | ---  | ---  | ---   | ---  | ---  | ---    | ---  | ---  | 15.7      | 13.3 | 14.6 |
| 8     | ---      | ---  | ---  | ---   | ---  | ---  | ---    | ---  | ---  | 14.8      | 11.7 | 13.3 |
| 9     | ---      | ---  | ---  | ---   | ---  | ---  | ---    | ---  | ---  | 14.0      | 11.6 | 12.9 |
| 10    | ---      | ---  | ---  | ---   | ---  | ---  | ---    | ---  | ---  | 14.8      | 11.6 | 12.7 |
| 11    | ---      | ---  | ---  | ---   | ---  | ---  | ---    | ---  | ---  | 14.8      | 10.2 | 13.0 |
| 12    | ---      | ---  | ---  | ---   | ---  | ---  | ---    | ---  | ---  | 14.8      | 10.2 | 13.4 |
| 13    | ---      | ---  | ---  | ---   | ---  | ---  | ---    | ---  | ---  | 14.8      | 12.4 | 13.6 |
| 14    | ---      | ---  | ---  | ---   | ---  | ---  | ---    | ---  | ---  | 14.0      | 12.4 | 13.3 |
| 15    | ---      | ---  | ---  | ---   | ---  | ---  | ---    | ---  | ---  | 14.0      | 10.8 | 12.7 |
| 16    | ---      | ---  | ---  | ---   | ---  | ---  | ---    | ---  | ---  | 14.7      | 11.6 | 13.1 |
| 17    | ---      | ---  | ---  | ---   | ---  | ---  | ---    | ---  | ---  | 13.9      | 12.3 | 13.2 |
| 18    | ---      | ---  | ---  | ---   | ---  | ---  | ---    | ---  | ---  | 13.9      | 11.5 | 12.8 |
| 19    | ---      | ---  | ---  | ---   | ---  | ---  | ---    | ---  | ---  | 13.9      | 11.5 | 12.4 |
| 20    | ---      | ---  | ---  | ---   | ---  | ---  | ---    | ---  | ---  | 13.5      | 11.5 | 12.4 |
| 21    | ---      | ---  | ---  | ---   | ---  | ---  | ---    | ---  | ---  | 13.8      | 10.6 | 12.2 |
| 22    | ---      | ---  | ---  | ---   | ---  | ---  | ---    | ---  | ---  | 14.5      | 11.5 | 12.8 |
| 23    | ---      | ---  | ---  | ---   | ---  | ---  | ---    | ---  | ---  | 14.7      | 11.9 | 13.1 |
| 24    | ---      | ---  | ---  | ---   | ---  | ---  | ---    | ---  | ---  | 12.9      | 11.2 | 12.1 |
| 25    | ---      | ---  | ---  | ---   | ---  | ---  | ---    | ---  | ---  | 12.2      | 10.5 | 11.1 |
| 26    | ---      | ---  | ---  | ---   | ---  | ---  | ---    | ---  | ---  | 11.1      | 9.4  | 10.2 |
| 27    | ---      | ---  | ---  | ---   | ---  | ---  | 13.4   | 10.2 | 12.0 | 12.6      | 8.9  | 10.7 |
| 28    | ---      | ---  | ---  | ---   | ---  | ---  | 11.8   | 7.0  | 9.4  | 12.5      | 10.7 | 11.5 |
| 29    | ---      | ---  | ---  | ---   | ---  | ---  | 9.4    | 5.4  | 7.1  | 14.8      | 10.8 | 12.8 |
| 30    | ---      | ---  | ---  | ---   | ---  | ---  | 11.7   | 7.0  | 9.5  | 15.9      | 12.8 | 14.4 |
| 31    | ---      | ---  | ---  | ---   | ---  | ---  | ---    | ---  | ---  | 15.7      | 12.5 | 14.1 |
| MONTH | ---      | ---  | ---  | ---   | ---  | ---  | ---    | ---  | ---  | 16.5      | 8.9  | 12.8 |
|       | JUNE     |      |      | JULY  |      |      | AUGUST |      |      | SEPTEMBER |      |      |
| 1     | 16.4     | 13.1 | 14.8 | 18.6  | 15.8 | 17.3 | 21.5   | 17.8 | 19.7 | ---       | ---  | ---  |
| 2     | 16.7     | 13.6 | 15.2 | 19.5  | 16.5 | 17.9 | 21.8   | 16.5 | 19.5 | ---       | ---  | ---  |
| 3     | 16.3     | 13.7 | 15.0 | 20.0  | 16.3 | 18.2 | 21.6   | 18.1 | 19.3 | ---       | ---  | ---  |
| 4     | 15.9     | 14.2 | 15.1 | 19.3  | 16.9 | 18.3 | 21.3   | 16.8 | 19.0 | ---       | ---  | ---  |
| 5     | 16.5     | 12.9 | 14.7 | 19.0  | 16.8 | 18.0 | 21.1   | 16.0 | 18.7 | 20.0      | ---  | ---  |
| 6     | 16.0     | 13.1 | 14.6 | 19.7  | 17.0 | 18.4 | 21.6   | 16.9 | 19.4 | 20.1      | 16.4 | 18.0 |
| 7     | 16.1     | 12.8 | 14.4 | 19.9  | 17.2 | 18.5 | 21.3   | 17.6 | 19.3 | 19.9      | 14.8 | 17.1 |
| 8     | 16.0     | 12.6 | 14.3 | 18.8  | 17.5 | 18.2 | 21.3   | 17.0 | 19.1 | 19.5      | 15.1 | 17.4 |
| 9     | 15.2     | 13.2 | 14.3 | 18.9  | 16.4 | 17.5 | 20.1   | 16.8 | 18.5 | 19.6      | 15.1 | 17.4 |
| 10    | 14.8     | 12.5 | 13.7 | 20.3  | 16.2 | 18.2 | 20.2   | 16.6 | 18.5 | 19.6      | 15.2 | 17.4 |
| 11    | 14.3     | 12.3 | 13.3 | 20.1  | 17.5 | 18.9 | 20.6   | 15.8 | 18.4 | 19.3      | 15.3 | 17.4 |
| 12    | 15.3     | 12.5 | 13.8 | 20.5  | 17.6 | 19.1 | 21.2   | 16.6 | 18.9 | 17.7      | 15.8 | 16.7 |
| 13    | 15.2     | 12.4 | 13.9 | 20.3  | 17.8 | 19.1 | 21.8   | 16.9 | 19.3 | 17.9      | 15.3 | 16.5 |
| 14    | 15.0     | 13.1 | 14.0 | 21.2  | 17.4 | 19.3 | 20.5   | 17.5 | 19.1 | 16.8      | 14.5 | 15.5 |
| 15    | 14.3     | 12.6 | 13.4 | 21.4  | 18.3 | 19.7 | 19.5   | 16.9 | 18.3 | 18.2      | 14.1 | 15.7 |
| 16    | 14.2     | 11.8 | 13.0 | 21.3  | 18.4 | 19.9 | 20.4   | 16.6 | 18.1 | 18.7      | 14.5 | 16.7 |
| 17    | 16.3     | 12.3 | 14.2 | 21.0  | 18.2 | 19.8 | ---    | ---  | ---  | 17.2      | 14.1 | 15.4 |
| 18    | 16.9     | 13.1 | 15.0 | 21.4  | 18.6 | 20.1 | ---    | ---  | ---  | 15.3      | 12.1 | 13.3 |
| 19    | 17.0     | 13.0 | 15.1 | 21.7  | 18.2 | 19.9 | ---    | ---  | ---  | 13.7      | 9.7  | 11.6 |
| 20    | 18.1     | 14.2 | 16.2 | 22.1  | 18.2 | 20.2 | ---    | ---  | ---  | 14.3      | 10.0 | 12.0 |
| 21    | 17.2     | 15.0 | 16.2 | 22.5  | 18.8 | 20.8 | 20.1   | 17.1 | 18.6 | 14.8      | 9.9  | 12.5 |
| 22    | 16.1     | 13.8 | 15.0 | 21.9  | 18.8 | 20.3 | 19.2   | 17.4 | 18.1 | 16.1      | 11.5 | 13.8 |
| 23    | 16.3     | 13.1 | 14.8 | 21.5  | 18.2 | 20.1 | 22.2   | 16.7 | 19.0 | 17.2      | 13.0 | 14.8 |
| 24    | 17.7     | 13.9 | 15.7 | 21.3  | 18.7 | 20.1 | 21.9   | 16.8 | 19.2 | 17.2      | 13.0 | 14.8 |
| 25    | 16.5     | 14.2 | 15.4 | 20.7  | 18.4 | 19.6 | ---    | ---  | ---  | 16.5      | 12.8 | 14.5 |
| 26    | 17.3     | 14.2 | 15.8 | 20.5  | 17.7 | 19.2 | ---    | ---  | ---  | 13.1      | 9.8  | 10.6 |
| 27    | 16.7     | 15.0 | 15.6 | 20.6  | 17.3 | 19.1 | ---    | ---  | ---  | 12.0      | 8.5  | 10.3 |
| 28    | 17.1     | 14.1 | 15.4 | 19.9  | 17.6 | 18.9 | ---    | ---  | ---  | 12.9      | 8.8  | 11.0 |
| 29    | 17.0     | 14.0 | 15.6 | 19.7  | 18.0 | 18.8 | ---    | ---  | ---  | 14.0      | 10.1 | 12.2 |
| 30    | 18.4     | 15.3 | 16.8 | 20.7  | 17.0 | 19.1 | ---    | ---  | ---  | 14.9      | 10.9 | 13.1 |
| 31    | ---      | ---  | ---  | 22.3  | 18.6 | 20.3 | ---    | ---  | ---  | ---       | ---  | ---  |
| MONTH | 18.4     | 11.8 | 14.8 | 22.5  | 15.8 | 19.1 | ---    | ---  | ---  | ---       | ---  | ---  |

**07096000 ARKANSAS RIVER AT CANON CITY, CO**

LOCATION.--Lat 38°26'02", long 105°15'24", in SE<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec.31, T.18 S., R.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 mi<sup>2</sup>.

**WATER-DISCHARGE RECORDS**

PERIOD OF RECORD.--January 1888 to current year. Monthly discharge only for some periods, published in WSP 1311. Published as "near Canyon" 1900-1906.

REVISED RECORDS.--WSP 1117: Drainage area. WSP 1311: 1897-98.

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 5,342.13 ft above sea level. See WSP 1711 or 1731 for history of changes prior to Oct. 1, 1957. Oct. 1, 1957 to Nov. 15, 1962, water-stage recorder at present site at datum 1.49 ft, higher.

REMARKS.--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 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

| DAY   | OCT   | NOV   | DEC   | JAN   | FEB   | MAR   | APR   | MAY    | JUN    | JUL   | AUG   | SEP   |
|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------|-------|-------|-------|
| 1     | 595   | 458   | 448   | 382   | 363   | 332   | 324   | 687    | 1230   | 1890  | 662   | 275   |
| 2     | 569   | 482   | 441   | 366   | 346   | 334   | 322   | 701    | 1220   | 1740  | 726   | 269   |
| 3     | 569   | 483   | 414   | 359   | 331   | 332   | 332   | 722    | 1300   | 1500  | 638   | 249   |
| 4     | 578   | 475   | 423   | 388   | 341   | 335   | 364   | 680    | 1610   | 1550  | 641   | 238   |
| 5     | 560   | 492   | 455   | 391   | e367  | 336   | 374   | 708    | 2140   | 1650  | 623   | 236   |
| 6     | 558   | 504   | 465   | 387   | e390  | 346   | 373   | 764    | 2780   | 1810  | 586   | 251   |
| 7     | 549   | 517   | 459   | 377   | e410  | 323   | 383   | 925    | 3040   | 1810  | 622   | 344   |
| 8     | 552   | 542   | 439   | 387   | e420  | 338   | 418   | 1100   | 3340   | 1810  | 688   | 319   |
| 9     | 550   | 542   | 436   | 395   | e410  | 332   | 429   | 1280   | 3490   | 1810  | 764   | 280   |
| 10    | 533   | 547   | 420   | 388   | e400  | 334   | 519   | 1490   | 3540   | 1660  | 746   | 267   |
| 11    | 516   | 526   | 422   | 399   | e390  | 336   | 520   | 1600   | 3500   | 1390  | 739   | 258   |
| 12    | 525   | 513   | 433   | 370   | e380  | 330   | 495   | 1640   | 3370   | 1300  | 662   | 254   |
| 13    | 531   | 538   | 447   | 372   | e360  | 321   | 470   | 1800   | 2990   | 1230  | 593   | 258   |
| 14    | 538   | 530   | 446   | 371   | e355  | 336   | 487   | 2370   | 3010   | 1160  | 638   | 280   |
| 15    | 507   | 541   | 415   | 366   | 357   | 333   | 501   | 2570   | 3030   | 1100  | 630   | 303   |
| 16    | 503   | 512   | 380   | 368   | 356   | 330   | 485   | 2670   | 3000   | 987   | 582   | 321   |
| 17    | 486   | 502   | 390   | 377   | 353   | 388   | 474   | 3360   | 2780   | 944   | 506   | 310   |
| 18    | 474   | 498   | 386   | 363   | 356   | 409   | 488   | 3890   | 2610   | 937   | 445   | 296   |
| 19    | 476   | 483   | 372   | 337   | 356   | 360   | 456   | 3880   | 2550   | 1000  | 416   | 296   |
| 20    | 479   | 484   | 363   | 369   | 355   | 354   | 427   | 4140   | 2250   | 976   | 413   | 300   |
| 21    | 490   | 484   | 342   | 362   | 362   | 358   | 556   | 4080   | 2360   | 922   | 394   | 320   |
| 22    | 473   | 477   | 360   | 366   | 372   | 362   | 585   | 3760   | 3050   | 894   | 348   | 319   |
| 23    | 474   | 471   | 339   | 369   | 366   | 361   | 577   | 3400   | 3250   | 868   | 338   | 299   |
| 24    | 461   | 461   | 332   | 353   | 351   | 355   | 591   | 2960   | 2820   | 828   | 325   | 289   |
| 25    | 427   | 452   | 336   | 372   | 347   | 345   | 645   | 2390   | 2630   | 816   | 253   | 303   |
| 26    | 435   | 464   | 346   | 361   | 352   | 339   | 736   | 2400   | 2560   | 780   | 226   | 329   |
| 27    | 429   | 471   | 350   | 318   | 340   | 360   | 795   | 1870   | 2500   | 724   | 298   | 351   |
| 28    | 435   | 442   | 352   | 365   | 330   | 339   | 869   | 1440   | 2350   | 680   | 360   | 355   |
| 29    | 431   | 384   | 349   | 377   | 329   | 339   | 785   | 1580   | 2140   | 686   | 323   | 357   |
| 30    | 451   | 432   | 354   | 402   | ---   | 328   | 729   | 1360   | 1990   | 794   | 304   | 352   |
| 31    | 458   | ---   | 367   | 376   | ---   | 315   | ---   | 1240   | ---    | 709   | 284   | ---   |
| TOTAL | 15612 | 14707 | 12281 | 11533 | 10545 | 10640 | 15509 | 63457  | 78430  | 36955 | 15773 | 8878  |
| MEAN  | 504   | 490   | 396   | 372   | 364   | 343   | 517   | 2047   | 2614   | 1192  | 509   | 296   |
| MAX   | 595   | 547   | 465   | 402   | 420   | 409   | 869   | 4140   | 3540   | 1890  | 764   | 357   |
| MIN   | 427   | 384   | 332   | 318   | 329   | 315   | 322   | 680    | 1220   | 680   | 226   | 236   |
| AC-FT | 30970 | 29170 | 24360 | 22880 | 20920 | 21100 | 30760 | 125900 | 155600 | 73300 | 31290 | 17610 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1889 - 1996, BY WATER YEAR (WY)

|      | 1889 | 1890 | 1891 | 1892 | 1893 | 1894 | 1895 | 1896 | 1897 | 1898 | 1899 | 1900 | 1901 | 1902 | 1903 | 1904 | 1905 | 1906 | 1907 | 1908 | 1909 | 1910 | 1911 | 1912 | 1913 | 1914 | 1915 | 1916 | 1917 | 1918 | 1919 | 1920 | 1921 | 1922 | 1923 | 1924 | 1925 | 1926 | 1927 | 1928 | 1929 | 1930 | 1931 | 1932 | 1933 | 1934 | 1935 | 1936 | 1937 | 1938 | 1939 | 1940 | 1941 | 1942 | 1943 | 1944 | 1945 | 1946 | 1947 | 1948 | 1949 | 1950 | 1951 | 1952 | 1953 | 1954 | 1955 | 1956 | 1957 | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 | 1970 | 1971 | 1972 | 1973 | 1974 | 1975 | 1976 | 1977 | 1978 | 1979 | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 374  | 376  | 368  | 343  | 339  | 348  | 428  | 1116 | 2287 | 1483 | 855  | 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 1995 CALENDAR YEAR | FOR 1996 WATER YEAR | WATER YEARS 1889 - 1996 |
|--------------------------|------------------------|---------------------|-------------------------|
| ANNUAL TOTAL             | 472522                 | 294320              |                         |
| ANNUAL MEAN              | 1295                   | 804                 |                         |
| HIGHEST ANNUAL MEAN      |                        |                     | 733                     |
| LOWEST ANNUAL MEAN       |                        |                     | 1299                    |
| HIGHEST DAILY MEAN       | 6580                   | Jun 18              | 329                     |
| LOWEST DAILY MEAN        | 332                    | Dec 24              | 9480                    |
| ANNUAL SEVEN-DAY MINIMUM | 343                    | Dec 23              | 69                      |
| INSTANTANEOUS PEAK FLOW  |                        |                     | 87                      |
| INSTANTANEOUS PEAK STAGE |                        |                     | a <sup>1</sup> 9000     |
| ANNUAL RUNOFF (AC-FT)    | 937200                 | 583800              | b, c <sup>10.70</sup>   |
| 10 PERCENT EXCEEDS       | 3770                   | 2170                | 531100                  |
| 50 PERCENT EXCEEDS       | 560                    | 453                 | 1720                    |
| 90 PERCENT EXCEEDS       | 421                    | 325                 | 412                     |
|                          |                        |                     | 240                     |

e-Estimated.  
a-Site and datum then in use, from rating curve extended above 5000 ft<sup>3</sup>/s.  
b-From floodmark.  
c-Maximum gage height, 10.90, 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 Oct. 1 to Dec. 20 and Apr. 19 to May 7, which are fair, and Dec. 21 to Apr. 18, which are poor. Records for water temperature are good except Dec. 20 to May 8, which are poor. 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, 673 microsiemens, July 10; minimum, 94 microsiemens, June 9.

WATER TEMPERATURE: Maximum, 22.0°C, July 21, Aug. 25-26; minimum, 0.0°C, many days during the winter.

## SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM @ 25 DEG. C), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DAY   | OCTOBER |     |      | NOVEMBER |     |      | DECEMBER |     |      | JANUARY |     |      |
|-------|---------|-----|------|----------|-----|------|----------|-----|------|---------|-----|------|
|       | MAX     | MIN | MEAN | MAX      | MIN | MEAN | MAX      | MIN | MEAN | MAX     | MIN | MEAN |
| 1     | 263     | 251 | 256  | 323      | 320 | 322  | 322      | 317 | 320  | ---     | --- | ---  |
| 2     | 260     | 254 | 256  | 323      | 318 | 320  | 319      | 314 | 316  | ---     | --- | ---  |
| 3     | 254     | 245 | 249  | 323      | 317 | 320  | 321      | 317 | 319  | ---     | --- | ---  |
| 4     | 254     | 247 | 252  | 329      | 318 | 322  | 321      | 313 | 317  | ---     | --- | ---  |
| 5     | 262     | 253 | 256  | 329      | 321 | 325  | 323      | 319 | 321  | ---     | --- | ---  |
| 6     | 273     | 260 | 266  | 325      | 313 | 319  | 321      | 316 | 318  | ---     | --- | ---  |
| 7     | 273     | 270 | 272  | 314      | 308 | 310  | 316      | 315 | 316  | ---     | --- | ---  |
| 8     | 287     | 270 | 277  | 308      | 301 | 305  | 316      | 313 | 315  | 321     | 312 | 317  |
| 9     | 290     | 287 | 288  | 301      | 299 | 300  | 331      | 313 | 321  | 325     | 321 | 324  |
| 10    | 294     | 285 | 288  | 300      | 298 | 299  | 336      | 324 | 330  | 325     | 309 | 312  |
| 11    | 294     | 290 | 292  | 303      | 296 | 298  | 324      | 318 | 320  | 323     | 311 | 319  |
| 12    | 291     | 286 | 288  | 309      | 299 | 303  | 321      | 317 | 318  | 330     | 323 | 327  |
| 13    | 286     | 283 | 285  | 308      | 301 | 303  | 318      | 304 | 312  | 326     | 315 | 319  |
| 14    | 286     | 282 | 283  | 306      | 301 | 302  | 307      | 302 | 305  | 330     | 319 | 323  |
| 15    | 290     | 284 | 287  | 306      | 302 | 304  | 310      | 301 | 305  | 335     | 329 | 332  |
| 16    | 296     | 290 | 294  | 308      | 302 | 305  | 318      | 305 | 309  | 339     | 333 | 335  |
| 17    | 299     | 294 | 297  | 311      | 307 | 309  | 322      | 314 | 317  | 344     | 339 | 341  |
| 18    | 301     | 297 | 299  | 313      | 309 | 310  | 321      | 311 | 315  | 341     | 322 | 332  |
| 19    | 304     | 299 | 301  | 318      | 311 | 314  | 330      | 310 | 317  | 322     | 304 | 313  |
| 20    | 301     | 299 | 300  | 318      | 314 | 315  | 342      | 322 | 328  | 304     | 293 | 296  |
| 21    | 304     | 301 | 302  | 316      | 311 | 313  | 341      | 326 | 334  | 305     | 295 | 300  |
| 22    | 308     | 302 | 304  | 316      | 311 | 313  | 340      | 328 | 333  | 311     | 305 | 308  |
| 23    | 313     | 308 | 310  | 316      | 312 | 314  | 342      | 331 | 335  | 321     | 311 | 317  |
| 24    | 315     | 310 | 313  | 316      | 311 | 313  | 359      | 338 | 349  | 329     | 321 | 326  |
| 25    | 318     | 313 | 316  | 318      | 311 | 314  | 361      | 351 | 355  | 331     | 329 | 330  |
| 26    | 318     | 313 | 315  | 317      | 312 | 314  | 360      | 352 | 355  | 330     | 323 | 328  |
| 27    | 318     | 314 | 315  | 315      | 310 | 312  | 352      | 342 | 346  | 323     | 315 | 319  |
| 28    | 319     | 314 | 316  | 313      | 306 | 309  | 351      | 339 | 342  | 315     | 298 | 308  |
| 29    | 319     | 317 | 318  | 323      | 313 | 316  | 352      | 339 | 343  | 308     | 291 | 298  |
| 30    | 322     | 318 | 320  | 325      | 321 | 323  | ---      | --- | ---  | 310     | 308 | 309  |
| 31    | 322     | 319 | 320  | ---      | --- | ---  | ---      | --- | ---  | 308     | 302 | 305  |
| MONTH | 322     | 245 | 291  | 329      | 296 | 312  | ---      | --- | ---  | ---     | --- | ---  |

07096000 ARKANSAS RIVER AT CANON CITY, CO--Continued

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM @ 25 DEG.C), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DAY   | MAX | MIN | MEAN |
|-------|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|------|
|       |     |     |      |     |     |      |     |     |      |     |     |      |
| 1     | 303 | 301 | 302  | 304 | 293 | 297  | 347 | 337 | 343  | --- | --- | ---  |
| 2     | 306 | 303 | 305  | 309 | 297 | 301  | 356 | 346 | 351  | --- | --- | ---  |
| 3     | 309 | 306 | 308  | 320 | 305 | 311  | 357 | 346 | 352  | --- | --- | ---  |
| 4     | 308 | 307 | 308  | 328 | 320 | 323  | 346 | 342 | 345  | --- | --- | ---  |
| 5     | 307 | 305 | 306  | 336 | 328 | 334  | 352 | 342 | 347  | --- | --- | ---  |
| 6     | 308 | 305 | 306  | 336 | 327 | 332  | 365 | 352 | 358  | --- | --- | ---  |
| 7     | 308 | 225 | 296  | 327 | 324 | 325  | 385 | 360 | 370  | --- | --- | ---  |
| 8     | 291 | 285 | 288  | 329 | 324 | 326  | 421 | 385 | 399  | 201 | 160 | 183  |
| 9     | 303 | 291 | 298  | 342 | 329 | 336  | 421 | 303 | 375  | 161 | 158 | 160  |
| 10    | 319 | 303 | 313  | 342 | 328 | 334  | 314 | 292 | 304  | 160 | 154 | 157  |
| 11    | 324 | 317 | 319  | 369 | 306 | 327  | 329 | 293 | 305  | 154 | 145 | 148  |
| 12    | 348 | 324 | 339  | 322 | 310 | 318  | 362 | 324 | 340  | 149 | 144 | 146  |
| 13    | 360 | 348 | 354  | 325 | 322 | 323  | --- | --- | ---  | 146 | 140 | 144  |
| 14    | 362 | 352 | 357  | 325 | 313 | 320  | --- | --- | ---  | 143 | 125 | 137  |
| 15    | 371 | 357 | 365  | 316 | 312 | 313  | --- | --- | ---  | 127 | 119 | 124  |
| 16    | 386 | 369 | 378  | 322 | 315 | 318  | --- | --- | ---  | 122 | 115 | 119  |
| 17    | 389 | 368 | 378  | 320 | 300 | 312  | --- | --- | ---  | 117 | 111 | 115  |
| 18    | 421 | 389 | 408  | 300 | 283 | 291  | --- | 233 | ---  | 112 | 108 | 111  |
| 19    | 429 | 419 | 423  | 289 | 283 | 285  | 240 | 234 | 237  | 109 | 105 | 107  |
| 20    | 451 | 429 | 441  | 301 | 289 | 293  | 246 | 238 | 243  | 107 | 103 | 105  |
| 21    | 488 | 451 | 466  | 301 | 298 | 299  | 254 | 236 | 246  | 107 | 102 | 104  |
| 22    | 464 | 436 | 448  | 301 | 296 | 299  | 236 | 217 | 223  | 106 | 103 | 105  |
| 23    | 436 | 387 | 417  | 300 | 293 | 297  | 225 | 221 | 223  | 109 | 104 | 107  |
| 24    | 387 | 367 | 374  | 297 | 291 | 294  | 225 | 218 | 221  | 113 | 107 | 110  |
| 25    | 401 | 373 | 385  | 296 | 290 | 293  | 220 | 213 | 215  | 124 | 113 | 119  |
| 26    | 406 | 239 | 339  | 300 | 290 | 292  | 216 | 200 | 209  | 132 | 124 | 128  |
| 27    | 296 | 290 | 293  | 297 | 290 | 293  | 205 | 192 | 200  | 146 | 132 | 138  |
| 28    | 296 | 285 | 289  | 298 | 292 | 295  | --- | --- | ---  | 168 | 146 | 161  |
| 29    | 304 | 290 | 296  | 307 | 296 | 300  | --- | --- | ---  | 166 | 150 | 156  |
| 30    | --- | --- | ---  | 328 | 307 | 319  | --- | --- | ---  | 161 | 151 | 155  |
| 31    | --- | --- | ---  | 339 | 328 | 335  | --- | --- | ---  | 163 | 155 | 159  |
| MONTH | 488 | 225 | 348  | 369 | 283 | 311  | --- | --- | ---  | --- | --- | ---  |
| DAY   | MAX | MIN | MEAN |
|       |     |     |      |     |     |      |     |     |      |     |     |      |
| 1     | 158 | 155 | 157  | 127 | 122 | 124  | 240 | 213 | 227  | 297 | 290 | 294  |
| 2     | 155 | 151 | 153  | 130 | 125 | 128  | 279 | 227 | 259  | 297 | 293 | 295  |
| 3     | 151 | 145 | 148  | 141 | 129 | 134  | 272 | 237 | 253  | 299 | 282 | 293  |
| 4     | 146 | 130 | 138  | 144 | 134 | 141  | 237 | 216 | 225  | 302 | 280 | 293  |
| 5     | 130 | 113 | 121  | 134 | 132 | 133  | 218 | 212 | 214  | 303 | 284 | 295  |
| 6     | 113 | 102 | 108  | 134 | 122 | 129  | 220 | 213 | 216  | 333 | 281 | 300  |
| 7     | 104 | 100 | 102  | 122 | 119 | 121  | 229 | 210 | 218  | 349 | 275 | 309  |
| 8     | 102 | 96  | 100  | 120 | 118 | 119  | 244 | 225 | 237  | --- | --- | ---  |
| 9     | 98  | 94  | 97   | 494 | 118 | 158  | 244 | 226 | 233  | --- | --- | ---  |
| 10    | 97  | 95  | 96   | 673 | 123 | 192  | 238 | 217 | 230  | --- | --- | ---  |
| 11    | 98  | 95  | 96   | 154 | 144 | 149  | 221 | 214 | 218  | --- | --- | ---  |
| 12    | 99  | 96  | 97   | 219 | 150 | 158  | 225 | 217 | 220  | --- | --- | ---  |
| 13    | 105 | 97  | 102  | 175 | 160 | 168  | 218 | 211 | 215  | 314 | 310 | 312  |
| 14    | 600 | 103 | 140  | 175 | 166 | 170  | 217 | 206 | 211  | 351 | 289 | 318  |
| 15    | 166 | 111 | 118  | 178 | 169 | 172  | 216 | 201 | 208  | 315 | 309 | 313  |
| 16    | 128 | 112 | 118  | 194 | 177 | 182  | 213 | 201 | 206  | 318 | 311 | 315  |
| 17    | 118 | 113 | 117  | 206 | 189 | 196  | 220 | 211 | 214  | 312 | 306 | 309  |
| 18    | 115 | 112 | 114  | 208 | 190 | 197  | 248 | 213 | 220  | 310 | 305 | 307  |
| 19    | 113 | 108 | 111  | 230 | 190 | 200  | 242 | 226 | 231  | 311 | 307 | 309  |
| 20    | 118 | 108 | 114  | 231 | 206 | 220  | 231 | 223 | 227  | 313 | 308 | 311  |
| 21    | 117 | 111 | 115  | 252 | 217 | 228  | 235 | 222 | 228  | 311 | 300 | 305  |
| 22    | 111 | 107 | 110  | 269 | 231 | 251  | 253 | 234 | 243  | 304 | 294 | 299  |
| 23    | 108 | 106 | 107  | 261 | 238 | 252  | 291 | 228 | 260  | 302 | 294 | 299  |
| 24    | 111 | 107 | 109  | 247 | 226 | 238  | 290 | 256 | 271  | 304 | 293 | 299  |
| 25    | 110 | 108 | 109  | 252 | 222 | 239  | --- | --- | ---  | 298 | 289 | 294  |
| 26    | 110 | 108 | 109  | 222 | 214 | 218  | --- | --- | ---  | 296 | 286 | 291  |
| 27    | 112 | 108 | 110  | 227 | 212 | 221  | 295 | 278 | 293  | 286 | 280 | 283  |
| 28    | 118 | 111 | 115  | 244 | 224 | 235  | 299 | 248 | 289  | 284 | 280 | 282  |
| 29    | 125 | 117 | 122  | 241 | 229 | 236  | 304 | 259 | 293  | 280 | 274 | 277  |
| 30    | 124 | 122 | 123  | 338 | 215 | 266  | 300 | 293 | 296  | 278 | 273 | 275  |
| 31    | --- | --- | ---  | 280 | 217 | 242  | 295 | 292 | 294  | --- | --- | ---  |
| MONTH | 600 | 94  | 116  | 673 | 118 | 188  | --- | --- | ---  | --- | --- | ---  |



07096000 ARKANSAS RIVER AT CANON CITY, CO--Continued

TEMPERATURE, WATER (DEG.C), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DAY   | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN | MAX    | MIN  | MEAN | MAX       | MIN  | MEAN |
|-------|------|------|------|------|------|------|--------|------|------|-----------|------|------|
|       | JUNE |      |      | JULY |      |      | AUGUST |      |      | SEPTEMBER |      |      |
| 1     | 16.2 | 13.2 | 14.6 | 18.5 | 16.1 | 17.3 | 20.9   | 18.1 | 19.7 | 20.1      | 18.4 | 19.2 |
| 2     | 16.3 | 13.9 | 15.1 | 19.0 | 16.5 | 17.8 | 21.1   | 16.6 | 19.4 | 18.5      | 17.3 | 17.9 |
| 3     | 16.0 | 13.8 | 15.0 | 19.5 | 16.6 | 18.1 | 20.5   | 18.5 | 19.3 | 19.2      | 16.5 | 17.8 |
| 4     | 15.5 | 14.6 | 15.1 | 19.0 | 17.2 | 18.3 | 20.2   | 17.5 | 18.9 | 19.7      | 17.1 | 18.4 |
| 5     | 16.0 | 13.3 | 14.7 | 19.2 | 17.0 | 18.1 | 20.0   | 16.8 | 18.6 | 19.6      | 17.2 | 18.4 |
| 6     | 15.8 | 13.3 | 14.7 | 19.1 | 17.0 | 18.2 | 20.7   | 17.8 | 19.4 | 19.0      | 17.3 | 18.2 |
| 7     | 15.8 | 13.0 | 14.4 | 19.3 | 17.4 | 18.5 | 20.9   | 18.2 | 19.4 | 18.8      | 16.0 | 17.5 |
| 8     | 15.8 | 12.7 | 14.4 | 18.4 | 17.7 | 18.0 | 21.0   | 17.4 | 19.1 | ---       | ---  | ---  |
| 9     | 15.0 | 13.2 | 14.3 | 18.6 | 16.3 | 17.5 | 19.8   | 17.1 | 18.7 | ---       | ---  | ---  |
| 10    | 14.7 | 12.7 | 13.7 | 19.9 | 16.2 | 18.2 | 20.5   | 17.4 | 18.9 | ---       | ---  | ---  |
| 11    | 14.3 | 12.4 | 13.4 | 19.8 | 17.6 | 18.8 | 20.2   | 16.6 | 18.6 | ---       | ---  | ---  |
| 12    | 15.2 | 12.7 | 13.8 | 20.5 | 17.7 | 18.9 | 20.6   | 17.1 | 19.0 | ---       | ---  | ---  |
| 13    | 15.2 | 12.7 | 14.0 | 19.9 | 17.9 | 19.0 | 20.6   | 17.4 | 19.2 | 18.0      | 17.1 | 17.8 |
| 14    | 14.9 | 13.3 | 14.1 | 20.6 | 17.6 | 19.1 | 20.1   | 18.2 | 19.4 | 17.1      | 16.1 | 16.4 |
| 15    | 14.3 | 12.8 | 13.6 | 20.7 | 18.2 | 19.5 | 19.9   | 17.5 | 18.6 | 17.2      | 15.5 | 16.3 |
| 16    | 14.4 | 12.0 | 13.1 | 20.7 | 18.3 | 19.6 | 20.0   | 17.2 | 18.4 | 18.0      | 15.6 | 16.8 |
| 17    | 16.0 | 12.4 | 14.2 | 20.3 | 18.6 | 19.6 | 20.5   | 16.6 | 18.5 | 17.6      | 15.4 | 16.9 |
| 18    | 16.6 | 13.3 | 15.0 | 21.2 | 18.8 | 19.9 | 20.8   | 17.7 | 19.0 | 15.4      | 14.2 | 14.8 |
| 19    | 16.5 | 13.3 | 15.0 | 21.0 | 18.5 | 19.9 | 20.1   | 17.6 | 18.8 | 14.2      | 12.4 | 13.3 |
| 20    | 17.7 | 14.5 | 16.2 | 21.4 | 18.3 | 20.0 | 20.5   | 17.4 | 18.9 | 13.9      | 12.3 | 13.0 |
| 21    | 17.3 | 15.3 | 16.2 | 22.0 | 19.1 | 20.7 | 20.3   | 18.1 | 19.0 | 14.1      | 12.5 | 13.4 |
| 22    | 16.4 | 14.0 | 15.1 | 21.6 | 18.8 | 20.3 | 19.1   | 17.8 | 18.4 | 15.1      | 13.4 | 14.3 |
| 23    | 16.1 | 13.3 | 14.8 | 21.3 | 18.6 | 19.9 | 20.9   | 17.3 | 18.9 | 15.8      | 14.6 | 15.2 |
| 24    | 17.2 | 14.1 | 15.6 | 20.7 | 18.9 | 19.8 | 21.7   | 17.7 | 19.5 | 16.0      | 14.4 | 15.2 |
| 25    | 16.4 | 14.3 | 15.4 | 20.1 | 18.8 | 19.5 | 22.0   | 18.5 | 20.2 | 15.9      | 14.9 | 15.4 |
| 26    | 17.1 | 14.3 | 15.8 | 20.3 | 17.8 | 19.0 | 22.0   | 19.3 | 20.4 | 14.9      | 11.6 | 13.1 |
| 27    | 16.6 | 15.0 | 15.7 | 20.4 | 17.6 | 19.1 | 20.5   | 15.5 | 19.1 | 12.3      | 11.1 | 11.7 |
| 28    | 16.9 | 14.2 | 15.4 | 19.8 | 18.1 | 18.9 | 20.2   | 15.5 | 18.1 | 12.7      | 11.2 | 12.0 |
| 29    | 16.7 | 14.3 | 15.6 | 19.3 | 18.3 | 18.8 | 19.7   | 16.7 | 18.3 | 13.4      | 12.1 | 12.8 |
| 30    | 18.2 | 15.5 | 16.7 | 20.5 | 17.3 | 19.0 | 20.2   | 18.2 | 19.1 | 14.1      | 12.9 | 13.5 |
| 31    | ---  | ---  | ---  | 21.3 | 19.0 | 20.2 | 21.1   | 18.1 | 19.5 | ---       | ---  | ---  |
| MONTH | 18.2 | 12.0 | 14.8 | 22.0 | 16.1 | 19.0 | 22.0   | 15.5 | 19.0 | ---       | ---  | ---  |

**07096250 FOURMILE CREEK BELOW CRIPPLE CREEK NEAR VICTOR, CO**

LOCATION.--Lat 38°39'52", 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 and 0.2 mi downstream from Cripple Creek.

DRAINAGE AREA.--272 mi<sup>2</sup>.

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

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 6,870 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 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

| DAY   | OCT  | NOV  | DEC  | JAN  | FEB   | MAR   | APR   | MAY   | JUN   | JUL  | AUG  | SEP  |
|-------|------|------|------|------|-------|-------|-------|-------|-------|------|------|------|
| 1     | 24   | 18   | 17   | 24   | e12   | 12    | 9.8   | 6.9   | 8.7   | 21   | 10   | 12   |
| 2     | 23   | 18   | 17   | e22  | e10   | 12    | 9.7   | 6.3   | 7.4   | 21   | 10   | 12   |
| 3     | 23   | 17   | 16   | 23   | e8.0  | 10    | 10    | 5.7   | 7.3   | 21   | 11   | 12   |
| 4     | 22   | 18   | 17   | 21   | e8.6  | 12    | 12    | 5.2   | 7.0   | 22   | 11   | 11   |
| 5     | 22   | 17   | 16   | 21   | e9.0  | 10    | 12    | 5.3   | 6.9   | 22   | 10   | 12   |
| 6     | 22   | 17   | 17   | e18  | e10   | 8.4   | 13    | 5.3   | 7.4   | 21   | 10   | 17   |
| 7     | 22   | 17   | 15   | e14  | e10   | 9.1   | 15    | 5.1   | 7.3   | 19   | 10   | 19   |
| 8     | 21   | 17   | 14   | e16  | e11   | 11    | 13    | 5.4   | 7.2   | 19   | 12   | 14   |
| 9     | 21   | 17   | 17   | 18   | e10   | 11    | 12    | 6.4   | 9.3   | 22   | 13   | 13   |
| 10    | 21   | 17   | 19   | 18   | e12   | 10    | 10    | 6.7   | 11    | 27   | 11   | 12   |
| 11    | 21   | 16   | 19   | 16   | 14    | 10    | 10    | 6.7   | 9.8   | 25   | 10   | 12   |
| 12    | 20   | 18   | 18   | 16   | 15    | 10    | 8.4   | 6.9   | 8.5   | 25   | 27   | 12   |
| 13    | 20   | 17   | 17   | 16   | 16    | 9.8   | 8.4   | 7.2   | 11    | 22   | 15   | 13   |
| 14    | 20   | 17   | 15   | 15   | 15    | 10    | 8.3   | 7.3   | 12    | 23   | 13   | 14   |
| 15    | 19   | 17   | 13   | 16   | 14    | 9.6   | 11    | 12    | 12    | 26   | 13   | 15   |
| 16    | 19   | 17   | 15   | 15   | 14    | 9.8   | 12    | 14    | 12    | 26   | 13   | 13   |
| 17    | 19   | 16   | 15   | 15   | 14    | 9.9   | 12    | 17    | 10    | 27   | 15   | 13   |
| 18    | 19   | 16   | 14   | e13  | 13    | 8.5   | 12    | 17    | 9.1   | 22   | 16   | 16   |
| 19    | 19   | 16   | 13   | e12  | 14    | 8.3   | 9.3   | 18    | 8.2   | 16   | 13   | 15   |
| 20    | 19   | 16   | 11   | e11  | 13    | 9.1   | 9.6   | 19    | 7.4   | 14   | 13   | 14   |
| 21    | 18   | 16   | 12   | e12  | 14    | 9.2   | 11    | 18    | 8.4   | 10   | 13   | 14   |
| 22    | 19   | 16   | 14   | e12  | 13    | 9.5   | 12    | 19    | 11    | 11   | 15   | 13   |
| 23    | 18   | 15   | 16   | e11  | 9.6   | 9.3   | 13    | 19    | 15    | 12   | 26   | 14   |
| 24    | 18   | 15   | 14   | e11  | 9.1   | 9.4   | 11    | 19    | 14    | 11   | 17   | 15   |
| 25    | 18   | 16   | 17   | e12  | 9.9   | 8.0   | 12    | 22    | 15    | 12   | 13   | 14   |
| 26    | 18   | 16   | 21   | e12  | 8.7   | 9.7   | 10    | 34    | 16    | 14   | 12   | 16   |
| 27    | 18   | 15   | 20   | e13  | 9.7   | 9.4   | 8.1   | 19    | 25    | 15   | 14   | 18   |
| 28    | 17   | 14   | 21   | e14  | 10    | 9.6   | 8.1   | 14    | 26    | 14   | 17   | 17   |
| 29    | 17   | 18   | e20  | e14  | 10    | 9.8   | 8.4   | 13    | 23    | 14   | 16   | 16   |
| 30    | 17   | 18   | e22  | e13  | ---   | 10    | 7.6   | 10    | 21    | 15   | 15   | 15   |
| 31    | 17   | ---  | 24   | e13  | ---   | 10    | ---   | 9.6   | ---   | 10   | 13   | ---  |
| TOTAL | 611  | 498  | 516  | 477  | 336.6 | 304.4 | 318.7 | 380.0 | 353.9 | 579  | 427  | 423  |
| MEAN  | 19.7 | 16.6 | 16.6 | 15.4 | 11.6  | 9.82  | 10.6  | 12.3  | 11.8  | 18.7 | 13.8 | 14.1 |
| MAX   | 24   | 18   | 24   | 24   | 16    | 12    | 15    | 34    | 26    | 27   | 27   | 19   |
| MIN   | 17   | 14   | 11   | 11   | 8.0   | 8.0   | 7.6   | 5.1   | 6.9   | 10   | 10   | 11   |
| AC-FT | 1210 | 988  | 1020 | 946  | 668   | 604   | 632   | 754   | 702   | 1150 | 847  | 839  |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1993 - 1996, BY WATER YEAR (WY)

|      | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 15.6 | 13.4 | 8.85 | 8.73 | 7.32 | 8.26 | 22.7 | 71.4 | 60.0 | 30.2 | 20.6 | 16.4 |
| 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 | 6.05 | 3.79 | 7.13 | 10.6 | 12.3 | 11.8 | 11.2 | 4.95 | 5.19 |
| (WY) | 1994 | 1994 | 1994 | 1995 | 1995 | 1995 | 1996 | 1996 | 1996 | 1993 | 1993 | 1993 |

## SUMMARY STATISTICS

## FOR 1995 CALENDAR YEAR

## FOR 1996 WATER YEAR

## WATER YEARS 1993 - 1996

|                          |         |        |       |
|--------------------------|---------|--------|-------|
| ANNUAL TOTAL             | 14070.4 | 5224.6 |       |
| ANNUAL MEAN              | 38.5    | 14.3   | 23.7  |
| HIGHEST ANNUAL MEAN      |         |        | 38.2  |
| LOWEST ANNUAL MEAN       |         |        | 12.6  |
| HIGHEST DAILY MEAN       | 195     | May 31 | 373   |
| LOWEST DAILY MEAN        | 2.5     | Mar 1  | 2.5   |
| ANNUAL SEVEN-DAY MINIMUM | 3.4     | Feb 5  | 3.4   |
| INSTANTANEOUS PEAK FLOW  |         |        | 70    |
| INSTANTANEOUS PEAK STAGE |         |        | 3.30  |
| ANNUAL RUNOFF (AC-FT)    | 27910   | 10360  | 17170 |
| 10 PERCENT EXCEEDS       | 97      | 21     | 56    |
| 50 PERCENT EXCEEDS       | 20      | 14     | 12    |
| 90 PERCENT EXCEEDS       | 5.0     | 8.5    | 5.7   |

e-Estimated.

a-From rating curve extended above 127 ft<sup>3</sup>/s.

**07096500 FOURMILE CREEK NEAR CANON CITY, CO**

LOCATION.--Lat 38°26'11", long 105°11'27", in NE¼SW¼ 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 mi<sup>2</sup>.

PERIOD OF RECORD.--April to October 1910 (gage heights and discharge measurements only), October 1948 to September 1953, November 1970 to current year. 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. April to October 1910, nonrecording gage at site 1,200 ft upstream at different datum. October 1948 to September 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 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

| DAY   | OCT  | NOV  | DEC  | JAN  | FEB  | MAR   | APR   | MAY  | JUN  | JUL  | AUG   | SEP  |
|-------|------|------|------|------|------|-------|-------|------|------|------|-------|------|
| 1     | 36   | e19  | e21  | 28   | 20   | 19    | e2.8  | 14   | 23   | 21   | 13    | 24   |
| 2     | 33   | e20  | e22  | 27   | 17   | 19    | e2.5  | 15   | 21   | 19   | 14    | 22   |
| 3     | 31   | e20  | e21  | 28   | 15   | 19    | e2.0  | 14   | 17   | 18   | 12    | 18   |
| 4     | 29   | e20  | e22  | 28   | 21   | 19    | e1.5  | 13   | 15   | 20   | 17    | 15   |
| 5     | 29   | e20  | e21  | 27   | 25   | 19    | e2.0  | 16   | 15   | 23   | 12    | 14   |
| 6     | e27  | e20  | e22  | 24   | 25   | 19    | e2.3  | 18   | 13   | 23   | 9.3   | 20   |
| 7     | e26  | e20  | e20  | 25   | 22   | 17    | e3.0  | 16   | 14   | 22   | 5.9   | 17   |
| 8     | e25  | e20  | e18  | 26   | 23   | 21    | e8.0  | 16   | 13   | 23   | 22    | 17   |
| 9     | e25  | e20  | e22  | 25   | 23   | 19    | 28    | 16   | 15   | 22   | 25    | 18   |
| 10    | e24  | e20  | e24  | 26   | 22   | 20    | 21    | 20   | 18   | 25   | 11    | 19   |
| 11    | e24  | e19  | e25  | 27   | 20   | 18    | 22    | 20   | 21   | 19   | 9.0   | 21   |
| 12    | e23  | e21  | e26  | 27   | 20   | 16    | 23    | 14   | 19   | 19   | 7.4   | 22   |
| 13    | e23  | e20  | 27   | 27   | 20   | 15    | 24    | 13   | 17   | 20   | 12    | 25   |
| 14    | e22  | e20  | 25   | 26   | 22   | 11    | 24    | 13   | 19   | 12   | 7.8   | 30   |
| 15    | e22  | e20  | 24   | 25   | 22   | 9.0   | 22    | 14   | 22   | 16   | 11    | 32   |
| 16    | e22  | e20  | 23   | 26   | 20   | 8.7   | 20    | 14   | 26   | 15   | 63    | 25   |
| 17    | e22  | e19  | 24   | 26   | 22   | 11    | 18    | 15   | 25   | 16   | 34    | 25   |
| 18    | e21  | e19  | 22   | 22   | 22   | e6.0  | 16    | 13   | 24   | 22   | 26    | 29   |
| 19    | e21  | e19  | 20   | 22   | 22   | e2.8  | 13    | 11   | 20   | 21   | 22    | 29   |
| 20    | e20  | e19  | 19   | 26   | 22   | e3.0  | 10    | 17   | 21   | 21   | 18    | 31   |
| 21    | e20  | e19  | 20   | 26   | 23   | e2.8  | 11    | 16   | 21   | 20   | 17    | 30   |
| 22    | e20  | e19  | 25   | 26   | 23   | e2.5  | 12    | 15   | 25   | 16   | 15    | 29   |
| 23    | e20  | e18  | 24   | 24   | 19   | e2.5  | 11    | 16   | 24   | 13   | 16    | 28   |
| 24    | e20  | e18  | 24   | 23   | 17   | e2.0  | 13    | 20   | 20   | 12   | 28    | 28   |
| 25    | e20  | e20  | 24   | 24   | 18   | e1.5  | 12    | 28   | 18   | 13   | 26    | 24   |
| 26    | e20  | e20  | 26   | 22   | 18   | e1.0  | 15    | 39   | 17   | 14   | 25    | 26   |
| 27    | e20  | e19  | 25   | 20   | 17   | e1.0  | 17    | 38   | 19   | 12   | 29    | 28   |
| 28    | e19  | e17  | 25   | 24   | 18   | e3.1  | 20    | 32   | 25   | 12   | 24    | 26   |
| 29    | e19  | e20  | 27   | 23   | 19   | e5.5  | 18    | 31   | 24   | 17   | 25    | 25   |
| 30    | e19  | e24  | 27   | 22   | ---  | e3.0  | 15    | 28   | 22   | 21   | 23    | 19   |
| 31    | e19  | ---  | 28   | 20   | ---  | e10   | ---   | 25   | ---  | 16   | 27    | ---  |
| TOTAL | 721  | 589  | 723  | 772  | 597  | 326.4 | 409.1 | 590  | 593  | 563  | 606.4 | 716  |
| MEAN  | 23.3 | 19.6 | 23.3 | 24.9 | 20.6 | 10.5  | 13.6  | 19.0 | 19.8 | 18.2 | 19.6  | 23.9 |
| MAX   | 36   | 24   | 28   | 28   | 25   | 21    | 28    | 39   | 26   | 25   | 63    | 32   |
| MIN   | 19   | 17   | 18   | 20   | 15   | 1.0   | 1.5   | 11   | 13   | 12   | 5.9   | 14   |
| AC-FT | 1430 | 1170 | 1430 | 1530 | 1180 | 647   | 811   | 1170 | 1180 | 1120 | 1200  | 1420 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1949 - 1996, BY WATER YEAR (WY)

|      | 1949 | 1950 | 1951 | 1952 | 1953 | 1954 | 1955 | 1956 | 1957 | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 | 1964 | 1965 | 1966 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 26.3 | 23.0 | 15.4 | 12.8 | 11.8 | 12.4 | 27.9 | 69.7 | 48.9 | 33.3 | 39.5 | 31.3 |      |      |      |      |      |      |
| MAX  | 92.3 | 67.5 | 35.5 | 28.0 | 36.2 | 36.8 | 103  | 354  | 207  | 181  | 264  | 234  |      |      |      |      |      |      |
| (WY) | 1985 | 1985 | 1978 | 1985 | 1983 | 1985 | 1985 | 1980 | 1983 | 1985 | 1984 | 1984 |      |      |      |      |      |      |
| MIN  | 1.74 | 3.20 | 3.77 | 3.20 | 2.79 | .94  | 1.61 | 2.25 | 1.71 | 1.83 | 1.70 | .85  |      |      |      |      |      |      |
| (WY) | 1953 | 1953 | 1953 | 1952 | 1952 | 1953 | 1950 | 1950 | 1953 | 1952 | 1951 | 1950 |      |      |      |      |      |      |

SUMMARY STATISTICS

|                          | FOR 1995 CALENDAR YEAR | FOR 1996 WATER YEAR | WATER YEARS 1949 - 1996 |
|--------------------------|------------------------|---------------------|-------------------------|
| ANNUAL TOTAL             | 20213.4                | 7205.9              |                         |
| ANNUAL MEAN              | 55.4                   | 19.7                | 30.0                    |
| HIGHEST ANNUAL MEAN      |                        |                     | 95.1                    |
| LOWEST ANNUAL MEAN       |                        |                     | 3.04                    |
| HIGHEST DAILY MEAN       | 419                    | 63                  | 1110                    |
| LOWEST DAILY MEAN        | 6.4                    | e <sup>a</sup> 1.0  | b.00                    |
| ANNUAL SEVEN-DAY MINIMUM | 7.0                    | 1.9                 | c.00                    |
| INSTANTANEOUS PEAK FLOW  |                        | c <sup>852</sup>    | d <sup>4260</sup>       |
| INSTANTANEOUS PEAK STAGE |                        | 4.62                | f <sup>9.25</sup>       |
| ANNUAL RUNOFF (AC-FT)    | 40090                  | 14290               | 21700                   |
| 10 PERCENT EXCEEDS       | 169                    | 27                  | 56                      |
| 50 PERCENT EXCEEDS       | 24                     | 20                  | 17                      |
| 90 PERCENT EXCEEDS       | 11                     | 11                  | 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 760 ft<sup>3</sup>/s, on basis of slope-area measurement of peak flow.

d-From rating curve extended above 96 ft<sup>3</sup>/s, on basis of slope-area measurement of peak flow.

f-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 mi<sup>2</sup>.

**WATER-DISCHARGE RECORDS**

PERIOD OF RECORD.--May 1939 to September 1952, October 1974 to current year.

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 5,021.59 ft above sea level. Prior to Oct. 1, 1974, at site 400 ft downstream at datum 0.03 ft, lower.

REMARKS.--Records good except for estimated daily discharges, which are poor. Natural flow of stream affected by transmountain diversions, storage reservoirs, power developments, diversions upstream from station for irrigation of about 60,000 acres and return flow from irrigated areas.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

| DAY   | OCT   | NOV   | DEC   | JAN   | FEB   | MAR   | APR   | MAY    | JUN    | JUL   | AUG   | SEP   |
|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------|-------|-------|-------|
| 1     | 702   | 511   | 503   | 410   | 437   | 306   | 329   | 730    | 1230   | 1930  | 694   | e270  |
| 2     | 654   | 540   | 511   | 383   | e390  | 318   | 318   | 722    | 1230   | 1780  | 751   | e255  |
| 3     | 647   | 544   | 489   | 391   | e365  | 317   | 322   | 719    | 1290   | 1550  | 707   | e242  |
| 4     | 642   | 517   | 481   | 422   | e370  | 319   | 379   | 680    | 1570   | 1520  | 696   | e225  |
| 5     | 642   | 530   | 473   | e431  | e390  | 336   | 416   | 685    | 2120   | 1660  | 659   | 220   |
| 6     | 638   | 542   | 481   | e414  | e440  | 360   | 429   | 746    | 2810   | 1810  | 612   | 270   |
| 7     | 636   | 551   | 473   | e410  | 447   | 340   | 431   | 870    | 3160   | 1860  | 645   | 374   |
| 8     | 627   | 580   | 465   | 424   | 467   | 353   | 455   | 1040   | 3500   | 1800  | 766   | 294   |
| 9     | 620   | 585   | 440   | 426   | 437   | 346   | 454   | 1130   | 3780   | 1900  | 893   | 271   |
| 10    | 600   | 580   | 430   | 428   | 429   | 352   | 529   | 1360   | 3840   | 1850  | 757   | 256   |
| 11    | 570   | 575   | 439   | 418   | 422   | 349   | 553   | 1480   | 3800   | 1460  | 760   | 248   |
| 12    | 560   | 551   | 442   | 408   | 410   | 345   | 525   | 1500   | 3690   | 1460  | 685   | 254   |
| 13    | 567   | 568   | 441   | 409   | 385   | 335   | 496   | 1670   | 3290   | 1280  | 590   | 391   |
| 14    | 593   | 564   | 436   | 404   | 361   | 354   | 507   | 2160   | 3240   | 1170  | 615   | e330  |
| 15    | 577   | 573   | 419   | 409   | 341   | 355   | 535   | 2480   | 3420   | 1100  | 640   | e310  |
| 16    | 556   | 563   | 386   | 424   | 337   | 343   | 511   | 2530   | 3270   | 987   | 736   | e320  |
| 17    | 527   | 549   | 392   | 441   | 337   | 395   | 482   | 3230   | 2960   | 950   | 599   | e320  |
| 18    | 516   | 549   | 384   | 419   | 341   | 435   | 492   | 3920   | 2750   | 945   | 505   | e305  |
| 19    | 514   | 538   | 356   | e400  | 345   | 387   | 485   | 3990   | 2640   | 1010  | 449   | e310  |
| 20    | 534   | 536   | 341   | e380  | 337   | 364   | 442   | 4320   | 2410   | 998   | 437   | 312   |
| 21    | 551   | 540   | e330  | 411   | 345   | 368   | 535   | 4260   | 2390   | 948   | 420   | 351   |
| 22    | 545   | 531   | 349   | 408   | 365   | 369   | 608   | 3830   | 3230   | 897   | 368   | 322   |
| 23    | 541   | 516   | 329   | 407   | 361   | 362   | 590   | 3480   | 3610   | 885   | 398   | 279   |
| 24    | 520   | 509   | e340  | e400  | 341   | 376   | 590   | 3020   | 3060   | 916   | 439   | 283   |
| 25    | 502   | 502   | e350  | 408   | 326   | 370   | 643   | 2440   | 2770   | 891   | 338   | 304   |
| 26    | 519   | 502   | e360  | e375  | 333   | 350   | 743   | 2440   | 2690   | 797   | 268   | 359   |
| 27    | 521   | 514   | e360  | e390  | 326   | 386   | 797   | 1980   | 2600   | 748   | 291   | 389   |
| 28    | 517   | 500   | e360  | 424   | 317   | 346   | 844   | 1410   | 2480   | 690   | 422   | 393   |
| 29    | 513   | 447   | e355  | 427   | 294   | 349   | 817   | 1590   | 2240   | 722   | 357   | 389   |
| 30    | 507   | 477   | 385   | 425   | ---   | 327   | 743   | 1400   | 2040   | 917   | e310  | 365   |
| 31    | 500   | ---   | 386   | 422   | ---   | 308   | ---   | 1260   | ---    | 823   | e290  | ---   |
| TOTAL | 17658 | 16084 | 12686 | 12748 | 10796 | 10920 | 16000 | 63072  | 83110  | 38254 | 17097 | 9211  |
| MEAN  | 570   | 536   | 409   | 411   | 372   | 352   | 533   | 2035   | 2770   | 1234  | 552   | 307   |
| MAX   | 702   | 585   | 511   | 441   | 467   | 435   | 844   | 4320   | 3840   | 1930  | 893   | 393   |
| MIN   | 500   | 447   | 329   | 375   | 294   | 306   | 318   | 680    | 1230   | 690   | 268   | 220   |
| AC-FT | 35020 | 31900 | 25160 | 25290 | 21410 | 21660 | 31740 | 125100 | 164800 | 75880 | 33910 | 18270 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 1996, 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 |  |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|--|
| MEAN | 395  | 416  | 375  | 350  | 343  | 359  | 515  | 1203 | 2514 | 1619 | 943  | 455  |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |  |
| MAX  | 1083 | 748  | 693  | 626  | 774  | 683  | 1869 | 2680 | 4429 | 4472 | 2380 | 1008 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |  |
| (WY) | 1985 | 1985 | 1983 | 1983 | 1985 | 1989 | 1942 | 1984 | 1980 | 1995 | 1984 | 1982 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |  |
| MIN  | 136  | 191  | 212  | 199  | 162  | 147  | 135  | 245  | 581  | 242  | 201  | 172  |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |  |
| (WY) | 1978 | 1978 | 1978 | 1979 | 1978 | 1978 | 1981 | 1977 | 1977 | 1977 | 1977 | 1977 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |  |

SUMMARY STATISTICS FOR 1995 CALENDAR YEAR FOR 1996 WATER YEAR WATER YEARS 1939 - 1996

|                          |         |        |      |        |        |        |       |      |
|--------------------------|---------|--------|------|--------|--------|--------|-------|------|
| ANNUAL TOTAL             | 506253  | 307636 |      |        |        |        |       |      |
| ANNUAL MEAN              | 1387    | 841    |      | 798    |        |        |       |      |
| HIGHEST ANNUAL MEAN      |         |        |      | 1387   |        |        |       |      |
| LOWEST ANNUAL MEAN       |         |        |      | 315    |        |        |       |      |
| HIGHEST DAILY MEAN       | 6830    | Jun 18 | 4320 | May 20 | 7460   | Jun 8  | 1942  |      |
| LOWEST DAILY MEAN        | 329     | Dec 23 | 220  | Sep 5  | 66     | Oct 28 | 1977  |      |
| ANNUAL SEVEN-DAY MINIMUM | 342     | Dec 19 | 253  | Aug 31 | 76     | Oct 24 | 1977  |      |
| INSTANTANEOUS PEAK FLOW  |         |        | 4620 | May 20 | a21100 | Jun 5  | 1949  |      |
| INSTANTANEOUS PEAK STAGE |         |        | 6.64 | May 20 |        | 12.18  | Jun 5 | 1949 |
| ANNUAL RUNOFF (AC-FT)    | 1004000 | 610200 |      |        | 578100 |        |       |      |
| 10 PERCENT EXCEEDS       | 4000    | 2180   |      |        | 1910   |        |       |      |
| 50 PERCENT EXCEEDS       | 606     | 502    |      |        | 456    |        |       |      |
| 90 PERCENT EXCEEDS       | 389     | 327    |      |        | 222    |        |       |      |

e-Estimated.

a-From rating curve extended above 5300 ft<sup>3</sup>/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 good except May 17 to Sept. 19, which are fair. Water temperature records good except Sept. 19-30, which are poor. Specific conductance data may not be representative of the cross section at the site during flash floods. Periodic water-quality data available Feb. 1977 to Sept. 1995 under National Stream-Quality Accounting Network (NASQAN) for this site.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily observed, 1,380 microsiemens, 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, 680 microsiemens, July 10; minimum, 133 microsiemens, June 23.

WATER TEMPERATURES: Maximum, 25.3°C, Aug. 26; minimum, 0.0°C, many days during the winter months.

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM @ 25 DEG. C), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DAY   | OCTOBER |     |      | NOVEMBER |     |      | DECEMBER |     |      | JANUARY |     |      |
|-------|---------|-----|------|----------|-----|------|----------|-----|------|---------|-----|------|
|       | MAX     | MIN | MEAN | MAX      | MIN | MEAN | MAX      | MIN | MEAN | MAX     | MIN | MEAN |
| 1     | 431     | 410 | 426  | 485      | 459 | 471  | 504      | 475 | 483  | 513     | 494 | 504  |
| 2     | 439     | 407 | 431  | 484      | 462 | 473  | 480      | 465 | 472  | 564     | 441 | 504  |
| 3     | 439     | 395 | 429  | 490      | 433 | 468  | 490      | 468 | 476  | 552     | 505 | 533  |
| 4     | 432     | 379 | 422  | 487      | 452 | 477  | 486      | 475 | 480  | 534     | 502 | 521  |
| 5     | 440     | 421 | 435  | 485      | 433 | 468  | 493      | 464 | 477  | 509     | 488 | 498  |
| 6     | 434     | 377 | 424  | 476      | 439 | 463  | 513      | 468 | 478  | 533     | 478 | 501  |
| 7     | 446     | 394 | 428  | 471      | 417 | 448  | 485      | 468 | 478  | 525     | 460 | 508  |
| 8     | 444     | 405 | 430  | 460      | 404 | 436  | 494      | 472 | 482  | 507     | 488 | 499  |
| 9     | 442     | 410 | 429  | 443      | 401 | 429  | 500      | 459 | 480  | 496     | 479 | 487  |
| 10    | 443     | 385 | 423  | 432      | 415 | 427  | 513      | 474 | 491  | 496     | 473 | 483  |
| 11    | 448     | 375 | 420  | 440      | 400 | 430  | 510      | 484 | 494  | 506     | 479 | 492  |
| 12    | 450     | 393 | 434  | 452      | 421 | 438  | 496      | 482 | 491  | 522     | 490 | 502  |
| 13    | 446     | 394 | 431  | 438      | 417 | 431  | 491      | 476 | 484  | 517     | 492 | 502  |
| 14    | 438     | 380 | 418  | 442      | 425 | 434  | 485      | 477 | 481  | 510     | 489 | 500  |
| 15    | 441     | 364 | 413  | 443      | 415 | 430  | 494      | 471 | 481  | 509     | 471 | 497  |
| 16    | 444     | 387 | 428  | 445      | 425 | 435  | 512      | 483 | 496  | 505     | 485 | 494  |
| 17    | 450     | 408 | 435  | 452      | 431 | 443  | 545      | 497 | 507  | 503     | 489 | 496  |
| 18    | 448     | 399 | 439  | 455      | 432 | 442  | 523      | 494 | 503  | 530     | 461 | 488  |
| 19    | 453     | 403 | 439  | 450      | 432 | 442  | 534      | 474 | 506  | 569     | 471 | 512  |
| 20    | 456     | 412 | 442  | 476      | 421 | 444  | 548      | 467 | 511  | 556     | 484 | 524  |
| 21    | 461     | 406 | 445  | 472      | 429 | 450  | 570      | 489 | 523  | 540     | 425 | 494  |
| 22    | 468     | 414 | 451  | 478      | 446 | 459  | 549      | 525 | 533  | 555     | 500 | 519  |
| 23    | 470     | 414 | 450  | 468      | 449 | 458  | 588      | 508 | 539  | 523     | 477 | 504  |
| 24    | 470     | 422 | 459  | 472      | 450 | 460  | 602      | 500 | 545  | 543     | 457 | 492  |
| 25    | 499     | 432 | 468  | 471      | 453 | 463  | 609      | 496 | 565  | 524     | 492 | 507  |
| 26    | 499     | 456 | 482  | 473      | 446 | 463  | 587      | 488 | 550  | 529     | 445 | 485  |
| 27    | 491     | 432 | 471  | 464      | 449 | 458  | 581      | 493 | 536  | 580     | 474 | 518  |
| 28    | 492     | 457 | 474  | 471      | 444 | 461  | 591      | 499 | 525  | 548     | 504 | 523  |
| 29    | 487     | 463 | 477  | 498      | 470 | 484  | 560      | 494 | 535  | 533     | 484 | 504  |
| 30    | 485     | 466 | 476  | 503      | 478 | 490  | 532      | 503 | 522  | 513     | 461 | 490  |
| 31    | 494     | 441 | 476  | ---      | --- | ---  | 563      | 504 | 521  | 527     | 466 | 491  |
| MONTH | 499     | 364 | 442  | 503      | 400 | 452  | 609      | 459 | 505  | 580     | 425 | 502  |



07097000 ARKANSAS RIVER AT PORTLAND, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DAY   | MAX      | MIN  | MEAN | MAX      | MIN | MEAN | MAX      | MIN  | MEAN | MAX     | MIN  | MEAN |
|-------|----------|------|------|----------|-----|------|----------|------|------|---------|------|------|
|       | OCTOBER  |      |      | NOVEMBER |     |      | DECEMBER |      |      | JANUARY |      |      |
| 1     | 14.3     | 10.5 | 12.5 | 9.0      | 7.1 | 8.4  | 8.3      | 4.7  | 6.4  | 2.2     | .5   | 1.4  |
| 2     | 14.7     | 10.2 | 12.5 | 7.1      | 4.2 | 5.8  | 7.8      | 4.7  | 6.1  | 1.6     | .0   | .5   |
| 3     | 15.0     | 9.9  | 12.4 | 6.2      | 2.3 | 4.3  | 7.2      | 4.3  | 5.7  | 2.4     | .0   | 1.0  |
| 4     | 12.6     | 10.1 | 11.5 | 6.8      | 3.3 | 5.1  | 7.5      | 4.0  | 5.7  | 3.4     | .9   | 2.0  |
| 5     | 12.7     | 8.2  | 10.5 | 7.7      | 3.4 | 5.5  | 6.6      | 4.9  | 5.7  | 1.4     | .2   | .7   |
| 6     | 12.2     | 7.5  | 9.9  | 7.2      | 4.9 | 6.0  | 7.4      | 3.7  | 5.4  | .6      | .1   | .3   |
| 7     | 12.8     | 7.6  | 10.2 | 7.5      | 4.0 | 5.7  | 5.5      | 4.0  | 4.8  | .5      | .2   | .3   |
| 8     | 13.2     | 8.4  | 10.9 | 8.6      | 3.9 | 6.1  | 4.8      | 1.9  | 3.8  | 3.9     | .4   | 1.8  |
| 9     | 12.3     | 8.8  | 10.6 | 9.4      | 5.6 | 7.4  | 2.2      | .0   | 1.1  | 3.8     | .4   | 2.1  |
| 10    | 14.0     | 8.8  | 11.1 | 7.3      | 5.2 | 6.5  | 4.2      | .2   | 2.3  | 4.1     | .6   | 2.2  |
| 11    | 14.8     | 9.7  | 11.9 | 8.1      | 3.8 | 5.9  | 5.9      | 2.9  | 4.3  | 4.5     | .4   | 2.2  |
| 12    | 14.6     | 10.3 | 12.4 | 9.4      | 5.4 | 7.2  | 6.5      | 3.8  | 5.2  | 4.8     | .6   | 2.6  |
| 13    | 14.1     | 10.2 | 12.2 | 8.8      | 5.9 | 7.3  | 8.2      | 5.5  | 6.5  | 5.2     | 1.4  | 3.1  |
| 14    | 13.4     | 8.8  | 10.9 | 10.0     | 5.5 | 7.7  | 6.9      | 4.8  | 5.6  | 4.9     | 1.1  | 2.8  |
| 15    | 13.8     | 8.9  | 11.1 | 9.6      | 5.9 | 7.7  | 5.5      | 2.9  | 4.2  | 4.8     | 1.0  | 2.8  |
| 16    | 13.8     | 9.6  | 11.5 | 10.0     | 6.3 | 7.9  | 4.0      | 2.1  | 3.1  | 5.5     | 1.9  | 3.9  |
| 17    | 13.9     | 9.9  | 11.8 | 9.7      | 6.0 | 7.8  | 3.6      | 1.4  | 2.6  | 4.7     | 1.5  | 3.3  |
| 18    | 13.9     | 9.2  | 11.5 | 9.4      | 5.9 | 7.5  | 3.5      | 1.1  | 2.2  | 2.2     | .2   | .9   |
| 19    | 12.8     | 9.3  | 11.0 | 9.2      | 5.6 | 7.3  | 2.7      | .1   | 1.2  | 1.0     | .1   | .5   |
| 20    | 11.9     | 7.5  | 9.5  | 8.2      | 4.8 | 6.5  | 1.8      | .0   | .7   | 2.8     | .2   | 1.3  |
| 21    | 12.0     | 7.4  | 9.5  | 7.6      | 3.7 | 5.8  | 1.5      | .0   | .4   | 3.2     | .1   | 1.4  |
| 22    | 10.1     | 7.5  | 8.8  | 7.6      | 4.5 | 5.9  | 2.2      | .2   | 1.0  | 3.5     | .2   | 1.7  |
| 23    | 9.2      | 5.2  | 7.2  | 8.0      | 4.7 | 6.1  | 1.8      | .0   | .6   | 2.1     | .2   | .8   |
| 24    | 9.1      | 4.4  | 6.8  | 7.1      | 4.4 | 5.5  | .5       | .0   | .1   | 2.3     | .1   | .8   |
| 25    | 10.1     | 5.2  | 7.5  | 8.0      | 4.1 | 5.9  | 1.4      | .0   | .3   | 2.2     | .0   | .8   |
| 26    | 11.0     | 6.7  | 8.6  | 7.8      | 4.8 | 6.1  | .9       | .0   | .2   | .6      | .1   | .2   |
| 27    | 11.2     | 7.0  | 9.0  | 5.8      | 3.9 | 5.3  | .8       | .0   | .1   | .4      | .1   | .2   |
| 28    | 10.2     | 6.5  | 8.4  | 4.2      | 1.9 | 3.1  | .2       | .0   | .0   | 1.6     | .1   | .6   |
| 29    | 9.6      | 6.4  | 8.2  | 6.4      | 2.8 | 4.3  | .5       | .0   | .1   | 3.1     | .1   | 1.3  |
| 30    | 10.6     | 6.9  | 8.7  | 7.3      | 3.9 | 5.4  | 1.4      | .0   | .5   | 1.7     | .1   | .6   |
| 31    | 10.7     | 6.6  | 8.5  | ---      | --- | ---  | 2.7      | .2   | 1.4  | .3      | .0   | .2   |
| MONTH | 15.0     | 4.4  | 10.2 | 10.0     | 1.9 | 6.2  | 8.3      | .0   | 2.8  | 5.5     | .0   | 1.4  |
| DAY   | MAX      | MIN  | MEAN | MAX      | MIN | MEAN | MAX      | MIN  | MEAN | MAX     | MIN  | MEAN |
|       | FEBRUARY |      |      | MARCH    |     |      | APRIL    |      |      | MAY     |      |      |
| 1     | .3       | .2   | .2   | 5.8      | .1  | 2.8  | 15.0     | 7.2  | 11.1 | 15.6    | 10.1 | 12.4 |
| 2     | .3       | .2   | .3   | 7.8      | 1.3 | 4.2  | 15.3     | 9.1  | 12.2 | 16.3    | 10.3 | 13.1 |
| 3     | .3       | .2   | .3   | 9.0      | 2.1 | 5.5  | 12.7     | 9.9  | 11.2 | 16.8    | 10.9 | 13.7 |
| 4     | .3       | .0   | .2   | 10.6     | 4.6 | 7.4  | 10.1     | 6.3  | 8.4  | 18.7    | 11.9 | 15.0 |
| 5     | .4       | .0   | .2   | 10.3     | 5.6 | 7.8  | 9.7      | 5.2  | 7.0  | 17.6    | 13.7 | 15.4 |
| 6     | 2.4      | .2   | 1.1  | 7.6      | 2.7 | 4.8  | 13.7     | 5.4  | 9.4  | 19.0    | 13.3 | 16.0 |
| 7     | 4.7      | 1.0  | 2.7  | 6.2      | .4  | 3.1  | 14.3     | 8.6  | 11.3 | 19.9    | 14.9 | 17.0 |
| 8     | 5.1      | 1.9  | 3.4  | 7.3      | 1.8 | 4.4  | 15.7     | 9.6  | 12.4 | 18.2    | 13.4 | 15.6 |
| 9     | 7.8      | 2.0  | 4.6  | 9.4      | 2.7 | 6.0  | 16.5     | 10.0 | 13.5 | 18.0    | 13.6 | 15.2 |
| 10    | 6.8      | 4.1  | 5.3  | 10.9     | 5.0 | 8.2  | 15.0     | 11.0 | 13.0 | 15.7    | 12.3 | 13.9 |
| 11    | 5.9      | 2.6  | 4.3  | 12.5     | 7.5 | 9.9  | 15.5     | 10.0 | 12.5 | 16.6    | 13.1 | 14.5 |
| 12    | 6.5      | 2.0  | 4.0  | 13.2     | 8.1 | 10.5 | 15.9     | 10.0 | 12.6 | 17.4    | 13.0 | 14.9 |
| 13    | 7.1      | 2.2  | 4.5  | 12.3     | 7.9 | 10.3 | 13.0     | 8.6  | 11.2 | 16.9    | 13.8 | 15.2 |
| 14    | 7.2      | 2.9  | 4.9  | 9.9      | 6.6 | 8.1  | 12.3     | 6.8  | 9.1  | 16.1    | 13.3 | 14.8 |
| 15    | 7.6      | 2.8  | 5.2  | 12.3     | 6.4 | 9.2  | 13.5     | 6.5  | 9.8  | 15.7    | 13.0 | 14.2 |
| 16    | 7.3      | 2.0  | 4.7  | 12.6     | 7.1 | 9.8  | 15.1     | 8.3  | 11.3 | 16.3    | 13.3 | 14.8 |
| 17    | 8.8      | 3.6  | 6.0  | 9.9      | 7.3 | 8.4  | 15.7     | 9.7  | 12.5 | 16.0    | 13.6 | 14.8 |
| 18    | 8.0      | 4.6  | 6.5  | 9.6      | 5.6 | 7.3  | 15.9     | 9.6  | 12.5 | 15.7    | 13.2 | 14.4 |
| 19    | 8.1      | 4.3  | 6.2  | 9.7      | 3.7 | 6.6  | 13.4     | 7.8  | 10.5 | 15.0    | 12.6 | 13.8 |
| 20    | ---      | ---  | ---  | 10.5     | 3.7 | 7.0  | 9.9      | 6.8  | 8.4  | 14.8    | 12.8 | 13.6 |
| 21    | ---      | ---  | ---  | 12.3     | 5.8 | 9.1  | 11.3     | 5.9  | 8.3  | 14.3    | 12.0 | 13.2 |
| 22    | ---      | ---  | ---  | 12.0     | 6.6 | 9.3  | 12.7     | 7.3  | 9.5  | 14.8    | 11.9 | 13.6 |
| 23    | ---      | ---  | ---  | 13.4     | 7.6 | 10.1 | 15.1     | 7.5  | 11.0 | 15.8    | 12.8 | 14.2 |
| 24    | ---      | ---  | ---  | 10.1     | 5.2 | 7.8  | 16.5     | 10.5 | 13.2 | 14.4    | 12.3 | 13.1 |
| 25    | ---      | ---  | ---  | 6.4      | 2.5 | 4.4  | 16.4     | 11.5 | 13.7 | 13.1    | 11.2 | 12.1 |
| 26    | ---      | ---  | ---  | 8.7      | 1.6 | 5.0  | 16.5     | 10.8 | 13.6 | 12.3    | 10.4 | 11.3 |
| 27    | 4.8      | ---  | ---  | 11.3     | 3.6 | 7.3  | 16.5     | 11.7 | 13.8 | 13.0    | 9.7  | 11.3 |
| 28    | 3.7      | .4   | 1.9  | 13.0     | 6.1 | 9.5  | 13.1     | 9.3  | 10.8 | 13.1    | 11.5 | 12.0 |
| 29    | 4.8      | .1   | 2.0  | 12.3     | 7.2 | 9.8  | 11.9     | 6.4  | 9.0  | 16.2    | 11.6 | 13.6 |
| 30    | ---      | ---  | ---  | 14.1     | 8.4 | 11.1 | 13.7     | 7.1  | 10.2 | 18.2    | 13.9 | 15.7 |
| 31    | ---      | ---  | ---  | 12.8     | 7.2 | 10.0 | ---      | ---  | ---  | 18.3    | 13.7 | 15.7 |
| MONTH | ---      | ---  | ---  | 14.1     | .1  | 7.6  | 16.5     | 5.2  | 11.1 | 19.9    | 9.7  | 14.1 |

## ARKANSAS RIVER BASIN

## 07097000 ARKANSAS RIVER AT PORTLAND, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DAY   | MAX  | MIN  | MEAN |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|
|       |      |      |      |      |      |      |      |      |      |      |      |      |
| 1     | 18.5 | 14.0 | 16.0 | 20.5 | 16.9 | 18.5 | 25.0 | 19.3 | 21.9 | 24.0 | 18.6 | 21.1 |
| 2     | 18.9 | 14.5 | 16.4 | 21.3 | 17.1 | 18.9 | 22.6 | 19.7 | 21.2 | 20.5 | 17.3 | 19.0 |
| 3     | 18.9 | 14.4 | 16.4 | 21.7 | 17.6 | 19.4 | 22.8 | 19.3 | 20.9 | 23.6 | 16.5 | 20.0 |
| 4     | 18.4 | 14.5 | 16.2 | 21.7 | 18.1 | 19.5 | 23.6 | 18.9 | 20.9 | 23.7 | 17.3 | 20.5 |
| 5     | 16.3 | 14.7 | 15.6 | 21.5 | 18.2 | 19.4 | 23.6 | 18.3 | 20.6 | 23.8 | 17.3 | 20.5 |
| 6     | 16.6 | 14.7 | 15.7 | 21.6 | 17.5 | 19.3 | 24.6 | 18.4 | 21.2 | 20.8 | 17.9 | 19.4 |
| 7     | 16.5 | 14.0 | 15.3 | 21.2 | 18.4 | 19.6 | 23.8 | 19.0 | 21.0 | 22.1 | 16.0 | 18.9 |
| 8     | 16.6 | 13.9 | 15.3 | 19.3 | 18.0 | 18.8 | 23.2 | 18.8 | 20.8 | 22.3 | 16.2 | 19.3 |
| 9     | 16.0 | 14.3 | 15.1 | 20.2 | 17.0 | 18.5 | 22.8 | 18.1 | 20.3 | 22.8 | 16.5 | 19.6 |
| 10    | 15.1 | 13.3 | 14.5 | 21.4 | 17.5 | 19.2 | 23.9 | 18.8 | 21.1 | 22.9 | 16.8 | 19.8 |
| 11    | 15.2 | 13.2 | 14.3 | 22.8 | 18.5 | 20.3 | 23.5 | 18.1 | 20.6 | 21.0 | 16.6 | 19.0 |
| 12    | 16.0 | 13.1 | 14.6 | 22.3 | 18.6 | 19.8 | 24.0 | 18.4 | 21.0 | 19.3 | 16.9 | 18.0 |
| 13    | 15.8 | 13.7 | 14.9 | 21.9 | 18.8 | 20.2 | 24.0 | 18.4 | 21.0 | 20.7 | 15.5 | 17.6 |
| 14    | 15.6 | 14.2 | 14.9 | 22.8 | 18.5 | 20.4 | 23.9 | 19.1 | 21.3 | 18.2 | 15.5 | 16.8 |
| 15    | 15.6 | 13.9 | 14.7 | 23.2 | 19.0 | 20.9 | 23.1 | 18.9 | 20.7 | 20.2 | 15.4 | 17.6 |
| 16    | 15.7 | 12.8 | 14.1 | 23.4 | 19.4 | 21.1 | 22.9 | 15.6 | 20.0 | 20.4 | 15.6 | 17.9 |
| 17    | 16.5 | 13.5 | 15.0 | 24.0 | 19.0 | 21.1 | 23.7 | 15.5 | 19.8 | 19.4 | 16.1 | 17.7 |
| 18    | 17.4 | 14.6 | 16.0 | 23.6 | 19.7 | 21.2 | 23.6 | 18.1 | 20.8 | 17.3 | 14.0 | 15.7 |
| 19    | 17.2 | 14.7 | 16.1 | 24.1 | 19.7 | 21.5 | 23.4 | 18.6 | 20.9 | 16.5 | 11.0 | 13.9 |
| 20    | 19.0 | 15.9 | 17.2 | 24.1 | 19.6 | 21.7 | 24.2 | 18.4 | 21.0 | 16.3 | 11.4 | 13.8 |
| 21    | 17.9 | 16.2 | 17.2 | 25.0 | 20.4 | 22.4 | 23.8 | 18.7 | 20.8 | 17.6 | 10.9 | 14.2 |
| 22    | 17.1 | 15.4 | 15.9 | 24.8 | 20.4 | 22.4 | 20.9 | 19.0 | 19.9 | 18.1 | 12.1 | 15.1 |
| 23    | 17.1 | 14.4 | 15.7 | 24.4 | 19.5 | 21.7 | 23.7 | 18.3 | 20.6 | 18.3 | 13.9 | 16.5 |
| 24    | 18.1 | 15.3 | 16.6 | 23.8 | 19.3 | 21.3 | 25.0 | 19.0 | 21.5 | 18.8 | 13.5 | 16.0 |
| 25    | 17.4 | 15.5 | 16.5 | 22.6 | 19.8 | 20.9 | 24.2 | 19.5 | 21.9 | 17.0 | 13.6 | 15.4 |
| 26    | 18.2 | 15.4 | 16.7 | 23.6 | 18.5 | 20.8 | 25.3 | 19.8 | 22.2 | 14.5 | 10.5 | 12.1 |
| 27    | 17.6 | 15.7 | 16.8 | 23.6 | 18.4 | 20.9 | 23.4 | 19.0 | 21.2 | 13.5 | 8.0  | 10.8 |
| 28    | 17.9 | 15.0 | 16.4 | 23.4 | 18.7 | 20.7 | 22.7 | 17.8 | 20.3 | 15.0 | 8.5  | 11.6 |
| 29    | 17.7 | 15.4 | 16.7 | 21.4 | 19.0 | 20.1 | 23.0 | 17.9 | 20.5 | 16.3 | 10.1 | 13.2 |
| 30    | 19.3 | 16.4 | 17.5 | 23.7 | 18.6 | 20.9 | 23.5 | 18.8 | 21.0 | 16.7 | 11.0 | 13.8 |
| 31    | ---  | ---  | ---  | 24.6 | 19.6 | 21.7 | 24.5 | 18.7 | 21.5 | ---  | ---  | ---  |
| MONTH | 19.3 | 12.8 | 15.8 | 25.0 | 16.9 | 20.4 | 25.3 | 15.5 | 20.9 | 24.0 | 8.0  | 16.8 |

**07099050 BEAVER CREEK ABOVE UPPER BEAVER CEMETERY, NEAR PENROSE, CO**

LOCATION.--Lat 38°33'42", long 105°01'17", in SE<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec.20, T.17 S., R.68 W., Fremont County, Hydrologic Unit 11020002, on left bank 40 ft upstream from bridge on Fremont County Road 132, 1 mi downstream from Banta Gulch, 1.3 mi northeast of Upper Beaver Cemetery, and 9.2 mi north of Penrose.

DRAINAGE AREA.--122 mi<sup>2</sup>.

PERIOD OF RECORD.--March 1991 to current year (seasonal 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. 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, 633 ft<sup>3</sup>/s, May 12, 1994, gage height, 6.45 ft, from floodmark, from rating curve extended above 410 ft<sup>3</sup>/s, on basis of slope-area measurement of peak flow; minimum daily, 4.2 ft<sup>3</sup>/s, Mar. 25, 1996.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period of seasonal operation, 95 ft<sup>3</sup>/s at 1830 Aug. 23, gage height, 3.83 ft; minimum daily, 4.2 ft<sup>3</sup>/s, Mar. 25.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

| DAY   | OCT  | NOV  | DEC | JAN | FEB | MAR | APR   | MAY   | JUN   | JUL  | AUG  | SEP  |
|-------|------|------|-----|-----|-----|-----|-------|-------|-------|------|------|------|
| 1     | 36   | 14   | 13  | --- | --- | --- | 5.5   | 11    | 24    | 14   | 22   | 25   |
| 2     | 32   | 13   | 13  | --- | --- | --- | 6.3   | 12    | 23    | 20   | 21   | 23   |
| 3     | 29   | 13   | 12  | --- | --- | --- | 7.8   | 12    | 16    | 18   | 20   | 23   |
| 4     | 30   | 12   | 12  | --- | --- | --- | 10    | 11    | 15    | 17   | 19   | 21   |
| 5     | 29   | 13   | 13  | --- | --- | --- | 9.8   | 12    | 13    | 16   | 16   | 20   |
| 6     | 28   | 13   | 12  | --- | --- | --- | 9.8   | 14    | 9.6   | 17   | 15   | 27   |
| 7     | 28   | 12   | 12  | --- | --- | --- | 9.0   | 12    | 12    | 15   | 17   | 38   |
| 8     | 27   | 13   | 11  | --- | --- | --- | 6.5   | 11    | 12    | 15   | 24   | 31   |
| 9     | 26   | 13   | 8.9 | --- | --- | --- | 6.9   | 12    | 12    | 18   | 36   | 27   |
| 10    | 25   | 13   | 13  | --- | --- | --- | 6.6   | 15    | 11    | 34   | 28   | 28   |
| 11    | 24   | 12   | 13  | --- | --- | 4.8 | 6.6   | 13    | 15    | 34   | 22   | 26   |
| 12    | 24   | 13   | 13  | --- | --- | 4.8 | 6.9   | 10    | 16    | 28   | 19   | 26   |
| 13    | 25   | 13   | 13  | --- | --- | 4.7 | 13    | 9.4   | 15    | 25   | 17   | 35   |
| 14    | 25   | 13   | --- | --- | --- | 5.7 | 12    | 8.5   | 18    | 23   | 16   | 37   |
| 15    | 25   | 13   | --- | --- | --- | 4.8 | 8.7   | 9.4   | 52    | 22   | 19   | 38   |
| 16    | 25   | 13   | --- | --- | --- | 5.1 | 13    | 9.8   | 47    | 20   | 21   | 34   |
| 17    | 25   | 13   | --- | --- | --- | 5.0 | 18    | 8.2   | 35    | 19   | 17   | 31   |
| 18    | 18   | 13   | --- | --- | --- | 4.3 | 18    | 11    | 27    | 21   | 18   | 21   |
| 19    | 14   | 13   | --- | --- | --- | 4.7 | 19    | 15    | 23    | 50   | 18   | 23   |
| 20    | 13   | 12   | --- | --- | --- | 5.1 | 12    | 14    | 20    | 33   | 17   | 18   |
| 21    | 14   | 12   | --- | --- | --- | 5.3 | 11    | 14    | 19    | 22   | 18   | 16   |
| 22    | 13   | 13   | --- | --- | --- | 5.3 | 13    | 13    | 23    | 16   | 20   | 15   |
| 23    | 13   | 12   | --- | --- | --- | 6.0 | 12    | 13    | 21    | 15   | 36   | 15   |
| 24    | 12   | 12   | --- | --- | --- | 5.3 | 13    | 14    | 17    | 16   | 57   | 27   |
| 25    | 14   | 13   | --- | --- | --- | 4.2 | 20    | 17    | 14    | 14   | 37   | 28   |
| 26    | 22   | 13   | --- | --- | --- | 5.4 | 17    | 26    | 12    | 16   | 28   | 29   |
| 27    | 32   | 13   | --- | --- | --- | 6.0 | 16    | 23    | 13    | 17   | 29   | 32   |
| 28    | 32   | 11   | --- | --- | --- | 5.2 | 16    | 23    | 14    | 16   | 37   | 30   |
| 29    | 32   | 14   | --- | --- | --- | 5.3 | 12    | 26    | 13    | 14   | 37   | 29   |
| 30    | 32   | 13   | --- | --- | --- | 6.0 | 13    | 22    | 11    | 20   | 33   | 28   |
| 31    | 29   | ---  | --- | --- | --- | 5.6 | ---   | 20    | ---   | 28   | 29   | ---  |
| TOTAL | 753  | 383  | --- | --- | --- | --- | 348.4 | 441.3 | 572.6 | 653  | 763  | 801  |
| MEAN  | 24.3 | 12.8 | --- | --- | --- | --- | 11.6  | 14.2  | 19.1  | 21.1 | 24.6 | 26.7 |
| MAX   | 36   | 14   | --- | --- | --- | --- | 20    | 26    | 52    | 50   | 57   | 38   |
| MIN   | 12   | 11   | --- | --- | --- | --- | 5.5   | 8.2   | 9.6   | 14   | 15   | 15   |
| AC-FT | 1490 | 760  | --- | --- | --- | --- | 691   | 875   | 1140  | 1300 | 1510 | 1590 |

**07099060 BEAVER CREEK ABOVE HIGHWAY 115, NEAR PENROSE, CO**

LOCATION.--Lat 38°29'21", long 104°59'49", in NE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec.16, T.18 S., R.68 W., Fremont County, Hydrologic Unit 11020002, on left bank 300 ft downstream from Beaver Park Irrigation Company diversion dam, 1.8 mi upstream from Highway 115, and 4.7 mi north of Penrose.

DRAINAGE AREA.--138 mi<sup>2</sup>.

PERIOD OF RECORD.--March 1991 to current year (seasonal 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 ft<sup>3</sup>/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 ft<sup>3</sup>/s, May 30, 1995, gage height, 6.55 ft, from rating curve extended above 325 ft<sup>3</sup>/s; no flow many days.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period of seasonal operation, 48 ft<sup>3</sup>/s at 1500 June 15, gage height, 3.28 ft, from rating curve extended above 325 ft<sup>3</sup>/s; no flow many days.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

| DAY   | OCT   | NOV   | DEC | JAN | FEB | MAR | APR  | MAY  | JUN   | JUL   | AUG   | SEP   |
|-------|-------|-------|-----|-----|-----|-----|------|------|-------|-------|-------|-------|
| 1     | 11    | 1.3   | 9.7 | --- | --- | --- | .00  | .07  | .00   | .00   | .00   | .26   |
| 2     | 12    | 1.0   | 3.4 | --- | --- | --- | .00  | .07  | .00   | .00   | .00   | .00   |
| 3     | 11    | .39   | 12  | --- | --- | --- | .00  | .06  | .00   | .00   | .00   | .00   |
| 4     | 10    | .30   | 16  | --- | --- | --- | .00  | .06  | .00   | .00   | .00   | .00   |
| 5     | 11    | .23   | 17  | --- | --- | --- | .00  | .06  | .00   | .00   | .00   | .00   |
| 6     | 11    | .20   | 14  | --- | --- | --- | .00  | .05  | .00   | .00   | .00   | .00   |
| 7     | 12    | .18   | 10  | --- | --- | --- | .00  | .06  | .00   | .00   | .00   | 7.1   |
| 8     | 11    | .16   | 8.1 | --- | --- | --- | .00  | .04  | .00   | .00   | .00   | .33   |
| 9     | 10    | .13   | 1.1 | --- | --- | --- | .00  | .04  | .00   | .00   | 2.1   | .00   |
| 10    | 8.1   | .08   | .38 | --- | --- | --- | .00  | .04  | .00   | 9.3   | .35   | .00   |
| 11    | 7.9   | .06   | .45 | --- | --- | --- | .00  | .02  | .00   | 2.9   | .38   | .00   |
| 12    | 6.9   | .03   | .44 | --- | --- | --- | .00  | .00  | .00   | .01   | .10   | .00   |
| 13    | 5.5   | .01   | .34 | --- | --- | .00 | .00  | .00  | .00   | .00   | .00   | 1.8   |
| 14    | 4.2   | .00   | .25 | --- | --- | .00 | .03  | .00  | .00   | .00   | .00   | 3.3   |
| 15    | 3.3   | .00   | --- | --- | --- | .00 | .04  | .00  | 30    | .00   | .00   | 6.5   |
| 16    | 3.7   | .00   | --- | --- | --- | .00 | .05  | .00  | 33    | .00   | .00   | 1.4   |
| 17    | 3.7   | .00   | --- | --- | --- | .00 | .06  | .00  | 9.3   | .00   | .00   | .55   |
| 18    | 3.5   | .00   | --- | --- | --- | .00 | .12  | .00  | .00   | .00   | .00   | .00   |
| 19    | 1.3   | .00   | --- | --- | --- | .00 | .11  | .00  | .00   | 8.7   | .00   | .00   |
| 20    | 1.5   | .00   | --- | --- | --- | .00 | .10  | .00  | .00   | .07   | .00   | .00   |
| 21    | 1.6   | .00   | --- | --- | --- | .00 | .08  | .00  | .00   | .00   | .00   | .00   |
| 22    | 1.4   | .00   | --- | --- | --- | .00 | .08  | .00  | .00   | .00   | e-.00 | .00   |
| 23    | 1.4   | .00   | --- | --- | --- | .00 | .07  | .00  | .00   | .00   | 3.0   | .00   |
| 24    | 1.4   | .00   | --- | --- | --- | .00 | .06  | .00  | .00   | .00   | 26    | 1.9   |
| 25    | 1.4   | .00   | --- | --- | --- | .00 | .07  | .00  | .00   | .00   | .68   | 2.0   |
| 26    | 1.4   | .00   | --- | --- | --- | .00 | .07  | 1.1  | .00   | .00   | .18   | .17   |
| 27    | 12    | 7.0   | --- | --- | --- | .00 | .07  | .13  | .00   | .00   | .16   | 1.9   |
| 28    | 15    | 5.8   | --- | --- | --- | .00 | .07  | .08  | .00   | .00   | .17   | .56   |
| 29    | 22    | 20    | --- | --- | --- | .00 | .06  | .00  | .00   | .00   | 1.2   | .04   |
| 30    | 27    | 22    | --- | --- | --- | .00 | .06  | .00  | .00   | .00   | .41   | .01   |
| 31    | 19    | ---   | --- | --- | --- | .00 | ---  | .00  | ---   | .00   | .39   | ---   |
| TOTAL | 252.2 | 58.87 | --- | --- | --- | --- | 1.20 | 1.88 | 72.30 | 20.98 | 35.12 | 27.82 |
| MEAN  | 8.14  | 1.96  | --- | --- | --- | --- | .040 | .061 | 2.41  | .68   | 1.13  | .93   |
| MAX   | 27    | 22    | --- | --- | --- | --- | .12  | 1.1  | 33    | 9.3   | 26    | 7.1   |
| MIN   | 1.3   | .00   | --- | --- | --- | --- | .00  | .00  | .00   | .00   | .00   | .00   |
| AC-FT | 500   | 117   | --- | --- | --- | --- | 2.4  | 3.7  | 143   | 42    | 70    | 55    |

e--Estimated.

**07099215 TURKEY CREEK NEAR FOUNTAIN, CO**

LOCATION.--Lat 38°36'42", long 104°53'39", in NW¼SE¼ sec. 33, T.16 S., R.67 W., El Paso County, Hydrologic Unit 11020002, on Fort Carson Military Reservation, on right bank 100 ft downstream from State Highway 115 bridge, 0.7 mi downstream from Turkey Canyon, 0.8 mi upstream from Turkey Creek Ranch, and 9.4 mi southwest of Fountain.

DRAINAGE AREA.--13.0 mi<sup>2</sup>.

PERIOD OF RECORD.--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 (M), 1979 (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 fair, and discharges above 190 ft<sup>3</sup>/s, which are poor. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

REVISIONS.--The maximum discharges for some water years have been revised, as shown in the following table. All of these figures are revised based on a discharge measurement and the extension of rating curve above 190 ft<sup>3</sup>/s in the 1995 water year. These figures supersede those published in the reports for 1980, 1982-1986.

| Water Year | Date          | Discharge (ft <sup>3</sup> /s) | Gage height (ft) | Water Year | Date          | Discharge (ft <sup>3</sup> /s) | Gage height (ft) |
|------------|---------------|--------------------------------|------------------|------------|---------------|--------------------------------|------------------|
| 1980       | Aug. 11, 1980 | 190                            | 3.97             | 1984       | Aug. 20, 1984 | 216                            | 4.30             |
| 1982       | Jul 28, 1982  | 450                            | 4.70             | 1985       | Oct. 4, 1984  | 184                            | 3.91             |
| 1983       | Aug. 6, 1983  | 164                            | 3.72             | 1986       | Aug. 31, 1986 | 154                            | 3.62             |

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

| DAY   | OCT  | NOV  | DEC  | JAN  | FEB  | MAR  | APR  | MAY  | JUN  | JUL   | AUG   | SEP   |
|-------|------|------|------|------|------|------|------|------|------|-------|-------|-------|
| 1     | .15  | .26  | .15  | .00  | e.00 | .00  | e.00 | .00  | .03  | .00   | .21   | 1.4   |
| 2     | .17  | .10  | .15  | .00  | e.00 | .00  | e.00 | .00  | .00  | .00   | .15   | 1.2   |
| 3     | .23  | .12  | .14  | .00  | e.00 | .00  | e.00 | .00  | .00  | .00   | .16   | 1.1   |
| 4     | .23  | .13  | .15  | e.00 | e.00 | .00  | e.00 | e.00 | .00  | .00   | .03   | .92   |
| 5     | .15  | .14  | .11  | e.00 | e.00 | .00  | e.00 | e.00 | .00  | .00   | .00   | .80   |
| 6     | .14  | .23  | .08  | e.00 | .00  | e.00 | e.00 | e.00 | .00  | .00   | .00   | .96   |
| 7     | .14  | .21  | .08  | e.00 | e.00 | e.00 | e.00 | e.00 | .00  | .00   | .00   | 1.5   |
| 8     | .20  | .22  | e.04 | e.00 | e.00 | e.00 | e.00 | e.00 | .00  | .00   | .09   | 1.0   |
| 9     | .18  | .25  | e.00 | e.00 | e.00 | e.00 | e.00 | e.00 | .00  | 5.8   | 1.8   | .77   |
| 10    | .23  | .15  | e.00 | e.00 | .00  | e.00 | e.00 | e.00 | .00  | 8.5   | 2.4   | .64   |
| 11    | .26  | .14  | e.00 | .00  | .00  | e.00 | e.00 | e.00 | .00  | 1.8   | 1.4   | .54   |
| 12    | .32  | .18  | e.00 | .00  | .00  | e.00 | e.00 | e.00 | .01  | .99   | .92   | .52   |
| 13    | .22  | .14  | e.00 | .00  | .00  | e.00 | e.00 | e.00 | .41  | .77   | .60   | .55   |
| 14    | .09  | .12  | e.00 | e.00 | e.00 | e.00 | e.00 | .00  | .18  | .61   | .41   | .60   |
| 15    | .19  | .13  | e.00 | e.00 | e.00 | e.00 | e.00 | .00  | .31  | .43   | .68   | .49   |
| 16    | .30  | .13  | e.00 | e.00 | e.00 | e.00 | e.00 | .00  | .81  | .21   | .98   | .48   |
| 17    | .33  | .15  | e.00 | .00  | e.00 | e.00 | e.00 | .00  | .47  | .08   | .64   | .42   |
| 18    | .34  | .15  | e.00 | .00  | e.00 | e.00 | e.00 | .00  | .31  | .05   | .32   | .47   |
| 19    | .35  | .16  | e.00 | e.00 | .00  | .00  | e.00 | .00  | .22  | .59   | .99   | .40   |
| 20    | .26  | .15  | .00  | e.00 | e.00 | .00  | e.00 | .00  | .18  | 1.8   | .15   | .36   |
| 21    | .29  | .14  | .00  | e.00 | e.00 | .00  | .00  | .00  | .17  | .92   | .18   | .29   |
| 22    | .30  | .18  | .00  | e.00 | e.00 | .00  | .00  | .00  | .22  | .62   | .42   | .27   |
| 23    | .21  | .17  | .00  | e.00 | e.00 | .00  | .00  | .00  | .16  | .59   | 7.7   | .31   |
| 24    | .15  | .18  | .00  | e.00 | e.00 | e.00 | e.00 | .00  | .08  | .43   | 8.5   | .33   |
| 25    | .21  | .21  | .00  | e.00 | e.00 | e.00 | e.00 | .05  | .05  | .38   | 3.1   | .31   |
| 26    | .23  | .22  | .00  | e.00 | e.00 | e.00 | e.00 | 1.4  | .04  | .77   | 2.6   | .36   |
| 27    | .25  | .09  | .00  | e.00 | e.00 | e.00 | e.00 | .75  | .01  | .42   | 5.4   | .42   |
| 28    | .19  | .18  | .00  | e.00 | e.00 | e.00 | e.00 | .30  | .00  | .42   | 3.8   | .44   |
| 29    | .22  | .09  | .00  | e.00 | e.00 | .00  | e.00 | .18  | .00  | .47   | 2.0   | .53   |
| 30    | .25  | .15  | .00  | e.00 | ---  | .00  | .00  | .08  | .00  | .44   | 1.8   | .41   |
| 31    | .29  | ---  | .00  | e.00 | ---  | .00  | ---  | .03  | ---  | .37   | 1.5   | ---   |
| TOTAL | 7.07 | 4.87 | 0.90 | 0.00 | 0.00 | 0.00 | 0.00 | 2.79 | 3.66 | 27.46 | 48.93 | 18.79 |
| MEAN  | .23  | .16  | .029 | .000 | .000 | .000 | .000 | .090 | .12  | .89   | 1.58  | .63   |
| MAX   | .35  | .26  | .15  | .00  | .00  | .00  | .00  | 1.4  | .81  | 8.5   | 8.5   | 1.5   |
| MIN   | .09  | .09  | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .00   | .00   | .27   |
| AC-FT | 14   | 9.7  | 1.8  | .00  | .00  | .00  | .00  | 5.5  | 7.3  | 54    | 97    | 37    |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1978 - 1996, BY WATER YEAR (WY)

|          | 1978 | 1979 | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 |
|----------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN     | 1.53 | .86  | .34  | .18  | .15  | .35  | 1.45 | 7.98 | 4.70 | 1.29 | 2.01 | .83  |      |      |      |      |      |      |      |
| MAX (WY) | 14.6 | 7.06 | 2.34 | 1.17 | .82  | 1.41 | 8.01 | 36.6 | 25.6 | 5.11 | 13.8 | 6.38 |      |      |      |      |      |      |      |
| MIN (WY) | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .040 | .006 | .002 | .000 | .000 |      |      |      |      |      |      |      |

SUMMARY STATISTICS

|                          | FOR 1996 WATER YEAR | WATER YEARS 1978 - 1996 |
|--------------------------|---------------------|-------------------------|
| ANNUAL TOTAL             | 114.47              |                         |
| ANNUAL MEAN              | .31                 | 1.60                    |
| HIGHEST ANNUAL MEAN      |                     | 5.53 1985               |
| LOWEST ANNUAL MEAN       |                     | .083 1989               |
| HIGHEST DAILY MEAN       | a 8.5 Jul 10        | 189 May 30 1995         |
| LOWEST DAILY MEAN        | b, e .00 Dec 9      | b .00 Jun 4 1978        |
| ANNUAL SEVEN-DAY MINIMUM | b .00 Dec 9         | b .00 Jun 9 1978        |
| INSTANTANEOUS PEAK FLOW  | 102 Aug 23          | 450 Jul 28 1982         |
| INSTANTANEOUS PEAK STAGE | 3.17 Aug 23         | 4.70 Jul 28 1982        |
| ANNUAL RUNOFF (AC-FT)    | 227                 | 1160                    |
| 10 PERCENT EXCEEDS       | .65                 | 4.0                     |
| 50 PERCENT EXCEEDS       | .00                 | .15                     |
| 90 PERCENT EXCEEDS       | .00                 | .00                     |

e-Estimated.

a-Also occurred Aug 24.

b-No flow many days some years.

## 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 mi<sup>2</sup>.

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. Prior to July 20, 1989, at site 0.6 mi downstream, at different datum.

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 those during winter period, estimated daily discharges, and those above 190 ft<sup>3</sup>/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 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

| DAY   | OCT  | NOV  | DEC  | JAN  | FEB  | MAR   | APR  | MAY   | JUN  | JUL   | AUG   | SEP  |
|-------|------|------|------|------|------|-------|------|-------|------|-------|-------|------|
| 1     | 1.1  | 1.5  | 1.5  | 1.5  | 1.4  | 1.0   | 1.2  | 1.1   | .55  | .13   | .34   | .27  |
| 2     | 1.1  | 1.5  | 1.5  | 1.4  | 1.3  | 1.0   | 1.2  | 1.1   | .52  | .12   | .17   | .23  |
| 3     | 1.2  | 1.5  | 1.5  | 1.5  | 1.4  | 1.0   | 1.2  | 1.1   | .53  | .10   | .14   | .17  |
| 4     | 1.1  | 1.6  | 1.5  | 1.5  | 1.4  | .96   | 1.4  | 1.2   | e.50 | .09   | .13   | .15  |
| 5     | 1.3  | 1.6  | 1.4  | 1.4  | 1.4  | .94   | 1.4  | 1.1   | e.40 | .08   | .12   | .16  |
| 6     | 1.4  | 1.5  | 1.5  | 1.3  | 1.3  | 1.1   | 1.4  | 1.1   | e.40 | .07   | .12   | .18  |
| 7     | 1.5  | 1.5  | 1.5  | 1.4  | 1.1  | .92   | 1.3  | .98   | e.40 | .07   | .14   | .17  |
| 8     | 1.5  | 1.5  | 1.5  | 1.5  | 1.1  | 1.0   | 1.2  | 1.0   | e.35 | .07   | .16   | .17  |
| 9     | 1.6  | 1.5  | 1.4  | 1.4  | 1.1  | .99   | 1.1  | .99   | e.35 | 2.4   | .16   | .16  |
| 10    | 1.6  | 1.5  | 1.5  | 1.4  | 1.1  | .96   | 1.1  | 1.0   | e.30 | 12    | .18   | .16  |
| 11    | 1.5  | 1.6  | 1.4  | 1.4  | 1.1  | .92   | 1.1  | 1.0   | e.30 | 1.5   | .21   | .16  |
| 12    | 1.5  | 1.5  | 1.4  | 1.4  | 1.1  | .89   | 1.2  | 1.0   | e.25 | .49   | .23   | .17  |
| 13    | 1.5  | 1.5  | 1.5  | 1.4  | 1.1  | .92   | 1.2  | .94   | e.40 | .38   | .24   | .18  |
| 14    | 1.7  | 1.5  | 1.5  | 1.4  | 1.2  | 1.1   | 1.2  | .93   | e.35 | .25   | .24   | .19  |
| 15    | 1.7  | 1.5  | 1.5  | 1.4  | 1.2  | 1.2   | 1.2  | .82   | e.40 | .32   | .26   | .19  |
| 16    | 1.6  | 1.5  | 1.6  | 1.4  | 1.2  | 1.1   | 1.1  | .79   | e.70 | .31   | .27   | .18  |
| 17    | 1.6  | 1.5  | 1.6  | 1.3  | 1.2  | 1.2   | 1.1  | .73   | e.50 | .21   | .27   | .18  |
| 18    | 1.7  | 1.5  | 1.6  | 1.0  | 1.2  | 1.3   | 1.1  | .73   | e.40 | .20   | .24   | .18  |
| 19    | 1.6  | 1.5  | 1.5  | 1.2  | 1.1  | 1.2   | 1.2  | .74   | e.30 | .21   | .23   | .17  |
| 20    | 1.8  | 1.5  | 1.5  | 1.4  | 1.1  | 1.2   | 1.2  | .79   | e.20 | .20   | .22   | .19  |
| 21    | 1.7  | 1.5  | 1.5  | 1.5  | 1.1  | 1.2   | 1.2  | .77   | e.18 | .19   | .18   | .19  |
| 22    | 1.6  | 1.5  | 1.6  | 1.4  | 1.1  | 1.2   | 1.2  | .66   | e.25 | 1.0   | .21   | .18  |
| 23    | 1.7  | 1.4  | 1.5  | 1.4  | 1.1  | 1.2   | 1.1  | .58   | e.20 | 2.9   | .20   | .18  |
| 24    | 1.6  | 1.5  | 1.5  | 1.3  | 1.1  | 1.2   | 1.0  | .57   | e.20 | .37   | .25   | .18  |
| 25    | 1.4  | 1.5  | 1.8  | 1.4  | 1.1  | 1.2   | 1.0  | .93   | .19  | .29   | .20   | .18  |
| 26    | 1.4  | 1.6  | 1.8  | 1.2  | 1.2  | 1.3   | 1.0  | 1.1   | .18  | .29   | .23   | .19  |
| 27    | 1.4  | 1.6  | 1.8  | 1.3  | 1.0  | 1.4   | 1.0  | .85   | .18  | .28   | 1.3   | .18  |
| 28    | 1.4  | 1.6  | 1.7  | 1.6  | 1.1  | 1.3   | 1.1  | .80   | .16  | .24   | 10    | .17  |
| 29    | 1.4  | 1.6  | 1.6  | 1.3  | 1.0  | 1.3   | 1.1  | .78   | .15  | .25   | 2.6   | .16  |
| 30    | 1.4  | 1.5  | 1.5  | 1.3  | ---  | 1.3   | 1.1  | .67   | .15  | .24   | .87   | .15  |
| 31    | 1.4  | ---  | 1.5  | 1.3  | ---  | 1.3   | ---  | .59   | ---  | 2.0   | .42   | ---  |
| TOTAL | 46.0 | 45.6 | 47.7 | 42.6 | 33.9 | 34.80 | 34.9 | 27.44 | 9.94 | 27.25 | 20.53 | 5.37 |
| MEAN  | 1.48 | 1.52 | 1.54 | 1.37 | 1.17 | 1.12  | 1.16 | .89   | .33  | .88   | .66   | .18  |
| MAX   | 1.8  | 1.6  | 1.8  | 1.6  | 1.4  | 1.4   | 1.4  | 1.2   | .70  | 12    | 10    | .27  |
| MIN   | 1.1  | 1.4  | 1.4  | 1.0  | 1.0  | .89   | 1.0  | .57   | .15  | .07   | .12   | .15  |
| AC-FT | 91   | 90   | 95   | 84   | 67   | 69    | 69   | 54    | 20   | 54    | 41    | 11   |

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1978 - 1996, BY WATER YEAR (WY)

|      | 1978 | 1979 | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 3.17 | 2.09 | .90  | .68  | .64  | .62  | 1.27 | 12.0 | 9.01 | 3.01 | 3.74 | 1.55 |      |      |      |      |      |      |      |
| MAX  | 44.6 | 26.7 | 6.47 | 2.69 | 2.58 | 2.75 | 12.9 | 73.6 | 49.6 | 17.1 | 40.9 | 18.1 |      |      |      |      |      |      |      |
| (WY) | 1985 | 1985 | 1985 | 1985 | 1985 | 1985 | 1985 | 1985 | 1985 | 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 1995 CALENDAR YEAR |        | FOR 1996 WATER YEAR |        | WATER YEARS 1978 - 1996 |             |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|-------------|
| ANNUAL TOTAL             | 3371.14                |        | 376.03              |        |                         |             |
| ANNUAL MEAN              | 9.24                   |        | 1.03                |        | 3.32                    |             |
| HIGHEST ANNUAL MEAN      |                        |        |                     |        | 13.1                    |             |
| LOWEST ANNUAL MEAN       |                        |        |                     |        | .000                    |             |
| HIGHEST DAILY MEAN       | 286                    | May 30 | 12                  | Jul 10 | 353                     | Aug 20 1982 |
| LOWEST DAILY MEAN        | .07                    | Apr 13 | .07                 | Jul 6  | a                       | May 18 1978 |
| ANNUAL SEVEN-DAY MINIMUM | .08                    | Apr 7  | .09                 | Jul 2  | b                       | May 18 1978 |
| INSTANTANEOUS PEAK FLOW  |                        |        | 63                  | Jul 9  | b                       | Aug 20 1982 |
| INSTANTANEOUS PEAK STAGE |                        |        | 6.96                | Jul 9  | c                       | Aug 20 1982 |
| ANNUAL RUNOFF (AC-FT)    | 6690                   |        | 746                 |        | 2400                    |             |
| 10 PERCENT EXCEEDS       | 22                     |        | 1.5                 |        | 4.9                     |             |
| 50 PERCENT EXCEEDS       | 1.4                    |        | 1.1                 |        | .40                     |             |
| 90 PERCENT EXCEEDS       | .15                    |        | .18                 |        | .00                     |             |

e-Estimated.

a-No flow many days during most years.

b-From rating curve extended above 100 ft<sup>3</sup>/s, on the basis of slope-area measurements at gage heights 8.04 ft and 11.27 ft.

c-Maximum gage height, 11.88 ft, Jun 8, 1987, site and datum then in use.

d-Also occurred Jul 7-8.

**07099233 TELLER RESERVOIR NEAR STONE CITY, CO**

LOCATION.--Lat 38°26'33", long 104°49'31", in SE<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec.31, T.18 S., R.66 W., 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 mi<sup>2</sup>.

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

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 5,453 ft above sea level, from topographic map.

REMARKS.--No estimated midnight contents. Records good. 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, 1991-94 water years.

EXTREMES (at 2400) FOR CURRENT YEAR.--Maximum contents, 676 acre-ft, Apr. 6-10, elevation, 80.20 ft; minimum contents, 469 acre-ft, Sept. 30, elevation, 78.03 ft.

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY OBSERVATION AT 24:00 VALUES

| DAY         | OCT   | NOV    | DEC   | JAN   | FEB   | MAR   | APR   | MAY   | JUN   | JUL   | AUG   | SEP   |
|-------------|-------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1           | 562   | 509    | 537   | 576   | 628   | 649   | 665   | 646   | 614   | 529   | 584   | 532   |
| 2           | 556   | 508    | 540   | 577   | 630   | 649   | 664   | 645   | 612   | 526   | 578   | 528   |
| 3           | 551   | 510    | 538   | 580   | 630   | 649   | 664   | 643   | 609   | 520   | 576   | 526   |
| 4           | 543   | 511    | 542   | 583   | 630   | 649   | 670   | 643   | 606   | 517   | 571   | 523   |
| 5           | 538   | 515    | 540   | 585   | 633   | 650   | 675   | 641   | 603   | 516   | 567   | 519   |
| 6           | 533   | 513    | 540   | 587   | 635   | 650   | 676   | 639   | 599   | 509   | 562   | 518   |
| 7           | 533   | 513    | 542   | 588   | 637   | 650   | 676   | 638   | 597   | 504   | 560   | 516   |
| 8           | 532   | 516    | 540   | 592   | 639   | 651   | 676   | 636   | 593   | 502   | 560   | 512   |
| 9           | 530   | 518    | 540   | 594   | 641   | 652   | 676   | 634   | 592   | 521   | 558   | 510   |
| 10          | 529   | 516    | 542   | 596   | 642   | 652   | 676   | 633   | 588   | 614   | 554   | 506   |
| 11          | 528   | 518    | 546   | 599   | 643   | 653   | 675   | 631   | 586   | 613   | 550   | 503   |
| 12          | 527   | 518    | 551   | 600   | 643   | 652   | 674   | 629   | 584   | 611   | 547   | 499   |
| 13          | 524   | 518    | 553   | 603   | 644   | 653   | 672   | 628   | 582   | 609   | 543   | 498   |
| 14          | 523   | 519    | 553   | 605   | 645   | 659   | 670   | 626   | 580   | 605   | 540   | 496   |
| 15          | 521   | 520    | 554   | 607   | 647   | 662   | 670   | 623   | 580   | 606   | 536   | 496   |
| 16          | 520   | 523    | 556   | 609   | 647   | 663   | 669   | 620   | 578   | 602   | 533   | 495   |
| 17          | 518   | 521    | 556   | 614   | 649   | 663   | 667   | 617   | 575   | 600   | 529   | 493   |
| 18          | 518   | 525    | 557   | 614   | 650   | 665   | 665   | 613   | 570   | 596   | 525   | 493   |
| 19          | 512   | 525    | 557   | 616   | 650   | 665   | 662   | 613   | 567   | 593   | 520   | 490   |
| 20          | 512   | 525    | 558   | 617   | 650   | 665   | 661   | 608   | 562   | 591   | 518   | 487   |
| 21          | 512   | 528    | 558   | 620   | 650   | 665   | 661   | 605   | 562   | 585   | 515   | 484   |
| 22          | 511   | 527    | 560   | 621   | 650   | 666   | 659   | 602   | 561   | 588   | 512   | 482   |
| 23          | 509   | 528    | 561   | 622   | 649   | 666   | 658   | 599   | 559   | 609   | 515   | 478   |
| 24          | 508   | 532    | 561   | 623   | 648   | 666   | 657   | 600   | 555   | 606   | 513   | 477   |
| 25          | 508   | 533    | 562   | 624   | 650   | 666   | 655   | 616   | 551   | 603   | 511   | 476   |
| 26          | 509   | 533    | 563   | 625   | 650   | 666   | 653   | 623   | 547   | 600   | 510   | 475   |
| 27          | 507   | 533    | 566   | 625   | 649   | 666   | 652   | 622   | 543   | 597   | 540   | 473   |
| 28          | 506   | 534    | 567   | 626   | 649   | 667   | 650   | 621   | 540   | 593   | 540   | 472   |
| 29          | 508   | 535    | 569   | 628   | 650   | 666   | 648   | 621   | 536   | 592   | 540   | 470   |
| 30          | 507   | 538    | 570   | 628   | ---   | 666   | 647   | 619   | 533   | 587   | 537   | 469   |
| 31          | 509   | ---    | 573   | 628   | ---   | 665   | ---   | 617   | ---   | 584   | 534   | ---   |
| TOTAL       | 16204 | 15662  | 17152 | 18812 | 18658 | 20426 | 19943 | 19351 | 17264 | 17828 | 16778 | 14896 |
| MEAN        | 523   | 522    | 553   | 607   | 643   | 659   | 665   | 624   | 575   | 575   | 541   | 497   |
| MAX         | 562   | 538    | 573   | 628   | 650   | 667   | 676   | 646   | 614   | 614   | 584   | 532   |
| MIN         | 506   | 508    | 537   | 576   | 628   | 649   | 647   | 599   | 533   | 502   | 510   | 469   |
| CAL YR 1995 | TOTAL | 240493 | MEAN  | 659   | MAX   | 1730  | MIN   | 280   |       |       |       |       |
| WTR YR 1996 | TOTAL | 212974 | MEAN  | 582   | MAX   | 676   | MIN   | 469   |       |       |       |       |

**07099235 TURKEY CREEK NEAR STONE CITY, CO**

LOCATION.--Lat 38°26'22", long 104°9'34", in SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec.31, T.18 S., R.66 W., Pueblo County, Hydrologic Unit 11020002, on 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 mi<sup>2</sup>.

PERIOD OF RECORD.--May 1978 to November 1984, June 1987 to current year.

REVISED RECORDS.--WDR CO-80-1: 1979(M).

GAGE.--Water-stage recorder with satellite telemetry, and 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 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 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

| DAY   | OCT   | NOV  | DEC  | JAN  | FEB  | MAR  | APR  | MAY  | JUN  | JUL  | AUG  | SEP  |
|-------|-------|------|------|------|------|------|------|------|------|------|------|------|
| 1     | 1.7   | .24  | .23  | .22  | .22  | .24  | .29  | .22  | .19  | .24  | e.27 | .25  |
| 2     | 1.6   | .24  | .21  | .22  | .22  | .24  | .27  | .22  | .19  | .25  | .27  | .20  |
| 3     | 1.6   | .24  | .21  | .23  | .22  | .24  | .27  | .22  | .18  | .25  | .26  | .20  |
| 4     | 1.5   | .25  | .21  | .22  | .23  | .24  | e.27 | .24  | .19  | .25  | .27  | .19  |
| 5     | 1.4   | .25  | .21  | .22  | .22  | .24  | e.27 | .25  | .19  | .25  | .27  | .17  |
| 6     | .89   | .24  | .22  | .22  | .23  | .24  | e.27 | .23  | .19  | e.25 | .28  | .17  |
| 7     | .22   | .24  | .22  | .22  | .27  | .24  | e.27 | .23  | .18  | e.25 | .24  | .16  |
| 8     | .22   | .24  | .22  | .22  | .23  | .24  | e.27 | .23  | .24  | e.25 | .24  | .15  |
| 9     | .21   | .24  | .21  | .22  | .23  | .24  | e.27 | .22  | .19  | e.28 | .22  | .14  |
| 10    | .21   | .24  | .22  | .23  | .23  | .25  | e.27 | .22  | .18  | e.30 | .21  | .14  |
| 11    | .21   | .23  | .22  | .22  | .22  | .24  | .27  | .22  | .21  | e.28 | .22  | .14  |
| 12    | .21   | .23  | .22  | .22  | .23  | .24  | e.26 | .23  | .22  | e.27 | .23  | .14  |
| 13    | .21   | .23  | .22  | .22  | .24  | .25  | e.26 | .24  | .23  | e.26 | e.24 | .15  |
| 14    | .21   | .22  | .21  | .22  | .23  | .27  | .24  | .22  | .23  | e.25 | e.24 | e.16 |
| 15    | .21   | .22  | .21  | .22  | .23  | .26  | e.25 | .21  | .22  | e.25 | e.24 | e.16 |
| 16    | .21   | .22  | .22  | .23  | .24  | .25  | e.25 | e.21 | e.22 | e.25 | e.24 | e.15 |
| 17    | .20   | .22  | .21  | .24  | .24  | .25  | e.25 | e.21 | e.23 | e.25 | e.24 | e.15 |
| 18    | .20   | .22  | .21  | .22  | .24  | .25  | .27  | e.21 | e.24 | e.25 | e.24 | e.15 |
| 19    | .20   | .22  | .22  | .23  | .24  | .25  | .28  | e.21 | e.25 | e.25 | e.24 | e.14 |
| 20    | .20   | .22  | .22  | .22  | .24  | .25  | .29  | e.21 | e.25 | e.25 | e.24 | e.14 |
| 21    | .20   | .22  | .22  | .22  | .24  | .25  | .25  | e.20 | .25  | e.26 | e.24 | e.14 |
| 22    | .21   | .22  | .23  | .23  | .24  | .26  | .27  | e.20 | .26  | e.29 | e.24 | e.14 |
| 23    | .20   | .22  | .23  | .24  | .23  | .26  | .27  | e.20 | .27  | e.30 | e.24 | e.15 |
| 24    | .20   | .22  | .23  | .24  | .24  | .29  | .26  | e.20 | .25  | e.29 | .23  | e.15 |
| 25    | .20   | .21  | .21  | .24  | .24  | .29  | .24  | .33  | .27  | e.28 | .21  | e.15 |
| 26    | .20   | .21  | .21  | .22  | .24  | .29  | .24  | .28  | .24  | e.28 | .24  | e.15 |
| 27    | .20   | .22  | .21  | .22  | .24  | .29  | .26  | .19  | .24  | e.28 | .25  | e.14 |
| 28    | .20   | .22  | .21  | .22  | .24  | .27  | .28  | .19  | .25  | e.28 | .25  | e.14 |
| 29    | .20   | .22  | .21  | .22  | .24  | .29  | .23  | .19  | .24  | e.27 | .25  | e.14 |
| 30    | .20   | .23  | .22  | .22  | ---  | .29  | .23  | .19  | .24  | e.27 | .26  | e.14 |
| 31    | .22   | ---  | .22  | .22  | ---  | .29  | ---  | .19  | ---  | e.27 | .24  | ---  |
| TOTAL | 13.84 | 6.84 | 6.72 | 6.95 | 6.80 | 7.99 | 7.87 | 6.81 | 6.73 | 8.20 | 7.55 | 4.69 |
| MEAN  | .45   | .23  | .22  | .22  | .23  | .26  | .26  | .22  | .22  | .26  | .24  | .16  |
| MAX   | 1.7   | .25  | .23  | .24  | .27  | .29  | .29  | .33  | .27  | .30  | .28  | .25  |
| MIN   | .20   | .21  | .21  | .22  | .22  | .24  | .23  | .19  | .18  | .24  | .21  | .14  |
| AC-FT | 27    | 14   | 13   | 14   | 13   | 16   | 16   | 14   | 13   | 16   | 15   | 9.3  |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1978 - 1996, BY WATER YEAR (WY)

|          | 1983 | 1983 | 1983 | 1983 | 1983 | 1983 | 1983 | 1995 | 1995 | 1995 | 1995 | 1995 |
|----------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN     | .32  | .31  | .26  | .24  | .25  | .24  | .20  | 1.12 | 2.09 | 1.24 | .75  | .57  |
| MAX (WY) | 1.64 | 1.57 | 1.47 | 1.49 | 1.54 | 1.36 | .92  | 8.37 | 20.3 | 9.78 | 4.43 | 3.03 |
| MIN (WY) | .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 1995 CALENDAR YEAR

FOR 1996 WATER YEAR

WATER YEARS 1978 - 1996

|                          |                  |        |                   |
|--------------------------|------------------|--------|-------------------|
| ANNUAL TOTAL             | 1444.68          | 90.99  |                   |
| ANNUAL MEAN              | 3.96             | .25    | .64               |
| HIGHEST ANNUAL MEAN      |                  |        | 3.93              |
| LOWEST ANNUAL MEAN       |                  |        | .024              |
| HIGHEST DAILY MEAN       | 70               | May 31 | 70                |
| LOWEST DAILY MEAN        | <sup>a</sup> .13 | Feb 13 | <sup>b</sup> .14  |
| ANNUAL SEVEN-DAY MINIMUM | .13              | Mar 31 | .14               |
| INSTANTANEOUS PEAK FLOW  |                  |        | 1.7               |
| INSTANTANEOUS PEAK STAGE |                  |        | <sup>c</sup> 3.94 |
| ANNUAL RUNOFF (AC-FT)    | 2870             | 180    | 465               |
| 10 PERCENT EXCEEDS       | 10               | .27    | 1.5               |
| 50 PERCENT EXCEEDS       | .22              | .23    | .13               |
| 90 PERCENT EXCEEDS       | .14              | .19    | .01               |

e-Estimated.

a-Also occurred Feb 14-17, Mar 4-9, 18-21, 27, and Mar 31 to Apr 18.

b-Also occurred Sep 10-12, 19-22, and 27-30.

c-Maximum gage height, 6.02 ft, Aug. 3, backwater, from beaver dam.

**07099350 PUEBLO RESERVOIR NEAR PUEBLO, CO**

LOCATION.--Lat 38°16'15", long 104°43'30", in NE¼ sec.36, T.20 S., R.66 W., Pueblo County, Hydrologic Unit 11020002, at dam on Arkansas River, 7 mi west of Pueblo.

DRAINAGE AREA.--4,669 mi<sup>2</sup>.

**RESERVOIR ELEVATIONS AND CONTENTS RECORDS**

PERIOD OF RECORD.--January 1974 to current year.

GAGE.--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, 294,710 acre-ft, Feb. 22, elevation, 4,888.35 ft; minimum contents, 198,180 acre-ft, Sept. 25-26, elevation, 4,866.45 ft.

MONTHEND ELEVATION AND CONTENTS, AT 2400, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| Date                 | Elevation<br>(feet) | Contents<br>(acre-feet) | Change in<br>contents<br>(acre-feet) |
|----------------------|---------------------|-------------------------|--------------------------------------|
| Sept. 30. . . . .    | 4,879.75            | 253,550                 | -                                    |
| Oct. 31. . . . .     | 4,879.22            | 251,140                 | -2,410                               |
| Nov. 30. . . . .     | 4,881.42            | 261,260                 | +10,120                              |
| Dec. 31. . . . .     | 4,884.40            | 275,340                 | +14,080                              |
| CAL YR 1995. . . . . | -                   | -                       | +143,940                             |
| Jan. 31. . . . .     | 4,887.72            | 291,560                 | +16,220                              |
| Feb. 29. . . . .     | 4,888.05            | 293,200                 | +1,640                               |
| Mar. 31. . . . .     | 4,884.07            | 273,760                 | -19,440                              |
| Apr. 30. . . . .     | 4,878.85            | 249,470                 | -24,290                              |
| May 31. . . . .      | 4,879.63            | 253,000                 | +3,530                               |
| June 30. . . . .     | 4,880.23            | 255,750                 | +2,750                               |
| July 31. . . . .     | 4,876.82            | 240,460                 | -15,290                              |
| Aug. 31. . . . .     | 4,866.97            | 200,170                 | -40,290                              |
| Sept. 30. . . . .    | 4,866.54            | 198,520                 | -1,650                               |
| WTR YR 1996. . . . . | -                   | -                       | -55,030                              |

## 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 SW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub>, sec.24, T.20 S., R.67 W., Pueblo County, Hydrologic Unit 11020002, at approximate center of transect, approximately 1.1 mi downstream from Rush Creek, 1.1 mi upstream from Turkey Creek, and 7.8 mi upstream from Pueblo Dam.

PERIOD OF RECORD.--June 1988 to current year.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DATE     | TIME | SAM-<br>PLING<br>DEPTH<br>(FEET) | SPE-<br>CIFIC<br>CON-<br>DUCT-<br>ANCE<br>(US/CM) | PH<br>WATER<br>WHOLE<br>FIELD<br>(STAND-<br>ARD<br>UNITS) | TEMPER-<br>ATURE<br>WATER<br>(DEG C) | TRANS-<br>PAR-<br>ENCY<br>(SECCHI<br>DISK)<br>(M) | OXYGEN,<br>DIS-<br>SOLVED<br>(MG/L) |
|----------|------|----------------------------------|---|---|--------------------------------------|---|-------------------------------------|
| MAY 1996 |      |                                  |   |   |                                      |   |                                     |
| 14...    | 1215 | --                               | --  | --  | --                                   | 1.1   | --                                  |
| 14...    | 1216 | 0.0                              | 277   | 9.0   | 18.5                                 | --  | 9.5                                 |
| 14...    | 1217 | 3.0                              | 278   | 9.0   | 18.5                                 | --  | 9.5                                 |
| 14...    | 1218 | 6.0                              | 278   | 9.0   | 18.5                                 | --  | 9.4                                 |
| 14...    | 1219 | 9.0                              | 277   | 9.0   | 18.0                                 | --  | 9.3                                 |
| 14...    | 1220 | 12.0                             | 275   | 9.0   | 18.0                                 | --  | 9.2                                 |
| 14...    | 1221 | 15.0                             | 268   | 8.6   | 17.0                                 | --  | 8.2                                 |
| 14...    | 1222 | 18.0                             | 258   | 8.4   | 16.0                                 | --  | 7.5                                 |
| 14...    | 1223 | 21.0                             | 252   | 8.2   | 15.5                                 | --  | 7.2                                 |
| 14...    | 1224 | 24.0                             | 251   | 8.1   | 15.0                                 | --  | 7.0                                 |
| 14...    | 1225 | 26.0                             | 270   | 8.0   | 15.0                                 | --  | 6.2                                 |
| JUN      |      |                                  |   |   |                                      |   |                                     |
| 28...    | 1010 | --                               | --  | --  | --                                   | 1.8   | --                                  |
| 28...    | 1011 | 0.0                              | 239   | 8.7   | 21.5                                 | --  | 7.7                                 |
| 28...    | 1012 | 3.0                              | 240   | 8.7   | 21.5                                 | --  | 7.7                                 |
| 28...    | 1013 | 6.0                              | 239   | 8.7   | 21.5                                 | --  | 7.7                                 |
| 28...    | 1014 | 9.0                              | 239   | 8.7   | 21.5                                 | --  | 7.8                                 |
| 28...    | 1015 | 12.0                             | 238   | 8.7   | 21.5                                 | --  | 7.8                                 |
| 28...    | 1016 | 15.0                             | 200   | 8.6   | 20.0                                 | --  | 7.6                                 |
| 28...    | 1017 | 18.0                             | 180   | 8.3   | 19.0                                 | --  | 7.3                                 |
| 28...    | 1018 | 21.0                             | 181   | 8.2   | 18.5                                 | --  | 7.3                                 |
| 28...    | 1019 | 24.0                             | 177   | 8.2   | 18.0                                 | --  | 7.2                                 |
| 28...    | 1020 | 27.0                             | 178   | 8.1   | 17.5                                 | --  | 7.1                                 |
| AUG      |      |                                  |   |   |                                      |   |                                     |
| 21...    | 1030 | --                               | --  | --  | --                                   | 1.2   | --                                  |
| 21...    | 1031 | 0.0                              | 365   | 9.0   | 23.5                                 | --  | 9.8                                 |
| 21...    | 1032 | 3.0                              | 365   | 9.0   | 23.5                                 | --  | 9.8                                 |
| 21...    | 1033 | 6.0                              | 366   | 8.9   | 23.5                                 | --  | 9.8                                 |
| 21...    | 1034 | 9.0                              | 369   | 8.9   | 23.0                                 | --  | 9.3                                 |
| 21...    | 1035 | 12.0                             | 402   | 8.5   | 23.0                                 | --  | 6.6                                 |
| 21...    | 1036 | 15.0                             | 412   | 8.4   | 22.0                                 | --  | 6.7                                 |
| 21...    | 1037 | 18.0                             | 418   | 8.3   | 21.5                                 | --  | 6.5                                 |
| SEP      |      |                                  |   |   |                                      |   |                                     |
| 24...    | 1105 | --                               | --  | --  | --                                   | 0.5   | --                                  |
| 24...    | 1106 | 0.0                              | 412   | 8.8   | 19.0                                 | --  | 8.4                                 |
| 24...    | 1107 | 3.0                              | 412   | 8.8   | 19.0                                 | --  | 8.3                                 |
| 24...    | 1108 | 6.0                              | 414   | 8.7   | 18.5                                 | --  | 8.0                                 |
| 24...    | 1109 | 9.0                              | 420   | 8.7   | 18.5                                 | --  | 7.3                                 |
| 24...    | 1110 | 12.0                             | 446   | 8.6   | 17.5                                 | --  | 7.0                                 |
| 24...    | 1111 | 13.0                             | 457   | 8.6   | 17.5                                 | --  | 6.7                                 |

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 SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>, sec.19, T.20 S., R.66 W., Pueblo County, Hydrologic Unit 11020002, at approximate center of transect, approximately 100 ft downstream from Turkey Creek, and 6.7 mi upstream from Pueblo Dam.

PERIOD OF RECORD.--June 1988 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DATE     | TIME | SAM-<br>PLING<br>DEPTH<br>(FEET) | SPE-<br>CIFIC<br>CON-<br>DUCT-<br>ANCE<br>(US/CM) | PH<br>WATER<br>WHOLE<br>FIELD<br>(STAND-<br>ARD<br>UNITS) | TEMPER-<br>ATURE<br>WATER<br>(DEG C) | TRANS-<br>PAR-<br>ENCY<br>(SECCHI<br>DISK)<br>(M) | OXYGEN,<br>DIS-<br>SOLVED<br>(MG/L) |
|----------|------|----------------------------------|---|---|--------------------------------------|---|-------------------------------------|
| MAY 1996 |      |                                  |   |   |                                      |   |                                     |
| 14...    | 1145 | --                               | --  | --  | --                                   | 1.2   | --                                  |
| 14...    | 1146 | 0.0                              | 290   | 8.7   | 18.0                                 | --  | 8.5                                 |
| 14...    | 1147 | 3.0                              | 288   | 8.7   | 18.0                                 | --  | 8.5                                 |
| 14...    | 1148 | 6.0                              | 287   | 8.7   | 17.5                                 | --  | 8.4                                 |
| 14...    | 1149 | 9.0                              | 290   | 8.7   | 17.5                                 | --  | 8.3                                 |
| 14...    | 1150 | 12.0                             | 290   | 8.6   | 17.5                                 | --  | 8.1                                 |
| 14...    | 1151 | 15.0                             | 288   | 8.4   | 16.5                                 | --  | 6.8                                 |
| 14...    | 1152 | 18.0                             | 295   | 8.2   | 16.5                                 | --  | 6.8                                 |
| 14...    | 1153 | 21.0                             | 286   | 8.0   | 15.5                                 | --  | 6.2                                 |
| 14...    | 1154 | 24.0                             | 303   | 7.9   | 15.0                                 | --  | 5.7                                 |
| 14...    | 1155 | 27.0                             | 330   | 7.8   | 14.0                                 | --  | 5.2                                 |
| 14...    | 1156 | 30.0                             | 437   | 7.7   | 13.5                                 | --  | 5.1                                 |
| 14...    | 1157 | 33.0                             | 471   | 7.7   | 12.5                                 | --  | 4.7                                 |
| 14...    | 1158 | 36.0                             | 494   | 7.7   | 11.5                                 | --  | 4.6                                 |
| 14...    | 1159 | 39.0                             | 495   | 7.6   | 11.0                                 | --  | 4.2                                 |
| JUN      |      |                                  |   |   |                                      |   |                                     |
| 28...    | 0945 | --                               | --  | --  | --                                   | 1.8   | --                                  |
| 28...    | 0946 | 0.0                              | 241   | 8.6   | 21.5                                 | --  | 7.6                                 |
| 28...    | 0947 | 3.0                              | 241   | 8.6   | 21.5                                 | --  | 7.6                                 |
| 28...    | 0948 | 6.0                              | 241   | 8.6   | 21.5                                 | --  | 7.6                                 |
| 28...    | 0949 | 9.0                              | 241   | 8.6   | 21.5                                 | --  | 7.6                                 |
| 28...    | 0950 | 12.0                             | 241   | 8.6   | 21.5                                 | --  | 7.6                                 |
| 28...    | 0951 | 15.0                             | 207   | 8.3   | 20.0                                 | --  | 7.2                                 |
| 28...    | 0952 | 18.0                             | 195   | 8.2   | 19.5                                 | --  | 7.1                                 |
| 28...    | 0953 | 21.0                             | 197   | 8.1   | 19.5                                 | --  | 7.0                                 |
| 28...    | 0954 | 24.0                             | 193   | 8.1   | 19.5                                 | --  | 7.0                                 |
| 28...    | 0955 | 27.0                             | 186   | 8.1   | 19.0                                 | --  | 7.0                                 |
| 28...    | 0956 | 30.0                             | 179   | 8.1   | 18.5                                 | --  | 6.9                                 |
| 28...    | 0957 | 33.0                             | 177   | 8.0   | 18.0                                 | --  | 6.8                                 |
| 28...    | 0958 | 36.0                             | 176   | 8.0   | 17.5                                 | --  | 6.5                                 |
| 28...    | 0959 | 39.0                             | 178   | 8.0   | 17.5                                 | --  | 6.2                                 |
| AUG      |      |                                  |   |   |                                      |   |                                     |
| 21...    | 1005 | --                               | --  | --  | --                                   | 1.8   | --                                  |
| 21...    | 1006 | 0.0                              | 343   | 8.7   | 23.0                                 | --  | 7.6                                 |
| 21...    | 1007 | 3.0                              | 343   | 8.7   | 23.0                                 | --  | 7.6                                 |
| 21...    | 1008 | 6.0                              | 343   | 8.7   | 23.0                                 | --  | 7.6                                 |
| 21...    | 1009 | 9.0                              | 343   | 8.7   | 23.0                                 | --  | 7.6                                 |
| 21...    | 1010 | 12.0                             | 343   | 8.7   | 23.0                                 | --  | 7.6                                 |
| 21...    | 1011 | 15.0                             | 343   | 8.6   | 23.0                                 | --  | 7.5                                 |
| 21...    | 1012 | 18.0                             | 343   | 8.6   | 23.0                                 | --  | 7.5                                 |
| 21...    | 1013 | 21.0                             | 343   | 8.6   | 23.0                                 | --  | 7.5                                 |
| 21...    | 1014 | 24.0                             | 365   | 8.6   | 22.5                                 | --  | 6.8                                 |
| 21...    | 1015 | 27.0                             | 416   | 8.0   | 21.5                                 | --  | 4.0                                 |
| 21...    | 1016 | 29.0                             | 420   | 7.9   | 21.0                                 | --  | 3.5                                 |
| SEP      |      |                                  |   |   |                                      |   |                                     |
| 24...    | 1040 | --                               | --  | --  | --                                   | 1.5   | --                                  |
| 24...    | 1041 | 0.0                              | 380   | 8.5   | 20.0                                 | --  | 6.7                                 |
| 24...    | 1042 | 3.0                              | 380   | 8.5   | 19.5                                 | --  | 6.8                                 |
| 24...    | 1043 | 6.0                              | 381   | 8.5   | 19.5                                 | --  | 6.8                                 |
| 24...    | 1044 | 9.0                              | 381   | 8.5   | 19.5                                 | --  | 6.8                                 |
| 24...    | 1045 | 12.0                             | 382   | 8.5   | 19.5                                 | --  | 6.8                                 |
| 24...    | 1046 | 15.0                             | 382   | 8.5   | 19.5                                 | --  | 6.8                                 |
| 24...    | 1047 | 18.0                             | 382   | 8.5   | 19.5                                 | --  | 6.8                                 |
| 24...    | 1048 | 21.0                             | 383   | 8.5   | 19.0                                 | --  | 6.9                                 |
| 24...    | 1049 | 24.0                             | 497   | 8.5   | 17.5                                 | --  | 6.9                                 |
| 24...    | 1050 | 25.0                             | 500   | 8.5   | 17.5                                 | --  | 5.6                                 |

## 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 NW<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub>, sec.29, T.20 S., R.66 W., Pueblo County, Hydrologic Unit 11020002, at approximate center of transect, approximately 1.3 mi upstream from Peck Creek, 2.2 mi downstream from Turkey Creek, and 4.5 mi upstream from Pueblo Dam.

PERIOD OF RECORD.--June 1988 to current year.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DATE     | TIME | SAM-<br>PLING<br>DEPTH<br>(FEET) | SPE-<br>CIFIC<br>CON-<br>DUCT-<br>ANCE<br>(US/CM) | PH<br>WATER<br>WHOLE<br>FIELD<br>(STAND-<br>ARD<br>UNITS) | TEMPER-<br>ATURE<br>WATER<br>(DEG C) | TRANS-<br>PAR-<br>ENCY<br>(SECCHI<br>DISK)<br>(M) | OXYGEN,<br>DIS-<br>SOLVED<br>(MG/L) |
|----------|------|----------------------------------|---|---|--------------------------------------|---|-------------------------------------|
| MAY 1996 |      |                                  |   |   |                                      |   |                                     |
| 14...    | 1405 | --                               | --  | --  | --                                   | 1.8   | --                                  |
| 14...    | 1406 | 0.0                              | 340   | 8.4   | 17.5                                 | --  | 7.8                                 |
| 14...    | 1407 | 6.0                              | 341   | 8.4   | 17.5                                 | --  | 7.7                                 |
| 14...    | 1408 | 12.0                             | 348   | 8.4   | 17.0                                 | --  | 7.6                                 |
| 14...    | 1409 | 18.0                             | 379   | 8.3   | 16.5                                 | --  | 7.5                                 |
| 14...    | 1410 | 24.0                             | 495   | 8.1   | 14.0                                 | --  | 7.6                                 |
| 14...    | 1411 | 30.0                             | 508   | 8.0   | 12.0                                 | --  | 7.4                                 |
| 14...    | 1412 | 36.0                             | 517   | 8.0   | 10.5                                 | --  | 7.4                                 |
| 14...    | 1413 | 42.0                             | 520   | 8.0   | 10.0                                 | --  | 7.5                                 |
| 14...    | 1414 | 48.0                             | 521   | 8.0   | 9.5                                  | --  | 7.6                                 |
| 14...    | 1415 | 54.0                             | 521   | 8.0   | 9.5                                  | --  | 7.6                                 |
| 14...    | 1416 | 60.0                             | 519   | 8.0   | 9.5                                  | --  | 7.6                                 |
| 14...    | 1417 | 63.0                             | 521   | 8.0   | 9.0                                  | --  | 7.6                                 |
| JUN      |      |                                  |   |   |                                      |   |                                     |
| 28...    | 1040 | --                               | --  | --  | --                                   | 2.1   | --                                  |
| 28...    | 1041 | 0.0                              | 275   | 8.5   | 22.0                                 | --  | 7.4                                 |
| 28...    | 1042 | 6.0                              | 276   | 8.5   | 21.5                                 | --  | 7.3                                 |
| 28...    | 1043 | 12.0                             | 274   | 8.5   | 21.5                                 | --  | 7.3                                 |
| 28...    | 1044 | 18.0                             | 301   | 8.3   | 20.5                                 | --  | 6.9                                 |
| 28...    | 1045 | 24.0                             | 283   | 8.2   | 19.5                                 | --  | 6.6                                 |
| 28...    | 1046 | 30.0                             | 210   | 8.1   | 18.5                                 | --  | 6.5                                 |
| 28...    | 1047 | 36.0                             | 194   | 8.1   | 18.0                                 | --  | 6.5                                 |
| 28...    | 1048 | 42.0                             | 192   | 8.0   | 17.5                                 | --  | 6.3                                 |
| 28...    | 1049 | 48.0                             | 200   | 8.0   | 16.5                                 | --  | 6.0                                 |
| 28...    | 1050 | 54.0                             | 207   | 7.9   | 16.5                                 | --  | 5.8                                 |
| 28...    | 1051 | 60.0                             | 209   | 7.9   | 16.5                                 | --  | 5.6                                 |
| 28...    | 1052 | 63.0                             | 214   | 7.9   | 16.5                                 | --  | 5.5                                 |
| AUG      |      |                                  |   |   |                                      |   |                                     |
| 21...    | 0945 | --                               | --  | --  | --                                   | 2.4   | --                                  |
| 21...    | 0946 | 0.0                              | 339   | 8.5   | 23.0                                 | --  | 6.9                                 |
| 21...    | 0947 | 6.0                              | 332   | 8.4   | 23.0                                 | --  | 6.9                                 |
| 21...    | 0948 | 12.0                             | 332   | 8.4   | 23.0                                 | --  | 6.8                                 |
| 21...    | 0949 | 18.0                             | 334   | 8.4   | 23.0                                 | --  | 6.5                                 |
| 21...    | 0950 | 24.0                             | 338   | 8.3   | 23.0                                 | --  | 5.9                                 |
| 21...    | 0951 | 30.0                             | 338   | 8.3   | 23.0                                 | --  | 5.9                                 |
| 21...    | 0952 | 36.0                             | 346   | 8.2   | 22.5                                 | --  | 5.5                                 |
| 21...    | 0953 | 42.0                             | 362   | 8.2   | 22.5                                 | --  | 5.4                                 |
| 21...    | 0954 | 48.0                             | 366   | 7.9   | 22.0                                 | --  | 3.8                                 |
| 21...    | 0955 | 53.0                             | 382   | 7.9   | 22.0                                 | --  | 3.9                                 |
| SEP      |      |                                  |   |   |                                      |   |                                     |
| 24...    | 1025 | --                               | --  | --  | --                                   | 1.8   | --                                  |
| 24...    | 1026 | 0.0                              | 373   | 8.2   | 20.0                                 | --  | 5.7                                 |
| 24...    | 1027 | 6.0                              | 374   | 8.2   | 19.5                                 | --  | 5.7                                 |
| 24...    | 1028 | 12.0                             | 374   | 8.2   | 19.5                                 | --  | 5.6                                 |
| 24...    | 1029 | 18.0                             | 374   | 8.2   | 19.5                                 | --  | 5.6                                 |
| 24...    | 1030 | 24.0                             | 374   | 8.2   | 19.5                                 | --  | 5.6                                 |
| 24...    | 1031 | 30.0                             | 374   | 8.1   | 19.5                                 | --  | 5.6                                 |
| 24...    | 1032 | 36.0                             | 373   | 8.1   | 19.5                                 | --  | 5.6                                 |
| 24...    | 1033 | 42.0                             | 373   | 8.1   | 19.5                                 | --  | 5.6                                 |
| 24...    | 1034 | 48.0                             | 380   | 8.1   | 19.5                                 | --  | 5.5                                 |
| 24...    | 1035 | 50.0                             | 411   | 8.1   | 19.0                                 | --  | 5.2                                 |

0709350 PUEBLO RESERVOIR NEAR PUEBLO, CO--Continued

WATER-QUALITY RECORDS

381559104465500 PUEBLO RESERVOIR SITE 5C

LOCATION.--Lat 38°15'59", long 104°46'55", in SW<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub>, sec.33, T.20 S., R.66 W., Pueblo County, Hydrologic Unit 11020002, at approximate center of transect, approximately 0.1 mi upstream from Peck Creek, 1.2 mi upstream from Rock Creek, and 3.2 mi upstream from Pueblo Dam.

PERIOD OF RECORD.--June 1988 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DATE     | TIME | SAM-<br>PLING<br>DEPTH<br>(FEET) | SPE-<br>CIFIC<br>CON-<br>DUCT-<br>ANCE<br>(US/CM) | PH<br>WATER<br>WHOLE<br>FIELD<br>(STAND-<br>ARD<br>UNITS) | TEMPER-<br>ATURE<br>WATER<br>(DEG C) | TRANS-<br>PAR-<br>ENCY<br>(SECCHI<br>DISK)<br>(M) | OXYGEN,<br>DIS-<br>SOLVED<br>(MG/L) |
|----------|------|----------------------------------|---|---|--------------------------------------|---|-------------------------------------|
| MAY 1996 |      |                                  |   |   |                                      |   |                                     |
| 14...    | 1115 | --                               | --  | --  | --                                   | 6.7   | --                                  |
| 14...    | 1116 | 0.0                              | 439   | 8.3   | 17.0                                 | --  | 7.6                                 |
| 14...    | 1117 | 3.0                              | 434   | 8.3   | 17.0                                 | --  | 7.5                                 |
| 14...    | 1118 | 6.0                              | 438   | 8.3   | 17.0                                 | --  | 7.5                                 |
| 14...    | 1119 | 9.0                              | 439   | 8.3   | 16.5                                 | --  | 7.5                                 |
| 14...    | 1120 | 12.0                             | 450   | 8.3   | 16.5                                 | --  | 7.5                                 |
| 14...    | 1121 | 15.0                             | 463   | 8.3   | 15.5                                 | --  | 7.6                                 |
| 14...    | 1122 | 18.0                             | 476   | 8.2   | 15.5                                 | --  | 7.6                                 |
| 14...    | 1123 | 21.0                             | 484   | 8.2   | 15.0                                 | --  | 7.7                                 |
| 14...    | 1124 | 24.0                             | 495   | 8.2   | 14.5                                 | --  | 7.7                                 |
| 14...    | 1125 | 27.0                             | 498   | 8.2   | 14.0                                 | --  | 7.7                                 |
| 14...    | 1126 | 30.0                             | 502   | 8.2   | 13.5                                 | --  | 7.7                                 |
| 14...    | 1127 | 33.0                             | 512   | 8.2   | 12.0                                 | --  | 7.6                                 |
| 14...    | 1128 | 35.0                             | 517   | 8.0   | 11.0                                 | --  | 7.4                                 |
| JUN      |      |                                  |   |   |                                      |   |                                     |
| 28...    | 0915 | --                               | --  | --  | --                                   | 3.7   | --                                  |
| 28...    | 0916 | 0.0                              | 307   | 8.4   | 21.5                                 | --  | 7.2                                 |
| 28...    | 0917 | 3.0                              | 307   | 8.4   | 21.5                                 | --  | 7.1                                 |
| 28...    | 0918 | 6.0                              | 305   | 8.4   | 21.5                                 | --  | 7.1                                 |
| 28...    | 0919 | 9.0                              | 305   | 8.4   | 21.5                                 | --  | 7.1                                 |
| 28...    | 0920 | 12.0                             | 304   | 8.4   | 21.5                                 | --  | 7.1                                 |
| 28...    | 0921 | 15.0                             | 304   | 8.4   | 21.5                                 | --  | 7.1                                 |
| 28...    | 0922 | 18.0                             | 304   | 8.3   | 21.0                                 | --  | 6.9                                 |
| 28...    | 0923 | 21.0                             | 299   | 8.2   | 20.5                                 | --  | 6.7                                 |
| 28...    | 0924 | 24.0                             | 291   | 8.1   | 20.0                                 | --  | 6.5                                 |
| 28...    | 0925 | 27.0                             | 288   | 8.1   | 20.0                                 | --  | 6.4                                 |
| 28...    | 0926 | 30.0                             | 286   | 8.0   | 19.5                                 | --  | 6.3                                 |
| 28...    | 0927 | 33.0                             | 278   | 8.0   | 19.5                                 | --  | 6.2                                 |
| 28...    | 0928 | 36.0                             | 256   | 8.0   | 19.0                                 | --  | 6.1                                 |
| 28...    | 0929 | 39.0                             | 218   | 8.0   | 18.5                                 | --  | 6.1                                 |
| 28...    | 0930 | 42.0                             | 217   | 7.9   | 18.0                                 | --  | 6.0                                 |
| 28...    | 0931 | 45.0                             | 196   | 7.9   | 17.5                                 | --  | 6.0                                 |
| 28...    | 0932 | 48.0                             | 196   | 7.9   | 17.5                                 | --  | 6.0                                 |
| 28...    | 0933 | 51.0                             | 195   | 7.9   | 17.5                                 | --  | 6.0                                 |
| 28...    | 0934 | 54.0                             | 203   | 7.9   | 17.0                                 | --  | 5.9                                 |
| 28...    | 0935 | 57.0                             | 200   | 7.9   | 17.0                                 | --  | 5.8                                 |
| 28...    | 0936 | 60.0                             | 208   | 7.9   | 17.0                                 | --  | 5.7                                 |
| 28...    | 0937 | 63.0                             | 209   | 7.9   | 17.0                                 | --  | 5.6                                 |
| 28...    | 0938 | 66.0                             | 210   | 7.9   | 16.5                                 | --  | 5.6                                 |
| 28...    | 0939 | 69.0                             | 212   | 7.8   | 16.5                                 | --  | 5.5                                 |
| 28...    | 0940 | 72.0                             | 218   | 7.8   | 16.5                                 | --  | 5.4                                 |
| 28...    | 0941 | 75.0                             | 222   | 7.8   | 16.0                                 | --  | 5.2                                 |
| AUG      |      |                                  |   |   |                                      |   |                                     |
| 21...    | 0915 | --                               | --  | --  | --                                   | 3.0   | --                                  |
| 21...    | 0916 | 0.0                              | 331   | 8.4   | 23.0                                 | --  | 6.7                                 |
| 21...    | 0917 | 3.0                              | 330   | 8.4   | 23.0                                 | --  | 6.7                                 |
| 21...    | 0918 | 6.0                              | 331   | 8.4   | 23.0                                 | --  | 6.7                                 |
| 21...    | 0919 | 9.0                              | 330   | 8.4   | 23.0                                 | --  | 6.7                                 |
| 21...    | 0920 | 12.0                             | 331   | 8.4   | 23.0                                 | --  | 6.6                                 |
| 21...    | 0921 | 15.0                             | 331   | 8.3   | 23.0                                 | --  | 6.5                                 |
| 21...    | 0922 | 18.0                             | 331   | 8.3   | 23.0                                 | --  | 6.5                                 |
| 21...    | 0923 | 21.0                             | 331   | 8.3   | 23.0                                 | --  | 6.4                                 |
| 21...    | 0924 | 24.0                             | 331   | 8.3   | 23.0                                 | --  | 6.4                                 |
| 21...    | 0925 | 27.0                             | 330   | 8.3   | 23.0                                 | --  | 6.0                                 |
| 21...    | 0926 | 30.0                             | 336   | 8.1   | 23.0                                 | --  | 5.3                                 |
| 21...    | 0927 | 33.0                             | 341   | 8.0   | 23.0                                 | --  | 4.7                                 |
| 21...    | 0928 | 36.0                             | 343   | 8.0   | 22.5                                 | --  | 4.5                                 |
| 21...    | 0929 | 39.0                             | 345   | 7.9   | 22.5                                 | --  | 4.1                                 |
| 21...    | 0930 | 42.0                             | 347   | 7.9   | 22.5                                 | --  | 3.7                                 |
| 21...    | 0931 | 45.0                             | 348   | 7.8   | 22.5                                 | --  | 3.4                                 |
| 21...    | 0932 | 48.0                             | 351   | 7.8   | 22.5                                 | --  | 3.1                                 |
| 21...    | 0933 | 51.0                             | 346   | 7.8   | 22.0                                 | --  | 2.6                                 |
| 21...    | 0934 | 54.0                             | 349   | 7.8   | 22.0                                 | --  | 2.3                                 |
| 21...    | 0935 | 57.0                             | 360   | 7.8   | 22.0                                 | --  | 2.7                                 |
| 21...    | 0936 | 60.0                             | 357   | 7.7   | 21.5                                 | --  | 2.2                                 |
| 21...    | 0937 | 63.0                             | 359   | 7.7   | 21.5                                 | --  | 2.1                                 |
| 21...    | 0938 | 66.0                             | 360   | 7.7   | 21.5                                 | --  | 2.1                                 |

## ARKANSAS RIVER BASIN

## 07099350 PUEBLO RESERVOIR NEAR PUEBLO, CO--Continued

## WATER-QUALITY RECORDS

## 381559104465500 PUEBLO RESERVOIR SITE 5C--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DATE  | TIME | SAM-<br>PLING<br>DEPTH<br>(FEET) | SPE-<br>CIFIC<br>CON-<br>DUCT-<br>ANCE<br>(US/CM) | PH<br>WATER<br>WHOLE<br>FIELD<br>(STAND-<br>ARD<br>UNITS) | TEMPER-<br>ATURE<br>WATER<br>(DEG C) | TRANS-<br>PAR-<br>ENCY<br>(SECCHI<br>DISK)<br>(M) | OXYGEN,<br>DIS-<br>SOLVED<br>(MG/L) |
|-------|------|----------------------------------|---|---|--------------------------------------|---|-------------------------------------|
| SEP   |      |                                  |   |   |                                      |   |                                     |
| 24... | 0955 | --                               | --  | --  | --                                   | 1.8   | --                                  |
| 24... | 0956 | 0.0                              | 372   | 8.2   | 20.0                                 | --  | 5.5                                 |
| 24... | 0957 | 3.0                              | 372   | 8.1   | 20.0                                 | --  | 5.5                                 |
| 24... | 0958 | 6.0                              | 372   | 8.1   | 20.0                                 | --  | 5.5                                 |
| 24... | 0959 | 9.0                              | 372   | 8.1   | 20.0                                 | --  | 5.5                                 |
| 24... | 1000 | 12.0                             | 372   | 8.1   | 20.0                                 | --  | 5.4                                 |
| 24... | 1001 | 15.0                             | 372   | 8.1   | 20.0                                 | --  | 5.4                                 |
| 24... | 1002 | 18.0                             | 372   | 8.1   | 20.0                                 | --  | 5.4                                 |
| 24... | 1003 | 21.0                             | 371   | 8.1   | 20.0                                 | --  | 5.4                                 |
| 24... | 1004 | 24.0                             | 371   | 8.1   | 20.0                                 | --  | 5.4                                 |
| 24... | 1005 | 27.0                             | 371   | 8.1   | 20.0                                 | --  | 5.3                                 |
| 24... | 1006 | 30.0                             | 371   | 8.1   | 19.5                                 | --  | 5.3                                 |
| 24... | 1007 | 33.0                             | 371   | 8.1   | 19.5                                 | --  | 5.3                                 |
| 24... | 1008 | 36.0                             | 371   | 8.1   | 19.5                                 | --  | 5.3                                 |
| 24... | 1009 | 39.0                             | 371   | 8.1   | 19.5                                 | --  | 5.3                                 |
| 24... | 1010 | 42.0                             | 371   | 8.1   | 19.5                                 | --  | 5.3                                 |
| 24... | 1011 | 45.0                             | 371   | 8.1   | 19.5                                 | --  | 5.3                                 |
| 24... | 1012 | 48.0                             | 371   | 8.1   | 19.5                                 | --  | 5.3                                 |
| 24... | 1013 | 51.0                             | 371   | 8.1   | 19.5                                 | --  | 5.3                                 |
| 24... | 1014 | 54.0                             | 371   | 8.1   | 19.5                                 | --  | 5.3                                 |
| 24... | 1015 | 57.0                             | 373   | 8.1   | 19.5                                 | --  | 4.9                                 |
| 24... | 1016 | 60.0                             | 400   | 8.1   | 19.0                                 | --  | 5.4                                 |
| 24... | 1017 | 63.0                             | 415   | 8.2   | 18.5                                 | --  | 5.3                                 |

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 NE<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub>, sec.34, T.20 S., R.66 W., Pueblo County, Hydrologic Unit 11020002, at approximate center of transect, approximately 0.2 mi downstream from Rock Creek, 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 1995 TO SEPTEMBER 1996

| DATE     | TIME | SAM-<br>PLING<br>DEPTH<br>(FEET) | SPE-<br>CIFIC<br>CON-<br>DUCT-<br>ANCE<br>(US/CM) | PH<br>WATER<br>WHOLE<br>FIELD<br>(STAND-<br>ARD<br>UNITS) | TEMPER-<br>ATURE<br>WATER<br>(DEG C) | TRANS-<br>PAR-<br>ENCY<br>(SECCHI<br>DISK)<br>(M) | OXYGEN,<br>DIS-<br>SOLVED<br>(MG/L) |
|----------|------|----------------------------------|---|---|--------------------------------------|---|-------------------------------------|
| MAY 1996 |      |                                  |   |   |                                      |   |                                     |
| 14...    | 0930 | --                               | --  | --  | --                                   | 9.4   | --                                  |
| 14...    | 0931 | 0.0                              | 481   | 8.4   | 16.5                                 | --  | 8.1                                 |
| 14...    | 0932 | 6.0                              | 495   | 8.4   | 16.0                                 | --  | 8.2                                 |
| 14...    | 0933 | 12.0                             | 500   | 8.4   | 16.0                                 | --  | 8.3                                 |
| 14...    | 0934 | 18.0                             | 501   | 8.4   | 15.5                                 | --  | 8.3                                 |
| 14...    | 0935 | 24.0                             | 508   | 8.4   | 14.5                                 | --  | 8.4                                 |
| 14...    | 0936 | 30.0                             | 515   | 8.3   | 13.0                                 | --  | 8.5                                 |
| 14...    | 0937 | 36.0                             | 520   | 8.3   | 12.0                                 | --  | 8.6                                 |
| 14...    | 0938 | 42.0                             | 522   | 8.2   | 11.0                                 | --  | 8.7                                 |
| 14...    | 0939 | 48.0                             | 522   | 8.2   | 10.5                                 | --  | 8.7                                 |
| 14...    | 0940 | 54.0                             | 524   | 8.2   | 10.0                                 | --  | 8.7                                 |
| 14...    | 0941 | 60.0                             | 522   | 8.2   | 9.5                                  | --  | 8.8                                 |
| 14...    | 0942 | 66.0                             | 521   | 8.2   | 9.5                                  | --  | 8.8                                 |
| 14...    | 0943 | 72.0                             | 523   | 8.2   | 9.5                                  | --  | 8.8                                 |
| 14...    | 0944 | 78.0                             | 522   | 8.1   | 9.0                                  | --  | 8.8                                 |
| 14...    | 0945 | 84.0                             | 523   | 8.1   | 9.0                                  | --  | 8.8                                 |
| 14...    | 0946 | 90.0                             | 523   | 8.1   | 9.0                                  | --  | 8.7                                 |
| 14...    | 0947 | 96.0                             | 524   | 8.1   | 9.0                                  | --  | 8.6                                 |
| JUN      |      |                                  |   |   |                                      |   |                                     |
| 28...    | 1100 | --                               | --  | --  | --                                   | 4.3   | --                                  |
| 28...    | 1101 | 0.0                              | 301   | 8.5   | 22.0                                 | --  | 7.2                                 |
| 28...    | 1102 | 6.0                              | 302   | 8.5   | 21.5                                 | --  | 7.2                                 |
| 28...    | 1103 | 12.0                             | 306   | 8.5   | 21.5                                 | --  | 7.3                                 |
| 28...    | 1104 | 18.0                             | 312   | 8.4   | 21.5                                 | --  | 7.3                                 |
| 28...    | 1105 | 24.0                             | 321   | 8.3   | 21.0                                 | --  | 7.0                                 |
| 28...    | 1106 | 30.0                             | 301   | 8.1   | 19.5                                 | --  | 6.4                                 |
| 28...    | 1107 | 36.0                             | 253   | 7.9   | 18.5                                 | --  | 6.1                                 |
| 28...    | 1108 | 42.0                             | 217   | 7.9   | 18.0                                 | --  | 6.0                                 |
| 28...    | 1109 | 48.0                             | 208   | 7.9   | 17.5                                 | --  | 5.9                                 |
| 28...    | 1110 | 54.0                             | 208   | 7.9   | 17.0                                 | --  | 5.8                                 |
| 28...    | 1111 | 60.0                             | 231   | 7.8   | 17.0                                 | --  | 5.7                                 |
| 28...    | 1112 | 66.0                             | 234   | 7.8   | 17.0                                 | --  | 5.6                                 |
| 28...    | 1113 | 72.0                             | 235   | 7.8   | 17.0                                 | --  | 5.6                                 |
| 28...    | 1114 | 78.0                             | 260   | 7.8   | 16.5                                 | --  | 5.5                                 |
| 28...    | 1115 | 84.0                             | 240   | 7.8   | 16.5                                 | --  | 5.5                                 |
| 28...    | 1116 | 90.0                             | 233   | 7.8   | 16.0                                 | --  | 5.2                                 |
| 28...    | 1117 | 96.0                             | 239   | 7.8   | 15.5                                 | --  | 5.0                                 |
| 28...    | 1118 | 102                              | 256   | 7.7   | 15.0                                 | --  | 4.6                                 |
| 28...    | 1119 | 105                              | 259   | 7.7   | 15.0                                 | --  | 4.5                                 |
| AUG      |      |                                  |   |   |                                      |   |                                     |
| 21...    | 0855 | --                               | --  | --  | --                                   | 3.4   | --                                  |
| 21...    | 0856 | 0.0                              | 330   | 8.4   | 23.0                                 | --  | 6.6                                 |
| 21...    | 0857 | 6.0                              | 330   | 8.3   | 23.0                                 | --  | 6.6                                 |
| 21...    | 0858 | 12.0                             | 330   | 8.3   | 23.0                                 | --  | 6.6                                 |
| 21...    | 0859 | 18.0                             | 329   | 8.3   | 23.0                                 | --  | 6.6                                 |
| 21...    | 0900 | 24.0                             | 328   | 8.3   | 23.0                                 | --  | 6.2                                 |
| 21...    | 0901 | 30.0                             | 330   | 8.2   | 23.0                                 | --  | 5.7                                 |
| 21...    | 0902 | 36.0                             | 332   | 8.1   | 22.5                                 | --  | 5.2                                 |
| 21...    | 0903 | 42.0                             | 332   | 8.1   | 22.5                                 | --  | 5.3                                 |
| 21...    | 0904 | 48.0                             | 333   | 8.0   | 22.5                                 | --  | 4.2                                 |
| 21...    | 0905 | 54.0                             | 335   | 7.9   | 22.0                                 | --  | 3.5                                 |
| 21...    | 0906 | 60.0                             | 348   | 7.8   | 22.0                                 | --  | 2.1                                 |
| 21...    | 0907 | 66.0                             | 343   | 7.8   | 21.5                                 | --  | 1.5                                 |
| 21...    | 0908 | 72.0                             | 345   | 7.7   | 21.5                                 | --  | 1.2                                 |
| 21...    | 0909 | 78.0                             | 347   | 7.7   | 21.0                                 | --  | 0.8                                 |
| 21...    | 0910 | 84.0                             | 341   | 7.7   | 20.5                                 | --  | 0.2                                 |
| 21...    | 0911 | 90.0                             | 320   | 7.7   | 19.5                                 | --  | 0.2                                 |

## ARKANSAS RIVER BASIN

## 07099350 PUEBLO RESERVOIR NEAR PUEBLO, CO--Continued

## WATER-QUALITY RECORDS

## 381548104453300 PUEBLO RESERVOIR SITE 6C--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DATE  | TIME | SAM-<br>PLING<br>DEPTH<br>(FEET) | SPE-<br>CIFIC<br>CON-<br>DUCT-<br>ANCE<br>(US/CM) | PH<br>WATER<br>WHOLE<br>FIELD<br>(STAND-<br>ARD<br>UNITS) | TEMPER-<br>ATURE<br>WATER<br>(DEG C) | TRANS-<br>PAR-<br>ENCY<br>(SECCHI<br>DISK)<br>(M) | OXYGEN,<br>DIS-<br>SOLVED<br>(MG/L) |
|-------|------|----------------------------------|---|---|--------------------------------------|---|-------------------------------------|
| SEP   |      |                                  |   |   |                                      |   |                                     |
| 24... | 0940 | --                               | --  | --  | --                                   | 2.1   | --                                  |
| 24... | 0941 | 0.0                              | 370   | 8.1   | 19.5                                 | --  | 5.3                                 |
| 24... | 0942 | 6.0                              | 370   | 8.1   | 20.0                                 | --  | 5.3                                 |
| 24... | 0943 | 12.0                             | 369   | 8.1   | 19.5                                 | --  | 5.3                                 |
| 24... | 0944 | 18.0                             | 369   | 8.1   | 19.5                                 | --  | 5.3                                 |
| 24... | 0945 | 24.0                             | 369   | 8.1   | 19.5                                 | --  | 5.3                                 |
| 24... | 0946 | 30.0                             | 369   | 8.1   | 19.5                                 | --  | 5.3                                 |
| 24... | 0947 | 36.0                             | 368   | 8.1   | 19.5                                 | --  | 5.2                                 |
| 24... | 0948 | 42.0                             | 368   | 8.1   | 19.5                                 | --  | 5.3                                 |
| 24... | 0949 | 48.0                             | 368   | 8.1   | 19.5                                 | --  | 5.3                                 |
| 24... | 0950 | 54.0                             | 369   | 8.1   | 19.5                                 | --  | 5.2                                 |
| 24... | 0951 | 60.0                             | 369   | 8.1   | 19.5                                 | --  | 5.2                                 |
| 24... | 0952 | 66.0                             | 372   | 8.1   | 19.5                                 | --  | 5.2                                 |
| 24... | 0953 | 72.0                             | 374   | 8.1   | 19.5                                 | --  | 5.2                                 |
| 24... | 0954 | 78.0                             | 377   | 8.1   | 19.5                                 | --  | 5.2                                 |
| 24... | 0955 | 83.0                             | 383   | 8.1   | 19.5                                 | --  | 5.1                                 |

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 SW¼/4NE¼/4, 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 1995 TO SEPTEMBER 1996

| DATE     | TIME | SAM-<br>PLING<br>DEPTH<br>(FEET) | SPE-<br>CIFIC<br>CON-<br>DUCT-<br>ANCE<br>(US/CM) | PH<br>WATER<br>WHOLE<br>FIELD<br>(STAND-<br>ARD<br>UNITS) | TEMPER-<br>ATURE<br>WATER<br>(DEG C) | TRANS-<br>PAR-<br>ENCY<br>(SECCHI<br>DISK)<br>(M) | OXYGEN,<br>DIS-<br>SOLVED<br>(MG/L) |
|----------|------|----------------------------------|---|---|--------------------------------------|---|-------------------------------------|
| MAY 1996 |      |                                  |   |   |                                      |   |                                     |
| 14...    | 0900 | --                               | --  | --  | --                                   | 9.4   | --                                  |
| 14...    | 0901 | 0.0                              | 516   | 8.2   | 15.5                                 | --  | 8.4                                 |
| 14...    | 0902 | 3.0                              | 516   | 8.2   | 15.0                                 | --  | 8.4                                 |
| 14...    | 0903 | 6.0                              | 518   | 8.3   | 15.0                                 | --  | 8.5                                 |
| 14...    | 0904 | 9.0                              | 518   | 8.3   | 15.0                                 | --  | 8.5                                 |
| 14...    | 0905 | 12.0                             | 518   | 8.3   | 15.0                                 | --  | 8.5                                 |
| 14...    | 0906 | 15.0                             | 517   | 8.4   | 15.0                                 | --  | 8.5                                 |
| 14...    | 0907 | 18.0                             | 517   | 8.4   | 14.5                                 | --  | 8.5                                 |
| 14...    | 0908 | 21.0                             | 515   | 8.4   | 14.5                                 | --  | 8.6                                 |
| 14...    | 0909 | 24.0                             | 515   | 8.4   | 14.0                                 | --  | 8.6                                 |
| 14...    | 0910 | 27.0                             | 516   | 8.4   | 13.5                                 | --  | 8.7                                 |
| 14...    | 0911 | 30.0                             | 517   | 8.3   | 13.5                                 | --  | 8.7                                 |
| 14...    | 0912 | 33.0                             | 517   | 8.3   | 13.5                                 | --  | 8.7                                 |
| 14...    | 0913 | 36.0                             | 518   | 8.3   | 13.0                                 | --  | 8.7                                 |
| 14...    | 0914 | 39.0                             | 520   | 8.3   | 12.5                                 | --  | 8.8                                 |
| 14...    | 0915 | 42.0                             | 520   | 8.3   | 12.0                                 | --  | 8.8                                 |
| 14...    | 0916 | 45.0                             | 523   | 8.3   | 11.5                                 | --  | 8.8                                 |
| 14...    | 0917 | 48.0                             | 522   | 8.3   | 11.5                                 | --  | 8.8                                 |
| 14...    | 0918 | 51.0                             | 526   | 8.2   | 10.5                                 | --  | 8.8                                 |
| 14...    | 0919 | 54.0                             | 525   | 8.2   | 10.5                                 | --  | 8.8                                 |
| 14...    | 0920 | 57.0                             | 525   | 8.2   | 10.0                                 | --  | 8.9                                 |
| 14...    | 0921 | 60.0                             | 527   | 8.2   | 10.0                                 | --  | 8.9                                 |
| 14...    | 0922 | 63.0                             | 526   | 8.2   | 9.5                                  | --  | 8.9                                 |
| 14...    | 0923 | 66.0                             | 525   | 8.2   | 9.5                                  | --  | 8.9                                 |
| 14...    | 0924 | 69.0                             | 526   | 8.2   | 9.5                                  | --  | 8.8                                 |
| 14...    | 0925 | 72.0                             | 525   | 8.2   | 9.5                                  | --  | 8.8                                 |
| 14...    | 0926 | 75.0                             | 526   | 8.2   | 9.5                                  | --  | 8.8                                 |
| 14...    | 0927 | 78.0                             | 526   | 8.2   | 9.0                                  | --  | 8.9                                 |
| 14...    | 0928 | 81.0                             | 525   | 8.2   | 9.0                                  | --  | 8.9                                 |
| 14...    | 0929 | 84.0                             | 525   | 8.1   | 9.0                                  | --  | 8.8                                 |
| 14...    | 0930 | 87.0                             | 525   | 8.1   | 9.0                                  | --  | 8.8                                 |
| 14...    | 0931 | 90.0                             | 525   | 8.1   | 9.0                                  | --  | 8.9                                 |
| 14...    | 0932 | 93.0                             | 525   | 8.1   | 9.0                                  | --  | 8.9                                 |
| 14...    | 0933 | 96.0                             | 525   | 8.1   | 9.0                                  | --  | 8.9                                 |
| 14...    | 0934 | 99.0                             | 525   | 8.1   | 9.0                                  | --  | 8.9                                 |
| 14...    | 0935 | 102                              | 525   | 8.1   | 9.0                                  | --  | 8.8                                 |
| 14...    | 0936 | 105                              | 525   | 8.1   | 9.0                                  | --  | 8.8                                 |
| 14...    | 0937 | 108                              | 525   | 8.1   | 9.0                                  | --  | 8.8                                 |
| 14...    | 0938 | 111                              | 526   | 8.1   | 9.0                                  | --  | 8.8                                 |
| 14...    | 0939 | 114                              | 526   | 8.1   | 8.5                                  | --  | 8.7                                 |
| 14...    | 0940 | 117                              | 526   | 8.1   | 8.5                                  | --  | 8.7                                 |
| 14...    | 0941 | 120                              | 526   | 8.1   | 8.5                                  | --  | 8.7                                 |
| 14...    | 0942 | 123                              | 527   | 8.1   | 8.5                                  | --  | 8.5                                 |
| JUN      |      |                                  |   |   |                                      |   |                                     |
| 28...    | 0840 | --                               | --  | --  | --                                   | 4.6   | --                                  |
| 28...    | 0841 | 0.0                              | 332   | 8.4   | 21.5                                 | --  | 7.4                                 |
| 28...    | 0842 | 3.0                              | 332   | 8.5   | 21.5                                 | --  | 7.5                                 |
| 28...    | 0843 | 6.00                             | 332   | 8.5   | 21.5                                 | --  | 7.5                                 |
| 28...    | 0844 | 9.00                             | 332   | 8.4   | 21.5                                 | --  | 7.5                                 |
| 28...    | 0845 | 12.0                             | 332   | 8.4   | 21.5                                 | --  | 7.5                                 |
| 28...    | 0846 | 15.0                             | 332   | 8.4   | 21.5                                 | --  | 7.5                                 |
| 28...    | 0847 | 18.0                             | 332   | 8.4   | 21.5                                 | --  | 7.5                                 |
| 28...    | 0848 | 21.0                             | 333   | 8.4   | 21.5                                 | --  | 7.5                                 |
| 28...    | 0849 | 24.0                             | 334   | 8.4   | 21.5                                 | --  | 7.4                                 |
| 28...    | 0850 | 27.0                             | 333   | 8.3   | 20.5                                 | --  | 7.1                                 |
| 28...    | 0851 | 30.0                             | 333   | 8.2   | 20.5                                 | --  | 7.0                                 |
| 28...    | 0852 | 33.0                             | 322   | 8.0   | 19.5                                 | --  | 6.4                                 |
| 28...    | 0853 | 36.0                             | 295   | 7.9   | 19.0                                 | --  | 5.9                                 |
| 28...    | 0854 | 39.0                             | 268   | 7.8   | 18.0                                 | --  | 5.7                                 |
| 28...    | 0855 | 42.0                             | 251   | 7.8   | 18.0                                 | --  | 5.6                                 |
| 28...    | 0856 | 45.0                             | 248   | 7.8   | 18.0                                 | --  | 5.6                                 |
| 28...    | 0857 | 48.0                             | 252   | 7.7   | 17.5                                 | --  | 5.5                                 |
| 28...    | 0858 | 51.0                             | 271   | 7.7   | 17.5                                 | --  | 5.5                                 |
| 28...    | 0859 | 54.0                             | 266   | 7.7   | 17.5                                 | --  | 5.4                                 |
| 28...    | 0900 | 57.0                             | 260   | 7.7   | 17.0                                 | --  | 5.4                                 |

## 07099350 PUEBLO RESERVOIR NEAR PUEBLO, CO--Continued

## WATER-QUALITY RECORDS

## 381602104435200 PUEBLO RESERVOIR SITE 7B--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DATE     | TIME | SAM-<br>PLING<br>DEPTH<br>(FEET) | SPE-<br>CIFIC<br>CON-<br>DUCT-<br>ANCE<br>(US/CM) | PH<br>WATER<br>WHOLE<br>FIELD<br>(STAND-<br>ARD<br>UNITS) | TEMPER-<br>ATURE<br>WATER<br>(DEG C) | TRANS-<br>PAR-<br>ENCY<br>(SECCHI<br>DISK)<br>(M) | OXYGEN,<br>DIS-<br>SOLVED<br>(MG/L) |
|----------|------|----------------------------------|---|---|--------------------------------------|---|-------------------------------------|
| JUN 1996 |      |                                  |   |   |                                      |   |                                     |
| 28...    | 0901 | 60.0                             | 260   | 7.7   | 17.0                                 | --  | 5.4                                 |
| 28...    | 0902 | 63.0                             | 284   | 7.7   | 17.0                                 | --  | 5.4                                 |
| 28...    | 0903 | 66.0                             | 291   | 7.6   | 17.0                                 | --  | 5.4                                 |
| 28...    | 0904 | 69.0                             | 289   | 7.7   | 17.0                                 | --  | 5.4                                 |
| 28...    | 0905 | 72.0                             | 300   | 7.6   | 17.0                                 | --  | 5.4                                 |
| 28...    | 0906 | 75.0                             | 301   | 7.6   | 17.0                                 | --  | 5.4                                 |
| 28...    | 0907 | 78.0                             | 298   | 7.7   | 16.5                                 | --  | 5.4                                 |
| 28...    | 0908 | 81.0                             | 275   | 7.7   | 16.5                                 | --  | 5.4                                 |
| 28...    | 0909 | 84.0                             | 272   | 7.7   | 16.5                                 | --  | 5.4                                 |
| 28...    | 0910 | 87.0                             | 266   | 7.7   | 16.0                                 | --  | 5.4                                 |
| 28...    | 0911 | 90.0                             | 265   | 7.7   | 16.0                                 | --  | 5.4                                 |
| 28...    | 0912 | 93.0                             | 258   | 7.7   | 16.0                                 | --  | 5.3                                 |
| 28...    | 0913 | 96.0                             | 259   | 7.7   | 15.5                                 | --  | 5.2                                 |
| 28...    | 0914 | 99.0                             | 259   | 7.7   | 15.5                                 | --  | 5.1                                 |
| 28...    | 0915 | 102                              | 271   | 7.7   | 15.5                                 | --  | 5.0                                 |
| 28...    | 0916 | 105                              | 309   | 7.6   | 15.0                                 | --  | 4.9                                 |
| 28...    | 0917 | 108                              | 326   | 7.6   | 14.5                                 | --  | 4.8                                 |
| 28...    | 0918 | 111                              | 339   | 7.6   | 14.0                                 | --  | 4.8                                 |
| 28...    | 0919 | 114                              | 363   | 7.5   | 13.5                                 | --  | 4.6                                 |
| 28...    | 0920 | 117                              | 386   | 7.5   | 13.0                                 | --  | 4.3                                 |
| 28...    | 0921 | 120                              | 397   | 7.5   | 12.5                                 | --  | 4.1                                 |
| 28...    | 0922 | 124                              | 401   | 7.5   | 12.5                                 | --  | 4.0                                 |
| AUG 1996 |      |                                  |   |   |                                      |   |                                     |
| 21...    | 0815 | --                               | --  | --  | --                                   | 4.0   | --                                  |
| 21...    | 0816 | 0.0                              | 331   | 8.3   | 23.0                                 | --  | 6.5                                 |
| 21...    | 0817 | 3.0                              | 331   | 8.3   | 23.0                                 | --  | 6.5                                 |
| 21...    | 0818 | 6.0                              | 331   | 8.2   | 23.0                                 | --  | 6.5                                 |
| 21...    | 0819 | 9.0                              | 331   | 8.2   | 23.0                                 | --  | 6.5                                 |
| 21...    | 0820 | 12.0                             | 331   | 8.2   | 23.0                                 | --  | 6.5                                 |
| 21...    | 0821 | 15.0                             | 331   | 8.2   | 23.0                                 | --  | 6.5                                 |
| 21...    | 0822 | 18.0                             | 330   | 8.2   | 23.0                                 | --  | 6.5                                 |
| 21...    | 0823 | 21.0                             | 330   | 8.2   | 23.0                                 | --  | 6.5                                 |
| 21...    | 0824 | 24.0                             | 329   | 8.2   | 23.0                                 | --  | 6.5                                 |
| 21...    | 0825 | 27.0                             | 329   | 8.2   | 23.0                                 | --  | 6.2                                 |
| 21...    | 0826 | 30.0                             | 329   | 8.2   | 22.5                                 | --  | 6.1                                 |
| 21...    | 0827 | 33.0                             | 329   | 8.2   | 22.5                                 | --  | 5.8                                 |
| 21...    | 0828 | 36.0                             | 328   | 8.2   | 22.5                                 | --  | 6.0                                 |
| 21...    | 0829 | 39.0                             | 328   | 8.2   | 22.5                                 | --  | 6.0                                 |
| 21...    | 0830 | 42.0                             | 328   | 8.2   | 22.5                                 | --  | 6.0                                 |
| 21...    | 0831 | 45.0                             | 327   | 8.2   | 22.5                                 | --  | 6.1                                 |
| 21...    | 0832 | 48.0                             | 327   | 8.2   | 22.5                                 | --  | 6.1                                 |
| 21...    | 0833 | 51.0                             | 327   | 8.2   | 22.5                                 | --  | 6.1                                 |
| 21...    | 0834 | 54.0                             | 332   | 8.1   | 22.5                                 | --  | 5.0                                 |
| 21...    | 0835 | 57.0                             | 339   | 7.8   | 22.0                                 | --  | 3.0                                 |
| 21...    | 0836 | 60.0                             | 340   | 7.8   | 22.0                                 | --  | 2.5                                 |
| 21...    | 0837 | 63.0                             | 343   | 7.7   | 21.5                                 | --  | 1.7                                 |
| 21...    | 0838 | 66.0                             | 344   | 7.7   | 21.5                                 | --  | 1.4                                 |
| 21...    | 0839 | 69.0                             | 342   | 7.7   | 21.5                                 | --  | 1.3                                 |
| 21...    | 0840 | 72.0                             | 342   | 7.7   | 21.5                                 | --  | 1.2                                 |
| 21...    | 0841 | 75.0                             | 337   | 7.7   | 21.0                                 | --  | 1.1                                 |
| 21...    | 0842 | 78.0                             | 333   | 7.7   | 21.0                                 | --  | 0.9                                 |
| 21...    | 0843 | 81.0                             | 330   | 7.7   | 20.5                                 | --  | 0.9                                 |
| 21...    | 0844 | 84.0                             | 329   | 7.7   | 20.5                                 | --  | 0.9                                 |
| 21...    | 0845 | 87.0                             | 324   | 7.7   | 20.0                                 | --  | 0.7                                 |
| 21...    | 0846 | 90.0                             | 315   | 7.7   | 19.5                                 | --  | 0.5                                 |
| 21...    | 0847 | 93.0                             | 309   | 7.7   | 19.0                                 | --  | 0.5                                 |
| 21...    | 0848 | 96.0                             | 308   | 7.7   | 19.0                                 | --  | 0.5                                 |
| 21...    | 0849 | 99.0                             | 305   | 7.7   | 18.5                                 | --  | 0.5                                 |
| 21...    | 0850 | 102                              | 303   | 7.7   | 18.0                                 | --  | 0.4                                 |
| 21...    | 0851 | 105                              | 303   | 7.7   | 18.0                                 | --  | 0.2                                 |
| 21...    | 0852 | 108                              | 301   | 7.7   | 17.5                                 | --  | 0.2                                 |
| 21...    | 0853 | 111                              | 302   | 7.7   | 17.0                                 | --  | 0.1                                 |
| 21...    | 0854 | 112                              | 302   | 7.7   | 17.0                                 | --  | 0.1                                 |

## 07099350 PUEBLO RESERVOIR NEAR PUEBLO, CO--Continued

## WATER-QUALITY RECORDS

## 381602104435200 PUEBLO RESERVOIR SITE 7B--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DATE  | TIME | SAM-<br>PLING<br>DEPTH<br>(FEET) | SPE-<br>CIFIC<br>CON-<br>DUCT-<br>ANCE<br>(US/CM) | PH<br>WATER<br>WHOLE<br>FIELD<br>(STAND-<br>ARD<br>UNITS) | TEMPER-<br>ATURE<br>WATER<br>(DEG C) | TRANS-<br>PAR-<br>ENCY<br>(SECCHI<br>DISK)<br>(M) | OXYGEN,<br>DIS-<br>SOLVED<br>(MG/L) |
|-------|------|----------------------------------|---|---|--------------------------------------|---|-------------------------------------|
| SEP   |      |                                  |   |   |                                      |   |                                     |
| 24... | 0905 | --                               | --  | --  | --                                   | 1.8   | --                                  |
| 24... | 0906 | 0.0                              | 370   | 8.2   | 20.0                                 | --  | 5.4                                 |
| 24... | 0907 | 3.0                              | 370   | 8.2   | 20.0                                 | --  | 5.4                                 |
| 24... | 0908 | 6.0                              | 371   | 8.1   | 20.0                                 | --  | 5.4                                 |
| 24... | 0909 | 9.0                              | 371   | 8.1   | 20.0                                 | --  | 5.4                                 |
| 24... | 0910 | 12.0                             | 371   | 8.1   | 20.0                                 | --  | 5.4                                 |
| 24... | 0911 | 15.0                             | 370   | 8.1   | 20.0                                 | --  | 5.4                                 |
| 24... | 0912 | 18.0                             | 370   | 8.1   | 20.0                                 | --  | 5.4                                 |
| 24... | 0913 | 21.0                             | 370   | 8.1   | 20.0                                 | --  | 5.4                                 |
| 24... | 0914 | 24.0                             | 369   | 8.1   | 20.0                                 | --  | 5.4                                 |
| 24... | 0915 | 27.0                             | 368   | 8.1   | 20.0                                 | --  | 5.4                                 |
| 24... | 0916 | 30.0                             | 368   | 8.1   | 20.0                                 | --  | 5.4                                 |
| 24... | 0917 | 33.0                             | 368   | 8.1   | 20.0                                 | --  | 5.4                                 |
| 24... | 0918 | 36.0                             | 368   | 8.1   | 20.0                                 | --  | 5.3                                 |
| 24... | 0919 | 39.0                             | 367   | 8.1   | 20.0                                 | --  | 5.3                                 |
| 24... | 0920 | 42.0                             | 368   | 8.1   | 20.0                                 | --  | 5.3                                 |
| 24... | 0921 | 45.0                             | 368   | 8.1   | 20.0                                 | --  | 5.2                                 |
| 24... | 0922 | 48.0                             | 368   | 8.1   | 20.0                                 | --  | 5.3                                 |
| 24... | 0923 | 51.0                             | 368   | 8.1   | 20.0                                 | --  | 5.2                                 |
| 24... | 0924 | 54.0                             | 370   | 8.1   | 20.0                                 | --  | 5.0                                 |
| 24... | 0925 | 57.0                             | 370   | 8.1   | 20.0                                 | --  | 5.0                                 |
| 24... | 0926 | 60.0                             | 372   | 8.1   | 19.5                                 | --  | 4.8                                 |
| 24... | 0927 | 63.0                             | 373   | 8.1   | 19.5                                 | --  | 4.7                                 |
| 24... | 0928 | 66.0                             | 376   | 8.0   | 19.5                                 | --  | 4.7                                 |
| 24... | 0929 | 69.0                             | 380   | 8.0   | 19.5                                 | --  | 4.7                                 |
| 24... | 0930 | 72.0                             | 380   | 8.0   | 19.5                                 | --  | 4.7                                 |
| 24... | 0931 | 75.0                             | 384   | 8.0   | 19.5                                 | --  | 4.6                                 |
| 24... | 0932 | 78.0                             | 388   | 8.0   | 19.5                                 | --  | 4.4                                 |
| 24... | 0933 | 81.0                             | 389   | 8.0   | 19.5                                 | --  | 4.4                                 |
| 24... | 0934 | 84.0                             | 390   | 8.0   | 19.5                                 | --  | 4.4                                 |
| 24... | 0935 | 87.0                             | 396   | 8.0   | 19.5                                 | --  | 4.4                                 |
| 24... | 0936 | 90.0                             | 396   | 8.0   | 19.5                                 | --  | 4.3                                 |
| 24... | 0937 | 93.0                             | 398   | 8.0   | 19.5                                 | --  | 4.3                                 |
| 24... | 0938 | 96.0                             | 401   | 8.0   | 19.0                                 | --  | 4.2                                 |
| 24... | 0939 | 100                              | 408   | 8.0   | 19.0                                 | --  | 4.2                                 |
| 24... | 0940 | 103                              | 409   | 8.0   | 19.0                                 | --  | 4.2                                 |
| 24... | 0941 | 106                              | 414   | 8.0   | 19.0                                 | --  | 3.8                                 |
| 24... | 0942 | 109                              | 420   | 8.0   | 18.5                                 | --  | 2.7                                 |
| 24... | 0943 | 110                              | 422   | 8.0   | 18.5                                 | --  | 2.6                                 |

## 07099400 ARKANSAS RIVER ABOVE PUEBLO, CO

LOCATION.--Lat 38°16'18", long 104°43'03", in SE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec.36, T.20 S., R.66 W., Pueblo County, Hydrologic Unit 11020002, on left bank 200 ft downstream from NE corner of Arkansas River bridge, 0.4 mi downstream from Pueblo Dam, and 7 mi west of Pueblo.

DRAINAGE AREA.--4,670 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Streamflow records, October 1965 to current year. Water-quality data available, October 1965 to September 1970, Dec. 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 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

| DAY   | OCT   | NOV   | DEC  | JAN  | FEB   | MAR   | APR   | MAY    | JUN    | JUL   | AUG   | SEP   |
|-------|-------|-------|------|------|-------|-------|-------|--------|--------|-------|-------|-------|
| 1     | 487   | 309   | 282  | 99   | 372   | 421   | e860  | 631    | 958    | 1550  | 1230  | e180  |
| 2     | 544   | 308   | 222  | 100  | 361   | 424   | 902   | 570    | 903    | 1360  | 1230  | e110  |
| 3     | 571   | 319   | 222  | 83   | 345   | 426   | 903   | 506    | 846    | 1300  | 1160  | e110  |
| 4     | 601   | 326   | 222  | 83   | 344   | 419   | 901   | 485    | 809    | 1270  | 1120  | e110  |
| 5     | 615   | 325   | 222  | 82   | 323   | 455   | 920   | 436    | 1260   | 1410  | 1120  | 105   |
| 6     | 615   | 325   | 211  | 83   | 337   | 477   | 960   | 425    | 2050   | 1580  | 1120  | 113   |
| 7     | 620   | 325   | 196  | 83   | 387   | 491   | 959   | 478    | 2500   | 1690  | 1090  | 126   |
| 8     | 594   | 357   | 193  | 83   | 402   | 473   | 956   | 610    | 2740   | 1620  | 1100  | 135   |
| 9     | 536   | 438   | 193  | 83   | 401   | 471   | 951   | 863    | 3110   | 1320  | 1210  | 165   |
| 10    | 545   | 468   | 193  | 85   | 402   | 469   | 987   | 1010   | 3480   | 596   | 1100  | 158   |
| 11    | 555   | 468   | 181  | 86   | 402   | 500   | 1000  | 1260   | 3710   | 1860  | 1100  | 160   |
| 12    | 554   | 468   | 174  | 87   | 393   | 600   | 1040  | 1300   | 3610   | 1720  | 1100  | 172   |
| 13    | 550   | 501   | 174  | 86   | 388   | 837   | 1070  | 1400   | 3200   | 1530  | 1050  | 194   |
| 14    | 553   | 434   | 174  | 86   | 370   | 980   | 937   | 1730   | 2730   | 1320  | 1010  | 207   |
| 15    | 545   | 232   | 174  | 86   | 326   | 950   | 930   | 2170   | 2770   | 1020  | 1160  | 208   |
| 16    | 525   | 232   | 174  | 86   | 247   | 643   | 898   | 2390   | 2900   | 890   | 1300  | 239   |
| 17    | 512   | 232   | 174  | 86   | 202   | 481   | 801   | 2540   | 3010   | 808   | 1330  | 280   |
| 18    | 489   | 238   | 174  | 86   | 202   | 462   | 664   | 3020   | 2620   | 721   | 1330  | 291   |
| 19    | 459   | 241   | 174  | 86   | 202   | 500   | 588   | 3220   | 2480   | 705   | 1330  | 273   |
| 20    | 443   | 241   | 123  | 86   | 202   | 619   | 506   | 3230   | 2280   | 1020  | 1320  | 233   |
| 21    | 443   | 245   | 102  | 88   | 202   | 676   | 542   | 3240   | 2030   | 1110  | 1290  | 206   |
| 22    | 442   | 245   | 103  | 88   | 249   | 676   | 564   | 3100   | 2320   | 1060  | 1280  | 174   |
| 23    | 435   | 245   | 105  | 88   | 345   | 687   | 568   | 2830   | 3020   | 911   | 877   | 166   |
| 24    | 412   | 245   | 106  | 88   | 511   | 690   | 597   | 2590   | 2900   | 1480  | 594   | 171   |
| 25    | 403   | 245   | 106  | 134  | 514   | 692   | 607   | 2490   | 2480   | 1550  | 400   | 185   |
| 26    | 380   | 245   | 106  | 162  | 488   | 666   | 570   | 2350   | 2380   | 1550  | 373   | 184   |
| 27    | 339   | 241   | 106  | 162  | 482   | 671   | 575   | 1990   | 2350   | 1480  | 327   | 169   |
| 28    | 321   | 241   | 106  | 163  | 465   | 711   | 580   | 1680   | 2220   | 1340  | 280   | 162   |
| 29    | 322   | 264   | 106  | 274  | 423   | 712   | 610   | 1740   | 1990   | 1200  | 282   | 162   |
| 30    | 311   | 328   | 106  | 338  | ---   | 914   | 635   | 1780   | 1790   | 1070  | 280   | 162   |
| 31    | 306   | ---   | 107  | 360  | ---   | 850   | ---   | 1560   | ---    | 1130  | 278   | ---   |
| TOTAL | 15027 | 9331  | 5011 | 3670 | 10287 | 19043 | 23581 | 53624  | 71446  | 39171 | 29771 | 5310  |
| MEAN  | 485   | 311   | 162  | 118  | 355   | 614   | 786   | 1730   | 2382   | 1264  | 960   | 177   |
| MAX   | 620   | 501   | 282  | 360  | 514   | 980   | 1070  | 3240   | 3710   | 1860  | 1330  | 291   |
| MIN   | 306   | 232   | 102  | 82   | 202   | 419   | 506   | 425    | 809    | 596   | 278   | 105   |
| AC-FT | 29810 | 18510 | 9940 | 7280 | 20400 | 37770 | 46770 | 106400 | 141700 | 77700 | 59050 | 10530 |

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 1996, 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 |  |  |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|--|--|
| MEAN | 373  | 253  | 158  | 179  | 230  | 305  | 569  | 1181 | 2403 | 1731 | 1054 | 464  |      |      |      |      |      |      |      |      |      |      |  |  |
| 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 1995 CALENDAR YEAR |  |  |  | FOR 1996 WATER YEAR |  |  |  | WATER YEARS 1975 - 1996 |  |  |  |
|--------------------------|------------------------|--|--|--|---------------------|--|--|--|-------------------------|--|--|--|
| ANNUAL TOTAL             | 413171                 |  |  |  | 285272              |  |  |  |                         |  |  |  |
| ANNUAL MEAN              | 1132                   |  |  |  | 779                 |  |  |  | a 743                   |  |  |  |
| HIGHEST ANNUAL MEAN      |                        |  |  |  |                     |  |  |  | 1227                    |  |  |  |
| LOWEST ANNUAL MEAN       |                        |  |  |  |                     |  |  |  | b 265                   |  |  |  |
| HIGHEST DAILY MEAN       | 5530                   |  |  |  | Jul 14              |  |  |  | 3710                    |  |  |  |
| LOWEST DAILY MEAN        | c 73                   |  |  |  | Jan 10              |  |  |  | 82                      |  |  |  |
| ANNUAL SEVEN-DAY MINIMUM | 73                     |  |  |  | Jan 10              |  |  |  | 83                      |  |  |  |
| INSTANTANEOUS PEAK FLOW  |                        |  |  |  |                     |  |  |  | 3780                    |  |  |  |
| INSTANTANEOUS PEAK STAGE |                        |  |  |  |                     |  |  |  | 5.78                    |  |  |  |
| ANNUAL RUNOFF (AC-FT)    | 819500                 |  |  |  | 565800              |  |  |  | 538500                  |  |  |  |
| 10 PERCENT EXCEEDS       | 3630                   |  |  |  | 1990                |  |  |  | 1910                    |  |  |  |
| 50 PERCENT EXCEEDS       | 486                    |  |  |  | 487                 |  |  |  | 392                     |  |  |  |
| 90 PERCENT EXCEEDS       | 82                     |  |  |  | 109                 |  |  |  | 90                      |  |  |  |

e-Estimated.

a-Average discharge for 8 years (water years 1966-73), 643 ft<sup>3</sup>/s; 465900 acre-ft/yr, prior to completion of Pueblo Dam.

b-Also the maximum daily discharge for period of record.

c-Also occurred Jan 11-12 and Jan 15-16.

d-Minimum daily discharge for period of record, 28 ft<sup>3</sup>/s, May 11, 1967.

f-Present site and datum, from rating curve extended above 1600 ft<sup>3</sup>/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 except Dec 12 to Jan. 4, Sept. 1-2, 23, which are poor. Records for daily water temperature are good except Oct. 1 to Jan. 9, which are fair, and Jan. 10 to Mar. 12, which are poor. 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, 595 microsiemens, Mar. 4; minimum, 235 microsiemens, July 22.

WATER TEMPERATURE: Maximum, 21.0°C, Sept. 3, 5; minimum, 2.9°C, Jan. 17.

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM @ 25 DEG. C), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DAY   | OCTOBER |     |      | NOVEMBER |     |      | DECEMBER |     |      | JANUARY |     |      |
|-------|---------|-----|------|----------|-----|------|----------|-----|------|---------|-----|------|
|       | MAX     | MIN | MEAN | MAX      | MIN | MEAN | MAX      | MIN | MEAN | MAX     | MIN | MEAN |
| 1     | 379     | 374 | 377  | 419      | 412 | 415  | 412      | 396 | 404  | ---     | --- | ---  |
| 2     | 382     | 373 | 378  | 420      | 416 | 418  | 410      | 406 | 408  | ---     | --- | ---  |
| 3     | 382     | 377 | 381  | 417      | 399 | 409  | 410      | 406 | 408  | 482     | --- | ---  |
| 4     | 384     | 345 | 369  | 403      | 389 | 396  | 414      | 407 | 410  | 468     | --- | ---  |
| 5     | 375     | 348 | 358  | 392      | 382 | 388  | 424      | 407 | 414  | 468     | 460 | 463  |
| 6     | 364     | 348 | 353  | 401      | 383 | 388  | 436      | 417 | 424  | 485     | 459 | 465  |
| 7     | 362     | 347 | 351  | 405      | 394 | 398  | 436      | 426 | 431  | 482     | 458 | 466  |
| 8     | 369     | 349 | 362  | 404      | 394 | 399  | 439      | 426 | 432  | 474     | 461 | ---  |
| 9     | 371     | 364 | 367  | 403      | 387 | 396  | 440      | 426 | 432  | 500     | 462 | 479  |
| 10    | 371     | 362 | 366  | 416      | 390 | 404  | 428      | 417 | 421  | 499     | 478 | 492  |
| 11    | 379     | 367 | 373  | 404      | 395 | 399  | 424      | 418 | 423  | 497     | 488 | 492  |
| 12    | 382     | 374 | 378  | 397      | 385 | 391  | 421      | 417 | 419  | 500     | 484 | 491  |
| 13    | 385     | 381 | 383  | 392      | 385 | 388  | 425      | 409 | 419  | 497     | 483 | 492  |
| 14    | 384     | 378 | 382  | 415      | 388 | 396  | 421      | --- | ---  | 500     | 485 | 492  |
| 15    | 383     | 370 | 378  | 408      | 401 | 406  | 432      | --- | ---  | 510     | 491 | 499  |
| 16    | 385     | 371 | 380  | 407      | 400 | 404  | ---      | --- | ---  | 518     | 490 | 500  |
| 17    | 390     | 368 | 380  | 413      | 403 | 408  | ---      | --- | ---  | 547     | 502 | 522  |
| 18    | 390     | 368 | 382  | 416      | 411 | 413  | 437      | --- | ---  | 535     | 493 | 515  |
| 19    | 397     | 378 | 390  | 422      | 413 | 418  | ---      | --- | ---  | 516     | 497 | 510  |
| 20    | 393     | 382 | 388  | 422      | 418 | 420  | ---      | --- | ---  | 527     | 488 | 510  |
| 21    | 389     | 366 | 380  | 424      | 418 | 422  | ---      | --- | ---  | 527     | 499 | 515  |
| 22    | 378     | 358 | 367  | 426      | 409 | 419  | ---      | --- | ---  | 536     | 497 | 515  |
| 23    | 364     | 359 | 361  | 430      | 412 | 422  | ---      | --- | ---  | 520     | 495 | 513  |
| 24    | 365     | 360 | 362  | 432      | 411 | 422  | ---      | --- | ---  | 529     | 507 | 520  |
| 25    | 372     | 360 | 364  | 425      | 398 | 411  | ---      | --- | ---  | 531     | 459 | 489  |
| 26    | 381     | 370 | 374  | 432      | 399 | 415  | ---      | --- | ---  | 464     | 462 | 463  |
| 27    | 396     | 373 | 386  | 409      | 396 | 402  | ---      | --- | ---  | 465     | 463 | 464  |
| 28    | 394     | 390 | 393  | 405      | 398 | 401  | ---      | --- | ---  | 471     | 464 | 467  |
| 29    | 405     | 394 | 398  | 403      | 397 | 400  | ---      | --- | ---  | 483     | 449 | 459  |
| 30    | 407     | 403 | 405  | 400      | 396 | 398  | ---      | --- | ---  | 464     | 453 | 458  |
| 31    | 412     | 406 | 409  | ---      | --- | ---  | ---      | --- | ---  | 465     | 453 | 459  |
| MONTH | 412     | 345 | 377  | 432      | 382 | 406  | ---      | --- | ---  | ---     | --- | ---  |

## ARKANSAS RIVER BASIN

## 07099400 ARKANSAS RIVER ABOVE PUEBLO, CO--Continued

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM @ 25 DEG. C), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DAY   | MAX | MIN  | MEAN | MAX | MIN  | MEAN | MAX | MIN    | MEAN | MAX | MIN       | MEAN |          |
|-------|-----|------|------|-----|------|------|-----|--------|------|-----|-----------|------|----------|
|       |     |      |      |     |      |      |     |        |      |     |           |      | FEBRUARY |
| 1     | 469 | 457  | 463  | 485 | 473  | 478  | 492 | 489    | 491  | 514 | 510       | 512  |          |
| 2     | 483 | 466  | 475  | 479 | 475  | 477  | 494 | 490    | 492  | 515 | 512       | 513  |          |
| 3     | 480 | 465  | 473  | 481 | 477  | 479  | 494 | 490    | 492  | 516 | 512       | 514  |          |
| 4     | 481 | 462  | 472  | 595 | 476  | 492  | 494 | 491    | 492  | 516 | 512       | 514  |          |
| 5     | 498 | 469  | 482  | 481 | 474  | 478  | 495 | 491    | 493  | 517 | 514       | 516  |          |
| 6     | 489 | 456  | 469  | 479 | 476  | 477  | 495 | 492    | 493  | 517 | 513       | 515  |          |
| 7     | 462 | 457  | 460  | 480 | 472  | 477  | 496 | 493    | 494  | 516 | 511       | 514  |          |
| 8     | 465 | 459  | 463  | 480 | 478  | 479  | 500 | 493    | 495  | 516 | 509       | 513  |          |
| 9     | 465 | 461  | 463  | 480 | 477  | 479  | 499 | 494    | 497  | 513 | 508       | 511  |          |
| 10    | 467 | 462  | 465  | 487 | 479  | 481  | 501 | 494    | 497  | 513 | 510       | 512  |          |
| 11    | 466 | 462  | 465  | 498 | 487  | 493  | 501 | 492    | 495  | 512 | 509       | 511  |          |
| 12    | 469 | 464  | 466  | 502 | 475  | 487  | 498 | 494    | 496  | 513 | 511       | 512  |          |
| 13    | 473 | 465  | 469  | 497 | 472  | 479  | 501 | 496    | 498  | 513 | 509       | 511  |          |
| 14    | 478 | 464  | 471  | 498 | 483  | 495  | 500 | 497    | 499  | 512 | 507       | 509  |          |
| 15    | 514 | 470  | 489  | 489 | 482  | 480  | 501 | 497    | 499  | 509 | 505       | 507  |          |
| 16    | 525 | 479  | 493  | 514 | 485  | 496  | 501 | 499    | 501  | 509 | 506       | 508  |          |
| 17    | 495 | 482  | 488  | 504 | 492  | 497  | 504 | 499    | 502  | 510 | 508       | 509  |          |
| 18    | 485 | 477  | 480  | 499 | 491  | 493  | 507 | 501    | 504  | 510 | 507       | 509  |          |
| 19    | 480 | 474  | 477  | 494 | 487  | 491  | 509 | 503    | 505  | 509 | 460       | 492  |          |
| 20    | 482 | 476  | 478  | 493 | 482  | 488  | 509 | 505    | 507  | 510 | 490       | 503  |          |
| 21    | 485 | 478  | 480  | 492 | 488  | 490  | 509 | 505    | 507  | 510 | 508       | 509  |          |
| 22    | 480 | 470  | 475  | 493 | 490  | 492  | 508 | 505    | 507  | 511 | 508       | 510  |          |
| 23    | 484 | 465  | 472  | 493 | 489  | 491  | 508 | 504    | 506  | 510 | 501       | 508  |          |
| 24    | 475 | 463  | 468  | 495 | 489  | 492  | 509 | 504    | 506  | 510 | 507       | 509  |          |
| 25    | 474 | 468  | 471  | 492 | 489  | 491  | 511 | 507    | 509  | 519 | 507       | 510  |          |
| 26    | 475 | 472  | 473  | 494 | 491  | 492  | 512 | 508    | 510  | 514 | 506       | 509  |          |
| 27    | 475 | 471  | 473  | 493 | 490  | 491  | 512 | 509    | 510  | 509 | 504       | 507  |          |
| 28    | 477 | 472  | 474  | 494 | 491  | 492  | 513 | 511    | 512  | 508 | 505       | 507  |          |
| 29    | 479 | 475  | 477  | 493 | 490  | 491  | 513 | 510    | 511  | 508 | 498       | 502  |          |
| 30    | --- | ---  | ---  | 492 | 486  | 489  | 513 | 509    | 512  | 506 | 497       | 501  |          |
| 31    | --- | ---  | ---  | 493 | 489  | 491  | --- | ---    | ---  | 513 | 483       | 499  |          |
| MONTH | 525 | 456  | 473  | 595 | 472  | 487  | 513 | 489    | 501  | 519 | 460       | 509  |          |
|       |     | JUNE |      |     | JULY |      |     | AUGUST |      |     | SEPTEMBER |      |          |
| 1     | 509 | 501  | 506  | 292 | 277  | 285  | 282 | 255    | 269  | --- | ---       | ---  |          |
| 2     | 509 | 501  | 504  | 303 | 277  | 296  | 286 | 268    | 279  | --- | ---       | ---  |          |
| 3     | 504 | 486  | 496  | 299 | 283  | 293  | 287 | 268    | 280  | 394 | 358       | 374  |          |
| 4     | 500 | 492  | 495  | 287 | 274  | 283  | 278 | 243    | 261  | 391 | 376       | 382  |          |
| 5     | 497 | 459  | 481  | 295 | 269  | 281  | 275 | 240    | 259  | 438 | 384       | 407  |          |
| 6     | 475 | 387  | 447  | 291 | 271  | 281  | 291 | 259    | 278  | 481 | 381       | 405  |          |
| 7     | 439 | 411  | 425  | 286 | 273  | 279  | 293 | 284    | 289  | 463 | 385       | 398  |          |
| 8     | 426 | 399  | 412  | 286 | 272  | 278  | 293 | 277    | 284  | 401 | 373       | 390  |          |
| 9     | 406 | 377  | 394  | 375 | 269  | 285  | 306 | 278    | 288  | 400 | 377       | 389  |          |
| 10    | 412 | 366  | 390  | 354 | 268  | 311  | 292 | 264    | 282  | 400 | 390       | 396  |          |
| 11    | 397 | 361  | 379  | 394 | 259  | 271  | 286 | 262    | 274  | 402 | 395       | 398  |          |
| 12    | 391 | 357  | 370  | 323 | 262  | 273  | 289 | 258    | 276  | 409 | 395       | 401  |          |
| 13    | 380 | 350  | 369  | 278 | 266  | 272  | 292 | 270    | 284  | 400 | 390       | 395  |          |
| 14    | 379 | 364  | 371  | 280 | 265  | 272  | 296 | 282    | 289  | 399 | 395       | 396  |          |
| 15    | 382 | 358  | 369  | 291 | 269  | 279  | 302 | 286    | 297  | 409 | 395       | 402  |          |
| 16    | 377 | 351  | 362  | 288 | 282  | 285  | 313 | 289    | 297  | 409 | 392       | 402  |          |
| 17    | 370 | 344  | 354  | 293 | 280  | 286  | 312 | 296    | 303  | 438 | 396       | 407  |          |
| 18    | 354 | 347  | 351  | 289 | 284  | 286  | 320 | 303    | 314  | 436 | 415       | 424  |          |
| 19    | 351 | 325  | 340  | 290 | 283  | 287  | 321 | 304    | 310  | 427 | 409       | 418  |          |
| 20    | 334 | 315  | 322  | 290 | 272  | 281  | 325 | 290    | 311  | 430 | 417       | 425  |          |
| 21    | 340 | 312  | 326  | 277 | 240  | 261  | 323 | 307    | 318  | 429 | 412       | 424  |          |
| 22    | 325 | 304  | 311  | 389 | 235  | 264  | 323 | 294    | 313  | 451 | 416       | 434  |          |
| 23    | 322 | 308  | 315  | 380 | 255  | 288  | 348 | 305    | 328  | --- | ---       | ---  |          |
| 24    | 310 | 297  | 304  | 280 | 254  | 270  | 339 | 323    | 327  | 471 | 435       | 451  |          |
| 25    | 308 | 286  | 297  | 281 | 271  | 276  | 389 | 327    | 348  | 448 | 433       | 441  |          |
| 26    | 306 | 285  | 296  | 288 | 269  | 281  | 362 | 340    | 348  | 444 | 424       | 433  |          |
| 27    | 306 | 283  | 294  | 286 | 271  | 280  | 381 | 343    | 354  | 433 | 421       | 426  |          |
| 28    | 314 | 275  | 298  | 287 | 275  | 281  | 359 | 349    | 354  | 422 | 415       | 419  |          |
| 29    | 292 | 275  | 287  | 286 | 277  | 282  | 395 | 353    | 361  | 426 | 413       | 419  |          |
| 30    | 309 | 280  | 292  | 293 | 277  | 283  | 374 | 362    | 368  | 438 | 426       | 429  |          |
| 31    | --- | ---  | ---  | 288 | 271  | 280  | 373 | 357    | 365  | --- | ---       | ---  |          |
| MONTH | 509 | 275  | 372  | 394 | 235  | 281  | 395 | 240    | 307  | --- | ---       | ---  |          |

07099400 ARKANSAS RIVER ABOVE PUEBLO, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DAY   | MAX      | MIN  | MEAN | MAX      | MIN  | MEAN | MAX      | MIN | MEAN | MAX     | MIN  | MEAN |
|-------|----------|------|------|----------|------|------|----------|-----|------|---------|------|------|
|       | OCTOBER  |      |      | NOVEMBER |      |      | DECEMBER |     |      | JANUARY |      |      |
| 1     | 17.5     | 16.8 | 17.1 | 13.1     | 12.5 | 12.9 | 9.8      | 5.8 | 8.7  | ---     | ---  | ---  |
| 2     | 17.4     | 16.6 | 16.9 | 12.5     | 12.4 | 12.4 | 9.9      | 8.3 | 9.3  | ---     | ---  | ---  |
| 3     | 17.6     | 16.5 | 17.0 | 12.9     | 12.3 | 12.5 | 9.6      | 8.6 | 9.3  | 6.7     | 5.5  | 6.1  |
| 4     | 17.4     | 15.2 | 16.5 | 12.8     | 11.4 | 12.2 | 9.8      | 9.2 | 9.4  | ---     | 5.1  | ---  |
| 5     | 17.5     | 16.4 | 16.8 | 12.8     | 11.9 | 12.4 | 9.5      | 8.8 | 9.1  | 5.3     | 4.8  | 5.0  |
| 6     | 17.3     | 16.5 | 16.8 | 12.5     | 11.9 | 12.2 | 9.4      | 8.3 | 8.9  | 5.8     | 4.7  | 5.1  |
| 7     | 17.3     | 16.5 | 16.8 | 12.2     | 11.6 | 11.9 | 8.9      | 8.5 | 8.6  | 5.9     | 4.9  | 5.3  |
| 8     | 17.0     | 16.4 | 16.7 | 12.1     | 10.9 | 11.6 | 8.8      | 8.2 | 8.5  | 6.3     | 4.9  | 5.6  |
| 9     | 16.4     | 15.9 | 16.2 | 12.3     | 11.5 | 11.9 | 8.7      | 8.0 | 8.3  | 6.2     | 4.4  | 5.1  |
| 10    | 16.5     | 15.9 | 16.1 | 11.8     | 10.4 | 11.4 | 8.7      | 8.0 | 8.3  | 5.6     | 4.3  | 4.6  |
| 11    | 16.4     | 15.5 | 15.9 | 11.6     | 10.3 | 10.9 | 8.5      | 8.0 | 8.2  | 5.5     | 4.1  | 4.6  |
| 12    | 16.3     | 15.7 | 15.9 | 12.1     | 11.3 | 11.5 | 8.5      | 7.6 | 8.2  | 5.8     | 4.2  | 4.7  |
| 13    | 15.9     | 15.6 | 15.7 | 11.8     | 11.0 | 11.5 | 8.5      | 7.4 | 8.0  | 5.9     | 4.3  | 4.8  |
| 14    | 15.9     | 15.3 | 15.6 | 11.7     | 11.1 | 11.4 | ---      | 6.9 | ---  | 5.8     | 4.3  | 4.8  |
| 15    | 16.1     | 14.7 | 15.7 | 11.6     | 10.8 | 11.1 | ---      | --- | ---  | 5.4     | 4.1  | 4.7  |
| 16    | 15.9     | 15.4 | 15.7 | 11.4     | 10.6 | 10.9 | ---      | --- | ---  | 5.9     | 4.4  | 4.9  |
| 17    | 15.8     | 15.1 | 15.6 | 11.1     | 10.0 | 10.6 | ---      | --- | ---  | 4.8     | 2.9  | 4.1  |
| 18    | 16.0     | 15.3 | 15.6 | 10.9     | 8.3  | 10.2 | ---      | --- | ---  | 4.8     | 3.4  | 3.9  |
| 19    | 15.6     | 15.1 | 15.4 | 10.9     | 9.6  | 10.2 | ---      | --- | ---  | 5.0     | 3.4  | 4.0  |
| 20    | 15.7     | 14.3 | 15.1 | 10.7     | 9.8  | 10.2 | ---      | --- | ---  | 5.0     | 3.6  | 4.1  |
| 21    | 15.7     | 14.7 | 15.2 | 10.6     | 9.3  | 10.1 | ---      | --- | ---  | 5.2     | 3.6  | 4.2  |
| 22    | 15.5     | 14.8 | 15.1 | 10.9     | 9.9  | 10.3 | ---      | --- | ---  | 5.1     | 3.7  | 4.1  |
| 23    | 15.3     | 14.4 | 14.8 | 10.7     | 8.8  | 10.1 | ---      | --- | ---  | 4.7     | 3.5  | 3.8  |
| 24    | 15.1     | 13.2 | 14.3 | 10.5     | 7.1  | 9.7  | ---      | --- | ---  | 4.9     | 3.4  | 3.9  |
| 25    | 14.9     | 14.1 | 14.5 | 10.9     | 9.1  | 10.1 | ---      | --- | ---  | 4.4     | 3.4  | 3.8  |
| 26    | 14.3     | 14.0 | 14.1 | 10.8     | 8.0  | 10.0 | ---      | --- | ---  | 4.0     | 3.3  | 3.5  |
| 27    | 14.2     | 13.4 | 13.8 | 10.2     | 8.1  | 9.5  | ---      | --- | ---  | 4.1     | 3.0  | 3.5  |
| 28    | 14.0     | 13.2 | 13.5 | 9.8      | 7.6  | 8.8  | ---      | --- | ---  | 4.3     | 3.3  | 3.7  |
| 29    | 13.6     | 13.1 | 13.4 | 10.2     | 8.0  | 9.4  | ---      | --- | ---  | 3.9     | 3.3  | 3.5  |
| 30    | 13.5     | 12.9 | 13.2 | 10.2     | 9.0  | 9.7  | ---      | --- | ---  | 4.0     | 3.3  | 3.6  |
| 31    | 13.4     | 12.8 | 13.1 | ---      | ---  | ---  | ---      | --- | ---  | 4.0     | 3.4  | 3.6  |
| MONTH | 17.6     | 12.8 | 15.4 | 13.1     | 7.1  | 10.9 | ---      | --- | ---  | ---     | ---  | ---  |
| DAY   | MAX      | MIN  | MEAN | MAX      | MIN  | MEAN | MAX      | MIN | MEAN | MAX     | MIN  | MEAN |
|       | FEBRUARY |      |      | MARCH    |      |      | APRIL    |     |      | MAY     |      |      |
| 1     | 3.9      | 3.4  | 3.6  | 4.5      | 3.9  | 4.1  | 5.8      | 5.1 | 5.4  | 9.5     | 8.8  | 9.1  |
| 2     | 3.5      | 3.2  | 3.3  | 4.6      | 3.8  | 4.1  | 5.8      | 5.2 | 5.4  | 9.7     | 8.9  | 9.1  |
| 3     | 3.9      | 3.2  | 3.4  | 4.6      | 3.9  | 4.2  | 5.7      | 5.3 | 5.4  | 9.8     | 8.8  | 9.1  |
| 4     | 4.1      | 3.2  | 3.6  | 5.5      | 3.9  | 4.4  | 5.6      | 5.2 | 5.3  | 9.8     | 8.8  | 9.2  |
| 5     | 4.1      | 3.4  | 3.7  | 4.9      | 3.9  | 4.3  | 6.0      | 5.1 | 5.4  | 10.0    | 8.9  | 9.3  |
| 6     | 3.9      | 3.2  | 3.5  | 4.5      | 3.8  | 4.1  | 6.2      | 5.4 | 5.8  | 10.2    | 9.0  | 9.4  |
| 7     | 3.9      | 3.4  | 3.6  | 4.3      | 3.7  | 4.0  | 6.3      | 5.5 | 5.7  | 9.9     | 9.1  | 9.4  |
| 8     | 3.9      | 3.4  | 3.6  | 4.4      | 3.9  | 4.1  | 6.3      | 5.5 | 5.8  | 9.9     | 9.0  | 9.3  |
| 9     | 4.2      | 3.4  | 3.7  | 4.6      | 4.0  | 4.2  | 6.2      | 5.6 | 5.8  | 9.8     | 9.1  | 9.3  |
| 10    | 3.9      | 3.4  | 3.6  | 4.6      | 3.9  | 4.2  | 6.1      | 5.6 | 5.8  | 9.8     | 9.1  | 9.4  |
| 11    | 3.8      | 3.3  | 3.5  | 5.0      | 4.2  | 4.4  | 6.7      | 5.6 | 6.1  | 9.7     | 9.2  | 9.4  |
| 12    | 3.9      | 3.2  | 3.5  | 5.2      | 4.2  | 4.5  | 6.8      | 5.8 | 6.2  | 9.7     | 9.2  | 9.3  |
| 13    | 4.1      | 3.3  | 3.6  | 5.0      | 4.3  | 4.6  | 7.4      | 6.2 | 6.6  | 9.8     | 9.3  | 9.5  |
| 14    | 4.4      | 3.4  | 3.8  | 4.5      | 3.4  | 4.5  | 7.8      | 6.4 | 7.1  | 9.7     | 9.3  | 9.5  |
| 15    | 4.4      | 3.5  | 3.8  | 4.9      | 4.4  | 4.7  | 7.3      | 6.5 | 7.0  | 9.8     | 9.2  | 9.5  |
| 16    | 4.4      | 3.3  | 3.7  | 5.1      | 4.4  | 4.7  | 7.5      | 6.7 | 6.9  | 9.8     | 9.4  | 9.6  |
| 17    | 4.5      | 3.4  | 3.8  | 5.1      | 4.6  | 4.7  | 8.9      | 6.3 | 7.8  | 9.7     | 9.4  | 9.6  |
| 18    | 4.5      | 3.5  | 3.9  | 5.1      | 4.5  | 4.7  | 9.3      | 8.3 | 8.8  | 9.9     | 9.3  | 9.6  |
| 19    | 4.5      | 3.7  | 4.0  | 5.2      | 4.4  | 4.7  | 9.5      | 8.3 | 9.0  | 10.1    | 9.6  | 9.8  |
| 20    | 4.8      | 3.8  | 4.2  | 5.2      | 4.5  | 4.7  | 8.9      | 8.4 | 8.7  | 10.9    | 9.6  | 10.0 |
| 21    | 4.9      | 3.8  | 4.3  | 5.3      | 4.6  | 4.8  | 9.0      | 8.3 | 8.5  | 10.4    | 9.8  | 10.1 |
| 22    | 4.8      | 4.1  | 4.3  | 5.2      | 4.6  | 4.8  | 9.0      | 8.3 | 8.5  | 10.5    | 9.9  | 10.2 |
| 23    | 4.6      | 3.9  | 4.2  | 5.4      | 4.7  | 5.0  | 9.2      | 8.2 | 8.6  | 11.0    | 10.0 | 10.4 |
| 24    | 4.5      | 4.0  | 4.2  | 5.3      | 4.7  | 5.0  | 9.2      | 8.4 | 8.7  | 11.2    | 9.9  | 10.5 |
| 25    | 4.7      | 4.1  | 4.4  | 5.3      | 4.7  | 4.9  | 9.1      | 8.4 | 8.7  | 10.9    | 10.5 | 10.7 |
| 26    | 4.5      | 4.1  | 4.3  | 5.5      | 4.8  | 5.0  | 9.3      | 8.4 | 8.7  | 11.2    | 10.5 | 10.8 |
| 27    | 4.3      | 3.9  | 4.1  | 5.5      | 4.8  | 5.0  | 9.3      | 8.5 | 8.8  | 11.4    | 10.6 | 11.1 |
| 28    | 4.4      | 3.9  | 4.0  | 5.5      | 4.8  | 5.1  | 9.0      | 8.4 | 8.7  | 11.1    | 10.6 | 10.8 |
| 29    | 4.4      | 3.6  | 4.0  | 5.7      | 5.0  | 5.2  | 9.6      | 8.7 | 9.1  | 11.6    | 10.8 | 11.2 |
| 30    | ---      | ---  | ---  | 5.7      | 5.0  | 5.3  | 9.6      | 8.8 | 9.1  | 11.8    | 10.9 | 11.4 |
| 31    | ---      | ---  | ---  | 5.7      | 5.0  | 5.3  | ---      | --- | ---  | 12.2    | 10.9 | 11.6 |
| MONTH | 4.9      | 3.2  | 3.8  | 5.7      | 3.4  | 4.6  | 9.6      | 5.1 | 7.2  | 12.2    | 8.8  | 9.9  |

## ARKANSAS RIVER BASIN

## 07099400 ARKANSAS RIVER ABOVE PUEBLO, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DAY   | MAX  | MIN  | MEAN |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|
|       |      |      |      |      |      |      |      |      |      |      |      |      |
| 1     | 11.7 | 11.0 | 11.3 | 16.2 | 15.9 | 16.0 | 18.7 | 18.1 | 18.3 | ---  | ---  | ---  |
| 2     | 11.9 | 11.0 | 11.4 | 16.3 | 15.9 | 16.1 | 18.7 | 18.1 | 18.3 | ---  | ---  | ---  |
| 3     | 12.1 | 11.0 | 11.6 | 16.4 | 15.9 | 16.1 | 18.7 | 18.1 | 18.4 | 21.0 | 19.2 | 19.8 |
| 4     | 12.0 | 11.2 | 11.6 | 16.4 | 15.9 | 16.1 | 18.8 | 18.2 | 18.4 | 20.9 | 19.2 | 19.7 |
| 5     | 12.6 | 11.4 | 11.9 | 16.6 | 16.0 | 16.3 | 18.9 | 18.2 | 18.5 | 21.0 | 19.3 | 19.8 |
| 6     | 13.8 | 12.1 | 12.7 | 16.9 | 16.1 | 16.5 | 18.8 | 18.3 | 18.6 | 20.7 | 19.2 | 19.7 |
| 7     | 13.3 | 12.7 | 13.0 | 16.8 | 16.2 | 16.5 | 19.1 | 18.3 | 18.8 | 20.6 | 19.4 | 19.8 |
| 8     | 13.5 | 12.8 | 13.2 | 17.0 | 16.3 | 16.6 | 19.1 | 18.6 | 18.8 | 20.9 | 19.4 | 19.9 |
| 9     | 13.8 | 13.3 | 13.5 | 16.9 | 15.5 | 16.5 | 19.3 | 18.7 | 19.0 | 20.8 | 19.5 | 20.0 |
| 10    | 14.0 | 13.2 | 13.7 | 16.6 | 15.5 | 16.0 | 19.5 | 18.8 | 19.0 | 20.9 | 19.3 | 20.1 |
| 11    | 14.5 | 13.5 | 14.1 | 17.0 | 16.3 | 16.7 | 19.3 | 18.8 | 19.0 | 20.8 | 19.5 | 20.0 |
| 12    | 14.5 | 13.6 | 14.1 | 17.4 | 16.5 | 16.9 | 19.5 | 18.9 | 19.2 | 20.1 | 19.6 | 19.9 |
| 13    | 14.7 | 14.1 | 14.4 | 17.1 | 16.6 | 16.8 | 19.7 | 18.8 | 19.2 | 20.9 | 19.9 | 20.2 |
| 14    | 14.8 | 14.2 | 14.5 | 17.2 | 16.6 | 16.9 | 19.5 | 19.0 | 19.3 | 20.5 | 20.0 | 20.2 |
| 15    | 15.1 | 14.3 | 14.7 | 17.1 | 16.6 | 16.8 | 20.0 | 19.1 | 19.5 | 20.9 | 20.0 | 20.3 |
| 16    | 15.3 | 14.5 | 15.0 | 17.2 | 16.7 | 16.9 | 19.7 | 19.4 | 19.6 | 20.9 | 20.1 | 20.3 |
| 17    | 15.4 | 14.6 | 15.1 | 17.3 | 16.7 | 17.0 | 19.8 | 19.4 | 19.7 | 20.8 | 19.9 | 20.3 |
| 18    | 15.4 | 14.9 | 15.1 | 17.3 | 16.7 | 16.9 | 20.2 | 19.7 | 20.0 | 20.7 | 19.8 | 20.2 |
| 19    | 15.5 | 15.0 | 15.2 | 17.5 | 16.8 | 17.0 | 20.4 | 19.7 | 20.1 | 20.8 | 19.9 | 20.3 |
| 20    | 15.6 | 15.1 | 15.3 | 17.6 | 16.8 | 17.1 | 20.4 | 19.9 | 20.3 | 20.8 | 19.3 | 20.2 |
| 21    | 15.5 | 14.9 | 15.3 | 17.7 | 17.1 | 17.3 | 20.8 | 20.1 | 20.3 | 20.8 | 19.8 | 20.1 |
| 22    | 15.8 | 15.2 | 15.5 | 17.7 | 16.2 | 17.3 | 20.5 | 20.1 | 20.4 | 20.7 | 19.7 | 20.0 |
| 23    | 15.9 | 15.3 | 15.7 | 17.7 | 16.4 | 17.3 | 20.7 | 19.7 | 20.2 | ---  | ---  | ---  |
| 24    | 15.9 | 15.5 | 15.7 | 18.0 | 17.4 | 17.7 | 20.3 | 19.6 | 20.0 | 20.0 | 19.1 | 19.4 |
| 25    | 16.1 | 15.6 | 15.8 | 18.1 | 17.6 | 17.8 | 20.2 | 19.2 | 19.8 | 20.0 | 18.7 | 19.2 |
| 26    | 16.1 | 15.7 | 15.9 | 18.2 | 17.7 | 17.9 | 20.4 | 19.3 | 19.8 | 19.5 | 18.7 | 19.0 |
| 27    | 16.2 | 15.7 | 15.9 | 18.3 | 17.8 | 18.0 | 20.2 | 19.3 | 19.7 | 19.6 | 18.3 | 18.9 |
| 28    | 16.3 | 15.7 | 16.0 | 18.4 | 17.8 | 18.0 | 20.2 | 19.4 | 19.7 | 19.6 | 18.5 | 18.9 |
| 29    | 16.3 | 15.7 | 16.0 | 18.3 | 17.7 | 18.1 | 20.4 | 19.4 | 19.8 | 19.6 | 18.4 | 18.8 |
| 30    | 16.3 | 15.8 | 16.0 | 18.4 | 17.8 | 18.1 | 20.4 | 19.4 | 19.7 | 19.3 | 18.2 | 18.6 |
| 31    | ---  | ---  | ---  | 18.4 | 17.9 | 18.1 | 20.5 | 19.5 | 19.9 | ---  | ---  | ---  |
| MONTH | 16.3 | 11.0 | 14.3 | 18.4 | 15.5 | 17.0 | 20.8 | 18.1 | 19.4 | ---  | ---  | ---  |

**07099969 ARKANSAS RIVER AT ST CHARLES MESA DIVERSION AT PUEBLO, CO**

**WATER-QUALITY RECORDS**

LOCATION.--Lat 38°15'13", long 104°36'20", in SW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec.6, T.21 S., R.64 W., Pueblo County, Hydrologic Unit 11020002, on right bank 10 ft upstream from intake of Saint Charles Mesa Water Association, 150 ft downstream from Santa Fe Avenue bridge, and 1.1 mi upstream from Fountain Creek.

DRAINAGE AREA.--4,778 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1988 to current year. Prior to October 1989, published as Arkansas River at Moffat Street at Pueblo (07099970).

PERIOD OF DAILY RECORD.--  
SPECIFIC CONDUCTANCE: October 1988 to current year.

INSTRUMENTATION.--Water-quality monitor.

REMARKS.--Records good. 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 RECORD.--  
SPECIFIC CONDUCTANCE: Maximum, 1,980 microsiemens, Nov. 24, 1988; minimum, 225 microsiemens, Aug 25, 1995.

EXTREMES FOR CURRENT YEAR.--  
SPECIFIC CONDUCTANCE: Maximum, 1230 microsiemens, Sept. 6; minimum, 233 microsiemens, July 22.

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM @ 25 DEG.C), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DAY   | OCTOBER |     |      | NOVEMBER |     |      | DECEMBER |     |      | JANUARY |     |      |
|-------|---------|-----|------|----------|-----|------|----------|-----|------|---------|-----|------|
|       | MAX     | MIN | MEAN | MAX      | MIN | MEAN | MAX      | MIN | MEAN | MAX     | MIN | MEAN |
| 1     | 556     | 522 | 540  | 661      | 636 | 649  | 603      | 577 | 588  | 772     | 754 | 762  |
| 2     | 558     | 533 | 544  | 666      | 646 | 658  | 616      | 597 | 606  | 809     | 734 | 763  |
| 3     | 569     | 538 | 548  | 663      | 612 | 636  | 622      | 601 | 611  | 847     | 778 | 807  |
| 4     | 567     | 520 | 550  | 634      | 605 | 621  | 619      | 586 | 606  | 827     | 761 | 789  |
| 5     | 533     | 505 | 519  | 628      | 598 | 611  | 630      | 603 | 616  | 789     | 768 | 780  |
| 6     | 547     | 514 | 528  | 623      | 598 | 611  | 637      | 606 | 621  | 824     | 765 | 789  |
| 7     | 545     | 511 | 528  | 632      | 599 | 617  | 642      | 619 | 633  | 834     | 787 | 807  |
| 8     | 557     | 520 | 537  | 639      | 588 | 614  | 656      | 626 | 640  | 835     | 799 | 815  |
| 9     | 550     | 523 | 539  | 607      | 563 | 585  | 643      | 617 | 632  | 814     | 786 | 799  |
| 10    | 548     | 519 | 536  | 599      | 561 | 575  | 639      | 606 | 624  | 823     | 806 | 811  |
| 11    | 562     | 529 | 543  | 586      | 556 | 570  | 640      | 608 | 626  | 827     | 796 | 812  |
| 12    | 567     | 534 | 550  | 577      | 550 | 564  | 641      | 619 | 630  | 824     | 788 | 809  |
| 13    | 575     | 543 | 557  | 585      | 549 | 562  | 642      | 619 | 630  | 829     | 788 | 811  |
| 14    | 563     | 542 | 554  | 632      | 562 | 576  | 639      | 623 | 631  | 829     | 795 | 809  |
| 15    | 565     | 535 | 553  | 655      | 620 | 638  | 639      | 622 | 631  | 815     | 783 | 804  |
| 16    | 564     | 524 | 544  | 661      | 609 | 638  | 650      | 635 | 643  | 822     | 789 | 803  |
| 17    | 556     | 513 | 537  | 662      | 626 | 643  | 651      | 633 | 642  | 823     | 779 | 810  |
| 18    | 558     | 530 | 545  | 663      | 629 | 648  | 655      | 638 | 647  | 842     | 720 | 784  |
| 19    | 578     | 539 | 554  | 678      | 641 | 656  | 668      | 640 | 653  | 1020    | 777 | 843  |
| 20    | 579     | 548 | 565  | 671      | 642 | 654  | 780      | 650 | 692  | 948     | 816 | 856  |
| 21    | 571     | 548 | 564  | 669      | 641 | 655  | 779      | 748 | 764  | 858     | 801 | 826  |
| 22    | 570     | 534 | 552  | 681      | 587 | 635  | 780      | 754 | 767  | 868     | 816 | 839  |
| 23    | 545     | 530 | 538  | 611      | 583 | 599  | 795      | 759 | 775  | 876     | 827 | 854  |
| 24    | 556     | 538 | 545  | 625      | 599 | 612  | 789      | 751 | 770  | 869     | 804 | 840  |
| 25    | 569     | 541 | 555  | 621      | 583 | 600  | 789      | 736 | 764  | 864     | 705 | 809  |
| 26    | 599     | 559 | 572  | 628      | 591 | 615  | 787      | 746 | 767  | 783     | 674 | 711  |
| 27    | 616     | 573 | 590  | 619      | 598 | 609  | 775      | 726 | 750  | 757     | 686 | 712  |
| 28    | 628     | 604 | 617  | 619      | 594 | 605  | 783      | 740 | 757  | 721     | 687 | 705  |
| 29    | 652     | 611 | 623  | 616      | 595 | 603  | 775      | 745 | 764  | 715     | 623 | 680  |
| 30    | 652     | 620 | 635  | 603      | 578 | 588  | 773      | 735 | 755  | 637     | 626 | 632  |
| 31    | 661     | 625 | 641  | ---      | --- | ---  | 780      | 765 | 772  | 633     | 611 | 623  |
| MONTH | 661     | 505 | 558  | 681      | 549 | 615  | 795      | 577 | 678  | 1020    | 611 | 784  |



**07099970 ARKANSAS RIVER AT MOFFAT STREET, AT PUEBLO, CO**

LOCATION.--Lat 38°15'13", long 104°36'20", in SW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec.6, T.21 S., R.64 W., Pueblo County, Hydrologic Unit 11020002, on right bank 10 ft upstream from intake of Saint Charles Mesa Water Association, 150 ft downstream from Santa Fe Avenue bridge, and 1.1 mi upstream from Fountain Creek.

DRAINAGE AREA.--4,778 mi<sup>2</sup>.

**WATER-DISCHARGE RECORDS**

PERIOD OF RECORD.--October 1988 to current year.

REVISED RECORDS: WDR CO-90-1: 1989(M).

GAGE.--Water-stage recorder and concrete control. Elevation of gage is 4,653 ft above sea level, from topographic map.

REMARKS.--No estimated daily discharges. Records good. 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 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

| DAY   | OCT   | NOV   | DEC  | JAN  | FEB   | MAR   | APR   | MAY    | JUN    | JUL   | AUG   | SEP  |
|-------|-------|-------|------|------|-------|-------|-------|--------|--------|-------|-------|------|
| 1     | 430   | 270   | 246  | 80   | 321   | 383   | 769   | 563    | 824    | 1480  | 1130  | 175  |
| 2     | 476   | 266   | 178  | 79   | 321   | 382   | 809   | 522    | 736    | 1260  | 1130  | 117  |
| 3     | 509   | 273   | 174  | 63   | 321   | 381   | 817   | 447    | 681    | 1200  | 1080  | 88   |
| 4     | 534   | 278   | 172  | 65   | 310   | 376   | 856   | 426    | 633    | 1140  | 1030  | 57   |
| 5     | 556   | 277   | 178  | 65   | 274   | 395   | 893   | 392    | 945    | 1290  | 1010  | 26   |
| 6     | 542   | 281   | 176  | 64   | 275   | 430   | 919   | 356    | 1780   | 1490  | 1000  | 22   |
| 7     | 538   | 278   | 162  | 62   | 330   | 439   | 915   | 394    | 2360   | 1600  | 982   | 69   |
| 8     | 525   | 300   | 161  | 62   | 354   | 422   | 894   | 501    | 2620   | 1560  | 992   | 56   |
| 9     | 484   | 376   | 163  | 64   | 356   | 425   | 871   | 727    | 3090   | 1520  | 1100  | 70   |
| 10    | 473   | 420   | 162  | 62   | 363   | 419   | 888   | 914    | 3560   | 558   | 997   | 65   |
| 11    | 478   | 433   | 154  | 59   | 366   | 434   | 920   | 1160   | 3930   | 1890  | 987   | 73   |
| 12    | 480   | 426   | 148  | 62   | 356   | 517   | 959   | 1210   | 3810   | 2030  | 976   | 87   |
| 13    | 490   | 449   | 141  | 60   | 342   | 724   | 1020  | 1270   | 3420   | 1490  | 941   | 118  |
| 14    | 491   | 444   | 139  | 61   | 329   | 894   | 871   | 1670   | 2710   | 1290  | 873   | 139  |
| 15    | 488   | 202   | 141  | 64   | 296   | 901   | 869   | 2210   | 2750   | 973   | 1020  | 191  |
| 16    | 461   | 196   | 144  | 64   | 222   | 632   | 849   | 2490   | 2870   | 820   | 1180  | 155  |
| 17    | 450   | 192   | 146  | 62   | 166   | 447   | 762   | 2590   | 3060   | 731   | 1220  | 196  |
| 18    | 429   | 194   | 144  | 69   | 164   | 416   | 647   | 3090   | 2540   | 621   | 1220  | 209  |
| 19    | 414   | 190   | 146  | 69   | 163   | 451   | 561   | 3420   | 2360   | 607   | 1200  | 202  |
| 20    | 403   | 194   | 114  | 66   | 164   | 555   | 481   | 3430   | 2150   | 853   | 1210  | 156  |
| 21    | 403   | 194   | 81   | 65   | 162   | 631   | 500   | 3430   | 1880   | 1020  | 1180  | 145  |
| 22    | 404   | 195   | 82   | 59   | 193   | 619   | 528   | 3290   | 2170   | 1140  | 1170  | 115  |
| 23    | 395   | 195   | 77   | 55   | 285   | 637   | 517   | 2880   | 3000   | 1040  | 915   | 88   |
| 24    | 387   | 196   | 76   | 57   | 435   | 643   | 520   | 2600   | 2970   | 1370  | 523   | 96   |
| 25    | 375   | 194   | 75   | 84   | 464   | 646   | 554   | 2680   | 2440   | 1460  | 364   | 118  |
| 26    | 356   | 194   | 79   | 126  | 446   | 621   | 520   | 2450   | 2300   | 1460  | 252   | 126  |
| 27    | 312   | 188   | 82   | 126  | 438   | 610   | 528   | 1900   | 2260   | 1410  | 255   | 130  |
| 28    | 277   | 192   | 81   | 122  | 433   | 640   | 555   | 1560   | 2150   | 1270  | 194   | 111  |
| 29    | 275   | 191   | 81   | 191  | 386   | 640   | 562   | 1570   | 1920   | 1120  | 248   | 104  |
| 30    | 269   | 266   | 80   | 281  | ---   | 812   | 571   | 1620   | 1720   | 985   | 209   | 99   |
| 31    | 261   | ---   | 80   | 301  | ---   | 803   | ---   | 1430   | ---    | 1000  | 205   | ---  |
| TOTAL | 13365 | 7944  | 4063 | 2769 | 9035  | 17325 | 21925 | 53192  | 69639  | 37678 | 26793 | 3403 |
| MEAN  | 431   | 265   | 131  | 89.3 | 312   | 559   | 731   | 1716   | 2321   | 1215  | 864   | 113  |
| MAX   | 556   | 449   | 246  | 301  | 464   | 901   | 1020  | 3430   | 3930   | 2030  | 1220  | 209  |
| MIN   | 261   | 188   | 75   | 55   | 162   | 376   | 481   | 356    | 633    | 558   | 194   | 22   |
| AC-FT | 26510 | 15760 | 8060 | 5490 | 17920 | 34360 | 43490 | 105500 | 138100 | 74730 | 53140 | 6750 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1989 - 1996, BY WATER YEAR (WY)

|      | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 |
|------|------|------|------|------|------|------|------|------|
| MEAN | 254  | 183  | 84.7 | 82.8 | 158  | 268  | 490  | 1121 |
| MAX  | 431  | 265  | 269  | 161  | 312  | 559  | 731  | 1716 |
| (WY) | 1996 | 1991 | 1995 | 1991 | 1996 | 1996 | 1996 | 1995 |
| MIN  | 125  | 87.9 | 16.1 | 16.7 | 64.2 | 159  | 217  | 491  |
| (WY) | 1990 | 1989 | 1990 | 1989 | 1995 | 1990 | 1991 | 1989 |

| SUMMARY STATISTICS       | FOR 1995 CALENDAR YEAR | FOR 1996 WATER YEAR | WATER YEARS 1989 - 1996 |
|--------------------------|------------------------|---------------------|-------------------------|
| ANNUAL TOTAL             | 405273                 | 267131              |                         |
| ANNUAL MEAN              | 1110                   | 730                 | 657                     |
| HIGHEST ANNUAL MEAN      |                        |                     | 1107                    |
| LOWEST ANNUAL MEAN       |                        |                     | 444                     |
| HIGHEST DAILY MEAN       | 5630                   | Jul 15              | 3930                    |
| LOWEST DAILY MEAN        | <sup>a</sup> 30        | Jan 12              | 22                      |
| ANNUAL SEVEN-DAY MINIMUM | 30                     | Jan 12              | 52                      |
| INSTANTANEOUS PEAK FLOW  |                        |                     | 5020                    |
| INSTANTANEOUS PEAK STAGE |                        |                     | 12.11                   |
| ANNUAL RUNOFF (AC-FT)    | 803900                 | 529900              | 476000                  |
| 10 PERCENT EXCEEDS       | 3820                   | 1890                | 1720                    |
| 50 PERCENT EXCEEDS       | 433                    | 436                 | 312                     |
| 90 PERCENT EXCEEDS       | 31                     | 80                  | 43                      |

a-Also occurred Jan 13 to Feb 8.

b-From rating curve extended above 3900 ft<sup>3</sup>/s.

## 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.

REMARKS.--Records for water temperature are good except for Dec. 15 to Apr. 25, which are fair. Records for specific conductance are good. 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, 1,140 microsiemens, Dec. 31, 1989; minimum daily mean, 252 microsiemens, June 29, 1993.

WATER TEMPERATURE: Maximum, 26.3°C, Aug. 31, 1990; minimum, 0.0°C, on many days during winter.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum daily mean, 861 microsiemens, Sept. 5, minimum daily mean, 296 microsiemens, July 25.

WATER TEMPERATURE: Maximum, 24.8°C, Sept. 4; minimum, 0.0°C, Jan. 18-19, 26.

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM @ 25 DEG. C), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

| DAY  | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 1    | 464 | 565 | 517 | 701 | 533 | 513 | 507 | 563 | 526 | 318 | 321 | 508 |
| 2    | 462 | 572 | 539 | 702 | 545 | 513 | 499 | 569 | 548 | 319 | 318 | 562 |
| 3    | 466 | 553 | 544 | 751 | 556 | 517 | 499 | 559 | 544 | 325 | 326 | 613 |
| 4    | 467 | 540 | 539 | 734 | 556 | 544 | --- | 558 | 555 | 320 | 333 | 735 |
| 5    | 441 | 532 | 548 | 725 | 563 | 531 | 499 | 567 | --- | 311 | 338 | 861 |
| 6    | 449 | 532 | 553 | 734 | 568 | 518 | 528 | 576 | --- | 307 | 339 | --- |
| 7    | 449 | 537 | 563 | 751 | 545 | 507 | 527 | 567 | 453 | 306 | 344 | 661 |
| 8    | 456 | 534 | 570 | 758 | 526 | 515 | 527 | 564 | 443 | 306 | 344 | 694 |
| 9    | 458 | 503 | 562 | 743 | 524 | 512 | 528 | 537 | 436 | --- | 328 | --- |
| 10   | 456 | 494 | 555 | 754 | 525 | 511 | 525 | 512 | 436 | --- | 344 | 655 |
| 11   | 462 | 490 | 557 | 763 | 520 | 519 | 515 | 486 | 433 | --- | 344 | 634 |
| 12   | 467 | 485 | 567 | 752 | 520 | 529 | 524 | 485 | 426 | --- | 346 | 621 |
| 13   | 473 | 478 | 567 | 762 | 527 | 486 | 505 | 482 | --- | 315 | 348 | --- |
| 14   | 471 | 490 | 568 | 752 | 537 | --- | 511 | 500 | 409 | 313 | 361 | 542 |
| 15   | 470 | 561 | 568 | 748 | 545 | --- | 520 | 519 | 404 | --- | 342 | --- |
| 16   | 462 | 561 | 579 | 747 | 564 | 537 | 519 | 528 | 400 | 367 | 324 | 529 |
| 17   | 456 | 572 | 578 | 753 | 588 | 546 | 533 | 533 | 397 | 373 | --- | 501 |
| 18   | 469 | 577 | 582 | 721 | 589 | 547 | 541 | 551 | 386 | 388 | --- | 507 |
| 19   | 476 | 584 | 588 | --- | 587 | 544 | 565 | 560 | 376 | 383 | --- | 507 |
| 20   | 486 | 582 | --- | --- | 584 | 548 | 557 | 561 | 351 | --- | 340 | 538 |
| 21   | 485 | 583 | 703 | 768 | 587 | 537 | 557 | 561 | --- | 327 | 339 | 544 |
| 22   | 475 | 565 | 706 | 789 | 587 | 539 | 559 | 555 | 344 | --- | 342 | 575 |
| 23   | 463 | 533 | 713 | 803 | 544 | 533 | 558 | 541 | 355 | --- | --- | 630 |
| 24   | 469 | 539 | 708 | 790 | 512 | 517 | 559 | 530 | 346 | --- | 431 | 636 |
| 25   | 477 | 534 | --- | 744 | 500 | 521 | 564 | --- | 334 | 296 | --- | --- |
| 26   | 492 | 547 | 706 | --- | 509 | 528 | 568 | --- | 329 | 298 | 488 | 593 |
| 27   | 513 | 542 | 690 | 641 | 511 | 528 | 569 | 508 | 329 | 303 | 480 | --- |
| 28   | 537 | 538 | 696 | 634 | 512 | 525 | 554 | 503 | 326 | 304 | 513 | 613 |
| 29   | 542 | 537 | 703 | 605 | 507 | 522 | 562 | 499 | 315 | 317 | --- | 616 |
| 30   | 552 | 512 | 695 | 550 | --- | 501 | 564 | 492 | 317 | 347 | --- | 623 |
| 31   | 558 | --- | 710 | 542 | --- | 499 | --- | 485 | --- | 343 | 501 | --- |
| MEAN | 478 | 539 | --- | --- | 544 | --- | --- | --- | --- | --- | --- | --- |
| MAX  | 558 | 584 | --- | --- | 589 | --- | --- | --- | --- | --- | --- | --- |
| MIN  | 441 | 478 | --- | --- | 500 | --- | --- | --- | --- | --- | --- | --- |

07099970 ARKANSAS RIVER AT MOFFAT STREET, AT PUEBLO, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DAY   | OCTOBER  |      |      | NOVEMBER |      |      | DECEMBER |     |      | JANUARY |      |      |
|-------|----------|------|------|----------|------|------|----------|-----|------|---------|------|------|
|       | MAX      | MIN  | MEAN | MAX      | MIN  | MEAN | MAX      | MIN | MEAN | MAX     | MIN  | MEAN |
| 1     | 18.8     | 14.9 | 16.6 | 11.8     | 9.7  | 11.1 | 10.8     | 7.8 | 9.3  | 4.3     | 2.7  | 3.5  |
| 2     | 18.6     | 14.6 | 16.4 | 9.7      | 8.8  | 9.1  | 10.2     | 7.3 | 8.8  | 4.2     | 1.9  | 2.9  |
| 3     | 19.2     | 14.7 | 16.6 | 12.0     | 9.1  | 10.4 | 9.2      | 6.8 | 8.2  | 5.1     | 1.5  | 3.3  |
| 4     | 16.3     | 14.9 | 15.6 | 12.1     | 8.7  | 10.4 | 9.7      | 6.3 | 8.2  | 5.1     | 2.9  | 4.0  |
| 5     | 18.1     | 14.1 | 15.6 | 12.9     | 8.6  | 10.8 | 9.1      | 7.1 | 7.9  | 2.9     | 1.3  | 2.0  |
| 6     | 18.0     | 13.9 | 15.6 | 12.0     | 10.0 | 10.9 | 8.9      | 5.8 | 7.4  | 3.2     | .3   | 1.6  |
| 7     | 18.5     | 14.1 | 15.9 | 11.8     | 8.8  | 10.4 | 7.2      | 5.1 | 6.3  | 4.1     | 1.0  | 2.4  |
| 8     | 18.0     | 14.4 | 15.9 | 12.6     | 8.4  | 10.5 | 6.7      | 4.6 | 5.7  | 5.9     | 2.2  | 3.9  |
| 9     | 17.2     | 13.8 | 15.3 | 12.8     | 9.4  | 10.9 | 5.8      | 3.0 | 4.6  | 6.3     | 3.1  | 4.6  |
| 10    | 18.2     | 13.6 | 15.7 | 10.6     | 9.0  | 9.7  | 7.7      | 3.7 | 5.8  | 5.8     | 3.0  | 4.3  |
| 11    | 18.3     | 13.6 | 15.6 | 11.8     | 8.3  | 9.9  | 8.2      | 5.4 | 7.0  | 5.5     | 2.1  | 3.9  |
| 12    | 17.8     | 14.0 | 15.6 | 12.1     | 9.4  | 10.7 | 8.6      | 6.2 | 7.5  | 6.1     | 2.6  | 4.3  |
| 13    | 16.8     | 13.6 | 15.0 | 11.7     | 9.4  | 10.4 | 9.2      | 6.6 | 8.0  | 6.6     | 2.9  | 4.7  |
| 14    | 17.0     | 12.7 | 14.6 | 12.6     | 9.3  | 10.7 | 8.0      | 5.5 | 7.0  | 6.1     | 3.2  | 4.7  |
| 15    | 17.7     | 13.0 | 15.0 | 11.9     | 8.4  | 10.3 | 7.1      | 4.3 | 6.1  | 5.4     | 2.6  | 4.2  |
| 16    | 17.4     | 13.3 | 15.1 | 12.0     | 8.1  | 10.2 | 7.0      | 4.6 | 6.1  | 7.3     | 3.9  | 5.4  |
| 17    | 17.1     | 13.5 | 15.0 | 11.7     | 8.6  | 10.3 | 6.3      | 4.5 | 5.6  | 5.8     | .1   | 3.8  |
| 18    | 17.3     | 13.0 | 14.9 | 11.3     | 7.5  | 9.6  | 6.4      | 4.6 | 5.4  | 1.4     | .0   | .5   |
| 19    | 16.1     | 13.0 | 14.4 | 11.1     | 7.6  | 9.5  | 5.5      | 2.7 | 4.3  | 2.7     | .0   | 1.2  |
| 20    | 16.3     | 11.9 | 13.9 | 10.3     | 7.3  | 9.0  | 5.8      | 2.7 | 4.3  | 4.5     | 1.4  | 2.7  |
| 21    | 16.0     | 12.3 | 14.0 | 10.4     | 6.9  | 8.8  | 5.0      | 2.5 | 4.0  | 5.1     | 1.2  | 3.1  |
| 22    | 14.7     | 11.6 | 13.2 | 11.1     | 7.9  | 9.4  | 4.7      | 3.2 | 4.2  | 5.5     | 1.7  | 3.2  |
| 23    | 15.0     | 11.4 | 12.8 | 10.8     | 7.8  | 9.2  | 5.1      | 2.3 | 3.5  | 3.6     | .6   | 1.9  |
| 24    | 14.7     | 11.2 | 12.7 | 9.9      | 7.0  | 8.5  | 4.8      | 1.6 | 3.3  | 4.2     | .3   | 2.1  |
| 25    | 15.2     | 11.1 | 13.0 | 11.1     | 7.9  | 9.5  | 5.2      | 2.0 | 3.7  | 5.2     | 1.7  | 2.8  |
| 26    | 14.7     | 11.4 | 12.9 | 10.9     | 7.7  | 9.3  | 5.8      | 2.9 | 4.3  | 2.5     | .0   | 1.3  |
| 27    | 14.5     | 11.4 | 12.9 | 8.8      | 7.3  | 8.1  | 4.8      | 1.9 | 3.6  | 2.9     | .1   | 1.5  |
| 28    | 13.8     | 10.2 | 12.0 | 8.4      | 5.8  | 7.3  | 4.3      | 1.5 | 3.1  | 4.7     | 1.3  | 3.0  |
| 29    | 13.3     | 10.3 | 11.8 | 9.6      | 6.5  | 8.1  | 5.5      | 2.8 | 4.0  | 3.4     | .6   | 2.2  |
| 30    | 13.4     | 10.1 | 11.9 | 10.6     | 7.7  | 9.1  | 4.0      | 1.7 | 3.1  | 2.9     | .1   | 1.6  |
| 31    | 13.2     | 10.0 | 11.6 | ---      | ---  | ---  | 5.2      | 3.2 | 4.2  | 3.0     | .2   | 1.6  |
| MONTH | 19.2     | 10.0 | 14.4 | 12.9     | 5.8  | 9.7  | 10.8     | 1.5 | 5.6  | 7.3     | .0   | 3.0  |
| DAY   | FEBRUARY |      |      | MARCH    |      |      | APRIL    |     |      | MAY     |      |      |
|       | MAX      | MIN  | MEAN | MAX      | MIN  | MEAN | MAX      | MIN | MEAN | MAX     | MIN  | MEAN |
| 1     | 3.1      | .9   | 1.8  | 7.5      | 2.6  | 4.8  | 10.4     | 4.8 | 7.0  | 14.3    | 8.3  | 10.7 |
| 2     | 2.0      | .2   | 1.1  | 8.0      | 3.0  | 5.1  | 9.8      | 5.3 | 7.0  | 14.4    | 8.3  | 10.9 |
| 3     | 2.6      | .2   | 1.2  | 8.3      | 3.0  | 5.3  | 7.6      | 5.6 | 6.4  | 13.8    | 8.2  | 10.9 |
| 4     | 4.6      | .2   | 2.1  | 8.7      | 3.9  | 6.1  | 6.9      | 5.0 | 6.1  | 15.7    | 8.3  | 11.6 |
| 5     | 5.7      | 2.4  | 3.9  | 9.1      | 3.8  | 6.2  | 9.3      | 4.5 | 6.2  | 14.6    | 9.5  | 11.6 |
| 6     | 5.6      | 2.3  | 3.8  | 6.0      | 3.0  | 4.6  | 10.2     | 5.1 | 7.2  | 16.4    | 9.2  | 12.3 |
| 7     | 6.3      | 3.1  | 4.4  | 7.7      | 2.6  | 4.7  | 9.3      | 5.8 | 7.1  | 15.9    | 10.0 | 12.6 |
| 8     | 5.3      | 2.8  | 4.0  | 8.1      | 3.4  | 5.3  | 10.7     | 5.8 | 7.7  | 16.0    | 9.1  | 11.9 |
| 9     | 7.0      | 2.3  | 4.4  | 9.0      | 3.5  | 5.9  | 10.8     | 5.9 | 7.9  | 14.9    | 9.6  | 11.5 |
| 10    | 5.8      | 2.6  | 4.0  | 9.0      | 4.1  | 6.2  | 9.3      | 5.9 | 7.3  | 13.5    | 9.3  | 10.8 |
| 11    | 5.8      | 1.8  | 3.6  | 10.0     | 5.0  | 7.0  | 10.1     | 5.9 | 7.7  | 13.0    | 9.3  | 10.6 |
| 12    | 5.8      | 1.8  | 3.6  | 9.8      | 5.1  | 7.0  | 10.8     | 6.0 | 7.9  | 12.4    | 9.1  | 10.3 |
| 13    | 6.5      | 1.9  | 3.9  | 8.5      | 4.7  | 6.2  | 10.0     | 6.3 | 7.5  | 12.9    | 9.4  | 10.7 |
| 14    | 7.3      | 2.4  | 4.5  | 5.6      | 3.9  | 5.2  | 10.1     | 6.3 | 7.8  | 12.4    | 9.4  | 10.4 |
| 15    | 6.6      | 2.8  | 4.5  | 8.6      | 4.3  | 6.1  | 11.2     | 6.1 | 8.2  | 12.1    | 9.0  | 10.2 |
| 16    | 6.4      | 1.6  | 4.1  | 8.4      | 4.7  | 6.2  | 11.8     | 6.5 | 8.4  | 12.1    | 9.2  | 10.3 |
| 17    | 7.5      | 2.3  | 5.0  | 6.8      | 4.7  | 5.7  | 12.1     | 6.7 | 8.9  | 11.9    | 9.3  | 10.2 |
| 18    | 6.9      | 3.0  | 5.3  | 7.1      | 4.5  | 5.4  | 13.8     | 8.0 | 10.4 | 11.6    | 9.2  | 10.1 |
| 19    | 6.9      | 2.9  | 5.1  | 8.9      | 3.5  | 5.8  | 12.8     | 7.0 | 9.7  | 11.5    | 9.5  | 10.3 |
| 20    | 8.4      | 3.6  | 6.0  | 9.1      | 3.6  | 5.9  | 10.6     | 7.5 | 8.9  | 11.9    | 9.6  | 10.4 |
| 21    | 8.6      | 4.0  | 6.5  | 9.7      | 4.3  | 6.4  | 12.3     | 7.1 | 9.3  | 11.9    | 9.6  | 10.5 |
| 22    | 7.9      | 4.7  | 6.3  | 9.3      | 4.4  | 6.4  | 12.9     | 8.0 | 9.9  | 12.1    | 9.7  | 10.7 |
| 23    | 7.2      | 3.4  | 5.3  | 8.6      | 4.7  | 6.3  | 13.9     | 7.4 | 10.3 | 12.6    | 9.9  | 10.9 |
| 24    | 7.0      | 3.0  | 4.7  | 6.4      | 4.0  | 5.2  | 14.2     | 8.3 | 10.8 | 14.1    | 9.9  | 11.0 |
| 25    | 8.1      | 3.8  | 5.5  | 6.6      | 3.2  | 4.6  | 13.1     | 8.5 | 10.4 | 12.5    | 10.5 | 11.3 |
| 26    | 5.2      | 3.2  | 4.1  | 9.0      | 3.6  | 5.7  | 13.8     | 7.6 | 10.3 | 11.9    | 10.6 | 11.2 |
| 27    | 6.3      | 2.6  | 4.2  | 9.9      | 4.1  | 6.4  | 13.2     | 8.2 | 10.4 | 13.4    | 10.3 | 11.5 |
| 28    | 5.4      | 2.4  | 3.7  | 9.6      | 4.6  | 6.6  | 9.7      | 7.3 | 8.4  | 12.8    | 10.4 | 11.3 |
| 29    | 7.0      | 2.3  | 4.4  | 9.7      | 5.1  | 6.8  | 13.4     | 7.2 | 9.8  | 14.2    | 10.6 | 12.0 |
| 30    | ---      | ---  | ---  | 9.4      | 5.4  | 6.8  | 13.6     | 7.6 | 10.2 | 14.6    | 11.0 | 12.4 |
| 31    | ---      | ---  | ---  | 9.6      | 4.8  | 6.7  | ---      | --- | ---  | 14.9    | 10.8 | 12.6 |
| MONTH | 8.6      | .2   | 4.2  | 10.0     | 2.6  | 5.9  | 14.2     | 4.5 | 8.5  | 16.4    | 8.2  | 11.1 |





## 07103700 FOUNTAIN CREEK NEAR COLORADO SPRINGS, CO--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--December 1974 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 during peak flows, 2,970 mg/L, July 9, 1996; minimum daily, 137 mg/L, Sept. 9, 1995.

SEDIMENT LOADS: Maximum daily during peak flows, 1,850 tons, July 9, 1996; minimum daily, 12 tons, Aug. 15, 1996.

EXTREMES FOR WATER YEAR 1996.--

SEDIMENT CONCENTRATIONS: Maximum daily during peak flows, 2,970 mg/L, July 9; minimum daily, 189 mg/L, Aug. 8.

SEDIMENT LOADS: Maximum daily during peak flows, 1,850 tons, July 9; minimum daily, 12 tons, Aug. 15.

## SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

| 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     | 10                   | ---                         | ---                           | 11                   | ---                         | ---                           | 14                   | ---                         | ---                           |
| 2     | 9.2                  | ---                         | ---                           | 10                   | ---                         | ---                           | 12                   | ---                         | ---                           |
| 3     | 104                  | ---                         | ---                           | 9.6                  | ---                         | ---                           | 10                   | ---                         | ---                           |
| 4     | 14                   | ---                         | ---                           | 9.7                  | ---                         | ---                           | 10                   | ---                         | ---                           |
| 5     | 9.0                  | ---                         | ---                           | 9.4                  | ---                         | ---                           | 10                   | ---                         | ---                           |
| 6     | 11                   | ---                         | ---                           | 9.3                  | ---                         | ---                           | 10                   | ---                         | ---                           |
| 7     | 9.8                  | ---                         | ---                           | 8.8                  | ---                         | ---                           | 9.6                  | ---                         | ---                           |
| 8     | 11                   | ---                         | ---                           | 10                   | ---                         | ---                           | 9.2                  | ---                         | ---                           |
| 9     | 9.5                  | ---                         | ---                           | 9.3                  | ---                         | ---                           | 9.5                  | ---                         | ---                           |
| 10    | 9.5                  | ---                         | ---                           | 9.1                  | ---                         | ---                           | 9.0                  | ---                         | ---                           |
| 11    | 7.5                  | ---                         | ---                           | 8.6                  | ---                         | ---                           | 8.5                  | ---                         | ---                           |
| 12    | 8.0                  | ---                         | ---                           | 8.6                  | ---                         | ---                           | 9.0                  | ---                         | ---                           |
| 13    | 9.6                  | ---                         | ---                           | 9.4                  | ---                         | ---                           | 9.0                  | ---                         | ---                           |
| 14    | 10                   | ---                         | ---                           | 9.3                  | ---                         | ---                           | 9.9                  | ---                         | ---                           |
| 15    | 13                   | ---                         | ---                           | 9.2                  | ---                         | ---                           | 8.4                  | ---                         | ---                           |
| 16    | 9.7                  | ---                         | ---                           | 9.4                  | ---                         | ---                           | 9.3                  | ---                         | ---                           |
| 17    | 12                   | ---                         | ---                           | 10                   | ---                         | ---                           | 9.7                  | ---                         | ---                           |
| 18    | 10                   | ---                         | ---                           | 8.8                  | ---                         | ---                           | 9.8                  | ---                         | ---                           |
| 19    | 9.5                  | ---                         | ---                           | 8.5                  | ---                         | ---                           | 9.6                  | ---                         | ---                           |
| 20    | 9.7                  | ---                         | ---                           | 9.4                  | ---                         | ---                           | 9.0                  | ---                         | ---                           |
| 21    | 9.8                  | ---                         | ---                           | 9.1                  | ---                         | ---                           | 9.1                  | ---                         | ---                           |
| 22    | 9.7                  | ---                         | ---                           | 9.0                  | ---                         | ---                           | 8.8                  | ---                         | ---                           |
| 23    | 10                   | ---                         | ---                           | 7.4                  | ---                         | ---                           | 8.9                  | ---                         | ---                           |
| 24    | 11                   | ---                         | ---                           | 8.9                  | ---                         | ---                           | 9.1                  | ---                         | ---                           |
| 25    | 11                   | ---                         | ---                           | 8.8                  | ---                         | ---                           | 8.6                  | ---                         | ---                           |
| 26    | 10                   | ---                         | ---                           | 9.7                  | ---                         | ---                           | 8.7                  | ---                         | ---                           |
| 27    | 10                   | ---                         | ---                           | 7.0                  | ---                         | ---                           | 8.5                  | ---                         | ---                           |
| 28    | 11                   | ---                         | ---                           | 5.4                  | ---                         | ---                           | 8.3                  | ---                         | ---                           |
| 29    | 11                   | ---                         | ---                           | 4.9                  | ---                         | ---                           | 8.8                  | ---                         | ---                           |
| 30    | 11                   | ---                         | ---                           | 14                   | ---                         | ---                           | 8.5                  | ---                         | ---                           |
| 31    | 11                   | ---                         | ---                           | ---                  | ---                         | ---                           | 7.9                  | ---                         | ---                           |
| TOTAL | 411.5                | ---                         | ---                           | 271.6                | ---                         | ---                           | 290.7                | ---                         | ---                           |

07103700 FOUNTAIN CREEK NEAR COLORADO SPRINGS, CO--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

| 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)    |            |
| JANUARY |           |         |            |           |         |            |           |           |            |
| 1       | 8.9       | ---     | ---        | 8.0       | ---     | ---        | 6.6       | ---       | ---        |
| 2       | 7.1       | ---     | ---        | 8.1       | ---     | ---        | 6.4       | ---       | ---        |
| 3       | 6.9       | ---     | ---        | 7.4       | ---     | ---        | 14        | ---       | ---        |
| 4       | 4.7       | ---     | ---        | 7.0       | ---     | ---        | 12        | ---       | ---        |
| 5       | 5.9       | ---     | ---        | 6.9       | ---     | ---        | 11        | ---       | ---        |
| 6       | 8.2       | ---     | ---        | 6.5       | ---     | ---        | 9.9       | ---       | ---        |
| 7       | 8.1       | ---     | ---        | 6.2       | ---     | ---        | 10        | ---       | ---        |
| 8       | 8.2       | ---     | ---        | 6.9       | ---     | ---        | 9.7       | ---       | ---        |
| 9       | 7.7       | ---     | ---        | 8.2       | ---     | ---        | 9.8       | ---       | ---        |
| 10      | 7.8       | ---     | ---        | 7.8       | ---     | ---        | 9.4       | ---       | ---        |
| 11      | 7.6       | ---     | ---        | 6.1       | ---     | ---        | 9.0       | ---       | ---        |
| 12      | 7.1       | ---     | ---        | 3.4       | ---     | ---        | 9.7       | ---       | ---        |
| 13      | 7.4       | ---     | ---        | 3.5       | ---     | ---        | 8.8       | ---       | ---        |
| 14      | 7.9       | ---     | ---        | 9.4       | ---     | ---        | 8.5       | ---       | ---        |
| 15      | 7.6       | ---     | ---        | 9.7       | ---     | ---        | 8.3       | ---       | ---        |
| 16      | 7.4       | ---     | ---        | 9.0       | ---     | ---        | 9.5       | ---       | ---        |
| 17      | 6.5       | ---     | ---        | 9.6       | ---     | ---        | 10        | ---       | ---        |
| 18      | 7.2       | ---     | ---        | 9.3       | ---     | ---        | 9.7       | ---       | ---        |
| 19      | 8.2       | ---     | ---        | 8.3       | ---     | ---        | 9.4       | ---       | ---        |
| 20      | 7.4       | ---     | ---        | 8.1       | ---     | ---        | 9.0       | ---       | ---        |
| 21      | 5.8       | ---     | ---        | 8.1       | ---     | ---        | 8.6       | ---       | ---        |
| 22      | 5.1       | ---     | ---        | 7.8       | ---     | ---        | 8.6       | ---       | ---        |
| 23      | 6.5       | ---     | ---        | 7.6       | ---     | ---        | 9.4       | ---       | ---        |
| 24      | 8.5       | ---     | ---        | 7.6       | ---     | ---        | 9.2       | ---       | ---        |
| 25      | 9.0       | ---     | ---        | 7.4       | ---     | ---        | 8.6       | ---       | ---        |
| 26      | 8.5       | ---     | ---        | 7.5       | ---     | ---        | 8.1       | ---       | ---        |
| 27      | 8.5       | ---     | ---        | 7.2       | ---     | ---        | 8.2       | ---       | ---        |
| 28      | 8.0       | ---     | ---        | 7.5       | ---     | ---        | 8.9       | ---       | ---        |
| 29      | 7.4       | ---     | ---        | ---       | ---     | ---        | 8.5       | ---       | ---        |
| 30      | 7.7       | ---     | ---        | ---       | ---     | ---        | 8.9       | ---       | ---        |
| 31      | 8.2       | ---     | ---        | ---       | ---     | ---        | 9.5       | ---       | ---        |
| TOTAL   | 231.0     | ---     | ---        | 210.1     | ---     | ---        | 287.2     | ---       | ---        |
| APRIL   |           |         |            |           |         |            |           |           |            |
| 1       | 9.2       | ---     | ---        | 37        | ---     | ---        | 169       | ---       | ---        |
| 2       | 8.8       | ---     | ---        | 30        | ---     | ---        | 147       | ---       | ---        |
| 3       | 8.6       | ---     | ---        | 35        | ---     | ---        | 143       | ---       | ---        |
| 4       | 8.5       | ---     | ---        | 35        | ---     | ---        | 131       | ---       | ---        |
| 5       | 9.6       | ---     | ---        | 73        | ---     | ---        | 122       | ---       | ---        |
| 6       | 9.5       | ---     | ---        | 71        | ---     | ---        | 111       | ---       | ---        |
| 7       | 9.2       | ---     | ---        | 59        | ---     | ---        | 109       | ---       | ---        |
| 8       | 9.0       | ---     | ---        | 51        | ---     | ---        | 120       | ---       | ---        |
| 9       | 10        | ---     | ---        | 45        | ---     | ---        | 127       | ---       | ---        |
| 10      | 9.8       | ---     | ---        | 41        | ---     | ---        | 99        | ---       | ---        |
| 11      | 9.9       | ---     | ---        | 41        | ---     | ---        | 103       | ---       | ---        |
| 12      | 10        | ---     | ---        | 39        | ---     | ---        | 100       | ---       | ---        |
| 13      | 10        | ---     | ---        | 37        | ---     | ---        | 109       | ---       | ---        |
| 14      | 11        | ---     | ---        | 41        | ---     | ---        | 124       | ---       | ---        |
| 15      | 10        | ---     | ---        | 42        | ---     | ---        | 129       | ---       | ---        |
| 16      | 13        | ---     | ---        | 47        | ---     | ---        | 128       | ---       | ---        |
| 17      | 15        | ---     | ---        | 192       | ---     | ---        | 128       | ---       | ---        |
| 18      | 16        | ---     | ---        | 72        | ---     | ---        | 174       | ---       | ---        |
| 19      | 15        | ---     | ---        | 150       | ---     | ---        | 147       | ---       | ---        |
| 20      | 16        | ---     | ---        | 163       | ---     | ---        | 131       | ---       | ---        |
| 21      | 18        | ---     | ---        | 167       | ---     | ---        | 138       | ---       | ---        |
| 22      | 16        | ---     | ---        | 183       | ---     | ---        | 127       | ---       | ---        |
| 23      | 16        | ---     | ---        | 177       | ---     | ---        | 141       | ---       | ---        |
| 24      | 18        | ---     | ---        | 171       | ---     | ---        | 131       | ---       | ---        |
| 25      | 21        | ---     | ---        | 184       | ---     | ---        | 122       | ---       | ---        |
| 26      | 29        | ---     | ---        | 181       | ---     | ---        | 108       | ---       | ---        |
| 27      | 24        | ---     | ---        | 190       | ---     | ---        | 113       | ---       | ---        |
| 28      | 25        | ---     | ---        | 161       | ---     | ---        | 114       | ---       | ---        |
| 29      | 32        | ---     | ---        | 170       | ---     | ---        | 137       | ---       | ---        |
| 30      | 37        | ---     | ---        | 185       | ---     | ---        | 133       | ---       | ---        |
| 31      | ---       | ---     | ---        | 195       | ---     | ---        | ---       | ---       | ---        |
| TOTAL   | 454.1     | ---     | ---        | 3265      | ---     | ---        | 3815      | ---       | ---        |
| MAY     |           |         |            |           |         |            |           |           |            |
| JUNE    |           |         |            |           |         |            |           |           |            |

## ARKANSAS RIVER BASIN

## 07103700 FOUNTAIN CREEK NEAR COLORADO SPRINGS, CO--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

| DAY   | MEAN<br>DISCHARGE<br>(CFS) | MEAN<br>CONCEN-<br>TRATION<br>(MG/L) | SEDIMENT<br>DISCHARGE<br>(TONS/DAY) | MEAN<br>DISCHARGE<br>(CFS) | MEAN<br>CONCEN-<br>TRATION<br>(MG/L) | SEDIMENT<br>DISCHARGE<br>(TONS/DAY) | MEAN<br>DISCHARGE<br>(CFS) | MEAN<br>CONCEN-<br>TRATION<br>(MG/L) | SEDIMENT<br>DISCHARGE<br>(TONS/DAY) |
|-------|----------------------------|--------------------------------------|-------------------------------------|----------------------------|--------------------------------------|-------------------------------------|----------------------------|--------------------------------------|-------------------------------------|
|       |                            |                                      |                                     |                            |                                      |                                     |                            |                                      |                                     |
| 1     | 190                        | ---                                  | ---                                 | 52                         | ---                                  | ---                                 | 25                         | ---                                  | ---                                 |
| 2     | 181                        | ---                                  | ---                                 | 36                         | ---                                  | ---                                 | 24                         | ---                                  | ---                                 |
| 3     | 173                        | ---                                  | ---                                 | 27                         | ---                                  | ---                                 | 22                         | ---                                  | ---                                 |
| 4     | 171                        | ---                                  | ---                                 | 29                         | ---                                  | ---                                 | 22                         | ---                                  | ---                                 |
| 5     | 147                        | ---                                  | ---                                 | 34                         | ---                                  | ---                                 | 21                         | ---                                  | ---                                 |
| 6     | 128                        | ---                                  | ---                                 | 39                         | ---                                  | ---                                 | 21                         | ---                                  | ---                                 |
| 7     | 125                        | ---                                  | ---                                 | 24                         | ---                                  | ---                                 | 27                         | ---                                  | ---                                 |
| 8     | 120                        | ---                                  | ---                                 | 14                         | ---                                  | ---                                 | 25                         | ---                                  | ---                                 |
| 9     | 117                        | ---                                  | ---                                 | 17                         | ---                                  | ---                                 | 35                         | 137                                  | 34                                  |
| 10    | 113                        | ---                                  | ---                                 | 17                         | ---                                  | ---                                 | 29                         | ---                                  | ---                                 |
| 11    | 107                        | ---                                  | ---                                 | 18                         | ---                                  | ---                                 | 27                         | ---                                  | ---                                 |
| 12    | 84                         | ---                                  | ---                                 | 21                         | ---                                  | ---                                 | 27                         | ---                                  | ---                                 |
| 13    | 77                         | ---                                  | ---                                 | 21                         | ---                                  | ---                                 | 25                         | ---                                  | ---                                 |
| 14    | 102                        | ---                                  | ---                                 | 21                         | ---                                  | ---                                 | 24                         | ---                                  | ---                                 |
| 15    | 111                        | ---                                  | ---                                 | 30                         | ---                                  | ---                                 | 23                         | ---                                  | ---                                 |
| 16    | 113                        | ---                                  | ---                                 | 28                         | ---                                  | ---                                 | 23                         | ---                                  | ---                                 |
| 17    | 118                        | ---                                  | ---                                 | 28                         | ---                                  | ---                                 | 23                         | ---                                  | ---                                 |
| 18    | 115                        | ---                                  | ---                                 | 30                         | ---                                  | ---                                 | 22                         | ---                                  | ---                                 |
| 19    | 125                        | ---                                  | ---                                 | 76                         | ---                                  | ---                                 | 21                         | ---                                  | ---                                 |
| 20    | 131                        | ---                                  | ---                                 | 38                         | ---                                  | ---                                 | 20                         | ---                                  | ---                                 |
| 21    | 121                        | ---                                  | ---                                 | 40                         | ---                                  | ---                                 | 22                         | ---                                  | ---                                 |
| 22    | 107                        | ---                                  | ---                                 | 55                         | ---                                  | ---                                 | 21                         | ---                                  | ---                                 |
| 23    | 97                         | ---                                  | ---                                 | 41                         | ---                                  | ---                                 | 20                         | ---                                  | ---                                 |
| 24    | 92                         | ---                                  | ---                                 | 34                         | ---                                  | ---                                 | 20                         | ---                                  | ---                                 |
| 25    | 75                         | ---                                  | ---                                 | 34                         | ---                                  | ---                                 | 22                         | ---                                  | ---                                 |
| 26    | 61                         | ---                                  | ---                                 | 35                         | ---                                  | ---                                 | 20                         | ---                                  | ---                                 |
| 27    | 57                         | ---                                  | ---                                 | 29                         | ---                                  | ---                                 | 19                         | ---                                  | ---                                 |
| 28    | 46                         | ---                                  | ---                                 | 29                         | ---                                  | ---                                 | 18                         | ---                                  | ---                                 |
| 29    | 44                         | ---                                  | ---                                 | 35                         | ---                                  | ---                                 | 18                         | ---                                  | ---                                 |
| 30    | 44                         | ---                                  | ---                                 | 28                         | ---                                  | ---                                 | 17                         | ---                                  | ---                                 |
| 31    | 44                         | ---                                  | ---                                 | 30                         | ---                                  | ---                                 | ---                        | ---                                  | ---                                 |
| TOTAL | 3336                       | ---                                  | ---                                 | 990                        | ---                                  | ---                                 | 683                        | ---                                  | ---                                 |

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

| DATE  | TIME | DIS-<br>CHARGE,<br>INST.<br>CUBIC<br>FEET<br>PER<br>SECOND | SEDI-<br>MENT,<br>SUS-<br>PENDE<br>(MG/L) | SEDI-<br>MENT,<br>DIS-<br>CHARGE,<br>SUS-<br>PENDE<br>(T/DAY) |
|-------|------|--|---|---|
| OCT   |      |  |   |   |
| 04... | 1035 | 16   | 321                                       | 14  |
| 13... | 0855 | 9.7  | 14  | 0.37  |
| DEC   |      |  |   |   |
| 01... | 0840 | 14   | 42  | 1.6   |
| 29... | 0815 | 6.7  | 14  | 0.25  |
| JAN   |      |  |   |   |
| 19... | 0930 | 6.7  | 13  | 0.24  |
| FEB   |      |  |   |   |
| 23... | 0840 | 7.6  | 10  | 0.21  |
| MAR   |      |  |   |   |
| 23... | 0815 | 8.6  | 69  | 1.6   |
| APR   |      |  |   |   |
| 20... | 0830 | 13   | 31  | 1.1   |
| MAY   |      |  |   |   |
| 25... | 0845 | 170  | 313                                       | 144   |
| JUN   |      |  |   |   |
| 22... | 0900 | 131  | 111                                       | 39  |
| JUL   |      |  |   |   |
| 27... | 0830 | 59   | 26  | 4.1   |
| AUG   |      |  |   |   |
| 17... | 1010 | 27   | 8   | 0.58  |
| 21... | 1300 | 39   | 26  | 2.7   |
| SEP   |      |  |   |   |
| 15... | 1135 | 25   | 16  | 1.1   |
| 28... | 0845 | 19   | 14  | 0.72  |

07103700 FOUNTAIN CREEK NEAR COLORADO SPRINGS, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DATE      | TIME | DIS-CHARGE, INST. CUBIC FEET PER SECOND | SPE-CIFIC CON-DUCT-ANCE (US/CM) | PH (STAND-ARD UNITS) | TEMPER-ATURE WATER (DEG C) | OXYGEN, DIS-SOLVED (MG/L) | OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) | COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML) | STREP-TOCOCCI, FECAL, KF AGAR (COLS. PER 100 ML) | CALCIUM DIS-SOLVED (MG/L AS CA) | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) |
|-----------|------|---|---------------------------------|----------------------|----------------------------|---------------------------|--|--|--|---------------------------------|-------------------------------------|
| OCT 26... | 1100 | 12                                      | 323                             | 8.4                  | 5.0                        | 10.1                      | --   | 62   | 140  | 33                              | 7.1                                 |
| NOV 30... | 1045 | 15                                      | 266                             | 8.4                  | 4.5                        | 10.0                      | 0.3  | 75   | 160  | 24                              | 4.9                                 |
| JAN 18... | 1000 | 6.7                                     | 350                             | 7.9                  | 0.0                        | 10.8                      | 0.3  | K38  | K33  | 37                              | 8.9                                 |
| FEB 22... | 1145 | 10                                      | 340                             | 8.2                  | 5.0                        | 9.7                       | 2.3  | 160  | 180  | 37                              | 7.9                                 |
| MAR 21... | 0845 | 10                                      | 361                             | 8.3                  | 2.0                        | 10.7                      | 0.2  | 50   | 40   | 37                              | 7.9                                 |
| APR 18... | 0930 | 19                                      | 274                             | 8.0                  | 5.0                        | 9.9                       | 0.6  | 64   | 75   | 29                              | 5.3                                 |
| MAY 16... | 1115 | 19                                      | 272                             | 8.2                  | 13.0                       | 7.9                       | 0.8  | 350  | 180  | 28                              | 5.3                                 |
| JUN 20... | 0745 | 12                                      | 294                             | 8.2                  | 13.0                       | 7.7                       | 0.6  | 490  | 310  | 32                              | 6.1                                 |
| JUL 18... | 0900 | 27                                      | 202                             | 8.2                  | 14.0                       | 7.9                       | 0.7  | K1500                                      | 1200   | 21                              | 3.9                                 |
| AUG 15... | 0800 | 17                                      | 268                             | 8.3                  | 13.5                       | 8.1                       | 0.8  | 880  | 880  | 27                              | 5.3                                 |
| SEP 12... | 0830 | 47                                      | 157                             | 8.1                  | 11.0                       | 8.9                       | 0.9  | 480  | 970  | 16                              | 2.7                                 |

| DATE      | ALKA-LINITY LAB (MG/L AS CACO3) | SULFATE DIS-SOLVED (MG/L AS SO4) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) | RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) | NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) | NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) | NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) | NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) | PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) |
|-----------|---------------------------------|----------------------------------|------------------------------------|-----------------------------------|--|---|---|---|---|---|
| OCT 26... | 107                             | 16                               | 17                                 | 2.7                               | 21   | 0.01                                      | 1.0                                       | <0.015                                    | 0.4   | 0.01                                      |
| NOV 30... | 88                              | 11                               | 13                                 | 2.8                               | 2  | <0.01                                     | 0.79                                      | <0.015                                    | <0.2  | <0.01                                     |
| JAN 18... | 125                             | 17                               | 18                                 | 3.1                               | 2  | <0.01                                     | 0.87                                      | <0.015                                    | <0.2  | <0.01                                     |
| FEB 22... | 118                             | 17                               | 19                                 | 2.7                               | 5  | 0.02                                      | 1.0                                       | <0.015                                    | <0.2  | <0.01                                     |
| MAR 21... | 119                             | 17                               | 20                                 | 2.9                               | 2  | <0.01                                     | 1.1                                       | <0.015                                    | <0.2  | 0.01                                      |
| APR 18... | 88                              | 13                               | 15                                 | 2.9                               | 6  | <0.01                                     | 0.75                                      | <0.015                                    | 0.2   | <0.01                                     |
| MAY 16... | 90                              | 12                               | 15                                 | 2.6                               | 19   | <0.01                                     | 0.65                                      | 0.03                                      | 0.2   | <0.01                                     |
| JUN 20... | 99                              | 13                               | 16                                 | 2.9                               | 25   | <0.01                                     | 0.80                                      | 0.03                                      | 0.2   | 0.02                                      |
| JUL 18... | 67                              | 9.5                              | 11                                 | 3.0                               | 134  | 0.01                                      | 0.42                                      | 0.03                                      | 0.3   | <0.01                                     |
| AUG 15... | 91                              | 12                               | 14                                 | 2.6                               | 32   | <0.01                                     | 0.70                                      | <0.015                                    | <0.2  | <0.01                                     |
| SEP 12... | 49                              | 7.2                              | 7.1                                | 2.6                               | 138  | 0.01                                      | 0.39                                      | <0.015                                    | 0.4   | <0.01                                     |

| DATE      | CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) | CADMIUM DIS-SOLVED (UG/L AS CD) | CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) | CHRO-MIUM, DIS-SOLVED (UG/L AS CR) | CHRO-MIUM, HEXA-VALENT, DIS. (UG/L AS CR) | COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) | COPPER, DIS-SOLVED (UG/L AS CU) | IRON, TOTAL RECOV-ERABLE (UG/L AS FE) | IRON, DIS-SOLVED (UG/L AS FE) |
|-----------|---|---------------------------------|--|------------------------------------|---|---|---------------------------------|---------------------------------------|-------------------------------|
| OCT 26... | <1                                      | <1                              | <1   | <1                                 | <1  | 2                                       | <1                              | 1000                                  | 30                            |
| NOV 30... | <1                                      | <1                              | <1   | <1                                 | <1  | <1                                      | 1                               | 170                                   | <10                           |
| JAN 18... | <1                                      | <1                              | <1   | <1                                 | <1  | <1                                      | <1                              | 140                                   | 40                            |
| FEB 22... | <1                                      | <1                              | <1   | <1                                 | <1  | 1                                       | <1                              | 240                                   | 40                            |
| MAR 21... | <1                                      | <1                              | <1   | <1                                 | <1  | <1                                      | <1                              | 170                                   | 20                            |
| APR 18... | <1                                      | <1                              | <1   | <1                                 | <1  | 1                                       | <1                              | 440                                   | <10                           |
| MAY 16... | <1                                      | <1                              | <1   | <1                                 | <1  | 2                                       | <1                              | 720                                   | 15                            |
| JUN 20... | <1                                      | <1                              | <1   | <1                                 | <1  | 1                                       | <1                              | 960                                   | 8                             |
| JUL 18... | <1                                      | <1                              | 1  | <1                                 | <1  | 2                                       | 1                               | 4600                                  | 10                            |
| AUG 15... | <1                                      | <1                              | <1   | <1                                 | <1  | 2                                       | <1                              | 1200                                  | <10                           |
| SEP 12... | <1                                      | <1                              | 2  | <1                                 | <1  | 3                                       | <1                              | 5900                                  | 20                            |

K-Based on non-ideal colony count.

## ARKANSAS RIVER BASIN

## 07103700 FOUNTAIN CREEK NEAR COLORADO SPRINGS, CO--Continued

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DATE         | LEAD,<br>TOTAL<br>RECOV-<br>ERABLE<br>(UG/L<br>AS PB) | LEAD,<br>DIS-<br>SOLVED<br>(UG/L<br>AS PB) | MANGA-<br>NESE,<br>TOTAL<br>RECOV-<br>ERABLE<br>(UG/L<br>AS MN) | MANGA-<br>NESE,<br>DIS-<br>SOLVED<br>(UG/L<br>AS MN) | NICKEL,<br>TOTAL<br>RECOV-<br>ERABLE<br>(UG/L<br>AS NI) | NICKEL,<br>DIS-<br>SOLVED<br>(UG/L<br>AS NI) | ZINC,<br>TOTAL<br>RECOV-<br>ERABLE<br>(UG/L<br>AS ZN) | ZINC,<br>DIS-<br>SOLVED<br>(UG/L<br>AS ZN) |
|--------------|---|--|---|--|---|--|---|--|
| OCT<br>26... | 3   | <1   | 110   | 50   | <1  | <1   | 20  | <10  |
| NOV<br>30... | <1  | <1   | 40  | 20   | <1  | <1   | <10   | <10  |
| JAN<br>18... | <1  | <1   | 40  | 40   | <1  | <1   | 30  | <10  |
| FEB<br>22... | <1  | <1   | 50  | 40   | <1  | <1   | <10   | <10  |
| MAR<br>21... | <1  | <1   | 40  | 30   | <1  | <1   | <10   | <10  |
| APR<br>18... | <1  | <1   | 50  | 20   | <1  | <1   | <10   | <3   |
| MAY<br>16... | 2   | <1   | 90  | 24   | <1  | <1   | <10   | <3   |
| JUN<br>20... | 2   | <1   | 80  | 27   | <1  | <1   | <10   | <3   |
| JUL<br>18... | 9   | 2  | 260   | 9  | 1   | <1   | 30  | <3   |
| AUG<br>15... | 3   | <1   | 70  | 20   | <1  | <1   | <10   | 3  |
| SEP<br>12... | 12  | <1   | 270   | <10  | 2   | <1   | 30  | <3   |

## MISCELLANEOUS FIELD MEASUREMENTS, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DATE              | TIME | DIS-<br>CHARGE,<br>INST.<br>CUBIC<br>FEET<br>PER<br>SECOND | SPE-<br>CIFIC<br>CON-<br>DUCT-<br>ANCE<br>(US/CM) | TEMPER-<br>ATURE<br>WATER<br>(DEG C) | DATE              | TIME | DIS-<br>CHARGE,<br>INST.<br>CUBIC<br>FEET<br>PER<br>SECOND | SPE-<br>CIFIC<br>CON-<br>DUCT-<br>ANCE<br>(US/CM) | TEMPER-<br>ATURE<br>WATER<br>(DEG C) |
|-------------------|------|--|---|--------------------------------------|-------------------|------|--|---|--------------------------------------|
| OCT 1995<br>11... | 1320 | 17   | 275   | 8.5                                  | MAY 1996<br>28... | 1345 | 30   | 220   | 7.5                                  |
| NOV<br>08...      | 1410 | 17   | 261   | 5.5                                  | JUN<br>27...      | 1240 | 12   | 300   | 16.0                                 |
| DEC<br>12...      | 1530 | 16   | 272   | 4.5                                  | JUL<br>15...      | 1007 | 26   | --  | 17.5                                 |
| JAN 1996<br>11... | 1345 | 13   | 302   | 3.0                                  | AUG<br>12...      | 1028 | 17   | 262   | 12.5                                 |
| FEB<br>13...      | 1015 | 8.7  | 377   | 1.5                                  | SEP<br>29...      | 1935 | 128  | 129   | 13.0                                 |
| MAR<br>12...      | 1315 | 9.9  | 364   | 6.5                                  | 10...             | 1340 | 22   | 215   | 13.5                                 |

## SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DATE         | TIME | DIS-<br>CHARGE,<br>INST.<br>CUBIC<br>FEET<br>PER<br>SECOND | SEDI-<br>MENT,<br>DIS-<br>CHARGE,<br>SUS-<br>PENDEED<br>(MG/L) | SEDI-<br>MENT,<br>DIS-<br>CHARGE,<br>SUS-<br>PENDEED<br>(T/DAY) |
|--------------|------|--|--|---|
| OCT<br>11... | 1235 | 16   | 26   | 1.1   |
| APR<br>24... | 1130 | 17   | 3  | 0.13  |
| MAY<br>16... | 1115 | 19   | 103  | 5.3   |
| 28...        | 1415 | 29   | 58   | 4.5   |
| JUN<br>20... | 0745 | 12   | 37   | 1.2   |
| JUL<br>18... | 0900 | 27   | 156  | 11  |
| AUG<br>15... | 0800 | 17   | 43   | 2.0   |
| 15...        | 1620 | 17   | 408  | 19  |
| 29...        | 1845 | 135  | 6200   | 2260  |
| SEP<br>12... | 0830 | 47   | 248  | 31  |



## ARKANSAS RIVER BASIN

## 07103700 FOUNTAIN CREEK NEAR COLORADO SPRINGS, CO--Continued

## SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DAY   | MEAN<br>DISCHARGE<br>(CFS) | MEAN<br>CONCEN-<br>TRATION<br>(MG/L) | SEDIMENT<br>DISCHARGE<br>(TONS/DAY) | MEAN<br>DISCHARGE<br>(CFS) | MEAN<br>CONCEN-<br>TRATION<br>(MG/L) | SEDIMENT<br>DISCHARGE<br>(TONS/DAY) | MEAN<br>DISCHARGE<br>(CFS) | MEAN<br>CONCEN-<br>TRATION<br>(MG/L) | SEDIMENT<br>DISCHARGE<br>(TONS/DAY) |       |
|-------|----------------------------|--------------------------------------|-------------------------------------|----------------------------|--------------------------------------|-------------------------------------|----------------------------|--------------------------------------|-------------------------------------|-------|
|       |                            |                                      |                                     |                            |                                      |                                     |                            |                                      |                                     | APRIL |
| 1     | 11                         | ---                                  | ---                                 | 16                         | ---                                  | ---                                 | 18                         | ---                                  | ---                                 |       |
| 2     | 10                         | ---                                  | ---                                 | 15                         | ---                                  | ---                                 | 17                         | ---                                  | ---                                 |       |
| 3     | 12                         | ---                                  | ---                                 | 15                         | ---                                  | ---                                 | 16                         | ---                                  | ---                                 |       |
| 4     | 12                         | ---                                  | ---                                 | 15                         | ---                                  | ---                                 | 16                         | ---                                  | ---                                 |       |
| 5     | 13                         | ---                                  | ---                                 | 16                         | ---                                  | ---                                 | 15                         | ---                                  | ---                                 |       |
| 6     | 12                         | ---                                  | ---                                 | 16                         | ---                                  | ---                                 | 13                         | ---                                  | ---                                 |       |
| 7     | 12                         | ---                                  | ---                                 | 16                         | ---                                  | ---                                 | 12                         | ---                                  | ---                                 |       |
| 8     | 12                         | ---                                  | ---                                 | 16                         | ---                                  | ---                                 | 11                         | ---                                  | ---                                 |       |
| 9     | 14                         | ---                                  | ---                                 | 17                         | ---                                  | ---                                 | 10                         | ---                                  | ---                                 |       |
| 10    | 17                         | ---                                  | ---                                 | 21                         | ---                                  | ---                                 | 11                         | ---                                  | ---                                 |       |
| 11    | 17                         | ---                                  | ---                                 | 19                         | ---                                  | ---                                 | 12                         | ---                                  | ---                                 |       |
| 12    | 16                         | ---                                  | ---                                 | 16                         | ---                                  | ---                                 | 12                         | ---                                  | ---                                 |       |
| 13    | 17                         | ---                                  | ---                                 | 15                         | ---                                  | ---                                 | 15                         | ---                                  | ---                                 |       |
| 14    | 18                         | ---                                  | ---                                 | 15                         | ---                                  | ---                                 | 15                         | ---                                  | ---                                 |       |
| 15    | 16                         | ---                                  | ---                                 | 16                         | ---                                  | ---                                 | 19                         | ---                                  | ---                                 |       |
| 16    | 17                         | ---                                  | ---                                 | 19                         | ---                                  | ---                                 | 22                         | ---                                  | ---                                 |       |
| 17    | 18                         | ---                                  | ---                                 | 19                         | ---                                  | ---                                 | 18                         | ---                                  | ---                                 |       |
| 18    | 18                         | ---                                  | ---                                 | 16                         | ---                                  | ---                                 | 15                         | ---                                  | ---                                 |       |
| 19    | 18                         | ---                                  | ---                                 | 16                         | ---                                  | ---                                 | 12                         | ---                                  | ---                                 |       |
| 20    | 16                         | ---                                  | ---                                 | 17                         | ---                                  | ---                                 | 12                         | ---                                  | ---                                 |       |
| 21    | 15                         | ---                                  | ---                                 | 17                         | ---                                  | ---                                 | 14                         | ---                                  | ---                                 |       |
| 22    | 15                         | ---                                  | ---                                 | 17                         | ---                                  | ---                                 | 16                         | ---                                  | ---                                 |       |
| 23    | 16                         | ---                                  | ---                                 | 17                         | ---                                  | ---                                 | 15                         | ---                                  | ---                                 |       |
| 24    | 16                         | ---                                  | ---                                 | 18                         | ---                                  | ---                                 | 13                         | ---                                  | ---                                 |       |
| 25    | 16                         | ---                                  | ---                                 | 68                         | 670                                  | 271                                 | 12                         | ---                                  | ---                                 |       |
| 26    | 14                         | ---                                  | ---                                 | 71                         | 407                                  | 96                                  | 11                         | ---                                  | ---                                 |       |
| 27    | 15                         | ---                                  | ---                                 | 36                         | ---                                  | ---                                 | 12                         | ---                                  | ---                                 |       |
| 28    | 16                         | ---                                  | ---                                 | 29                         | ---                                  | ---                                 | 13                         | ---                                  | ---                                 |       |
| 29    | 15                         | ---                                  | ---                                 | 25                         | ---                                  | ---                                 | 11                         | ---                                  | ---                                 |       |
| 30    | 17                         | ---                                  | ---                                 | 21                         | ---                                  | ---                                 | 14                         | ---                                  | ---                                 |       |
| 31    | ---                        | ---                                  | ---                                 | 18                         | ---                                  | ---                                 | ---                        | ---                                  | ---                                 |       |
| TOTAL | 451                        | ---                                  | ---                                 | 668                        | ---                                  | ---                                 | 422                        | ---                                  | ---                                 |       |
|       |                            | JULY                                 |                                     |                            | AUGUST                               |                                     |                            | SEPTEMBER                            |                                     |       |
| 1     | 15                         | ---                                  | ---                                 | 36                         | 461                                  | 599                                 | 41                         | ---                                  | ---                                 |       |
| 2     | 13                         | ---                                  | ---                                 | 42                         | 2010                                 | 440                                 | 33                         | ---                                  | ---                                 |       |
| 3     | 13                         | ---                                  | ---                                 | 25                         | ---                                  | ---                                 | 29                         | ---                                  | ---                                 |       |
| 4     | 13                         | ---                                  | ---                                 | 23                         | ---                                  | ---                                 | 27                         | ---                                  | ---                                 |       |
| 5     | 14                         | ---                                  | ---                                 | 20                         | ---                                  | ---                                 | 24                         | ---                                  | ---                                 |       |
| 6     | 14                         | ---                                  | ---                                 | 19                         | ---                                  | ---                                 | 29                         | ---                                  | ---                                 |       |
| 7     | 13                         | ---                                  | ---                                 | 20                         | ---                                  | ---                                 | 30                         | ---                                  | ---                                 |       |
| 8     | 13                         | ---                                  | ---                                 | 23                         | 189                                  | 28                                  | 23                         | ---                                  | ---                                 |       |
| 9     | 60                         | 2970                                 | 1850                                | 21                         | ---                                  | ---                                 | 23                         | ---                                  | ---                                 |       |
| 10    | 63                         | 1150                                 | 340                                 | 19                         | ---                                  | ---                                 | 22                         | ---                                  | ---                                 |       |
| 11    | 29                         | ---                                  | ---                                 | 17                         | ---                                  | ---                                 | 30                         | ---                                  | ---                                 |       |
| 12    | 41                         | 453                                  | 82                                  | 16                         | ---                                  | ---                                 | 40                         | ---                                  | ---                                 |       |
| 13    | 40                         | ---                                  | ---                                 | 16                         | ---                                  | ---                                 | 26                         | ---                                  | ---                                 |       |
| 14    | 30                         | ---                                  | ---                                 | 16                         | ---                                  | ---                                 | 26                         | ---                                  | ---                                 |       |
| 15    | 26                         | ---                                  | ---                                 | 18                         | 194                                  | 12                                  | 28                         | ---                                  | ---                                 |       |
| 16    | 21                         | ---                                  | ---                                 | 16                         | ---                                  | ---                                 | 26                         | ---                                  | ---                                 |       |
| 17    | 33                         | 953                                  | 456                                 | 16                         | ---                                  | ---                                 | 36                         | 1420                                 | 431                                 |       |
| 18    | 54                         | 424                                  | 93                                  | 15                         | ---                                  | ---                                 | 35                         | ---                                  | ---                                 |       |
| 19    | 51                         | ---                                  | ---                                 | 18                         | ---                                  | ---                                 | 32                         | ---                                  | ---                                 |       |
| 20    | 38                         | ---                                  | ---                                 | 21                         | ---                                  | ---                                 | 29                         | ---                                  | ---                                 |       |
| 21    | 38                         | ---                                  | ---                                 | 16                         | ---                                  | ---                                 | 28                         | ---                                  | ---                                 |       |
| 22    | 43                         | ---                                  | ---                                 | 17                         | ---                                  | ---                                 | 29                         | ---                                  | ---                                 |       |
| 23    | 42                         | ---                                  | ---                                 | 30                         | ---                                  | ---                                 | 34                         | ---                                  | ---                                 |       |
| 24    | 38                         | ---                                  | ---                                 | 32                         | ---                                  | ---                                 | 33                         | ---                                  | ---                                 |       |
| 25    | 33                         | ---                                  | ---                                 | 20                         | ---                                  | ---                                 | 29                         | ---                                  | ---                                 |       |
| 26    | 59                         | 2640                                 | 897                                 | 18                         | ---                                  | ---                                 | 30                         | ---                                  | ---                                 |       |
| 27    | 28                         | ---                                  | ---                                 | 27                         | ---                                  | ---                                 | 32                         | ---                                  | ---                                 |       |
| 28    | 24                         | ---                                  | ---                                 | 34                         | ---                                  | ---                                 | 31                         | ---                                  | ---                                 |       |
| 29    | 22                         | ---                                  | ---                                 | 61                         | 2000                                 | 718                                 | 31                         | ---                                  | ---                                 |       |
| 30    | 26                         | ---                                  | ---                                 | 65                         | 903                                  | 217                                 | 28                         | ---                                  | ---                                 |       |
| 31    | 24                         | ---                                  | ---                                 | 52                         | ---                                  | ---                                 | ---                        | ---                                  | ---                                 |       |
| TOTAL | 971                        | ---                                  | ---                                 | 789                        | ---                                  | ---                                 | 894                        | ---                                  | ---                                 |       |

**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 mi<sup>2</sup>.

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

GAGE.--Water-stage recorder. Elevation of gage is 6,310 ft above sea level, from topographic map.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

| DAY   | OCT  | NOV  | DEC  | JAN  | FEB  | MAR   | APR  | MAY  | JUN  | JUL  | AUG  | SEP  |
|-------|------|------|------|------|------|-------|------|------|------|------|------|------|
| 1     | .00  | .00  | .00  | .00  | .00  | .00   | .82  | .00  | .00  | .00  | .00  | .00  |
| 2     | .00  | .00  | .00  | .00  | .00  | .00   | .67  | .00  | .00  | .00  | .00  | .00  |
| 3     | .00  | .00  | .00  | .00  | .00  | .00   | .33  | .00  | .00  | .00  | .00  | .00  |
| 4     | .00  | .00  | .00  | .00  | .00  | .00   | .26  | .00  | .01  | .00  | .00  | .00  |
| 5     | .00  | .00  | .00  | .00  | .00  | .00   | .27  | .00  | .00  | .00  | .00  | .00  |
| 6     | .00  | .00  | .00  | .00  | .00  | .00   | .23  | .00  | .00  | .00  | .00  | .00  |
| 7     | .00  | .00  | .00  | .00  | .00  | .00   | .24  | .00  | .00  | .00  | .00  | .00  |
| 8     | .00  | .00  | .00  | .00  | .00  | .00   | .24  | .00  | .00  | .00  | .00  | .00  |
| 9     | .00  | .00  | .00  | .00  | .00  | .00   | .24  | .01  | .00  | .19  | .00  | .00  |
| 10    | .00  | .00  | .00  | .00  | .00  | .00   | .26  | .01  | .00  | .02  | .00  | .00  |
| 11    | .00  | .00  | .00  | .00  | .00  | .00   | .19  | .00  | .00  | .00  | .00  | .00  |
| 12    | .00  | .00  | .00  | .00  | .00  | .00   | .05  | .00  | .00  | .01  | .00  | .00  |
| 13    | .00  | .00  | .00  | .00  | .00  | .00   | .01  | .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  | .01  | .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  | .57   | .00  | .00  | .00  | .00  | .00  | .00  |
| 23    | .00  | .00  | .00  | .00  | .00  | 1.3   | .00  | .00  | .00  | .00  | .00  | .00  |
| 24    | .00  | .00  | .00  | .00  | .00  | 1.5   | .00  | .00  | .00  | .00  | .00  | .00  |
| 25    | .00  | .00  | .00  | .00  | .00  | 1.7   | .00  | .19  | .00  | .00  | .00  | .00  |
| 26    | .00  | .00  | .00  | .00  | .00  | 1.6   | .00  | .07  | .00  | .00  | .00  | .00  |
| 27    | .00  | .00  | .00  | .00  | .00  | 1.3   | .00  | .00  | .00  | .00  | .00  | .00  |
| 28    | .00  | .00  | .00  | .00  | .00  | .94   | .00  | .01  | .00  | .00  | .00  | .00  |
| 29    | .00  | .00  | .00  | .00  | .00  | .94   | .00  | .09  | .00  | .00  | .00  | .00  |
| 30    | .00  | .00  | .00  | .00  | ---  | .93   | .00  | .06  | .00  | .00  | .00  | .00  |
| 31    | .00  | ---  | .00  | .00  | ---  | .93   | ---  | .00  | ---  | .00  | .00  | ---  |
| TOTAL | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 11.71 | 3.81 | 0.44 | 0.02 | 0.22 | 0.00 | 0.00 |
| MEAN  | .000 | .000 | .000 | .000 | .000 | .38   | .13  | .014 | .001 | .007 | .000 | .000 |
| MAX   | .00  | .00  | .00  | .00  | .00  | 1.7   | .82  | .19  | .01  | .19  | .00  | .00  |
| MIN   | .00  | .00  | .00  | .00  | .00  | .00   | .00  | .00  | .00  | .00  | .00  | .00  |
| AC-FT | .00  | .00  | .00  | .00  | .00  | 23    | 7.6  | .9   | .04  | .4   | .00  | .00  |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 1996, BY WATER YEAR (WY)

|      | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | .031 | .000 | .000 | .004 | .000 | .13  | .66  | 9.80 | 4.67 | 1.40 | .17  | .24  |
| MAX  | .12  | .002 | .001 | .015 | .000 | .38  | 1.99 | 41.1 | 20.6 | 6.78 | .77  | .76  |
| (WY) | 1995 | 1995 | 1993 | 1995 | 1993 | 1996 | 1995 | 1995 | 1995 | 1995 | 1995 | 1994 |
| MIN  | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .014 | .001 | .000 | .000 | .000 |
| (WY) | 1993 | 1993 | 1994 | 1993 | 1993 | 1994 | 1994 | 1996 | 1996 | 1993 | 1993 | 1993 |

SUMMARY STATISTICS

FOR 1995 CALENDAR YEAR

FOR 1996 WATER YEAR

WATER YEARS 1992 - 1996

|                          |                  |        |                  |             |
|--------------------------|------------------|--------|------------------|-------------|
| ANNUAL TOTAL             | 2196.62          | 16.20  |                  |             |
| ANNUAL MEAN              | 6.02             | .044   |                  |             |
| HIGHEST ANNUAL MEAN      |                  |        | 1.73             | 1995        |
| LOWEST ANNUAL MEAN       |                  |        | .044             | 1996        |
| HIGHEST DAILY MEAN       | 109              | May 30 | 109              | May 30 1995 |
| LOWEST DAILY MEAN        | <sup>a</sup> .00 | Jan 1  | <sup>a</sup> .00 | Aug 15 1992 |
| ANNUAL SEVEN-DAY MINIMUM | .00              | Jan 18 | .00              | Aug 15 1992 |
| INSTANTANEOUS PEAK FLOW  |                  |        | 2.9              | Jul 9       |
| INSTANTANEOUS PEAK STAGE |                  |        | 2.73             | Jul 9       |
| ANNUAL RUNOFF (AC-FT)    | 4360             | 32     | 1250             |             |
| 10 PERCENT EXCEEDS       | 22               | .00    | 1.5              |             |
| 50 PERCENT EXCEEDS       | .00              | .00    | .00              |             |
| 90 PERCENT EXCEEDS       | .00              | .00    | .00              |             |

a-No flow most of time most years.

b-From rating curve extended above 900 ft<sup>3</sup>/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 SE<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> 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 1995 TO SEPTEMBER 1996

| DATE      | TIME | DIS-CHARGE, INST. CUBIC FEET PER SECOND | SPE-CIFIC CON-DUCT-ANCE (US/CM) | PH (STAND-ARD UNITS) | TEMPER-ATURE WATER (DEG C) | OXYGEN, DIS-SOLVED (MG/L) | OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) | COLI-FORM, FECAL, UM-MF (COLS./100 ML) | STREP-TOCOCCI, FECAL, KF AGAR (COLS./100 ML) | CALCIUM DIS-SOLVED (MG/L AS CA) | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) |
|-----------|------|---|---------------------------------|----------------------|----------------------------|---------------------------|--|--|--|---------------------------------|-------------------------------------|
| OCT 25... | 1000 | 2.2                                     | 172                             | 7.3                  | 3.0                        | 9.8                       | 0.5  | --                                     | 150  | 21                              | 3.5                                 |
| NOV 29... | 1030 | 2.1                                     | 170                             | 7.7                  | 1.5                        | 10.7                      | 0.2  | >120                                   | 48   | 20                              | 3.5                                 |
| JAN 17... | 1030 | 1.1                                     | 195                             | 7.9                  | 1.5                        | 10.4                      | 0.2  | <1                                     | K15  | 23                              | 4.5                                 |
| FEB 21... | 1100 | 1.1                                     | 186                             | 7.9                  | 5.5                        | 9.2                       | 0.2  | K120                                   | 140  | 23                              | 4.2                                 |
| MAR 20... | 0915 | 1.0                                     | 188                             | 7.9                  | 1.0                        | 10.7                      | 0  | 23                                     | K10  | 20                              | 3.7                                 |
| APR 17... | 0945 | 8.7                                     | 117                             | 7.9                  | 4.5                        | 9.8                       | 0.4  | K11                                    | 27   | 13                              | 2.0                                 |
| MAY 15... | 1000 | 4.5                                     | 128                             | 7.8                  | 12.5                       | 8.3                       | 0.2  | K3                                     | 24   | 15                              | 2.3                                 |
| JUN 19... | 0845 | 3.7                                     | 139                             | 8.0                  | 14.0                       | 8.3                       | 0.8  | 36                                     | 37   | 17                              | 2.8                                 |
| JUL 17... | 0915 | 0.67                                    | 195                             | 8.1                  | 17.5                       | 7.1                       | 0.6  | 68                                     | 84   | 25                              | 4.4                                 |
| AUG 14... | 0900 | 0.27                                    | 213                             | 8.0                  | 16.0                       | 7.7                       | 0.3  | 60                                     | 160  | 26                              | 4.5                                 |
| SEP 11... | 0945 | 0.31                                    | 225                             | 8.1                  | 14.5                       | 9.1                       | 0.1  | 120                                    | 48   | 28                              | 4.8                                 |

| DATE      | ALKA-LINITY LAB (MG/L AS CACO3) | SULFATE DIS-SOLVED (MG/L AS SO4) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) | RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) | NITRO-GEN, NITRITE SOLVED (MG/L AS N) | NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) | NITRO-GEN, AMMONIA SOLVED (MG/L AS N) | NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) | PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) |
|-----------|---------------------------------|----------------------------------|------------------------------------|-----------------------------------|--|---------------------------------------|---|---------------------------------------|---|---|
| OCT 25... | 61                              | 7.1                              | 7.0                                | 1.7                               | 3  | <0.01                                 | 0.05                                      | <0.015                                | <0.2  | <0.01                                     |
| NOV 29... | 60                              | 5.5                              | 6.4                                | 1.8                               | 2  | <0.01                                 | 0.11                                      | <0.015                                | <0.2  | <0.01                                     |
| JAN 17... | 68                              | 8.6                              | 7.6                                | 1.8                               | 3  | <0.01                                 | 0.16                                      | <0.015                                | 0.2   | <0.01                                     |
| FEB 21... | 67                              | 10                               | 8.1                                | 1.6                               | 5  | <0.01                                 | 0.11                                      | <0.015                                | <0.2  | 0.01                                      |
| MAR 20... | 61                              | 10                               | 8.3                                | 1.8                               | 5  | <0.01                                 | 0.12                                      | <0.015                                | <0.2  | <0.01                                     |
| APR 17... | 39                              | 7.5                              | 3.2                                | 1.7                               | 34   | <0.01                                 | 0.05                                      | <0.015                                | 0.2   | <0.01                                     |
| MAY 15... | 46                              | 6.5                              | 3.5                                | 1.7                               | 3  | <0.01                                 | <0.05                                     | <0.015                                | <0.2  | <0.01                                     |
| JUN 19... | 52                              | 5.6                              | 4.4                                | 1.8                               | <1   | <0.01                                 | <0.05                                     | 0.02                                  | <0.2  | <0.01                                     |
| JUL 17... | 82                              | 4.3                              | 6.1                                | 2.1                               | 12   | <0.01                                 | 0.08                                      | 0.04                                  | <0.2  | <0.01                                     |
| AUG 14... | 89                              | 3.0                              | 7.3                                | 1.8                               | 5  | <0.01                                 | <0.05                                     | <0.015                                | <0.2  | <0.01                                     |
| SEP 11... | 96                              | 4.1                              | 6.6                                | 1.9                               | 2  | <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 1995 TO SEPTEMBER 1996

| DATE      | CADMIUM<br>TOTAL<br>RECOV-<br>ERABLE<br>(UG/L<br>AS CD) | CADMIUM<br>DIS-<br>SOLVED<br>(UG/L<br>AS CD) | CHRO-<br>MIUM,<br>TOTAL<br>RECOV-<br>ERABLE<br>(UG/L<br>AS CR) | CHRO-<br>MIUM,<br>DIS-<br>SOLVED<br>(UG/L<br>AS CR) | CHRO-<br>MIUM,<br>HEXA-<br>VALENT,<br>DIS-<br>(UG/L<br>AS CR) | COPPER,<br>TOTAL<br>RECOV-<br>ERABLE<br>(UG/L<br>AS CU) | COPPER,<br>DIS-<br>SOLVED<br>(UG/L<br>AS CU) | IRON,<br>TOTAL<br>RECOV-<br>ERABLE<br>(UG/L<br>AS FE) | IRON,<br>DIS-<br>SOLVED<br>(UG/L<br>AS FE) |
|-----------|---|--|--|---|---|---|--|---|--|
| OCT 25... | <1  | <1   | <1   | <1  | <1  | <1  | <1   | 310   | 60   |
| NOV 29... | <1  | <1   | 3  | <1  | <1  | <1  | <1   | 300   | 90   |
| JAN 17... | <1  | <1   | <1   | <1  | <1  | <1  | <1   | 460   | 140  |
| FEB 21... | <1  | <1   | <1   | <1  | <1  | <1  | <1   | 360   | 120  |
| MAR 20... | <1  | <1   | <1   | <1  | <1  | <1  | <1   | 280   | 80   |
| APR 17... | <1  | <1   | <1   | <1  | <1  | <1  | <1   | 720   | 20   |
| MAY 15... | <1  | <1   | <1   | <1  | <1  | <1  | <1   | 290   | 84   |
| JUN 19... | <1  | <1   | <1   | <1  | <1  | <1  | <1   | 400   | 130  |
| JUL 17... | <1  | <1   | <1   | <1  | <1  | <1  | <1   | 770   | 120  |
| AUG 14... | <1  | <1   | <1   | <1  | <1  | <1  | <1   | 800   | <10  |
| SEP 11... | <1  | <1   | <1   | <1  | <1  | <1  | <1   | 720   | 150  |

| DATE      | LEAD,<br>TOTAL<br>RECOV-<br>ERABLE<br>(UG/L<br>AS PB) | LEAD,<br>DIS-<br>SOLVED<br>(UG/L<br>AS PB) | MANGA-<br>NESE,<br>TOTAL<br>RECOV-<br>ERABLE<br>(UG/L<br>AS MN) | MANGA-<br>NESE,<br>DIS-<br>SOLVED<br>(UG/L<br>AS MN) | NICKEL,<br>TOTAL<br>RECOV-<br>ERABLE<br>(UG/L<br>AS NI) | NICKEL,<br>DIS-<br>SOLVED<br>(UG/L<br>AS NI) | ZINC,<br>TOTAL<br>RECOV-<br>ERABLE<br>(UG/L<br>AS ZN) | ZINC,<br>DIS-<br>SOLVED<br>(UG/L<br>AS ZN) |
|-----------|---|--|---|--|---|--|---|--|
| OCT 25... | <1  | <1   | 110   | 90   | <1  | <1   | <10   | <10  |
| NOV 29... | <1  | <1   | 80  | 70   | 5   | <1   | <10   | <10  |
| JAN 17... | <1  | <1   | 140   | 130  | <1  | <1   | 30  | <10  |
| FEB 21... | <1  | <1   | 130   | 110  | <1  | <1   | <10   | <10  |
| MAR 20... | <1  | <1   | 100   | 100  | <1  | <1   | <10   | <10  |
| APR 17... | <1  | <1   | 60  | 30   | <1  | <1   | <10   | <3   |
| MAY 15... | <1  | <1   | 50  | 36   | <1  | <1   | <10   | <3   |
| JUN 19... | 1   | <1   | 70  | 68   | <1  | <1   | <10   | <3   |
| JUL 17... | <1  | <1   | 310   | 290  | <1  | <1   | <10   | <3   |
| AUG 14... | <1  | <1   | 530   | 510  | <1  | <1   | <10   | 3  |
| SEP 11... | <1  | <1   | 450   | 440  | <1  | <1   | <10   | 4  |

**07103780 MONUMENT CREEK ABOVE NORTH GATE BOULEVARD, AT U.S. AIR FORCE ACADEMY, CO**

LOCATION.--Lat 39°01'52", long 104°50'52", in SW¼SW¼ sec.1, T.12 S., R.67 W., El Paso County, Hydrologic Unit 11020003, on right bank, at U.S. Air Force Academy, 50 ft upstream from Denver and Rio Grande Western Railroad bridge, 0.8 mi upstream from North Gate Boulevard, and 1.5 mi downstream from Beaver Creek.

DRAINAGE AREA.--81.7 mi<sup>2</sup>.

**WATER-DISCHARGE RECORDS**

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

GAGE.--Water-stage recorder. 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 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

| DAY   | OCT   | NOV   | DEC   | JAN   | FEB   | MAR   | APR   | MAY   | JUN   | JUL   | AUG   | SEP   |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1     | 7.2   | 6.2   | 5.4   | 4.0   | e3.5  | e6.0  | 8.3   | 15    | 22    | 4.9   | 5.0   | 3.9   |
| 2     | 9.3   | 5.9   | 4.8   | e4.0  | e3.5  | e7.0  | 15    | 16    | 20    | 4.5   | 5.4   | 3.8   |
| 3     | 11    | 6.9   | 4.8   | e4.0  | e3.5  | 7.4   | 14    | 15    | 16    | 4.3   | 4.9   | 3.7   |
| 4     | 12    | 13    | 6.6   | e3.8  | e3.7  | 6.3   | 16    | 14    | 15    | 4.6   | 4.3   | 3.3   |
| 5     | 12    | 17    | 4.5   | e3.6  | e4.0  | 6.8   | 15    | 13    | 15    | 4.4   | 3.9   | 3.2   |
| 6     | 11    | 12    | 4.3   | e4.0  | e4.6  | 9.2   | 12    | 13    | 14    | 4.0   | 3.4   | 3.5   |
| 7     | 10    | 5.6   | 4.6   | e4.2  | 5.2   | e8.0  | 11    | 13    | 12    | 3.9   | 3.4   | 3.6   |
| 8     | 8.3   | 6.8   | e5.2  | e4.5  | 5.2   | 9.5   | 6.0   | 12    | 6.2   | 4.1   | 3.9   | 3.2   |
| 9     | 6.0   | 9.3   | e5.4  | 4.6   | 5.9   | 9.1   | 6.0   | 11    | 5.8   | 6.4   | 3.8   | 3.1   |
| 10    | 5.8   | 6.6   | e5.4  | 4.4   | 5.0   | 8.0   | 7.1   | 11    | 5.6   | 7.6   | 3.4   | 3.6   |
| 11    | 5.5   | 8.1   | 5.4   | e5.0  | 6.0   | 6.1   | 10    | 10    | 5.3   | 6.4   | 3.1   | 3.9   |
| 12    | 5.7   | 8.7   | 5.5   | e5.3  | 5.9   | 5.4   | 13    | 10    | 7.6   | 6.3   | 3.0   | 6.1   |
| 13    | 5.1   | 5.3   | e6.0  | e5.6  | 5.8   | 5.3   | 16    | 9.9   | 17    | 11    | 2.8   | 4.5   |
| 14    | 4.1   | 6.3   | e7.0  | e5.8  | 4.4   | 5.8   | 16    | 10    | 17    | 9.3   | 2.8   | 4.5   |
| 15    | 4.1   | 6.2   | e7.0  | e5.6  | 3.9   | 6.6   | 16    | 8.9   | 17    | 7.2   | 3.2   | 4.2   |
| 16    | 5.1   | 7.4   | e6.6  | e5.4  | 5.8   | 6.2   | 19    | 9.1   | 16    | 4.5   | 3.3   | 3.9   |
| 17    | 5.2   | 5.7   | e6.6  | 5.0   | 4.0   | 6.3   | 16    | 8.9   | 15    | 4.0   | 3.3   | 4.1   |
| 18    | 5.4   | 6.9   | 6.6   | e5.0  | 5.3   | 7.4   | 14    | 8.2   | 9.8   | 5.3   | 3.4   | 5.1   |
| 19    | 5.0   | 6.0   | e6.6  | e4.7  | 6.5   | 13    | 16    | 7.8   | 5.8   | 5.3   | 3.6   | 4.9   |
| 20    | 7.5   | 6.2   | e6.5  | e4.5  | 4.6   | 12    | 12    | 7.8   | 5.5   | 3.6   | 4.2   | 4.0   |
| 21    | 11    | 7.0   | e6.3  | e5.0  | 4.1   | 10    | 13    | 7.6   | 6.2   | 3.7   | 3.6   | 3.7   |
| 22    | 9.9   | 12    | 6.1   | e5.4  | 7.7   | 7.3   | 13    | 7.5   | 5.4   | 3.2   | 3.5   | 3.5   |
| 23    | 10    | 13    | 8.3   | e5.8  | 4.9   | 6.6   | 13    | 7.7   | 5.1   | 2.9   | 4.0   | 3.7   |
| 24    | 11    | 13    | e8.0  | e6.0  | 4.8   | 7.0   | 14    | 8.3   | 5.2   | 3.0   | 3.8   | 4.2   |
| 25    | 9.8   | 13    | 8.5   | e6.0  | 6.1   | 14    | 11    | 15    | 4.9   | 3.5   | 3.6   | 4.6   |
| 26    | 8.7   | 14    | 9.4   | e6.0  | 6.9   | 12    | 14    | 42    | 5.2   | 22    | 3.5   | 4.5   |
| 27    | 6.0   | 11    | 9.7   | e6.0  | e6.2  | 5.9   | 14    | 30    | 5.8   | 12    | 3.9   | 5.9   |
| 28    | 5.7   | 5.7   | 7.8   | e5.8  | e6.0  | 5.4   | 16    | 36    | 6.1   | 7.1   | 4.0   | 5.5   |
| 29    | 6.4   | 5.6   | 6.2   | e5.2  | e6.0  | 5.6   | 15    | 48    | 5.3   | 6.4   | 4.2   | 6.0   |
| 30    | 8.9   | 5.8   | 7.0   | e4.5  | ---   | 5.4   | 15    | 43    | 5.5   | 6.3   | 6.6   | 7.0   |
| 31    | 10    | ---   | 3.7   | e4.0  | ---   | 5.3   | ---   | 26    | ---   | 5.8   | 4.3   | ---   |
| TOTAL | 242.7 | 256.2 | 195.8 | 152.7 | 149.0 | 235.9 | 396.4 | 494.7 | 302.3 | 187.5 | 119.1 | 128.7 |
| MEAN  | 7.83  | 8.54  | 6.32  | 4.93  | 5.14  | 7.61  | 13.2  | 16.0  | 10.1  | 6.05  | 3.84  | 4.29  |
| MAX   | 12    | 17    | 9.7   | 6.0   | 7.7   | 14    | 19    | 48    | 22    | 22    | 6.6   | 7.0   |
| MIN   | 4.1   | 5.3   | 3.7   | 3.6   | 3.5   | 5.3   | 6.0   | 7.5   | 4.9   | 2.9   | 2.8   | 3.1   |
| AC-FT | 481   | 508   | 388   | 303   | 296   | 468   | 786   | 981   | 600   | 372   | 236   | 255   |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1985 - 1996, BY WATER YEAR (WY)

|      | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 4.66 | 5.50 | 4.68 | 4.18 | 4.59 | 7.88 | 21.3 | 40.6 | 21.2 | 8.88 | 5.68 | 4.48 |
| MAX  | 9.71 | 9.37 | 9.00 | 9.51 | 8.85 | 14.8 | 46.2 | 105  | 60.4 | 30.6 | 13.0 | 12.7 |
| (WY) | 1986 | 1986 | 1986 | 1986 | 1986 | 1992 | 1992 | 1985 | 1995 | 1995 | 1985 | 1985 |
| MIN  | .95  | 1.63 | 1.54 | 1.08 | 1.81 | 2.38 | 7.04 | 6.57 | 4.49 | 1.04 | .90  | 1.16 |
| (WY) | 1990 | 1990 | 1990 | 1990 | 1990 | 1991 | 1989 | 1989 | 1989 | 1989 | 1989 | 1989 |

## SUMMARY STATISTICS

## FOR 1995 CALENDAR YEAR

## FOR 1996 WATER YEAR

## WATER YEARS 1985 - 1996

|                          |        |        |  |  |  |      |        |  |  |      |        |      |
|--------------------------|--------|--------|--|--|--|------|--------|--|--|------|--------|------|
| ANNUAL TOTAL             | 8215.6 | 2861.0 |  |  |  |      |        |  |  |      |        |      |
| ANNUAL MEAN              | 22.5   | 7.82   |  |  |  |      |        |  |  | 10.4 |        |      |
| HIGHEST ANNUAL MEAN      |        |        |  |  |  |      |        |  |  | 21.8 |        | 1995 |
| LOWEST ANNUAL MEAN       |        |        |  |  |  |      |        |  |  | 3.82 |        | 1989 |
| HIGHEST DAILY MEAN       | 219    | May 21 |  |  |  | 48   | May 29 |  |  | 345  | Apr 30 | 1985 |
| LOWEST DAILY MEAN        | a2.8   | Feb 4  |  |  |  | b2.8 | Aug 13 |  |  | .58  | Oct 15 | 1989 |
| ANNUAL SEVEN-DAY MINIMUM | 2.8    | Feb 7  |  |  |  | 3.1  | Aug 11 |  |  | .69  | Aug 26 | 1989 |
| INSTANTANEOUS PEAK FLOW  |        |        |  |  |  | 194  | Jul 26 |  |  | 372  | Apr 30 | 1985 |
| INSTANTANEOUS PEAK STAGE |        |        |  |  |  | 5.12 | Jul 26 |  |  | 6.05 | Apr 30 | 1985 |
| ANNUAL RUNOFF (AC-FT)    | 16300  | 5670   |  |  |  | 7520 |        |  |  |      |        |      |
| 10 PERCENT EXCEEDS       | 58     | 14     |  |  |  | 26   |        |  |  |      |        |      |
| 50 PERCENT EXCEEDS       | 8.4    | 6.0    |  |  |  | 5.4  |        |  |  |      |        |      |
| 90 PERCENT EXCEEDS       | 3.5    | 3.7    |  |  |  | 1.8  |        |  |  |      |        |      |

e-Estimated.

a-Also occurred Feb 7-12, and Mar 5, 7, 1995.

b-Also occurred Aug 14.

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 1995 TO SEPTEMBER 1996

| DATE      | TIME | DIS-CHARGE, INST. CUBIC FEET PER SECOND | SPE-CIFIC CON-DUCT-ANCE (US/CM) | PH (STAND-ARD UNITS) | TEMPER-ATURE WATER (DEG C) | OXYGEN, DIS-SOLVED (MG/L) | OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) | COLI-FORM, FECAL, UM-MF (COLS./100 ML) | STREP-TOCOCCI, FECAL, KF AGAR (COLS. PER 100 ML) | CALCIUM DIS-SOLVED (MG/L AS CA) | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) |
|-----------|------|---|---------------------------------|----------------------|----------------------------|---------------------------|--|--|--|---------------------------------|-------------------------------------|
| OCT 25... | 1210 | 11                                      | 275                             | 8.0                  | 7.0                        | 9.5                       | 2.1  | --                                     | 75   | 29                              | 4.9                                 |
| NOV 29... | 1200 | 5.8                                     | 325                             | 8.0                  | 5.5                        | 9.9                       | 1.6  | 26                                     | K10  | 30                              | 5.1                                 |
| JAN 17... | 1215 | 4.8                                     | 343                             | 7.9                  | 2.0                        | 10.2                      | 1.1  | K8                                     | 29   | 33                              | 5.7                                 |
| FEB 21... | 1245 | 3.5                                     | 370                             | 8.2                  | 10.0                       | 8.6                       | 1.1  | 57                                     | 57   | 32                              | 5.3                                 |
| MAR 20... | 1045 | 11                                      | 267                             | 8.2                  | 4.0                        | 10.3                      | 1.2  | K8                                     | 26   | 28                              | 4.7                                 |
| APR 17... | 1145 | 22                                      | 211                             | 8.1                  | 9.0                        | 9.3                       | 1.8  | 48                                     | 40   | 22                              | 3.3                                 |
| MAY 15... | 1215 | 9.1                                     | 217                             | 8.8                  | 19.0                       | 8.0                       | 1.3  | K9                                     | 21   | 22                              | 3.4                                 |
| JUN 19... | 1100 | 5.4                                     | 257                             | 8.2                  | 19.0                       | 7.7                       | 1.0  | 56                                     | 28   | 26                              | 4.1                                 |
| JUL 17... | 1115 | 3.5                                     | 330                             | 8.5                  | 22.5                       | 7.8                       | 1.2  | 120                                    | K33  | 29                              | 4.6                                 |
| AUG 14... | 1115 | 2.7                                     | 342                             | 8.6                  | 21.0                       | 8.0                       | 1.1  | K38                                    | K36  | 28                              | 4.7                                 |
| SEP 11... | 1130 | 3.5                                     | 366                             | 8.5                  | 18.0                       | 8.8                       | 0.2  | 73                                     | 70   | 31                              | 5.2                                 |

| DATE      | ALKA-LINITY LAB (MG/L AS CACO3) | SULFATE DIS-SOLVED (MG/L AS SO4) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) | RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) | NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) | NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) | NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) | NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) | PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) |
|-----------|---------------------------------|----------------------------------|------------------------------------|-----------------------------------|--|---|---|---|---|---|
| OCT 25... | 78                              | 17                               | 23                                 | 1.4                               | 1  | 0.02                                      | 0.60                                      | <0.015                                    | 0.5   | 0.33                                      |
| NOV 29... | 82                              | 27                               | 24                                 | 1.1                               | 6  | <0.01                                     | 1.20                                      | <0.015                                    | 0.4   | 0.69                                      |
| JAN 17... | 84                              | 32                               | 25                                 | 1.3                               | 7  | <0.01                                     | 1.70                                      | 0.12                                      | 0.6   | 0.92                                      |
| FEB 21... | 90                              | 33                               | 27                                 | 1.2                               | 1  | 0.02                                      | 1.20                                      | 0.12                                      | 0.6   | 1.2                                       |
| MAR 20... | 74                              | 17                               | 18                                 | 1.6                               | 24   | 0.04                                      | 0.29                                      | 0.04                                      | 0.5   | 0.39                                      |
| APR 17... | 62                              | 15                               | 11                                 | 1.6                               | 62   | <0.01                                     | 0.30                                      | <0.015                                    | 0.5   | 0.28                                      |
| MAY 15... | 65                              | 15                               | 13                                 | 1.6                               | 8  | <0.01                                     | 0.10                                      | 0.02                                      | 0.4   | 0.52                                      |
| JUN 19... | 75                              | 19                               | 16                                 | 1.6                               | 11   | <0.01                                     | 0.10                                      | 0.04                                      | 0.3   | 0.52                                      |
| JUL 17... | 91                              | 28                               | 25                                 | 1.6                               | 14   | 0.03                                      | 0.76                                      | 0.04                                      | 0.4   | 0.72                                      |
| AUG 14... | 96                              | 27                               | 26                                 | 1.4                               | 11   | <0.01                                     | <0.05                                     | 0.02                                      | 0.4   | 1.1                                       |
| SEP 11... | 102                             | 30                               | 26                                 | 1.3                               | 7  | <0.01                                     | 0.34                                      | <0.015                                    | 0.4   | 1.0                                       |

K-Based on non-ideal colony count.

07103780 MONUMENT CREEK ABOVE NORTH GATE BOULEVARD, AT U.S. AIR FORCE ACADEMY, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DATE      | CADMIUM<br>TOTAL<br>RECOV-<br>ERABLE<br>(UG/L<br>AS CD) | CADMIUM<br>DIS-<br>SOLVED<br>(UG/L<br>AS CD) | CHRO-<br>MIUM,<br>TOTAL<br>RECOV-<br>ERABLE<br>(UG/L<br>AS CR) | CHRO-<br>MIUM,<br>DIS-<br>SOLVED<br>(UG/L<br>AS CR) | CHRO-<br>MIUM,<br>HEXA-<br>VALENT,<br>DIS-<br>(UG/L<br>AS CR) | COPPER,<br>TOTAL<br>RECOV-<br>ERABLE<br>(UG/L<br>AS CU) | COPPER,<br>DIS-<br>SOLVED<br>(UG/L<br>AS CU) | IRON,<br>TOTAL<br>RECOV-<br>ERABLE<br>(UG/L<br>AS FE) | IRON,<br>DIS-<br>SOLVED<br>(UG/L<br>AS FE) |
|-----------|---|--|--|---|---|---|--|---|--|
| OCT 25... | <1  | <1   | <1   | <1  | <1  | 2   | 2  | 420   | 200  |
| NOV 29... | <1  | <1   | <1   | <1  | <1  | 3   | 2  | 310   | 120  |
| JAN 17... | <1  | <1   | <1   | <1  | <1  | 3   | 5  | 330   | 110  |
| FEB 21... | <1  | <1   | <1   | <1  | <1  | 2   | 3  | 290   | 100  |
| MAR 20... | <1  | <1   | <1   | <1  | <1  | 2   | 1  | 550   | 40   |
| APR 17... | <1  | <1   | <1   | <1  | 1   | 2   | 1  | 1200  | 40   |
| MAY 15... | <1  | <1   | <1   | <1  | <1  | 1   | 1  | 390   | 98   |
| JUN 19... | <1  | <1   | <1   | <1  | <1  | 1   | <1   | 520   | 94   |
| JUL 17... | <1  | <1   | <1   | <1  | <1  | 2   | 2  | 440   | 110  |
| AUG 14... | <1  | <1   | <1   | <1  | <1  | 3   | 1  | 460   | 50   |
| SEP 11... | <1  | <1   | <1   | <1  | <1  | 2   | 2  | 550   | 60   |

| DATE      | LEAD,<br>TOTAL<br>RECOV-<br>ERABLE<br>(UG/L<br>AS PB) | LEAD,<br>DIS-<br>SOLVED<br>(UG/L<br>AS PB) | MANGA-<br>NESE,<br>TOTAL<br>RECOV-<br>ERABLE<br>(UG/L<br>AS MN) | MANGA-<br>NESE,<br>DIS-<br>SOLVED<br>(UG/L<br>AS MN) | NICKEL,<br>TOTAL<br>RECOV-<br>ERABLE<br>(UG/L<br>AS NI) | NICKEL,<br>DIS-<br>SOLVED<br>(UG/L<br>AS NI) | ZINC,<br>TOTAL<br>RECOV-<br>ERABLE<br>(UG/L<br>AS ZN) | ZINC,<br>DIS-<br>SOLVED<br>(UG/L<br>AS ZN) |
|-----------|---|--|---|--|---|--|---|--|
| OCT 25... | <1  | <1   | 80  | 50   | 1   | <1   | <10   | <10  |
| NOV 29... | <1  | <1   | 50  | 30   | 3   | 1  | <10   | <10  |
| JAN 17... | <1  | <1   | 70  | 50   | <1  | <1   | 30  | <10  |
| FEB 21... | <1  | <1   | 60  | 50   | 1   | 1  | 20  | 20   |
| MAR 20... | <1  | <1   | 160   | 50   | 1   | <1   | <10   | <10  |
| APR 17... | 2   | <1   | 150   | 40   | 2   | <1   | 20  | <3   |
| MAY 15... | <1  | <1   | 70  | 30   | <1  | <1   | <10   | <3   |
| JUN 19... | <1  | <1   | 80  | 56   | 1   | 2  | <10   | <3   |
| JUL 17... | <1  | <1   | 80  | 49   | 2   | 2  | 10  | 4  |
| AUG 14... | <1  | <1   | 50  | 40   | 3   | 3  | <10   | 10   |
| SEP 11... | <1  | <1   | 50  | 40   | 2   | 2  | <10   | 13   |

MISCELLANEOUS FIELD MEASUREMENTS, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DATE      | TIME | DIS-<br>CHARGE,<br>INST.<br>CUBIC<br>FEET<br>PER<br>SECOND | SPE-<br>CIFIC<br>CON-<br>DUCT-<br>ANCE<br>(US/CM) | TEMPER-<br>ATURE<br>WATER<br>(DEG C) | DATE      | TIME | DIS-<br>CHARGE,<br>INST.<br>CUBIC<br>FEET<br>PER<br>SECOND | SPE-<br>CIFIC<br>CON-<br>DUCT-<br>ANCE<br>(US/CM) | TEMPER-<br>ATURE<br>WATER<br>(DEG C) |
|-----------|------|--|---|--------------------------------------|-----------|------|--|---|--------------------------------------|
| OCT 1995  |      |  |   |                                      | MAY 1996  |      |  |   |                                      |
| 11...     | 1110 | 6.5  | 303   | 10.0                                 | 17...     | 0930 | 9.0  | 234   | 13.5                                 |
| NOV 08... | 1130 | 6.0  | 348   | 8.0                                  | 29...     | 1230 | 46   | --  | 16.0                                 |
| DEC 13... | 1505 | 5.6  | 268   | 7.0                                  | JUN 13... | 1445 | 16   | 210   | 22.5                                 |
| JAN 1996  |      |  |   |                                      | JUL 12... | 1030 | 5.1  | 320   | 21.0                                 |
| 12...     | 1250 | 5.7  | --  | 3.0                                  | AUG 09... | 1035 | 3.5  | 339   | 18.0                                 |
| FEB 13... | 1350 | 5.5  | 372   | --                                   | SEP 10... | 1010 | 2.9  | 365   | 15.5                                 |
| MAR 13... | 1120 | 4.9  | 322   | 8.0                                  |           |      |  |   |                                      |
| APR 16... | 1410 | 23   | 213   | 14.0                                 |           |      |  |   |                                      |

**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 mi<sup>2</sup>.

PERIOD OF RECORD.--November 1993 to current year.

GAGE.--Water-stage recorder and satellite telemetry. Elevation of gage is 8,710 ft above sea level, from topographic map.

REMARKS.--No estimated daily discharges. Records good. Natural flow of stream affected by storage reservoir and transmountain diversions. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

| DAY   | OCT   | NOV   | DEC   | JAN   | FEB   | MAR   | APR   | MAY   | JUN   | JUL   | AUG   | SEP   |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1     | 4.6   | 4.7   | 8.0   | 8.2   | 9.0   | 7.7   | 8.6   | 11    | 15    | 21    | 13    | 7.8   |
| 2     | 4.6   | 5.1   | 8.0   | 8.2   | 9.1   | 7.9   | 8.9   | 11    | 17    | 20    | 13    | 7.7   |
| 3     | 4.9   | 6.6   | 8.0   | 8.1   | 10    | 8.0   | 8.6   | 15    | 20    | 20    | 13    | 9.0   |
| 4     | 4.9   | 6.6   | 8.0   | 8.1   | 11    | 8.1   | 8.9   | 22    | 21    | 19    | 12    | 10    |
| 5     | 4.4   | 6.7   | 7.9   | 8.5   | 10    | 8.1   | 8.9   | 23    | 21    | 19    | 12    | 10    |
| 6     | 4.4   | 6.7   | 7.9   | 8.5   | 9.8   | 7.7   | 9.1   | 24    | 20    | 14    | 12    | 11    |
| 7     | 4.6   | 6.1   | 7.8   | 8.7   | 9.5   | 7.9   | 8.8   | 23    | 20    | 14    | 12    | 9.8   |
| 8     | 4.5   | 5.4   | 7.7   | 8.8   | 9.8   | 8.1   | 9.0   | 23    | 19    | 15    | 12    | 8.6   |
| 9     | 4.4   | 5.3   | 7.8   | 8.9   | 9.4   | 8.2   | 13    | 23    | 19    | 15    | 12    | 11    |
| 10    | 4.3   | 5.5   | 8.1   | 8.8   | 9.1   | 8.7   | 14    | 22    | 18    | 13    | 12    | 11    |
| 11    | 4.3   | 5.8   | 8.3   | 8.6   | 9.2   | 8.9   | 14    | 14    | 19    | 10    | 12    | 12    |
| 12    | 4.3   | 5.8   | 8.3   | 8.5   | 9.1   | 9.0   | 11    | 14    | 18    | 9.2   | 11    | 10    |
| 13    | 4.3   | 5.8   | 8.3   | 8.6   | 9.1   | 9.4   | 8.7   | 14    | 17    | 9.3   | 11    | 5.5   |
| 14    | 4.3   | 5.8   | 8.1   | 8.4   | 9.2   | 9.6   | 8.3   | 14    | 13    | 11    | 11    | 5.8   |
| 15    | 4.2   | 5.8   | 7.9   | 8.6   | 9.3   | 9.7   | 6.4   | 15    | 11    | 13    | 12    | 7.0   |
| 16    | 3.9   | 5.8   | 8.0   | 8.7   | 9.5   | 9.7   | 4.5   | 23    | 6.2   | 13    | 12    | 6.5   |
| 17    | 3.8   | 5.8   | 8.0   | 8.6   | 9.5   | 9.7   | 4.4   | 22    | 6.2   | 13    | 12    | 5.4   |
| 18    | 3.8   | 5.8   | 8.0   | 8.6   | 9.8   | 9.7   | 6.1   | 26    | 8.6   | 13    | 13    | 5.1   |
| 19    | 3.8   | 5.8   | 8.0   | 11    | 9.9   | 9.5   | 7.9   | 27    | 12    | 13    | 13    | 4.8   |
| 20    | 3.8   | 5.8   | 8.0   | 13    | 9.8   | 9.4   | 8.1   | 23    | 17    | 11    | 13    | 4.6   |
| 21    | 3.8   | 5.8   | 8.0   | 13    | 9.7   | 9.6   | 8.2   | 23    | 19    | 9.6   | 13    | 4.6   |
| 22    | 3.7   | 5.9   | 8.0   | 14    | 9.5   | 9.8   | 8.3   | 23    | 13    | 9.2   | 13    | 4.6   |
| 23    | 3.6   | 5.9   | 8.0   | 15    | 6.9   | 9.7   | 9.5   | 22    | 8.0   | 9.0   | 13    | 4.7   |
| 24    | 3.6   | 5.9   | 8.0   | 14    | 3.7   | 9.4   | 18    | 21    | 10    | 9.5   | 10    | 4.8   |
| 25    | 3.5   | 7.1   | 7.9   | 8.0   | 4.6   | 9.4   | 19    | 12    | 10    | 10    | 6.0   | 4.7   |
| 26    | 3.5   | 8.1   | 7.8   | 8.0   | 6.8   | 9.5   | 19    | 5.7   | 10    | 12    | 5.9   | 4.6   |
| 27    | 4.0   | 8.1   | 8.0   | 8.0   | 7.1   | 9.6   | 19    | 5.6   | 11    | 13    | 7.4   | 4.5   |
| 28    | 5.5   | 8.0   | 8.2   | 7.9   | 7.2   | 9.6   | 15    | 5.3   | 12    | 13    | 10    | 4.2   |
| 29    | 5.5   | 8.0   | 8.2   | 8.0   | 7.2   | 9.3   | 10    | 8.7   | 19    | 13    | 10    | 4.1   |
| 30    | 5.7   | 8.0   | 8.2   | 8.0   | ---   | 9.2   | 11    | 13    | 23    | 13    | 10    | 4.1   |
| 31    | 5.8   | ---   | 8.4   | 8.8   | ---   | 8.9   | ---   | 14    | ---   | 13    | 8.9   | ---   |
| TOTAL | 134.3 | 187.5 | 248.8 | 290.1 | 253.8 | 279.0 | 314.2 | 542.3 | 453.0 | 409.8 | 350.2 | 207.5 |
| MEAN  | 4.33  | 6.25  | 8.03  | 9.36  | 8.75  | 9.00  | 10.5  | 17.5  | 15.1  | 13.2  | 11.3  | 6.92  |
| MAX   | 5.8   | 8.1   | 8.4   | 15    | 11    | 9.8   | 19    | 27    | 23    | 21    | 13    | 12    |
| MIN   | 3.5   | 4.7   | 7.7   | 7.9   | 3.7   | 7.7   | 4.4   | 5.3   | 6.2   | 9.0   | 5.9   | 4.1   |
| AC-FT | 266   | 372   | 493   | 575   | 503   | 553   | 623   | 1080  | 899   | 813   | 695   | 412   |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 1996, BY WATER YEAR (WY)

|      | 1994 | 1995 | 1996 | 1994 | 1995 | 1996 | 1994 | 1995 | 1996 | 1994 | 1995 | 1996 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 7.20 | 8.40 | 8.89 | 8.31 | 8.05 | 8.58 | 9.14 | 11.7 | 11.0 | 14.3 | 11.6 | 8.24 |
| 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 | 1994 | 1994 | 1994 | 1994 |
| MIN  | 4.33 | 6.25 | 8.03 | 7.66 | 7.04 | 6.02 | 6.97 | 6.98 | 8.10 | 9.19 | 7.72 | 5.62 |
| (WY) | 1996 | 1996 | 1996 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 | 1995 |

SUMMARY STATISTICS FOR 1995 CALENDAR YEAR FOR 1996 WATER YEAR WATER YEARS 1994 - 1996

|                          |             |              |                  |
|--------------------------|-------------|--------------|------------------|
| ANNUAL TOTAL             | 2553.0      | 3670.5       |                  |
| ANNUAL MEAN              | 6.99        | 10.0         | 8.97             |
| HIGHEST ANNUAL MEAN      |             |              | 10.0             |
| LOWEST ANNUAL MEAN       |             |              | 7.92             |
| HIGHEST DAILY MEAN       | 19 Jul 30   | 27 May 19    | 29 Jul 10 1994   |
| LOWEST DAILY MEAN        | a3.5 Oct 25 | a3.5 Oct 25  | 1.7 Dec 22 1994  |
| ANNUAL SEVEN-DAY MINIMUM | 3.6 Oct 20  | b3.6 Oct 20  | 3.6 Oct 20 1995  |
| INSTANTANEOUS PEAK FLOW  |             | b28 May 16   | 32 Jul 10 1994   |
| INSTANTANEOUS PEAK STAGE |             | b5.19 May 16 | 5.26 Jul 10 1994 |
| ANNUAL RUNOFF (AC-FT)    | 5060        | 7280         | 6500             |
| 10 PERCENT EXCEEDS       | 10          | 18           | 16               |
| 50 PERCENT EXCEEDS       | 6.2         | 8.9          | 8.9              |
| 90 PERCENT EXCEEDS       | 4.4         | 4.6          | 4.9              |

a-Also occurred Oct 26.  
b-Also occurred May 18-19.

**07103800 WEST MONUMENT CREEK AT U.S. AIR FORCE ACADEMY, CO**

LOCATION.--Lat 38°58'14", long 104°54'08", in SW¼SW¼ sec.28, T.12 S., R.67 W., El Paso County, Hydrologic Unit 11020003, on left bank 500 ft upstream from diversion to city of Colorado Springs water-treatment plant, 2.7 mi south of U.S. Air Force Academy chapel, and 4.4 mi upstream from mouth.

DRAINAGE AREA.--14.9 mi<sup>2</sup>.

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 fair except for estimated daily discharges, which are poor. Natural flow of stream affected by trans-mountain diversions from Colorado River basin, storage reservoirs, and operation of water-supply system. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

| DAY   | OCT  | NOV  | DEC   | JAN   | FEB   | MAR   | APR   | MAY   | JUN   | JUL   | AUG   | SEP   |
|-------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1     | 1.3  | 1.1  | 1.2   | .60   | e.54  | .65   | .83   | 1.0   | 1.6   | .66   | .63   | .70   |
| 2     | 1.3  | 1.1  | 1.2   | .59   | e.50  | .59   | .89   | .97   | 1.4   | .62   | .66   | .69   |
| 3     | 1.2  | 1.7  | 1.2   | .61   | e.50  | .60   | .87   | .97   | 1.3   | .61   | .69   | .66   |
| 4     | 1.3  | 1.0  | 1.2   | .65   | e.50  | .61   | .85   | .96   | 1.3   | .60   | .68   | .63   |
| 5     | 1.2  | 1.1  | 1.2   | .65   | e.55  | .62   | .88   | .96   | 1.2   | .59   | .64   | .64   |
| 6     | 1.2  | 1.1  | 1.2   | .65   | e.55  | e.60  | .91   | .96   | 1.1   | .57   | .62   | .76   |
| 7     | 1.2  | 1.1  | 1.2   | .65   | .55   | e.60  | .93   | .96   | 1.1   | .56   | .63   | .88   |
| 8     | 1.2  | 1.1  | e1.1  | .63   | .54   | e.60  | 1.0   | .94   | 1.0   | .59   | .65   | .75   |
| 9     | 1.2  | 1.1  | e1.1  | .61   | .54   | .62   | 1.0   | .92   | 1.0   | .69   | .67   | .70   |
| 10    | 1.2  | 1.1  | e1.1  | .65   | .54   | .67   | 1.1   | .93   | .98   | 1.0   | .64   | .69   |
| 11    | 1.1  | 1.1  | 1.1   | .65   | .54   | .68   | 1.1   | .92   | .99   | .90   | .60   | .76   |
| 12    | 1.1  | 1.1  | 1.1   | .71   | .54   | .66   | 1.0   | .88   | .97   | .71   | .58   | 1.2   |
| 13    | 1.1  | 1.1  | 1.1   | .83   | .51   | .68   | 1.1   | .83   | 1.0   | .68   | .57   | .92   |
| 14    | 1.1  | 1.1  | 1.1   | .85   | .49   | .72   | .99   | .82   | 1.0   | .62   | .58   | .89   |
| 15    | 1.1  | 1.1  | 1.1   | .79   | .49   | .75   | 1.1   | .80   | 1.1   | .61   | .60   | .87   |
| 16    | 1.1  | 1.1  | 1.0   | .81   | .50   | .73   | 1.2   | .78   | 1.1   | .61   | .65   | .83   |
| 17    | 1.1  | 1.1  | .99   | e.80  | .49   | .73   | 1.2   | .76   | .96   | .58   | .60   | .88   |
| 18    | 1.1  | 1.1  | e.90  | e.80  | .52   | e.80  | 1.2   | .75   | .89   | .69   | .59   | .99   |
| 19    | 1.1  | 1.1  | e.90  | e.80  | .54   | e1.0  | 1.1   | .75   | .84   | .76   | .91   | .97   |
| 20    | 1.1  | 1.1  | e.90  | e.80  | .54   | e.90  | 1.1   | .77   | .82   | .71   | .98   | .89   |
| 21    | 1.1  | 1.2  | e.90  | e.78  | .55   | .75   | 1.0   | .75   | .84   | .87   | .75   | .85   |
| 22    | 1.1  | 1.2  | e.85  | .72   | .59   | .84   | 1.0   | .72   | .86   | .69   | .70   | .82   |
| 23    | 1.2  | 1.2  | e.83  | e.75  | .55   | .86   | 1.0   | .71   | .80   | .66   | .81   | .86   |
| 24    | 1.2  | 1.2  | e.80  | e.70  | e.70  | .78   | 1.1   | .75   | .76   | .65   | .86   | .93   |
| 25    | 1.2  | 1.2  | e.80  | e.70  | .79   | 1.1   | 1.1   | 1.9   | .72   | .65   | .77   | .85   |
| 26    | 1.2  | 1.2  | e.75  | e.70  | .68   | .92   | .99   | 5.1   | .70   | .75   | .86   | .87   |
| 27    | 1.2  | 1.2  | e.72  | e.70  | e.60  | .84   | .97   | 3.9   | .71   | .84   | .73   | .92   |
| 28    | 1.1  | 1.2  | e.70  | e.70  | e.60  | .81   | .98   | 2.2   | .69   | .70   | .74   | .92   |
| 29    | 1.1  | 1.2  | e.70  | .65   | e.60  | .81   | .96   | 2.0   | .65   | .72   | .75   | .89   |
| 30    | 1.1  | 1.3  | e.65  | .65   | ---   | .82   | .98   | 1.8   | .66   | .69   | .88   | .85   |
| 31    | 1.1  | ---  | e.62  | e.60  | ---   | .80   | ---   | 1.7   | ---   | .67   | .76   | ---   |
| TOTAL | 35.9 | 34.6 | 30.21 | 21.78 | 16.13 | 23.14 | 30.43 | 39.16 | 29.04 | 21.25 | 21.78 | 25.06 |
| MEAN  | 1.16 | 1.15 | .97   | .70   | .56   | .75   | 1.01  | 1.26  | .97   | .69   | .70   | .84   |
| MAX   | 1.3  | 1.7  | 1.2   | .85   | .79   | 1.1   | 1.2   | 5.1   | 1.6   | 1.0   | .98   | 1.2   |
| MIN   | 1.1  | 1.0  | .62   | .59   | .49   | .59   | .83   | .71   | .65   | .56   | .57   | .63   |
| AC-FT | 71   | 69   | 60    | 43    | 32    | 46    | 60    | 78    | 58    | 42    | 43    | 50    |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1970 - 1996, 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 |  |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|--|
| MEAN | 1.69 | 1.13 | .92  | .63  | .34  | .43  | 1.82 | 6.25 | 3.85 | 2.50 | 2.62 | 1.85 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |  |
| MAX  | 11.7 | 7.74 | 8.62 | 8.78 | 3.63 | 2.46 | 12.4 | 30.5 | 27.9 | 23.3 | 23.8 | 20.3 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |  |
| (WY) | 1972 | 1971 | 1971 | 1971 | 1971 | 1971 | 1971 | 1980 | 1971 | 1970 | 1970 | 1970 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |  |
| MIN  | .000 | .000 | .000 | .000 | .000 | .001 | .11  | .20  | .031 | .017 | .000 | .000 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |  |
| (WY) | 1993 | 1993 | 1994 | 1993 | 1976 | 1991 | 1989 | 1976 | 1976 | 1993 | 1993 | 1993 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |  |

SUMMARY STATISTICS

FOR 1995 CALENDAR YEAR

FOR 1996 WATER YEAR

WATER YEARS 1970 - 1996

|                          |         |        |      |
|--------------------------|---------|--------|------|
| ANNUAL TOTAL             | 1775.50 | 328.48 |      |
| ANNUAL MEAN              | 4.86    | .90    | 1.72 |
| HIGHEST ANNUAL MEAN      |         |        | 13.4 |
| LOWEST ANNUAL MEAN       |         |        | .10  |
| HIGHEST DAILY MEAN       | 52      | May 21 | 59   |
| LOWEST DAILY MEAN        | e.62    | Dec 31 | a.49 |
| ANNUAL SEVEN-DAY MINIMUM | .71     | Dec 25 | .51  |
| INSTANTANEOUS PEAK FLOW  |         |        | 5.7  |
| INSTANTANEOUS PEAK STAGE |         |        | 1.56 |
| ANNUAL RUNOFF (AC-FT)    | 3520    | 652    | 1250 |
| 10 PERCENT EXCEEDS       | 12      | 1.2    | 4.6  |
| 50 PERCENT EXCEEDS       | 1.2     | .84    | .44  |
| 90 PERCENT EXCEEDS       | .85     | .60    | .05  |

e-Estimated.  
a-Also occurred Feb 15, 17.  
b-No flow many days during 1976, 1991-92.  
c-From rating curve extended above 34 ft<sup>3</sup>/s.  
d-Maximum gage height, 3.88 ft, Dec 22, 1983, backwater from ice.

**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 mi<sup>2</sup>.

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

REVISED RECORDS.--WDR CO-93-1: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 6,680 ft above sea level, from topographic map.

REMARKS.--Records fair except for winter period 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.

REVISIONS.--The maximum discharge for water year 1995 has been revised to 428 ft<sup>3</sup>/s, June 2, 1995, gage height, 4.10 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

| DAY   | OCT   | NOV   | DEC   | JAN   | FEB   | MAR   | APR   | MAY   | JUN   | JUL    | AUG   | SEP   |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|-------|-------|
| 1     | 1.9   | 2.0   | .38   | .61   | .20   | e.40  | e.50  | e.30  | 1.1   | 1.4    | e25   | e.52  |
| 2     | 2.2   | 1.5   | e.36  | e.55  | e.17  | e.50  | e.50  | e.30  | .54   | 1.3    | e2.0  | e.50  |
| 3     | 2.2   | 1.6   | .34   | .46   | e.15  | .56   | e.50  | e.30  | .62   | 1.1    | e1.2  | e.46  |
| 4     | 3.1   | 1.5   | .31   | .26   | e.18  | .37   | e.50  | e.30  | .55   | .95    | e.90  | e.43  |
| 5     | 2.0   | 1.4   | e.30  | .26   | e.25  | .26   | e.50  | e.30  | .37   | 1.5    | e.75  | e.42  |
| 6     | 1.6   | 1.3   | .34   | e.30  | .35   | e1.0  | e.50  | e.30  | .31   | 1.5    | e.70  | e1.2  |
| 7     | 2.1   | 1.2   | .50   | e.35  | .49   | 1.4   | e.50  | e.30  | .43   | 1.2    | e.70  | e.57  |
| 8     | 1.9   | 1.1   | .56   | e.38  | .46   | e1.0  | e.50  | e.30  | .43   | 1.5    | e.70  | e.48  |
| 9     | 2.1   | 1.1   | e.70  | .39   | .90   | .67   | e.50  | 2.1   | .25   | 18     | e.85  | e.56  |
| 10    | 2.1   | 1.2   | .99   | .43   | .78   | .52   | e.50  | 1.5   | .47   | 11     | e.80  | .82   |
| 11    | 1.7   | 1.3   | .87   | e.45  | .81   | .42   | e.68  | .48   | .45   | 1.4    | e.68  | 7.0   |
| 12    | 1.8   | .95   | .76   | e.40  | .75   | .41   | e.66  | e.40  | .84   | 1.5    | e.65  | 1.5   |
| 13    | 1.6   | .90   | .59   | .31   | .79   | .57   | e.70  | e.42  | 31    | 1.8    | e.60  | 1.4   |
| 14    | 1.2   | .80   | .41   | .28   | 1.1   | 1.1   | 1.9   | e.38  | 25    | 1.7    | e8.0  | .83   |
| 15    | 1.3   | .71   | .33   | .34   | .76   | .70   | .73   | e.40  | 5.8   | 1.7    | e15   | 2.0   |
| 16    | 1.2   | .63   | .55   | .65   | e.80  | .64   | .77   | e.48  | 1.9   | 1.2    | e1.5  | .62   |
| 17    | 1.0   | .56   | .66   | e.65  | 1.1   | .57   | .69   | e.45  | 4.3   | 11     | e1.0  | 13    |
| 18    | 1.2   | .43   | .60   | e.62  | .80   | .51   | .36   | e.43  | 1.3   | 11     | e.90  | 4.4   |
| 19    | 1.2   | .52   | e.64  | .58   | .60   | 1.1   | e.32  | e.45  | .69   | 1.5    | e10   | 2.0   |
| 20    | 1.0   | .63   | e.68  | .47   | 1.0   | .62   | e.31  | .85   | 1.5   | 1.4    | e2.0  | .74   |
| 21    | .92   | .76   | e.70  | .38   | .61   | .32   | e.30  | .45   | 2.9   | 12     | .83   | .65   |
| 22    | 1.4   | .54   | e.70  | .23   | .36   | .29   | e.30  | e.40  | 2.2   | 1.0    | 2.9   | .41   |
| 23    | 3.4   | .43   | e.68  | .15   | .55   | .29   | e.30  | e.45  | 1.3   | .85    | 4.3   | 5.4   |
| 24    | 2.3   | .45   | e.60  | .52   | .43   | .73   | e.30  | 2.2   | 1.0   | 2.2    | 1.5   | 1.2   |
| 25    | 1.7   | .43   | e.62  | e.55  | .41   | 1.9   | e.30  | 32    | 1.0   | 3.4    | e.67  | .59   |
| 26    | 1.9   | .40   | e.64  | e.58  | .33   | 1.2   | e.30  | 22    | 1.0   | 21     | e.61  | 4.0   |
| 27    | 1.6   | .57   | e.68  | e.58  | e.32  | e.75  | e.30  | 4.2   | 1.2   | e3.0   | e.74  | 5.0   |
| 28    | 1.8   | .67   | e.70  | .48   | e.31  | e.70  | e.30  | 2.3   | 1.1   | e1.3   | e1.1  | .54   |
| 29    | 2.1   | .75   | e.70  | .29   | e.30  | e.62  | e.30  | .91   | 1.3   | e1.0   | e1.9  | .40   |
| 30    | 1.5   | .49   | e.70  | e.25  | ---   | e.52  | e.30  | .75   | 1.4   | e.90   | e.85  | .43   |
| 31    | 2.1   | ---   | e.70  | e.22  | ---   | e.50  | ---   | .79   | ---   | e2.5   | e.51  | ---   |
| TOTAL | 55.12 | 26.82 | 18.29 | 12.97 | 16.06 | 21.14 | 15.12 | 77.19 | 92.25 | 122.80 | 89.84 | 58.07 |
| MEAN  | 1.78  | .89   | .59   | .42   | .55   | .68   | .50   | 2.49  | 3.07  | 3.96   | 2.90  | 1.94  |
| MAX   | 3.4   | 2.0   | .99   | .65   | 1.1   | 1.9   | 1.9   | 32    | 31    | 21     | 25    | 13    |
| MIN   | .92   | .40   | .30   | .15   | .15   | .26   | .30   | .30   | .25   | .85    | .51   | .40   |
| AC-FT | 109   | 53    | 36    | 26    | 32    | 42    | 30    | 153   | 183   | 244    | 178   | 115   |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 1996, BY WATER YEAR (WY)

|      | 1992 | 1993 | 1994 | 1995 | 1996 |
|------|------|------|------|------|------|
| MEAN | 1.33 | .72  | .47  | .42  | .51  |
| MAX  | 2.59 | .89  | .59  | .58  | .56  |
| (WY) | 1995 | 1996 | 1996 | 1993 | 1995 |
| MIN  | .35  | .47  | .33  | .33  | .42  |
| (WY) | 1993 | 1993 | 1993 | 1994 | 1994 |

SUMMARY STATISTICS

FOR 1995 CALENDAR YEAR

FOR 1996 WATER YEAR

WATER YEARS 1992 - 1996

|                          |        |        |      |             |
|--------------------------|--------|--------|------|-------------|
| ANNUAL TOTAL             | 984.41 | 605.67 |      |             |
| ANNUAL MEAN              | 2.70   | 1.65   |      |             |
| HIGHEST ANNUAL MEAN      |        |        | 1.45 |             |
| LOWEST ANNUAL MEAN       |        |        | 2.74 | 1995        |
| HIGHEST DAILY MEAN       | 42     | Jun 2  | .65  | 1993        |
| LOWEST DAILY MEAN        | e.15   | Jan 23 | a.15 | Jan 23 1995 |
| ANNUAL SEVEN-DAY MINIMUM | .17    | Jan 21 | .20  | Jan 21 1995 |
| INSTANTANEOUS PEAK FLOW  |        |        | 543  | Jul 26 1993 |
| INSTANTANEOUS PEAK STAGE |        |        | 4.60 | Jul 26 1993 |
| ANNUAL RUNOFF (AC-FT)    | 1950   |        | 1200 | 1050        |
| 10 PERCENT EXCEEDS       | 6.8    |        | 2.2  | 2.2         |
| 50 PERCENT EXCEEDS       | 1.1    |        | .70  | .56         |
| 90 PERCENT EXCEEDS       | .33    |        | .30  | .29         |

e-Estimated.

a-Also occurred Feb 3.

b-Also occurred Jan 23, 1996.

c-From rating curve extended above 1.1 ft<sup>3</sup>/s, on basis of slope-area measurement of peak flow.

**07103990 COTTONWOOD CREEK AT MOUTH AT PIKEVIEW, CO**

LOCATION.--Lat 38°55'41", long 104°38'35", in SW¼SW¼ 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 mi<sup>2</sup>.

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 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 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

| DAY   | OCT   | NOV   | DEC   | JAN   | FEB   | MAR   | APR   | MAY   | JUN   | JUL   | AUG   | SEP   |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1     | 7.6   | 5.0   | 4.1   | e5.6  | 4.1   | e6.9  | 4.1   | 4.3   | 5.6   | 6.4   | e50   | e5.0  |
| 2     | 7.5   | e5.4  | 3.1   | e5.4  | 4.0   | 6.8   | 4.0   | 4.1   | 5.0   | 6.1   | e10   | e4.8  |
| 3     | 7.2   | e5.0  | 3.8   | e5.0  | 3.8   | 5.4   | 4.1   | 4.0   | 4.8   | 6.2   | e7.0  | e4.7  |
| 4     | 8.7   | e6.0  | 4.3   | e4.7  | 4.3   | 4.5   | 4.6   | 4.1   | 4.7   | 6.2   | e5.5  | e4.5  |
| 5     | 8.4   | e5.6  | 4.0   | e4.5  | 4.5   | 4.7   | 4.9   | 4.9   | 4.9   | 6.5   | e4.7  | e4.3  |
| 6     | 8.0   | e5.2  | e4.2  | e4.5  | 4.4   | 5.4   | 4.1   | 5.1   | 5.0   | 6.2   | e4.7  | e6.0  |
| 7     | 7.5   | 4.8   | e4.2  | e5.0  | 4.5   | 5.8   | 4.1   | 4.9   | 4.6   | 6.0   | e4.7  | 4.8   |
| 8     | 6.6   | 4.7   | 4.3   | e5.3  | 4.6   | 4.8   | 4.0   | 4.9   | 4.8   | 6.5   | e5.5  | 5.1   |
| 9     | 6.4   | 5.7   | 4.1   | e5.3  | 5.9   | 4.4   | 4.0   | 6.5   | 4.6   | 24    | e8.0  | 5.1   |
| 10    | 6.1   | 6.2   | e4.2  | e5.0  | 6.2   | 4.0   | 4.0   | 4.5   | 4.5   | 22    | e6.0  | 5.2   |
| 11    | 5.9   | 6.1   | 4.2   | e4.9  | 6.4   | 3.9   | 3.9   | 3.4   | 4.1   | 9.7   | e5.2  | 11    |
| 12    | 6.0   | 5.9   | e4.3  | 5.4   | 6.7   | 3.9   | 4.0   | 3.5   | 4.6   | 7.5   | e4.8  | 6.3   |
| 13    | 5.5   | 6.5   | e4.4  | 5.0   | 6.0   | 4.0   | 4.6   | 3.5   | 37    | 7.3   | e4.5  | 6.1   |
| 14    | 5.2   | 7.7   | 4.5   | 5.5   | 6.1   | 6.1   | 4.6   | 3.5   | 12    | 7.0   | e20   | 5.7   |
| 15    | 5.4   | 7.4   | e4.5  | 6.0   | 6.0   | 5.4   | 4.6   | 3.4   | 17    | 8.2   | e9.0  | 6.7   |
| 16    | 5.4   | 7.6   | e4.6  | 6.0   | 6.0   | 4.1   | 4.0   | 3.4   | 9.1   | 7.3   | e5.0  | 6.4   |
| 17    | 5.0   | 7.3   | e4.5  | e5.4  | 6.1   | 5.2   | 3.2   | 3.1   | 7.6   | 12    | e4.5  | 14    |
| 18    | 5.8   | 5.5   | e4.7  | 4.9   | 6.2   | 5.1   | 3.7   | 3.1   | 7.2   | 19    | e4.2  | 7.4   |
| 19    | 5.5   | 6.2   | e4.4  | 4.5   | e6.0  | 5.5   | 3.6   | 3.2   | 6.5   | 16    | e30   | 7.1   |
| 20    | 6.3   | 5.6   | e4.3  | 4.5   | e5.5  | 4.6   | 2.8   | 3.5   | 7.4   | 10    | e8.0  | 6.5   |
| 21    | 6.2   | 6.1   | e4.3  | 4.4   | e5.4  | 4.2   | 3.0   | 3.7   | 7.3   | 21    | e5.0  | 6.4   |
| 22    | 6.1   | 5.7   | e4.5  | 4.1   | e5.4  | 4.3   | 3.8   | 3.5   | 7.2   | 12    | e6.0  | 6.2   |
| 23    | 7.6   | 4.9   | e5.0  | 3.9   | e5.7  | 4.5   | 3.4   | 3.6   | 6.4   | 8.0   | e10   | 12    |
| 24    | 6.9   | 4.6   | e5.2  | 3.8   | e6.0  | 4.4   | 3.7   | 4.9   | 6.2   | 8.6   | e5.0  | 6.2   |
| 25    | e5.9  | 4.5   | e5.6  | 3.9   | e6.2  | 4.8   | 3.8   | 23    | 6.1   | 7.7   | e4.5  | 6.3   |
| 26    | e5.6  | 4.9   | e5.7  | 3.9   | e6.0  | 4.5   | 3.8   | 14    | 6.1   | 69    | e4.0  | 8.3   |
| 27    | e5.3  | 4.6   | e5.8  | 3.9   | e6.0  | 4.1   | 3.8   | 5.3   | 6.5   | e10   | e4.5  | 7.6   |
| 28    | 5.3   | 5.0   | e5.8  | 4.2   | e6.5  | 4.2   | 4.2   | 6.6   | 6.6   | e4.0  | e6.0  | 5.8   |
| 29    | 4.9   | 5.0   | e5.8  | 4.0   | e6.7  | 4.3   | 4.4   | 6.2   | 6.3   | e9.0  | e9.0  | 6.1   |
| 30    | 4.8   | 4.3   | e5.7  | 4.0   | ---   | 4.5   | 3.8   | 5.4   | 6.8   | e7.5  | e6.0  | 6.9   |
| 31    | 5.1   | ---   | e5.6  | 3.9   | ---   | 4.5   | ---   | 5.2   | ---   | e9.0  | e5.5  | ---   |
| TOTAL | 193.7 | 169.0 | 143.7 | 146.4 | 161.2 | 148.8 | 118.6 | 162.3 | 226.5 | 365.9 | 266.8 | 198.5 |
| MEAN  | 6.25  | 5.63  | 4.64  | 4.72  | 5.56  | 4.80  | 3.95  | 5.24  | 7.55  | 11.8  | 8.61  | 6.62  |
| MAX   | 8.7   | 7.7   | 5.8   | 6.0   | 6.7   | 6.9   | 4.9   | 23    | 37    | 69    | 50    | 14    |
| MIN   | 4.8   | 4.3   | 3.1   | 3.8   | 3.8   | 3.9   | 2.8   | 3.1   | 4.1   | 4.0   | 4.0   | 4.3   |
| AC-FT | 384   | 335   | 285   | 290   | 320   | 295   | 235   | 322   | 449   | 726   | 529   | 394   |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1986 - 1996, BY WATER YEAR (WY)

|      | 4.89 | 4.31 | 3.74 | 3.77 | 4.12 | 5.35 | 4.79 | 7.22 | 7.87 | 7.55 | 7.19 | 5.49 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 4.89 | 4.31 | 3.74 | 3.77 | 4.12 | 5.35 | 4.79 | 7.22 | 7.87 | 7.55 | 7.19 | 5.49 |
| MAX  | 9.59 | 6.93 | 6.76 | 5.30 | 6.26 | 11.1 | 7.01 | 19.5 | 26.4 | 16.8 | 9.38 | 9.86 |
| (WY) | 1995 | 1995 | 1995 | 1994 | 1988 | 1992 | 1990 | 1995 | 1995 | 1995 | 1995 | 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 1995 CALENDAR YEAR

FOR 1996 WATER YEAR

WATER YEARS 1986 - 1996

|                          |  |        |  |                  |        |  |                   |        |  |                   |        |      |
|--------------------------|--|--------|--|------------------|--------|--|-------------------|--------|--|-------------------|--------|------|
| ANNUAL TOTAL             |  | 3599.9 |  | 2301.4           |        |  |                   |        |  |                   |        |      |
| ANNUAL MEAN              |  | 9.86   |  | 6.29             |        |  |                   |        |  | 5.67              |        |      |
| HIGHEST ANNUAL MEAN      |  |        |  |                  |        |  |                   |        |  | 10.4              |        | 1995 |
| LOWEST ANNUAL MEAN       |  |        |  |                  |        |  |                   |        |  | 4.01              |        | 1989 |
| HIGHEST DAILY MEAN       |  |        |  | e <sup>150</sup> | Jul 1  |  | 69                | Jul 26 |  | 150               | Jul 1  | 1995 |
| LOWEST DAILY MEAN        |  |        |  | 3.0              | Mar 22 |  | 2.8               | Apr 20 |  | .01               | Jul 10 | 1989 |
| ANNUAL SEVEN-DAY MINIMUM |  |        |  | 3.4              | Mar 17 |  | 3.3               | May 13 |  | .12               | Jul 5  | 1989 |
| INSTANTANEOUS PEAK FLOW  |  |        |  |                  |        |  | a <sup>1410</sup> | Jul 26 |  | b <sup>2380</sup> | Jun 17 | 1993 |
| INSTANTANEOUS PEAK STAGE |  |        |  |                  |        |  | c <sup>8.26</sup> | Jul 26 |  | c <sup>8.26</sup> | Jul 26 | 1996 |
| ANNUAL RUNOFF (AC-FT)    |  |        |  | 7140             |        |  | 4560              |        |  | 4110              |        |      |
| 10 PERCENT EXCEEDS       |  |        |  | 17               |        |  | 8.0               |        |  | 8.0               |        |      |
| 50 PERCENT EXCEEDS       |  |        |  | 6.1              |        |  | 5.2               |        |  | 4.0               |        |      |
| 90 PERCENT EXCEEDS       |  |        |  | 4.2              |        |  | 3.9               |        |  | 2.2               |        |      |

e-Estimated.

a-From rating curve extended above 1100 ft<sup>3</sup>/s.

b-From rating curve extended above 60 ft<sup>3</sup>/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 U.S. Interstate Highway I-25, 0.9 mi downstream from Cottonwood Creek, and 1.3 mi downstream from Woodmen Valley Road.

DRAINAGE AREA.--204 mi<sup>2</sup>.

**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, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

| DAY   | OCT  | NOV  | DEC  | JAN  | FEB  | MAR  | APR  | MAY  | JUN  | JUL  | AUG    | SEP  |
|-------|------|------|------|------|------|------|------|------|------|------|--------|------|
| 1     | 25   | 27   | 24   | 29   | e19  | e14  | 21   | 26   | 35   | 12   | e850   | 25   |
| 2     | 25   | 26   | 21   | e28  | e16  | e13  | 37   | 28   | 29   | 11   | e50    | 21   |
| 3     | 30   | 23   | 19   | e30  | e14  | e14  | 34   | 28   | 31   | 11   | 21     | 20   |
| 4     | 35   | 29   | e19  | e28  | e15  | e17  | 39   | 30   | 27   | 12   | 14     | 20   |
| 5     | 33   | 35   | e19  | e25  | e16  | 20   | 46   | 27   | 24   | 16   | 11     | 17   |
| 6     | 28   | 37   | e19  | e23  | e18  | 21   | 35   | 21   | 25   | 17   | 9.9    | 23   |
| 7     | 27   | 23   | e18  | e25  | e20  | 24   | 30   | 26   | 29   | 15   | 8.7    | 29   |
| 8     | 21   | 24   | e18  | e27  | 22   | 27   | 22   | 34   | 22   | 16   | 11     | 22   |
| 9     | 17   | 28   | e17  | e28  | 18   | 24   | 18   | 26   | 17   | 79   | 14     | 18   |
| 10    | 20   | 26   | 16   | e29  | 15   | 28   | 20   | 54   | 15   | 89   | 9.7    | 17   |
| 11    | 18   | 27   | 21   | 31   | 16   | 24   | 20   | 32   | 15   | 35   | 6.8    | 46   |
| 12    | 19   | 24   | 23   | 22   | 19   | 20   | 26   | 34   | 16   | 24   | 5.9    | 46   |
| 13    | 23   | 22   | 28   | 20   | 17   | 17   | 32   | 29   | 124  | 32   | 5.0    | 34   |
| 14    | 22   | 26   | 32   | 18   | 19   | 26   | 48   | 29   | 53   | 31   | 73     | 27   |
| 15    | 20   | 26   | 34   | 19   | 16   | 23   | 33   | 28   | 41   | 26   | 59     | 25   |
| 16    | 20   | 28   | 39   | 24   | 16   | 24   | 38   | 23   | 42   | 19   | 23     | 19   |
| 17    | 22   | 30   | 34   | 25   | 17   | 26   | 34   | 21   | 39   | 36   | 9.9    | 46   |
| 18    | 22   | 29   | 34   | e24  | 17   | 24   | 30   | 18   | 37   | 93   | 7.9    | 44   |
| 19    | 22   | 26   | 31   | e22  | 18   | 27   | 29   | 16   | 33   | 49   | 105    | 39   |
| 20    | 20   | 29   | 31   | e19  | 16   | 29   | 24   | 17   | 35   | 33   | 38     | 26   |
| 21    | 25   | 28   | 36   | e21  | 16   | 31   | 24   | 19   | 39   | 92   | 21     | 26   |
| 22    | 31   | 32   | 40   | e23  | 17   | 26   | 24   | 21   | 37   | 21   | 22     | 24   |
| 23    | 35   | 32   | 33   | e24  | 16   | 22   | 25   | 21   | 36   | 15   | 29     | 51   |
| 24    | 33   | 35   | 40   | e22  | e16  | 23   | 25   | 28   | 25   | 44   | 31     | 38   |
| 25    | 34   | 36   | 39   | e21  | e16  | 21   | 25   | 169  | 20   | 51   | 16     | 30   |
| 26    | 29   | 32   | 37   | e19  | e15  | 25   | 22   | 115  | 19   | 135  | 16     | 37   |
| 27    | 27   | 32   | 37   | e18  | 15   | 22   | 24   | 51   | 16   | 79   | 16     | 50   |
| 28    | 24   | 29   | 44   | e18  | 16   | 21   | 26   | 53   | 14   | 31   | 17     | 31   |
| 29    | 22   | 24   | 46   | e21  | e14  | 21   | 33   | 49   | 12   | 34   | 23     | 27   |
| 30    | 22   | 25   | e45  | e23  | ---  | 18   | 25   | 56   | 12   | 21   | 39     | 23   |
| 31    | 26   | ---  | 43   | e21  | ---  | 17   | ---  | 44   | ---  | e30  | 30     | ---  |
| TOTAL | 777  | 850  | 937  | 727  | 485  | 689  | 869  | 1173 | 919  | 1209 | 1592.8 | 901  |
| MEAN  | 25.1 | 28.3 | 30.2 | 23.5 | 16.7 | 22.2 | 29.0 | 37.8 | 30.6 | 39.0 | 51.4   | 30.0 |
| MAX   | 35   | 37   | 46   | 31   | 22   | 31   | 48   | 169  | 124  | 135  | 850    | 51   |
| MIN   | 17   | 22   | 16   | 18   | 14   | 13   | 18   | 16   | 12   | 11   | 5.0    | 17   |
| AC-FT | 1540 | 1690 | 1860 | 1440 | 962  | 1370 | 1720 | 2330 | 1820 | 2400 | 3160   | 1790 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 1996, 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 |  |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|--|
| MEAN | 17.8 | 16.8 | 14.4 | 13.0 | 14.1 | 20.7 | 45.5 | 88.9 | 43.0 | 24.9 | 26.6 | 15.2 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |  |
| 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 1995 CALENDAR YEAR

FOR 1996 WATER YEAR

WATER YEARS 1939 - 1996

|                          |       |         |              |
|--------------------------|-------|---------|--------------|
| ANNUAL TOTAL             | 22817 | 11128.8 |              |
| ANNUAL MEAN              | 62.5  | 30.4    | 29.0         |
| HIGHEST ANNUAL MEAN      |       |         | 72.1         |
| LOWEST ANNUAL MEAN       |       |         | 8.21         |
| HIGHEST DAILY MEAN       | 576   | May 17  | e850 Aug 1   |
| LOWEST DAILY MEAN        | 11    | Jan 23  | 5.0 Aug 13   |
| ANNUAL SEVEN-DAY MINIMUM | 12    | Apr 2   | 8.7 Aug 7    |
| INSTANTANEOUS PEAK FLOW  |       |         | a2260 Aug 19 |
| INSTANTANEOUS PEAK STAGE |       |         | 9.89 Aug 19  |
| ANNUAL RUNOFF (AC-FT)    | 45260 | 22070   | 21040        |
| 10 PERCENT EXCEEDS       | 137   | 42      | 58           |
| 50 PERCENT EXCEEDS       | 29    | 25      | 16           |
| 90 PERCENT EXCEEDS       | 14    | 16      | 4.5          |

e-Estimated.

a-From rating curve extended above 100 ft<sup>3</sup>/s, on basis of a slope-area measurement of peak flow.

b-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. 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 1995 water year for daily sediment during peak flows are poor. Records for 1996 water year for daily sediment during peak flows are fair except for estimated daily sediment values, which are poor.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SEDIMENT CONCENTRATIONS: Maximum daily during peak flows, 4,710 mg/L, July 27, 1996; minimum daily, 203 mg/L, Aug. 14, 1996.

SEDIMENT LOADS: Maximum daily during peak flows, 3,050 tons, June 13, 1996; minimum daily, 38 tons, May 24, 1996.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATIONS: Maximum daily during peak flows, 4,710 mg/L, July 27; minimum daily, 203 mg/L, Aug. 14.

SEDIMENT LOADS: Maximum daily during peak flows, 3,050 tons, June 13; minimum daily, 38 tons, May 24.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DATE      | TIME | DIS-CHARGE, INST. CUBIC FEET PER SECOND | SPE-CIFIC CON-DUCT-ANCE (US/CM) | PH (STAND-ARD UNITS) | TEMPER-ATURE WATER (DEG C) | OXYGEN, DIS-SOLVED (MG/L) | OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) | COLI-FORM, FECAL, UM-MF (COLS./100 ML) | STREP-TOCOCCI, FECAL, KF AGAR (COLS. PER 100 ML) | CALCIUM DIS-SOLVED (MG/L AS CA) | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) |
|-----------|------|---|---------------------------------|----------------------|----------------------------|---------------------------|--|--|--|---------------------------------|-------------------------------------|
| OCT 25... | 1400 | 36                                      | 437                             | 7.9                  | 10.5                       | --                        | 1.0  | --                                     | 130  | 55                              | 7.6                                 |
| NOV 29... | 1430 | 24                                      | 500                             | 8.3                  | 7.5                        | 9.5                       | 0.7  | --                                     | 53   | 61                              | 8.6                                 |
| JAN 17... | 1330 | 25                                      | 480                             | 8.1                  | 2.5                        | 10.1                      | 0.6  | K21                                    | 57   | 61                              | 8.8                                 |
| FEB 21... | 1415 | 17                                      | 488                             | 8.1                  | 12.0                       | 7.5                       | 0.9  | 100                                    | 120  | 57                              | 8.1                                 |
| MAR 20... | 1230 | 28                                      | 455                             | 8.3                  | 9.5                        | 9.4                       | 0.4  | 98                                     | K30  | 54                              | 7.6                                 |
| APR 17... | 1245 | 31                                      | 383                             | 8.3                  | 14.5                       | 8.2                       | 1.0  | 77                                     | 32   | 44                              | 6.1                                 |
| MAY 15... | 1400 | 29                                      | 361                             | 8.5                  | 24.0                       | 6.9                       | 1.0  | K320                                   | 120  | 42                              | 5.8                                 |
| JUN 19... | 1245 | 30                                      | 416                             | 8.4                  | 25.5                       | 6.2                       | 0.7  | K18                                    | 94   | 53                              | 6.8                                 |
| JUL 17... | 1300 | 17                                      | 483                             | 8.5                  | 28.0                       | 6.4                       | 0.7  | 720                                    | 210  | 61                              | 7.7                                 |
| AUG 14... | 1230 | 2.9                                     | 525                             | 8.7                  | 26.0                       | 6.3                       | 2.5  | K1700                                  | K2100  | 62                              | 8.2                                 |
| SEP 11... | 1145 | 20                                      | 527                             | 8.5                  | 21.0                       | 7.0                       | 0.6  | K2500                                  | 270  | 66                              | 8.2                                 |

| DATE      | ALKA-LINITY LAB (MG/L AS CACO3) | SULFATE DIS-SOLVED (MG/L AS SO4) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) | RESIDUE TOTAL AT 105 DEG. C, SUS-PENDE (MG/L) | NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) | NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) | NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) | NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) | PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P) |
|-----------|---------------------------------|----------------------------------|------------------------------------|-----------------------------------|---|---|---|---|---|--|
| OCT 25... | 116                             | 64                               | 27                                 | 1.0                               | 66  | 0.01                                      | 2.1                                       | <0.015                                    | 0.5   | 0.08                                       |
| NOV 29... | 125                             | 72                               | 23                                 | 1.1                               | 99  | <0.01                                     | 2.8                                       | <0.015                                    | 0.4   | 0.08                                       |
| JAN 17... | 119                             | 73                               | 24                                 | 1.0                               | 140   | <0.01                                     | 2.7                                       | 0.02                                      | 0.5   | 0.10                                       |
| FEB 21... | 112                             | 76                               | 26                                 | 0.9                               | 342   | 0.02                                      | 2.3                                       | <0.015                                    | 0.3   | 0.13                                       |
| MAR 20... | 107                             | 66                               | 24                                 | 1.1                               | 221   | <0.01                                     | 2.1                                       | 0.02                                      | 0.2   | 0.12                                       |
| APR 17... | 94                              | 52                               | 22                                 | 1.4                               | 82  | <0.01                                     | 1.4                                       | <0.015                                    | 0.4   | 0.14                                       |
| MAY 15... | 94                              | 50                               | 17                                 | 1.3                               | 118   | 0.01                                      | 1.3                                       | 0.02                                      | 0.6   | 0.15                                       |
| JUN 19... | 98                              | 60                               | 19                                 | 1.4                               | 159   | 0.01                                      | 1.7                                       | 0.02                                      | 0.5   | 0.11                                       |
| JUL 17... | 127                             | 75                               | 23                                 | 1.2                               | 83  | 0.02                                      | 2.1                                       | 0.03                                      | 0.3   | 0.14                                       |
| AUG 14... | 133                             | 86                               | 25                                 | 1.0                               | 1320  | 0.02                                      | 2.8                                       | 0.02                                      | 1.1   | 0.09                                       |
| SEP 11... | 137                             | 82                               | 24                                 | 1.0                               | 148   | 0.01                                      | 2.8                                       | <0.015                                    | 0.5   | 0.09                                       |

K-Based on non-ideal colony count.

07104000 MONUMENT CREEK AT PIKEVIEW, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DATE      | CADMIUM<br>TOTAL<br>RECOV-<br>ERABLE<br>(UG/L<br>AS CD) | CADMIUM<br>DIS-<br>SOLVED<br>(UG/L<br>AS CD) | CHRO-<br>MIUM,<br>TOTAL<br>RECOV-<br>ERABLE<br>(UG/L<br>AS CR) | CHRO-<br>MIUM,<br>DIS-<br>SOLVED<br>(UG/L<br>AS CR) | CHRO-<br>MIUM,<br>HEXA-<br>VALENT,<br>DIS.<br>(UG/L<br>AS CR) | COPPER,<br>TOTAL<br>RECOV-<br>ERABLE<br>(UG/L<br>AS CU) | COPPER,<br>DIS-<br>SOLVED<br>(UG/L<br>AS CU) | IRON,<br>TOTAL<br>RECOV-<br>ERABLE<br>(UG/L<br>AS FE) | IRON,<br>DIS-<br>SOLVED<br>(UG/L<br>AS FE) |
|-----------|---|--|--|---|---|---|--|---|--|
| OCT 25... | <1  | <1   | <1   | <1  | <1  | 2   | <1   | 2000  | 20   |
| NOV 29... | <1  | <1   | <1   | <1  | <1  | 3   | <1   | 1900  | 20   |
| JAN 17... | <1  | <1   | 1  | <1  | <1  | 3   | <1   | 2700  | <10  |
| FEB 21... | <1  | <1   | 1  | <1  | <1  | 6   | <1   | 4600  | <10  |
| MAR 20... | <1  | <1   | <1   | <1  | <1  | 4   | <1   | 2600  | <10  |
| APR 17... | <1  | <1   | <1   | <1  | 1   | 2   | 1  | 1100  | <10  |
| MAY 15... | <1  | <1   | <1   | <1  | <1  | 4   | <1   | 1600  | 10   |
| JUN 19... | <1  | <1   | <1   | <1  | <1  | 4   | 1  | 3400  | 4  |
| JUL 17... | <1  | <1   | <1   | <1  | <1  | 3   | <1   | 1200  | <3   |
| AUG 14... | <1  | <1   | 5  | <1  | <1  | 31  | 1  | 2300  | <10  |
| SEP 11... | <1  | <1   | 2  | <1  | <1  | 4   | 1  | 2500  | <10  |

| DATE      | LEAD,<br>TOTAL<br>RECOV-<br>ERABLE<br>(UG/L<br>AS PB) | LEAD,<br>DIS-<br>SOLVED<br>(UG/L<br>AS PB) | MANGA-<br>NESE,<br>TOTAL<br>RECOV-<br>ERABLE<br>(UG/L<br>AS MN) | MANGA-<br>NESE,<br>DIS-<br>SOLVED<br>(UG/L<br>AS MN) | NICKEL,<br>TOTAL<br>RECOV-<br>ERABLE<br>(UG/L<br>AS NI) | NICKEL,<br>DIS-<br>SOLVED<br>(UG/L<br>AS NI) | ZINC,<br>TOTAL<br>RECOV-<br>ERABLE<br>(UG/L<br>AS ZN) | ZINC,<br>DIS-<br>SOLVED<br>(UG/L<br>AS ZN) |
|-----------|---|--|---|--|---|--|---|--|
| OCT 25... | 2   | <1   | 100   | 40   | 2   | <1   | 10  | <10  |
| NOV 29... | 2   | <1   | 100   | 40   | 2   | <1   | 20  | <10  |
| JAN 17... | 3   | <1   | 120   | 50   | 2   | <1   | 40  | <10  |
| FEB 21... | 8   | <1   | 230   | 50   | 3   | 1  | 30  | <10  |
| MAR 20... | 5   | <1   | 140   | 40   | 3   | <1   | 20  | <10  |
| APR 17... | 2   | <1   | 80  | 30   | 2   | <1   | 20  | <3   |
| MAY 15... | 3   | <1   | 90  | 9  | 2   | <1   | 20  | <3   |
| JUN 19... | 4   | <1   | 80  | 8  | 2   | 1  | 20  | <3   |
| JUL 17... | 2   | <1   | 50  | 4  | 2   | 1  | <10   | <3   |
| AUG 14... | 43  | <1   | 260   | <10  | 11  | 1  | 90  | 4  |
| SEP 11... | 4   | <1   | 80  | <10  | 3   | 1  | <10   | <3   |

## ARKANSAS RIVER BASIN

## 07104000 MONUMENT CREEK AT PIKEVIEW, CO--Continued

## MISCELLANEOUS FIELD MEASUREMENTS, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DATE     | TIME | DIS-<br>CHARGE,<br>INST.<br>CUBIC<br>FEET<br>PER<br>SECOND | SPE-<br>CIFIC<br>CON-<br>DUCT-<br>ANCE<br>(US/CM) | TEMPER-<br>ATURE<br>WATER<br>(DEG C) | DATE     | TIME | DIS-<br>CHARGE,<br>INST.<br>CUBIC<br>FEET<br>PER<br>SECOND | SPE-<br>CIFIC<br>CON-<br>DUCT-<br>ANCE<br>(US/CM) | TEMPER-<br>ATURE<br>WATER<br>(DEG C) |
|----------|------|--|---|--------------------------------------|----------|------|--|---|--------------------------------------|
| JAN 1995 |      |  |   |                                      | JAN 1996 |      |  |   |                                      |
| 09...    | 1550 | 20   | 445   | 0.5                                  | 22...    | 1245 | 22   | 548   | 0.0                                  |
| FEB      |      |  |   |                                      | FEB      |      |  |   |                                      |
| 24...    | 1310 | 15   | 493   | 11.5                                 | 13...    | 1510 | 26   | 494   | 6.0                                  |
| MAR      |      |  |   |                                      | MAR      |      |  |   |                                      |
| 29...    | 1445 | 21   | 653   | 4.5                                  | 12...    | 1055 | 20   | 483   | 9.5                                  |
| APR      |      |  |   |                                      | MAY      |      |  |   |                                      |
| 27...    | 1230 | 49   | 400   | 9.5                                  | 21...    | 1340 | 20   | 411   | 21.5                                 |
| MAY      |      |  |   |                                      | 28...    | 1100 | 54   | 343   | 9.0                                  |
| 08...    | 1420 | 128  | 245   | 12.0                                 | JUN      |      |  |   |                                      |
| JUL      |      |  |   |                                      | 13...    | 1110 | 33   | 358   | 18.5                                 |
| 06...    | 1445 | 109  | 211   | 23.0                                 | 14...    | 1530 | 34   | 341   | 20.0                                 |
| 25...    | 1410 | 60   | 374   | 22.5                                 | 27...    | 1225 | 17   | 456   | 20.0                                 |
| AUG      |      |  |   |                                      | JUL      |      |  |   |                                      |
| 29...    | 1310 | 30   | 459   | 25.0                                 | 22...    | 1400 | 16   | 487   | 28.5                                 |
| OCT      |      |  |   |                                      | AUG      |      |  |   |                                      |
| 06...    | 1045 | 28   | 464   | 7.0                                  | 02...    | 1230 | 26   | 430   | 26.0                                 |
| NOV      |      |  |   |                                      | 22...    | 1425 | 18   | 515   | 20.5                                 |
| 07...    | 1425 | 23   | 496   | 8.5                                  | SEP      |      |  |   |                                      |
| DEC      |      |  |   |                                      | 20...    | 1415 | 19   | 459   | 13.0                                 |
| 12...    | 1155 | 23   | 500   | 5.0                                  |          |      |  |   |                                      |

## SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DATE  | TIME | DIS-<br>CHARGE,<br>INST.<br>CUBIC<br>FEET<br>PER<br>SECOND | SEDI-<br>MENT,<br>DIS-<br>CHARGE,<br>SUS-<br>PENDEDED<br>(MG/L) | SEDI-<br>MENT,<br>DIS-<br>CHARGE,<br>SUS-<br>PENDEDED<br>(T/DAY) |
|-------|------|--|---|--|
| OCT   |      |  |   |  |
| 26... | 1315 | 27   | 63  | 4.6  |
| APR   |      |  |   |  |
| 24... | 1515 | 26   | 140   | 9.8  |
| MAY   |      |  |   |  |
| 28... | 1140 | 55   | 341   | 51   |
| JUN   |      |  |   |  |
| 14... | 1435 | 39   | 306   | 32   |
| AUG   |      |  |   |  |
| 15... | 1700 | 43   | 976   | 113  |

## SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

| DATE  | TIME | DIS-<br>CHARGE,<br>INST.<br>CUBIC<br>FEET<br>PER<br>SECOND | SEDI-<br>MENT,<br>DIS-<br>CHARGE,<br>SUS-<br>PENDEDED<br>(MG/L) | SEDI-<br>MENT,<br>DIS-<br>CHARGE,<br>SUS-<br>PENDEDED<br>(T/DAY) |
|-------|------|--|---|--|
| OCT   |      |  |   |  |
| 03... | 1540 | 48   | 48  | 6.2  |
| 04... | 0930 | 323  | 3770  | 3290   |
| 04... | 1030 | 300  | 2270  | 1840   |
| 04... | 1035 | 280  | 2570  | 1940   |
| 13... | 1105 | 205  | 59  | 33   |
| DEC   |      |  |   |  |
| 01... | 0920 | 8.0  | 1560  | 34   |
| 29... | 0850 | 100  | 77  | 21   |
| JAN   |      |  |   |  |
| 19... | 1015 | 5.1  | 89  | 1.2  |
| FEB   |      |  |   |  |
| 23... | 0910 | 16   | 95  | 4.1  |
| MAR   |      |  |   |  |
| 23... | 0915 | 20   | 96  | 5.2  |
| APR   |      |  |   |  |
| 20... | 0900 | 47   | 256   | 32   |
| JUN   |      |  |   |  |
| 22... | 0945 | 60   | 245   | 40   |
| JUL   |      |  |   |  |
| 27... | 1015 | 57   | 110   | 17   |
| AUG   |      |  |   |  |
| 17... | 1145 | 27   | 65  | 4.7  |
| SEP   |      |  |   |  |
| 28... | 1025 | 24   | 48  | 3.1  |

07104000 MONUMENT CREEK AT PIKEVIEW, CO--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DAY   | MEAN DISCHARGE (CFS) | MEAN CONCENTRATION (MG/L) | SEDIMENT DISCHARGE (TONS/DAY) | OCTOBER              |                           |                               | NOVEMBER             |                           |                               | DECEMBER             |                           |                               |
|-------|----------------------|---------------------------|-------------------------------|----------------------|---------------------------|-------------------------------|----------------------|---------------------------|-------------------------------|----------------------|---------------------------|-------------------------------|
|       |                      |                           |                               | MEAN DISCHARGE (CFS) | MEAN CONCENTRATION (MG/L) | SEDIMENT DISCHARGE (TONS/DAY) | MEAN DISCHARGE (CFS) | MEAN CONCENTRATION (MG/L) | SEDIMENT DISCHARGE (TONS/DAY) | MEAN DISCHARGE (CFS) | MEAN CONCENTRATION (MG/L) | SEDIMENT DISCHARGE (TONS/DAY) |
| 1     | 25                   | ---                       | ---                           | 27                   | ---                       | ---                           | 24                   | ---                       | ---                           |                      |                           |                               |
| 2     | 25                   | ---                       | ---                           | 26                   | ---                       | ---                           | 21                   | ---                       | ---                           |                      |                           |                               |
| 3     | 30                   | ---                       | ---                           | 23                   | ---                       | ---                           | 19                   | ---                       | ---                           |                      |                           |                               |
| 4     | 35                   | ---                       | ---                           | 29                   | ---                       | ---                           | e19                  | ---                       | ---                           |                      |                           |                               |
| 5     | 33                   | ---                       | ---                           | 35                   | ---                       | ---                           | e19                  | ---                       | ---                           |                      |                           |                               |
| 6     | 28                   | ---                       | ---                           | 37                   | ---                       | ---                           | e19                  | ---                       | ---                           |                      |                           |                               |
| 7     | 27                   | ---                       | ---                           | 23                   | ---                       | ---                           | e18                  | ---                       | ---                           |                      |                           |                               |
| 8     | 21                   | ---                       | ---                           | 24                   | ---                       | ---                           | e18                  | ---                       | ---                           |                      |                           |                               |
| 9     | 17                   | ---                       | ---                           | 28                   | ---                       | ---                           | e17                  | ---                       | ---                           |                      |                           |                               |
| 10    | 20                   | ---                       | ---                           | 26                   | ---                       | ---                           | 16                   | ---                       | ---                           |                      |                           |                               |
| 11    | 18                   | ---                       | ---                           | 27                   | ---                       | ---                           | 21                   | ---                       | ---                           |                      |                           |                               |
| 12    | 19                   | ---                       | ---                           | 24                   | ---                       | ---                           | 23                   | ---                       | ---                           |                      |                           |                               |
| 13    | 23                   | ---                       | ---                           | 22                   | ---                       | ---                           | 28                   | ---                       | ---                           |                      |                           |                               |
| 14    | 22                   | ---                       | ---                           | 26                   | ---                       | ---                           | 32                   | ---                       | ---                           |                      |                           |                               |
| 15    | 20                   | ---                       | ---                           | 26                   | ---                       | ---                           | 34                   | ---                       | ---                           |                      |                           |                               |
| 16    | 20                   | ---                       | ---                           | 28                   | ---                       | ---                           | 39                   | ---                       | ---                           |                      |                           |                               |
| 17    | 22                   | ---                       | ---                           | 30                   | ---                       | ---                           | 34                   | ---                       | ---                           |                      |                           |                               |
| 18    | 22                   | ---                       | ---                           | 29                   | ---                       | ---                           | 34                   | ---                       | ---                           |                      |                           |                               |
| 19    | 22                   | ---                       | ---                           | 26                   | ---                       | ---                           | 31                   | ---                       | ---                           |                      |                           |                               |
| 20    | 20                   | ---                       | ---                           | 29                   | ---                       | ---                           | 31                   | ---                       | ---                           |                      |                           |                               |
| 21    | 25                   | ---                       | ---                           | 28                   | ---                       | ---                           | 36                   | ---                       | ---                           |                      |                           |                               |
| 22    | 31                   | ---                       | ---                           | 32                   | ---                       | ---                           | 40                   | ---                       | ---                           |                      |                           |                               |
| 23    | 35                   | ---                       | ---                           | 32                   | ---                       | ---                           | 33                   | ---                       | ---                           |                      |                           |                               |
| 24    | 33                   | ---                       | ---                           | 35                   | ---                       | ---                           | 40                   | ---                       | ---                           |                      |                           |                               |
| 25    | 34                   | ---                       | ---                           | 36                   | ---                       | ---                           | 39                   | ---                       | ---                           |                      |                           |                               |
| 26    | 29                   | ---                       | ---                           | 32                   | ---                       | ---                           | 37                   | ---                       | ---                           |                      |                           |                               |
| 27    | 27                   | ---                       | ---                           | 32                   | ---                       | ---                           | 37                   | ---                       | ---                           |                      |                           |                               |
| 28    | 24                   | ---                       | ---                           | 29                   | ---                       | ---                           | 44                   | ---                       | ---                           |                      |                           |                               |
| 29    | 22                   | ---                       | ---                           | 24                   | ---                       | ---                           | 46                   | ---                       | ---                           |                      |                           |                               |
| 30    | 22                   | ---                       | ---                           | 25                   | ---                       | ---                           | e45                  | ---                       | ---                           |                      |                           |                               |
| 31    | 26                   | ---                       | ---                           | ---                  | ---                       | ---                           | 43                   | ---                       | ---                           |                      |                           |                               |
| TOTAL | 777                  | ---                       | ---                           | 850                  | ---                       | ---                           | 937                  | ---                       | ---                           |                      |                           |                               |
|       |                      |                           |                               | JANUARY              |                           |                               | FEBRUARY             |                           |                               | MARCH                |                           |                               |
| 1     | 29                   | ---                       | ---                           | e19                  | ---                       | ---                           | e14                  | ---                       | ---                           |                      |                           |                               |
| 2     | e28                  | ---                       | ---                           | e16                  | ---                       | ---                           | e13                  | ---                       | ---                           |                      |                           |                               |
| 3     | e30                  | ---                       | ---                           | e14                  | ---                       | ---                           | e14                  | ---                       | ---                           |                      |                           |                               |
| 4     | e28                  | ---                       | ---                           | e15                  | ---                       | ---                           | e17                  | ---                       | ---                           |                      |                           |                               |
| 5     | e25                  | ---                       | ---                           | e16                  | ---                       | ---                           | 20                   | ---                       | ---                           |                      |                           |                               |
| 6     | e23                  | ---                       | ---                           | e18                  | ---                       | ---                           | 21                   | ---                       | ---                           |                      |                           |                               |
| 7     | e25                  | ---                       | ---                           | e20                  | ---                       | ---                           | 24                   | ---                       | ---                           |                      |                           |                               |
| 8     | e27                  | ---                       | ---                           | 22                   | ---                       | ---                           | 27                   | ---                       | ---                           |                      |                           |                               |
| 9     | e28                  | ---                       | ---                           | 18                   | ---                       | ---                           | 24                   | ---                       | ---                           |                      |                           |                               |
| 10    | e29                  | ---                       | ---                           | 15                   | ---                       | ---                           | 28                   | ---                       | ---                           |                      |                           |                               |
| 11    | 31                   | ---                       | ---                           | 16                   | ---                       | ---                           | 24                   | ---                       | ---                           |                      |                           |                               |
| 12    | 22                   | ---                       | ---                           | 19                   | ---                       | ---                           | 20                   | ---                       | ---                           |                      |                           |                               |
| 13    | 20                   | ---                       | ---                           | 17                   | ---                       | ---                           | 17                   | ---                       | ---                           |                      |                           |                               |
| 14    | 18                   | ---                       | ---                           | 19                   | ---                       | ---                           | 26                   | ---                       | ---                           |                      |                           |                               |
| 15    | 19                   | ---                       | ---                           | 16                   | ---                       | ---                           | 23                   | ---                       | ---                           |                      |                           |                               |
| 16    | 24                   | ---                       | ---                           | 16                   | ---                       | ---                           | 24                   | ---                       | ---                           |                      |                           |                               |
| 17    | 25                   | ---                       | ---                           | 17                   | ---                       | ---                           | 26                   | ---                       | ---                           |                      |                           |                               |
| 18    | e24                  | ---                       | ---                           | 17                   | ---                       | ---                           | 24                   | ---                       | ---                           |                      |                           |                               |
| 19    | e22                  | ---                       | ---                           | 18                   | ---                       | ---                           | 27                   | ---                       | ---                           |                      |                           |                               |
| 20    | e19                  | ---                       | ---                           | 16                   | ---                       | ---                           | 29                   | ---                       | ---                           |                      |                           |                               |
| 21    | e21                  | ---                       | ---                           | 16                   | ---                       | ---                           | 31                   | ---                       | ---                           |                      |                           |                               |
| 22    | e23                  | ---                       | ---                           | 17                   | ---                       | ---                           | 26                   | ---                       | ---                           |                      |                           |                               |
| 23    | e24                  | ---                       | ---                           | 16                   | ---                       | ---                           | 22                   | ---                       | ---                           |                      |                           |                               |
| 24    | e22                  | ---                       | ---                           | e16                  | ---                       | ---                           | 23                   | ---                       | ---                           |                      |                           |                               |
| 25    | e21                  | ---                       | ---                           | e16                  | ---                       | ---                           | 21                   | ---                       | ---                           |                      |                           |                               |
| 26    | e19                  | ---                       | ---                           | e15                  | ---                       | ---                           | 25                   | ---                       | ---                           |                      |                           |                               |
| 27    | e18                  | ---                       | ---                           | 15                   | ---                       | ---                           | 22                   | ---                       | ---                           |                      |                           |                               |
| 28    | e18                  | ---                       | ---                           | 16                   | ---                       | ---                           | 21                   | ---                       | ---                           |                      |                           |                               |
| 29    | e21                  | ---                       | ---                           | e14                  | ---                       | ---                           | 21                   | ---                       | ---                           |                      |                           |                               |
| 30    | e23                  | ---                       | ---                           | ---                  | ---                       | ---                           | 18                   | ---                       | ---                           |                      |                           |                               |
| 31    | e21                  | ---                       | ---                           | ---                  | ---                       | ---                           | 17                   | ---                       | ---                           |                      |                           |                               |
| TOTAL | 727                  | ---                       | ---                           | 485                  | ---                       | ---                           | 689                  | ---                       | ---                           |                      |                           |                               |

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 NW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec.18, T.14 S., R.66 W., El Paso County, Hydrologic Unit 11020003 at bridge on Bijou Street in Colorado Springs.

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DATE      | TIME | DIS-CHARGE, INST. CUBIC FEET PER SECOND | SPE-CIFIC CON-DUCT-ANCE (US/CM) | PH (STAND-ARD UNITS) | TEMPER-ATURE WATER (DEG C) | OXYGEN, DIS-SOLVED (MG/L) | OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) | COLI-FORM, FECAL, UM-MF (COLS./100 ML) | STREP-TOCOCCI, FECAL, KF AGAR (COLS. PER 100 ML) | CALCIUM DIS-SOLVED (MG/L AS CA) | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) |
|-----------|------|---|---------------------------------|----------------------|----------------------------|---------------------------|--|--|--|---------------------------------|-------------------------------------|
| OCT 26... | 0910 | 30                                      | 745                             | 8.2                  | 3.5                        | 10.6                      | 0.8  | 260                                    | 260  | 91                              | 16                                  |
| NOV 30... | 0815 | 24                                      | 760                             | 8.2                  | 2.5                        | 10.5                      | 0.4  | --                                     | 120  | 93                              | 17                                  |
| JAN 17... | 1515 | 25                                      | 734                             | 8.3                  | 0.0                        | 11.7                      | 1.3  | K77                                    | 120  | 88                              | 17                                  |
| FEB 22... | 0915 | 46                                      | 701                             | 8.4                  | 5.0                        | 10.0                      | 0.7  | 220                                    | 260  | 90                              | 15                                  |
| MAR 20... | 1430 | 27                                      | 668                             | 8.5                  | 12.5                       | 8.5                       | 0.4  | K24                                    | K38  | 78                              | 14                                  |
| APR 17... | 1430 | 30                                      | 574                             | 8.5                  | 18.5                       | 7.2                       | 1.0  | 77                                     | K38  | 66                              | 12                                  |
| MAY 16... | 0900 | 26                                      | 683                             | 8.5                  | 15.0                       | 7.8                       | 0.8  | 96                                     | 330  | 79                              | 15                                  |
| JUN 19... | 1500 | 15                                      | 615                             | 8.5                  | 29.0                       | 5.8                       | 0.9  | K280                                   | 240  | 76                              | 13                                  |
| JUL 17... | 1445 | 12                                      | 738                             | 8.6                  | 29.0                       | 6.1                       | 0.6  | 300                                    | 210  | 89                              | 17                                  |
| AUG 14... | 1330 | 12                                      | 788                             | 8.6                  | 26.0                       | 6.5                       | 2.1  | 260                                    | K110   | 85                              | 18                                  |
| SEP 11... | 1415 | 15                                      | 742                             | 8.6                  | 26.0                       | 7.0                       | 0.5  | 1300                                   | 240  | 87                              | 16                                  |

| DATE      | ALKA-LINITY LAB (MG/L AS CACO3) | SULFATE DIS-SOLVED (MG/L AS SO4) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) | RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) | NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) | NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) | NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) | NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) | PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) |
|-----------|---------------------------------|----------------------------------|------------------------------------|-----------------------------------|--|---|---|---|---|---|
| OCT 26... | 161                             | 160                              | 29                                 | 1.3                               | 80   | 0.02                                      | 3.9                                       | <0.015                                    | 0.5   | 0.05                                      |
| NOV 30... | 161                             | 160                              | 27                                 | 1.2                               | 70   | <0.01                                     | 4.1                                       | <0.015                                    | 0.4   | 0.06                                      |
| JAN 17... | 153                             | 160                              | 28                                 | 1.3                               | 318  | 0.01                                      | 4.4                                       | 0.02                                      | 0.7   | 0.09                                      |
| FEB 22... | 152                             | 160                              | 29                                 | 1.2                               | --   | 0.03                                      | 3.9                                       | <0.015                                    | 0.2   | 0.10                                      |
| MAR 20... | 137                             | 140                              | 28                                 | 1.3                               | 244  | 0.01                                      | 3.4                                       | <0.015                                    | 0.6   | 0.11                                      |
| APR 17... | 121                             | 120                              | 26                                 | 1.4                               | 168  | <0.01                                     | 2.5                                       | <0.015                                    | 0.6   | 0.11                                      |
| MAY 16... | 145                             | 160                              | 24                                 | 1.3                               | 114  | 0.02                                      | 2.6                                       | <0.015                                    | 0.6   | 0.12                                      |
| JUN 19... | 132                             | 130                              | 22                                 | 1.5                               | 330  | 0.01                                      | 2.7                                       | 0.03                                      | 0.7   | 0.11                                      |
| JUL 17... | 159                             | 180                              | 27                                 | 1.5                               | 39   | 0.02                                      | 3.3                                       | 0.03                                      | <0.2  | 0.09                                      |
| AUG 14... | 148                             | 200                              | 29                                 | 1.3                               | 43   | 0.03                                      | 4.0                                       | <0.015                                    | 0.6   | 0.04                                      |
| SEP 11... | 157                             | 170                              | 26                                 | 1.2                               | 79   | 0.02                                      | 4.0                                       | <0.015                                    | 0.4   | 0.05                                      |

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 1995 TO SEPTEMBER 1996

| DATE         | CADMIUM<br>TOTAL<br>RECOV-<br>ERABLE<br>(UG/L<br>AS CD) | CADMIUM<br>DIS-<br>SOLVED<br>(UG/L<br>AS CD) | CHRO-<br>MIUM,<br>TOTAL<br>RECOV-<br>ERABLE<br>(UG/L<br>AS CR) | CHRO-<br>MIUM,<br>DIS-<br>SOLVED<br>(UG/L<br>AS CR) | CHRO-<br>MIUM,<br>HEXA-<br>VALENT,<br>DIS.<br>(UG/L<br>AS CR) | COPPER,<br>TOTAL<br>RECOV-<br>ERABLE<br>(UG/L<br>AS CU) | COPPER,<br>DIS-<br>SOLVED<br>(UG/L<br>AS CU) | IRON,<br>TOTAL<br>RECOV-<br>ERABLE<br>(UG/L<br>AS FE) | IRON,<br>DIS-<br>SOLVED<br>(UG/L<br>AS FE) |
|--------------|---|--|--|---|---|---|--|---|--|
| OCT<br>26... | <1  | <1   | <1   | <1  | <1  | 3   | 1  | 2200  | <10  |
| NOV<br>30... | <1  | <1   | 1  | <1  | <1  | 3   | 1  | 1800  | <10  |
| JAN<br>17... | <1  | <1   | 4  | 1   | <1  | 7   | <1   | 5900  | <10  |
| FEB<br>22... | <1  | <1   | 2  | <1  | <1  | 5   | 1  | 3700  | <10  |
| MAR<br>20... | <1  | <1   | 2  | <1  | <1  | 6   | <1   | 3400  | <10  |
| APR<br>17... | <1  | <1   | 2  | <1  | <1  | 4   | 1  | 2700  | <10  |
| MAY<br>16... | <1  | <1   | 2  | <1  | <1  | 4   | 1  | 2300  | <3   |
| JUN<br>19... | <1  | <1   | 3  | <1  | <1  | 7   | <1   | 6000  | <3   |
| JUL<br>17... | <1  | <1   | <1   | 1   | <1  | 3   | 1  | 710   | <3   |
| AUG<br>14... | <1  | <1   | 1  | <1  | <1  | 3   | 2  | 11000   | <10  |
| SEP<br>11... | <1  | <1   | 2  | <1  | <1  | 3   | 1  | 1800  | <10  |

| DATE         | LEAD,<br>TOTAL<br>RECOV-<br>ERABLE<br>(UG/L<br>AS PB) | LEAD,<br>DIS-<br>SOLVED<br>(UG/L<br>AS PB) | MANGA-<br>NESE,<br>TOTAL<br>RECOV-<br>ERABLE<br>(UG/L<br>AS MN) | MANGA-<br>NESE,<br>DIS-<br>SOLVED<br>(UG/L<br>AS MN) | NICKEL,<br>TOTAL<br>RECOV-<br>ERABLE<br>(UG/L<br>AS NI) | NICKEL,<br>DIS-<br>SOLVED<br>(UG/L<br>AS NI) | ZINC,<br>TOTAL<br>RECOV-<br>ERABLE<br>(UG/L<br>AS ZN) | ZINC,<br>DIS-<br>SOLVED<br>(UG/L<br>AS ZN) |
|--------------|---|--|---|--|---|--|---|--|
| OCT<br>26... | 2   | <1   | 80  | <10  | 3   | <1   | 10  | <10  |
| NOV<br>30... | 3   | <1   | 80  | <10  | 3   | 1  | 10  | <10  |
| JAN<br>17... | 8   | <1   | 180   | 10   | 5   | <1   | 60  | <10  |
| FEB<br>22... | 5   | <1   | 120   | 10   | 4   | 2  | 30  | <10  |
| MAR<br>20... | 5   | <1   | 130   | <10  | 4   | 1  | 20  | <10  |
| APR<br>17... | 4   | <1   | 100   | <10  | 3   | <1   | 20  | <3   |
| MAY<br>16... | 3   | <1   | 90  | 4  | 3   | 1  | 20  | <3   |
| JUN<br>19... | 8   | <1   | 150   | 4  | 4   | 1  | 30  | <3   |
| JUL<br>17... | <1  | <1   | 30  | 4  | 1   | 1  | <10   | <3   |
| AUG<br>14... | 1   | <1   | 20  | <10  | 2   | 1  | <10   | <3   |
| SEP<br>11... | 2   | <1   | 40  | <10  | 2   | <1   | <10   | 5  |

**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, 0.6 mi southwest of Bear Creek Nature Center, and 3.4 mi upstream from mouth.

DRAINAGE AREA.--6.89 mi<sup>2</sup>.

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

GAGE.--Water-stage recorder. Elevation of gage is 6,520 ft above sea level, from topographic map.

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

| DAY   | OCT  | NOV  | DEC  | JAN  | FEB  | MAR  | APR  | MAY  | JUN   | JUL   | AUG  | SEP  |
|-------|------|------|------|------|------|------|------|------|-------|-------|------|------|
| 1     | 2.8  | 2.3  | 2.3  | e1.9 | e1.7 | e1.7 | 1.8  | 1.3  | 1.9   | 1.2   | 2.1  | 2.3  |
| 2     | 2.8  | 2.3  | 2.3  | e1.9 | e1.7 | e1.8 | 1.9  | 1.2  | 1.8   | 1.0   | 1.9  | 2.1  |
| 3     | 2.8  | 2.4  | 2.2  | e1.9 | e1.7 | e1.8 | 1.9  | 1.2  | 1.7   | .87   | 1.7  | 1.9  |
| 4     | 2.8  | 2.5  | 2.2  | e1.8 | e1.7 | e1.8 | 1.9  | 1.3  | 1.6   | .81   | 1.5  | 1.9  |
| 5     | 2.8  | 2.4  | 2.2  | e1.7 | e1.8 | e1.8 | 1.8  | 1.3  | 1.6   | .81   | 1.5  | 1.9  |
| 6     | 2.8  | 2.3  | 2.2  | e1.7 | e1.8 | e1.8 | 1.9  | 1.3  | 1.6   | .80   | 1.4  | 2.0  |
| 7     | 2.8  | 2.4  | 2.2  | e1.7 | e1.8 | e1.8 | 2.0  | 1.6  | 1.5   | .88   | 1.3  | 2.1  |
| 8     | 2.7  | 2.5  | 2.1  | e1.7 | e1.8 | e1.9 | 2.0  | 1.7  | 1.5   | 1.1   | 1.6  | 1.9  |
| 9     | 2.7  | 2.5  | 1.9  | e1.7 | e1.8 | e1.9 | 2.0  | 1.5  | 1.4   | 2.7   | 1.7  | 1.7  |
| 10    | 2.6  | 2.6  | e1.9 | e1.8 | e1.8 | e2.2 | 2.0  | 1.6  | 1.4   | 5.5   | 1.5  | 1.6  |
| 11    | 2.7  | 2.6  | e2.0 | e1.8 | e1.9 | e2.0 | 2.0  | 1.5  | 1.5   | 3.6   | 1.3  | 2.2  |
| 12    | 2.7  | 2.6  | e2.0 | e1.9 | e1.8 | e1.8 | 1.9  | 1.4  | 1.4   | 3.2   | 1.3  | 3.8  |
| 13    | 2.7  | 2.5  | e2.0 | e1.9 | e1.8 | e1.7 | 1.8  | 1.4  | 1.4   | 3.2   | 1.1  | 2.9  |
| 14    | 2.7  | 2.4  | e2.0 | e1.9 | e1.8 | e1.8 | 1.8  | 1.3  | 1.4   | 3.0   | 1.1  | 2.7  |
| 15    | 2.6  | 2.4  | e1.9 | e1.9 | e1.8 | e1.8 | 1.8  | 1.3  | 1.6   | 2.8   | 1.2  | 2.4  |
| 16    | 2.5  | 2.4  | e1.9 | e1.9 | e1.9 | 1.8  | 1.9  | 1.2  | 1.5   | 2.7   | 1.1  | 2.1  |
| 17    | 2.5  | 2.3  | e1.9 | e1.8 | e1.8 | 1.8  | 1.9  | 1.2  | 1.4   | 2.0   | 1.2  | 2.2  |
| 18    | 2.5  | 2.3  | e1.9 | e1.7 | e1.8 | 1.7  | 1.9  | 1.3  | 1.3   | 1.9   | 1.2  | 2.4  |
| 19    | 2.6  | 2.3  | e1.9 | e1.7 | e1.8 | 1.9  | 1.8  | 1.2  | 1.3   | 2.2   | 1.2  | 2.1  |
| 20    | 2.5  | 2.3  | e1.8 | e1.8 | e1.9 | 2.0  | 1.8  | 1.3  | 1.3   | 1.8   | 1.4  | 2.1  |
| 21    | 2.4  | 2.3  | e1.8 | e1.8 | e1.9 | 1.8  | 1.8  | 1.3  | 1.2   | 1.8   | 1.4  | 2.1  |
| 22    | 2.5  | 2.3  | e1.7 | e1.7 | e1.9 | 1.8  | 1.8  | 1.3  | 1.3   | 1.5   | 1.3  | 2.0  |
| 23    | 2.5  | 2.3  | e1.7 | e1.7 | e1.9 | 1.9  | 1.8  | 1.3  | 1.3   | 1.3   | 1.8  | 2.6  |
| 24    | 2.4  | 2.3  | e1.7 | e1.7 | e1.8 | 1.9  | 1.8  | 1.3  | 1.2   | 1.3   | 2.4  | 3.1  |
| 25    | 2.3  | 2.3  | e1.7 | e1.7 | e1.7 | 1.9  | 1.8  | 2.8  | 1.1   | 1.3   | 1.9  | 2.9  |
| 26    | 2.3  | 2.3  | e1.7 | e1.6 | e1.7 | 1.9  | 1.7  | 4.0  | 1.1   | 1.5   | 1.7  | 3.0  |
| 27    | 2.4  | 2.3  | e1.7 | e1.6 | e1.7 | 1.8  | 1.8  | 3.1  | 1.1   | 1.6   | 2.0  | 3.3  |
| 28    | 2.3  | 2.3  | e1.8 | e1.6 | e1.7 | 1.7  | 1.8  | 2.5  | 1.0   | 1.4   | 1.9  | 3.2  |
| 29    | 2.3  | 2.3  | e1.8 | e1.7 | e1.7 | 1.9  | 1.6  | 2.3  | .97   | 1.5   | 3.1  | 3.1  |
| 30    | 2.3  | 2.3  | e1.8 | e1.7 | ---  | 1.8  | 1.3  | 2.1  | 1.2   | 1.4   | 3.6  | 3.1  |
| 31    | 2.3  | ---  | e1.9 | e1.7 | ---  | 1.8  | ---  | 2.0  | ---   | 1.7   | 2.4  | ---  |
| TOTAL | 79.6 | 71.3 | 60.1 | 54.6 | 51.9 | 57.0 | 55.0 | 51.1 | 41.57 | 58.37 | 51.8 | 72.7 |
| MEAN  | 2.57 | 2.38 | 1.94 | 1.76 | 1.79 | 1.84 | 1.83 | 1.65 | 1.39  | 1.88  | 1.67 | 2.42 |
| MAX   | 2.8  | 2.6  | 2.3  | 1.9  | 1.9  | 2.2  | 2.0  | 4.0  | 1.9   | 5.5   | 3.6  | 3.8  |
| MIN   | 2.3  | 2.3  | 1.7  | 1.6  | 1.7  | 1.7  | 1.3  | 1.2  | .97   | .80   | 1.1  | 1.6  |
| AC-FT | 158  | 141  | 119  | 108  | 103  | 113  | 109  | 101  | 82    | 116   | 103  | 144  |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 1996, BY WATER YEAR (WY)

|      | 1992 | 1993 | 1994 | 1995 | 1996 | 1995 | 1996 | 1995 | 1996 | 1995 | 1996 | 1995 | 1996 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 1.59 | 1.32 | 1.20 | 1.13 | 1.13 | 1.26 | 1.83 | 8.57 | 4.59 | 2.77 | 2.05 | 1.78 |      |
| MAX  | 2.76 | 2.38 | 1.94 | 1.76 | 1.79 | 1.84 | 3.01 | 18.9 | 14.9 | 7.55 | 4.00 | 3.05 |      |
| (WY) | 1995 | 1996 | 1996 | 1996 | 1996 | 1995 | 1994 | 1995 | 1995 | 1995 | 1995 | 1994 |      |
| 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 1995 CALENDAR YEAR

FOR 1996 WATER YEAR

WATER YEARS 1992 - 1996

|                          |                     |        |      |             |
|--------------------------|---------------------|--------|------|-------------|
| ANNUAL TOTAL             | 1890.04             | 705.04 |      |             |
| ANNUAL MEAN              | 5.18                | 1.93   |      |             |
| HIGHEST ANNUAL MEAN      |                     |        | 2.60 | 1995        |
| LOWEST ANNUAL MEAN       |                     |        | .41  | 1993        |
| HIGHEST DAILY MEAN       |                     |        | 36   | May 18 1995 |
| LOWEST DAILY MEAN        | 36 <sup>a</sup> .97 | May 18 | .80  | Jul 6 1992  |
| ANNUAL SEVEN-DAY MINIMUM | 1.3                 | Apr 17 | .90  | Jul 2 1992  |
| INSTANTANEOUS PEAK FLOW  |                     |        | 14   | Aug 29 1995 |
| INSTANTANEOUS PEAK STAGE |                     |        | 1.50 | Aug 29 1995 |
| ANNUAL RUNOFF (AC-FT)    | 3750                | 1400   | 1890 |             |
| 10 PERCENT EXCEEDS       | 11                  | 2.6    | 4.4  |             |
| 50 PERCENT EXCEEDS       | 2.5                 | 1.8    | 1.5  |             |
| 90 PERCENT EXCEEDS       | 1.4                 | 1.3    | .24  |             |

e-Estimated.

a-Also occurred Apr 19.

**07105490 CHEYENNE CREEK AT EVANS AVENUE AT COLORADO SPRINGS, CO**

LOCATION.--Lat 38°47'26", Long 104°51'49", SW¼NW¼ 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 mi<sup>2</sup>.

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

REVISED RECORDS.--WDR CO-93-1: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 6,280 ft above sea level, from topographic map.

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 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

| DAY   | OCT   | NOV   | DEC   | JAN   | FEB   | MAR   | APR  | MAY  | JUN  | JUL    | AUG   | SEP   |
|-------|-------|-------|-------|-------|-------|-------|------|------|------|--------|-------|-------|
| 1     | 6.3   | 4.6   | 4.4   | 4.5   | e3.0  | 3.5   | 2.9  | 1.9  | 5.7  | 3.8    | 10    | 12    |
| 2     | 6.2   | 4.3   | 4.1   | 4.4   | e3.0  | 3.4   | 2.5  | 2.1  | 5.1  | 1.8    | 9.6   | 10    |
| 3     | 7.8   | 4.1   | 4.0   | 4.6   | e3.0  | 3.3   | 2.9  | 2.1  | 3.1  | 1.6    | 8.1   | 9.0   |
| 4     | 8.2   | 4.8   | 4.0   | 4.5   | e3.2  | 3.5   | 2.6  | 2.1  | 1.9  | 1.2    | 6.5   | 8.4   |
| 5     | 6.2   | 5.1   | 4.0   | 4.5   | e3.5  | 3.4   | 2.9  | 2.1  | 1.4  | .93    | 5.6   | 8.0   |
| 6     | 4.9   | 4.9   | 4.2   | 4.5   | e3.7  | 3.1   | 3.1  | 1.9  | 1.4  | .94    | 4.6   | 9.0   |
| 7     | 5.6   | 4.9   | 4.7   | 4.5   | e3.7  | 3.4   | 3.1  | 1.6  | 1.8  | .86    | 4.3   | 9.5   |
| 8     | 5.6   | 4.9   | 4.0   | 3.9   | e3.7  | 3.4   | 3.7  | 1.6  | 2.1  | .97    | 4.6   | 7.7   |
| 9     | 4.9   | 4.9   | 2.6   | 4.5   | e3.7  | 3.5   | 3.8  | 1.7  | 3.3  | e1.7   | 5.6   | 6.5   |
| 10    | 5.1   | 5.2   | 5.6   | 4.6   | e3.8  | 3.5   | 3.8  | 2.1  | 5.6  | e2.8   | 6.5   | 6.5   |
| 11    | 4.8   | 4.8   | 4.3   | 4.5   | e3.8  | 3.7   | 4.0  | 1.9  | e4.5 | e6.4   | 5.4   | 6.4   |
| 12    | 4.6   | 4.7   | 3.7   | 7.4   | e3.7  | 3.7   | 4.3  | 2.1  | 2.3  | e5.6   | 4.7   | 12    |
| 13    | 4.7   | 4.6   | 3.7   | 11    | e3.7  | 3.6   | 3.4  | 2.1  | 3.5  | e6.9   | 4.6   | 9.9   |
| 14    | 4.8   | 4.6   | 2.9   | 11    | e3.7  | 3.7   | 3.0  | 2.0  | 5.4  | e7.0   | 4.5   | 9.3   |
| 15    | 4.7   | 4.4   | 2.4   | 8.8   | e3.7  | 3.6   | 2.8  | 2.1  | e4.5 | e7.4   | 3.9   | 8.6   |
| 16    | 4.7   | 4.4   | 4.2   | 2.6   | e3.8  | 3.4   | 2.9  | 2.0  | e2.8 | e7.7   | 3.5   | 8.4   |
| 17    | 4.5   | 4.5   | 2.8   | 2.9   | e3.8  | 3.7   | 2.8  | 2.3  | e2.3 | e8.0   | 3.0   | 10    |
| 18    | 4.7   | 4.3   | 2.4   | 2.2   | e3.7  | 3.6   | 2.8  | 2.3  | e3.0 | 8.5    | 3.3   | 12    |
| 19    | 4.7   | 4.1   | 2.7   | 3.1   | e3.7  | 3.6   | 2.7  | 2.2  | e3.7 | 10     | 3.0   | 10    |
| 20    | 4.8   | 4.1   | 3.2   | e3.5  | e3.6  | 3.8   | 2.7  | 2.4  | 4.2  | 12     | 5.3   | 9.2   |
| 21    | 4.8   | 4.2   | 3.6   | e3.8  | e3.8  | 3.9   | 2.6  | 2.7  | 4.1  | 14     | 5.3   | 8.4   |
| 22    | 4.8   | 4.3   | 3.7   | e4.0  | e3.9  | 4.1   | 2.8  | 2.6  | 4.1  | 13     | 3.9   | 7.9   |
| 23    | 4.6   | 4.9   | 3.6   | e4.0  | e3.9  | 4.1   | 2.9  | 2.4  | 3.9  | 13     | 17    | 9.4   |
| 24    | 4.8   | 4.9   | 3.6   | e4.0  | e3.9  | 3.8   | 3.0  | 2.3  | 3.5  | 12     | 15    | 12    |
| 25    | 4.9   | 4.9   | 3.7   | e4.0  | e3.8  | 3.0   | 3.1  | 3.3  | 3.1  | 9.4    | 9.3   | 11    |
| 26    | 4.9   | 4.9   | 3.6   | e3.7  | e3.7  | 3.8   | 2.8  | 3.6  | 2.7  | 9.2    | 6.9   | 11    |
| 27    | 4.8   | 4.8   | 3.4   | e3.5  | 3.6   | 3.7   | 2.0  | e3.8 | 2.6  | 11     | 14    | 11    |
| 28    | 4.8   | 4.7   | 3.5   | e3.1  | 4.0   | 3.7   | 2.0  | e4.3 | 2.0  | 9.1    | 15    | 11    |
| 29    | 5.0   | 5.1   | 3.7   | e3.0  | 3.5   | 3.7   | 1.9  | e4.7 | 1.6  | 8.7    | 20    | 11    |
| 30    | 4.7   | 4.5   | 3.8   | e3.0  | ---   | 3.7   | 1.8  | e5.0 | 3.1  | 8.1    | 20    | 11    |
| 31    | 4.6   | ---   | 4.4   | e3.0  | ---   | 3.7   | ---  | 6.2  | ---  | 9.7    | 15    | ---   |
| TOTAL | 160.5 | 139.4 | 114.5 | 140.6 | 105.6 | 111.6 | 87.6 | 81.5 | 98.3 | 213.30 | 248.0 | 286.1 |
| MEAN  | 5.18  | 4.65  | 3.69  | 4.54  | 3.64  | 3.60  | 2.92 | 2.63 | 3.28 | 6.88   | 8.00  | 9.54  |
| MAX   | 8.2   | 5.2   | 5.6   | 11    | 4.0   | 4.1   | 4.3  | 6.2  | 5.7  | 14     | 20    | 12    |
| MIN   | 4.5   | 4.1   | 2.4   | 2.2   | 3.0   | 3.0   | 1.8  | 1.6  | 1.4  | .86    | 3.0   | 6.4   |
| AC-FT | 318   | 276   | 227   | 279   | 209   | 221   | 174  | 162  | 195  | 423    | 492   | 567   |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 1996, BY WATER YEAR (WY)

|      | 1992 | 1993 | 1994 | 1995 | 1996 |
|------|------|------|------|------|------|
| MEAN | 3.78 | 3.43 | 2.67 | 2.73 | 2.50 |
| MAX  | 6.87 | 4.65 | 3.84 | 4.54 | 3.64 |
| (WY) | 1995 | 1996 | 1995 | 1996 | 1994 |
| MIN  | .73  | .84  | .46  | .91  | 1.53 |
| (WY) | 1993 | 1993 | 1993 | 1993 | 1993 |

SUMMARY STATISTICS

|                          | FOR 1995 CALENDAR YEAR | FOR 1996 WATER YEAR | WATER YEARS 1992 - 1996 |
|--------------------------|------------------------|---------------------|-------------------------|
| ANNUAL TOTAL             | 7913.0                 | 1787.00             |                         |
| ANNUAL MEAN              | 21.7                   | 4.88                | 10.7                    |
| HIGHEST ANNUAL MEAN      |                        |                     | 21.8                    |
| LOWEST ANNUAL MEAN       |                        |                     | 1.40                    |
| HIGHEST DAILY MEAN       | 168                    | May 30              | 175                     |
| LOWEST DAILY MEAN        | 2.1                    | Mar 1               | .86                     |
| ANNUAL SEVEN-DAY MINIMUM | 2.6                    | Feb 24              | 1.2                     |
| INSTANTANEOUS PEAK FLOW  |                        |                     | 112                     |
| INSTANTANEOUS PEAK STAGE |                        |                     | 1.80                    |
| ANNUAL RUNOFF (AC-FT)    | 15700                  | 3540                | 7780                    |
| 10 PERCENT EXCEEDS       | 71                     | 9.3                 | 23                      |
| 50 PERCENT EXCEEDS       | 5.0                    | 4.0                 | 3.7                     |
| 90 PERCENT EXCEEDS       | 2.8                    | 2.2                 | .72                     |

e-Estimated.

a-Also occurred Aug 30.

**07105500 FOUNTAIN CREEK AT COLORADO SPRINGS, CO**

LOCATION.--Lat 38°48'59", long 104°49'20", in NE 1/4 SW 1/4 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 mi<sup>2</sup>.

**WATER-DISCHARGE RECORDS**

PERIOD OF RECORD.--October 1921 to September 1924, January 1976 to current year. Monthly discharge only for some periods, published in WSP 1311. Statistical summary computed for 1976 to current year.

GAGE.--Water-stage recorder with satellite telemetry. 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 ft<sup>3</sup>/s, which are poor. Natural flow of stream affected by storage reservoirs, power developments, ground-water withdrawals, diversions for irrigation and municipal use, return flow from irrigated areas and discharges from sewage treatment plants.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

| DAY   | OCT  | NOV  | DEC  | JAN  | FEB  | MAR  | APR  | MAY  | JUN  | JUL  | AUG  | SEP  |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1     | 66   | 53   | 51   | e44  | 32   | 33   | 40   | 35   | 69   | 37   | 88   | 77   |
| 2     | 64   | 51   | 50   | e46  | 42   | 34   | 47   | 36   | 58   | 20   | 249  | 67   |
| 3     | 68   | 50   | 49   | 46   | 54   | 34   | 47   | 40   | 47   | 19   | 57   | 57   |
| 4     | 78   | 58   | 50   | 43   | 43   | 35   | 57   | 40   | 41   | 19   | 47   | 54   |
| 5     | 78   | 67   | 52   | 35   | 47   | 38   | 69   | 40   | 36   | 29   | 36   | 49   |
| 6     | 71   | 66   | 55   | 31   | 45   | 41   | 45   | 40   | 39   | 22   | 31   | 79   |
| 7     | 70   | 55   | 54   | 40   | 41   | 40   | 45   | 36   | 40   | 20   | 33   | 70   |
| 8     | 68   | 55   | 51   | 48   | 39   | 38   | 42   | 38   | 29   | 19   | 92   | 44   |
| 9     | 63   | 60   | 35   | 43   | 43   | 38   | 40   | 46   | 26   | 339  | 58   | 40   |
| 10    | 61   | 61   | 57   | 43   | 42   | 41   | 44   | 86   | 27   | 274  | 42   | 42   |
| 11    | 58   | 56   | 58   | 39   | 37   | 35   | 47   | 49   | 28   | 64   | 30   | 129  |
| 12    | 60   | 62   | 55   | 44   | 38   | 35   | 49   | 36   | 30   | 65   | 25   | 188  |
| 13    | 64   | 57   | e54  | 47   | 37   | 35   | 58   | 35   | 119  | 75   | 21   | 76   |
| 14    | 62   | 56   | e54  | 44   | 37   | 60   | 73   | 35   | 80   | 68   | 28   | 69   |
| 15    | 63   | 53   | e54  | 46   | 37   | 46   | 56   | 34   | 80   | 62   | 190  | 87   |
| 16    | 62   | 55   | e53  | 43   | 34   | 43   | 56   | 33   | 70   | 51   | 48   | 66   |
| 17    | 56   | 54   | e52  | 37   | 36   | 45   | 48   | 32   | 57   | 71   | 29   | 189  |
| 18    | 53   | 56   | e46  | 20   | 38   | 41   | 44   | 31   | 44   | 173  | 29   | 114  |
| 19    | 54   | 55   | e47  | 38   | 37   | 43   | 50   | 29   | 28   | 105  | 143  | 96   |
| 20    | 51   | 53   | e48  | 44   | 36   | 43   | 52   | 29   | 25   | 69   | 66   | 72   |
| 21    | 56   | 54   | e46  | 40   | 35   | 46   | 49   | 28   | 40   | 196  | 41   | 67   |
| 22    | 60   | 57   | e45  | 40   | 42   | 45   | 45   | 27   | 49   | 66   | 51   | 65   |
| 23    | 62   | 60   | e45  | 38   | 37   | 45   | 44   | 27   | 36   | 61   | 116  | 128  |
| 24    | 61   | 62   | e46  | 40   | 34   | 43   | 41   | 53   | 25   | 93   | 107  | 88   |
| 25    | 65   | 60   | e47  | 43   | 31   | 35   | 37   | 340  | 22   | 110  | 58   | 75   |
| 26    | 56   | 62   | e47  | 28   | 33   | 44   | 34   | 395  | 21   | 272  | 43   | 96   |
| 27    | 54   | 61   | e47  | 32   | 31   | 43   | 35   | 202  | 22   | 123  | 54   | 112  |
| 28    | 52   | 54   | e46  | 45   | 31   | 39   | 47   | 115  | 24   | 67   | 74   | 82   |
| 29    | 53   | 56   | e46  | 41   | 34   | 37   | 51   | 104  | 21   | 72   | 123  | 77   |
| 30    | 51   | 54   | e45  | 37   | ---  | 38   | 37   | 98   | 29   | 64   | 156  | 74   |
| 31    | 56   | ---  | e45  | 32   | ---  | 41   | ---  | 74   | ---  | 68   | 86   | ---  |
| TOTAL | 1896 | 1713 | 1530 | 1237 | 1103 | 1254 | 1429 | 2243 | 1262 | 2793 | 2251 | 2529 |
| MEAN  | 61.2 | 57.1 | 49.4 | 39.9 | 38.0 | 40.5 | 47.6 | 72.4 | 42.1 | 90.1 | 72.6 | 84.3 |
| MAX   | 78   | 67   | 58   | 48   | 54   | 60   | 73   | 395  | 119  | 339  | 249  | 189  |
| MIN   | 51   | 50   | 35   | 20   | 31   | 33   | 34   | 27   | 21   | 19   | 21   | 40   |
| AC-FT | 3760 | 3400 | 3030 | 2450 | 2190 | 2490 | 2830 | 4450 | 2500 | 5540 | 4460 | 5020 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1976 - 1996, 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 |  |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|--|
| MEAN | 43.6 | 36.3 | 29.3 | 26.7 | 25.9 | 37.5 | 70.0 | 177  | 111  | 73.7 | 75.4 | 43.0 |      |      |      |      |      |      |      |      |      |  |
| MAX  | 212  | 143  | 81.3 | 61.6 | 56.6 | 83.6 | 166  | 767  | 489  | 268  | 167  | 84.7 |      |      |      |      |      |      |      |      |      |  |
| (WY) | 1985 | 1985 | 1985 | 1985 | 1985 | 1985 | 1985 | 1980 | 1995 | 1995 | 1983 | 1995 |      |      |      |      |      |      |      |      |      |  |
| 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 1995 CALENDAR YEAR

FOR 1996 WATER YEAR

WATER YEARS 1976 - 1996

|                          |        |        |                   |             |
|--------------------------|--------|--------|-------------------|-------------|
| ANNUAL TOTAL             | 56775  | 21240  |                   |             |
| ANNUAL MEAN              | 156    | 58.0   | 64.5              |             |
| HIGHEST ANNUAL MEAN      |        |        | 155               | 1995        |
| LOWEST ANNUAL MEAN       |        |        | 23.2              | 1978        |
| HIGHEST DAILY MEAN       | 1940   | May 17 | 1940              | May 17 1995 |
| LOWEST DAILY MEAN        | 14     | Feb 12 | <sup>a</sup> 19   | Jul 3       |
| ANNUAL SEVEN-DAY MINIMUM | 21     | Feb 6  | 21                | Jul 2       |
| INSTANTANEOUS PEAK FLOW  |        |        | 2570              | Jul 26      |
| INSTANTANEOUS PEAK STAGE |        |        | <sup>c</sup> 6.18 | Jul 26      |
| ANNUAL RUNOFF (AC-FT)    | 112600 | 42130  | 46730             |             |
| 10 PERCENT EXCEEDS       | 408    | 86     | 131               |             |
| 50 PERCENT EXCEEDS       | 62     | 47     | 33                |             |
| 90 PERCENT EXCEEDS       | 25     | 31     | 14                |             |

e-Estimated.

a-Also occurred Jul 4, 8.

b-From slope-area measurement of peak flow.

c-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 1995 water year for daily sediment during peak flows are fair. Records for 1996 water year for daily sediment during peak flows are fair.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SEDIMENT CONCENTRATIONS: Maximum daily during peak flows, 8,520 mg/L, Aug. 2, 1996; minimum daily, 109 mg/L, June 12, 1996.

SEDIMENT LOADS: Maximum daily during peak flows, 6,670 tons, Aug. 2, 1996; minimum daily, 9.4 tons, June 12, 1996.

EXTREMES FOR CURRENT YEAR.--

SEDIMENT CONCENTRATIONS: Maximum daily during peak flows, 8,520 mg/L, Aug. 2; minimum daily, 109 mg/L, June 12.

SEDIMENT LOADS: Maximum daily during peak flows, 6,670 tons, Aug. 2; minimum daily, 9.4 tons, June 12.

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

| 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     | 191                  | ---                         | ---                           | 34                   | ---                         | ---                           | 49                   | ---                         | ---                           |
| 2     | 138                  | ---                         | ---                           | 32                   | ---                         | ---                           | 41                   | ---                         | ---                           |
| 3     | 302                  | ---                         | ---                           | 35                   | ---                         | ---                           | 35                   | ---                         | ---                           |
| 4     | 573                  | ---                         | ---                           | 42                   | ---                         | ---                           | 36                   | ---                         | ---                           |
| 5     | 116                  | ---                         | ---                           | 42                   | ---                         | ---                           | 33                   | ---                         | ---                           |
| 6     | 55                   | ---                         | ---                           | 34                   | ---                         | ---                           | 30                   | ---                         | ---                           |
| 7     | 40                   | ---                         | ---                           | 30                   | ---                         | ---                           | 26                   | ---                         | ---                           |
| 8     | 65                   | ---                         | ---                           | 32                   | ---                         | ---                           | 23                   | ---                         | ---                           |
| 9     | 41                   | ---                         | ---                           | 38                   | ---                         | ---                           | 27                   | ---                         | ---                           |
| 10    | 39                   | ---                         | ---                           | 35                   | ---                         | ---                           | 28                   | ---                         | ---                           |
| 11    | 34                   | ---                         | ---                           | 33                   | ---                         | ---                           | 40                   | ---                         | ---                           |
| 12    | 32                   | ---                         | ---                           | 30                   | ---                         | ---                           | 35                   | ---                         | ---                           |
| 13    | 32                   | ---                         | ---                           | 29                   | ---                         | ---                           | 39                   | ---                         | ---                           |
| 14    | 36                   | ---                         | ---                           | 28                   | ---                         | ---                           | 32                   | ---                         | ---                           |
| 15    | 342                  | ---                         | ---                           | 32                   | ---                         | ---                           | 28                   | ---                         | ---                           |
| 16    | 57                   | ---                         | ---                           | 32                   | ---                         | ---                           | 32                   | ---                         | ---                           |
| 17    | 170                  | ---                         | ---                           | 40                   | ---                         | ---                           | 35                   | ---                         | ---                           |
| 18    | 66                   | ---                         | ---                           | 33                   | ---                         | ---                           | 30                   | ---                         | ---                           |
| 19    | 55                   | ---                         | ---                           | 32                   | ---                         | ---                           | 28                   | ---                         | ---                           |
| 20    | 49                   | ---                         | ---                           | 59                   | ---                         | ---                           | 26                   | ---                         | ---                           |
| 21    | 48                   | ---                         | ---                           | 40                   | ---                         | ---                           | 29                   | ---                         | ---                           |
| 22    | 47                   | ---                         | ---                           | 32                   | ---                         | ---                           | 28                   | ---                         | ---                           |
| 23    | 46                   | ---                         | ---                           | 29                   | ---                         | ---                           | 27                   | ---                         | ---                           |
| 24    | 45                   | ---                         | ---                           | 32                   | ---                         | ---                           | 29                   | ---                         | ---                           |
| 25    | 42                   | ---                         | ---                           | 34                   | ---                         | ---                           | 28                   | ---                         | ---                           |
| 26    | 44                   | ---                         | ---                           | 36                   | ---                         | ---                           | 31                   | ---                         | ---                           |
| 27    | 42                   | ---                         | ---                           | 27                   | ---                         | ---                           | 27                   | ---                         | ---                           |
| 28    | 49                   | ---                         | ---                           | 20                   | ---                         | ---                           | 28                   | ---                         | ---                           |
| 29    | 46                   | ---                         | ---                           | 20                   | ---                         | ---                           | 30                   | ---                         | ---                           |
| 30    | 56                   | ---                         | ---                           | 47                   | ---                         | ---                           | 32                   | ---                         | ---                           |
| 31    | 45                   | ---                         | ---                           | ---                  | ---                         | ---                           | 21                   | ---                         | ---                           |
| TOTAL | 2943                 | ---                         | ---                           | 1019                 | ---                         | ---                           | 963                  | ---                         | ---                           |

07105500 FOUNTAIN CREEK AT COLORADO SPRINGS, CO--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

| 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 |
| 1     | 22                   | ---                        | ---                           | 27                   | ---                        | ---                           | 21                   | ---                        | ---                           |         |
| 2     | 24                   | ---                        | ---                           | 24                   | ---                        | ---                           | 32                   | ---                        | ---                           |         |
| 3     | 23                   | ---                        | ---                           | 23                   | ---                        | ---                           | 68                   | ---                        | ---                           |         |
| 4     | 15                   | ---                        | ---                           | 21                   | ---                        | ---                           | 42                   | ---                        | ---                           |         |
| 5     | 27                   | ---                        | ---                           | 21                   | ---                        | ---                           | 34                   | ---                        | ---                           |         |
| 6     | 32                   | ---                        | ---                           | 23                   | ---                        | ---                           | 66                   | ---                        | ---                           |         |
| 7     | 29                   | ---                        | ---                           | 21                   | ---                        | ---                           | 32                   | ---                        | ---                           |         |
| 8     | 37                   | ---                        | ---                           | 24                   | ---                        | ---                           | 29                   | ---                        | ---                           |         |
| 9     | 31                   | ---                        | ---                           | 23                   | ---                        | ---                           | 30                   | ---                        | ---                           |         |
| 10    | 30                   | ---                        | ---                           | 24                   | ---                        | ---                           | 30                   | ---                        | ---                           |         |
| 11    | 26                   | ---                        | ---                           | 18                   | ---                        | ---                           | 30                   | ---                        | ---                           |         |
| 12    | 24                   | ---                        | ---                           | 14                   | ---                        | ---                           | 29                   | ---                        | ---                           |         |
| 13    | 26                   | ---                        | ---                           | 33                   | ---                        | ---                           | 33                   | ---                        | ---                           |         |
| 14    | 26                   | ---                        | ---                           | 133                  | ---                        | ---                           | 29                   | ---                        | ---                           |         |
| 15    | 30                   | ---                        | ---                           | 62                   | ---                        | ---                           | 26                   | ---                        | ---                           |         |
| 16    | 26                   | ---                        | ---                           | 34                   | ---                        | ---                           | 54                   | ---                        | ---                           |         |
| 17    | 19                   | ---                        | ---                           | 29                   | ---                        | ---                           | 41                   | ---                        | ---                           |         |
| 18    | 19                   | ---                        | ---                           | 30                   | ---                        | ---                           | 34                   | ---                        | ---                           |         |
| 19    | 24                   | ---                        | ---                           | 28                   | ---                        | ---                           | 31                   | ---                        | ---                           |         |
| 20    | 23                   | ---                        | ---                           | 28                   | ---                        | ---                           | 30                   | ---                        | ---                           |         |
| 21    | 22                   | ---                        | ---                           | 27                   | ---                        | ---                           | 28                   | ---                        | ---                           |         |
| 22    | 22                   | ---                        | ---                           | 29                   | ---                        | ---                           | 28                   | ---                        | ---                           |         |
| 23    | 21                   | ---                        | ---                           | 26                   | ---                        | ---                           | 28                   | ---                        | ---                           |         |
| 24    | 27                   | ---                        | ---                           | 24                   | ---                        | ---                           | 24                   | ---                        | ---                           |         |
| 25    | 31                   | ---                        | ---                           | 25                   | ---                        | ---                           | 27                   | ---                        | ---                           |         |
| 26    | 31                   | ---                        | ---                           | 24                   | ---                        | ---                           | 33                   | ---                        | ---                           |         |
| 27    | 28                   | ---                        | ---                           | 23                   | ---                        | ---                           | 29                   | ---                        | ---                           |         |
| 28    | 25                   | ---                        | ---                           | 25                   | ---                        | ---                           | 36                   | ---                        | ---                           |         |
| 29    | 25                   | ---                        | ---                           | ---                  | ---                        | ---                           | 31                   | ---                        | ---                           |         |
| 30    | 22                   | ---                        | ---                           | ---                  | ---                        | ---                           | 31                   | ---                        | ---                           |         |
| 31    | 26                   | ---                        | ---                           | ---                  | ---                        | ---                           | 29                   | ---                        | ---                           |         |
| TOTAL | 793                  | ---                        | ---                           | 843                  | ---                        | ---                           | 1045                 | ---                        | ---                           |         |
|       |                      | APRIL                      |                               |                      | MAY                        |                               |                      | JUNE                       |                               |         |
| 1     | 27                   | ---                        | ---                           | 156                  | ---                        | ---                           | 829                  | ---                        | ---                           |         |
| 2     | 25                   | ---                        | ---                           | 161                  | ---                        | ---                           | 835                  | ---                        | ---                           |         |
| 3     | 25                   | ---                        | ---                           | 163                  | ---                        | ---                           | 819                  | ---                        | ---                           |         |
| 4     | 23                   | ---                        | ---                           | 150                  | ---                        | ---                           | 942                  | ---                        | ---                           |         |
| 5     | 22                   | ---                        | ---                           | 656                  | ---                        | ---                           | 757                  | ---                        | ---                           |         |
| 6     | 22                   | ---                        | ---                           | 333                  | ---                        | ---                           | 643                  | ---                        | ---                           |         |
| 7     | 23                   | ---                        | ---                           | 260                  | ---                        | ---                           | 571                  | ---                        | ---                           |         |
| 8     | 24                   | ---                        | ---                           | 234                  | ---                        | ---                           | 717                  | ---                        | ---                           |         |
| 9     | 91                   | ---                        | ---                           | 216                  | ---                        | ---                           | 644                  | ---                        | ---                           |         |
| 10    | 67                   | ---                        | ---                           | 197                  | ---                        | ---                           | 590                  | ---                        | ---                           |         |
| 11    | 37                   | ---                        | ---                           | 185                  | ---                        | ---                           | 503                  | ---                        | ---                           |         |
| 12    | 37                   | ---                        | ---                           | 199                  | ---                        | ---                           | 434                  | ---                        | ---                           |         |
| 13    | 40                   | ---                        | ---                           | 207                  | ---                        | ---                           | 384                  | ---                        | ---                           |         |
| 14    | 51                   | ---                        | ---                           | 197                  | ---                        | ---                           | 384                  | ---                        | ---                           |         |
| 15    | 49                   | ---                        | ---                           | 184                  | ---                        | ---                           | 386                  | ---                        | ---                           |         |
| 16    | 52                   | ---                        | ---                           | 238                  | ---                        | ---                           | 376                  | ---                        | ---                           |         |
| 17    | 128                  | ---                        | ---                           | 1940                 | ---                        | ---                           | 444                  | ---                        | ---                           |         |
| 18    | 165                  | ---                        | ---                           | 761                  | ---                        | ---                           | 463                  | ---                        | ---                           |         |
| 19    | 213                  | ---                        | ---                           | 714                  | ---                        | ---                           | 353                  | ---                        | ---                           |         |
| 20    | 113                  | ---                        | ---                           | 673                  | ---                        | ---                           | 317                  | ---                        | ---                           |         |
| 21    | 151                  | ---                        | ---                           | 698                  | ---                        | ---                           | 292                  | ---                        | ---                           |         |
| 22    | 104                  | ---                        | ---                           | 758                  | ---                        | ---                           | 271                  | ---                        | ---                           |         |
| 23    | 70                   | ---                        | ---                           | 773                  | ---                        | ---                           | 406                  | ---                        | ---                           |         |
| 24    | 92                   | ---                        | ---                           | 811                  | ---                        | ---                           | 307                  | ---                        | ---                           |         |
| 25    | 73                   | ---                        | ---                           | 791                  | ---                        | ---                           | 274                  | ---                        | ---                           |         |
| 26    | 198                  | ---                        | ---                           | 800                  | ---                        | ---                           | 241                  | ---                        | ---                           |         |
| 27    | 83                   | ---                        | ---                           | 700                  | ---                        | ---                           | 245                  | ---                        | ---                           |         |
| 28    | 86                   | ---                        | ---                           | 650                  | ---                        | ---                           | 414                  | ---                        | ---                           |         |
| 29    | 146                  | ---                        | ---                           | 1300                 | ---                        | ---                           | 390                  | ---                        | ---                           |         |
| 30    | 146                  | ---                        | ---                           | 1350                 | ---                        | ---                           | 428                  | ---                        | ---                           |         |
| 31    | ---                  | ---                        | ---                           | 999                  | ---                        | ---                           | ---                  | ---                        | ---                           |         |
| TOTAL | 2383                 | ---                        | ---                           | 17454                | ---                        | ---                           | 14659                | ---                        | ---                           |         |

ARKANSAS RIVER BASIN

07105500 FOUNTAIN CREEK AT COLORADO SPRINGS, CO--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

| 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     | 711                  | ---                         | ---                           | 129                  | ---                         | ---                           | 49                   | ---                         | ---                           |
| 2     | 438                  | ---                         | ---                           | 105                  | ---                         | ---                           | 58                   | ---                         | ---                           |
| 3     | 418                  | ---                         | ---                           | 100                  | ---                         | ---                           | 64                   | ---                         | ---                           |
| 4     | 412                  | ---                         | ---                           | 128                  | ---                         | ---                           | 45                   | ---                         | ---                           |
| 5     | 374                  | ---                         | ---                           | 96                   | ---                         | ---                           | 41                   | ---                         | ---                           |
| 6     | 331                  | ---                         | ---                           | 91                   | ---                         | ---                           | 53                   | ---                         | ---                           |
| 7     | 302                  | ---                         | ---                           | 83                   | ---                         | ---                           | 129                  | 687                         | 299                           |
| 8     | 282                  | ---                         | ---                           | 80                   | ---                         | ---                           | 88                   | ---                         | ---                           |
| 9     | 270                  | ---                         | ---                           | 75                   | ---                         | ---                           | 232                  | ---                         | ---                           |
| 10    | 248                  | ---                         | ---                           | 76                   | ---                         | ---                           | 212                  | ---                         | ---                           |
| 11    | 221                  | ---                         | ---                           | 87                   | ---                         | ---                           | 167                  | ---                         | ---                           |
| 12    | 201                  | ---                         | ---                           | 115                  | ---                         | ---                           | 138                  | ---                         | ---                           |
| 13    | 194                  | ---                         | ---                           | 89                   | ---                         | ---                           | 111                  | ---                         | ---                           |
| 14    | 302                  | ---                         | ---                           | 91                   | ---                         | ---                           | 87                   | ---                         | ---                           |
| 15    | 319                  | ---                         | ---                           | 93                   | ---                         | ---                           | 69                   | ---                         | ---                           |
| 16    | 290                  | ---                         | ---                           | 71                   | ---                         | ---                           | 52                   | ---                         | ---                           |
| 17    | 259                  | ---                         | ---                           | 67                   | ---                         | ---                           | 46                   | ---                         | ---                           |
| 18    | 270                  | ---                         | ---                           | 97                   | ---                         | ---                           | 67                   | 313                         | 129                           |
| 19    | 295                  | ---                         | ---                           | 400                  | ---                         | ---                           | 86                   | 918                         | 231                           |
| 20    | 286                  | ---                         | ---                           | 130                  | ---                         | ---                           | 66                   | ---                         | ---                           |
| 21    | 254                  | ---                         | ---                           | 122                  | ---                         | ---                           | 81                   | ---                         | ---                           |
| 22    | 224                  | ---                         | ---                           | 204                  | ---                         | ---                           | 68                   | ---                         | ---                           |
| 23    | 247                  | ---                         | ---                           | 181                  | ---                         | ---                           | 65                   | ---                         | ---                           |
| 24    | 211                  | ---                         | ---                           | 170                  | ---                         | ---                           | 68                   | ---                         | ---                           |
| 25    | 179                  | ---                         | ---                           | 144                  | ---                         | ---                           | 74                   | ---                         | ---                           |
| 26    | 156                  | ---                         | ---                           | 147                  | ---                         | ---                           | 77                   | ---                         | ---                           |
| 27    | 139                  | ---                         | ---                           | 110                  | ---                         | ---                           | 68                   | ---                         | ---                           |
| 28    | 121                  | ---                         | ---                           | 87                   | ---                         | ---                           | 57                   | ---                         | ---                           |
| 29    | 114                  | ---                         | ---                           | 94                   | ---                         | ---                           | 59                   | ---                         | ---                           |
| 30    | 112                  | ---                         | ---                           | 80                   | ---                         | ---                           | 63                   | ---                         | ---                           |
| 31    | 119                  | ---                         | ---                           | 78                   | ---                         | ---                           | ---                  | ---                         | ---                           |
| TOTAL | 8299                 | ---                         | ---                           | 3620                 | ---                         | ---                           | 2540                 | ---                         | ---                           |

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

| DATE      | TIME | DIS- CHARGE, INST. CUBIC FEET PER SECOND | SEDI- MENT, SUS- PENDED (MG/L) | SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) |
|-----------|------|--|--------------------------------|--|
| DEC 29... | 0850 | 13                                       | 77                             | 2.7  |
| JAN 19... | 1015 | 11                                       | 89                             | 2.6  |
| FEB 23... | 0910 | 28                                       | 95                             | 7.2  |
| MAR 23... | 0915 | 30                                       | 96                             | 7.8  |
| APR 20... | 0900 | 95                                       | 256                            | 66   |
| JUN 22... | 0945 | 280                                      | 111                            | 84   |
| AUG 28... | 1405 | 85                                       | 87                             | 20   |
| SEP 15... | 1325 | 68                                       | 47                             | 8.6  |
| SEP 27... | 1150 | 71                                       | 101                            | 19   |

07105500 FOUNTAIN CREEK AT COLORADO SPRINGS, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DATE      | TIME | DIS-CHARGE, INST. CUBIC FEET PER SECOND | SPE-CIFIC CON-DUCT-ANCE (US/CM) | PH (STAND-ARD UNITS) | TEMPER-ATURE WATER (DEG C) | OXYGEN, DIS-SOLVED (MG/L) | OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) | COLI-FORM, FECAL, UM-MF (COLS./100 ML) | STREP-TOCOCCI, FECAL, KF AGAR (COLS./100 ML) | CALCIUM DIS-SOLVED (MG/L AS CA) | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) |
|-----------|------|---|---------------------------------|----------------------|----------------------------|---------------------------|--|--|--|---------------------------------|-------------------------------------|
| OCT 26... | 1315 | 53                                      | 670                             | 8.0                  | 9.0                        | 9.3                       | 1.0  | K130                                   | 140  | 74                              | 17                                  |
| NOV 30... | 1300 | 55                                      | 656                             | 8.2                  | 6.5                        | 10.2                      | 0.7  | 240                                    | K800   | 72                              | 17                                  |
| JAN 18... | 1130 | 16                                      | 721                             | 7.9                  | 1.0                        | 10.4                      | 0.5  | 70                                     | 77   | 70                              | 24                                  |
| FEB 22... | 1330 | 39                                      | 681                             | 8.4                  | 10.5                       | 8.8                       | 1.4  | K100                                   | K80  | 71                              | 18                                  |
| MAR 21... | 1015 | 48                                      | 610                             | 8.3                  | 6.5                        | 9.8                       | 0.3  | 45                                     | 48   | 65                              | 15                                  |
| APR 18... | 1045 | 45                                      | 602                             | 8.4                  | 9.5                        | 9.4                       | 0.9  | 90                                     | 87   | 64                              | 14                                  |
| MAY 16... | 1300 | 35                                      | 680                             | 8.3                  | 24.5                       | 6.4                       | 2.9  | K720                                   | 840  | 72                              | 16                                  |
| JUN 20... | 1015 | 25                                      | 700                             | 8.4                  | 20.0                       | 7.3                       | 0.7  | K1100                                  | 350  | 77                              | 18                                  |
| JUL 18... | 1045 | 61                                      | 460                             | 8.2                  | 20.0                       | 6.7                       | 1.0  | >1200                                  | 1200   | 50                              | 11                                  |
| AUG 15... | 1000 | 58                                      | 436                             | 8.1                  | 16.5                       | 7.5                       | 4.0  | >1200                                  | K3300  | 44                              | 8.8                                 |
| SEP 12... | 1015 | 103                                     | 325                             | 8.1                  | 13.0                       | 8.5                       | e1.6                                       | K800                                   | 1700   | 33                              | 6.6                                 |

| DATE      | ALKA-LINITY LAB (MG/L AS CACO3) | SULFATE DIS-SOLVED (MG/L AS SO4) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) | SULFIDE TOTAL (MG/L AS S) | RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) | NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) | NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) | NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) | NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) | PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) |
|-----------|---------------------------------|----------------------------------|------------------------------------|-----------------------------------|---------------------------|--|---|---|---|---|---|
| OCT 26... | 145                             | 140                              | 26                                 | 2.2                               | --                        | 53   | 0.02                                      | 2.9                                       | <0.015                                    | 0.3   | 0.02                                      |
| NOV 30... | 137                             | 140                              | 24                                 | 2.1                               | <0.5                      | 84   | <0.01                                     | 2.9                                       | <0.015                                    | 0.3   | 0.03                                      |
| JAN 18... | 145                             | 180                              | 30                                 | 3.1                               | --                        | 27   | <0.01                                     | 2.5                                       | <0.015                                    | <0.2  | 0.02                                      |
| FEB 22... | 144                             | 140                              | 27                                 | 2.0                               | --                        | 119  | 0.02                                      | 2.8                                       | <0.015                                    | 0.3   | 0.05                                      |
| MAR 21... | 128                             | 120                              | 25                                 | 2.0                               | --                        | 131  | <0.01                                     | 2.2                                       | <0.015                                    | 0.3   | 0.07                                      |
| APR 18... | 124                             | 130                              | 25                                 | 2.0                               | --                        | 128  | 0.01                                      | 2.2                                       | 0.02                                      | 0.5   | 0.07                                      |
| MAY 16... | 137                             | 160                              | 25                                 | 1.9                               | <0.5                      | 302  | 0.02                                      | 2.4                                       | 0.02                                      | 1.1   | 0.07                                      |
| JUN 20... | 137                             | 170                              | 24                                 | 2.1                               | --                        | 76   | 0.02                                      | 2.5                                       | 0.03                                      | <0.2  | 0.06                                      |
| JUL 18... | 105                             | 94                               | 17                                 | 2.3                               | --                        | 194  | 0.03                                      | 1.4                                       | 0.04                                      | 0.5   | 0.03                                      |
| AUG 15... | 94                              | 87                               | 15                                 | 1.2                               | --                        | 454  | 0.04                                      | 1.7                                       | 0.14                                      | 1.2   | 0.05                                      |
| SEP 12... | 77                              | 56                               | 11                                 | 2.0                               | --                        | 220  | 0.02                                      | 1.1                                       | 0.03                                      | 0.6   | 0.03                                      |

| DATE      | ARSENIC TOTAL (UG/L AS AS) | ARSENIC DIS-SOLVED (UG/L AS AS) | BORON, TOTAL RECOV-ERABLE (UG/L AS B) | BORON, DIS-SOLVED (UG/L AS B) | CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) | CADMIUM DIS-SOLVED (UG/L AS CD) | CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) | CHRO-MIUM, DIS-SOLVED (UG/L AS CR) | CHRO-MIUM, HEXA-VALENT, DIS-SOLVED (UG/L AS CR) | COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) | COPPER, DIS-SOLVED (UG/L AS CU) | IRON, TOTAL RECOV-ERABLE (UG/L AS FE) |
|-----------|----------------------------|---------------------------------|---------------------------------------|-------------------------------|---|---------------------------------|--|------------------------------------|---|---|---------------------------------|---------------------------------------|
| OCT 26... | --                         | --                              | --                                    | --                            | <1                                      | <1                              | <1   | <1                                 | <1  | 2                                       | <1                              | 1400                                  |
| NOV 30... | 1                          | <1                              | 70                                    | 70                            | <1                                      | <1                              | <1   | <1                                 | <1  | 2                                       | 1                               | 2100                                  |
| JAN 18... | --                         | --                              | --                                    | --                            | <1                                      | <1                              | <1   | <1                                 | <1  | 1                                       | <1                              | 560                                   |
| FEB 22... | --                         | --                              | --                                    | --                            | <1                                      | <1                              | 2  | <1                                 | <1  | 4                                       | <1                              | 3000                                  |
| MAR 21... | --                         | --                              | --                                    | --                            | <1                                      | <1                              | 1  | <1                                 | <1  | 3                                       | 1                               | 2100                                  |
| APR 18... | --                         | --                              | --                                    | --                            | <1                                      | <1                              | 1  | <1                                 | <1  | 5                                       | 1                               | 2000                                  |
| MAY 16... | 2                          | <1                              | 90                                    | 80                            | <1                                      | <1                              | 3  | <1                                 | <1  | 8                                       | 1                               | 4600                                  |
| JUN 20... | --                         | --                              | --                                    | --                            | <1                                      | <1                              | <1   | <1                                 | <1  | 3                                       | <1                              | 1600                                  |
| JUL 18... | --                         | --                              | --                                    | --                            | <1                                      | <1                              | 2  | <1                                 | <1  | 6                                       | 2                               | 7700                                  |
| AUG 15... | --                         | --                              | --                                    | --                            | <1                                      | <1                              | 4  | <1                                 | <1  | 11                                      | 2                               | 11000                                 |
| SEP 12... | --                         | --                              | --                                    | --                            | <1                                      | <1                              | 4  | <1                                 | <1  | 6                                       | 1                               | 5600                                  |

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

ARKANSAS RIVER BASIN

07105500 FOUNTAIN CREEK AT COLORADO SPRINGS, CO--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DATE      | IRON,<br>DIS-<br>SOLVED<br>(UG/L<br>AS FE) | LEAD,<br>TOTAL<br>RECOV-<br>ERABLE<br>(UG/L<br>AS PB) | LEAD,<br>DIS-<br>SOLVED<br>(UG/L<br>AS PB) | MANGA-<br>NESE,<br>TOTAL<br>RECOV-<br>ERABLE<br>(UG/L<br>AS MN) | MANGA-<br>NESE,<br>DIS-<br>SOLVED<br>(UG/L<br>AS MN) | NICKEL,<br>TOTAL<br>RECOV-<br>ERABLE<br>(UG/L<br>AS NI) | NICKEL,<br>DIS-<br>SOLVED<br>(UG/L<br>AS NI) | SELE-<br>NIUM,<br>DIS-<br>SOLVED<br>(UG/L<br>AS SE) | ZINC,<br>TOTAL<br>RECOV-<br>ERABLE<br>(UG/L<br>AS ZN) | ZINC,<br>DIS-<br>SOLVED<br>(UG/L<br>AS ZN) | CYANIDE<br>TOTAL<br>(MG/L<br>AS CN) |
|-----------|--|---|--|---|--|---|--|---|---|--|-------------------------------------|
| OCT 26... | <10  | 2   | <1   | 90  | 40   | 2   | <1   | 6   | 20  | <10  | --                                  |
| NOV 30... | <10  | 2   | <1   | 100   | 30   | 2   | <1   | 6   | 20  | <10  | <0.010                              |
| JAN 18... | 10   | 1   | <1   | 80  | 70   | 1   | <1   | 5   | 40  | <10  | --                                  |
| FEB 22... | 20   | 7   | <1   | 120   | 40   | 3   | 1  | 6   | 30  | <10  | --                                  |
| MAR 21... | 10   | 3   | <1   | 100   | 30   | 3   | 1  | 5   | 20  | <10  | --                                  |
| APR 18... | <10  | 3   | <1   | 90  | 20   | 2   | 1  | 6   | 20  | <3   | --                                  |
| MAY 16... | 4  | 8   | <1   | 170   | 17   | 5   | 1  | 6   | 50  | 6  | <0.010                              |
| JUN 20... | <3   | 2   | <1   | 70  | 24   | 1   | 1  | 7   | 10  | 4  | --                                  |
| JUL 18... | 5  | 11  | <1   | 200   | 13   | 2   | <1   | 4   | 30  | <3   | --                                  |
| AUG 15... | <10  | 18  | <1   | 220   | <10  | 6   | 1  | 3   | 60  | 5  | --                                  |
| SEP 12... | <10  | 15  | <1   | 210   | <10  | 4   | <1   | 2   | 30  | 8  | --                                  |

MISCELLANEOUS FIELD MEASUREMENTS, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

|           |      |     |     |      |  |           |      |    |     |      |
|-----------|------|-----|-----|------|--|-----------|------|----|-----|------|
| JAN 1995  |      |     |     |      |  | NOV 1995  |      |    |     |      |
| 13...     | 1430 | 40  | 480 | 3.5  |  | 21...     | 1340 | 53 | 672 | 7.5  |
| 26...     | 1140 | 42  | 710 | 1.0  |  | DEC 13... | 1345 | 54 | 689 | 6.5  |
| FEB 16... | 1230 | 27  | 548 | 2.0  |  | JAN 1996  |      |    |     |      |
| MAR 20... | 1235 | 32  | 730 | 13.0 |  | 02...     | 1410 | 44 | 804 | 1.5  |
| APR 20... | 1540 | 138 | 580 | 8.0  |  | 29...     | 1500 | 62 | 706 | 1.5  |
| MAY 12... | 1150 | 197 | 380 | 12.5 |  | FEB 27... | 1315 | 29 | 912 | 4.5  |
| 19...     | 1200 | 764 | 258 | 10.5 |  | MAR 21... | 1210 | 44 | 625 | 10.5 |
| JUN 02... | 1200 | 690 | 332 | 12.5 |  | MAY 01... | 1315 | 36 | 707 | 16.5 |
| 14...     | 1045 | 392 | 352 | 13.5 |  | 13...     | 1410 | 33 | 732 | 21.5 |
| 28...     | 1340 | 238 | 392 | 17.0 |  | 28...     | 1540 | 97 | 494 | 10.0 |
| JUL 18... | 1610 | 310 | 283 | 17.5 |  | JUN 13... | 1300 | 43 | 655 | 21.5 |
| 25...     | 1400 | 173 | 432 | 19.5 |  | 14...     | 1330 | 57 | 558 | 20.5 |
| AUG 17... | 1425 | 68  | 695 | 24.0 |  | 26...     | 1535 | 21 | 825 | 28.5 |
| 22...     | 1330 | 114 | 550 | 22.5 |  | JUL 22... | 1125 | 70 | 480 | 21.0 |
| SEP 15... | 1320 | 72  | 591 | 19.0 |  | AUG 13... | 1310 | 23 | 895 | 23.5 |
| 26...     | 1415 | 78  | 588 | 15.5 |  | 20...     | 0910 | 63 | 540 | 14.5 |
| OCT 03... | 1135 | 68  | 660 | 11.5 |  | 26...     | 1440 | 36 | 705 | 25.0 |
| 27...     | 1240 | 56  | 700 | 10.0 |  | SEP 05... | 1150 | 57 | 570 | 19.0 |
|           |      |     |     |      |  | 17...     | 1320 | 71 | 490 | 15.5 |

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DATE      | TIME | DIS-<br>CHARGE,<br>INST.<br>CUBIC<br>FEET<br>PER<br>SECOND | SEDI-<br>MENT,<br>SUS-<br>PENDE<br>(MG/L) | SEDI-<br>MENT,<br>DIS-<br>CHARGE,<br>SUS-<br>PENDE<br>(T/DAY) |
|-----------|------|--|---|---|
| OCT 26... | 1315 | 53   | 63  | 9.0   |
| MAY 08... | 1445 | 39   | 151                                       | 16  |
| 28...     | 1545 | 98   | 346                                       | 92  |
| JUN 14... | 1200 | 57   | 419                                       | 64  |
| AUG 15... | 1000 | 58   | 638                                       | 100   |
| 15...     | 1730 | 79   | 854                                       | 182   |
| 29...     | 1815 | 214  | 4270                                      | 2470  |
| SEP 12... | 1015 | 103  | 359                                       | 100   |



## 07105500 FOUNTAIN CREEK AT COLORADO SPRINGS, CO--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DAY   | MEAN<br>DISCHARGE<br>(CFS) | MEAN<br>CONCEN-<br>TRATION<br>(MG/L) | SEDIMENT<br>DISCHARGE<br>(TONS/DAY) | MEAN<br>DISCHARGE<br>(CFS) | MEAN<br>CONCEN-<br>TRATION<br>(MG/L) | SEDIMENT<br>DISCHARGE<br>(TONS/DAY) | MEAN<br>DISCHARGE<br>(CFS) | MEAN<br>CONCEN-<br>TRATION<br>(MG/L) | SEDIMENT<br>DISCHARGE<br>(TONS/DAY) |       |
|-------|----------------------------|--------------------------------------|-------------------------------------|----------------------------|--------------------------------------|-------------------------------------|----------------------------|--------------------------------------|-------------------------------------|-------|
|       |                            |                                      |                                     |                            |                                      |                                     |                            |                                      |                                     | APRIL |
| 1     | 40                         | ---                                  | ---                                 | 35                         | ---                                  | ---                                 | 69                         | ---                                  | ---                                 |       |
| 2     | 47                         | ---                                  | ---                                 | 36                         | ---                                  | ---                                 | 58                         | ---                                  | ---                                 |       |
| 3     | 47                         | ---                                  | ---                                 | 40                         | ---                                  | ---                                 | 47                         | ---                                  | ---                                 |       |
| 4     | 57                         | ---                                  | ---                                 | 40                         | ---                                  | ---                                 | 41                         | ---                                  | ---                                 |       |
| 5     | 69                         | ---                                  | ---                                 | 40                         | ---                                  | ---                                 | 36                         | ---                                  | ---                                 |       |
| 6     | 45                         | ---                                  | ---                                 | 40                         | ---                                  | ---                                 | 39                         | ---                                  | ---                                 |       |
| 7     | 45                         | ---                                  | ---                                 | 36                         | ---                                  | ---                                 | 40                         | ---                                  | ---                                 |       |
| 8     | 42                         | ---                                  | ---                                 | 38                         | ---                                  | ---                                 | 29                         | ---                                  | ---                                 |       |
| 9     | 40                         | ---                                  | ---                                 | 46                         | 173                                  | 50                                  | 26                         | ---                                  | ---                                 |       |
| 10    | 44                         | ---                                  | ---                                 | 86                         | 1560                                 | 401                                 | 27                         | ---                                  | ---                                 |       |
| 11    | 47                         | ---                                  | ---                                 | 49                         | ---                                  | ---                                 | 28                         | ---                                  | ---                                 |       |
| 12    | 49                         | ---                                  | ---                                 | 36                         | ---                                  | ---                                 | 30                         | 109                                  | 9.4                                 |       |
| 13    | 58                         | ---                                  | ---                                 | 35                         | ---                                  | ---                                 | 119                        | 3650                                 | 3080                                |       |
| 14    | 73                         | ---                                  | ---                                 | 35                         | ---                                  | ---                                 | 80                         | 1640                                 | 450                                 |       |
| 15    | 56                         | ---                                  | ---                                 | 34                         | ---                                  | ---                                 | 80                         | 4160                                 | 868                                 |       |
| 16    | 56                         | ---                                  | ---                                 | 33                         | ---                                  | ---                                 | 70                         | ---                                  | ---                                 |       |
| 17    | 48                         | ---                                  | ---                                 | 32                         | ---                                  | ---                                 | 57                         | ---                                  | ---                                 |       |
| 18    | 44                         | ---                                  | ---                                 | 31                         | ---                                  | ---                                 | 44                         | ---                                  | ---                                 |       |
| 19    | 50                         | ---                                  | ---                                 | 29                         | ---                                  | ---                                 | 28                         | ---                                  | ---                                 |       |
| 20    | 52                         | ---                                  | ---                                 | 29                         | ---                                  | ---                                 | 25                         | ---                                  | ---                                 |       |
| 21    | 49                         | ---                                  | ---                                 | 28                         | ---                                  | ---                                 | 40                         | ---                                  | ---                                 |       |
| 22    | 45                         | ---                                  | ---                                 | 27                         | ---                                  | ---                                 | 49                         | ---                                  | ---                                 |       |
| 23    | 44                         | ---                                  | ---                                 | 27                         | ---                                  | ---                                 | 36                         | ---                                  | ---                                 |       |
| 24    | 41                         | ---                                  | ---                                 | 53                         | 226                                  | 54                                  | 25                         | ---                                  | ---                                 |       |
| 25    | 37                         | ---                                  | ---                                 | 340                        | 2040                                 | 2510                                | 22                         | ---                                  | ---                                 |       |
| 26    | 34                         | ---                                  | ---                                 | 395                        | 1730                                 | 1960                                | 21                         | ---                                  | ---                                 |       |
| 27    | 35                         | ---                                  | ---                                 | 202                        | ---                                  | ---                                 | 22                         | ---                                  | ---                                 |       |
| 28    | 47                         | ---                                  | ---                                 | 115                        | ---                                  | ---                                 | 24                         | ---                                  | ---                                 |       |
| 29    | 51                         | ---                                  | ---                                 | 104                        | ---                                  | ---                                 | 21                         | ---                                  | ---                                 |       |
| 30    | 37                         | ---                                  | ---                                 | 98                         | ---                                  | ---                                 | 29                         | ---                                  | ---                                 |       |
| 31    | ---                        | ---                                  | ---                                 | 74                         | ---                                  | ---                                 | ---                        | ---                                  | ---                                 |       |
| TOTAL | 1429                       | ---                                  | ---                                 | 2243                       | ---                                  | ---                                 | 1262                       | ---                                  | ---                                 |       |
|       |                            | JULY                                 |                                     |                            | AUGUST                               |                                     |                            | SEPTEMBER                            |                                     |       |
| 1     | 37                         | ---                                  | ---                                 | 88                         | 555                                  | 849                                 | 77                         | ---                                  | ---                                 |       |
| 2     | 20                         | ---                                  | ---                                 | 249                        | 8520                                 | 6670                                | 67                         | ---                                  | ---                                 |       |
| 3     | 19                         | ---                                  | ---                                 | 57                         | ---                                  | ---                                 | 57                         | ---                                  | ---                                 |       |
| 4     | 19                         | ---                                  | ---                                 | 47                         | ---                                  | ---                                 | 54                         | ---                                  | ---                                 |       |
| 5     | 29                         | ---                                  | ---                                 | 36                         | ---                                  | ---                                 | 49                         | ---                                  | ---                                 |       |
| 6     | 22                         | ---                                  | ---                                 | 31                         | ---                                  | ---                                 | 79                         | ---                                  | ---                                 |       |
| 7     | 20                         | ---                                  | ---                                 | 33                         | ---                                  | ---                                 | 70                         | ---                                  | ---                                 |       |
| 8     | 19                         | ---                                  | ---                                 | 92                         | 556                                  | 446                                 | 44                         | ---                                  | ---                                 |       |
| 9     | 339                        | 2090                                 | 6090                                | 58                         | 1200                                 | 206                                 | 40                         | ---                                  | ---                                 |       |
| 10    | 274                        | ---                                  | ---                                 | 42                         | ---                                  | ---                                 | 42                         | ---                                  | ---                                 |       |
| 11    | 64                         | ---                                  | ---                                 | 30                         | ---                                  | ---                                 | 129                        | ---                                  | ---                                 |       |
| 12    | 65                         | ---                                  | ---                                 | 25                         | ---                                  | ---                                 | 188                        | ---                                  | ---                                 |       |
| 13    | 75                         | ---                                  | ---                                 | 21                         | ---                                  | ---                                 | 76                         | ---                                  | ---                                 |       |
| 14    | 68                         | ---                                  | ---                                 | 28                         | 148                                  | 105                                 | 69                         | ---                                  | ---                                 |       |
| 15    | 62                         | ---                                  | ---                                 | 190                        | 1900                                 | 2500                                | 87                         | ---                                  | ---                                 |       |
| 16    | 51                         | ---                                  | ---                                 | 48                         | ---                                  | ---                                 | 66                         | ---                                  | ---                                 |       |
| 17    | 71                         | ---                                  | ---                                 | 29                         | ---                                  | ---                                 | 189                        | ---                                  | ---                                 |       |
| 18    | 173                        | ---                                  | ---                                 | 29                         | ---                                  | ---                                 | 114                        | ---                                  | ---                                 |       |
| 19    | 105                        | ---                                  | ---                                 | 143                        | 2720                                 | 3630                                | 96                         | ---                                  | ---                                 |       |
| 20    | 69                         | ---                                  | ---                                 | 66                         | 1130                                 | 255                                 | 72                         | ---                                  | ---                                 |       |
| 21    | 196                        | 2540                                 | 2020                                | 41                         | ---                                  | ---                                 | 67                         | ---                                  | ---                                 |       |
| 22    | 66                         | ---                                  | ---                                 | 51                         | ---                                  | ---                                 | 65                         | ---                                  | ---                                 |       |
| 23    | 61                         | ---                                  | ---                                 | 116                        | ---                                  | ---                                 | 128                        | ---                                  | ---                                 |       |
| 24    | 93                         | 364                                  | 581                                 | 107                        | ---                                  | ---                                 | 88                         | ---                                  | ---                                 |       |
| 25    | 110                        | 1610                                 | 825                                 | 58                         | ---                                  | ---                                 | 75                         | ---                                  | ---                                 |       |
| 26    | 272                        | 3020                                 | 5480                                | 43                         | ---                                  | ---                                 | 96                         | ---                                  | ---                                 |       |
| 27    | 123                        | 6580                                 | 2610                                | 54                         | ---                                  | ---                                 | 112                        | ---                                  | ---                                 |       |
| 28    | 67                         | ---                                  | ---                                 | 74                         | ---                                  | ---                                 | 82                         | ---                                  | ---                                 |       |
| 29    | 72                         | ---                                  | ---                                 | 123                        | 1220                                 | 674                                 | 77                         | ---                                  | ---                                 |       |
| 30    | 64                         | ---                                  | ---                                 | 156                        | 1870                                 | 1110                                | 74                         | ---                                  | ---                                 |       |
| 31    | 68                         | ---                                  | ---                                 | 86                         | ---                                  | ---                                 | ---                        | ---                                  | ---                                 |       |
| TOTAL | 2793                       | ---                                  | ---                                 | 2251                       | ---                                  | ---                                 | 2529                       | ---                                  | ---                                 |       |

**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 mi<sup>2</sup>.

**WATER-DISCHARGE RECORDS**

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

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 5,840 ft above sea level, from topographic map. Prior to July 10, 1990, at site 500 ft upstream, at datum 2.00 ft, higher.

REMARKS.--Records good except for estimated daily discharges, and those above 1,200 ft<sup>3</sup>/s, which are poor. Natural flow of stream affected by storage reservoirs, power developments, ground-water withdrawals, diversions for irrigation and municipal use, return flow from irrigated areas, and flows from sewage treatment plants.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

| DAY   | OCT  | NOV  | DEC  | JAN  | FEB  | MAR  | APR  | MAY  | JUN  | JUL  | AUG  | SEP  |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1     | 100  | 116  | 77   | 97   | 90   | 99   | 92   | 73   | 101  | 102  | 128  | 168  |
| 2     | 92   | 115  | 82   | 91   | 86   | 106  | 102  | 76   | 126  | 74   | 449  | 165  |
| 3     | 101  | 112  | 79   | 108  | 92   | 106  | 103  | 88   | 87   | 70   | 127  | 147  |
| 4     | 112  | 124  | 80   | 103  | 102  | 100  | 120  | 92   | 68   | 66   | 110  | 102  |
| 5     | 106  | 138  | 79   | 88   | 111  | 97   | 148  | 95   | 66   | 76   | 97   | 80   |
| 6     | 96   | 134  | 82   | 91   | 108  | 118  | 114  | 91   | 75   | 71   | 87   | 150  |
| 7     | 97   | 117  | 80   | 104  | 104  | 115  | 107  | 76   | 79   | 69   | 86   | 123  |
| 8     | 97   | 118  | 77   | 110  | 101  | 114  | 105  | 74   | 64   | 72   | 159  | 82   |
| 9     | 92   | 129  | 61   | 103  | 107  | 114  | 97   | 90   | 59   | e500 | 123  | 75   |
| 10    | 88   | 139  | 88   | 100  | 106  | 119  | 78   | 180  | 65   | e400 | 109  | 77   |
| 11    | 86   | 139  | 84   | 94   | 99   | 105  | 66   | 66   | 59   | 141  | 87   | 203  |
| 12    | 85   | 149  | 79   | 102  | 100  | 98   | 89   | 49   | 63   | 141  | 104  | 329  |
| 13    | 89   | 142  | 81   | 105  | 96   | 95   | 119  | 64   | 174  | 124  | 78   | 148  |
| 14    | 92   | 137  | 81   | 100  | 99   | 149  | 140  | 71   | 125  | 114  | 98   | 126  |
| 15    | 97   | 114  | 74   | 105  | 96   | 112  | 102  | 71   | 153  | 108  | 315  | 163  |
| 16    | 93   | 119  | 83   | 98   | 94   | 111  | 94   | 68   | 114  | 93   | 121  | 105  |
| 17    | 82   | 105  | 77   | 92   | 99   | 117  | 79   | 69   | 91   | 111  | 83   | 367  |
| 18    | 81   | 89   | 67   | 70   | 99   | 109  | 74   | 71   | 87   | 225  | 79   | 192  |
| 19    | 79   | 106  | 88   | 86   | 98   | 107  | 77   | 71   | 74   | 177  | 212  | 161  |
| 20    | 78   | 92   | 103  | 100  | 96   | 108  | 84   | 73   | 67   | 109  | 120  | 106  |
| 21    | 87   | 76   | 104  | 100  | 95   | 111  | 82   | 73   | 95   | 275  | 85   | 100  |
| 22    | 94   | 84   | 102  | 92   | 102  | 109  | 79   | 69   | 112  | 106  | 96   | 99   |
| 23    | 93   | 85   | 95   | 92   | 97   | 110  | 78   | 71   | 92   | 99   | 229  | 214  |
| 24    | 92   | 83   | 94   | 94   | 99   | 104  | 74   | 116  | 79   | 155  | 186  | 152  |
| 25    | 93   | 92   | 94   | 97   | 94   | 95   | 59   | 706  | 72   | 190  | 124  | 141  |
| 26    | 85   | 102  | 95   | 79   | 94   | 104  | 44   | 553  | 72   | 352  | 121  | 190  |
| 27    | 84   | 99   | 92   | 90   | 96   | 101  | 47   | 187  | 76   | 216  | 135  | 202  |
| 28    | 85   | 87   | 92   | 106  | 98   | 95   | 57   | 140  | 78   | 145  | 164  | 161  |
| 29    | 90   | 90   | 95   | 99   | 104  | 93   | 65   | 131  | 74   | 162  | 230  | 156  |
| 30    | 84   | 85   | 95   | 93   | ---  | 90   | 71   | 119  | 81   | 154  | 295  | 148  |
| 31    | 108  | ---  | 106  | 87   | ---  | 99   | ---  | 88   | ---  | 143  | 189  | ---  |
| TOTAL | 2838 | 3317 | 2666 | 2976 | 2862 | 3310 | 2646 | 3861 | 2628 | 4840 | 4626 | 4632 |
| MEAN  | 91.5 | 111  | 86.0 | 96.0 | 98.7 | 107  | 88.2 | 125  | 87.6 | 156  | 149  | 154  |
| MAX   | 112  | 149  | 106  | 110  | 111  | 149  | 148  | 706  | 174  | 500  | 449  | 367  |
| MIN   | 78   | 76   | 61   | 70   | 86   | 90   | 44   | 49   | 59   | 66   | 78   | 75   |
| AC-FT | 5630 | 6580 | 5290 | 5900 | 5680 | 6570 | 5250 | 7660 | 5210 | 9600 | 9180 | 9190 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 1996, BY WATER YEAR (WY)

|      | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 |
|------|------|------|------|------|------|------|------|
| MEAN | 87.7 | 82.0 | 65.3 | 73.5 | 81.6 | 96.4 | 112  |
| MAX  | 179  | 111  | 102  | 96.0 | 98.7 | 131  | 150  |
| (WY) | 1995 | 1996 | 1995 | 1996 | 1996 | 1992 | 1995 |
| MIN  | 47.3 | 48.6 | 39.5 | 46.2 | 56.4 | 76.4 | 86.1 |
| (WY) | 1993 | 1990 | 1990 | 1990 | 1990 | 1991 | 1993 |

SUMMARY STATISTICS

|                          | FOR 1995 CALENDAR YEAR | FOR 1996 WATER YEAR | WATER YEARS 1990 - 1996 |
|--------------------------|------------------------|---------------------|-------------------------|
| ANNUAL TOTAL             | 87377                  | 41202               |                         |
| ANNUAL MEAN              | 239                    | 113                 | 123                     |
| HIGHEST ANNUAL MEAN      |                        |                     | 246                     |
| LOWEST ANNUAL MEAN       |                        |                     | 76.0                    |
| HIGHEST DAILY MEAN       | 4200                   | 706                 | 4200                    |
| LOWEST DAILY MEAN        | 61                     | 44                  | 31                      |
| ANNUAL SEVEN-DAY MINIMUM | 76                     | 59                  | 35                      |
| INSTANTANEOUS PEAK FLOW  |                        | 4190                | 11300                   |
| INSTANTANEOUS PEAK STAGE |                        | a6.75               | 11.11                   |
| ANNUAL RUNOFF (AC-FT)    | 173300                 | 81720               | 89240                   |
| 10 PERCENT EXCEEDS       | 491                    | 157                 | 169                     |
| 50 PERCENT EXCEEDS       | 107                    | 97                  | 86                      |
| 90 PERCENT EXCEEDS       | 79                     | 73                  | 50                      |

e-Estimated.

a-From floodmark.

## 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 poor. 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, 0.5°C, Jan. 15, 1992 and Mar. 10, 1992.

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, 901 microsiemens, Dec. 9; minimum, 134 microsiemens, Sept. 6.

pH: Maximum, 8.3 units, Sept. 17; minimum, 6.9 units, Jan. 1.

WATER TEMPERATURE: Maximum, 24.1°C, July 6; minimum, 2.2°C, Apr. 28.

DISSOLVED OXYGEN: Maximum, 11.1 mg/l, Mar. 24; minimum, 5.2 mg/l, June 18.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DATE  | TIME | DIS-<br>CHARGE,<br>INST.<br>CUBIC<br>FEET<br>PER<br>SECOND | SPE-<br>CIFIC<br>CON-<br>DUCT-<br>ANCE<br>(US/CM) | PH<br>(STAND-<br>ARD<br>UNITS) | TEMPER-<br>ATURE<br>WATER<br>(DEG C) | OXYGEN,<br>DIS-<br>SOLVED<br>(MG/L) | OXYGEN<br>DEMAND,<br>BIO-<br>CHEM-<br>ICAL,<br>5 DAY<br>(MG/L) | COLI-<br>FORM,<br>FECAL,<br>0.7<br>UM-MF<br>(COLS./<br>100 ML) | STREP-<br>TOCOCCI<br>FECAL,<br>KF AGAR<br>(COLS.<br>PER<br>100 ML) | CALCIUM<br>DIS-<br>SOLVED<br>(MG/L<br>AS CA) | MAGNE-<br>SIUM,<br>DIS-<br>SOLVED<br>(MG/L<br>AS MG) |
|-------|------|--|---|--------------------------------|--------------------------------------|-------------------------------------|--|--|--|--|--|
| OCT   |      |  |   |                                |                                      |                                     |  |  |  |  |  |
| 26... | 1500 | 90   | 819   | 8.1                            | 14.5                                 | 9.2                                 | >20  | 150  | 280  | 61   | 19   |
| NOV   |      |  |   |                                |                                      |                                     |  |  |  |  |  |
| 30... | 1430 | 94   | 798   | 8.1                            | 11.5                                 | 8.1                                 | 7.1  | 440  | 360  | 61   | 19   |
| JAN   |      |  |   |                                |                                      |                                     |  |  |  |  |  |
| 18... | 1230 | 87   | 853   | 7.8                            | 10.0                                 | 7.6                                 | 19   | 440  | 300  | 59   | 17   |
| FEB   |      |  |   |                                |                                      |                                     |  |  |  |  |  |
| 22... | 1500 | 106  | 780   | 7.5                            | 12.5                                 | 8.1                                 | 15   | 280  | 180  | 55   | 18   |
| MAR   |      |  |   |                                |                                      |                                     |  |  |  |  |  |
| 21... | 1215 | 133  | 699   | 7.8                            | 13.5                                 | 8.3                                 | 9.6  | K47  | 60   | 50   | 16   |
| APR   |      |  |   |                                |                                      |                                     |  |  |  |  |  |
| 18... | 1230 | 87   | 719   | 8.0                            | 15.0                                 | 8.4                                 | 9.4  | 56   | 60   | 54   | 16   |
| MAY   |      |  |   |                                |                                      |                                     |  |  |  |  |  |
| 16... | 1430 | 74   | 757   | 7.9                            | 22.0                                 | 6.5                                 | 4.7  | 280  | 570  | 52   | 19   |
| JUN   |      |  |   |                                |                                      |                                     |  |  |  |  |  |
| 20... | 1215 | 97   | 714   | 7.7                            | 22.0                                 | 6.4                                 | 8.7  | 140  | K80  | 50   | 17   |
| JUL   |      |  |   |                                |                                      |                                     |  |  |  |  |  |
| 18... | 1230 | 97   | 660   | 8.0                            | 22.0                                 | 6.5                                 | 9.3  | K2800  | 880  | 46   | 16   |
| AUG   |      |  |   |                                |                                      |                                     |  |  |  |  |  |
| 15... | 1130 | 142  | 634   | 7.8                            | 21.0                                 | 6.5                                 | 11   | K2100  | K3300  | 44   | 13   |
| SEP   |      |  |   |                                |                                      |                                     |  |  |  |  |  |
| 12... | 1215 | 209  | 533   | 7.9                            | 16.0                                 | 7.8                                 | e6.0   | K1300  | 1600   | 39   | 11   |

| DATE  | ALKA-<br>LINITY<br>LAB<br>(MG/L<br>AS<br>CACO3) | SULFATE<br>DIS-<br>SOLVED<br>(MG/L<br>AS SO4) | CHLO-<br>RIDE,<br>DIS-<br>SOLVED<br>(MG/L<br>AS CL) | FLUO-<br>RIDE,<br>DIS-<br>SOLVED<br>(MG/L<br>AS F) | SULFIDE<br>TOTAL<br>(MG/L<br>AS S) | RESIDUE<br>TOTAL<br>AT 105<br>DEG. C,<br>SUS-<br>PENDE<br>(MG/L) | NITRO-<br>GEN,<br>NITRITE<br>DIS-<br>SOLVED<br>(MG/L<br>AS N) | NITRO-<br>GEN,<br>NO2+NO3<br>DIS-<br>SOLVED<br>(MG/L<br>AS N) | NITRO-<br>GEN,<br>AMMONIA<br>DIS-<br>SOLVED<br>(MG/L<br>AS N) | NITRO-<br>GEN, AM-<br>MONIA +<br>ORGANIC<br>TOTAL<br>(MG/L<br>AS N) | PHOS-<br>PHORUS<br>ORTHO,<br>DIS-<br>SOLVED<br>(MG/L<br>AS P) |
|-------|---|---|---|--|------------------------------------|--|---|---|---|---|---|
| OCT   |   |   |   |  |                                    |  |   |   |   |   |   |
| 26... | 110   | 180   | 39  | 2.0  | --                                 | 20   | 0.17  | 3.0   | 6.2   | 8.3   | 0.32  |
| NOV   |   |   |   |  |                                    |  |   |   |   |   |   |
| 30... | 106   | 170   | 37  | 1.9  | <0.5                               | 42   | 0.14  | 3.4   | 6.4   | 7.0   | 0.43  |
| JAN   |   |   |   |  |                                    |  |   |   |   |   |   |
| 18... | 103   | 180   | 50  | 2.1  | --                                 | 24   | 1.6   | 4.0   | 5.2   | 7.0   | 0.03  |
| FEB   |   |   |   |  |                                    |  |   |   |   |   |   |
| 22... | 108   | 160   | 41  | 1.8  | --                                 | 89   | 0.22  | 3.3   | 5.1   | 5.9   | 0.04  |
| MAR   |   |   |   |  |                                    |  |   |   |   |   |   |
| 21... | 114   | 140   | 37  | 1.8  | --                                 | 63   | 0.13  | 3.9   | 1.2   | 2.3   | 0.10  |
| APR   |   |   |   |  |                                    |  |   |   |   |   |   |
| 18... | 109   | 160   | 37  | 1.8  | --                                 | 46   | 0.15  | 3.7   | 2.6   | 3.5   | 0.06  |
| MAY   |   |   |   |  |                                    |  |   |   |   |   |   |
| 16... | 115   | 180   | 38  | 1.9  | <0.5                               | 52   | 0.20  | 3.9   | 0.85  | 2.0   | 0.31  |
| JUN   |   |   |   |  |                                    |  |   |   |   |   |   |
| 20... | 111   | 170   | 38  | 1.7  | --                                 | 32   | 0.07  | 4.4   | 0.25  | 1.8   | 1.2   |
| JUL   |   |   |   |  |                                    |  |   |   |   |   |   |
| 18... | 106   | 140   | 32  | 2.0  | --                                 | 97   | 0.10  | 2.0   | 1.7   | 3.4   | 0.66  |
| AUG   |   |   |   |  |                                    |  |   |   |   |   |   |
| 15... | 99  | 140   | 31  | 1.3  | --                                 | 214  | 0.08  | 2.1   | 1.8   | 3.3   | 0.27  |
| SEP   |   |   |   |  |                                    |  |   |   |   |   |   |
| 12... | 84  | 110   | 25  | 1.7  | --                                 | 128  | 0.10  | 2.5   | 1.4   | 2.2   | 0.18  |

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 1995 TO SEPTEMBER 1996

| DATE      | ARSENIC<br>TOTAL<br>(UG/L<br>AS AS) | ARSENIC<br>DIS-<br>SOLVED<br>(UG/L<br>AS AS) | BORON,<br>TOTAL<br>RECOV-<br>ERABLE<br>(UG/L<br>AS B) | BORON,<br>DIS-<br>SOLVED<br>(UG/L<br>AS B) | CADMIUM<br>TOTAL<br>RECOV-<br>ERABLE<br>(UG/L<br>AS CD) | CADMIUM<br>DIS-<br>SOLVED<br>(UG/L<br>AS CD) | CHRO-<br>MIUM,<br>TOTAL<br>RECOV-<br>ERABLE<br>(UG/L<br>AS CR) | CHRO-<br>MIUM,<br>DIS-<br>SOLVED<br>(UG/L<br>AS CR) | CHRO-<br>MIUM,<br>HEXA-<br>VALENT,<br>DIS.<br>(UG/L<br>AS CR) | COPPER,<br>TOTAL<br>RECOV-<br>ERABLE<br>(UG/L<br>AS CU) | COPPER,<br>DIS-<br>SOLVED<br>(UG/L<br>AS CU) | IRON,<br>TOTAL<br>RECOV-<br>ERABLE<br>(UG/L<br>AS FE) |
|-----------|-------------------------------------|--|---|--|---|--|--|---|---|---|--|---|
| OCT 26... | --                                  | --   | --  | --   | <1  | <1   | <1   | <1  | <1  | 4   | 2  | 560   |
| NOV 30... | <1                                  | <1   | 120   | 130  | <1  | <1   | <1   | <1  | <1  | 4   | 2  | 770   |
| JAN 18... | --                                  | --   | --  | --   | <1  | <1   | 1  | <1  | <1  | 3   | 1  | 450   |
| FEB 22... | --                                  | --   | --  | --   | <1  | <1   | 1  | <1  | <1  | 3   | 1  | 2000  |
| MAR 21... | --                                  | --   | --  | --   | <1  | <1   | 1  | <1  | <1  | 3   | 2  | 900   |
| APR 18... | --                                  | --   | --  | --   | <1  | <1   | 1  | <1  | <1  | 7   | 4  | 830   |
| MAY 16... | 1                                   | <1   | 160   | 160  | <1  | <1   | <1   | <1  | <1  | 3   | 3  | 870   |
| JUN 20... | --                                  | --   | --  | --   | <1  | <1   | <1   | <1  | <1  | 5   | 1  | 510   |
| JUL 18... | --                                  | --   | --  | --   | <1  | <1   | 2  | <1  | <1  | 5   | 3  | 2200  |
| AUG 15... | --                                  | --   | --  | --   | <1  | <1   | 2  | <1  | <1  | 8   | 2  | 5300  |
| SEP 12... | --                                  | --   | --  | --   | <1  | <1   | 2  | <1  | <1  | 6   | 2  | 3400  |

| DATE      | IRON,<br>DIS-<br>SOLVED<br>(UG/L<br>AS FE) | LEAD,<br>TOTAL<br>RECOV-<br>ERABLE<br>(UG/L<br>AS PB) | LEAD,<br>DIS-<br>SOLVED<br>(UG/L<br>AS PB) | MANGA-<br>NESE,<br>TOTAL<br>RECOV-<br>ERABLE<br>(UG/L<br>AS MN) | MANGA-<br>NESE,<br>DIS-<br>SOLVED<br>(UG/L<br>AS MN) | NICKEL,<br>TOTAL<br>RECOV-<br>ERABLE<br>(UG/L<br>AS NI) | NICKEL,<br>DIS-<br>SOLVED<br>(UG/L<br>AS NI) | SELE-<br>NIUM,<br>DIS-<br>SOLVED<br>(UG/L<br>AS SE) | ZINC,<br>TOTAL<br>RECOV-<br>ERABLE<br>(UG/L<br>AS ZN) | ZINC,<br>DIS-<br>SOLVED<br>(UG/L<br>AS ZN) | CYANIDE<br>TOTAL<br>(MG/L<br>AS CN) |
|-----------|--|---|--|---|--|---|--|---|---|--|-------------------------------------|
| OCT 26... | 40   | 1   | <1   | 100   | 80   | 3   | 1  | 6   | 30  | 20   | --                                  |
| NOV 30... | 30   | <1  | <1   | 90  | 70   | 4   | 3  | 4   | 30  | 20   | <0.01                               |
| JAN 18... | 50   | 1   | <1   | 110   | 90   | 4   | 2  | 3   | 30  | 20   | --                                  |
| FEB 22... | 30   | 6   | <1   | 120   | 80   | 3   | 2  | 3   | 50  | 30   | --                                  |
| MAR 21... | 20   | 2   | <1   | 100   | 60   | 4   | 3  | 3   | 50  | 40   | --                                  |
| APR 18... | 30   | 2   | <1   | 90  | 60   | 3   | 2  | 4   | 30  | 19   | --                                  |
| MAY 16... | 29   | 2   | <1   | 100   | 74   | 4   | 3  | 4   | 40  | 27   | <0.01                               |
| JUN 20... | 32   | 2   | <1   | 90  | 72   | 2   | 2  | 4   | 40  | 34   | --                                  |
| JUL 18... | 34   | 6   | <1   | 120   | 41   | 3   | 3  | 3   | 40  | 23   | --                                  |
| AUG 15... | 20   | 15  | <1   | 180   | 40   | 10  | 6  | 4   | 60  | 19   | --                                  |
| SEP 12... | 30   | 17  | <1   | 170   | 40   | 4   | 1  | 2   | 30  | 19   | --                                  |

## 07105530 FOUNTAIN CREEK BELOW JANITELL ROAD, BELOW COLORADO SPRINGS, CO--Continued

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM @ 25 DEG. C), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DAY   | MAX | MIN | MEAN |
|-------|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|------|
|       |     |     |      |     |     |      |     |     |      |     |     |      |
| 1     | --- | --- | ---  | 793 | 698 | 749  | 775 | 729 | 754  | --- | --- | ---  |
| 2     | --- | --- | ---  | 779 | 727 | 750  | 799 | 737 | 768  | --- | --- | ---  |
| 3     | --- | --- | 713  | 805 | 734 | 761  | 793 | 737 | 763  | 760 | 696 | 728  |
| 4     | 729 | 631 | 694  | --- | 671 | 700  | 787 | 727 | 759  | 740 | 704 | 724  |
| 5     | 711 | 582 | 661  | --- | 665 | 690  | 777 | 735 | 756  | 723 | 690 | 705  |
| 6     | 720 | 649 | 693  | --- | 669 | 700  | 760 | 725 | 742  | 732 | 669 | 707  |
| 7     | 732 | 659 | 701  | --- | 681 | 710  | 785 | 723 | 754  | --- | --- | ---  |
| 8     | 743 | 658 | 707  | 771 | 656 | 730  | 796 | 720 | 758  | --- | --- | ---  |
| 9     | 761 | 677 | 725  | 755 | 674 | 723  | 901 | 775 | 839  | --- | --- | ---  |
| 10    | 753 | 696 | 724  | 758 | 672 | 710  | 796 | 705 | 751  | --- | --- | ---  |
| 11    | 748 | 710 | 724  | --- | --- | ---  | 723 | 672 | 696  | --- | --- | ---  |
| 12    | 782 | 686 | 735  | --- | --- | ---  | 730 | 670 | 704  | --- | --- | ---  |
| 13    | 757 | 702 | 730  | --- | --- | ---  | 792 | 685 | 714  | --- | --- | ---  |
| 14    | 758 | 676 | 717  | --- | --- | ---  | 763 | 677 | 703  | --- | --- | ---  |
| 15    | 747 | 686 | 720  | --- | --- | ---  | 750 | 652 | 695  | --- | --- | ---  |
| 16    | 741 | 672 | 716  | --- | --- | ---  | 710 | 640 | 679  | --- | --- | ---  |
| 17    | 774 | 699 | 745  | --- | --- | ---  | 713 | 652 | 679  | --- | --- | ---  |
| 18    | 781 | 740 | 763  | --- | --- | ---  | 738 | 666 | 704  | --- | --- | ---  |
| 19    | 777 | 732 | 760  | --- | --- | ---  | 790 | 712 | 751  | --- | --- | ---  |
| 20    | 765 | 625 | 688  | --- | --- | ---  | 770 | 720 | 746  | --- | --- | ---  |
| 21    | 660 | 637 | 600  | --- | --- | ---  | 764 | 708 | 733  | --- | --- | ---  |
| 22    | 744 | 595 | 637  | --- | --- | ---  | 736 | 698 | 715  | --- | --- | ---  |
| 23    | 848 | 695 | 731  | --- | --- | ---  | 741 | 682 | 713  | --- | --- | ---  |
| 24    | 835 | 674 | 732  | --- | --- | ---  | 729 | 683 | 707  | 751 | 696 | 723  |
| 25    | 704 | 662 | 682  | --- | --- | ---  | 724 | 670 | 693  | 753 | 704 | 733  |
| 26    | 752 | 665 | 708  | --- | --- | ---  | 715 | 673 | 693  | 789 | 736 | 762  |
| 27    | --- | --- | ---  | --- | --- | ---  | 730 | 671 | 701  | 807 | 745 | 775  |
| 28    | --- | --- | ---  | --- | --- | ---  | 733 | 672 | 698  | 763 | 724 | 744  |
| 29    | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  | 755 | 718 | 736  |
| 30    | 752 | 710 | 731  | --- | --- | ---  | --- | --- | ---  | 778 | 745 | 762  |
| 31    | 764 | 727 | 739  | --- | --- | ---  | --- | --- | ---  | 817 | 772 | 792  |
| MONTH | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
|       | MAX | MIN | MEAN |
|       |     |     |      |     |     |      |     |     |      |     |     |      |
| 1     | 797 | 759 | 776  | 805 | 698 | 747  | 732 | 681 | 706  | 746 | 705 | 727  |
| 2     | 781 | 742 | 766  | 802 | 697 | 745  | 711 | 660 | 686  | 743 | 703 | 728  |
| 3     | 833 | 737 | 785  | 778 | 691 | 726  | 677 | 608 | 642  | 726 | 668 | 712  |
| 4     | 892 | 732 | 812  | 755 | 692 | 723  | 691 | 607 | 649  | 794 | 724 | 759  |
| 5     | 824 | 764 | 789  | 759 | 721 | 740  | 676 | 615 | 646  | 771 | 726 | 748  |
| 6     | 809 | 732 | 762  | --- | --- | ---  | 673 | 630 | 652  | 782 | 714 | 748  |
| 7     | 777 | 729 | 751  | --- | --- | ---  | 678 | 637 | 658  | 796 | 756 | 776  |
| 8     | 763 | 718 | 745  | 780 | 735 | 758  | 709 | 631 | 670  | 787 | 744 | 766  |
| 9     | 768 | 721 | 745  | 756 | 710 | 733  | 713 | 621 | 667  | 783 | 740 | 761  |
| 10    | 784 | 716 | 750  | 735 | 690 | 711  | 684 | 622 | 653  | 649 | 389 | 530  |
| 11    | 811 | 713 | 762  | 796 | 701 | 743  | 750 | 615 | 682  | --- | --- | ---  |
| 12    | 836 | 693 | 742  | 780 | 745 | 762  | 738 | 682 | 703  | 764 | 718 | 741  |
| 13    | 832 | 703 | 759  | 769 | 720 | 753  | 746 | 626 | 683  | 750 | 674 | 712  |
| 14    | 794 | 701 | 747  | 859 | 700 | 762  | 731 | 600 | 666  | 774 | 710 | 735  |
| 15    | 760 | 719 | 740  | 800 | 726 | 763  | 675 | 596 | 638  | 749 | 692 | 730  |
| 16    | 795 | 705 | 747  | 753 | 704 | 738  | 657 | 618 | 637  | 759 | 668 | 725  |
| 17    | 775 | 702 | 732  | 786 | 709 | 729  | 680 | 634 | 653  | 772 | 724 | 749  |
| 18    | --- | --- | ---  | 738 | 686 | 709  | 740 | 664 | 698  | 778 | 732 | 752  |
| 19    | --- | --- | ---  | 739 | 668 | 708  | 704 | 618 | 671  | 787 | 716 | 749  |
| 20    | --- | --- | ---  | 700 | 657 | 680  | 660 | 598 | 638  | 778 | 735 | 758  |
| 21    | 788 | 714 | 750  | 676 | 643 | 660  | 675 | 619 | 643  | 810 | 747 | 767  |
| 22    | 748 | 720 | 734  | 675 | 648 | 660  | 690 | 621 | 662  | 797 | 748 | 766  |
| 23    | 759 | 711 | 735  | 716 | 664 | 686  | 682 | 655 | 666  | 773 | 721 | 753  |
| 24    | 768 | 714 | 741  | 707 | 662 | 681  | 711 | 666 | 686  | 791 | 558 | 710  |
| 25    | 833 | 716 | 774  | 745 | 675 | 709  | 719 | 688 | 707  | 617 | 227 | 421  |
| 26    | 773 | 699 | 734  | 739 | 640 | 697  | 729 | 654 | 689  | 374 | 246 | 350  |
| 27    | --- | --- | ---  | 716 | 655 | 682  | 726 | 718 | 722  | 588 | 270 | 474  |
| 28    | --- | --- | ---  | 737 | 677 | 704  | 721 | 685 | 694  | 589 | 506 | 544  |
| 29    | --- | --- | ---  | 736 | 686 | 719  | 704 | 657 | 680  | 547 | 481 | 521  |
| 30    | --- | --- | ---  | 750 | 703 | 726  | 732 | 700 | 716  | 548 | 472 | 516  |
| 31    | --- | --- | ---  | 729 | 686 | 707  | --- | --- | ---  | 649 | 485 | 583  |
| MONTH | --- | --- | ---  | --- | --- | ---  | 750 | 596 | 672  | --- | --- | ---  |

07105530 FOUNTAIN CREEK BELOW JANITELL ROAD, BELOW COLORADO SPRINGS, CO--Continued

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM @ 25 DEG. C), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DAY   | JUNE |     |      | JULY |     |      | AUGUST |     |      | SEPTEMBER |     |      |
|-------|------|-----|------|------|-----|------|--------|-----|------|-----------|-----|------|
|       | MAX  | MIN | MEAN | MAX  | MIN | MEAN | MAX    | MIN | MEAN | MAX       | MIN | MEAN |
| 1     | 669  | 586 | 633  | ---  | --- | ---  | 642    | 549 | 596  | ---       | --- | ---  |
| 2     | 687  | 581 | 641  | ---  | --- | ---  | 635    | 230 | 304  | 661       | 626 | 644  |
| 3     | 725  | 640 | 684  | 809  | 739 | 774  | ---    | --- | ---  | 711       | 653 | 682  |
| 4     | 751  | 667 | 725  | 798  | 655 | 710  | ---    | --- | ---  | 701       | 657 | 679  |
| 5     | 772  | 690 | 731  | 782  | 690 | 736  | 792    | 687 | 740  | 715       | 669 | 692  |
| 6     | 758  | 665 | 724  | ---  | --- | ---  | 788    | 716 | 752  | 719       | 134 | 512  |
| 7     | 711  | 657 | 681  | ---  | --- | ---  | 770    | 723 | 746  | ---       | --- | ---  |
| 8     | 759  | 707 | 736  | ---  | --- | ---  | 754    | 276 | 515  | ---       | --- | ---  |
| 9     | 767  | 724 | 741  | ---  | --- | ---  | 604    | 387 | 528  | ---       | --- | ---  |
| 10    | 772  | 722 | 747  | ---  | --- | ---  | ---    | --- | ---  | 775       | 677 | 726  |
| 11    | 784  | 724 | 751  | 689  | 647 | 668  | ---    | --- | ---  | 763       | 248 | 705  |
| 12    | 806  | 727 | 766  | 731  | 505 | 644  | ---    | --- | ---  | 611       | 225 | 464  |
| 13    | 754  | 293 | 636  | 643  | 531 | 590  | ---    | --- | ---  | 656       | 437 | 574  |
| 14    | 645  | 396 | 547  | 642  | 534 | 606  | 834    | 348 | 788  | 661       | 450 | 589  |
| 15    | 594  | 455 | 531  | 666  | 523 | 609  | ---    | --- | ---  | 626       | 453 | 567  |
| 16    | 588  | 500 | 549  | 672  | 575 | 637  | ---    | --- | ---  | 646       | 524 | 584  |
| 17    | 637  | 516 | 583  | 715  | --- | ---  | ---    | --- | ---  | 640       | 235 | 500  |
| 18    | 690  | 625 | 649  | 655  | 250 | 421  | ---    | --- | ---  | 549       | 337 | 486  |
| 19    | 694  | 635 | 669  | 519  | 354 | 436  | ---    | --- | ---  | 572       | 437 | 520  |
| 20    | 755  | 665 | 721  | ---  | --- | ---  | ---    | --- | ---  | 615       | 511 | 570  |
| 21    | 684  | 546 | 615  | ---  | --- | ---  | ---    | --- | ---  | 642       | 565 | 606  |
| 22    | 675  | 523 | 599  | ---  | --- | ---  | ---    | --- | ---  | 691       | 549 | 605  |
| 23    | 680  | 607 | 643  | ---  | --- | ---  | 793    | 337 | 631  | 691       | 330 | 543  |
| 24    | 728  | 626 | 677  | 663  | 248 | 529  | 611    | 325 | 476  | 607       | 441 | 539  |
| 25    | 728  | 650 | 686  | 661  | 267 | 497  | 729    | 514 | 621  | 624       | 537 | 587  |
| 26    | 777  | 655 | 716  | 700  | 268 | 519  | 795    | 644 | 720  | 632       | 478 | 588  |
| 27    | ---  | 637 | 702  | 678  | 375 | 557  | 779    | 354 | 644  | 580       | 457 | 524  |
| 28    | ---  | --- | ---  | 787  | 660 | 723  | ---    | --- | ---  | 614       | 530 | 572  |
| 29    | ---  | --- | ---  | 770  | 677 | 723  | ---    | 239 | 392  | 622       | 526 | 578  |
| 30    | ---  | --- | ---  | 742  | 646 | 702  | ---    | 241 | 325  | 617       | 528 | 584  |
| 31    | ---  | --- | ---  | 749  | 652 | 700  | ---    | --- | ---  | ---       | --- | ---  |
| MONTH | ---  | --- | ---  | ---  | --- | ---  | ---    | --- | ---  | ---       | --- | ---  |

pH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DAY   | OCTOBER |     |      | NOVEMBER |     |      | DECEMBER |     |      | JANUARY |     |      |
|-------|---------|-----|------|----------|-----|------|----------|-----|------|---------|-----|------|
|       | MAX     | MIN | MEAN | MAX      | MIN | MEAN | MAX      | MIN | MEAN | MAX     | MIN | MEAN |
| 1     | ---     | --- | ---  | 7.5      | 7.3 | 7.4  | 7.8      | 7.5 | 7.6  | 7.3     | 6.9 | 7.2  |
| 2     | ---     | --- | ---  | 7.5      | 7.3 | 7.4  | 7.8      | 7.5 | 7.6  | 7.3     | 7.1 | 7.2  |
| 3     | ---     | --- | ---  | 7.7      | 7.4 | 7.5  | 7.8      | 7.5 | 7.6  | 7.3     | 7.1 | 7.2  |
| 4     | 7.7     | 7.6 | 7.6  | 7.6      | 7.4 | 7.5  | 7.8      | 7.5 | 7.6  | 7.4     | 7.2 | 7.3  |
| 5     | 7.8     | 7.6 | 7.6  | 7.7      | 7.4 | 7.6  | 7.8      | 7.5 | 7.6  | 7.4     | 7.1 | 7.2  |
| 6     | 7.7     | 7.5 | 7.6  | 7.7      | 7.4 | 7.5  | 7.7      | 7.5 | 7.6  | 7.4     | 7.1 | 7.2  |
| 7     | 7.7     | 7.5 | 7.6  | 7.7      | 7.5 | 7.6  | 7.8      | 7.6 | 7.6  | 7.4     | 7.1 | 7.2  |
| 8     | 7.7     | 7.5 | 7.6  | 7.9      | 7.6 | 7.7  | 7.8      | 7.5 | 7.6  | 7.5     | 7.2 | 7.4  |
| 9     | 7.7     | 7.5 | 7.6  | 7.9      | 7.6 | 7.7  | 7.9      | 7.6 | 7.7  | 7.7     | 7.2 | 7.5  |
| 10    | 7.7     | 7.5 | 7.6  | 7.8      | 7.6 | 7.7  | 7.9      | 7.5 | 7.6  | 7.7     | 7.2 | 7.4  |
| 11    | 7.7     | 7.5 | 7.6  | 7.9      | 7.5 | 7.8  | 7.8      | 7.6 | 7.6  | 7.7     | 7.2 | 7.4  |
| 12    | 7.8     | 7.5 | 7.7  | 8.1      | 7.6 | 7.9  | 7.8      | 7.5 | 7.6  | 7.6     | 7.1 | 7.4  |
| 13    | 7.9     | 7.6 | 7.7  | 7.8      | 7.5 | 7.6  | 7.7      | 7.4 | 7.5  | 7.6     | 7.0 | 7.4  |
| 14    | 7.8     | 7.6 | 7.7  | 8.0      | 7.5 | 7.8  | 7.5      | 7.3 | 7.4  | 7.7     | 7.3 | 7.5  |
| 15    | 7.6     | 7.4 | 7.6  | 8.0      | 7.8 | 7.9  | 7.5      | 7.3 | 7.4  | 7.6     | 7.3 | 7.5  |
| 16    | 7.6     | 7.4 | 7.5  | 8.1      | 7.9 | 8.0  | 7.6      | 7.3 | 7.4  | 7.7     | 7.4 | 7.5  |
| 17    | 7.6     | 7.4 | 7.4  | 8.0      | 7.7 | 7.9  | 7.6      | 7.4 | 7.5  | 7.7     | 7.4 | 7.5  |
| 18    | 7.6     | 7.3 | 7.4  | 8.0      | 7.7 | 7.9  | 7.6      | 7.4 | 7.5  | 7.6     | 7.2 | 7.4  |
| 19    | 7.5     | 7.3 | 7.4  | 8.0      | 7.6 | 7.8  | 7.8      | 7.3 | 7.5  | 7.5     | 7.2 | 7.4  |
| 20    | 7.5     | 7.4 | 7.4  | 7.8      | 7.6 | 7.7  | 7.5      | 7.3 | 7.4  | 7.7     | 7.3 | 7.5  |
| 21    | 7.6     | 7.4 | 7.4  | 7.8      | 7.6 | 7.7  | 7.6      | 7.3 | 7.4  | 7.6     | 7.0 | 7.3  |
| 22    | 7.6     | 7.4 | 7.5  | 7.8      | 7.4 | 7.6  | 7.6      | 7.4 | 7.5  | 7.7     | 7.0 | 7.2  |
| 23    | 7.6     | 7.4 | 7.5  | 7.6      | 7.4 | 7.5  | 7.6      | 7.4 | 7.5  | 7.4     | 7.0 | 7.1  |
| 24    | 7.6     | 7.4 | 7.5  | 7.6      | 7.4 | 7.5  | 7.7      | 7.5 | 7.6  | 7.3     | 7.0 | 7.2  |
| 25    | 7.6     | 7.4 | 7.5  | 7.6      | 7.4 | 7.4  | 7.7      | 7.5 | 7.6  | 7.4     | 7.1 | 7.2  |
| 26    | 7.6     | 7.4 | 7.5  | 7.7      | 7.4 | 7.5  | 7.7      | 7.5 | 7.6  | 7.3     | 7.0 | 7.1  |
| 27    | 7.6     | 7.4 | 7.4  | 7.8      | 7.4 | 7.7  | 7.6      | 7.4 | 7.5  | 7.4     | 7.0 | 7.2  |
| 28    | 7.5     | 7.4 | 7.4  | 7.7      | 7.4 | 7.5  | 7.6      | 7.4 | 7.4  | 7.4     | 7.0 | 7.2  |
| 29    | 7.5     | 7.2 | 7.4  | 7.7      | 7.4 | 7.5  | 7.5      | 7.3 | 7.4  | 7.4     | 7.0 | 7.2  |
| 30    | 7.5     | 7.2 | 7.4  | 7.7      | 7.4 | 7.6  | 7.4      | 7.2 | 7.3  | 7.4     | 7.1 | 7.2  |
| 31    | 7.6     | 7.2 | 7.4  | ---      | --- | ---  | 7.4      | 7.2 | 7.3  | 7.4     | 7.1 | 7.2  |
| MONTH | ---     | --- | ---  | 8.1      | 7.3 | 7.6  | 7.9      | 7.2 | 7.5  | 7.7     | 6.9 | 7.3  |

## 07105530 FOUNTAIN CREEK BELOW JANITELL ROAD, BELOW COLORADO SPRINGS, CO--Continued

pH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DAY   | MAX      | MIN | MEAN | MAX   | MIN | MEAN | MAX    | MIN | MEAN | MAX       | MIN | MEAN |
|-------|----------|-----|------|-------|-----|------|--------|-----|------|-----------|-----|------|
|       | FEBRUARY |     |      | MARCH |     |      | APRIL  |     |      | MAY       |     |      |
| 1     | 7.4      | 7.1 | 7.2  | 7.7   | 7.1 | 7.4  | 7.7    | 7.4 | 7.5  | 8.0       | 7.5 | 7.7  |
| 2     | 7.4      | 7.1 | 7.3  | 7.5   | 7.1 | 7.4  | 7.7    | 7.4 | 7.5  | 8.1       | 7.5 | 7.7  |
| 3     | 7.4      | 7.1 | 7.3  | 7.6   | 7.2 | 7.4  | 7.7    | 7.4 | 7.5  | 7.8       | 7.5 | 7.6  |
| 4     | 7.6      | 7.1 | 7.4  | 7.7   | 7.1 | 7.4  | 7.6    | 7.4 | 7.5  | 7.8       | 7.5 | 7.7  |
| 5     | 7.6      | 7.1 | 7.3  | 7.5   | 7.1 | 7.3  | 7.6    | 7.4 | 7.5  | 7.8       | 7.4 | 7.6  |
| 6     | 7.5      | 7.2 | 7.3  | 7.6   | 7.3 | 7.5  | 7.7    | 7.3 | 7.5  | 7.7       | 7.4 | 7.5  |
| 7     | 7.4      | 7.1 | 7.2  | 7.6   | 7.3 | 7.5  | 7.7    | 7.4 | 7.5  | 7.7       | 7.4 | 7.6  |
| 8     | 7.4      | 7.1 | 7.2  | 7.6   | 7.4 | 7.5  | 7.7    | 7.4 | 7.5  | 7.6       | 7.3 | 7.5  |
| 9     | 7.7      | 7.1 | 7.5  | 7.6   | 7.3 | 7.5  | 7.7    | 7.4 | 7.5  | 7.7       | 7.4 | 7.5  |
| 10    | 7.7      | 7.1 | 7.4  | 7.7   | 7.3 | 7.5  | 7.6    | 7.4 | 7.5  | 7.8       | 7.5 | 7.6  |
| 11    | 7.5      | 7.1 | 7.4  | 7.7   | 7.5 | 7.6  | 7.7    | 7.4 | 7.6  | 7.8       | 7.5 | 7.6  |
| 12    | 7.5      | 7.0 | 7.3  | 7.7   | 7.4 | 7.5  | 7.9    | 7.5 | 7.7  | 8.0       | 7.5 | 7.6  |
| 13    | 7.6      | 7.3 | 7.4  | 7.7   | 7.4 | 7.5  | 7.8    | 7.6 | 7.7  | 8.0       | 7.2 | 7.5  |
| 14    | 7.6      | 7.1 | 7.4  | 7.7   | 7.4 | 7.5  | 7.8    | 7.6 | 7.7  | 7.8       | 7.5 | 7.6  |
| 15    | 7.5      | 7.2 | 7.3  | 7.7   | 7.4 | 7.5  | 7.9    | 7.7 | 7.8  | 7.8       | 7.5 | 7.6  |
| 16    | 7.5      | 7.2 | 7.3  | 7.7   | 7.4 | 7.5  | 7.9    | 7.7 | 7.8  | 7.9       | 7.5 | 7.6  |
| 17    | 7.6      | 7.1 | 7.3  | 7.7   | 7.4 | 7.5  | 8.0    | 7.7 | 7.8  | 7.9       | 7.5 | 7.6  |
| 18    | 7.6      | 7.3 | 7.5  | 7.7   | 7.4 | 7.5  | 8.2    | 7.5 | 7.8  | 7.9       | 7.5 | 7.6  |
| 19    | 7.8      | 7.3 | 7.6  | 7.6   | 7.4 | 7.5  | 7.9    | 7.5 | 7.7  | 7.8       | 7.5 | 7.6  |
| 20    | 7.8      | 7.3 | 7.5  | 7.6   | 7.4 | 7.5  | 7.8    | 7.5 | 7.6  | 7.8       | 7.5 | 7.6  |
| 21    | 7.7      | 7.3 | 7.5  | 7.7   | 7.4 | 7.5  | 7.8    | 7.5 | 7.6  | 7.8       | 7.4 | 7.6  |
| 22    | 7.8      | 7.4 | 7.5  | 7.7   | 7.4 | 7.5  | 7.8    | 7.4 | 7.5  | 7.8       | 7.4 | 7.6  |
| 23    | 7.7      | 7.3 | 7.4  | 7.7   | 7.4 | 7.5  | 7.6    | 7.4 | 7.5  | 7.8       | 7.4 | 7.6  |
| 24    | 7.6      | 7.3 | 7.4  | 7.7   | 7.4 | 7.5  | 7.6    | 7.4 | 7.5  | 7.9       | 7.5 | 7.7  |
| 25    | 7.7      | 7.2 | 7.4  | 7.7   | 7.3 | 7.4  | 7.9    | 7.4 | 7.6  | 8.0       | 7.7 | 7.8  |
| 26    | 7.6      | 7.2 | 7.3  | 7.6   | 7.3 | 7.4  | 8.1    | 7.4 | 7.8  | 8.0       | 7.7 | 7.8  |
| 27    | 7.6      | 7.3 | 7.4  | 7.6   | 7.4 | 7.5  | 7.9    | 7.6 | 7.8  | 7.9       | 7.7 | 7.8  |
| 28    | 7.5      | 7.2 | 7.4  | 7.7   | 7.5 | 7.5  | 8.1    | 7.6 | 7.7  | 8.0       | 7.7 | 7.9  |
| 29    | 7.6      | 7.1 | 7.4  | 7.8   | 7.5 | 7.5  | 8.1    | 7.6 | 7.8  | 7.9       | 7.7 | 7.8  |
| 30    | ---      | --- | ---  | 7.8   | 7.4 | 7.5  | 8.0    | 7.5 | 7.7  | 8.0       | 7.7 | 7.8  |
| 31    | ---      | --- | ---  | 7.7   | 7.4 | 7.5  | ---    | --- | ---  | 8.0       | 7.7 | 7.8  |
| MONTH | 7.8      | 7.0 | 7.4  | 7.8   | 7.1 | 7.5  | 8.2    | 7.3 | 7.6  | 8.1       | 7.2 | 7.6  |
|       | JUNE     |     |      | JULY  |     |      | AUGUST |     |      | SEPTEMBER |     |      |
| 1     | 8.0      | 7.5 | 7.8  | 7.6   | 7.4 | 7.5  | 7.6    | 7.5 | 7.5  | 8.1       | 7.8 | 7.9  |
| 2     | 7.8      | 7.5 | 7.7  | ---   | --- | ---  | 7.9    | 7.7 | 7.8  | 8.0       | 7.7 | 7.9  |
| 3     | 7.9      | 7.5 | 7.7  | 7.9   | 7.8 | 7.9  | ---    | --- | ---  | 7.9       | 7.7 | 7.8  |
| 4     | 7.9      | 7.6 | 7.7  | 8.1   | 7.8 | 7.9  | ---    | --- | ---  | 7.8       | 7.6 | 7.7  |
| 5     | 8.2      | 7.6 | 7.7  | 8.0   | 7.8 | 7.9  | 7.7    | 7.6 | 7.6  | 7.8       | 7.6 | 7.7  |
| 6     | 8.0      | 7.6 | 7.7  | 8.0   | 7.7 | 7.9  | 7.7    | 7.6 | 7.6  | 8.1       | 7.7 | 7.8  |
| 7     | 7.8      | 7.5 | 7.7  | 8.0   | 7.7 | 7.8  | 7.8    | 7.5 | 7.6  | 8.0       | 7.9 | 7.9  |
| 8     | 7.9      | 7.5 | 7.6  | 8.0   | 7.7 | 7.8  | 7.9    | 7.5 | 7.6  | 8.0       | 7.8 | 7.9  |
| 9     | 8.2      | 7.5 | 7.7  | 8.1   | 7.8 | 8.0  | 7.7    | 7.5 | 7.6  | 8.0       | 7.8 | 7.9  |
| 10    | 8.0      | 7.5 | 7.6  | ---   | --- | ---  | 7.8    | 7.5 | 7.6  | 8.0       | 7.8 | 7.9  |
| 11    | 7.8      | 7.5 | 7.6  | 8.0   | 8.0 | 8.0  | 7.7    | 7.4 | 7.5  | 8.1       | 7.7 | 7.8  |
| 12    | 7.9      | 7.5 | 7.6  | 8.1   | 7.9 | 8.0  | 7.6    | 7.3 | 7.4  | 8.2       | 7.7 | 7.9  |
| 13    | 8.0      | 7.5 | 7.7  | 8.1   | 7.9 | 8.0  | 7.6    | 7.3 | 7.5  | 7.9       | 7.6 | 7.8  |
| 14    | 7.8      | 7.6 | 7.7  | 8.1   | 8.0 | 8.0  | 7.7    | 7.4 | 7.6  | 7.8       | 7.6 | 7.7  |
| 15    | 7.8      | 7.6 | 7.6  | 8.2   | 8.0 | 8.1  | 8.1    | 7.4 | 7.8  | 8.0       | 7.6 | 7.7  |
| 16    | 7.8      | 7.6 | 7.7  | 8.1   | 8.0 | 8.1  | 7.8    | 7.4 | 7.5  | 7.8       | 7.6 | 7.7  |
| 17    | 7.9      | 7.6 | 7.7  | 8.2   | 7.8 | 8.1  | 7.4    | 7.3 | 7.3  | 8.3       | 7.6 | 7.8  |
| 18    | 7.9      | 7.6 | 7.7  | 8.1   | 7.9 | 8.0  | 7.5    | 7.3 | 7.3  | 8.0       | 7.7 | 7.8  |
| 19    | 7.9      | 7.5 | 7.7  | 8.1   | 8.0 | 8.0  | 8.1    | 7.3 | 7.5  | 8.2       | 7.4 | 7.8  |
| 20    | 7.8      | 7.6 | 7.7  | 8.0   | 7.8 | 7.9  | ---    | --- | ---  | 7.7       | 7.5 | 7.6  |
| 21    | 7.9      | 7.7 | 7.8  | 7.9   | 7.7 | 7.8  | ---    | --- | ---  | 7.8       | 7.5 | 7.6  |
| 22    | 7.9      | 7.7 | 7.7  | 7.8   | 7.5 | 7.7  | 7.9    | 7.7 | 7.8  | 7.8       | 7.6 | 7.7  |
| 23    | 7.9      | 7.5 | 7.7  | 7.7   | 7.5 | 7.6  | 8.1    | 7.7 | 7.9  | 7.8       | 7.6 | 7.7  |
| 24    | 7.7      | 7.5 | 7.6  | 7.6   | 7.1 | 7.4  | 8.1    | 7.8 | 7.9  | 7.9       | 7.7 | 7.8  |
| 25    | 7.7      | 7.5 | 7.6  | 7.6   | 7.2 | 7.3  | 8.0    | 7.7 | 7.9  | 7.8       | 7.6 | 7.7  |
| 26    | 7.7      | 7.5 | 7.6  | 7.7   | 7.0 | 7.3  | 8.0    | 7.7 | 7.8  | 7.9       | 7.7 | 7.8  |
| 27    | 8.0      | 7.5 | 7.7  | 7.6   | 7.4 | 7.5  | 8.0    | 7.7 | 7.9  | 8.1       | 7.8 | 7.9  |
| 28    | 7.9      | 7.6 | 7.7  | 7.7   | 7.4 | 7.5  | 7.9    | 7.7 | 7.8  | 8.0       | 7.8 | 7.9  |
| 29    | 7.9      | 7.5 | 7.7  | 7.7   | 7.4 | 7.5  | 8.0    | 7.7 | 7.8  | 8.0       | 7.7 | 7.8  |
| 30    | 7.7      | 7.4 | 7.6  | 7.5   | 7.4 | 7.5  | 8.1    | 7.8 | 8.0  | 8.0       | 7.8 | 7.9  |
| 31    | ---      | --- | ---  | 7.7   | 7.5 | 7.6  | 8.1    | 7.9 | 8.0  | ---       | --- | ---  |
| MONTH | 8.2      | 7.4 | 7.7  | ---   | --- | ---  | ---    | --- | ---  | 8.3       | 7.4 | 7.8  |



## 07105530 FOUNTAIN CREEK BELOW JANITELL ROAD, BELOW COLORADO SPRINGS, CO--Continued

## TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DAY   | MAX  | MIN  | MEAN |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|
|       |      |      |      |      |      |      |      |      |      |      |      |      |
| 1     | 19.8 | 12.7 | 16.3 | 22.9 | 16.4 | 18.6 | 23.5 | 15.6 | 20.1 | 20.5 | 14.1 | 17.3 |
| 2     | 20.3 | 12.6 | 16.5 | ---  | ---  | ---  | 22.1 | 15.7 | 17.8 | 19.3 | 14.7 | 17.2 |
| 3     | 21.2 | 13.0 | 17.3 | 23.0 | 19.0 | 21.2 | ---  | ---  | ---  | 21.8 | 14.4 | 18.3 |
| 4     | 20.2 | 14.0 | 17.6 | 23.5 | 17.9 | 20.4 | ---  | ---  | ---  | 21.7 | 15.2 | 18.6 |
| 5     | 19.7 | 13.8 | 17.6 | 23.7 | 18.5 | 20.7 | ---  | ---  | ---  | 21.9 | 15.0 | 18.8 |
| 6     | 21.5 | 14.4 | 17.6 | 24.1 | 18.3 | 20.7 | 23.6 | 16.9 | 20.3 | 20.3 | 14.7 | 17.4 |
| 7     | 21.5 | 13.4 | 17.6 | 23.0 | 18.1 | 20.6 | 22.7 | 17.0 | 19.8 | 20.6 | 12.4 | 16.5 |
| 8     | 21.9 | 14.5 | 18.3 | 20.1 | 18.4 | 19.5 | 22.8 | 17.8 | 19.9 | 21.3 | 13.8 | 17.8 |
| 9     | 20.9 | 15.7 | 18.2 | 21.4 | 18.0 | 19.4 | 22.3 | 16.0 | 19.1 | 21.2 | 14.2 | 18.1 |
| 10    | 21.8 | 15.5 | 18.2 | ---  | ---  | ---  | 23.3 | 17.2 | 20.2 | 21.7 | 14.7 | 18.2 |
| 11    | 21.0 | 15.0 | 18.1 | 23.4 | 19.7 | 21.6 | 23.2 | 16.6 | 20.1 | 20.7 | 14.7 | 18.2 |
| 12    | 22.4 | 15.3 | 18.1 | 21.7 | 17.7 | 19.4 | 23.4 | 17.0 | 20.4 | 16.0 | 13.7 | 15.3 |
| 13    | 20.4 | 11.9 | 16.4 | 22.0 | 16.4 | 19.1 | 22.8 | 17.5 | 20.4 | 17.8 | 14.1 | 15.8 |
| 14    | 19.8 | 13.5 | 16.4 | 22.3 | 15.7 | 19.1 | 23.1 | 10.7 | 20.4 | 17.7 | 13.5 | 15.9 |
| 15    | 17.8 | 15.0 | 16.2 | 22.5 | 16.5 | 19.4 | 21.6 | 10.7 | 17.7 | 19.2 | 13.2 | 16.2 |
| 16    | 21.6 | 13.5 | 17.1 | 22.4 | 17.7 | 19.9 | 23.2 | 16.0 | 19.6 | 18.1 | 14.1 | 16.3 |
| 17    | 21.2 | 13.9 | 17.8 | 23.1 | 17.4 | 20.2 | 23.0 | 17.2 | 20.1 | 18.1 | 11.7 | 15.2 |
| 18    | 22.4 | 14.8 | 18.8 | 21.9 | 17.4 | 19.3 | 22.8 | 17.8 | 20.3 | 15.4 | 11.5 | 13.4 |
| 19    | 22.2 | 15.3 | 19.0 | 21.3 | 15.3 | 18.3 | 23.2 | 14.6 | 18.3 | 16.6 | 8.5  | 12.9 |
| 20    | 23.0 | 16.8 | 19.8 | 22.6 | 16.1 | 19.3 | ---  | ---  | ---  | 16.8 | 10.4 | 13.9 |
| 21    | 21.9 | 16.8 | 18.9 | 23.3 | 12.5 | 19.1 | ---  | ---  | ---  | 18.4 | 10.3 | 14.5 |
| 22    | 19.9 | 16.7 | 18.1 | 23.2 | 16.0 | 19.5 | ---  | ---  | ---  | 18.2 | 11.5 | 15.2 |
| 23    | 21.8 | 14.6 | 18.3 | 23.6 | 15.8 | 19.2 | 22.4 | 17.0 | 18.7 | 17.8 | 12.7 | 15.0 |
| 24    | 22.8 | 17.5 | 19.7 | 22.2 | 11.8 | 18.7 | 21.3 | 14.9 | 18.0 | 17.9 | 12.1 | 15.0 |
| 25    | 22.4 | 16.5 | 19.5 | 21.3 | 11.8 | 17.6 | 22.4 | 16.1 | 19.2 | 16.7 | 12.2 | 14.8 |
| 26    | 23.1 | 16.9 | 19.9 | 22.7 | 15.2 | 18.2 | 22.5 | 17.0 | 19.8 | 13.8 | 8.7  | 11.6 |
| 27    | 21.7 | 17.9 | 19.6 | 22.4 | 14.0 | 18.0 | 22.0 | 16.7 | 19.1 | 14.0 | 6.1  | 10.6 |
| 28    | 22.0 | 17.5 | 19.7 | 21.5 | 15.4 | 18.3 | 20.8 | 14.6 | 17.6 | 16.6 | 9.1  | 13.0 |
| 29    | 22.3 | 17.3 | 19.7 | 19.5 | 16.3 | 17.9 | 21.5 | 15.3 | 17.9 | 17.2 | 10.2 | 13.9 |
| 30    | 20.9 | 18.0 | 19.2 | 22.8 | 15.7 | 19.3 | 18.9 | 12.4 | 15.9 | 17.7 | 10.9 | 14.6 |
| 31    | ---  | ---  | ---  | 23.4 | 17.3 | 20.0 | 20.7 | 14.3 | 17.4 | ---  | ---  | ---  |
| MONTH | 23.1 | 11.9 | 18.2 | ---  | ---  | ---  | ---  | ---  | ---  | 21.9 | 6.1  | 15.6 |

## OXYGEN, DISSOLVED (MG/L), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DAY   | MAX | MIN | MEAN | MAX  | MIN | MEAN | MAX  | MIN | MEAN | MAX  | MIN | MEAN |
|-------|-----|-----|------|------|-----|------|------|-----|------|------|-----|------|
|       |     |     |      |      |     |      |      |     |      |      |     |      |
| 1     | 8.4 | 6.4 | 7.4  | 8.4  | 7.3 | 7.9  | 9.6  | 8.2 | 8.8  | 9.6  | 7.6 | 8.8  |
| 2     | 8.4 | 7.0 | 7.7  | 9.2  | 8.3 | 8.8  | 9.7  | 8.1 | 8.8  | 9.4  | 8.2 | 8.8  |
| 3     | 8.5 | 7.4 | 8.0  | 9.4  | 8.3 | 8.7  | 9.9  | 8.4 | 8.9  | 9.5  | 8.4 | 9.1  |
| 4     | 8.6 | 7.7 | 8.1  | 9.5  | 8.0 | 8.7  | 9.6  | 8.0 | 8.8  | 9.9  | 8.9 | 9.3  |
| 5     | 9.2 | 7.7 | 8.4  | 10.0 | 7.8 | 8.7  | 9.5  | 8.4 | 9.0  | 9.7  | 8.9 | 9.2  |
| 6     | 9.2 | 7.4 | 8.3  | 9.5  | 8.0 | 8.6  | 9.6  | 8.5 | 9.0  | 9.6  | 8.6 | 9.0  |
| 7     | 9.0 | 7.0 | 7.9  | 9.3  | 7.9 | 8.5  | 9.8  | 8.8 | 9.2  | 9.4  | 8.6 | 8.9  |
| 8     | 8.4 | 7.1 | 7.7  | 9.5  | 7.3 | 8.3  | 9.8  | 8.9 | 9.4  | 9.7  | 8.6 | 9.1  |
| 9     | 8.5 | 6.9 | 7.7  | 8.8  | 7.4 | 7.9  | 9.4  | 8.4 | 8.9  | 9.6  | 8.4 | 9.0  |
| 10    | 8.3 | 6.8 | 7.6  | 8.5  | 7.8 | 8.2  | 9.8  | 9.1 | 9.3  | 9.4  | 8.1 | 8.7  |
| 11    | 8.2 | 6.5 | 7.4  | 9.4  | 8.0 | 8.5  | 9.7  | 8.4 | 9.0  | 9.1  | 8.3 | 8.7  |
| 12    | 8.1 | 6.6 | 7.3  | 9.5  | 7.6 | 8.4  | 9.5  | 8.2 | 8.7  | 9.3  | 8.2 | 8.9  |
| 13    | 8.2 | 6.8 | 7.5  | 8.7  | 7.8 | 8.1  | 9.0  | 8.4 | 8.6  | 9.5  | 8.3 | 9.0  |
| 14    | 8.7 | 6.9 | 7.8  | 9.2  | 7.6 | 8.2  | 9.6  | 8.6 | 9.0  | 9.6  | 8.6 | 9.1  |
| 15    | 8.6 | 6.7 | 7.6  | 9.1  | 7.8 | 8.4  | 10.1 | 8.7 | 9.4  | 9.7  | 8.7 | 9.2  |
| 16    | 8.2 | 6.4 | 7.3  | 9.3  | 7.7 | 8.5  | 10.2 | 8.8 | 9.4  | 9.8  | 8.6 | 9.1  |
| 17    | 8.0 | 6.4 | 7.2  | 9.1  | 7.7 | 8.4  | 10.4 | 9.1 | 9.5  | 9.4  | 8.6 | 9.0  |
| 18    | 8.0 | 6.3 | 7.1  | 9.5  | 7.7 | 8.5  | 9.9  | 9.0 | 9.3  | 9.0  | 8.4 | 8.6  |
| 19    | 8.4 | 6.6 | 7.3  | 9.4  | 7.4 | 8.3  | 9.5  | 8.2 | 9.0  | 9.6  | 8.5 | 9.1  |
| 20    | 8.5 | 7.0 | 7.8  | 9.1  | 7.9 | 8.3  | 9.4  | 8.4 | 8.9  | 9.8  | 9.1 | 9.5  |
| 21    | 8.6 | 6.6 | 7.6  | 9.3  | 8.3 | 8.7  | 9.6  | 8.8 | 9.1  | 9.5  | 8.6 | 9.1  |
| 22    | 8.5 | 6.9 | 7.7  | 9.4  | 7.9 | 8.7  | 9.6  | 8.7 | 9.1  | 10.1 | 8.7 | 9.2  |
| 23    | 9.0 | 7.2 | 8.2  | 9.6  | 7.9 | 8.7  | 9.6  | 8.7 | 9.1  | 9.4  | 8.5 | 9.0  |
| 24    | 9.0 | 7.3 | 8.2  | 9.8  | 8.0 | 8.8  | 9.4  | 8.7 | 9.1  | 9.1  | 8.0 | 8.6  |
| 25    | 8.8 | 7.3 | 8.1  | 9.3  | 7.8 | 8.5  | 9.8  | 8.8 | 9.3  | 9.0  | 8.3 | 8.7  |
| 26    | 8.4 | 6.9 | 7.7  | 9.2  | 7.7 | 8.5  | 9.6  | 8.8 | 9.2  | 9.2  | 8.2 | 8.6  |
| 27    | 8.6 | 7.1 | 7.7  | 9.4  | 8.6 | 9.0  | 9.4  | 8.6 | 9.0  | 9.1  | 8.1 | 8.7  |
| 28    | 8.7 | 7.3 | 8.0  | 9.5  | 8.5 | 9.0  | 9.3  | 8.3 | 8.9  | 9.3  | 8.1 | 8.7  |
| 29    | 8.6 | 7.1 | 8.0  | 9.4  | 8.0 | 8.7  | 9.5  | 8.6 | 9.0  | 9.2  | 8.7 | 9.0  |
| 30    | 8.5 | 7.1 | 7.7  | 9.2  | 8.4 | 8.7  | 9.0  | 8.0 | 8.8  | 9.1  | 8.2 | 8.6  |
| 31    | 8.8 | 6.9 | 7.7  | ---  | --- | ---  | 9.4  | 8.3 | 8.9  | 8.9  | 7.9 | 8.5  |
| MONTH | 9.2 | 6.3 | 7.7  | 10.0 | 7.3 | 8.5  | 10.4 | 8.0 | 9.0  | 10.1 | 7.6 | 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 SE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> 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 1995 TO SEPTEMBER 1996

| DATE      | TIME | DIS-CHARGE, INST. CUBIC FEET PER SECOND | SPE-CIFIC CON-DUCT-ANCE (US/CM) | PH (STAND-ARD UNITS) | TEMPER-ATURE WATER (DEG C) | OXYGEN, DIS-SOLVED (MG/L) | OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) | COLI-FORM, FECAL, UM-MF (COLS./100 ML) | STREP-TOCOCCI, FECAL, KF AGAR (COLS. PER 100 ML) | CALCIUM DIS-SOLVED (MG/L AS CA) | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) |
|-----------|------|---|---------------------------------|----------------------|----------------------------|---------------------------|--|--|--|---------------------------------|-------------------------------------|
| OCT 27... | 0930 | 106                                     | 771                             | 8.0                  | 10.5                       | 8.6                       | 17   | 360                                    | 300  | 57                              | 17                                  |
| DEC 01... | 0915 | 77                                      | 765                             | 7.9                  | 8.5                        | 9.1                       | 9.7  | 190                                    | 120  | 61                              | 18                                  |
| JAN 18... | 1430 | 104                                     | 843                             | 7.8                  | 10.0                       | 7.8                       | 16   | 240                                    | 180  | 58                              | 17                                  |
| FEB 23... | 0930 | 131                                     | 757                             | 7.6                  | 8.5                        | 9.4                       | 14   | 430                                    | 300  | 51                              | 17                                  |
| MAR 21... | 1345 | 102                                     | 717                             | 8.0                  | 14.0                       | 8.5                       | 6.7  | K24                                    | 70   | 53                              | 17                                  |
| APR 18... | 1400 | 73                                      | 715                             | 8.1                  | 17.0                       | 8.1                       | 9.6  | 47                                     | 47   | 54                              | 16                                  |
| MAY 17... | 1000 | 109                                     | 747                             | 7.9                  | 18.0                       | 7.4                       | 5.9  | 600                                    | 630  | 49                              | 17                                  |
| JUN 20... | 1345 | 88                                      | 747                             | 8.0                  | 24.0                       | 6.3                       | 8.3  | 190                                    | K100   | 51                              | 18                                  |
| JUL 19... | 0900 | 190                                     | 497                             | 7.9                  | 17.0                       | 6.5                       | 5.3  | 1000                                   | 1200   | 37                              | 11                                  |
| AUG 15... | 1300 | 110                                     | 662                             | 7.9                  | 22.0                       | 6.6                       | 13   | 1200                                   | 1700   | 46                              | 14                                  |
| SEP 12... | 1400 | 131                                     | 565                             | 7.9                  | 16.5                       | 7.8                       | e7.6                                       | K1700                                  | 1400   | 41                              | 12                                  |

| DATE      | ALKA-LINITY LAB (MG/L AS CACO3) | SULFATE DIS-SOLVED (MG/L AS SO4) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) | RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) | NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) | NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) | NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) | NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) | PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) |
|-----------|---------------------------------|----------------------------------|------------------------------------|-----------------------------------|--|---|---|---|---|---|
| OCT 27... | 117                             | 170                              | 38                                 | 1.8                               | 40   | 0.13                                      | 2.7                                       | 4.2                                       | 6.7   | 0.36                                      |
| DEC 01... | 112                             | 170                              | 36                                 | 1.6                               | 27   | 0.13                                      | 3.4                                       | 5.2                                       | 6.6   | 0.58                                      |
| JAN 18... | 110                             | 180                              | 51                                 | 2.1                               | 30   | 1.5                                       | 3.2                                       | 5.4                                       | 6.8   | 0.03                                      |
| FEB 23... | 103                             | 150                              | 40                                 | 1.8                               | 102  | 0.28                                      | 3.7                                       | 4.3                                       | 5.2   | 0.05                                      |
| MAR 21... | 114                             | 150                              | 38                                 | 1.8                               | 60   | 0.14                                      | 3.9                                       | 1.4                                       | 2.3   | 0.17                                      |
| APR 18... | 106                             | 160                              | 39                                 | 1.8                               | 45   | 0.17                                      | 3.6                                       | 2.5                                       | 3.5   | 0.07                                      |
| MAY 17... | 110                             | 170                              | 39                                 | 1.8                               | 30   | 0.23                                      | 3.9                                       | 1.2                                       | 2.7   | 0.37                                      |
| JUN 20... | 109                             | 170                              | 38                                 | 1.7                               | 34   | 0.09                                      | 4.7                                       | 0.25                                      | 1.7   | 1.3                                       |
| JUL 19... | 88                              | 100                              | 22                                 | 2.2                               | 194  | 0.07                                      | 1.5                                       | 1.3                                       | 2.7   | 0.48                                      |
| AUG 15... | 100                             | 150                              | 33                                 | 1.4                               | 226  | 0.11                                      | 2.3                                       | 2.1                                       | 3.3   | 0.28                                      |
| SEP 12... | 86                              | 120                              | 25                                 | 1.8                               | 130  | 0.12                                      | 2.9                                       | 1.9                                       | 2.6   | 0.22                                      |

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 1995 TO SEPTEMBER 1996

| DATE      | CADMIUM<br>TOTAL<br>RECOV-<br>ERABLE<br>(UG/L<br>AS CD) | CADMIUM<br>DIS-<br>SOLVED<br>(UG/L<br>AS CD) | CHRO-<br>MIUM,<br>TOTAL<br>RECOV-<br>ERABLE<br>(UG/L<br>AS CR) | CHRO-<br>MIUM,<br>DIS-<br>SOLVED<br>(UG/L<br>AS CR) | CHRO-<br>MIUM,<br>HEXA-<br>VALENT,<br>DIS.<br>(UG/L<br>AS CR) | COPPER,<br>TOTAL<br>RECOV-<br>ERABLE<br>(UG/L<br>AS CU) | COPPER,<br>DIS-<br>SOLVED<br>(UG/L<br>AS CU) | IRON,<br>TOTAL<br>RECOV-<br>ERABLE<br>(UG/L<br>AS FE) | IRON,<br>DIS-<br>SOLVED<br>(UG/L<br>AS FE) |
|-----------|---|--|--|---|---|---|--|---|--|
| OCT 27... | <1  | <1   | <1   | <1  | <1  | 4   | 2  | 880   | 10   |
| DEC 01... | <1  | <1   | 2  | <1  | <1  | 4   | 2  | 620   | 30   |
| JAN 18... | <1  | <1   | 1  | <1  | <1  | 4   | 1  | 570   | 40   |
| FEB 23... | <1  | <1   | 2  | 1   | <1  | 3   | 2  | 1700  | 40   |
| MAR 21... | <1  | <1   | 1  | <1  | <1  | 3   | 2  | 830   | 20   |
| APR 18... | <1  | <1   | <1   | <1  | <1  | 6   | 4  | 790   | 20   |
| MAY 17... | <1  | <1   | <1   | <1  | <1  | 6   | 2  | 770   | 41   |
| JUN 20... | <1  | <1   | 1  | 1   | <1  | 5   | 2  | 580   | 25   |
| JUL 19... | <1  | <1   | 3  | <1  | <1  | 7   | 1  | 6500  | 22   |
| AUG 15... | <1  | <1   | 2  | <1  | <1  | 7   | 2  | 4300  | 10   |
| SEP 12... | <1  | <1   | 2  | <1  | <1  | 6   | 2  | 3200  | 20   |

| DATE      | LEAD,<br>TOTAL<br>RECOV-<br>ERABLE<br>(UG/L<br>AS PB) | LEAD,<br>DIS-<br>SOLVED<br>(UG/L<br>AS PB) | MANGA-<br>NESE,<br>TOTAL<br>RECOV-<br>ERABLE<br>(UG/L<br>AS MN) | MANGA-<br>NESE,<br>DIS-<br>SOLVED<br>(UG/L<br>AS MN) | NICKEL,<br>TOTAL<br>RECOV-<br>ERABLE<br>(UG/L<br>AS NI) | NICKEL,<br>DIS-<br>SOLVED<br>(UG/L<br>AS NI) | ZINC,<br>TOTAL<br>RECOV-<br>ERABLE<br>(UG/L<br>AS ZN) | ZINC,<br>DIS-<br>SOLVED<br>(UG/L<br>AS ZN) |
|-----------|---|--|---|--|---|--|---|--|
| OCT 27... | 2   | <1   | 110   | 80   | 3   | 2  | 30  | 10   |
| DEC 01... | 1   | <1   | 80  | 60   | 4   | 4  | 30  | 20   |
| JAN 18... | 1   | <1   | 110   | 100  | 4   | 2  | 40  | 20   |
| FEB 23... | 5   | <1   | 120   | 60   | 3   | 2  | 50  | 40   |
| MAR 21... | 2   | <1   | 90  | 60   | 4   | 3  | 50  | 40   |
| APR 18... | 2   | <1   | 90  | 60   | 2   | 2  | 30  | 18   |
| MAY 17... | 2   | <1   | 110   | 78   | 4   | 3  | 40  | 31   |
| JUN 20... | 2   | <1   | 90  | 69   | 2   | 2  | 40  | 27   |
| JUL 19... | 24  | <1   | 280   | 23   | 4   | 1  | 60  | 10   |
| AUG 15... | 14  | <1   | 150   | 40   | 10  | 7  | 50  | 21   |
| SEP 12... | 24  | <1   | 150   | 40   | 4   | 2  | 30  | 15   |



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, except for May 24-30, which are poor. Records for daily pH are fair. Records for daily water temperature are good, except for Nov. 18-21 and July 22-24, which are fair. Records for daily dissolved oxygen are fair, except for Oct. 1 to Dec. 16, which 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, 8.7 units Apr. 27, 1996; 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, 1,460 microsiemens, Mar. 6; minimum, 200 microsiemens, May 25.

pH: Maximum, 8.7 units Apr. 27; minimum, 6.5 units, May 24-25.

WATER TEMPERATURE: Maximum, 28.3°C, July 6; minimum, 0.0°C, Dec. 9, Jan.2, Feb. 2-3.

DISSOLVED OXYGEN: Maximum, 12.1 mg/L, Feb. 2; minimum, 4.5 mg/L, Oct. 7.

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM @ 25 DEG. C), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DAY   | OCTOBER |     |      | NOVEMBER |     |      | DECEMBER |     |      | JANUARY |     |      |
|-------|---------|-----|------|----------|-----|------|----------|-----|------|---------|-----|------|
|       | MAX     | MIN | MEAN | MAX      | MIN | MEAN | MAX      | MIN | MEAN | MAX     | MIN | MEAN |
| 1     | 867     | 804 | 828  | 969      | 829 | 864  | 849      | 824 | 836  | 844     | 807 | 827  |
| 2     | 831     | 762 | 821  | 876      | 829 | 858  | 869      | 825 | 841  | 852     | 834 | 844  |
| 3     | 876     | 810 | 830  | 927      | 861 | 897  | 856      | 820 | 835  | 889     | 828 | 856  |
| 4     | 860     | 792 | 817  | 932      | 805 | 866  | 844      | 811 | 829  | 873     | 796 | 850  |
| 5     | 841     | 743 | 785  | 865      | 688 | 788  | 848      | 788 | 821  | 856     | 800 | 839  |
| 6     | 827     | 794 | 812  | 735      | 646 | 686  | 805      | 760 | 784  | 875     | 799 | 845  |
| 7     | 842     | 810 | 824  | 816      | 711 | 751  | 793      | 768 | 779  | 898     | 823 | 861  |
| 8     | 840     | 807 | 825  | 823      | 722 | 766  | 773      | 739 | 755  | 844     | 783 | 815  |
| 9     | 865     | 821 | 839  | 794      | 725 | 757  | 880      | 633 | 789  | 818     | 793 | 804  |
| 10    | 857     | 828 | 843  | 821      | 778 | 796  | 832      | 727 | 789  | 813     | 775 | 793  |
| 11    | 893     | 810 | 842  | 816      | 761 | 797  | 823      | 739 | 773  | 811     | 775 | 793  |
| 12    | 872     | 805 | 847  | 868      | 779 | 814  | 855      | 738 | 804  | 813     | 776 | 793  |
| 13    | 860     | 810 | 839  | 864      | 835 | 845  | 830      | 736 | 803  | 808     | 766 | 784  |
| 14    | 864     | 825 | 836  | 888      | 792 | 863  | 850      | 789 | 813  | 822     | 773 | 789  |
| 15    | 850     | 806 | 827  | 906      | 735 | 860  | 845      | 782 | 813  | 871     | 783 | 813  |
| 16    | 942     | 809 | 836  | ---      | --- | ---  | 834      | 777 | 803  | 862     | 780 | 820  |
| 17    | 1000    | 824 | 858  | ---      | --- | ---  | 864      | 780 | 807  | 872     | 798 | 848  |
| 18    | 942     | 803 | 863  | ---      | --- | ---  | 848      | 786 | 818  | 973     | 848 | 904  |
| 19    | 875     | 837 | 859  | ---      | --- | ---  | 895      | 808 | 845  | 919     | 832 | 884  |
| 20    | 867     | 818 | 847  | ---      | --- | ---  | 860      | 803 | 836  | 892     | 814 | 855  |
| 21    | 876     | 795 | 845  | 900      | 828 | 875  | 856      | 811 | 834  | 899     | 835 | 861  |
| 22    | 852     | 818 | 838  | 897      | 845 | 867  | 838      | 808 | 824  | ---     | --- | ---  |
| 23    | 836     | 784 | 801  | 914      | 832 | 853  | 841      | 812 | 825  | 913     | 854 | 887  |
| 24    | 867     | 795 | 822  | 892      | 812 | 844  | 846      | 803 | 829  | 835     | 782 | 803  |
| 25    | 807     | 762 | 778  | 878      | 831 | 844  | 829      | 790 | 815  | 843     | 796 | 825  |
| 26    | 832     | 764 | 795  | 866      | 800 | 832  | 835      | 798 | 816  | 882     | 812 | 851  |
| 27    | 863     | 775 | 842  | 865      | 819 | 839  | 865      | 811 | 833  | 921     | 846 | 876  |
| 28    | 878     | 833 | 854  | 902      | 825 | 859  | 882      | 815 | 858  | 878     | 804 | 851  |
| 29    | 834     | 793 | 811  | 876      | 830 | 851  | 880      | 822 | 847  | 879     | 827 | 852  |
| 30    | 847     | 798 | 822  | 892      | 819 | 836  | 885      | 804 | 845  | 904     | 850 | 871  |
| 31    | 887     | 822 | 850  | ---      | --- | ---  | 848      | 812 | 828  | 911     | 843 | 880  |
| MONTH | 1000    | 743 | 830  | ---      | --- | ---  | 895      | 633 | 817  | ---     | --- | ---  |



07105800 FOUNTAIN CREEK AT SECURITY, CO--Continued

pH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| 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      | 7.4 | 7.5  | 7.5      | 7.4 | 7.4  | 8.0     | 7.8 | 7.9  |
| 2     | 7.6      | 7.5 | 7.6  | 7.7      | 7.3 | 7.5  | 7.5      | 7.4 | 7.4  | 7.9     | 7.5 | 7.7  |
| 3     | 8.0      | 7.5 | 7.8  | 7.5      | 7.2 | 7.3  | 7.5      | 7.4 | 7.4  | 8.0     | 7.3 | 7.6  |
| 4     | 8.0      | 7.6 | 7.9  | 7.4      | 7.3 | 7.3  | 7.5      | 7.4 | 7.4  | 7.8     | 7.7 | 7.7  |
| 5     | 8.0      | 7.6 | 7.8  | 7.4      | 7.3 | 7.4  | 7.6      | 7.4 | 7.5  | 7.8     | 7.7 | 7.7  |
| 6     | 8.0      | 7.6 | 7.7  | 7.5      | 7.2 | 7.4  | 7.5      | 7.4 | 7.5  | 7.9     | 7.7 | 7.7  |
| 7     | 7.7      | 7.4 | 7.6  | 7.5      | 7.2 | 7.4  | 7.6      | 7.5 | 7.5  | 7.8     | 7.7 | 7.7  |
| 8     | 7.6      | 7.4 | 7.5  | 7.7      | 7.3 | 7.4  | 7.6      | 7.5 | 7.5  | 7.8     | 7.5 | 7.7  |
| 9     | 7.6      | 7.5 | 7.6  | 7.7      | 7.2 | 7.5  | 7.7      | 7.5 | 7.6  | 7.7     | 7.5 | 7.6  |
| 10    | 7.6      | 7.5 | 7.6  | 7.8      | 7.6 | 7.7  | 7.6      | 7.4 | 7.5  | 7.7     | 7.5 | 7.6  |
| 11    | 7.7      | 7.4 | 7.6  | 7.7      | 7.4 | 7.6  | 7.5      | 7.4 | 7.5  | 7.7     | 7.5 | 7.6  |
| 12    | 7.9      | 7.4 | 7.6  | 7.6      | 7.4 | 7.5  | 7.5      | 7.4 | 7.5  | 7.6     | 7.5 | 7.5  |
| 13    | 7.7      | 7.4 | 7.5  | 7.4      | 7.3 | 7.4  | 7.5      | 7.5 | 7.5  | 7.6     | 7.4 | 7.5  |
| 14    | 7.5      | 7.4 | 7.4  | 7.4      | 7.3 | 7.4  | 7.6      | 7.5 | 7.5  | 7.5     | 7.4 | 7.4  |
| 15    | 7.8      | 7.4 | 7.5  | 7.5      | 7.3 | 7.4  | 7.7      | 7.5 | 7.5  | 7.5     | 7.4 | 7.4  |
| 16    | 7.8      | 7.6 | 7.7  | 7.6      | 7.3 | 7.5  | 7.7      | 7.5 | 7.6  | 7.5     | 7.4 | 7.4  |
| 17    | 7.7      | 7.5 | 7.6  | 7.5      | 7.3 | 7.4  | 7.8      | 7.6 | 7.7  | 7.6     | 7.4 | 7.5  |
| 18    | 7.7      | 7.4 | 7.6  | 7.5      | 7.3 | 7.4  | 7.8      | 7.7 | 7.7  | 7.5     | 7.4 | 7.4  |
| 19    | 7.8      | 7.4 | 7.5  | ---      | --- | ---  | 7.9      | 7.7 | 7.7  | 7.4     | 7.3 | 7.4  |
| 20    | 7.5      | 7.4 | 7.5  | ---      | --- | ---  | 7.8      | 7.6 | 7.7  | 7.5     | 7.3 | 7.4  |
| 21    | 7.5      | 7.4 | 7.5  | 7.6      | 7.5 | 7.5  | 7.8      | 7.6 | 7.7  | 7.5     | 7.3 | 7.4  |
| 22    | 7.5      | 7.4 | 7.5  | 7.6      | 7.5 | 7.6  | 7.7      | 7.1 | 7.4  | 7.4     | 7.3 | 7.3  |
| 23    | 7.5      | 7.4 | 7.5  | 7.6      | 7.5 | 7.6  | 7.5      | 7.1 | 7.3  | 7.4     | 7.3 | 7.3  |
| 24    | 7.6      | 7.4 | 7.5  | 7.6      | 7.4 | 7.5  | 7.5      | 7.2 | 7.3  | 7.4     | 7.2 | 7.3  |
| 25    | 7.6      | 7.4 | 7.5  | 7.5      | 7.4 | 7.5  | 7.5      | 7.2 | 7.3  | 7.3     | 7.2 | 7.2  |
| 26    | 7.5      | 7.4 | 7.4  | 7.5      | 7.4 | 7.5  | 7.7      | 7.2 | 7.3  | 7.4     | 7.3 | 7.3  |
| 27    | 7.5      | 7.3 | 7.4  | 7.5      | 7.5 | 7.5  | 8.0      | 7.3 | 7.6  | 7.5     | 7.3 | 7.3  |
| 28    | 7.6      | 7.5 | 7.5  | 7.6      | 7.5 | 7.5  | 8.0      | 7.6 | 7.8  | 7.4     | 7.3 | 7.4  |
| 29    | 7.6      | 7.5 | 7.5  | 7.6      | 7.4 | 7.5  | 7.6      | 7.4 | 7.5  | 7.5     | 7.4 | 7.4  |
| 30    | 7.6      | 7.4 | 7.5  | 7.5      | 7.4 | 7.5  | 7.5      | 7.3 | 7.4  | 7.8     | 7.4 | 7.6  |
| 31    | 7.6      | 7.4 | 7.4  | ---      | --- | ---  | 7.9      | 7.3 | 7.6  | 7.8     | 7.7 | 7.7  |
| MONTH | 8.0      | 7.3 | 7.6  | ---      | --- | ---  | 8.0      | 7.1 | 7.5  | 8.0     | 7.2 | 7.5  |
| DAY   | MAX      | MIN | MEAN | MAX      | MIN | MEAN | MAX      | MIN | MEAN | MAX     | MIN | MEAN |
|       | FEBRUARY |     |      | MARCH    |     |      | APRIL    |     |      | MAY     |     |      |
| 1     | 7.8      | 7.7 | 7.7  | 7.5      | 7.3 | 7.4  | 8.0      | 7.3 | 7.5  | 7.9     | 7.5 | 7.7  |
| 2     | 7.8      | 7.7 | 7.8  | 7.7      | 7.4 | 7.5  | 7.9      | 7.4 | 7.6  | 7.9     | 7.3 | 7.6  |
| 3     | 7.8      | 7.7 | 7.8  | 7.9      | 7.5 | 7.6  | 7.8      | 7.4 | 7.5  | 7.8     | 7.2 | 7.4  |
| 4     | 7.8      | 7.7 | 7.7  | 7.9      | 7.6 | 7.8  | 7.7      | 7.4 | 7.5  | 7.8     | 7.2 | 7.4  |
| 5     | 7.8      | 7.7 | 7.7  | 8.0      | 7.4 | 7.7  | 7.6      | 7.5 | 7.5  | 7.7     | 7.1 | 7.3  |
| 6     | 7.8      | 7.7 | 7.7  | 7.8      | 7.3 | 7.5  | 7.9      | 7.5 | 7.6  | 7.4     | 7.0 | 7.2  |
| 7     | 7.8      | 7.7 | 7.7  | 7.8      | 7.3 | 7.5  | 7.9      | 7.5 | 7.6  | 7.5     | 7.0 | 7.2  |
| 8     | 7.8      | 7.7 | 7.7  | 7.8      | 7.6 | 7.7  | 8.0      | 7.5 | 7.7  | 7.6     | 7.0 | 7.2  |
| 9     | 7.8      | 7.7 | 7.7  | 7.7      | 7.5 | 7.6  | 7.9      | 7.5 | 7.7  | 8.2     | 6.9 | 7.4  |
| 10    | 7.8      | 7.6 | 7.7  | 7.7      | 7.4 | 7.5  | 7.8      | 7.5 | 7.6  | 7.4     | 7.1 | 7.3  |
| 11    | 7.7      | 7.5 | 7.6  | 7.6      | 7.3 | 7.5  | 7.8      | 7.5 | 7.6  | 7.5     | 7.2 | 7.4  |
| 12    | 7.7      | 7.4 | 7.5  | 7.5      | 7.2 | 7.3  | 7.7      | 7.3 | 7.5  | 7.7     | 7.5 | 7.6  |
| 13    | 7.6      | 7.3 | 7.5  | 7.4      | 7.1 | 7.2  | 7.5      | 7.3 | 7.4  | 7.8     | 7.6 | 7.7  |
| 14    | 7.5      | 7.2 | 7.4  | 7.3      | 7.0 | 7.1  | 7.5      | 7.2 | 7.4  | 7.9     | 7.7 | 7.8  |
| 15    | 7.4      | 7.2 | 7.3  | 7.2      | 7.0 | 7.1  | 7.5      | 7.3 | 7.4  | 8.0     | 7.7 | 7.9  |
| 16    | 7.4      | 7.2 | 7.3  | 7.3      | 7.1 | 7.2  | 8.2      | 7.4 | 7.8  | 8.2     | 7.7 | 7.9  |
| 17    | 7.4      | 7.2 | 7.3  | 7.3      | 7.1 | 7.2  | 8.4      | 7.8 | 8.1  | 8.1     | 7.7 | 7.9  |
| 18    | 7.4      | 7.2 | 7.3  | 7.3      | 7.1 | 7.2  | 8.3      | 7.7 | 8.0  | 8.0     | 7.6 | 7.8  |
| 19    | 7.4      | 7.2 | 7.3  | 7.3      | 7.1 | 7.2  | 8.4      | 7.8 | 8.0  | 8.0     | 7.5 | 7.7  |
| 20    | 7.4      | 7.2 | 7.2  | 7.3      | 7.1 | 7.2  | 8.3      | 7.7 | 7.9  | 7.9     | 7.5 | 7.7  |
| 21    | 7.4      | 7.2 | 7.3  | 7.5      | 7.1 | 7.3  | 8.4      | 7.7 | 8.0  | 8.0     | 7.4 | 7.7  |
| 22    | 7.4      | 7.2 | 7.3  | 7.6      | 7.2 | 7.3  | 8.2      | 7.6 | 7.9  | 7.8     | --- | ---  |
| 23    | 7.4      | 7.1 | 7.3  | 7.5      | 7.2 | 7.3  | 8.4      | 7.6 | 7.9  | 7.8     | --- | ---  |
| 24    | 7.2      | 7.0 | 7.2  | 7.5      | 7.2 | 7.3  | 8.5      | 7.5 | 7.9  | 7.5     | 6.5 | 7.1  |
| 25    | 7.2      | 6.9 | 7.1  | 7.5      | 7.2 | 7.4  | 8.6      | 7.5 | 8.0  | 7.3     | 6.5 | 7.0  |
| 26    | 7.1      | 6.9 | 7.1  | 7.5      | 7.2 | 7.3  | 8.5      | 7.6 | 8.0  | 7.3     | 7.1 | 7.1  |
| 27    | 7.4      | 7.0 | 7.2  | 7.5      | 7.2 | 7.3  | 8.7      | 7.6 | 7.9  | 7.2     | 7.0 | 7.2  |
| 28    | 7.4      | 7.2 | 7.3  | 7.6      | 7.2 | 7.3  | 8.3      | 7.6 | 7.9  | 7.2     | 7.1 | 7.2  |
| 29    | 7.4      | 7.2 | 7.3  | 7.8      | 7.2 | 7.4  | 8.0      | 7.6 | 7.8  | 7.3     | 7.2 | 7.2  |
| 30    | ---      | --- | ---  | 7.8      | 7.3 | 7.5  | 8.0      | 7.5 | 7.7  | 7.3     | 7.2 | 7.2  |
| 31    | ---      | --- | ---  | 7.8      | 7.3 | 7.5  | ---      | --- | ---  | 7.4     | 7.2 | 7.3  |
| MONTH | 7.8      | 6.9 | 7.4  | 8.0      | 7.0 | 7.4  | 8.7      | 7.2 | 7.7  | 8.2     | --- | ---  |

## 07105800 FOUNTAIN CREEK AT SECURITY, CO--Continued

pH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DAY   | MAX | MIN | MEAN |
|-------|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|------|
|       |     |     |      |     |     |      |     |     |      |     |     |      |
| 1     | 7.4 | 7.2 | 7.4  | 7.4 | 7.1 | 7.2  | 7.3 | 7.2 | 7.3  | 7.4 | 7.3 | 7.3  |
| 2     | 7.5 | 7.1 | 7.3  | 7.4 | 7.1 | 7.3  | 7.5 | 7.1 | 7.3  | 7.4 | 7.3 | 7.3  |
| 3     | 7.6 | 7.3 | 7.4  | 7.5 | 7.2 | 7.4  | --- | --- | ---  | 7.4 | 7.3 | 7.4  |
| 4     | 7.6 | 7.4 | 7.5  | 7.9 | 7.1 | 7.5  | --- | --- | ---  | 7.5 | 7.3 | 7.4  |
| 5     | 7.6 | 7.5 | 7.5  | 7.5 | 7.0 | 7.3  | 7.7 | 7.7 | 7.7  | 7.6 | 7.3 | 7.4  |
| 6     | 7.7 | 7.4 | 7.5  | 7.7 | 7.1 | 7.3  | 7.8 | 7.6 | 7.7  | 7.4 | 7.2 | 7.4  |
| 7     | 7.7 | 7.4 | 7.6  | 7.7 | 7.1 | 7.3  | 7.8 | 7.6 | 7.7  | 7.4 | 7.2 | 7.4  |
| 8     | 7.7 | 7.3 | 7.5  | 7.5 | 7.1 | 7.2  | 7.8 | 7.4 | 7.6  | 7.5 | 7.3 | 7.4  |
| 9     | 7.7 | 7.3 | 7.5  | 7.6 | 7.1 | 7.3  | 7.5 | 7.4 | 7.5  | 7.6 | 7.3 | 7.4  |
| 10    | 7.7 | 7.1 | 7.4  | 7.6 | 7.1 | 7.3  | 7.5 | 7.4 | 7.4  | 7.6 | 7.3 | 7.4  |
| 11    | 7.5 | 7.2 | 7.3  | 7.3 | 7.1 | 7.2  | 7.5 | 7.4 | 7.4  | 7.6 | 7.3 | 7.5  |
| 12    | 7.5 | 7.2 | 7.4  | --- | --- | ---  | 7.4 | 7.3 | 7.4  | 7.7 | 7.4 | 7.5  |
| 13    | 7.4 | 7.1 | 7.2  | --- | --- | ---  | 7.5 | 7.3 | 7.4  | 7.9 | 7.8 | 7.8  |
| 14    | 7.3 | 7.1 | 7.2  | --- | --- | ---  | 7.5 | 7.3 | 7.4  | 7.8 | 7.7 | 7.8  |
| 15    | 7.2 | 7.0 | 7.1  | 7.7 | 7.2 | 7.4  | 7.6 | 7.3 | 7.3  | 7.8 | 7.6 | 7.7  |
| 16    | 7.3 | 7.0 | 7.1  | 7.6 | 6.9 | 7.1  | 7.4 | 7.2 | 7.3  | 7.8 | 7.5 | 7.7  |
| 17    | 7.2 | 6.9 | 7.1  | 7.5 | 7.0 | 7.2  | 7.4 | 7.3 | 7.4  | 8.0 | 7.5 | 7.6  |
| 18    | 7.2 | 6.9 | 7.0  | 7.5 | 7.0 | 7.3  | 7.4 | 7.3 | 7.4  | 7.7 | 7.4 | 7.5  |
| 19    | 7.2 | 6.9 | 7.1  | 7.7 | 7.2 | 7.4  | 7.6 | 7.3 | 7.4  | 8.0 | 7.3 | 7.6  |
| 20    | 7.3 | 6.9 | 7.1  | 7.8 | 7.3 | 7.5  | 7.5 | 7.3 | 7.4  | 7.6 | 7.3 | 7.5  |
| 21    | 7.2 | 6.8 | 7.0  | 7.9 | 7.2 | 7.5  | 7.5 | 7.4 | 7.4  | 7.7 | 7.5 | 7.6  |
| 22    | 6.9 | 6.8 | 6.9  | 7.5 | 7.2 | 7.3  | 7.4 | 7.2 | 7.4  | 7.9 | 7.5 | 7.7  |
| 23    | 7.2 | 6.9 | 7.1  | --- | --- | ---  | 7.4 | 7.2 | 7.3  | 8.0 | 7.7 | 7.8  |
| 24    | 7.3 | 6.9 | 7.1  | 7.8 | 7.7 | 7.8  | 7.4 | 7.3 | 7.3  | 7.9 | 7.8 | 7.9  |
| 25    | 7.3 | 6.9 | 7.1  | 7.9 | 7.6 | 7.8  | 7.4 | 7.3 | 7.4  | 7.9 | 7.8 | 7.8  |
| 26    | 7.4 | 6.9 | 7.1  | 7.8 | 7.5 | 7.7  | 7.4 | 7.3 | 7.3  | 7.9 | 7.8 | 7.8  |
| 27    | 7.2 | 6.9 | 7.1  | 7.7 | 7.3 | 7.5  | 7.4 | 7.2 | 7.3  | 7.8 | 7.7 | 7.8  |
| 28    | 7.4 | 6.9 | 7.2  | 7.5 | 7.4 | 7.4  | 7.5 | 7.2 | 7.3  | 7.9 | 7.6 | 7.8  |
| 29    | 7.4 | 7.1 | 7.2  | 7.5 | 7.2 | 7.4  | 7.5 | 7.3 | 7.4  | 7.8 | 7.5 | 7.6  |
| 30    | 7.5 | 7.0 | 7.3  | 7.4 | 7.2 | 7.3  | 7.4 | 7.3 | 7.4  | 7.7 | 7.4 | 7.6  |
| 31    | --- | --- | ---  | 7.4 | 7.2 | 7.3  | 7.5 | 7.3 | 7.4  | --- | --- | ---  |
| MONTH | 7.7 | 6.8 | 7.2  | --- | --- | ---  | --- | --- | ---  | 8.0 | 7.2 | 7.6  |

TEMPERATURE, WATER (DEG.C), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DAY   | MAX  | MIN  | MEAN | MAX  | MIN | MEAN | MAX  | MIN | MEAN | MAX  | MIN | MEAN |
|-------|------|------|------|------|-----|------|------|-----|------|------|-----|------|
|       |      |      |      |      |     |      |      |     |      |      |     |      |
| 1     | 16.3 | 10.7 | 13.6 | 10.8 | 8.4 | 9.4  | 11.7 | 5.6 | 8.3  | 4.2  | 1.9 | 3.0  |
| 2     | 17.0 | 9.1  | 12.8 | 8.4  | 5.5 | 6.9  | 11.0 | 4.7 | 7.9  | 5.0  | .0  | 2.4  |
| 3     | 18.1 | 9.2  | 12.9 | 11.2 | 4.6 | 7.4  | 9.6  | 5.2 | 7.4  | 10.0 | 2.0 | 5.4  |
| 4     | 13.7 | 9.6  | 11.4 | 11.3 | 5.0 | 8.1  | 9.7  | 4.6 | 7.0  | 8.3  | 4.1 | 5.8  |
| 5     | 14.7 | 7.1  | 10.1 | 13.2 | 4.7 | 8.9  | 7.6  | 4.5 | 5.9  | 6.3  | 2.8 | 4.5  |
| 6     | 15.3 | 6.2  | 10.1 | 11.3 | 7.1 | 9.4  | 9.9  | 4.3 | 6.3  | 7.5  | 1.4 | 4.2  |
| 7     | 16.4 | 6.6  | 11.1 | 12.2 | 7.3 | 9.3  | 7.1  | 3.1 | 5.0  | 9.0  | 3.9 | 6.0  |
| 8     | 16.4 | 8.7  | 12.1 | 14.5 | 6.7 | 10.4 | 6.1  | .9  | 3.8  | 10.2 | 4.2 | 6.7  |
| 9     | 15.1 | 8.4  | 11.6 | 14.5 | 8.7 | 11.4 | 5.8  | .0  | 2.6  | 10.7 | 4.4 | 7.0  |
| 10    | 17.7 | 8.6  | 12.6 | 11.1 | 7.6 | 9.5  | 8.0  | 1.7 | 4.7  | 10.4 | 4.9 | 6.9  |
| 11    | 18.2 | 9.1  | 13.1 | 13.0 | 6.7 | 9.9  | 8.9  | 4.2 | 6.0  | 10.6 | 3.8 | 6.6  |
| 12    | 17.4 | 10.5 | 13.6 | 13.6 | 8.9 | 11.4 | 9.1  | 4.8 | 6.7  | 11.5 | 4.1 | 7.1  |
| 13    | 16.1 | 8.7  | 12.1 | 12.3 | 9.2 | 11.1 | 10.6 | 6.0 | 7.8  | 11.1 | 4.4 | 7.3  |
| 14    | 16.4 | 7.3  | 11.4 | 15.7 | 8.8 | 11.9 | 9.5  | 5.1 | 6.8  | 10.6 | 4.4 | 7.2  |
| 15    | 16.8 | 8.3  | 12.4 | 14.8 | 9.1 | 11.8 | 8.3  | 2.5 | 5.0  | 10.2 | 3.9 | 6.8  |
| 16    | 17.9 | 9.9  | 13.4 | 15.5 | 8.7 | 12.0 | 6.6  | 2.2 | 4.5  | 11.0 | 4.6 | 7.3  |
| 17    | 17.3 | 10.2 | 13.2 | 15.0 | 9.6 | 12.1 | 4.3  | .3  | 2.5  | 7.2  | 1.3 | 4.9  |
| 18    | 18.5 | 9.4  | 13.4 | 14.6 | 8.6 | 11.2 | 6.0  | 1.7 | 3.2  | 7.2  | 1.0 | 3.3  |
| 19    | 15.2 | 9.1  | 11.8 | 14.3 | 7.8 | 10.3 | 5.7  | .1  | 2.6  | 9.8  | 2.4 | 5.0  |
| 20    | 16.6 | 6.4  | 10.8 | 11.1 | 5.1 | 8.1  | 7.7  | 1.0 | 3.7  | 7.9  | 2.3 | 4.7  |
| 21    | 16.1 | 8.9  | 12.2 | 10.4 | 4.4 | 7.6  | 5.8  | 2.0 | 3.7  | 9.1  | 2.5 | 5.4  |
| 22    | 13.3 | 7.7  | 10.8 | 9.5  | 5.6 | 7.1  | 4.9  | 2.3 | 3.5  | 8.2  | 3.3 | 5.3  |
| 23    | 14.2 | 5.8  | 9.2  | 9.6  | 3.9 | 6.6  | 5.8  | .6  | 3.1  | 8.4  | 2.2 | 4.5  |
| 24    | 14.2 | 6.0  | 9.8  | 9.5  | 3.9 | 6.5  | 6.8  | 1.0 | 3.5  | 7.6  | 2.1 | 4.0  |
| 25    | 14.9 | 7.1  | 10.7 | 9.8  | 5.3 | 7.2  | 6.7  | 1.2 | 3.7  | 7.2  | 1.7 | 3.7  |
| 26    | 15.3 | 8.3  | 11.2 | 10.3 | 5.4 | 7.5  | 7.2  | 1.6 | 3.8  | 7.5  | .7  | 3.4  |
| 27    | 14.9 | 8.0  | 10.9 | 7.7  | 4.3 | 5.9  | 6.6  | .9  | 3.4  | 7.6  | 1.4 | 4.1  |
| 28    | 12.9 | 6.0  | 9.4  | 7.5  | 3.8 | 5.3  | 7.1  | .9  | 3.6  | 9.0  | 3.3 | 5.6  |
| 29    | 14.0 | 7.3  | 10.8 | 10.6 | 3.9 | 6.8  | 7.3  | 2.2 | 4.1  | 9.6  | 1.8 | 5.0  |
| 30    | 13.4 | 7.6  | 10.1 | 10.4 | 5.7 | 7.7  | 6.8  | 1.4 | 3.8  | 7.6  | 2.1 | 3.9  |
| 31    | 14.8 | 6.7  | 10.3 | ---  | --- | ---  | 6.1  | 2.3 | 4.3  | 7.4  | .6  | 3.1  |
| MONTH | 18.5 | 5.8  | 11.6 | 15.7 | 3.8 | 9.0  | 11.7 | .0  | 4.8  | 11.5 | .0  | 5.2  |



## 07105800 FOUNTAIN CREEK AT SECURITY, CO--Continued

OXYGEN, DISSOLVED (MG/L), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DAY   | OCTOBER  |     |      | NOVEMBER |     |      | DECEMBER |     |      | JANUARY |     |      |
|-------|----------|-----|------|----------|-----|------|----------|-----|------|---------|-----|------|
|       | MAX      | MIN | MEAN | MAX      | MIN | MEAN | MAX      | MIN | MEAN | MAX     | MIN | MEAN |
| 1     | 6.5      | 5.2 | 5.7  | 7.5      | 6.4 | 7.0  | 8.5      | 6.5 | 7.6  | 9.4     | 8.5 | 9.0  |
| 2     | 6.9      | 5.0 | 6.0  | 9.0      | 7.4 | 8.1  | 8.6      | 6.6 | 7.6  | 10.7    | 8.2 | 9.3  |
| 3     | 7.0      | 5.2 | 6.0  | 9.2      | 7.0 | 8.1  | 8.6      | 7.1 | 7.8  | 9.3     | 7.5 | 8.5  |
| 4     | 6.6      | 5.6 | 6.0  | 8.9      | 6.7 | 7.8  | 8.8      | 6.9 | 7.8  | 9.6     | 8.1 | 8.8  |
| 5     | 7.0      | 5.5 | 6.3  | 8.9      | 6.1 | 7.5  | 9.1      | 7.4 | 8.2  | 10.1    | 8.7 | 9.4  |
| 6     | 7.3      | 5.4 | 6.1  | 8.2      | --- | ---  | 8.7      | 7.0 | 8.1  | 10.8    | 8.3 | 9.6  |
| 7     | 6.9      | 4.5 | 5.8  | 8.2      | --- | ---  | 9.3      | 7.7 | 8.5  | 9.8     | 7.9 | 8.9  |
| 8     | 6.6      | 4.7 | 5.5  | 8.2      | --- | ---  | 10.2     | 8.2 | 8.9  | 9.7     | 7.6 | 8.7  |
| 9     | 6.0      | --- | ---  | 7.0      | --- | ---  | ---      | 7.9 | ---  | 9.5     | 7.5 | 8.6  |
| 10    | ---      | --- | ---  | 7.4      | --- | ---  | 9.7      | 7.4 | 8.7  | 9.2     | 7.5 | 8.6  |
| 11    | ---      | --- | ---  | 7.5      | --- | ---  | 8.8      | 7.0 | 8.1  | 9.6     | 7.8 | 8.8  |
| 12    | ---      | --- | ---  | 6.6      | --- | ---  | 8.4      | 6.7 | 7.6  | 10.3    | 7.7 | 9.1  |
| 13    | ---      | --- | ---  | 6.4      | --- | ---  | 8.0      | 6.8 | 7.3  | 10.1    | 7.6 | 8.9  |
| 14    | ---      | --- | ---  | 6.3      | --- | ---  | 8.8      | 7.3 | 8.1  | 10.0    | 7.6 | 8.9  |
| 15    | ---      | --- | ---  | 6.1      | --- | ---  | 9.9      | 7.5 | 8.8  | 10.3    | 7.6 | 9.0  |
| 16    | ---      | --- | ---  | 6.5      | --- | ---  | 9.7      | 7.9 | 8.8  | 9.9     | 7.5 | 8.6  |
| 17    | ---      | --- | ---  | 6.6      | --- | ---  | 10.1     | 8.7 | 9.4  | 10.8    | 8.3 | 9.3  |
| 18    | ---      | --- | ---  | 6.8      | --- | ---  | 9.8      | 8.1 | 9.2  | 11.5    | 8.3 | 9.9  |
| 19    | ---      | --- | ---  | ---      | --- | ---  | 10.2     | 8.1 | 9.4  | 10.4    | 7.0 | 9.1  |
| 20    | ---      | --- | ---  | ---      | --- | ---  | 9.7      | 7.4 | 8.8  | 10.6    | 7.9 | 9.5  |
| 21    | ---      | --- | ---  | ---      | 6.6 | ---  | 9.3      | 7.8 | 8.6  | 10.3    | 7.2 | 8.9  |
| 22    | ---      | --- | ---  | 8.1      | 6.8 | 7.6  | 9.3      | 8.3 | 8.7  | 9.8     | 7.3 | 8.7  |
| 23    | ---      | --- | ---  | 8.6      | 6.7 | 7.7  | 9.8      | 7.7 | 8.9  | 10.6    | 7.2 | 9.1  |
| 24    | ---      | --- | ---  | 8.8      | 6.9 | 7.9  | 9.7      | 7.6 | 8.8  | 10.6    | 7.7 | 9.1  |
| 25    | ---      | --- | ---  | 8.3      | 6.8 | 7.7  | 9.7      | 7.8 | 8.8  | 9.8     | 7.7 | 8.8  |
| 26    | ---      | --- | ---  | 8.3      | 6.7 | 7.6  | 9.8      | 7.6 | 8.8  | 10.4    | 8.1 | 9.4  |
| 27    | ---      | --- | ---  | 8.9      | 7.9 | 8.3  | 9.9      | 7.7 | 8.9  | 10.2    | 8.2 | 9.3  |
| 28    | 8.5      | 6.4 | 7.4  | 9.3      | 8.0 | 8.7  | 9.8      | 7.5 | 8.8  | 9.5     | 7.8 | 8.8  |
| 29    | 8.4      | 6.2 | 7.1  | 9.3      | 7.3 | 8.4  | 9.5      | 7.6 | 8.7  | 10.0    | 7.9 | 9.0  |
| 30    | 7.9      | 6.1 | 6.9  | 8.9      | 7.4 | 8.2  | 9.5      | 7.6 | 8.7  | 11.2    | 8.5 | 10.0 |
| 31    | 8.1      | 5.3 | 6.7  | ---      | --- | ---  | 9.3      | 8.1 | 8.6  | 12.0    | --- | ---  |
| MONTH | ---      | --- | ---  | ---      | --- | ---  | ---      | 6.5 | ---  | 12.0    | --- | ---  |
| DAY   | FEBRUARY |     |      | MARCH    |     |      | APRIL    |     |      | MAY     |     |      |
|       | MAX      | MIN | MEAN | MAX      | MIN | MEAN | MAX      | MIN | MEAN | MAX     | MIN | MEAN |
| 1     | 11.2     | --- | ---  | 9.7      | --- | ---  | 8.7      | 5.5 | 7.1  | 8.5     | 5.6 | 6.8  |
| 2     | 12.1     | --- | ---  | 9.6      | --- | ---  | 9.3      | 5.7 | 7.1  | 8.3     | 5.0 | 6.6  |
| 3     | 11.8     | --- | ---  | 9.2      | --- | ---  | 8.9      | 6.3 | 7.5  | 7.5     | 4.8 | 6.0  |
| 4     | 12.0     | --- | ---  | 7.9      | --- | ---  | 9.4      | 7.2 | 8.0  | 7.1     | --- | 6.1  |
| 5     | 9.9      | --- | ---  | 7.7      | --- | ---  | 9.2      | 6.8 | 8.0  | ---     | --- | ---  |
| 6     | 9.8      | --- | ---  | 9.7      | 7.0 | 8.5  | 9.4      | 6.0 | 7.7  | ---     | --- | ---  |
| 7     | 9.5      | --- | ---  | 10.3     | 7.7 | 9.0  | 9.2      | 6.5 | 7.7  | ---     | --- | ---  |
| 8     | 9.5      | --- | ---  | 10.1     | 7.5 | 8.8  | 9.6      | 5.9 | 7.5  | ---     | --- | ---  |
| 9     | 9.7      | --- | ---  | 10.1     | 6.9 | 8.3  | 9.6      | 6.3 | 7.6  | ---     | --- | ---  |
| 10    | 9.7      | --- | ---  | 9.0      | 6.5 | 7.7  | 9.6      | 5.6 | 7.4  | ---     | --- | ---  |
| 11    | 10.4     | --- | ---  | 8.7      | 6.5 | 7.5  | 9.0      | 6.0 | 7.1  | ---     | --- | ---  |
| 12    | 10.6     | --- | ---  | 8.4      | 6.5 | 7.2  | 9.1      | 5.5 | 6.9  | ---     | --- | ---  |
| 13    | 10.3     | --- | ---  | 8.5      | 6.4 | 7.3  | 8.8      | 5.6 | 7.4  | ---     | --- | ---  |
| 14    | 9.4      | --- | ---  | 9.2      | 7.4 | 8.2  | 11.4     | 6.9 | 9.1  | ---     | --- | ---  |
| 15    | 9.5      | --- | ---  | 8.6      | 6.5 | 7.5  | 10.0     | 4.7 | 7.8  | ---     | --- | ---  |
| 16    | 10.1     | --- | ---  | 8.6      | 7.0 | 7.6  | 8.9      | 6.2 | 7.3  | ---     | --- | ---  |
| 17    | 9.3      | --- | ---  | 8.3      | 7.5 | 7.8  | 8.8      | 6.2 | 7.5  | ---     | --- | ---  |
| 18    | 8.7      | --- | ---  | 8.9      | 7.7 | 8.2  | 9.0      | 6.2 | 7.5  | ---     | --- | ---  |
| 19    | 8.9      | --- | ---  | 9.2      | 7.0 | 8.1  | 9.4      | 6.6 | 8.0  | ---     | --- | ---  |
| 20    | 8.2      | --- | ---  | 9.2      | 6.8 | 7.9  | 9.5      | 6.8 | 8.2  | ---     | --- | ---  |
| 21    | ---      | --- | ---  | 8.7      | 6.9 | 7.7  | 9.1      | 6.8 | 7.8  | ---     | --- | ---  |
| 22    | 8.1      | --- | ---  | 9.0      | 6.8 | 7.8  | 9.4      | 6.8 | 7.8  | ---     | 5.8 | ---  |
| 23    | ---      | --- | ---  | 8.6      | 6.4 | 7.4  | 9.4      | 5.8 | 7.7  | 7.3     | 6.1 | 6.8  |
| 24    | ---      | --- | ---  | 9.7      | 7.3 | 8.6  | 8.7      | 5.3 | 7.0  | 8.1     | 5.5 | 7.1  |
| 25    | ---      | --- | ---  | 9.8      | 8.0 | 8.9  | 8.6      | 5.5 | 6.9  | 8.5     | 5.6 | 7.2  |
| 26    | ---      | --- | ---  | 9.4      | 7.0 | 8.3  | 8.5      | 4.9 | 6.8  | 8.5     | 7.5 | 7.9  |
| 27    | ---      | --- | ---  | 9.2      | 6.6 | 7.9  | 8.1      | 5.1 | 6.2  | 8.2     | 6.9 | 7.6  |
| 28    | 10.8     | --- | ---  | 8.8      | 6.5 | 7.5  | 8.7      | 5.7 | 7.0  | 8.3     | 7.4 | 7.8  |
| 29    | 10.7     | --- | ---  | 8.6      | 6.0 | 7.2  | 7.8      | 4.7 | 6.3  | 8.0     | 6.4 | 7.3  |
| 30    | ---      | --- | ---  | 8.8      | 6.1 | 7.2  | 7.5      | 5.3 | 6.3  | 7.5     | 6.1 | 6.9  |
| 31    | ---      | --- | ---  | 8.7      | 6.1 | 7.3  | ---      | --- | ---  | 7.7     | 6.7 | 7.2  |
| MONTH | ---      | --- | ---  | 10.3     | --- | ---  | 11.4     | 4.7 | 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 mi<sup>2</sup>.

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

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 5,530 ft above sea level, from topographic map. January 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 80 ft<sup>3</sup>/s, which are poor. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

| DAY   | OCT  | NOV  | DEC  | JAN   | FEB   | MAR  | APR  | MAY   | JUN  | JUL   | AUG   | SEP  |
|-------|------|------|------|-------|-------|------|------|-------|------|-------|-------|------|
| 1     | 1.8  | 1.5  | e1.8 | 1.0   | e.86  | e1.5 | 1.1  | 2.2   | 3.8  | 1.1   | 4.0   | 3.2  |
| 2     | 1.7  | 1.5  | 1.8  | e.96  | e.92  | 1.5  | 1.1  | 2.3   | 3.3  | 1.1   | 3.8   | 2.9  |
| 3     | 1.8  | e1.4 | e1.7 | e.96  | e1.0  | 1.5  | 1.2  | 2.3   | 2.7  | 1.3   | 3.5   | 2.8  |
| 4     | 1.9  | e1.4 | e1.7 | e.95  | e1.1  | 1.5  | 1.2  | 2.4   | 2.3  | 1.5   | 3.5   | 2.6  |
| 5     | 1.9  | e1.4 | e1.7 | e.94  | e1.2  | 1.5  | 1.2  | 2.6   | 2.2  | 1.6   | 3.6   | 2.4  |
| 6     | 1.9  | e1.5 | e1.7 | e.96  | e1.2  | 1.5  | 1.2  | 2.7   | 1.9  | 1.7   | 3.7   | 2.3  |
| 7     | 2.0  | 1.6  | e1.7 | 1.1   | e1.2  | e1.4 | 1.2  | 2.7   | 1.7  | 1.8   | 3.9   | 2.2  |
| 8     | 1.9  | 1.6  | e1.6 | e.97  | e1.3  | 1.5  | 1.2  | 3.2   | 1.6  | 1.8   | 4.1   | 2.2  |
| 9     | 1.9  | e1.7 | e1.5 | 1.0   | e1.3  | 1.5  | 1.3  | 3.8   | 1.8  | 3.8   | 4.2   | 2.2  |
| 10    | 1.7  | e1.8 | e1.3 | .98   | 1.5   | 1.5  | 1.2  | 4.1   | 1.9  | 9.5   | 4.1   | 2.2  |
| 11    | 1.6  | e1.7 | e1.4 | .97   | e1.2  | 1.5  | 1.2  | 3.9   | 1.6  | 2.6   | 4.0   | 2.3  |
| 12    | 2.0  | e1.6 | e1.4 | .95   | e1.3  | 1.5  | 1.3  | 3.2   | 1.2  | 2.8   | 4.3   | 2.2  |
| 13    | 1.6  | e1.6 | 1.5  | .93   | e1.3  | 1.5  | 1.4  | 3.1   | 1.1  | 3.1   | 4.4   | 2.2  |
| 14    | 1.5  | e1.7 | 1.5  | 1.0   | e1.3  | 1.5  | 1.3  | 3.1   | 13   | 3.2   | 5.0   | 2.3  |
| 15    | 1.5  | e1.7 | 1.4  | e1.0  | e1.3  | 1.5  | 1.3  | 3.1   | 20   | 3.1   | 44    | 2.6  |
| 16    | 1.4  | e1.6 | 1.4  | e1.1  | e1.4  | 1.5  | 2.9  | 3.2   | 4.5  | 3.1   | 7.6   | 2.4  |
| 17    | 1.5  | e1.6 | 1.4  | e1.2  | e1.3  | 1.5  | 5.3  | 3.2   | 2.9  | 3.1   | 4.9   | 2.4  |
| 18    | 1.5  | e1.7 | e1.3 | e1.2  | e1.4  | 1.5  | 2.2  | 3.2   | 2.2  | 3.2   | 4.0   | 2.4  |
| 19    | 1.6  | e1.6 | 1.3  | e1.2  | e1.4  | 1.5  | 2.3  | 3.4   | 2.4  | 3.6   | 4.5   | 2.4  |
| 20    | 1.6  | e1.7 | 1.2  | e1.1  | e1.4  | 1.5  | 2.2  | 3.5   | 2.3  | 12    | 9.3   | 2.4  |
| 21    | 1.6  | e1.6 | 1.2  | e1.0  | e1.4  | 1.5  | 2.2  | 3.7   | 2.1  | 9.7   | 3.6   | 2.4  |
| 22    | 1.8  | e1.6 | 1.2  | .99   | e1.4  | 1.5  | 2.2  | 3.9   | 1.9  | 7.6   | 4.1   | 2.4  |
| 23    | 2.0  | e1.7 | e1.1 | e1.0  | e1.4  | 1.3  | 2.2  | 4.2   | 1.8  | 6.0   | 7.4   | 2.4  |
| 24    | 1.6  | e1.6 | e1.1 | e1.1  | 1.5   | 1.2  | 2.2  | 4.9   | 1.6  | 4.5   | 10    | 2.4  |
| 25    | 1.6  | e1.6 | e1.2 | e1.4  | 1.5   | e1.1 | 2.1  | 5.1   | 1.5  | 4.4   | 5.1   | 2.4  |
| 26    | 1.7  | e1.6 | e1.1 | e1.3  | 1.5   | 1.2  | 2.1  | 4.6   | 1.4  | 6.6   | 4.6   | 2.3  |
| 27    | 1.7  | e1.7 | e1.2 | e1.3  | e1.4  | 1.2  | 2.1  | 5.1   | 1.3  | 4.2   | 4.6   | 2.3  |
| 28    | 1.7  | e1.7 | e1.1 | e1.0  | e1.4  | 1.1  | 2.1  | 5.2   | 1.2  | 3.8   | 4.8   | 2.2  |
| 29    | 1.6  | e1.7 | e1.1 | e1.1  | e1.4  | 1.2  | 2.1  | 5.0   | 1.2  | 3.7   | 4.3   | 2.2  |
| 30    | 1.6  | e1.8 | 1.1  | e1.0  | ---   | 1.2  | 2.1  | 4.2   | 1.1  | 3.7   | 4.2   | 2.2  |
| 31    | 1.6  | ---  | 1.1  | e1.0  | ---   | 1.2  | ---  | 3.6   | ---  | 3.7   | 3.5   | ---  |
| TOTAL | 52.8 | 48.5 | 42.8 | 32.66 | 37.78 | 43.6 | 54.7 | 110.7 | 89.5 | 122.9 | 186.6 | 71.8 |
| MEAN  | 1.70 | 1.62 | 1.38 | 1.05  | 1.30  | 1.41 | 1.82 | 3.57  | 2.98 | 3.96  | 6.02  | 2.39 |
| MAX   | 2.0  | 1.8  | 1.8  | 1.4   | 1.5   | 1.5  | 5.3  | 5.2   | 20   | 12    | 44    | 3.2  |
| MIN   | 1.4  | 1.4  | 1.1  | .93   | .86   | 1.1  | 1.1  | 2.2   | 1.1  | 1.1   | 3.5   | 2.2  |
| AC-FT | 105  | 96   | 85   | 65    | 75    | 86   | 108  | 220   | 178  | 244   | 370   | 142  |

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1976 - 1996, BY WATER YEAR (WY)

|      | 1976 | 1977 | 1978 | 1979 | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 2.11 | 2.32 | 1.76 | 1.68 | 1.61 | 1.76 | 1.69 | 2.52 | 3.81 | 3.23 | 4.55 | 1.83 |      |      |      |
| MAX  | 3.55 | 6.49 | 3.17 | 2.74 | 2.39 | 3.54 | 2.72 | 10.1 | 27.7 | 27.9 | 13.4 | 5.12 |      |      |      |
| (WY) | 1985 | 1982 | 1995 | 1986 | 1977 | 1980 | 1993 | 1995 | 1985 | 1984 | 1994 |      |      |      |      |
| MIN  | 1.20 | 1.58 | .87  | 1.01 | .79  | 1.05 | .56  | .91  | .98  | .96  | .84  | .68  |      |      |      |
| (WY) | 1979 | 1984 | 1988 | 1988 | 1990 | 1990 | 1990 | 1986 | 1989 | 1989 | 1993 | 1990 |      |      |      |

## SUMMARY STATISTICS

## FOR 1995 CALENDAR YEAR

## FOR 1996 WATER YEAR

## WATER YEARS 1976 - 1996

|                          |         |        |  |  |  |      |        |  |  |        |  |  |  |        |      |
|--------------------------|---------|--------|--|--|--|------|--------|--|--|--------|--|--|--|--------|------|
| ANNUAL TOTAL             | 1723.49 | 894.34 |  |  |  |      |        |  |  |        |  |  |  |        |      |
| ANNUAL MEAN              | 4.72    | 2.44   |  |  |  |      |        |  |  | 2.40   |  |  |  |        |      |
| HIGHEST ANNUAL MEAN      |         |        |  |  |  |      |        |  |  | 5.12   |  |  |  |        | 1995 |
| LOWEST ANNUAL MEAN       |         |        |  |  |  |      |        |  |  | 1.20   |  |  |  |        | 1990 |
| HIGHEST DAILY MEAN       | 457     | Jun 3  |  |  |  | 44   | Aug 15 |  |  | 700    |  |  |  | Jul 28 | 1985 |
| LOWEST DAILY MEAN        | .99     | Mar 15 |  |  |  | e.86 | Feb 1  |  |  | a.00   |  |  |  | Apr 12 | 1990 |
| ANNUAL SEVEN-DAY MINIMUM | 1.0     | Mar 13 |  |  |  | .97  | Jan 8  |  |  | .07    |  |  |  | Apr 10 | 1990 |
| INSTANTANEOUS PEAK FLOW  |         |        |  |  |  | 374  | Aug 15 |  |  | b.4810 |  |  |  | Jun 3  | 1994 |
| INSTANTANEOUS PEAK STAGE |         |        |  |  |  | 6.83 | Aug 15 |  |  | c.9.51 |  |  |  | Jun 3  | 1994 |
| ANNUAL RUNOFF (AC-FT)    | 3420    |        |  |  |  | 1770 |        |  |  | 1740   |  |  |  |        |      |
| 10 PERCENT EXCEEDS       |         | 3.7    |  |  |  | 4.2  |        |  |  | 3.0    |  |  |  |        |      |
| 50 PERCENT EXCEEDS       |         | 1.8    |  |  |  | 1.7  |        |  |  | 1.7    |  |  |  |        |      |
| 90 PERCENT EXCEEDS       |         | 1.1    |  |  |  | 1.1  |        |  |  | .93    |  |  |  |        |      |

e-Estimated.

a-Also occurred Apr 13 and 15, 1990.

b-From rating curve extended above 100 ft<sup>3</sup>/s, on basis of slope-area measurement of peak flow.

c-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 SW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> 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 1995 TO SEPTEMBER 1996

| DATE      | TIME | DIS-CHARGE, INST. CUBIC FEET PER SECOND | SPE-CIFIC CON-DUCT-ANCE (US/CM) | PH (STAND-ARD UNITS) | TEMPER-ATURE WATER (DEG C) | OXYGEN, DIS-SOLVED (MG/L) | OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) | COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML) | STREP-TOCOCCI, FECAL, KF AGAR (COLS./100 ML) | CALCIUM DIS-SOLVED (MG/L AS CA) | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) |
|-----------|------|---|---------------------------------|----------------------|----------------------------|---------------------------|--|--|--|---------------------------------|-------------------------------------|
| OCT 27... | 1200 | 95                                      | 1040                            | 8.1                  | 11.0                       | 8.4                       | 5.8  | K100                                       | K87  | 85                              | 27                                  |
| DEC 01... | 1145 | 93                                      | 1030                            | 7.8                  | 9.5                        | 7.7                       | 7.4  | 170  | 83   | 81                              | 28                                  |
| JAN 19... | 0930 | 109                                     | 996                             | --                   | 0.0                        | 9.6                       | 23   | 140  | 170  | 76                              | 24                                  |
| FEB 23... | 1200 | 107                                     | 924                             | 7.9                  | 9.0                        | 8.1                       | 7.0  | K110                                       | K80  | 72                              | 24                                  |
| MAR 22... | 1015 | 128                                     | 910                             | 8.1                  | 10.0                       | 8.3                       | 5.7  | K28  | K18  | 70                              | 22                                  |
| APR 19... | 1000 | 44                                      | 1040                            | 8.0                  | 9.5                        | 8.3                       | 4.0  | K9   | K42  | 82                              | 26                                  |
| MAY 17... | 1230 | 44                                      | 1120                            | 8.1                  | 23.5                       | 6.2                       | 1.5  | 97   | K45  | 84                              | 29                                  |
| JUN 21... | 0900 | 104                                     | 928                             | 8.2                  | 17.0                       | 8.3                       | 6.0  | 620  | 440  | 71                              | 23                                  |
| JUL 19... | 1100 | 209                                     | 656                             | 8.0                  | 23.0                       | 6.4                       | 5.0  | K1400                                      | 1600   | 51                              | 15                                  |
| AUG 16... | 0830 | 180                                     | 848                             | 7.9                  | 17.0                       | 7.0                       | 6.4  | K1500                                      | K2200  | 61                              | 20                                  |
| SEP 13... | 0745 | 153                                     | 844                             | 8.1                  | 15.0                       | 7.4                       | 4.5  | K2200                                      | K2100  | 65                              | 20                                  |

| DATE      | ALKA-LINITY LAB (MG/L AS CACO3) | SULFATE DIS-SOLVED (MG/L AS SO4) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) | SULFIDE TOTAL (MG/L AS S) | RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) | NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) | NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) | NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) | NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) | PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) |
|-----------|---------------------------------|----------------------------------|------------------------------------|-----------------------------------|---------------------------|--|---|---|---|---|---|
| OCT 27... | 161                             | 270                              | 48                                 | 1.7                               | --                        | 38   | 0.13                                      | 6.6                                       | 0.16                                      | 1.0   | 0.42                                      |
| DEC 01... | 157                             | 260                              | 49                                 | 1.7                               | <0.5                      | 46   | 0.18                                      | 7.5                                       | 0.50                                      | 1.3   | 0.49                                      |
| JAN 19... | 143                             | 250                              | 54                                 | 1.9                               | --                        | 76   | 0.05                                      | 5.8                                       | 2.8                                       | 4.1   | 0.19                                      |
| FEB 23... | 142                             | 220                              | 48                                 | 1.6                               | --                        | 84   | 0.13                                      | 6.3                                       | 0.63                                      | 1.2   | 0.26                                      |
| MAR 22... | 140                             | 220                              | 44                                 | 1.8                               | --                        | 77   | 0.07                                      | 5.6                                       | 0.13                                      | 0.7   | 0.71                                      |
| APR 19... | 158                             | 280                              | 49                                 | 1.7                               | --                        | 30   | 0.09                                      | 5.4                                       | 0.23                                      | 0.9   | 0.32                                      |
| MAY 17... | 175                             | 320                              | 52                                 | 1.8                               | <0.5                      | 22   | 0.08                                      | 3.7                                       | 0.07                                      | 0.8   | 0.45                                      |
| JUN 21... | 141                             | 230                              | 46                                 | 1.8                               | --                        | 182  | 0.07                                      | 5.2                                       | 0.06                                      | 1.1   | 1.1                                       |
| JUL 19... | 112                             | 150                              | 28                                 | 1.8                               | --                        | 588  | 0.05                                      | 2.7                                       | 0.08                                      | 0.9   | 0.45                                      |
| AUG 16... | 136                             | 210                              | 38                                 | 1.2                               | --                        | 536  | 0.12                                      | 4.2                                       | 0.09                                      | 1.2   | 0.48                                      |
| SEP 13... | 134                             | 210                              | 36                                 | 1.7                               | --                        | 221  | 0.01                                      | 3.6                                       | <0.015                                    | 0.6   | 0.29                                      |

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 1995 TO SEPTEMBER 1996

| DATE         | ARSENIC<br>TOTAL<br>(UG/L<br>AS AS) | ARSENIC<br>DIS-<br>SOLVED<br>(UG/L<br>AS AS) | BORON,<br>TOTAL<br>RECOV-<br>ERABLE<br>(UG/L<br>AS B) | BORON,<br>DIS-<br>SOLVED<br>(UG/L<br>AS B) | CADMIUM<br>TOTAL<br>RECOV-<br>ERABLE<br>(UG/L<br>AS CD) | CADMIUM<br>DIS-<br>SOLVED<br>(UG/L<br>AS CD) | CHRO-<br>MIUM,<br>TOTAL<br>RECOV-<br>ERABLE<br>(UG/L<br>AS CR) | CHRO-<br>MIUM,<br>DIS-<br>SOLVED<br>(UG/L<br>AS CR) | CHRO-<br>MIUM,<br>HEXA-<br>VALENT,<br>DIS.<br>(UG/L<br>AS CR) | COPPER,<br>TOTAL<br>RECOV-<br>ERABLE<br>(UG/L<br>AS CU) | COPPER,<br>DIS-<br>SOLVED<br>(UG/L<br>AS CU) | IRON,<br>TOTAL<br>RECOV-<br>ERABLE<br>(UG/L<br>AS FE) |
|--------------|-------------------------------------|--|---|--|---|--|--|---|---|---|--|---|
| OCT<br>27... | --                                  | --   | --  | --   | <1  | <1   | <1   | <1  | <1  | 3   | 2  | 990   |
| DEC<br>01... | 1                                   | <1   | 180   | 200  | <1  | <1   | <1   | <1  | <1  | 4   | 2  | 930   |
| JAN<br>19... | --                                  | --   | --  | --   | <1  | <1   | 2  | <1  | <1  | 5   | 2  | 1900  |
| FEB<br>23... | --                                  | --   | --  | --   | <1  | <1   | 2  | <1  | <1  | 3   | 2  | 2000  |
| MAR<br>22... | --                                  | --   | --  | --   | <1  | <1   | 1  | <1  | <1  | 4   | 2  | 1400  |
| APR<br>19... | --                                  | --   | --  | --   | <1  | <1   | <1   | <1  | <1  | 5   | 3  | 540   |
| MAY<br>17... | 2                                   | 1  | 210   | 210  | <1  | <1   | <1   | <1  | <1  | 3   | 2  | 550   |
| JUN<br>21... | --                                  | --   | --  | --   | <1  | <1   | 2  | <1  | <1  | 8   | 2  | 4800  |
| JUL<br>19... | --                                  | --   | --  | --   | <1  | <1   | 5  | <1  | <1  | 12  | 2  | 45000   |
| AUG<br>16... | --                                  | --   | --  | --   | <1  | <1   | 5  | <1  | <1  | 16  | 2  | 14000   |
| SEP<br>13... | --                                  | --   | --  | --   | <1  | <1   | 3  | <1  | <1  | 7   | 2  | 5400  |

| DATE         | IRON,<br>DIS-<br>SOLVED<br>(UG/L<br>AS FE) | LEAD,<br>TOTAL<br>RECOV-<br>ERABLE<br>(UG/L<br>AS PB) | LEAD,<br>DIS-<br>SOLVED<br>(UG/L<br>AS PB) | MANGA-<br>NESE,<br>TOTAL<br>RECOV-<br>ERABLE<br>(UG/L<br>AS MN) | MANGA-<br>NESE,<br>DIS-<br>SOLVED<br>(UG/L<br>AS MN) | NICKEL,<br>TOTAL<br>RECOV-<br>ERABLE<br>(UG/L<br>AS NI) | NICKEL,<br>DIS-<br>SOLVED<br>(UG/L<br>AS NI) | SELE-<br>NIUM,<br>DIS-<br>SOLVED<br>(UG/L<br>AS SE) | ZINC,<br>TOTAL<br>RECOV-<br>ERABLE<br>(UG/L<br>AS ZN) | ZINC,<br>DIS-<br>SOLVED<br>(UG/L<br>AS ZN) | CYANIDE<br>TOTAL<br>(MG/L<br>AS CN) |
|--------------|--|---|--|---|--|---|--|---|---|--|-------------------------------------|
| OCT<br>27... | <10  | 2   | <1   | 120   | 60   | 4   | 3  | 6   | 20  | <10  | --                                  |
| DEC<br>01... | 10   | 2   | <1   | 140   | 100  | 4   | 4  | 6   | 20  | 10   | <0.01                               |
| JAN<br>19... | 30   | 3   | <1   | 170   | 110  | 4   | 3  | 4   | 60  | 20   | --                                  |
| FEB<br>23... | 20   | 4   | <1   | 150   | 90   | 4   | 3  | 5   | 40  | 20   | --                                  |
| MAR<br>22... | <10  | 3   | 1  | 110   | 50   | 4   | 3  | 4   | 40  | 20   | --                                  |
| APR<br>19... | 10   | 2   | <1   | 90  | 60   | 5   | 4  | 5   | 20  | 10   | --                                  |
| MAY<br>17... | 5  | 1   | <1   | 90  | 65   | 4   | 4  | 5   | 20  | 9  | <0.01                               |
| JUN<br>21... | 14   | 6   | <1   | 160   | 16   | 6   | 3  | 5   | 40  | 17   | --                                  |
| JUL<br>19... | 8  | 26  | <1   | 350   | 11   | 9   | 3  | 3   | 80  | 6  | --                                  |
| AUG<br>16... | <10  | 23  | <1   | 360   | 30   | 13  | 5  | 4   | 90  | 10   | --                                  |
| SEP<br>13... | 9  | 12  | <1   | 160   | 8  | 7   | 2  | 4   | 30  | 11   | --                                  |

**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 mi<sup>2</sup>.

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 and Parshall flume. Elevation of gage is 6,430 ft above sea level, from topographic map.

REMARKS.--Records good except for June 2, 8-9, 11, 14-20, 22, 24, 28-29, which are fair, and estimated daily discharges, 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 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

| DAY   | OCT   | NOV   | DEC   | JAN   | FEB   | MAR   | APR  | MAY   | JUN   | JUL   | AUG   | SEP   |
|-------|-------|-------|-------|-------|-------|-------|------|-------|-------|-------|-------|-------|
| 1     | 1.2   | .82   | e.92  | e.68  | e.81  | e.84  | 1.2  | 1.2   | 2.9   | .77   | .92   | 2.8   |
| 2     | 1.2   | .81   | e.91  | e.68  | e.74  | e.84  | 1.2  | 1.1   | 2.2   | .62   | .81   | 2.3   |
| 3     | 1.1   | .88   | e.90  | e.66  | e.63  | e.84  | 1.4  | 1.0   | 1.8   | .55   | .76   | 1.9   |
| 4     | 1.0   | .90   | e.85  | e.68  | e.52  | e.83  | 1.4  | 1.0   | 1.6   | .48   | .67   | 1.6   |
| 5     | 1.0   | .89   | e.84  | e.70  | e.60  | e.82  | 1.3  | 1.0   | 1.4   | .48   | .59   | 1.4   |
| 6     | 1.0   | .89   | e.83  | e.72  | e.83  | .83   | 1.4  | 1.0   | 1.3   | .46   | .55   | 1.4   |
| 7     | 1.1   | .89   | e.82  | e.72  | e.90  | .82   | 1.8  | 1.0   | 1.1   | .39   | .49   | 1.6   |
| 8     | 1.0   | .89   | .81   | e.72  | e.94  | .82   | 1.9  | .91   | 1.1   | .39   | .99   | 1.3   |
| 9     | 1.1   | .89   | .48   | .76   | .96   | .86   | 2.0  | .89   | 1.0   | 1.9   | 4.6   | 1.2   |
| 10    | 1.0   | .89   | .78   | .76   | .97   | .99   | 2.0  | 1.2   | .99   | 8.7   | 2.2   | 1.0   |
| 11    | 1.0   | .89   | .99   | .76   | 1.0   | .96   | 2.0  | 1.1   | 1.2   | 3.3   | 1.5   | .97   |
| 12    | .91   | e.84  | .89   | .76   | 1.0   | .90   | 2.0  | 1.0   | 1.0   | 2.4   | 1.3   | .89   |
| 13    | .82   | e.84  | .89   | .76   | 1.0   | .82   | 1.9  | .89   | 1.0   | 2.8   | 1.1   | 1.1   |
| 14    | .87   | .90   | .83   | .76   | 1.1   | .88   | 1.7  | .88   | 1.0   | 2.9   | 1.0   | 1.2   |
| 15    | .84   | .89   | .67   | .76   | 1.0   | .83   | 1.6  | .73   | 1.8   | 2.7   | .96   | 1.3   |
| 16    | .82   | .89   | e.62  | .81   | 1.0   | .82   | 1.7  | .65   | 2.0   | 2.4   | .96   | 1.2   |
| 17    | .94   | .89   | e.60  | .92   | .97   | .82   | 1.6  | .59   | 1.4   | 2.1   | .92   | 1.1   |
| 18    | 1.1   | .89   | .62   | .89   | .99   | .71   | 1.5  | .59   | 1.2   | 2.1   | .82   | 1.2   |
| 19    | .90   | .89   | e.60  | .89   | .97   | .90   | 1.5  | .56   | 1.0   | 2.0   | .96   | 1.3   |
| 20    | .88   | .89   | e.60  | .89   | 1.1   | 1.0   | 1.4  | .55   | .89   | 1.7   | .87   | 1.2   |
| 21    | .85   | .94   | e.60  | .89   | 1.1   | 1.0   | 1.3  | .59   | .87   | 1.3   | .79   | 1.0   |
| 22    | .85   | .92   | e.57  | .89   | 1.1   | 1.0   | 1.4  | .54   | 1.0   | 1.1   | .77   | 1.0   |
| 23    | .82   | .89   | e.58  | .89   | 1.0   | 1.2   | 1.3  | .48   | e.88  | 1.2   | 1.9   | 1.0   |
| 24    | .79   | .89   | e.60  | .89   | 1.0   | 1.1   | 1.3  | .59   | .76   | .96   | 2.4   | 1.5   |
| 25    | .79   | .89   | e.60  | .89   | 1.0   | .64   | 1.4  | 1.7   | e.70  | 1.0   | 1.3   | 1.3   |
| 26    | .74   | .89   | e.62  | .93   | .86   | .64   | 1.3  | 5.8   | e.67  | 1.0   | 1.4   | 1.3   |
| 27    | .72   | .89   | e.62  | e.95  | e.89  | .79   | 1.2  | 4.7   | e.62  | 1.2   | 3.3   | 1.5   |
| 28    | .73   | e.88  | e.64  | e.92  | e.88  | 1.1   | 1.3  | 3.8   | .59   | .97   | 5.7   | 1.7   |
| 29    | .62   | e.82  | e.64  | e.92  | e.85  | 1.1   | 1.3  | 3.3   | .56   | .96   | 4.3   | 1.9   |
| 30    | .59   | e.89  | e.64  | e.90  | ---   | 1.2   | 1.2  | 2.8   | .60   | .96   | 4.3   | 2.1   |
| 31    | .74   | ---   | e.65  | e.90  | ---   | 1.2   | ---  | 2.8   | ---   | 1.1   | 3.3   | ---   |
| TOTAL | 28.02 | 26.46 | 22.21 | 25.25 | 26.71 | 28.10 | 45.5 | 44.94 | 35.13 | 50.89 | 52.43 | 42.26 |
| MEAN  | .90   | .88   | .72   | .81   | .92   | .91   | 1.52 | 1.45  | 1.17  | 1.64  | 1.69  | 1.41  |
| MAX   | 1.2   | .94   | .99   | .95   | 1.1   | 1.2   | 2.0  | 5.8   | 2.9   | 8.7   | 5.7   | 2.8   |
| MIN   | .59   | .81   | .48   | .66   | .52   | .64   | 1.2  | .48   | .56   | .39   | .49   | .89   |
| AC-FT | 56    | 52    | 44    | 50    | 53    | 56    | 90   | 89    | 70    | 101   | 104   | 84    |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1978 - 1996, BY WATER YEAR (WY)

|      | 1978 | 1979 | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 4.00 | 2.34 | 1.26 | 1.07 | 1.01 | 1.62 | 6.96 | 25.3 | 11.7 | 4.10 | 6.46 | 3.17 |      |      |      |      |      |      |      |
| MAX  | 29.0 | 13.0 | 3.89 | 2.25 | 1.78 | 5.13 | 17.6 | 81.5 | 39.2 | 11.6 | 28.2 | 13.5 |      |      |      |      |      |      |      |
| (WY) | 1985 | 1985 | 1985 | 1985 | 1983 | 1987 | 1987 | 1995 | 1995 | 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 | 1978 | 1978 | 1978 | 1978 |      |      |      |      |      |      |      |

SUMMARY STATISTICS

FOR 1996 WATER YEAR

<sup>a</sup>WATER YEARS 1978 - 1996

|                          |                  |                  |                              |
|--------------------------|------------------|------------------|------------------------------|
| ANNUAL TOTAL             | 427.90           |                  |                              |
| ANNUAL MEAN              | 1.17             | 5.52             |                              |
| HIGHEST ANNUAL MEAN      |                  | 12.2             | 1985                         |
| LOWEST ANNUAL MEAN       |                  | 1.17             | 1996                         |
| HIGHEST DAILY MEAN       |                  | <sup>e</sup> 380 | May 30 1995                  |
| LOWEST DAILY MEAN        | <sup>b</sup> .39 | Jul 7            | .00 Aug 22 1978              |
| ANNUAL SEVEN-DAY MINIMUM | .48              | Jul 2            | .00 Aug 22 1978              |
| INSTANTANEOUS PEAK FLOW  | 16               | Jul 10           | <sup>c</sup> 513 Jun 3 1981  |
| INSTANTANEOUS PEAK STAGE | 1.06             | Jul 10           | <sup>d</sup> 3.72 Jun 3 1981 |
| ANNUAL RUNOFF (AC-FT)    | 849              |                  | 4000                         |
| 10 PERCENT EXCEEDS       | 1.9              |                  | 14                           |
| 50 PERCENT EXCEEDS       | .93              |                  | 1.6                          |
| 90 PERCENT EXCEEDS       | .62              |                  | .50                          |

e-Estimated.

a-Does not include 1988 to 1994 water years.

b-Also occurred Jul 8.

c-From rating curve extended above 70 ft<sup>3</sup>/s, on basis of slope-area measurement of peak flow.

d-From floodmark.

## 07105928 LITTLE FOUNTAIN CREEK NEAR FORT CARSON, CO

LOCATION.--Lat 38°40'49", long 104°51'08", in SW¼SE¼ 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 mi<sup>2</sup>.

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. 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 ft<sup>3</sup>/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 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

| DAY   | OCT   | NOV  | DEC  | JAN  | FEB  | MAR  | APR   | MAY   | JUN   | JUL   | AUG   | SEP   |
|-------|-------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|
| 1     | .05   | .46  | .06  | e.21 | e.05 | .39  | .56   | .62   | 1.8   | .04   | 1.0   | 1.9   |
| 2     | .05   | .15  | .06  | e.21 | e.05 | .38  | .67   | .64   | 2.0   | .02   | .88   | 1.6   |
| 3     | .05   | .09  | .05  | e.21 | e.05 | .36  | .88   | .56   | 2.5   | .01   | .73   | 1.3   |
| 4     | .04   | .13  | .05  | e.21 | .06  | .37  | .99   | .49   | .98   | .00   | .70   | 1.0   |
| 5     | .06   | .12  | .05  | e.21 | .07  | .38  | .86   | .43   | .96   | .00   | .63   | .83   |
| 6     | .06   | .15  | e.05 | e.21 | .07  | .39  | .76   | .35   | 1.4   | .00   | .53   | .80   |
| 7     | .05   | .18  | e.05 | e.19 | .06  | .38  | 1.1   | .31   | .59   | .00   | .93   | 1.1   |
| 8     | .04   | .18  | e.04 | .18  | .05  | .36  | 1.3   | 1.7   | .31   | .00   | .39   | .73   |
| 9     | .26   | .19  | .03  | .15  | .04  | .36  | 1.6   | .08   | .40   | .18   | 3.6   | 1.60  |
| 10    | 2.0   | .17  | .02  | .14  | .03  | .37  | 1.5   | .28   | 1.4   | 6.8   | 2.2   | .51   |
| 11    | .41   | .22  | .01  | .13  | .02  | .32  | 1.7   | .25   | .66   | 3.1   | 1.5   | .44   |
| 12    | .73   | .29  | .02  | .10  | .02  | .09  | 1.5   | .35   | .54   | 2.2   | 1.3   | .44   |
| 13    | .86   | .31  | .02  | .08  | .02  | .05  | 1.5   | .21   | .68   | 2.9   | 1.9   | .70   |
| 14    | .96   | .24  | .02  | .09  | .02  | .03  | 1.3   | .43   | .64   | 3.0   | .57   | .84   |
| 15    | .93   | .40  | .02  | .09  | .02  | .02  | 1.1   | .20   | 1.5   | 2.8   | .76   | .78   |
| 16    | .96   | .19  | .02  | e.09 | .02  | .02  | 2.7   | .01   | 1.7   | 2.6   | .44   | .71   |
| 17    | .96   | .10  | .01  | e.09 | .02  | .01  | .80   | .00   | 1.2   | 2.4   | .45   | .69   |
| 18    | 1.5   | .07  | .02  | e.09 | .01  | .03  | .90   | .00   | .99   | 2.4   | .40   | 1.0   |
| 19    | 1.1   | .13  | .02  | e.09 | .01  | .05  | 1.0   | .00   | .79   | 2.3   | .53   | .96   |
| 20    | 1.0   | .20  | .02  | e.09 | .01  | .14  | .77   | .00   | .66   | 2.0   | .48   | .74   |
| 21    | 1.0   | .21  | .02  | e.08 | .01  | .28  | .92   | .01   | .68   | 1.6   | .37   | .69   |
| 22    | .99   | .12  | .02  | e.08 | .01  | .25  | 1.0   | .05   | .88   | 1.4   | .62   | .61   |
| 23    | 1.8   | .07  | .02  | e.08 | .01  | .24  | .97   | .00   | .72   | 1.6   | 1.3   | .63   |
| 24    | .51   | .06  | .01  | e.08 | .00  | .33  | .96   | .00   | 1.5   | 1.1   | 2.0   | 1.1   |
| 25    | .33   | .06  | .01  | e.07 | .00  | .26  | .99   | .27   | .37   | 1.2   | .95   | .94   |
| 26    | 1.1   | .06  | .45  | e.07 | .01  | .30  | .89   | 4.6   | .19   | 1.2   | .91   | 1.1   |
| 27    | .23   | .08  | .36  | e.07 | .12  | .45  | .80   | 4.7   | .14   | 1.3   | 2.2   | 1.3   |
| 28    | .31   | .09  | .31  | e.06 | .41  | .38  | .91   | 3.6   | .11   | 1.1   | 4.3   | 1.4   |
| 29    | .23   | .08  | .25  | .05  | .41  | .44  | 1.7   | 3.3   | .07   | 1.1   | 3.0   | 1.8   |
| 30    | .42   | .08  | .23  | .05  | ---  | .51  | .26   | 2.9   | .06   | 1.7   | 3.2   | 1.8   |
| 31    | .13   | ---  | .23  | .05  | ---  | .44  | ---   | 2.8   | ---   | .88   | 2.4   | ---   |
| TOTAL | 19.12 | 4.88 | 2.55 | 3.60 | 1.68 | 8.38 | 32.89 | 29.14 | 26.42 | 46.93 | 41.17 | 29.04 |
| MEAN  | .62   | .16  | .082 | .12  | .058 | .27  | 1.10  | .94   | .88   | 1.51  | 1.33  | .97   |
| MAX   | 2.0   | .46  | .45  | .21  | .41  | .51  | 2.7   | 4.7   | 2.5   | 6.8   | 4.3   | 1.9   |
| MIN   | .04   | .06  | .01  | .05  | .00  | .01  | .26   | .00   | .06   | .00   | .37   | .44   |
| AC-FT | 38    | 9.7  | 5.1  | 7.1  | 3.3  | 17   | 65    | 58    | 52    | 93    | 82    | 58    |

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1978 - 1996, BY WATER YEAR (WY)

|      | 1978 | 1979 | 1985 | 1988 | 1989 | 1995 | 1996 |
|------|------|------|------|------|------|------|------|
| MEAN | 3.12 | 1.39 | .32  | .18  | .28  | .84  | 5.09 |
| MAX  | 31.2 | 14.2 | 2.88 | .98  | 1.27 | 3.71 | 18.2 |
| (WY) | 1985 | 1985 | 1985 | 1985 | 1983 | 1987 | 1985 |
| MIN  | .000 | .000 | .000 | .000 | .000 | .085 | .064 |
| (WY) | 1979 | 1979 | 1979 | 1979 | 1979 | 1989 | 1989 |

## SUMMARY STATISTICS

## FOR 1996 WATER YEAR

## WATER YEARS 1978 - 1996

|                          |              |                   |
|--------------------------|--------------|-------------------|
| ANNUAL TOTAL             | 245.80       |                   |
| ANNUAL MEAN              | .67          | 3.78              |
| HIGHEST ANNUAL MEAN      |              | 11.7              |
| LOWEST ANNUAL MEAN       |              | .22               |
| HIGHEST DAILY MEAN       | 6.8 Jul 10   | 351 May 30 1995   |
| LOWEST DAILY MEAN        | a .00 Feb 24 | a .00 May 30 1978 |
| ANNUAL SEVEN-DAY MINIMUM | .00 Jul 2    | .00 Jun 15 1978   |
| INSTANTANEOUS PEAK FLOW  | 22 May 8     | b 524 May 30 1995 |
| INSTANTANEOUS PEAK STAGE | 2.85 May 8   | 6.11 May 30 1995  |
| ANNUAL RUNOFF (AC-FT)    | 488          | 2740              |
| 10 PERCENT EXCEEDS       | 1.7          | 11                |
| 50 PERCENT EXCEEDS       | .37          | .43               |
| 90 PERCENT EXCEEDS       | .02          | .00               |

e-Estimated.

a-No flow at times most years.

b-From rating curve extended above 160 ft<sup>3</sup>/s.

**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 20 ft 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 mi<sup>2</sup>.

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 estimated daily discharges, and those above 150 ft<sup>3</sup>/s, which are poor. Several measurements of specific conductance and water temperature were obtained and are published in the "Supplemental Water-Quality Data For Gaging Stations" section of this report.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

| DAY   | OCT   | NOV   | DEC   | JAN  | FEB  | MAR   | APR   | MAY   | JUN  | JUL   | AUG   | SEP   |
|-------|-------|-------|-------|------|------|-------|-------|-------|------|-------|-------|-------|
| 1     | .62   | e.69  | e.39  | e.30 | e.24 | e.30  | .52   | .35   | .73  | .13   | .99   | 5.7   |
| 2     | .56   | e.66  | e.45  | e.31 | e.23 | e.31  | .51   | .31   | .64  | .09   | .70   | 4.4   |
| 3     | .51   | e.63  | e.47  | e.32 | e.23 | e.32  | .66   | .24   | .57  | .05   | .66   | 3.5   |
| 4     | .53   | e.61  | e.47  | e.33 | e.23 | e.34  | .84   | .21   | .49  | .04   | .54   | 2.7   |
| 5     | .60   | e.60  | e.46  | e.33 | e.23 | .35   | .86   | .18   | .40  | .03   | .44   | 2.2   |
| 6     | .66   | e.59  | e.45  | e.32 | e.24 | .36   | .87   | .16   | .34  | .02   | .35   | 2.0   |
| 7     | .68   | e.59  | e.43  | e.32 | e.23 | .38   | .95   | .14   | .32  | .02   | .38   | 1.9   |
| 8     | .65   | e.58  | e.41  | e.33 | .24  | .35   | .97   | .11   | .28  | .03   | .46   | 1.6   |
| 9     | .66   | e.57  | e.30  | e.33 | .24  | .39   | 1.0   | .12   | .25  | 4.3   | 1.3   | 1.2   |
| 10    | .64   | e.55  | e.27  | e.34 | .27  | .38   | 1.0   | .36   | .25  | 20    | .93   | 1.0   |
| 11    | .62   | e.50  | e.29  | e.33 | .32  | .39   | .99   | .32   | .30  | 4.3   | .65   | .85   |
| 12    | .74   | e.47  | e.31  | e.32 | .39  | .38   | .91   | .23   | .27  | 2.9   | .53   | .87   |
| 13    | .71   | e.53  | e.32  | e.33 | .38  | .37   | .98   | .18   | .28  | 2.8   | .36   | .90   |
| 14    | .77   | e.56  | e.33  | e.34 | .38  | .40   | .94   | .15   | .30  | 3.1   | .27   | .89   |
| 15    | .76   | e.53  | e.35  | e.35 | .36  | .42   | .85   | .11   | .54  | 2.5   | .26   | .94   |
| 16    | .68   | e.52  | e.31  | e.33 | .40  | .46   | .78   | .08   | .74  | 2.1   | .23   | .86   |
| 17    | .70   | e.52  | e.31  | e.31 | .35  | .42   | .66   | .06   | .44  | 1.9   | .19   | 1.1   |
| 18    | .78   | e.56  | e.30  | e.32 | .35  | .41   | .54   | .04   | .34  | 1.8   | .16   | 1.7   |
| 19    | .92   | e.53  | e.29  | e.26 | .35  | .38   | .48   | .03   | .25  | 2.0   | .21   | 1.6   |
| 20    | .95   | e.51  | e.28  | e.27 | .44  | .38   | .42   | .03   | .21  | 1.8   | .19   | 1.2   |
| 21    | .97   | e.56  | e.27  | e.28 | .48  | .41   | .43   | .03   | .21  | 1.5   | .15   | 1.0   |
| 22    | .96   | e.58  | e.27  | e.27 | .53  | .47   | .43   | .02   | .25  | 1.3   | .17   | .83   |
| 23    | e.96  | e.57  | e.28  | e.27 | .49  | .54   | .40   | .02   | .19  | 1.2   | 2.9   | .86   |
| 24    | e.94  | e.54  | e.28  | e.28 | .38  | .55   | .33   | .02   | .14  | 1.0   | 4.4   | 1.2   |
| 25    | e.92  | e.52  | e.29  | e.28 | .37  | .46   | .29   | .53   | .11  | .94   | 2.1   | 1.0   |
| 26    | e.90  | e.52  | e.29  | e.27 | .37  | .60   | .24   | 2.7   | .08  | .88   | 1.7   | 1.1   |
| 27    | e.85  | e.51  | e.29  | e.27 | .35  | .54   | .28   | 1.9   | .07  | .83   | 7.4   | 1.4   |
| 28    | e.80  | e.47  | e.29  | e.27 | e.33 | .52   | .43   | 1.3   | .06  | .76   | 15    | 1.7   |
| 29    | e.77  | e.42  | e.29  | e.26 | e.32 | .53   | .49   | 1.1   | .06  | .71   | 11    | 1.8   |
| 30    | e.74  | e.37  | e.29  | e.26 | ---  | .59   | .41   | .94   | .08  | .69   | 10    | 1.8   |
| 31    | e.71  | ---   | e.29  | e.25 | ---  | .55   | ---   | .83   | ---  | .98   | 7.5   | ---   |
| TOTAL | 23.26 | 16.36 | 10.32 | 9.35 | 9.72 | 13.25 | 19.46 | 12.80 | 9.19 | 60.70 | 72.12 | 49.80 |
| MEAN  | .75   | .55   | .33   | .30  | .34  | .43   | .65   | .41   | .31  | 1.96  | 2.33  | 1.66  |
| MAX   | .97   | .69   | .47   | .35  | .53  | .60   | 1.0   | 2.7   | .74  | 20    | 15    | 5.7   |
| MIN   | .51   | .37   | .27   | .25  | .23  | .30   | .24   | .02   | .06  | .02   | .15   | .83   |
| AC-FT | 46    | 32    | 20    | 19   | 19   | 26    | 39    | 25    | 18   | 120   | 143   | 99    |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1978 - 1996, BY WATER YEAR (WY)

|      | 1978 | 1979 | 1985 | 1986 | 1987 | 1988 | 1989 | 1995 | 1996 | 1997 | 1998 | 1999 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 1.73 | 1.11 | .51  | .48  | .49  | .99  | 4.20 | 9.94 | 4.60 | 2.01 | 2.79 | 1.37 |
| MAX  | 20.7 | 10.7 | 2.25 | 1.42 | 1.33 | 2.43 | 12.3 | 39.1 | 26.4 | 7.23 | 14.8 | 7.75 |
| (WY) | 1985 | 1985 | 1985 | 1985 | 1985 | 1987 | 1985 | 1995 | 1995 | 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 1995 CALENDAR YEAR

FOR 1996 WATER YEAR

WATER YEARS 1978 - 1996

|                          |         |        |        |
|--------------------------|---------|--------|--------|
| ANNUAL TOTAL             | 2419.91 | 306.33 |        |
| ANNUAL MEAN              | 6.63    | .84    | 2.57   |
| HIGHEST ANNUAL MEAN      |         |        | 7.70   |
| LOWEST ANNUAL MEAN       |         |        | .36    |
| HIGHEST DAILY MEAN       | 175     | May 30 | 175    |
| LOWEST DAILY MEAN        | a,e .27 | Dec 10 | b .02  |
| ANNUAL SEVEN-DAY MINIMUM | .28     | Dec 19 | c .00  |
| INSTANTANEOUS PEAK FLOW  |         |        | d .03  |
| INSTANTANEOUS PEAK STAGE |         |        | e .00  |
| ANNUAL RUNOFF (AC-FT)    | 4800    | 608    | f 377  |
| 10 PERCENT EXCEEDS       | 21      | 1.5    | g 5.28 |
| 50 PERCENT EXCEEDS       | .79     | .44    | h .66  |
| 90 PERCENT EXCEEDS       | .47     | .19    | i .14  |

e-Estimated.

a-Also occurred Dec 21-22.

b-Also occurred May 23-24, and Jul 6-7.

c-No flow many days in most years.

d-From rating curve extended above 175 ft<sup>3</sup>/s, on basis of slope-area measurement of peak flow.

f-From rating curve extended above 130 ft<sup>3</sup>/s.

g-From floodmark.

## 07105950 ROCK CREEK NEAR FORT CARSON, CO

LOCATION.--Lat 38°41'49", long 104°49'39", in SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> 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 mi<sup>2</sup>.

PERIOD OF RECORD.--May 1978 to current year. Water-quality data available, May 1978 to September 1981.

GAGE.--Water-stage recorder. Elevation of gage is 6,150 ft above sea level, from topographic map.

REMARKS.--Records good except for July 10 to Aug. 6 and estimated daily discharges, which are fair. 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.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

| DAY   | OCT  | NOV  | DEC  | JAN  | FEB  | MAR  | APR  | MAY  | JUN  | JUL   | AUG   | SEP  |
|-------|------|------|------|------|------|------|------|------|------|-------|-------|------|
| 1     | .00  | .00  | e.00 | e.00 | e.00 | e.00 | .00  | .00  | .00  | .00   | .23   | 1.1  |
| 2     | .00  | .00  | e.00 | e.00 | e.00 | e.00 | .00  | .00  | .00  | .00   | .21   | .64  |
| 3     | .00  | .00  | e.00 | e.00 | e.00 | e.00 | .00  | .00  | .00  | .00   | .20   | .34  |
| 4     | .00  | .00  | e.00 | e.00 | e.00 | e.00 | .00  | .00  | .00  | .00   | .19   | .26  |
| 5     | .00  | .00  | e.00 | e.00 | e.00 | e.00 | .00  | .00  | .00  | .00   | .17   | .24  |
| 6     | .00  | .00  | e.00 | e.00 | e.00 | e.00 | .00  | .00  | .00  | .00   | .16   | .22  |
| 7     | .00  | .00  | e.00 | e.00 | e.00 | e.00 | .00  | .00  | .00  | .00   | .14   | .25  |
| 8     | .00  | .00  | e.00 | e.00 | e.00 | e.00 | .00  | .00  | .00  | .00   | .14   | .27  |
| 9     | .00  | .00  | e.00 | e.00 | e.00 | e.00 | .00  | .00  | .00  | .15   | .14   | .29  |
| 10    | .00  | .00  | e.00 | e.00 | e.00 | e.00 | .00  | .00  | .00  | 16    | .14   | .30  |
| 11    | .00  | e.00 | e.00 | e.00 | e.00 | e.00 | .00  | .00  | .00  | .54   | .18   | .30  |
| 12    | .00  | e.00 | e.00 | e.00 | e.00 | e.00 | .00  | .00  | .00  | .21   | .19   | .33  |
| 13    | .00  | e.00 | e.00 | e.00 | e.00 | e.00 | .00  | .00  | .00  | .23   | .18   | .33  |
| 14    | .00  | e.00 | e.00 | e.00 | e.00 | e.00 | .00  | .00  | .00  | .30   | .17   | .33  |
| 15    | .00  | e.00 | e.00 | e.00 | e.00 | e.00 | .00  | .00  | .00  | .31   | .18   | .33  |
| 16    | .00  | e.00 | e.00 | e.00 | e.00 | e.00 | .00  | .00  | .00  | .31   | .13   | .33  |
| 17    | .00  | e.00 | e.00 | e.00 | e.00 | e.00 | .00  | .00  | .00  | .28   | .08   | .32  |
| 18    | .00  | e.00 | e.00 | e.00 | e.00 | e.00 | .00  | .00  | .00  | .28   | .05   | .32  |
| 19    | .00  | e.00 | e.00 | e.00 | e.00 | e.00 | .00  | .00  | .00  | .31   | .03   | .31  |
| 20    | .00  | e.00 | e.00 | e.00 | e.00 | e.00 | .00  | .00  | .00  | .30   | .00   | .30  |
| 21    | .00  | e.00 | e.00 | e.00 | e.00 | e.00 | .00  | .00  | .00  | .30   | .00   | .27  |
| 22    | .00  | e.00 | e.00 | e.00 | e.00 | e.00 | .00  | .00  | .00  | .29   | .00   | .27  |
| 23    | .00  | e.00 | e.00 | e.00 | e.00 | e.00 | .00  | .00  | .00  | .29   | .04   | .27  |
| 24    | .00  | e.00 | e.00 | e.00 | e.00 | e.00 | .00  | .00  | .00  | .28   | .12   | .27  |
| 25    | .00  | e.00 | e.00 | e.00 | e.00 | e.00 | .00  | .00  | .00  | .28   | .10   | .24  |
| 26    | .00  | e.00 | e.00 | e.00 | e.00 | e.00 | .00  | .00  | .00  | .27   | .09   | .24  |
| 27    | .00  | e.00 | e.00 | e.00 | e.00 | e.00 | .00  | .00  | .00  | .27   | 7.1   | .27  |
| 28    | .00  | e.00 | e.00 | e.00 | e.00 | e.00 | .00  | .00  | .00  | .26   | 5.4   | .26  |
| 29    | .00  | e.00 | e.00 | e.00 | e.00 | .00  | .00  | .00  | .00  | .26   | 2.9   | .24  |
| 30    | .00  | e.00 | e.00 | e.00 | e.00 | ---  | .00  | .00  | .00  | .24   | 2.7   | .23  |
| 31    | .00  | ---  | e.00 | e.00 | ---  | .00  | ---  | .00  | ---  | .23   | 1.7   | ---  |
| TOTAL | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 22.19 | 23.06 | 9.67 |
| MEAN  | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .72   | .74   | .32  |
| MAX   | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .00  | 16    | 7.1   | 1.1  |
| MIN   | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .00   | .00   | .22  |
| AC-FT | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .00  | 44    | 46    | 19   |

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1978 - 1996, BY WATER YEAR (WY)

|      |      |      |      |      |      |      |      |      |      |      |      |      |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 1.11 | .56  | .094 | .053 | .040 | .15  | 2.70 | 8.87 | 3.20 | 1.14 | 1.47 | .61  |
| MAX  | 18.6 | 9.66 | 1.43 | .81  | .67  | 1.28 | 10.0 | 42.8 | 20.3 | 6.57 | 15.4 | 6.75 |
| (WY) | 1985 | 1985 | 1985 | 1985 | 1985 | 1985 | 1985 | 1980 | 1995 | 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 1995 CALENDAR YEAR

## FOR 1996 WATER YEAR

## WATER YEARS 1978 - 1996

|                          |                  |        |                  |             |
|--------------------------|------------------|--------|------------------|-------------|
| ANNUAL TOTAL             | 2079.38          | 54.92  |                  |             |
| ANNUAL MEAN              | 5.70             | .15    | 1.71             |             |
| HIGHEST ANNUAL MEAN      |                  |        | 6.24             | 1985        |
| LOWEST ANNUAL MEAN       |                  |        | .000             | 1989        |
| HIGHEST DAILY MEAN       | 183              | May 30 | 183              | May 30 1995 |
| LOWEST DAILY MEAN        | <sup>a</sup> .00 | Jan 1  | <sup>a</sup> .00 | Oct 1 1978  |
| ANNUAL SEVEN-DAY MINIMUM | .00              | Jan 1  | .00              | Oct 1 1978  |
| INSTANTANEOUS PEAK FLOW  |                  |        | 50               | Jul 10 1995 |
| INSTANTANEOUS PEAK STAGE |                  |        | 4.33             | Jul 10 1995 |
| ANNUAL RUNOFF (AC-FT)    | 4120             | 109    | 1240             |             |
| 10 PERCENT EXCEEDS       | 19               | .27    | 3.5              |             |
| 50 PERCENT EXCEEDS       | .00              | .00    | .00              |             |
| 90 PERCENT EXCEEDS       | .00              | .00    | .00              |             |

e-Estimated.

a-No flow most of time.

b-From rating curve extended above 100 ft<sup>3</sup>/s.

**07106000 FOUNTAIN CREEK NEAR FOUNTAIN, CO**

LOCATION.--Lat 38°36'06", long 104°40'11", in SW<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec.4, T.17 S., R.65 W., El Paso County, Hydrologic Unit 11020003, on right bank 50 ft upstream from Old Pueblo Road bridge, 100 ft downstream from Denver & Rio Grande Railroad bridge, 0.90 mi downstream from Little Fountain Creek, and 5.6 mi south of Fountain.

DRAINAGE AREA.--681 mi<sup>2</sup>.

**WATER-DISCHARGE RECORDS**

PERIOD OF RECORD.--September 1938 to March 1, 1940 (monthly records only), March 2, 1940 to September 1954; July 2, 1985 to current year.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 5,355 ft above sea level, from topographic map. Sept. 18, 1938 to Mar. 1, 1940, nonrecording gage, and Mar. 2, 1940 to Sept. 30, 1954, recording gage, both at different datum and at site 200 ft downstream. July 2, 1985 to Sept. 2, 1987, recording gage at site 500 ft downstream, at different datum. Sept. 3, 1987 to Mar. 13, 1990, recording gage at site 1,100 ft upstream at different datums.

REMARKS.--Records good except those above about 1,000 ft<sup>3</sup>/s, which are poor. Natural flow of stream affected by storage reservoirs, power developments, diversions for irrigation, municipal use, and 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, but was probably exceeded by the flood of June 1965.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

| DAY   | OCT  | NOV  | DEC  | JAN   | FEB  | MAR  | APR  | MAY  | JUN  | JUL   | AUG   | SEP   |
|-------|------|------|------|-------|------|------|------|------|------|-------|-------|-------|
| 1     | 187  | 168  | 127  | e148  | 141  | 143  | 143  | 59   | 105  | 120   | 235   | 216   |
| 2     | 183  | 173  | 129  | e150  | 142  | 141  | 148  | 67   | 137  | 82    | 716   | 213   |
| 3     | 175  | 166  | 126  | 163   | 136  | 142  | 158  | 80   | 128  | 58    | 157   | 197   |
| 4     | 163  | 178  | 130  | 177   | 151  | 141  | 172  | 85   | 98   | 53    | 124   | 181   |
| 5     | 180  | 187  | 128  | 159   | 183  | 129  | 245  | 90   | 73   | 43    | 116   | 178   |
| 6     | 145  | 194  | 131  | 145   | 179  | 146  | 177  | 85   | 82   | 63    | 113   | 211   |
| 7     | 143  | 171  | 123  | 156   | 173  | 148  | 164  | 64   | 84   | 76    | 111   | 265   |
| 8     | 146  | 163  | 127  | 185   | 164  | 161  | 160  | 56   | 64   | 73    | 135   | 148   |
| 9     | 148  | 170  | 97   | 188   | 162  | 144  | 133  | 64   | 54   | 521   | 308   | 138   |
| 10    | 150  | 181  | 122  | 186   | 174  | 149  | 106  | 214  | 56   | 1130  | 214   | 131   |
| 11    | 157  | 174  | 139  | 183   | 155  | 140  | 84   | 57   | 104  | 168   | 133   | 119   |
| 12    | 153  | 175  | 129  | 186   | 157  | 129  | 59   | 55   | 84   | 156   | 126   | 456   |
| 13    | 167  | 177  | 123  | 191   | 154  | 124  | 66   | 55   | 117  | 163   | 109   | 161   |
| 14    | 162  | 173  | 126  | 187   | 158  | 176  | 128  | 61   | 233  | 156   | 93    | 186   |
| 15    | 168  | 161  | 123  | 186   | 156  | 181  | 108  | 48   | 258  | 146   | 435   | 259   |
| 16    | 169  | 166  | 125  | 189   | 147  | 159  | e85  | 48   | 182  | 149   | 170   | 161   |
| 17    | 152  | 167  | 128  | 176   | 156  | 151  | e66  | 54   | 131  | 128   | 121   | 378   |
| 18    | 137  | 169  | 118  | 127   | 157  | 161  | 55   | 62   | 116  | 221   | 107   | 300   |
| 19    | 126  | 135  | 117  | 152   | 156  | 147  | 43   | 51   | 117  | 333   | 209   | 161   |
| 20    | 115  | 173  | 159  | 178   | 156  | 151  | 49   | 63   | 98   | 236   | 251   | 119   |
| 21    | 127  | 149  | 163  | 175   | 149  | 156  | 44   | 55   | 104  | 545   | 126   | 113   |
| 22    | 137  | 115  | 167  | 180   | 151  | 152  | 47   | 65   | 148  | 266   | 150   | 112   |
| 23    | 148  | 121  | e160 | 164   | 151  | 148  | 44   | 73   | 119  | 218   | 424   | 191   |
| 24    | 144  | 119  | e145 | 158   | 143  | 146  | e45  | 78   | 110  | 160   | 601   | 243   |
| 25    | 129  | 125  | e147 | 173   | 138  | 132  | e46  | 799  | 95   | 389   | 155   | 175   |
| 26    | 124  | 141  | e148 | 143   | 134  | 142  | e43  | 716  | 93   | 378   | 167   | 210   |
| 27    | 116  | 145  | e148 | 142   | 128  | 155  | e40  | 202  | 100  | 383   | 160   | 318   |
| 28    | 115  | 132  | e141 | 166   | 132  | 149  | 32   | 145  | 94   | 162   | 250   | 230   |
| 29    | 123  | 143  | e145 | 166   | 137  | 138  | 43   | 113  | 87   | 181   | 308   | 222   |
| 30    | 124  | 139  | e140 | 150   | ---  | 133  | 45   | 109  | 85   | 204   | 484   | 218   |
| 31    | 137  | ---  | e150 | 139   | ---  | 140  | ---  | 112  | ---  | 224   | 251   | ---   |
| TOTAL | 4550 | 4750 | 4181 | 5168  | 4420 | 4554 | 2778 | 3885 | 3356 | 7185  | 7059  | 6210  |
| MEAN  | 147  | 158  | 135  | 167   | 152  | 147  | 92.6 | 125  | 112  | 232   | 228   | 207   |
| MAX   | 187  | 194  | 167  | 191   | 183  | 181  | 245  | 799  | 258  | 1130  | 716   | 456   |
| MIN   | 115  | 115  | 97   | 127   | 128  | 124  | 32   | 48   | 54   | 43    | 93    | 112   |
| AC-FT | 9020 | 9420 | 8290 | 10250 | 8770 | 9030 | 5510 | 7710 | 6660 | 14250 | 14000 | 12320 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 1996, 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 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 53.8 | 68.3 | 56.8 | 59.4 | 64.3 | 72.7 | 94.3 | 185  | 133  | 94.4 | 110  | 55.8 |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| MAX  | 201  | 158  | 155  | 167  | 152  | 199  | 590  | 899  | 818  | 432  | 476  | 207  |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| (WY) | 1995 | 1996 | 1986 | 1996 | 1996 | 1987 | 1942 | 1995 | 1995 | 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 1995 CALENDAR YEAR

FOR 1996 WATER YEAR

WATER YEARS 1939 - 1996

|                          |                 |        |       |
|--------------------------|-----------------|--------|-------|
| ANNUAL TOTAL             | 107331          | 58096  |       |
| ANNUAL MEAN              | 294             | 159    | 86.9  |
| HIGHEST ANNUAL MEAN      |                 |        | 295   |
| LOWEST ANNUAL MEAN       |                 |        | 10.3  |
| HIGHEST DAILY MEAN       | 3580            | May 17 | 1130  |
| LOWEST DAILY MEAN        | <sup>a</sup> 78 | Aug 18 | 32    |
| ANNUAL SEVEN-DAY MINIMUM | 91              | Aug 31 | 42    |
| INSTANTANEOUS PEAK FLOW  |                 |        | 4130  |
| INSTANTANEOUS PEAK STAGE |                 |        | 8.10  |
| ANNUAL RUNOFF (AC-FT)    | 212900          | 115200 | 62950 |
| 10 PERCENT EXCEEDS       | 680             | 219    | 170   |
| 50 PERCENT EXCEEDS       | 148             | 146    | 47    |
| 90 PERCENT EXCEEDS       | 113             | 65     | 6.4   |

e-Estimated.

a-Also occurred Sep 5.

b-Also occurred Sep 30, 1939.

c-From rating curve extended above 3000 ft<sup>3</sup>/s, on basis of slope-area measurement of peak flow.

d-At different datum.

f-Maximum gage height, 10.34 ft, Sep 3, 1994, present datum.



07106000 FOUNTAIN CREEK NEAR FOUNTAIN, CO--Continued

SPECIFIC CONDUCTANCE, (MICORSIEMENS/CM @ 25 DEG. C), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DAY   | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN | MAX  | MIN    | MEAN | MAX  | MIN       | MEAN |          |
|-------|------|------|------|------|------|------|------|--------|------|------|-----------|------|----------|
|       |      |      |      |      |      |      |      |        |      |      |           |      | FEBRUARY |
| 1     | 1010 | 937  | 976  | 1020 | 964  | 984  | 959  | 887    | 910  | 1100 | 1000      | 1040 |          |
| 2     | 1000 | 971  | 988  | 1000 | 936  | 966  | 943  | 874    | 913  | 1060 | 939       | 1030 |          |
| 3     | 1010 | 882  | 934  | 986  | 926  | 954  | 949  | 864    | 902  | 1040 | 935       | ---  |          |
| 4     | 991  | 914  | 956  | 969  | 926  | 942  | 929  | 853    | 897  | ---  | ---       | ---  |          |
| 5     | 1020 | 932  | 970  | 994  | 937  | 959  | 868  | 816    | 844  | ---  | ---       | ---  |          |
| 6     | 1000 | 901  | 943  | 1080 | 923  | 967  | 911  | 849    | 879  | ---  | ---       | ---  |          |
| 7     | 988  | 909  | 947  | 1140 | 902  | 1070 | 921  | 882    | 900  | 989  | 906       | 938  |          |
| 8     | 983  | 920  | 947  | 1060 | 980  | 1010 | 929  | 870    | 897  | 1070 | 926       | 988  |          |
| 9     | 980  | 930  | 949  | 1020 | 958  | 991  | 987  | 886    | 928  | 1070 | 998       | 1020 |          |
| 10    | 964  | 898  | 927  | 999  | 937  | 971  | 982  | 918    | 941  | 1010 | 946       | ---  |          |
| 11    | 980  | 914  | 938  | 999  | 943  | 967  | 1010 | 931    | 971  | 997  | 922       | ---  |          |
| 12    | 969  | 908  | 934  | 1040 | 970  | 997  | 1040 | 949    | 1000 | ---  | ---       | ---  |          |
| 13    | 979  | 913  | 943  | 1030 | 964  | 997  | 973  | 877    | 939  | 1140 | 1020      | 1080 |          |
| 14    | 977  | 907  | 941  | 997  | 908  | 968  | 915  | 805    | 885  | 1110 | 1010      | 1050 |          |
| 15    | 979  | 908  | 941  | 975  | 846  | 922  | 946  | 805    | 893  | 1140 | 986       | 1050 |          |
| 16    | 964  | 896  | 935  | 968  | 860  | 920  | 1010 | 915    | 954  | 1110 | 1000      | 1060 |          |
| 17    | 945  | 890  | 909  | 955  | 799  | 901  | 1030 | 936    | 981  | 1120 | 1000      | 1060 |          |
| 18    | 1010 | 912  | 967  | 924  | 793  | 873  | 1060 | 982    | 1020 | 1110 | 1000      | 1050 |          |
| 19    | 1010 | 855  | 949  | 981  | 831  | 911  | 1080 | 1010   | 1040 | 1090 | 1000      | 1040 |          |
| 20    | 953  | 858  | 914  | 882  | 763  | 825  | 1040 | 967    | 1010 | 1070 | 924       | 994  |          |
| 21    | 1000 | 869  | 953  | 885  | 825  | 855  | ---  | ---    | ---  | ---  | ---       | ---  |          |
| 22    | 1000 | 932  | 962  | 888  | 827  | 853  | 1010 | 932    | 976  | 1060 | 920       | 989  |          |
| 23    | 969  | 921  | 939  | 901  | 836  | 866  | 953  | 921    | 935  | 1090 | 997       | 1030 |          |
| 24    | 988  | 919  | 952  | 913  | 863  | 884  | 1140 | 1020   | 1070 | 1060 | 855       | 990  |          |
| 25    | 1010 | 927  | 969  | 939  | 869  | 901  | 1090 | 1010   | 1050 | 872  | 389       | 651  |          |
| 26    | 1020 | 954  | 982  | 946  | 834  | 892  | 1110 | 884    | 964  | 498  | 384       | 444  |          |
| 27    | 1060 | 974  | 1010 | 931  | 840  | 883  | 1170 | 878    | 1060 | 634  | 484       | 561  |          |
| 28    | 1040 | 959  | 994  | 951  | 887  | 910  | 1180 | 1060   | 1110 | 872  | 631       | 756  |          |
| 29    | 1100 | 976  | 1040 | 957  | 899  | 923  | 1120 | 1010   | 1070 | 857  | 813       | 830  |          |
| 30    | ---  | ---  | ---  | 970  | 899  | 929  | 1110 | 992    | 1050 | 852  | 798       | 828  |          |
| 31    | ---  | ---  | ---  | 951  | 884  | 921  | ---  | ---    | ---  | 911  | 805       | 841  |          |
| MONTH | 1100 | 855  | 955  | 1140 | 763  | 933  | ---  | ---    | ---  | ---  | ---       | ---  |          |
|       |      | JUNE |      |      | JULY |      |      | AUGUST |      |      | SEPTEMBER |      |          |
| 1     | 909  | 850  | 874  | 971  | 786  | 895  | 936  | 675    | 859  | 861  | 808       | 839  |          |
| 2     | 869  | 819  | 839  | 838  | 777  | 802  | 742  | 406    | 560  | 872  | 827       | 845  |          |
| 3     | 888  | 830  | 859  | 1070 | 833  | 932  | 849  | 742    | 807  | 928  | 863       | 891  |          |
| 4     | 960  | 877  | 916  | 1010 | 956  | 979  | 932  | 846    | 882  | 912  | 860       | 899  |          |
| 5     | 1000 | 935  | 964  | 1020 | 911  | 984  | 971  | 879    | 914  | 926  | 883       | 904  |          |
| 6     | 1020 | 954  | 978  | 958  | 839  | 901  | 996  | 922    | 948  | ---  | ---       | ---  |          |
| 7     | 970  | 894  | 931  | 839  | 741  | 808  | 1010 | 935    | 959  | ---  | ---       | ---  |          |
| 8     | 997  | 910  | 949  | 857  | 775  | 830  | 996  | 865    | 940  | ---  | ---       | ---  |          |
| 9     | 1000 | 933  | 961  | 977  | 419  | 789  | 865  | 553    | 714  | ---  | ---       | ---  |          |
| 10    | 1000 | 856  | 965  | 824  | 344  | 628  | 827  | 618    | 755  | 960  | 889       | 920  |          |
| 11    | 986  | 803  | 923  | 909  | 743  | 840  | 902  | 785    | 847  | 972  | 916       | 949  |          |
| 12    | 1020 | 960  | 980  | 965  | 813  | 913  | 1040 | 851    | 922  | 935  | ---       | ---  |          |
| 13    | 1060 | 823  | 994  | 930  | 831  | 871  | 1020 | 965    | 992  | 891  | 798       | 860  |          |
| 14    | 950  | 608  | 753  | 953  | 890  | 917  | 1050 | 964    | 1030 | 925  | 877       | 902  |          |
| 15    | 946  | 773  | 830  | 961  | 891  | 921  | 975  | 443    | 657  | 927  | 787       | 860  |          |
| 16    | 864  | 752  | 810  | 966  | 907  | 934  | 909  | 797    | 849  | 986  | 885       | 944  |          |
| 17    | 879  | 827  | 846  | 988  | 916  | 948  | 997  | 909    | 961  | 1020 | 953       | 979  |          |
| 18    | 962  | 842  | 893  | 955  | 594  | 836  | 1050 | 959    | 1000 | ---  | ---       | ---  |          |
| 19    | 923  | 868  | 892  | 747  | 542  | 652  | 1050 | 506    | 941  | 948  | 819       | 875  |          |
| 20    | 1010 | 891  | 937  | 879  | 647  | 800  | 924  | 477    | 731  | 1030 | 947       | 994  |          |
| 21    | 948  | 899  | 927  | 879  | 494  | 656  | 994  | 924    | 957  | 1030 | ---       | ---  |          |
| 22    | 905  | 815  | 864  | 888  | 728  | 849  | 1010 | 767    | 928  | ---  | ---       | ---  |          |
| 23    | 947  | 844  | 899  | 873  | 615  | 800  | 973  | 388    | 824  | ---  | ---       | ---  |          |
| 24    | 1170 | 880  | 950  | 915  | 842  | 878  | 878  | 477    | 667  | ---  | ---       | ---  |          |
| 25    | 1040 | 873  | 931  | 874  | 488  | 667  | 979  | 876    | 938  | 830  | ---       | ---  |          |
| 26    | 1020 | 909  | 969  | 843  | 490  | 783  | 962  | 919    | 944  | ---  | ---       | ---  |          |
| 27    | 989  | 929  | 953  | ---  | ---  | ---  | 1660 | 956    | 1040 | 832  | 778       | 806  |          |
| 28    | 1030 | 935  | 969  | ---  | ---  | ---  | 1660 | 893    | 995  | 849  | 801       | 827  |          |
| 29    | 989  | 850  | 932  | 881  | 848  | 863  | 941  | 572    | 873  | 856  | 833       | 847  |          |
| 30    | 850  | 792  | 818  | 881  | 802  | 838  | 808  | 572    | 690  | 859  | 823       | 849  |          |
| 31    | ---  | ---  | ---  | 936  | 625  | 846  | 841  | 797    | 815  | ---  | ---       | ---  |          |
| MONTH | 1170 | 608  | 910  | ---  | ---  | ---  | 1660 | 388    | 869  | ---  | ---       | ---  |          |

## ARKANSAS RIVER BASIN

## 07106000 FOUNTAIN CREEK NEAR FOUNTAIN, CO--Continued

pH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DAY   | MAX | MIN | MEAN |
|-------|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|------|
|       |     |     |      |     |     |      |     |     |      |     |     |      |
| 1     | 7.6 | 7.1 | 7.3  | 7.7 | 6.6 | 7.1  | 7.8 | 7.5 | 7.7  | 7.7 | 7.5 | 7.7  |
| 2     | 7.7 | 7.1 | 7.4  | --- | --- | ---  | 7.8 | 7.6 | 7.7  | 7.8 | 7.5 | 7.7  |
| 3     | 7.6 | 7.1 | 7.3  | --- | --- | ---  | 7.8 | 7.6 | 7.7  | 7.7 | 7.5 | 7.6  |
| 4     | 7.3 | 6.9 | 7.1  | --- | --- | ---  | 7.7 | 7.5 | 7.6  | 7.6 | 7.4 | 7.5  |
| 5     | 7.3 | 6.9 | 7.1  | --- | --- | ---  | 7.7 | 7.5 | 7.6  | 7.5 | 7.3 | 7.4  |
| 6     | 7.5 | 6.9 | 7.1  | --- | --- | ---  | 7.7 | 7.5 | 7.6  | 7.4 | 7.2 | 7.3  |
| 7     | 7.6 | 6.9 | 7.2  | --- | --- | ---  | 7.7 | 7.4 | 7.5  | 7.5 | 7.2 | 7.4  |
| 8     | 7.7 | 7.0 | 7.3  | --- | --- | ---  | 7.6 | 7.5 | 7.5  | 7.4 | 7.2 | 7.3  |
| 9     | 7.6 | 7.0 | 7.2  | --- | --- | ---  | 7.6 | 7.5 | 7.5  | 7.4 | 7.3 | 7.4  |
| 10    | 7.6 | 7.1 | 7.3  | --- | --- | ---  | 7.6 | 7.4 | 7.5  | 7.4 | 7.2 | 7.3  |
| 11    | 7.6 | 7.1 | 7.3  | --- | --- | ---  | 7.6 | 7.4 | 7.5  | 7.4 | 7.1 | 7.3  |
| 12    | 7.9 | 7.2 | 7.5  | --- | --- | ---  | 7.5 | 7.3 | 7.4  | 7.4 | 7.2 | 7.3  |
| 13    | 7.8 | 7.1 | 7.3  | --- | --- | ---  | 7.5 | 7.0 | 7.4  | 7.4 | 7.3 | 7.3  |
| 14    | 7.8 | 7.1 | 7.4  | 7.6 | 7.5 | 7.5  | 7.5 | 7.0 | 7.4  | 7.4 | 7.2 | 7.3  |
| 15    | 8.0 | 7.2 | 7.5  | 7.7 | 7.5 | 7.6  | 7.4 | 7.1 | 7.4  | 7.4 | 7.3 | 7.3  |
| 16    | 8.1 | 7.3 | 7.6  | 7.7 | 7.5 | 7.6  | 7.5 | 7.2 | 7.5  | 7.5 | 7.3 | 7.4  |
| 17    | 8.2 | 7.5 | 7.8  | 7.7 | 7.6 | 7.6  | 7.5 | 7.1 | 7.5  | 7.4 | 7.3 | 7.3  |
| 18    | 8.3 | 7.5 | 7.8  | 7.6 | 7.4 | 7.5  | 7.5 | 7.1 | 7.5  | 7.4 | 7.1 | 7.3  |
| 19    | 8.0 | 6.9 | 7.5  | 7.6 | 7.1 | 7.5  | 7.5 | 7.4 | 7.5  | 7.4 | 7.2 | 7.3  |
| 20    | 7.1 | 6.8 | 6.9  | 7.5 | 7.0 | 7.4  | 7.5 | 7.4 | 7.5  | 7.4 | 7.3 | 7.3  |
| 21    | 7.1 | 6.6 | 6.8  | 7.6 | 7.4 | 7.5  | 7.6 | 7.4 | 7.6  | 7.4 | 7.2 | 7.3  |
| 22    | 6.9 | 6.6 | 6.8  | 7.7 | 7.4 | 7.6  | 7.6 | 7.6 | 7.6  | 7.5 | 7.3 | 7.4  |
| 23    | 7.0 | 6.7 | 6.8  | 7.7 | 7.6 | 7.7  | 7.6 | 7.4 | 7.6  | 7.4 | 7.2 | 7.4  |
| 24    | 6.9 | 6.6 | 6.7  | 7.7 | 7.6 | 7.7  | 7.6 | 7.5 | 7.6  | 7.4 | 7.1 | 7.3  |
| 25    | 7.0 | 6.6 | 6.7  | 7.8 | 7.6 | 7.6  | 7.7 | 7.4 | 7.6  | 7.4 | 7.4 | 7.4  |
| 26    | 7.1 | 6.5 | 6.8  | 7.8 | 7.6 | 7.7  | 7.7 | 7.3 | 7.6  | 7.4 | 7.3 | 7.3  |
| 27    | 7.7 | 6.7 | 7.0  | 7.8 | 7.6 | 7.7  | 7.7 | 7.3 | 7.6  | 7.4 | 7.2 | 7.3  |
| 28    | 7.3 | 6.5 | 6.8  | 7.7 | 7.7 | 7.7  | 7.6 | 7.5 | 7.6  | 7.4 | 7.4 | 7.4  |
| 29    | 7.4 | 6.5 | 6.9  | 7.7 | 7.7 | 7.7  | 7.7 | 7.3 | 7.5  | 7.4 | 7.1 | 7.3  |
| 30    | 7.5 | 6.6 | 6.9  | 7.8 | 7.6 | 7.7  | 7.6 | 7.3 | 7.6  | 7.6 | 7.1 | 7.4  |
| 31    | 7.5 | 6.5 | 6.8  | --- | --- | ---  | 7.7 | 7.4 | 7.6  | 7.6 | 7.5 | 7.6  |
| MONTH | 8.3 | 6.5 | 7.2  | --- | --- | ---  | 7.8 | 7.0 | 7.5  | 7.8 | 7.1 | 7.4  |
| DAY   | MAX | MIN | MEAN |
|       |     |     |      |     |     |      |     |     |      |     |     |      |
| 1     | 7.6 | 7.4 | 7.6  | 7.6 | 7.5 | 7.6  | 8.1 | 7.8 | 8.0  | 7.8 | 7.2 | 7.7  |
| 2     | 7.6 | 7.4 | 7.5  | 7.7 | 7.5 | 7.6  | 8.1 | 7.9 | 8.0  | 7.8 | 7.1 | 7.5  |
| 3     | 7.6 | 7.4 | 7.5  | 7.8 | 7.5 | 7.6  | 8.0 | 7.9 | 7.9  | 7.6 | 7.0 | 7.2  |
| 4     | 7.6 | 7.5 | 7.6  | 7.8 | 7.5 | 7.6  | 7.9 | 7.8 | 7.9  | 7.5 | 7.0 | 7.1  |
| 5     | 7.6 | 7.5 | 7.5  | 7.9 | 7.6 | 7.7  | 7.9 | 7.7 | 7.8  | 7.1 | 6.9 | 7.0  |
| 6     | 7.6 | 7.5 | 7.5  | 7.7 | 7.5 | 7.6  | 8.0 | 7.8 | 7.9  | 7.4 | 6.9 | 7.1  |
| 7     | 7.7 | 7.5 | 7.6  | 7.5 | 7.2 | 7.4  | 8.0 | 7.8 | 7.9  | 7.7 | 7.1 | 7.3  |
| 8     | 7.7 | 7.5 | 7.6  | 7.3 | 7.2 | 7.3  | 8.0 | 7.7 | 7.8  | 7.8 | 7.2 | 7.5  |
| 9     | 7.7 | 7.4 | 7.5  | 7.4 | 7.2 | 7.3  | 7.9 | 7.7 | 7.8  | 7.9 | 7.4 | 7.7  |
| 10    | 7.5 | 7.3 | 7.4  | 7.5 | 7.2 | 7.4  | 7.9 | 7.7 | 7.8  | 7.5 | 7.1 | 7.3  |
| 11    | 7.5 | 7.3 | 7.4  | 7.4 | 7.2 | 7.3  | 7.9 | 7.7 | 7.9  | 7.5 | 7.2 | 7.3  |
| 12    | 7.5 | 7.3 | 7.4  | 7.4 | 7.2 | 7.3  | 8.1 | 7.9 | 8.0  | 7.4 | 7.2 | 7.3  |
| 13    | 7.4 | 7.2 | 7.3  | 7.5 | 7.2 | 7.3  | 8.2 | 7.8 | 8.0  | 7.9 | 7.3 | 7.6  |
| 14    | 7.4 | 7.3 | 7.3  | 7.4 | 7.0 | 7.2  | 7.8 | 7.7 | 7.8  | 8.0 | 7.8 | 7.9  |
| 15    | 7.4 | 7.1 | 7.2  | 7.3 | 7.0 | 7.2  | 8.1 | 7.7 | 7.8  | 8.0 | 7.9 | 7.9  |
| 16    | 7.2 | 7.1 | 7.1  | 7.4 | 7.1 | 7.2  | 8.1 | 7.8 | 8.0  | 8.1 | 8.0 | 8.0  |
| 17    | 7.3 | 7.1 | 7.2  | 7.3 | 7.1 | 7.2  | 8.1 | 7.9 | 8.0  | 8.1 | 7.9 | 8.0  |
| 18    | 7.3 | 7.1 | 7.2  | 7.2 | 7.1 | 7.2  | 8.1 | 7.3 | 8.0  | 8.1 | 7.9 | 8.0  |
| 19    | 7.3 | 7.1 | 7.2  | 7.4 | 7.0 | 7.2  | 8.1 | 7.5 | 8.0  | 8.0 | 7.5 | 7.9  |
| 20    | 7.2 | 7.1 | 7.2  | 7.4 | 7.2 | 7.3  | 8.0 | 7.4 | 7.9  | 7.8 | 7.3 | 7.5  |
| 21    | 7.3 | 7.1 | 7.2  | 7.3 | 7.2 | 7.3  | --- | --- | ---  | 7.9 | 7.4 | 7.8  |
| 22    | 7.3 | 7.1 | 7.2  | --- | --- | ---  | 7.8 | 7.6 | 7.7  | 8.1 | 7.6 | 7.7  |
| 23    | 7.3 | 7.1 | 7.2  | --- | --- | ---  | 7.8 | 7.6 | 7.7  | 7.9 | 7.6 | 7.7  |
| 24    | 7.4 | 7.1 | 7.2  | --- | --- | ---  | 8.1 | 7.6 | 7.8  | 7.8 | 7.3 | 7.6  |
| 25    | 7.4 | 7.1 | 7.2  | --- | --- | ---  | 8.2 | 7.9 | 8.0  | 7.5 | 7.3 | 7.4  |
| 26    | 7.3 | 7.1 | 7.2  | --- | --- | ---  | 8.0 | 7.7 | 7.9  | 7.5 | 7.2 | 7.4  |
| 27    | 7.3 | 7.1 | 7.2  | 8.0 | 7.8 | 8.0  | 8.1 | 7.8 | 7.9  | 7.3 | 7.2 | 7.3  |
| 28    | 7.3 | 7.1 | 7.2  | 8.1 | 7.9 | 8.0  | 8.0 | 7.5 | 7.9  | 7.7 | 7.2 | 7.4  |
| 29    | 7.6 | 7.0 | 7.4  | 8.1 | 7.9 | 8.0  | 7.8 | 7.6 | 7.7  | 7.7 | 7.6 | 7.6  |
| 30    | --- | --- | ---  | 8.1 | 7.9 | 8.0  | 7.9 | 7.2 | 7.7  | 7.7 | 7.6 | 7.6  |
| 31    | --- | --- | ---  | 8.1 | 7.9 | 8.0  | --- | --- | ---  | 7.7 | 7.5 | 7.6  |
| MONTH | 7.7 | 7.0 | 7.3  | --- | --- | ---  | --- | --- | ---  | 8.1 | 6.9 | 7.5  |

07106000 FOUNTAIN CREEK NEAR FOUNTAIN, CO--Continued

pH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DAY   | MAX | MIN | MEAN |
|-------|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|------|
|       |     |     |      |     |     |      |     |     |      |     |     |      |
| 1     | 7.6 | 7.5 | 7.5  | 7.3 | 6.9 | 7.1  | 7.7 | 7.4 | 7.6  | 7.7 | 7.6 | 7.6  |
| 2     | 7.6 | 7.5 | 7.5  | 7.3 | 7.0 | 7.1  | 7.7 | 7.3 | 7.5  | 7.6 | 7.5 | 7.5  |
| 3     | 7.5 | 7.4 | 7.5  | 7.4 | 7.0 | 7.2  | 7.6 | 7.5 | 7.6  | 7.6 | 7.5 | 7.5  |
| 4     | 7.5 | 7.4 | 7.5  | 7.4 | 6.9 | 7.1  | 7.7 | 7.5 | 7.6  | 7.6 | 7.5 | 7.6  |
| 5     | 7.5 | 7.3 | 7.4  | 7.6 | 6.9 | 7.2  | 7.9 | 7.4 | 7.6  | 7.6 | 7.6 | 7.6  |
| 6     | 7.5 | 7.3 | 7.4  | 7.5 | 7.1 | 7.3  | 7.8 | 7.6 | 7.7  | 7.6 | 7.5 | 7.6  |
| 7     | 7.5 | 7.3 | 7.4  | 7.5 | 7.1 | 7.3  | 7.8 | 7.6 | 7.7  | 7.6 | 7.4 | 7.5  |
| 8     | 7.4 | 7.2 | 7.3  | 7.4 | 7.2 | 7.3  | 7.7 | 7.6 | 7.6  | 7.7 | 7.6 | 7.6  |
| 9     | 7.4 | 7.2 | 7.3  | 7.5 | 6.7 | 7.2  | 7.6 | 7.3 | 7.4  | 7.7 | 7.6 | 7.7  |
| 10    | 7.5 | 7.2 | 7.3  | 7.7 | 7.0 | 7.3  | 7.5 | 7.4 | 7.4  | 7.7 | 7.6 | 7.7  |
| 11    | 7.4 | 7.1 | 7.2  | 7.6 | 7.3 | 7.5  | 7.5 | 7.1 | 7.3  | 7.9 | 7.7 | 7.8  |
| 12    | 7.4 | 7.2 | 7.3  | 7.6 | 7.5 | 7.5  | 7.8 | 7.3 | 7.5  | 7.9 | 7.7 | 7.8  |
| 13    | 7.4 | 7.1 | 7.2  | 7.7 | 7.6 | 7.6  | 7.8 | 7.7 | 7.7  | 7.9 | 7.8 | 7.9  |
| 14    | 7.2 | 7.0 | 7.1  | 7.8 | 7.6 | 7.7  | 7.8 | 7.7 | 7.7  | 7.9 | 7.7 | 7.8  |
| 15    | 7.2 | 7.1 | 7.2  | 7.9 | 7.7 | 7.8  | 7.7 | 7.5 | 7.6  | 7.8 | 7.7 | 7.8  |
| 16    | 7.3 | 7.1 | 7.2  | 7.9 | 7.7 | 7.8  | 7.7 | 7.7 | 7.7  | 7.8 | 7.7 | 7.7  |
| 17    | 7.3 | 7.2 | 7.3  | 7.8 | 7.7 | 7.8  | 7.8 | 7.7 | 7.7  | 7.7 | 7.5 | 7.7  |
| 18    | 7.3 | 7.2 | 7.2  | 7.8 | 7.5 | 7.7  | 7.7 | 7.7 | 7.7  | 7.7 | 7.5 | 7.6  |
| 19    | 7.4 | 7.2 | 7.3  | 7.6 | 7.4 | 7.5  | 7.8 | 7.5 | 7.7  | 7.9 | 7.7 | 7.8  |
| 20    | 7.4 | 7.2 | 7.3  | 7.7 | 7.5 | 7.6  | 7.8 | 7.6 | 7.7  | 7.9 | 7.8 | 7.9  |
| 21    | 7.5 | 7.2 | 7.4  | 7.6 | 7.4 | 7.5  | 7.8 | 7.7 | 7.7  | 7.9 | 7.8 | 7.9  |
| 22    | 7.4 | 7.2 | 7.3  | 7.6 | 7.4 | 7.5  | 7.8 | 7.7 | 7.7  | 7.9 | 7.8 | 7.9  |
| 23    | 7.4 | 7.2 | 7.3  | 7.6 | 7.4 | 7.5  | 7.8 | 7.6 | 7.7  | 8.0 | 7.7 | 7.9  |
| 24    | 7.4 | 7.2 | 7.3  | 7.6 | 7.5 | 7.6  | 7.7 | 7.6 | 7.7  | 8.0 | 7.7 | 7.9  |
| 25    | 7.3 | 7.1 | 7.2  | 7.7 | 7.4 | 7.6  | 7.8 | 7.7 | 7.7  | 7.9 | 7.7 | 7.8  |
| 26    | 7.3 | 7.0 | 7.2  | 7.7 | 7.5 | 7.5  | 7.8 | 7.7 | 7.7  | 7.8 | 7.4 | 7.7  |
| 27    | 7.4 | 6.9 | 7.1  | 7.7 | 7.4 | 7.5  | 7.8 | 7.6 | 7.7  | 8.0 | 7.5 | 7.7  |
| 28    | 7.2 | 6.9 | 7.0  | 7.5 | 7.4 | 7.5  | 7.7 | 7.5 | 7.7  | 8.0 | 7.9 | 7.9  |
| 29    | 7.3 | 6.9 | 7.0  | 7.5 | 7.3 | 7.4  | 7.7 | 7.4 | 7.6  | 8.0 | 7.8 | 7.9  |
| 30    | 7.2 | 6.9 | 7.0  | 7.6 | 7.4 | 7.5  | 7.7 | 7.4 | 7.5  | 7.9 | 7.7 | 7.8  |
| 31    | --- | --- | ---  | 7.6 | 7.4 | 7.5  | 7.7 | 7.6 | 7.7  | --- | --- | ---  |
| MONTH | 7.6 | 6.9 | 7.3  | 7.9 | 6.7 | 7.5  | 7.9 | 7.1 | 7.6  | 8.0 | 7.4 | 7.7  |

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DAY   | MAX  | MIN  | MEAN | MAX  | MIN | MEAN | MAX  | MIN | MEAN | MAX | MIN | MEAN |
|-------|------|------|------|------|-----|------|------|-----|------|-----|-----|------|
|       |      |      |      |      |     |      |      |     |      |     |     |      |
| 1     | 17.8 | 10.8 | 13.7 | 9.4  | 7.9 | 8.4  | 11.1 | 4.6 | 7.3  | 4.3 | 1.4 | 2.6  |
| 2     | 17.1 | 9.4  | 12.8 | ---  | --- | ---  | 10.4 | 4.0 | 6.9  | 4.1 | .4  | 1.7  |
| 3     | 17.7 | 9.1  | 12.9 | ---  | --- | ---  | 9.6  | 4.4 | 6.6  | 7.4 | .6  | 3.6  |
| 4     | 12.7 | 9.0  | 10.8 | ---  | --- | ---  | 9.4  | 3.8 | 6.2  | 6.1 | 1.9 | 3.6  |
| 5     | 14.1 | 6.9  | 9.8  | ---  | --- | ---  | 6.5  | 3.1 | 5.2  | 3.5 | .7  | 1.8  |
| 6     | 14.9 | 6.1  | 9.9  | ---  | --- | ---  | 9.7  | 2.7 | 5.5  | 4.2 | .5  | 1.5  |
| 7     | 16.1 | 6.8  | 11.0 | ---  | --- | ---  | 6.2  | 2.1 | 4.0  | 6.4 | .6  | 2.9  |
| 8     | 16.6 | 8.2  | 11.8 | ---  | --- | ---  | 5.7  | .6  | 3.1  | 8.3 | 2.2 | 4.6  |
| 9     | 14.2 | 7.7  | 10.8 | ---  | --- | ---  | 4.2  | .6  | 1.5  | 8.3 | 2.7 | 5.0  |
| 10    | 17.2 | 8.1  | 12.1 | ---  | --- | ---  | 7.7  | .5  | 3.6  | 8.9 | 2.7 | 4.9  |
| 11    | 17.5 | 8.7  | 12.6 | ---  | --- | ---  | 8.4  | 3.2 | 5.3  | 7.8 | 1.5 | 4.3  |
| 12    | 16.2 | 10.2 | 12.9 | ---  | --- | ---  | 8.2  | 4.0 | 5.9  | 8.9 | 1.9 | 5.0  |
| 13    | 15.7 | 9.0  | 11.9 | 9.0  | 7.5 | 8.4  | 10.4 | 5.3 | 7.2  | 9.3 | 2.5 | 5.5  |
| 14    | 16.0 | 7.0  | 11.0 | 12.8 | 5.7 | 8.8  | 8.9  | 3.8 | 5.6  | 9.0 | 2.7 | 5.4  |
| 15    | 16.8 | 8.0  | 11.9 | 12.3 | 6.2 | 8.8  | 7.7  | 1.5 | 4.2  | 8.6 | 2.1 | 5.0  |
| 16    | 16.3 | 8.9  | 12.1 | 12.7 | 5.7 | 8.8  | 6.3  | 2.1 | 4.1  | 9.8 | 2.9 | 5.7  |
| 17    | 16.4 | 9.1  | 12.2 | 12.1 | 6.6 | 8.9  | 4.6  | 1.0 | 2.6  | 5.8 | .3  | 3.1  |
| 18    | 17.3 | 8.2  | 12.2 | 12.0 | 5.5 | 8.3  | 6.2  | 1.4 | 3.0  | 2.8 | .3  | .8   |
| 19    | 14.9 | 8.3  | 11.2 | 12.0 | 5.5 | ---  | 4.3  | .6  | 1.9  | 5.4 | .3  | 2.1  |
| 20    | 14.3 | 6.1  | 9.8  | 10.9 | 5.4 | 7.7  | 6.3  | .5  | 2.7  | 6.0 | .3  | 2.4  |
| 21    | 14.7 | 6.8  | 10.3 | 11.4 | 4.3 | 7.6  | 5.4  | 1.2 | 3.0  | 6.4 | .3  | 2.7  |
| 22    | 11.8 | 5.9  | 8.9  | 10.3 | 5.8 | 8.3  | 3.9  | 1.3 | 2.5  | 6.4 | .9  | 2.9  |
| 23    | 11.9 | 4.0  | 7.2  | 11.1 | 5.0 | 7.2  | 5.1  | .6  | 2.0  | 5.1 | .3  | 1.8  |
| 24    | 11.2 | 4.3  | 7.5  | 9.0  | 4.2 | 6.3  | 6.0  | .5  | 2.6  | 4.8 | .3  | 1.7  |
| 25    | 13.0 | 5.7  | 8.7  | 10.9 | 5.4 | 7.2  | 6.6  | .7  | 3.1  | 6.3 | .0  | 1.8  |
| 26    | 12.8 | 6.4  | 9.0  | 11.1 | 5.5 | 7.6  | 6.8  | 1.2 | 3.4  | 3.2 | .0  | .7   |
| 27    | 13.4 | 6.4  | 9.4  | 7.0  | 3.8 | 5.3  | 5.9  | .6  | 2.7  | 3.8 | .0  | 1.1  |
| 28    | 12.5 | 5.2  | 8.5  | 7.3  | 2.3 | 4.3  | 5.2  | .5  | 2.6  | 6.3 | .1  | 2.7  |
| 29    | 12.8 | 6.0  | 9.4  | 9.4  | 2.4 | 5.4  | 6.5  | 1.6 | 3.4  | 5.3 | .0  | 2.1  |
| 30    | 12.9 | 6.4  | 9.2  | 8.9  | 4.3 | 6.3  | 6.2  | .3  | 2.9  | 3.4 | .0  | .9   |
| 31    | 12.9 | 5.5  | 8.9  | ---  | --- | ---  | 6.6  | 2.2 | 4.1  | 3.1 | .0  | .8   |
| MONTH | 17.8 | 4.0  | 10.7 | ---  | --- | ---  | 11.1 | .3  | 4.0  | 9.8 | .0  | 2.9  |

## 07106000 FOUNTAIN CREEK NEAR FOUNTAIN, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DAY   | FEBRUARY |      |      | MARCH |      |      | APRIL  |      |      | MAY       |      |      |
|-------|----------|------|------|-------|------|------|--------|------|------|-----------|------|------|
|       | MAX      | MIN  | MEAN | MAX   | MIN  | MEAN | MAX    | MIN  | MEAN | MAX       | MIN  | MEAN |
| 1     | 2.5      | .0   | .5   | 12.2  | 2.4  | 6.3  | 17.0   | 5.7  | 10.9 | ---       | 9.0  | 13.7 |
| 2     | .7       | .0   | .1   | 12.2  | 2.7  | 6.8  | 17.0   | 6.8  | 11.5 | ---       | 9.6  | ---  |
| 3     | 1.9      | .0   | .3   | 12.0  | 2.8  | 7.0  | 10.7   | 8.0  | 9.2  | ---       | 9.4  | ---  |
| 4     | 4.8      | .0   | 1.8  | 12.6  | 4.7  | 8.1  | 10.7   | 5.2  | 7.9  | ---       | 9.5  | ---  |
| 5     | 8.2      | 1.4  | 4.2  | 12.5  | 4.5  | 7.9  | 13.6   | 5.0  | 8.4  | ---       | ---  | ---  |
| 6     | 7.6      | 2.1  | 4.5  | 7.0   | 1.2  | 4.0  | 16.9   | 5.2  | 10.7 | 23.1      | ---  | ---  |
| 7     | 9.5      | 2.7  | 5.5  | 9.6   | .2   | 4.1  | 15.2   | 7.6  | 11.0 | 21.0      | 13.7 | 15.9 |
| 8     | 8.1      | 3.0  | 5.1  | 9.6   | 1.0  | 4.8  | 18.1   | 8.9  | 13.1 | 21.6      | 11.7 | 15.9 |
| 9     | 11.5     | 2.2  | 6.4  | 12.0  | 2.1  | 6.6  | 19.1   | 9.0  | 13.8 | 24.5      | 12.7 | 17.1 |
| 10    | 9.3      | 3.8  | 6.1  | 13.1  | 4.2  | 8.4  | 17.5   | 8.7  | 12.5 | 19.3      | 11.8 | 14.6 |
| 11    | 9.0      | 1.4  | 4.8  | 14.2  | 6.3  | 9.8  | 16.3   | 8.0  | 11.3 | 19.8      | 11.8 | 15.1 |
| 12    | 10.0     | 1.1  | 4.9  | 14.4  | 6.3  | 9.6  | 19.0   | 7.7  | 12.2 | ---       | ---  | ---  |
| 13    | 10.0     | 1.4  | 5.2  | 13.1  | 5.1  | 8.5  | 14.7   | 5.5  | 9.7  | 24.5      | 15.2 | 18.8 |
| 14    | 10.1     | 2.9  | 6.1  | 6.4   | 3.4  | 4.6  | 13.8   | 4.1  | 7.8  | 23.4      | 14.0 | 17.9 |
| 15    | 10.4     | 3.0  | 6.1  | 12.6  | 3.8  | 7.7  | 17.6   | 4.9  | 10.4 | 25.0      | 12.2 | 18.3 |
| 16    | 11.1     | 1.5  | 5.9  | 12.5  | 4.1  | 7.8  | 18.6   | 6.8  | 11.9 | 24.9      | 13.2 | 18.7 |
| 17    | 11.6     | 3.1  | 6.9  | 9.5   | 4.6  | 6.2  | 18.2   | 7.5  | 11.8 | 25.2      | 14.2 | 19.2 |
| 18    | 9.6      | 4.7  | 6.7  | 7.9   | 3.0  | 4.8  | 17.4   | 6.7  | 11.2 | 25.0      | 14.0 | 18.8 |
| 19    | 9.8      | 3.5  | 6.4  | 12.3  | 1.1  | 5.8  | 16.5   | 5.4  | 10.2 | 24.2      | 13.7 | 18.5 |
| 20    | 12.8     | 4.7  | 8.2  | 12.7  | 2.0  | 6.9  | ---    | 5.0  | ---  | 23.1      | 15.6 | 19.1 |
| 21    | 14.1     | 5.9  | 9.5  | 15.0  | 3.9  | 8.9  | ---    | ---  | ---  | 23.7      | 13.8 | 18.1 |
| 22    | 12.3     | 6.0  | 8.6  | 14.5  | 4.8  | 9.2  | ---    | ---  | ---  | 22.7      | 12.9 | 17.7 |
| 23    | 11.2     | 3.6  | 6.9  | 13.9  | 5.3  | 8.9  | ---    | 5.2  | 9.4  | 24.9      | 14.9 | 18.7 |
| 24    | 11.4     | 3.5  | 6.9  | 6.8   | 1.6  | 3.9  | 20.8   | 9.2  | 13.2 | 17.8      | 12.3 | 15.0 |
| 25    | 12.2     | 4.4  | 7.6  | 8.0   | .6   | 3.4  | 21.8   | 10.5 | 14.7 | 15.0      | 11.7 | 13.7 |
| 26    | 6.2      | 2.3  | 4.0  | 12.6  | .6   | 6.1  | 22.2   | 8.4  | 14.6 | 13.3      | 10.6 | 12.0 |
| 27    | 8.5      | .6   | 3.8  | 14.8  | 2.7  | 8.3  | 21.5   | 9.0  | 14.0 | ---       | ---  | ---  |
| 28    | 6.6      | 1.4  | 3.2  | 15.0  | 4.6  | 9.2  | 13.0   | 6.6  | 8.9  | ---       | ---  | ---  |
| 29    | 10.5     | .6   | 4.8  | 15.1  | 5.5  | 9.5  | 19.3   | 5.4  | 11.2 | 22.3      | 11.3 | 16.0 |
| 30    | ---      | ---  | ---  | 15.8  | 6.5  | 10.1 | ---    | ---  | ---  | 24.0      | 13.6 | 17.7 |
| 31    | ---      | ---  | ---  | 16.1  | 5.0  | 10.0 | ---    | ---  | ---  | 23.5      | 13.2 | 17.5 |
| MONTH | 14.1     | .0   | 5.2  | 16.1  | .2   | 7.2  | ---    | ---  | ---  | ---       | ---  | ---  |
| DAY   | JUNE     |      |      | JULY  |      |      | AUGUST |      |      | SEPTEMBER |      |      |
|       | MAX      | MIN  | MEAN | MAX   | MIN  | MEAN | MAX    | MIN  | MEAN | MAX       | MIN  | MEAN |
| 1     | 20.7     | 13.5 | 17.2 | 27.7  | 16.6 | 21.2 | 27.9   | 16.7 | 22.2 | 24.9      | 15.0 | 19.4 |
| 2     | 23.7     | 12.7 | 17.8 | 28.1  | 16.0 | 21.7 | 25.3   | 14.3 | 20.1 | 20.9      | 15.1 | 17.7 |
| 3     | 24.2     | 13.0 | 18.3 | 27.8  | 16.4 | 21.7 | 25.1   | 18.3 | 21.4 | 25.9      | 14.0 | 19.3 |
| 4     | 22.5     | 13.9 | 18.2 | 28.6  | 16.8 | 21.5 | 26.5   | 17.3 | 21.4 | 25.3      | 15.0 | 19.6 |
| 5     | 21.9     | 13.9 | 17.9 | 26.6  | 17.8 | 21.3 | 26.1   | 16.1 | 20.8 | 25.5      | 14.9 | 19.6 |
| 6     | 25.4     | 12.9 | 18.3 | 29.1  | 17.4 | 22.1 | 26.9   | 16.4 | 21.2 | 22.0      | 15.4 | 17.5 |
| 7     | 25.4     | 13.6 | 19.5 | 28.1  | 17.3 | 21.6 | 26.3   | 16.5 | 20.7 | 23.5      | 13.4 | 17.8 |
| 8     | 25.7     | 13.4 | 19.3 | 22.4  | 17.2 | 19.4 | 26.3   | 18.1 | 21.3 | 24.8      | 13.6 | 18.7 |
| 9     | 25.1     | 15.1 | 18.8 | 26.7  | 17.7 | 20.0 | 26.1   | 17.4 | 21.0 | 25.3      | 14.0 | 19.0 |
| 10    | 23.8     | 14.5 | 18.1 | 21.8  | 16.8 | 18.9 | 27.6   | 17.9 | 22.1 | 24.0      | 14.4 | 18.9 |
| 11    | 24.5     | 14.4 | 18.4 | 27.1  | 17.7 | 21.7 | 27.5   | 16.9 | 21.0 | 23.2      | 14.4 | 18.4 |
| 12    | 25.7     | 14.4 | 19.0 | 26.5  | 18.6 | 21.4 | 28.3   | 16.8 | 21.9 | 17.2      | 14.9 | 15.7 |
| 13    | 25.2     | 14.6 | 18.6 | 24.9  | 18.2 | 21.1 | 27.4   | 16.2 | 21.2 | 19.8      | 14.4 | 16.3 |
| 14    | 22.0     | 13.7 | 17.0 | 26.7  | 17.1 | 21.3 | 26.7   | 17.1 | 21.0 | 19.0      | 14.4 | 16.3 |
| 15    | 20.4     | 15.4 | 17.1 | 25.0  | 17.5 | 21.0 | 22.9   | 14.6 | 18.5 | 21.2      | 14.2 | 17.0 |
| 16    | 25.9     | 14.3 | 18.8 | 28.2  | 18.5 | 22.8 | 26.4   | 16.0 | 20.3 | 21.1      | 15.0 | 17.2 |
| 17    | 26.3     | 14.3 | 19.7 | 29.5  | 18.6 | 23.4 | 26.9   | 15.7 | 20.8 | 21.8      | 14.1 | 17.6 |
| 18    | 27.7     | 15.2 | 20.9 | 27.9  | 20.7 | 23.5 | 26.7   | 16.7 | 21.1 | 18.5      | 11.7 | 14.0 |
| 19    | 27.8     | 14.9 | 21.0 | 29.0  | 19.6 | 23.2 | 26.4   | 16.7 | 20.1 | 18.4      | 9.5  | 13.7 |
| 20    | 28.0     | 16.7 | 21.8 | 30.4  | 19.9 | 24.5 | 26.3   | 14.5 | 19.7 | 19.2      | 10.9 | 14.6 |
| 21    | 24.4     | 17.2 | 19.9 | 29.1  | 16.0 | 23.6 | 27.2   | 16.7 | 20.7 | 20.7      | 10.1 | 14.9 |
| 22    | 21.6     | 16.4 | 18.6 | 28.1  | 20.6 | 23.8 | 22.0   | 17.2 | 18.7 | 21.2      | 11.4 | 15.7 |
| 23    | 25.5     | 14.2 | 19.4 | 27.4  | 17.5 | 21.7 | 26.0   | 17.0 | 19.8 | 20.8      | ---  | ---  |
| 24    | 27.5     | 17.4 | 21.3 | 25.6  | 16.7 | 20.9 | 24.2   | 16.7 | 19.8 | ---       | 12.5 | ---  |
| 25    | 25.7     | 15.9 | 20.5 | 20.3  | 13.9 | 17.7 | 25.5   | 16.4 | 20.6 | 19.8      | ---  | ---  |
| 26    | 27.2     | 16.0 | 21.0 | 22.5  | 15.8 | 18.6 | 27.0   | 16.6 | 20.7 | 13.4      | 9.4  | 11.0 |
| 27    | 25.5     | 17.1 | 20.3 | ---   | ---  | ---  | 25.0   | 16.4 | 19.9 | 14.8      | 7.1  | 10.7 |
| 28    | 26.4     | 16.4 | 20.7 | ---   | ---  | ---  | 22.7   | 15.3 | 18.6 | 18.1      | 8.3  | 12.6 |
| 29    | 26.9     | 16.4 | 21.0 | 21.2  | 17.2 | 19.1 | 25.0   | 15.9 | 19.5 | 19.4      | 9.9  | 14.1 |
| 30    | 23.5     | 17.6 | 19.7 | 26.2  | 17.4 | 21.2 | 22.1   | 15.4 | 18.3 | 20.5      | 10.7 | 15.1 |
| 31    | ---      | ---  | ---  | 28.0  | 19.2 | 22.3 | 24.8   | 16.0 | 19.5 | ---       | ---  | ---  |
| MONTH | 28.0     | 12.7 | 19.3 | ---   | ---  | ---  | 28.3   | 14.3 | 20.4 | ---       | ---  | ---  |

07106000 FOUNTAIN CREEK NEAR FOUNTAIN, CO--Continued

OXYGEN, DISSOLVED (MG/L), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DAY   | MAX      | MIN | MEAN | MAX      | MIN | MEAN | MAX      | MIN | MEAN | MAX     | MIN | MEAN |
|-------|----------|-----|------|----------|-----|------|----------|-----|------|---------|-----|------|
|       | OCTOBER  |     |      | NOVEMBER |     |      | DECEMBER |     |      | JANUARY |     |      |
| 1     | 7.9      | 7.3 | 7.6  | 9.0      | 7.1 | 7.9  | 9.4      | 7.9 | 8.7  | ---     | --- | ---  |
| 2     | 8.1      | 7.3 | 7.7  | ---      | --- | ---  | 9.4      | 7.6 | 8.6  | ---     | --- | ---  |
| 3     | 8.1      | 7.3 | 7.7  | ---      | --- | ---  | 9.2      | 7.6 | 8.5  | ---     | 6.7 | ---  |
| 4     | 8.1      | 7.7 | 7.9  | ---      | --- | ---  | 9.2      | 7.8 | 8.5  | 9.1     | 7.5 | 8.3  |
| 5     | 8.4      | 7.6 | 8.0  | ---      | --- | ---  | 9.3      | 7.9 | 8.7  | 10.3    | 8.8 | 9.5  |
| 6     | 8.7      | 7.5 | 8.1  | ---      | --- | ---  | 9.1      | 8.2 | 8.7  | 10.1    | 8.6 | 9.4  |
| 7     | 8.5      | 7.4 | 7.9  | ---      | --- | ---  | 9.7      | 7.7 | 9.0  | 10.2    | 7.6 | 9.1  |
| 8     | 8.3      | 7.4 | 7.8  | ---      | --- | ---  | 10.0     | 8.4 | 9.3  | 9.3     | 6.6 | 8.2  |
| 9     | 8.3      | 7.5 | 7.9  | ---      | --- | ---  | 10.4     | 8.9 | 9.7  | 9.3     | 6.9 | 8.1  |
| 10    | 8.0      | 7.2 | 7.6  | ---      | --- | ---  | 10.2     | 7.6 | 8.8  | 9.2     | 6.6 | 8.1  |
| 11    | 8.1      | 7.2 | 7.6  | ---      | --- | ---  | 9.1      | 7.9 | 8.5  | 10.1    | 6.8 | 8.5  |
| 12    | 8.0      | 7.4 | 7.7  | 8.1      | 7.1 | 7.8  | 8.8      | 7.5 | 8.3  | 9.6     | 6.4 | 7.9  |
| 13    | 8.3      | 7.7 | 7.9  | 8.1      | 6.8 | 7.5  | 8.8      | 7.5 | 8.3  | 9.0     | 6.3 | 7.6  |
| 14    | 8.8      | 7.8 | 8.3  | 7.4      | 6.6 | 7.0  | 9.6      | 7.5 | 8.9  | 8.8     | 6.8 | 7.7  |
| 15    | 8.7      | 8.0 | 8.3  | 7.3      | 6.8 | 7.1  | 10.3     | 8.4 | 9.2  | 9.3     | 6.9 | 7.9  |
| 16    | 8.7      | 8.1 | 8.4  | 7.5      | 7.0 | 7.2  | 9.6      | 8.4 | 8.8  | 8.5     | 6.9 | 7.6  |
| 17    | 8.7      | 7.9 | 8.4  | 7.6      | 7.2 | 7.4  | 9.9      | 8.6 | 9.3  | 9.4     | 7.2 | 8.1  |
| 18    | 8.8      | 7.9 | 8.3  | 7.7      | 7.1 | 7.4  | 9.7      | 8.1 | 9.1  | 10.2    | 8.9 | 9.5  |
| 19    | 8.8      | 8.0 | 8.3  | 7.7      | 7.1 | 7.4  | 10.2     | 8.3 | 9.2  | 9.7     | 7.3 | 8.4  |
| 20    | 8.9      | 7.9 | 8.4  | 7.6      | 7.0 | 7.3  | 10.1     | 7.9 | 9.1  | 10.4    | 7.6 | 8.9  |
| 21    | 8.6      | 7.2 | 7.9  | 7.8      | 7.2 | 7.5  | 9.7      | 8.5 | 9.2  | 10.2    | 7.8 | 8.8  |
| 22    | 7.5      | 6.7 | 7.1  | ---      | --- | ---  | 9.8      | 8.9 | 9.5  | 10.1    | 7.8 | 9.0  |
| 23    | 7.3      | 5.4 | 6.4  | 10.1     | 8.6 | 9.3  | 10.2     | 8.4 | 9.3  | 10.3    | 8.3 | 9.2  |
| 24    | 8.3      | 7.1 | 7.7  | 10.1     | 8.8 | 9.4  | 10.4     | 8.5 | 9.3  | 10.4    | 8.1 | 9.4  |
| 25    | 8.4      | 6.4 | 7.6  | 9.7      | 8.4 | 9.1  | 10.6     | 8.2 | 9.5  | 10.2    | 7.2 | 9.1  |
| 26    | 8.7      | 7.5 | 8.1  | 8.8      | 8.3 | 8.5  | 10.3     | 8.3 | 9.3  | 10.3    | 8.7 | 9.7  |
| 27    | 8.8      | 8.2 | 8.4  | 9.5      | 8.4 | 9.0  | 10.4     | 8.1 | 9.4  | 10.7    | 8.9 | 9.7  |
| 28    | 9.1      | 8.0 | 8.5  | 10.0     | 8.9 | 9.5  | 10.4     | --- | ---  | 10.5    | 7.8 | 9.5  |
| 29    | 8.7      | 7.6 | 8.1  | 10.0     | 8.3 | 9.2  | ---      | --- | ---  | 11.0    | 8.6 | 9.8  |
| 30    | 8.4      | 7.7 | 7.9  | 9.3      | 8.2 | 8.9  | ---      | --- | ---  | 10.9    | 8.2 | 9.3  |
| 31    | 8.5      | 7.2 | 7.8  | ---      | --- | ---  | ---      | --- | ---  | 10.9    | 9.5 | 10.1 |
| MONTH | 9.1      | 5.4 | 7.9  | ---      | --- | ---  | ---      | --- | ---  | ---     | --- | ---  |
| DAY   | MAX      | MIN | MEAN | MAX      | MIN | MEAN | MAX      | MIN | MEAN | MAX     | MIN | MEAN |
|       | FEBRUARY |     |      | MARCH    |     |      | APRIL    |     |      | MAY     |     |      |
| 1     | 10.9     | 8.1 | 9.1  | 10.3     | 7.7 | 9.2  | 8.7      | 7.1 | 7.9  | 8.6     | 7.1 | 7.9  |
| 2     | 10.5     | 7.0 | 8.7  | 10.2     | 7.9 | 9.0  | 8.6      | 6.7 | 7.8  | 8.5     | --- | ---  |
| 3     | 10.0     | 8.2 | 9.1  | 9.8      | 8.0 | 8.9  | 8.4      | 7.4 | 8.0  | 7.9     | 5.8 | 6.7  |
| 4     | 9.2      | 6.8 | 7.9  | 9.0      | 7.8 | 8.3  | 8.9      | 7.5 | 8.0  | 7.9     | 6.0 | 6.5  |
| 5     | 8.0      | 5.8 | 7.0  | 9.2      | 7.6 | 8.4  | 8.7      | 7.1 | 7.8  | 6.7     | 5.8 | 6.2  |
| 6     | 8.1      | 6.2 | 7.1  | 9.9      | 8.6 | 9.2  | 8.7      | 6.8 | 7.7  | 6.6     | 5.6 | 6.2  |
| 7     | 9.0      | 6.9 | 7.8  | 10.3     | 7.4 | 9.0  | 7.8      | 6.7 | 7.2  | ---     | --- | ---  |
| 8     | 9.5      | 8.2 | 8.8  | 10.0     | 6.3 | 8.2  | 7.1      | 5.3 | 6.5  | 6.8     | --- | ---  |
| 9     | 9.6      | 7.0 | 8.4  | 9.1      | 6.7 | 7.9  | 7.0      | 5.0 | 6.0  | 6.8     | 5.3 | 6.1  |
| 10    | 10.1     | 8.7 | 9.2  | 8.6      | 7.3 | 8.0  | 7.0      | 5.4 | 6.3  | 6.3     | 4.9 | 5.8  |
| 11    | 10.6     | 8.8 | 9.8  | 8.1      | 5.2 | 6.5  | 7.7      | 5.7 | 6.7  | ---     | --- | ---  |
| 12    | 10.9     | 8.5 | 9.8  | 7.3      | 5.0 | 6.1  | 8.4      | 6.2 | 7.4  | ---     | --- | ---  |
| 13    | 10.5     | 7.2 | 9.0  | 8.4      | 6.9 | 7.4  | 9.2      | 6.8 | 7.8  | ---     | --- | ---  |
| 14    | 9.1      | 6.6 | 7.9  | 9.3      | 7.7 | 8.5  | 9.3      | 7.1 | 8.3  | 6.6     | 5.6 | 6.0  |
| 15    | 9.2      | 7.1 | 8.1  | 8.4      | 6.8 | 7.6  | 9.2      | 6.6 | 7.9  | 6.7     | 5.7 | 6.1  |
| 16    | 10.0     | 6.7 | 8.2  | 8.6      | 7.5 | 8.1  | 9.3      | 6.8 | 8.0  | 6.6     | 5.5 | 6.1  |
| 17    | 9.3      | 7.2 | 8.1  | 8.6      | 7.0 | 8.0  | 8.8      | 6.0 | 7.8  | 6.8     | 5.8 | 6.2  |
| 18    | 8.4      | 7.5 | 7.9  | 9.5      | 7.4 | 8.4  | 9.4      | 7.0 | 8.0  | 7.1     | 6.1 | 6.5  |
| 19    | 9.3      | 7.5 | 8.2  | 9.9      | 7.4 | 8.8  | 9.8      | 7.4 | 8.5  | 7.4     | 5.6 | 6.2  |
| 20    | 8.7      | 6.6 | 7.7  | 10.0     | 7.5 | 8.8  | ---      | --- | ---  | ---     | --- | ---  |
| 21    | 8.4      | 6.7 | 7.4  | 9.5      | 7.6 | 8.6  | ---      | --- | ---  | ---     | 6.6 | ---  |
| 22    | 8.5      | 7.0 | 7.6  | 9.9      | 7.5 | 8.7  | ---      | --- | ---  | 8.1     | 5.5 | 6.0  |
| 23    | 9.7      | 8.3 | 8.9  | 9.7      | 7.6 | 8.5  | ---      | --- | ---  | 8.1     | 6.8 | 7.3  |
| 24    | 9.6      | 8.1 | 8.8  | 10.1     | 7.7 | 9.1  | ---      | 6.5 | ---  | 8.0     | 7.0 | 7.5  |
| 25    | 9.0      | 8.0 | 8.4  | 10.9     | 8.2 | 9.7  | 7.6      | 6.6 | 7.0  | 7.8     | 6.6 | 7.2  |
| 26    | 9.8      | 8.6 | 9.1  | 10.9     | 7.3 | 9.2  | 8.0      | 6.6 | 7.2  | 7.9     | 7.4 | 7.6  |
| 27    | 10.8     | 7.8 | 9.4  | 9.6      | 7.2 | 8.4  | 7.6      | 6.8 | 7.2  | ---     | --- | ---  |
| 28    | 11.4     | 9.1 | 10.1 | 9.0      | 7.3 | 8.2  | 8.7      | 7.0 | 8.2  | ---     | 7.2 | ---  |
| 29    | 11.1     | 7.8 | 9.4  | 8.6      | 7.1 | 8.0  | 9.0      | 7.0 | 8.0  | 7.8     | 6.3 | 7.0  |
| 30    | ---      | --- | ---  | 8.6      | 7.3 | 8.0  | 8.8      | 7.0 | 8.0  | 8.0     | 6.7 | 7.1  |
| 31    | ---      | --- | ---  | 8.9      | 7.3 | 8.1  | ---      | --- | ---  | 7.6     | 6.5 | 7.2  |
| MONTH | 11.4     | 5.8 | 8.5  | 10.9     | 5.0 | 8.3  | ---      | --- | ---  | ---     | --- | ---  |

## ARKANSAS RIVER BASIN

## 07106000 FOUNTAIN CREEK NEAR FOUNTAIN, CO--Continued

## OXYGEN, DISSOLVED (MG/L), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DAY   | MAX | MIN | MEAN |
|-------|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|------|
|       |     |     |      |     |     |      |     |     |      |     |     |      |
| 1     | 7.5 | 6.6 | 7.0  | 7.1 | 6.0 | 6.4  | 7.0 | 6.1 | 6.5  | 7.4 | 5.8 | 6.6  |
| 2     | 7.6 | 6.3 | 7.0  | 7.0 | 5.6 | 6.2  | 7.3 | 6.1 | 6.6  | 7.4 | 6.5 | 6.9  |
| 3     | 7.6 | 6.3 | 6.9  | 7.0 | 5.4 | 6.1  | 6.7 | 6.1 | 6.4  | 7.6 | 5.7 | 6.7  |
| 4     | 7.2 | 6.1 | 6.6  | 6.8 | 5.2 | 5.9  | 6.7 | 6.0 | 6.3  | 7.7 | 6.0 | 6.8  |
| 5     | 6.9 | 6.1 | 6.5  | 6.6 | 5.0 | 5.5  | 6.8 | 5.8 | 6.3  | 7.8 | 6.0 | 7.0  |
| 6     | 7.2 | 5.6 | 6.4  | 6.1 | 4.9 | 5.4  | 6.6 | 5.8 | 6.2  | 7.9 | 6.5 | 7.3  |
| 7     | --- | --- | ---  | 6.6 | 4.8 | 5.5  | 6.6 | 5.9 | 6.3  | 8.4 | 6.2 | 7.4  |
| 8     | 8.7 | 7.3 | 7.9  | 6.8 | 5.2 | 5.7  | 6.6 | 6.0 | 6.3  | 8.3 | 6.3 | 7.2  |
| 9     | 8.2 | 7.2 | 7.7  | 7.0 | 5.0 | 5.7  | 6.4 | 5.7 | 6.1  | 8.1 | 6.2 | 7.2  |
| 10    | 8.2 | 7.1 | 7.7  | 6.5 | 5.3 | 5.8  | 6.4 | 5.6 | 6.1  | 8.5 | 5.1 | 6.8  |
| 11    | 7.9 | 6.9 | 7.4  | 6.2 | 4.9 | 5.5  | 6.6 | 5.2 | 5.9  | 7.2 | 4.6 | 6.1  |
| 12    | 7.9 | 6.8 | 7.4  | 5.9 | 5.2 | 5.6  | 6.6 | 5.5 | 6.1  | --- | --- | ---  |
| 13    | 7.7 | 6.7 | 7.2  | 6.1 | 5.6 | 5.9  | 7.3 | 5.4 | 6.4  | 7.8 | 6.3 | 7.1  |
| 14    | 7.7 | 6.8 | 7.3  | 6.6 | 5.8 | 6.2  | 6.8 | 5.4 | 6.2  | 6.8 | 6.1 | 6.5  |
| 15    | 7.2 | 6.6 | 6.9  | 6.8 | 6.1 | 6.5  | 7.4 | 6.0 | 6.7  | 6.9 | 5.9 | 6.4  |
| 16    | 7.2 | 6.1 | 6.7  | 7.1 | 6.3 | 6.7  | 7.0 | 5.6 | 6.4  | 6.7 | 6.0 | 6.4  |
| 17    | 7.1 | 6.1 | 6.6  | 7.1 | 6.3 | 6.7  | 7.1 | 5.1 | 6.2  | 6.9 | 6.0 | 6.4  |
| 18    | 7.0 | 6.0 | 6.5  | 7.1 | 6.4 | 6.7  | 6.8 | 5.0 | 6.1  | 7.9 | 6.1 | 7.0  |
| 19    | 7.0 | 5.9 | 6.4  | 7.2 | 6.3 | 6.8  | 6.9 | 5.4 | 6.4  | 8.4 | --- | ---  |
| 20    | 6.8 | 6.0 | 6.4  | 7.2 | 6.3 | 6.8  | 7.8 | 5.5 | 6.8  | --- | --- | ---  |
| 21    | 6.8 | 6.3 | 6.6  | 8.1 | 6.4 | 7.1  | 7.1 | 5.0 | 6.3  | --- | --- | ---  |
| 22    | 6.8 | 6.4 | 6.6  | 7.2 | 5.7 | 6.4  | 7.1 | 6.2 | 6.7  | --- | --- | ---  |
| 23    | 7.0 | 6.2 | 6.6  | 6.7 | 5.7 | 6.2  | 7.4 | 5.6 | 6.7  | --- | --- | ---  |
| 24    | 6.9 | 6.1 | 6.5  | 6.5 | 5.8 | 6.1  | 7.7 | 6.1 | 7.0  | 7.9 | --- | ---  |
| 25    | 7.0 | 6.3 | 6.6  | 6.7 | 6.0 | 6.2  | 7.4 | 5.5 | 6.5  | --- | 7.0 | ---  |
| 26    | 7.1 | 6.3 | 6.6  | 6.2 | 4.8 | 5.6  | 7.3 | 5.7 | 6.5  | --- | --- | ---  |
| 27    | 7.1 | 6.4 | 6.7  | 6.5 | 5.7 | 6.1  | 7.3 | 5.9 | 6.7  | --- | 7.6 | ---  |
| 28    | 7.4 | 6.3 | 6.8  | --- | --- | ---  | 7.8 | 6.1 | 7.0  | 9.3 | 6.9 | 8.1  |
| 29    | 7.4 | 6.3 | 6.8  | --- | 6.7 | ---  | 6.9 | 5.6 | 6.3  | 8.6 | 6.5 | 7.6  |
| 30    | 7.3 | 6.3 | 6.6  | 7.0 | 6.2 | 6.6  | 7.2 | 6.1 | 6.6  | 8.1 | 6.3 | 7.2  |
| 31    | --- | --- | ---  | 6.7 | 6.2 | 6.5  | 7.1 | 5.7 | 6.5  | --- | --- | ---  |
| MONTH | --- | --- | ---  | --- | --- | ---  | 7.8 | 5.0 | 6.4  | --- | --- | ---  |

**07106300 FOUNTAIN CREEK NEAR PINON, CO**

LOCATION (REVISED).--Lat 38°26'23", long 104°35'35", in NW¼SE¼ sec.31, T.18 S., R.64 W., Pueblo County, Hydrologic Unit 11020003, on right bank, 0.5 mi below Pinon Road bridge, 0.9 mi northeast of Pinon, and 2.7 mi upstream from Steele Hollow Creek.

DRAINAGE AREA.--849 mi<sup>2</sup>.

**WATER-DISCHARGE RECORDS**

PERIOD OF RECORD.--April 1973 to current year. Low-flow records may not be equivalent prior to October 1995, as a result of varying underflow (diversion system) entering between the sites.

REVISED RECORDS.--WDR CO-80-1: Drainage area.

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 4,990 ft above sea level, from topographic map. Apr. 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 ft<sup>3</sup>/s, which are poor. Natural flow of stream affected by storage reservoirs, power developments, transbasin and transmountain diversions for municipal use, diversions upstream from station for municipal use and for irrigation of about 10,000 acres, and return flow from irrigated areas.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

| DAY   | OCT  | NOV  | DEC  | JAN   | FEB  | MAR  | APR  | MAY  | JUN  | JUL   | AUG   | SEP   |
|-------|------|------|------|-------|------|------|------|------|------|-------|-------|-------|
| 1     | 184  | 187  | 125  | 148   | 152  | 123  | 135  | 52   | 110  | 77    | 172   | 231   |
| 2     | 184  | 197  | 116  | 146   | e160 | 123  | 135  | 51   | 118  | 56    | 683   | 199   |
| 3     | 155  | 199  | 128  | 149   | e155 | 133  | 142  | 66   | 118  | 41    | 239   | 183   |
| 4     | 150  | 201  | 132  | 165   | e170 | 136  | 162  | 71   | 94   | 43    | 184   | 168   |
| 5     | 156  | 212  | 140  | 168   | 191  | 131  | 217  | 79   | 63   | 41    | 132   | 154   |
| 6     | 126  | 235  | 139  | 162   | 172  | 137  | 200  | 81   | 55   | 45    | 115   | 145   |
| 7     | 139  | 211  | 127  | 169   | 159  | 147  | 188  | 64   | 70   | 49    | 102   | 204   |
| 8     | 150  | 190  | 144  | 189   | 173  | 160  | 170  | 52   | 63   | 64    | 99    | 165   |
| 9     | 148  | 194  | 120  | 183   | 166  | 152  | 153  | 52   | 49   | 426   | 240   | 148   |
| 10    | 139  | 188  | 123  | 178   | 174  | 149  | 119  | 129  | 54   | 1790  | 205   | 129   |
| 11    | 132  | 177  | 151  | 179   | 163  | 145  | 113  | 75   | 81   | 310   | 140   | 113   |
| 12    | 137  | 180  | 140  | 179   | 161  | 128  | 86   | 37   | 62   | 215   | 122   | 367   |
| 13    | 133  | 174  | 129  | 188   | 157  | 126  | 86   | 31   | 57   | 247   | 106   | 162   |
| 14    | 143  | 171  | 126  | 187   | 157  | 151  | 117  | 34   | 159  | 217   | 71    | 174   |
| 15    | 144  | 160  | 128  | 180   | 155  | 191  | 136  | 34   | 257  | 191   | 314   | 226   |
| 16    | 146  | 161  | 123  | 185   | 148  | 147  | 99   | 31   | 195  | 185   | 216   | 179   |
| 17    | 133  | 166  | 115  | 180   | 143  | 138  | 94   | 25   | 130  | 129   | 136   | 127   |
| 18    | 120  | 159  | 110  | 154   | 141  | 138  | 70   | 27   | 103  | 153   | 107   | 453   |
| 19    | 108  | 140  | 104  | 158   | 142  | 137  | 74   | 25   | 92   | 340   | 98    | 220   |
| 20    | 95   | 153  | 133  | 171   | 142  | 135  | 83   | 25   | 78   | 405   | 266   | 173   |
| 21    | 98   | 153  | 142  | 183   | 140  | 131  | 81   | 28   | 74   | 713   | 131   | 148   |
| 22    | 116  | 109  | 157  | 192   | 136  | 133  | 72   | 38   | 103  | 224   | 117   | 137   |
| 23    | 140  | 108  | 153  | 173   | 138  | 138  | 72   | 39   | 108  | 260   | 214   | 135   |
| 24    | 130  | 110  | 144  | 178   | 130  | 140  | 71   | 46   | 89   | 157   | 1070  | 267   |
| 25    | 137  | 111  | 142  | 183   | 125  | 138  | 56   | 389  | 80   | 326   | 243   | 180   |
| 26    | 139  | 118  | 146  | 186   | 123  | 139  | 49   | 912  | 71   | 168   | 230   | 166   |
| 27    | 135  | 130  | 149  | 163   | 117  | 143  | 45   | 284  | 69   | 655   | 197   | 244   |
| 28    | 133  | 121  | 139  | 181   | 120  | 140  | 45   | 176  | 66   | 239   | 248   | 218   |
| 29    | 138  | 120  | 145  | 188   | 123  | 129  | 51   | 147  | 63   | 179   | 217   | 195   |
| 30    | 146  | 124  | 137  | 167   | ---  | 128  | 47   | 127  | 68   | 177   | 428   | 189   |
| 31    | 143  | ---  | 140  | 168   | ---  | 126  | ---  | 126  | ---  | 186   | 261   | ---   |
| TOTAL | 4277 | 4859 | 4147 | 5380  | 4333 | 4312 | 3168 | 3353 | 2799 | 8308  | 7103  | 5799  |
| MEAN  | 138  | 162  | 134  | 174   | 149  | 139  | 106  | 108  | 93.3 | 268   | 229   | 193   |
| MAX   | 184  | 235  | 157  | 192   | 191  | 191  | 217  | 912  | 257  | 1790  | 1070  | 453   |
| MIN   | 95   | 108  | 104  | 146   | 117  | 123  | 45   | 25   | 49   | 41    | 71    | 113   |
| AC-FT | 8480 | 9640 | 8230 | 10670 | 8590 | 8550 | 6280 | 6650 | 5550 | 16480 | 14090 | 11500 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1973 - 1996, 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 |  |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|--|
| MEAN | 68.7 | 84.9 | 81.6 | 91.8 | 97.3 | 104  | 106  | 249  | 152  | 94.7 | 120  | 63.2 |      |      |      |      |      |      |      |      |      |      |      |      |  |
| MAX  | 457  | 289  | 155  | 174  | 149  | 207  | 299  | 1349 | 773  | 365  | 385  | 205  |      |      |      |      |      |      |      |      |      |      |      |      |  |
| (WY) | 1985 | 1985 | 1985 | 1996 | 1996 | 1992 | 1985 | 1980 | 1995 | 1985 | 1982 | 1982 |      |      |      |      |      |      |      |      |      |      |      |      |  |
| MIN  | .81  | 5.77 | 30.0 | 19.0 | 35.2 | 20.0 | 3.36 | .96  | 8.39 | 4.34 | 3.87 | .000 |      |      |      |      |      |      |      |      |      |      |      |      |  |
| (WY) | 1976 | 1979 | 1977 | 1979 | 1978 | 1978 | 1975 | 1975 | 1978 | 1976 | 1974 | 1975 |      |      |      |      |      |      |      |      |      |      |      |      |  |

SUMMARY STATISTICS

|                          | FOR 1995 CALENDAR YEAR | FOR 1996 WATER YEAR | FOR 1995 CALENDAR YEAR | FOR 1996 WATER YEAR | FOR 1997 WATER YEAR | FOR 1998 WATER YEAR | FOR 1999 WATER YEAR | FOR 2000 WATER YEAR |
|--------------------------|------------------------|---------------------|------------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| ANNUAL TOTAL             | 103567                 | 57838               |                        |                     |                     |                     |                     |                     |
| ANNUAL MEAN              | 284                    | 158                 |                        |                     |                     |                     |                     |                     |
| HIGHEST ANNUAL MEAN      |                        |                     |                        |                     |                     |                     |                     | 108                 |
| LOWEST ANNUAL MEAN       |                        |                     |                        |                     |                     |                     |                     | 283                 |
| HIGHEST DAILY MEAN       | 3500                   | May 17              | 1790                   | Jul 10              | 4140                | May 8               | 1980                | 29.4                |
| LOWEST DAILY MEAN        | 43                     | Sep 4               | a25                    | May 17              | b.00                | Jul 6               | 1973                |                     |
| ANNUAL SEVEN-DAY MINIMUM | 49                     | Aug 31              | c28                    | May 15              | d.00                | Aug 18              | 1973                |                     |
| INSTANTANEOUS PEAK FLOW  |                        |                     | c3200                  | Jul 10              | d10200              | May 8               | 1980                |                     |
| INSTANTANEOUS PEAK STAGE |                        |                     | 6.28                   | Jul 10              | 7.05                | May 8               | 1980                |                     |
| ANNUAL RUNOFF (AC-FT)    | 205400                 | 114700              |                        |                     | 78280               |                     |                     |                     |
| 10 PERCENT EXCEEDS       | 647                    | 217                 |                        |                     | 206                 |                     |                     |                     |
| 50 PERCENT EXCEEDS       | 145                    | 140                 |                        |                     | 73                  |                     |                     |                     |
| 90 PERCENT EXCEEDS       | 101                    | 63                  |                        |                     | 2.0                 |                     |                     |                     |

e-Estimated.  
a-Also occurred May 19-20.  
b-No flow at times most years.  
c-From rating curve extended above 2580 ft<sup>3</sup>/s.  
d-From rating curve extended above 7300 ft<sup>3</sup>/s.

ARKANSAS RIVER BASIN

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 1995 TO SEPTEMBER 1996

| DATE      | TIME | DIS-CHARGE, INST. CUBIC FEET PER SECOND | SPE-CIFIC CON-DUCT-ANCE (US/CM) | PH (STAND-ARD UNITS) | TEMPER-ATURE WATER (DEG C) | OXYGEN, DIS-SOLVED (MG/L) | OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) | COLI-FORM, FECAL, UM-MF (COLS./100 ML) | STREP-TOCOCCI, FECAL, KF AGAR (COLS. PER 100 ML) | CALCIUM DIS-SOLVED (MG/L AS CA) | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) |
|-----------|------|---|---------------------------------|----------------------|----------------------------|---------------------------|--|--|--|---------------------------------|-------------------------------------|
| JAN 19... | 1145 | 120                                     | 1120                            | 8.2                  | 0.0                        | 12.0                      | 9.2  | K85                                    | 140  | 86                              | 26                                  |
| MAR 22... | 1215 | 147                                     | 1000                            | 8.3                  | 12.0                       | 9.0                       | 4.8  | 53                                     | K28  | 80                              | 25                                  |
| JUN 21... | 1145 | 59                                      | 1090                            | 8.3                  | 24.0                       | 7.0                       | 1.0  | 580                                    | K73  | 92                              | 27                                  |
| SEP 13... | 0930 | 174                                     | 886                             | 8.3                  | 15.5                       | 7.6                       | 3.5  | >1200                                  | 1900   | 71                              | 21                                  |

| DATE      | ALKA-LINITY LAB (MG/L AS CACO3) | SULFATE DIS-SOLVED (MG/L AS SO4) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) | RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) | NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) | NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) | NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) | NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) | PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) |
|-----------|---------------------------------|----------------------------------|------------------------------------|-----------------------------------|--|---|---|---|---|---|
| JAN 19... | 167                             | 280                              | 55                                 | 2.1                               | 216  | 0.05                                      | 6.5                                       | 0.65                                      | 1.8   | 0.22                                      |
| MAR 22... | 158                             | 250                              | 50                                 | 1.9                               | 185  | <0.01                                     | 5.5                                       | <0.015                                    | 1.1   | 0.38                                      |
| JUN 21... | 182                             | 300                              | 48                                 | 2.0                               | 108  | <0.01                                     | 3.4                                       | 0.02                                      | 0.6   | 0.53                                      |
| SEP 13... | 147                             | 230                              | 37                                 | 1.7                               | 208  | 0.01                                      | 3.5                                       | <0.015                                    | 0.9   | 0.32                                      |

| DATE      | CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) | CADMIUM DIS-SOLVED (UG/L AS CD) | CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) | CHRO-MIUM, DIS-SOLVED (UG/L AS CR) | CHRO-MIUM, HEXA-VALENT, DIS-SOLVED (UG/L AS CR) | COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) | COPPER, DIS-SOLVED (UG/L AS CU) | IRON, TOTAL RECOV-ERABLE (UG/L AS FE) | IRON, DIS-SOLVED (UG/L AS FE) |
|-----------|---|---------------------------------|--|------------------------------------|---|---|---------------------------------|---------------------------------------|-------------------------------|
| JAN 19... | <1                                      | <1                              | 3  | <1                                 | <1  | 8                                       | 3                               | 4600                                  | 10                            |
| MAR 22... | <1                                      | <1                              | 3  | <1                                 | <1  | 7                                       | 2                               | 4200                                  | <10                           |
| JUN 21... | <1                                      | <1                              | 1  | <1                                 | <1  | 5                                       | 2                               | 2700                                  | <3                            |
| SEP 13... | <1                                      | <1                              | 6  | <1                                 | <1  | 12                                      | 2                               | 4800                                  | 3                             |

| DATE      | LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) | LEAD, DIS-SOLVED (UG/L AS PB) | MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) | MANGA-NESE, DIS-SOLVED (UG/L AS MN) | NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) | NICKEL, DIS-SOLVED (UG/L AS NI) | SELE-NIUM, DIS-SOLVED (UG/L AS SE) | ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) | ZINC, DIS-SOLVED (UG/L AS ZN) |
|-----------|---------------------------------------|-------------------------------|---|-------------------------------------|---|---------------------------------|------------------------------------|---------------------------------------|-------------------------------|
| JAN 19... | 7                                     | <1                            | 200   | 20                                  | 7                                       | 3                               | 4                                  | 70                                    | 10                            |
| MAR 22... | 7                                     | <1                            | 170   | <10                                 | 7                                       | 3                               | 5                                  | 50                                    | 20                            |
| JUN 21... | 4                                     | <1                            | 120   | 3                                   | 5                                       | 3                               | 6                                  | 30                                    | 6                             |
| SEP 13... | 19                                    | <1                            | 300   | 2                                   | 10                                      | 2                               | 4                                  | 60                                    | <3                            |

K-Based on non-ideal colony count.

07106300 FOUNTAIN CREEK NEAR PINON, CO--Continued

MISCELLANEOUS FIELD MEASUREMENTS, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DATE     | TIME | DIS-<br>CHARGE,<br>INST.<br>CUBIC<br>FEET<br>PER<br>SECOND | SPE-<br>CIFIC<br>CON-<br>DUCT-<br>ANCE<br>(US/CM) | TEMPER-<br>ATURE<br>WATER<br>(DEG C) | DATE     | TIME | DIS-<br>CHARGE,<br>INST.<br>CUBIC<br>FEET<br>PER<br>SECOND | SPE-<br>CIFIC<br>CON-<br>DUCT-<br>ANCE<br>(US/CM) | TEMPER-<br>ATURE<br>WATER<br>(DEG C) |
|----------|------|--|---|--------------------------------------|----------|------|--|---|--------------------------------------|
| OCT 1995 |      |  |   |                                      | MAY 1996 |      |  |   |                                      |
| 04...    | 1200 | 162  | 1100  | 15.0                                 | 10...    | 1345 | 238  | 1070  | 17.5                                 |
| 19...    | 1555 | 110  | 1080  | 15.0                                 | 17...    | 1205 | 24   | 1200  | 15.5                                 |
| 26...    | 0915 | 138  | 1110  | 9.5                                  | 24...    | 1130 | 43   | 1180  | 15.5                                 |
| NOV      |      |  |   |                                      | 29...    | 1600 | 141  | 1130  | 16.5                                 |
| 13...    | 1235 | 182  | 1080  | 10.0                                 | JUN      |      |  |   |                                      |
| 30...    | 1315 | 134  | 1130  | 11.5                                 | 12...    | 1335 | 66   | 1170  | 20.5                                 |
| DEC      |      |  |   |                                      | 27...    | 1600 | 65   | 1140  | 27.0                                 |
| 14...    | 1220 | 134  | 1140  | 11.0                                 | JUL      |      |  |   |                                      |
| JAN 1996 |      |  |   |                                      | 08...    | 1100 | 64   | 1170  | 16.5                                 |
| 03...    | 1510 | 154  | 1120  | 8.0                                  | 12...    | 1030 | 230  | 1040  | 21.0                                 |
| 10...    | 1500 | 179  | 1130  | 9.5                                  | 22...    | 1330 | 206  | 930   | 28.0                                 |
| 31...    | 1220 | 143  | 1120  | 4.0                                  | 31...    | 1050 | 213  | 850   | 22.5                                 |
| FEB      |      |  |   |                                      | AUG      |      |  |   |                                      |
| 23...    | 1320 | 149  | 1110  | 11.0                                 | 02...    | 1105 | 1260   | 582   | 19.5                                 |
| MAR      |      |  |   |                                      | 08...    | 1405 | 116  | 1120  | 23.0                                 |
| 11...    | 1405 | 145  | 1050  | 13.5                                 | 21...    | 1410 | 127  | 1120  | 22.5                                 |
| 22...    | 1045 | 149  | 1060  | 10.0                                 | 27...    | 1030 | 195  | 1120  | 18.0                                 |
| 29...    | 1350 | 133  | 1060  | 15.0                                 | SEP      |      |  |   |                                      |
| MAY      |      |  |   |                                      | 03...    | 1255 | 183  | 975   | 23.0                                 |
| 01...    | 1400 | 57   | 1170  | 16.0                                 | 23...    | 1250 | 151  | 1020  | 20.5                                 |



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 since December 1985, 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, 203 microsiemens, June 6, 1991.

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, 2,160 microsiemens, Aug. 19; minimum, 381 microsiemens, July 9.

WATER TEMPERATURE: Maximum, 32.4°C, July 4; minimum, 0.0°C, many days during winter.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DATE      | TIME | DIS-CHARGE, INST. CUBIC FEET PER SECOND | SPE-CIFIC CON-DUCT-ANCE (US/CM) | PH (STAND-ARD UNITS) | TEMPER-ATURE WATER (DEG C) | OXYGEN, DIS-SOLVED (MG/L) | OXYGEN DEMAND, BIO-CHEM-ICAL, 5 DAY (MG/L) | COLI-FORM, FECAL, UM-MF (COLS./100 ML) |
|-----------|------|---|---------------------------------|----------------------|----------------------------|---------------------------|--|--|
| OCT 27... | 1400 | 129                                     | 1240                            | 8.4                  | 13.0                       | 8.8                       | 2.2  | K75                                    |
| DEC 01... | 1500 | 113                                     | 1200                            | 8.4                  | 11.5                       | 10.4                      | 2.7  | K10                                    |
| JAN 19... | 1400 | 174                                     | 1220                            | --                   | 0.5                        | 11.6                      | 4.9  | 97                                     |
| FEB 23... | 1345 | 158                                     | 1140                            | 8.4                  | 10.5                       | 8.8                       | 2.8  | K85                                    |
| MAR 22... | 1415 | 138                                     | 1110                            | 8.4                  | 14.5                       | 8.6                       | 2.4  | K24                                    |
| APR 19... | 1130 | 76                                      | 1340                            | 8.4                  | 11.0                       | 9.6                       | 0.9  | K29                                    |
| MAY 17... | 1445 | 27                                      | 1560                            | 8.4                  | 27.0                       | 6.9                       | 0.4  | K50                                    |
| JUN 21... | 1330 | 65                                      | 1310                            | 8.4                  | 27.0                       | 6.7                       | 0.6  | 940                                    |
| JUL 19... | 1330 | 556                                     | 850                             | 8.2                  | 26.5                       | 6.3                       | 6.3  | >1200                                  |
| AUG 16... | 1000 | 238                                     | 991                             | 8.3                  | 20.0                       | 7.3                       | 3.9  | K1400                                  |
| SEP 13... | 1130 | 148                                     | 984                             | 8.3                  | 19.5                       | 7.4                       | 1.8  | >1200                                  |

| DATE      | STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) | RESIDUE TOTAL AT 105 DEG. C, SUS-PENDED (MG/L) | NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) | NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) | NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) | NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) | PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) | SELE-NIUM, DIS-SOLVED (UG/L AS SE) |
|-----------|---|--|---|---|---|---|---|------------------------------------|
| OCT 27... | K55   | 86   | 0.01                                      | 5.3                                       | <0.015                                    | 0.4   | 0.35                                      | 11                                 |
| DEC 01... | K37   | 77   | <0.01                                     | 6.2                                       | <0.015                                    | 0.6   | 0.38                                      | 15                                 |
| JAN 19... | 150   | 264  | 0.04                                      | 6.5                                       | 0.24                                      | 1.4   | 0.21                                      | 12                                 |
| FEB 23... | K110  | 187  | <0.01                                     | 6.4                                       | <0.015                                    | 0.6   | 0.27                                      | 18                                 |
| MAR 22... | 93  | 196  | <0.01                                     | 5.3                                       | <0.015                                    | 0.6   | 0.31                                      | 13                                 |
| APR 19... | K49   | 82   | <0.01                                     | 5.2                                       | 0.02                                      | 0.6   | 0.27                                      | 26                                 |
| MAY 17... | K27   | 6  | 0.01                                      | 4.9                                       | 0.02                                      | 0.4   | 0.27                                      | 38                                 |
| JUN 21... | 170   | --   | 0.01                                      | 4.2                                       | 0.03                                      | 1.6   | 0.36                                      | --                                 |
| JUL 19... | K3000   | 2410   | 0.01                                      | 2.6                                       | 0.05                                      | 4.3   | 0.35                                      | 11                                 |
| AUG 16... | K2400   | 1180   | <0.01                                     | 2.8                                       | <0.015                                    | 2.3   | 0.29                                      | 14                                 |
| SEP 13... | 2300  | 374  | 0.04                                      | 4.8                                       | 0.04                                      | 0.8   | 0.39                                      | 14                                 |

K--Based on non-ideal colony count.

## ARKANSAS RIVER BASIN

## 07106500 FOUNTAIN CREEK AT PUEBLO, CO--Continued

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM @25 DEG. C), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DAY   | MAX  | MIN  | MEAN |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|
|       |      |      |      |      |      |      |      |      |      |      |      |      |
| 1     | 950  | 893  | 925  | 1310 | 1230 | 1270 | 1300 | 1260 | 1280 | 1220 | 1160 | 1180 |
| 2     | 1080 | 900  | 965  | 1300 | 1270 | 1280 | 1290 | 1270 | 1280 | 1210 | 1150 | 1180 |
| 3     | 1150 | 933  | 1060 | 1300 | 1260 | 1280 | 1300 | 1260 | 1280 | 1210 | 1180 | 1200 |
| 4     | 1160 | 1120 | 1140 | 1270 | 1240 | 1250 | 1300 | 1270 | 1290 | 1210 | 1180 | 1190 |
| 5     | 1150 | 1070 | 1110 | 1250 | 1190 | 1220 | 1300 | 1270 | 1280 | 1230 | 1170 | 1190 |
| 6     | 1150 | 1050 | 1110 | 1220 | 1130 | 1180 | 1300 | 1220 | 1270 | 1270 | 1180 | 1220 |
| 7     | 1180 | 1130 | 1150 | 1210 | 1160 | 1180 | 1270 | 1260 | 1270 | 1270 | 1180 | 1220 |
| 8     | 1210 | 1080 | 1150 | 1240 | 1210 | 1220 | 1280 | 1250 | 1270 | 1260 | 1150 | 1210 |
| 9     | 1190 | 1100 | 1150 | 1240 | 1200 | 1220 | 1320 | 1230 | 1280 | 1220 | 1180 | 1200 |
| 10    | 1200 | 1150 | 1170 | 1260 | 1200 | 1220 | 1330 | 1220 | 1280 | 1210 | 1150 | 1200 |
| 11    | 1190 | 1150 | 1170 | 1230 | 1190 | 1210 | 1280 | 1210 | 1250 | 1230 | 1120 | 1180 |
| 12    | 1190 | 1150 | 1170 | 1240 | 1200 | 1220 | 1250 | 1210 | 1240 | 1230 | 1120 | 1180 |
| 13    | 1210 | 1150 | 1180 | 1230 | 1190 | 1210 | 1270 | 1230 | 1250 | 1240 | 1090 | 1180 |
| 14    | 1220 | 1180 | 1210 | 1250 | 1180 | 1220 | 1270 | 1240 | 1260 | 1230 | 1140 | 1170 |
| 15    | 1220 | 1180 | 1210 | 1210 | 1170 | 1190 | 1280 | 1260 | 1270 | 1190 | 1140 | 1170 |
| 16    | 1230 | 1180 | 1210 | 1210 | 1190 | 1200 | 1280 | 1260 | 1270 | 1190 | 1150 | 1170 |
| 17    | 1210 | 1170 | 1200 | 1220 | 1180 | 1200 | 1280 | 1260 | 1270 | 1200 | 1150 | 1180 |
| 18    | 1270 | 1200 | 1230 | 1210 | 1170 | 1190 | 1290 | 1250 | 1270 | 1290 | 1160 | 1230 |
| 19    | 1270 | 1240 | 1260 | 1230 | 1170 | 1200 | 1330 | 1250 | 1270 | 1320 | 1180 | 1250 |
| 20    | 1300 | 1250 | 1280 | 1240 | 1170 | 1200 | 1320 | 1220 | 1260 | 1260 | 1200 | 1220 |
| 21    | 1310 | 1270 | 1290 | 1210 | 1170 | 1190 | 1300 | 1250 | 1260 | 1220 | 1160 | 1190 |
| 22    | 1310 | 1260 | 1280 | 1300 | 1200 | 1260 | 1320 | 1240 | 1280 | 1210 | 1160 | 1190 |
| 23    | 1300 | 1220 | 1260 | 1310 | 1280 | 1290 | 1290 | 1210 | 1230 | 1210 | 1160 | 1190 |
| 24    | 1320 | 1260 | 1290 | 1310 | 1280 | 1290 | 1260 | 1210 | 1230 | 1240 | 1170 | 1190 |
| 25    | 1290 | 1260 | 1280 | 1310 | 1280 | 1290 | 1250 | 1200 | 1210 | 1220 | 1160 | 1180 |
| 26    | 1290 | 1250 | 1270 | 1310 | 1270 | 1290 | 1240 | 1170 | 1200 | 1250 | 1170 | 1200 |
| 27    | 1310 | 1270 | 1290 | 1310 | 1260 | 1280 | 1220 | 1180 | 1200 | 1290 | 1180 | 1220 |
| 28    | 1310 | 1270 | 1290 | 1290 | 1260 | 1280 | 1260 | 1180 | 1210 | 1250 | 1150 | 1210 |
| 29    | 1320 | 1270 | 1290 | 1300 | 1280 | 1290 | 1240 | 1180 | 1200 | 1230 | 1140 | 1180 |
| 30    | 1310 | 1250 | 1290 | 1300 | 1240 | 1280 | 1230 | 1180 | 1190 | 1230 | 1140 | 1170 |
| 31    | 1300 | 1270 | 1290 | ---  | ---  | ---  | 1210 | 1160 | 1190 | 1220 | 1140 | 1180 |
| MONTH | 1320 | 893  | 1200 | 1310 | 1130 | 1240 | 1330 | 1160 | 1250 | 1320 | 1090 | 1190 |
| DAY   | MAX  | MIN  | MEAN |
|       |      |      |      |      |      |      |      |      |      |      |      |      |
| 1     | 1230 | 1140 | 1190 | 1130 | 1040 | 1090 | 1210 | 1150 | 1180 | 1470 | 1400 | 1440 |
| 2     | 1290 | 1150 | 1230 | ---  | ---  | ---  | 1210 | 1160 | 1180 | 1470 | 1390 | 1410 |
| 3     | 1340 | 1240 | 1290 | ---  | ---  | ---  | 1210 | 1150 | 1170 | 1450 | 1350 | 1400 |
| 4     | 1320 | 1150 | 1200 | ---  | ---  | ---  | 1340 | 1140 | 1170 | 1390 | 1300 | 1340 |
| 5     | 1170 | 1100 | 1140 | ---  | ---  | ---  | 1350 | 1110 | 1170 | 1350 | 1280 | 1320 |
| 6     | 1190 | 1140 | 1170 | ---  | ---  | ---  | 1140 | 1090 | 1110 | 1330 | 1280 | 1310 |
| 7     | 1190 | 1130 | 1170 | ---  | ---  | ---  | 1160 | 1120 | 1140 | 1350 | 1310 | 1330 |
| 8     | 1200 | 1160 | 1180 | ---  | ---  | ---  | 1190 | 1140 | 1160 | 1420 | 1340 | 1380 |
| 9     | 1200 | 1160 | 1180 | ---  | ---  | ---  | 1200 | 1150 | 1180 | 1430 | 1190 | 1410 |
| 10    | 1200 | 1150 | 1170 | ---  | ---  | ---  | 1250 | 1200 | 1240 | 1420 | 1190 | 1370 |
| 11    | 1180 | 1140 | 1160 | 1170 | 1140 | 1160 | 1290 | 1240 | 1260 | 1230 | 1120 | 1160 |
| 12    | 1200 | 1130 | 1170 | 1190 | 1140 | 1170 | 1360 | 1280 | 1320 | 1390 | 1230 | 1300 |
| 13    | 1200 | 1140 | 1170 | 1190 | 1150 | 1170 | 1370 | 1320 | 1350 | 1510 | 1350 | 1450 |
| 14    | 1200 | 1140 | 1170 | 1180 | 1120 | 1160 | 1380 | 1220 | 1300 | 1510 | 1470 | 1490 |
| 15    | 1190 | 1150 | 1170 | ---  | ---  | ---  | 1280 | 1160 | 1210 | 1500 | 1460 | 1490 |
| 16    | 1190 | 1130 | 1150 | ---  | ---  | ---  | 1330 | 1230 | 1270 | 1520 | 1480 | 1500 |
| 17    | 1170 | 1100 | 1140 | ---  | ---  | ---  | 1350 | 1300 | 1320 | 1600 | 1490 | 1550 |
| 18    | 1200 | 1130 | 1170 | ---  | ---  | ---  | 1390 | 1310 | 1350 | 1600 | 1520 | 1560 |
| 19    | 1190 | 1140 | 1170 | ---  | ---  | ---  | 1430 | 1370 | 1410 | ---  | ---  | ---  |
| 20    | 1200 | 1110 | 1160 | ---  | ---  | ---  | 1450 | 1400 | 1430 | 1630 | 1520 | 1550 |
| 21    | 1180 | 1130 | 1150 | ---  | ---  | ---  | 1420 | 1360 | 1390 | 1550 | 1470 | 1510 |
| 22    | 1170 | 1130 | 1160 | ---  | ---  | ---  | 1420 | 1340 | 1380 | 1500 | 1400 | 1450 |
| 23    | 1170 | 1120 | 1150 | ---  | ---  | ---  | 1430 | 1370 | 1400 | 1490 | 1410 | 1450 |
| 24    | 1150 | 1110 | 1130 | ---  | ---  | ---  | 1440 | 1370 | 1400 | 1550 | 1370 | 1480 |
| 25    | 1160 | 1100 | 1130 | ---  | ---  | ---  | 1470 | 1380 | 1440 | ---  | ---  | ---  |
| 26    | 1170 | 1120 | 1140 | ---  | ---  | ---  | 1470 | 1400 | 1440 | ---  | ---  | ---  |
| 27    | 1170 | 1060 | 1130 | 1200 | 1120 | 1160 | 1500 | 1420 | 1450 | ---  | ---  | ---  |
| 28    | 1180 | 1090 | 1130 | 1170 | 1120 | 1150 | 1520 | 1490 | 1500 | ---  | ---  | ---  |
| 29    | 1150 | 1040 | 1100 | 1180 | 1140 | 1160 | 1540 | 1430 | 1460 | ---  | ---  | ---  |
| 30    | ---  | ---  | ---  | 1190 | 1140 | 1170 | 1470 | 1420 | 1450 | 1210 | 1170 | 1190 |
| 31    | ---  | ---  | ---  | 1210 | 1150 | 1180 | ---  | ---  | ---  | 1210 | 1140 | 1170 |
| MONTH | 1340 | 1040 | 1160 | ---  | ---  | ---  | 1540 | 1090 | 1310 | ---  | ---  | ---  |

07106500 FOUNTAIN CREEK AT PUEBLO, CO--Continued

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM @ 25 DEG. C), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

|       | JUNE |      |      | JULY |      |      | AUGUST |      |      | SEPTEMBER |      |      |
|-------|------|------|------|------|------|------|--------|------|------|-----------|------|------|
| 1     | 1220 | 1180 | 1200 | 1410 | 1280 | 1340 | 1150   | 1080 | 1110 | 1040      | 977  | 1010 |
| 2     | 1240 | 1180 | 1210 | 1400 | 1300 | 1340 | ---    | ---  | ---  | 1060      | 1040 | 1050 |
| 3     | 1220 | 1160 | 1190 | 1460 | 1380 | 1420 | ---    | ---  | ---  | 1160      | 1050 | 1080 |
| 4     | 1260 | 1210 | 1230 | 1510 | 1430 | 1470 | ---    | ---  | ---  | 1200      | 1140 | 1170 |
| 5     | 1350 | 1260 | 1300 | 1550 | 1500 | 1520 | ---    | ---  | ---  | 1220      | 1140 | 1190 |
| 6     | 1390 | 1350 | 1370 | 1560 | 1470 | 1540 | ---    | ---  | ---  | 1240      | 1190 | 1220 |
| 7     | 1400 | 1310 | 1350 | 1570 | 1530 | 1550 | ---    | ---  | ---  | 1250      | 907  | 1100 |
| 8     | 1390 | 1310 | 1340 | 1540 | 1310 | 1390 | 1350   | 1180 | 1230 | 1080      | 945  | 1010 |
| 9     | 1430 | 1360 | 1400 | 1430 | 381  | 1220 | 1370   | 891  | 1150 | 1160      | 1080 | 1110 |
| 10    | 1740 | 1320 | 1410 | ---  | ---  | ---  | 1110   | 982  | 1060 | 1240      | 1160 | 1190 |
| 11    | 1400 | 1210 | 1330 | ---  | ---  | ---  | 1190   | 1080 | 1130 | 1290      | 1240 | 1260 |
| 12    | 1370 | 1310 | 1330 | 1290 | 918  | 1110 | 1240   | 1180 | 1210 | 1310      | 643  | 966  |
| 13    | 1460 | 1270 | 1360 | 1080 | 998  | 1020 | 1280   | 1220 | 1250 | 1120      | 772  | 899  |
| 14    | 1340 | 1020 | 1190 | 1020 | 994  | 1010 | 1370   | 1280 | 1320 | 884       | 854  | 866  |
| 15    | 1120 | 900  | 1010 | 1050 | 1010 | 1030 | 1390   | 581  | 1090 | 1380      | 884  | 1030 |
| 16    | 1070 | 947  | 998  | 1050 | 1020 | 1040 | 1050   | 793  | 966  | 1050      | 948  | 999  |
| 17    | 1170 | 1070 | 1110 | 1090 | 1050 | 1070 | 1210   | 1050 | 1120 | 1080      | 1030 | 1060 |
| 18    | 1240 | 1170 | 1200 | 1110 | 1070 | 1090 | 1390   | 1210 | 1250 | 1110      | 591  | 796  |
| 19    | 1280 | 1230 | 1250 | ---  | ---  | ---  | 2160   | 1250 | 1370 | 1010      | 881  | 956  |
| 20    | 1350 | 1270 | 1300 | ---  | ---  | ---  | 1770   | 784  | 1050 | 1070      | 1010 | 1030 |
| 21    | 1750 | 1190 | 1420 | ---  | ---  | ---  | 1220   | 1060 | 1140 | 1120      | 1060 | 1080 |
| 22    | 1390 | 1180 | 1290 | ---  | ---  | ---  | 1350   | 1220 | 1280 | 1150      | 1090 | 1120 |
| 23    | 1250 | 1120 | 1170 | 1370 | 880  | 995  | 1370   | 1050 | 1250 | 1180      | 1100 | 1140 |
| 24    | 1160 | 1080 | 1120 | 1100 | 978  | 1020 | 1080   | 402  | 597  | 1200      | 831  | 975  |
| 25    | 1190 | 1120 | 1150 | 1120 | 681  | 922  | ---    | ---  | ---  | 1090      | 926  | 995  |
| 26    | 1360 | 1190 | 1290 | 1070 | 779  | 929  | ---    | ---  | ---  | 1100      | 1060 | 1080 |
| 27    | 1390 | 1330 | 1360 | 1070 | 399  | 625  | ---    | ---  | ---  | 1320      | 878  | 1050 |
| 28    | 1420 | 1330 | 1380 | 762  | 614  | 677  | 1380   | 1120 | 1180 | 1040      | 953  | 993  |
| 29    | 1420 | 1330 | 1380 | 846  | 762  | 797  | 1150   | 913  | 1070 | 1070      | 1010 | 1040 |
| 30    | 1440 | 1340 | 1390 | 892  | 846  | 864  | 1140   | 776  | 955  | 1080      | 1030 | 1060 |
| 31    | ---  | ---  | ---  | 1120 | 892  | 1000 | 1000   | 956  | 976  | ---       | ---  | ---  |
| MONTH | 1750 | 900  | 1270 | ---  | ---  | ---  | ---    | ---  | ---  | 1380      | 591  | 1050 |

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DAY   | MAX     | MIN  | MEAN | MAX      | MIN | MEAN | MAX      | MIN | MEAN | MAX     | MIN | MEAN |
|-------|---------|------|------|----------|-----|------|----------|-----|------|---------|-----|------|
|       | OCTOBER |      |      | NOVEMBER |     |      | DECEMBER |     |      | JANUARY |     |      |
| 1     | 18.1    | 11.0 | 14.5 | 8.6      | 4.8 | 6.9  | 10.8     | 3.7 | 6.9  | 2.7     | .0  | 1.3  |
| 2     | 18.5    | 9.9  | 13.8 | 4.8      | 2.2 | 3.3  | 10.6     | 3.7 | 6.6  | 1.4     | .0  | .6   |
| 3     | 19.2    | 9.4  | 13.8 | 8.3      | 1.8 | 4.3  | 9.1      | 3.1 | 5.7  | 4.2     | .0  | 1.8  |
| 4     | 14.7    | 9.7  | 12.0 | 8.2      | 1.2 | 4.4  | 9.5      | 1.9 | 5.5  | 4.1     | .5  | 2.1  |
| 5     | 16.3    | 6.8  | 10.7 | 9.6      | 1.3 | 5.4  | 6.9      | 2.4 | 4.9  | 2.2     | .0  | 1.1  |
| 6     | 16.3    | 6.3  | 10.7 | 8.0      | 4.4 | 6.1  | 8.2      | 1.0 | 4.1  | .9      | .0  | .2   |
| 7     | 17.2    | 7.0  | 11.8 | 9.3      | 2.4 | 5.6  | 3.9      | .4  | 2.2  | 2.0     | .0  | .7   |
| 8     | 16.3    | 10.3 | 12.7 | 11.0     | 2.5 | 6.5  | 3.8      | .0  | 1.5  | 5.9     | .0  | 2.0  |
| 9     | 15.7    | 8.3  | 12.0 | 12.3     | 4.6 | 8.1  | 1.0      | .0  | .1   | 5.2     | .0  | 2.5  |
| 10    | 18.5    | 8.2  | 12.9 | 7.5      | 3.2 | 5.2  | 4.9      | .0  | 1.8  | 4.1     | .1  | 2.5  |
| 11    | 19.4    | 9.0  | 13.5 | 9.2      | .9  | 5.0  | 6.2      | .1  | 3.1  | 5.1     | .0  | 2.5  |
| 12    | 19.1    | 10.3 | 14.0 | 10.5     | 4.4 | 7.4  | 7.6      | 2.6 | 5.0  | 6.8     | .0  | 3.5  |
| 13    | 17.5    | 10.2 | 13.3 | 8.6      | 4.7 | 6.6  | 10.2     | 4.0 | 6.5  | 7.2     | .6  | 3.7  |
| 14    | 16.9    | 8.1  | 12.0 | 11.6     | 3.5 | 7.3  | 7.8      | 2.3 | 4.7  | 7.4     | .7  | 3.7  |
| 15    | 18.4    | 8.1  | 12.8 | 11.6     | 4.7 | 7.8  | 6.3      | .0  | 2.9  | 6.2     | .0  | 3.1  |
| 16    | 18.3    | 9.2  | 13.1 | 12.0     | 1.6 | 7.8  | 5.0      | .3  | 2.7  | 8.2     | 2.2 | 4.9  |
| 17    | 17.9    | 9.9  | 13.4 | 11.8     | 5.3 | 3.1  | 3.1      | .5  | 1.8  | 5.0     | .0  | 2.4  |
| 18    | 16.8    | 8.8  | 12.4 | 11.2     | 3.7 | 7.2  | 4.9      | .1  | 2.0  | .2      | .0  | .0   |
| 19    | 15.6    | 7.7  | 11.1 | 10.9     | 3.8 | 7.0  | 2.9      | .0  | 1.0  | .8      | .0  | .1   |
| 20    | 14.8    | 4.9  | 9.3  | 9.5      | 3.5 | 6.2  | 2.4      | .0  | .8   | 3.1     | .0  | .8   |
| 21    | 15.0    | 5.3  | 9.7  | 8.7      | 2.5 | 5.6  | 2.3      | .0  | .9   | 4.6     | .0  | 1.6  |
| 22    | 12.1    | 5.4  | 8.2  | 12.1     | 4.5 | 7.0  | 2.3      | .0  | .7   | 5.0     | .0  | 1.4  |
| 23    | 11.8    | 3.2  | 6.8  | 10.8     | 4.2 | 6.7  | 1.9      | .0  | .4   | 2.6     | .0  | .5   |
| 24    | 11.5    | 2.7  | 6.5  | 8.9      | 3.2 | 5.7  | 2.4      | .0  | .6   | 3.3     | .0  | .9   |
| 25    | 12.8    | 3.2  | 7.6  | 12.2     | 3.6 | 7.2  | 3.3      | .0  | 1.0  | 5.3     | .0  | 1.2  |
| 26    | 13.1    | 4.9  | 8.4  | 11.3     | 4.4 | 7.2  | 4.2      | .0  | 1.5  | .2      | .0  | .0   |
| 27    | 13.5    | 5.5  | 8.9  | 6.5      | 3.0 | 5.0  | 3.0      | .0  | 1.1  | .4      | .0  | .0   |
| 28    | 11.6    | 4.0  | 7.7  | 5.8      | .2  | 2.9  | 1.8      | .0  | .6   | 3.9     | .0  | 1.2  |
| 29    | 10.4    | 4.3  | 7.5  | 9.1      | 1.5 | 4.9  | 3.6      | .0  | 1.2  | 3.4     | .0  | .9   |
| 30    | 12.1    | 4.4  | 8.0  | 9.1      | 3.6 | 6.2  | 1.9      | .0  | .6   | .2      | .0  | .0   |
| 31    | 11.9    | 4.8  | 7.7  | ---      | --- | ---  | 3.7      | .0  | 1.7  | .0      | .0  | .0   |
| MONTH | 19.4    | 2.7  | 10.9 | 12.3     | .2  | 6.2  | 10.8     | .0  | 2.6  | 8.2     | .0  | 1.5  |



**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 mi<sup>2</sup>.

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

GAGE.--Water-stage recorder with satellite telemetry and crest-stage gage. Datum of gage is 4,581.58 ft above sea level, (Colorado Division of Highways benchmark).

REMARKS.--Records good except for estimated daily discharges, and those above 1,500 ft<sup>3</sup>/s, 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 ft<sup>3</sup>/s, at site 5.0 mi downstream.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

| DAY   | OCT   | NOV  | DEC  | JAN  | FEB  | MAR  | APR  | MAY  | JUN   | JUL    | AUG  | SEP  |
|-------|-------|------|------|------|------|------|------|------|-------|--------|------|------|
| 1     | 12    | e34  | e12  | e12  | e13  | 16   | 18   | 29   | 15    | 8.7    | 21   | 47   |
| 2     | 11    | e40  | e12  | e12  | e13  | 16   | 18   | 27   | 13    | 8.4    | 17   | 40   |
| 3     | 9.7   | e42  | e11  | e12  | e14  | 16   | 17   | 22   | 13    | 8.3    | 16   | 34   |
| 4     | 11    | e41  | e11  | e12  | e15  | 16   | 18   | 21   | 12    | 8.7    | 15   | 29   |
| 5     | 19    | e39  | e10  | e12  | 15   | 16   | 22   | 19   | 13    | 8.9    | 16   | 23   |
| 6     | 21    | e33  | e10  | 13   | 16   | 16   | 21   | 19   | e13   | 8.7    | 14   | 22   |
| 7     | 19    | e31  | e10  | 14   | 18   | 16   | 20   | 21   | 13    | 8.4    | 14   | 22   |
| 8     | 16    | e31  | e10  | 13   | 18   | 16   | 21   | 20   | 13    | 11     | 15   | 22   |
| 9     | 14    | e30  | e10  | 13   | 16   | 16   | 20   | 18   | 12    | 95     | 14   | 22   |
| 10    | 17    | e29  | e10  | 14   | 17   | 16   | 20   | 17   | 13    | 128    | 12   | 20   |
| 11    | e17   | e28  | e10  | 13   | 15   | 15   | 20   | 18   | 13    | 16     | 12   | 20   |
| 12    | e15   | e27  | e10  | 13   | 15   | 15   | 24   | 16   | 12    | 300    | 11   | 20   |
| 13    | e16   | e27  | e11  | 13   | 15   | 15   | 22   | 16   | 103   | 80     | 11   | 20   |
| 14    | e15   | e26  | e11  | 13   | 15   | 15   | 23   | 17   | 71    | 28     | 11   | 21   |
| 15    | e15   | e25  | e11  | 11   | 15   | 21   | 23   | 14   | 31    | 21     | 11   | 23   |
| 16    | e16   | e24  | e11  | 11   | 14   | 19   | 23   | 13   | 27    | 17     | 10   | 20   |
| 17    | e19   | e23  | e11  | 12   | 14   | 18   | 27   | 12   | 20    | 17     | 11   | 20   |
| 18    | e26   | e21  | e11  | 12   | 14   | 18   | 26   | 12   | 19    | 16     | 12   | 19   |
| 19    | e32   | e21  | e11  | e12  | 14   | 18   | 30   | 11   | 17    | 15     | 11   | 18   |
| 20    | e36   | e21  | e11  | 11   | 13   | 21   | 31   | 13   | 16    | 13     | 12   | 18   |
| 21    | e37   | e20  | e11  | 12   | 14   | 17   | 33   | 13   | 15    | 13     | 100  | 16   |
| 22    | e38   | e19  | e11  | 11   | 13   | 16   | 34   | 13   | 15    | 13     | 27   | 15   |
| 23    | e45   | e18  | e11  | 11   | 14   | 17   | 35   | 13   | 14    | 581    | 34   | 15   |
| 24    | e46   | e17  | e11  | 12   | 15   | 18   | 36   | 14   | 13    | 50     | 101  | 15   |
| 25    | e43   | e16  | e12  | 12   | 14   | 18   | 33   | 41   | 12    | 39     | 65   | 15   |
| 26    | e40   | e15  | e12  | 12   | 15   | 18   | 28   | 101  | 12    | 31     | 85   | 15   |
| 27    | e35   | e14  | e12  | e12  | 16   | 19   | 27   | 77   | 11    | 26     | 121  | 17   |
| 28    | e29   | e13  | e12  | e12  | 16   | 18   | 27   | 50   | 10    | 35     | 267  | 16   |
| 29    | e28   | e12  | e12  | e12  | 16   | 17   | 29   | 47   | 8.9   | 84     | 69   | 16   |
| 30    | e29   | e12  | e12  | e12  | ---  | 17   | 30   | 30   | 9.2   | 32     | 195  | 15   |
| 31    | e32   | ---  | e12  | e12  | ---  | 19   | ---  | 16   | ---   | 25     | 61   | ---  |
| TOTAL | 758.7 | 749  | 342  | 378  | 432  | 529  | 756  | 770  | 579.1 | 1746.1 | 1391 | 635  |
| MEAN  | 24.5  | 25.0 | 11.0 | 12.2 | 14.9 | 17.1 | 25.2 | 24.8 | 19.3  | 56.3   | 44.9 | 21.2 |
| MAX   | 46    | 42   | 12   | 14   | 18   | 21   | 36   | 101  | 103   | 581    | 267  | 47   |
| MIN   | 9.7   | 12   | 10   | 11   | 13   | 15   | 17   | 11   | 8.9   | 8.3    | 10   | 15   |
| AC-FT | 1500  | 1490 | 678  | 750  | 857  | 1050 | 1500 | 1530 | 1150  | 3460   | 2760 | 1260 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1979 - 1996, BY WATER YEAR (WY)

|      | 1979 | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 13.9 | 14.4 | 12.2 | 12.2 | 12.9 | 17.7 | 61.9 | 153  | 89.1 | 38.9 | 49.3 | 20.9 |      |      |      |      |      |      |
| 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 1995 CALENDAR YEAR | FOR 1996 WATER YEAR | WATER YEARS 1979 - 1996 |
|--------------------------|------------------------|---------------------|-------------------------|
| ANNUAL TOTAL             | 25409.4                | 9065.9              |                         |
| ANNUAL MEAN              | 69.6                   | 24.8                | 41.5                    |
| HIGHEST ANNUAL MEAN      |                        |                     | 88.4                    |
| LOWEST ANNUAL MEAN       |                        |                     | 9.52                    |
| HIGHEST DAILY MEAN       | 800                    | May 17              | 1550                    |
| LOWEST DAILY MEAN        | 5.1                    | Mar 13              | .25                     |
| ANNUAL SEVEN-DAY MINIMUM | 5.8                    | Mar 16              | 2.7                     |
| INSTANTANEOUS PEAK FLOW  |                        | a 3440              | b 7560                  |
| INSTANTANEOUS PEAK STAGE |                        | 9.93                | 12.70                   |
| ANNUAL RUNOFF (AC-FT)    | 50400                  | 17980               | 30080                   |
| 10 PERCENT EXCEEDS       | 205                    | 36                  | 92                      |
| 50 PERCENT EXCEEDS       | 15                     | 16                  | 13                      |
| 90 PERCENT EXCEEDS       | 7.6                    | 11                  | 6.4                     |

e-Estimated.

a-From rating curve extended above 811 ft<sup>3</sup>/s.

b-From rating curve extended above 1800 ft<sup>3</sup>/s.

## 07109500 ARKANSAS RIVER NEAR AVONDALE, CO

LOCATION.--Lat 38°14'53", long 104°23'55", in NE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec.1, T.21 S., R.63 W., Pueblo County, Hydrologic Unit 11020002, on right bank 15 ft downstream from bridge on Sixmile Road, 0.3 mi upstream from Sixmile Creek, and 2.6 mi west of Avondale.

DRAINAGE AREA.--6,327 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1939 to September 1951, February 1965 to current year. Statistical summary computed for 1975 to current year.

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 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

| DAY   | OCT   | NOV   | DEC   | JAN   | FEB   | MAR   | APR   | MAY    | JUN    | JUL    | AUG   | SEP   |
|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------|--------|-------|-------|
| 1     | 761   | 552   | 555   | 384   | 603   | 643   | 966   | 733    | 1200   | 1790   | 1440  | 642   |
| 2     | 784   | 574   | 450   | 385   | 605   | 639   | 1030  | 705    | 955    | 1550   | 1730  | 535   |
| 3     | 829   | 579   | 429   | 363   | 580   | 632   | 1010  | 648    | 931    | 1450   | 1570  | 473   |
| 4     | 824   | 594   | 426   | 371   | 600   | 633   | 1070  | 619    | 869    | 1340   | 1370  | 413   |
| 5     | 859   | 601   | 433   | 374   | 575   | 642   | 1170  | 594    | 988    | 1440   | 1310  | 351   |
| 6     | 857   | 614   | 447   | 373   | 560   | 685   | 1200  | 546    | 1760   | 1650   | 1270  | 345   |
| 7     | 834   | 610   | 431   | 370   | 596   | 702   | 1150  | 569    | 2540   | 1730   | 1240  | 412   |
| 8     | 830   | 605   | 433   | 363   | 629   | 697   | 1130  | 607    | 2660   | 1780   | 1240  | 428   |
| 9     | 803   | 671   | 436   | 380   | 632   | 695   | 1090  | 780    | 3060   | 2130   | 1410  | 400   |
| 10    | 774   | 740   | 429   | 379   | 631   | 687   | 1100  | 1020   | 3440   | e5410  | 1350  | 376   |
| 11    | 784   | 756   | 438   | 373   | 628   | 684   | 1120  | 1300   | 3900   | 2380   | 1290  | 369   |
| 12    | 784   | 752   | 431   | 368   | 616   | 731   | 1140  | 1350   | 3800   | 3110   | 1240  | 475   |
| 13    | 792   | 752   | 422   | 374   | 603   | 890   | 1250  | 1350   | 3670   | 2060   | 1210  | 541   |
| 14    | 793   | 815   | 414   | 373   | 595   | 1080  | 1090  | 1620   | 3160   | 1800   | 1100  | 519   |
| 15    | 794   | 553   | 410   | 370   | 573   | 1260  | 1080  | 2090   | 3150   | 1420   | 1260  | 643   |
| 16    | 785   | 499   | 412   | 382   | 525   | 962   | 1050  | 2400   | 3220   | 1200   | 1520  | 578   |
| 17    | 773   | 499   | 415   | 380   | 441   | 727   | 964   | 2510   | 3410   | 1100   | 1500  | 553   |
| 18    | 745   | 497   | 419   | 377   | 436   | 675   | 861   | 2960   | 2890   | 932    | 1450  | 772   |
| 19    | 689   | 492   | 419   | 383   | 435   | 698   | 734   | 3370   | 2630   | 1010   | 1410  | 675   |
| 20    | 656   | 485   | 411   | 367   | 439   | 767   | 694   | 3430   | 2450   | 1160   | 1550  | 568   |
| 21    | 653   | 497   | 374   | 369   | 444   | 879   | 677   | 3470   | 2180   | 1540   | 1570  | 522   |
| 22    | 645   | 490   | 373   | 361   | 449   | 858   | 723   | 3420   | 2320   | 1440   | 1440  | 458   |
| 23    | 640   | 475   | 368   | 359   | 529   | 882   | 720   | 3040   | 3010   | 2030   | 1350  | 407   |
| 24    | 646   | 470   | 366   | 368   | 645   | 879   | 705   | 2770   | 3280   | 1670   | 1820  | 476   |
| 25    | 641   | 464   | 362   | 366   | 720   | 869   | 750   | 3210   | 2680   | 1860   | 1080  | 490   |
| 26    | 632   | 469   | 367   | 447   | 687   | 851   | 701   | 4190   | 2460   | 1830   | 684   | 481   |
| 27    | 599   | 470   | 382   | 450   | 686   | 823   | 690   | 2880   | 2460   | 2050   | 768   | 572   |
| 28    | 551   | 476   | 379   | 433   | 681   | 859   | 693   | 2030   | 2400   | 1760   | 919   | 527   |
| 29    | 550   | 462   | 381   | 468   | 652   | 858   | 711   | 1880   | 2160   | 1560   | 692   | 487   |
| 30    | 548   | 538   | 388   | 580   | ---   | 966   | 721   | 1960   | 1990   | 1370   | 1070  | 470   |
| 31    | 540   | ---   | 382   | 588   | ---   | 1030  | ---   | 1760   | ---    | 1290   | 779   | ---   |
| TOTAL | 22395 | 17051 | 12782 | 12278 | 16795 | 24883 | 27990 | 59811  | 75623  | 54842  | 39632 | 14958 |
| MEAN  | 722   | 568   | 412   | 396   | 579   | 803   | 933   | 1929   | 2521   | 1769   | 1278  | 499   |
| MAX   | 859   | 815   | 555   | 588   | 720   | 1260  | 1250  | 4190   | 3900   | 5410   | 1820  | 772   |
| MIN   | 540   | 462   | 362   | 359   | 435   | 632   | 677   | 546    | 869    | 932    | 684   | 345   |
| AC-FT | 44420 | 33820 | 25350 | 24350 | 33310 | 49360 | 55520 | 118600 | 150000 | 108800 | 78610 | 29670 |

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 1996, 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 |  |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|--|
| MEAN | 531  | 455  | 345  | 378  | 430  | 517  | 810  | 1614 | 2716 | 1962 | 1323 | 632  |      |      |      |      |      |      |      |      |      |      |  |
| MAX  | 1631 | 985  | 718  | 770  | 1103 | 994  | 1884 | 4170 | 4913 | 4432 | 3210 | 1511 |      |      |      |      |      |      |      |      |      |      |  |
| (WY) | 1985 | 1985 | 1987 | 1985 | 1985 | 1985 | 1987 | 1980 | 1995 | 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 1995 CALENDAR YEAR | FOR 1996 WATER YEAR | WATER YEARS 1975 - 1996 |
|--------------------------|------------------------|---------------------|-------------------------|
| ANNUAL TOTAL             | 564916                 | 379040              |                         |
| ANNUAL MEAN              | 1548                   | 1036                | a978                    |
| HIGHEST ANNUAL MEAN      |                        |                     | 1626                    |
| LOWEST ANNUAL MEAN       |                        |                     | 411                     |
| HIGHEST DAILY MEAN       | 6020                   | Jun 23              | e5410 Jul 10            |
| LOWEST DAILY MEAN        | 272                    | Feb 6               | c90 Sep 6               |
| ANNUAL SEVEN-DAY MINIMUM | 277                    | Feb 3               | d118 Jan 19             |
| INSTANTANEOUS PEAK FLOW  |                        |                     | d15400 Jul 10           |
| INSTANTANEOUS PEAK STAGE |                        | f8.90 Jul 10        | 8.93 Jul 30 1978        |
| ANNUAL RUNOFF (AC-FT)    | 1121000                | 751800              | 708600                  |
| 10 PERCENT EXCEEDS       | 4600                   | 2220                | 2300                    |
| 50 PERCENT EXCEEDS       | 756                    | 703                 | 582                     |
| 90 PERCENT EXCEEDS       | 313                    | 383                 | 268                     |

e-Estimated.

a-Average discharge for 20 years (water years 1940-51, 1966-73), 867 ft<sup>3</sup>/s; 628100 acre-ft/yr, prior to completion of Pueblo Reservoir.

b-Maximum daily discharge for period of record, 12100 ft<sup>3</sup>/s, Apr 24, 1942.

c-Minimum daily discharge for period of record, 50 ft<sup>3</sup>/s, Apr 2, 1940.

d-Maximum discharge and stage for period of record, about 50000 ft<sup>3</sup>/s, Jun 18, 1965, gage height, 9.77 ft, from rating curve extended above 6700 ft<sup>3</sup>/s, on basis of records for station near Pueblo and indirect measurements of peak flow on Fountain Creek at Pueblo, Chico Creek near North Avondale, and Arkansas River near North Avondale.

f-From floodmark.

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 Feb. 2, 28, May 9-10, June 8, 12-13, which are fair, and July 12 to Sept. 30, which are poor. Records for daily pH are fair. Records for daily water temperature are good except Oct. 1-6, Jan. 12-22, Mar. 15-26, which are fair, and Aug. 15 to Sept. 13, which are poor. 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 during winters.

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, 1,130 microsiemens, Sept. 5; minimum, 340 microsiemens, July 8.

pH: Maximum, 9.0 units, May 1; minimum, 7.2 units, several days in January.

WATER TEMPERATURE: Maximum, 27.1°C, Sept. 5; minimum, 0.0°C, several days during winter.

DISSOLVED OXYGEN: Maximum, 14.0 mg/L, Feb. 16; minimum, 2.7 mg/L, July 29.

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM @ 25 DEG. C), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DAY   | OCTOBER |     |      | NOVEMBER |     |      | DECEMBER |      |      | JANUARY |      |      |
|-------|---------|-----|------|----------|-----|------|----------|------|------|---------|------|------|
|       | MAX     | MIN | MEAN | MAX      | MIN | MEAN | MAX      | MIN  | MEAN | MAX     | MIN  | MEAN |
| 1     | 818     | 795 | 806  | 846      | 819 | 836  | 846      | 817  | 833  | 1040    | 1020 | 1040 |
| 2     | 811     | 776 | 793  | 849      | 833 | 843  | 928      | 837  | 900  | 1040    | 1010 | 1020 |
| 3     | 778     | 751 | 767  | 852      | 836 | 845  | 921      | 893  | 909  | 1070    | 1010 | 1040 |
| 4     | 773     | 725 | 757  | 855      | 824 | 838  | 927      | 904  | 916  | 1090    | 1050 | 1070 |
| 5     | 725     | 669 | 690  | 847      | 820 | 834  | 929      | 905  | 917  | 1060    | 1040 | 1050 |
| 6     | 682     | 660 | 672  | 841      | 817 | 829  | 918      | 888  | 906  | 1060    | 1020 | 1040 |
| 7     | 684     | 654 | 671  | 834      | 821 | 827  | 932      | 910  | 921  | 1080    | 1030 | 1060 |
| 8     | 695     | 651 | 670  | 842      | 817 | 826  | 942      | 908  | 927  | 1090    | 1050 | 1070 |
| 9     | 701     | 673 | 689  | 817      | 765 | 799  | 938      | 888  | 914  | 1070    | 1040 | 1050 |
| 10    | 718     | 691 | 704  | 772      | 745 | 758  | 935      | 891  | 914  | 1060    | 1040 | 1050 |
| 11    | 710     | 685 | 700  | 765      | 740 | 750  | 946      | 901  | 925  | 1080    | 1050 | 1060 |
| 12    | 708     | 683 | 698  | 754      | 722 | 738  | 964      | 927  | 945  | 1070    | 1050 | 1060 |
| 13    | 709     | 682 | 697  | 748      | 718 | 729  | 974      | 945  | 962  | 1070    | 1050 | 1060 |
| 14    | 711     | 685 | 698  | 727      | 682 | 699  | 991      | 940  | 964  | 1070    | 1050 | 1060 |
| 15    | 715     | 683 | 697  | 873      | 697 | 819  | 968      | 936  | 954  | 1060    | 1040 | 1050 |
| 16    | 726     | 692 | 708  | 876      | 838 | 858  | 970      | 941  | 953  | 1060    | 1040 | 1050 |
| 17    | 728     | 702 | 719  | 879      | 853 | 867  | 965      | 941  | 952  | 1060    | 1050 | 1050 |
| 18    | 733     | 704 | 719  | 883      | 855 | 869  | 949      | 938  | 944  | 1070    | 1050 | 1060 |
| 19    | 735     | --- | ---  | 887      | 855 | 869  | 949      | 939  | 943  | 1060    | 1040 | 1050 |
| 20    | 751     | 730 | 742  | 892      | 864 | 878  | 954      | 917  | 937  | 1070    | 1050 | 1060 |
| 21    | 751     | 715 | 735  | 886      | 868 | 878  | 1050     | 950  | 1020 | 1070    | 1050 | 1060 |
| 22    | 755     | 716 | 740  | 905      | 867 | 882  | 1040     | 1010 | 1030 | 1070    | 1040 | 1060 |
| 23    | 759     | 716 | 739  | 904      | 874 | 889  | 1050     | 1020 | 1030 | 1080    | 1060 | 1070 |
| 24    | 755     | 730 | 746  | 898      | 874 | 883  | 1050     | 1010 | 1030 | 1070    | 1030 | 1060 |
| 25    | 770     | 741 | 754  | 899      | 885 | 892  | 1040     | 1020 | 1030 | 1080    | 1060 | 1070 |
| 26    | 786     | 746 | 762  | 899      | 880 | 889  | 1040     | 1020 | 1030 | 1060    | 959  | 998  |
| 27    | 814     | 764 | 786  | 909      | 886 | 897  | 1040     | 1010 | 1020 | 989     | 941  | 965  |
| 28    | 834     | 800 | 814  | 899      | 885 | 894  | 1040     | 1000 | 1020 | 1000    | 950  | 966  |
| 29    | 832     | 799 | 817  | 921      | 884 | 902  | 1030     | 1010 | 1020 | 994     | 863  | 979  |
| 30    | 843     | 803 | 823  | 920      | 819 | 857  | 1030     | 1010 | 1020 | 870     | 811  | 836  |
| 31    | 845     | 821 | 836  | ---      | --- | ---  | 1040     | 1020 | 1030 | 839     | 790  | 817  |
| MONTH | 845     | --- | ---  | 921      | 682 | 839  | 1050     | 817  | 962  | 1090    | 790  | 1030 |

## ARKANSAS RIVER BASIN

## 07109500 ARKANSAS RIVER NEAR AVONDALE, CO--Continued

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM @ 25 DEG. C), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DAY   | MAX      | MIN | MEAN | MAX   | MIN | MEAN | MAX    | MIN | MEAN | MAX       | MIN  | MEAN |
|-------|----------|-----|------|-------|-----|------|--------|-----|------|-----------|------|------|
|       | FEBRUARY |     |      | MARCH |     |      | APRIL  |     |      | MAY       |      |      |
| 1     | 847      | 785 | 809  | 835   | 770 | 800  | 710    | 687 | 699  | 746       | 716  | 733  |
| 2     | 821      | 777 | 800  | 842   | 796 | 821  | 695    | 670 | 684  | 788       | 733  | 755  |
| 3     | 840      | 812 | 822  | 824   | 790 | 809  | 694    | 671 | 684  | 813       | 768  | 786  |
| 4     | 841      | 814 | 828  | 837   | 793 | 814  | 683    | 663 | 675  | 832       | 792  | 815  |
| 5     | 840      | 814 | 829  | 877   | 799 | 835  | 714    | 662 | 691  | 867       | 798  | 827  |
| 6     | 870      | 831 | 847  | 806   | 773 | 790  | 711    | 694 | 700  | 901       | 840  | 866  |
| 7     | 842      | 792 | 820  | 804   | 764 | 784  | 695    | 678 | 688  | 901       | 847  | 868  |
| 8     | 802      | 778 | 791  | 816   | 783 | 801  | 687    | 671 | 681  | 853       | 802  | 826  |
| 9     | 795      | 768 | 784  | 806   | 773 | 788  | 687    | 669 | 680  | 802       | 735  | 752  |
| 10    | 809      | 779 | 793  | 797   | 769 | 785  | 687    | 664 | 676  | 706       | 676  | 689  |
| 11    | 796      | 761 | 777  | 805   | 774 | 791  | 674    | 659 | 667  | 766       | 668  | 696  |
| 12    | 787      | 752 | 771  | 796   | 757 | 775  | 675    | 649 | 664  | 669       | 647  | 655  |
| 13    | 791      | 758 | 776  | 780   | 688 | 721  | 665    | 647 | 656  | 652       | 632  | 643  |
| 14    | 807      | 764 | 783  | 688   | 662 | 674  | 693    | 661 | 678  | 643       | 611  | 627  |
| 15    | 832      | 782 | 807  | 723   | 645 | 681  | 710    | 670 | 692  | 612       | 595  | 605  |
| 16    | 857      | 812 | 832  | 783   | 689 | 715  | 706    | 683 | 697  | 599       | 590  | 595  |
| 17    | 915      | 857 | 893  | 807   | 767 | 781  | 727    | 687 | 703  | 596       | 584  | 591  |
| 18    | 910      | 886 | 898  | 812   | 790 | 802  | 755    | 709 | 726  | 587       | 577  | 583  |
| 19    | 913      | 886 | 902  | 809   | 770 | 791  | 761    | 743 | 754  | 582       | 574  | 577  |
| 20    | 911      | 887 | 902  | 776   | 728 | 760  | 785    | 754 | 767  | 582       | 573  | 578  |
| 21    | 940      | 894 | 913  | 735   | 707 | 724  | 786    | 761 | 774  | 585       | 577  | 581  |
| 22    | 934      | 907 | 924  | 744   | 719 | 730  | 769    | 743 | 756  | 587       | 577  | 581  |
| 23    | 909      | 808 | 864  | 730   | 714 | 723  | 762    | 743 | 755  | 594       | 583  | 587  |
| 24    | 810      | 721 | 783  | 723   | 703 | 715  | 771    | 749 | 761  | 591       | 561  | 580  |
| 25    | 746      | 716 | 727  | 715   | 695 | 707  | 755    | 725 | 739  | 668       | 568  | 612  |
| 26    | 746      | 720 | 736  | 746   | 696 | 719  | 763    | 734 | 750  | 753       | 587  | 644  |
| 27    | 766      | 743 | 753  | 752   | 723 | 739  | 762    | 731 | 749  | 648       | 607  | 625  |
| 28    | 768      | 740 | 754  | 746   | 715 | 730  | 755    | 718 | 737  | 656       | 629  | 646  |
| 29    | 782      | 756 | 769  | 735   | 717 | 729  | 745    | 718 | 730  | 663       | 635  | 647  |
| 30    | ---      | --- | ---  | 732   | 680 | 704  | 751    | 724 | 739  | 635       | 622  | 629  |
| 31    | ---      | --- | ---  | 706   | 669 | 686  | ---    | --- | ---  | 650       | 628  | 636  |
| MONTH | 940      | 716 | 817  | 877   | 645 | 756  | 786    | 647 | 712  | 901       | 561  | 672  |
|       | JUNE     |     |      | JULY  |     |      | AUGUST |     |      | SEPTEMBER |      |      |
| 1     | 707      | 639 | 674  | 415   | 373 | 390  | 492    | 467 | 476  | 1030      | 955  | 980  |
| 2     | 724      | 702 | 710  | 425   | 396 | 409  | 618    | 461 | 497  | 1100      | 1020 | 1040 |
| 3     | 731      | 703 | 716  | 416   | 396 | 404  | 524    | 461 | 486  | 1110      | 1060 | 1080 |
| 4     | 737      | 718 | 727  | 407   | 381 | 397  | 531    | 520 | 525  | 1120      | 1080 | 1100 |
| 5     | 730      | 619 | 708  | 386   | 366 | 378  | 531    | 520 | 527  | 1130      | 1060 | 1100 |
| 6     | 621      | 512 | 586  | 366   | 352 | 359  | 531    | 493 | 513  | 1090      | 1050 | 1070 |
| 7     | 525      | 458 | 508  | 354   | 342 | 348  | 503    | 475 | 494  | 1110      | 1020 | 1060 |
| 8     | 519      | 479 | 502  | 377   | 340 | 354  | 504    | 485 | 496  | 1040      | 975  | 1010 |
| 9     | 483      | 451 | 469  | ---   | --- | ---  | 516    | 445 | 479  | 999       | 965  | 983  |
| 10    | 477      | 441 | 458  | ---   | --- | ---  | 542    | 498 | 521  | 972       | 934  | 955  |
| 11    | 464      | 430 | 446  | ---   | --- | ---  | 534    | 507 | 516  | 936       | 893  | 917  |
| 12    | 462      | 433 | 445  | 712   | 513 | 598  | 521    | 493 | 510  | 893       | 858  | 879  |
| 13    | 494      | 427 | 441  | 623   | 523 | 548  | 496    | 464 | 488  | 891       | 827  | 859  |
| 14    | 849      | 473 | 534  | 582   | 486 | 511  | ---    | --- | ---  | 936       | 858  | 886  |
| 15    | 593      | 469 | 499  | 535   | 445 | 492  | ---    | --- | ---  | 885       | 721  | 833  |
| 16    | 503      | 459 | 483  | 521   | 460 | 483  | 609    | 496 | 586  | 882       | 839  | 852  |
| 17    | 459      | 442 | 451  | 502   | 454 | 469  | 582    | 557 | 567  | 847       | 793  | 821  |
| 18    | 466      | 449 | 457  | 502   | 455 | 476  | 583    | 541 | 558  | 793       | 679  | 735  |
| 19    | 457      | 442 | 449  | 533   | 447 | 477  | 583    | 554 | 567  | 737       | 679  | 704  |
| 20    | 447      | 418 | 431  | 492   | 408 | 460  | 676    | 572 | 624  | 792       | 735  | 765  |
| 21    | 466      | 422 | 436  | 463   | 401 | 419  | 937    | 591 | 641  | 824       | 792  | 799  |
| 22    | 469      | 406 | 434  | 530   | 418 | 442  | 614    | 592 | 605  | 868       | 824  | 840  |
| 23    | 412      | 386 | 400  | 788   | 482 | 630  | 701    | 584 | 617  | 913       | 868  | 887  |
| 24    | 407      | 371 | 386  | 535   | 478 | 495  | 916    | 637 | 714  | 924       | 888  | 911  |
| 25    | 398      | 374 | 385  | 526   | 463 | 479  | 839    | 656 | 729  | 904       | 881  | 887  |
| 26    | 391      | 371 | 381  | 495   | 460 | 477  | 873    | 779 | 838  | 930       | 900  | 912  |
| 27    | 383      | 364 | 374  | 485   | 425 | 456  | 853    | 740 | 767  | 946       | 876  | 923  |
| 28    | 387      | 364 | 373  | 510   | 473 | 493  | 1000   | 845 | 890  | 940       | 904  | 923  |
| 29    | 388      | 361 | 374  | 498   | 477 | 487  | 888    | 763 | 844  | 929       | 863  | 887  |
| 30    | 399      | 369 | 380  | 501   | 488 | 492  | 1020   | 628 | 852  | 889       | 858  | 874  |
| 31    | ---      | --- | ---  | 508   | 491 | 502  | 1000   | 945 | 975  | ---       | ---  | ---  |
| MONTH | 849      | 361 | 487  | ---   | --- | ---  | ---    | --- | ---  | 1130      | 679  | 916  |

07109500 ARKANSAS RIVER NEAR AVONDALE, CO--Continued

pH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DAY   | MAX      | MIN | MEAN | MAX      | MIN | MEAN | MAX      | MIN | MEAN | MAX     | MIN | MEAN |
|-------|----------|-----|------|----------|-----|------|----------|-----|------|---------|-----|------|
|       | OCTOBER  |     |      | NOVEMBER |     |      | DECEMBER |     |      | JANUARY |     |      |
| 1     | 8.7      | 8.3 | 8.6  | 8.3      | 7.6 | 8.0  | 8.3      | 7.6 | 8.1  | 8.0     | 7.2 | 7.5  |
| 2     | 8.7      | 8.0 | 8.4  | 8.2      | 7.7 | 8.0  | 8.3      | 7.5 | 8.0  | 8.3     | 7.2 | 7.4  |
| 3     | 8.7      | 8.0 | 8.4  | 8.3      | 7.7 | 8.1  | 8.7      | 7.7 | 8.2  | 8.4     | 7.2 | 7.7  |
| 4     | 8.7      | 8.0 | 8.4  | 8.3      | 7.8 | 8.0  | 8.4      | 7.8 | 8.1  | 8.4     | 7.3 | 7.8  |
| 5     | 8.7      | 8.0 | 8.4  | 8.3      | 7.9 | 8.1  | 8.5      | 7.6 | 8.1  | 8.0     | 7.2 | 7.5  |
| 6     | 8.7      | 7.8 | 8.3  | 8.3      | 7.9 | 8.1  | 8.5      | 7.7 | 8.2  | 8.4     | 7.2 | 7.5  |
| 7     | 8.2      | 7.9 | 8.1  | 8.3      | 7.9 | 8.1  | 8.6      | 7.7 | 8.3  | 8.4     | 7.2 | 7.8  |
| 8     | 8.3      | 7.8 | 8.1  | 8.5      | 7.8 | 8.1  | 8.9      | 7.9 | 8.4  | 8.3     | 7.2 | 7.7  |
| 9     | 8.3      | 7.7 | 8.0  | 8.4      | 7.9 | 8.1  | 8.9      | 8.0 | 8.5  | 8.3     | 7.3 | 7.8  |
| 10    | 8.3      | 7.7 | 8.0  | 8.3      | 7.9 | 8.0  | 8.8      | 7.7 | 8.5  | 8.3     | 7.3 | 7.7  |
| 11    | 8.2      | 7.5 | 7.9  | 8.3      | 7.8 | 8.0  | 8.8      | 7.8 | 8.4  | 8.3     | 7.5 | 7.9  |
| 12    | 8.3      | 7.6 | 8.0  | 8.2      | 7.9 | 8.1  | 8.7      | 7.8 | 8.3  | 8.1     | 7.5 | 7.8  |
| 13    | 8.4      | 7.7 | 8.1  | 8.4      | 7.8 | 8.0  | 8.1      | 7.6 | 7.9  | 8.3     | 7.3 | 7.9  |
| 14    | 8.5      | 7.5 | 8.2  | 8.3      | 7.8 | 8.0  | 8.1      | 7.6 | 7.9  | 8.2     | 7.5 | 8.0  |
| 15    | 8.5      | 7.6 | 8.2  | 8.1      | 7.5 | 7.9  | 8.3      | 7.7 | 8.0  | 8.2     | 7.6 | 7.9  |
| 16    | 8.4      | 7.8 | 8.1  | 8.3      | 7.7 | 8.1  | 8.3      | 7.6 | 7.9  | 8.4     | 7.6 | 8.0  |
| 17    | 8.5      | 7.6 | 8.1  | 8.4      | 7.7 | 8.1  | 8.1      | 7.5 | 7.8  | 8.4     | 7.3 | 8.0  |
| 18    | 8.6      | 7.6 | 8.2  | 8.4      | 7.6 | 8.1  | 8.4      | 7.5 | 8.0  | 8.3     | 7.3 | 7.9  |
| 19    | 8.4      | 7.8 | 8.1  | 8.5      | 7.9 | 8.2  | 8.3      | 7.5 | 7.9  | 8.4     | 7.6 | 8.0  |
| 20    | 8.1      | 7.7 | 8.0  | 8.6      | 7.7 | 8.2  | 8.5      | 7.6 | 8.0  | 8.4     | 8.0 | 8.1  |
| 21    | 8.1      | 7.5 | 7.9  | 8.5      | 7.7 | 8.2  | 8.2      | 7.5 | 7.8  | 8.6     | 8.3 | 8.4  |
| 22    | 8.2      | 7.6 | 8.0  | 8.5      | 7.8 | 8.2  | 8.3      | 7.6 | 7.9  | 8.6     | 8.1 | 8.4  |
| 23    | 8.2      | 7.6 | 8.0  | 8.7      | 8.0 | 8.4  | 8.4      | 7.7 | 8.0  | ---     | --- | ---  |
| 24    | 8.2      | 7.6 | 8.0  | 8.5      | 8.0 | 8.3  | 8.3      | 7.5 | 7.9  | ---     | --- | ---  |
| 25    | 8.3      | 7.5 | 8.0  | 8.5      | 7.9 | 8.3  | 8.3      | 7.6 | 7.9  | ---     | --- | ---  |
| 26    | 8.3      | 7.8 | 8.0  | 8.4      | 8.0 | 8.2  | 8.4      | 7.6 | 7.9  | ---     | --- | ---  |
| 27    | 8.5      | 7.7 | 8.0  | 8.5      | 7.9 | 8.3  | 8.2      | 7.5 | 7.8  | ---     | --- | ---  |
| 28    | 8.4      | 7.8 | 8.1  | 8.4      | 7.8 | 8.2  | 8.4      | 7.5 | 7.9  | ---     | --- | ---  |
| 29    | 8.4      | 7.8 | 8.1  | 8.7      | 7.9 | 8.4  | 8.4      | 7.5 | 8.0  | ---     | --- | ---  |
| 30    | 8.5      | 7.6 | 8.1  | 8.4      | 7.8 | 8.2  | 8.3      | 7.5 | 7.9  | 8.3     | 7.5 | 7.9  |
| 31    | 8.4      | 7.6 | 8.0  | ---      | --- | ---  | 8.2      | 7.5 | 7.8  | 8.5     | 7.8 | 8.3  |
| MONTH | 8.7      | 7.5 | 8.1  | 8.7      | 7.5 | 8.1  | 8.9      | 7.5 | 8.0  | ---     | --- | ---  |
| DAY   | MAX      | MIN | MEAN | MAX      | MIN | MEAN | MAX      | MIN | MEAN | MAX     | MIN | MEAN |
|       | FEBRUARY |     |      | MARCH    |     |      | APRIL    |     |      | MAY     |     |      |
| 1     | 8.4      | 7.9 | 8.2  | 8.5      | 7.8 | 8.1  | 8.3      | 8.0 | 8.1  | 9.0     | 8.5 | 8.7  |
| 2     | 8.2      | 7.9 | 8.0  | 8.5      | 8.0 | 8.3  | 8.2      | 7.8 | 8.1  | 8.8     | 8.3 | 8.5  |
| 3     | 8.2      | 7.8 | 8.0  | 8.5      | 8.2 | 8.3  | 8.2      | 7.8 | 8.0  | 8.7     | 8.0 | 8.4  |
| 4     | 8.5      | 7.7 | 8.0  | 8.4      | 8.1 | 8.2  | 8.1      | 7.7 | 8.0  | 8.9     | 8.1 | 8.4  |
| 5     | 8.5      | 7.7 | 8.3  | 8.4      | 8.1 | 8.3  | 8.3      | 7.7 | 8.0  | 8.8     | 8.1 | 8.4  |
| 6     | 8.5      | 7.5 | 8.0  | 8.4      | 8.1 | 8.2  | 8.3      | 8.0 | 8.1  | 8.9     | 8.1 | 8.4  |
| 7     | 8.1      | 7.5 | 7.8  | 8.3      | 8.1 | 8.2  | 8.3      | 8.0 | 8.2  | 8.9     | 8.0 | 8.4  |
| 8     | 8.1      | 7.5 | 7.8  | 8.3      | 8.0 | 8.2  | 8.3      | 8.1 | 8.2  | 8.8     | 8.0 | 8.4  |
| 9     | 8.2      | 7.7 | 7.9  | 8.3      | 8.0 | 8.1  | 8.3      | 8.0 | 8.2  | 8.7     | 8.1 | 8.4  |
| 10    | 8.3      | 7.5 | 7.9  | 8.3      | 8.0 | 8.1  | 8.3      | 7.9 | 8.2  | 8.5     | 8.1 | 8.3  |
| 11    | 8.2      | 7.5 | 7.9  | 8.3      | 7.9 | 8.1  | 8.2      | 7.9 | 8.1  | 8.5     | 8.1 | 8.2  |
| 12    | 8.3      | 7.5 | 7.9  | 8.3      | 7.9 | 8.1  | 8.4      | 8.0 | 8.2  | 8.5     | 8.0 | 8.3  |
| 13    | 8.2      | 7.5 | 7.9  | 8.2      | 7.8 | 8.0  | 8.3      | 8.0 | 8.1  | 8.5     | 7.9 | 8.3  |
| 14    | 8.2      | 7.6 | 8.0  | 8.0      | 7.8 | 7.9  | 8.3      | 7.9 | 8.1  | 8.4     | 7.7 | 8.0  |
| 15    | 8.3      | 7.5 | 7.9  | 8.1      | 7.8 | 8.0  | 8.5      | 7.8 | 8.2  | 8.2     | 7.3 | 7.8  |
| 16    | 8.3      | 7.5 | 7.9  | 8.1      | 7.9 | 8.0  | 8.5      | 8.1 | 8.3  | 8.1     | 7.7 | 7.9  |
| 17    | 8.4      | 7.5 | 8.0  | 8.1      | 7.9 | 8.0  | 8.5      | 7.9 | 8.3  | 8.4     | 7.6 | 8.0  |
| 18    | 8.5      | 7.7 | 8.1  | 8.1      | 7.8 | 8.0  | 8.6      | 8.1 | 8.3  | 8.3     | 7.6 | 8.0  |
| 19    | 8.4      | 7.7 | 8.1  | 8.1      | 7.9 | 8.0  | 8.5      | 8.1 | 8.3  | 8.2     | 7.5 | 7.9  |
| 20    | 8.6      | 7.9 | 8.2  | 8.1      | 7.9 | 8.0  | 8.5      | 8.0 | 8.3  | 8.3     | 7.5 | 7.9  |
| 21    | 8.5      | 7.9 | 8.2  | 8.1      | 7.9 | 8.0  | 8.6      | 8.1 | 8.4  | 8.3     | 7.6 | 8.0  |
| 22    | 8.5      | 7.8 | 8.2  | 8.1      | 7.9 | 8.0  | 8.7      | 8.1 | 8.4  | 8.4     | 7.5 | 8.0  |
| 23    | 8.2      | 7.5 | 7.8  | 8.2      | 7.9 | 8.0  | 8.6      | 8.0 | 8.3  | 8.4     | 7.3 | 8.0  |
| 24    | 8.4      | 7.5 | 7.9  | 8.2      | 7.9 | 8.1  | 8.7      | 8.1 | 8.4  | 8.6     | 7.3 | 8.2  |
| 25    | 8.5      | 7.5 | 8.0  | 8.2      | 7.9 | 8.1  | 8.7      | 8.1 | 8.4  | 8.6     | 7.7 | 8.2  |
| 26    | 8.6      | 7.8 | 8.2  | 8.3      | 7.9 | 8.1  | 8.7      | 8.1 | 8.4  | 8.5     | 7.8 | 8.2  |
| 27    | 8.6      | 7.6 | 8.2  | 8.3      | 8.0 | 8.1  | 8.8      | 8.1 | 8.4  | 8.4     | 7.6 | 8.2  |
| 28    | 8.5      | 7.5 | 8.0  | 8.3      | 7.9 | 8.2  | ---      | --- | ---  | 8.4     | 7.7 | 8.1  |
| 29    | 8.5      | 7.5 | 8.0  | 8.3      | 7.9 | 8.1  | ---      | --- | ---  | 8.5     | 7.8 | 8.1  |
| 30    | ---      | --- | ---  | 8.3      | 7.9 | 8.1  | ---      | --- | ---  | 8.5     | 7.8 | 8.1  |
| 31    | ---      | --- | ---  | 8.3      | 8.0 | 8.2  | ---      | --- | ---  | 8.4     | 7.6 | 8.2  |
| MONTH | 8.6      | 7.5 | 8.0  | 8.5      | 7.8 | 8.1  | ---      | --- | ---  | 9.0     | 7.3 | 8.2  |

## ARKANSAS RIVER BASIN

## 07109500 ARKANSAS RIVER NEAR AVONDALE, CO--Continued

pH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DAY   | MAX | MIN | MEAN |
|-------|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|------|
|       |     |     |      |     |     |      |     |     |      |     |     |      |
| 1     | 8.3 | 7.6 | 8.0  | 8.7 | 8.2 | 8.5  | 8.2 | 7.8 | 7.9  | 8.6 | 8.5 | 8.6  |
| 2     | 8.2 | 7.6 | 8.0  | 8.7 | 8.1 | 8.5  | 8.2 | 7.9 | 8.0  | 8.6 | 8.4 | 8.5  |
| 3     | 8.2 | 7.6 | 8.0  | 8.7 | 7.8 | 8.4  | 8.0 | 7.8 | 7.9  | 8.7 | 8.5 | 8.6  |
| 4     | 8.4 | 7.8 | 8.1  | 8.8 | 8.2 | 8.5  | 8.2 | 7.8 | 8.0  | 8.7 | 8.5 | 8.6  |
| 5     | 8.5 | 7.8 | 8.2  | 8.9 | 8.3 | 8.6  | 8.2 | 7.9 | 8.0  | 8.7 | 8.5 | 8.6  |
| 6     | 8.5 | 7.7 | 8.3  | --- | --- | ---  | 8.4 | 7.9 | 8.1  | 8.8 | 8.5 | 8.6  |
| 7     | 8.5 | 7.7 | 8.2  | --- | --- | ---  | 8.3 | 7.9 | 8.1  | 8.6 | 8.2 | 8.4  |
| 8     | 8.5 | 7.9 | 8.3  | --- | --- | ---  | 8.3 | 7.8 | 8.1  | 8.3 | 8.0 | 8.2  |
| 9     | 8.5 | 7.6 | 8.2  | --- | --- | ---  | 8.3 | 8.0 | 8.2  | 8.2 | 7.8 | 8.0  |
| 10    | 8.4 | 7.8 | 8.2  | --- | --- | ---  | 8.4 | 7.8 | 8.1  | 8.0 | 7.5 | 7.8  |
| 11    | 8.4 | 7.7 | 8.2  | --- | --- | ---  | 8.3 | 8.0 | 8.1  | 8.0 | 7.7 | 7.9  |
| 12    | 8.4 | 7.8 | 8.2  | --- | --- | ---  | 8.4 | 8.0 | 8.2  | 8.3 | 7.9 | 8.1  |
| 13    | 8.4 | 7.5 | 8.1  | 7.9 | 7.7 | 7.8  | 8.4 | 7.9 | 8.2  | 8.4 | 7.9 | 8.2  |
| 14    | 8.4 | 7.6 | 8.2  | 7.9 | 7.8 | 7.8  | 8.4 | 7.9 | 8.2  | 8.3 | 8.0 | 8.2  |
| 15    | 8.4 | 7.8 | 8.3  | 7.9 | 7.6 | 7.8  | 8.6 | 8.0 | 8.3  | 8.4 | 8.0 | 8.2  |
| 16    | 8.5 | 7.9 | 8.3  | 7.9 | 7.7 | 7.8  | 8.7 | 8.2 | 8.4  | 8.5 | 8.1 | 8.3  |
| 17    | 8.5 | 7.5 | 8.3  | 7.9 | 7.6 | 7.8  | 8.7 | 8.2 | 8.5  | 8.6 | 8.1 | 8.4  |
| 18    | 8.4 | 7.4 | 8.2  | 7.8 | 7.5 | 7.7  | 8.7 | 8.3 | 8.5  | 8.6 | 8.0 | 8.4  |
| 19    | 8.5 | 7.6 | 8.2  | 7.9 | 7.4 | 7.7  | 8.7 | 7.9 | 8.5  | 8.5 | 8.0 | 8.4  |
| 20    | 8.4 | 7.5 | 8.0  | 7.9 | 7.6 | 7.8  | 8.6 | 8.3 | 8.5  | 8.5 | 8.1 | 8.4  |
| 21    | 8.1 | 7.6 | 7.8  | 7.9 | 7.7 | 7.8  | 8.6 | 8.2 | 8.5  | 8.5 | 8.2 | 8.4  |
| 22    | 8.3 | 7.6 | 8.0  | 7.9 | 7.6 | 7.8  | 8.6 | 8.4 | 8.5  | 8.5 | 8.2 | 8.4  |
| 23    | 8.4 | 7.8 | 8.1  | 7.9 | 7.4 | 7.7  | 8.6 | 8.3 | 8.5  | 8.5 | 8.2 | 8.4  |
| 24    | 8.5 | 7.7 | 8.2  | 7.9 | 7.7 | 7.8  | 8.5 | 8.2 | 8.4  | 8.5 | 7.9 | 8.3  |
| 25    | 8.6 | 7.9 | 8.4  | 7.9 | 7.7 | 7.8  | 8.5 | 8.4 | 8.5  | 8.4 | 8.1 | 8.3  |
| 26    | 8.6 | 8.0 | 8.3  | 7.9 | 7.6 | 7.8  | 8.5 | 8.3 | 8.5  | 8.3 | 7.9 | 8.2  |
| 27    | 8.6 | 7.7 | 8.3  | 7.9 | 7.7 | 7.8  | 8.6 | 8.4 | 8.5  | 8.4 | 8.0 | 8.2  |
| 28    | 8.6 | 8.1 | 8.5  | 7.9 | 7.6 | 7.8  | 8.5 | 8.2 | 8.4  | 8.4 | 7.9 | 8.0  |
| 29    | 8.7 | 8.1 | 8.5  | 7.9 | 7.6 | 7.8  | 8.6 | 8.4 | 8.5  | 8.5 | 7.9 | 8.2  |
| 30    | 8.7 | 8.0 | 8.4  | 7.9 | 7.6 | 7.8  | 8.6 | 8.3 | 8.5  | 8.4 | 7.7 | 8.2  |
| 31    | --- | --- | ---  | 8.0 | 7.8 | 7.9  | 8.6 | 8.4 | 8.5  | --- | --- | ---  |
| MONTH | 8.7 | 7.4 | 8.2  | --- | --- | ---  | 8.7 | 7.8 | 8.3  | 8.8 | 7.5 | 8.3  |

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DAY   | MAX  | MIN  | MEAN | MAX  | MIN | MEAN | MAX  | MIN | MEAN | MAX | MIN | MEAN |
|-------|------|------|------|------|-----|------|------|-----|------|-----|-----|------|
|       |      |      |      |      |     |      |      |     |      |     |     |      |
| 1     | 18.0 | 15.0 | 16.7 | 10.4 | 8.5 | 9.8  | 10.3 | 7.3 | 8.9  | 3.9 | 2.1 | 2.9  |
| 2     | 18.1 | 14.5 | 16.5 | 8.5  | 6.2 | 6.9  | 10.0 | 7.0 | 8.6  | 3.0 | .6  | 1.8  |
| 3     | 18.2 | 14.6 | 16.5 | 9.4  | 5.9 | 7.5  | 9.0  | 6.7 | 8.0  | 4.0 | .3  | 1.9  |
| 4     | 17.9 | 15.4 | 16.2 | 9.2  | 6.0 | 7.8  | 8.9  | 5.6 | 7.3  | 4.3 | 2.1 | 3.3  |
| 5     | 16.7 | 14.3 | 15.5 | 10.0 | 5.9 | 8.3  | 8.7  | 6.5 | 7.4  | 3.0 | .9  | 1.7  |
| 6     | 16.0 | 13.0 | 14.7 | 10.0 | 8.1 | 9.1  | 7.8  | 4.7 | 6.3  | --- | --- | ---  |
| 7     | 16.3 | 11.6 | 14.0 | 9.8  | 6.8 | 8.5  | 6.4  | 4.2 | 5.1  | 2.5 | .6  | 1.9  |
| 8     | 16.6 | 12.4 | 14.7 | 10.8 | 6.8 | 8.9  | 5.1  | 3.3 | 4.3  | 5.3 | 1.0 | 3.0  |
| 9     | 15.7 | 12.0 | 14.1 | 11.8 | 8.0 | 10.0 | 3.3  | .6  | 2.0  | 5.9 | 2.4 | 4.3  |
| 10    | 17.1 | 11.9 | 14.5 | 10.8 | 7.2 | 8.7  | 5.3  | 1.1 | 3.1  | 5.7 | 2.6 | 4.3  |
| 11    | 17.3 | 12.3 | 15.0 | 9.6  | 5.7 | 7.7  | 6.4  | 3.1 | 4.9  | 5.1 | 2.0 | 3.8  |
| 12    | 17.1 | 13.0 | 15.3 | 11.0 | 7.9 | 9.6  | 7.2  | 4.6 | 5.9  | 6.4 | 2.2 | 4.4  |
| 13    | 16.1 | 12.9 | 14.7 | 10.2 | 8.1 | 9.3  | 8.3  | 5.9 | 7.2  | 7.0 | 3.0 | 5.2  |
| 14    | 15.6 | 11.0 | 13.5 | 11.4 | 7.5 | 9.6  | 7.3  | 5.0 | 6.3  | 6.7 | 3.7 | 5.4  |
| 15    | 16.4 | 11.4 | 14.1 | 11.2 | 8.0 | 9.8  | 6.2  | 3.6 | 5.1  | 6.2 | 3.1 | 4.9  |
| 16    | 16.4 | 12.1 | 14.4 | 11.3 | 7.8 | 9.8  | 6.1  | 3.7 | 5.0  | 8.2 | 4.7 | 6.4  |
| 17    | 16.2 | 12.5 | 14.5 | 11.3 | 8.4 | 10.0 | 5.3  | 3.8 | 4.5  | 7.4 | 2.2 | 5.6  |
| 18    | 16.1 | 11.7 | 14.1 | 10.6 | 7.5 | 9.3  | 5.3  | 3.6 | 4.3  | --- | --- | ---  |
| 19    | ---  | ---  | ---  | 10.4 | 7.5 | 9.1  | 4.0  | 1.6 | 2.9  | --- | --- | ---  |
| 20    | 14.4 | 9.9  | 12.3 | 9.7  | 7.0 | 8.5  | 3.6  | 1.0 | 2.5  | 4.3 | 1.4 | 3.0  |
| 21    | 14.2 | 10.3 | 12.4 | 9.2  | 6.2 | 7.9  | 3.3  | .8  | 2.2  | 5.4 | 1.6 | 3.5  |
| 22    | 13.3 | 10.5 | 12.0 | 10.3 | 7.4 | 8.8  | 3.3  | 2.1 | 2.8  | 4.8 | 1.9 | 3.7  |
| 23    | 12.7 | 8.2  | 10.4 | 10.3 | 7.4 | 8.8  | 3.0  | .3  | 1.7  | 2.8 | .3  | 1.4  |
| 24    | 12.1 | 8.3  | 10.3 | 9.0  | 6.6 | 8.0  | 2.2  | .3  | 1.5  | 2.7 | .2  | 1.8  |
| 25    | 12.8 | 8.5  | 10.8 | 11.0 | 7.2 | 9.1  | 3.4  | .2  | 2.0  | 4.6 | .9  | 2.6  |
| 26    | 13.0 | 9.3  | 11.2 | 10.3 | 7.6 | 9.1  | 4.5  | 1.2 | 2.8  | --- | --- | ---  |
| 27    | 13.4 | 9.8  | 11.7 | 9.5  | 6.7 | 7.7  | 3.3  | .5  | 2.1  | --- | --- | ---  |
| 28    | 12.1 | 8.8  | 10.7 | 7.1  | 4.5 | 5.9  | 2.4  | .2  | 1.4  | 4.4 | .2  | 2.0  |
| 29    | 11.1 | 8.8  | 10.1 | 8.7  | 4.6 | 6.7  | 3.7  | 1.1 | 2.3  | 2.7 | .2  | 1.6  |
| 30    | 12.1 | 8.7  | 10.5 | 10.2 | 6.6 | 8.4  | 3.0  | .4  | 1.7  | 1.5 | .0  | .2   |
| 31    | 11.4 | 8.7  | 10.1 | ---  | --- | ---  | 4.3  | 1.8 | 2.9  | .2  | .0  | .0   |
| MONTH | ---  | ---  | ---  | 11.8 | 4.5 | 8.6  | 10.3 | .2  | 4.3  | --- | --- | ---  |

07109500 ARKANSAS RIVER NEAR AVONDALE, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DAY   | FEBRUARY |      |      | MARCH |      |      | APRIL  |      |      | MAY       |      |      |
|-------|----------|------|------|-------|------|------|--------|------|------|-----------|------|------|
|       | MAX      | MIN  | MEAN | MAX   | MIN  | MEAN | MAX    | MIN  | MEAN | MAX       | MIN  | MEAN |
| 1     | .3       | .0   | .0   | 7.4   | 2.2  | 4.9  | 12.6   | 5.8  | 9.3  | 16.9      | 9.6  | 13.2 |
| 2     | .2       | .0   | .0   | 8.3   | 3.0  | 5.8  | 11.7   | 6.3  | 9.4  | 17.1      | 10.4 | 13.9 |
| 3     | .0       | .0   | .0   | 8.4   | 3.0  | 6.0  | 10.0   | 6.8  | 8.0  | 16.4      | 10.7 | 13.8 |
| 4     | 1.1      | .0   | .1   | 9.4   | 4.7  | 7.3  | 7.9    | 6.2  | 7.0  | 18.5      | 10.8 | 14.6 |
| 5     | 5.4      | 1.1  | 3.1  | 9.6   | 5.1  | 7.6  | 9.2    | 4.3  | 6.6  | 17.3      | 12.8 | 15.1 |
| 6     | 5.5      | 2.1  | 3.7  | 8.1   | 3.2  | 4.9  | 11.8   | 5.1  | 8.5  | 19.8      | 12.9 | 16.1 |
| 7     | 7.4      | 3.6  | 5.4  | 6.2   | 1.0  | 3.8  | 10.9   | 6.6  | 8.8  | 20.0      | 14.2 | 16.8 |
| 8     | 6.3      | 3.8  | 5.1  | 7.9   | 2.6  | 5.3  | 13.3   | 7.0  | 10.0 | 19.7      | 13.0 | 16.3 |
| 9     | 7.8      | 2.9  | 5.4  | 9.3   | 3.4  | 6.4  | 13.6   | 7.6  | 10.7 | 18.5      | 12.7 | 15.9 |
| 10    | 6.8      | 3.9  | 5.5  | 10.2  | 4.9  | 7.8  | 12.1   | 7.6  | 10.2 | 16.5      | 11.2 | 14.0 |
| 11    | 5.9      | 2.2  | 4.3  | 12.0  | 6.6  | 9.3  | 11.8   | 7.4  | 9.8  | 16.3      | 11.2 | 13.8 |
| 12    | 6.0      | 1.9  | 4.1  | 11.8  | 7.2  | 9.7  | 12.9   | 7.1  | 9.9  | 15.6      | 10.8 | 13.2 |
| 13    | 6.8      | 1.9  | 4.5  | 10.2  | 6.0  | 8.4  | 11.4   | 7.4  | 9.4  | 16.4      | 10.9 | 13.5 |
| 14    | 7.7      | 2.9  | 5.4  | 8.5   | 5.5  | 6.1  | 11.2   | 6.1  | 8.4  | 16.2      | 11.3 | 13.6 |
| 15    | 7.4      | 3.6  | 5.6  | 9.8   | 4.6  | 7.1  | 12.7   | 6.2  | 9.4  | 15.6      | 10.0 | 12.6 |
| 16    | 6.7      | 2.3  | 4.8  | 9.3   | 5.2  | 7.5  | 12.8   | 7.1  | 9.9  | 15.7      | 10.1 | 12.6 |
| 17    | 8.3      | 3.4  | 6.0  | 8.5   | 6.0  | 7.1  | 13.6   | 7.3  | 10.6 | 15.4      | 10.3 | 12.6 |
| 18    | 7.3      | 4.6  | 6.2  | 7.4   | 5.1  | 6.2  | 14.4   | 8.4  | 11.4 | 14.9      | 10.3 | 12.2 |
| 19    | 7.6      | 4.0  | 5.9  | 9.8   | 3.8  | 6.8  | 12.7   | 7.3  | 10.4 | 14.7      | 10.4 | 12.2 |
| 20    | 9.6      | 4.9  | 7.2  | 10.3  | 4.4  | 7.5  | 11.8   | 7.9  | 9.7  | 15.0      | 10.5 | 12.2 |
| 21    | 10.8     | 6.2  | 8.6  | 11.2  | 5.0  | 8.3  | 13.5   | 7.3  | 10.2 | 15.0      | 10.5 | 12.3 |
| 22    | 9.6      | 7.3  | 8.4  | 11.1  | 5.7  | 8.6  | 14.8   | 8.5  | 11.3 | 15.3      | 10.6 | 12.7 |
| 23    | 8.5      | 5.0  | 6.9  | 10.8  | 6.0  | 8.5  | 16.2   | 8.3  | 12.1 | 15.5      | 11.0 | 13.0 |
| 24    | 7.7      | 3.4  | 5.6  | 9.0   | 4.7  | 6.0  | 16.2   | 10.1 | 13.3 | 14.5      | 11.4 | 12.7 |
| 25    | 9.1      | 4.1  | 6.6  | 5.9   | 2.1  | 4.2  | 15.9   | 10.1 | 13.1 | 13.0      | 11.8 | 12.3 |
| 26    | 7.6      | 3.5  | 4.6  | 9.3   | 2.7  | 6.0  | 16.3   | 9.2  | 12.7 | 13.9      | 12.1 | 12.9 |
| 27    | 5.3      | 1.6  | 3.6  | 10.9  | 4.4  | 7.8  | 15.7   | 10.5 | 13.2 | 16.3      | 11.6 | 13.7 |
| 28    | 4.2      | 1.6  | 3.0  | 11.1  | 5.6  | 8.6  | 13.2   | 8.4  | 9.9  | 15.1      | 11.8 | 13.2 |
| 29    | 6.3      | 1.4  | 3.9  | 11.8  | 6.3  | 9.1  | 14.8   | 7.3  | 10.8 | 17.5      | 11.9 | 14.3 |
| 30    | ---      | ---  | ---  | 11.2  | 7.0  | 9.0  | 15.5   | 8.6  | 12.1 | 18.2      | 12.7 | 15.3 |
| 31    | ---      | ---  | ---  | 10.8  | 5.5  | 8.4  | ---    | ---  | ---  | 18.7      | 12.5 | 15.5 |
| MONTH | 10.8     | .0   | 4.6  | 12.0  | 1.0  | 7.1  | 16.3   | 4.3  | 10.2 | 20.0      | 9.6  | 13.7 |
|       | JUNE     |      |      | JULY  |      |      | AUGUST |      |      | SEPTEMBER |      |      |
| 1     | 19.9     | 13.3 | 16.5 | 22.0  | 16.5 | 19.1 | 24.3   | 18.4 | 21.3 | 26.1      | 20.7 | 23.5 |
| 2     | 19.9     | 13.9 | 17.1 | 22.9  | 16.4 | 19.5 | 22.6   | 18.9 | 21.0 | 23.8      | 20.5 | 22.4 |
| 3     | 20.8     | 13.9 | 17.5 | 23.0  | 16.7 | 19.8 | 22.6   | 18.7 | 20.6 | 26.7      | 19.2 | 22.8 |
| 4     | 20.3     | 14.6 | 17.7 | 23.2  | 16.9 | 20.0 | 23.8   | 18.7 | 21.2 | 26.9      | 20.5 | 23.7 |
| 5     | 19.0     | 14.2 | 16.8 | 21.8  | 17.1 | 19.5 | 23.8   | 17.9 | 20.9 | 27.1      | 20.1 | 23.6 |
| 6     | 18.4     | 13.1 | 15.6 | 22.8  | 17.0 | 19.7 | 24.7   | 17.8 | 21.2 | 24.1      | 20.7 | 22.4 |
| 7     | 18.5     | 13.0 | 15.6 | 22.3  | 16.9 | 19.5 | 23.9   | 18.0 | 21.0 | 25.8      | 19.0 | 22.3 |
| 8     | 18.4     | 13.1 | 15.6 | 19.5  | 17.2 | 18.3 | 23.4   | 18.7 | 21.1 | 26.5      | 19.9 | 23.0 |
| 9     | 17.6     | 13.8 | 15.4 | 21.4  | 17.3 | 18.9 | 23.7   | 18.4 | 21.1 | 24.3      | 20.3 | 22.1 |
| 10    | 17.3     | 13.8 | 15.3 | ---   | ---  | ---  | 24.3   | 18.5 | 21.3 | 24.0      | 16.9 | 20.4 |
| 11    | 17.9     | 14.0 | 15.5 | ---   | ---  | ---  | 24.3   | 18.3 | 21.3 | 24.0      | 17.4 | 20.7 |
| 12    | 17.9     | 14.2 | 15.8 | 20.9  | ---  | ---  | 24.8   | 18.3 | 21.6 | 21.3      | 17.8 | 18.5 |
| 13    | 17.8     | 14.6 | 15.8 | 21.7  | 17.6 | 19.5 | 23.9   | 18.4 | 21.3 | 22.1      | 17.0 | 19.2 |
| 14    | 17.8     | 14.5 | 16.0 | 22.9  | 17.3 | 19.9 | ---    | 19.0 | ---  | 20.4      | 17.5 | 18.9 |
| 15    | 18.4     | 15.4 | 16.6 | 22.7  | 17.5 | 20.2 | 23.7   | ---  | ---  | 21.2      | 17.0 | 19.0 |
| 16    | 19.8     | 15.2 | 17.2 | 24.3  | 18.0 | 21.2 | 23.6   | 19.1 | 21.3 | 21.9      | 17.4 | 19.4 |
| 17    | 20.1     | 15.3 | 17.3 | 25.0  | 18.5 | 21.6 | 24.2   | 18.8 | 21.4 | 22.0      | 17.1 | 19.4 |
| 18    | 20.8     | 15.4 | 17.7 | 24.2  | 19.1 | 21.8 | 24.3   | 19.3 | 21.7 | 18.7      | 16.4 | 17.4 |
| 19    | 20.8     | 15.2 | 17.8 | 24.8  | 18.6 | 21.8 | 24.3   | 19.3 | 21.2 | 18.0      | 13.7 | 16.0 |
| 20    | 21.4     | 16.0 | 18.4 | 25.0  | 19.3 | 22.1 | 24.5   | 19.4 | 21.8 | 19.6      | 14.4 | 16.9 |
| 21    | 19.3     | 16.0 | 17.7 | 24.3  | 18.4 | 21.4 | 24.6   | 19.9 | 22.2 | 20.9      | 14.1 | 17.5 |
| 22    | 18.3     | 16.3 | 17.2 | 24.4  | 18.8 | 21.7 | 22.2   | 20.5 | 21.2 | 21.5      | 15.4 | 18.4 |
| 23    | 20.2     | 15.4 | 17.5 | 24.4  | 17.2 | 21.1 | 24.7   | 20.3 | 22.2 | 21.0      | 16.1 | 18.5 |
| 24    | 20.9     | 16.4 | 18.2 | 22.7  | 17.8 | 20.3 | 23.9   | 19.6 | 21.8 | 19.9      | 15.7 | 17.7 |
| 25    | 21.0     | 15.9 | 18.0 | 21.6  | 18.1 | 19.8 | 25.3   | 20.6 | 23.0 | 20.4      | 15.5 | 17.9 |
| 26    | 21.3     | 16.0 | 18.4 | 22.4  | 17.7 | 19.9 | 26.3   | 21.4 | 23.6 | 16.8      | 13.3 | 14.5 |
| 27    | 19.9     | 16.5 | 18.1 | 22.6  | 17.6 | 20.0 | 24.6   | 20.6 | 22.6 | 16.0      | 10.8 | 13.4 |
| 28    | 21.1     | 16.3 | 18.4 | 22.8  | 18.1 | 20.4 | 24.4   | 19.5 | 22.0 | 18.0      | 11.8 | 14.8 |
| 29    | 21.2     | 16.5 | 18.7 | 21.5  | 18.5 | 19.9 | 25.6   | 20.2 | 22.7 | 19.2      | 13.4 | 16.4 |
| 30    | 20.6     | 17.0 | 18.6 | 24.1  | 18.3 | 21.0 | 24.4   | 18.9 | 22.0 | 20.3      | 14.1 | 17.2 |
| 31    | ---      | ---  | ---  | 24.2  | 19.1 | 21.7 | 25.1   | 20.3 | 22.5 | ---       | ---  | ---  |
| MONTH | 21.4     | 13.0 | 17.1 | ---   | ---  | ---  | ---    | ---  | ---  | 27.1      | 10.8 | 19.3 |

## ARKANSAS RIVER BASIN

## 07109500 ARKANSAS RIVER NEAR AVONDALE, CO--Continued

## OXYGEN, DISSOLVED (MG/L), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DAY   | MAX  | MIN  | MEAN | OCTOBER  |     |      | NOVEMBER |     |      | DECEMBER |      |      | JANUARY |     |      |
|-------|------|------|------|----------|-----|------|----------|-----|------|----------|------|------|---------|-----|------|
|       |      |      |      | MAX      | MIN | MEAN | MAX      | MIN | MEAN | MAX      | MIN  | MEAN | MAX     | MIN | MEAN |
| 1     | ---  | ---  | ---  | 10.5     | 8.3 | 9.2  | 9.4      | 7.0 | 8.0  | ---      | ---  | ---  |         |     |      |
| 2     | ---  | ---  | ---  | 11.7     | 9.2 | 10.4 | 9.1      | 6.8 | 7.7  | ---      | ---  | ---  |         |     |      |
| 3     | ---  | ---  | ---  | 11.5     | 8.4 | 10.3 | 9.4      | 6.6 | 8.0  | 11.7     | ---  | ---  |         |     |      |
| 4     | ---  | ---  | ---  | 11.2     | 7.9 | 9.5  | 8.4      | 6.4 | 7.7  | 11.0     | 8.9  | 9.9  |         |     |      |
| 5     | ---  | ---  | ---  | 11.2     | 7.8 | 9.4  | 7.7      | 4.7 | 6.1  | 12.2     | 8.4  | 10.3 |         |     |      |
| 6     | ---  | ---  | ---  | 10.5     | 7.8 | 8.9  | 10.2     | 5.1 | 7.5  | 12.2     | 9.6  | 11.0 |         |     |      |
| 7     | 9.7  | 7.6  | 8.8  | 10.5     | 7.5 | 8.8  | 10.2     | 7.8 | 8.8  | 12.3     | 9.0  | 10.5 |         |     |      |
| 8     | 9.6  | 7.6  | 8.7  | 10.8     | 7.7 | 9.1  | 11.4     | 7.3 | 9.4  | 11.5     | 8.2  | 10.0 |         |     |      |
| 9     | 9.9  | 7.9  | 8.8  | 10.6     | 8.1 | 9.0  | 12.6     | 7.6 | 10.8 | 11.0     | 7.5  | 9.3  |         |     |      |
| 10    | 9.8  | 7.5  | 8.7  | 10.5     | 8.1 | 9.5  | 12.1     | 8.9 | 10.6 | 11.1     | 7.6  | 9.4  |         |     |      |
| 11    | 9.8  | 7.3  | 8.5  | 11.6     | 8.9 | 10.3 | 11.3     | 8.5 | 9.7  | 11.4     | 8.6  | 10.0 |         |     |      |
| 12    | 9.6  | 7.2  | 8.2  | 10.7     | 8.8 | 9.6  | 10.9     | 8.2 | 9.2  | 11.4     | 9.1  | 10.6 |         |     |      |
| 13    | 10.0 | 7.2  | 8.5  | 11.1     | 8.8 | 9.9  | 10.5     | 7.7 | 8.8  | 10.7     | 8.0  | 9.5  |         |     |      |
| 14    | 10.4 | 7.7  | 8.9  | 11.0     | 9.0 | 9.9  | 10.8     | 7.7 | 9.0  | 10.4     | 7.6  | 9.0  |         |     |      |
| 15    | 10.4 | 7.5  | 8.8  | 11.0     | 8.9 | 9.8  | 11.2     | 8.4 | 9.5  | 10.8     | 8.3  | 9.4  |         |     |      |
| 16    | 10.2 | 7.1  | 8.6  | 10.8     | 8.8 | 9.6  | 10.7     | 7.8 | 9.1  | 10.2     | 7.1  | 8.2  |         |     |      |
| 17    | 10.0 | 7.1  | 8.4  | 11.0     | 8.5 | 9.6  | 10.1     | 7.0 | 8.3  | 10.5     | 5.4  | 6.7  |         |     |      |
| 18    | 10.1 | 7.1  | 8.5  | 11.2     | 8.5 | 9.8  | 9.7      | 6.4 | 7.6  | 11.6     | 9.7  | 10.8 |         |     |      |
| 19    | ---  | 7.2  | ---  | 11.6     | 9.0 | 10.1 | 10.5     | 6.7 | 8.1  | 11.2     | 9.4  | 10.4 |         |     |      |
| 20    | 11.4 | 8.2  | 9.8  | 12.1     | 9.3 | 10.5 | 12.1     | 6.9 | 9.4  | 11.0     | 7.9  | 9.6  |         |     |      |
| 21    | 10.8 | 7.9  | 9.2  | 12.2     | 9.5 | 10.4 | 11.2     | 8.2 | 10.1 | 11.8     | 8.9  | 10.4 |         |     |      |
| 22    | 10.4 | 7.9  | 9.1  | 11.4     | 8.4 | 9.9  | 10.8     | 7.8 | 9.6  | 11.9     | 8.2  | 10.0 |         |     |      |
| 23    | 11.0 | 8.6  | 9.8  | 11.9     | 8.4 | 9.9  | 12.0     | 7.7 | 10.3 | ---      | ---  | ---  |         |     |      |
| 24    | 11.0 | 8.5  | 9.6  | ---      | --- | ---  | 12.0     | 8.3 | 10.8 | 12.5     | 10.3 | 11.4 |         |     |      |
| 25    | 11.0 | 8.1  | 9.5  | ---      | --- | ---  | 11.5     | 7.0 | 9.4  | 11.4     | 9.9  | 10.8 |         |     |      |
| 26    | 10.3 | 8.0  | 9.0  | ---      | --- | ---  | 11.4     | 9.3 | 10.4 | 12.6     | 9.2  | 10.8 |         |     |      |
| 27    | 10.5 | 8.0  | 9.1  | ---      | --- | ---  | 11.4     | 8.5 | 10.2 | 11.6     | 9.3  | 11.0 |         |     |      |
| 28    | 10.8 | 8.1  | 9.3  | ---      | --- | ---  | 12.0     | 8.7 | 10.6 | 11.8     | 8.7  | 10.2 |         |     |      |
| 29    | 10.9 | 8.3  | 9.5  | 10.5     | 8.1 | 9.3  | ---      | --- | ---  | 11.7     | 8.3  | 10.0 |         |     |      |
| 30    | 11.1 | 8.1  | 9.4  | 9.5      | 7.3 | 8.2  | ---      | --- | ---  | 11.8     | 9.8  | 11.0 |         |     |      |
| 31    | 11.0 | 8.2  | 9.2  | ---      | --- | ---  | ---      | --- | ---  | 11.6     | 10.4 | 11.1 |         |     |      |
| MONTH | ---  | ---  | ---  | ---      | --- | ---  | ---      | --- | ---  | ---      | ---  | ---  |         |     |      |
| DAY   | MAX  | MIN  | MEAN | FEBRUARY |     |      | MARCH    |     |      | APRIL    |      |      | MAY     |     |      |
|       |      |      |      | MAX      | MIN | MEAN | MAX      | MIN | MEAN | MAX      | MIN  | MEAN | MAX     | MIN | MEAN |
| 1     | 11.5 | 10.5 | 11.1 | 11.9     | 9.8 | 10.8 | 10.3     | 7.4 | 9.0  | 11.1     | 6.3  | 8.8  |         |     |      |
| 2     | 11.5 | 10.3 | 11.2 | 11.0     | 9.2 | 10.2 | 9.9      | 7.6 | 8.7  | 11.0     | 6.1  | 8.3  |         |     |      |
| 3     | 11.2 | 8.8  | 10.2 | 11.3     | 9.1 | 10.3 | 10.1     | 7.9 | 9.1  | 10.7     | 6.4  | 8.3  |         |     |      |
| 4     | 11.5 | 7.7  | 9.7  | 10.6     | 8.5 | 9.6  | 10.3     | 8.7 | 9.4  | 10.5     | 6.2  | 8.3  |         |     |      |
| 5     | 10.9 | 9.3  | 10.2 | 10.7     | 8.4 | 9.4  | 10.8     | 8.3 | 9.7  | 10.7     | 6.0  | 8.1  |         |     |      |
| 6     | 11.1 | 9.2  | 9.8  | 11.8     | 8.4 | 10.5 | 10.3     | 7.6 | 9.0  | 10.3     | 5.8  | 7.9  |         |     |      |
| 7     | 10.4 | 8.8  | 9.6  | 12.5     | 9.5 | 11.1 | 9.8      | 8.0 | 9.0  | 10.1     | 5.1  | 7.4  |         |     |      |
| 8     | 10.8 | 9.0  | 9.9  | 11.7     | 8.8 | 10.3 | 9.8      | 7.4 | 8.7  | 10.1     | 5.2  | 7.6  |         |     |      |
| 9     | 11.4 | 9.2  | 10.3 | 11.3     | 8.2 | 9.8  | 9.6      | 7.4 | 8.4  | 9.7      | 5.5  | 7.1  |         |     |      |
| 10    | 11.3 | 9.4  | 10.5 | 10.8     | 7.9 | 9.3  | 9.6      | 7.5 | 8.5  | 9.4      | 6.5  | 8.1  |         |     |      |
| 11    | 12.6 | 10.6 | 11.6 | 10.1     | 7.2 | 8.7  | 9.4      | 7.4 | 8.3  | 8.8      | 7.1  | 7.9  |         |     |      |
| 12    | 13.2 | 11.0 | 12.0 | 9.7      | 7.3 | 8.3  | 9.8      | 7.4 | 8.6  | 9.3      | 7.7  | 8.6  |         |     |      |
| 13    | 13.4 | 10.7 | 11.9 | 9.5      | 7.0 | 8.3  | 9.3      | 7.5 | 8.4  | 9.7      | 8.0  | 8.7  |         |     |      |
| 14    | 13.0 | 10.5 | 11.7 | 9.9      | 7.1 | 9.5  | 10.0     | 7.8 | 9.0  | 9.2      | 7.8  | 8.5  |         |     |      |
| 15    | 13.0 | 10.8 | 11.7 | 10.2     | 8.4 | 9.2  | 10.0     | 7.5 | 8.8  | 9.5      | 8.1  | 8.8  |         |     |      |
| 16    | 14.0 | 10.8 | 12.4 | 10.0     | 8.0 | 9.1  | 9.8      | 7.3 | 8.5  | 9.6      | 8.0  | 8.9  |         |     |      |
| 17    | 13.0 | 9.2  | 11.5 | 9.4      | 8.0 | 9.0  | 9.7      | 7.2 | 8.5  | 9.4      | 8.2  | 8.8  |         |     |      |
| 18    | ---  | ---  | ---  | 10.0     | 8.9 | 9.5  | 9.4      | 6.9 | 8.1  | 9.4      | 8.4  | 9.0  |         |     |      |
| 19    | ---  | ---  | ---  | 10.4     | 8.2 | 9.4  | 10.0     | 6.9 | 8.4  | 9.4      | 8.5  | 9.0  |         |     |      |
| 20    | ---  | ---  | ---  | 10.6     | 8.0 | 9.3  | 9.8      | 7.1 | 8.4  | 9.4      | 8.4  | 8.9  |         |     |      |
| 21    | 11.8 | 6.9  | 9.4  | 9.9      | 7.5 | 8.6  | 9.8      | 7.4 | 8.6  | 9.4      | 8.2  | 8.8  |         |     |      |
| 22    | 9.8  | 6.6  | 8.0  | 9.8      | 7.6 | 8.7  | 10.0     | 7.1 | 8.6  | 9.1      | 8.0  | 8.6  |         |     |      |
| 23    | 10.5 | 7.6  | 8.6  | 9.6      | 7.7 | 8.6  | 10.0     | 6.7 | 8.4  | 8.7      | 7.8  | 8.3  |         |     |      |
| 24    | 11.3 | 8.9  | 10.0 | 10.8     | 8.0 | 9.8  | 9.9      | 6.4 | 8.2  | 8.6      | 7.2  | 8.0  |         |     |      |
| 25    | 10.8 | 8.7  | 9.7  | 11.9     | 9.8 | 10.9 | 10.1     | 6.4 | 8.2  | 8.2      | 7.2  | 7.8  |         |     |      |
| 26    | 11.6 | 8.8  | 10.5 | 11.2     | 8.5 | 10.1 | 10.5     | 6.5 | 8.6  | 8.4      | 7.7  | 8.0  |         |     |      |
| 27    | 12.3 | 10.4 | 11.1 | 10.8     | 8.0 | 9.5  | 10.4     | 6.5 | 8.2  | 8.3      | 7.1  | 7.8  |         |     |      |
| 28    | 12.7 | 10.6 | 11.7 | 10.4     | 8.0 | 9.1  | 11.6     | 7.0 | 9.4  | 8.2      | 6.7  | 7.6  |         |     |      |
| 29    | 12.4 | 9.7  | 11.2 | 10.1     | 7.7 | 8.8  | 11.7     | 7.4 | 9.7  | 8.1      | 6.6  | 7.3  |         |     |      |
| 30    | ---  | ---  | ---  | 10.0     | 7.9 | 8.9  | 11.1     | 7.1 | 8.9  | 7.6      | 6.2  | 6.9  |         |     |      |
| 31    | ---  | ---  | ---  | 10.6     | 8.0 | 9.3  | ---      | --- | ---  | 7.7      | 5.9  | 6.9  |         |     |      |
| MONTH | ---  | ---  | ---  | 12.5     | 7.0 | 9.5  | 11.7     | 6.4 | 8.7  | 11.1     | 5.1  | 8.2  |         |     |      |

07109500 ARKANSAS RIVER NEAR AVONDALE, CO--Continued

OXYGEN, DISSOLVED (MG/L), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DAY   | MAX | MIN | MEAN |
|-------|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|------|
|       |     |     |      |     |     |      |     |     |      |     |     |      |
| 1     | 7.4 | 4.3 | 6.2  | 7.7 | 5.9 | 6.8  | 7.1 | 5.2 | 6.1  | 5.6 | 4.3 | 4.9  |
| 2     | 7.4 | 4.2 | 5.8  | 7.5 | 5.7 | 6.6  | 7.3 | 5.5 | 6.5  | 5.5 | 4.5 | 5.1  |
| 3     | 7.8 | 5.6 | 6.8  | 7.3 | 5.8 | 6.6  | 6.8 | 5.6 | 6.2  | 6.2 | 4.7 | 5.5  |
| 4     | 8.2 | 5.6 | 6.9  | 7.1 | 5.8 | 6.4  | 6.4 | 5.3 | 5.9  | 5.7 | 4.6 | 5.2  |
| 5     | 8.3 | 6.7 | 7.5  | 7.3 | 6.1 | 6.6  | 6.9 | 5.5 | 6.1  | 6.0 | 4.6 | 5.3  |
| 6     | 9.9 | 7.7 | 9.0  | 7.3 | 6.2 | 6.8  | 7.1 | 5.2 | 6.1  | 6.2 | 4.9 | 5.6  |
| 7     | 9.9 | 8.3 | 9.3  | 7.8 | 6.4 | 7.0  | 7.0 | 5.2 | 6.1  | --- | --- | ---  |
| 8     | 9.5 | 8.6 | 9.1  | 7.3 | 6.2 | 6.8  | 7.0 | 5.4 | 6.1  | --- | --- | ---  |
| 9     | 9.5 | 8.8 | 9.2  | 6.9 | 5.6 | 6.2  | 7.4 | 6.0 | 6.7  | --- | --- | ---  |
| 10    | 9.5 | 8.8 | 9.2  | --- | --- | ---  | 7.1 | 4.9 | 6.1  | --- | --- | ---  |
| 11    | 9.7 | 8.7 | 9.1  | --- | --- | ---  | 7.3 | 5.1 | 6.2  | --- | --- | ---  |
| 12    | 9.5 | 8.5 | 9.1  | --- | --- | ---  | 7.4 | 5.2 | 6.2  | --- | --- | ---  |
| 13    | 9.5 | 8.5 | 9.0  | 6.1 | 5.3 | 5.7  | 6.9 | 5.3 | 6.2  | --- | 5.2 | ---  |
| 14    | 9.0 | 7.8 | 8.4  | 6.5 | 5.5 | 6.0  | 7.2 | 5.3 | 6.2  | 6.6 | 4.8 | 6.0  |
| 15    | 8.9 | 8.1 | 8.5  | 6.5 | 4.9 | 5.8  | 7.3 | 6.0 | 6.6  | 6.1 | 4.9 | 5.5  |
| 16    | 9.1 | 7.8 | 8.4  | 6.1 | 4.8 | 5.4  | 6.7 | 6.0 | 6.4  | 6.4 | 4.9 | 5.8  |
| 17    | 9.0 | 7.9 | 8.5  | 6.1 | 5.0 | 5.5  | 6.7 | 5.7 | 6.3  | 6.5 | 5.0 | 5.9  |
| 18    | 8.6 | 7.5 | 8.1  | 6.1 | 5.0 | 5.5  | 6.6 | 5.7 | 6.2  | 6.7 | 5.3 | 6.0  |
| 19    | 8.4 | 7.3 | 7.9  | 6.4 | 4.7 | 5.7  | 7.8 | 5.8 | 6.5  | 7.2 | 5.5 | 6.4  |
| 20    | 8.1 | 6.3 | 7.7  | 6.8 | 5.4 | 6.2  | 7.1 | 5.6 | 6.3  | 6.7 | 5.1 | 5.8  |
| 21    | 8.0 | 6.1 | 7.4  | --- | --- | ---  | 6.7 | 4.5 | 6.1  | 6.6 | 4.8 | 5.8  |
| 22    | 8.0 | 7.2 | 7.6  | --- | --- | ---  | 6.5 | 5.5 | 6.1  | 6.5 | 4.8 | 5.6  |
| 23    | 8.2 | 7.5 | 7.9  | --- | --- | ---  | 6.2 | 4.7 | 5.7  | 6.4 | 5.0 | 5.7  |
| 24    | 8.2 | 7.2 | 7.8  | 7.5 | 5.2 | 6.7  | 6.6 | 4.8 | 5.7  | 6.6 | 4.9 | 5.8  |
| 25    | 8.1 | 6.6 | 7.6  | 7.4 | 5.2 | 6.4  | 5.9 | 4.7 | 5.5  | --- | --- | ---  |
| 26    | 8.0 | 6.8 | 7.4  | 6.7 | 4.8 | 5.5  | 5.6 | 4.3 | 5.0  | --- | --- | ---  |
| 27    | 7.8 | 6.9 | 7.3  | 7.1 | 4.0 | 5.4  | 5.9 | 4.7 | 5.3  | 7.8 | 6.5 | 7.2  |
| 28    | 7.7 | 6.4 | 7.2  | 5.4 | 3.9 | 4.8  | 6.3 | 4.6 | 5.4  | 7.8 | 6.1 | 7.3  |
| 29    | 7.8 | 6.5 | 7.1  | 6.0 | 2.7 | 4.1  | 5.6 | 3.8 | 5.2  | 7.5 | 5.8 | 6.7  |
| 30    | 7.4 | 6.6 | 7.0  | 6.3 | 4.8 | 5.5  | 6.3 | 4.7 | 5.7  | 7.3 | 5.5 | 6.5  |
| 31    | --- | --- | ---  | 6.2 | 5.0 | 5.7  | 5.6 | 4.2 | 5.1  | --- | --- | ---  |
| MONTH | 9.9 | 4.2 | 7.9  | --- | --- | ---  | 7.8 | 3.8 | 6.0  | --- | --- | ---  |

**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 mi<sup>2</sup>.

PERIOD OF RECORD.--January 1922 to September 1925 (monthly and annual discharge only, published in WSP 1311 as near Nepesta), October 1979 to current year.

GAGE.--Water-stage recorder with satellite telemetry and crest-stage gages. Datum of gage is 4,443.75 ft above sea level.

REMARKS.--Records 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 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

| DAY   | OCT   | NOV  | DEC  | JAN  | FEB  | MAR   | APR   | MAY   | JUN   | JUL   | AUG    | SEP   |
|-------|-------|------|------|------|------|-------|-------|-------|-------|-------|--------|-------|
| 1     | 18    | 29   | 17   | e20  | e15  | e20   | 9.0   | 4.5   | 15    | .60   | .00    | 6.5   |
| 2     | 21    | 28   | 18   | e20  | e14  | e19   | 7.2   | 4.7   | 21    | .34   | .00    | 5.1   |
| 3     | 21    | 41   | 18   | e20  | e14  | e18   | 6.0   | 4.5   | 20    | .34   | .00    | 5.4   |
| 4     | 16    | 40   | 17   | 24   | e14  | e17   | 5.8   | 4.5   | 17    | .20   | .00    | 5.3   |
| 5     | 16    | 39   | 15   | 17   | e15  | 16    | 7.2   | 4.5   | 14    | .20   | .00    | 4.9   |
| 6     | 17    | 38   | 13   | 16   | e15  | 15    | 6.9   | 4.5   | 9.3   | .23   | .00    | 3.7   |
| 7     | 18    | 39   | 13   | 14   | e15  | e15   | 6.1   | 4.6   | 10    | .00   | .00    | 4.1   |
| 8     | 18    | 40   | 13   | 22   | e16  | e17   | 6.2   | 4.7   | 8.6   | .01   | .00    | 3.9   |
| 9     | 15    | 40   | 14   | 22   | e16  | 18    | 5.9   | 5.0   | 8.0   | .30   | .00    | 3.2   |
| 10    | 13    | 38   | e14  | 16   | e18  | 18    | 5.4   | 4.8   | 10    | 49    | .00    | 3.1   |
| 11    | 12    | 41   | 14   | 16   | e18  | 19    | 5.9   | 4.7   | 12    | 1.4   | .00    | 2.7   |
| 12    | 11    | 44   | 15   | 14   | e20  | 16    | 5.9   | 4.7   | 9.6   | 6.0   | .00    | 3.2   |
| 13    | 12    | 41   | 13   | 16   | 25   | 15    | 6.1   | 4.8   | 9.6   | 6.8   | .00    | 4.0   |
| 14    | 11    | 40   | 12   | 14   | 24   | 18    | 9.2   | 4.4   | 31    | 3.3   | .00    | 5.1   |
| 15    | 9.9   | 35   | 12   | 14   | 22   | 23    | 9.6   | 4.1   | 26    | 1.2   | .00    | 4.1   |
| 16    | 11    | 18   | 12   | 14   | 19   | 26    | 6.6   | 4.3   | 18    | .58   | .00    | 3.0   |
| 17    | 13    | 15   | 12   | e17  | 17   | 47    | 5.6   | 4.0   | 16    | .45   | .00    | 3.8   |
| 18    | 15    | 15   | 13   | e16  | 19   | 44    | 5.1   | 3.9   | 9.1   | .40   | .00    | 3.0   |
| 19    | 15    | 18   | 13   | e16  | 19   | 41    | 5.1   | 3.8   | 4.4   | .53   | .00    | 3.5   |
| 20    | 12    | 19   | 14   | e16  | 19   | 42    | 5.9   | 3.9   | 4.2   | .26   | .00    | 6.4   |
| 21    | 13    | 15   | 14   | e15  | 21   | 52    | 5.2   | 3.9   | 3.5   | .15   | .00    | 7.2   |
| 22    | 12    | 11   | 14   | e15  | 31   | 48    | 5.7   | 4.0   | 3.6   | .12   | .00    | 7.9   |
| 23    | 39    | 11   | e14  | e15  | 35   | 44    | 5.7   | 3.9   | 3.3   | .15   | 3.7    | 8.0   |
| 24    | 41    | 11   | e15  | e15  | 43   | 41    | 5.1   | 3.9   | 3.5   | .00   | 28     | 7.8   |
| 25    | 28    | 12   | e15  | e15  | 46   | 43    | 4.8   | 7.9   | 2.1   | .00   | 2.4    | 6.6   |
| 26    | 28    | 12   | 18   | e15  | 42   | 41    | 4.5   | 19    | 1.7   | .00   | 1.4    | 5.9   |
| 27    | 23    | 12   | e18  | e14  | 32   | 33    | 4.4   | 15    | 1.7   | .00   | 4.4    | 5.3   |
| 28    | 28    | 17   | e18  | e17  | 24   | 26    | 4.6   | 11    | 1.1   | .00   | 165    | 4.5   |
| 29    | 25    | 17   | e18  | e15  | e22  | 13    | 4.8   | 14    | 1.2   | .00   | 2.0    | 4.6   |
| 30    | 27    | 17   | e20  | e15  | ---  | 11    | 4.8   | 14    | 1.2   | .00   | 23     | 4.0   |
| 31    | 27    | ---  | e20  | e15  | ---  | 9.4   | ---   | 15    | ---   | .00   | 7.2    | ---   |
| TOTAL | 585.9 | 793  | 466  | 510  | 650  | 825.4 | 180.3 | 200.5 | 295.7 | 72.56 | 237.10 | 145.8 |
| MEAN  | 18.9  | 26.4 | 15.0 | 16.5 | 22.4 | 26.6  | 6.01  | 6.47  | 9.86  | 2.34  | 7.65   | 4.86  |
| MAX   | 41    | 44   | 20   | 24   | 46   | 52    | 9.6   | 19    | 31    | 49    | 165    | 8.0   |
| MIN   | 9.9   | 11   | 12   | 14   | 14   | 9.4   | 4.4   | 3.8   | 1.1   | .00   | .00    | 2.7   |
| AC-FT | 1160  | 1570 | 924  | 1010 | 1290 | 1640  | 358   | 398   | 587   | 144   | 470    | 289   |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 - 1996, BY WATER YEAR (WY)

|      | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 8.45 | 15.2 | 14.3 | 20.9 | 25.1 | 21.1 | 22.7 | 157  | 112  | 30.6 | 30.8 | 6.21 |      |      |      |      |      |
| 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 1995 CALENDAR YEAR | FOR 1996 WATER YEAR | WATER YEARS 1980 - 1996 |
|--------------------------|------------------------|---------------------|-------------------------|
| ANNUAL TOTAL             | 21899.74               | 4962.26             |                         |
| ANNUAL MEAN              | 60.0                   | 13.6                | 38.8                    |
| HIGHEST ANNUAL MEAN      |                        |                     | 153                     |
| LOWEST ANNUAL MEAN       |                        |                     | 5.09                    |
| HIGHEST DAILY MEAN       | 1300                   | Jul 19              | 2900                    |
| LOWEST DAILY MEAN        | .38                    | Aug 18              | a .00                   |
| ANNUAL SEVEN-DAY MINIMUM | .86                    | Aug 12              | .00                     |
| INSTANTANEOUS PEAK FLOW  |                        |                     | b 8030                  |
| INSTANTANEOUS PEAK STAGE |                        |                     | c 10.90                 |
| ANNUAL RUNOFF (AC-FT)    | 43440                  | 9840                | 28140                   |
| 10 PERCENT EXCEEDS       | 205                    | 28                  | 59                      |
| 50 PERCENT EXCEEDS       | 18                     | 12                  | 6.0                     |
| 90 PERCENT EXCEEDS       | 5.2                    | .20                 | .00                     |

e-Estimated.

a-No flow many days most years.

b-Maximum discharge for period of record, 19400 ft<sup>3</sup>/s, Aug 1, 1923, gage height, 9.4 ft, datum then in use, from rating curve extended above 1200 ft<sup>3</sup>/s, on the basis of slope-area measurement of peak flow.

c-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 NW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec.21, T.22 S., R.58 W., Otero County, Hydrologic Unit 11020005, 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 mi<sup>2</sup>, of which 54 mi<sup>2</sup> is probably noncontributing.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1964 to current year. Statistical summary computed for 1975 to current year.

GAGE.--Water-stage recorders with satellite telemetry on river and on Catlin Canal. 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 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

| DAY   | OCT   | NOV   | DEC   | JAN   | FEB   | MAR   | APR   | MAY   | JUN   | JUL   | AUG   | SEP   |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1     | 687   | 561   | 355   | 382   | e380  | 391   | 632   | 377   | 1120  | 1220  | 1050  | 594   |
| 2     | 690   | 570   | 344   | 393   | e400  | 388   | 617   | 389   | 523   | 928   | 1150  | 601   |
| 3     | 728   | 578   | 287   | 383   | e410  | 391   | 601   | 390   | 548   | 657   | 1620  | 547   |
| 4     | 780   | 593   | 265   | 416   | e425  | 400   | 597   | 361   | 856   | 707   | 1170  | 481   |
| 5     | 801   | 597   | 230   | 414   | e450  | 435   | 689   | 329   | 571   | 879   | 953   | 368   |
| 6     | 856   | 610   | 219   | 401   | e510  | 473   | 764   | 324   | 576   | 1040  | 830   | 328   |
| 7     | 868   | 635   | 221   | 527   | e560  | 512   | 760   | 319   | 813   | 1230  | 796   | 353   |
| 8     | 846   | 655   | 218   | 415   | e610  | 519   | 739   | 316   | 1290  | 1350  | 756   | 377   |
| 9     | 831   | 648   | 210   | 436   | e660  | 537   | 720   | 328   | 1570  | 1340  | 751   | 386   |
| 10    | 609   | 679   | 210   | 457   | e720  | 541   | 690   | 458   | 2020  | 3690  | 936   | 358   |
| 11    | 531   | 744   | 208   | 442   | e740  | 552   | 676   | 607   | 2590  | 2970  | 829   | 348   |
| 12    | 534   | 797   | 204   | 427   | e760  | 542   | 695   | 817   | 2760  | 1930  | 767   | 342   |
| 13    | 531   | 814   | 202   | 431   | 752   | 533   | 714   | 825   | 2700  | 2600  | 792   | 342   |
| 14    | 532   | 853   | 200   | 436   | 766   | 560   | 845   | 883   | 2390  | 1870  | 769   | 341   |
| 15    | 548   | 938   | 199   | 433   | 747   | 815   | 720   | 1210  | 1850  | 1380  | 899   | 385   |
| 16    | 549   | 718   | 197   | 413   | 701   | 906   | 705   | 1700  | 2190  | 982   | 994   | 461   |
| 17    | 532   | 638   | 195   | 417   | 624   | 691   | 647   | 1510  | 2150  | 907   | 1140  | 398   |
| 18    | 683   | 634   | 190   | 367   | 566   | 506   | 568   | 1220  | 2030  | 718   | 1090  | 365   |
| 19    | 704   | 623   | 187   | 384   | 532   | 453   | 490   | 1780  | 1490  | 572   | 1030  | 521   |
| 20    | 671   | 608   | 186   | 421   | 531   | 465   | e398  | 1980  | 1320  | 562   | 1090  | 462   |
| 21    | 657   | 594   | 356   | 409   | 271   | 503   | e409  | 2010  | 1470  | 830   | 1240  | 398   |
| 22    | 675   | 602   | 376   | 375   | 235   | 549   | 417   | 2000  | 1290  | 1220  | 1210  | 371   |
| 23    | 639   | 555   | 366   | 365   | 239   | 537   | 445   | 1840  | 1670  | 1460  | 1330  | 335   |
| 24    | 658   | 522   | 363   | 346   | 299   | 554   | 427   | 1460  | 2580  | 1520  | 1440  | 304   |
| 25    | 658   | 537   | 374   | 347   | 430   | 550   | 408   | 1600  | 2160  | 1520  | 1660  | 336   |
| 26    | 625   | 546   | 363   | e341  | 483   | 552   | 430   | 3110  | 1790  | 1770  | 868   | 367   |
| 27    | 624   | 535   | 364   | e340  | 470   | 531   | 384   | 2780  | 1670  | 1850  | 535   | 383   |
| 28    | 598   | 560   | 381   | e340  | 426   | 494   | 365   | 1490  | 1680  | 1940  | 1200  | 456   |
| 29    | 547   | 573   | 379   | e340  | 410   | 515   | 376   | 1090  | 1590  | 1620  | 630   | 475   |
| 30    | 546   | 537   | 359   | e350  | ---   | 495   | 377   | 1230  | 1450  | 2090  | 1610  | 430   |
| 31    | 548   | ---   | 384   | e360  | ---   | 585   | ---   | 1220  | ---   | 1140  | 1410  | ---   |
| TOTAL | 20286 | 19054 | 8592  | 12308 | 15107 | 16475 | 17305 | 35953 | 48707 | 44492 | 32545 | 12213 |
| MEAN  | 654   | 635   | 277   | 397   | 521   | 531   | 577   | 1160  | 1624  | 1435  | 1050  | 407   |
| MAX   | 868   | 938   | 384   | 527   | 766   | 906   | 845   | 3110  | 2760  | 3690  | 1660  | 601   |
| MIN   | 531   | 522   | 186   | 340   | 235   | 388   | 365   | 316   | 523   | 562   | 535   | 304   |
| AC-FT | 40240 | 37790 | 17040 | 24410 | 29960 | 32680 | 34320 | 71310 | 96610 | 88250 | 64550 | 24220 |

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 1996, 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 |  |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|--|
| MEAN | 417  | 424  | 358  | 414  | 411  | 387  | 555  | 1218 | 2130 | 1466 | 982  | 447  |      |      |      |      |      |      |      |      |      |      |  |
| MAX  | 1234 | 925  | 773  | 854  | 1249 | 867  | 1526 | 3888 | 4420 | 4108 | 2384 | 1209 |      |      |      |      |      |      |      |      |      |      |  |
| (WY) | 1985 | 1985 | 1987 | 1985 | 1985 | 1985 | 1987 | 1987 | 1995 | 1995 | 1984 | 1982 |      |      |      |      |      |      |      |      |      |      |  |
| MIN  | 91.0 | 152  | 133  | 175  | 180  | 175  | 86.6 | 212  | 432  | 286  | 526  | 84.5 |      |      |      |      |      |      |      |      |      |      |  |
| (WY) | 1979 | 1979 | 1991 | 1990 | 1995 | 1978 | 1978 | 1981 | 1977 | 1977 | 1978 | 1977 |      |      |      |      |      |      |      |      |      |      |  |

## SUMMARY STATISTICS

|                          | FOR 1995 CALENDAR YEAR | FOR 1996 WATER YEAR | FOR 1995 CALENDAR YEAR | FOR 1996 WATER YEAR | FOR 1997 WATER YEAR |
|--------------------------|------------------------|---------------------|------------------------|---------------------|---------------------|
| ANNUAL TOTAL             | 491244                 | 283037              |                        |                     |                     |
| ANNUAL MEAN              | 1346                   | 773                 |                        |                     | a,769               |
| HIGHEST ANNUAL MEAN      |                        |                     |                        |                     | 1327                |
| LOWEST ANNUAL MEAN       |                        |                     |                        |                     | 351                 |
| HIGHEST DAILY MEAN       | 6560                   | Jul 20              | 3690                   | Jul 10              | b,8480              |
| LOWEST DAILY MEAN        | 146                    | Feb 4               | 186                    | Dec 20              | c,30                |
| ANNUAL SEVEN-DAY MINIMUM | 151                    | Feb 4               | 193                    | Dec 14              | f,46                |
| INSTANTANEOUS PEAK FLOW  |                        |                     | d,7040                 | Jul 10              | f,23300             |
| INSTANTANEOUS PEAK STAGE |                        |                     | Not determined         |                     | 10.81               |
| ANNUAL RUNOFF (AC-FT)    | 974400                 | 561400              |                        |                     | 556900              |
| 10 PERCENT EXCEEDS       | 4280                   | 1600                |                        |                     | 1680                |
| 50 PERCENT EXCEEDS       | 671                    | 571                 |                        |                     | 445                 |
| 90 PERCENT EXCEEDS       | 205                    | 342                 |                        |                     | 194                 |

e-Estimated.

a-Average discharge for 9 years (water years 1965-73), 636 ft<sup>3</sup>/s, 460800 acre-ft/yr, prior to completion of Pueblo Dam.

b-Maximum daily discharge for period of record, 43200 ft<sup>3</sup>/s, Jun 18, 1965.

c-Also occurred Sep 12, 1974.

d-Maximum combined instantaneous discharge.

f-Maximum discharge and stage for period of record, 43200 ft<sup>3</sup>/s, Jun 18, 1965, gage height, 7.95 ft, site and datum then in use, from rating curve extended above 13000 ft<sup>3</sup>/s, on basis of flow-over-dam computation of peak flow.

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 Feb. 8, 22, Mar. 19-20, Apr. 18, 23, June 25-26, Aug. 13, 15, 17, Aug. 20 to Sept. 9, and Sept. 13, 19-30, which are poor. Records for water temperature are good except for Oct. 2, 9, Apr. 18, 23, June 5, Aug. 20, and Sept. 13-17, which are poor. 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, 1,580 microsiemens, Jan. 30; minimum, 436 microsiemens, June 25.

WATER TEMPERATURE: Maximum, 29.5°C, July 20; minimum, 0.1°C, many days during winter.

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM @ 25 DEG.C), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DAY   | MAX  | MIN | MEAN | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN |
|-------|------|-----|------|------|------|------|------|------|------|------|------|------|
|       |      |     |      |      |      |      |      |      |      |      |      |      |
| 1     | 979  | 965 | 973  | 984  | 966  | 975  | 1160 | 1100 | 1140 | 1290 | 1230 | 1260 |
| 2     | 975  | 957 | 966  | 980  | 958  | 971  | 1160 | 1140 | 1150 | 1310 | 1270 | 1290 |
| 3     | 977  | 951 | 964  | 992  | 968  | 980  | 1180 | 1140 | 1150 | 1330 | 1260 | 1300 |
| 4     | 955  | 921 | 941  | 992  | 978  | 987  | 1310 | 1170 | 1240 | 1380 | 1260 | 1330 |
| 5     | 941  | 908 | 930  | 986  | 958  | 976  | 1320 | 1300 | 1310 | 1350 | 1270 | 1320 |
| 6     | 926  | 895 | 909  | 986  | 968  | 976  | 1300 | 1270 | 1290 | 1370 | 1310 | 1330 |
| 7     | 908  | 890 | 898  | 984  | 968  | 977  | 1280 | 1260 | 1280 | 1350 | 1310 | 1320 |
| 8     | 900  | 887 | 894  | 986  | 962  | 977  | 1330 | 1280 | 1310 | 1320 | 1280 | 1310 |
| 9     | 904  | 880 | 892  | 970  | 956  | 965  | 1370 | 1320 | 1340 | 1350 | 1300 | 1320 |
| 10    | 981  | 904 | 949  | 962  | 922  | 945  | 1360 | 1300 | 1340 | 1310 | 1280 | 1300 |
| 11    | 1000 | 970 | 982  | 922  | 896  | 906  | 1420 | 1320 | 1360 | 1320 | 1280 | 1300 |
| 12    | 984  | 962 | 972  | 904  | 878  | 893  | 1430 | 1390 | 1410 | 1320 | 1290 | 1300 |
| 13    | 980  | 946 | 965  | 888  | 874  | 881  | 1450 | 1430 | 1440 | 1310 | 1290 | 1300 |
| 14    | 962  | 924 | 947  | 888  | 862  | 877  | 1450 | 1440 | 1450 | 1310 | 1290 | 1300 |
| 15    | 954  | 932 | 943  | 884  | 858  | 877  | 1450 | 1440 | 1450 | 1310 | 1290 | 1300 |
| 16    | 962  | 930 | 947  | 908  | 878  | 891  | 1450 | 1440 | 1440 | 1300 | 1280 | 1290 |
| 17    | 966  | 940 | 953  | 936  | 904  | 921  | 1450 | 1430 | 1440 | 1290 | 1210 | 1260 |
| 18    | 966  | 908 | 929  | 974  | 936  | 958  | 1450 | 1440 | 1450 | 1330 | 1240 | 1290 |
| 19    | 932  | 914 | 922  | 1010 | 970  | 993  | 1480 | 1440 | 1450 | 1330 | 1270 | 1290 |
| 20    | 944  | 922 | 932  | 1030 | 1010 | 1020 | 1460 | 1400 | 1440 | 1280 | 1230 | 1260 |
| 21    | 952  | 926 | 942  | 1040 | 1020 | 1030 | 1450 | 1090 | 1280 | 1280 | 1250 | 1270 |
| 22    | 934  | 904 | 922  | 1040 | 1030 | 1040 | 1280 | 1050 | 1210 | 1310 | 1240 | 1280 |
| 23    | 946  | 904 | 925  | 1040 | 1030 | 1040 | 1310 | 1210 | 1280 | 1380 | 1300 | 1340 |
| 24    | 986  | 912 | 938  | 1040 | 1040 | 1040 | 1330 | 1260 | 1280 | 1380 | 1320 | 1350 |
| 25    | 944  | 932 | 938  | 1050 | 1040 | 1040 | 1290 | 1220 | 1270 | 1370 | 1310 | 1340 |
| 26    | 948  | 932 | 943  | 1060 | 1040 | 1050 | 1290 | 1240 | 1260 | 1410 | 1340 | 1370 |
| 27    | 962  | 930 | 942  | 1060 | 1020 | 1040 | 1280 | 1230 | 1260 | 1370 | 1270 | 1320 |
| 28    | 968  | 946 | 959  | 1060 | 1030 | 1050 | 1290 | 1150 | 1270 | 1290 | 1210 | 1250 |
| 29    | 980  | 956 | 968  | 1070 | 1050 | 1060 | 1290 | 1250 | 1260 | 1320 | 1240 | 1290 |
| 30    | 974  | 958 | 967  | 1100 | 1050 | 1070 | 1310 | 1250 | 1280 | 1580 | 1280 | 1370 |
| 31    | 978  | 954 | 968  | ---  | ---  | ---  | 1280 | 1210 | 1260 | 1440 | 1180 | 1220 |
| MONTH | 1000 | 880 | 943  | 1100 | 858  | 980  | 1480 | 1050 | 1320 | 1580 | 1180 | 1300 |

## ARKANSAS RIVER BASIN

## 07119700 ARKANSAS RIVER AT CATLIN DAM NEAR FOWLER, CO--Continued

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM @ 25 DEG.C), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DAY   | FEBRUARY |      |      | MARCH |      |      | APRIL  |      |      | MAY       |      |      |
|-------|----------|------|------|-------|------|------|--------|------|------|-----------|------|------|
|       | MAX      | MIN  | MEAN | MAX   | MIN  | MEAN | MAX    | MIN  | MEAN | MAX       | MIN  | MEAN |
| 1     | 1210     | 1140 | 1170 | 1140  | 1080 | 1110 | 856    | 834  | 846  | 1050      | 1020 | 1040 |
| 2     | 1230     | 1170 | 1200 | 1150  | 1110 | 1120 | 868    | 844  | 857  | 1060      | 1020 | 1040 |
| 3     | 1240     | 1190 | 1220 | 1150  | 1100 | 1130 | 864    | 846  | 855  | 1060      | 1020 | 1050 |
| 4     | 1250     | 1210 | 1230 | 1150  | 1110 | 1130 | 870    | 838  | 859  | 1090      | 1020 | 1060 |
| 5     | 1240     | 1100 | 1180 | 1160  | 1050 | 1110 | 842    | 816  | 828  | 1110      | 1080 | 1100 |
| 6     | 1100     | 993  | 1030 | 1080  | 1010 | 1050 | 913    | 823  | 883  | 1130      | 1090 | 1110 |
| 7     | 1030     | 991  | 1010 | 1010  | 944  | 975  | 896    | 868  | 879  | 1220      | 1110 | 1170 |
| 8     | 1180     | 1020 | 1070 | 1060  | 938  | 998  | 876    | 850  | 866  | 1210      | 1130 | 1160 |
| 9     | ---      | ---  | ---  | 970   | 943  | 956  | 863    | 824  | 844  | 1130      | 1070 | 1110 |
| 10    | 1080     | 1060 | 1070 | 987   | 949  | 969  | 826    | 798  | 812  | 1070      | 920  | 987  |
| 11    | 1080     | 1050 | 1070 | 988   | 948  | 967  | 835    | 809  | 823  | 920       | 812  | 848  |
| 12    | 1100     | 1060 | 1070 | 991   | 963  | 977  | 831    | 811  | 820  | 864       | 688  | 799  |
| 13    | 1080     | 1050 | 1060 | 993   | 939  | 965  | 831    | 803  | 820  | 736       | 680  | 696  |
| 14    | 1080     | 1070 | 1070 | 970   | 834  | 917  | 821    | 768  | 791  | 720       | 704  | 711  |
| 15    | 1090     | 1070 | 1080 | 868   | 814  | 837  | 837    | 777  | 810  | 708       | 670  | 692  |
| 16    | 1110     | 1080 | 1100 | 1010  | 852  | 879  | 888    | 832  | 851  | 686       | 632  | 647  |
| 17    | 1150     | 1110 | 1130 | 1010  | 876  | 906  | 836    | 814  | 824  | 654       | 624  | 637  |
| 18    | 1210     | 1140 | 1160 | 1000  | 924  | 977  | 844    | 826  | 832  | 648       | 630  | 641  |
| 19    | 1230     | 1210 | 1230 | 1060  | 1010 | 1030 | ---    | ---  | ---  | 634       | 602  | 614  |
| 20    | 1250     | 1230 | 1240 | 1080  | 1020 | 1040 | ---    | ---  | ---  | 610       | 598  | 604  |
| 21    | 1360     | 1240 | 1300 | 1020  | 970  | 998  | ---    | ---  | ---  | 610       | 598  | 603  |
| 22    | 1470     | 1340 | 1390 | 988   | 920  | 937  | ---    | ---  | ---  | 614       | 602  | 608  |
| 23    | 1450     | 1400 | 1430 | 948   | 924  | 936  | 1030   | 1010 | 1020 | 630       | 602  | 614  |
| 24    | 1420     | 1240 | 1330 | 926   | 900  | 912  | 1030   | 1010 | 1020 | 634       | 614  | 625  |
| 25    | 1240     | 1120 | 1170 | 914   | 890  | 902  | 1060   | 1020 | 1040 | 770       | 608  | 642  |
| 26    | ---      | ---  | ---  | 898   | 886  | 893  | 1020   | 999  | 1010 | 778       | 680  | 715  |
| 27    | ---      | ---  | ---  | 904   | 888  | 893  | 1030   | 1000 | 1020 | 752       | 664  | 717  |
| 28    | 1100     | 1080 | 1090 | 936   | 904  | 924  | 1060   | 1010 | 1040 | 808       | 724  | 750  |
| 29    | 1120     | 1080 | 1100 | 944   | 902  | 916  | 1050   | 1020 | 1040 | 776       | 748  | 764  |
| 30    | ---      | ---  | ---  | 940   | 902  | 921  | 1040   | 1020 | 1030 | ---       | ---  | ---  |
| 31    | ---      | ---  | ---  | 920   | 844  | 888  | ---    | ---  | ---  | ---       | ---  | ---  |
| MONTH | ---      | ---  | ---  | 1160  | 814  | 973  | ---    | ---  | ---  | ---       | ---  | ---  |
| DAY   | JUNE     |      |      | JULY  |      |      | AUGUST |      |      | SEPTEMBER |      |      |
|       | MAX      | MIN  | MEAN | MAX   | MIN  | MEAN | MAX    | MIN  | MEAN | MAX       | MIN  | MEAN |
| 1     | ---      | ---  | ---  | 610   | 546  | 573  | 746    | 732  | 738  | 1050      | 929  | 982  |
| 2     | ---      | ---  | ---  | 652   | 580  | 603  | 734    | 698  | 708  | 1080      | 1050 | 1060 |
| 3     | ---      | ---  | ---  | 698   | 652  | 673  | 708    | 626  | 672  | 1130      | 1070 | 1100 |
| 4     | ---      | ---  | ---  | 700   | 652  | 671  | 678    | 648  | 662  | 1200      | 1120 | 1170 |
| 5     | 1050     | ---  | ---  | 756   | 624  | 655  | 694    | 668  | 680  | 1290      | 1200 | 1240 |
| 6     | 1040     | 868  | 987  | 636   | 602  | 623  | 712    | 682  | 696  | 1340      | 1260 | 1310 |
| 7     | 874      | 698  | 778  | 610   | 570  | 586  | 710    | 682  | 695  | 1340      | 1300 | 1320 |
| 8     | 698      | 652  | 665  | 586   | 548  | 565  | 716    | 698  | 705  | 1330      | 1270 | 1310 |
| 9     | 668      | 598  | 634  | 594   | 546  | 567  | 736    | 714  | 725  | 1350      | 1250 | 1280 |
| 10    | 600      | 510  | 567  | 1060  | 500  | 674  | 738    | 668  | 697  | ---       | ---  | ---  |
| 11    | 560      | 482  | 516  | 1010  | 852  | 930  | 714    | 678  | 696  | ---       | ---  | ---  |
| 12    | 568      | 536  | 546  | 852   | 578  | 692  | 730    | 704  | 713  | ---       | ---  | ---  |
| 13    | 556      | 528  | 541  | 626   | 560  | 590  | 726    | 702  | 711  | 1360      | 1100 | 1290 |
| 14    | 754      | 528  | 580  | 630   | 550  | 598  | ---    | ---  | ---  | 1090      | 946  | 983  |
| 15    | 726      | 590  | 629  | 620   | 568  | 592  | 912    | 692  | 780  | 1090      | 953  | 1010 |
| 16    | 780      | 576  | 646  | 666   | 614  | 635  | 862    | 680  | 745  | 1140      | 1090 | 1110 |
| 17    | 652      | 576  | 609  | 686   | 656  | 669  | 878    | 682  | 758  | 1170      | 1070 | 1140 |
| 18    | 598      | 564  | 577  | 666   | 642  | 652  | ---    | ---  | ---  | 1160      | 1110 | 1140 |
| 19    | 616      | 582  | 597  | 698   | 652  | 680  | ---    | ---  | ---  | 1110      | 882  | 1010 |
| 20    | 614      | 592  | 603  | 710   | 670  | 690  | ---    | ---  | ---  | 948       | 883  | 911  |
| 21    | 604      | 568  | 587  | 760   | 664  | 701  | 732    | 683  | 709  | 1010      | 942  | 972  |
| 22    | 638      | 586  | 604  | 836   | 760  | 794  | 737    | 624  | 676  | 1030      | 997  | 1010 |
| 23    | 654      | 560  | 597  | 971   | 824  | 880  | 795    | 689  | 740  | 1060      | 1010 | 1040 |
| 24    | 568      | 514  | 535  | 910   | 736  | 851  | 850    | 783  | 805  | 1110      | 1050 | 1080 |
| 25    | 532      | 436  | 502  | 736   | 636  | 671  | 842    | 798  | 820  | 1130      | 1100 | 1110 |
| 26    | 560      | 513  | 540  | 658   | 610  | 631  | 851    | 801  | 821  | 1110      | 1090 | 1100 |
| 27    | 564      | 544  | 552  | 1020  | 600  | 641  | 928    | 848  | 896  | 1130      | 1090 | 1110 |
| 28    | 642      | 534  | 558  | 644   | 578  | 618  | 983    | 906  | 941  | 1160      | 1110 | 1140 |
| 29    | 554      | 524  | 540  | 726   | 614  | 647  | 980    | 928  | 947  | 1180      | 1140 | 1160 |
| 30    | 572      | 544  | 555  | 724   | 626  | 667  | 949    | 825  | 892  | 1200      | 1160 | 1180 |
| 31    | ---      | ---  | ---  | 738   | 710  | 722  | 937    | 867  | 897  | ---       | ---  | ---  |
| MONTH | ---      | ---  | ---  | 1060  | 500  | 669  | ---    | ---  | ---  | ---       | ---  | ---  |

07119700 ARKANSAS RIVER AT CATLIN DAM NEAR FOWLER, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DAY   | OCTOBER  |      |      | NOVEMBER |     |      | DECEMBER |      |      | JANUARY |      |      |
|-------|----------|------|------|----------|-----|------|----------|------|------|---------|------|------|
|       | MAX      | MIN  | MEAN | MAX      | MIN | MEAN | MAX      | MIN  | MEAN | MAX     | MIN  | MEAN |
| 1     | 17.8     | 13.7 | 15.8 | 9.2      | 5.7 | 8.0  | 9.7      | 5.4  | 7.5  | 4.0     | .6   | 2.1  |
| 2     | ---      | 12.4 | ---  | 5.7      | 3.7 | 4.5  | 9.5      | 5.7  | 7.5  | 1.4     | .1   | .3   |
| 3     | 18.1     | 12.7 | 15.3 | 7.5      | 3.3 | 5.0  | 8.9      | 5.4  | 7.1  | 1.0     | .1   | .4   |
| 4     | 15.6     | 12.1 | 14.2 | 7.3      | 3.5 | 5.3  | 8.7      | 3.9  | 6.4  | 3.1     | .2   | 1.4  |
| 5     | 14.0     | 9.3  | 11.5 | 8.5      | 3.4 | 6.0  | 7.7      | 3.8  | 5.9  | .7      | .1   | .2   |
| 6     | 14.2     | 8.8  | 11.4 | 9.4      | 6.5 | 7.8  | 7.7      | 2.0  | 4.5  | .4      | .1   | .1   |
| 7     | 14.7     | 10.2 | 12.3 | 8.8      | 5.0 | 6.8  | 3.6      | 1.4  | 2.6  | .7      | .1   | .2   |
| 8     | 15.6     | 10.8 | 13.1 | 9.6      | 4.8 | 7.1  | 4.1      | .1   | 1.7  | 2.2     | .1   | 1.0  |
| 9     | 14.9     | 11.0 | 13.0 | 11.1     | 6.5 | 8.8  | 1.0      | .1   | .2   | 5.2     | .5   | 2.7  |
| 10    | 17.0     | 10.7 | 13.7 | 9.3      | 5.2 | 7.5  | 3.3      | .1   | 1.3  | 5.5     | 1.6  | 3.2  |
| 11    | 17.9     | 11.3 | 14.4 | 7.3      | 3.0 | 5.3  | 5.9      | .3   | 3.1  | 4.8     | .4   | 2.6  |
| 12    | 17.9     | 12.7 | 15.3 | 9.4      | 6.0 | 7.7  | 6.6      | 2.2  | 4.3  | 5.7     | .7   | 3.1  |
| 13    | 17.0     | 12.8 | 14.6 | 9.1      | 6.9 | 8.0  | 9.3      | 5.1  | 6.6  | 6.7     | 1.5  | 3.9  |
| 14    | 15.9     | 10.0 | 12.9 | 9.9      | 6.0 | 8.0  | 8.1      | 3.2  | 5.6  | 6.5     | 2.1  | 4.1  |
| 15    | 16.5     | 10.1 | 13.2 | 10.3     | 7.2 | 8.8  | 7.7      | 2.0  | 4.8  | 5.4     | 1.3  | 3.3  |
| 16    | 16.6     | 11.4 | 13.8 | 11.0     | 7.0 | 9.0  | 7.1      | 1.8  | 4.4  | 7.0     | 2.4  | 4.4  |
| 17    | 17.0     | 11.7 | 14.1 | 11.4     | 7.5 | 9.3  | 5.4      | 2.9  | 3.9  | 5.6     | .1   | 3.6  |
| 18    | 16.6     | 11.6 | 14.0 | 10.5     | 6.4 | 8.4  | 4.5      | 1.1  | 3.1  | .2      | .1   | .1   |
| 19    | 14.7     | 11.6 | 13.1 | 10.4     | 6.2 | 8.1  | 3.9      | .1   | 1.3  | .2      | .1   | .2   |
| 20    | 13.5     | 8.5  | 11.0 | 9.4      | 5.8 | 7.5  | 3.3      | .1   | 1.0  | .5      | .1   | .2   |
| 21    | 13.9     | 8.6  | 11.0 | 8.8      | 4.8 | 6.8  | 1.0      | .1   | .4   | 1.4     | .1   | .5   |
| 22    | 12.8     | 8.6  | 10.8 | 9.5      | 6.0 | 7.3  | 3.0      | .2   | 1.2  | 3.8     | .1   | 1.3  |
| 23    | 10.2     | 5.5  | 7.8  | 9.5      | 5.9 | 7.4  | 1.0      | .1   | .3   | 2.3     | .1   | .6   |
| 24    | 9.5      | 6.0  | 7.5  | 9.2      | 4.6 | 7.0  | .8       | .1   | .2   | 2.3     | .1   | .8   |
| 25    | 11.1     | 5.6  | 8.3  | 10.6     | 5.8 | 8.0  | 1.6      | .1   | .5   | 5.0     | .1   | 1.6  |
| 26    | 12.1     | 7.2  | 9.3  | 10.3     | 6.6 | 8.3  | 3.7      | .1   | 1.4  | .5      | .1   | .1   |
| 27    | 12.9     | 8.3  | 10.3 | 9.4      | 5.1 | 7.2  | 2.3      | .1   | .8   | .2      | .1   | .1   |
| 28    | 11.3     | 7.4  | 9.4  | 5.3      | 2.6 | 4.2  | 1.1      | .1   | .4   | 2.1     | .1   | .7   |
| 29    | 9.6      | 7.1  | 8.4  | 6.2      | 2.7 | 4.5  | 1.8      | .1   | .6   | 2.6     | .1   | .9   |
| 30    | 10.9     | 6.2  | 8.4  | 8.6      | 4.4 | 6.3  | .7       | .1   | .2   | 1.5     | .1   | .4   |
| 31    | 11.1     | 7.5  | 8.9  | ---      | --- | ---  | 3.1      | .1   | 1.3  | .6      | .1   | .2   |
| MONTH | ---      | 5.5  | ---  | 11.4     | 2.6 | 7.1  | 9.7      | .1   | 2.9  | 7.0     | .1   | 1.4  |
| DAY   | FEBRUARY |      |      | MARCH    |     |      | APRIL    |      |      | MAY     |      |      |
|       | MAX      | MIN  | MEAN | MAX      | MIN | MEAN | MAX      | MIN  | MEAN | MAX     | MIN  | MEAN |
| 1     | .1       | .1   | .1   | 7.6      | 1.6 | 4.6  | 16.1     | 9.1  | 12.5 | 21.0    | 11.2 | 15.6 |
| 2     | .2       | .1   | .1   | 9.1      | 2.6 | 5.7  | 17.0     | 11.0 | 13.8 | 21.9    | 13.0 | 17.2 |
| 3     | .1       | .1   | .1   | 9.5      | 3.2 | 6.3  | 13.3     | 10.5 | 11.6 | 22.5    | 13.7 | 17.7 |
| 4     | .1       | .1   | .1   | 11.4     | 5.4 | 8.2  | 10.5     | 7.0  | 8.8  | 22.8    | 13.3 | 17.7 |
| 5     | .2       | .1   | .1   | 10.7     | 5.2 | 8.0  | 9.6      | 5.5  | 7.4  | 18.9    | 14.5 | 16.6 |
| 6     | .1       | .1   | .1   | 8.0      | 1.7 | 4.3  | 14.1     | 6.7  | 10.3 | 23.7    | 13.0 | 17.6 |
| 7     | .2       | .1   | .1   | 4.4      | .1  | 2.0  | 13.4     | 10.4 | 12.0 | 21.7    | 15.5 | 18.1 |
| 8     | 1.5      | .1   | .4   | 7.3      | 2.2 | 4.5  | 17.1     | 10.9 | 13.9 | 25.2    | 15.1 | 19.5 |
| 9     | 5.7      | .2   | 1.9  | 9.7      | 3.4 | 6.5  | 19.3     | 13.0 | 16.1 | 25.0    | 17.2 | 20.3 |
| 10    | 7.2      | 4.5  | 5.7  | 12.1     | 6.1 | 9.0  | 17.4     | 13.9 | 15.8 | 21.8    | 15.2 | 18.2 |
| 11    | 6.0      | 2.6  | 4.4  | 14.3     | 9.0 | 11.5 | 17.7     | 11.7 | 14.6 | 21.1    | 15.3 | 17.9 |
| 12    | 5.9      | 2.0  | 4.0  | 14.5     | 9.6 | 11.9 | 17.4     | 11.0 | 14.1 | 22.7    | 16.9 | 19.6 |
| 13    | 6.6      | 1.8  | 4.3  | 13.8     | 8.4 | 10.9 | 16.2     | 9.5  | 13.5 | 20.6    | 16.2 | 18.6 |
| 14    | 8.2      | 3.3  | 5.7  | 10.0     | 3.6 | 6.8  | 10.7     | 6.8  | 8.8  | 21.8    | 16.7 | 19.2 |
| 15    | 8.2      | 4.5  | 6.2  | 10.2     | 3.5 | 6.8  | 14.8     | 7.2  | 10.9 | 21.1    | 16.9 | 19.2 |
| 16    | 7.3      | 2.6  | 5.0  | 11.0     | 7.3 | 9.2  | 16.3     | 10.3 | 13.1 | 20.6    | 16.3 | 18.6 |
| 17    | 9.1      | 3.9  | 6.2  | 10.0     | 7.0 | 8.6  | 17.6     | 11.7 | 14.2 | 21.1    | 16.0 | 18.5 |
| 18    | 8.4      | 5.0  | 6.7  | 7.3      | 5.2 | 6.2  | 17.9     | 10.9 | 14.1 | 21.3    | 16.4 | 18.9 |
| 19    | 9.5      | 4.4  | 6.4  | 10.8     | 3.3 | 6.8  | ---      | ---  | ---  | 18.9    | 15.7 | 17.3 |
| 20    | 9.5      | 6.2  | 7.6  | 12.1     | 4.4 | 8.1  | ---      | ---  | ---  | 18.3    | 14.6 | 16.4 |
| 21    | 13.1     | 6.4  | 9.4  | 13.5     | 6.1 | 9.7  | ---      | ---  | ---  | 18.1    | 13.8 | 16.0 |
| 22    | 12.8     | 7.3  | 9.7  | 13.5     | 7.5 | 10.5 | ---      | ---  | ---  | 19.1    | 14.5 | 16.8 |
| 23    | 10.2     | 6.0  | 8.3  | 13.8     | 9.1 | 11.3 | 19.9     | ---  | ---  | 20.0    | 15.4 | 17.7 |
| 24    | 9.4      | 4.6  | 7.2  | 10.7     | 4.2 | 7.1  | 20.1     | 13.2 | 16.6 | 18.8    | 15.5 | 17.1 |
| 25    | 10.3     | 5.1  | 7.6  | 6.3      | 1.1 | 3.9  | 20.9     | 13.1 | 16.8 | 16.8    | 13.0 | 14.2 |
| 26    | 7.7      | 3.6  | 5.3  | 9.4      | 1.9 | 5.6  | 19.9     | 11.9 | 15.9 | 13.2    | 12.3 | 12.8 |
| 27    | 4.5      | .9   | 2.7  | 12.7     | 5.1 | 8.7  | 20.1     | 13.4 | 16.3 | 16.4    | 12.2 | 14.3 |
| 28    | 2.0      | .1   | 1.1  | 14.2     | 7.3 | 10.6 | 14.4     | 9.1  | 10.9 | 16.7    | 13.8 | 15.2 |
| 29    | 5.9      | .1   | 2.5  | 15.4     | 8.7 | 11.9 | 17.3     | 6.1  | 11.2 | 19.8    | 14.2 | 16.7 |
| 30    | ---      | ---  | ---  | 15.4     | 9.6 | 12.0 | 19.0     | 9.7  | 14.0 | ---     | ---  | ---  |
| 31    | ---      | ---  | ---  | 14.5     | 7.8 | 11.2 | ---      | ---  | ---  | ---     | ---  | ---  |
| MONTH | 13.1     | .1   | 4.1  | 15.4     | .1  | 8.0  | ---      | ---  | ---  | ---     | ---  | ---  |

## 07119700 ARKANSAS RIVER AT CATLIN DAM NEAR FOWLER, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DAY   | MAX  | MIN  | MEAN | JUNE |      |      | JULY |      |      | AUGUST |      |      | SEPTEMBER |     |      |
|-------|------|------|------|------|------|------|------|------|------|--------|------|------|-----------|-----|------|
|       |      |      |      | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN | MAX    | MIN  | MEAN | MAX       | MIN | MEAN |
| 1     | ---  | ---  | ---  | 26.3 | 20.4 | 23.5 | 27.4 | 22.2 | 24.7 | 26.0   | 19.5 | 22.5 |           |     |      |
| 2     | ---  | ---  | ---  | 27.4 | 21.2 | 24.2 | 26.6 | 21.9 | 24.4 | 25.2   | 20.8 | 22.6 |           |     |      |
| 3     | ---  | ---  | ---  | 28.1 | 21.6 | 24.8 | 24.9 | 22.2 | 23.7 | 25.7   | 18.6 | 21.9 |           |     |      |
| 4     | ---  | ---  | ---  | 28.8 | 22.1 | 25.3 | 25.0 | 21.8 | 23.4 | 26.2   | 19.2 | 22.5 |           |     |      |
| 5     | 24.4 | ---  | ---  | 28.1 | 22.3 | 24.8 | 26.2 | 20.7 | 23.2 | 27.0   | 18.8 | 22.3 |           |     |      |
| 6     | 23.2 | 17.3 | 20.1 | 27.4 | 21.5 | 24.5 | 27.0 | 19.9 | 23.3 | 22.7   | 18.2 | 20.3 |           |     |      |
| 7     | 24.0 | 17.1 | 20.4 | 27.0 | 21.8 | 24.2 | 25.9 | 20.2 | 22.9 | 24.1   | 16.2 | 19.8 |           |     |      |
| 8     | 23.1 | 17.5 | 20.4 | 24.0 | 20.5 | 21.9 | 25.1 | 21.1 | 23.2 | 25.3   | 16.8 | 20.8 |           |     |      |
| 9     | 22.5 | 18.8 | 20.5 | 22.0 | 19.2 | 20.8 | 26.3 | 20.3 | 23.2 | 25.9   | 17.6 | 21.3 |           |     |      |
| 10    | 21.0 | 17.1 | 19.0 | 20.6 | 18.5 | 19.6 | 25.9 | 20.3 | 23.0 | ---    | ---  | ---  |           |     |      |
| 11    | 20.0 | 16.8 | 18.3 | 25.6 | 19.4 | 22.1 | 26.8 | 20.6 | 23.7 | ---    | ---  | ---  |           |     |      |
| 12    | 20.2 | 16.5 | 18.4 | 25.5 | 21.8 | 23.3 | 27.2 | 20.8 | 24.0 | ---    | ---  | ---  |           |     |      |
| 13    | 20.7 | 17.1 | 18.8 | 23.2 | 19.1 | 21.3 | ---  | ---  | ---  | 24.0   | ---  | ---  |           |     |      |
| 14    | 19.4 | 17.3 | 18.3 | 24.6 | 19.9 | 22.2 | ---  | ---  | ---  | 19.2   | 16.9 | 17.9 |           |     |      |
| 15    | 20.9 | 17.1 | 19.1 | 25.9 | 20.5 | 23.1 | ---  | ---  | ---  | 19.0   | 16.2 | 17.6 |           |     |      |
| 16    | 22.2 | 17.8 | 20.0 | 27.8 | 21.0 | 24.3 | ---  | ---  | ---  | 18.3   | 16.4 | 17.3 |           |     |      |
| 17    | 23.3 | 18.8 | 20.9 | 28.5 | 22.7 | 25.6 | ---  | ---  | ---  | 23.3   | 16.2 | 19.1 |           |     |      |
| 18    | 24.1 | 18.9 | 21.5 | 29.0 | 23.2 | 25.3 | ---  | ---  | ---  | 19.9   | 15.9 | 17.5 |           |     |      |
| 19    | 24.8 | 19.2 | 22.1 | 28.8 | 21.4 | 25.2 | ---  | ---  | ---  | 18.4   | 12.4 | 15.4 |           |     |      |
| 20    | 25.8 | 20.6 | 23.2 | 29.5 | 23.2 | 26.2 | 25.3 | ---  | ---  | 19.3   | 13.4 | 16.3 |           |     |      |
| 21    | 23.8 | 20.6 | 22.3 | 26.8 | 22.1 | 24.5 | 26.4 | 21.9 | 23.9 | 21.3   | 13.4 | 17.1 |           |     |      |
| 22    | 21.9 | 19.0 | 20.3 | 25.4 | 22.0 | 23.7 | 23.8 | 21.6 | 22.3 | 21.5   | 14.7 | 17.9 |           |     |      |
| 23    | 22.4 | 17.0 | 19.7 | 25.9 | 20.9 | 23.1 | 23.1 | 20.2 | 21.6 | 21.8   | 15.7 | 18.3 |           |     |      |
| 24    | 23.0 | 19.8 | 21.1 | 24.8 | 20.5 | 22.8 | 24.1 | 20.7 | 22.3 | 21.8   | 14.5 | 17.8 |           |     |      |
| 25    | 22.7 | 18.6 | 20.7 | 24.2 | 20.1 | 22.3 | 24.7 | 20.8 | 22.7 | 21.0   | 14.9 | 17.3 |           |     |      |
| 26    | 24.6 | 18.9 | 21.7 | 23.8 | 19.8 | 21.9 | 25.9 | 21.0 | 23.0 | 15.4   | 12.2 | 13.6 |           |     |      |
| 27    | 23.1 | 20.6 | 21.9 | 24.4 | 20.1 | 22.1 | 26.1 | 19.7 | 22.4 | 16.7   | 9.5  | 13.0 |           |     |      |
| 28    | 23.2 | 18.9 | 21.0 | 25.7 | 20.8 | 23.2 | 23.4 | 19.9 | 21.8 | 18.6   | 11.0 | 14.4 |           |     |      |
| 29    | 24.2 | 20.7 | 22.3 | 24.0 | 20.9 | 22.4 | 26.1 | 19.9 | 22.1 | 19.8   | 12.8 | 16.1 |           |     |      |
| 30    | 24.3 | 20.4 | 22.3 | 24.7 | 20.7 | 22.5 | 21.2 | 17.5 | 19.6 | 21.3   | 13.5 | 17.2 |           |     |      |
| 31    | ---  | ---  | ---  | 26.8 | 21.7 | 24.0 | 22.8 | 19.5 | 21.0 | ---    | ---  | ---  |           |     |      |
| MONTH | ---  | ---  | ---  | 29.5 | 18.5 | 23.4 | ---  | ---  | ---  | ---    | ---  | ---  |           |     |      |



## 07123000 ARKANSAS RIVER AT LA JUNTA, CO

LOCATION.--Lat 37°59'26", long 103°31'55", in SE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec.2, T.24 S., R.55 W., Otero County, Hydrologic Unit 11020005, on right bank at upstream side of bridge on State Highway 109 in La Junta, 450 ft upstream from King Arroyo.

DRAINAGE AREA.--12,210 mi<sup>2</sup>, of which 115 mi<sup>2</sup> is probably noncontributing.

PERIOD OF RECORD.--May to August 1889, September 1893 to December 1895 (gage heights, discharge measurements, and flood data only), April to October 1903, June to November 1908 (gage heights and discharge measurements only), April 1912 to current year. Monthly discharge only for some periods, published in WSP 1311. Published as "near La Junta" in 1903. Statistical summary computed for 1975 to current year.

REVISED RECORDS.--WSP 1341: Drainage area. WSP 1731: 1922.

GAGE.--Water-stage recorder with satellite telemetry, 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 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 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

| DAY   | OCT  | NOV  | DEC  | JAN   | FEB   | MAR  | APR  | MAY   | JUN   | JUL   | AUG  | SEP  |
|-------|------|------|------|-------|-------|------|------|-------|-------|-------|------|------|
| 1     | 85   | 65   | 51   | 174   | e290  | 387  | 58   | 46    | 804   | 125   | e60  | e250 |
| 2     | 93   | 66   | 50   | e139  | e280  | 336  | 69   | 48    | 872   | 140   | e55  | e240 |
| 3     | 76   | 72   | 47   | e115  | e260  | 295  | 99   | 50    | 560   | 91    | 46   | e215 |
| 4     | 84   | 64   | 49   | 117   | e240  | 277  | 88   | 47    | 463   | 88    | 69   | e150 |
| 5     | 79   | 64   | 47   | e139  | e250  | 211  | 72   | 35    | 491   | 88    | 46   | 144  |
| 6     | 78   | 71   | 44   | e145  | e280  | 221  | 71   | 43    | 155   | 107   | e40  | 117  |
| 7     | 58   | 60   | 40   | e145  | e340  | 309  | 75   | 40    | 106   | 180   | e35  | 111  |
| 8     | 56   | 58   | 39   | 135   | 384   | 381  | 80   | 39    | 113   | 267   | e30  | 70   |
| 9     | 52   | 68   | 39   | 149   | 437   | 377  | 88   | 37    | 89    | 237   | e25  | 65   |
| 10    | 44   | 71   | 42   | 159   | 431   | 341  | 79   | 34    | 316   | 238   | e25  | 46   |
| 11    | 43   | 56   | 45   | 124   | 412   | 164  | 59   | 37    | 683   | 1180  | 25   | 55   |
| 12    | 56   | 77   | 44   | 112   | 393   | 76   | 53   | 41    | 678   | 719   | 24   | 59   |
| 13    | 51   | 76   | 50   | 114   | 397   | 62   | 56   | 36    | 723   | 1390  | 32   | 58   |
| 14    | 47   | 72   | 45   | 111   | 399   | 62   | 53   | 36    | 489   | 681   | 60   | 54   |
| 15    | 56   | 95   | 46   | 108   | 392   | 88   | 66   | 35    | 872   | 392   | 68   | 54   |
| 16    | 61   | 60   | 46   | 113   | 420   | 65   | 63   | 73    | 729   | 422   | 70   | 54   |
| 17    | 65   | 39   | 43   | 109   | 584   | 61   | 72   | 194   | 694   | 152   | 70   | 55   |
| 18    | 67   | 41   | 43   | e80   | 535   | 47   | 63   | 101   | 516   | 114   | 78   | 49   |
| 19    | 71   | 37   | 97   | e110  | 469   | 41   | 50   | 100   | 337   | 112   | 121  | 49   |
| 20    | 71   | 35   | 120  | e180  | 400   | 48   | 50   | 334   | 245   | 136   | 158  | 53   |
| 21    | 82   | 33   | 122  | e210  | 368   | 52   | 43   | 220   | 127   | 131   | 122  | 56   |
| 22    | 74   | 34   | 114  | e230  | 323   | 52   | 36   | 251   | 124   | 111   | 64   | 61   |
| 23    | 80   | 36   | e120 | e258  | 293   | 53   | 44   | 294   | 100   | 98    | e66  | 61   |
| 24    | 51   | 39   | e132 | e277  | 284   | 46   | 58   | 147   | 503   | 290   | 55   | 61   |
| 25    | 53   | 41   | 190  | 287   | 271   | 48   | 56   | 461   | 1080  | 197   | e150 | 59   |
| 26    | 67   | 44   | 160  | e280  | 268   | 43   | 46   | 970   | 652   | 107   | 144  | 58   |
| 27    | 68   | 37   | e133 | e270  | 339   | 45   | 45   | 774   | 367   | 110   | 109  | 57   |
| 28    | 59   | 33   | e130 | 281   | 361   | 54   | 38   | 312   | 289   | 120   | 432  | 64   |
| 29    | 58   | 36   | 116  | 286   | 380   | 54   | 41   | 220   | 334   | 97    | 451  | 69   |
| 30    | 59   | 46   | 119  | e290  | ---   | 46   | 38   | 199   | 216   | 419   | 970  | 73   |
| 31    | 61   | ---  | 169  | e290  | ---   | 48   | ---  | 403   | ---   | 311   | e790 | ---  |
| TOTAL | 2005 | 1626 | 2532 | 5537  | 10480 | 4390 | 1809 | 5657  | 13727 | 8850  | 4490 | 2567 |
| MEAN  | 64.7 | 54.2 | 81.7 | 179   | 361   | 142  | 60.3 | 182   | 458   | 285   | 145  | 85.6 |
| MAX   | 93   | 95   | 190  | 290   | 584   | 387  | 99   | 970   | 1080  | 1390  | 970  | 250  |
| MIN   | 43   | 33   | 39   | 80    | 240   | 41   | 36   | 34    | 89    | 88    | 24   | 46   |
| AC-FT | 3980 | 3230 | 5020 | 10980 | 20790 | 8710 | 3590 | 11220 | 27230 | 17550 | 8910 | 5090 |

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 1996, 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 |  |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|--|
| MEAN | 185  | 116  | 118  | 147  | 154  | 96.4 | 119  | 524  | 901  | 600  | 287  | 135  |      |      |      |      |      |      |      |      |      |      |  |
| MAX  | 1189 | 545  | 335  | 453  | 620  | 400  | 770  | 3082 | 4307 | 3634 | 1345 | 463  |      |      |      |      |      |      |      |      |      |      |  |
| (WY) | 1985 | 1987 | 1987 | 1987 | 1985 | 1987 | 1987 | 1987 | 1995 | 1995 | 1984 | 1982 |      |      |      |      |      |      |      |      |      |      |  |
| MIN  | 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 1995 CALENDAR YEAR FOR 1996 WATER YEAR WATER YEARS 1975 - 1996

|                          |        |        |  |  |  |  |      |        |        |   |     |      |        |        |        |      |  |  |  |  |  |  |      |
|--------------------------|--------|--------|--|--|--|--|------|--------|--------|---|-----|------|--------|--------|--------|------|--|--|--|--|--|--|------|
| ANNUAL TOTAL             | 294462 | 63670  |  |  |  |  |      |        |        |   |     |      |        |        |        |      |  |  |  |  |  |  |      |
| ANNUAL MEAN              | 807    | 174    |  |  |  |  |      |        |        |   |     |      |        |        |        |      |  |  |  |  |  |  |      |
| HIGHEST ANNUAL MEAN      |        |        |  |  |  |  |      |        |        | a | 282 |      |        |        |        |      |  |  |  |  |  |  |      |
| LOWEST ANNUAL MEAN       |        |        |  |  |  |  |      |        |        |   | 832 |      |        |        |        |      |  |  |  |  |  |  | 1995 |
| HIGHEST DAILY MEAN       | 5950   | Jul 20 |  |  |  |  | 1390 | Jul 13 |        |   | b   | 9790 | Aug 22 | 1984   |        |      |  |  |  |  |  |  |      |
| LOWEST DAILY MEAN        | 21     | Apr 3  |  |  |  |  | 24   | Aug 12 |        |   |     | c    | 2.5    | Dec 8  | 1978   |      |  |  |  |  |  |  |      |
| ANNUAL SEVEN-DAY MINIMUM | 26     | Mar 29 |  |  |  |  | 28   | Aug 7  |        |   |     | d    | 3.0    | Dec 4  | 1978   |      |  |  |  |  |  |  |      |
| INSTANTANEOUS PEAK FLOW  |        |        |  |  |  |  | 2380 | Jul 11 |        |   |     | e    | 18000  | Aug 22 | 1984   |      |  |  |  |  |  |  |      |
| INSTANTANEOUS PEAK STAGE |        |        |  |  |  |  | f    | 9.28   | Jul 11 |   |     |      | g      | 11.09  | Aug 22 | 1984 |  |  |  |  |  |  |      |
| ANNUAL RUNOFF (AC-FT)    | 584100 | 126300 |  |  |  |  |      |        |        |   |     |      |        |        |        |      |  |  |  |  |  |  |      |
| 10 PERCENT EXCEEDS       | 4040   | 406    |  |  |  |  |      |        |        |   |     |      |        |        |        |      |  |  |  |  |  |  |      |
| 50 PERCENT EXCEEDS       | 94     | 84     |  |  |  |  |      |        |        |   |     |      |        |        |        |      |  |  |  |  |  |  |      |
| 90 PERCENT EXCEEDS       | 41     | 41     |  |  |  |  |      |        |        |   |     |      |        |        |        |      |  |  |  |  |  |  |      |

e-Estimated.

a-Average discharge for 61 years (water years 1913-73), 244 ft<sup>3</sup>/s; 176800 acre-ft/yr, prior to completion of Pueblo Dam.

b-Maximum daily discharge for period of record, 61100 ft<sup>3</sup>/s, Jun 4, 1921.

c-Minimum daily discharge for period of record, no flow, Jan 20-22 and Mar 20-22, 1915.

d-Maximum discharge and stage for period of record, 200000 ft<sup>3</sup>/s, Jun 4, 1921, gage height, 18.40 ft, site and datum then in use, from rating curve extended above 15000 ft<sup>3</sup>/s, on basis of slope-area measurement of peak flow.

f-Maximum gage height, 9.30 ft, Jul 13.

g-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 SE¼NE¼ sec.3, T.23 S., R.52 W., Bent County, Hydrologic Unit 11020009, on right bank at upstream side of bridge on U.S. Highway 50, 1.1 mi north of courthouse in Las Animas, and 4.2 mi upstream from Purgatoire River.

DRAINAGE AREA.--14,417 mi<sup>2</sup>, of which 441 mi<sup>2</sup> are probably noncontributing.

**WATER-DISCHARGE RECORDS**

PERIOD OF RECORD.--May to November 1898 (gage heights only), August to November 1909 (gage heights and discharge measurements only), May 1939 to current year. Statistical summary computed for 1975 to current year.

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 and those above 1,500 ft<sup>3</sup>/s, 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 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

| DAY   | OCT  | NOV  | DEC  | JAN   | FEB   | MAR   | APR  | MAY   | JUN   | JUL   | AUG  | SEP  |
|-------|------|------|------|-------|-------|-------|------|-------|-------|-------|------|------|
| 1     | 162  | 82   | 93   | 176   | e280  | 415   | 53   | 53    | 495   | 326   | 189  | 411  |
| 2     | 92   | 82   | 92   | 173   | e260  | 396   | 45   | 53    | 1080  | 197   | 104  | 312  |
| 3     | 93   | 76   | 90   | 134   | e250  | 349   | 48   | 45    | 905   | 168   | 88   | 272  |
| 4     | 90   | 77   | 89   | 131   | e270  | 310   | 84   | 44    | 552   | 144   | 99   | 226  |
| 5     | 95   | 75   | 89   | 141   | e300  | 273   | 104  | 50    | 471   | 130   | 90   | 171  |
| 6     | 94   | 78   | 87   | 141   | e350  | 237   | 93   | 55    | 323   | 112   | 77   | 125  |
| 7     | 94   | 80   | 87   | 147   | e390  | 310   | 77   | 50    | 145   | 104   | 76   | 95   |
| 8     | 89   | 80   | 86   | 148   | e430  | 445   | 71   | 46    | 113   | 155   | 78   | 89   |
| 9     | 87   | 82   | e84  | 147   | e500  | 484   | 73   | 44    | 114   | 231   | 78   | 79   |
| 10    | 87   | 84   | e84  | 163   | e480  | 489   | 78   | 44    | 100   | 260   | 82   | 74   |
| 11    | 84   | 87   | 80   | 159   | 469   | 411   | 73   | 47    | 278   | 566   | 77   | 73   |
| 12    | 79   | 90   | 76   | 128   | 484   | 210   | 55   | 51    | 584   | 1010  | 72   | 74   |
| 13    | 80   | 101  | 73   | 119   | 493   | 155   | 46   | 47    | 717   | 1930  | 72   | 79   |
| 14    | 78   | 111  | 70   | 114   | 515   | 111   | 52   | 47    | 616   | 2020  | 74   | 96   |
| 15    | 80   | 152  | 67   | 107   | 513   | 106   | 57   | 42    | 724   | 1240  | 74   | 98   |
| 16    | 84   | 156  | 67   | 105   | 528   | 132   | 63   | 45    | 886   | 860   | 75   | 89   |
| 17    | 81   | 126  | 67   | 100   | 644   | 116   | 59   | 60    | 844   | 447   | 79   | 90   |
| 18    | 83   | 107  | 67   | 63    | 833   | 120   | 56   | 72    | 598   | 217   | 83   | 85   |
| 19    | 84   | 102  | 67   | 61    | 696   | 115   | 57   | 37    | 469   | 174   | 79   | 86   |
| 20    | 80   | 99   | 93   | 95    | 585   | 108   | 50   | 41    | 288   | 155   | 163  | 92   |
| 21    | 86   | 98   | 111  | 173   | 470   | 93    | 47   | 144   | 206   | 142   | 114  | 116  |
| 22    | 92   | 99   | 104  | 239   | 435   | 77    | 45   | 115   | 167   | 124   | 84   | 95   |
| 23    | 91   | 98   | 98   | 293   | 346   | 71    | 46   | 115   | 146   | 107   | 76   | 91   |
| 24    | 101  | 97   | 100  | 287   | 303   | 64    | 46   | 129   | 154   | 102   | 221  | 85   |
| 25    | 87   | 96   | 130  | 314   | 283   | 63    | 44   | 121   | 711   | 189   | 125  | 86   |
| 26    | 81   | 96   | 166  | 305   | 268   | 67    | 44   | 996   | 823   | 138   | 222  | 94   |
| 27    | 81   | 94   | 150  | 321   | 305   | 68    | 43   | 1220  | 557   | 112   | 142  | 110  |
| 28    | 75   | 94   | 137  | 316   | 363   | 66    | 40   | 790   | 378   | 97    | 118  | 147  |
| 29    | 75   | 94   | 137  | 322   | 407   | 62    | 40   | 336   | 328   | 96    | 300  | 160  |
| 30    | 75   | 93   | 135  | e315  | ---   | 61    | 45   | 253   | 351   | 108   | 293  | 158  |
| 31    | 78   | ---  | 146  | e300  | ---   | 58    | ---  | 210   | ---   | 303   | 1020 | ---  |
| TOTAL | 2718 | 2886 | 3022 | 5737  | 12450 | 6042  | 1734 | 5402  | 14123 | 11964 | 4524 | 3858 |
| MEAN  | 87.7 | 96.2 | 97.5 | 185   | 429   | 195   | 57.8 | 174   | 471   | 386   | 146  | 129  |
| MAX   | 162  | 156  | 166  | 322   | 833   | 489   | 104  | 1220  | 1080  | 2020  | 1020 | 411  |
| MIN   | 75   | 75   | 67   | 61    | 250   | 58    | 40   | 37    | 100   | 96    | 72   | 73   |
| AC-FT | 5390 | 5720 | 5990 | 11380 | 24690 | 11980 | 3440 | 10710 | 28010 | 23730 | 8970 | 7650 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1975 - 1996, 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 |  |  |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|--|--|
| MEAN | 164  | 120  | 131  | 164  | 188  | 109  | 114  | 509  | 871  | 550  | 239  | 118  |      |      |      |      |      |      |      |      |      |      |  |  |
| MAX  | 1092 | 532  | 378  | 453  | 761  | 405  | 877  | 3205 | 4263 | 3339 | 1051 | 373  |      |      |      |      |      |      |      |      |      |      |  |  |
| (WY) | 1985 | 1987 | 1987 | 1985 | 1985 | 1987 | 1987 | 1987 | 1995 | 1995 | 1984 | 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 1995 CALENDAR YEAR |        | FOR 1996 WATER YEAR |        | WATER YEARS 1975 - 1996 |      |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|------|
| ANNUAL TOTAL             | 298768                 |        | 74460               |        |                         |      |
| ANNUAL MEAN              | 819                    |        | 203                 |        |                         |      |
| HIGHEST ANNUAL MEAN      |                        |        |                     |        | a                       | 273  |
| LOWEST ANNUAL MEAN       |                        |        |                     |        |                         | 841  |
| HIGHEST DAILY MEAN       | 5960                   | Jul 21 | 2020                | Jul 14 | b                       | 5960 |
| LOWEST DAILY MEAN        | c                      | 26     | 37                  | May 19 | d                       | 3.0  |
| ANNUAL SEVEN-DAY MINIMUM | 27                     | Apr 2  | 43                  | Apr 24 | e                       | 4.1  |
| INSTANTANEOUS PEAK FLOW  |                        |        | 2320                |        | f                       | 7150 |
| INSTANTANEOUS PEAK STAGE |                        |        | 7.71                |        | g                       | 7.38 |
| ANNUAL RUNOFF (AC-FT)    | 592600                 |        | 147700              |        | 198000                  |      |
| 10 PERCENT EXCEEDS       | 3860                   |        | 481                 |        | 541                     |      |
| 50 PERCENT EXCEEDS       | 126                    |        | 103                 |        | 115                     |      |
| 90 PERCENT EXCEEDS       | 67                     |        | 57                  |        | 14                      |      |

e-Estimated.

a-Average discharge for 34 years (water years 1940-73), 203 ft<sup>3</sup>/s; 147100 acre-ft/yr, prior to completion of Pueblo Dam.

b-Maximum daily discharge for period of record, 25800 ft<sup>3</sup>/s, May 20, 1955.

c-Also occurred Apr 4.

d-Minimum daily discharge for period of record, 0.9 ft<sup>3</sup>/s, Jul 31, Aug 1 and 3, 1964.

e-Maximum discharge and stage for period of record, 44000 ft<sup>3</sup>/s, May 20, 1955, gage height, 15.03 ft, site and datum then in use, from rating curve extended above 24000 ft<sup>3</sup>/s, on basis of slope-area measurement of peak flow.

f-Maximum gage height for statistical period, 8.52 ft, Jul 21, 1995.

## 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 and 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 1996 WATER YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 5,550 microsiemens, Apr. 22-23; minimum, 965 microsiemens, July 13.

WATER TEMPERATURE: Maximum, 31.2°C, July 4-5; minimum, 0.0°C, many days during winter.

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM @ 25 DEG. C), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DAY   | OCTOBER |      |      | NOVEMBER |      |      | DECEMBER |      |      | JANUARY |      |      |
|-------|---------|------|------|----------|------|------|----------|------|------|---------|------|------|
|       | MAX     | MIN  | MEAN | MAX      | MIN  | MEAN | MAX      | MIN  | MEAN | MAX     | MIN  | MEAN |
| 1     | 2990    | 1750 | 2190 | 2670     | 2560 | 2600 | 2770     | 2740 | 2760 | 2330    | 2180 | 2210 |
| 2     | 2770    | 2360 | 2630 | 2720     | 2580 | 2610 | 2800     | 2740 | 2770 | 2380    | 2240 | 2310 |
| 3     | 2780    | 2520 | 2680 | 2810     | 2580 | 2670 | 2810     | 2750 | 2780 | 2490    | 2380 | 2440 |
| 4     | 2670    | 2580 | 2620 | 2900     | 2710 | 2780 | 2800     | 2770 | 2790 | 2520    | 2460 | 2490 |
| 5     | 2670    | 2480 | 2550 | 3010     | 2750 | 2880 | 2810     | 2780 | 2790 | 2460    | 2330 | 2400 |
| 6     | 2550    | 2360 | 2460 | 2940     | 2720 | 2770 | 2830     | 2800 | 2820 | 2410    | 2260 | 2330 |
| 7     | 2660    | 2310 | 2480 | 2870     | 2690 | 2750 | 2850     | 2800 | 2830 | 2360    | 2270 | 2320 |
| 8     | 2740    | 2330 | 2540 | 2870     | 2760 | 2820 | 2870     | 2830 | 2840 | ---     | ---  | ---  |
| 9     | 2840    | 2690 | 2760 | 2910     | 2740 | 2820 | 2960     | 2830 | 2910 | ---     | ---  | ---  |
| 10    | 2850    | 2810 | 2830 | 2830     | 2730 | 2780 | 3000     | 2850 | 2920 | 2330    | 2250 | 2290 |
| 11    | 2810    | 2690 | 2750 | 2810     | 2690 | 2750 | 2880     | 2770 | 2830 | 2360    | 2280 | 2310 |
| 12    | 2920    | 2700 | 2810 | 2770     | 2670 | 2720 | 2860     | 2820 | 2850 | 2540    | 2350 | 2450 |
| 13    | 2910    | 2770 | 2840 | 2740     | 2400 | 2570 | 2860     | 2820 | 2840 | 2590    | 2510 | 2540 |
| 14    | 2820    | 2630 | 2720 | 2450     | 2300 | 2380 | 2870     | 2820 | 2850 | 2590    | 2530 | 2560 |
| 15    | 2860    | 2750 | 2800 | 2360     | 2300 | 2350 | 2870     | 2840 | 2850 | 2600    | 2560 | 2580 |
| 16    | 2890    | 2750 | 2820 | 2350     | 2230 | 2290 | 2880     | 2850 | 2860 | 2600    | 2540 | 2570 |
| 17    | 2820    | 2760 | 2790 | 2620     | 2340 | 2480 | 2890     | 2860 | 2870 | 2650    | 2570 | 2610 |
| 18    | 2810    | 2730 | 2760 | 2770     | 2610 | 2710 | 2880     | 2850 | 2860 | 3000    | 2550 | 2780 |
| 19    | 2800    | 2730 | 2750 | 2800     | 2750 | 2770 | 2870     | 2840 | 2860 | 2950    | 2700 | 2840 |
| 20    | 2880    | 2740 | 2780 | 2800     | 2770 | 2780 | 2870     | 2610 | 2710 | 2800    | 2110 | 2670 |
| 21    | 2820    | 2620 | 2740 | 2800     | 2770 | 2780 | 2660     | 2600 | 2630 | 2160    | 1990 | 2080 |
| 22    | 2690    | 2410 | 2610 | 2810     | 2710 | 2780 | 2620     | 2590 | 2600 | 2000    | 1840 | 1920 |
| 23    | 2700    | 2550 | 2630 | 2820     | 2760 | 2790 | 2640     | 2590 | 2620 | 1810    | 1730 | 1770 |
| 24    | 2570    | 2420 | 2480 | 2800     | 2750 | 2770 | 2650     | 2580 | 2620 | 1890    | 1770 | 1830 |
| 25    | 2770    | 2570 | 2660 | 2790     | 2750 | 2760 | 2630     | 2410 | 2520 | 1900    | 1880 | 1890 |
| 26    | 2790    | 2650 | 2730 | 2800     | 2760 | 2780 | 2410     | 2200 | 2300 | 1920    | 1800 | 1860 |
| 27    | 2780    | 2670 | 2720 | 2800     | 2760 | 2780 | 2470     | 2250 | 2360 | ---     | ---  | ---  |
| 28    | 2780    | 2730 | 2760 | 2790     | 2700 | 2770 | 2550     | 2450 | 2500 | 1930    | 1860 | 1900 |
| 29    | 2760    | 2690 | 2730 | 2770     | 2730 | 2750 | 2590     | 2490 | 2540 | 1960    | 1850 | 1900 |
| 30    | 2760    | 2670 | 2700 | 2780     | 2740 | 2760 | 2620     | 2510 | 2560 | ---     | ---  | ---  |
| 31    | 2710    | 2610 | 2650 | ---      | ---  | ---  | 2560     | 2330 | 2500 | ---     | ---  | ---  |
| MONTH | 2990    | 1750 | 2680 | 3010     | 2230 | 2700 | 3000     | 2200 | 2720 | ---     | ---  | ---  |



## ARKANSAS RIVER BASIN

## 07124000 ARKANSAS RIVER AT LAS ANIMAS, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DAY   | MAX      | MIN  | MEAN | MAX      | MIN | MEAN | MAX      | MIN  | MEAN | MAX     | MIN  | MEAN |
|-------|----------|------|------|----------|-----|------|----------|------|------|---------|------|------|
|       | OCTOBER  |      |      | NOVEMBER |     |      | DECEMBER |      |      | JANUARY |      |      |
| 1     | 18.4     | 12.8 | 15.3 | 9.5      | 5.9 | 8.3  | 10.3     | 5.1  | 7.7  | 3.4     | .8   | 2.0  |
| 2     | 19.2     | 11.4 | 15.0 | 5.9      | 4.3 | 5.1  | 10.3     | 5.3  | 7.7  | 1.5     | .0   | .4   |
| 3     | 19.8     | 11.3 | 15.0 | 9.8      | 3.6 | 6.2  | 9.5      | 4.9  | 7.1  | .4      | .0   | .1   |
| 4     | 17.3     | 11.4 | 13.8 | 8.1      | 3.7 | 5.6  | 8.8      | 5.4  | 7.1  | 1.9     | .0   | .8   |
| 5     | 14.7     | 8.8  | 11.1 | 10.7     | 3.1 | 6.8  | 7.7      | 4.8  | 6.4  | .4      | .0   | .1   |
| 6     | 16.2     | 7.4  | 11.2 | 10.9     | 5.7 | 8.1  | 7.5      | 3.1  | 5.1  | .4      | .0   | .0   |
| 7     | 16.9     | 8.9  | 12.4 | 10.3     | 4.8 | 7.2  | 4.5      | 2.4  | 3.5  | .8      | .0   | .2   |
| 8     | 18.1     | 10.1 | 13.6 | 11.6     | 4.0 | 7.5  | 4.7      | .5   | 2.8  | 3.0     | .0   | 1.2  |
| 9     | 17.9     | 10.1 | 13.7 | 12.6     | 5.6 | 8.8  | 2.8      | .0   | .9   | 5.0     | .7   | 2.8  |
| 10    | 18.8     | 10.5 | 14.2 | 8.7      | 4.4 | 6.9  | 4.3      | .0   | 1.9  | 5.2     | 2.2  | 3.6  |
| 11    | 19.7     | 11.2 | 15.0 | 9.6      | 2.1 | 5.7  | 5.9      | .9   | 3.5  | 5.1     | 1.4  | 3.3  |
| 12    | 19.9     | 12.1 | 15.5 | 11.6     | 5.3 | 8.2  | 6.5      | 2.6  | 4.5  | 6.1     | 1.3  | 3.6  |
| 13    | 16.7     | 11.2 | 13.9 | 9.2      | 6.1 | 7.8  | 8.2      | 4.3  | 6.1  | 6.9     | 1.8  | 4.3  |
| 14    | 16.9     | 8.1  | 12.1 | 11.7     | 5.4 | 8.4  | 7.3      | 3.6  | 5.6  | 7.1     | 2.5  | 4.8  |
| 15    | 18.0     | 9.0  | 13.0 | 11.3     | 6.2 | 8.7  | 7.8      | 3.1  | 5.5  | 5.7     | 2.1  | 3.9  |
| 16    | 18.3     | 10.7 | 14.0 | 10.6     | 6.4 | 8.5  | 7.7      | 3.6  | 5.7  | 6.4     | 2.2  | 4.3  |
| 17    | 18.2     | 11.4 | 14.3 | 11.2     | 6.3 | 8.5  | 5.6      | 3.3  | 4.4  | 6.3     | .0   | 4.0  |
| 18    | 18.4     | 10.3 | 14.0 | 10.7     | 5.3 | 7.8  | 5.0      | 3.2  | 3.9  | 1.8     | .0   | .6   |
| 19    | 15.4     | 9.8  | 12.5 | 10.3     | 4.9 | 7.5  | 6.1      | 2.7  | 4.0  | 3.3     | 1.0  | 2.1  |
| 20    | 14.7     | 6.7  | 10.3 | 9.6      | 4.7 | 7.0  | 3.6      | .5   | 2.0  | 3.8     | .0   | 1.2  |
| 21    | 14.5     | 6.9  | 10.4 | 10.0     | 4.1 | 6.9  | 3.2      | .0   | 1.5  | 2.5     | .0   | .8   |
| 22    | 13.0     | 7.5  | 10.1 | 10.4     | 5.7 | 7.7  | 4.2      | 1.1  | 2.5  | 2.5     | .0   | .8   |
| 23    | 11.2     | 5.0  | 7.7  | 10.1     | 5.6 | 7.5  | 2.9      | .0   | 1.2  | .1      | .0   | .0   |
| 24    | 8.9      | 4.8  | 6.6  | 9.7      | 4.2 | 6.9  | 1.8      | .0   | .5   | .6      | .0   | .1   |
| 25    | 12.3     | 4.3  | 7.9  | 11.6     | 5.5 | 8.2  | 3.0      | .0   | .9   | 2.3     | .0   | .7   |
| 26    | 13.4     | 5.9  | 9.2  | 11.0     | 6.5 | 8.6  | 3.0      | .0   | 1.1  | .2      | .0   | .0   |
| 27    | 14.2     | 7.8  | 10.6 | 8.9      | 4.5 | 7.3  | 2.6      | .0   | 1.0  | .1      | .0   | .0   |
| 28    | 12.3     | 6.3  | 9.3  | 6.8      | 2.2 | 4.5  | 1.8      | .0   | .6   | 2.5     | .0   | .9   |
| 29    | 11.1     | 6.4  | 8.6  | 7.5      | 2.5 | 4.9  | 3.6      | .4   | 1.7  | 3.2     | .0   | 1.4  |
| 30    | 11.6     | 6.8  | 8.5  | 10.1     | 4.0 | 6.9  | 1.7      | .0   | .6   | .0      | .0   | .0   |
| 31    | 11.6     | 7.2  | 9.0  | ---      | --- | ---  | 3.4      | .0   | 1.5  | .0      | .0   | .0   |
| MONTH | 19.9     | 4.3  | 11.9 | 12.6     | 2.1 | 7.3  | 10.3     | .0   | 3.5  | 7.1     | .0   | 1.5  |
| DAY   | MAX      | MIN  | MEAN | MAX      | MIN | MEAN | MAX      | MIN  | MEAN | MAX     | MIN  | MEAN |
|       | FEBRUARY |      |      | MARCH    |     |      | APRIL    |      |      | MAY     |      |      |
| 1     | .0       | .0   | .0   | 6.1      | 1.5 | 3.8  | ---      | ---  | ---  | 22.5    | 9.6  | 15.2 |
| 2     | .1       | .0   | .0   | 7.8      | 2.5 | 5.0  | 19.5     | ---  | ---  | 23.2    | 10.3 | 15.9 |
| 3     | .0       | .0   | .0   | 8.8      | 3.4 | 6.0  | 14.5     | 9.0  | 11.3 | 25.3    | 10.2 | 16.3 |
| 4     | .0       | .0   | .0   | 9.8      | 5.4 | 7.4  | 11.4     | 7.4  | 9.1  | 24.8    | 11.4 | 17.3 |
| 5     | .1       | .0   | .0   | 10.8     | 5.1 | 7.8  | 11.3     | 5.3  | 8.3  | 19.1    | 13.1 | 15.1 |
| 6     | .1       | .0   | .0   | 6.8      | 1.3 | 3.8  | 17.7     | 5.2  | 10.9 | 24.2    | 11.1 | 16.4 |
| 7     | .1       | .0   | .0   | 3.6      | .0  | 1.5  | 16.4     | 8.2  | 12.0 | 22.5    | 13.3 | 17.2 |
| 8     | .1       | .0   | .0   | 6.0      | 1.0 | 3.3  | 20.6     | 9.5  | 14.5 | 27.1    | 14.0 | 19.0 |
| 9     | .1       | .0   | .1   | 8.4      | 2.8 | 5.4  | 22.7     | 10.0 | 15.7 | 27.2    | 15.2 | 19.4 |
| 10    | 5.9      | .0   | 2.9  | 11.2     | 5.5 | 8.2  | 21.1     | 11.5 | 15.6 | 24.5    | 12.3 | 17.1 |
| 11    | 5.3      | 2.1  | 3.7  | 13.9     | 8.7 | 11.1 | 21.3     | 10.6 | 14.7 | 24.3    | 12.2 | 17.1 |
| 12    | 5.0      | 1.1  | 3.1  | 14.8     | 9.0 | 11.6 | 21.6     | 8.8  | 14.2 | 26.5    | 13.0 | 18.4 |
| 13    | 6.2      | 1.9  | 4.0  | 14.1     | 7.8 | 10.8 | 17.8     | 6.6  | 12.0 | 24.0    | 13.5 | 17.4 |
| 14    | 7.7      | 3.3  | 5.4  | 10.2     | 4.2 | 6.7  | 13.6     | 5.6  | 8.5  | 27.3    | 13.5 | 19.3 |
| 15    | 7.4      | 4.6  | 5.9  | 12.8     | 3.7 | 7.8  | 19.8     | 5.4  | 11.9 | 27.3    | 13.5 | 20.0 |
| 16    | 6.9      | 2.8  | 4.9  | 13.8     | 6.1 | 9.5  | 20.2     | 8.4  | 13.3 | 28.6    | 14.0 | 20.8 |
| 17    | 8.1      | 3.8  | 5.9  | 11.7     | 6.4 | 8.5  | 20.1     | 9.3  | 13.8 | 27.7    | 14.9 | 21.1 |
| 18    | 8.3      | 5.4  | 6.8  | 9.4      | 4.6 | 6.6  | 21.2     | 8.6  | 13.9 | 28.1    | 17.3 | 21.5 |
| 19    | 7.5      | 5.2  | 6.4  | 11.3     | 2.6 | 6.3  | 18.5     | 7.6  | 12.4 | 25.0    | 13.7 | 18.8 |
| 20    | 9.2      | 5.3  | 7.1  | 13.0     | 2.8 | 7.3  | 15.1     | 6.7  | 10.5 | 26.1    | 12.6 | 18.4 |
| 21    | 10.9     | 6.7  | 8.8  | 15.7     | 4.7 | 9.4  | 16.9     | 6.9  | 11.2 | 24.6    | 16.4 | 19.6 |
| 22    | 11.9     | 7.9  | 9.7  | 15.5     | 5.6 | 10.0 | 20.3     | 6.8  | 12.6 | 26.3    | 15.2 | 20.2 |
| 23    | 10.9     | 7.0  | 8.8  | 16.9     | 7.0 | 11.3 | 22.7     | 7.7  | 14.5 | 27.1    | 17.9 | 21.6 |
| 24    | 9.9      | 5.6  | 7.7  | 8.8      | 2.0 | 5.5  | 21.7     | 10.1 | 15.4 | 22.0    | 16.8 | 19.2 |
| 25    | 11.6     | 6.4  | 8.8  | 9.6      | .0  | 4.0  | 21.0     | 10.4 | 14.9 | 16.8    | 13.4 | 14.3 |
| 26    | 7.8      | 3.9  | 5.7  | 14.0     | 1.3 | 7.0  | 22.9     | 8.3  | 15.1 | 15.0    | 13.3 | 13.9 |
| 27    | 4.9      | 1.3  | 3.0  | 16.4     | 3.8 | 9.3  | 21.1     | 10.5 | 14.8 | 17.6    | 12.7 | 15.0 |
| 28    | 3.6      | .6   | 2.0  | 17.1     | 5.6 | 10.5 | 14.4     | 8.0  | 10.4 | 18.0    | 14.6 | 16.1 |
| 29    | 4.9      | .2   | 2.5  | 18.4     | 7.0 | 12.0 | 20.3     | 5.0  | 12.1 | 21.7    | 14.5 | 17.6 |
| 30    | ---      | ---  | ---  | 16.6     | 8.3 | 11.6 | 21.4     | 7.3  | 13.6 | 24.2    | 15.3 | 19.4 |
| 31    | ---      | ---  | ---  | ---      | --- | ---  | ---      | ---  | ---  | 24.7    | 16.7 | 20.2 |
| MONTH | 11.9     | .0   | 3.9  | ---      | --- | ---  | ---      | ---  | ---  | 28.6    | 9.6  | 18.0 |

## 07124000 ARKANSAS RIVER AT LAS ANIMAS, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DAY   | MAX  | MIN  | MEAN |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|
|       |      |      |      |      |      |      |      |      |      |      |      |      |
| 1     | 22.4 | 18.4 | 20.2 | 28.3 | 19.8 | 23.5 | 28.8 | 21.4 | 24.4 | 25.1 | 20.0 | 22.1 |
| 2     | 23.0 | 19.6 | 21.3 | 29.8 | 20.2 | 24.7 | 29.8 | 20.0 | 24.4 | 25.7 | 21.0 | 23.1 |
| 3     | 24.5 | 20.2 | 22.1 | 30.2 | 20.6 | 25.0 | 30.5 | 19.7 | 23.9 | 25.7 | 19.9 | 22.7 |
| 4     | 22.8 | 20.0 | 21.6 | 31.2 | 20.7 | 25.5 | 27.4 | 19.8 | 23.4 | 25.9 | 19.5 | 22.4 |
| 5     | 24.6 | 20.9 | 22.6 | 31.2 | 21.1 | 25.2 | 29.0 | 18.6 | 23.2 | 25.8 | 18.9 | 21.9 |
| 6     | 24.7 | 19.3 | 21.8 | 30.5 | 19.8 | 24.7 | 29.9 | 18.0 | 23.3 | 24.4 | 18.1 | 20.7 |
| 7     | 26.2 | 16.9 | 21.1 | 30.5 | 19.6 | 23.8 | 28.0 | 17.4 | 22.2 | ---  | ---  | ---  |
| 8     | 26.9 | 15.6 | 21.0 | 23.3 | 18.6 | 21.0 | 24.5 | 18.6 | 21.3 | ---  | ---  | ---  |
| 9     | 28.4 | 17.2 | 22.0 | 22.2 | 19.4 | 20.8 | 27.7 | 18.3 | 22.0 | ---  | ---  | ---  |
| 10    | 28.7 | 17.3 | 22.2 | 22.9 | 18.8 | 20.0 | 28.5 | 17.1 | 22.2 | 26.4 | ---  | ---  |
| 11    | 25.5 | 19.0 | 21.8 | 25.2 | 19.0 | 21.9 | 28.8 | 17.1 | 22.4 | 24.8 | 15.8 | 20.1 |
| 12    | 24.3 | 19.5 | 21.7 | 26.1 | 22.3 | 23.3 | 28.4 | 16.7 | 22.0 | 20.5 | 15.8 | 17.7 |
| 13    | 23.9 | 20.2 | 21.8 | 23.4 | 19.2 | 21.6 | 29.4 | 16.6 | 22.5 | 23.1 | 15.7 | 18.6 |
| 14    | 23.5 | 21.0 | 22.1 | 23.6 | 21.0 | 22.5 | 29.3 | 19.0 | 23.3 | 21.5 | 15.5 | 18.4 |
| 15    | 24.7 | 20.4 | 22.2 | 26.7 | 21.3 | 23.6 | 27.4 | 18.2 | 22.3 | 20.8 | 16.6 | 18.4 |
| 16    | 24.3 | 20.4 | 22.2 | 27.1 | 22.2 | 24.5 | 27.9 | 18.0 | 22.6 | 22.6 | 16.2 | 18.6 |
| 17    | 25.7 | 20.9 | 23.1 | 28.0 | 23.7 | 25.7 | 28.0 | 18.0 | 22.4 | 24.8 | 15.1 | 19.1 |
| 18    | 27.3 | 21.5 | 24.1 | 28.2 | 23.3 | 25.3 | 29.0 | 18.2 | 22.8 | 22.2 | 15.4 | 17.9 |
| 19    | 27.6 | 21.5 | 24.3 | 27.9 | 22.0 | 24.7 | 27.6 | 18.0 | 22.3 | 21.5 | 12.1 | 16.4 |
| 20    | 28.3 | 21.8 | 24.7 | 28.7 | 22.9 | 25.5 | 25.3 | 18.0 | 21.7 | 22.0 | 12.9 | 17.0 |
| 21    | 26.5 | 21.0 | 23.4 | 28.7 | 22.0 | 25.3 | 29.0 | 19.7 | 23.5 | 22.1 | 13.3 | 17.3 |
| 22    | 24.6 | 19.7 | 21.5 | 28.0 | 22.4 | 24.9 | 26.4 | 19.5 | 22.3 | 22.5 | 13.6 | 17.8 |
| 23    | 27.1 | 18.1 | 22.2 | 27.5 | 21.4 | 24.1 | 25.8 | 19.0 | 22.0 | 21.9 | 14.6 | 17.8 |
| 24    | 28.8 | 20.0 | 23.2 | 28.2 | 20.7 | 23.6 | 24.6 | 18.6 | 21.3 | 22.9 | 14.6 | 18.1 |
| 25    | 24.3 | 20.5 | 22.2 | 27.1 | 19.7 | 23.1 | 28.0 | 19.1 | 23.1 | 22.0 | 14.1 | 17.3 |
| 26    | 25.7 | 21.4 | 23.2 | 24.7 | 19.3 | 21.5 | 26.4 | 19.6 | 22.8 | 14.4 | 11.0 | 12.5 |
| 27    | 26.1 | 22.1 | 23.8 | 28.6 | 18.6 | 23.0 | 26.0 | 19.1 | 22.6 | 16.3 | 9.9  | 12.4 |
| 28    | 25.9 | 21.2 | 23.2 | 28.1 | 19.0 | 23.1 | 27.3 | 19.3 | 22.7 | 18.4 | 10.1 | 13.8 |
| 29    | 26.3 | 21.1 | 23.3 | 26.6 | 18.9 | 21.8 | 24.6 | 19.3 | 22.0 | 19.6 | 12.2 | 15.6 |
| 30    | 23.3 | 20.4 | 21.9 | 27.2 | 19.3 | 22.4 | 22.1 | 19.9 | 20.9 | 20.8 | 13.3 | 16.8 |
| 31    | ---  | ---  | ---  | 27.1 | 18.6 | 23.0 | 21.7 | 18.9 | 20.1 | ---  | ---  | ---  |
| MONTH | 28.8 | 15.6 | 22.4 | 31.2 | 18.6 | 23.5 | 30.5 | 16.6 | 22.5 | ---  | ---  | ---  |

## 07124200 PURGATOIRE RIVER AT MADRID, CO

LOCATION.--Lat 37°07'46", long 104°38'20", in SW<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec.35, T.33 S., R.65 W., Las Animas County, Hydrologic Unit 11020010, on left bank 70 ft downstream from county bridge, 0.3 mi northeast of Madrid, and 1.0 mi downstream from Burro Canyon.

DRAINAGE AREA.--505 mi<sup>2</sup>.

PERIOD OF RECORD.--March 1972 to current year. Water-quality data available October 1978 to September 1981.

GAGE.--Water-stage recorder with satellite telemetry. 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 ft<sup>3</sup>/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 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

| DAY   | OCT  | NOV  | DEC  | JAN  | FEB  | MAR  | APR  | MAY  | JUN  | JUL  | AUG  | SEP  |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1     | 67   | 35   | 27   | e19  | e17  | 25   | 22   | 39   | 56   | 50   | e32  | 42   |
| 2     | 65   | 34   | 24   | e18  | e17  | 20   | 23   | 39   | 55   | 47   | e22  | 38   |
| 3     | 67   | 32   | 24   | e19  | e18  | 18   | 25   | 38   | 55   | 44   | 52   | 35   |
| 4     | 63   | 30   | 23   | e19  | e19  | 19   | 29   | 40   | 59   | 41   | 24   | 30   |
| 5     | 61   | 32   | 22   | e18  | e20  | 17   | 28   | 43   | 63   | 41   | 20   | 26   |
| 6     | 62   | 32   | 22   | e20  | e22  | 16   | 23   | 52   | 58   | 39   | 15   | 27   |
| 7     | 61   | 31   | 21   | e21  | e24  | 14   | 27   | 64   | 60   | 36   | 42   | 29   |
| 8     | 60   | 31   | 22   | e22  | e25  | 20   | 26   | 70   | 57   | 45   | 24   | 27   |
| 9     | 60   | 31   | e23  | e22  | e27  | 19   | 28   | 71   | 56   | 59   | 31   | 24   |
| 10    | 57   | 34   | e25  | e23  | e26  | 18   | 29   | 73   | 50   | 56   | 28   | 24   |
| 11    | 54   | 29   | e26  | e23  | e25  | 18   | 32   | 82   | 52   | 57   | 23   | 25   |
| 12    | 51   | 39   | 25   | e23  | e25  | 18   | 32   | 84   | 51   | 40   | 18   | 24   |
| 13    | 50   | 37   | 21   | e24  | e24  | 18   | 32   | 93   | 62   | 39   | 17   | 65   |
| 14    | 49   | 33   | 20   | e23  | e24  | 19   | 30   | 92   | 70   | 36   | 15   | 41   |
| 15    | 49   | 31   | 19   | e23  | e22  | 22   | 29   | 82   | 86   | 36   | 61   | 39   |
| 16    | 49   | 30   | 17   | e23  | e21  | 20   | 28   | 80   | 56   | 46   | 27   | 35   |
| 17    | 47   | 28   | e15  | e21  | 20   | 19   | 27   | 83   | 41   | 49   | 32   | 29   |
| 18    | 47   | 28   | e16  | e20  | 19   | 17   | 27   | 82   | 34   | 70   | e19  | 30   |
| 19    | 46   | 28   | e16  | e19  | 18   | 17   | 29   | 78   | 29   | 50   | 16   | 30   |
| 20    | 43   | 27   | e15  | e19  | 18   | 20   | 29   | 77   | 27   | 39   | 19   | 27   |
| 21    | 42   | 27   | e16  | e21  | 19   | 22   | 28   | 76   | 24   | 36   | 19   | 27   |
| 22    | 40   | 27   | e16  | e22  | 20   | 20   | 27   | 75   | 33   | 29   | 151  | 25   |
| 23    | 38   | 26   | e16  | e20  | 19   | 21   | 27   | 75   | 36   | 32   | 85   | 28   |
| 24    | 37   | 26   | e17  | e21  | 16   | 21   | 26   | 74   | 30   | 81   | 51   | 30   |
| 25    | 39   | 25   | e18  | e23  | 18   | 19   | 29   | 99   | 26   | 298  | 37   | 25   |
| 26    | 38   | 24   | e19  | e21  | 17   | 19   | 34   | 98   | 27   | 159  | 34   | 25   |
| 27    | 37   | 23   | e18  | e20  | 14   | 26   | 37   | 67   | 42   | 94   | 38   | 33   |
| 28    | 37   | 20   | e19  | e20  | 14   | 23   | 41   | 56   | 47   | 21   | 58   | 29   |
| 29    | 37   | 26   | e17  | e20  | 14   | 21   | 41   | 50   | 44   | 86   | 68   | 28   |
| 30    | 36   | 26   | e19  | e17  | ---  | 22   | 43   | 58   | 45   | e50  | 97   | 26   |
| 31    | 35   | ---  | e20  | e18  | ---  | 22   | ---  | 60   | ---  | e44  | 50   | ---  |
| TOTAL | 1524 | 882  | 618  | 642  | 582  | 610  | 888  | 2150 | 1431 | 1850 | 1225 | 923  |
| MEAN  | 49.2 | 29.4 | 19.9 | 20.7 | 20.1 | 19.7 | 29.6 | 69.4 | 47.7 | 59.7 | 39.5 | 30.8 |
| MAX   | 67   | 39   | 27   | 24   | 27   | 26   | 43   | 99   | 86   | 298  | 151  | 65   |
| MIN   | 35   | 20   | 15   | 17   | 14   | 14   | 22   | 38   | 24   | 21   | 15   | 24   |
| AC-FT | 3020 | 1750 | 1230 | 1270 | 1150 | 1210 | 1760 | 4260 | 2840 | 3670 | 2430 | 1830 |

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1972 - 1996, 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 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 30.1 | 24.7 | 21.0 | 18.4 | 19.6 | 20.6 | 46.8 | 133  | 201  | 129  | 112  | 57.0 |      |      |      |      |      |      |      |      |      |      |      |      |      |
| MAX  | 78.5 | 37.7 | 40.3 | 36.6 | 37.2 | 55.9 | 203  | 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 1995 CALENDAR YEAR

## FOR 1996 WATER YEAR

## WATER YEARS 1972 - 1996

|                          |       |        |                    |
|--------------------------|-------|--------|--------------------|
| ANNUAL TOTAL             | 34405 | 13325  |                    |
| ANNUAL MEAN              | 94.3  | 36.4   | 70.0               |
| HIGHEST ANNUAL MEAN      |       |        | 145                |
| LOWEST ANNUAL MEAN       |       |        | 21.6               |
| HIGHEST DAILY MEAN       | 778   | Jun 30 | 1640               |
| LOWEST DAILY MEAN        | 14    | Feb 12 | <sup>a</sup> 14    |
| ANNUAL SEVEN-DAY MINIMUM | 15    | Feb 8  | Feb 27             |
| INSTANTANEOUS PEAK FLOW  |       |        | 16                 |
| INSTANTANEOUS PEAK STAGE |       |        | Dec 17             |
| ANNUAL RUNOFF (AC-FT)    | 68240 | 26430  | <sup>c</sup> 14300 |
| 10 PERCENT EXCEEDS       | 282   | 64     | <sup>d</sup> 12.80 |
| 50 PERCENT EXCEEDS       | 39    | 28     | Jul 20 1976        |
| 90 PERCENT EXCEEDS       | 18    | 18     | Jul 20 1976        |

e-Estimated.

a-Also occurred Feb 28-29, and Mar 7.

b-Also occurred Feb 24 to Mar 2, 1977.

c-From rating curve extended above 300 ft<sup>3</sup>/s, on basis of drift-timed measurement, and slope-area measurements of peak flow.

d-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 mi<sup>2</sup>.

PERIOD OF RECORD.--August 1977 to current year.

REVISED RECORDS.--WDR CO-78-1: 1977(M). WDR CO-83-1: 1981-82 (contents). WDR CO-89-1: 1988 (contents).

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 6,073.64 ft above sea level, (levels by U.S. Army, Corps of Engineers).

REMARKS.--Records good. Reservoir is formed by a rock and earthfill dam completed in 1977. Storage began Aug. 19, 1977. 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, 30,900 acre-ft, Apr. 15-16, maximum elevation, 6,193.02 ft; minimum contents, 8,150 acre-ft, Sept. 26, minimum elevation, 6,155.48 ft.

Capacity table (elevation, in feet, and contents, in acre-feet, effective Nov. 1, 1994)

|         |        |         |        |
|---------|--------|---------|--------|
| 6,160.0 | 10,080 | 6,185.0 | 24,530 |
| 6,165.0 | 12,360 | 6,190.0 | 28,370 |
| 6,170.0 | 14,940 | 6,195.0 | 32,550 |
| 6,175.0 | 17,800 | 6,200.0 | 37,010 |
| 6,180.0 | 21,000 | 6,205.0 | 41,820 |

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY OBSERVATION AT 24:00 VALUES

| DAY | OCT   | NOV   | DEC   | JAN   | FEB   | MAR   | APR   | MAY    | JUN   | JUL   | AUG  | SEP  |
|-----|-------|-------|-------|-------|-------|-------|-------|--------|-------|-------|------|------|
| 1   | 22600 | 23900 | 25800 | 26900 | 28100 | 29300 | 30700 | 27100  | 13100 | 10600 | 9130 | 8370 |
| 2   | 22500 | 23900 | 25900 | 26900 | 28200 | 29400 | 30700 | 26600  | 12700 | 10500 | 8890 | 8240 |
| 3   | 22600 | 24000 | 26000 | 27000 | 28200 | 29400 | 30700 | 26200  | 12300 | 10400 | 8800 | 8300 |
| 4   | 22500 | 24100 | 26000 | 27000 | 28300 | 29400 | 30700 | e25700 | 11900 | 10400 | 8810 | 8320 |
| 5   | 22500 | 24200 | 26000 | 27000 | 28300 | 29500 | 30700 | e25300 | 11600 | 10300 | 8800 | 8300 |
| 6   | 22500 | 24200 | 26100 | 27100 | 28400 | 29500 | 30800 | e24800 | 11300 | 10100 | 8750 | 8280 |
| 7   | 22500 | 24300 | 26100 | 27100 | 28400 | 29500 | 30800 | 24400  | 10900 | 9880  | 8790 | 8270 |
| 8   | 22400 | 24400 | 26200 | 27200 | 28500 | 29600 | 30800 | 24000  | 10600 | 9690  | 8750 | 8240 |
| 9   | 22500 | 24500 | 26200 | 27200 | 28600 | 29600 | 30800 | 23600  | 10600 | 9630  | 8720 | 8220 |
| 10  | 22500 | 24500 | 26200 | 27300 | 28600 | 29600 | 30800 | 23200  | 10600 | 9430  | 8650 | 8220 |
| 11  | 22400 | 24600 | 26300 | 27300 | 28700 | 29700 | 30800 | 22800  | 10600 | 9250  | 8600 | 8250 |
| 12  | 22400 | 24700 | 26300 | 27400 | 28700 | 29700 | 30800 | 22400  | 10500 | e9110 | 8550 | 8260 |
| 13  | 22400 | 24800 | 26200 | 27400 | 28700 | 29700 | 30800 | 22000  | 10500 | e8980 | 8510 | 8310 |
| 14  | 22500 | 24800 | 26200 | 27500 | 28800 | 29800 | 30800 | 21600  | 10600 | 8840  | 8460 | 8240 |
| 15  | 22600 | 24900 | 26300 | 27500 | 28800 | 29900 | 30900 | 21300  | 10800 | 8740  | 8520 | 8180 |
| 16  | 22700 | 25000 | 26300 | 27600 | 28900 | 30000 | 30900 | 20900  | 10900 | 8750  | 8530 | 8190 |
| 17  | 22800 | 25000 | 26400 | 27600 | 28900 | 30000 | 30800 | 20400  | 10900 | 8780  | 8510 | 8200 |
| 18  | 22900 | 25100 | 26400 | 27600 | 29000 | 30000 | 30800 | 19900  | 11000 | 8820  | 8450 | 8200 |
| 19  | 22900 | 25200 | 26400 | 27700 | 29000 | 30100 | 30800 | 19400  | 11000 | 8860  | 8320 | 8210 |
| 20  | 23000 | 25200 | 26400 | 27700 | 29000 | 30100 | 30800 | 18900  | 11100 | 8900  | 8470 | 8190 |
| 21  | 23100 | 25300 | 26500 | 27800 | 29100 | 30200 | 30800 | 18400  | 11100 | 8870  | 8410 | 8180 |
| 22  | 23200 | 25300 | 26500 | 27800 | 29100 | 30200 | 30600 | 17800  | 11100 | 8770  | 8410 | 8170 |
| 23  | 23300 | 25400 | 26500 | 27800 | 29200 | 30300 | 30300 | 17300  | 11100 | 8760  | 8270 | 8160 |
| 24  | 23300 | 25400 | 26600 | 27900 | 29200 | 30300 | 29900 | 16800  | 11000 | 8780  | 8290 | 8170 |
| 25  | 23400 | 25500 | 26600 | 27900 | 29200 | 30300 | 29600 | 16400  | 10900 | 9360  | 8410 | 8170 |
| 26  | 23500 | 25500 | 26600 | 27900 | 29200 | 30400 | 29200 | 16000  | 10700 | 9620  | 8490 | 8150 |
| 27  | 23600 | 25600 | 26700 | 28000 | 29300 | 30400 | 28800 | 15500  | 10600 | 9870  | 8620 | 8170 |
| 28  | 23600 | 25600 | 26700 | 28000 | 29300 | 30500 | 28400 | 15000  | 10600 | 9910  | 8760 | 8180 |
| 29  | 23700 | 25700 | 26700 | 28100 | 29300 | 30500 | 28000 | 14500  | 10600 | 9840  | 8940 | 8190 |
| 30  | 23800 | 25800 | 26800 | 28100 | ---   | 30600 | 27500 | 14000  | 10600 | 9530  | 8940 | 8160 |
| 31  | 23900 | ---   | 26800 | 28100 | ---   | 30600 | ---   | 13500  | ---   | 9270  | 8680 | ---  |
| MAX | 23900 | 25800 | 26800 | 28100 | 29300 | 30600 | 30900 | 27100  | 13100 | 10600 | 9130 | 8370 |
| MIN | 22400 | 23900 | 25800 | 26900 | 28100 | 29300 | 27500 | 13500  | 10500 | 8740  | 8270 | 8150 |

CAL YR 1995 MAX 38700 MIN 13400  
WTR YR 1996 MAX 30900 MIN 8150

e-Estimated.

## 07124410 PURGATOIRE RIVER BELOW TRINIDAD LAKE, CO

LOCATION.--Lat 37°08'37", long 104°32'49", in NE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec.27, T.33 S., R.64 W., Las Animas County, Hydrologic Unit 11020010, on left bank of flip bucket outlet, 500 ft downstream from base of dam, 0.8 mi upstream from Santa Fe Railroad bridge, and 3.0 mi southwest of courthouse in Trinidad.

DRAINAGE AREA.--672 mi<sup>2</sup>.

PERIOD OF RECORD.--December 1976 to current year. Water-quality data available, March 1977 to September 1984.

GAGE.--Water-stage recorder with satellite telemetry, and concrete control. Datum of gage is 6,073.64 ft above sea level, (levels by U.S. Army, Corps of Engineers). Auxillary gage is water-stage recorder in shelter about 1,000 ft downstream.

REMARKS.--No estimated daily discharges. Records good except those below 0.5 ft<sup>3</sup>/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 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

| DAY   | OCT    | NOV  | DEC    | JAN  | FEB  | MAR  | APR     | MAY   | JUN     | JUL     | AUG    | SEP  |
|-------|--------|------|--------|------|------|------|---------|-------|---------|---------|--------|------|
| 1     | 70     | .33  | .22    | .14  | .28  | .07  | .04     | 262   | 248     | 55      | 88     | 168  |
| 2     | 71     | .33  | .22    | .14  | .28  | .06  | .04     | 261   | 246     | 81      | 129    | 88   |
| 3     | 71     | .32  | .22    | .14  | .22  | .06  | 16      | 261   | 244     | 50      | 81     | 18   |
| 4     | 71     | .32  | .22    | .14  | .22  | .06  | 26      | 260   | 228     | 29      | 21     | 30   |
| 5     | 70     | .29  | .22    | .14  | .22  | .05  | 26      | 259   | 218     | 87      | 26     | 42   |
| 6     | 70     | .26  | .22    | .14  | .22  | .06  | 26      | 257   | 206     | 117     | 34     | 46   |
| 7     | 70     | .23  | .22    | .14  | .22  | .06  | 26      | 267   | 195     | 116     | 30     | 46   |
| 8     | 60     | .40  | .20    | .15  | .22  | .06  | 26      | 276   | 187     | 111     | 56     | 46   |
| 9     | 55     | .36  | .19    | .18  | .22  | .06  | 26      | 275   | 48      | 87      | 67     | 37   |
| 10    | 55     | .24  | .19    | .18  | .22  | .05  | 26      | 274   | 48      | 137     | 64     | 24   |
| 11    | 69     | .23  | .18    | .18  | .22  | .04  | 26      | 274   | 63      | 116     | 50     | 20   |
| 12    | 77     | .27  | .35    | .18  | .22  | .04  | 26      | 273   | 74      | 88      | 38     | 26   |
| 13    | 28     | .19  | .35    | .18  | .21  | .04  | 26      | 272   | 57      | 77      | 35     | 31   |
| 14    | .44    | .21  | .13    | .18  | .21  | .05  | 26      | 272   | 47      | 72      | 35     | 69   |
| 15    | .44    | .22  | .18    | .18  | .22  | .04  | 26      | 271   | 22      | 64      | 25     | 57   |
| 16    | .42    | .22  | .18    | .18  | .18  | .04  | 26      | 270   | 8.3     | 33      | 39     | 31   |
| 17    | .39    | .22  | .20    | .18  | .18  | .04  | 26      | 294   | 7.5     | 32      | 50     | 24   |
| 18    | .38    | .24  | .18    | .18  | .18  | .04  | 26      | 305   | 3.0     | 30      | 50     | 23   |
| 19    | .38    | .27  | .18    | .18  | .18  | .04  | 26      | 304   | .16     | 28      | 71     | 28   |
| 20    | .34    | .27  | .18    | .22  | .14  | .04  | 26      | 315   | .13     | 42      | 34     | 33   |
| 21    | .30    | .27  | .18    | .23  | .13  | .04  | 25      | 319   | 12      | 46      | 59     | 29   |
| 22    | .26    | .29  | .18    | .22  | .11  | .04  | 124     | 317   | 18      | 56      | 109    | 29   |
| 23    | .27    | .33  | .18    | .22  | .11  | .04  | 194     | 315   | 18      | 62      | 144    | 31   |
| 24    | .27    | .32  | .17    | .33  | .11  | .04  | 193     | 321   | 64      | 62      | 52     | 29   |
| 25    | .31    | .29  | .17    | .33  | .11  | .04  | 193     | 305   | 92      | 63      | 1.1    | 29   |
| 26    | .33    | .26  | .15    | .31  | .09  | .04  | 209     | 293   | 92      | 24      | 1.1    | 28   |
| 27    | .33    | .28  | .14    | .28  | .08  | .04  | 233     | 290   | 90      | .84     | 1.1    | 28   |
| 28    | .33    | .27  | .16    | .28  | .08  | .04  | 231     | 289   | 52      | .90     | 1.1    | 28   |
| 29    | .33    | .22  | .18    | .28  | .08  | .04  | 250     | 287   | 31      | 89      | 1.1    | 28   |
| 30    | .33    | .22  | .15    | .28  | ---  | .05  | 262     | 286   | 31      | 176     | 98     | 37   |
| 31    | .33    | ---  | .14    | .28  | ---  | .04  | ---     | 262   | ---     | 147     | 163    | ---  |
| TOTAL | 843.18 | 8.17 | 106.02 | 6.37 | 5.16 | 1.45 | 2372.08 | 8786  | 2650.09 | 2178.74 | 1653.5 | 1183 |
| MEAN  | 27.2   | .27  | 3.42   | .21  | .18  | .047 | 79.1    | 283   | 88.3    | 70.3    | 53.3   | 39.4 |
| MAX   | 77     | .40  | 35     | .33  | .28  | .07  | 262     | 321   | 248     | 176     | 163    | 168  |
| MIN   | .26    | .19  | .14    | .14  | .08  | .04  | .04     | 257   | .13     | .84     | 1.1    | 18   |
| AC-FT | 1670   | 16   | 210    | 13   | 10   | 2.9  | 4710    | 17430 | 5260    | 4320    | 3280   | 2350 |

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1977 - 1996, BY WATER YEAR (WY)

|      | 1977 | 1978 | 1979 | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 24.7 | 6.87 | 2.63 | 2.90 | 3.40 | 3.57 | 33.6 | 174  | 201  | 175  | 152  | 110  |
| 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 1995 CALENDAR YEAR

## FOR 1996 WATER YEAR

## WATER YEARS 1977 - 1996

|                          |                  |                  |                  |
|--------------------------|------------------|------------------|------------------|
| ANNUAL TOTAL             | 28567.40         | 19793.76         |                  |
| ANNUAL MEAN              | 78.3             | 54.1             | 77.1             |
| HIGHEST ANNUAL MEAN      |                  |                  | 146              |
| LOWEST ANNUAL MEAN       |                  |                  | 42.8             |
| HIGHEST DAILY MEAN       | 323              | 321              | 917              |
| LOWEST DAILY MEAN        | <sup>a</sup> .00 | <sup>b</sup> .04 | <sup>c</sup> .00 |
| ANNUAL SEVEN-DAY MINIMUM | .01              | .04              | .00              |
| INSTANTANEOUS PEAK FLOW  |                  | 330              | 963              |
| INSTANTANEOUS PEAK STAGE |                  | 6.55             | 7.89             |
| ANNUAL RUNOFF (AC-FT)    | 56660            | 39260            | 55840            |
| 10 PERCENT EXCEEDS       | 265              | 236              | 245              |
| 50 PERCENT EXCEEDS       | 13               | 17               | 12               |
| 90 PERCENT EXCEEDS       | .04              | .09              | .04              |

a-No flow many days during winter.

b-Also occurred Mar 12-13, 15-29, and Mar 31 to Apr 2.

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 mi<sup>2</sup>.

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.--Records good except for estimated daily discharges and those greater than 50 ft<sup>3</sup>/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 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

| DAY   | OCT    | NOV  | DEC  | JAN  | FEB  | MAR  | APR   | MAY   | JUN  | JUL  | AUG  | SEP  |
|-------|--------|------|------|------|------|------|-------|-------|------|------|------|------|
| 1     | 11     | .02  | e.00 | e.00 | e.00 | .00  | .00   | 4.5   | e.00 | 1.3  | .00  | .00  |
| 2     | 14     | .01  | e.00 | e.00 | e.00 | .00  | .00   | 5.3   | e.00 | .01  | .00  | .00  |
| 3     | 12     | .01  | e.00 | e.00 | e.00 | .00  | .00   | 5.7   | e.00 | .00  | .00  | .00  |
| 4     | 9.5    | .02  | e.00 | e.00 | e.00 | .00  | .00   | 4.8   | e.00 | .00  | .00  | .00  |
| 5     | 9.8    | .01  | e.00 | e.00 | e.00 | .00  | .00   | 6.8   | e.51 | .00  | .00  | .00  |
| 6     | 9.8    | .02  | e.00 | e.00 | e.00 | .00  | .00   | 6.8   | e.60 | .00  | .00  | .00  |
| 7     | 9.3    | .01  | e.00 | e.00 | e.00 | .00  | .00   | 6.3   | e.69 | .00  | .00  | .00  |
| 8     | 10     | .01  | e.00 | e.00 | e.00 | .00  | .00   | 4.9   | e.62 | .00  | .00  | .00  |
| 9     | 11     | e.00 | e.00 | e.00 | e.00 | .00  | .00   | 2.6   | e.62 | .00  | .00  | .00  |
| 10    | 9.1    | e.00 | e.00 | e.00 | e.00 | .00  | .00   | 5.1   | e.66 | .03  | .00  | .00  |
| 11    | 9.1    | e.00 | e.00 | e.00 | e.00 | .00  | .00   | 3.6   | e.70 | .00  | .00  | .00  |
| 12    | 7.7    | e.00 | e.00 | e.00 | e.00 | .00  | .00   | 2.4   | e.95 | .00  | .00  | .00  |
| 13    | 4.2    | e.00 | e.00 | e.00 | e.00 | .00  | .00   | 3.1   | .41  | .00  | .00  | .00  |
| 14    | 3.0    | .00  | e.00 | e.00 | e.00 | .00  | .00   | 3.5   | .19  | .00  | .00  | .00  |
| 15    | 3.6    | .00  | e.00 | e.00 | e.00 | .00  | .00   | 1.2   | .95  | .00  | .00  | .00  |
| 16    | 3.7    | .00  | e.00 | e.00 | e.00 | .00  | .00   | .37   | .15  | .00  | .00  | .00  |
| 17    | 3.2    | .00  | e.00 | e.00 | e.00 | .00  | .00   | .09   | .01  | .00  | .00  | .00  |
| 18    | 2.0    | .00  | e.00 | e.00 | e.00 | .00  | .00   | .15   | .00  | .04  | .00  | .00  |
| 19    | 1.4    | .00  | e.00 | e.00 | e.00 | .00  | .00   | .05   | .00  | .00  | .00  | .00  |
| 20    | .71    | .00  | e.00 | e.00 | e.00 | .00  | .00   | .00   | .00  | .00  | .00  | .00  |
| 21    | .47    | .00  | e.00 | e.00 | e.00 | .00  | .00   | .00   | .01  | .00  | .00  | .00  |
| 22    | .29    | .00  | e.00 | e.00 | e.00 | .00  | .00   | .00   | .00  | .00  | .00  | .00  |
| 23    | .11    | .00  | e.00 | e.00 | e.00 | .00  | .00   | .00   | .00  | .00  | .00  | .00  |
| 24    | .06    | .00  | e.00 | e.00 | .00  | .00  | .00   | .00   | .00  | .00  | .00  | .00  |
| 25    | .04    | .00  | e.00 | e.00 | .00  | .00  | .00   | .19   | .00  | .00  | .00  | .00  |
| 26    | .04    | .00  | e.00 | e.00 | .00  | .00  | .00   | 1.1   | .00  | .00  | .00  | .00  |
| 27    | .03    | .00  | e.00 | e.00 | .00  | .00  | 2.5   | .33   | .00  | .00  | .00  | .00  |
| 28    | .02    | .00  | e.00 | e.00 | .00  | .00  | 2.6   | .02   | .00  | .00  | .00  | .00  |
| 29    | .02    | .00  | e.00 | e.00 | .00  | .00  | 3.7   | .00   | .01  | .00  | .00  | .00  |
| 30    | .02    | .00  | e.00 | e.00 | ---  | .00  | 3.7   | e.00  | 1.7  | .00  | .00  | .00  |
| 31    | .02    | ---  | e.00 | e.00 | ---  | .00  | ---   | e.00  | ---  | .00  | .00  | ---  |
| TOTAL | 145.23 | 0.11 | 0.00 | 0.00 | 0.00 | 0.00 | 12.50 | 68.90 | 8.78 | 1.38 | 0.00 | 0.00 |
| MEAN  | 4.68   | .004 | .000 | .000 | .000 | .000 | .42   | 2.22  | .29  | .045 | .000 | .000 |
| MAX   | 14     | .02  | .00  | .00  | .00  | .00  | 3.7   | 6.8   | 1.7  | 1.3  | .00  | .00  |
| MIN   | .02    | .00  | .00  | .00  | .00  | .00  | .00   | .00   | .00  | .00  | .00  | .00  |
| AC-FT | 288    | .2   | .00  | .00  | .00  | .00  | 25    | 137   | 17   | 2.7  | .00  | .00  |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1985 - 1996, BY WATER YEAR (WY)

|      | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 2.31 | .043 | .021 | .023 | .044 | .004 | .049 | 1.17 | 1.61 | .60  | 2.12 | 2.79 |
| 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 | 1996 | 1987 | 1985 | 1990 | 1986 | 1988 |
| MIN  | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .015 | .000 | .000 |
| (WY) | 1990 | 1990 | 1990 | 1989 | 1989 | 1989 | 1989 | 1990 | 1990 | 1993 | 1996 | 1991 |

SUMMARY STATISTICS

|                          | FOR 1995 CALENDAR YEAR | FOR 1996 WATER YEAR | WATER YEARS 1985 - 1996 |
|--------------------------|------------------------|---------------------|-------------------------|
| ANNUAL TOTAL             | 563.10                 | 236.90              |                         |
| ANNUAL MEAN              | 1.54                   | .65                 | .84                     |
| HIGHEST ANNUAL MEAN      |                        |                     | 2.53                    |
| LOWEST ANNUAL MEAN       |                        |                     | .049                    |
| HIGHEST DAILY MEAN       | 90 Sep 10              | 14 Oct 2            | 171 Aug 23 1986         |
| LOWEST DAILY MEAN        | a.00 Jan 1             | a.00 Nov 9          | a.00 Jul 27 1985        |
| ANNUAL SEVEN-DAY MINIMUM | .00 Jan 1              | b.00 Nov 9          | .00 Aug 5 1985          |
| INSTANTANEOUS PEAK FLOW  |                        | b.18 Oct 2          | c.511 Aug 23 1986       |
| INSTANTANEOUS PEAK STAGE |                        | 5.38 Oct 2          | d.10.02 Aug 23 1986     |
| ANNUAL RUNOFF (AC-FT)    | 1120                   | 470                 | 607                     |
| 10 PERCENT EXCEEDS       | 4.8                    | 1.8                 | 1.8                     |
| 50 PERCENT EXCEEDS       | .00                    | .00                 | .00                     |
| 90 PERCENT EXCEEDS       | .00                    | .00                 | .00                     |

e-Estimated.

a-No flow many days most years.

b-From rating curve extended above 14 ft<sup>3</sup>/s, on basis of flow through culvert computation.

c-From rating curve extended above 45 ft<sup>3</sup>/s, on basis of flow through culvert computation.

d-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.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily rainfall, 3.00 inches, Sept. 9, 1995.

EXTREMES FOR CURRENT YEAR.--Maximum daily rainfall, 1.13 inches, May 25.

RAINFALL ACCUMULATED (INCHES), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY SUM VALUES

| DAY   | OCT  | NOV | DEC | JAN | FEB | MAR | APR | MAY  | JUN | JUL  | AUG  | SEP  |
|-------|------|-----|-----|-----|-----|-----|-----|------|-----|------|------|------|
| 1     | .05  | .00 | --- | --- | --- | --- | --- | .00  | --- | .00  | .00  | .00  |
| 2     | .00  | .00 | --- | --- | --- | --- | --- | .00  | --- | .00  | .00  | .00  |
| 3     | .00  | .03 | --- | --- | --- | --- | --- | .00  | --- | .00  | .00  | .00  |
| 4     | .00  | .00 | --- | --- | --- | --- | --- | .00  | --- | .00  | .35  | .00  |
| 5     | .00  | .00 | --- | --- | --- | --- | --- | .01  | --- | .11  | .00  | .00  |
| 6     | .00  | .00 | --- | --- | --- | --- | --- | .00  | --- | .00  | .00  | .22  |
| 7     | .00  | .00 | --- | --- | --- | --- | --- | .00  | --- | .00  | .00  | .01  |
| 8     | .00  | .00 | --- | --- | --- | --- | --- | .00  | --- | .09  | .00  | .00  |
| 9     | .00  | .00 | --- | --- | --- | --- | --- | .00  | --- | .53  | .00  | .00  |
| 10    | .00  | --- | --- | --- | --- | --- | --- | .17  | --- | .25  | .00  | .00  |
| 11    | .00  | --- | --- | --- | --- | --- | --- | .00  | --- | .00  | .00  | .00  |
| 12    | .00  | --- | --- | --- | --- | --- | --- | .00  | --- | .00  | .00  | .29  |
| 13    | .00  | --- | --- | --- | --- | --- | --- | .00  | .00 | .00  | .00  | .22  |
| 14    | .00  | --- | --- | --- | --- | --- | --- | .00  | .40 | .12  | .01  | .02  |
| 15    | .00  | --- | --- | --- | --- | --- | --- | .00  | .07 | .00  | .15  | .00  |
| 16    | .00  | --- | --- | --- | --- | --- | --- | .00  | .00 | .00  | .33  | .00  |
| 17    | .00  | --- | --- | --- | --- | --- | --- | .00  | .00 | .00  | .00  | .11  |
| 18    | .00  | --- | --- | --- | --- | --- | --- | .00  | .00 | .55  | .00  | .31  |
| 19    | .00  | --- | --- | --- | --- | --- | .00 | .00  | .00 | .00  | .00  | .00  |
| 20    | .00  | --- | --- | --- | --- | --- | .00 | .00  | .00 | .00  | .00  | .00  |
| 21    | .00  | --- | --- | --- | --- | --- | .00 | .00  | .40 | .00  | .24  | .00  |
| 22    | .00  | --- | --- | --- | --- | --- | .00 | .00  | .17 | .03  | .29  | .00  |
| 23    | .00  | --- | --- | --- | --- | --- | .00 | .00  | .00 | .03  | .10  | .00  |
| 24    | .00  | --- | --- | --- | --- | --- | .00 | .00  | .00 | .00  | .00  | .02  |
| 25    | .00  | --- | --- | --- | --- | --- | .00 | 1.13 | .00 | .03  | .00  | .02  |
| 26    | .00  | --- | --- | --- | --- | --- | .00 | .12  | .00 | .21  | .22  | .04  |
| 27    | .00  | --- | --- | --- | --- | --- | .00 | .00  | .00 | .01  | .24  | .39  |
| 28    | .00  | --- | --- | --- | --- | --- | .04 | .27  | .00 | .00  | .00  | .00  |
| 29    | .00  | --- | --- | --- | --- | --- | .00 | .00  | .00 | .21  | .00  | .00  |
| 30    | .00  | --- | --- | --- | --- | --- | .00 | .00  | .08 | .00  | .00  | .00  |
| 31    | .00  | --- | --- | --- | --- | --- | --- | ---  | --- | .00  | .00  | ---  |
| TOTAL | 0.05 | --- | --- | --- | --- | --- | --- | ---  | --- | 2.17 | 1.93 | 1.65 |



## 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 water temperature are fair. Records for specific conductance are good. 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, 3,590 microsiemens, Oct. 2; minimum, 171 microsiemens, Aug. 28.

WATER TEMPERATURE: Maximum, 30.7°C, July 4; minimum, 1.2°C, Dec. 9.

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM @ 25 DEG. C), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

|       | OCTOBER |      |      | NOVEMBER |      |      | DECEMBER |      |      | JANUARY |      |      |
|-------|---------|------|------|----------|------|------|----------|------|------|---------|------|------|
| 1     | 2140    | 1540 | 1760 | 1800     | 1580 | 1740 | 2080     | 1820 | 1960 | 2290    | 2170 | 2220 |
| 2     | 3590    | 2120 | 2750 | 1820     | 1600 | 1720 | 1980     | 1930 | 1950 | 2260    | 2160 | 2220 |
| 3     | 2310    | 1780 | 2000 | 1840     | 1630 | 1740 | 1990     | 1920 | 1960 | 2310    | 2140 | 2230 |
| 4     | 1810    | 1660 | 1740 | 1850     | 1700 | 1800 | 1990     | 1930 | 1960 | 2240    | 2150 | 2200 |
| 5     | 1750    | 1580 | 1650 | 1860     | 1610 | 1780 | 2010     | 1940 | 1970 | 2230    | 2170 | 2200 |
| 6     | 1760    | 1660 | 1710 | 1880     | 1640 | 1800 | 2010     | 1950 | 1980 | 2280    | 2160 | 2210 |
| 7     | 1770    | 1610 | 1700 | 1880     | 1670 | 1820 | 2010     | 1970 | 1990 | 2260    | 2120 | 2180 |
| 8     | ---     | ---  | ---  | 1900     | 1760 | 1850 | 2030     | 1980 | 2000 | 2220    | 2090 | 2160 |
| 9     | 1620    | 1380 | 1500 | 1920     | 1750 | 1870 | 2130     | 2000 | 2060 | 2210    | 2140 | 2180 |
| 10    | 1580    | 1380 | 1430 | 1920     | 1720 | 1840 | 2150     | 2010 | 2060 | 2210    | 2140 | 2180 |
| 11    | 1410    | 1290 | 1340 | 1910     | 1810 | 1860 | 2120     | 2030 | 2080 | 2260    | 2110 | 2170 |
| 12    | 1330    | 1190 | 1270 | 1970     | 1780 | 1910 | 2130     | 2060 | 2100 | 2160    | 2090 | 2120 |
| 13    | 1370    | 1280 | 1330 | 1970     | 1850 | 1930 | 2140     | 2080 | 2120 | 2130    | 2070 | 2100 |
| 14    | 1450    | 1330 | 1400 | 1960     | 1810 | 1910 | 2130     | 2070 | 2100 | 2130    | 2050 | 2090 |
| 15    | 1450    | 1370 | 1430 | 1940     | 1800 | 1900 | 2110     | 2050 | 2080 | 2110    | 2040 | 2080 |
| 16    | 1450    | 1370 | 1420 | 1970     | 1760 | 1900 | 2090     | 2040 | 2060 | 2110    | 2040 | 2080 |
| 17    | 1520    | 1410 | 1460 | 1990     | 1800 | 1940 | 2070     | 2030 | 2050 | 2110    | 2000 | 2050 |
| 18    | 1610    | 1490 | 1560 | 1990     | 1900 | 1950 | 2100     | 2030 | 2060 | 2110    | 2020 | 2060 |
| 19    | 1610    | 1550 | 1590 | 1990     | 1690 | 1890 | 2170     | 2030 | 2090 | 2170    | 2020 | 2090 |
| 20    | 1600    | 1510 | 1570 | 2020     | 1860 | 1940 | 2190     | 2070 | 2130 | 2110    | 2030 | 2070 |
| 21    | 1620    | 1530 | 1590 | 1990     | 1800 | 1940 | 2180     | 2080 | 2120 | 2140    | 2030 | 2090 |
| 22    | 1660    | 1510 | 1610 | 2010     | 1870 | 1960 | 2140     | 2090 | 2110 | 2140    | 2040 | 2090 |
| 23    | 1680    | 1600 | 1640 | 2010     | 1780 | 1960 | 2190     | 2090 | 2130 | 2200    | 2070 | 2130 |
| 24    | 1690    | 1620 | 1650 | 2020     | 1880 | 1980 | 2250     | 2120 | 2170 | 2210    | 2050 | 2140 |
| 25    | 1710    | 1620 | 1670 | 2020     | 1860 | 1970 | 2240     | 2110 | 2180 | 2170    | 2090 | 2130 |
| 26    | 1720    | 1620 | 1680 | 2030     | 1860 | 1990 | 2230     | 2130 | 2180 | 2250    | 2100 | 2170 |
| 27    | 1730    | 1620 | 1690 | 2040     | 1790 | 1970 | 2280     | 2140 | 2200 | 2320    | 2090 | 2180 |
| 28    | 1740    | 1620 | 1690 | 2050     | 1860 | 1970 | 2260     | 2150 | 2210 | 2220    | 2090 | 2160 |
| 29    | 1760    | 1500 | 1680 | 2050     | 1860 | 1990 | 2240     | 2160 | 2200 | 2220    | 2050 | 2150 |
| 30    | 1770    | 1680 | 1730 | 2070     | 1850 | 2000 | 2310     | 2190 | 2250 | 2330    | 2130 | 2190 |
| 31    | 1780    | 1660 | 1730 | ---      | ---  | ---  | 2280     | 2180 | 2230 | 2340    | 2130 | 2200 |
| MONTH | ---     | ---  | ---  | 2070     | 1580 | 1890 | 2310     | 1820 | 2090 | 2340    | 2000 | 2150 |

07126200 VAN BREMER ARROYO NEAR MODEL, CO--Continued

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM @ 25 DEG. C), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

|       | FEBRUARY |      |      | MARCH |      |      | APRIL  |      |      | MAY       |      |      |
|-------|----------|------|------|-------|------|------|--------|------|------|-----------|------|------|
| 1     | 2250     | 2140 | 2190 | 2070  | 1940 | 2000 | 2200   | 2100 | 2150 | 2160      | 2090 | 2120 |
| 2     | 2260     | 2160 | 2200 | 2070  | 1970 | 2010 | 2200   | 2140 | 2160 | 2160      | 2090 | 2130 |
| 3     | 2270     | 2170 | 2210 | 2080  | 1980 | 2030 | 2200   | 2120 | 2160 | 2160      | 2080 | 2110 |
| 4     | 2240     | 2140 | 2190 | 2080  | 2010 | 2040 | 2180   | 2120 | 2150 | 2430      | 2080 | 2210 |
| 5     | 2220     | 2120 | 2160 | 2100  | 2030 | 2070 | 2170   | 2110 | 2140 | 2950      | 2260 | 2430 |
| 6     | 2230     | 2150 | 2200 | 2100  | 2050 | 2060 | 2200   | 2110 | 2140 | 3510      | 2950 | 3270 |
| 7     | 2240     | 2120 | 2180 | 2200  | 1960 | 2100 | 2230   | 2130 | 2170 | 3140      | 2240 | 2590 |
| 8     | 2160     | 2040 | 2100 | 2100  | 2010 | 2070 | 2240   | 2130 | 2170 | 2270      | 2040 | 2150 |
| 9     | 2070     | 1960 | 2030 | 2130  | 2020 | 2070 | 2240   | 2130 | 2180 | 2070      | 1970 | 2010 |
| 10    | 2050     | 1960 | 2010 | 2150  | 2050 | 2080 | 2220   | 2140 | 2170 | 2040      | 1970 | 2000 |
| 11    | 1990     | 1890 | 1940 | 2140  | 2040 | 2080 | 2220   | 2140 | 2170 | 2170      | 1990 | 2050 |
| 12    | 1940     | 1850 | 1900 | 2110  | 2050 | 2080 | 2220   | 2130 | 2170 | 2330      | 2150 | 2250 |
| 13    | 1950     | 1850 | 1900 | 2120  | 2060 | 2090 | 2200   | 2130 | 2170 | 2340      | 2280 | 2310 |
| 14    | 1970     | 1900 | 1930 | 2120  | 2060 | 2090 | 2250   | 2120 | 2170 | 2390      | 2290 | 2330 |
| 15    | 1970     | 1920 | 1950 | 2190  | 2060 | 2120 | 2270   | 2180 | 2220 | 2450      | 2270 | 2370 |
| 16    | 1990     | 1870 | 1930 | 2180  | 2120 | 2140 | 2250   | 2170 | 2210 | 2510      | 2410 | 2450 |
| 17    | 1970     | 1920 | 1950 | 2170  | 2070 | 2110 | 2240   | 2170 | 2200 | 2500      | 2390 | 2450 |
| 18    | 1960     | 1910 | 1930 | 2140  | 2070 | 2110 | 2230   | 2140 | 2190 | 2470      | 2350 | 2410 |
| 19    | 1950     | 1890 | 1920 | 2160  | 2080 | 2120 | 2230   | 2150 | 2180 | 2400      | 2320 | 2360 |
| 20    | 1950     | 1890 | 1920 | 2170  | 2050 | 2110 | 2220   | 2130 | 2170 | 2400      | 2290 | 2340 |
| 21    | 1950     | 1890 | 1910 | 2170  | 2080 | 2120 | 2190   | 2120 | 2150 | 2330      | 2250 | 2290 |
| 22    | 1980     | 1900 | 1930 | 2160  | 2090 | 2130 | 2190   | 2110 | 2150 | 2330      | 2240 | 2280 |
| 23    | 1980     | 1920 | 1950 | 2160  | 2090 | 2120 | 2200   | 2100 | 2150 | 2330      | 2190 | 2240 |
| 24    | 1970     | 1920 | 1950 | 2160  | 2100 | 2130 | 2190   | 2120 | 2150 | 2260      | 2150 | 2200 |
| 25    | 1960     | 1910 | 1930 | 2190  | 2110 | 2160 | 2210   | 2130 | 2170 | 2210      | 960  | 1670 |
| 26    | 1960     | 1900 | 1930 | 2230  | 2060 | 2150 | 2180   | 2110 | 2140 | 1440      | 1100 | 1270 |
| 27    | 1970     | 1880 | 1930 | 2210  | 2110 | 2150 | 2180   | 2120 | 2150 | 1660      | 1440 | 1570 |
| 28    | 1980     | 1930 | 1950 | 2210  | 2100 | 2150 | 2160   | 2090 | 2120 | 1720      | 1630 | 1680 |
| 29    | 2010     | 1860 | 1960 | 2190  | 2120 | 2150 | 2150   | 2090 | 2110 | 1790      | 1680 | 1730 |
| 30    | ---      | ---  | ---  | 2210  | 2130 | 2160 | 2160   | 2090 | 2120 | 1870      | 1740 | 1800 |
| 31    | ---      | ---  | ---  | 2210  | 2110 | 2160 | ---    | ---  | ---  | 1900      | 1800 | 1850 |
| MONTH | 2270     | 1850 | 2010 | 2230  | 1940 | 2100 | 2270   | 2090 | 2160 | 3510      | 960  | 2160 |
|       | JUNE     |      |      | JULY  |      |      | AUGUST |      |      | SEPTEMBER |      |      |
| 1     | 1930     | 1820 | 1870 | 2010  | 1940 | 1970 | 1480   | 1370 | 1430 | 1000      | 835  | 908  |
| 2     | 1960     | 1860 | 1900 | 2030  | 1980 | 2000 | 1500   | 1400 | 1440 | 1180      | 978  | 1070 |
| 3     | 2000     | 1870 | 1930 | 2030  | 1970 | 2000 | 1540   | 1440 | 1490 | 1260      | 1160 | 1200 |
| 4     | 2000     | 1900 | 1940 | 2050  | 1980 | 2010 | 1560   | 1480 | 1520 | 1340      | 1160 | 1230 |
| 5     | 2000     | 1910 | 1950 | 2050  | 1980 | 2000 | 1600   | 1510 | 1560 | 1420      | 1240 | 1290 |
| 6     | 1990     | 1920 | 1960 | 2030  | 1790 | 1950 | 1590   | 1540 | 1570 | 1430      | 1290 | 1340 |
| 7     | 1950     | 1880 | 1920 | 2090  | 1970 | 2020 | 1650   | 1550 | 1590 | 1360      | 1030 | 1150 |
| 8     | 2000     | 1890 | 1940 | 2100  | 1960 | 2020 | 1650   | 1590 | 1620 | 1310      | 1130 | 1210 |
| 9     | 2030     | 1940 | 1980 | 2030  | 1910 | 1990 | 1650   | 1600 | 1620 | 1460      | 1280 | 1350 |
| 10    | 2040     | 1950 | 2000 | 2170  | 1880 | 2040 | 1660   | 1590 | 1620 | 1450      | 1370 | 1410 |
| 11    | 2030     | 1950 | 1990 | 2180  | 1900 | 2080 | 1690   | 1610 | 1650 | 1460      | 1380 | 1400 |
| 12    | 2030     | 1940 | 1980 | 2140  | 1990 | 2080 | 1710   | 1640 | 1670 | 1470      | 948  | 1340 |
| 13    | 2050     | 1910 | 2000 | 2090  | 2010 | 2040 | 1720   | 1660 | 1680 | 1330      | 1090 | 1260 |
| 14    | 2050     | 1930 | 1990 | 2090  | 1950 | 2020 | 1720   | 1620 | 1680 | 1330      | 1180 | 1270 |
| 15    | 2150     | 1990 | 2060 | 2140  | 1890 | 2040 | 1690   | 307  | 1580 | 1440      | 1300 | 1360 |
| 16    | 2130     | 2060 | 2090 | 2130  | 1990 | 2050 | 552    | 272  | 463  | 1480      | 1400 | 1440 |
| 17    | 2160     | 2020 | 2080 | 2100  | 1890 | 2040 | 664    | 501  | 578  | 1530      | 1440 | 1490 |
| 18    | 2140     | 1990 | 2070 | 2090  | 1980 | 2030 | 808    | 636  | 703  | 1530      | 1440 | 1480 |
| 19    | 2110     | 1980 | 2060 | 2060  | 1920 | 2000 | 1080   | 785  | 911  | 1530      | 1470 | 1500 |
| 20    | 2090     | 1990 | 2040 | 2080  | 1890 | 2020 | 1140   | 998  | 1060 | 1560      | 1490 | 1520 |
| 21    | 2050     | 1950 | 2020 | 2040  | 1870 | 2000 | 1240   | 1090 | 1170 | 1580      | 1520 | 1540 |
| 22    | 2030     | 1960 | 1990 | 2040  | 215  | 1850 | 1280   | 1170 | 1220 | 1600      | 1540 | 1560 |
| 23    | 2020     | 1940 | 1980 | 582   | 194  | 404  | 1250   | 378  | 966  | 1620      | 1570 | 1590 |
| 24    | 2050     | 1980 | 2010 | 728   | 546  | 627  | 607    | 398  | 504  | 1640      | 1590 | 1610 |
| 25    | 2040     | 1940 | 1980 | 1040  | 702  | 840  | 766    | 581  | 659  | 1650      | 1590 | 1630 |
| 26    | 1990     | 1940 | 1960 | 1170  | 939  | 1010 | 1130   | 738  | 885  | 1650      | 1570 | 1610 |
| 27    | 2000     | 1950 | 1980 | 1070  | 839  | 957  | 1120   | 294  | 975  | 1650      | 1540 | 1600 |
| 28    | 2000     | 1940 | 1970 | 1290  | 992  | 1120 | 471    | 171  | 278  | 1690      | 1620 | 1660 |
| 29    | 2000     | 1940 | 1970 | 1360  | 1240 | 1300 | 553    | 350  | 441  | 1770      | 1650 | 1680 |
| 30    | 2000     | 1950 | 1970 | 1380  | 1200 | 1290 | 704    | 508  | 588  | 1790      | 1720 | 1750 |
| 31    | ---      | ---  | ---  | 1410  | 1240 | 1320 | 865    | 678  | 735  | ---       | ---  | ---  |
| MONTH | 2160     | 1820 | 1990 | 2180  | 194  | 1710 | 1720   | 171  | 1160 | 1790      | 835  | 1410 |

## 07126200 VAN BREMER ARROYO NEAR MODEL, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DAY   | MAX      | MIN  | MEAN | MAX      | MIN | MEAN | MAX      | MIN  | MEAN | MAX     | MIN  | MEAN |
|-------|----------|------|------|----------|-----|------|----------|------|------|---------|------|------|
|       | OCTOBER  |      |      | NOVEMBER |     |      | DECEMBER |      |      | JANUARY |      |      |
| 1     | 16.9     | 13.3 | 15.3 | 9.5      | 7.3 | 8.8  | 9.9      | 4.9  | 7.2  | 5.6     | 2.8  | 4.3  |
| 2     | 16.8     | 14.1 | 15.4 | 7.3      | 4.4 | 5.9  | 9.0      | 5.3  | 6.9  | 3.6     | 2.0  | 2.8  |
| 3     | 16.9     | 13.5 | 15.2 | 9.4      | 3.8 | 6.2  | 9.5      | 4.0  | 6.4  | 4.8     | 2.1  | 3.4  |
| 4     | 16.2     | 13.8 | 15.0 | 9.8      | 4.6 | 6.8  | 9.0      | 5.0  | 6.8  | 6.3     | 2.7  | 4.3  |
| 5     | 14.8     | 12.2 | 13.5 | 9.3      | 4.6 | 7.0  | 8.2      | 5.0  | 6.4  | 3.4     | 2.4  | 2.9  |
| 6     | ---      | 10.8 | ---  | 11.1     | 5.8 | 8.3  | 9.4      | 4.6  | 6.4  | 4.9     | 2.5  | 3.5  |
| 7     | 12.9     | 10.1 | 11.6 | 11.2     | 5.7 | 8.2  | 6.5      | 4.1  | 5.2  | 5.2     | 2.3  | 3.6  |
| 8     | ---      | ---  | ---  | 11.4     | 5.4 | 8.1  | 6.1      | 1.9  | 4.2  | 6.6     | 3.2  | 4.7  |
| 9     | 13.7     | 10.8 | 12.3 | 11.8     | 6.2 | 8.6  | 5.5      | 1.2  | 3.7  | 8.2     | 3.5  | 5.4  |
| 10    | 14.0     | 11.0 | 12.5 | 8.1      | 4.9 | 7.0  | 5.6      | 2.8  | 4.2  | 7.1     | 3.4  | 5.1  |
| 11    | 14.9     | 11.2 | 13.0 | 9.3      | 3.1 | 6.3  | 7.4      | 3.4  | 5.1  | 7.8     | 3.1  | 5.0  |
| 12    | 15.2     | 11.9 | 13.6 | 10.6     | 5.7 | 8.0  | 7.7      | 3.6  | 5.6  | 9.0     | 3.1  | 5.5  |
| 13    | 14.9     | 12.6 | 13.7 | 10.7     | 5.8 | 8.1  | 7.6      | 5.3  | 6.3  | 9.4     | 3.1  | 5.9  |
| 14    | 13.6     | 10.6 | 12.3 | 11.9     | 5.5 | 8.5  | 9.3      | 4.3  | 6.4  | 9.4     | 3.2  | 6.0  |
| 15    | 14.4     | 10.2 | 12.3 | 11.7     | 6.2 | 8.7  | 8.9      | 4.8  | 6.6  | 8.3     | 3.7  | 5.6  |
| 16    | 14.4     | 10.8 | 12.7 | 11.7     | 6.3 | 8.9  | 7.6      | 4.5  | 5.9  | 8.6     | 3.9  | 5.7  |
| 17    | 14.3     | 10.9 | 12.7 | 11.7     | 6.6 | 8.7  | 5.6      | 3.9  | 4.8  | 6.6     | 1.3  | 4.5  |
| 18    | 14.5     | 10.8 | 12.7 | 11.3     | 5.4 | 8.2  | 5.1      | 3.4  | 4.1  | 4.0     | 1.6  | 2.7  |
| 19    | 13.3     | 10.3 | 12.0 | 10.9     | 5.4 | 7.9  | 6.1      | 2.8  | 4.1  | 4.7     | 1.5  | 3.2  |
| 20    | 13.2     | 8.2  | 10.6 | 9.8      | 5.0 | 7.3  | 5.8      | 2.9  | 4.3  | 5.9     | 3.2  | 4.4  |
| 21    | 13.2     | 8.1  | 10.5 | 10.2     | 4.5 | 7.3  | 5.3      | 2.8  | 4.3  | 6.7     | 2.6  | 4.4  |
| 22    | 14.0     | 8.7  | 10.7 | 10.6     | 5.9 | 7.9  | 5.4      | 3.9  | 4.5  | 7.4     | 3.4  | 4.9  |
| 23    | 12.0     | 6.7  | 8.9  | 10.2     | 6.0 | 7.7  | 5.6      | 3.5  | 4.4  | 5.7     | 2.3  | 3.9  |
| 24    | 10.8     | 6.4  | 8.3  | 9.4      | 4.3 | 6.9  | 5.2      | 2.6  | 3.9  | 5.8     | 2.7  | 4.1  |
| 25    | 13.0     | 6.2  | 9.1  | 10.3     | 5.2 | 7.4  | 5.6      | 2.6  | 4.3  | 7.6     | 2.0  | 4.1  |
| 26    | 11.9     | 7.0  | 9.2  | 10.1     | 5.5 | 7.5  | 6.6      | 3.2  | 4.7  | 5.5     | 2.4  | 3.6  |
| 27    | 13.2     | 6.8  | 9.7  | 7.6      | 5.2 | 6.5  | 5.8      | 2.7  | 4.4  | 5.7     | 1.7  | 3.6  |
| 28    | 13.2     | 6.9  | 9.7  | 7.4      | 3.4 | 5.3  | 5.3      | 3.0  | 4.1  | 7.6     | 3.2  | 4.8  |
| 29    | 12.7     | 7.5  | 10.0 | 8.7      | 3.6 | 5.8  | 5.1      | 3.5  | 4.3  | 7.2     | 2.9  | 4.8  |
| 30    | 13.2     | 7.3  | 10.0 | 9.4      | 4.0 | 6.4  | 4.8      | 2.7  | 3.7  | 6.0     | 2.1  | 3.5  |
| 31    | 12.6     | 7.4  | 9.9  | ---      | --- | ---  | 5.4      | 3.4  | 4.3  | 6.0     | 2.0  | 3.5  |
| MONTH | ---      | ---  | ---  | 11.9     | 3.1 | 7.5  | 9.9      | 1.2  | 5.1  | 9.4     | 1.3  | 4.3  |
| DAY   | MAX      | MIN  | MEAN | MAX      | MIN | MEAN | MAX      | MIN  | MEAN | MAX     | MIN  | MEAN |
|       | FEBRUARY |      |      | MARCH    |     |      | APRIL    |      |      | MAY     |      |      |
| 1     | 4.9      | 2.7  | 3.4  | 10.2     | 2.9 | 6.0  | 19.3     | 8.4  | 13.0 | 21.5    | 10.3 | 15.6 |
| 2     | 3.6      | 1.4  | 2.6  | 11.5     | 2.4 | 6.5  | 19.1     | 9.1  | 13.6 | 22.6    | 11.8 | 17.0 |
| 3     | 3.3      | 2.1  | 2.7  | 13.0     | 3.3 | 7.7  | 17.6     | 10.4 | 13.4 | 22.7    | 12.3 | 17.2 |
| 4     | 4.1      | 2.2  | 3.1  | 12.0     | 6.1 | 8.6  | 12.3     | 8.1  | 10.6 | 23.1    | 12.6 | 17.0 |
| 5     | 6.5      | 3.3  | 4.8  | 13.1     | 5.7 | 8.9  | 11.4     | 7.1  | 8.9  | 18.3    | 15.4 | 16.6 |
| 6     | 8.5      | 3.8  | 5.9  | 8.0      | 3.7 | 4.8  | 16.7     | 5.4  | 10.8 | 20.6    | 14.3 | 17.5 |
| 7     | 8.5      | 4.0  | 5.8  | 8.4      | 2.5 | 5.2  | 15.8     | 8.1  | 11.8 | 22.3    | 17.5 | 19.6 |
| 8     | 9.2      | 3.7  | 6.1  | 11.3     | 2.8 | 6.5  | 20.1     | 9.9  | 14.6 | 22.2    | 16.4 | 19.3 |
| 9     | 11.4     | 3.5  | 6.9  | 13.8     | 3.6 | 8.1  | 21.5     | 11.2 | 16.0 | 23.2    | 18.0 | 20.3 |
| 10    | 10.8     | 4.3  | 7.0  | 15.6     | 5.3 | 9.9  | 18.5     | 12.2 | 15.2 | 23.0    | 17.3 | 19.4 |
| 11    | 9.7      | 3.5  | 6.1  | 16.4     | 7.8 | 11.6 | 19.7     | 10.6 | 14.8 | 24.1    | 15.6 | 19.3 |
| 12    | 8.9      | 2.9  | 5.7  | 15.0     | 7.9 | 11.1 | 21.2     | 11.7 | 15.5 | 23.8    | 17.2 | 20.4 |
| 13    | 11.1     | 4.0  | 6.7  | 15.3     | 6.9 | 10.7 | 17.2     | 7.7  | 12.9 | 24.1    | 17.7 | 20.1 |
| 14    | 11.1     | 3.9  | 7.1  | 9.8      | 5.9 | 7.9  | 14.8     | 5.6  | 9.4  | 23.1    | 17.1 | 19.9 |
| 15    | 10.8     | 4.4  | 7.0  | 14.3     | 5.9 | 9.3  | 18.2     | 7.3  | 12.0 | 24.1    | 16.1 | 20.0 |
| 16    | 10.9     | 3.3  | 6.7  | 14.3     | 7.1 | 10.2 | 18.4     | 9.4  | 13.1 | 25.9    | 17.2 | 21.4 |
| 17    | 12.2     | 4.1  | 7.8  | 10.1     | 6.7 | 8.4  | 18.3     | 10.1 | 13.9 | 26.0    | 17.7 | 21.6 |
| 18    | 9.6      | 5.7  | 7.6  | 9.9      | 4.9 | 6.9  | 20.1     | 10.0 | 14.5 | 26.0    | 17.5 | 21.2 |
| 19    | 10.1     | 4.2  | 6.9  | 12.9     | 4.0 | 8.0  | 17.2     | 9.6  | 13.2 | 24.2    | 17.0 | 20.5 |
| 20    | 12.3     | 5.5  | 8.3  | 15.1     | 4.4 | 9.2  | 15.6     | 9.0  | 12.0 | 24.6    | 16.1 | 19.9 |
| 21    | 13.7     | 6.6  | 9.9  | 16.0     | 6.2 | 10.6 | 17.3     | 8.0  | 12.5 | 23.7    | 15.8 | 19.2 |
| 22    | 13.9     | 7.5  | 10.2 | 15.9     | 7.1 | 10.8 | 19.2     | 9.0  | 13.5 | 25.7    | 15.5 | 20.1 |
| 23    | 12.7     | 5.8  | 9.0  | 16.5     | 8.1 | 11.7 | 21.1     | 9.4  | 15.1 | 26.4    | 15.9 | 20.8 |
| 24    | 12.1     | 5.6  | 8.6  | 10.6     | 4.5 | 7.5  | 20.6     | 11.5 | 16.0 | 21.7    | 17.2 | 19.5 |
| 25    | 13.3     | 6.0  | 9.2  | 8.8      | 2.7 | 5.3  | 19.4     | 12.1 | 15.4 | 18.5    | 13.1 | 15.1 |
| 26    | 10.8     | 4.9  | 7.3  | 13.7     | 2.6 | 7.5  | 21.3     | 10.6 | 15.7 | 15.2    | 12.9 | 13.9 |
| 27    | 9.9      | 3.0  | 5.7  | 16.3     | 4.8 | 9.7  | 21.0     | 12.1 | 16.1 | 22.9    | 11.5 | 16.5 |
| 28    | 5.4      | 1.5  | 3.5  | 15.9     | 7.1 | 11.1 | 15.0     | 9.4  | 11.2 | 20.7    | 13.4 | 16.9 |
| 29    | 9.6      | 2.7  | 5.3  | 16.7     | 8.2 | 12.0 | 18.5     | 6.9  | 12.2 | 25.5    | 14.2 | 18.6 |
| 30    | ---      | ---  | ---  | 14.5     | 8.8 | 11.0 | 20.4     | 9.0  | 14.3 | 23.8    | 15.4 | 19.2 |
| 31    | ---      | ---  | ---  | 17.4     | 6.9 | 11.6 | ---      | ---  | ---  | 25.2    | 15.8 | 19.9 |
| MONTH | 13.9     | 1.4  | 6.4  | 17.4     | 2.4 | 8.8  | 21.5     | 5.4  | 13.4 | 26.4    | 10.3 | 18.8 |

## 07126200 VAN BREMER ARROYO NEAR MODEL, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DAY   | MAX  | MIN  | MEAN |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|
|       |      |      |      |      |      |      |      |      |      |      |      |      |
| 1     | 26.6 | 16.0 | 20.5 | 28.0 | 18.0 | 22.7 | 30.5 | 19.6 | 24.3 | 25.5 | 18.3 | 21.6 |
| 2     | 27.3 | 16.8 | 21.3 | 29.3 | 18.6 | 23.5 | 29.9 | 20.6 | 24.6 | 24.6 | 18.4 | 21.2 |
| 3     | 27.5 | 17.2 | 21.8 | 30.1 | 19.0 | 24.1 | 29.4 | 19.8 | 23.9 | 27.1 | 16.8 | 21.2 |
| 4     | 25.8 | 17.3 | 21.5 | 30.7 | 20.1 | 24.9 | 27.9 | 20.8 | 24.2 | 27.2 | 17.6 | 21.8 |
| 5     | 26.2 | 16.7 | 21.0 | 29.5 | 20.8 | 24.5 | 28.5 | 18.5 | 23.1 | 27.1 | 18.2 | 21.9 |
| 6     | 24.5 | 16.4 | 20.2 | 30.1 | 20.3 | 24.7 | 28.7 | 18.4 | 23.1 | 24.4 | 18.4 | 20.8 |
| 7     | 26.7 | 15.8 | 21.1 | 29.5 | 21.0 | 24.8 | 27.6 | 18.8 | 22.9 | 25.4 | 17.0 | 20.4 |
| 8     | 28.2 | 15.8 | 21.8 | 24.0 | 20.6 | 22.0 | 23.7 | 18.9 | 21.4 | 27.0 | 17.7 | 21.7 |
| 9     | 27.7 | 17.7 | 22.1 | 25.6 | 19.4 | 22.0 | 27.5 | 18.8 | 22.2 | 26.7 | 18.5 | 21.8 |
| 10    | 28.0 | 17.0 | 21.9 | 28.2 | 19.1 | 23.1 | 27.4 | 19.0 | 22.7 | 27.4 | 17.7 | 21.6 |
| 11    | 25.5 | 17.3 | 20.9 | 30.2 | 19.5 | 24.5 | 28.0 | 18.3 | 22.8 | 26.2 | 17.8 | 21.3 |
| 12    | 26.8 | 16.3 | 20.9 | 27.2 | 20.5 | 23.3 | 28.6 | 18.2 | 22.9 | 21.3 | 18.5 | 19.6 |
| 13    | 25.0 | 17.5 | 20.8 | 24.9 | 19.0 | 21.6 | 28.4 | 18.5 | 23.0 | 24.8 | 17.0 | 19.9 |
| 14    | 24.1 | 18.7 | 20.9 | 28.8 | 17.7 | 22.8 | 28.2 | 19.1 | 22.6 | 20.0 | 17.2 | 18.7 |
| 15    | 27.8 | 18.6 | 22.0 | 28.3 | 19.2 | 23.3 | 28.4 | 10.1 | 22.1 | 21.4 | 16.7 | 18.6 |
| 16    | 28.7 | 18.5 | 23.0 | 30.5 | 18.9 | 24.3 | 18.6 | 10.1 | 14.9 | 24.8 | 15.2 | 19.1 |
| 17    | 28.5 | 18.5 | 23.4 | 30.0 | 20.5 | 25.1 | 24.1 | 16.3 | 19.5 | 24.1 | 15.6 | 19.3 |
| 18    | 29.6 | 18.5 | 23.9 | 28.9 | 21.4 | 24.2 | 26.6 | 18.3 | 21.1 | 21.9 | 16.1 | 18.2 |
| 19    | 29.5 | 17.8 | 23.6 | 30.2 | 19.7 | 24.5 | 26.6 | 18.3 | 21.8 | 20.7 | 12.6 | 16.5 |
| 20    | 29.8 | 19.2 | 23.9 | 29.7 | 20.8 | 24.3 | 26.2 | 18.7 | 22.4 | 21.5 | 13.4 | 17.1 |
| 21    | 26.8 | 19.3 | 22.7 | 29.3 | 19.3 | 23.8 | 27.1 | 19.2 | 22.7 | 23.1 | 13.1 | 17.5 |
| 22    | 23.8 | 19.4 | 21.2 | 29.5 | 3.2  | 22.3 | 25.6 | 19.9 | 22.1 | 24.2 | 14.5 | 18.8 |
| 23    | 28.7 | 16.9 | 22.1 | 19.8 | 5.4  | 13.8 | 27.3 | 19.6 | 21.4 | 23.4 | 15.2 | 18.7 |
| 24    | 29.4 | 19.6 | 23.1 | 26.1 | 16.6 | 20.5 | 23.8 | 19.1 | 21.0 | 22.8 | 14.6 | 18.4 |
| 25    | 26.1 | 17.8 | 21.7 | 25.6 | 18.0 | 21.1 | 25.0 | 19.3 | 21.2 | 21.7 | 15.0 | 18.1 |
| 26    | 27.6 | 17.7 | 22.3 | 28.7 | 17.4 | 21.4 | 27.2 | 19.6 | 22.2 | 15.8 | 10.7 | 13.0 |
| 27    | 23.1 | 19.8 | 21.5 | 29.1 | 18.8 | 22.7 | 27.6 | 18.9 | 22.0 | 17.5 | 9.2  | 12.7 |
| 28    | 26.7 | 18.4 | 21.8 | 27.2 | 19.2 | 22.6 | 23.0 | 17.3 | 20.1 | 19.9 | 10.5 | 14.7 |
| 29    | 23.9 | 19.9 | 21.7 | 27.0 | 19.2 | 22.3 | 24.6 | 19.5 | 21.8 | 21.2 | 12.1 | 16.1 |
| 30    | 24.7 | 19.3 | 21.5 | 28.8 | 19.6 | 23.4 | 24.9 | 20.0 | 21.8 | 22.2 | 13.1 | 17.2 |
| 31    | ---  | ---  | ---  | 30.3 | 20.2 | 24.2 | 25.3 | 18.8 | 21.4 | ---  | ---  | ---  |
| MONTH | 29.8 | 15.8 | 21.9 | 30.7 | 3.2  | 23.0 | 30.5 | 10.1 | 22.0 | 27.4 | 9.2  | 18.9 |

## 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.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily rainfall, 2.67 inches, May 25, 1996.

EXTREMES FOR CURRENT YEAR.--Maximum daily rainfall, 2.67 inches, May 25.

RAINFALL ACCUMULATED (INCHES), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY SUM VALUES

| DAY   | OCT  | NOV  | DEC | JAN | FEB | MAR | APR | MAY  | JUN  | JUL  | AUG  | SEP  |
|-------|------|------|-----|-----|-----|-----|-----|------|------|------|------|------|
| 1     | .02  | .00  | .00 | --- | --- | --- | --- | .00  | .00  | .00  | .07  | .00  |
| 2     | .00  | .00  | --- | --- | --- | --- | --- | .00  | .00  | .00  | .00  | .00  |
| 3     | .00  | .02  | --- | --- | --- | --- | --- | .00  | .00  | .00  | .00  | .00  |
| 4     | .00  | .00  | --- | --- | --- | --- | --- | .00  | .00  | .00  | .00  | .00  |
| 5     | .00  | .00  | --- | --- | --- | --- | --- | .02  | .00  | .13  | .00  | .00  |
| 6     | .00  | .00  | --- | --- | --- | --- | --- | .00  | .00  | .00  | .00  | .46  |
| 7     | .00  | .00  | --- | --- | --- | --- | --- | .00  | .00  | .00  | .00  | .01  |
| 8     | .00  | .00  | --- | --- | --- | --- | --- | .00  | .00  | .06  | .00  | .00  |
| 9     | .00  | .00  | --- | --- | --- | --- | --- | .00  | .00  | .23  | .00  | .00  |
| 10    | .00  | .04  | --- | --- | --- | --- | --- | .01  | .00  | .19  | .00  | .06  |
| 11    | .00  | .05  | --- | --- | --- | --- | --- | .00  | .01  | .00  | .00  | .03  |
| 12    | .00  | .00  | --- | --- | --- | --- | --- | .00  | .16  | .00  | .00  | .50  |
| 13    | .00  | .00  | --- | --- | --- | --- | --- | .00  | .56  | .00  | .00  | .21  |
| 14    | .00  | .00  | --- | --- | --- | --- | --- | .00  | .19  | .11  | .28  | .01  |
| 15    | .00  | .00  | --- | --- | --- | --- | --- | .00  | .25  | .00  | .21  | .03  |
| 16    | .00  | .00  | --- | --- | --- | --- | --- | .00  | .00  | .01  | .12  | .00  |
| 17    | .00  | .00  | --- | --- | --- | --- | --- | .00  | .00  | .00  | .00  | .05  |
| 18    | .00  | .00  | --- | --- | --- | --- | .00 | .00  | .00  | .15  | .00  | .04  |
| 19    | .00  | .00  | --- | --- | --- | --- | .00 | .00  | .00  | .00  | .03  | .00  |
| 20    | .00  | .00  | --- | --- | --- | --- | .00 | .00  | .00  | .00  | .00  | .00  |
| 21    | .00  | .00  | --- | --- | --- | --- | .00 | .00  | .16  | .04  | .20  | .00  |
| 22    | .00  | .00  | --- | --- | --- | --- | .00 | .00  | .17  | .20  | .11  | .00  |
| 23    | .00  | .00  | --- | --- | --- | --- | .00 | .00  | .00  | .02  | 1.02 | .00  |
| 24    | .00  | .00  | --- | --- | --- | --- | .00 | .00  | .00  | .00  | .00  | .00  |
| 25    | .00  | .00  | --- | --- | --- | --- | .00 | 2.67 | .00  | .01  | .00  | .22  |
| 26    | .00  | .00  | --- | --- | --- | --- | .00 | .10  | .00  | .51  | .00  | .11  |
| 27    | .00  | .05  | --- | --- | --- | --- | .00 | .00  | .00  | .00  | .75  | .30  |
| 28    | .00  | .00  | --- | --- | --- | --- | .02 | .18  | .03  | .00  | .00  | .00  |
| 29    | .00  | .00  | --- | --- | --- | --- | .00 | .00  | .00  | .27  | .06  | .00  |
| 30    | .00  | .00  | --- | --- | --- | --- | .00 | .00  | .05  | .00  | .00  | .00  |
| 31    | .00  | ---  | --- | --- | --- | --- | --- | .00  | ---  | .05  | .00  | ---  |
| TOTAL | 0.02 | 0.16 | --- | --- | --- | --- | --- | 2.98 | 1.58 | 1.98 | 2.85 | 2.03 |

**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 mi<sup>2</sup>.

**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 ft<sup>3</sup>/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. Flood of June 18, 1965, reached a stage of 23.5 ft, from floodmarks, discharge, 47,700 ft<sup>3</sup>/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

| DAY   | OCT  | NOV  | DEC  | JAN  | FEB  | MAR  | APR   | MAY   | JUN   | JUL    | AUG    | SEP    |
|-------|------|------|------|------|------|------|-------|-------|-------|--------|--------|--------|
| 1     | 43   | 35   | 34   | e33  | 26   | 25   | 19    | 10    | 30    | 3.3    | 150    | 9.4    |
| 2     | 45   | 38   | 34   | e31  | 22   | 25   | 17    | 9.8   | 36    | 2.5    | 51     | 8.6    |
| 3     | 45   | 38   | 34   | 31   | 18   | 25   | 15    | 20    | 35    | 2.1    | 50     | 7.0    |
| 4     | 42   | 39   | 33   | e33  | 20   | 25   | 16    | 14    | 30    | 2.0    | 21     | 6.6    |
| 5     | 38   | 40   | 34   | e32  | 29   | 25   | 17    | 15    | 33    | 7.6    | 14     | 5.9    |
| 6     | 37   | 39   | 34   | e31  | 38   | 25   | 19    | 16    | 32    | 6.9    | 10     | 370    |
| 7     | 38   | 37   | 35   | e31  | 41   | 24   | 19    | 19    | 30    | 4.0    | 8.7    | 1100   |
| 8     | 39   | 36   | e32  | e33  | 43   | 24   | 23    | 15    | 29    | 5.8    | 4.7    | 79     |
| 9     | 58   | 35   | e30  | e35  | 42   | 28   | 22    | 14    | 27    | 11     | 3.3    | 34     |
| 10    | 61   | 35   | 27   | e37  | 41   | 28   | 20    | 12    | 24    | 53     | 2.7    | 47     |
| 11    | 46   | 36   | 34   | e37  | 36   | 27   | 18    | 14    | 21    | 38     | 6.6    | 84     |
| 12    | 45   | 38   | 36   | e37  | 34   | 27   | 17    | 16    | 18    | 23     | 8.7    | 26     |
| 13    | 39   | 34   | 35   | e37  | 32   | 26   | 17    | 15    | 18    | 17     | 6.0    | 33     |
| 14    | 35   | 32   | 35   | e37  | 31   | 25   | 18    | 17    | 18    | 18     | 6.5    | 33     |
| 15    | 37   | 31   | 35   | e36  | 31   | 30   | 17    | 14    | 37    | 16     | 7.1    | 20     |
| 16    | 35   | 31   | 36   | e34  | 30   | 41   | 20    | 13    | 107   | 10     | 232    | 18     |
| 17    | 34   | 31   | 35   | e35  | 29   | 44   | 17    | 12    | 55    | 8.0    | 29     | 15     |
| 18    | 32   | 33   | 34   | e33  | 29   | 37   | 14    | 9.3   | 38    | 7.2    | 13     | 16     |
| 19    | 35   | 34   | 34   | e29  | 28   | 34   | 12    | 7.7   | 32    | 5.6    | 7.2    | 12     |
| 20    | 37   | 33   | 30   | e32  | 26   | 32   | 11    | 7.0   | 24    | 5.8    | 4.9    | 11     |
| 21    | 35   | 33   | 28   | 36   | 26   | 30   | 12    | 6.7   | 16    | 6.8    | 14     | 12     |
| 22    | 34   | 33   | e28  | 38   | 26   | 27   | 11    | 11    | 13    | 118    | 398    | 14     |
| 23    | 33   | 33   | e28  | 37   | 25   | 25   | 12    | 9.1   | 13    | 275    | 408    | 14     |
| 24    | 32   | 32   | e28  | 35   | 23   | 23   | 13    | 7.1   | 11    | 91     | 309    | 14     |
| 25    | 34   | 32   | 27   | 33   | 23   | 22   | 11    | 69    | 8.5   | 33     | 79     | 15     |
| 26    | 34   | 32   | 29   | e30  | 25   | 22   | 9.5   | 250   | 6.7   | 27     | 47     | 11     |
| 27    | 34   | 33   | 29   | 27   | 25   | 22   | 11    | 69    | 5.5   | 127    | 37     | 10     |
| 28    | 35   | 34   | 33   | 32   | 25   | 22   | 11    | 54    | 4.4   | 54     | 486    | 15     |
| 29    | 35   | 36   | 34   | e31  | 24   | 21   | 14    | 40    | 3.3   | 23     | 26     | 24     |
| 30    | 35   | 35   | 33   | e30  | ---  | 20   | 16    | 41    | 4.4   | 16     | 14     | 22     |
| 31    | 36   | ---  | 34   | e30  | ---  | 20   | ---   | 34    | ---   | 11     | 10     | ---    |
| TOTAL | 1198 | 1038 | 1002 | 1033 | 848  | 831  | 468.5 | 860.7 | 759.8 | 1028.6 | 2464.4 | 2086.5 |
| MEAN  | 38.6 | 34.6 | 32.3 | 33.3 | 29.2 | 26.8 | 15.6  | 27.8  | 25.3  | 33.2   | 79.5   | 69.5   |
| MAX   | 61   | 40   | 36   | 38   | 43   | 44   | 23    | 250   | 107   | 275    | 486    | 1100   |
| MIN   | 32   | 31   | 27   | 27   | 18   | 20   | 9.5   | 6.7   | 3.3   | 2.0    | 2.7    | 5.9    |
| AC-FT | 2380 | 2060 | 1990 | 2050 | 1680 | 1650 | 929   | 1710  | 1510  | 2040   | 4890   | 4140   |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1976 - 1996, 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 |  |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|--|
| MEAN | 33.0 | 30.0 | 28.3 | 27.4 | 29.4 | 33.8 | 85.4 | 136  | 108  | 90.3 | 145  | 64.5 |      |      |      |      |      |      |      |      |      |  |
| 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 1995 CALENDAR YEAR

FOR 1996 WATER YEAR

WATER YEARS 1976 - 1996

|                          |         |         |  |      |        |  |  |       |        |   |       |       |  |  |  |  |  |  |  |  |  |             |
|--------------------------|---------|---------|--|------|--------|--|--|-------|--------|---|-------|-------|--|--|--|--|--|--|--|--|--|-------------|
| ANNUAL TOTAL             | 21431.1 | 13618.5 |  |      |        |  |  |       |        |   |       |       |  |  |  |  |  |  |  |  |  |             |
| ANNUAL MEAN              | 58.7    | 37.2    |  |      |        |  |  |       |        | a | 67.9  |       |  |  |  |  |  |  |  |  |  |             |
| HIGHEST ANNUAL MEAN      |         |         |  |      |        |  |  |       |        |   | 181   |       |  |  |  |  |  |  |  |  |  | 1981        |
| LOWEST ANNUAL MEAN       |         |         |  |      |        |  |  |       |        |   | 12.3  |       |  |  |  |  |  |  |  |  |  | 1976        |
| HIGHEST DAILY MEAN       |         |         |  | 3980 | May 30 |  |  | 1100  | Sep 7  |   | 10000 |       |  |  |  |  |  |  |  |  |  | Jul 3 1981  |
| LOWEST DAILY MEAN        |         |         |  | 6.1  | Aug 6  |  |  | 2.0   | Jul 4  |   | b     |       |  |  |  |  |  |  |  |  |  | Jun 28 1976 |
| ANNUAL SEVEN-DAY MINIMUM |         |         |  | 9.0  | Jul 31 |  |  | 3.1   | Jun 28 |   |       |       |  |  |  |  |  |  |  |  |  | Jun 28 1976 |
| INSTANTANEOUS PEAK FLOW  |         |         |  |      |        |  |  | 7540  | Sep 6  |   | c     | 42400 |  |  |  |  |  |  |  |  |  | Jul 3 1981  |
| INSTANTANEOUS PEAK STAGE |         |         |  |      |        |  |  | 10.59 | Sep 6  |   |       | 22.00 |  |  |  |  |  |  |  |  |  | Jul 3 1981  |
| ANNUAL RUNOFF (AC-FT)    | 42510   | 27010   |  |      |        |  |  |       |        |   | 49170 |       |  |  |  |  |  |  |  |  |  |             |
| 10 PERCENT EXCEEDS       |         |         |  | 76   |        |  |  | 42    |        |   | 113   |       |  |  |  |  |  |  |  |  |  |             |
| 50 PERCENT EXCEEDS       |         |         |  | 32   |        |  |  | 29    |        |   | 29    |       |  |  |  |  |  |  |  |  |  |             |
| 90 PERCENT EXCEEDS       |         |         |  | 18   |        |  |  | 8.7   |        |   | 5.8   |       |  |  |  |  |  |  |  |  |  |             |

e-Estimated.

a-Average discharge for 10 years (water years 1967-76), 37.9 ft<sup>3</sup>/s; 27460 acre-ft/yr, prior to completion of Trinidad Dam.

b-No flow at times in most years.

c-From rating curve extended above 2100 ft<sup>3</sup>/s, on basis of two slope-area measurements of peak flow.

## 07126300 PURGATOIRE RIVER NEAR THATCHER, CO--Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 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 since December 1983 with satellite telemetry.

REMARKS.--Records 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, 245 microsiemens, Aug. 20, 1994.

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, 6,790 microsiemens, July 23; minimum, 301 microsiemens, Sept. 7.

WATER TEMPERATURE: Maximum, 29.4°C, July 17; minimum, 0.0°C, on many days during the winter months.

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM @ 25 DEG. C), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DAY   | MAX  | MIN  | MEAN | OCTOBER |      |      | NOVEMBER |      |      | DECEMBER |      |      | JANUARY |     |      |
|-------|------|------|------|---------|------|------|----------|------|------|----------|------|------|---------|-----|------|
|       |      |      |      | MAX     | MIN  | MEAN | MAX      | MIN  | MEAN | MAX      | MIN  | MEAN | MAX     | MIN | MEAN |
| 1     | 3000 | 2750 | 2890 | 3290    | 3260 | 3280 | 3540     | 3470 | 3500 | 3610     | 3310 | 3470 |         |     |      |
| 2     | 2930 | 2820 | 2850 | 3270    | 3250 | 3260 | 3560     | 3520 | 3550 | 3620     | 3420 | 3500 |         |     |      |
| 3     | 3230 | 2930 | 3060 | 3260    | 3240 | 3250 | 3560     | 3510 | 3530 | 3800     | 3500 | 3630 |         |     |      |
| 4     | 3060 | 2990 | 3020 | 3280    | 3240 | 3250 | 3530     | 3490 | 3510 | 3800     | 3370 | 3490 |         |     |      |
| 5     | 3040 | 2990 | 3010 | 3300    | 3270 | 3280 | 3490     | 3430 | 3460 | 3530     | 3380 | 3440 |         |     |      |
| 6     | 3040 | 2890 | 2970 | 3300    | 3280 | 3290 | 3440     | 3420 | 3430 | 3810     | 3520 | 3610 |         |     |      |
| 7     | 3050 | 2930 | 2990 | 3360    | 3290 | 3320 | 3450     | 3410 | 3430 | 3810     | 3570 | 3720 |         |     |      |
| 8     | 3100 | 2990 | 3040 | 3380    | 3340 | 3360 | 3420     | 3370 | 3390 | 3720     | 3330 | 3460 |         |     |      |
| 9     | 3160 | 3050 | 3110 | 3350    | 3330 | 3340 | 3450     | 3380 | 3420 | 3530     | 3390 | 3470 |         |     |      |
| 10    | 3130 | 3090 | 3110 | 3340    | 3280 | 3320 | 3560     | 3410 | 3480 | 3620     | 3400 | 3510 |         |     |      |
| 11    | 3160 | 2210 | 2840 | 3320    | 3280 | 3300 | 3660     | 3380 | 3480 | 3520     | 3280 | 3410 |         |     |      |
| 12    | 2210 | 2160 | 2180 | 3310    | 3270 | 3280 | 3660     | 3340 | 3470 | 3520     | 3200 | 3290 |         |     |      |
| 13    | 2370 | 2180 | 2240 | 3300    | 3280 | 3290 | 3540     | 3440 | 3490 | 3480     | 3230 | 3300 |         |     |      |
| 14    | 2980 | 2370 | 2660 | 3530    | 3290 | 3440 | 3470     | 3340 | 3410 | 3500     | 3280 | 3350 |         |     |      |
| 15    | 3260 | 2980 | 3180 | 3720    | 3480 | 3620 | 3380     | 3300 | 3350 | 3530     | 3250 | 3360 |         |     |      |
| 16    | 3160 | 3110 | 3140 | 3720    | 3690 | 3710 | 3440     | 3380 | 3410 | 3540     | 3270 | 3380 |         |     |      |
| 17    | 3350 | 3130 | 3260 | 3690    | 3660 | 3670 | 3400     | 3360 | 3380 | 3500     | 3240 | 3310 |         |     |      |
| 18    | 3360 | 3290 | 3330 | 3680    | 3640 | 3670 | 3400     | 3350 | 3370 | 3510     | 3260 | 3360 |         |     |      |
| 19    | 3300 | 3140 | 3190 | 3670    | 3640 | 3650 | 3450     | 3390 | 3420 | 3560     | 3380 | 3470 |         |     |      |
| 20    | 3220 | 3150 | 3190 | 3650    | 3640 | 3650 | 3470     | 3290 | 3430 | 3680     | 3400 | 3490 |         |     |      |
| 21    | 3330 | 3220 | 3280 | 3670    | 3550 | 3640 | 3590     | 3450 | 3510 | 3540     | 3400 | 3450 |         |     |      |
| 22    | 3290 | 3250 | 3270 | 3560    | 3450 | 3500 | 3680     | 3440 | 3500 | 3600     | 3460 | 3540 |         |     |      |
| 23    | 3260 | 3250 | 3250 | 3480    | 3460 | 3470 | 3630     | 3500 | 3560 | 3680     | 3500 | 3570 |         |     |      |
| 24    | 3290 | 3230 | 3260 | 3490    | 3450 | 3470 | 4030     | 3580 | 3810 | 3690     | 3420 | 3510 |         |     |      |
| 25    | 3340 | 3290 | 3310 | 3490    | 3470 | 3480 | 4170     | 3660 | 3850 | 3570     | 3360 | 3420 |         |     |      |
| 26    | 3350 | 3320 | 3340 | 3490    | 3460 | 3480 | 3750     | 3570 | 3670 | 3550     | 3250 | 3420 |         |     |      |
| 27    | 3390 | 3330 | 3350 | 3480    | 3460 | 3470 | 3830     | 3590 | 3710 | 4010     | 3520 | 3620 |         |     |      |
| 28    | 3350 | 3340 | 3350 | 3500    | 3450 | 3480 | 3940     | 3760 | 3860 | 4030     | 3510 | 3620 |         |     |      |
| 29    | 3370 | 3330 | 3350 | 3500    | 3440 | 3460 | 3900     | 3590 | 3760 | 3600     | 3390 | 3480 |         |     |      |
| 30    | 3390 | 3300 | 3360 | 3470    | 3440 | 3460 | 3770     | 3600 | 3690 | 3710     | 3520 | 3610 |         |     |      |
| 31    | 3300 | 3280 | 3280 | ---     | ---  | ---  | 3870     | 3610 | 3740 | 4080     | 3570 | 3780 |         |     |      |
| MONTH | 3390 | 2160 | 3090 | 3720    | 3240 | 3440 | 4170     | 3290 | 3530 | 4080     | 3200 | 3490 |         |     |      |



## 07126300 PURGATOIRE RIVER NEAR THATCHER, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DAY   | MAX  | MIN  | MEAN | MAX  | MIN | MEAN | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN |
|-------|------|------|------|------|-----|------|------|------|------|------|------|------|
|       |      |      |      |      |     |      |      |      |      |      |      |      |
| 1     | 16.5 | 13.8 | 15.2 | 9.2  | 7.4 | 8.6  | 6.1  | 3.6  | 4.8  | .7   | .1   | .3   |
| 2     | 16.3 | 13.5 | 14.9 | 7.4  | 4.9 | 6.0  | 5.6  | 4.2  | 4.8  | .3   | .1   | .1   |
| 3     | 16.7 | 13.2 | 14.9 | 6.8  | 4.3 | 5.4  | 5.5  | 3.5  | 4.5  | .4   | .1   | .2   |
| 4     | 16.0 | 13.6 | 14.6 | 6.6  | 4.5 | 5.4  | 5.6  | 4.0  | 4.8  | .5   | .1   | .2   |
| 5     | 14.4 | 11.9 | 13.0 | 6.4  | 4.2 | 5.4  | 5.6  | 4.1  | 4.8  | .2   | .1   | .1   |
| 6     | 14.0 | 10.7 | 12.2 | 7.4  | 5.0 | 6.2  | 5.5  | 3.5  | 4.3  | .3   | .1   | .2   |
| 7     | 13.6 | 11.1 | 12.3 | 7.7  | 5.2 | 6.3  | 4.0  | 3.2  | 3.7  | .3   | .1   | .2   |
| 8     | 14.1 | 10.9 | 12.5 | 8.0  | 5.2 | 6.5  | 3.7  | 1.4  | 2.9  | .4   | .1   | .2   |
| 9     | 13.9 | 11.2 | 12.6 | 8.6  | 5.8 | 7.0  | 1.5  | .2   | .8   | .5   | .1   | .2   |
| 10    | 14.5 | 11.2 | 12.9 | 7.2  | 5.1 | 6.5  | 1.2  | .1   | .5   | .6   | .1   | .3   |
| 11    | 15.3 | 11.8 | 13.5 | 6.5  | 3.8 | 5.2  | 2.1  | .1   | .9   | .7   | .0   | .3   |
| 12    | 15.4 | 12.5 | 14.1 | 7.5  | 5.1 | 6.3  | 2.3  | .7   | 1.5  | .9   | .0   | .3   |
| 13    | 14.9 | 12.9 | 13.8 | 7.8  | 5.6 | 6.6  | 3.3  | 1.8  | 2.5  | 1.2  | .0   | .4   |
| 14    | 14.4 | 11.1 | 12.7 | 8.2  | 5.6 | 6.8  | 4.1  | 2.3  | 3.2  | 1.5  | .0   | .5   |
| 15    | 14.7 | 11.2 | 12.8 | 8.4  | 5.9 | 7.0  | 4.4  | 2.7  | 3.5  | 1.2  | .0   | .5   |
| 16    | 14.8 | 11.7 | 13.2 | 8.8  | 6.2 | 7.4  | 4.3  | 2.8  | 3.4  | 1.6  | .0   | .6   |
| 17    | 14.9 | 12.0 | 13.3 | 8.6  | 6.3 | 7.3  | 3.5  | 2.0  | 2.9  | 1.7  | .1   | .9   |
| 18    | 15.0 | 11.6 | 13.2 | 8.2  | 5.9 | 6.9  | 2.3  | 1.3  | 1.8  | .3   | .1   | .2   |
| 19    | 13.5 | 11.3 | 12.5 | 7.8  | 5.5 | 6.6  | 2.3  | .8   | 1.4  | .3   | .1   | .2   |
| 20    | 12.6 | 9.7  | 11.1 | 7.3  | 5.3 | 6.2  | 1.3  | .1   | .6   | .4   | .1   | .2   |
| 21    | 12.5 | 9.5  | 11.0 | 7.0  | 4.7 | 5.8  | .5   | .1   | .3   | .4   | .1   | .2   |
| 22    | 12.7 | 9.9  | 11.0 | 7.5  | 5.3 | 6.3  | .8   | .1   | .3   | .6   | .1   | .2   |
| 23    | 10.1 | 7.5  | 8.8  | 7.4  | 5.4 | 6.2  | .6   | .1   | .2   | .4   | .1   | .2   |
| 24    | 8.8  | 6.7  | 7.7  | 6.6  | 4.5 | 5.6  | .4   | .1   | .2   | .4   | .1   | .2   |
| 25    | 9.7  | 6.5  | 8.0  | 6.8  | 4.8 | 5.7  | .4   | .1   | .2   | .7   | .1   | .2   |
| 26    | 9.5  | 7.1  | 8.2  | 7.1  | 4.8 | 5.8  | .6   | .1   | .2   | .3   | .1   | .2   |
| 27    | 10.2 | 7.2  | 8.6  | 6.0  | 4.6 | 5.5  | .4   | .0   | .2   | .4   | .1   | .2   |
| 28    | 10.1 | 7.3  | 8.7  | 4.7  | 3.1 | 3.9  | .3   | .1   | .2   | .7   | .0   | .3   |
| 29    | 10.2 | 8.0  | 9.1  | 5.1  | 2.9 | 3.9  | .4   | .1   | .2   | .5   | .1   | .2   |
| 30    | 10.4 | 7.7  | 9.0  | 5.4  | 3.1 | 4.2  | .4   | .0   | .2   | .4   | .0   | .2   |
| 31    | 10.1 | 7.8  | 9.0  | ---  | --- | ---  | .4   | .1   | .2   | .7   | .1   | .2   |
| MONTH | 16.7 | 6.5  | 11.8 | 9.2  | 2.9 | 6.1  | 6.1  | .0   | 1.9  | 1.7  | .0   | .3   |
| DAY   | MAX  | MIN  | MEAN | MAX  | MIN | MEAN | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN |
|       |      |      |      |      |     |      |      |      |      |      |      |      |
| 1     | .4   | .1   | .2   | 5.3  | 1.2 | 3.1  | 15.3 | 10.0 | 12.4 | 18.9 | 12.6 | 15.5 |
| 2     | .4   | .1   | .2   | 6.3  | 1.9 | 3.9  | 15.5 | 10.5 | 12.9 | 20.2 | 14.4 | 17.1 |
| 3     | .3   | .1   | .2   | 7.5  | 2.7 | 4.9  | 15.1 | 11.6 | 13.1 | 20.3 | 15.3 | 17.8 |
| 4     | .2   | .1   | .2   | 8.4  | 4.7 | 6.4  | 12.6 | 10.2 | 11.5 | 21.3 | 15.7 | 18.2 |
| 5     | .3   | .1   | .2   | 9.7  | 5.6 | 7.5  | 10.3 | 8.4  | 9.3  | 18.8 | 16.3 | 17.3 |
| 6     | .4   | .1   | .2   | 7.8  | 2.3 | 4.8  | 12.7 | 7.1  | 9.8  | 21.6 | 15.0 | 18.0 |
| 7     | .4   | .1   | .2   | 5.2  | .8  | 2.8  | 13.2 | 9.2  | 11.2 | 22.6 | 17.6 | 19.8 |
| 8     | .5   | .1   | .2   | 6.5  | 2.4 | 4.2  | 16.5 | 11.0 | 13.5 | 23.0 | 17.2 | 19.9 |
| 9     | 1.0  | .1   | .4   | 7.7  | 3.0 | 5.3  | 18.1 | 13.0 | 15.4 | 24.0 | 18.3 | 20.8 |
| 10    | 1.8  | .1   | .6   | 9.6  | 4.8 | 7.2  | 16.5 | 14.0 | 15.3 | 22.2 | 17.5 | 19.5 |
| 11    | 2.1  | .1   | .8   | 11.5 | 7.2 | 9.2  | 17.3 | 12.8 | 14.9 | 23.0 | 16.9 | 19.7 |
| 12    | 2.4  | .1   | 1.0  | 11.9 | 8.1 | 9.9  | 18.5 | 13.4 | 15.7 | 23.7 | 17.9 | 20.6 |
| 13    | 3.5  | .1   | 1.5  | 12.0 | 8.1 | 9.9  | 15.8 | 11.2 | 13.9 | 23.5 | 18.7 | 20.6 |
| 14    | 4.2  | .8   | 2.3  | 10.0 | 6.4 | 8.1  | 11.6 | 7.8  | 9.7  | 21.4 | 18.5 | 20.1 |
| 15    | 4.8  | 1.7  | 3.0  | 10.4 | 5.8 | 7.9  | 14.5 | 8.4  | 11.2 | 23.0 | 17.8 | 20.3 |
| 16    | 4.8  | 1.4  | 3.1  | 10.4 | 7.2 | 8.7  | 15.3 | 10.7 | 12.6 | 25.1 | 18.6 | 21.6 |
| 17    | 6.2  | 2.4  | 4.2  | 8.8  | 6.6 | 7.7  | 16.2 | 11.6 | 13.8 | 25.3 | 19.5 | 22.2 |
| 18    | 6.0  | 3.9  | 4.9  | 7.4  | 5.5 | 6.3  | 17.8 | 12.6 | 14.9 | 24.5 | 19.9 | 22.0 |
| 19    | 5.9  | 3.3  | 4.5  | 8.8  | 4.9 | 6.7  | 16.7 | 12.6 | 14.3 | 24.1 | 19.6 | 21.7 |
| 20    | 7.1  | 4.0  | 5.4  | 9.8  | 5.1 | 7.4  | 14.1 | 10.7 | 12.5 | 23.4 | 18.5 | 21.0 |
| 21    | 9.1  | 5.4  | 7.1  | 11.4 | 6.6 | 8.9  | 15.3 | 10.1 | 12.5 | 22.7 | 18.8 | 20.7 |
| 22    | 10.2 | 6.7  | 8.3  | 12.3 | 8.0 | 10.0 | 16.3 | 10.4 | 13.0 | 23.4 | 18.1 | 20.6 |
| 23    | 9.4  | 6.2  | 7.7  | 13.0 | 8.6 | 10.6 | 18.2 | 11.7 | 14.7 | 24.7 | 18.6 | 21.6 |
| 24    | 8.4  | 5.6  | 6.9  | 10.8 | 5.0 | 7.8  | 18.4 | 13.8 | 16.0 | 22.4 | 19.0 | 20.4 |
| 25    | 9.2  | 5.6  | 7.2  | 6.0  | 3.1 | 4.5  | 18.4 | 14.4 | 16.2 | 20.2 | 14.6 | 17.0 |
| 26    | 7.8  | 5.0  | 6.3  | 8.3  | 2.6 | 5.3  | 19.6 | 13.7 | 16.3 | 15.5 | 13.4 | 14.1 |
| 27    | 6.5  | 3.5  | 4.9  | 10.7 | 4.9 | 7.6  | 19.8 | 14.8 | 17.0 | 17.8 | 12.6 | 14.9 |
| 28    | 4.2  | 2.1  | 3.2  | 12.4 | 7.1 | 9.7  | 16.9 | 10.1 | 12.7 | 17.7 | 14.3 | 16.0 |
| 29    | 4.7  | .8   | 2.6  | 13.1 | 9.0 | 11.0 | 14.7 | 8.5  | 11.3 | 21.1 | 15.5 | 18.0 |
| 30    | ---  | ---  | ---  | 12.4 | 9.3 | 10.6 | 17.1 | 10.9 | 13.8 | 21.1 | 17.3 | 19.1 |
| 31    | ---  | ---  | ---  | 13.6 | 8.4 | 10.9 | ---  | ---  | ---  | 22.1 | 17.5 | 19.6 |
| MONTH | 10.2 | .1   | 3.0  | 13.6 | .8  | 7.4  | 19.8 | 7.1  | 13.4 | 25.3 | 12.6 | 19.2 |

07126300 PURGATOIRE RIVER NEAR THATCHER, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

|       | JUNE |      |      | JULY |      |      | AUGUST |      |      | SEPTEMBER |      |      |
|-------|------|------|------|------|------|------|--------|------|------|-----------|------|------|
| 1     | 23.4 | 18.3 | 20.6 | 26.1 | 21.2 | 23.6 | 25.0   | 22.5 | 23.7 | 26.4      | 21.4 | 23.6 |
| 2     | 23.2 | 19.2 | 21.2 | 27.5 | 22.3 | 24.9 | 25.9   | 21.0 | 23.3 | 24.5      | 21.7 | 23.0 |
| 3     | 24.4 | 19.7 | 21.9 | 29.2 | 22.8 | 25.8 | 26.2   | 21.5 | 23.8 | 25.8      | 20.5 | 22.9 |
| 4     | 23.7 | 19.9 | 21.9 | 28.7 | 23.4 | 26.2 | 26.7   | 22.8 | 24.8 | 26.2      | 21.0 | 23.3 |
| 5     | 24.3 | 19.6 | 22.0 | 28.4 | 24.7 | 26.3 | 27.8   | 22.0 | 24.6 | 25.1      | 20.9 | 23.0 |
| 6     | 22.4 | 19.1 | 20.8 | 28.5 | 23.5 | 25.8 | 27.9   | 21.8 | 24.6 | 22.9      | 8.3  | 21.1 |
| 7     | 23.7 | 18.7 | 21.1 | 28.2 | 24.5 | 26.1 | 27.1   | 21.8 | 24.1 | 14.9      | 3.7  | 9.8  |
| 8     | 24.9 | 19.1 | 21.9 | 25.3 | 22.6 | 23.6 | 24.1   | 21.9 | 23.1 | 19.7      | 14.7 | 17.0 |
| 9     | 25.1 | 20.6 | 22.8 | 24.2 | 21.5 | 22.8 | 27.3   | 21.1 | 23.9 | 21.7      | 17.7 | 19.6 |
| 10    | 25.6 | 20.2 | 22.7 | 25.8 | 21.8 | 23.6 | 25.6   | 21.6 | 23.6 | 22.6      | 18.0 | 20.2 |
| 11    | 24.7 | 20.7 | 22.5 | 26.8 | 22.0 | 24.2 | 27.2   | 22.1 | 24.1 | 20.9      | 17.5 | 19.3 |
| 12    | 25.3 | 20.1 | 22.4 | 25.9 | 21.9 | 23.7 | 27.8   | 21.6 | 24.2 | 19.9      | 18.8 | 19.3 |
| 13    | 24.4 | 20.8 | 22.5 | 23.8 | 21.4 | 22.5 | 28.2   | 21.8 | 24.6 | 20.9      | 17.7 | 19.2 |
| 14    | 23.3 | 21.4 | 22.3 | 26.0 | 20.2 | 22.9 | 27.3   | 21.8 | 24.3 | 19.6      | 17.9 | 18.7 |
| 15    | 24.9 | 20.7 | 22.6 | 26.1 | 21.7 | 23.8 | 27.5   | 21.7 | 24.0 | 19.4      | 17.3 | 18.2 |
| 16    | 24.4 | 21.1 | 22.7 | 28.6 | 21.7 | 24.8 | 23.9   | 15.6 | 18.5 | 20.9      | 16.5 | 18.5 |
| 17    | 24.7 | 21.0 | 22.8 | 29.4 | 23.2 | 25.9 | 23.1   | 17.2 | 19.9 | 20.6      | 16.9 | 18.7 |
| 18    | 26.1 | 20.9 | 23.4 | 27.7 | 24.0 | 25.6 | 24.4   | 19.6 | 21.9 | 19.9      | 17.2 | 18.4 |
| 19    | 26.8 | 21.4 | 24.0 | 28.9 | 23.3 | 25.8 | 25.4   | 20.7 | 22.7 | 19.3      | 15.6 | 17.3 |
| 20    | 27.9 | 22.2 | 24.9 | 29.3 | 24.4 | 26.3 | 27.3   | 20.7 | 23.5 | 19.0      | 15.5 | 17.0 |
| 21    | 26.6 | 22.6 | 24.3 | 28.3 | 23.2 | 25.6 | 26.0   | 21.4 | 23.7 | 19.5      | 15.2 | 17.2 |
| 22    | 23.6 | 21.3 | 22.6 | 26.8 | 7.3  | 24.3 | 23.7   | 19.4 | 21.2 | 20.6      | 16.1 | 18.2 |
| 23    | 26.3 | 19.8 | 22.8 | 23.1 | 7.3  | 18.3 | 21.7   | 19.6 | 20.5 | 20.9      | 17.1 | 18.7 |
| 24    | 27.6 | 22.1 | 24.3 | 23.6 | 19.5 | 21.5 | 21.5   | 19.5 | 20.3 | 20.5      | 16.9 | 18.6 |
| 25    | 25.7 | 20.8 | 23.2 | 23.9 | 20.2 | 21.9 | 23.0   | 19.0 | 20.9 | 20.4      | 17.2 | 18.6 |
| 26    | 26.1 | 20.6 | 23.3 | 25.6 | 19.9 | 22.5 | 24.4   | 20.7 | 22.3 | 17.4      | 12.5 | 14.6 |
| 27    | 24.2 | 22.1 | 23.0 | 24.6 | 21.4 | 23.0 | 25.2   | 20.8 | 22.8 | 14.7      | 10.9 | 12.7 |
| 28    | 24.3 | 20.4 | 22.1 | 24.0 | 20.3 | 22.2 | 22.6   | 16.1 | 19.5 | 16.0      | 11.6 | 13.6 |
| 29    | 23.5 | 21.9 | 22.6 | 25.3 | 21.0 | 22.7 | 24.8   | 20.2 | 22.3 | 17.2      | 13.2 | 15.0 |
| 30    | 23.8 | 21.9 | 22.6 | 27.6 | 21.6 | 24.2 | 24.0   | 20.8 | 22.3 | 18.2      | 14.0 | 16.0 |
| 31    | ---  | ---  | ---  | 28.8 | 22.4 | 25.2 | 25.9   | 20.9 | 23.1 | ---       | ---  | ---  |
| MONTH | 27.9 | 18.3 | 22.6 | 29.4 | 7.3  | 24.1 | 28.2   | 15.6 | 22.8 | 26.4      | 3.7  | 18.4 |
| YEAR  | 29.4 | .0   | 12.6 |      |      |      |        |      |      |           |      |      |

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DATE  | TIME | DIS-<br>CHARGE,<br>INST.<br>CUBIC<br>FEET<br>PER<br>SECOND | SEDI-<br>MENT,<br>DIS-<br>CHARGE,<br>SUS-<br>PENDEDED<br>(MG/L) | SEDI-<br>MENT,<br>DIS-<br>CHARGE,<br>SUS-<br>PENDEDED<br>(T/DAY) |
|-------|------|--|---|--|
| NOV   |      |  |   |  |
| 09... | 1350 | 36   | 38  | 3.7  |
| DEC   |      |  |   |  |
| 14... | 1025 | 34   | 44  | 4.0  |
| JAN   |      |  |   |  |
| 24... | 1200 | 42   | 23  | 2.6  |
| FEB   |      |  |   |  |
| 22... | 1335 | 28   | 44  | 3.3  |
| APR   |      |  |   |  |
| 18... | 1430 | 14   | 20  | 0.76   |
| MAY   |      |  |   |  |
| 30... | 1455 | 42   | 264   | 30   |
| AUG   |      |  |   |  |
| 07... | 1450 | 7.4  | 51  | 1.0  |
| 23... | 1710 | 476  | 14600   | 18800  |
| SEP   |      |  |   |  |
| 20... | 1140 | 12   | 29  | 0.94   |

## ARKANSAS RIVER BASIN

## 07126300 PURGATOIRE RIVER NEAR THATCHER, CO--Continued

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

| DATE  | TIME | DIS-<br>CHARGE,<br>INST.<br>CUBIC<br>FEET<br>PER<br>SECOND | SEDI-<br>MENT,<br>SUS-<br>PENDE<br>(MG/L) | SEDI-<br>MENT,<br>DIS-<br>CHARGE,<br>SUS-<br>PENDE<br>(T/DAY) |
|-------|------|--|---|---|
| OCT   |      |  |   |   |
| 27... | 1055 | 47   | 37  | 4.7   |
| DEC   |      |  |   |   |
| 01... | 1525 | 21   | 26  | 1.5   |
| JAN   |      |  |   |   |
| 13... | 1325 | 32   | 21  | 1.8   |
| MAR   |      |  |   |   |
| 14... | 1345 | 19   | 37  | 1.9   |
| APR   |      |  |   |   |
| 11... | 1620 | 32   | 62  | 5.4   |
| MAY   |      |  |   |   |
| 16... | 1125 | 14   | 44  | 1.7   |
| 31... | 1455 | 509  | 1990                                      | 2730  |
| JUN   |      |  |   |   |
| 06... | 1725 | 91   | 3860                                      | 948   |
| 22... | 1325 | 60   | 249                                       | 40  |
| AUG   |      |  |   |   |
| 03... | 1615 | 11   | 65  | 1.9   |
| SEP   |      |  |   |   |
| 14... | 1125 | 74   | 306                                       | 61  |

**07126325 TAYLOR ARROYO BELOW ROCK CROSSING, NEAR THATCHER, CO**

LOCATION.--Lat 37°25'26", long 103°55'09", in SE<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec.17, T.30 S., R.58 W., Las Animas County, Hydrologic Unit 11020010, on left bank 5 mi upstream from mouth, 1.6 mi southeast of Rock Crossing, and 13.5 mi southeast of Thatcher.

DRAINAGE AREA.--48.4 mi<sup>2</sup>.

**WATER-DISCHARGE RECORDS**

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

GAGE.--Water-stage recorder with satellite telemetry, artificial control, and crest-stage gage. Elevation of gage is 4,982 ft above sea level, from topographic map.

REMARKS.--Records good except those above 6 ft<sup>3</sup>/s, which are fair.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
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  | e.00 | .00  | .00  | .00   | .00  |
| 4     | .00  | .00  | .00  | .00  | .00  | .00  | .00  | e.00 | .00  | .00  | .00   | .00  |
| 5     | .00  | .00  | .00  | .00  | .00  | .00  | .00  | e.00 | .00  | .00  | .00   | .00  |
| 6     | .00  | .00  | .00  | .00  | .00  | .00  | .00  | e.00 | .00  | .00  | .00   | .00  |
| 7     | .00  | .00  | .00  | .00  | .00  | .00  | .00  | e.00 | .00  | .00  | .00   | .00  |
| 8     | .00  | .00  | .00  | .00  | .00  | .00  | .00  | e.00 | .00  | .00  | .00   | .00  |
| 9     | .00  | .00  | .00  | .00  | .00  | .00  | .00  | e.00 | .00  | .00  | .00   | .00  |
| 10    | .00  | .00  | .00  | .00  | .00  | .00  | .00  | e.00 | .00  | .00  | .00   | .00  |
| 11    | .00  | .00  | .00  | .00  | .00  | .00  | .00  | e.00 | .00  | .00  | .00   | .00  |
| 12    | .00  | .00  | .00  | .00  | .00  | .00  | .00  | e.00 | .00  | .00  | .00   | .00  |
| 13    | .00  | .00  | .00  | .00  | .00  | .00  | .00  | e.00 | .00  | .00  | .00   | .00  |
| 14    | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .00   | .01  |
| 15    | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .10   | .00  |
| 16    | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .21   | .00  |
| 17    | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .01   | .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  | .01   | .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  | 1.2  | .00  | .00  | .00   | .00  |
| 26    | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .51  | .00  | .00  | .00   | .00  |
| 27    | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .02  | .00  | .00  | 1.6   | .00  |
| 28    | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .00  | 10    | .00  |
| 29    | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .15   | .00  |
| 30    | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .02   | .00  |
| 31    | .00  | ---  | .00  | .00  | ---  | .00  | ---  | .00  | ---  | .00  | .00   | ---  |
| TOTAL | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.73 | 0.00 | 0.00 | 12.10 | 0.01 |
| MEAN  | .000 | .000 | .000 | .000 | .000 | .000 | .000 | .056 | .000 | .000 | .39   | .000 |
| MAX   | .00  | .00  | .00  | .00  | .00  | .00  | .00  | 1.2  | .00  | .00  | 10    | .01  |
| MIN   | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .00   | .00  |
| AC-FT | .00  | .00  | .00  | .00  | .00  | .00  | .00  | 3.4  | .00  | .00  | 24    | .02  |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1983 - 1996, BY WATER YEAR (WY)

|      | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | .019 | .000 | .000 | .000 | .000 | .000 | .024 | .56  | .61  | .75  | .57  | .030 |      |      |
| 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 1995 CALENDAR YEAR | FOR 1996 WATER YEAR     | WATER YEARS 1983 - 1996       |
|--------------------------|------------------------|-------------------------|-------------------------------|
| ANNUAL TOTAL             | 342.23                 | 13.84                   |                               |
| ANNUAL MEAN              | .94                    | .038                    | .23                           |
| HIGHEST ANNUAL MEAN      |                        |                         | .94                           |
| LOWEST ANNUAL MEAN       |                        |                         | .038                          |
| HIGHEST DAILY MEAN       | 78 Jun 28              | 10 Aug 28               | 144 Jul 31 1989               |
| LOWEST DAILY MEAN        | <sup>a</sup> .00 Jan 1 | <sup>a</sup> .00 Oct 1  | <sup>a</sup> .00 Mar 18 1983  |
| ANNUAL SEVEN-DAY MINIMUM | .00 Jan 1              | .00 Oct 1               | <sup>c</sup> 2820 Mar 18 1983 |
| INSTANTANEOUS PEAK FLOW  |                        | <sup>b</sup> 109 Aug 27 | <sup>c</sup> 2820 Jul 31 1989 |
| INSTANTANEOUS PEAK STAGE |                        | 5.85 Aug 27             | 10.96 Jul 31 1989             |
| ANNUAL RUNOFF (AC-FT)    | 679                    | 27                      | 165                           |
| 10 PERCENT EXCEEDS       | .02                    | .00                     | .00                           |
| 50 PERCENT EXCEEDS       | .00                    | .00                     | .00                           |
| 90 PERCENT EXCEEDS       | .00                    | .00                     | .00                           |

e-Estimated.

a-No flow most of the time.

b-From rating curve extended above 3.1 ft<sup>3</sup>/s on basis of area-velocity study.

c-From rating extended to peak flow on the basis of slope-conveyance.







07126325 TAYLOR ARROYO BELOW ROCK CROSSING NEAR THATCHER, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DAY   | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN |
|-------|-----|-----|------|-----|-----|------|------|------|------|------|------|------|
|       |     |     |      |     |     |      |      |      |      |      |      |      |
| 1     | --- | --- | ---  | --- | --- | ---  | ---  | ---  | ---  | ---  | ---  | ---  |
| 2     | --- | --- | ---  | --- | --- | ---  | ---  | ---  | ---  | ---  | ---  | ---  |
| 3     | --- | --- | ---  | --- | --- | ---  | ---  | ---  | ---  | ---  | ---  | ---  |
| 4     | --- | --- | ---  | --- | --- | ---  | ---  | ---  | ---  | ---  | ---  | ---  |
| 5     | --- | --- | ---  | --- | --- | ---  | ---  | ---  | ---  | ---  | ---  | ---  |
| 6     | --- | --- | ---  | --- | --- | ---  | ---  | ---  | ---  | ---  | ---  | ---  |
| 7     | --- | --- | ---  | --- | --- | ---  | ---  | ---  | ---  | ---  | ---  | ---  |
| 8     | --- | --- | ---  | --- | --- | ---  | ---  | ---  | ---  | ---  | ---  | ---  |
| 9     | --- | --- | ---  | --- | --- | ---  | ---  | ---  | ---  | ---  | ---  | ---  |
| 10    | --- | --- | ---  | --- | --- | ---  | ---  | ---  | ---  | ---  | ---  | ---  |
| 11    | --- | --- | ---  | --- | --- | ---  | ---  | ---  | ---  | ---  | ---  | ---  |
| 12    | --- | --- | ---  | --- | --- | ---  | ---  | ---  | ---  | ---  | ---  | ---  |
| 13    | --- | --- | ---  | --- | --- | ---  | ---  | ---  | ---  | 20.2 | 19.5 | ---  |
| 14    | --- | --- | ---  | --- | --- | ---  | ---  | ---  | ---  | 19.5 | 17.3 | ---  |
| 15    | --- | --- | ---  | --- | --- | ---  | 18.8 | 17.8 | ---  | ---  | ---  | ---  |
| 16    | --- | --- | ---  | --- | --- | ---  | ---  | ---  | ---  | ---  | ---  | ---  |
| 17    | --- | --- | ---  | --- | --- | ---  | ---  | ---  | ---  | ---  | ---  | ---  |
| 18    | --- | --- | ---  | --- | --- | ---  | ---  | ---  | ---  | ---  | ---  | ---  |
| 19    | --- | --- | ---  | --- | --- | ---  | ---  | ---  | ---  | ---  | ---  | ---  |
| 20    | --- | --- | ---  | --- | --- | ---  | ---  | ---  | ---  | ---  | ---  | ---  |
| 21    | --- | --- | ---  | --- | --- | ---  | ---  | ---  | ---  | ---  | ---  | ---  |
| 22    | --- | --- | ---  | --- | --- | ---  | ---  | ---  | ---  | ---  | ---  | ---  |
| 23    | --- | --- | ---  | --- | --- | ---  | ---  | ---  | ---  | ---  | ---  | ---  |
| 24    | --- | --- | ---  | --- | --- | ---  | ---  | ---  | ---  | ---  | ---  | ---  |
| 25    | --- | --- | ---  | --- | --- | ---  | ---  | ---  | ---  | ---  | ---  | ---  |
| 26    | --- | --- | ---  | --- | --- | ---  | ---  | ---  | ---  | ---  | ---  | ---  |
| 27    | --- | --- | ---  | --- | --- | ---  | ---  | ---  | ---  | ---  | ---  | ---  |
| 28    | --- | --- | ---  | --- | --- | ---  | ---  | ---  | ---  | ---  | ---  | ---  |
| 29    | --- | --- | ---  | --- | --- | ---  | 25.1 | ---  | ---  | ---  | ---  | ---  |
| 30    | --- | --- | ---  | --- | --- | ---  | 24.3 | 20.0 | 21.7 | ---  | ---  | ---  |
| 31    | --- | --- | ---  | --- | --- | ---  | 21.7 | 19.5 | ---  | ---  | ---  | ---  |
| MONTH | --- | --- | ---  | --- | --- | ---  | ---  | ---  | ---  | ---  | ---  | ---  |

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DATE  | TIME | DIS-CHARGE, INST. CUBIC FEET PER SECOND | SEDI-MENT, SUS-PENDED (MG/L) | SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) |
|-------|------|---|------------------------------|---|
| AUG   |      |   |                              |   |
| 16... | 1215 | 0.17                                    | 109                          | 0.05                                      |
| 28... | 1210 | 3.1                                     | 299                          | 2.5                                       |
| 28... | 1215 | 3.1                                     | 299                          | 2.5                                       |
| 28... | 1925 | 1.0                                     | 224                          | 0.60                                      |

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

| DATE  | TIME | DIS-CHARGE, INST. CUBIC FEET PER SECOND | SEDI-MENT, SUS-PENDED (MG/L) | SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) |
|-------|------|---|------------------------------|---|
| MAY   |      |   |                              |   |
| 17... | 1348 | 30                                      | 523                          | 42  |
| 18... | 1322 | 3.8                                     | 145                          | 1.5                                       |

## 07126325 TAYLOR ARROYO BELOW ROCK CROSSING NEAR THATCHER, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DAY   | MEAN               | MEAN                         | SEDIMENT                | MEAN               | MEAN                         | SEDIMENT                | MEAN               | MEAN                         | SEDIMENT                |
|-------|--------------------|------------------------------|-------------------------|--------------------|------------------------------|-------------------------|--------------------|------------------------------|-------------------------|
|       | DISCHARGE<br>(CFS) | CONCEN-<br>TRATION<br>(MG/L) | DISCHARGE<br>(TONS/DAY) | DISCHARGE<br>(CFS) | CONCEN-<br>TRATION<br>(MG/L) | DISCHARGE<br>(TONS/DAY) | DISCHARGE<br>(CFS) | CONCEN-<br>TRATION<br>(MG/L) | DISCHARGE<br>(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               | ---                          | ---                     |
|       | 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               | ---                          | ---                     |



## 07126325 TAYLOR ARROYO BELOW ROCK CROSSING NEAR THATCHER, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

| DAY   | MEAN               | MEAN                         | SEDIMENT                | MEAN               | MEAN                         | SEDIMENT                | MEAN               | MEAN                         | SEDIMENT                |
|-------|--------------------|------------------------------|-------------------------|--------------------|------------------------------|-------------------------|--------------------|------------------------------|-------------------------|
|       | DISCHARGE<br>(CFS) | CONCEN-<br>TRATION<br>(MG/L) | DISCHARGE<br>(TONS/DAY) | DISCHARGE<br>(CFS) | CONCEN-<br>TRATION<br>(MG/L) | DISCHARGE<br>(TONS/DAY) | DISCHARGE<br>(CFS) | CONCEN-<br>TRATION<br>(MG/L) | DISCHARGE<br>(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               | ---                          | ---                     |
|       | 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               | ---                          | ---                     |

07126325 TAYLOR ARROYO BELOW ROCK CROSSING NEAR THATCHER, CO--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

| 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     | .00                  | ---                        | ---                           | .00                  | ---                        | ---                           | .06                  | 41                         | .01                           |
| 2     | .00                  | ---                        | ---                           | .00                  | ---                        | ---                           | .00                  | ---                        | ---                           |
| 3     | .00                  | ---                        | ---                           | .00                  | ---                        | ---                           | .00                  | ---                        | ---                           |
| 4     | .00                  | ---                        | ---                           | .00                  | ---                        | ---                           | .02                  | 16                         | .01                           |
| 5     | .00                  | ---                        | ---                           | .48                  | 108                        | 1.3                           | .00                  | ---                        | ---                           |
| 6     | .00                  | ---                        | ---                           | 58                   | 1770                       | 416                           | .00                  | ---                        | ---                           |
| 7     | .00                  | ---                        | ---                           | .44                  | 602                        | .78                           | .00                  | ---                        | ---                           |
| 8     | .00                  | ---                        | ---                           | .12                  | ---                        | e.05                          | .68                  | ---                        | e.64                          |
| 9     | .00                  | ---                        | ---                           | .06                  | ---                        | e.02                          | .19                  | ---                        | e.10                          |
| 10    | .00                  | ---                        | ---                           | .00                  | ---                        | ---                           | .11                  | ---                        | e.05                          |
| 11    | .00                  | ---                        | ---                           | .04                  | ---                        | e.01                          | .02                  | ---                        | e.00                          |
| 12    | .00                  | ---                        | ---                           | .01                  | ---                        | e.00                          | .00                  | ---                        | ---                           |
| 13    | .00                  | ---                        | ---                           | .00                  | ---                        | ---                           | .00                  | ---                        | ---                           |
| 14    | .00                  | ---                        | ---                           | .00                  | ---                        | ---                           | .00                  | ---                        | ---                           |
| 15    | .00                  | ---                        | ---                           | .00                  | ---                        | ---                           | .00                  | ---                        | ---                           |
| 16    | .00                  | ---                        | ---                           | .00                  | ---                        | ---                           | .00                  | ---                        | ---                           |
| 17    | .00                  | ---                        | ---                           | 33                   | 847                        | 174                           | .00                  | ---                        | ---                           |
| 18    | .00                  | ---                        | ---                           | 6.7                  | 283                        | 8.8                           | .00                  | ---                        | ---                           |
| 19    | .00                  | ---                        | ---                           | .06                  | 23                         | .01                           | .00                  | ---                        | ---                           |
| 20    | .00                  | ---                        | ---                           | .00                  | ---                        | ---                           | .00                  | ---                        | ---                           |
| 21    | .00                  | ---                        | ---                           | .00                  | ---                        | ---                           | .00                  | ---                        | ---                           |
| 22    | .01                  | ---                        | ---                           | .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                  | ---                        | ---                           | 78                   | ---                        | e559                          |
| 29    | .00                  | ---                        | ---                           | 56                   | ---                        | e348                          | 33                   | ---                        | e164                          |
| 30    | .00                  | ---                        | ---                           | 64                   | ---                        | e421                          | 1.2                  | ---                        | e1.4                          |
| 31    | ---                  | ---                        | ---                           | .78                  | 146                        | .39                           | ---                  | ---                        | ---                           |
| TOTAL | 0.01                 | ---                        | ---                           | 219.69               | ---                        | ---                           | 113.28               | ---                        | ---                           |
|       |                      |                            |                               |                      |                            |                               |                      |                            |                               |
|       | JULY                 |                            |                               | AUGUST               |                            |                               | SEPTEMBER            |                            |                               |
| 1     | .35                  | ---                        | e.25                          | .00                  | ---                        | ---                           | .00                  | ---                        | ---                           |
| 2     | 4.1                  | ---                        | e8.3                          | .00                  | ---                        | ---                           | .00                  | ---                        | ---                           |
| 3     | .63                  | ---                        | e.57                          | .00                  | ---                        | ---                           | .00                  | ---                        | ---                           |
| 4     | .06                  | ---                        | e.02                          | .00                  | ---                        | ---                           | .00                  | ---                        | ---                           |
| 5     | .00                  | ---                        | ---                           | .00                  | ---                        | ---                           | .00                  | ---                        | ---                           |
| 6     | .00                  | ---                        | ---                           | .00                  | ---                        | ---                           | .00                  | ---                        | ---                           |
| 7     | .00                  | ---                        | ---                           | .00                  | ---                        | ---                           | .00                  | ---                        | ---                           |
| 8     | .00                  | ---                        | ---                           | .00                  | ---                        | ---                           | .00                  | ---                        | ---                           |
| 9     | .00                  | ---                        | ---                           | .00                  | ---                        | ---                           | .19                  | 49                         | .15                           |
| 10    | .00                  | ---                        | ---                           | .00                  | ---                        | ---                           | 1.5                  | 210                        | 2.1                           |
| 11    | .00                  | ---                        | ---                           | .07                  | 49                         | .05                           | .62                  | 143                        | .34                           |
| 12    | .00                  | ---                        | ---                           | .00                  | ---                        | ---                           | .02                  | ---                        | .00                           |
| 13    | .00                  | ---                        | ---                           | .00                  | ---                        | ---                           | .00                  | ---                        | ---                           |
| 14    | .12                  | ---                        | e.05                          | .00                  | ---                        | ---                           | .00                  | ---                        | ---                           |
| 15    | .07                  | ---                        | e.02                          | .00                  | ---                        | ---                           | .00                  | ---                        | ---                           |
| 16    | .00                  | ---                        | ---                           | .00                  | ---                        | ---                           | .00                  | ---                        | ---                           |
| 17    | 1.1                  | ---                        | e1.3                          | .00                  | ---                        | ---                           | .00                  | ---                        | ---                           |
| 18    | .30                  | ---                        | e.20                          | .00                  | ---                        | ---                           | .00                  | ---                        | ---                           |
| 19    | .04                  | ---                        | e.01                          | .00                  | ---                        | ---                           | .00                  | ---                        | ---                           |
| 20    | .01                  | 55                         | .00                           | .00                  | ---                        | ---                           | .00                  | ---                        | ---                           |
| 21    | .05                  | 30                         | .02                           | .00                  | ---                        | ---                           | .00                  | ---                        | ---                           |
| 22    | .02                  | 43                         | .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                  | ---                        | ---                           | ---                  | ---                        | ---                           |
| TOTAL | 6.85                 | ---                        | ---                           | 0.07                 | ---                        | ---                           | 2.33                 | ---                        | ---                           |

e-Estimated.

## 07126485 PURGATOIRE RIVER AT ROCK CROSSING NEAR TIMPAS, CO

LOCATION.--Lat 37°37'10', long 103°35'32" in NE¼SE¼ sec.10, T.28 S., R.55 W., Las Animas County, Hydrologic Unit 11020010, on right bank (revised) at Rock Crossing, 2.1 mi upstream from Minnie Canyon, 2.4 mi downstream from Beauty Canyon, and 17 mi southeast of Timpas.

DRAINAGE AREA.--2,635 mi<sup>2</sup>.

## 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.

REMARKS.--Records good except for discharges above 1,000 ft<sup>3</sup>/s, which are fair, and Sept. 21-27 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 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

| DAY   | OCT  | NOV  | DEC  | JAN  | FEB  | MAR  | APR  | MAY    | JUN    | JUL    | AUG    | SEP  |
|-------|------|------|------|------|------|------|------|--------|--------|--------|--------|------|
| 1     | 41   | 35   | 37   | e33  | e29  | 27   | 20   | e14    | 35     | 14     | 22     | 50   |
| 2     | 38   | 35   | 37   | e31  | e25  | 26   | 20   | 15     | 31     | 6.2    | 108    | 39   |
| 3     | 42   | 37   | 36   | e31  | e20  | 27   | 19   | 12     | 33     | e5.0   | 48     | 35   |
| 4     | 40   | 39   | 35   | e32  | e22  | 27   | 18   | 11     | 34     | e4.1   | 49     | 32   |
| 5     | 38   | 40   | 36   | e31  | e28  | 27   | 17   | 16     | 29     | e3.6   | 26     | 28   |
| 6     | 34   | 42   | 36   | e31  | 36   | 27   | 18   | 14     | 29     | e3.0   | 18     | 26   |
| 7     | 34   | 40   | 37   | e31  | e39  | 27   | 19   | 14     | 32     | e2.6   | 13     | 1380 |
| 8     | 35   | 38   | 43   | e33  | 43   | 27   | 19   | 15     | 27     | e2.5   | 11     | 238  |
| 9     | 35   | 38   | 43   | e34  | 45   | 24   | 21   | 17     | 27     | e2.3   | 10     | 86   |
| 10    | 51   | 38   | 34   | e35  | 43   | 29   | 21   | 14     | 24     | 5.5    | 8.3    | 47   |
| 11    | 58   | 39   | 40   | 36   | 42   | 29   | 20   | 13     | 26     | 23     | 6.5    | 69   |
| 12    | 44   | 42   | 35   | 37   | 37   | 28   | 19   | 11     | 22     | 35     | 5.2    | 70   |
| 13    | 41   | 38   | 37   | 36   | 37   | 28   | 18   | 12     | 169    | 25     | e4.0   | 39   |
| 14    | 38   | 35   | 36   | 36   | 35   | 28   | 26   | 13     | 22     | 15     | e3.9   | 44   |
| 15    | 33   | 34   | 36   | 34   | 35   | 28   | 24   | 13     | 60     | 13     | 9.2    | 41   |
| 16    | 35   | 33   | 36   | 34   | 33   | 28   | 18   | 14     | 81     | 13     | 136    | 30   |
| 17    | 33   | 33   | 37   | 34   | 32   | 40   | 18   | 12     | 91     | 11     | 104    | 24   |
| 18    | 32   | 34   | 38   | e33  | 31   | 46   | 18   | 11     | 52     | 9.3    | 34     | 39   |
| 19    | 31   | 35   | 36   | e30  | 31   | 40   | 16   | 11     | 37     | 8.4    | 20     | 59   |
| 20    | 31   | 35   | 35   | e32  | 30   | 35   | 14   | 8.9    | 31     | 120    | 27     | 22   |
| 21    | 34   | 35   | 32   | e35  | 28   | 33   | 13   | 7.6    | 26     | 260    | 10     | 17   |
| 22    | 34   | 35   | 30   | e37  | 28   | 31   | 12   | 6.5    | 29     | 44     | 66     | 16   |
| 23    | 32   | 35   | e30  | e37  | 28   | 29   | 12   | 6.0    | 18     | 158    | 562    | 17   |
| 24    | 32   | 34   | e30  | e35  | 27   | 25   | 12   | 5.9    | 15     | 165    | 574    | 17   |
| 25    | 32   | 33   | e30  | e33  | 27   | 24   | 12   | 494    | 13     | 77     | 285    | 16   |
| 26    | 33   | 34   | e31  | e31  | 25   | 23   | 13   | 751    | 11     | 35     | 63     | 19   |
| 27    | 34   | 35   | e32  | e30  | 27   | 24   | 12   | 148    | 9.1    | 372    | 45     | 24   |
| 28    | 34   | 36   | e33  | e33  | 27   | 23   | 11   | 80     | 8.1    | 143    | 496    | 18   |
| 29    | 35   | 39   | e34  | e32  | 27   | 23   | 11   | 76     | 7.3    | 59     | 109    | 16   |
| 30    | 35   | 37   | e33  | e32  | ---  | 22   | e13  | 42     | 131    | 242    | 2210   | 22   |
| 31    | 35   | ---  | e35  | e32  | ---  | 21   | ---  | 42     | ---    | 30     | 97     | ---  |
| TOTAL | 1134 | 1093 | 1090 | 1031 | 917  | 876  | 504  | 1919.9 | 1159.5 | 1906.5 | 5180.1 | 2580 |
| MEAN  | 36.6 | 36.4 | 35.2 | 33.3 | 31.6 | 28.3 | 16.8 | 61.9   | 38.6   | 61.5   | 167    | 86.0 |
| MAX   | 58   | 42   | 43   | 37   | 45   | 46   | 26   | 751    | 169    | 372    | 2210   | 1380 |
| MIN   | 31   | 33   | 30   | 30   | 20   | 21   | 11   | 5.9    | 7.3    | 2.3    | 3.9    | 16   |
| AC-FT | 2250 | 2170 | 2160 | 2040 | 1820 | 1740 | 1000 | 3810   | 2300   | 3780   | 10270  | 5120 |

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1983 - 1996, BY WATER YEAR (WY)

|      | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 40.1 | 38.7 | 34.0 | 31.5 | 34.5 | 43.0 | 88.1 | 137  | 121  | 76.3 | 111  | 48.3 |      |      |
| 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 1995 CALENDAR YEAR |        | FOR 1996 WATER YEAR |        | WATER YEARS 1983 - 1996 |             |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|-------------|
| ANNUAL TOTAL             | 22732.2                |        | 19391.0             |        |                         |             |
| ANNUAL MEAN              | 62.3                   |        | 53.0                |        |                         |             |
| HIGHEST ANNUAL MEAN      |                        |        |                     |        | 123                     | 1987        |
| LOWEST ANNUAL MEAN       |                        |        |                     |        | 29.6                    | 1989        |
| HIGHEST DAILY MEAN       | 3680                   | May 30 | 2210                | Aug 30 | 3680                    | May 30 1995 |
| LOWEST DAILY MEAN        | 6.7                    | Aug 8  | e2.3                | Jul 9  | a.00                    | Jun 30 1990 |
| ANNUAL SEVEN-DAY MINIMUM | 8.9                    | Aug 2  | 3.3                 | Jul 3  | b.00                    | Jun 30 1990 |
| INSTANTANEOUS PEAK FLOW  |                        |        | b9110               | Aug 30 | b11400                  | Jul 9 1992  |
| INSTANTANEOUS PEAK STAGE |                        |        | 16.12               | Aug 30 | c17.90                  | Jul 9 1992  |
| ANNUAL RUNOFF (AC-FT)    | 45090                  |        | 38460               |        | 45050                   |             |
| 10 PERCENT EXCEEDS       | 93                     |        | 59                  |        | 121                     |             |
| 50 PERCENT EXCEEDS       | 33                     |        | 32                  |        | 35                      |             |
| 90 PERCENT EXCEEDS       | 19                     |        | 12                  |        | 14                      |             |

e-Estimated.

a-Also occurred Jul 1-9, 1990.

b-From rating curve extended above 5450 ft<sup>3</sup>/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 (discontinued).

WATER TEMPERATURE: July 1983 to September 1992 (discontinued).

SUSPENDED SEDIMENT: August 1983 to September 1992 (discontinued).

REMARKS.--Daily maximum and minimum specific conductance and daily mean water temperature data for July 1983 to September 1992 are available in district office. 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.--

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.

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DATE  | TIME | DIS-<br>CHARGE,<br>INST.<br>CUBIC<br>FEET<br>PER<br>SECOND | SEDI-<br>MENT,<br>DIS-<br>CHARGE,<br>SUS-<br>PENDEDED<br>(MG/L) | SEDI-<br>MENT,<br>DIS-<br>CHARGE,<br>SUS-<br>PENDEDED<br>(T/DAY) |
|-------|------|--|---|--|
| DEC   |      |  |   |  |
| 12... | 1035 | 46   | 31  | 3.9  |
| JAN   |      |  |   |  |
| 22... | 1520 | 39   | 26  | 2.7  |
| FEB   |      |  |   |  |
| 21... | 1620 | 28   | 43  | 3.3  |
| APR   |      |  |   |  |
| 19... | 1640 | 15   | 69  | 2.8  |
| MAY   |      |  |   |  |
| 29... | 1040 | 73   | 517   | 102  |
| AUG   |      |  |   |  |
| 01... | 1320 | 19   | 224   | 11   |
| 20... | 1050 | 25   | 176   | 12   |
| 28... | 1700 | 509  | 15800   | 28300  |
| 29... | 1710 | 72   | 1320  | 257  |
| SEP   |      |  |   |  |
| 19... | 1145 | 40   | 261   | 28   |

SUSPENDED-SEDIMENT DISCHARGE, WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

| DATE  | TIME | DIS-<br>CHARGE,<br>INST.<br>CUBIC<br>FEET<br>PER<br>SECOND | SEDI-<br>MENT,<br>DIS-<br>CHARGE,<br>SUS-<br>PENDEDED<br>(MG/L) | SEDI-<br>MENT,<br>DIS-<br>CHARGE,<br>SUS-<br>PENDEDED<br>(T/DAY) |
|-------|------|--|---|--|
| OCT   |      |  |   |  |
| 25... | 1215 | 47   | 17  | 2.2  |
| NOV   |      |  |   |  |
| 30... | 1435 | 37   | 20  | 2.0  |
| JAN   |      |  |   |  |
| 12... | 1435 | 33   | 64  | 5.7  |
| APR   |      |  |   |  |
| 17... | 1405 | 24   | 57  | 3.7  |
| MAY   |      |  |   |  |
| 12... | 1610 | 24   | 397   | 26   |
| JUN   |      |  |   |  |
| 07... | 1615 | 108  | 348   | 101  |
| 19... | 1410 | 56   | 46  | 7.0  |
| AUG   |      |  |   |  |
| 02... | 1310 | 9.3  | 87  | 2.2  |
| SEP   |      |  |   |  |
| 22... | 1350 | 46   | 67  | 8.3  |

**07128500 PURGATOIRE RIVER NEAR LAS ANIMAS, CO**

LOCATION.--Lat 38°02'02", long 103°12'00", in NE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec.23, T.23 S., R.52 W., Bent County, Hydrologic Unit 11020010, on right bank at downstream side of bridge on State Highway 101, 2.3 mi southeast of courthouse in Las Animas, and 4.5 mi upstream from mouth.

DRAINAGE AREA.--3,318 mi<sup>2</sup>.

**WATER-DISCHARGE RECORDS**

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.

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, 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.

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 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

| DAY   | OCT  | NOV  | DEC  | JAN  | FEB  | MAR  | APR   | MAY    | JUN  | JUL    | AUG    | SEP  |
|-------|------|------|------|------|------|------|-------|--------|------|--------|--------|------|
| 1     | 50   | 54   | 38   | 43   | e25  | 29   | 14    | 11     | 61   | 87     | 72     | 192  |
| 2     | 47   | 54   | 39   | 30   | e20  | 27   | 9.6   | 11     | 55   | 63     | 45     | 126  |
| 3     | 40   | 51   | 37   | 28   | e16  | 27   | 8.7   | 10     | 38   | 22     | 50     | 100  |
| 4     | 35   | 45   | 33   | e30  | e21  | 25   | 11    | 9.2    | 17   | 9.6    | 50     | 87   |
| 5     | 38   | 47   | 39   | 29   | e30  | 29   | 14    | 10     | 18   | 6.6    | 44     | 79   |
| 6     | 38   | 51   | 38   | 27   | 37   | 25   | 13    | 9.8    | 22   | 5.7    | 50     | 78   |
| 7     | 36   | 53   | 38   | 36   | 43   | 17   | 11    | 8.4    | 22   | 6.4    | 28     | 71   |
| 8     | 30   | 55   | 36   | 44   | 42   | 31   | 13    | 8.0    | 35   | 7.7    | 23     | 889  |
| 9     | 31   | 53   | 22   | 45   | 53   | 27   | 8.8   | 8.7    | 49   | 14     | 28     | 241  |
| 10    | 27   | 51   | e25  | 46   | 51   | 27   | 8.0   | 9.2    | 40   | 20     | 35     | 132  |
| 11    | 28   | 53   | e35  | 44   | 44   | 23   | 14    | 11     | 34   | 13     | 35     | 98   |
| 12    | 41   | 57   | e38  | 46   | 40   | 21   | 16    | 9.3    | 36   | 25     | 27     | 85   |
| 13    | 39   | 60   | 37   | 47   | 39   | 21   | 9.9   | 7.3    | 56   | 586    | 9.2    | 110  |
| 14    | 33   | 62   | 36   | 43   | 35   | 32   | 28    | 7.1    | 114  | 306    | 8.3    | 93   |
| 15    | 41   | 39   | 37   | 38   | 31   | 80   | 49    | 6.5    | 61   | 57     | 234    | 96   |
| 16    | 41   | 33   | 36   | 39   | 30   | 67   | 13    | 6.7    | 529  | 31     | 29     | 103  |
| 17    | 38   | 33   | 34   | 36   | 34   | 64   | 12    | 6.4    | 150  | 16     | 17     | 98   |
| 18    | 32   | 31   | 37   | 19   | 33   | 60   | 9.1   | 7.5    | 92   | 55     | 68     | 88   |
| 19    | 37   | 28   | 41   | 32   | 34   | 64   | 8.6   | 5.5    | 62   | 52     | 27     | 82   |
| 20    | 33   | 24   | 40   | 39   | 29   | 66   | 8.3   | 7.2    | 34   | 58     | 532    | 124  |
| 21    | 37   | 25   | 35   | 38   | 27   | 62   | 8.1   | 16     | 27   | 81     | 73     | 96   |
| 22    | 38   | 31   | 39   | 39   | 26   | 60   | 8.0   | 14     | 31   | 197    | 43     | 85   |
| 23    | 41   | 30   | 29   | 30   | 28   | 55   | 9.0   | 5.0    | 27   | 58     | 82     | 77   |
| 24    | 43   | 30   | 22   | 30   | 30   | 46   | 11    | 5.5    | 20   | 77     | 607    | 72   |
| 25    | 46   | 29   | 28   | 36   | 27   | 47   | 11    | 14     | 25   | 131    | 369    | 72   |
| 26    | 53   | 29   | 32   | 27   | 27   | 48   | 10    | 1840   | 20   | 1020   | 202    | 70   |
| 27    | 53   | 34   | 28   | 39   | 24   | 45   | 8.9   | 1080   | 15   | 549    | 106    | 64   |
| 28    | 47   | 37   | 31   | 45   | 22   | 35   | 9.6   | 517    | 16   | 275    | 72     | 66   |
| 29    | 49   | 38   | 32   | 38   | 24   | 35   | 10    | 271    | 12   | 139    | 257    | 68   |
| 30    | 51   | 38   | 24   | 31   | ---  | 30   | 11    | 169    | 99   | 403    | 324    | 57   |
| 31    | 55   | ---  | 39   | 30   | ---  | 24   | ---   | 88     | ---  | 254    | 1370   | ---  |
| TOTAL | 1248 | 1255 | 1055 | 1124 | 922  | 1249 | 375.6 | 4189.3 | 1817 | 4625.0 | 4916.5 | 3699 |
| MEAN  | 40.3 | 41.8 | 34.0 | 36.3 | 31.8 | 40.3 | 12.5  | 135    | 60.6 | 149    | 159    | 123  |
| MAX   | 55   | 62   | 41   | 47   | 53   | 80   | 49    | 1840   | 529  | 1020   | 1370   | 889  |
| MIN   | 27   | 24   | 22   | 19   | 16   | 17   | 8.0   | 5.0    | 12   | 5.7    | 8.3    | 57   |
| AC-FT | 2480 | 2490 | 2090 | 2230 | 1830 | 2480 | 745   | 8310   | 3600 | 9170   | 9750   | 7340 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1978 - 1996, BY WATER YEAR (WY)

|      | 1978 | 1979 | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 30.3 | 32.7 | 28.0 | 30.8 | 31.1 | 38.4 | 81.9 | 136  | 118  | 73.2 | 122  | 50.7 |      |      |      |      |      |      |      |
| MAX  | 82.6 | 59.1 | 41.9 | 48.0 | 56.2 | 125  | 418  | 614  | 724  | 263  | 761  | 224  |      |      |      |      |      |      |      |
| (WY) | 1986 | 1987 | 1994 | 1993 | 1988 | 1987 | 1983 | 1987 | 1983 | 1981 | 1981 | 1981 |      |      |      |      |      |      |      |
| MIN  | 1.58 | 1.90 | 2.38 | 4.72 | 5.65 | 5.26 | 3.53 | 5.41 | 8.76 | 7.67 | 3.76 | 3.14 |      |      |      |      |      |      |      |
| (WY) | 1978 | 1979 | 1979 | 1979 | 1979 | 1978 | 1978 | 1991 | 1990 | 1994 | 1980 | 1978 |      |      |      |      |      |      |      |

SUMMARY STATISTICS

|                          | FOR 1995 CALENDAR YEAR |        | FOR 1996 WATER YEAR |        | WATER YEARS 1978 - 1996 |  |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|--|
| ANNUAL TOTAL             | 21926.9                |        | 26475.4             |        |                         |  |
| ANNUAL MEAN              | 60.1                   |        | 72.3                |        | a 64.6                  |  |
| HIGHEST ANNUAL MEAN      |                        |        |                     |        | 166 1983                |  |
| LOWEST ANNUAL MEAN       |                        |        |                     |        | 22.7 1989               |  |
| HIGHEST DAILY MEAN       | 2280                   | May 31 | 1840                | May 26 | b 3610 Aug 18 1981      |  |
| LOWEST DAILY MEAN        | 6.6                    | Aug 12 | 5.0                 | May 23 | c 1.2 Oct 12 1977       |  |
| ANNUAL SEVEN-DAY MINIMUM | 7.4                    | Aug 12 | 6.7                 | May 14 | d 1.3 Oct 10 1977       |  |
| INSTANTANEOUS PEAK FLOW  |                        |        | 2830                | Aug 31 | e 6680 Jul 5 1981       |  |
| INSTANTANEOUS PEAK STAGE |                        |        | 10.21               | Aug 31 | f 10.09 Jul 5 1981      |  |
| ANNUAL RUNOFF (AC-FT)    | 43490                  |        | 52510               |        | 46820                   |  |
| 10 PERCENT EXCEEDS       | 99                     |        | 99                  |        | 124                     |  |
| 50 PERCENT EXCEEDS       | 33                     |        | 36                  |        | 27                      |  |
| 90 PERCENT EXCEEDS       | 11                     |        | 9.9                 |        | 4.4                     |  |

e-Estimated.

a-Average discharge for 37 years (water years 1923-31, 1949-76), 116 ft<sup>3</sup>/s; 84040 acre-ft/yr, prior to completion of Trinidad Reservoir.

b-Maximum daily discharge for period of record, 46300 ft<sup>3</sup>/s, May 20, 1955.

c-No flow at times in 1924-25, 1927, 1949, and 1974.

d-Maximum discharge and stage for period of record, 70000 ft<sup>3</sup>/s, May 20, 1955, gage height, 20.00 ft, from rating curve extended above 38000 ft<sup>3</sup>/s, at different datum.

f-Maximum gage height for statistical period, 10.21 ft, Aug 31, 1996.

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WATER-QUALITY RECORDS

PERIOD OF RECORD.--December 1985 to September 1996 (discontinued).

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: December 1985 to September 1996 (discontinued).

WATER TEMPERATURE: December 1985 to September 1996 (discontinued).

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 DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 6,320 microsiemens, July 31, 1989; minimum, 365 microsiemens, July 21, 1990.

WATER TEMPERATURE: maximum, 34.7°C, Aug. 18, 1994; minimum, 0.0°C, many days during winter months.

EXTREMES FOR CURRENT YEAR.--

SPECIFIC CONDUCTANCE: Maximum, 5,690 microsiemens, May 20; minimum, 423 microsiemens, Aug. 30.

WATER TEMPERATURE: Maximum, 34.5°C, July 5; minimum, 0.0°C, many days during winter.

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM @ 25 DEG. C), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DAY   | OCTOBER |      |      | NOVEMBER |      |      | DECEMBER |      |      | JANUARY |      |      |
|-------|---------|------|------|----------|------|------|----------|------|------|---------|------|------|
|       | MAX     | MIN  | MEAN | MAX      | MIN  | MEAN | MAX      | MIN  | MEAN | MAX     | MIN  | MEAN |
| 1     | 2470    | 2170 | 2360 | 3170     | 3100 | 3150 | 4080     | 3960 | 4010 | 3950    | 3830 | 3890 |
| 2     | 2360    | 2160 | 2240 | 3180     | 3130 | 3160 | 4220     | 3940 | 4080 | 4110    | 3820 | 3930 |
| 3     | 2510    | 2350 | 2430 | 3200     | 3120 | 3160 | 4080     | 3880 | 3980 | 4250    | 4110 | 4210 |
| 4     | 2550    | 2450 | 2510 | 3120     | 3080 | 3100 | 4010     | 3900 | 3940 | 4320    | 4060 | 4200 |
| 5     | 2550    | 2490 | 2520 | 3180     | 3090 | 3140 | 3900     | 3780 | 3880 | 4270    | 4080 | 4180 |
| 6     | 2610    | 2510 | 2550 | 3250     | 3110 | 3210 | 3960     | 3760 | 3920 | 4460    | 4270 | 4390 |
| 7     | 2620    | 2530 | 2580 | 3280     | 3120 | 3200 | 3910     | 3870 | 3890 | 4440    | 4150 | 4340 |
| 8     | 2640    | 2550 | 2610 | 3200     | 3110 | 3140 | 3910     | 3880 | 3900 | 4220    | 4070 | 4160 |
| 9     | 2650    | 2560 | 2600 | 3340     | 3130 | 3180 | 4160     | 3940 | 4050 | 4290    | 4110 | 4220 |
| 10    | 2660    | 2570 | 2620 | 3370     | 3180 | 3280 | 4210     | 4040 | 4140 | 4110    | 3880 | 4020 |
| 11    | 2790    | 2620 | 2670 | 3220     | 3140 | 3160 | 4050     | 3890 | 3980 | 3950    | 3740 | 3860 |
| 12    | 3190    | 2790 | 2980 | 3160     | 3100 | 3140 | 3910     | 3790 | 3850 | 3890    | 3560 | 3720 |
| 13    | 3190    | 3060 | 3100 | 3120     | 3010 | 3090 | 3920     | 3840 | 3900 | 3770    | 3490 | 3630 |
| 14    | 3070    | 2900 | 3000 | 3110     | 2990 | 3050 | 3910     | 3800 | 3870 | 3810    | 3620 | 3720 |
| 15    | 3090    | 2930 | 3010 | 3710     | 3070 | 3480 | 3910     | 3840 | 3870 | 3780    | 3720 | 3760 |
| 16    | 3150    | 3030 | 3060 | 3800     | 3680 | 3750 | 3880     | 3830 | 3870 | 3840    | 3720 | 3790 |
| 17    | 3160    | 3060 | 3100 | 3820     | 3750 | 3790 | 3880     | 3840 | 3860 | 3980    | 3800 | 3890 |
| 18    | 3170    | 3020 | 3110 | 3880     | 3730 | 3840 | 3850     | 3790 | 3820 | 4470    | 3500 | 3980 |
| 19    | 3160    | 3080 | 3120 | 3970     | 3880 | 3930 | 3790     | 3750 | 3770 | 4550    | 4210 | 4380 |
| 20    | 3180    | 3120 | 3160 | 4070     | 3820 | 3990 | 3810     | 3750 | 3780 | 4220    | 3970 | 4100 |
| 21    | 3270    | 3150 | 3210 | 4190     | 4030 | 4100 | 3900     | 3760 | 3850 | 4140    | 3720 | 3930 |
| 22    | 3180    | 2920 | 3030 | 4180     | 3870 | 3940 | 3840     | 3730 | 3800 | 4000    | 3440 | 3720 |
| 23    | 3160    | 2890 | 3010 | 4050     | 3900 | 3970 | 4030     | 3780 | 3900 | 4000    | 3550 | 3790 |
| 24    | 3120    | 2880 | 3030 | 3990     | 3840 | 3900 | 4130     | 3980 | 4030 | 4120    | 3820 | 3970 |
| 25    | 3020    | 2810 | 2880 | 3940     | 3870 | 3900 | 4150     | 3900 | 4060 | 3940    | 3780 | 3860 |
| 26    | 2910    | 2880 | 2900 | 4040     | 3920 | 3980 | 3980     | 3830 | 3930 | 4150    | 3880 | 3990 |
| 27    | 3090    | 2910 | 2990 | 4030     | 3980 | 4010 | 4020     | 3870 | 3970 | 4160    | 3960 | 4050 |
| 28    | 3260    | 3140 | 3200 | 4080     | 4010 | 4050 | 4060     | 3960 | 4000 | 4110    | 3770 | 3970 |
| 29    | 3300    | 3180 | 3220 | 4090     | 4040 | 4070 | 4070     | 3980 | 4020 | 3920    | 3790 | 3870 |
| 30    | 3230    | 3110 | 3200 | 4060     | 3990 | 4030 | 4090     | 3980 | 4050 | 4000    | 3750 | 3880 |
| 31    | 3220    | 3120 | 3160 | ---      | ---  | ---  | 4090     | 3890 | 3980 | 4400    | 3800 | 4100 |
| MONTH | 3300    | 2160 | 2880 | 4190     | 2990 | 3560 | 4220     | 3730 | 3930 | 4550    | 3440 | 3980 |

## 07128500 PURGATOIRE RIVER NEAR LAS ANIMAS, CO--Continued

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM @ 25 DEG.C), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DAY   | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN | MAX  | MIN    | MEAN | MAX  | MIN       | MEAN |          |
|-------|------|------|------|------|------|------|------|--------|------|------|-----------|------|----------|
|       |      |      |      |      |      |      |      |        |      |      |           |      | FEBRUARY |
| 1     | 4330 | 4200 | 4260 | 4220 | 4120 | 4160 | 3850 | 3430   | 3670 | 5340 | 4920      | 5160 |          |
| 2     | 4450 | 3720 | 4100 | 4270 | 4180 | 4240 | 4700 | 3850   | 4320 | 5200 | 4770      | 5010 |          |
| 3     | 4430 | 3830 | 4200 | 4290 | 4200 | 4250 | 4930 | 4540   | 4730 | 5200 | 4980      | 5130 |          |
| 4     | 4570 | 4430 | 4490 | 4320 | 4200 | 4220 | 4910 | 4010   | 4570 | 4990 | 4670      | 4870 |          |
| 5     | 4500 | 4300 | 4400 | 4300 | 4190 | 4250 | 4340 | 3960   | 4140 | 4960 | 4560      | 4760 |          |
| 6     | 4390 | 4140 | 4240 | 4270 | 4190 | 4220 | 4200 | 3770   | 4000 | 5250 | 4770      | 5010 |          |
| 7     | 4150 | 3910 | 4040 | 4510 | 4200 | 4330 | 4380 | 3950   | 4200 | 5240 | 5010      | 5140 |          |
| 8     | 3930 | 3690 | 3830 | 4530 | 4110 | 4250 | 3990 | 3620   | 3840 | 5300 | 5130      | 5220 |          |
| 9     | 3690 | 3320 | 3580 | 4500 | 4210 | 4300 | 4620 | 3770   | 4310 | 5510 | 5230      | 5350 |          |
| 10    | 3560 | 3330 | 3440 | 4540 | 4330 | 4450 | 4920 | 4580   | 4740 | 5460 | 4970      | 5220 |          |
| 11    | 3790 | 3440 | 3650 | 4370 | 4300 | 4330 | 5350 | 3480   | 4250 | 5090 | 4510      | 4800 |          |
| 12    | 3820 | 3740 | 3780 | 4490 | 4300 | 4410 | 4050 | 3370   | 3580 | 5190 | 4640      | 4920 |          |
| 13    | 3880 | 3720 | 3800 | 4510 | 4320 | 4420 | 4990 | 3720   | 4580 | 5270 | 5110      | 5180 |          |
| 14    | 4040 | 3870 | 3940 | 4480 | 2990 | 4210 | 5210 | 3070   | 3980 | 5390 | 5090      | 5250 |          |
| 15    | 4160 | 4030 | 4070 | 3160 | 2680 | 2940 | 3470 | 2750   | 3010 | 5430 | 5230      | 5320 |          |
| 16    | 4170 | 4070 | 4130 | 3190 | 3040 | 3130 | 4700 | 3470   | 4320 | 5450 | 4980      | 5210 |          |
| 17    | 4120 | 4030 | 4070 | 3190 | 3040 | 3140 | 4720 | 4580   | 4650 | 5260 | 4880      | 5070 |          |
| 18    | 4140 | 4010 | 4110 | 3240 | 3040 | 3140 | 4690 | 4540   | 4630 | 5530 | 4850      | 5110 |          |
| 19    | 4010 | 3810 | 3870 | 3420 | 3100 | 3260 | 4950 | 4690   | 4840 | 5360 | 4920      | 5100 |          |
| 20    | 3950 | 3850 | 3890 | 3530 | 3410 | 3450 | 4980 | 4820   | 4910 | 5690 | 4630      | 5370 |          |
| 21    | 3980 | 3940 | 3960 | 3660 | 3340 | 3470 | 4990 | 4770   | 4880 | 4630 | 2730      | 3480 |          |
| 22    | 4040 | 3930 | 3980 | 3390 | 3230 | 3310 | 4890 | 4570   | 4760 | 3360 | 2730      | 3100 |          |
| 23    | 4140 | 4030 | 4080 | 3500 | 3280 | 3360 | 5310 | 4890   | 5060 | 4640 | 3290      | 3960 |          |
| 24    | 4110 | 4020 | 4080 | 3530 | 3300 | 3470 | 5310 | 4780   | 5020 | 5160 | 3750      | 4450 |          |
| 25    | 4230 | 4080 | 4150 | 3500 | 3180 | 3420 | 4900 | 4150   | 4440 | 4110 | 3330      | 3750 |          |
| 26    | 4240 | 4020 | 4130 | 3440 | 3330 | 3390 | 4840 | 4110   | 4440 | 4180 | 470       | 1160 |          |
| 27    | 4160 | 4010 | 4070 | 3480 | 3380 | 3430 | 5200 | 4840   | 5080 | 980  | 575       | 778  |          |
| 28    | 4230 | 4140 | 4190 | 3580 | 3400 | 3490 | 5220 | 4860   | 5060 | 1890 | 766       | 1560 |          |
| 29    | 4270 | 4160 | 4220 | 3400 | 2930 | 3130 | 5120 | 4820   | 5010 | 2230 | 1860      | 2040 |          |
| 30    | ---  | ---  | ---  | 3250 | 3080 | 3160 | 5330 | 4900   | 5110 | 3080 | 2230      | 2620 |          |
| 31    | ---  | ---  | ---  | 3450 | 3250 | 3360 | ---  | ---    | ---  | 3190 | 3030      | 3100 |          |
| MONTH | 4570 | 3320 | 4030 | 4540 | 2680 | 3740 | 5350 | 2750   | 4470 | 5690 | 470       | 4260 |          |
|       |      | JUNE |      |      | JULY |      |      | AUGUST |      |      | SEPTEMBER |      |          |
| 1     | 3150 | 3040 | 3090 | 3480 | 1690 | 2460 | 2090 | 1260   | 1630 | 1570 | 880       | 1240 |          |
| 2     | 3040 | 2540 | 2730 | 3130 | 2320 | 2530 | 2620 | 2090   | 2440 | 2010 | 1570      | 1800 |          |
| 3     | 2960 | 2450 | 2630 | 2860 | 2490 | 2650 | 3200 | 2160   | 2680 | 2270 | 2000      | 2140 |          |
| 4     | 3520 | 2960 | 3230 | 3400 | 2840 | 3100 | 2700 | 2160   | 2480 | 2390 | 2200      | 2300 |          |
| 5     | 3630 | 3270 | 3470 | 4090 | 3400 | 3760 | 2820 | 2600   | 2680 | 2580 | 2350      | 2470 |          |
| 6     | 3270 | 2980 | 3110 | 4260 | 4020 | 4140 | 3090 | 2650   | 2800 | 2550 | 2450      | 2500 |          |
| 7     | 3170 | 2870 | 3050 | 4370 | 3600 | 4020 | 3290 | 2890   | 3070 | 2680 | 2490      | 2610 |          |
| 8     | 3090 | 2740 | 2930 | 3650 | 3470 | 3550 | 3560 | 3290   | 3430 | 3430 | ---       | ---  |          |
| 9     | 2830 | 2600 | 2730 | 3600 | 2810 | 3270 | 3570 | 3060   | 3320 | 1400 | ---       | ---  |          |
| 10    | 3140 | 2590 | 2810 | 2810 | 2400 | 2530 | 3180 | 2950   | 3090 | 1820 | 1390      | 1590 |          |
| 11    | 3120 | 2590 | 2890 | 3150 | 2610 | 2880 | 3070 | 2910   | 2990 | 2190 | 1820      | 2020 |          |
| 12    | 2610 | 2310 | 2460 | 2920 | 2070 | 2510 | 3580 | 2880   | 3070 | 2340 | 2180      | 2240 |          |
| 13    | 3480 | 2210 | 2860 | 3850 | 510  | 1220 | 4700 | 3580   | 4310 | 2470 | 2120      | 2250 |          |
| 14    | 3390 | 2190 | 2470 | 1330 | 555  | 942  | 4900 | 4450   | 4670 | 2390 | 2290      | 2320 |          |
| 15    | 2340 | 2200 | 2250 | 1710 | 1320 | 1550 | 4650 | 835    | 1750 | 2510 | 2290      | 2390 |          |
| 16    | 3100 | 597  | 1340 | 2370 | 1640 | 2000 | 2320 | 1570   | 1900 | 2610 | 2500      | 2550 |          |
| 17    | 1280 | 729  | 978  | 2730 | 2180 | 2470 | 2970 | 2320   | 2740 | 2610 | 2460      | 2540 |          |
| 18    | 1470 | 1280 | 1360 | 2820 | 1980 | 2190 | 3610 | 2000   | 3090 | 2500 | 2440      | 2470 |          |
| 19    | 1930 | 1450 | 1700 | 2370 | 2170 | 2270 | 3310 | 2480   | 2930 | 2600 | 2490      | 2550 |          |
| 20    | 2480 | 1910 | 2200 | 3110 | 2370 | 2540 | 2630 | 514    | 1030 | 2960 | 2580      | 2820 |          |
| 21    | 2850 | 2320 | 2490 | 3670 | 1970 | 2550 | 1740 | 921    | 1290 | 2890 | 2140      | 2510 |          |
| 22    | 2910 | 2350 | 2530 | 3350 | 1360 | 2270 | ---  | 1860   | ---  | 2270 | 2220      | 2250 |          |
| 23    | 2840 | 2540 | 2660 | 2070 | 1380 | 1740 | 3070 | ---    | ---  | 2310 | 2220      | 2270 |          |
| 24    | 3210 | 2840 | 3040 | 2460 | 1540 | 2100 | 2800 | 769    | 1420 | 2430 | 2280      | 2360 |          |
| 25    | 3370 | 2190 | 2820 | 1770 | 951  | 1320 | 1520 | 1110   | 1320 | 2540 | 2430      | 2480 |          |
| 26    | 2640 | 2330 | 2430 | ---  | ---  | ---  | 1430 | 1030   | 1170 | 2560 | 2450      | 2520 |          |
| 27    | 3100 | 2520 | 2840 | ---  | ---  | ---  | 1860 | 1230   | 1680 | 2640 | 2380      | 2540 |          |
| 28    | 3230 | 2570 | 2910 | ---  | ---  | ---  | 2070 | 1810   | 1910 | 2660 | 2480      | 2590 |          |
| 29    | 3390 | 3070 | 3230 | ---  | ---  | ---  | 2170 | 1370   | 1740 | 2650 | 2420      | 2580 |          |
| 30    | 3350 | 841  | 2270 | 1820 | 615  | 1170 | 1470 | 423    | 1170 | 2460 | 2420      | 2440 |          |
| 31    | ---  | ---  | ---  | 1270 | 721  | 1060 | 884  | 482    | 651  | ---  | ---       | ---  |          |
| MONTH | 3630 | 597  | 2580 | ---  | ---  | ---  | ---  | ---    | ---  | 3430 | ---       | ---  |          |

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TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DAY   | MAX      | MIN  | MEAN | MAX      | MIN | MEAN | MAX      | MIN  | MEAN | MAX     | MIN  | MEAN |
|-------|----------|------|------|----------|-----|------|----------|------|------|---------|------|------|
|       | OCTOBER  |      |      | NOVEMBER |     |      | DECEMBER |      |      | JANUARY |      |      |
| 1     | 17.3     | 12.5 | 15.1 | 8.6      | 6.1 | 7.9  | 8.4      | 4.1  | 6.4  | 2.1     | .0   | .8   |
| 2     | 17.6     | 11.9 | 14.7 | 6.1      | 3.5 | 4.6  | 8.1      | 4.5  | 6.3  | 1.7     | .0   | .2   |
| 3     | 18.1     | 11.7 | 14.8 | 7.0      | 2.6 | 4.6  | 7.2      | 3.7  | 5.5  | .7      | .0   | .1   |
| 4     | 16.5     | 12.2 | 13.9 | 6.1      | 2.8 | 4.4  | 7.0      | 4.0  | 5.7  | .5      | .0   | .1   |
| 5     | 13.5     | 9.4  | 11.2 | 7.6      | 2.4 | 5.2  | 6.6      | 4.0  | 5.3  | .0      | .0   | .0   |
| 6     | 13.8     | 7.7  | 10.4 | 9.0      | 5.2 | 7.3  | 5.7      | 2.2  | 3.8  | .8      | .0   | .1   |
| 7     | 14.5     | 8.4  | 11.2 | 8.3      | 4.5 | 6.4  | 3.3      | 1.1  | 1.9  | 1.1     | .0   | .2   |
| 8     | 15.9     | 9.5  | 12.5 | 9.0      | 3.8 | 6.0  | 2.6      | .0   | 1.1  | 1.2     | .0   | .2   |
| 9     | 15.3     | 9.6  | 12.4 | 10.2     | 5.0 | 7.6  | 2.3      | .0   | .4   | 1.9     | .0   | .4   |
| 10    | 16.8     | 9.9  | 13.1 | 8.5      | 4.3 | 6.6  | 2.2      | .0   | .5   | 1.9     | .0   | .6   |
| 11    | 17.6     | 10.8 | 13.9 | 6.4      | 1.9 | 4.3  | 2.3      | .0   | .8   | 3.4     | .0   | .8   |
| 12    | 17.9     | 12.5 | 15.1 | 9.3      | 4.4 | 7.0  | 2.5      | .0   | 1.1  | 4.0     | .0   | 1.3  |
| 13    | 16.0     | 11.8 | 14.1 | 8.1      | 5.8 | 7.2  | 5.6      | 1.4  | 3.4  | 4.1     | .0   | 1.3  |
| 14    | 14.2     | 8.3  | 11.4 | 9.6      | 5.4 | 7.6  | 5.4      | 2.4  | 4.0  | 3.3     | .0   | 1.4  |
| 15    | 15.1     | 8.7  | 11.9 | 10.3     | 5.7 | 8.1  | 5.8      | 2.2  | 4.1  | 3.0     | .0   | 1.5  |
| 16    | 15.7     | 10.4 | 13.1 | 11.0     | 5.7 | 8.4  | 5.6      | 2.4  | 4.2  | 4.4     | .0   | 2.3  |
| 17    | 16.6     | 11.4 | 13.8 | 11.1     | 6.5 | 8.7  | 4.4      | 2.1  | 3.2  | 5.2     | .0   | 2.7  |
| 18    | 16.6     | 10.5 | 13.4 | 10.4     | 5.4 | 7.9  | 3.0      | 1.6  | 2.3  | .0      | .0   | .0   |
| 19    | 14.6     | 10.2 | 12.4 | 10.1     | 4.9 | 7.4  | 3.9      | 1.2  | 2.3  | .1      | .0   | .0   |
| 20    | 12.9     | 6.9  | 9.7  | 9.7      | 4.5 | 6.8  | 2.3      | .0   | .8   | 1.0     | .0   | .2   |
| 21    | 12.7     | 6.8  | 9.7  | 8.7      | 3.8 | 6.2  | 2.4      | .0   | .9   | 2.3     | .0   | .5   |
| 22    | 12.1     | 7.8  | 9.7  | 9.1      | 4.6 | 6.6  | 2.4      | .0   | .9   | 1.9     | .0   | .3   |
| 23    | 10.1     | 5.7  | 7.6  | 8.7      | 4.6 | 6.4  | 2.4      | .0   | .5   | 2.1     | .0   | .4   |
| 24    | 7.7      | 4.5  | 5.9  | 8.1      | 3.2 | 5.8  | 2.6      | .0   | .6   | 2.3     | .0   | .4   |
| 25    | 9.2      | 3.4  | 6.3  | 10.2     | 4.3 | 6.9  | 2.3      | .0   | .5   | 2.4     | .0   | .4   |
| 26    | 10.4     | 5.2  | 7.8  | 10.0     | 5.4 | 7.6  | 2.4      | .0   | .7   | 1.4     | .0   | .2   |
| 27    | 12.1     | 7.5  | 9.7  | 8.0      | 4.0 | 6.6  | 2.3      | .0   | .5   | 1.2     | .0   | .2   |
| 28    | 10.4     | 6.4  | 8.6  | 5.0      | 1.3 | 3.3  | 2.1      | .0   | .4   | 2.3     | .0   | .5   |
| 29    | 9.4      | 6.7  | 8.2  | 5.5      | 1.4 | 3.5  | 2.4      | .0   | .8   | 2.4     | .0   | .4   |
| 30    | 10.2     | 6.7  | 8.1  | 8.1      | 3.0 | 5.5  | 1.2      | .0   | .2   | 1.1     | .0   | .2   |
| 31    | 9.8      | 6.5  | 8.0  | ---      | --- | ---  | 2.0      | .0   | .6   | .5      | .0   | .0   |
| MONTH | 18.1     | 3.4  | 11.2 | 11.1     | 1.3 | 6.4  | 8.4      | .0   | 2.2  | 5.2     | .0   | .6   |
|       | FEBRUARY |      |      | MARCH    |     |      | APRIL    |      |      | MAY     |      |      |
| 1     | .0       | .0   | .0   | 7.3      | .2  | 3.9  | 19.7     | 7.3  | 12.6 | 23.1    | 10.2 | 15.6 |
| 2     | .0       | .0   | .0   | 9.5      | 1.0 | 5.1  | 19.9     | 8.6  | 13.5 | 24.4    | 11.2 | 16.8 |
| 3     | .0       | .0   | .0   | 10.1     | 1.7 | 5.9  | 16.1     | 9.7  | 12.0 | 26.0    | 11.2 | 17.2 |
| 4     | .0       | .0   | .0   | 10.5     | 4.3 | 7.2  | 12.4     | 7.7  | 9.7  | 26.4    | 12.5 | 18.6 |
| 5     | .6       | .0   | .1   | 11.5     | 4.3 | 7.6  | 11.2     | 5.6  | 8.2  | 20.6    | 14.0 | 16.3 |
| 6     | 1.1      | .0   | .3   | 6.1      | .0  | 2.5  | 18.1     | 4.5  | 10.6 | 25.8    | 11.8 | 17.4 |
| 7     | 2.5      | .0   | .5   | 7.1      | .0  | 2.3  | 17.6     | 8.2  | 12.1 | 25.8    | 14.4 | 19.0 |
| 8     | 2.7      | .0   | .7   | 7.4      | .0  | 3.5  | 20.7     | 9.4  | 14.2 | 28.8    | 15.7 | 20.8 |
| 9     | 5.3      | .0   | 1.5  | 10.5     | 1.6 | 5.9  | 24.5     | 9.1  | 15.9 | 29.0    | 16.8 | 21.1 |
| 10    | 4.5      | .0   | 1.8  | 13.4     | 4.2 | 8.7  | 22.8     | 10.9 | 16.0 | 26.2    | 13.8 | 18.7 |
| 11    | 5.4      | .0   | 2.5  | 16.1     | 7.7 | 11.4 | 21.7     | 10.6 | 15.0 | 25.9    | 13.8 | 18.7 |
| 12    | 5.7      | .0   | 2.8  | 16.1     | 8.0 | 11.6 | 20.7     | 9.9  | 14.4 | 28.0    | 13.8 | 19.6 |
| 13    | 6.9      | .1   | 3.6  | 15.9     | 7.2 | 10.9 | 17.7     | 6.9  | 12.6 | 26.5    | 15.0 | 19.2 |
| 14    | 8.3      | 1.7  | 5.0  | 9.9      | 2.4 | 6.2  | 11.4     | 6.0  | 8.0  | 28.6    | 15.2 | 20.7 |
| 15    | 7.5      | 2.9  | 5.1  | 8.5      | 2.2 | 5.1  | 15.9     | 6.6  | 10.4 | 28.4    | 14.8 | 21.4 |
| 16    | 7.4      | .5   | 4.0  | 11.6     | 5.2 | 8.2  | 20.1     | 8.8  | 13.2 | 30.7    | 15.5 | 22.4 |
| 17    | 9.1      | 2.1  | 5.6  | 10.6     | 6.9 | 8.4  | 20.1     | 9.8  | 14.0 | 29.3    | 16.3 | 22.0 |
| 18    | 8.8      | 4.1  | 6.5  | 8.2      | 4.8 | 6.4  | 22.2     | 8.8  | 14.3 | 28.1    | 16.1 | 21.2 |
| 19    | 7.5      | 3.4  | 5.8  | 7.9      | 2.8 | 5.3  | 19.8     | 7.9  | 12.7 | 26.9    | 14.5 | 20.3 |
| 20    | 10.7     | 4.3  | 7.3  | 10.2     | 2.6 | 6.4  | 16.2     | 6.7  | 10.9 | 27.2    | 13.2 | 19.4 |
| 21    | 12.4     | 5.6  | 9.0  | 12.7     | 4.8 | 8.7  | 17.6     | 6.8  | 11.4 | 24.3    | 14.6 | 18.7 |
| 22    | 12.8     | 6.9  | 9.4  | 13.0     | 6.5 | 9.7  | 21.8     | 6.7  | 13.2 | 26.2    | 15.1 | 19.8 |
| 23    | 11.7     | 5.4  | 8.3  | 14.5     | 7.7 | 11.0 | 23.3     | 8.1  | 15.1 | 27.5    | 15.0 | 19.5 |
| 24    | 9.6      | 4.3  | 6.9  | 10.3     | 1.8 | 5.7  | 21.6     | 10.9 | 15.8 | 21.2    | 14.3 | 16.7 |
| 25    | 12.2     | 5.2  | 8.3  | 4.9      | .0  | 2.4  | 21.7     | 11.3 | 15.5 | 14.3    | 11.2 | 12.2 |
| 26    | 6.8      | 3.0  | 4.9  | 8.7      | .3  | 4.6  | 22.7     | 8.9  | 15.5 | 11.4    | 8.8  | 9.9  |
| 27    | 6.4      | .0   | 2.8  | 12.2     | 3.4 | 7.7  | 23.2     | 11.0 | 16.1 | 13.6    | 10.0 | 11.8 |
| 28    | 5.4      | .0   | 2.1  | 14.6     | 6.4 | 10.0 | 13.0     | 8.0  | 10.4 | 15.5    | 11.0 | 13.2 |
| 29    | 7.5      | .0   | 3.2  | 15.7     | 7.8 | 11.5 | 18.3     | 3.5  | 10.5 | 21.5    | 12.7 | 17.1 |
| 30    | ---      | ---  | ---  | 15.7     | 8.9 | 11.5 | 21.8     | 6.9  | 13.5 | 22.0    | 15.7 | 18.4 |
| 31    | ---      | ---  | ---  | 16.2     | 7.0 | 11.3 | ---      | ---  | ---  | 21.3    | ---  | ---  |
| MONTH | 12.8     | .0   | 3.7  | 16.2     | .0  | 7.3  | 24.5     | 3.5  | 12.9 | 30.7    | ---  | ---  |

## ARKANSAS RIVER BASIN

## 07128500 PURGATOIRE RIVER NEAR LAS ANIMAS, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DAY   | MAX  | MIN  | MEAN | JUNE |      |      | JULY |      |      | AUGUST |      |      | SEPTEMBER |     |      |
|-------|------|------|------|------|------|------|------|------|------|--------|------|------|-----------|-----|------|
|       |      |      |      | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN | MAX    | MIN  | MEAN | MAX       | MIN | MEAN |
| 1     | 25.0 | ---  | ---  | 28.3 | 19.0 | 23.3 | 29.2 | 21.4 | 25.0 | 24.6   | 19.7 | 21.9 |           |     |      |
| 2     | 24.8 | 15.5 | 18.9 | 30.3 | 21.7 | 25.6 | 30.3 | 21.9 | 25.8 | 25.9   | 20.2 | 23.1 |           |     |      |
| 3     | 26.3 | 17.2 | 21.2 | 31.6 | 21.2 | 26.0 | 30.0 | 22.1 | 25.7 | 25.9   | 20.2 | 23.1 |           |     |      |
| 4     | 27.4 | ---  | ---  | 34.0 | 20.9 | 26.7 | 28.5 | 22.9 | 25.4 | 25.9   | 19.9 | 22.6 |           |     |      |
| 5     | 27.7 | 17.7 | 22.4 | 34.5 | 21.6 | 26.8 | 29.4 | 20.7 | 24.5 | 25.3   | 20.0 | 22.1 |           |     |      |
| 6     | 26.2 | 17.7 | 21.5 | 33.9 | 21.0 | 26.8 | 30.0 | 20.9 | 24.9 | 23.2   | 18.9 | 20.8 |           |     |      |
| 7     | 26.9 | 16.9 | 21.4 | 32.3 | 21.4 | 25.7 | 28.6 | 19.7 | 23.8 | 23.4   | 18.0 | 20.2 |           |     |      |
| 8     | 26.5 | 16.8 | 21.4 | 24.1 | 20.7 | 22.4 | 25.7 | 20.8 | 23.2 | 20.5   | 12.9 | 16.6 |           |     |      |
| 9     | 27.5 | 19.1 | 22.7 | 23.1 | 19.6 | 21.4 | 29.2 | 20.6 | 23.9 | 20.8   | 14.0 | 17.4 |           |     |      |
| 10    | 28.4 | 19.6 | 23.3 | 23.1 | 18.7 | 20.4 | 29.1 | 19.7 | 23.7 | 23.2   | 17.6 | 20.4 |           |     |      |
| 11    | 27.9 | 19.0 | 22.5 | 30.6 | 18.3 | 23.3 | 30.2 | 20.0 | 24.3 | 23.3   | 19.0 | 20.9 |           |     |      |
| 12    | 27.7 | 18.7 | 22.7 | 29.4 | 21.2 | 23.7 | 30.6 | 20.5 | 24.7 | 21.1   | 18.0 | 19.3 |           |     |      |
| 13    | 26.5 | 19.5 | 23.0 | 21.5 | 16.5 | 20.0 | 31.7 | 18.7 | 24.6 | 20.9   | 17.5 | 18.8 |           |     |      |
| 14    | 24.5 | ---  | ---  | 25.1 | 12.8 | 20.3 | 31.6 | 21.0 | 25.3 | 20.2   | 17.5 | 18.7 |           |     |      |
| 15    | 27.9 | 20.3 | 23.4 | 29.7 | 20.3 | 24.4 | 22.9 | 14.2 | 19.2 | 20.2   | 17.8 | 18.5 |           |     |      |
| 16    | 23.4 | 19.5 | 21.8 | 31.2 | 21.3 | 26.1 | 27.8 | 19.1 | 22.9 | 21.4   | 16.6 | 18.5 |           |     |      |
| 17    | 27.5 | 20.1 | 23.4 | 33.3 | 22.7 | 27.8 | 27.7 | 18.5 | 22.7 | 22.7   | 16.0 | 18.9 |           |     |      |
| 18    | 28.4 | 20.9 | 24.4 | 31.0 | 23.8 | 26.5 | 28.8 | 19.0 | 24.0 | 21.1   | 17.3 | 18.8 |           |     |      |
| 19    | 29.1 | 20.8 | 24.7 | 29.6 | 22.7 | 25.9 | 28.3 | 20.3 | 24.3 | 19.4   | 15.1 | 17.0 |           |     |      |
| 20    | 29.9 | 21.4 | 25.1 | 31.4 | 24.3 | 27.1 | 24.2 | ---  | ---  | 19.8   | 15.6 | 17.2 |           |     |      |
| 21    | 29.1 | 20.4 | 24.0 | 31.0 | 23.4 | 27.2 | 27.5 | 20.8 | 23.7 | 20.1   | 14.6 | 17.1 |           |     |      |
| 22    | 25.7 | 20.2 | 22.2 | 29.5 | 25.0 | 26.8 | 26.8 | 22.2 | 23.9 | 21.2   | 16.1 | 18.2 |           |     |      |
| 23    | 26.2 | 18.3 | 21.6 | 29.8 | 22.5 | 25.6 | 27.1 | 21.7 | 23.9 | 20.9   | 16.1 | 18.3 |           |     |      |
| 24    | 28.0 | 20.3 | 22.5 | 29.5 | 21.3 | 25.1 | 24.5 | 21.2 | 23.0 | 20.7   | 14.9 | 17.6 |           |     |      |
| 25    | 27.7 | 18.6 | 22.5 | 27.2 | 22.5 | 24.4 | 25.4 | 21.4 | 23.3 | 20.9   | 15.7 | 18.1 |           |     |      |
| 26    | 26.5 | 19.4 | 23.0 | ---  | ---  | ---  | 25.4 | 21.4 | 23.2 | 15.7   | 11.1 | 13.4 |           |     |      |
| 27    | ---  | ---  | ---  | ---  | ---  | ---  | 25.6 | 21.0 | 22.9 | 14.2   | 9.9  | 11.5 |           |     |      |
| 28    | 28.9 | 19.3 | 23.3 | ---  | ---  | ---  | 26.6 | 20.9 | 23.3 | 16.7   | 10.8 | 13.3 |           |     |      |
| 29    | 29.0 | 20.5 | 24.0 | ---  | ---  | ---  | 25.3 | 21.1 | 23.3 | 19.0   | 13.1 | 15.5 |           |     |      |
| 30    | 23.2 | 18.5 | 21.0 | 26.7 | ---  | ---  | 22.7 | 19.7 | 20.8 | 20.1   | 13.5 | 16.3 |           |     |      |
| 31    | ---  | ---  | ---  | 27.9 | 21.6 | 24.3 | 21.6 | 16.5 | 19.5 | ---    | ---  | ---  |           |     |      |
| MONTH | ---  | ---  | ---  | ---  | ---  | ---  | 31.7 | ---  | ---  | 25.9   | 9.9  | 18.5 |           |     |      |

**07130000 JOHN MARTIN RESERVOIR AT CADDOA, CO**

LOCATION.--Lat 38°04'05", long 102°56'13", in NE<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec.8, T.23 S., R.49 W., Bent County, Hydrologic Unit 11020009, at dam on Arkansas River at Caddoa, 3.2 mi southeast of Hasty, and 58 mi upstream from Colorado-Kansas State line.

DRAINAGE AREA.--18,915 mi<sup>2</sup>, of which 785 mi<sup>2</sup> is probably noncontributing.

PERIOD OF RECORD.--January 1943 to current year. Month-end contents only prior to November 1943, published in WSP 1311.

GAGE.--Water-stage recorder with satellite telemetry for elevations above 3,784 ft (48 acre-feet), and nonrecording gage read once daily for those below. Datum of gage is 3,760.00 ft above sea level, (levels by U.S. Corps of Engineers); gage readings have been reduced to elevations above sea level.

REMARKS.--No estimated contents. Records good. Reservoir is formed by concrete and earthfill dam. Storage began while dam was under construction prior to 1943, and record of contents began Jan. 1, 1943. Capacity (based on 1994 resurvey used from Nov. 1, 1994) 605,100 acre-ft, at elevation 3,870.00 ft, top of spillway gates, of which 345,700 acre-ft between elevations 3779.26 ft, elevation of no contents, and 3851.87 ft, is reserved for flood control. Contents table shown is from the latest survey of 1994. No dead storage. Figures given represent total contents.

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

EXTREMES (AT 2400) FOR PERIOD OF RECORD.--Maximum contents, 429,600 acre-ft, Aug. 25, 1965, elevation, 3,856.16 ft; no contents at times many years.

EXTREMES (AT 2400) FOR CURRENT YEAR.--Maximum contents, 321,000 acre-ft, Mar. 18, elevation, 3,849.67 ft; minimum contents, 215,000 acre-ft, Aug. 19, elevation, 3,838.93 ft.

Capacity table (elevation, in feet, and contents, in acre-feet)

|         |        |         |         |
|---------|--------|---------|---------|
| 3,785.0 | 193    | 3,820.0 | 87,700  |
| 3,790.0 | 2,400  | 3,830.0 | 146,000 |
| 3,795.0 | 8,480  | 3,840.0 | 224,000 |
| 3,800.0 | 18,400 | 3,850.0 | 324,000 |
| 3,810.0 | 47,000 | 3,860.0 | 450,000 |

RESERVOIR STORAGE (ACRE-FEET), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY OBSERVATION AT 24:00 VALUES

| DAY         | OCT    | NOV    | DEC    | JAN    | FEB    | MAR    | APR    | MAY    | JUN    | JUL    | AUG    | SEP    |
|-------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 1           | 268000 | 258000 | 264000 | 274000 | 289000 | 312000 | 306000 | 260000 | 236000 | 242000 | 225000 | 229000 |
| 2           | 268000 | 258000 | 264000 | 274000 | 290000 | 313000 | 304000 | 259000 | 237000 | 241000 | 225000 | 230000 |
| 3           | 267000 | 257000 | 264000 | 274000 | 290000 | 313000 | 302000 | 258000 | 238000 | 241000 | 225000 | 230000 |
| 4           | 267000 | 257000 | 265000 | 275000 | 290000 | 314000 | 300000 | 257000 | 239000 | 240000 | 225000 | 230000 |
| 5           | 266000 | 257000 | 265000 | 275000 | 291000 | 314000 | 299000 | 256000 | 240000 | 239000 | 225000 | 230000 |
| 6           | 265000 | 257000 | 265000 | 276000 | 292000 | 315000 | 297000 | 255000 | 241000 | 236000 | 224000 | 231000 |
| 7           | 265000 | 257000 | 265000 | 276000 | 293000 | 315000 | 296000 | 254000 | 241000 | 234000 | 223000 | 231000 |
| 8           | 265000 | 258000 | 265000 | 276000 | 294000 | 316000 | 294000 | 253000 | 241000 | 232000 | 223000 | 232000 |
| 9           | 265000 | 258000 | 266000 | 277000 | 296000 | 316000 | 292000 | 251000 | 241000 | 230000 | 221000 | 232000 |
| 10          | 264000 | 258000 | 266000 | 278000 | 297000 | 317000 | 291000 | 249000 | 241000 | 229000 | 221000 | 232000 |
| 11          | 264000 | 258000 | 266000 | 278000 | 298000 | 317000 | 289000 | 247000 | 241000 | 228000 | 220000 | 232000 |
| 12          | 264000 | 258000 | 266000 | 279000 | 299000 | 318000 | 287000 | 245000 | 241000 | 228000 | 219000 | 231000 |
| 13          | 263000 | 259000 | 267000 | 279000 | 300000 | 318000 | 285000 | 243000 | 242000 | 229000 | 218000 | 232000 |
| 14          | 263000 | 259000 | 267000 | 280000 | 301000 | 319000 | 283000 | 241000 | 242000 | 232000 | 217000 | 232000 |
| 15          | 263000 | 259000 | 267000 | 280000 | 302000 | 320000 | 281000 | 240000 | 242000 | 234000 | 216000 | 232000 |
| 16          | 262000 | 260000 | 267000 | 280000 | 303000 | 320000 | 280000 | 238000 | 243000 | 234000 | 216000 | 232000 |
| 17          | 262000 | 260000 | 268000 | 281000 | 304000 | 320000 | 279000 | 236000 | 244000 | 233000 | 215000 | 233000 |
| 18          | 262000 | 260000 | 268000 | 281000 | 305000 | 321000 | 277000 | 233000 | 245000 | 232000 | 215000 | 233000 |
| 19          | 261000 | 261000 | 268000 | 281000 | 306000 | 320000 | 276000 | 231000 | 244000 | 231000 | 215000 | 233000 |
| 20          | 261000 | 261000 | 269000 | 281000 | 307000 | 319000 | 275000 | 229000 | 243000 | 229000 | 217000 | 233000 |
| 21          | 260000 | 261000 | 269000 | 282000 | 308000 | 319000 | 273000 | 227000 | 241000 | 228000 | 217000 | 233000 |
| 22          | 261000 | 261000 | 269000 | 283000 | 308000 | 318000 | 272000 | 225000 | 240000 | 227000 | 217000 | 233000 |
| 23          | 260000 | 262000 | 270000 | 283000 | 309000 | 317000 | 271000 | 223000 | 240000 | 226000 | 217000 | 233000 |
| 24          | 259000 | 262000 | 270000 | 284000 | 309000 | 316000 | 269000 | 221000 | 239000 | 224000 | 218000 | 233000 |
| 25          | 259000 | 262000 | 270000 | 285000 | 310000 | 316000 | 268000 | 221000 | 239000 | 223000 | 219000 | 234000 |
| 26          | 259000 | 262000 | 271000 | 285000 | 310000 | 315000 | 266000 | 226000 | 240000 | 224000 | 221000 | 234000 |
| 27          | 259000 | 263000 | 271000 | 286000 | 311000 | 314000 | 265000 | 231000 | 241000 | 224000 | 221000 | 234000 |
| 28          | 258000 | 263000 | 272000 | 287000 | 311000 | 314000 | 264000 | 233000 | 241000 | 224000 | 222000 | 234000 |
| 29          | 258000 | 263000 | 272000 | 287000 | 312000 | 312000 | 263000 | 234000 | 241000 | 224000 | 222000 | 234000 |
| 30          | 258000 | 263000 | 273000 | 288000 | ---    | 310000 | 261000 | 234000 | 241000 | 224000 | 224000 | 234000 |
| 31          | 258000 | ---    | 273000 | 288000 | ---    | 308000 | ---    | 235000 | ---    | 225000 | 227000 | ---    |
| MEAN        | 262000 | 260000 | 268000 | 280000 | 301000 | 316000 | 282000 | 240000 | 241000 | 231000 | 220000 | 232000 |
| MAX         | 268000 | 263000 | 273000 | 288000 | 312000 | 321000 | 306000 | 260000 | 245000 | 242000 | 227000 | 234000 |
| MIN         | 258000 | 257000 | 264000 | 274000 | 289000 | 308000 | 261000 | 221000 | 236000 | 223000 | 215000 | 229000 |
| CAL YR 1995 | MEAN   | 213000 | MAX    | 368000 | MIN    | 87300  |        |        |        |        |        |        |
| WTR YR 1996 | MEAN   | 261000 | MAX    | 321000 | MIN    | 215000 |        |        |        |        |        |        |



**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, 2,220 microsiemens, Feb. 16; minimum, 1,130 microsiemens, Oct. 1.

WATER TEMPERATURE: Maximum, 24.6°C, Jun. 2; minimum, 1.3°C, Feb. 27.

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM @ 25 DEG. C), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DAY   | MAX  | MIN  | MEAN | OCTOBER |      |      | NOVEMBER |      |      | DECEMBER |      |      | JANUARY |     |      |
|-------|------|------|------|---------|------|------|----------|------|------|----------|------|------|---------|-----|------|
|       |      |      |      | MAX     | MIN  | MEAN | MAX      | MIN  | MEAN | MAX      | MIN  | MEAN | MAX     | MIN | MEAN |
| 1     | 1140 | 1130 | 1140 | 1260    | 1250 | 1250 | 1490     | 1460 | 1470 | 2020     | 1940 | 1980 |         |     |      |
| 2     | 1180 | 1140 | 1160 | 1260    | 1250 | 1250 | 1470     | 1450 | 1460 | 2070     | 1940 | 1980 |         |     |      |
| 3     | 1200 | 1160 | 1180 | 1260    | 1240 | 1250 | 1470     | 1450 | 1460 | 2080     | 1980 | 2040 |         |     |      |
| 4     | 1180 | 1150 | 1170 | 1260    | 1250 | 1260 | 1480     | 1450 | 1470 | 2110     | 2010 | 2050 |         |     |      |
| 5     | 1170 | 1160 | 1170 | 1270    | 1250 | 1260 | 1490     | 1460 | 1470 | 2100     | 1990 | 2040 |         |     |      |
| 6     | 1170 | 1160 | 1170 | 1280    | 1260 | 1270 | 1520     | 1490 | 1500 | 2080     | 2040 | 2060 |         |     |      |
| 7     | 1180 | 1150 | 1170 | 1290    | 1270 | 1280 | 1540     | 1510 | 1530 | 2070     | 2030 | 2050 |         |     |      |
| 8     | 1180 | 1170 | 1170 | 1310    | 1290 | 1300 | 1650     | 1530 | 1560 | 2070     | 1970 | 2040 |         |     |      |
| 9     | 1190 | 1170 | 1180 | 1310    | 1300 | 1300 | 1670     | 1620 | 1640 | 2030     | 1960 | 1990 |         |     |      |
| 10    | 1190 | 1170 | 1180 | 1310    | 1290 | 1300 | 1720     | 1630 | 1680 | 2060     | 1970 | 2000 |         |     |      |
| 11    | 1200 | 1170 | 1180 | 1310    | 1290 | 1300 | 1740     | 1700 | 1720 | 2110     | 2040 | 2080 |         |     |      |
| 12    | 1200 | 1180 | 1190 | 1310    | 1300 | 1310 | 1760     | 1660 | 1690 | 2060     | 2000 | 2040 |         |     |      |
| 13    | 1210 | 1190 | 1200 | 1360    | 1300 | 1320 | 1740     | 1680 | 1710 | 2040     | 1980 | 2010 |         |     |      |
| 14    | 1200 | 1180 | 1190 | 1560    | 1350 | 1430 | 1730     | 1650 | 1690 | 2010     | 1970 | 1990 |         |     |      |
| 15    | 1230 | 1200 | 1220 | 1490    | 1390 | 1400 | 1860     | 1660 | 1760 | 2000     | 1960 | 1990 |         |     |      |
| 16    | 1250 | 1200 | 1220 | 1430    | 1390 | 1400 | 1890     | 1790 | 1840 | 2090     | 1980 | 2030 |         |     |      |
| 17    | 1230 | 1180 | 1190 | 1440    | 1420 | 1430 | 1880     | 1800 | 1840 | 2100     | 2030 | 2060 |         |     |      |
| 18    | 1220 | 1180 | 1200 | 1490    | 1430 | 1460 | 1890     | 1800 | 1850 | ---      | ---  | ---  |         |     |      |
| 19    | 1220 | 1210 | 1210 | 1470    | 1450 | 1460 | 1900     | 1870 | 1890 | 2130     | 2080 | 2100 |         |     |      |
| 20    | 1220 | 1210 | 1210 | 1680    | 1540 | 1610 | 1950     | 1930 | 1940 | 2090     | 2040 | 2060 |         |     |      |
| 21    | 1220 | 1210 | 1210 | 1640    | 1580 | 1610 | 1940     | 1870 | 1900 | 2060     | 2000 | 2020 |         |     |      |
| 22    | 1220 | 1210 | 1210 | 1670    | 1600 | 1640 | 1890     | 1840 | 1860 | 2020     | 1980 | 2000 |         |     |      |
| 23    | 1230 | 1210 | 1220 | 1700    | 1670 | 1680 | 1990     | 1940 | 1970 | 2030     | 1990 | 2020 |         |     |      |
| 24    | 1230 | 1220 | 1220 | 1710    | 1670 | 1700 | 1960     | 1880 | 1920 | 2050     | 2020 | 2040 |         |     |      |
| 25    | 1230 | 1220 | 1230 | 1720    | 1700 | 1710 | 1920     | 1880 | 1900 | 2060     | 2030 | 2040 |         |     |      |
| 26    | 1230 | 1220 | 1230 | 1720    | 1670 | 1700 | 1930     | 1860 | 1900 | 2090     | 2030 | 2060 |         |     |      |
| 27    | 1230 | 1220 | 1230 | 1680    | 1520 | 1590 | 1880     | 1840 | 1860 | ---      | ---  | ---  |         |     |      |
| 28    | 1230 | 1220 | 1230 | 1520    | 1490 | 1510 | 1880     | 1820 | 1860 | ---      | ---  | ---  |         |     |      |
| 29    | 1230 | 1220 | 1230 | 1500    | 1480 | 1490 | 1960     | 1840 | 1900 | ---      | ---  | ---  |         |     |      |
| 30    | 1240 | 1220 | 1230 | 1480    | 1470 | 1470 | 1960     | 1850 | 1910 | 2150     | 2080 | 2110 |         |     |      |
| 31    | 1260 | 1230 | 1240 | ---     | ---  | ---  | 2020     | 1960 | 1990 | 2180     | 2140 | 2160 |         |     |      |
| MONTH | 1260 | 1130 | 1200 | 1720    | 1240 | 1430 | 2020     | 1450 | 1750 | ---      | ---  | ---  |         |     |      |

## 07130500 ARKANSAS RIVER BELOW JOHN MARTIN RESERVOIR, CO--Continued

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM @ 25 DEG. C), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DAY   | MAX  | MIN  | MEAN |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|
|       |      |      |      |      |      |      |      |      |      |      |      |      |
| 1     | 2200 | 2100 | 2160 | 2010 | 1980 | 1990 | 1610 | 1600 | 1600 | 1650 | 1640 | 1650 |
| 2     | 2180 | 2110 | 2140 | 1980 | 1960 | 1970 | 1600 | 1590 | 1600 | 1650 | 1640 | 1650 |
| 3     | 2140 | 2060 | 2100 | 1960 | 1920 | 1940 | 1600 | 1590 | 1590 | 1670 | 1650 | 1660 |
| 4     | 2120 | 2050 | 2080 | 1930 | 1890 | 1910 | 1600 | 1590 | 1600 | 1670 | 1660 | 1660 |
| 5     | 2140 | 2030 | 2090 | 1900 | 1870 | 1890 | 1600 | 1590 | 1590 | 1670 | 1640 | 1670 |
| 6     | 2130 | 2010 | 2070 | 1880 | 1830 | 1860 | 1610 | 1590 | 1600 | 1670 | 1660 | 1670 |
| 7     | 2050 | 1950 | 2000 | 1830 | 1700 | 1750 | 1600 | 1590 | 1600 | 1670 | 1660 | 1670 |
| 8     | 2040 | 1940 | 1990 | 1760 | 1710 | 1750 | 1600 | 1590 | 1590 | 1670 | 1650 | 1660 |
| 9     | 2130 | 2030 | 2080 | 1740 | 1670 | 1690 | 1600 | 1590 | 1600 | 1660 | 1650 | 1660 |
| 10    | 2040 | 1930 | 1990 | 1670 | 1650 | 1670 | 1600 | 1590 | 1590 | 1650 | 1630 | 1640 |
| 11    | 2080 | 1950 | 2010 | 1660 | 1650 | 1660 | 1610 | 1590 | 1600 | 1640 | 1630 | 1640 |
| 12    | 2090 | 2000 | 2040 | 1670 | 1650 | 1660 | 1620 | 1590 | 1610 | 1640 | 1630 | 1640 |
| 13    | 2120 | 2020 | 2070 | 1670 | 1650 | 1660 | 1620 | 1610 | 1620 | 1630 | 1620 | 1630 |
| 14    | 2170 | 2020 | 2090 | 1670 | 1650 | 1660 | 1630 | 1610 | 1620 | 1670 | 1610 | 1640 |
| 15    | 2200 | 2140 | 2170 | ---  | ---  | ---  | 1640 | 1620 | 1630 | 1670 | 1650 | 1660 |
| 16    | 2220 | 2150 | 2190 | ---  | ---  | ---  | 1640 | 1620 | 1630 | 1670 | 1650 | 1660 |
| 17    | 2160 | 2110 | 2130 | ---  | ---  | ---  | 1650 | 1630 | 1630 | 1660 | 1640 | 1650 |
| 18    | 2130 | 2110 | 2120 | 1850 | 1680 | 1720 | 1640 | 1630 | 1630 | 1640 | 1630 | 1640 |
| 19    | 2130 | 2110 | 2120 | 1680 | 1640 | 1660 | 1640 | 1630 | 1630 | 1640 | 1630 | 1640 |
| 20    | 2130 | 2100 | 2110 | 1650 | 1640 | 1640 | 1640 | 1630 | 1630 | 1640 | 1630 | 1640 |
| 21    | 2110 | 2090 | 2100 | 1650 | 1640 | 1640 | 1640 | 1630 | 1630 | 1640 | 1630 | 1630 |
| 22    | 2110 | 2080 | 2100 | 1640 | 1630 | 1640 | 1640 | 1630 | 1640 | 1640 | 1630 | 1640 |
| 23    | 2080 | 2030 | 2050 | 1640 | 1630 | 1640 | 1640 | 1630 | 1640 | 1650 | 1640 | 1640 |
| 24    | 2040 | 2010 | 2020 | 1640 | 1620 | 1630 | 1640 | 1630 | 1630 | 1650 | 1640 | 1650 |
| 25    | 2010 | 1930 | 1980 | 1640 | 1630 | 1640 | 1640 | 1610 | 1630 | 1660 | 1640 | 1650 |
| 26    | 1980 | 1950 | 1960 | 1650 | 1630 | 1640 | 1650 | 1620 | 1640 | 1720 | 1650 | 1690 |
| 27    | 2010 | 1950 | 1980 | 1640 | 1630 | 1640 | 1650 | 1640 | 1640 | 1710 | 1670 | 1690 |
| 28    | 2030 | 1970 | 2000 | 1640 | 1630 | 1640 | 1670 | 1630 | 1640 | 1720 | 1680 | 1700 |
| 29    | 2020 | 1990 | 2010 | 1640 | 1610 | 1630 | 1650 | 1640 | 1640 | 1730 | 1680 | 1710 |
| 30    | ---  | ---  | ---  | 1610 | 1600 | 1600 | 1660 | 1640 | 1650 | 1750 | 1690 | 1720 |
| 31    | ---  | ---  | ---  | 1610 | 1590 | 1600 | ---  | ---  | ---  | 1760 | 1700 | 1730 |
| MONTH | 2220 | 1930 | 2070 | ---  | ---  | ---  | 1670 | 1590 | 1620 | 1760 | 1610 | 1660 |
| DAY   | MAX  | MIN  | MEAN |
|       |      |      |      |      |      |      |      |      |      |      |      |      |
| 1     | 1750 | 1700 | 1730 | 1850 | 1780 | 1840 | 1870 | 1830 | 1850 | 1960 | 1950 | 1960 |
| 2     | 1740 | 1700 | 1720 | 1860 | 1820 | 1850 | 1890 | 1830 | 1860 | 1960 | 1930 | 1940 |
| 3     | 1760 | 1730 | 1740 | 1860 | 1840 | 1850 | 1850 | 1830 | 1840 | 1950 | 1910 | 1930 |
| 4     | 1780 | 1750 | 1770 | 1860 | 1830 | 1850 | 1850 | 1840 | 1840 | 1920 | 1910 | 1920 |
| 5     | 1770 | 1750 | 1760 | 1850 | 1820 | 1840 | 1890 | 1850 | 1870 | 1920 | 1870 | 1900 |
| 6     | 1770 | 1760 | 1770 | 1850 | 1830 | 1840 | 1880 | 1860 | 1870 | 1910 | 1880 | 1900 |
| 7     | 1790 | 1760 | 1780 | 1830 | 1800 | 1820 | 1880 | 1860 | 1870 | 1900 | 1880 | 1890 |
| 8     | 1800 | 1780 | 1790 | 1850 | 1810 | 1840 | 1880 | 1860 | 1870 | 1900 | 1870 | 1890 |
| 9     | 1810 | 1790 | 1800 | 1850 | 1830 | 1850 | 1890 | 1860 | 1870 | 1890 | 1870 | 1880 |
| 10    | 1810 | 1790 | 1800 | 1850 | 1840 | 1850 | 1890 | 1880 | 1880 | 1880 | 1870 | 1880 |
| 11    | 1810 | 1780 | 1800 | 1860 | 1840 | 1840 | 1890 | 1880 | 1880 | 1880 | 1860 | 1870 |
| 12    | 1800 | 1770 | 1780 | 1850 | 1810 | 1840 | 1900 | 1880 | 1890 | 1880 | 1860 | 1870 |
| 13    | 1780 | 1760 | 1770 | 1860 | 1800 | 1850 | 1900 | 1890 | 1890 | 1880 | 1860 | 1870 |
| 14    | 1780 | 1760 | 1770 | 1850 | 1840 | 1850 | 1900 | 1890 | 1900 | 1880 | 1860 | 1870 |
| 15    | 1780 | 1760 | 1770 | 1860 | 1820 | 1850 | 1900 | 1880 | 1900 | 1880 | 1860 | 1870 |
| 16    | 1800 | 1770 | 1790 | 1850 | 1760 | 1810 | 1900 | 1880 | 1890 | 1880 | 1870 | 1870 |
| 17    | 1810 | 1800 | 1810 | 1860 | 1760 | 1820 | 1890 | 1870 | 1870 | 1920 | 1870 | 1890 |
| 18    | 1820 | 1800 | 1810 | 1870 | 1860 | 1860 | 1880 | 1860 | 1870 | 1920 | 1900 | 1910 |
| 19    | 1820 | 1790 | 1810 | 1860 | 1850 | 1860 | 1890 | 1860 | 1880 | 1930 | 1910 | 1920 |
| 20    | 1810 | 1790 | 1800 | 1870 | 1850 | 1860 | 1930 | 1870 | 1910 | 1920 | 1900 | 1910 |
| 21    | 1790 | 1760 | 1770 | 1870 | 1850 | 1860 | 1920 | 1900 | 1910 | 1920 | 1910 | 1920 |
| 22    | 1810 | 1780 | 1800 | 1870 | 1850 | 1860 | 1940 | 1920 | 1930 | 1930 | 1910 | 1920 |
| 23    | 1810 | 1790 | 1800 | 1870 | 1850 | 1860 | 1950 | 1920 | 1940 | 1930 | 1910 | 1920 |
| 24    | 1810 | 1780 | 1800 | 1870 | 1850 | 1860 | 1940 | 1930 | 1940 | 1930 | 1920 | 1920 |
| 25    | 1850 | 1790 | 1820 | 1870 | 1850 | 1860 | 1950 | 1930 | 1940 | 1930 | 1920 | 1920 |
| 26    | 1860 | 1830 | 1850 | 1860 | 1840 | 1860 | 1950 | 1930 | 1940 | 1950 | 1930 | 1940 |
| 27    | 1860 | 1850 | 1850 | 1860 | 1840 | 1850 | 1950 | 1940 | 1940 | 1970 | 1950 | 1960 |
| 28    | 1860 | 1820 | 1860 | 1860 | 1840 | 1850 | 1960 | 1940 | 1950 | 1990 | 1960 | 1970 |
| 29    | 1860 | 1830 | 1850 | 1880 | 1850 | 1860 | 1960 | 1940 | 1950 | 2000 | 1970 | 1990 |
| 30    | 1860 | 1820 | 1850 | 1890 | 1850 | 1870 | 1960 | 1930 | 1960 | 2000 | 1980 | 1990 |
| 31    | ---  | ---  | ---  | 1890 | 1860 | 1870 | 1960 | 1950 | 1960 | ---  | ---  | ---  |
| MONTH | 1860 | 1700 | 1790 | 1890 | 1760 | 1850 | 1960 | 1830 | 1900 | 2000 | 1860 | 1910 |

07130500 ARKANSAS RIVER BELOW JOHN MARTIN RESERVOIR, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DAY   | MAX      | MIN  | MEAN | MAX      | MIN  | MEAN | MAX      | MIN  | MEAN | MAX     | MIN  | MEAN |
|-------|----------|------|------|----------|------|------|----------|------|------|---------|------|------|
|       | OCTOBER  |      |      | NOVEMBER |      |      | DECEMBER |      |      | JANUARY |      |      |
| 1     | 18.2     | 17.5 | 17.8 | 11.4     | 10.8 | 11.2 | 9.3      | 7.3  | 8.0  | 6.0     | 4.2  | 5.0  |
| 2     | 17.9     | 17.2 | 17.5 | 10.8     | 10.5 | 10.7 | 8.9      | 7.3  | 7.9  | 4.6     | 3.3  | 4.1  |
| 3     | 17.9     | 17.2 | 17.5 | 10.9     | 9.9  | 10.4 | 8.8      | 7.1  | 7.7  | 4.6     | 2.7  | 3.7  |
| 4     | 17.6     | 16.8 | 17.2 | 10.4     | 9.7  | 10.0 | 8.4      | 6.9  | 7.6  | 4.5     | 3.3  | 3.9  |
| 5     | 16.8     | 15.7 | 16.3 | 10.5     | 9.7  | 10.0 | 7.9      | 6.7  | 7.3  | 4.4     | 3.4  | 3.8  |
| 6     | 16.3     | 15.3 | 15.8 | 10.6     | 9.7  | 10.0 | 7.8      | 6.4  | 6.9  | 4.7     | 3.3  | 3.9  |
| 7     | 16.0     | 15.2 | 15.5 | 10.2     | 9.3  | 9.6  | 6.9      | 6.2  | 6.5  | 5.0     | 3.7  | 4.3  |
| 8     | 15.8     | 15.1 | 15.4 | 10.1     | 9.0  | 9.4  | 7.0      | 5.0  | 6.1  | 5.6     | 3.7  | 4.6  |
| 9     | 15.8     | 15.0 | 15.3 | 10.2     | 9.0  | 9.5  | 5.6      | 4.1  | 4.8  | 6.2     | 3.6  | 4.8  |
| 10    | 15.7     | 14.9 | 15.2 | 9.6      | 8.5  | 9.1  | 6.0      | 3.9  | 4.9  | 5.9     | 4.2  | 5.1  |
| 11    | 15.7     | 14.9 | 15.2 | 9.5      | 8.4  | 8.8  | 6.9      | 4.4  | 5.5  | 6.1     | 3.8  | 4.7  |
| 12    | 15.6     | 14.9 | 15.1 | 9.9      | 8.7  | 9.2  | 7.2      | 5.1  | 6.0  | 6.1     | 3.7  | 4.7  |
| 13    | 15.1     | 14.7 | 14.9 | 9.5      | 8.6  | 9.1  | 7.4      | 5.9  | 6.5  | 6.3     | 3.4  | 4.7  |
| 14    | 15.4     | 14.6 | 14.9 | 10.2     | 8.2  | 9.0  | 7.3      | 5.1  | 6.2  | 6.7     | 3.6  | 5.0  |
| 15    | 15.4     | 14.5 | 14.9 | 9.9      | 8.3  | 9.0  | 7.0      | 4.9  | 5.9  | 6.5     | 4.3  | 5.2  |
| 16    | 15.2     | 14.6 | 14.8 | 10.0     | 8.5  | 9.1  | 8.1      | 5.5  | 6.5  | 7.1     | 4.5  | 5.6  |
| 17    | 15.2     | 14.5 | 14.8 | 10.0     | 8.4  | 9.0  | 6.8      | 5.3  | 6.0  | 7.1     | 3.3  | 5.8  |
| 18    | 15.1     | 14.4 | 14.7 | 10.1     | 8.3  | 8.9  | 6.1      | 4.5  | 5.3  | 3.8     | 1.9  | 2.7  |
| 19    | 14.7     | 14.1 | 14.4 | 9.7      | 7.9  | 8.7  | 5.8      | 4.2  | 4.9  | 4.2     | 1.9  | 2.9  |
| 20    | 14.5     | 13.7 | 14.1 | 9.5      | 8.1  | 8.7  | 5.1      | 3.1  | 4.0  | 4.5     | 2.8  | 3.6  |
| 21    | 14.3     | 13.5 | 13.8 | 9.6      | 8.0  | 8.5  | 4.7      | 2.5  | 3.6  | 4.5     | 2.9  | 3.8  |
| 22    | 14.3     | 13.2 | 13.8 | 10.0     | 7.9  | 8.6  | 4.8      | 3.0  | 3.9  | 4.6     | 3.2  | 3.9  |
| 23    | 13.2     | 12.3 | 12.5 | 9.7      | 8.1  | 8.6  | 4.4      | 3.0  | 3.7  | 4.7     | 3.4  | 4.0  |
| 24    | 12.6     | 12.1 | 12.3 | 9.7      | 7.8  | 8.5  | 4.5      | 2.5  | 3.5  | 5.1     | 3.3  | 4.2  |
| 25    | 12.5     | 11.9 | 12.1 | 10.1     | 8.0  | 8.8  | 4.6      | 2.8  | 3.7  | 5.6     | 3.7  | 4.5  |
| 26    | 12.4     | 11.7 | 11.9 | 10.0     | 8.5  | 9.1  | 5.1      | 3.4  | 4.2  | 5.0     | 3.2  | 4.1  |
| 27    | 12.4     | 11.7 | 11.9 | 8.9      | 7.2  | 8.3  | 5.5      | 3.2  | 4.2  | 5.2     | 2.8  | 3.8  |
| 28    | 12.2     | 11.5 | 11.8 | 8.2      | 6.7  | 7.3  | 5.0      | 3.4  | 4.2  | 6.3     | 3.4  | 4.6  |
| 29    | 11.9     | 11.4 | 11.6 | 8.5      | 6.8  | 7.4  | 5.6      | 4.0  | 4.6  | 6.0     | 3.6  | 4.7  |
| 30    | 11.7     | 11.2 | 11.4 | 8.9      | 7.1  | 7.8  | 5.3      | 3.3  | 4.2  | 5.2     | 2.9  | 4.0  |
| 31    | 11.8     | 11.2 | 11.4 | ---      | ---  | ---  | 6.2      | 3.8  | 5.0  | 5.3     | 3.3  | 4.3  |
| MONTH | 18.2     | 11.2 | 14.4 | 11.4     | 6.7  | 9.1  | 9.3      | 2.5  | 5.5  | 7.1     | 1.9  | 4.3  |
|       | FEBRUARY |      |      | MARCH    |      |      | APRIL    |      |      | MAY     |      |      |
| 1     | 5.4      | 3.8  | 4.5  | 4.3      | 2.7  | 3.4  | 6.0      | 5.4  | 5.7  | 11.1    | 10.2 | 10.6 |
| 2     | 4.4      | 2.5  | 3.5  | 4.5      | 2.9  | 3.5  | 6.8      | 5.9  | 6.3  | 11.3    | 10.5 | 10.9 |
| 3     | 4.7      | 3.1  | 3.8  | 4.6      | 2.9  | 3.6  | 6.8      | 6.5  | 6.6  | 11.7    | 10.6 | 11.1 |
| 4     | 4.6      | 3.4  | 3.9  | 4.2      | 3.3  | 3.7  | 6.5      | 6.3  | 6.4  | 12.1    | 11.1 | 11.5 |
| 5     | 5.5      | 3.9  | 4.7  | 4.5      | 3.2  | 3.7  | 6.7      | 6.3  | 6.5  | 11.9    | 11.3 | 11.5 |
| 6     | 7.1      | 4.1  | 5.3  | 3.5      | 2.8  | 3.1  | 7.1      | 6.6  | 6.8  | 12.4    | 11.4 | 11.8 |
| 7     | 7.9      | 4.1  | 5.9  | 3.7      | 2.6  | 3.0  | 7.4      | 6.8  | 7.1  | 12.4    | 11.6 | 12.0 |
| 8     | 7.5      | 4.4  | 5.8  | 4.2      | 2.8  | 3.4  | 7.3      | 6.9  | 7.0  | 12.8    | 11.9 | 12.4 |
| 9     | 7.1      | 3.9  | 5.4  | 4.4      | 3.0  | 3.6  | 7.3      | 6.8  | 7.0  | 12.8    | 12.1 | 12.5 |
| 10    | 7.5      | 4.8  | 6.0  | 4.9      | 3.2  | 4.0  | 7.6      | 6.8  | 7.3  | 13.2    | 12.3 | 12.7 |
| 11    | 7.7      | 3.9  | 5.4  | 5.4      | 4.0  | 4.4  | 8.9      | 7.4  | 8.2  | 12.9    | 12.5 | 12.7 |
| 12    | 7.4      | 4.4  | 5.6  | 5.0      | 4.0  | 4.4  | 9.0      | 8.5  | 8.8  | 13.9    | 12.7 | 13.3 |
| 13    | 9.3      | 4.6  | 6.4  | 5.1      | 4.0  | 4.5  | 9.1      | 8.4  | 8.7  | 13.6    | 12.9 | 13.2 |
| 14    | 9.2      | 5.8  | 7.4  | 4.4      | 3.6  | 4.0  | 8.6      | 8.4  | 8.5  | 14.3    | 12.9 | 13.7 |
| 15    | 8.5      | 5.6  | 7.4  | ---      | ---  | ---  | 8.7      | 8.3  | 8.4  | 14.1    | 13.6 | 13.8 |
| 16    | 6.9      | 2.9  | 5.2  | ---      | ---  | ---  | 9.2      | 8.3  | 8.7  | 14.0    | 13.6 | 13.8 |
| 17    | 5.3      | 3.1  | 4.0  | ---      | ---  | ---  | 9.6      | 8.6  | 9.1  | 14.2    | 13.6 | 13.8 |
| 18    | 4.8      | 3.3  | 3.8  | 6.3      | 4.4  | 5.4  | 9.8      | 9.4  | 9.6  | 14.3    | 13.7 | 14.0 |
| 19    | 4.4      | 2.9  | 3.5  | 4.8      | 4.1  | 4.4  | 10.3     | 9.5  | 9.9  | 14.6    | 13.9 | 14.3 |
| 20    | 4.8      | 3.1  | 3.7  | 5.1      | 4.3  | 4.6  | 10.3     | 9.8  | 10.0 | 15.5    | 14.1 | 14.7 |
| 21    | 4.4      | 3.1  | 3.6  | 5.3      | 4.4  | 4.7  | 10.2     | 9.6  | 9.9  | 14.7    | 14.3 | 14.4 |
| 22    | 4.4      | 3.1  | 3.7  | 5.3      | 4.5  | 4.8  | 10.0     | 9.5  | 9.7  | 15.4    | 14.3 | 14.9 |
| 23    | 4.2      | 3.0  | 3.4  | 5.7      | 4.7  | 5.2  | 10.3     | 9.5  | 9.9  | 15.1    | 14.7 | 14.9 |
| 24    | 4.0      | 2.7  | 3.3  | 5.3      | 4.7  | 5.0  | 10.5     | 9.8  | 10.2 | 15.5    | 14.8 | 15.2 |
| 25    | 4.5      | 3.0  | 3.6  | 5.1      | 4.5  | 4.7  | 10.9     | 10.1 | 10.4 | 15.3    | 15.0 | 15.1 |
| 26    | 4.8      | 1.9  | 3.4  | 5.2      | 4.3  | 4.7  | 10.6     | 10.1 | 10.4 | 16.9    | 13.7 | 15.1 |
| 27    | 5.1      | 1.3  | 3.3  | 5.3      | 4.6  | 4.9  | 10.7     | 10.1 | 10.3 | 17.9    | 13.1 | 15.3 |
| 28    | 4.0      | 2.3  | 3.2  | 5.5      | 4.7  | 5.0  | 10.8     | 10.1 | 10.5 | 17.3    | 13.6 | 15.1 |
| 29    | 4.2      | 2.6  | 3.3  | 5.4      | 5.0  | 5.2  | 10.7     | 10.1 | 10.4 | 19.6    | 14.3 | 16.4 |
| 30    | ---      | ---  | ---  | 5.6      | 5.1  | 5.4  | 10.8     | 10.1 | 10.4 | 22.8    | 15.2 | 18.1 |
| 31    | ---      | ---  | ---  | 5.7      | 5.4  | 5.5  | ---      | ---  | ---  | 23.8    | 16.2 | 19.0 |
| MONTH | 9.3      | 1.3  | 4.6  | ---      | ---  | ---  | 10.9     | 5.4  | 8.6  | 23.8    | 10.2 | 13.8 |

## 07130500 ARKANSAS RIVER BELOW JOHN MARTIN RESERVOIR, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DAY   | MAX  | MIN  | MEAN |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|
|       |      |      |      |      |      |      |      |      |      |      |      |      |
| 1     | 23.2 | 16.5 | 19.5 | 21.4 | 20.5 | 20.9 | 24.2 | 22.9 | 23.4 | 23.7 | 22.3 | 22.8 |
| 2     | 24.6 | 17.0 | 20.0 | 21.5 | 20.5 | 21.0 | 24.3 | 23.0 | 23.5 | 23.7 | 22.4 | 22.9 |
| 3     | 19.6 | 17.1 | 18.1 | 21.7 | 20.8 | 21.2 | 24.2 | 22.9 | 23.4 | 23.5 | 22.0 | 22.7 |
| 4     | 18.5 | 16.9 | 17.5 | 21.5 | 20.6 | 21.0 | 24.0 | 23.1 | 23.4 | 23.5 | 22.4 | 22.8 |
| 5     | 18.4 | 16.8 | 17.5 | 21.4 | 20.6 | 21.0 | 24.0 | 22.8 | 23.3 | 23.2 | 22.1 | 22.5 |
| 6     | 18.4 | 16.7 | 17.4 | 21.9 | 21.2 | 21.4 | 23.9 | 22.8 | 23.3 | 23.0 | 22.1 | 22.4 |
| 7     | 18.5 | 16.6 | 17.4 | 22.0 | 21.3 | 21.6 | 23.9 | 23.1 | 23.4 | 22.8 | 21.8 | 22.2 |
| 8     | 18.7 | 16.5 | 17.5 | 21.8 | 21.5 | 21.6 | 23.6 | 23.2 | 23.3 | 23.1 | 21.8 | 22.3 |
| 9     | 18.9 | 16.9 | 17.7 | 21.6 | 21.3 | 21.5 | 23.7 | 23.0 | 23.3 | 23.0 | 21.7 | 22.3 |
| 10    | 18.7 | 17.4 | 18.0 | 21.7 | 21.4 | 21.5 | 23.7 | 23.0 | 23.3 | 22.9 | 21.9 | 22.3 |
| 11    | 18.8 | 17.8 | 18.2 | 22.1 | 21.4 | 21.7 | 23.6 | 23.0 | 23.2 | 22.8 | 21.8 | 22.2 |
| 12    | 18.6 | 17.8 | 18.1 | 22.1 | 21.6 | 21.8 | 23.7 | 23.0 | 23.3 | 22.3 | 21.6 | 21.9 |
| 13    | 19.0 | 17.9 | 18.3 | 22.1 | 21.7 | 21.8 | 23.7 | 23.1 | 23.3 | 22.0 | 21.5 | 21.7 |
| 14    | 18.7 | 18.2 | 18.4 | 22.8 | 21.6 | 22.1 | 23.7 | 23.2 | 23.4 | 22.0 | 21.2 | 21.6 |
| 15    | 19.0 | 18.3 | 18.6 | 22.8 | 21.8 | 22.2 | 23.7 | 23.1 | 23.4 | 21.7 | 21.1 | 21.3 |
| 16    | 19.5 | 18.5 | 18.9 | 22.7 | 22.2 | 22.4 | 23.9 | 23.1 | 23.4 | 21.6 | 20.9 | 21.2 |
| 17    | 19.7 | 18.6 | 19.0 | 22.6 | 22.2 | 22.4 | 23.8 | 23.0 | 23.3 | 21.7 | 20.5 | 21.0 |
| 18    | 19.5 | 18.6 | 19.0 | 22.9 | 22.2 | 22.4 | 23.7 | 23.0 | 23.2 | 21.4 | 20.4 | 20.8 |
| 19    | 19.1 | 18.5 | 18.8 | 22.8 | 22.3 | 22.6 | 23.9 | 23.0 | 23.4 | 20.8 | 19.7 | 20.2 |
| 20    | 19.4 | 18.7 | 19.0 | 22.9 | 22.4 | 22.6 | 24.1 | 23.1 | 23.5 | 20.8 | 19.8 | 20.2 |
| 21    | 20.0 | 18.8 | 19.3 | 22.8 | 22.3 | 22.6 | 24.2 | 23.0 | 23.5 | 20.6 | 19.5 | 19.9 |
| 22    | 19.7 | 19.2 | 19.4 | 22.7 | 22.2 | 22.4 | 23.9 | 23.2 | 23.5 | 20.6 | 19.4 | 19.9 |
| 23    | 20.0 | 19.2 | 19.5 | 23.0 | 22.5 | 22.7 | 23.9 | 23.3 | 23.5 | 20.2 | 19.3 | 19.7 |
| 24    | 20.4 | 19.4 | 19.9 | 23.1 | 22.1 | 22.7 | 23.9 | 23.2 | 23.4 | 20.1 | 19.2 | 19.6 |
| 25    | 20.8 | 19.7 | 20.1 | 23.0 | 22.5 | 22.8 | 24.2 | 23.0 | 23.5 | 20.0 | 18.8 | 19.4 |
| 26    | 20.7 | 19.7 | 20.1 | 23.2 | 22.6 | 22.8 | 24.1 | 23.0 | 23.4 | 18.8 | 17.9 | 18.3 |
| 27    | 20.7 | 19.8 | 20.1 | 23.6 | 22.7 | 23.1 | 24.0 | 23.0 | 23.3 | 18.4 | 17.5 | 17.9 |
| 28    | 20.6 | 19.8 | 20.2 | 23.8 | 22.8 | 23.3 | 23.9 | 22.7 | 23.2 | 18.7 | 17.4 | 17.8 |
| 29    | 21.5 | 20.3 | 20.9 | 23.7 | 22.9 | 23.2 | 23.7 | 22.7 | 23.1 | 18.6 | 17.3 | 17.8 |
| 30    | 21.0 | 20.6 | 20.8 | 23.5 | 22.9 | 23.2 | 23.3 | 22.4 | 22.7 | 18.6 | 17.3 | 17.8 |
| 31    | ---  | ---  | ---  | 24.2 | 23.0 | 23.5 | 23.6 | 22.3 | 22.8 | ---  | ---  | ---  |
| MONTH | 24.6 | 16.5 | 18.9 | 24.2 | 20.5 | 22.2 | 24.3 | 22.3 | 23.3 | 23.7 | 17.3 | 20.8 |

**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 mi<sup>2</sup>, of which 950 mi<sup>2</sup> is probably noncontributing.

PERIOD OF RECORD.--Streamflow records, May 1913 to September 1955, April 1959 to current year. Monthly discharge only for some periods, published in WSP 1311. Statistical summary computed for 1949 to current year. 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. Datum 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 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

| DAY   | OCT  | NOV  | DEC   | JAN   | FEB   | MAR  | APR   | MAY   | JUN   | JUL   | AUG  | SEP  |
|-------|------|------|-------|-------|-------|------|-------|-------|-------|-------|------|------|
| 1     | 32   | 22   | 49    | 7.5   | e20   | 10   | 633   | 56    | 216   | 75    | 199  | 60   |
| 2     | 27   | 21   | 48    | 7.3   | e19   | 11   | 520   | 58    | 176   | 54    | 96   | 47   |
| 3     | 31   | 20   | 48    | 7.6   | e17   | 11   | 495   | 62    | 133   | 52    | 61   | 36   |
| 4     | 33   | 23   | 47    | 7.4   | e20   | 12   | 512   | 49    | 43    | 59    | 60   | 36   |
| 5     | 29   | 19   | 44    | 7.0   | 29    | 16   | 465   | 62    | 27    | 131   | 51   | 35   |
| 6     | 28   | 29   | 43    | 6.8   | 31    | e17  | 359   | 61    | 23    | 569   | 66   | 41   |
| 7     | 22   | 53   | 41    | 6.8   | 27    | e16  | 367   | 43    | e22   | 614   | 63   | 40   |
| 8     | 20   | 46   | 41    | 6.9   | 26    | e19  | 369   | 30    | e21   | 632   | 59   | 32   |
| 9     | 20   | 44   | 42    | 7.0   | 26    | 22   | 335   | 415   | e20   | 609   | 63   | 30   |
| 10    | 37   | 43   | 39    | 6.7   | 27    | 22   | 314   | 520   | e23   | 558   | 91   | 33   |
| 11    | 46   | 65   | 34    | 6.5   | 27    | 18   | 325   | 427   | e26   | 473   | 92   | 36   |
| 12    | 46   | 79   | 24    | 6.5   | 25    | 31   | 514   | 420   | 74    | 391   | 76   | 36   |
| 13    | 37   | 78   | 21    | 6.8   | 13    | 35   | 557   | 404   | 180   | 611   | 45   | 40   |
| 14    | 33   | 72   | 16    | 6.5   | 8.3   | 76   | 604   | 343   | 127   | 540   | 50   | 49   |
| 15    | 31   | 64   | 15    | 6.6   | 8.1   | 112  | 569   | 299   | 624   | 229   | 129  | 126  |
| 16    | 41   | 62   | 14    | 6.7   | 8.0   | 58   | 392   | 312   | 988   | 207   | 167  | 99   |
| 17    | 31   | 61   | 14    | 9.9   | 8.2   | 45   | 177   | 375   | 195   | 630   | 89   | 67   |
| 18    | 28   | 62   | 13    | e24   | 8.7   | 31   | 155   | 564   | 158   | 564   | 63   | 53   |
| 19    | 21   | 62   | 13    | e25   | 8.7   | 29   | 114   | 583   | 530   | 494   | 59   | 217  |
| 20    | 16   | 60   | 13    | 26    | 9.0   | 23   | 116   | 569   | 583   | 365   | 98   | 179  |
| 21    | 16   | 59   | 12    | 25    | 9.9   | 28   | 156   | 431   | 600   | 333   | 124  | 99   |
| 22    | 17   | 59   | 11    | 24    | 9.8   | 34   | 164   | 414   | 489   | 343   | 84   | 86   |
| 23    | 17   | 59   | 11    | 25    | 9.7   | 39   | 148   | 440   | 209   | 397   | 72   | 77   |
| 24    | 17   | 58   | 11    | 24    | 11    | 40   | 155   | 464   | 84    | 399   | 67   | 59   |
| 25    | 16   | 55   | 10    | 23    | 12    | 51   | 162   | 790   | 61    | 369   | 65   | 49   |
| 26    | 16   | 54   | 9.9   | 24    | 12    | 34   | 194   | 3080  | 49    | 252   | 69   | 43   |
| 27    | 16   | 52   | 9.6   | 24    | 10    | 26   | 96    | 2950  | 50    | 140   | 92   | 43   |
| 28    | 16   | 51   | 9.1   | 27    | 9.9   | 26   | 76    | 600   | 57    | 122   | 81   | 40   |
| 29    | 17   | 50   | 8.6   | 25    | 9.9   | 96   | 79    | 393   | 47    | 122   | 68   | 34   |
| 30    | 23   | 50   | 7.8   | 22    | ---   | 572  | 81    | 313   | 48    | 301   | 67   | 30   |
| 31    | 21   | ---  | 7.7   | e21   | ---   | 640  | ---   | 258   | ---   | 470   | 63   | ---  |
| TOTAL | 801  | 1532 | 726.7 | 459.5 | 460.2 | 2200 | 9203  | 15785 | 5883  | 11105 | 2529 | 1852 |
| MEAN  | 25.8 | 51.1 | 23.4  | 14.8  | 15.9  | 71.0 | 307   | 509   | 196   | 358   | 81.6 | 61.7 |
| MAX   | 46   | 79   | 49    | 27    | 31    | 640  | 633   | 3080  | 988   | 632   | 199  | 217  |
| MIN   | 16   | 19   | 7.7   | 6.5   | 8.0   | 10   | 76    | 30    | 20    | 52    | 45   | 30   |
| AC-FT | 1590 | 3040 | 1440  | 911   | 913   | 4360 | 18250 | 31310 | 11670 | 22030 | 5020 | 3670 |

| STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1949 - 1996, BY WATER YEAR (WY) |      |      |      |      |      |      |      |      |      |      |      |      |
|---|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN  | 37.1 | 17.1 | 21.5 | 23.3 | 30.2 | 29.2 | 163  | 174  | 242  | 292  | 206  | 96.0 |
| MAX   | 233  | 52.2 | 71.5 | 158  | 507  | 210  | 1089 | 2143 | 2087 | 2457 | 1547 | 689  |
| (WY)  | 1949 | 1987 | 1966 | 1966 | 1966 | 1986 | 1987 | 1987 | 1987 | 1995 | 1965 | 1965 |
| MIN   | .84  | 1.81 | .56  | .47  | .72  | 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 1995 CALENDAR YEAR |        | FOR 1996 WATER YEAR |        | WATER YEARS 1949 - 1996 |             |
|--------------------------|--|------------------------|--------|---------------------|--------|-------------------------|-------------|
| ANNUAL TOTAL             |  | 105616.5               |        | 52536.4             |        |                         |             |
| ANNUAL MEAN              |  | 289                    |        | 144                 |        | a <sub>109</sub>        |             |
| HIGHEST ANNUAL MEAN      |  |                        |        |                     |        | 537                     | 1987        |
| LOWEST ANNUAL MEAN       |  |                        |        |                     |        | 27.0                    | 1975        |
| HIGHEST DAILY MEAN       |  | b <sub>2770</sub>      | Jul 4  | 3080                | May 26 | c <sub>25000</sub>      | Jun 18 1965 |
| LOWEST DAILY MEAN        |  | d <sub>3.7</sub>       | Apr 11 | f <sub>6.5</sub>    | Jan 11 | g <sub>.00</sub>        | Dec 5 1953  |
| ANNUAL SEVEN-DAY MINIMUM |  | 4.2                    | Apr 6  | h <sub>6.6</sub>    | Jan 10 | .21                     | Jan 10 1965 |
| INSTANTANEOUS PEAK FLOW  |  |                        |        | h <sub>5030</sub>   | May 27 | i <sub>73800</sub>      | Jun 18 1965 |
| INSTANTANEOUS PEAK STAGE |  |                        |        | 13.06               | May 27 | j <sub>16.48</sub>      | Jun 18 1965 |
| ANNUAL RUNOFF (AC-FT)    |  | 209500                 |        | 104200              |        | 79270                   |             |
| 10 PERCENT EXCEEDS       |  | 687                    |        | 466                 |        | 394                     |             |
| 50 PERCENT EXCEEDS       |  | 26                     |        | 48                  |        | 22                      |             |
| 90 PERCENT EXCEEDS       |  | 7.9                    |        | 10                  |        | 3.9                     |             |

e-Estimated.

a-Average discharge for 30 years (water years 1914-43), 298 ft<sup>3</sup>/s; 215900 acre-ft/yr, prior to and during construction of John Martin Dam.

b-Also occurred Jul 5, 1995.

c-Maximum daily discharge for period of record, 87300 ft<sup>3</sup>/s, Jun 6, 1921.

d-Also occurred Apr 16.

f-Also occurred Jan 12, 14.

g-Minimum daily discharge for period of record, no flow at times in 1913-15.

h-From rating curve extended above 3500 ft<sup>3</sup>/s.

i-Maximum discharge and stage for period of record, 130000 ft<sup>3</sup>/s, Jun 5, 1921, gage height, 14.55 ft, datum then in use, from rating curve extended above 10000 ft<sup>3</sup>/s.

j-Datum then in use, from floodmarks.

## 07134100 BIG SANDY CREEK NEAR LAMAR, CO

LOCATION.--Lat 38°06'51", long 102°29'00", in SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> 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 mi<sup>2</sup>.

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 ft<sup>3</sup>/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 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

| DAY   | OCT   | NOV   | DEC   | JAN  | FEB  | MAR    | APR   | MAY   | JUN  | JUL   | AUG  | SEP  |
|-------|-------|-------|-------|------|------|--------|-------|-------|------|-------|------|------|
| 1     | 11    | 7.2   | 8.4   | 51   | 33   | 33     | 9.2   | 8.4   | 15   | 15    | 33   | 21   |
| 2     | 3.4   | 7.2   | 8.6   | 45   | 38   | 37     | 11    | 10    | 12   | 16    | 29   | 18   |
| 3     | 4.2   | 7.2   | 8.6   | 41   | 31   | 37     | 8.1   | 8.7   | 11   | 12    | 26   | 16   |
| 4     | 3.1   | 7.3   | 8.7   | 43   | 43   | 37     | 8.1   | 9.1   | 10   | 18    | 28   | 15   |
| 5     | 2.6   | 7.6   | 8.6   | 50   | 41   | 39     | 8.7   | 8.2   | 11   | 12    | 20   | 14   |
| 6     | 3.3   | 8.8   | 8.8   | 43   | 51   | 37     | 13    | 13    | 14   | 11    | 18   | 13   |
| 7     | 7.8   | 8.0   | 8.8   | 32   | 55   | 33     | 17    | 9.0   | 13   | 17    | 17   | 13   |
| 8     | 13    | 8.0   | 8.8   | 44   | 53   | 49     | 14    | 8.6   | 12   | 11    | 17   | 12   |
| 9     | 11    | 8.4   | 8.4   | 55   | 56   | 44     | 12    | 12    | 11   | 12    | 25   | 11   |
| 10    | 8.3   | 8.5   | 8.4   | 54   | 57   | 42     | 20    | 16    | 11   | 13    | 27   | 11   |
| 11    | 3.0   | 8.5   | 8.4   | 45   | 49   | 40     | 29    | 20    | 11   | 9.9   | 25   | 10   |
| 12    | 2.9   | 9.2   | 8.6   | 42   | 47   | 39     | 22    | 18    | 10   | 10    | 26   | 10   |
| 13    | 1.9   | 9.1   | 8.6   | 42   | 44   | 38     | 23    | 17    | 50   | 22    | 24   | 14   |
| 14    | 3.5   | 9.2   | 8.7   | 42   | 45   | 47     | 20    | 17    | 28   | 51    | 40   | 13   |
| 15    | 4.3   | 11    | 9.0   | 42   | 45   | 80     | 20    | 19    | 27   | 106   | 271  | 23   |
| 16    | 3.8   | 11    | 9.1   | 42   | 42   | 67     | 20    | 21    | 107  | 65    | 320  | 24   |
| 17    | 11    | 9.2   | 9.4   | 42   | 41   | 53     | 19    | 12    | 41   | 26    | 291  | 18   |
| 18    | 14    | 8.6   | 9.8   | 27   | 43   | 44     | 16    | 13    | 18   | 27    | 234  | 15   |
| 19    | 15    | 8.5   | 9.4   | 29   | 42   | 39     | 18    | 11    | 14   | 42    | 154  | 15   |
| 20    | 16    | 8.5   | 18    | 41   | 43   | 61     | 12    | 16    | 13   | 35    | 333  | 14   |
| 21    | 15    | 8.5   | 34    | 50   | 42   | 26     | 13    | 12    | 12   | 28    | 243  | 13   |
| 22    | 15    | 8.6   | 44    | 45   | 41   | 16     | 13    | 11    | 12   | 29    | 82   | 12   |
| 23    | 13    | 9.0   | 45    | 42   | 35   | 11     | 15    | 14    | 22   | 26    | 31   | 11   |
| 24    | 13    | 9.3   | 43    | 40   | 33   | 13     | 21    | 18    | 19   | 17    | 26   | 11   |
| 25    | 7.6   | 8.7   | 48    | 41   | 29   | 14     | 20    | 25    | 13   | 17    | 22   | 11   |
| 26    | 6.8   | 8.8   | 49    | 34   | 29   | 13     | 17    | e112  | 14   | 20    | 21   | 11   |
| 27    | 7.5   | 8.3   | 47    | 31   | 27   | 12     | 13    | e110  | 13   | 27    | 21   | 11   |
| 28    | 7.1   | 8.1   | 47    | 43   | 29   | 9.2    | 12    | e75   | 12   | 23    | 19   | 11   |
| 29    | 6.9   | 8.3   | 49    | 45   | 31   | 10     | 11    | e50   | 13   | 21    | 17   | 10   |
| 30    | 7.0   | 8.4   | 46    | 37   | ---  | 10     | 9.5   | 24    | 18   | 57    | 25   | 56   |
| 31    | 7.2   | ---   | 51    | 28   | ---  | 8.9    | ---   | 19    | ---  | 44    | 27   | ---  |
| TOTAL | 249.2 | 257.0 | 688.1 | 1288 | 1195 | 1039.1 | 464.6 | 737.0 | 587  | 839.9 | 2492 | 457  |
| MEAN  | 8.04  | 8.57  | 22.2  | 41.5 | 41.2 | 33.5   | 15.5  | 23.8  | 19.6 | 27.1  | 80.4 | 15.2 |
| MAX   | 16    | 11    | 51    | 55   | 57   | 80     | 29    | 112   | 107  | 106   | 333  | 56   |
| MIN   | 1.9   | 7.2   | 8.4   | 27   | 27   | 8.9    | 8.1   | 8.2   | 10   | 9.9   | 17   | 10   |
| AC-FT | 494   | 510   | 1360  | 2550 | 2370 | 2060   | 922   | 1460  | 1160 | 1670  | 4940 | 906  |

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1968 - 1996, BY WATER YEAR (WY)

|      | 1968 | 1969 | 1970 | 1971 | 1972 | 1973 | 1974 | 1975 | 1976 | 1977 | 1978 | 1979 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 4.86 | 12.8 | 15.0 | 15.3 | 17.9 | 17.1 | 16.3 | 14.8 | 8.31 | 6.86 | 9.44 | 8.71 |
| MAX  | 10.7 | 43.8 | 45.1 | 41.5 | 48.0 | 48.8 | 65.3 | 41.1 | 19.6 | 27.1 | 80.4 | 41.8 |
| (WY) | 1971 | 1971 | 1970 | 1996 | 1971 | 1974 | 1970 | 1973 | 1996 | 1996 | 1996 | 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 WATER YEAR

## WATER YEARS 1968 - 1996

|                          |         |       |
|--------------------------|---------|-------|
| ANNUAL TOTAL             | 10293.9 |       |
| ANNUAL MEAN              | 28.1    | 12.4  |
| HIGHEST ANNUAL MEAN      |         | 28.1  |
| LOWEST ANNUAL MEAN       |         | 2.23  |
| HIGHEST DAILY MEAN       | 333     | 619   |
| LOWEST DAILY MEAN        | 1.9     | a.00  |
| ANNUAL SEVEN-DAY MINIMUM | 4.0     | .00   |
| INSTANTANEOUS PEAK FLOW  | 419     | b2520 |
| INSTANTANEOUS PEAK STAGE | c5.74   | 8.48  |
| ANNUAL RUNOFF (AC-FT)    | 20420   | 8990  |
| 10 PERCENT EXCEEDS       | 49      | 33    |
| 50 PERCENT EXCEEDS       | 17      | 6.5   |
| 90 PERCENT EXCEEDS       | 8.4     | .62   |

e-Estimated.

a-Also occurred Aug 14-18, 1976, and days during 1977, 1978, and 1979.

b-On basis of measurement of peak flow through culvert and over road.

c-Maximum stage, 8.18 ft, May 27, caused by backwater from Arkansas River.

**07134180 ARKANSAS RIVER NEAR GRANADA, CO**

LOCATION.--Lat 38°05'44", long 102°18'37", in SE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec.36, T.22 S., R.44 W., Prowers County, Hydrologic Unit 11020009, on left bank at upstream side 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 mi<sup>2</sup>.

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.--No estimated daily discharges. Records good. 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 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

| DAY   | OCT  | NOV  | DEC  | JAN  | FEB  | MAR  | APR   | MAY   | JUN   | JUL   | AUG   | SEP   |
|-------|------|------|------|------|------|------|-------|-------|-------|-------|-------|-------|
| 1     | 54   | 45   | 123  | 119  | 159  | 52   | 588   | 100   | 384   | 142   | 474   | 149   |
| 2     | 55   | 45   | 126  | 113  | 151  | 53   | 564   | 90    | 336   | 126   | 299   | 141   |
| 3     | 53   | 44   | 132  | 108  | 144  | 54   | 517   | 87    | 303   | 102   | 191   | 135   |
| 4     | 59   | 45   | 132  | 108  | 125  | 53   | 525   | 87    | 264   | 106   | 158   | 125   |
| 5     | 50   | 52   | 128  | 113  | 173  | 53   | 534   | 87    | 208   | 103   | 134   | 112   |
| 6     | 40   | 50   | 126  | 112  | 149  | 56   | 449   | 90    | 183   | 308   | 113   | 113   |
| 7     | 47   | 55   | 122  | 126  | 158  | 77   | 410   | 86    | 166   | 586   | 102   | 116   |
| 8     | 45   | 62   | 118  | 140  | 152  | 78   | 388   | 79    | 156   | 680   | 106   | 118   |
| 9     | 41   | 87   | 116  | 145  | 153  | 64   | 345   | 122   | 149   | 703   | 106   | 115   |
| 10    | 40   | 97   | 125  | 128  | 152  | 56   | 313   | 423   | 124   | 687   | 173   | 114   |
| 11    | 47   | 98   | 130  | 120  | 144  | 49   | 289   | 477   | 108   | 643   | 186   | 117   |
| 12    | 49   | 112  | 126  | 117  | 143  | 52   | 370   | 464   | 106   | 548   | 172   | 127   |
| 13    | 48   | 116  | 116  | 115  | 138  | 56   | 486   | 465   | 412   | 683   | 161   | 167   |
| 14    | 49   | 118  | 105  | 115  | 120  | 63   | 554   | 443   | 332   | 829   | 116   | 155   |
| 15    | 67   | 132  | 99   | 113  | 112  | 110  | 590   | 389   | 465   | 636   | 292   | 229   |
| 16    | 99   | 140  | 96   | 132  | 107  | 99   | 520   | 353   | 1070  | 434   | 449   | 252   |
| 17    | 102  | 138  | 95   | 141  | 106  | 80   | 345   | 350   | 793   | 538   | 359   | 217   |
| 18    | 71   | 140  | 95   | 102  | 107  | 71   | 224   | 462   | 404   | 697   | 287   | 214   |
| 19    | 46   | 139  | 92   | 128  | 107  | 62   | 184   | 548   | 475   | 662   | 177   | 214   |
| 20    | 44   | 137  | 90   | 137  | 109  | 59   | 151   | 592   | 640   | 590   | 507   | 505   |
| 21    | 42   | 134  | 99   | 148  | 108  | 63   | 159   | 547   | 710   | 535   | 481   | 311   |
| 22    | 42   | 130  | 108  | 150  | 109  | 53   | 179   | 498   | 708   | 513   | 331   | 262   |
| 23    | 43   | 130  | 111  | 143  | 107  | 54   | 178   | 503   | 650   | 521   | 209   | 235   |
| 24    | 43   | 131  | 112  | 141  | 102  | 56   | 175   | 512   | 363   | 522   | 172   | 202   |
| 25    | 43   | 130  | 114  | 143  | 99   | 64   | 182   | 612   | 231   | 523   | 161   | 176   |
| 26    | 43   | 129  | 118  | 132  | 96   | 78   | 170   | 1560  | 189   | 479   | 171   | 168   |
| 27    | 43   | 124  | 117  | 124  | 97   | 68   | 168   | 2900  | 155   | 368   | 172   | 158   |
| 28    | 43   | 123  | 115  | 136  | 96   | 60   | 112   | 1630  | 155   | 260   | 174   | 154   |
| 29    | 43   | 125  | 118  | 146  | 73   | 59   | 102   | 738   | 138   | 224   | 156   | 147   |
| 30    | 43   | 124  | 114  | 135  | ---  | 208  | 104   | 532   | 140   | 279   | 165   | 145   |
| 31    | 44   | ---  | 116  | 138  | ---  | 489  | ---   | 439   | ---   | 613   | 163   | ---   |
| TOTAL | 1578 | 3132 | 3534 | 3968 | 3596 | 2549 | 9875  | 16265 | 10517 | 14640 | 6917  | 5393  |
| MEAN  | 50.9 | 104  | 114  | 128  | 124  | 82.2 | 329   | 525   | 351   | 472   | 223   | 180   |
| MAX   | 102  | 140  | 132  | 150  | 173  | 489  | 590   | 2900  | 1070  | 829   | 507   | 505   |
| MIN   | 40   | 44   | 90   | 102  | 73   | 49   | 102   | 79    | 106   | 102   | 102   | 112   |
| AC-FT | 3130 | 6210 | 7010 | 7870 | 7130 | 5060 | 19590 | 32260 | 20860 | 29040 | 13720 | 10700 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1981 - 1996, BY WATER YEAR (WY)

|      | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 68.7 | 83.4 | 104  | 97.5 | 98.3 | 91.9 | 186  | 246  | 342  | 450  | 224  | 120  |      |      |      |      |
| MAX  | 184  | 149  | 157  | 134  | 143  | 249  | 1138 | 2072 | 2196 | 2144 | 607  | 430  |      |      |      |      |
| (WY) | 1984 | 1987 | 1988 | 1988 | 1988 | 1987 | 1987 | 1987 | 1995 | 1983 | 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 1995 CALENDAR YEAR | FOR 1996 WATER YEAR | WATER YEARS 1981 - 1996 |
|--------------------------|------------------------|---------------------|-------------------------|
| ANNUAL TOTAL             | 108142.4               | 81964               |                         |
| ANNUAL MEAN              | 296                    | 224                 | 183                     |
| HIGHEST ANNUAL MEAN      |                        |                     | 597                     |
| LOWEST ANNUAL MEAN       |                        |                     | 59.3                    |
| HIGHEST DAILY MEAN       | 2380                   | Jul 10              | 3330                    |
| LOWEST DAILY MEAN        | <sup>a</sup> 5.3       | May 5               | <sup>c</sup> 2.7        |
| ANNUAL SEVEN-DAY MINIMUM | 5.7                    | Apr 30              | 3.0                     |
| INSTANTANEOUS PEAK FLOW  |                        | 3190                | <sup>d</sup> 3460       |
| INSTANTANEOUS PEAK STAGE |                        | 12.38               | <sup>f</sup> 11.78      |
| ANNUAL RUNOFF (AC-FT)    | 214500                 | 162600              | 132300                  |
| 10 PERCENT EXCEEDS       | 862                    | 524                 | 455                     |
| 50 PERCENT EXCEEDS       | 97                     | 133                 | 89                      |
| 90 PERCENT EXCEEDS       | 7.1                    | 53                  | 6.6                     |

a-Also occurred May 16.  
b-Also occurred Oct 10.  
c-Also occurred Aug 18-19, 1990.  
d-From rating curve extended above 2700 ft<sup>3</sup>/s.  
f-Maximum gage height, 12.38 ft, May 27, 1996.

**07134990 WILD HORSE CREEK ABOVE HOLLY, CO**

LOCATION.--Lat 38°03'29", long 102°08'10", in SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec. 10, T.23 S., R.42 W., Prowers County, Hydrologic Unit 11020009 (revised), on left bank, 50 ft upstream from County Road No. 34, 0.60 mi northwest of Holly, and 0.80 mi upstream from mouth.

DRAINAGE AREA.--270 mi<sup>2</sup>, approximately.

PERIOD OF RECORD.--June 1995 to current year (seasonal record only).

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 3,405 ft above sea level, from topographic map.

REMARKS.--Records 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 ft<sup>3</sup>/s, May 26, 1996, gage height, 6.90 ft from flood mark, on basis of indirect determination of peak flow; minimum daily, 3.1 ft<sup>3</sup>/s, Sept. 19, 1995.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period of seasonal operation, 1,270 ft<sup>3</sup>/s, May 26, gage height, 6.90 ft from flood mark, on basis of indirect determination of peak flow; minimum daily, 4.7 ft<sup>3</sup>/s, June 12.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

| DAY   | OCT   | NOV | DEC | JAN | FEB | MAR | APR  | MAY    | JUN    | JUL    | AUG    | SEP  |
|-------|-------|-----|-----|-----|-----|-----|------|--------|--------|--------|--------|------|
| 1     | 35    | 35  | --- | --- | --- | --- | ---  | e8.5   | 14     | 36     | 33     | 20   |
| 2     | 29    | 31  | --- | --- | --- | --- | ---  | e8.5   | 13     | 12     | 23     | 14   |
| 3     | 19    | 23  | --- | --- | --- | --- | ---  | e15    | 13     | 8.0    | 14     | 15   |
| 4     | 16    | 19  | --- | --- | --- | --- | ---  | e9.0   | 10     | 5.6    | 6.7    | 14   |
| 5     | 15    | 18  | --- | --- | --- | --- | ---  | e8.5   | 8.4    | 5.8    | 8.6    | 11   |
| 6     | 19    | 20  | --- | --- | --- | --- | ---  | e9.0   | 9.4    | 15     | 39     | 16   |
| 7     | 20    | 22  | --- | --- | --- | --- | ---  | 35     | 12     | 10     | 16     | 103  |
| 8     | 17    | 17  | --- | --- | --- | --- | ---  | 43     | 20     | 12     | 6.0    | 63   |
| 9     | 17    | 15  | --- | --- | --- | --- | ---  | e12    | 16     | 11     | 8.6    | 18   |
| 10    | 16    | 10  | --- | --- | --- | --- | ---  | 25     | 7.0    | 15     | 215    | 15   |
| 11    | 12    | 10  | --- | --- | --- | --- | ---  | 85     | 5.2    | 46     | 34     | 13   |
| 12    | 7.6   | 10  | --- | --- | --- | --- | ---  | 76     | 4.7    | 21     | 11     | 12   |
| 13    | 18    | 9.4 | --- | --- | --- | --- | ---  | 84     | 5.0    | 8.9    | 15     | 11   |
| 14    | 20    | 12  | --- | --- | --- | --- | ---  | e40    | 101    | 131    | 29     | 11   |
| 15    | 18    | 24  | --- | --- | --- | --- | ---  | e8.5   | 95     | 34     | 72     | 12   |
| 16    | 19    | 29  | --- | --- | --- | --- | e8.6 | e8.4   | 96     | 24     | 131    | 15   |
| 17    | 29    | 24  | --- | --- | --- | --- | e12  | e9.0   | 87     | 92     | 37     | 13   |
| 18    | 25    | 23  | --- | --- | --- | --- | e14  | e8.2   | 42     | 65     | 14     | 36   |
| 19    | 23    | 23  | --- | --- | --- | --- | e10  | e8.6   | 29     | 113    | 29     | 49   |
| 20    | 22    | 21  | --- | --- | --- | --- | e17  | e20    | 20     | 42     | 162    | 13   |
| 21    | 24    | 21  | --- | --- | --- | --- | 134  | e12    | 10     | 42     | 47     | 15   |
| 22    | 24    | 22  | --- | --- | --- | --- | 146  | e6.0   | 18     | 55     | 8.8    | 17   |
| 23    | 25    | --- | --- | --- | --- | --- | e70  | 5.5    | 24     | 86     | 48     | 46   |
| 24    | 25    | --- | --- | --- | --- | --- | e10  | 29     | 19     | 172    | 37     | 22   |
| 25    | 28    | --- | --- | --- | --- | --- | e8.5 | 184    | 287    | 61     | 17     | 18   |
| 26    | 37    | --- | --- | --- | --- | --- | e9.0 | 499    | 115    | 169    | 27     | 25   |
| 27    | 46    | --- | --- | --- | --- | --- | e9.0 | 406    | 10     | 133    | 38     | 23   |
| 28    | 46    | --- | --- | --- | --- | --- | e10  | 189    | 18     | 143    | 12     | 20   |
| 29    | 47    | --- | --- | --- | --- | --- | e11  | 94     | 104    | 143    | 15     | 18   |
| 30    | 47    | --- | --- | --- | --- | --- | e9.0 | 20     | 55     | 194    | 69     | 17   |
| 31    | 40    | --- | --- | --- | --- | --- | ---  | 15     | ---    | 89     | 67     | ---  |
| TOTAL | 785.6 | --- | --- | --- | --- | --- | ---  | 1980.7 | 1267.7 | 1994.3 | 1289.7 | 695  |
| MEAN  | 25.3  | --- | --- | --- | --- | --- | ---  | 63.9   | 42.3   | 64.3   | 41.6   | 23.2 |
| MAX   | 47    | --- | --- | --- | --- | --- | ---  | 499    | 287    | 194    | 215    | 103  |
| MIN   | 7.6   | --- | --- | --- | --- | --- | ---  | 5.5    | 4.7    | 5.6    | 6.0    | 11   |
| AC-FT | 1560  | --- | --- | --- | --- | --- | ---  | 3930   | 2510   | 3960   | 2560   | 1380 |

e-Estimated.

**07135000 TWO BUTTE CREEK NEAR HOLLY, CO**

LOCATION.--Lat 38°01'40", long 102°08'19", in SE<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec. 21, T.23 S., R.42 W., Prowers County, Hydrologic Unit 11020013 (revised), on right bank 15 ft upstream from county road DD, about 1 mi upstream from mouth, and 2.9 mi southwest of Holly.

DRAINAGE AREA.--817 mi<sup>2</sup>.

PERIOD OF RECORD.--April 1942 to September 1946. June 1995 to current year (seasonal record only).

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 3,415 ft above sea level, from topographic map.

REMARKS.--No estimated daily discharges. 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 during period of seasonal operation, 756 ft<sup>3</sup>/s, May 26, 1996, gage height, 8.68 ft, result of slope-area determination of peak flow; no flow, most of the time.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period of seasonal operation, 756 ft<sup>3</sup>/s, May 26, gage height, 8.68 ft, result of slope-area determination of peak flow; no flow, most of the time.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
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  | .05  | .00  | .00  |
| 6     | .00  | .00 | --- | --- | --- | --- | .00  | .00    | .00  | .00  | .00  | .00  |
| 7     | .00  | .00 | --- | --- | --- | --- | .00  | .00    | .00  | .00  | .00  | .00  |
| 8     | .00  | .00 | --- | --- | --- | --- | .00  | .00    | .00  | .00  | .00  | .00  |
| 9     | .00  | .00 | --- | --- | --- | --- | .00  | .00    | .00  | .00  | .00  | .00  |
| 10    | .00  | .00 | --- | --- | --- | --- | .00  | .00    | .00  | .00  | .04  | .00  |
| 11    | .00  | .00 | --- | --- | --- | --- | .00  | .00    | .00  | .00  | .00  | .00  |
| 12    | .00  | .00 | --- | --- | --- | --- | .00  | .00    | .00  | .00  | .00  | .00  |
| 13    | .00  | .00 | --- | --- | --- | --- | .00  | .00    | .00  | .00  | .00  | .00  |
| 14    | .00  | .00 | --- | --- | --- | --- | .00  | .00    | .00  | .00  | .00  | .00  |
| 15    | .00  | .00 | --- | --- | --- | --- | .00  | .00    | .00  | .00  | .08  | .00  |
| 16    | .00  | .00 | --- | --- | --- | --- | .00  | .00    | .00  | .00  | .03  | .00  |
| 17    | .00  | .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    | .00  | .00  | .35  | .00  |
| 21    | .00  | .00 | --- | --- | --- | .00 | .00  | .00    | .00  | .00  | .00  | .00  |
| 22    | .00  | .00 | --- | --- | --- | .00 | .00  | .00    | .00  | .00  | .00  | .00  |
| 23    | .00  | --- | --- | --- | --- | .00 | .00  | .00    | .00  | .31  | .00  | .00  |
| 24    | .00  | --- | --- | --- | --- | .00 | .00  | .00    | .00  | .06  | .00  | .00  |
| 25    | .00  | --- | --- | --- | --- | .00 | .00  | .82    | .39  | .00  | .30  | .00  |
| 26    | .00  | --- | --- | --- | --- | .00 | .00  | 302    | .00  | .00  | .01  | .00  |
| 27    | .00  | --- | --- | --- | --- | .00 | .00  | 38     | .00  | .00  | .00  | .00  |
| 28    | .00  | --- | --- | --- | --- | .00 | .00  | 2.1    | .00  | .00  | .00  | .00  |
| 29    | .00  | --- | --- | --- | --- | .00 | .00  | .00    | .00  | .00  | .00  | .00  |
| 30    | .00  | --- | --- | --- | --- | .00 | .00  | .00    | .00  | .00  | .01  | .00  |
| 31    | .00  | --- | --- | --- | --- | .00 | ---  | .00    | ---  | .00  | .00  | ---  |
| TOTAL | 0.00 | --- | --- | --- | --- | --- | 0.00 | 342.92 | 0.39 | 0.42 | 0.82 | 0.00 |
| MEAN  | .000 | --- | --- | --- | --- | --- | .000 | 11.1   | .013 | .014 | .026 | .000 |
| MAX   | .00  | --- | --- | --- | --- | --- | .00  | 302    | .39  | .31  | .35  | .00  |
| MIN   | .00  | --- | --- | --- | --- | --- | .00  | .00    | .00  | .00  | .00  | .00  |
| AC-FT | .00  | --- | --- | --- | --- | --- | .00  | 680    | .8   | .8   | 1.6  | .00  |

**07137000 FRONTIER DITCH NEAR COOLIDGE, KS**

LOCATION.--Lat 38°02'18", long 102°02'19", in SW<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec.21, T.23 S., R.43 W., Hamilton County, Hydrologic Unit 11030001, on left bank 0.3 mi east of Colorado-Kansas State line, 0.5 mi downstream from Holly drain diversion, 1.5 mi west of Coolidge, and 2.3 mi downstream from diversion of the Arkansas River.

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

REVISED RECORDS.--WSP 1731: 1951.

GAGE.--Water-stage recorders and Parshall flume. Datum of gage is 3,343.14 ft above sea level.

REMARKS.--Records good. This ditch diverts water from the Arkansas River in Colorado for use in Kansas. These records and records for the Arkansas River near Coolidge represent total flow of the Arkansas River at the Colorado-Kansas State line. Satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 84 ft<sup>3</sup>/s, Aug. 1, 1975; no flow many days each year.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

| DAY         | OCT   | NOV     | DEC  | JAN  | FEB  | MAR  | APR  | MAY  | JUN   | JUL   | AUG  | SEP  |
|-------------|-------|---------|------|------|------|------|------|------|-------|-------|------|------|
| 1           | .16   | 34      | 20   | .00  | .00  | .00  | .00  | 36   | .00   | 30    | .00  | .00  |
| 2           | .00   | 33      | 1.0  | .00  | .00  | .00  | .00  | 35   | .00   | 28    | .00  | .00  |
| 3           | .00   | 34      | 3.3  | .00  | .00  | .00  | 30   | 34   | .00   | 21    | .00  | .00  |
| 4           | .00   | 35      | 25   | .00  | .00  | .00  | 36   | 13   | .00   | 27    | .00  | .00  |
| 5           | .00   | 35      | 26   | .00  | .00  | .00  | 36   | 2.9  | .00   | 26    | .00  | .00  |
| 6           | .00   | 37      | 23   | .00  | .00  | .00  | 36   | 37   | .00   | 45    | .00  | .00  |
| 7           | 12    | 37      | 21   | .00  | .00  | .00  | 37   | 38   | .00   | 48    | .00  | .00  |
| 8           | 30    | 37      | 19   | .00  | .00  | .00  | 36   | 37   | .00   | 29    | .00  | .00  |
| 9           | 32    | 33      | e19  | .00  | .00  | .00  | 36   | 35   | .00   | 28    | .00  | .00  |
| 10          | 38    | 33      | e21  | .00  | .00  | .00  | 39   | 39   | .00   | 29    | .00  | .00  |
| 11          | 38    | 32      | 24   | .00  | .00  | .00  | 39   | 36   | 1.9   | 27    | .00  | .00  |
| 12          | 38    | 36      | 25   | .00  | .00  | .00  | 38   | 29   | 24    | 21    | .00  | .00  |
| 13          | 40    | 38      | 24   | .00  | .00  | .00  | 38   | 20   | 33    | 22    | 7.8  | .00  |
| 14          | 40    | 29      | 23   | .00  | .00  | .00  | 37   | 12   | 37    | 5.3   | 35   | .00  |
| 15          | 40    | 8.2     | 22   | .00  | .00  | .00  | 39   | 16   | 33    | .17   | 40   | .00  |
| 16          | 41    | 37      | 21   | .00  | .00  | .00  | 39   | 21   | 35    | .00   | 35   | .00  |
| 17          | 37    | 33      | 20   | .00  | .00  | .00  | 41   | 23   | 29    | 3.1   | 32   | .00  |
| 18          | 40    | 32      | 18   | e.00 | .00  | .00  | 39   | 25   | 20    | 24    | 33   | .00  |
| 19          | 40    | 32      | 19   | e.00 | .00  | .00  | 39   | 31   | 32    | 12    | 33   | .00  |
| 20          | 35    | 34      | 18   | e.00 | .00  | .00  | 39   | 18   | 34    | 12    | 19   | .00  |
| 21          | 37    | 34      | 18   | e.00 | .00  | .00  | 39   | 11   | 34    | 14    | .24  | .00  |
| 22          | 29    | 36      | 13   | e.00 | .00  | .00  | 39   | .01  | 22    | 23    | .00  | .00  |
| 23          | .06   | 35      | 1.1  | e.00 | .00  | .00  | 39   | .00  | .14   | 23    | .00  | .00  |
| 24          | .00   | 37      | .78  | e.00 | .00  | .00  | 40   | .00  | .00   | 24    | .00  | .00  |
| 25          | .00   | 38      | .53  | e.00 | .00  | .00  | 40   | .79  | .00   | 12    | .00  | .00  |
| 26          | .00   | 35      | .33  | .00  | .00  | .00  | 39   | 1.0  | .00   | 25    | .00  | .00  |
| 27          | .00   | 34      | .05  | .00  | .00  | .00  | 39   | 2.0  | .00   | 24    | .00  | .00  |
| 28          | .00   | 32      | .00  | e.00 | .00  | .00  | 38   | 3.7  | .00   | .57   | .00  | .00  |
| 29          | .00   | 22      | .00  | e.00 | .00  | .00  | 38   | .03  | .00   | .03   | .00  | .00  |
| 30          | 6.4   | 9.2     | .00  | .00  | ---  | .00  | 38   | .00  | 2.5   | .00   | .00  | .00  |
| 31          | 34    | ---     | .00  | .00  | ---  | .00  | ---  | .00  | ---   | .00   | .00  | ---  |
| MEAN        | 19.6  | 32.4    | 13.7 | .000 | .000 | .000 | 35.4 | 17.9 | 11.3  | 18.8  | 7.58 | .000 |
| MAX         | 41    | 38      | 26   | .00  | .00  | .00  | 41   | 39   | 37    | 48    | 40   | .00  |
| MIN         | .00   | 8.2     | .00  | .00  | .00  | .00  | .00  | .00  | .00   | .00   | .00  | .00  |
| AC-FT       | 1210  | 1930    | 845  | .00  | .00  | .00  | 2110 | 1100 | 670   | 1160  | 466  | .00  |
| CAL YR 1995 | TOTAL | 5305.91 | MEAN | 14.5 | MAX  | 51   | MIN  | .00  | AC-FT | 10520 |      |      |
| WTR YR 1996 | TOTAL | 4780.29 | MEAN | 13.1 | MAX  | 48   | MIN  | .00  | AC-FT | 9480  |      |      |

e-Estimated.









**08220000 RIO GRANDE NEAR DEL NORTE, CO**

LOCATION.--Lat 37°41'22", long 106°27'38", in NW<sup>1</sup>/<sub>4</sub> 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 mi<sup>2</sup>, approximately.

**WATER-DISCHARGE RECORDS**

PERIOD OF RECORD.--June 1889 to current year. Monthly discharge only for some periods, published in WSP 1312.

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, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

| DAY   | OCT   | NOV   | DEC   | JAN   | FEB   | MAR   | APR   | MAY    | JUN   | JUL   | AUG   | SEP   |
|-------|-------|-------|-------|-------|-------|-------|-------|--------|-------|-------|-------|-------|
| 1     | 718   | 304   | 219   | e160  | e190  | 191   | 231   | 1060   | 1780  | 819   | 241   | 205   |
| 2     | 688   | 291   | 217   | e150  | e170  | 200   | 284   | 1200   | 1640  | 751   | 221   | 205   |
| 3     | 672   | 229   | 206   | e150  | e160  | 203   | 378   | 1470   | 1690  | 701   | 235   | 213   |
| 4     | 615   | 219   | 214   | e170  | e150  | 215   | 357   | 1770   | 1720  | 666   | 242   | 212   |
| 5     | 567   | 226   | 228   | e170  | e170  | 225   | 331   | 2180   | 1780  | 650   | 239   | 211   |
| 6     | 538   | 236   | 238   | e150  | e190  | 217   | 320   | 2510   | 1710  | 627   | 223   | 206   |
| 7     | 529   | 242   | 211   | e160  | e200  | 191   | 340   | 2610   | 1650  | 588   | 219   | 206   |
| 8     | 511   | 246   | 209   | e160  | e220  | 205   | 384   | 2720   | 1540  | 561   | 217   | 206   |
| 9     | 503   | 241   | 185   | e180  | e220  | 212   | 516   | 2730   | 1520  | 615   | 231   | 195   |
| 10    | 465   | 265   | 178   | e170  | e220  | 231   | 705   | 2440   | 1440  | 600   | 230   | 187   |
| 11    | 419   | 212   | e186  | e160  | e210  | 243   | 766   | 2460   | 1350  | 525   | 215   | 178   |
| 12    | 390   | 254   | 209   | e160  | e200  | 261   | 695   | 2810   | 1310  | 484   | 200   | 200   |
| 13    | 365   | 287   | 247   | e170  | e210  | 259   | 680   | 3130   | 1290  | 472   | 193   | 269   |
| 14    | 355   | 267   | 227   | e170  | e220  | 223   | 545   | 3130   | 1310  | 430   | 180   | 269   |
| 15    | 350   | 249   | 179   | e170  | e210  | 228   | 434   | 3090   | 1410  | 393   | 170   | 346   |
| 16    | 348   | 243   | 150   | e180  | e210  | 221   | 395   | 3210   | 1460  | 375   | 168   | 348   |
| 17    | 343   | 241   | 193   | e180  | e220  | 216   | 390   | 3380   | 1320  | 424   | 167   | 331   |
| 18    | 335   | 230   | 175   | e160  | e235  | 195   | 401   | 3180   | 1170  | 431   | 170   | 338   |
| 19    | 329   | 227   | 161   | e160  | e230  | 190   | 404   | 3010   | 1080  | 398   | 165   | 359   |
| 20    | 315   | 230   | 146   | e170  | 241   | 203   | 393   | 2880   | 1060  | 360   | 162   | 318   |
| 21    | 312   | 226   | e150  | e150  | 260   | 218   | 384   | 2700   | 966   | 342   | 168   | 299   |
| 22    | 320   | 223   | e140  | e170  | 264   | 231   | 351   | 2420   | 1140  | 318   | e189  | 296   |
| 23    | 296   | 225   | e130  | e160  | 225   | 243   | 349   | 2360   | 1140  | 292   | 202   | 286   |
| 24    | 292   | 200   | e130  | e160  | 209   | 226   | 449   | 1920   | 1210  | 268   | 271   | 273   |
| 25    | 312   | 205   | e130  | e180  | 224   | 200   | 710   | 1690   | 1310  | 254   | 302   | 269   |
| 26    | 319   | 231   | e150  | e150  | 217   | 202   | 1090  | 1470   | 1200  | 261   | 294   | 269   |
| 27    | 330   | 212   | e150  | e140  | 185   | 198   | 1360  | 1450   | 1240  | 244   | 302   | 271   |
| 28    | 312   | 147   | e150  | e180  | e175  | 208   | 1460  | 1680   | 1320  | 238   | 321   | 275   |
| 29    | 319   | 158   | e180  | e200  | e185  | 224   | 1100  | 1570   | 1180  | 246   | 287   | 269   |
| 30    | 324   | 227   | e180  | e200  | ---   | 218   | 1030  | 1510   | 949   | 285   | 257   | 260   |
| 31    | 329   | ---   | e180  | e210  | ---   | 217   | ---   | 1610   | ---   | 262   | 227   | ---   |
| TOTAL | 12820 | 6993  | 5648  | 5200  | 6020  | 6714  | 17232 | 71350  | 40885 | 13880 | 6908  | 7769  |
| MEAN  | 414   | 233   | 182   | 168   | 208   | 217   | 574   | 2302   | 1363  | 448   | 223   | 259   |
| MAX   | 718   | 304   | 247   | 210   | 264   | 261   | 1460  | 3380   | 1780  | 819   | 321   | 359   |
| MIN   | 292   | 147   | 130   | 140   | 150   | 190   | 231   | 1060   | 949   | 238   | 162   | 178   |
| AC-FT | 25430 | 13870 | 11200 | 10310 | 11940 | 13320 | 34180 | 141500 | 81100 | 27530 | 13700 | 15410 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1890 - 1996, BY WATER YEAR (WY)

|      | 1890 | 1900 | 1910 | 1920 | 1930 | 1940 | 1950 | 1960 | 1970 | 1980 | 1990 |      |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 481  | 285  | 206  | 189  | 197  | 271  | 770  | 2504 | 3158 | 1435 | 788  | 506  |
| 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 1995 CALENDAR YEAR | FOR 1996 WATER YEAR | WATER YEARS 1890 - 1996 |
|--------------------------|------------------------|---------------------|-------------------------|
| ANNUAL TOTAL             | 419169                 | 201419              |                         |
| ANNUAL MEAN              | 1148                   | 550                 | 904                     |
| HIGHEST ANNUAL MEAN      |                        |                     | 1482                    |
| LOWEST ANNUAL MEAN       |                        |                     | 311                     |
| HIGHEST DAILY MEAN       | 6370                   | Jun 18              | 3380 May 17             |
| LOWEST DAILY MEAN        | a, e130                | Dec 23              | a, e130 Dec 23          |
| ANNUAL SEVEN-DAY MINIMUM | 139                    | Dec 20              | 139 Dec 20              |
| INSTANTANEOUS PEAK FLOW  |                        |                     | 3760 May 17             |
| INSTANTANEOUS PEAK STAGE |                        | 3.72                | May 17                  |
| ANNUAL RUNOFF (AC-FT)    | 831400                 | 399500              | 655200                  |
| 10 PERCENT EXCEEDS       | 3930                   | 1470                | 2460                    |
| 50 PERCENT EXCEEDS       | 494                    | 254                 | 365                     |
| 90 PERCENT EXCEEDS       | 180                    | 170                 | 165                     |

e-Estimated.

a-Also occurred Dec 24-25.

b-From rating curve extended above 12900 ft<sup>3</sup>/s.

**08220000 RIO GRANDE NEAR DEL NORTE, CO--Continued**  
**(Rio Grande National Water-Quality Assessment Program station)**

**WATER-QUALITY RECORDS**

PERIOD OF RECORD.--April 1993 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DATE      | TIME   | DIS-CHARGE, INST. CUBIC FEET PER SECOND         | SPE-CIFIC CON-DUCT-ANCE (US/CM)                 | PH WATER WHOLE FIELD (STAND-ARD UNITS)    | TEMPER-ATURE AIR (DEG C)                    | TEMPER-ATURE WATER (DEG C)                | BARO-METRIC PRES-SURE (MM OF HG)           | OXYGEN, DIS-SOLVED (MG/L)                       | OXYGEN, SATUR-ATION                                  | HARD-NESS TOTAL (MG/L AS CACO3)     | CALCIUM DIS-SOLVED (MG/L AS CA)            | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) |
|-----------|--------|---|---|---|---|---|--|---|--|-------------------------------------|--|-------------------------------------|
| JUL 15... | 1330   | 351   | 82  | 7.7                                       | 23.5  | 19.0                                      | 571  | 7.5   | 109  | 31                                  | 9.9  | 1.5                                 |
| DATE      |        | SODIUM, DIS-SOLVED (MG/L AS NA)                 | SODIUM RATIO                                    | POTAS-SIUM, DIS-SOLVED (MG/L AS K)        | BICAR-a BONATE WATER FIELD (MG/L AS HCO3)   | CAR-b BONATE WATER FIELD (MG/L AS CO3)    | ALKA-c LINITY TOT IT FIELD (MG/L AS CACO3) | SULFATE DIS-SOLVED (MG/L AS SO4)                | CHLO-RIDE, DIS-SOLVED (MG/L AS CL)                   | FLUO-RIDE, DIS-SOLVED (MG/L AS F)   | SILICA, DIS-SOLVED (MG/L AS SIO2)          |                                     |
| JUL 15... | 3.5    | 19  | 0.3   | 1.7                                       | 37  | 0   | 30   | 5.3   | 0.60   | 0.10                                | 21   |                                     |
| DATE      |        | SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) | SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) | NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) | NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)        | NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) | NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N)  | NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) | NITRO-GEN, AM-MONIA + ORGANIC DIS-SOLVED (MG/L AS N) | PHOS-PHORUS TOTAL (MG/L AS P)       | PHOS-PHORUS DIS-SOLVED (MG/L AS P)         |                                     |
| JUL 15... | 72     | 62  | 0.10  | 0.010                                     | 0.080                                       | 0.080                                     | 0.030                                      | <0.20   | <0.20  | 0.040                               | 0.030                                      |                                     |
| DATE      |        | PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P)       | IRON, DIS-SOLVED (UG/L AS FE)                   | MANGA-NESE, DIS-SOLVED (UG/L AS MN)       | CARBON, ORGANIC TOTAL (MG/L AS C)           | CARBON, ORGANIC DIS-SOLVED (MG/L AS C)    | PROP-CHLOR, WATER, DISS, REC (UG/L)        | BUTYL-ATE, WATER, DISS, REC (UG/L)              | SI-MAZINE, WATER, DISS, REC (UG/L)                   | PRO-METON, WATER, DISS, REC (UG/L)  | DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) | CYANA-ZINE, WATER, DISS, REC (UG/L) |
| JUL 15... | 0.040  | 75  | 11  | 2.6                                       | 1.8   | <0.007                                    | <0.002                                     | <0.005  | <0.018   | <0.002                              | <0.004                                     |                                     |
| DATE      |        | FONOFOS WATER DISS REC (UG/L)                   | ALPHA BHC DIS-SOLVED (UG/L)                     | P, P' DDE DISSOLV (UG/L)                  | CHLOR-PYRIFOS DIS-SOLVED (UG/L)             | LINDANE DIS-SOLVED (UG/L)                 | DI-ELDRIN WATER DISSOLV (UG/L)             | METO-LACHLOR WATER DISSOLV (UG/L)               | MALA-THION, DIS-SOLVED (UG/L)                        | PARA-THION, DIS-SOLVED (UG/L)       | DI-AZINON, DIS-SOLVED (UG/L)               | ATRA-ZINE, WATER, DISS, REC (UG/L)  |
| JUL 15... | <0.003 | <0.002  | <0.006  | <0.004                                    | <0.004                                      | <0.001                                    | <0.002                                     | <0.005  | <0.004   | <0.002                              | <0.001                                     |                                     |
| DATE      |        | ALA-CHLOR, WATER, DISS, REC (UG/L)              | ACETO-CHLOR, WATER FLTRD REC (UG/L)             | METRI-BUZIN SENCOR WATER DISSOLV (UG/L)   | 2,6-DI-ETHYL ANILINE WAT FLT GF, REC (UG/L) | TRI-FLUR-ALIN WAT FLT GF, REC (UG/L)      | ETHAL-FLUR-ALIN WAT FLT GF, REC (UG/L)     | PHORATE WATER FLTRD GF, REC (UG/L)              | TER-BACIL WATER FLTRD GF, REC (UG/L)                 | LIN-URON WATER FLTRD GF, REC (UG/L) | METHYL PARA-THION WAT FLT GF, REC (UG/L)   |                                     |
| JUL 15... | <0.002 | <0.002  | <0.004  | <0.003                                    | <0.002                                      | <0.004                                    | <0.002                                     | <0.002  | <0.007   | <0.002                              | <0.006                                     |                                     |

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

**08220000 RIO GRANDE NEAR DEL NORTE, CO--Continued  
(Rio Grande National Water-Quality Assessment Program station)**

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DATE         | EPTC<br>WATER<br>FLTRD<br>0.7 U<br>GF, REC<br>(UG/L)           | PEB-<br>ULATE<br>WATER<br>FILTRD<br>0.7 U<br>GF, REC<br>(UG/L) | TEBU-<br>THIURON<br>WATER<br>FLTRD<br>0.7 U<br>GF, REC<br>(UG/L) | MOL-<br>INATE<br>WATER<br>FLTRD<br>0.7 U<br>GF, REC<br>(UG/L)    | ETHO-<br>PROP<br>WATER<br>FLTRD<br>0.7 U<br>GF, REC<br>(UG/L) | BEN-<br>FLUR-<br>ALIN<br>WAT FLD<br>0.7 U<br>GF, REC<br>(UG/L)   | CARBO-<br>FURAN<br>WATER<br>FLTRD<br>0.7 U<br>GF, REC<br>(UG/L)  | TER-<br>BUFOS<br>WATER<br>FLTRD<br>0.7 U<br>GF, REC<br>(UG/L)   | PRON-<br>AMIDE<br>WATER<br>FLTRD<br>0.7 U<br>GF, REC<br>(UG/L)   | DISUL-<br>FOTON<br>WATER<br>FLTRD<br>0.7 U<br>GF, REC<br>(UG/L) |
|--------------|--|--|--|--|---|--|--|---|--|---|
| JUL<br>15... | <0.002   | <0.004   | <0.010   | <0.004   | <0.003  | <0.002   | <0.003   | <0.013  | <0.003   | <0.017  |
| DATE         | TRIAL-<br>LATE<br>WATER<br>FLTRD<br>0.7 U<br>GF, REC<br>(UG/L) | PRO-<br>PANIL<br>WATER<br>FLTRD<br>0.7 U<br>GF, REC<br>(UG/L)  | CAR-<br>BARYL<br>WATER<br>FLTRD<br>0.7 U<br>GF, REC<br>(UG/L)    | THIO-<br>BENCARB<br>WATER<br>FLTRD<br>0.7 U<br>GF, REC<br>(UG/L) | DCPA<br>WATER<br>FLTRD<br>0.7 U<br>GF, REC<br>(UG/L)          | PENDI-<br>METH-<br>ALIN<br>WAT FLT<br>0.7 U<br>GF, REC<br>(UG/L) | NAPROP-<br>AMIDE<br>WATER<br>FLTRD<br>0.7 U<br>GF, REC<br>(UG/L) | PRO-<br>PARGITE<br>WATER<br>FLTRD<br>0.7 U<br>GF, REC<br>(UG/L) | METHYL<br>AZIN-<br>PHOS<br>WAT FLT<br>0.7 U<br>GF, REC<br>(UG/L) | PER-<br>METHRIN<br>CIS<br>WAT FLT<br>0.7 U<br>GF, REC<br>(UG/L) |
| JUL<br>15... | <0.001   | <0.004   | <0.003   | <0.002   | <0.002  | <0.004   | <0.003   | <0.013  | <0.001   | <0.005  |



**08235250 ALAMOSA RIVER ABOVE WIGHTMAN FORK NEAR JASPER, CO**

LOCATION.--Lat 37°24'09", long 106°31'17", in SE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec.35, T.37 N., R.4 E., Rio Grande County, Hydrologic Unit 13010001, 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 mi<sup>2</sup>.

**WATER-DISCHARGE RECORDS**

PERIOD OF RECORD.--July 1995 to current year (seasonal record).

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 9,380 ft above sea level, from topographic map.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge during period of seasonal operation, 529 ft<sup>3</sup>/s, May 16, 1996, gage height, 4.74 ft; minimum daily, 6.7 ft<sup>3</sup>/s, Aug. 19-20, 1996.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period of seasonal operation, 529 ft<sup>3</sup>/s, May 16, gage height, 4.74 ft; minimum daily, 6.7 ft<sup>3</sup>/s, Aug. 19-20.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

| DAY   | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY   | JUN  | JUL  | AUG   | SEP   |
|-------|-----|-----|-----|-----|-----|-----|-----|-------|------|------|-------|-------|
| 1     | 48  | --- | --- | --- | --- | --- | --- | 121   | 88   | 42   | 15    | 9.9   |
| 2     | 42  | --- | --- | --- | --- | --- | --- | 156   | 89   | 30   | 14    | 9.3   |
| 3     | 39  | --- | --- | --- | --- | --- | --- | 190   | 88   | 27   | 15    | 8.9   |
| 4     | 36  | --- | --- | --- | --- | --- | --- | 216   | 87   | 30   | 15    | 8.1   |
| 5     | 32  | --- | --- | --- | --- | --- | --- | 243   | 92   | 30   | 14    | 7.9   |
| 6     | 31  | --- | --- | --- | --- | --- | --- | 265   | 92   | 27   | 12    | 8.3   |
| 7     | 30  | --- | --- | --- | --- | --- | --- | 269   | 89   | 25   | 10    | 8.1   |
| 8     | 28  | --- | --- | --- | --- | --- | --- | 271   | 83   | 45   | 11    | 7.9   |
| 9     | 27  | --- | --- | --- | --- | --- | --- | 303   | 72   | 81   | 11    | 7.3   |
| 10    | 26  | --- | --- | --- | --- | --- | 36  | 309   | 65   | 64   | 11    | 7.1   |
| 11    | 25  | --- | --- | --- | --- | --- | 35  | 345   | 67   | 48   | 9.0   | 7.0   |
| 12    | e24 | --- | --- | --- | --- | --- | 35  | 352   | 63   | 54   | 8.3   | 8.4   |
| 13    | --- | --- | --- | --- | --- | --- | 36  | 340   | 61   | 50   | 8.0   | 8.1   |
| 14    | --- | --- | --- | --- | --- | --- | 30  | 353   | 63   | 39   | 7.7   | 11    |
| 15    | --- | --- | --- | --- | --- | --- | 27  | 348   | 65   | 34   | 7.7   | 13    |
| 16    | --- | --- | --- | --- | --- | --- | 27  | 369   | 56   | 32   | 7.8   | 10    |
| 17    | --- | --- | --- | --- | --- | --- | 26  | 349   | 52   | 50   | 7.4   | 11    |
| 18    | --- | --- | --- | --- | --- | --- | 24  | 317   | 48   | 50   | 7.0   | 13    |
| 19    | --- | --- | --- | --- | --- | --- | 22  | 298   | 44   | 40   | 6.7   | 13    |
| 20    | --- | --- | --- | --- | --- | --- | 22  | 274   | 42   | 33   | 6.7   | 14    |
| 21    | --- | --- | --- | --- | --- | --- | 22  | 235   | 43   | 29   | 10    | 14    |
| 22    | --- | --- | --- | --- | --- | --- | 27  | 205   | 54   | 25   | 13    | 14    |
| 23    | --- | --- | --- | --- | --- | --- | 39  | 174   | 41   | 22   | 14    | 13    |
| 24    | --- | --- | --- | --- | --- | --- | 63  | 135   | 36   | 20   | 12    | 12    |
| 25    | --- | --- | --- | --- | --- | --- | 93  | 110   | 33   | 21   | 11    | 12    |
| 26    | --- | --- | --- | --- | --- | --- | 131 | 96    | 39   | 19   | 9.8   | 11    |
| 27    | --- | --- | --- | --- | --- | --- | 173 | 81    | 48   | 18   | 16    | 9.3   |
| 28    | --- | --- | --- | --- | --- | --- | 149 | 78    | 49   | 24   | 15    | 9.7   |
| 29    | --- | --- | --- | --- | --- | --- | 97  | 73    | 41   | 24   | 14    | 9.4   |
| 30    | --- | --- | --- | --- | --- | --- | 94  | 81    | 42   | 19   | 15    | 9.1   |
| 31    | --- | --- | --- | --- | --- | --- | --- | 85    | ---  | 16   | 11    | ---   |
| TOTAL | --- | --- | --- | --- | --- | --- | --- | 7041  | 1832 | 1068 | 345.1 | 304.8 |
| MEAN  | --- | --- | --- | --- | --- | --- | --- | 227   | 61.1 | 34.5 | 11.1  | 10.2  |
| MAX   | --- | --- | --- | --- | --- | --- | --- | 369   | 92   | 81   | 16    | 14    |
| MIN   | --- | --- | --- | --- | --- | --- | --- | 73    | 33   | 16   | 6.7   | 7.0   |
| AC-FT | --- | --- | --- | --- | --- | --- | --- | 13970 | 3630 | 2120 | 685   | 605   |

e-Estimated.



08235250 ALAMOSA RIVER ABOVE WIGHTMAN FORK NEAR JASPER, CO--Continued

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM @ 25 DEG. C), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DAY   | MAX | MIN  | MEAN | MAX | MIN  | MEAN | MAX | MIN    | MEAN | MAX | MIN       | MEAN |          |
|-------|-----|------|------|-----|------|------|-----|--------|------|-----|-----------|------|----------|
|       |     |      |      |     |      |      |     |        |      |     |           |      | FEBRUARY |
| 1     | --- | ---  | ---  | --- | ---  | ---  | --- | ---    | ---  | 104 | 86        | 97   |          |
| 2     | --- | ---  | ---  | --- | ---  | ---  | --- | ---    | ---  | 93  | 75        | 86   |          |
| 3     | --- | ---  | ---  | --- | ---  | ---  | --- | ---    | ---  | 83  | 65        | 76   |          |
| 4     | --- | ---  | ---  | --- | ---  | ---  | --- | ---    | ---  | 76  | 62        | 71   |          |
| 5     | --- | ---  | ---  | --- | ---  | ---  | --- | ---    | ---  | 73  | 57        | 67   |          |
| 6     | --- | ---  | ---  | --- | ---  | ---  | --- | ---    | ---  | 69  | 53        | 63   |          |
| 7     | --- | ---  | ---  | --- | ---  | ---  | --- | ---    | ---  | 67  | 57        | 62   |          |
| 8     | --- | ---  | ---  | --- | ---  | ---  | --- | ---    | ---  | 66  | 54        | 62   |          |
| 9     | --- | ---  | ---  | --- | ---  | ---  | --- | ---    | ---  | 61  | 52        | 58   |          |
| 10    | --- | ---  | ---  | --- | ---  | ---  | 223 | 189    | 203  | 62  | 51        | 58   |          |
| 11    | --- | ---  | ---  | --- | ---  | ---  | 198 | 191    | 194  | 62  | 47        | 56   |          |
| 12    | --- | ---  | ---  | --- | ---  | ---  | 202 | 183    | 192  | 60  | 47        | 53   |          |
| 13    | --- | ---  | ---  | --- | ---  | ---  | 189 | 176    | 183  | 57  | 47        | 52   |          |
| 14    | --- | ---  | ---  | --- | ---  | ---  | 199 | 184    | 191  | 57  | 47        | 51   |          |
| 15    | --- | ---  | ---  | --- | ---  | ---  | 220 | 191    | 206  | 63  | 47        | 56   |          |
| 16    | --- | ---  | ---  | --- | ---  | ---  | 223 | 208    | 215  | 62  | 45        | 55   |          |
| 17    | --- | ---  | ---  | --- | ---  | ---  | 217 | 210    | 213  | 60  | 47        | 53   |          |
| 18    | --- | ---  | ---  | --- | ---  | ---  | 225 | 216    | 221  | 60  | 50        | 54   |          |
| 19    | --- | ---  | ---  | --- | ---  | ---  | 244 | 222    | 234  | 59  | 47        | 54   |          |
| 20    | --- | ---  | ---  | --- | ---  | ---  | 253 | 215    | 233  | --- | ---       | ---  |          |
| 21    | --- | ---  | ---  | --- | ---  | ---  | 242 | 226    | 236  | --- | ---       | ---  |          |
| 22    | --- | ---  | ---  | --- | ---  | ---  | 237 | 202    | 224  | --- | ---       | ---  |          |
| 23    | --- | ---  | ---  | --- | ---  | ---  | 205 | 159    | 189  | --- | ---       | ---  |          |
| 24    | --- | ---  | ---  | --- | ---  | ---  | 159 | 130    | 146  | --- | ---       | ---  |          |
| 25    | --- | ---  | ---  | --- | ---  | ---  | 130 | 111    | 124  | --- | ---       | ---  |          |
| 26    | --- | ---  | ---  | --- | ---  | ---  | 111 | 93     | 105  | --- | ---       | ---  |          |
| 27    | --- | ---  | ---  | --- | ---  | ---  | 96  | 82     | 90   | --- | ---       | ---  |          |
| 28    | --- | ---  | ---  | --- | ---  | ---  | 97  | 83     | 90   | --- | ---       | ---  |          |
| 29    | --- | ---  | ---  | --- | ---  | ---  | 112 | 96     | 105  | --- | ---       | ---  |          |
| 30    | --- | ---  | ---  | --- | ---  | ---  | 117 | 95     | 108  | 93  | ---       | ---  |          |
| 31    | --- | ---  | ---  | --- | ---  | ---  | --- | ---    | ---  | 92  | 72        | 85   |          |
| MONTH | --- | ---  | ---  | --- | ---  | ---  | --- | ---    | ---  | --- | ---       | ---  |          |
|       |     | JUNE |      |     | JULY |      |     | AUGUST |      |     | SEPTEMBER |      |          |
| 1     | 89  | 71   | 82   | 125 | 113  | 119  | 195 | 186    | 189  | --- | ---       | ---  |          |
| 2     | 87  | 68   | 80   | 130 | 123  | 127  | 204 | 190    | 193  | --- | ---       | ---  |          |
| 3     | 86  | 70   | 79   | 137 | 124  | 132  | 206 | 172    | 189  | --- | ---       | ---  |          |
| 4     | 89  | 69   | 81   | 143 | 96   | 131  | 195 | 176    | 186  | --- | ---       | ---  |          |
| 5     | 87  | 68   | 78   | 131 | 107  | 123  | 205 | 187    | 193  | 279 | 265       | 271  |          |
| 6     | 85  | 67   | 77   | 139 | 123  | 132  | 220 | 205    | 211  | 290 | 253       | 266  |          |
| 7     | 87  | 68   | 78   | 143 | 130  | 138  | 244 | 220    | 228  | 277 | 262       | 271  |          |
| 8     | 88  | 69   | 81   | 757 | 139  | 256  | 368 | 228    | 249  | 279 | 262       | 273  |          |
| 9     | 93  | 78   | 88   | 265 | 122  | 154  | 243 | 209    | 235  | 288 | 274       | 282  |          |
| 10    | 98  | 89   | 94   | 122 | 106  | 115  | 233 | 189    | 213  | 298 | 280       | 290  |          |
| 11    | 100 | 78   | 92   | 105 | 100  | 103  | 246 | 232    | 237  | 299 | 282       | 292  |          |
| 12    | 101 | 80   | 93   | 165 | 96   | 108  | 256 | 243    | 249  | 322 | 258       | 283  |          |
| 13    | 103 | 83   | 96   | 112 | 104  | 109  | 263 | 253    | 258  | 284 | 267       | 274  |          |
| 14    | 108 | 85   | 98   | 116 | 111  | 114  | 271 | 262    | 267  | 377 | 247       | 292  |          |
| 15    | 103 | 94   | 99   | 120 | 115  | 117  | 276 | 268    | 271  | 247 | 224       | 230  |          |
| 16    | 107 | 93   | 101  | 126 | 118  | 121  | 277 | 268    | 272  | 245 | 231       | 236  |          |
| 17    | 109 | 93   | 102  | 140 | 82   | 113  | 282 | 272    | 278  | 253 | 228       | 239  |          |
| 18    | 113 | 94   | 105  | 129 | 96   | 119  | 284 | 274    | 279  | 242 | 226       | 232  |          |
| 19    | 117 | 97   | 109  | 128 | 118  | 123  | 288 | 275    | 281  | 248 | 199       | 226  |          |
| 20    | 120 | 101  | 111  | 141 | 126  | 132  | 285 | 271    | 279  | 216 | 198       | 208  |          |
| 21    | 119 | 99   | 110  | 154 | 140  | 146  | 399 | 224    | 281  | 213 | 202       | 206  |          |
| 22    | 110 | 96   | 104  | 159 | 149  | 154  | 335 | 218    | 255  | 204 | 194       | 198  |          |
| 23    | 121 | 103  | 113  | 150 | 138  | 143  | 451 | 221    | 256  | 208 | 202       | 204  |          |
| 24    | 129 | 115  | 122  | 156 | 144  | 148  | 410 | 262    | 309  | 212 | 205       | 209  |          |
| 25    | 135 | 122  | 128  | 331 | 142  | 182  | 332 | 307    | 317  | 216 | 209       | 213  |          |
| 26    | 139 | 119  | 130  | 179 | 161  | 166  | --- | ---    | ---  | 222 | 214       | 217  |          |
| 27    | 123 | 116  | 119  | 172 | 164  | 167  | --- | ---    | ---  | 261 | 220       | 233  |          |
| 28    | 118 | 112  | 115  | 693 | 143  | 205  | --- | ---    | ---  | 237 | 221       | 227  |          |
| 29    | 126 | 112  | 118  | 322 | 143  | 168  | --- | ---    | ---  | 233 | 227       | 230  |          |
| 30    | 133 | 113  | 126  | 182 | 170  | 173  | --- | ---    | ---  | 237 | 233       | 234  |          |
| 31    | --- | ---  | ---  | 190 | 178  | 182  | --- | ---    | ---  | --- | ---       | ---  |          |
| MONTH | 139 | 67   | 100  | 757 | 82   | 143  | --- | ---    | ---  | --- | ---       | ---  |          |

08235250 ALAMOSA RIVER ABOVE WIGHTMAN FORK NEAR JASPER, CO--Continued

pH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DAY   | MAX      | MIN | MEAN | MAX      | MIN | MEAN | MAX      | MIN | MEAN | MAX     | MIN | MEAN |
|-------|----------|-----|------|----------|-----|------|----------|-----|------|---------|-----|------|
|       | OCTOBER  |     |      | NOVEMBER |     |      | DECEMBER |     |      | JANUARY |     |      |
| 1     | 6.2      | 5.8 | 5.9  | ---      | --- | ---  | ---      | --- | ---  | ---     | --- | ---  |
| 2     | 6.2      | 5.7 | 5.9  | ---      | --- | ---  | ---      | --- | ---  | ---     | --- | ---  |
| 3     | 5.9      | 5.6 | 5.7  | ---      | --- | ---  | ---      | --- | ---  | ---     | --- | ---  |
| 4     | 5.7      | 5.4 | 5.5  | ---      | --- | ---  | ---      | --- | ---  | ---     | --- | ---  |
| 5     | 6.0      | 5.0 | 5.4  | ---      | --- | ---  | ---      | --- | ---  | ---     | --- | ---  |
| 6     | 5.8      | 5.0 | 5.4  | ---      | --- | ---  | ---      | --- | ---  | ---     | --- | ---  |
| 7     | 5.5      | 5.1 | 5.3  | ---      | --- | ---  | ---      | --- | ---  | ---     | --- | ---  |
| 8     | 5.3      | 5.0 | 5.2  | ---      | --- | ---  | ---      | --- | ---  | ---     | --- | ---  |
| 9     | 5.3      | 4.9 | 5.1  | ---      | --- | ---  | ---      | --- | ---  | ---     | --- | ---  |
| 10    | 5.1      | 4.9 | 5.0  | ---      | --- | ---  | ---      | --- | ---  | ---     | --- | ---  |
| 11    | 5.0      | 4.9 | 5.0  | ---      | --- | ---  | ---      | --- | ---  | ---     | --- | ---  |
| 12    | 5.0      | 4.9 | 4.9  | ---      | --- | ---  | ---      | --- | ---  | ---     | --- | ---  |
| 13    | ---      | 4.8 | ---  | ---      | --- | ---  | ---      | --- | ---  | ---     | --- | ---  |
| 14    | ---      | --- | ---  | ---      | --- | ---  | ---      | --- | ---  | ---     | --- | ---  |
| 15    | ---      | --- | ---  | ---      | --- | ---  | ---      | --- | ---  | ---     | --- | ---  |
| 16    | ---      | --- | ---  | ---      | --- | ---  | ---      | --- | ---  | ---     | --- | ---  |
| 17    | ---      | --- | ---  | ---      | --- | ---  | ---      | --- | ---  | ---     | --- | ---  |
| 18    | ---      | --- | ---  | ---      | --- | ---  | ---      | --- | ---  | ---     | --- | ---  |
| 19    | ---      | --- | ---  | ---      | --- | ---  | ---      | --- | ---  | ---     | --- | ---  |
| 20    | ---      | --- | ---  | ---      | --- | ---  | ---      | --- | ---  | ---     | --- | ---  |
| 21    | ---      | --- | ---  | ---      | --- | ---  | ---      | --- | ---  | ---     | --- | ---  |
| 22    | ---      | --- | ---  | ---      | --- | ---  | ---      | --- | ---  | ---     | --- | ---  |
| 23    | ---      | --- | ---  | ---      | --- | ---  | ---      | --- | ---  | ---     | --- | ---  |
| 24    | ---      | --- | ---  | ---      | --- | ---  | ---      | --- | ---  | ---     | --- | ---  |
| 25    | ---      | --- | ---  | ---      | --- | ---  | ---      | --- | ---  | ---     | --- | ---  |
| 26    | ---      | --- | ---  | ---      | --- | ---  | ---      | --- | ---  | ---     | --- | ---  |
| 27    | ---      | --- | ---  | ---      | --- | ---  | ---      | --- | ---  | ---     | --- | ---  |
| 28    | ---      | --- | ---  | ---      | --- | ---  | ---      | --- | ---  | ---     | --- | ---  |
| 29    | ---      | --- | ---  | ---      | --- | ---  | ---      | --- | ---  | ---     | --- | ---  |
| 30    | ---      | --- | ---  | ---      | --- | ---  | ---      | --- | ---  | ---     | --- | ---  |
| 31    | ---      | --- | ---  | ---      | --- | ---  | ---      | --- | ---  | ---     | --- | ---  |
| MONTH | ---      | --- | ---  | ---      | --- | ---  | ---      | --- | ---  | ---     | --- | ---  |
|       | FEBRUARY |     |      | MARCH    |     |      | APRIL    |     |      | MAY     |     |      |
| 1     | ---      | --- | ---  | ---      | --- | ---  | ---      | --- | ---  | 7.2     | 6.9 | 7.0  |
| 2     | ---      | --- | ---  | ---      | --- | ---  | ---      | --- | ---  | 7.2     | 7.0 | 7.1  |
| 3     | ---      | --- | ---  | ---      | --- | ---  | ---      | --- | ---  | 7.2     | 6.8 | 7.1  |
| 4     | ---      | --- | ---  | ---      | --- | ---  | ---      | --- | ---  | 7.1     | 6.8 | 7.0  |
| 5     | ---      | --- | ---  | ---      | --- | ---  | ---      | --- | ---  | 7.1     | 6.7 | 7.0  |
| 6     | ---      | --- | ---  | ---      | --- | ---  | ---      | --- | ---  | 7.0     | 6.1 | 6.9  |
| 7     | ---      | --- | ---  | ---      | --- | ---  | ---      | --- | ---  | 6.9     | 6.2 | 6.9  |
| 8     | ---      | --- | ---  | ---      | --- | ---  | ---      | --- | ---  | 6.9     | 6.7 | 6.9  |
| 9     | ---      | --- | ---  | ---      | --- | ---  | ---      | 3.5 | ---  | 7.0     | 6.8 | 6.9  |
| 10    | ---      | --- | ---  | ---      | --- | ---  | 4.7      | 4.0 | 4.5  | 7.0     | 6.8 | 6.9  |
| 11    | ---      | --- | ---  | ---      | --- | ---  | 5.0      | 4.7 | 4.8  | 7.0     | 6.2 | 6.9  |
| 12    | ---      | --- | ---  | ---      | --- | ---  | 5.1      | 4.7 | 4.9  | 7.0     | 6.8 | 6.9  |
| 13    | ---      | --- | ---  | ---      | --- | ---  | 5.3      | 4.9 | 5.1  | 7.1     | 7.0 | 7.0  |
| 14    | ---      | --- | ---  | ---      | --- | ---  | 5.2      | 5.0 | 5.1  | 7.2     | 7.0 | 7.0  |
| 15    | ---      | --- | ---  | ---      | --- | ---  | 5.2      | 4.9 | 5.1  | 7.2     | 7.1 | 7.1  |
| 16    | ---      | --- | ---  | ---      | --- | ---  | 5.1      | 4.8 | 5.0  | 7.2     | 7.1 | 7.1  |
| 17    | ---      | --- | ---  | ---      | --- | ---  | 5.0      | 4.9 | 5.0  | 7.2     | 7.1 | 7.1  |
| 18    | ---      | --- | ---  | ---      | --- | ---  | 5.0      | 4.9 | 5.0  | 7.3     | 7.1 | 7.2  |
| 19    | ---      | --- | ---  | ---      | --- | ---  | 5.0      | 4.8 | 4.9  | 7.3     | 7.1 | 7.2  |
| 20    | ---      | --- | ---  | ---      | --- | ---  | 5.0      | 4.5 | 4.9  | 7.3     | 7.1 | 7.2  |
| 21    | ---      | --- | ---  | ---      | --- | ---  | 5.0      | 4.5 | 4.8  | 7.2     | 7.1 | 7.1  |
| 22    | ---      | --- | ---  | ---      | --- | ---  | 5.0      | 4.7 | 4.8  | 7.2     | 7.0 | 7.1  |
| 23    | ---      | --- | ---  | ---      | --- | ---  | 5.1      | 4.7 | 5.0  | 7.2     | 7.0 | 7.1  |
| 24    | ---      | --- | ---  | ---      | --- | ---  | 5.5      | 5.0 | 5.3  | 7.1     | 7.0 | 7.0  |
| 25    | ---      | --- | ---  | ---      | --- | ---  | 5.7      | 5.1 | 5.5  | 7.0     | 6.9 | 6.9  |
| 26    | ---      | --- | ---  | ---      | --- | ---  | 6.3      | 5.6 | 6.0  | 6.9     | 6.9 | 6.9  |
| 27    | ---      | --- | ---  | ---      | --- | ---  | 6.7      | 5.9 | 6.4  | 6.9     | 6.8 | 6.8  |
| 28    | ---      | --- | ---  | ---      | --- | ---  | 7.0      | 6.7 | 6.9  | 6.9     | 6.7 | 6.8  |
| 29    | ---      | --- | ---  | ---      | --- | ---  | 7.0      | 6.8 | 6.9  | 7.0     | 6.6 | 6.7  |
| 30    | ---      | --- | ---  | ---      | --- | ---  | 7.0      | 6.7 | 6.9  | 7.2     | 6.7 | 6.9  |
| 31    | ---      | --- | ---  | ---      | --- | ---  | ---      | --- | ---  | 7.2     | 7.0 | 7.0  |
| MONTH | ---      | --- | ---  | ---      | --- | ---  | ---      | --- | ---  | 7.3     | 6.1 | 7.0  |





**08235270 WIGHTMAN FORK BELOW CROPSEY CREEK AT SUMMITVILLE, CO**

LOCATION.--Lat 37°25'45", long 106°35'03", in NW<sup>1</sup>/<sub>4</sub>Nw<sup>1</sup>/<sub>4</sub> sec.29, T.37 N., R.04 E., Rio Grande County, Hydrologic Unit 13010002, on left bank about 200 feet downstream from the confluence of Cropsey Creek and 0.25 miles east of Summitville.

DRAINAGE AREA.--4.44 mi<sup>2</sup>.

**WATER-DISCHARGE RECORDS**

PERIOD OF RECORD.--July 1995 to current year (seasonal 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, 69 ft<sup>3</sup>/s, May 11, 1996, gage height, 5.49 ft; minimum daily discharge, 0.90 ft<sup>3</sup>/s, Aug. 19, 1996.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period of seasonal operation, 69 ft<sup>3</sup>/s, May 11, gage height, 5.49 ft; minimum daily discharge, 0.90 ft<sup>3</sup>/s, Aug. 19.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

| DAY   | OCT  | NOV | DEC | JAN | FEB | MAR | APR  | MAY  | JUN   | JUL  | AUG   | SEP  |
|-------|------|-----|-----|-----|-----|-----|------|------|-------|------|-------|------|
| 1     | 4.7  | --- | --- | --- | --- | --- | ---  | 21   | 9.9   | 3.8  | 1.6   | 1.9  |
| 2     | 2.9  | --- | --- | --- | --- | --- | ---  | 29   | 8.8   | 3.7  | 1.6   | 1.6  |
| 3     | 3.3  | --- | --- | --- | --- | --- | ---  | 32   | 7.6   | 3.7  | 1.6   | 2.1  |
| 4     | e3.0 | --- | --- | --- | --- | --- | ---  | 35   | 6.3   | 3.4  | 1.7   | 1.4  |
| 5     | e2.7 | --- | --- | --- | --- | --- | ---  | 38   | 6.7   | 3.4  | 1.7   | 1.7  |
| 6     | e3.0 | --- | --- | --- | --- | --- | ---  | 40   | 6.7   | 3.7  | 1.7   | 1.3  |
| 7     | e2.8 | --- | --- | --- | --- | --- | ---  | 37   | 6.5   | 3.6  | 1.6   | 2.0  |
| 8     | e2.6 | --- | --- | --- | --- | --- | ---  | 36   | 6.3   | 7.4  | 1.5   | 2.2  |
| 9     | e2.6 | --- | --- | --- | --- | --- | ---  | 35   | 5.9   | 7.6  | 1.6   | 2.1  |
| 10    | e2.4 | --- | --- | --- | --- | --- | 5.3  | 36   | 5.0   | 4.5  | 1.2   | 1.8  |
| 11    | e2.3 | --- | --- | --- | --- | --- | 5.2  | 39   | 5.2   | 3.5  | 1.6   | 1.6  |
| 12    | e2.2 | --- | --- | --- | --- | --- | 5.1  | 37   | 5.0   | 3.8  | 1.6   | 2.0  |
| 13    | ---  | --- | --- | --- | --- | --- | 4.7  | 34   | 5.1   | 3.6  | 1.2   | 2.4  |
| 14    | ---  | --- | --- | --- | --- | --- | e4.5 | 32   | 5.9   | 3.2  | 1.3   | 2.5  |
| 15    | ---  | --- | --- | --- | --- | --- | e4.5 | 29   | 5.9   | 3.0  | 1.0   | 1.8  |
| 16    | ---  | --- | --- | --- | --- | --- | 4.5  | 29   | 4.9   | 3.0  | .99   | 1.5  |
| 17    | ---  | --- | --- | --- | --- | --- | e4.2 | 27   | 4.2   | 3.3  | .97   | 2.2  |
| 18    | ---  | --- | --- | --- | --- | --- | e4.5 | 25   | 4.1   | 3.0  | .91   | 2.5  |
| 19    | ---  | --- | --- | --- | --- | --- | e3.9 | 23   | 4.2   | 2.7  | .90   | 2.7  |
| 20    | ---  | --- | --- | --- | --- | --- | e3.9 | 23   | 3.7   | 2.3  | 1.2   | 2.6  |
| 21    | ---  | --- | --- | --- | --- | --- | e3.9 | 21   | 3.8   | 2.5  | 1.5   | 1.4  |
| 22    | ---  | --- | --- | --- | --- | --- | e3.9 | 19   | 4.3   | 2.4  | 1.9   | 1.5  |
| 23    | ---  | --- | --- | --- | --- | --- | e5.7 | 18   | 3.9   | 2.2  | 2.5   | 2.6  |
| 24    | ---  | --- | --- | --- | --- | --- | 7.9  | 13   | 3.6   | 2.1  | 1.9   | 2.3  |
| 25    | ---  | --- | --- | --- | --- | --- | 13   | 13   | 3.6   | 1.8  | e1.7  | 2.3  |
| 26    | ---  | --- | --- | --- | --- | --- | 27   | 12   | 4.0   | 2.1  | 1.5   | 2.8  |
| 27    | ---  | --- | --- | --- | --- | --- | 33   | 12   | 3.9   | 1.7  | 1.5   | 2.6  |
| 28    | ---  | --- | --- | --- | --- | --- | 27   | 12   | 3.9   | 2.4  | 1.3   | 1.6  |
| 29    | ---  | --- | --- | --- | --- | --- | 21   | 11   | 3.8   | 2.2  | 1.7   | 1.3  |
| 30    | ---  | --- | --- | --- | --- | --- | 12   | 11   | 3.8   | 2.1  | 1.5   | 1.9  |
| 31    | ---  | --- | --- | --- | --- | --- | ---  | 11   | ---   | 2.0  | 1.1   | ---  |
| TOTAL | ---  | --- | --- | --- | --- | --- | ---  | 790  | 156.5 | 99.7 | 45.57 | 60.2 |
| MEAN  | ---  | --- | --- | --- | --- | --- | ---  | 25.5 | 5.22  | 3.22 | 1.47  | 2.01 |
| MAX   | ---  | --- | --- | --- | --- | --- | ---  | 40   | 9.9   | 7.6  | 2.5   | 2.8  |
| MIN   | ---  | --- | --- | --- | --- | --- | ---  | 11   | 3.6   | 1.7  | .90   | 1.3  |
| AC-FT | ---  | --- | --- | --- | --- | --- | ---  | 1570 | 310   | 198  | 90    | 119  |

e-Estimated.



08235270 WIGHTMAN FORK BELOW CROSEY CREEK AT SUMMITVILLE, CO--Continued

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM @ 25 DEG. C), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DAY   | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN | MAX  | MIN    | MEAN | MAX  | MIN       | MEAN |          |
|-------|------|------|------|------|------|------|------|--------|------|------|-----------|------|----------|
|       |      |      |      |      |      |      |      |        |      |      |           |      | FEBRUARY |
| 1     | ---  | ---  | ---  | ---  | ---  | ---  | ---  | ---    | ---  | 661  | 406       | 566  |          |
| 2     | ---  | ---  | ---  | ---  | ---  | ---  | ---  | ---    | ---  | 552  | 293       | 429  |          |
| 3     | ---  | ---  | ---  | ---  | ---  | ---  | ---  | ---    | ---  | 455  | 127       | 267  |          |
| 4     | ---  | ---  | ---  | ---  | ---  | ---  | ---  | ---    | ---  | 400  | 197       | 291  |          |
| 5     | ---  | ---  | ---  | ---  | ---  | ---  | ---  | ---    | ---  | 400  | 189       | 282  |          |
| 6     | ---  | ---  | ---  | ---  | ---  | ---  | ---  | ---    | ---  | 379  | 108       | 261  |          |
| 7     | ---  | ---  | ---  | ---  | ---  | ---  | ---  | ---    | ---  | 399  | 212       | 297  |          |
| 8     | ---  | ---  | ---  | ---  | ---  | ---  | ---  | ---    | ---  | 605  | 119       | 351  |          |
| 9     | ---  | ---  | ---  | ---  | ---  | ---  | ---  | ---    | ---  | 587  | 166       | 343  |          |
| 10    | ---  | ---  | ---  | ---  | ---  | ---  | ---  | ---    | ---  | 549  | 290       | 418  |          |
| 11    | ---  | ---  | ---  | ---  | ---  | ---  | 1400 | 1250   | 1360 | 593  | 273       | 431  |          |
| 12    | ---  | ---  | ---  | ---  | ---  | ---  | 1430 | 1010   | 1290 | 585  | 344       | 470  |          |
| 13    | ---  | ---  | ---  | ---  | ---  | ---  | 1480 | 830    | 1340 | 696  | 423       | 557  |          |
| 14    | ---  | ---  | ---  | ---  | ---  | ---  | 1720 | 403    | 923  | 690  | 291       | 543  |          |
| 15    | ---  | ---  | ---  | ---  | ---  | ---  | 1850 | 491    | 1390 | 600  | 323       | 483  |          |
| 16    | ---  | ---  | ---  | ---  | ---  | ---  | 1710 | 438    | 1220 | 768  | 460       | 612  |          |
| 17    | ---  | ---  | ---  | ---  | ---  | ---  | 1870 | 1620   | 1740 | 910  | 533       | 755  |          |
| 18    | ---  | ---  | ---  | ---  | ---  | ---  | 1960 | 1830   | 1900 | 584  | 503       | 552  |          |
| 19    | ---  | ---  | ---  | ---  | ---  | ---  | 2090 | 1890   | 2000 | 518  | 444       | 495  |          |
| 20    | ---  | ---  | ---  | ---  | ---  | ---  | 2230 | 2040   | 2140 | 512  | 452       | 490  |          |
| 21    | ---  | ---  | ---  | ---  | ---  | ---  | 2360 | 2140   | 2280 | 532  | 477       | 515  |          |
| 22    | ---  | ---  | ---  | ---  | ---  | ---  | 2420 | 1900   | 2200 | 597  | 527       | 569  |          |
| 23    | ---  | ---  | ---  | ---  | ---  | ---  | 2140 | 1170   | 1730 | 588  | 560       | 579  |          |
| 24    | ---  | ---  | ---  | ---  | ---  | ---  | 1440 | 670    | 1150 | 597  | 523       | 566  |          |
| 25    | ---  | ---  | ---  | ---  | ---  | ---  | 728  | 264    | 588  | 614  | 597       | 606  |          |
| 26    | ---  | ---  | ---  | ---  | ---  | ---  | 510  | 295    | 399  | 670  | 610       | 630  |          |
| 27    | ---  | ---  | ---  | ---  | ---  | ---  | 506  | 130    | 289  | 708  | 661       | 681  |          |
| 28    | ---  | ---  | ---  | ---  | ---  | ---  | 706  | 112    | 391  | 698  | 661       | 676  |          |
| 29    | ---  | ---  | ---  | ---  | ---  | ---  | 926  | 124    | 473  | 710  | 540       | 666  |          |
| 30    | ---  | ---  | ---  | ---  | ---  | ---  | 1210 | 613    | 953  | 731  | 506       | 593  |          |
| 31    | ---  | ---  | ---  | ---  | ---  | ---  | ---  | ---    | ---  | 738  | 562       | 656  |          |
| MONTH | ---  | ---  | ---  | ---  | ---  | ---  | ---  | ---    | ---  | 910  | 108       | 504  |          |
|       |      | JUNE |      |      | JULY |      |      | AUGUST |      |      | SEPTEMBER |      |          |
| 1     | 726  | 574  | 657  | 1110 | 965  | 1070 | 1700 | 919    | 1410 | ---  | ---       | ---  |          |
| 2     | 748  | 607  | 679  | 1210 | 545  | 1130 | 1630 | 842    | 1130 | ---  | ---       | ---  |          |
| 3     | 741  | 631  | 690  | 1240 | 1170 | 1210 | 1690 | 992    | 1510 | ---  | ---       | ---  |          |
| 4     | 745  | 343  | 573  | 1240 | 685  | 1140 | 1680 | 928    | 1430 | ---  | ---       | ---  |          |
| 5     | 765  | 655  | 711  | 1290 | 576  | 1010 | 1800 | 1680   | 1720 | 2220 | 1160      | 1990 |          |
| 6     | 758  | 651  | 712  | 1300 | 1230 | 1270 | 1900 | 1760   | 1820 | 2220 | 1170      | 1760 |          |
| 7     | 772  | 687  | 734  | 1300 | 1240 | 1270 | 1870 | 1420   | 1790 | 2210 | 1470      | 2060 |          |
| 8     | 767  | 716  | 742  | 1510 | 1030 | 1280 | 1700 | 921    | 1450 | 2240 | 2140      | 2190 |          |
| 9     | 808  | 745  | 778  | 1110 | 819  | 904  | 1730 | 1680   | 1710 | 2260 | 2190      | 2230 |          |
| 10    | 844  | 338  | 621  | 1060 | 484  | 909  | 1730 | 897    | 1220 | 2300 | 2070      | 2240 |          |
| 11    | 934  | 384  | 859  | 1240 | 452  | 798  | 1860 | 1470   | 1710 | 2340 | 1960      | 2180 |          |
| 12    | 1090 | 693  | 906  | 1230 | 1060 | 1150 | 1860 | 1720   | 1830 | 2430 | 1680      | 2200 |          |
| 13    | 1020 | 854  | 957  | 1140 | 974  | 1110 | 1880 | 1120   | 1450 | 2370 | 1620      | 2230 |          |
| 14    | 992  | 770  | 885  | 1210 | 733  | 1060 | 1700 | 1390   | 1590 | 2370 | 1360      | 2040 |          |
| 15    | 873  | 769  | 828  | 1300 | 770  | 1160 | ---  | ---    | ---  | 2030 | 1310      | 1560 |          |
| 16    | 926  | 469  | 747  | 1290 | 663  | 1020 | ---  | ---    | ---  | 2240 | 981       | 1700 |          |
| 17    | 956  | 408  | 685  | 1460 | 1210 | 1260 | ---  | ---    | ---  | 2250 | 1040      | 2060 |          |
| 18    | 787  | 408  | 602  | 1320 | 1260 | 1290 | ---  | ---    | ---  | 2240 | 1620      | 2110 |          |
| 19    | 1000 | 732  | 906  | 1420 | 1290 | 1350 | ---  | ---    | ---  | 2270 | 1850      | 2080 |          |
| 20    | 896  | 478  | 777  | 1430 | 753  | 1150 | 1440 | ---    | ---  | 2210 | 2000      | 2080 |          |
| 21    | 787  | 595  | 726  | 1530 | 1300 | 1430 | 1460 | 773    | 1070 | 2150 | 1020      | 1550 |          |
| 22    | 818  | 753  | 785  | 1630 | 1460 | 1540 | 997  | 832    | 906  | 2170 | 996       | 1480 |          |
| 23    | 943  | 818  | 887  | 1610 | 1460 | 1550 | ---  | ---    | ---  | 2290 | 2170      | 2220 |          |
| 24    | 961  | 774  | 901  | 1570 | 1150 | 1490 | ---  | ---    | ---  | 2300 | 1820      | 2170 |          |
| 25    | 1060 | 961  | 1010 | 1560 | 654  | 1140 | ---  | ---    | ---  | 2180 | 1700      | 2000 |          |
| 26    | 1080 | 888  | 1030 | 1560 | 1260 | 1470 | ---  | ---    | ---  | 2250 | 2110      | 2180 |          |
| 27    | 921  | 628  | 830  | 1570 | 881  | 1390 | ---  | ---    | ---  | 2350 | 2190      | 2260 |          |
| 28    | 925  | 563  | 754  | 1570 | 1450 | 1500 | ---  | ---    | ---  | 2280 | 1120      | 1780 |          |
| 29    | 1050 | 925  | 992  | 1540 | 1410 | 1470 | ---  | ---    | ---  | 2160 | 1210      | 1710 |          |
| 30    | 1100 | 1050 | 1070 | 1620 | 1430 | 1540 | ---  | ---    | ---  | 2270 | 1210      | 1880 |          |
| 31    | ---  | ---  | ---  | 1680 | 1570 | 1630 | ---  | ---    | ---  | ---  | ---       | ---  |          |
| MONTH | 1100 | 338  | 801  | 1680 | 452  | 1250 | ---  | ---    | ---  | ---  | ---       | ---  |          |

08235270 WIGHTMAN FORK BELOW CROSEY CREEK AT SUMMITVILLE, CO--Continued

pH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DAY   | MAX      | MIN | MEAN | MAX      | MIN | MEAN | MAX      | MIN | MEAN | MAX     | MIN | MEAN |
|-------|----------|-----|------|----------|-----|------|----------|-----|------|---------|-----|------|
|       | OCTOBER  |     |      | NOVEMBER |     |      | DECEMBER |     |      | JANUARY |     |      |
| 1     | 4.4      | 3.7 | 4.0  | ---      | --- | ---  | ---      | --- | ---  | ---     | --- | ---  |
| 2     | 4.0      | 3.6 | 3.8  | ---      | --- | ---  | ---      | --- | ---  | ---     | --- | ---  |
| 3     | 4.3      | 3.7 | 3.9  | ---      | --- | ---  | ---      | --- | ---  | ---     | --- | ---  |
| 4     | 4.3      | 3.9 | 4.0  | ---      | --- | ---  | ---      | --- | ---  | ---     | --- | ---  |
| 5     | 4.3      | 4.0 | 4.1  | ---      | --- | ---  | ---      | --- | ---  | ---     | --- | ---  |
| 6     | 4.3      | 4.0 | 4.2  | ---      | --- | ---  | ---      | --- | ---  | ---     | --- | ---  |
| 7     | 4.4      | 4.1 | 4.3  | ---      | --- | ---  | ---      | --- | ---  | ---     | --- | ---  |
| 8     | 4.5      | 3.8 | 4.2  | ---      | --- | ---  | ---      | --- | ---  | ---     | --- | ---  |
| 9     | 4.4      | 3.8 | 4.2  | ---      | --- | ---  | ---      | --- | ---  | ---     | --- | ---  |
| 10    | 4.5      | 4.1 | 4.3  | ---      | --- | ---  | ---      | --- | ---  | ---     | --- | ---  |
| 11    | 4.8      | 3.7 | 4.3  | ---      | --- | ---  | ---      | --- | ---  | ---     | --- | ---  |
| 12    | 4.7      | 3.9 | 4.2  | ---      | --- | ---  | ---      | --- | ---  | ---     | --- | ---  |
| 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     | ---      | --- | ---  | ---      | --- | ---  | ---      | --- | ---  | 6.5     | 5.4 | 6.1  |
| 2     | ---      | --- | ---  | ---      | --- | ---  | ---      | --- | ---  | 5.8     | 5.4 | 5.6  |
| 3     | ---      | --- | ---  | ---      | --- | ---  | ---      | --- | ---  | 5.8     | 5.2 | 5.5  |
| 4     | ---      | --- | ---  | ---      | --- | ---  | ---      | --- | ---  | 5.6     | 5.3 | 5.5  |
| 5     | ---      | --- | ---  | ---      | --- | ---  | ---      | --- | ---  | 5.6     | 5.1 | 5.4  |
| 6     | ---      | --- | ---  | ---      | --- | ---  | ---      | --- | ---  | 5.5     | 4.9 | 5.2  |
| 7     | ---      | --- | ---  | ---      | --- | ---  | ---      | --- | ---  | 5.8     | 4.7 | 5.1  |
| 8     | ---      | --- | ---  | ---      | --- | ---  | ---      | --- | ---  | 5.0     | 4.2 | 4.7  |
| 9     | ---      | --- | ---  | ---      | --- | ---  | ---      | --- | ---  | 4.7     | 4.2 | 4.4  |
| 10    | ---      | --- | ---  | ---      | --- | ---  | 6.0      | 5.7 | 5.8  | 4.4     | 4.1 | 4.3  |
| 11    | ---      | --- | ---  | ---      | --- | ---  | 6.2      | 5.8 | 6.0  | 4.6     | 3.8 | 4.1  |
| 12    | ---      | --- | ---  | ---      | --- | ---  | 6.3      | 5.9 | 6.1  | 4.8     | 3.9 | 4.2  |
| 13    | ---      | --- | ---  | ---      | --- | ---  | 6.3      | 5.9 | 6.2  | 4.0     | 3.6 | 3.9  |
| 14    | ---      | --- | ---  | ---      | --- | ---  | 6.2      | 5.3 | 5.7  | 3.9     | 3.7 | 3.9  |
| 15    | ---      | --- | ---  | ---      | --- | ---  | 6.0      | 4.9 | 5.6  | 4.2     | 3.9 | 4.0  |
| 16    | ---      | --- | ---  | ---      | --- | ---  | 5.9      | 4.9 | 5.5  | 4.4     | 3.9 | 4.1  |
| 17    | ---      | --- | ---  | ---      | --- | ---  | 5.9      | 5.7 | 5.8  | 4.2     | 3.9 | 4.1  |
| 18    | ---      | --- | ---  | ---      | --- | ---  | 6.0      | 5.7 | 5.9  | 4.2     | 4.0 | 4.1  |
| 19    | ---      | --- | ---  | ---      | --- | ---  | 6.1      | 5.8 | 6.0  | 4.2     | 4.2 | 4.2  |
| 20    | ---      | --- | ---  | ---      | --- | ---  | 6.2      | 5.4 | 6.1  | 4.3     | 4.1 | 4.2  |
| 21    | ---      | --- | ---  | ---      | --- | ---  | 6.2      | 5.9 | 6.0  | 4.3     | 4.2 | 4.2  |
| 22    | ---      | --- | ---  | ---      | --- | ---  | 6.3      | 5.7 | 6.0  | 4.3     | 4.2 | 4.2  |
| 23    | ---      | --- | ---  | ---      | --- | ---  | 6.4      | 6.0 | 6.2  | 4.3     | 4.2 | 4.3  |
| 24    | ---      | --- | ---  | ---      | --- | ---  | 6.3      | 5.3 | 6.1  | 4.4     | 4.2 | 4.3  |
| 25    | ---      | --- | ---  | ---      | --- | ---  | 5.9      | 5.6 | 5.7  | 4.4     | 4.3 | 4.4  |
| 26    | ---      | --- | ---  | ---      | --- | ---  | 6.0      | 5.6 | 5.7  | 4.4     | 4.3 | 4.4  |
| 27    | ---      | --- | ---  | ---      | --- | ---  | 5.9      | 5.4 | 5.6  | 4.4     | 4.3 | 4.4  |
| 28    | ---      | --- | ---  | ---      | --- | ---  | 6.6      | 5.8 | 6.2  | 4.4     | 4.3 | 4.3  |
| 29    | ---      | --- | ---  | ---      | --- | ---  | 6.8      | 6.5 | 6.6  | 4.5     | 4.3 | 4.4  |
| 30    | ---      | --- | ---  | ---      | --- | ---  | 6.8      | 6.3 | 6.6  | 5.0     | 4.3 | 4.6  |
| 31    | ---      | --- | ---  | ---      | --- | ---  | ---      | --- | ---  | 5.1     | 4.8 | 5.0  |
| MONTH | ---      | --- | ---  | ---      | --- | ---  | ---      | --- | ---  | 6.5     | 3.6 | 4.6  |





**08235290 WIGHTMAN FORK AT MOUTH NEAR JASPER, CO**

LOCATION.--Lat 37°24'14", long 106°31'16", in SE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> 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 mi<sup>2</sup>.

**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 9,420 ft above sea level, from topographic map.

REMARKS.--No estimated daily discharges. Records fair. Flow regulated by releases from Summitville Mine upstream.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge during period of season operation, 258 ft<sup>3</sup>/s, May 5, 1996, gage height, 5.09 ft; minimum daily, 1.2 ft<sup>3</sup>/s, Aug. 19, 1996.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period of seasonal operation, 258 ft<sup>3</sup>/s, May 5, gage height, 5.09 ft; minimum daily, 1.2 ft<sup>3</sup>/s, Aug. 19.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

| DAY   | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY  | JUN   | JUL   | AUG  | SEP   |
|-------|-----|-----|-----|-----|-----|-----|-----|------|-------|-------|------|-------|
| 1     | 14  | --- | --- | --- | --- | --- | --- | 54   | 13    | 6.5   | 2.7  | 2.3   |
| 2     | 9.9 | --- | --- | --- | --- | --- | --- | 93   | 13    | 5.7   | 2.1  | 2.9   |
| 3     | 8.9 | --- | --- | --- | --- | --- | --- | 114  | 12    | 5.5   | 2.9  | 2.2   |
| 4     | 8.0 | --- | --- | --- | --- | --- | --- | 119  | 11    | 5.1   | 2.5  | 2.9   |
| 5     | 6.9 | --- | --- | --- | --- | --- | --- | 139  | 11    | 4.4   | 2.6  | 2.6   |
| 6     | 6.9 | --- | --- | --- | --- | --- | --- | 127  | 11    | 4.8   | 2.4  | 2.9   |
| 7     | 6.7 | --- | --- | --- | --- | --- | --- | 118  | 11    | 5.0   | 2.3  | 2.8   |
| 8     | 6.1 | --- | --- | --- | --- | --- | --- | 106  | 10    | 12    | 2.2  | 3.4   |
| 9     | 5.7 | --- | --- | --- | --- | --- | 19  | 102  | 9.8   | 13    | 2.6  | 3.3   |
| 10    | 6.2 | --- | --- | --- | --- | --- | 20  | 94   | 8.8   | 10    | 1.9  | 3.3   |
| 11    | 6.0 | --- | --- | --- | --- | --- | 20  | 101  | 8.9   | 6.8   | 2.3  | 2.6   |
| 12    | --- | --- | --- | --- | --- | --- | 18  | 89   | 8.7   | 7.4   | 2.2  | 3.7   |
| 13    | --- | --- | --- | --- | --- | --- | 17  | 80   | 9.1   | 6.9   | 1.5  | 3.5   |
| 14    | --- | --- | --- | --- | --- | --- | 14  | 73   | 12    | 5.5   | 1.8  | 4.5   |
| 15    | --- | --- | --- | --- | --- | --- | 12  | 66   | 15    | 5.1   | 1.5  | 3.5   |
| 16    | --- | --- | --- | --- | --- | --- | 11  | 65   | 10    | 4.3   | 1.4  | 3.5   |
| 17    | --- | --- | --- | --- | --- | --- | 12  | 55   | 8.5   | 5.8   | 1.5  | 3.4   |
| 18    | --- | --- | --- | --- | --- | --- | 10  | 46   | 7.3   | 5.5   | 1.3  | 4.6   |
| 19    | --- | --- | --- | --- | --- | --- | 9.8 | 42   | 7.2   | 4.6   | 1.2  | 4.5   |
| 20    | --- | --- | --- | --- | --- | --- | 11  | 37   | 5.9   | 3.6   | 1.3  | 4.6   |
| 21    | --- | --- | --- | --- | --- | --- | 9.5 | 31   | 5.8   | 3.7   | 3.0  | 3.6   |
| 22    | --- | --- | --- | --- | --- | --- | 10  | 28   | 7.9   | 3.6   | 3.8  | 2.6   |
| 23    | --- | --- | --- | --- | --- | --- | 16  | 25   | 6.6   | 3.5   | 4.5  | 4.0   |
| 24    | --- | --- | --- | --- | --- | --- | 30  | 21   | 5.5   | 3.3   | 3.5  | 4.1   |
| 25    | --- | --- | --- | --- | --- | --- | 52  | 18   | 5.5   | 3.2   | 2.5  | 3.3   |
| 26    | --- | --- | --- | --- | --- | --- | 98  | 17   | 6.6   | 3.5   | 2.2  | 4.4   |
| 27    | --- | --- | --- | --- | --- | --- | 132 | 17   | 8.3   | 3.0   | 2.7  | 4.0   |
| 28    | --- | --- | --- | --- | --- | --- | 96  | 17   | 7.1   | 4.6   | 2.6  | 3.1   |
| 29    | --- | --- | --- | --- | --- | --- | 42  | 15   | 6.7   | 4.6   | 2.6  | 3.1   |
| 30    | --- | --- | --- | --- | --- | --- | 31  | 14   | 6.0   | 3.7   | 3.2  | 2.7   |
| 31    | --- | --- | --- | --- | --- | --- | --- | 14   | ---   | 3.2   | 2.2  | ---   |
| TOTAL | --- | --- | --- | --- | --- | --- | --- | 1937 | 269.2 | 167.4 | 73.0 | 101.9 |
| MEAN  | --- | --- | --- | --- | --- | --- | --- | 62.5 | 8.97  | 5.40  | 2.35 | 3.40  |
| MAX   | --- | --- | --- | --- | --- | --- | --- | 139  | 15    | 13    | 4.5  | 4.6   |
| MIN   | --- | --- | --- | --- | --- | --- | --- | 14   | 5.5   | 3.0   | 1.2  | 2.2   |
| AC-FT | --- | --- | --- | --- | --- | --- | --- | 3840 | 534   | 332   | 145  | 202   |



08235290 WIGHTMAN FORK AT MOUTH NEAR JASPER, CO--Continued

SPECIFIC CONDUCTANCE, (MICROSIEMENS/CM @ 25 DEG. C), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DAY   | FEBRUARY |      |      | MARCH |      |      | APRIL |        |      | MAY  |           |      |  |
|-------|----------|------|------|-------|------|------|-------|--------|------|------|-----------|------|--|
|       | MAX      | MIN  | MEAN | MAX   | MIN  | MEAN | MAX   | MIN    | MEAN | MAX  | MIN       | MEAN |  |
| 1     | ---      | ---  | ---  | ---   | ---  | ---  | ---   | ---    | ---  | 356  | 238       | 313  |  |
| 2     | ---      | ---  | ---  | ---   | ---  | ---  | ---   | ---    | ---  | 284  | 189       | 240  |  |
| 3     | ---      | ---  | ---  | ---   | ---  | ---  | ---   | ---    | ---  | 247  | 113       | 177  |  |
| 4     | ---      | ---  | ---  | ---   | ---  | ---  | ---   | ---    | ---  | 208  | 135       | 174  |  |
| 5     | ---      | ---  | ---  | ---   | ---  | ---  | ---   | ---    | ---  | 211  | 129       | 169  |  |
| 6     | ---      | ---  | ---  | ---   | ---  | ---  | ---   | ---    | ---  | 206  | 98        | 160  |  |
| 7     | ---      | ---  | ---  | ---   | ---  | ---  | ---   | ---    | ---  | 235  | 141       | 181  |  |
| 8     | ---      | ---  | ---  | ---   | ---  | ---  | ---   | ---    | ---  | 280  | 100       | 196  |  |
| 9     | ---      | ---  | ---  | ---   | ---  | ---  | ---   | ---    | ---  | 280  | 115       | 180  |  |
| 10    | ---      | ---  | ---  | ---   | ---  | ---  | 620   | 345    | 536  | 286  | 175       | 234  |  |
| 11    | ---      | ---  | ---  | ---   | ---  | ---  | 610   | 568    | 594  | 302  | 172       | 237  |  |
| 12    | ---      | ---  | ---  | ---   | ---  | ---  | 646   | 562    | 614  | 326  | 179       | 250  |  |
| 13    | ---      | ---  | ---  | ---   | ---  | ---  | 659   | 553    | 607  | 353  | 223       | 290  |  |
| 14    | ---      | ---  | ---  | ---   | ---  | ---  | 657   | 337    | 521  | 375  | 157       | 304  |  |
| 15    | ---      | ---  | ---  | ---   | ---  | ---  | 891   | 365    | 699  | 364  | 163       | 276  |  |
| 16    | ---      | ---  | ---  | ---   | ---  | ---  | 851   | 378    | 583  | 413  | 257       | 334  |  |
| 17    | ---      | ---  | ---  | ---   | ---  | ---  | 833   | 715    | 795  | 435  | 173       | 335  |  |
| 18    | ---      | ---  | ---  | ---   | ---  | ---  | 889   | 822    | 868  | 254  | 175       | 219  |  |
| 19    | ---      | ---  | ---  | ---   | ---  | ---  | 1010  | 784    | 894  | 233  | 164       | 204  |  |
| 20    | ---      | ---  | ---  | ---   | ---  | ---  | 996   | 810    | 891  | 274  | 164       | 236  |  |
| 21    | ---      | ---  | ---  | ---   | ---  | ---  | 1040  | 756    | 934  | 290  | 177       | 253  |  |
| 22    | ---      | ---  | ---  | ---   | ---  | ---  | 1070  | 894    | 984  | 340  | 255       | 296  |  |
| 23    | ---      | ---  | ---  | ---   | ---  | ---  | 944   | 551    | 827  | 329  | 197       | 296  |  |
| 24    | ---      | ---  | ---  | ---   | ---  | ---  | 612   | 414    | 544  | 350  | 228       | 291  |  |
| 25    | ---      | ---  | ---  | ---   | ---  | ---  | 424   | 180    | 363  | 349  | 323       | 337  |  |
| 26    | ---      | ---  | ---  | ---   | ---  | ---  | 303   | 175    | 248  | 377  | 331       | 356  |  |
| 27    | ---      | ---  | ---  | ---   | ---  | ---  | 241   | 111    | 179  | 423  | 362       | 389  |  |
| 28    | ---      | ---  | ---  | ---   | ---  | ---  | 296   | 111    | 185  | 403  | 361       | 389  |  |
| 29    | ---      | ---  | ---  | ---   | ---  | ---  | 407   | 139    | 255  | 433  | 256       | 397  |  |
| 30    | ---      | ---  | ---  | ---   | ---  | ---  | 525   | 168    | 435  | 432  | 250       | 348  |  |
| 31    | ---      | ---  | ---  | ---   | ---  | ---  | ---   | ---    | ---  | 441  | 375       | 411  |  |
| MONTH | ---      | ---  | ---  | ---   | ---  | ---  | ---   | ---    | ---  | 441  | 98        | 273  |  |
|       |          | JUNE |      |       | JULY |      |       | AUGUST |      |      | SEPTEMBER |      |  |
| 1     | 449      | 386  | 422  | 686   | 620  | 655  | 1110  | 991    | 1080 | 853  | 656       | 696  |  |
| 2     | 475      | 388  | 440  | 769   | 589  | 733  | 997   | 593    | 777  | 1450 | 853       | 1370 |  |
| 3     | 492      | 415  | 453  | 818   | 642  | 793  | 1120  | 669    | 1030 | 1250 | 770       | 927  |  |
| 4     | 480      | 270  | 408  | 851   | 720  | 826  | 1090  | 690    | 915  | 1630 | 858       | 1470 |  |
| 5     | 528      | 273  | 479  | 855   | 490  | 707  | 1160  | 1090   | 1130 | 1620 | 934       | 1210 |  |
| 6     | 529      | 456  | 491  | 881   | 840  | 862  | 1230  | 1150   | 1200 | 1660 | 1290      | 1540 |  |
| 7     | 539      | 451  | 506  | 906   | 854  | 874  | 1280  | 1210   | 1250 | 1550 | 935       | 1280 |  |
| 8     | 557      | 468  | 520  | 1130  | 317  | 802  | 1240  | 841    | 1110 | 1630 | 1390      | 1580 |  |
| 9     | 575      | 507  | 547  | 667   | 315  | 387  | 1220  | 1180   | 1200 | 1650 | 1600      | 1630 |  |
| 10    | 602      | 349  | 549  | 625   | 358  | 492  | 1210  | 722    | 1120 | 1650 | 1620      | 1630 |  |
| 11    | 621      | 322  | 503  | 600   | 399  | 462  | 1260  | 772    | 1080 | 1660 | 1170      | 1470 |  |
| 12    | 674      | 516  | 582  | 759   | 517  | 709  | 1310  | 1240   | 1270 | 1670 | 1350      | 1570 |  |
| 13    | 668      | 617  | 648  | 691   | 635  | 666  | 1280  | 372    | 762  | 1600 | 1160      | 1460 |  |
| 14    | 618      | 446  | 563  | 747   | 484  | 671  | 1290  | 336    | 934  | 1620 | 1480      | 1570 |  |
| 15    | 540      | 409  | 471  | 820   | 730  | 794  | 991   | 391    | 654  | 1480 | 883       | 1070 |  |
| 16    | 572      | 308  | 492  | 824   | 477  | 667  | 805   | 290    | 625  | 1540 | 1120      | 1470 |  |
| 17    | 624      | 341  | 541  | 875   | 735  | 801  | 750   | 286    | 616  | 1630 | 898       | 1290 |  |
| 18    | 716      | 312  | 518  | 934   | 783  | 815  | ---   | ---    | ---  | 1630 | 1310      | 1550 |  |
| 19    | 728      | 344  | 595  | 864   | 819  | 839  | ---   | ---    | ---  | 1610 | 1450      | 1530 |  |
| 20    | 728      | 539  | 594  | 921   | 758  | 879  | ---   | ---    | ---  | 1580 | 1340      | 1460 |  |
| 21    | 643      | 374  | 509  | 975   | 573  | 859  | 1260  | 602    | 821  | 1550 | 1300      | 1490 |  |
| 22    | 565      | 498  | 522  | 1010  | 957  | 988  | 1010  | 554    | 720  | 1300 | 783       | 900  |  |
| 23    | 623      | 505  | 566  | 1070  | 971  | 1040 | 953   | 575    | 670  | 1700 | 812       | 1540 |  |
| 24    | 656      | 478  | 608  | 1090  | 959  | 1050 | 1020  | 603    | 730  | 1730 | 1660      | 1690 |  |
| 25    | 688      | 652  | 667  | 1070  | 829  | 997  | 616   | 590    | 602  | 1690 | 1090      | 1490 |  |
| 26    | 708      | 576  | 673  | 1020  | 622  | 836  | 660   | 610    | 618  | 1700 | 1590      | 1640 |  |
| 27    | 576      | 486  | 535  | 1060  | 889  | 1020 | 704   | 488    | 608  | 1820 | 1680      | 1730 |  |
| 28    | 587      | 369  | 451  | 1330  | 682  | 980  | 596   | 520    | 567  | 1720 | 1470      | 1640 |  |
| 29    | 640      | 549  | 595  | 1210  | 820  | 897  | 606   | 559    | 595  | 1660 | 923       | 1460 |  |
| 30    | 674      | 639  | 659  | 979   | 890  | 946  | 970   | 531    | 690  | 1670 | 888       | 1210 |  |
| 31    | ---      | ---  | ---  | 1050  | 977  | 1030 | 719   | 584    | 636  | ---  | ---       | ---  |  |
| MONTH | 728      | 270  | 537  | 1330  | 315  | 809  | ---   | ---    | ---  | 1820 | 656       | 1420 |  |

08235290 WIGHTMAN FORK AT MOUTH NEAR JASPER, CO--Continued

pH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DAY   | MAX      | MIN | MEAN | MAX      | MIN | MEAN | MAX      | MIN | MEAN | MAX     | MIN | MEAN |
|-------|----------|-----|------|----------|-----|------|----------|-----|------|---------|-----|------|
|       | OCTOBER  |     |      | NOVEMBER |     |      | DECEMBER |     |      | JANUARY |     |      |
| 1     | 4.9      | 4.6 | 4.8  | ---      | --- | ---  | ---      | --- | ---  | ---     | --- | ---  |
| 2     | 4.8      | 4.6 | 4.7  | ---      | --- | ---  | ---      | --- | ---  | ---     | --- | ---  |
| 3     | 4.7      | 4.5 | 4.6  | ---      | --- | ---  | ---      | --- | ---  | ---     | --- | ---  |
| 4     | 4.6      | 4.5 | 4.6  | ---      | --- | ---  | ---      | --- | ---  | ---     | --- | ---  |
| 5     | 4.7      | 4.5 | 4.6  | ---      | --- | ---  | ---      | --- | ---  | ---     | --- | ---  |
| 6     | 4.7      | 4.6 | 4.6  | ---      | --- | ---  | ---      | --- | ---  | ---     | --- | ---  |
| 7     | 4.6      | 4.5 | 4.5  | ---      | --- | ---  | ---      | --- | ---  | ---     | --- | ---  |
| 8     | 4.6      | 4.5 | 4.5  | ---      | --- | ---  | ---      | --- | ---  | ---     | --- | ---  |
| 9     | 4.6      | 4.5 | 4.5  | ---      | --- | ---  | ---      | --- | ---  | ---     | --- | ---  |
| 10    | 4.6      | 4.5 | 4.6  | ---      | --- | ---  | ---      | --- | ---  | ---     | --- | ---  |
| 11    | 4.5      | 4.4 | 4.4  | ---      | --- | ---  | ---      | --- | ---  | ---     | --- | ---  |
| 12    | 4.5      | 4.4 | 4.4  | ---      | --- | ---  | ---      | --- | ---  | ---     | --- | ---  |
| 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     | ---      | --- | ---  | ---      | --- | ---  | ---      | --- | ---  | 7.5     | 7.3 | 7.4  |
| 2     | ---      | --- | ---  | ---      | --- | ---  | ---      | --- | ---  | 7.4     | 7.2 | 7.3  |
| 3     | ---      | --- | ---  | ---      | --- | ---  | ---      | --- | ---  | 7.4     | 7.1 | 7.3  |
| 4     | ---      | --- | ---  | ---      | --- | ---  | ---      | --- | ---  | 7.3     | 7.0 | 7.2  |
| 5     | ---      | --- | ---  | ---      | --- | ---  | ---      | --- | ---  | 7.2     | 6.9 | 7.1  |
| 6     | ---      | --- | ---  | ---      | --- | ---  | ---      | --- | ---  | 7.2     | 6.9 | 7.0  |
| 7     | ---      | --- | ---  | ---      | --- | ---  | ---      | --- | ---  | 7.2     | 6.9 | 7.0  |
| 8     | ---      | --- | ---  | ---      | --- | ---  | ---      | --- | ---  | 7.0     | 6.8 | 6.9  |
| 9     | ---      | --- | ---  | ---      | --- | ---  | ---      | --- | ---  | 6.8     | 6.5 | 6.7  |
| 10    | ---      | --- | ---  | ---      | --- | ---  | 7.3      | 7.2 | 7.3  | 6.6     | 5.9 | 6.4  |
| 11    | ---      | --- | ---  | ---      | --- | ---  | 7.4      | 7.3 | 7.4  | 6.4     | 5.5 | 6.0  |
| 12    | ---      | --- | ---  | ---      | --- | ---  | 7.4      | 7.4 | 7.4  | 6.5     | 5.5 | 6.0  |
| 13    | ---      | --- | ---  | ---      | --- | ---  | 7.4      | 7.4 | 7.4  | 5.8     | 5.0 | 5.5  |
| 14    | ---      | --- | ---  | ---      | --- | ---  | 7.4      | 7.4 | 7.4  | 5.3     | 4.8 | 5.2  |
| 15    | ---      | --- | ---  | ---      | --- | ---  | 7.4      | 7.3 | 7.3  | 5.3     | 4.9 | 5.1  |
| 16    | ---      | --- | ---  | ---      | --- | ---  | 7.4      | 7.3 | 7.3  | 5.3     | 4.8 | 5.1  |
| 17    | ---      | --- | ---  | ---      | --- | ---  | 7.4      | 7.3 | 7.4  | 5.4     | 5.0 | 5.2  |
| 18    | ---      | --- | ---  | ---      | --- | ---  | 7.4      | 7.3 | 7.3  | 5.3     | 4.9 | 5.2  |
| 19    | ---      | --- | ---  | ---      | --- | ---  | 7.4      | 7.3 | 7.4  | 5.2     | 4.9 | 5.1  |
| 20    | ---      | --- | ---  | ---      | --- | ---  | 7.4      | 7.3 | 7.3  | 5.3     | 5.0 | 5.2  |
| 21    | ---      | --- | ---  | ---      | --- | ---  | 7.4      | 7.3 | 7.3  | 5.3     | 5.0 | 5.2  |
| 22    | ---      | --- | ---  | ---      | --- | ---  | 7.4      | 7.3 | 7.3  | 5.4     | 5.2 | 5.3  |
| 23    | ---      | --- | ---  | ---      | --- | ---  | 7.4      | 7.3 | 7.3  | 5.5     | 5.2 | 5.4  |
| 24    | ---      | --- | ---  | ---      | --- | ---  | 7.5      | 7.4 | 7.4  | 6.0     | 5.3 | 5.6  |
| 25    | ---      | --- | ---  | ---      | --- | ---  | 7.5      | 7.3 | 7.4  | 6.5     | 6.0 | 6.4  |
| 26    | ---      | --- | ---  | ---      | --- | ---  | 7.4      | 7.1 | 7.3  | 6.7     | 6.2 | 6.5  |
| 27    | ---      | --- | ---  | ---      | --- | ---  | 7.3      | 7.2 | 7.3  | 6.3     | 5.9 | 6.2  |
| 28    | ---      | --- | ---  | ---      | --- | ---  | 7.4      | 7.2 | 7.3  | 6.3     | 6.0 | 6.2  |
| 29    | ---      | --- | ---  | ---      | --- | ---  | 7.5      | 7.3 | 7.4  | 6.5     | 5.9 | 6.3  |
| 30    | ---      | --- | ---  | ---      | --- | ---  | 7.5      | 7.3 | 7.4  | 6.4     | 5.9 | 6.1  |
| 31    | ---      | --- | ---  | ---      | --- | ---  | ---      | --- | ---  | 6.9     | 6.4 | 6.6  |
| MONTH | ---      | --- | ---  | ---      | --- | ---  | ---      | --- | ---  | 7.5     | 4.8 | 6.1  |



## 08235290 WIGHTMAN FORK AT MOUTH NEAR JASPER, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DAY      | MAX  | MIN | MEAN  | MAX  | MIN  | MEAN   | MAX  | MIN | MEAN      | MAX  | MIN | MEAN |
|----------|------|-----|-------|------|------|--------|------|-----|-----------|------|-----|------|
|          |      |     |       |      |      |        |      |     |           |      |     |      |
| 1        | ---  | --- | ---   | ---  | ---  | ---    | ---  | --- | ---       | 6.9  | .0  | 2.0  |
| 2        | ---  | --- | ---   | ---  | ---  | ---    | ---  | --- | ---       | 6.5  | .0  | 2.0  |
| 3        | ---  | --- | ---   | ---  | ---  | ---    | ---  | --- | ---       | 6.4  | .2  | 2.0  |
| 4        | ---  | --- | ---   | ---  | ---  | ---    | ---  | --- | ---       | 6.5  | .2  | 2.1  |
| 5        | ---  | --- | ---   | ---  | ---  | ---    | ---  | --- | ---       | 6.6  | .0  | 2.0  |
| 6        | ---  | --- | ---   | ---  | ---  | ---    | ---  | --- | ---       | 6.6  | .1  | 2.1  |
| 7        | ---  | --- | ---   | ---  | ---  | ---    | ---  | --- | ---       | 6.8  | .1  | 2.3  |
| 8        | ---  | --- | ---   | ---  | ---  | ---    | ---  | --- | ---       | 7.2  | .3  | 2.5  |
| 9        | ---  | --- | ---   | ---  | ---  | ---    | ---  | .0  | ---       | 7.4  | .4  | 2.7  |
| 10       | ---  | --- | ---   | ---  | ---  | ---    | 3.0  | .0  | 1.0       | 7.8  | .2  | 2.9  |
| 11       | ---  | --- | ---   | ---  | ---  | ---    | 3.8  | .0  | 1.2       | 8.6  | .3  | 3.2  |
| 12       | ---  | --- | ---   | ---  | ---  | ---    | 5.3  | .0  | 1.4       | 9.1  | .8  | 3.8  |
| 13       | ---  | --- | ---   | ---  | ---  | ---    | 1.8  | .0  | .4        | 9.0  | .8  | 3.8  |
| 14       | ---  | --- | ---   | ---  | ---  | ---    | 1.2  | .0  | .2        | 9.1  | 1.6 | 4.3  |
| 15       | ---  | --- | ---   | ---  | ---  | ---    | 4.3  | .0  | 1.1       | 10.2 | 1.4 | 4.6  |
| 16       | ---  | --- | ---   | ---  | ---  | ---    | 5.6  | .0  | 1.7       | 10.9 | 1.8 | 5.2  |
| 17       | ---  | --- | ---   | ---  | ---  | ---    | 3.6  | .0  | 1.4       | 10.8 | 2.4 | 5.6  |
| 18       | ---  | --- | ---   | ---  | ---  | ---    | 1.7  | .0  | .5        | 11.3 | 2.0 | 5.6  |
| 19       | ---  | --- | ---   | ---  | ---  | ---    | 3.6  | .0  | .8        | 11.9 | 2.9 | 6.3  |
| 20       | ---  | --- | ---   | ---  | ---  | ---    | .0   | .0  | .0        | 11.5 | 2.7 | 6.1  |
| 21       | ---  | --- | ---   | ---  | ---  | ---    | 3.8  | .0  | 1.0       | 11.8 | 1.6 | 5.8  |
| 22       | ---  | --- | ---   | ---  | ---  | ---    | 4.8  | .0  | 1.3       | 11.9 | 1.9 | 6.0  |
| 23       | ---  | --- | ---   | ---  | ---  | ---    | 7.4  | .0  | 1.9       | 11.5 | 2.3 | 6.1  |
| 24       | ---  | --- | ---   | ---  | ---  | ---    | 7.1  | .0  | 2.0       | 6.8  | 1.2 | 4.1  |
| 25       | ---  | --- | ---   | ---  | ---  | ---    | 6.0  | .2  | 1.8       | 7.6  | 2.6 | 4.7  |
| 26       | ---  | --- | ---   | ---  | ---  | ---    | 4.4  | .0  | 1.2       | 6.7  | 1.0 | 3.5  |
| 27       | ---  | --- | ---   | ---  | ---  | ---    | 5.0  | .2  | 1.5       | 10.9 | .5  | 4.7  |
| 28       | ---  | --- | ---   | ---  | ---  | ---    | .8   | .0  | .1        | 8.7  | 1.9 | 4.8  |
| 29       | ---  | --- | ---   | ---  | ---  | ---    | 4.0  | .0  | 1.0       | 12.7 | .8  | 6.1  |
| 30       | ---  | --- | ---   | ---  | ---  | ---    | 7.5  | .0  | 2.1       | 12.0 | 2.3 | 6.7  |
| 31       | ---  | --- | ---   | ---  | ---  | ---    | ---  | --- | ---       | 12.2 | 1.5 | 6.4  |
| MONTH    | ---  | --- | ---   | ---  | ---  | ---    | ---  | --- | ---       | 12.7 | .0  | 4.2  |
| FEBRUARY |      |     | MARCH |      |      | APRIL  |      |     | MAY       |      |     |      |
| 1        | 13.1 | 1.9 | 6.9   | 15.1 | 7.3  | 11.0   | 13.9 | 8.0 | 11.1      | 11.4 | 6.6 | 9.1  |
| 2        | 13.2 | 1.8 | 7.1   | 14.8 | 7.0  | 10.7   | 13.7 | 9.3 | 11.8      | 9.9  | 6.9 | 8.6  |
| 3        | 13.8 | 2.4 | 7.8   | 15.8 | 7.3  | 11.1   | 15.2 | 9.9 | 12.5      | 12.2 | 5.9 | 9.0  |
| 4        | 13.2 | 3.5 | 8.2   | 14.7 | 8.2  | 11.5   | 14.1 | 9.7 | 12.0      | 11.2 | 6.5 | 9.0  |
| 5        | 13.2 | 3.8 | 8.3   | 16.7 | 8.3  | 12.2   | 14.0 | 6.5 | 10.4      | 11.9 | 6.6 | 9.5  |
| 6        | 15.3 | 4.6 | 9.3   | 16.6 | 9.6  | 13.0   | 14.2 | 7.0 | 10.7      | 12.2 | 8.2 | 10.1 |
| 7        | 13.0 | 3.8 | 8.6   | 13.1 | 9.1  | 11.3   | 13.9 | 7.1 | 10.7      | 10.5 | 5.9 | 8.3  |
| 8        | 13.7 | 3.9 | 8.7   | 13.0 | 8.7  | 10.3   | 13.2 | 9.7 | 11.5      | 10.7 | 4.5 | 7.8  |
| 9        | 10.2 | 5.0 | 7.7   | 13.7 | 7.4  | 9.9    | 11.2 | 7.7 | 9.5       | 12.1 | 5.0 | 8.4  |
| 10       | 12.0 | 4.5 | 8.2   | 13.8 | 7.3  | 10.5   | 11.5 | 6.4 | 9.2       | 10.9 | 5.8 | 8.2  |
| 11       | 14.2 | 4.8 | 9.3   | 15.2 | 7.7  | 11.5   | 13.7 | 6.9 | 10.5      | 10.8 | 6.8 | 8.8  |
| 12       | 12.5 | 5.8 | 9.0   | 11.9 | 9.3  | 10.7   | 12.9 | 8.0 | 10.5      | 9.9  | 7.5 | 8.8  |
| 13       | 13.8 | 6.5 | 9.5   | 12.9 | 8.4  | 10.4   | 12.2 | 8.0 | 10.3      | 10.8 | 7.4 | 9.0  |
| 14       | 10.6 | 6.7 | 8.6   | 16.6 | 6.0  | 11.0   | 11.6 | 8.8 | 10.4      | 8.4  | 5.8 | 7.0  |
| 15       | 11.9 | 6.8 | 8.9   | 18.0 | 8.9  | 12.8   | 11.1 | 8.4 | 9.9       | 10.1 | 4.8 | 7.2  |
| 16       | 13.9 | 4.7 | 8.9   | 15.9 | 9.3  | 12.6   | 11.8 | 7.7 | 10.0      | 9.9  | 4.0 | 7.0  |
| 17       | 12.6 | 5.7 | 9.0   | 14.7 | 9.9  | 12.4   | 12.4 | 7.9 | 10.4      | 8.7  | 5.2 | 7.0  |
| 18       | 15.3 | 4.7 | 9.7   | 17.1 | 10.3 | 13.1   | 13.2 | 8.4 | 10.9      | 5.8  | 2.1 | 4.1  |
| 19       | 15.8 | 4.2 | 9.7   | 17.1 | 8.4  | 12.6   | 12.0 | 8.7 | 10.6      | 7.0  | .0  | 3.0  |
| 20       | 16.1 | 5.3 | 10.6  | 16.9 | 9.1  | 13.1   | 12.3 | 9.0 | 11.0      | 8.2  | 1.3 | 4.4  |
| 21       | 14.4 | 8.1 | 11.2  | 16.8 | 8.9  | 13.0   | 11.5 | 9.3 | 10.4      | 8.4  | 1.4 | 4.9  |
| 22       | 13.1 | 8.0 | 10.4  | 16.4 | 8.7  | 12.6   | 11.2 | 8.6 | 9.7       | 8.9  | 3.0 | 5.9  |
| 23       | 14.6 | 4.5 | 9.3   | 16.7 | 8.3  | 12.4   | 13.4 | 9.0 | 10.8      | 10.0 | 3.5 | 6.6  |
| 24       | 15.3 | 4.9 | 9.8   | 15.2 | 7.7  | 11.5   | 11.7 | 8.9 | 10.5      | 9.9  | 4.0 | 6.6  |
| 25       | 14.7 | 6.1 | 10.2  | 12.5 | 8.0  | 10.4   | 11.6 | 8.1 | 10.0      | 8.3  | 3.8 | 6.0  |
| 26       | 14.2 | 7.4 | 10.4  | 13.5 | 7.8  | 10.7   | 12.8 | 9.1 | 10.8      | 5.4  | 2.0 | 3.9  |
| 27       | 12.9 | 8.5 | 10.6  | 13.6 | 7.6  | 10.8   | 11.9 | 8.6 | 10.1      | 4.7  | .0  | 1.8  |
| 28       | 14.4 | 8.4 | 11.0  | 12.0 | 9.1  | 10.6   | 13.7 | 6.3 | 9.8       | 6.3  | .0  | 2.9  |
| 29       | 13.5 | 6.1 | 9.9   | 13.4 | 9.1  | 11.2   | 12.8 | 7.5 | 10.2      | 7.2  | 1.3 | 4.4  |
| 30       | 12.6 | 7.5 | 10.1  | 15.9 | 8.0  | 11.9   | 13.4 | 6.5 | 9.8       | 8.3  | 2.0 | 4.9  |
| 31       | ---  | --- | ---   | 14.9 | 8.5  | 11.8   | 13.0 | 6.6 | 9.9       | ---  | --- | ---  |
| MONTH    | 16.1 | 1.8 | 9.2   | 18.0 | 6.0  | 11.6   | 15.2 | 6.3 | 10.5      | 12.2 | .0  | 6.7  |
| JUNE     |      |     | JULY  |      |      | AUGUST |      |     | SEPTEMBER |      |     |      |

**08235350 ALAMOSA RIVER ABOVE JASPER, CO**

LOCATION.--Lat 37°25'03", long 106°29'30", in SE<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> 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 mi<sup>2</sup>.

PERIOD OF RECORD.--July 1995 to current year (seasonal records only).

GAGE.--Water-stage recorder with satellite telemetry. Elevation of gage is 9,200 ft above sea level, from topographic map.

REMARKS.--No estimated daily discharges. Records fair except for discharges above 600 ft<sup>3</sup>/s, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge during period of seasonal operation, 769 ft<sup>3</sup>/s, July 16, 1995; gage height, 5.34 ft; minimum daily, 11 ft<sup>3</sup>/s, Aug. 19-20, 1996.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period of seasonal operation, 759 ft<sup>3</sup>/s, May 11; gage height, 5.33 ft; minimum daily, 11 ft<sup>3</sup>/s, Aug. 19-20.

REVISIONS.--The maximum discharge during period of seasonal operation for water year 1995 has been revised to 769 ft<sup>3</sup>/s, July 16, 1995; gage height, 5.34 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

| DAY   | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY   | JUN  | JUL  | AUG  | SEP  |
|-------|-----|-----|-----|-----|-----|-----|-----|-------|------|------|------|------|
| 1     | 56  | --- | --- | --- | --- | --- | --- | 177   | 101  | 54   | 21   | 14   |
| 2     | 49  | --- | --- | --- | --- | --- | --- | 254   | 101  | 46   | 19   | 14   |
| 3     | 46  | --- | --- | --- | --- | --- | --- | 305   | 99   | 43   | 21   | 12   |
| 4     | 43  | --- | --- | --- | --- | --- | --- | 343   | 95   | 45   | 21   | 13   |
| 5     | 38  | --- | --- | --- | --- | --- | --- | 393   | 99   | 46   | 19   | 12   |
| 6     | 37  | --- | --- | --- | --- | --- | --- | 411   | 99   | 42   | 16   | 13   |
| 7     | 36  | --- | --- | --- | --- | --- | --- | 407   | 95   | 41   | 15   | 13   |
| 8     | 35  | --- | --- | --- | --- | --- | --- | 395   | 88   | 59   | 16   | 13   |
| 9     | 33  | --- | --- | --- | --- | --- | --- | 396   | 79   | 97   | 16   | 12   |
| 10    | 33  | --- | --- | --- | --- | --- | 55  | 398   | 73   | 77   | 17   | 12   |
| 11    | 32  | --- | --- | --- | --- | --- | 54  | 443   | 73   | 63   | 14   | 12   |
| 12    | 31  | --- | --- | --- | --- | --- | 53  | 445   | 70   | 66   | 14   | 14   |
| 13    | 30  | --- | --- | --- | --- | --- | 53  | 429   | 68   | 62   | 13   | 13   |
| 14    | --- | --- | --- | --- | --- | --- | 45  | 432   | 72   | 53   | 13   | 17   |
| 15    | --- | --- | --- | --- | --- | --- | 40  | 399   | 76   | 47   | 13   | 17   |
| 16    | --- | --- | --- | --- | --- | --- | 39  | 415   | 66   | 43   | 13   | 15   |
| 17    | --- | --- | --- | --- | --- | --- | 40  | 394   | 62   | 56   | 12   | 15   |
| 18    | --- | --- | --- | --- | --- | --- | 37  | 350   | 58   | 57   | 12   | 17   |
| 19    | --- | --- | --- | --- | --- | --- | 34  | 333   | 55   | 49   | 11   | 18   |
| 20    | --- | --- | --- | --- | --- | --- | 34  | 307   | 52   | 42   | 11   | 18   |
| 21    | --- | --- | --- | --- | --- | --- | 33  | 262   | 52   | 38   | 15   | 18   |
| 22    | --- | --- | --- | --- | --- | --- | 37  | 231   | 61   | 35   | 20   | 16   |
| 23    | --- | --- | --- | --- | --- | --- | 50  | 198   | 52   | 31   | 21   | 16   |
| 24    | --- | --- | --- | --- | --- | --- | 79  | 156   | 46   | 29   | 18   | 16   |
| 25    | --- | --- | --- | --- | --- | --- | 120 | 127   | 43   | 29   | 16   | 15   |
| 26    | --- | --- | --- | --- | --- | --- | 176 | 112   | 47   | 28   | 15   | 15   |
| 27    | --- | --- | --- | --- | --- | --- | 230 | 96    | 57   | 25   | 22   | 14   |
| 28    | --- | --- | --- | --- | --- | --- | 213 | 95    | 57   | 31   | 23   | 14   |
| 29    | --- | --- | --- | --- | --- | --- | 136 | 91    | 51   | 32   | 18   | 14   |
| 30    | --- | --- | --- | --- | --- | --- | 120 | 98    | 50   | 26   | 21   | 13   |
| 31    | --- | --- | --- | --- | --- | --- | --- | 98    | ---  | 23   | 15   | ---  |
| TOTAL | --- | --- | --- | --- | --- | --- | --- | 8990  | 2097 | 1415 | 511  | 435  |
| MEAN  | --- | --- | --- | --- | --- | --- | --- | 290   | 69.9 | 45.6 | 16.5 | 14.5 |
| MAX   | --- | --- | --- | --- | --- | --- | --- | 445   | 101  | 97   | 23   | 18   |
| MIN   | --- | --- | --- | --- | --- | --- | --- | 91    | 43   | 23   | 11   | 12   |
| AC-FT | --- | --- | --- | --- | --- | --- | --- | 17830 | 4160 | 2810 | 1010 | 863  |

**08235700 ALAMOSA RIVER BELOW CASTLEMAN GULCH NEAR JASPER, CO**

LOCATION.--Lat 37°24'10", long 106°27'00", in SE<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> 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 town of Jasper.

DRAINAGE AREA.--76.3 mi<sup>2</sup>.

**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 9,040 ft above sea level, from topographic map.

REMARKS.--No estimated daily discharges. Records fair except those for discharges above 700 ft<sup>3</sup>/s, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge during period of seasonal operation, 702 ft<sup>3</sup>/s, July 16, 1995; gage height, 5.12 ft; minimum daily, 12 ft<sup>3</sup>/s, Aug. 19-20, 1996.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period of seasonal operation, 689 ft<sup>3</sup>/s, May 11; gage height, 5.10 ft; minimum daily, 12 ft<sup>3</sup>/s, Aug. 19-20.

REVISIONS.--The maximum discharge during period of seasonal operation for water year 1995 has been revised to 702 ft<sup>3</sup>/s, July 16, 1995; gage height, 5.12 ft.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

| DAY   | OCT | NOV | DEC | JAN | FEB | MAR | APR  | MAY   | JUN  | JUL  | AUG  | SEP  |
|-------|-----|-----|-----|-----|-----|-----|------|-------|------|------|------|------|
| 1     | 70  | --- | --- | --- | --- | --- | 28   | 190   | 130  | 60   | 24   | 18   |
| 2     | 60  | --- | --- | --- | --- | --- | 32   | 251   | 129  | 50   | 21   | 19   |
| 3     | 55  | --- | --- | --- | --- | --- | 30   | 313   | 127  | 46   | 23   | 17   |
| 4     | 52  | --- | --- | --- | --- | --- | 28   | 356   | 120  | 45   | 23   | 17   |
| 5     | 45  | --- | --- | --- | --- | --- | 26   | 396   | 122  | 49   | 21   | 16   |
| 6     | 44  | --- | --- | --- | --- | --- | 26   | 437   | 121  | 43   | 18   | 16   |
| 7     | 44  | --- | --- | --- | --- | --- | 29   | 443   | 116  | 42   | 18   | 15   |
| 8     | 42  | --- | --- | --- | --- | --- | 37   | 462   | 109  | 59   | 18   | 16   |
| 9     | 40  | --- | --- | --- | --- | --- | 54   | 430   | 97   | 111  | 19   | 15   |
| 10    | 40  | --- | --- | --- | --- | --- | 65   | 424   | 86   | 92   | 19   | 15   |
| 11    | 39  | --- | --- | --- | --- | --- | 64   | 457   | 84   | 70   | 16   | 14   |
| 12    | 38  | --- | --- | --- | --- | --- | 63   | 477   | 83   | 76   | 15   | 17   |
| 13    | 37  | --- | --- | --- | --- | --- | 66   | 471   | 79   | 73   | 14   | 16   |
| 14    | --- | --- | --- | --- | --- | --- | 54   | 471   | 87   | 59   | 14   | 20   |
| 15    | --- | --- | --- | --- | --- | --- | 48   | 425   | 95   | 51   | 14   | 22   |
| 16    | --- | --- | --- | --- | --- | --- | 48   | 420   | 79   | 45   | 14   | 19   |
| 17    | --- | --- | --- | --- | --- | --- | 50   | 412   | 72   | 61   | 14   | 18   |
| 18    | --- | --- | --- | --- | --- | --- | 47   | 390   | 66   | 70   | 13   | 22   |
| 19    | --- | --- | --- | --- | --- | --- | 43   | 368   | 61   | 57   | 12   | 22   |
| 20    | --- | --- | --- | --- | --- | --- | 42   | 329   | 57   | 47   | 12   | 23   |
| 21    | --- | --- | --- | --- | --- | --- | 41   | 276   | 57   | 42   | 18   | 22   |
| 22    | --- | --- | --- | --- | --- | --- | 44   | 259   | 70   | 38   | 27   | 21   |
| 23    | --- | --- | --- | --- | --- | --- | 59   | 242   | 58   | 34   | 30   | 21   |
| 24    | --- | --- | --- | --- | --- | --- | 98   | 198   | 50   | 31   | 25   | 20   |
| 25    | --- | --- | --- | --- | --- | --- | 159  | 169   | 46   | 31   | 22   | 19   |
| 26    | --- | --- | --- | --- | --- | --- | 228  | 155   | 49   | 30   | 20   | 20   |
| 27    | --- | --- | --- | --- | --- | --- | 272  | 136   | 64   | 27   | 26   | 18   |
| 28    | --- | --- | --- | --- | --- | --- | 241  | 135   | 63   | 36   | 31   | 18   |
| 29    | --- | --- | --- | --- | --- | 18  | 154  | 123   | 57   | 39   | 23   | 17   |
| 30    | --- | --- | --- | --- | --- | 18  | 141  | 133   | 53   | 30   | 28   | 16   |
| 31    | --- | --- | --- | --- | --- | 22  | ---  | 129   | ---  | 26   | 21   | ---  |
| TOTAL | --- | --- | --- | --- | --- | --- | 2317 | 9877  | 2487 | 1570 | 613  | 549  |
| MEAN  | --- | --- | --- | --- | --- | --- | 77.2 | 319   | 82.9 | 50.6 | 19.8 | 18.3 |
| MAX   | --- | --- | --- | --- | --- | --- | 272  | 477   | 130  | 111  | 31   | 23   |
| MIN   | --- | --- | --- | --- | --- | --- | 26   | 123   | 46   | 26   | 12   | 14   |
| AC-FT | --- | --- | --- | --- | --- | --- | 4600 | 19590 | 4930 | 3110 | 1220 | 1090 |





08235700 ALAMOSA RIVER BELOW CASTLEMAN GULCH NEAR JASPER, CO--Continued

pH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DAY   | MAX | MIN | MEAN |
|-------|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|------|
|       |     |     |      |     |     |      |     |     |      |     |     |      |
| 1     | 5.4 | 5.0 | 5.2  | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| 2     | 5.3 | 5.0 | 5.2  | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| 3     | 5.3 | 5.1 | 5.2  | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| 4     | 5.2 | 5.1 | 5.1  | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| 5     | 5.4 | 5.0 | 5.2  | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| 6     | 5.4 | 5.0 | 5.2  | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| 7     | 5.3 | 5.1 | 5.2  | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| 8     | 5.2 | 5.1 | 5.1  | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| 9     | 5.2 | 5.0 | 5.1  | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| 10    | 5.2 | 5.0 | 5.1  | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| 11    | 5.1 | 4.9 | 5.0  | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| 12    | 5.1 | 4.9 | 5.0  | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| 13    | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| 14    | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| 15    | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| 16    | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| 17    | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| 18    | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| 19    | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| 20    | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| 21    | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| 22    | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| 23    | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| 24    | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| 25    | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| 26    | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| 27    | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| 28    | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| 29    | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| 30    | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| 31    | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| MONTH | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
|       | MAX | MIN | MEAN |
|       |     |     |      |     |     |      |     |     |      |     |     |      |
| 1     | --- | --- | ---  | --- | --- | ---  | 4.8 | 4.5 | 4.6  | 6.9 | 6.7 | 6.9  |
| 2     | --- | --- | ---  | --- | --- | ---  | 4.8 | 4.4 | 4.6  | 7.0 | 6.9 | 6.9  |
| 3     | --- | --- | ---  | --- | --- | ---  | 4.9 | 4.8 | 4.9  | 7.0 | 6.8 | 6.9  |
| 4     | --- | --- | ---  | --- | --- | ---  | 5.0 | 4.9 | 4.9  | 7.0 | 6.7 | 6.9  |
| 5     | --- | --- | ---  | --- | --- | ---  | 5.0 | 4.9 | 4.9  | 7.0 | 6.6 | 6.8  |
| 6     | --- | --- | ---  | --- | --- | ---  | 5.0 | 4.8 | 4.9  | 7.0 | 6.7 | 6.8  |
| 7     | --- | --- | ---  | --- | --- | ---  | 5.0 | 4.8 | 4.9  | 6.9 | 6.5 | 6.8  |
| 8     | --- | --- | ---  | --- | --- | ---  | 5.0 | 4.8 | 4.9  | 6.9 | 6.8 | 6.9  |
| 9     | --- | --- | ---  | --- | --- | ---  | 5.2 | 4.8 | 5.0  | 7.0 | 6.8 | 6.9  |
| 10    | --- | --- | ---  | --- | --- | ---  | 5.6 | 5.1 | 5.4  | 6.9 | 6.7 | 6.8  |
| 11    | --- | --- | ---  | --- | --- | ---  | 5.9 | 5.5 | 5.8  | 6.9 | 6.2 | 6.7  |
| 12    | --- | --- | ---  | --- | --- | ---  | 6.0 | 5.7 | 5.9  | 6.8 | 6.5 | 6.7  |
| 13    | --- | --- | ---  | --- | --- | ---  | 6.0 | 5.7 | 5.9  | 6.8 | 6.5 | 6.7  |
| 14    | --- | --- | ---  | --- | --- | ---  | 6.1 | 5.9 | 6.0  | 6.8 | 6.6 | 6.7  |
| 15    | --- | --- | ---  | --- | --- | ---  | 5.9 | 5.6 | 5.9  | 6.9 | 6.6 | 6.8  |
| 16    | --- | --- | ---  | --- | --- | ---  | 5.7 | 5.5 | 5.6  | 6.9 | 6.7 | 6.8  |
| 17    | --- | --- | ---  | --- | --- | ---  | 5.7 | 5.5 | 5.6  | 7.0 | 6.8 | 6.9  |
| 18    | --- | --- | ---  | --- | --- | ---  | 5.7 | 5.7 | 5.7  | 7.0 | 6.9 | 6.9  |
| 19    | --- | --- | ---  | --- | --- | ---  | 5.7 | 5.5 | 5.6  | 7.0 | 6.9 | 7.0  |
| 20    | --- | --- | ---  | --- | --- | ---  | 5.6 | 5.4 | 5.5  | 7.0 | 6.9 | 7.0  |
| 21    | --- | --- | ---  | --- | --- | ---  | 5.6 | 5.4 | 5.5  | 7.0 | 6.9 | 6.9  |
| 22    | --- | --- | ---  | --- | --- | ---  | 5.4 | 5.3 | 5.4  | 7.0 | 6.8 | 6.9  |
| 23    | --- | --- | ---  | --- | --- | ---  | 5.6 | 5.3 | 5.4  | 7.0 | 6.8 | 6.9  |
| 24    | --- | --- | ---  | --- | --- | ---  | 6.1 | 5.4 | 5.9  | 6.9 | 6.8 | 6.8  |
| 25    | --- | --- | ---  | --- | --- | ---  | 6.4 | 5.9 | 6.2  | 6.8 | 6.7 | 6.8  |
| 26    | --- | --- | ---  | --- | --- | ---  | 6.7 | 6.2 | 6.5  | 6.8 | 6.4 | 6.7  |
| 27    | --- | --- | ---  | --- | --- | ---  | 6.8 | 6.2 | 6.6  | 6.7 | 6.5 | 6.6  |
| 28    | --- | --- | ---  | --- | --- | ---  | 7.0 | 6.7 | 6.9  | 6.6 | 6.5 | 6.6  |
| 29    | --- | --- | ---  | --- | --- | ---  | 6.9 | 6.8 | 6.9  | 6.6 | 6.4 | 6.5  |
| 30    | --- | --- | ---  | 4.8 | 4.6 | 4.7  | 6.9 | 6.5 | 6.8  | 6.9 | 6.5 | 6.7  |
| 31    | --- | --- | ---  | 4.8 | 4.5 | 4.6  | --- | --- | ---  | 6.9 | 6.7 | 6.8  |
| MONTH | --- | --- | ---  | --- | --- | ---  | 7.0 | 4.4 | 5.6  | 7.0 | 6.2 | 6.8  |



RIO GRANDE BASIN  
**08235700 ALAMOSA RIVER BELOW CASTLEMAN GULCH NEAR JASPER, CO--Continued**

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DAY   | MAX      | MIN | MEAN | MAX   | MIN  | MEAN | MAX    | MIN  | MEAN | MAX       | MIN | MEAN |
|-------|----------|-----|------|-------|------|------|--------|------|------|-----------|-----|------|
|       | FEBRUARY |     |      | MARCH |      |      | APRIL  |      |      | MAY       |     |      |
| 1     | ---      | --- | ---  | ---   | ---  | ---  | 6.4    | .0   | 2.0  | 9.4       | .0  | 3.5  |
| 2     | ---      | --- | ---  | ---   | ---  | ---  | 5.8    | .0   | 2.2  | 9.8       | .3  | 3.6  |
| 3     | ---      | --- | ---  | ---   | ---  | ---  | 7.6    | .0   | 2.8  | 9.4       | .3  | 3.6  |
| 4     | ---      | --- | ---  | ---   | ---  | ---  | 5.4    | .1   | 2.2  | 9.4       | .5  | 3.6  |
| 5     | ---      | --- | ---  | ---   | ---  | ---  | 8.1    | .1   | 3.2  | 9.4       | .2  | 3.5  |
| 6     | ---      | --- | ---  | ---   | ---  | ---  | 7.4    | .0   | 3.0  | 9.3       | .3  | 3.6  |
| 7     | ---      | --- | ---  | ---   | ---  | ---  | 8.7    | .0   | 3.5  | 9.2       | .4  | 3.6  |
| 8     | ---      | --- | ---  | ---   | ---  | ---  | 9.9    | .2   | 3.8  | 9.5       | .7  | 3.9  |
| 9     | ---      | --- | ---  | ---   | ---  | ---  | 7.2    | .0   | 3.1  | 9.6       | 1.0 | 4.1  |
| 10    | ---      | --- | ---  | ---   | ---  | ---  | 6.0    | .0   | 2.7  | 9.9       | .7  | 4.2  |
| 11    | ---      | --- | ---  | ---   | ---  | ---  | 7.5    | .0   | 3.2  | 10.7      | .7  | 4.3  |
| 12    | ---      | --- | ---  | ---   | ---  | ---  | 9.1    | .0   | 3.6  | 10.2      | 1.2 | 4.6  |
| 13    | ---      | --- | ---  | ---   | ---  | ---  | 4.2    | .0   | 1.8  | 10.0      | 1.1 | 4.5  |
| 14    | ---      | --- | ---  | ---   | ---  | ---  | 4.8    | .0   | 1.8  | 10.2      | 1.8 | 5.0  |
| 15    | ---      | --- | ---  | ---   | ---  | ---  | 9.0    | .0   | 3.4  | 10.9      | 1.7 | 5.3  |
| 16    | ---      | --- | ---  | ---   | ---  | ---  | 9.3    | .0   | 4.2  | 11.6      | 2.0 | 5.7  |
| 17    | ---      | --- | ---  | ---   | ---  | ---  | 7.1    | .1   | 3.4  | 11.3      | 2.7 | 5.9  |
| 18    | ---      | --- | ---  | ---   | ---  | ---  | 4.0    | .9   | 2.3  | 11.3      | 2.1 | 5.9  |
| 19    | ---      | --- | ---  | ---   | ---  | ---  | 8.5    | .0   | 3.3  | 11.9      | 3.1 | 6.5  |
| 20    | ---      | --- | ---  | ---   | ---  | ---  | 3.5    | .0   | 1.5  | 11.4      | 2.9 | 6.3  |
| 21    | ---      | --- | ---  | ---   | ---  | ---  | 8.5    | .0   | 3.6  | 11.9      | 1.7 | 6.1  |
| 22    | ---      | --- | ---  | ---   | ---  | ---  | 9.4    | .0   | 4.0  | 11.7      | 2.0 | 6.3  |
| 23    | ---      | --- | ---  | ---   | ---  | ---  | 11.0   | .0   | 4.6  | 11.2      | 2.7 | 6.5  |
| 24    | ---      | --- | ---  | ---   | ---  | ---  | 10.9   | .1   | 4.2  | 7.0       | 1.7 | 4.6  |
| 25    | ---      | --- | ---  | ---   | ---  | ---  | 10.0   | 1.0  | 4.1  | 9.2       | 2.9 | 5.6  |
| 26    | ---      | --- | ---  | ---   | ---  | ---  | 9.3    | .0   | 3.1  | 7.8       | 1.8 | 4.8  |
| 27    | ---      | --- | ---  | ---   | ---  | ---  | 8.3    | .4   | 3.0  | 11.1      | 1.6 | 6.1  |
| 28    | ---      | --- | ---  | ---   | ---  | ---  | 1.4    | .0   | .5   | 9.8       | 2.7 | 5.9  |
| 29    | ---      | --- | ---  | ---   | ---  | ---  | 7.3    | .0   | 2.3  | 13.3      | 1.6 | 7.2  |
| 30    | ---      | --- | ---  | 8.4   | .0   | 2.9  | 10.1   | .0   | 3.8  | 12.3      | 3.1 | 7.6  |
| 31    | ---      | --- | ---  | 7.2   | .0   | 2.4  | ---    | ---  | ---  | 13.2      | 2.2 | 7.5  |
| MONTH | ---      | --- | ---  | ---   | ---  | ---  | 11.0   | .0   | 3.0  | 13.3      | .0  | 5.1  |
|       | JUNE     |     |      | JULY  |      |      | AUGUST |      |      | SEPTEMBER |     |      |
| 1     | 12.9     | 2.4 | 7.8  | 16.0  | 7.7  | 11.6 | 15.5   | 7.9  | 12.0 | 14.3      | 6.6 | 10.8 |
| 2     | 12.1     | 2.2 | 7.7  | 18.4  | 7.3  | 12.4 | 17.7   | 8.8  | 13.1 | 12.5      | 7.8 | 9.9  |
| 3     | 12.4     | 2.8 | 8.1  | 19.2  | 7.5  | 12.8 | 20.0   | 10.1 | 14.1 | 17.9      | 6.0 | 11.0 |
| 4     | 13.1     | 3.8 | 8.3  | 16.3  | 8.3  | 12.7 | 18.0   | 9.7  | 13.7 | 17.5      | 7.0 | 11.4 |
| 5     | 12.3     | 3.8 | 8.7  | 19.4  | 8.3  | 13.4 | 19.7   | 6.6  | 12.9 | 15.7      | 6.9 | 11.3 |
| 6     | 15.4     | 4.4 | 9.7  | 18.5  | 9.9  | 14.0 | 20.0   | 7.1  | 13.1 | 17.1      | 8.4 | 12.0 |
| 7     | 13.1     | 3.9 | 8.8  | 14.4  | 9.1  | 12.2 | 16.9   | 7.2  | 12.3 | 14.2      | 6.6 | 10.1 |
| 8     | 13.2     | 4.2 | 9.1  | 16.2  | 9.1  | 11.7 | 18.3   | 9.6  | 13.1 | 14.8      | 5.3 | 10.0 |
| 9     | 10.3     | 5.2 | 8.1  | 14.9  | 7.7  | 10.5 | 13.4   | 7.7  | 10.8 | 13.9      | 5.8 | 9.7  |
| 10    | 12.3     | 4.8 | 8.7  | 14.7  | 7.8  | 11.4 | 15.5   | 6.4  | 11.2 | 14.1      | 6.6 | 10.2 |
| 11    | 14.2     | 5.0 | 9.8  | 16.7  | 8.4  | 12.5 | 19.5   | 6.9  | 12.9 | 15.0      | 6.9 | 10.7 |
| 12    | 12.0     | 6.2 | 9.4  | 13.8  | 8.9  | 11.2 | 16.7   | 8.5  | 12.5 | 12.2      | 8.4 | 10.2 |
| 13    | 12.6     | 6.8 | 9.6  | 13.3  | 8.1  | 10.3 | 16.5   | 8.0  | 12.0 | 15.4      | 8.1 | 11.0 |
| 14    | 11.4     | 7.2 | 9.3  | 17.5  | 6.6  | 12.0 | 13.7   | 8.8  | 11.4 | 9.8       | 7.0 | 8.3  |
| 15    | 14.1     | 7.4 | 9.9  | 20.6  | 9.7  | 14.1 | 15.0   | 8.0  | 11.3 | 16.4      | 5.5 | 10.2 |
| 16    | 13.9     | 5.6 | 10.2 | 19.0  | 10.0 | 14.0 | 16.9   | 7.3  | 11.9 | 14.6      | 5.2 | 9.5  |
| 17    | 14.9     | 6.5 | 10.8 | 16.5  | 10.2 | 13.3 | 15.9   | 7.3  | 11.4 | 12.9      | 6.3 | 8.6  |
| 18    | 17.3     | 5.8 | 11.4 | 19.6  | 10.2 | 14.0 | 19.8   | 8.3  | 13.2 | 8.7       | 3.5 | 6.2  |
| 19    | 18.0     | 5.2 | 11.5 | 19.6  | 8.5  | 14.0 | 16.4   | 8.1  | 12.6 | 11.3      | .6  | 5.6  |
| 20    | 18.1     | 6.1 | 12.1 | 21.3  | 9.4  | 15.1 | 15.8   | 8.7  | 12.2 | 12.2      | 2.4 | 7.2  |
| 21    | 16.6     | 8.7 | 12.2 | 18.9  | 9.1  | 14.3 | 15.0   | 9.6  | 11.7 | 13.2      | 2.4 | 7.6  |
| 22    | 14.4     | 8.4 | 11.3 | 20.6  | 9.0  | 14.5 | 12.8   | 9.2  | 10.5 | 13.8      | 3.6 | 8.5  |
| 23    | 17.1     | 5.3 | 10.9 | 20.4  | 8.4  | 14.1 | 14.9   | 9.5  | 11.8 | 14.4      | 4.4 | 8.9  |
| 24    | 18.2     | 5.6 | 11.6 | 19.9  | 7.9  | 13.2 | 14.2   | 9.8  | 11.7 | 14.1      | 4.9 | 9.0  |
| 25    | 16.4     | 7.0 | 11.2 | 15.7  | 8.3  | 11.8 | 13.5   | 8.3  | 11.1 | 11.9      | 4.5 | 7.9  |
| 26    | 14.7     | 7.8 | 11.3 | 15.3  | 8.0  | 11.9 | 17.9   | 6.4  | 12.0 | 9.5       | 3.9 | 6.3  |
| 27    | 15.0     | 9.0 | 11.5 | 15.9  | 7.7  | 12.1 | 13.2   | 8.9  | 10.8 | 9.9       | .5  | 4.9  |
| 28    | 16.8     | 8.8 | 12.3 | 13.8  | 9.4  | 11.5 | 17.3   | 6.5  | 11.5 | 11.6      | 1.2 | 6.2  |
| 29    | 14.6     | 6.9 | 10.9 | 14.4  | 9.1  | 11.7 | 17.6   | 7.4  | 12.0 | 12.4      | 2.7 | 7.4  |
| 30    | 14.6     | 8.0 | 11.1 | 18.1  | 8.2  | 13.2 | 16.3   | 6.7  | 11.2 | 12.5      | 3.0 | 7.2  |
| 31    | ---      | --- | ---  | 17.6  | 8.5  | 13.2 | 18.6   | 6.6  | 12.2 | ---       | --- | ---  |
| MONTH | 18.2     | 2.2 | 10.1 | 21.3  | 6.6  | 12.7 | 20.0   | 6.4  | 12.1 | 17.9      | .5  | 8.9  |









## 08236000 ALAMOSA RIVER ABOVE TERRACE RESERVOIR, CO--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1994 TO SEPTEMBER 1995

| 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    | ---      | --- | ---  | ---   | --- | ---  | ---    | ---  | ---  | ---       | ---  | ---  |
| 22    | ---      | --- | ---  | ---   | --- | ---  | ---    | ---  | ---  | ---       | ---  | ---  |
| 23    | ---      | --- | ---  | ---   | --- | ---  | ---    | ---  | ---  | ---       | ---  | ---  |
| 24    | ---      | --- | ---  | ---   | --- | ---  | ---    | ---  | ---  | ---       | ---  | ---  |
| 25    | ---      | --- | ---  | ---   | --- | ---  | ---    | ---  | ---  | ---       | ---  | ---  |
| 26    | ---      | --- | ---  | ---   | --- | ---  | ---    | ---  | ---  | ---       | ---  | ---  |
| 27    | ---      | --- | ---  | ---   | --- | ---  | ---    | ---  | ---  | ---       | ---  | ---  |
| 28    | ---      | --- | ---  | ---   | --- | ---  | ---    | ---  | ---  | ---       | ---  | ---  |
| 29    | ---      | --- | ---  | ---   | --- | ---  | ---    | ---  | ---  | ---       | ---  | ---  |
| 30    | ---      | --- | ---  | ---   | --- | ---  | ---    | ---  | ---  | ---       | ---  | ---  |
| 31    | ---      | --- | ---  | ---   | --- | ---  | ---    | ---  | ---  | ---       | ---  | ---  |
| MONTH | ---      | --- | ---  | ---   | --- | ---  | ---    | ---  | ---  | ---       | ---  | ---  |
|       | JUNE     |     |      | JULY  |     |      | AUGUST |      |      | SEPTEMBER |      |      |
| 1     | ---      | --- | ---  | 9.6   | 3.7 | 6.6  | 16.6   | 8.2  | 12.3 | 15.3      | 10.0 | 13.2 |
| 2     | 8.6      | 2.1 | 5.0  | 10.4  | 3.7 | 6.9  | ---    | ---  | ---  | 15.6      | 10.0 | 12.6 |
| 3     | 10.7     | 1.4 | 5.1  | 8.6   | 3.3 | 6.0  | 14.2   | ---  | ---  | 17.0      | 9.6  | 13.2 |
| 4     | 8.0      | 2.2 | 4.6  | 10.0  | 2.8 | 6.0  | 15.4   | 10.0 | 12.7 | 17.2      | 10.7 | 13.9 |
| 5     | 11.3     | 2.2 | 5.9  | 12.5  | 3.3 | 7.8  | 14.6   | 9.5  | 12.2 | 17.8      | 10.1 | 13.8 |
| 6     | 9.8      | 2.2 | 5.2  | 13.8  | 4.5 | 8.9  | 15.0   | 9.1  | 12.3 | 15.4      | 10.4 | 12.9 |
| 7     | 9.4      | 1.9 | 4.9  | 11.3  | 4.4 | 8.2  | 15.0   | 9.8  | 12.6 | 13.1      | 10.6 | 11.8 |
| 8     | 10.1     | 2.0 | 5.3  | 12.7  | 4.7 | 8.7  | 17.3   | 11.4 | 14.3 | 13.3      | 9.2  | 11.2 |
| 9     | 9.9      | 1.7 | 5.2  | 13.1  | 5.0 | 8.9  | 15.2   | 12.0 | 13.5 | 11.7      | 9.0  | 10.6 |
| 10    | 9.1      | 1.5 | 4.7  | 12.2  | 5.1 | 8.8  | 15.4   | 10.1 | 13.0 | 11.2      | 7.6  | 9.5  |
| 11    | 11.6     | 1.5 | 5.7  | 13.2  | 5.3 | 9.3  | 18.7   | 12.3 | 14.8 | 14.0      | 7.2  | 10.5 |
| 12    | 11.7     | 2.3 | 6.1  | 14.0  | 5.3 | 9.6  | 15.8   | 12.3 | 14.1 | 14.1      | 6.8  | 10.6 |
| 13    | 11.3     | 2.6 | 6.0  | 11.0  | 5.5 | 8.1  | 16.5   | 10.6 | 13.8 | 14.4      | 7.4  | 11.0 |
| 14    | 10.3     | 2.6 | 5.9  | 11.0  | 5.8 | 8.4  | 16.0   | 11.9 | 14.0 | 11.0      | 7.6  | 9.1  |
| 15    | 8.3      | 3.4 | 5.6  | 12.8  | 6.1 | 9.5  | 18.7   | 10.7 | 14.5 | 12.3      | 5.7  | 9.2  |
| 16    | 7.7      | 3.2 | 5.2  | 11.9  | 6.8 | 9.3  | 15.3   | 10.7 | 13.3 | 14.6      | 7.8  | 11.2 |
| 17    | 8.0      | 4.3 | 5.8  | 10.3  | 6.3 | 8.0  | 17.7   | 10.8 | 14.4 | 14.7      | 7.7  | 11.2 |
| 18    | 10.9     | 2.5 | 6.1  | 12.2  | 6.6 | 9.4  | 18.0   | 11.1 | 14.6 | 13.3      | 9.1  | 11.1 |
| 19    | 12.1     | 3.6 | 7.2  | 11.8  | 7.2 | 9.5  | 15.4   | 11.5 | 13.7 | 12.6      | 6.9  | 9.9  |
| 20    | 12.2     | 3.8 | 7.6  | 11.2  | 6.2 | 9.1  | 14.2   | 9.9  | 12.0 | 12.3      | 6.5  | 9.5  |
| 21    | 11.2     | 4.1 | 7.2  | 14.1  | 6.1 | 10.1 | 15.4   | 10.1 | 12.2 | 11.5      | 7.6  | 9.1  |
| 22    | 11.0     | 2.6 | 6.3  | 13.1  | 6.2 | 9.9  | 13.4   | 9.9  | 11.9 | 11.2      | 5.2  | 8.1  |
| 23    | 11.0     | 2.6 | 6.4  | 12.8  | 5.3 | 9.5  | 14.6   | 9.6  | 12.1 | 11.2      | 4.0  | 7.7  |
| 24    | 10.0     | 3.0 | 6.0  | 14.9  | 6.3 | 10.7 | 14.5   | 11.6 | 13.1 | 10.0      | 6.1  | 7.9  |
| 25    | 9.2      | 3.1 | 6.3  | 14.9  | 6.5 | 11.1 | 14.5   | 10.1 | 12.5 | 11.0      | 4.4  | 7.9  |
| 26    | 8.8      | 3.4 | 6.0  | 15.7  | 7.1 | 11.7 | 16.7   | 10.5 | 13.2 | 10.1      | 6.1  | 8.1  |
| 27    | 8.2      | 3.6 | 6.1  | 15.7  | 6.8 | 11.5 | 14.1   | 10.9 | 12.6 | 12.8      | 5.5  | 9.0  |
| 28    | 9.9      | 3.6 | 6.5  | 15.4  | 7.9 | 12.0 | 14.1   | 10.4 | 12.5 | 9.5       | 6.9  | 8.1  |
| 29    | 9.1      | 4.3 | 6.5  | 13.3  | 8.5 | 11.4 | 15.0   | 10.1 | 12.9 | 10.6      | 6.9  | 8.3  |
| 30    | 9.0      | 5.0 | 6.8  | 14.5  | 9.5 | 12.1 | 16.8   | 10.7 | 13.9 | 8.7       | 3.5  | 6.5  |
| 31    | ---      | --- | ---  | 12.8  | 9.4 | 11.4 | 17.9   | 10.7 | 14.9 | ---       | ---  | ---  |
| MONTH | ---      | --- | ---  | 15.7  | 2.8 | 9.3  | ---    | ---  | ---  | 17.8      | 3.5  | 10.2 |



## 08236000 ALAMOSA RIVER ABOVE TERRACE RESERVOIR, CO--Continued

| TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996 |      |      |      |      |      |      |        |      |      |           |      |      |
|--|------|------|------|------|------|------|--------|------|------|-----------|------|------|
| DAY  | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN | MAX    | MIN  | MEAN | MAX       | MIN  | MEAN |
|  | JUNE |      |      | JULY |      |      | AUGUST |      |      | SEPTEMBER |      |      |
| 1  | 13.7 | 4.9  | 9.3  | 17.9 | 9.9  | 13.6 | 18.6   | 10.7 | 14.2 | 16.9      | 9.5  | 13.1 |
| 2  | 13.2 | 4.8  | 9.3  | 20.4 | 9.4  | 14.7 | 18.0   | 11.1 | 14.5 | 14.9      | 10.1 | 12.2 |
| 3  | 12.8 | 5.5  | 9.6  | 21.1 | 10.3 | 15.7 | 21.0   | 12.3 | 15.7 | 18.2      | 8.2  | 12.9 |
| 4  | 12.6 | 6.1  | 9.7  | 18.1 | 11.5 | 15.1 | 20.1   | 12.3 | 15.6 | 18.5      | 9.2  | 13.4 |
| 5  | 13.2 | 6.5  | 10.2 | 19.5 | 11.0 | 15.2 | 20.5   | 9.6  | 14.8 | 17.6      | 9.4  | 13.1 |
| 6  | 15.4 | 6.8  | 11.0 | 21.3 | 12.6 | 16.6 | 21.0   | 9.9  | 15.1 | 17.5      | 11.3 | 13.8 |
| 7  | 14.6 | 6.8  | 11.1 | 16.1 | 11.6 | 14.2 | 19.0   | 10.3 | 14.7 | 15.2      | 8.7  | 11.8 |
| 8  | 14.5 | 6.9  | 10.8 | 16.9 | 11.3 | 13.6 | 21.1   | 11.5 | 15.4 | 16.3      | 7.2  | 11.5 |
| 9  | 11.5 | 7.7  | 9.9  | 14.2 | 9.2  | 12.0 | 15.4   | 10.9 | 13.1 | 17.2      | 7.9  | 12.2 |
| 10   | 13.5 | 6.4  | 9.9  | 16.0 | 9.5  | 12.5 | 17.0   | 8.6  | 12.8 | 16.6      | 8.7  | 12.6 |
| 11   | 15.5 | 7.2  | 11.5 | 17.2 | 10.2 | 13.8 | 20.6   | 9.1  | 14.6 | 16.4      | 9.4  | 12.7 |
| 12   | 12.5 | 8.6  | 10.9 | 14.4 | 11.4 | 12.6 | 20.2   | 11.0 | 15.3 | 13.2      | 10.5 | 11.8 |
| 13   | 13.2 | 8.6  | 10.8 | 13.4 | 9.3  | 11.4 | 18.9   | 11.0 | 14.8 | 15.4      | 9.4  | 11.9 |
| 14   | 13.3 | 9.1  | 10.8 | 19.0 | 8.7  | 13.6 | 15.3   | 11.2 | 13.4 | 10.8      | 8.6  | 9.6  |
| 15   | 13.2 | 8.6  | 10.9 | 18.3 | 11.4 | 14.8 | 16.8   | 9.9  | 13.1 | 14.1      | 7.1  | 10.6 |
| 16   | 14.8 | 7.7  | 11.6 | 18.6 | 12.4 | 15.6 | 18.6   | 9.7  | 13.9 | 15.8      | 7.5  | 11.3 |
| 17   | 17.9 | 8.5  | 12.8 | 17.8 | 12.1 | 15.0 | 17.2   | 9.4  | 13.0 | 14.2      | 8.4  | 10.8 |
| 18   | 18.1 | 8.2  | 13.0 | 15.8 | 12.2 | 14.1 | 19.6   | 9.9  | 14.4 | 9.0       | 5.7  | 7.8  |
| 19   | 18.7 | 7.8  | 13.3 | 19.5 | 10.9 | 15.4 | 19.6   | 10.6 | 14.8 | 11.1      | 2.7  | 6.8  |
| 20   | 19.3 | 8.8  | 14.1 | 20.7 | 12.0 | 16.5 | 20.4   | 11.5 | 15.1 | 12.4      | 4.7  | 8.4  |
| 21   | 17.4 | 10.7 | 14.1 | 21.3 | 12.4 | 16.9 | 16.2   | 11.6 | 13.3 | 13.4      | 4.8  | 8.9  |
| 22   | 14.9 | 10.2 | 12.8 | 20.9 | 11.9 | 16.5 | 12.8   | 10.8 | 11.7 | 14.2      | 5.8  | 9.8  |
| 23   | 17.6 | 7.5  | 12.6 | 19.4 | 11.9 | 16.2 | 15.2   | 10.8 | 12.6 | 14.5      | 6.5  | 10.3 |
| 24   | 18.6 | 8.1  | 13.4 | 20.0 | 11.1 | 15.3 | 15.3   | 11.4 | 13.1 | 14.2      | 6.8  | 10.3 |
| 25   | 16.6 | 9.6  | 12.9 | 16.5 | 10.7 | 13.9 | 17.4   | 10.1 | 13.5 | 12.4      | 6.4  | 9.2  |
| 26   | 16.0 | 10.0 | 13.0 | 16.4 | 10.6 | 13.5 | 16.0   | 11.2 | 13.5 | 10.5      | 5.3  | 7.6  |
| 27   | 16.1 | 10.6 | 13.0 | 16.5 | 10.1 | 13.4 | 16.0   | 10.9 | 13.1 | 10.0      | 2.8  | 6.1  |
| 28   | 17.4 | 10.6 | 13.9 | 15.7 | 11.3 | 13.3 | 16.9   | 8.3  | 12.4 | 11.5      | 2.9  | 6.8  |
| 29   | 15.7 | 9.6  | 13.2 | 15.2 | 11.0 | 13.2 | 19.0   | 9.9  | 13.9 | 12.3      | 4.3  | 8.1  |
| 30   | 14.2 | 10.3 | 12.4 | 19.3 | 10.1 | 14.6 | 17.1   | 10.0 | 13.8 | 11.6      | 5.0  | 8.4  |
| 31   | ---  | ---  | ---  | 20.7 | 11.3 | 15.5 | 18.1   | 9.2  | 13.7 | ---       | ---  | ---  |
| MONTH  | 19.3 | 4.8  | 11.7 | 21.3 | 8.7  | 14.5 | 21.1   | 8.3  | 14.0 | 18.5      | 2.7  | 10.5 |





08236500 ALAMOSA RIVER BELOW TERRACE RESERVOIR, CO--Continued

pH, WATER, WHOLE, FIELD, STANDARD UNITS, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DAY   | MAX | MIN | MEAN |
|-------|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|------|
|       |     |     |      |     |     |      |     |     |      |     |     |      |
| 1     | 5.4 | 5.3 | 5.3  | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| 2     | 5.4 | 5.3 | 5.3  | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| 3     | 5.4 | 5.4 | 5.4  | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| 4     | 5.4 | 5.4 | 5.4  | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| 5     | 5.4 | 5.4 | 5.4  | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| 6     | 5.5 | 5.4 | 5.4  | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| 7     | 5.5 | 5.5 | 5.5  | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| 8     | 5.5 | 5.5 | 5.5  | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| 9     | 5.5 | 5.5 | 5.5  | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| 10    | 5.6 | 5.5 | 5.5  | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| 11    | 5.5 | 5.5 | 5.5  | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| 12    | 5.5 | 5.5 | 5.5  | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| 13    | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| 14    | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| 15    | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| 16    | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| 17    | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| 18    | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| 19    | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| 20    | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| 21    | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| 22    | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| 23    | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| 24    | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| 25    | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| 26    | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| 27    | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| 28    | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| 29    | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| 30    | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| 31    | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| MONTH | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| DAY   | MAX | MIN | MEAN |
|       |     |     |      |     |     |      |     |     |      |     |     |      |
| 1     | --- | --- | ---  | --- | --- | ---  | 6.8 | 6.6 | 6.7  | 6.9 | 6.8 | 6.9  |
| 2     | --- | --- | ---  | --- | --- | ---  | 6.7 | 6.6 | 6.6  | 6.9 | 6.8 | 6.9  |
| 3     | --- | --- | ---  | --- | --- | ---  | 6.7 | 6.6 | 6.7  | 6.9 | 6.8 | 6.9  |
| 4     | --- | --- | ---  | --- | --- | ---  | 6.7 | 6.6 | 6.7  | 6.9 | 6.9 | 6.9  |
| 5     | --- | --- | ---  | --- | --- | ---  | 6.7 | 6.7 | 6.7  | 6.9 | 6.9 | 6.9  |
| 6     | --- | --- | ---  | --- | --- | ---  | 6.8 | 6.7 | 6.7  | 7.0 | 6.9 | 6.9  |
| 7     | --- | --- | ---  | --- | --- | ---  | 6.8 | 6.7 | 6.8  | 7.0 | 6.9 | 6.9  |
| 8     | --- | --- | ---  | --- | --- | ---  | 6.8 | 6.8 | 6.8  | 6.9 | 6.9 | 6.9  |
| 9     | --- | --- | ---  | --- | --- | ---  | 6.8 | 6.7 | 6.8  | 6.9 | 6.9 | 6.9  |
| 10    | --- | --- | ---  | --- | --- | ---  | 6.8 | 6.7 | 6.7  | 7.0 | 6.9 | 6.9  |
| 11    | --- | --- | ---  | --- | --- | ---  | 6.7 | 6.7 | 6.7  | 7.0 | 6.9 | 7.0  |
| 12    | --- | --- | ---  | --- | --- | ---  | 6.7 | 6.7 | 6.7  | 7.0 | 6.9 | 7.0  |
| 13    | --- | --- | ---  | --- | --- | ---  | 6.8 | 6.7 | 6.7  | 7.0 | 6.9 | 7.0  |
| 14    | --- | --- | ---  | --- | --- | ---  | 6.8 | 6.7 | 6.7  | 7.0 | 6.9 | 7.0  |
| 15    | --- | --- | ---  | --- | --- | ---  | 6.8 | 6.7 | 6.8  | 7.0 | 6.9 | 7.0  |
| 16    | --- | --- | ---  | --- | --- | ---  | 6.8 | 6.8 | 6.8  | 7.0 | 6.9 | 7.0  |
| 17    | --- | --- | ---  | --- | --- | ---  | 6.8 | 6.8 | 6.8  | 7.0 | 7.0 | 7.0  |
| 18    | --- | --- | ---  | --- | --- | ---  | 6.8 | 6.8 | 6.8  | 7.0 | 7.0 | 7.0  |
| 19    | --- | --- | ---  | --- | --- | ---  | 6.8 | 6.8 | 6.8  | 7.0 | 7.0 | 7.0  |
| 20    | --- | --- | ---  | --- | --- | ---  | 6.9 | 6.8 | 6.8  | 7.0 | 7.0 | 7.0  |
| 21    | --- | --- | ---  | --- | --- | ---  | 6.8 | 6.8 | 6.8  | 7.0 | 7.0 | 7.0  |
| 22    | --- | --- | ---  | --- | --- | ---  | 6.8 | 6.8 | 6.8  | 7.1 | 7.0 | 7.1  |
| 23    | --- | --- | ---  | --- | --- | ---  | 6.8 | 6.8 | 6.8  | 7.2 | 7.1 | 7.1  |
| 24    | --- | --- | ---  | --- | --- | ---  | 6.8 | 6.7 | 6.8  | 7.2 | 7.1 | 7.1  |
| 25    | --- | --- | ---  | --- | --- | ---  | 6.8 | 6.7 | 6.8  | 7.2 | 7.1 | 7.2  |
| 26    | --- | --- | ---  | --- | --- | ---  | 6.8 | 6.7 | 6.8  | 7.2 | 7.1 | 7.2  |
| 27    | --- | --- | ---  | --- | --- | ---  | 6.8 | 6.8 | 6.8  | 7.2 | 7.2 | 7.2  |
| 28    | --- | --- | ---  | --- | --- | ---  | 6.8 | 6.7 | 6.8  | 7.2 | 7.2 | 7.2  |
| 29    | --- | --- | ---  | 7.3 | 6.8 | 7.0  | 6.8 | 6.7 | 6.8  | 7.2 | 7.2 | 7.2  |
| 30    | --- | --- | ---  | 6.8 | 6.7 | 6.8  | 6.9 | 6.8 | 6.8  | 7.2 | 7.0 | 7.2  |
| 31    | --- | --- | ---  | 6.8 | 6.7 | 6.8  | --- | --- | ---  | 7.3 | 7.2 | 7.2  |
| MONTH | --- | --- | ---  | --- | --- | ---  | 6.9 | 6.6 | 6.8  | 7.3 | 6.8 | 7.0  |







08240000 RIO GRANDE ABOVE MOUTH OF TRINCHERA CREEK, NEAR LASAUSES--Continued  
(Rio Grande National Water-Quality Assessment Program station)

WATER-QUALITY RECORDS

PERIOD OF RECORDS.--May 1993 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DATE      | TIME  | DIS-CHARGE, INST. CUBIC FEET PER SECOND         | SPE-CIFIC CON-DUCT-ANCE (US/CM)     | PH WATER WHOLE FIELD (STAND-ARD UNITS)    | TEMPER-ATURE AIR (DEG C)                 | TEMPER-ATURE WATER (DEG C)                    | BARO-METRIC PRES-SURE (MM OF HG)          | OXYGEN, DIS-SOLVED (MG/L)                       | OXYGEN, SATUR-ATION                            | HARD-NESS TOTAL (MG/L AS CaCO3)            | CALCIUM DIS-SOLVED (MG/L AS Ca)     | MAGNE-SIUM, DIS-SOLVED (MG/L AS Mg) |
|-----------|---|---|-------------------------------------|---|--|---|---|---|--|--|-------------------------------------|-------------------------------------|
| JUL 16... | 0745  | 20  | 606                                 | 8.3                                       | 14.5                                     | 15.0  | 582                                       | 6.6   | 86   | 140  | 42                                  | 9.2                                 |
| DATE      | SODIUM, DIS-SOLVED (MG/L AS NA)                 | SODIUM PERCENT                                  | SODIUM AD-SORP-TION RATIO           | POTAS-SIUM, DIS-SOLVED (MG/L AS K)        | BICAR-BONATE WATER DIS IT (MG/L AS HCO3) | CAR-b BONATE WATER DIS IT FIELD (MG/L AS CO3) | ALKA-c LINITY TOT IT (MG/L AS CaCO3)      | SULFATE DIS-SOLVED (MG/L AS SO4)                | CHLO-RIDE, DIS-SOLVED (MG/L AS CL)             | FLUO-RIDE, DIS-SOLVED (MG/L AS F)          | SILICA, DIS-SOLVED (MG/L AS SiO2)   |                                     |
| JUL 16... | 67  | 49  | 2                                   | 7.1                                       | 221                                      | 0   | 181                                       | 87  | 19   | 1.2  | 23                                  |                                     |
| DATE      | SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) | SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) | SOLIDS, DIS-SOLVED (TONS AC-FT)     | NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) | NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)     | NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N)     | NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) | NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) | NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) | PHOS-PHORUS TOTAL (MG/L AS P)              | PHOS-PHORUS DIS-SOLVED (MG/L AS P)  |                                     |
| JUL 16... | 399   | 365   | 0.54                                | <0.010                                    | 0.070                                    | 0.070   | 0.030                                     | 0.90  | 0.50   | 0.160                                      | 0.060                               |                                     |
| DATE      | PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P)       | IRON, DIS-SOLVED (UG/L AS FE)                   | MANGA-NESE, DIS-SOLVED (UG/L AS MN) | CARBON, ORGANIC TOTAL (MG/L AS C)         | CARBON, ORGANIC DIS-SOLVED (MG/L AS C)   | PROP-CHLOR, WATER, DISS, REC (UG/L)           | BUTYL-ATE, WATER, DISS, REC (UG/L)        | SI-MAZINE, WATER, DISS, REC (UG/L)              | PRO-METON, WATER, DISS, REC (UG/L)             | DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) | CYANA-ZINE, WATER, DISS, REC (UG/L) |                                     |
| JUL 16... | 0.060   | 67  | 210                                 | 10  | 6.0                                      | <0.007  | <0.002                                    | <0.005  | e0.007   | <0.002                                     | <0.004                              |                                     |
| DATE      | FONOFOS WATER DISS REC (UG/L)                   | ALPHA BHC DIS-SOLVED (UG/L)                     | P,P' DDE DISSOLV (UG/L)             | CHLOR-PYRIFOS DIS-SOLVED (UG/L)           | LINDANE DIS-SOLVED (UG/L)                | DI-ELDRIN WATER, DISS, REC (UG/L)             | METO-LACHLOR WATER, DISS, REC (UG/L)      | MALA-THION, WATER, DISS, REC (UG/L)             | PARA-THION, DIS-SOLVED (UG/L)                  | DI-AZINON, DIS-SOLVED (UG/L)               | ATRA-ZINE, WATER, DISS, REC (UG/L)  |                                     |
| JUL 16... | <0.003  | <0.002  | <0.006                              | <0.004                                    | <0.004                                   | <0.001  | <0.002                                    | <0.005  | <0.004   | <0.002                                     | 0.004                               |                                     |
| DATE      | ALA-CHLOR, WATER, DISS, REC (UG/L)              | ACETO-CHLOR, WATER, FLTRD REC (UG/L)            | METRI-BUZIN WATER DISSOLV (UG/L)    | 2,6-DI-ETHYL ANILINE WAT FLT (UG/L)       | TRI-FLUR-ALIN WAT FLT (UG/L)             | ETHAL-FLUR-ALIN WAT FLT (UG/L)                | PHORATE WATER FLTRD REC (UG/L)            | TER-BACIL WATER FLTRD REC (UG/L)                | LIN-URON WATER FLTRD REC (UG/L)                | METHYL PARA-THION WAT FLT (UG/L)           |                                     |                                     |
| JUL 16... | <0.002  | <0.002  | <0.004                              | <0.003                                    | <0.002                                   | <0.004  | <0.002                                    | <0.007  | <0.002   | <0.002                                     | <0.006                              |                                     |

e-Estimated.

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

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

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

**08240000 RIO GRANDE ABOVE MOUTH OF TRINCHERA CREEK, NEAR LASAUSES--Continued**  
**(Rio Grande National Water-Quality Assessment Program station)**

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

|              | EPTC<br>WATER<br>FLTRD<br>0.7 U<br>GF, REC<br>(UG/L)           | PEB-<br>ULATE<br>WATER<br>FILTRD<br>0.7 U<br>GF, REC<br>(UG/L) | TEBU-<br>THIURON<br>WATER<br>FLTRD<br>0.7 U<br>GF, REC<br>(UG/L) | MOL-<br>INATE<br>WATER<br>FLTRD<br>0.7 U<br>GF, REC<br>(UG/L)    | ETHO-<br>PROP<br>WATER<br>FLTRD<br>0.7 U<br>GF, REC<br>(UG/L) | BEN-<br>FLUR-<br>ALIN<br>WAT FLD<br>0.7 U<br>GF, REC<br>(UG/L)   | CARBO-<br>FURAN<br>WATER<br>FLTRD<br>0.7 U<br>GF, REC<br>(UG/L)  | TER-<br>BUFOS<br>WATER<br>FLTRD<br>0.7 U<br>GF, REC<br>(UG/L)   | PRON-<br>AMIDE<br>WATER<br>FLTRD<br>0.7 U<br>GF, REC<br>(UG/L)   | DISUL-<br>FOTON<br>WATER<br>FLTRD<br>0.7 U<br>GF, REC<br>(UG/L) |
|--------------|--|--|--|--|---|--|--|---|--|---|
| JUL<br>16... | e0.002   | <0.004   | <0.010   | <0.004   | <0.003  | <0.002   | <0.003   | <0.013  | <0.003   | <0.017  |
|              | TRIAL-<br>LATE<br>WATER<br>FLTRD<br>0.7 U<br>GF, REC<br>(UG/L) | PRO-<br>PANIL<br>WATER<br>FLTRD<br>0.7 U<br>GF, REC<br>(UG/L)  | CAR-<br>BARYL<br>WATER<br>FLTRD<br>0.7 U<br>GF, REC<br>(UG/L)    | THIO-<br>BENCARB<br>WATER<br>FLTRD<br>0.7 U<br>GF, REC<br>(UG/L) | DCPA<br>WATER<br>FLTRD<br>0.7 U<br>GF, REC<br>(UG/L)          | PENDI-<br>METH-<br>ALIN<br>WAT FLT<br>0.7 U<br>GF, REC<br>(UG/L) | NAPROP-<br>AMIDE<br>WATER<br>FLTRD<br>0.7 U<br>GF, REC<br>(UG/L) | PRO-<br>PARGITE<br>WATER<br>FLTRD<br>0.7 U<br>GF, REC<br>(UG/L) | METHYL<br>AZIN-<br>PHOS<br>WAT FLT<br>0.7 U<br>GF, REC<br>(UG/L) | PER-<br>METHRIN<br>CIS<br>WAT FLT<br>0.7 U<br>GF, REC<br>(UG/L) |
| JUL<br>16... | <0.001   | <0.004   | <0.003   | <0.002   | <0.002  | <0.004   | <0.003   | <0.013  | <0.001   | <0.005  |

e-Estimated.

**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 mi<sup>2</sup>, 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 53,570 acre-ft, May 21, elevation, 10,027.57 ft; minimum contents, about 24,401 acre-ft, Sept. 30, elevation, 9,990.23 ft.

MONTHEND ELEVATION AND CONTENTS, AT 0800, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| Date                 | Elevation<br>(feet) | Contents<br>(acre-feet) | Change in<br>contents<br>(acre-feet) |
|----------------------|---------------------|-------------------------|--------------------------------------|
| Sept. 30. . . . .    | 10,021.4            | 48,040                  | -                                    |
| Oct. 31. . . . .     | 10,018.5            | 45,520                  | -2,520                               |
| Nov. 30. . . . .     | 10,018.5            | 45,480                  | -40                                  |
| Dec. 31. . . . .     | 10,018.2            | 45,330                  | -150                                 |
| CAL YR 1995. . . . . |                     |                         | +4,530                               |
| Jan. 31. . . . .     | 10,018.2            | 45,200                  | -130                                 |
| Feb. 29. . . . .     | 10,018.5            | 45,530                  | +330                                 |
| Mar. 31. . . . .     | 10,018.8            | 45,740                  | +210                                 |
| Apr. 30. . . . .     | 10,019.4            | 46,240                  | +500                                 |
| May 31. . . . .      | 10,027.1            | 53,130                  | +6,890                               |
| June 30. . . . .     | 10,019.9            | 46,710                  | -6,420                               |
| July 31. . . . .     | 10,011.0            | 39,270                  | -7,440                               |
| Aug. 31. . . . .     | 9,995.6             | 27,900                  | -11,370                              |
| Sept. 30. . . . .    | 9,990.4             | 24,530                  | -3,370                               |
| WTR YR 1996. . . . . |                     |                         | -23,510                              |



**08246500 CONEJOS RIVER NEAR MOGOTE, CO**

LOCATION.--Lat 37°03'14", long 106°11'13", in SE<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec.34, T.33 N., R.7 E., Conejos County, Hydrologic Unit 13010005, on left bank 75 ft downstream from bridge on State Highway 174, 0.4 mi downstream from Fox Creek, 5.3 mi west of Mogote, and 10 mi west of Antonito.

DRAINAGE AREA.--282 mi<sup>2</sup>.

PERIOD OF RECORD.--April 1903 to October 1905, October 1911 to current year. Monthly discharge only for some periods, published in WSP 1312. Records for March 1900 at site 5.5 mi upstream and May 1905 to September 1911 (some missing periods most years) at site 3.2 mi upstream not equivalent to present site due to inflow.

REVISED RECORDS.--WSP 898: 1911(M). WSP 1312: 1903-5, 1913. See also PERIOD OF RECORD.

GAGE.--Water-stage recorder with satellite telemetry. Datum of gage is 8,273.69 ft above sea level, Colorado State Highway datum. Apr. 17, 1903 to Oct. 31, 1905, nonrecording gage 400 ft downstream, at different datum. Oct. 5, 1911 to early 1915, nonrecording gage, and from early 1915 to Oct. 1, 1988, water-stage recorder at site 100 ft upstream, at datum 2.15 ft, lower. Since Oct. 1, 1988, at present site and datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. Diversions for irrigation of about 500 acres of hay meadows upstream from station. Some regulation by Platoro Reservoir (station 08244500).

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

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY MEAN VALUES

| DAY   | OCT  | NOV  | DEC  | JAN  | FEB  | MAR  | APR   | MAY   | JUN   | JUL   | AUG   | SEP  |
|-------|------|------|------|------|------|------|-------|-------|-------|-------|-------|------|
| 1     | 147  | 107  | e70  | e56  | e50  | e56  | 149   | 559   | 559   | 257   | 171   | 129  |
| 2     | 135  | 84   | e68  | e54  | e49  | e58  | 185   | 627   | 562   | 229   | 164   | 118  |
| 3     | 125  | 72   | e64  | e54  | e47  | e59  | 183   | 730   | 568   | 212   | 169   | 118  |
| 4     | 116  | 71   | e66  | e56  | e49  | 63   | 174   | 875   | 608   | 224   | 158   | 129  |
| 5     | 107  | 74   | e66  | e54  | e50  | 62   | 147   | 941   | 656   | 202   | 153   | 128  |
| 6     | 106  | 76   | e66  | e52  | e52  | 55   | 132   | 1060  | 664   | 240   | 146   | 163  |
| 7     | 106  | 74   | e60  | e52  | e52  | 52   | 144   | 1140  | 706   | 230   | 173   | 147  |
| 8     | 102  | 73   | e56  | e54  | e50  | 62   | 161   | 1220  | 711   | 294   | 233   | 121  |
| 9     | 98   | 74   | e49  | e56  | e50  | 65   | 237   | 1270  | 648   | 435   | 297   | 112  |
| 10    | 96   | 84   | e49  | e54  | e54  | 72   | 280   | 1270  | 619   | 419   | 294   | 118  |
| 11    | 106  | 57   | e50  | e52  | e54  | 84   | 252   | 1270  | 526   | 452   | 265   | 122  |
| 12    | 115  | 89   | e54  | e54  | e52  | 89   | 293   | 1280  | 537   | 374   | 275   | 127  |
| 13    | 115  | 87   | e58  | e54  | e54  | 87   | 293   | 1350  | 574   | 339   | 323   | 140  |
| 14    | 129  | 85   | e54  | e54  | e58  | 74   | 226   | 1470  | 584   | 317   | 308   | 137  |
| 15    | 146  | 81   | e50  | e54  | 61   | 74   | 200   | 1500  | 589   | 276   | 312   | 146  |
| 16    | 148  | 80   | e46  | e54  | 66   | 67   | 199   | 1380  | 524   | 261   | 312   | 120  |
| 17    | 137  | 79   | e52  | e52  | 67   | 68   | 205   | 1430  | 443   | 248   | 306   | 112  |
| 18    | 145  | 72   | e47  | e48  | 72   | 63   | 189   | 1310  | 348   | 281   | 283   | 115  |
| 19    | 150  | 73   | e49  | e50  | e67  | 64   | 174   | 1380  | 357   | 284   | 293   | 116  |
| 20    | 148  | 72   | e48  | e48  | 76   | 70   | 168   | 1380  | 339   | 266   | 301   | 107  |
| 21    | 148  | 71   | e52  | e46  | 106  | 83   | 156   | 1270  | 304   | 221   | 312   | 102  |
| 22    | 150  | 70   | e52  | e48  | 87   | 100  | 165   | 1320  | 307   | 225   | 315   | 106  |
| 23    | 104  | 71   | e50  | e46  | 68   | 113  | 186   | 1180  | 294   | 254   | 312   | 103  |
| 24    | 114  | 61   | e50  | e46  | 66   | 101  | 262   | 992   | 268   | 267   | 245   | 103  |
| 25    | 122  | 65   | e52  | e48  | 72   | 86   | 406   | 813   | 258   | 254   | 193   | 102  |
| 26    | 127  | 72   | e54  | e44  | 61   | 83   | 556   | 684   | 250   | 213   | 182   | 100  |
| 27    | 164  | e55  | e54  | e46  | 47   | 81   | 667   | 554   | 275   | 223   | 191   | 100  |
| 28    | 167  | e44  | e56  | e52  | e52  | 94   | 728   | 509   | 238   | 223   | 205   | 98   |
| 29    | 169  | e60  | e58  | e50  | e54  | 111  | 544   | 466   | 211   | 191   | 162   | 98   |
| 30    | 136  | e68  | e56  | e52  | ---  | 105  | 500   | 473   | 212   | 233   | 161   | 106  |
| 31    | 133  | ---  | e58  | e52  | ---  | 122  | ---   | 481   | ---   | 189   | 150   | ---  |
| TOTAL | 4011 | 2201 | 1714 | 1592 | 1743 | 2423 | 8161  | 32184 | 13739 | 8333  | 7364  | 3543 |
| MEAN  | 129  | 73.4 | 55.3 | 51.4 | 60.1 | 78.2 | 272   | 1038  | 458   | 269   | 238   | 118  |
| MAX   | 169  | 107  | 70   | 56   | 106  | 122  | 728   | 1500  | 711   | 452   | 323   | 163  |
| MIN   | 96   | 44   | 46   | 44   | 47   | 52   | 132   | 466   | 211   | 189   | 146   | 98   |
| AC-FT | 7960 | 4370 | 3400 | 3160 | 3460 | 4810 | 16190 | 63840 | 27250 | 16530 | 14610 | 7030 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1903 - 1996, 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 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 116  | 95.9 | 51.8 | 48.0 | 51.8 | 79.4 | 321  | 1108 | 1300 | 481  | 207  | 130  |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 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 1995 CALENDAR YEAR | FOR 1996 WATER YEAR | WATER YEARS 1903 - 1996 |
|--------------------------|------------------------|---------------------|-------------------------|
| ANNUAL TOTAL             | 159126                 | 87008               |                         |
| ANNUAL MEAN              | 436                    | 238                 | 331                     |
| HIGHEST ANNUAL MEAN      |                        |                     | 592                     |
| LOWEST ANNUAL MEAN       |                        |                     | 109                     |
| HIGHEST DAILY MEAN       | 2100                   | 1500                | 4490                    |
| LOWEST DAILY MEAN        | <sup>a</sup> 44        | <sup>e, b</sup> 44  | 10                      |
| ANNUAL SEVEN-DAY MINIMUM | 49                     | 46                  | 17                      |
| INSTANTANEOUS PEAK FLOW  |                        | 1680                | <sup>c</sup> 9000       |
| INSTANTANEOUS PEAK STAGE |                        | 4.92                | <sup>d</sup> 8.50       |
| ANNUAL RUNOFF (AC-FT)    | 315600                 | 172600              | 239600                  |
| 10 PERCENT EXCEEDS       | 1450                   | 577                 | 1060                    |
| 50 PERCENT EXCEEDS       | 145                    | 121                 | 96                      |
| 90 PERCENT EXCEEDS       | 54                     | 52                  | 42                      |

e-Estimated.  
a-Also occurred Nov 28.  
b-Also occurred Jan 26.  
c-Present site and datum, from rating curve extended above 3100 ft<sup>3</sup>/s.  
d-From floodmarks.









08251500 RIO GRANDE NEAR LOBATOS, CO--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1993 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DATE      | TIME | DIS-CHARGE, INST. CUBIC FEET PER SECOND | SPE-CIFIC CON-DUCT-ANCE (US/CM) | PH (STAND-ARD UNITS) | TEMPER-ATURE WATER (DEG C) | OXYGEN, DIS-SOLVED (MG/L) | CALCIUM DIS-SOLVED (MG/L AS CA) | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) | SODIUM, DIS-SOLVED (MG/L AS NA) | POTAS-SIUM, DIS-SOLVED (MG/L AS K) | ALKA-LINITY LAB (MG/L AS CACO3) | SULFATE DIS-SOLVED (MG/L AS SO4) |
|-----------|------|---|---------------------------------|----------------------|----------------------------|---------------------------|---------------------------------|-------------------------------------|---------------------------------|------------------------------------|---------------------------------|----------------------------------|
| FEB 27... | 1000 | 556                                     | 269                             | 8.0                  | 0.0                        | 10.8                      | 28                              | 5.3                                 | 20                              | 3.8                                | 96                              | 29                               |
| APR 22... | 1145 | 148                                     | 518                             | 8.4                  | 9.0                        | 9.6                       | 43                              | 8.8                                 | 52                              | 5.8                                | 167                             | 76                               |
| JUN 26... | 0930 | 53                                      | 461                             | 8.2                  | 16.0                       | 7.8                       | 39                              | 8.6                                 | 45                              | 6.6                                | 166                             | 59                               |
| AUG 20... | 1045 | 31                                      | 479                             | 8.7                  | 22.0                       | 6.5                       | 27                              | 7.7                                 | 59                              | 7.5                                | 169                             | 49                               |

| DATE      | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) | SILICA, DIS-SOLVED (MG/L AS SIO2) | SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) | NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) | NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) | NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) | NITRO-GEN, AM-MONIA + ORGANIC (MG/L AS N) | NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) | PHOS-PHORUS TOTAL (MG/L AS P) | PHOS-PHORUS DIS-SOLVED (MG/L AS P) | PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) |
|-----------|------------------------------------|-----------------------------------|-----------------------------------|---|---|---|---|---|--|-------------------------------|------------------------------------|---|
| FEB 27... | 6.3                                | 0.4                               | 29                                | 187   | 0.01                                      | 0.32                                      | 0.04                                      | 0.3                                       | <0.2   | 0.10                          | 0.05                               | 0.05                                      |
| APR 22... | 14                                 | 0.9                               | 29                                | 342   | <0.01                                     | <0.05                                     | <0.015                                    | 0.5                                       | 0.4  | 0.10                          | 0.02                               | 0.03                                      |
| JUN 26... | 9.7                                | 0.7                               | 24                                | 303   | <0.01                                     | <0.05                                     | <0.015                                    | 0.6                                       | 0.5  | 0.06                          | 0.03                               | 0.03                                      |
| AUG 20... | 17                                 | 0.8                               | 22                                | 296   | <0.01                                     | <0.05                                     | <0.015                                    | 0.6                                       | 0.3  | 0.07                          | <0.01                              | 0.02                                      |

| DATE      | ALUM-INUM, DIS-SOLVED (UG/L AS AL) | ANTI-MONY, DIS-SOLVED (UG/L AS SB) | ARSENIC DIS-SOLVED (UG/L AS AS) | BARIUM, DIS-SOLVED (UG/L AS BA) | BERYL-LIUM, DIS-SOLVED (UG/L AS BE) | CADMIUM DIS-SOLVED (UG/L AS CD) | CHRO-MIUM, DIS-SOLVED (UG/L AS CR) | COBALT, DIS-SOLVED (UG/L AS CO) | COPPER, DIS-SOLVED (UG/L AS CU) |
|-----------|------------------------------------|------------------------------------|---------------------------------|---------------------------------|-------------------------------------|---------------------------------|------------------------------------|---------------------------------|---------------------------------|
| FEB 27... |                                    | 2                                  | <1                              | 2                               | 25                                  | <1                              | <1                                 | 1                               | <1                              |
| APR 22... |                                    | 1                                  | <1                              | 3                               | 42                                  | <1                              | <1                                 | 2                               | <1                              |
| JUN 26... | --                                 | --                                 | --                              | --                              | --                                  | --                              | --                                 | --                              | --                              |
| AUG 20... |                                    | 1                                  | <1                              | 5                               | 37                                  | <1                              | <1                                 | 3                               | <1                              |

| DATE      | IRON, DIS-SOLVED (UG/L AS FE) | LEAD, DIS-SOLVED (UG/L AS PB) | MANGA-NESE, DIS-SOLVED (UG/L AS MN) | MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) | NICKEL, DIS-SOLVED (UG/L AS NI) | SELE-NIUM, DIS-SOLVED (UG/L AS SE) | SILVER, DIS-SOLVED (UG/L AS AG) | ZINC, DIS-SOLVED (UG/L AS ZN) | URANIUM NATURAL DIS-SOLVED (UG/L AS U) |
|-----------|-------------------------------|-------------------------------|-------------------------------------|--------------------------------------|---------------------------------|------------------------------------|---------------------------------|-------------------------------|--|
| FEB 27... | 39                            | <1                            | 15                                  | 2                                    | <1                              | <1                                 | <1                              | 2                             | 1.0                                    |
| APR 22... | 27                            | <1                            | 69                                  | 5                                    | 1                               | <1                                 | <1                              | <1                            | 3.0                                    |
| JUN 26... | 47                            | --                            | 39                                  | --                                   | --                              | --                                 | --                              | --                            | --                                     |
| AUG 20... | 7                             | <1                            | 12                                  | 7                                    | 2                               | <1                                 | <1                              | <1                            | 4.0                                    |

a-Lab total dissolved alkalinity, determined by fixed-endpoint titration method.

08251500 RIO GRANDE NEAR LOBATOS, CO--Continued

(Rio Grande National Water-Quality Assessment Program station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DATE      | TIME | DIS-CHARGE, INST. CUBIC FEET PER SECOND | SPE-CIFIC CON-DUCT-ANCE (US/CM) | PH WATER WHOLE FIELD (STAND-ARD UNITS) | TEMPER-ATURE AIR (DEG C) | TEMPER-ATURE WATER (DEG C) | BARO-METRIC PRES-SURE (MM OF HG) | OXYGEN, DIS-SOLVED (MG/L) | OXYGEN, (PER-CENT SATUR-ATION) | HARD-NESS TOTAL (MG/L AS CACO3) | CALCIUM DIS-SOLVED (MG/L AS CA) | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) |
|-----------|------|---|---------------------------------|--|--------------------------|----------------------------|----------------------------------|---------------------------|--------------------------------|---------------------------------|---------------------------------|-------------------------------------|
| OCT 17... | 1200 | 125                                     | 495                             | 8.7                                    | 13.0                     | 13.0                       | 583                              | 9.1                       | 114                            | 140                             | 41                              | 8.4                                 |
| JUL 16... | 1000 | 31                                      | 457                             | 8.5                                    | 19.5                     | 19.0                       | 584                              | 7.1                       | 101                            | 130                             | 38                              | 8.5                                 |

| DATE      | SODIUM, DIS-SOLVED (MG/L AS NA) | SODIUM PERCENT | SODIUM AD-SORP-TION RATIO | POTAS-SIUM, DIS-SOLVED (MG/L AS K) | BICAR- <sup>b</sup> BONATE WATER DIS IT FIELD (MG/L AS HCO3) | CAR- <sup>c</sup> BONATE WATER DIS IT FIELD (MG/L AS CO3) | ALKA- <sup>d</sup> LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3) | SULFATE DIS-SOLVED (MG/L AS SO4) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) | SILICA, DIS-SOLVED (MG/L AS SIO2) |
|-----------|---------------------------------|----------------|---------------------------|------------------------------------|--|---|--|----------------------------------|------------------------------------|-----------------------------------|-----------------------------------|
| OCT 17... | 45                              | 40             | 2                         | 6.0                                | 179  | 5   | 156  | 73                               | 13                                 | 0.70                              | 23                                |
| JUL 16... | 48                              | 43             | 2                         | 6.7                                | 184  | 6   | 162  | 46                               | 11                                 | 0.90                              | 23                                |

| DATE      | SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) | SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) | SOLIDS, DIS-SOLVED (TONS PER AC-FT) | NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) | NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) | NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) | NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) | NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) | NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) | PHOS-PHORUS TOTAL (MG/L AS P) | PHOS-PHORUS DIS-SOLVED (MG/L AS P) |
|-----------|---|---|-------------------------------------|---|--------------------------------------|---|---|---|--|-------------------------------|------------------------------------|
| OCT 17... | 314   | 303   | 0.43                                | <0.010                                    | --                                   | <0.050                                    | <0.015                                    | 0.40  | 0.30   | 0.030                         | 0.030                              |
| JUL 16... | 298   | 279   | 0.41                                | <0.010                                    | 0.070                                | 0.070                                     | 0.030                                     | 0.90  | 0.50   | 0.090                         | 0.030                              |

| DATE      | PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) | IRON, DIS-SOLVED (UG/L AS FE) | MANGA-NESE, DIS-SOLVED (UG/L AS MN) | CARBON, ORGANIC TOTAL (MG/L AS C) | CARBON, ORGANIC DIS-SOLVED (MG/L AS C) | PROP-CHLOR, WATER, DISS, REC (UG/L) | BUTYL-ATE, WATER, DISS, REC (UG/L) | SI-MAZINE, WATER, DISS, REC (UG/L) | PRO-METON, WATER, DISS, REC (UG/L) | DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) | CYANA-ZINE, WATER, DISS, REC (UG/L) |
|-----------|---|-------------------------------|-------------------------------------|-----------------------------------|--|-------------------------------------|------------------------------------|------------------------------------|------------------------------------|--|-------------------------------------|
| OCT 17... | 0.040                                     | 68                            | 19                                  | --                                | --                                     | --                                  | --                                 | --                                 | --                                 | --   | --                                  |
| JUL 16... | 0.030                                     | 39                            | 42                                  | 12                                | 7.0                                    | <0.007                              | <0.002                             | <0.005                             | <0.018                             | <0.002                                     | <0.004                              |

| DATE      | FONOFOS WATER DISS REC (UG/L) | ALPHA BHC DIS-SOLVED (UG/L) | P,P' DDE DISSOLV (UG/L) | CHLOR-PYRIFOS DIS-SOLVED (UG/L) | LINDANE DIS-SOLVED (UG/L) | DI-ELDRIN DIS-SOLVED (UG/L) | METO-LACHLOR WATER DISSOLV (UG/L) | MALA-THION, DIS-SOLVED (UG/L) | PARA-THION, DIS-SOLVED (UG/L) | DI-AZINON, DIS-SOLVED (UG/L) | ATRA-ZINE, WATER, DISS, REC (UG/L) |
|-----------|-------------------------------|-----------------------------|-------------------------|---------------------------------|---------------------------|-----------------------------|-----------------------------------|-------------------------------|-------------------------------|------------------------------|------------------------------------|
| OCT 17... | --                            | --                          | --                      | --                              | --                        | --                          | --                                | --                            | --                            | --                           | --                                 |
| JUL 16... | <0.003                        | <0.002                      | <0.006                  | <0.004                          | <0.004                    | <0.001                      | <0.002                            | <0.005                        | <0.004                        | <0.002                       | 0.005                              |

b-Field dissolved bicarbonate, determined by incremental titration method.  
 c-Field dissolved carbonate, determined by incremental titration method.  
 d-Field total dissolved alkalinity, determined by incremental titration method.

## 08251500 RIO GRANDE NEAR LOBATOS, CO--Continued

## (Rio Grande National Water-Quality Assessment Program station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DATE         | ALA-<br>CHLOR,<br>WATER,<br>DISS,<br>REC,<br>(UG/L)            | ACETO-<br>CHLOR,<br>WATER,<br>FLTRD<br>REC<br>(UG/L)           | METRI-<br>BUZIN<br>WATER<br>DISSOLV<br>(UG/L)                    | 2,6-DI-<br>ETHYL<br>ANILINE<br>WAT FLT<br>0.7 U<br>GF, REC<br>(UG/L) | TRI-<br>FLUR-<br>ALIN<br>WAT FLT<br>0.7 U<br>GF, REC<br>(UG/L) | ETHAL-<br>FLUR-<br>ALIN<br>WAT FLT<br>0.7 U<br>GF, REC<br>(UG/L) | PHORATE<br>WATER<br>FLTRD<br>0.7 U<br>GF, REC<br>(UG/L)          | TER-<br>BACIL<br>URON<br>WATER<br>FLTRD<br>0.7 U<br>GF, REC<br>(UG/L) | LIN-<br>URON<br>WATER<br>FLTRD<br>0.7 U<br>GF, REC<br>(UG/L)     | METHYL<br>PARA-<br>THION<br>WAT FLT<br>0.7 U<br>GF, REC<br>(UG/L) |
|--------------|--|--|--|--|--|--|--|---|--|---|
| OCT<br>17... | --   | --   | --   | --   | --   | --   | --   | --  | --   | --  |
| JUL<br>16... | <0.002   | <0.002   | <0.004   | <0.003   | <0.002   | <0.004   | <0.002   | <0.007  | <0.002   | <0.006  |
| DATE         | EPTC<br>WATER<br>FLTRD<br>0.7 U<br>GF, REC<br>(UG/L)           | PEB-<br>ULATE<br>WATER<br>FILTRD<br>0.7 U<br>GF, REC<br>(UG/L) | TEBU-<br>THIURON<br>WATER<br>FLTRD<br>0.7 U<br>GF, REC<br>(UG/L) | MOL-<br>INATE<br>WATER<br>FLTRD<br>0.7 U<br>GF, REC<br>(UG/L)        | ETHO-<br>PROP<br>WATER<br>FLTRD<br>0.7 U<br>GF, REC<br>(UG/L)  | BEN-<br>FLUR-<br>ALIN<br>WAT FLD<br>0.7 U<br>GF, REC<br>(UG/L)   | CARBO-<br>FURAN<br>WATER<br>FLTRD<br>0.7 U<br>GF, REC<br>(UG/L)  | TER-<br>BUFOS<br>WATER<br>FLTRD<br>0.7 U<br>GF, REC<br>(UG/L)         | PRON-<br>AMIDE<br>WATER<br>FLTRD<br>0.7 U<br>GF, REC<br>(UG/L)   | DISUL-<br>FOTON<br>WATER<br>FLTRD<br>0.7 U<br>GF, REC<br>(UG/L)   |
| OCT<br>17... | --   | --   | --   | --   | --   | --   | --   | --  | --   | --  |
| JUL<br>16... | <0.002   | <0.004   | <0.010   | <0.004   | <0.003   | <0.002   | <0.003   | <0.013  | <0.003   | <0.017  |
| DATE         | TRIAL-<br>LATE<br>WATER<br>FLTRD<br>0.7 U<br>GF, REC<br>(UG/L) | PRO-<br>PANIL<br>WATER<br>FLTRD<br>0.7 U<br>GF, REC<br>(UG/L)  | CAR-<br>BARYL<br>WATER<br>FLTRD<br>0.7 U<br>GF, REC<br>(UG/L)    | THIO-<br>BENCARB<br>WATER<br>FLTRD<br>0.7 U<br>GF, REC<br>(UG/L)     | D CPA<br>WATER<br>FLTRD<br>0.7 U<br>GF, REC<br>(UG/L)          | PENDI-<br>METH-<br>ALIN<br>WAT FLT<br>0.7 U<br>GF, REC<br>(UG/L) | NAPROP-<br>AMIDE<br>WATER<br>FLTRD<br>0.7 U<br>GF, REC<br>(UG/L) | PRO-<br>PARGITE<br>WATER<br>FLTRD<br>0.7 U<br>GF, REC<br>(UG/L)       | METHYL<br>AZIN-<br>PHOS<br>WAT FLT<br>0.7 U<br>GF, REC<br>(UG/L) | PER-<br>METHRIN<br>CIS<br>WAT FLT<br>0.7 U<br>GF, REC<br>(UG/L)   |
| OCT<br>17... | --   | --   | --   | --   | --   | --   | --   | --  | --   | --  |
| JUL<br>16... | <0.001   | <0.004   | <0.003   | <0.002   | e0.002   | <0.004   | <0.003   | <0.013  | <0.001   | <0.005  |

e-Estimated.

**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 6 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 NW<sup>1</sup>/<sub>4</sub> 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 1995 TO SEPTEMBER 1996

| Diversion                | Oct.   | Nov.   | Dec.   | Jan.   | Feb.   | Mar.  | Apr.  | May    | June   | July   | Aug.   | Sept.  |
|--------------------------|--------|--------|--------|--------|--------|-------|-------|--------|--------|--------|--------|--------|
| 09013000                 | 10,330 | 12,680 | 13,650 | 13,150 | 12,480 | 6,330 | 9,140 | 32,030 | 27,180 | 32,090 | 22,100 | 16,170 |
| Water year 1996, 207,300 |        |        |        |        |        |       |       |        |        |        |        |        |

**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 SE<sup>1</sup>/<sub>4</sub> 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 SW<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec.2, T.8 S., R.78 W., left bank of Bemrose Creek in SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> 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 1995 TO SEPTEMBER 1996

| Diversion               | Oct.  | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June  | July  | Aug.  | Sept. |
|-------------------------|-------|------|------|------|------|------|------|-----|-------|-------|-------|-------|
| 09042000                | 1,290 | 486  | 0    | 0    | 0    | 0    | 0    | 0   | 5,740 | 1,460 | 1,070 | 1,440 |
| Water year 1996, 11,490 |       |      |      |      |      |      |      |     |       |       |       |       |

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 1995 TO SEPTEMBER 1996

| Diversion               | Oct. | Nov. | Dec. | Jan. | Feb. | Mar.  | Apr.   | May   | June  | July  | Aug. | Sept. |
|-------------------------|------|------|------|------|------|-------|--------|-------|-------|-------|------|-------|
| 09063700                | 0    | 0    | 0    | 0    | 0    | 7,270 | 14,710 | 1,770 | 7,490 | 6,470 | 964  | 3.6   |
| Water year 1996, 38,690 |      |      |      |      |      |       |        |       |       |       |      |       |

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 1995 TO SEPTEMBER 1996

| Diversion               | Oct.  | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May    | June   | July  | Aug. | Sept. |
|-------------------------|-------|------|------|------|------|------|------|--------|--------|-------|------|-------|
| 09073000                | 1,270 | 722  | 199  | 155  | 83   | 77   | 318  | 14,930 | 14,280 | 2,610 | 194  | 11    |
| Water year 1996, 34,850 |       |      |      |      |      |      |      |        |        |       |      |       |

**TRANSMOUNTAIN DIVERSIONS FROM COLORADO RIVER BASIN IN COLORADO****TO ARKANSAS RIVER BASIN--Continued**

09077160 Charles H. Bousted 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 1995 TO SEPTEMBER 1996

| Diversion               | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May   | June   | July  | Aug. | Sept. |
|-------------------------|------|------|------|------|------|------|------|-------|--------|-------|------|-------|
| 09077160                | 145  | 149  | 146  | 135  | 136  | 181  | 193  | 1,290 | 26,470 | 8,710 | 790  | 194   |
| Water year 1996, 38,540 |      |      |      |      |      |      |      |       |        |       |      |       |

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 1995 TO SEPTEMBER 1996

| Diversion              | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June  | July | Aug. | Sept. |
|------------------------|------|------|------|------|------|------|------|-----|-------|------|------|-------|
| 09077500               | 113  | 73   | 64   | 58   | 52   | 55   | 48   | 87  | 1,640 | 77   | 84   | 102   |
| Water year 1996, 2,450 |      |      |      |      |      |      |      |     |       |      |      |       |

**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     | 09247000            | Don LaFont Ditches<br>1 & 2        |
| 09022500              | Moffat Water Tunnel         | 09115000                | Larkspur Ditch  | 09341000            | Treasure Pass Ditch                |
| 09046000              | Boreas Pass Ditch           |                         |                 | 09348000            | Williams Creek Squaw<br>Pass Ditch |
| 09047300              | Vidler Tunnel               |                         |                 | 09351000            | Pine River-Weminuche<br>Pass Ditch |
| 09050590              | Harold D. Roberts<br>Tunnel |                         |                 | 09351500            | Weminuche Pass Ditch               |

## 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<br>and<br>number   | Location<br>and<br>drainage area   | Period<br>of<br>record | Water year 1996 maximum |                        |  | Period of record maximum |                        |  |
|---|--|------------------------|-------------------------|------------------------|--|--------------------------|------------------------|--|
|   |  |                        | Date                    | Gage<br>height<br>(ft) | Dis-<br>charge<br>(ft <sup>3</sup> /s) | Date                     | Gage<br>height<br>(ft) | Dis-<br>charge<br>(ft <sup>3</sup> /s) |
| <b>PLATTE RIVER BASIN</b>   |  |                        |                         |                        |  |                          |                        |  |
| Lee Gulch at<br>Littleton, CO<br>(06709740)                                   | Lat 39°35'47", long 105°00'57",<br>in SW <sup>1</sup> /4SW <sup>1</sup> /4 sec.21, T.5 S.,<br>R.68W., Arapahoe County, on<br>right bank 30 ft upstream<br>from culvert under Prince St.<br>and 0.6 mi upstream from<br>mouth in Littleton. Drainage<br>area not determined.              | 1980-96                | 5-26-96                 | 11.16                  | 110                                    | <sup>a</sup> 1983        | 16.00                  | 444                                    |
| Dutch Creek at<br>Platte Canyon<br>Drive, near<br>Littleton, CO<br>(06709910) | Lat 39°36'01", long 105°02'28",<br>in NW <sup>1</sup> /4SE <sup>1</sup> /4 sec.19, T.5 S.,<br>R.69 W., Arapahoe County, on<br>left bank 150 ft down-stream<br>from bridge on Platte Canyon<br>Road. Drainage area not<br>determined.   | 1985-96                | 5-26-96                 | 10.21                  | 481                                    | 6-01-91                  | 11.51                  | 1,090                                  |
| Littles Creek at<br>Littleton, CO<br>(06709995)                               | Lat 39°36'44", long 105°01'09",<br>in SE <sup>1</sup> /4SE <sup>1</sup> /4 sec.17, T.5 S.,<br>R.68 W., Arapahoe County,<br>50 ft upstream from Rapp St.,<br>and 150 ft south of W. Alamo<br>St. in Littleton. REVISED<br>RECORDS.--WD CO-89-1:<br>1988. Drainage area not<br>determined. | 1985-96                | 9-18-96                 | 10.76                  | 74                                     | 7-29-90                  | 13.01                  | 503                                    |
| Weaver Creek near<br>Lakewood, CO<br>(06711305)                               | Lat 39°38'13", long 105°07'47",<br>in NE <sup>1</sup> /4NE <sup>1</sup> /4 sec.8, T.5 S.,<br>R.69 W., Jefferson County,<br>500 ft upstream from Simms<br>St., and 700 ft south of West<br>Quincy Ave. Drainage area<br>not determined.   | 1982-96                | 5-26-96                 | 10.75                  | 45                                     | <sup>a</sup> 1985        | 13.93                  | 1,010                                  |
| Little Dry Creek<br>near Arapahoe<br>Road, CO<br>(06711515)                   | Lat 39°35'38", long 104°54'23",<br>in NE <sup>1</sup> /4NE <sup>1</sup> /4 sec.29, T.5 S.,<br>R.67 W., Arapahoe County, on<br>right bank, 800 ft downstream<br>from Quebec St. (formerly<br>published as Inflow to Holly<br>Reservoir, 1985-86). Drain-<br>age area not determined.      | 1985-96                | 7-12-96                 | 9.28                   | 362                                    | <sup>a</sup> 1985        | 10.52                  | 800                                    |

## MAXIMUM DISCHARGE AT CREST-STAGE PARTIAL-RECORD STATIONS--Continued

| Station name<br>and<br>number   | Location<br>and<br>drainage area   | Period<br>of<br>record | Water year 1996 maximum |                        |  | Period of record maximum |                        |  |
|---|--|------------------------|-------------------------|------------------------|--|--------------------------|------------------------|--|
|   |  |                        | Date                    | Gage<br>height<br>(ft) | Dis-<br>charge<br>(ft <sup>3</sup> /s) | Date                     | Gage<br>height<br>(ft) | Dis-<br>charge<br>(ft <sup>3</sup> /s) |
| <b>PLATTE RIVER BASIN- Continued</b>                                      |  |                        |                         |                        |  |                          |                        |  |
| Willow Creek at Dry<br>Creek Road, near<br>Englewood, CO<br>(06711535)    | Lat 39°34'49", long 104°54'42",<br>in NW <sup>1</sup> /4NE <sup>1</sup> /4 sec.32, T.5 S.,<br>R.67 W., Arapahoe County, on<br>left bank, upstream wingwall<br>of bridge on Dry Creek Road<br>over Willow Creek. Drainage<br>area not determined.   | 1985-96                | 5-26-96                 | 9.62                   | 905                                    | <sup>a</sup> 1985        | 14.28                  | 3,470                                  |
| Little Dry Creek<br>above Englewood,<br>CO<br>(06711555)                  | Lat 39°38'57", long 104°58'42",<br>in SE <sup>1</sup> /4NE <sup>1</sup> /4 sec.3, T.5 S.,<br>R.68 W., Arapahoe County, on<br>right bank 250 ft downstream<br>from bridge on Clarkson St.,<br>and 800 ft south of Hampton<br>Ave., in Cherry Hills Vil-<br>lage. Drainage area not<br>determined. Prior to<br>April 2, 1992, gage was<br>located at a site 300 ft<br>upstream from the present<br>location. | 1982-96                | 5-26-96                 | 7.35                   | 445                                    | <sup>a</sup> 1983        | 15.64                  | 1,060                                  |
| Harvard Gulch at<br>Colorado Blvd. at<br>Denver, CO<br>(06711570)         | Lat 39°40'08", long 104°56'32",<br>in SE <sup>1</sup> /4SE <sup>1</sup> /4 sec.25, T.4 S.,<br>R.67 W., Denver County, on<br>left bank, 100 ft upstream<br>from S. Jackson St., and<br>400 ft north of E. Yale Ave.<br>Drainage area not determined.  | 1979-96                | 7-12-96                 | 13.34                  | 673                                    | 7-20-92                  | 13.50                  | 750                                    |
| Harvard Gulch<br>below University<br>Blvd. at Denver,<br>CO<br>(06711572) | Lat 39°40'10", long 104°57'33",<br>in SE <sup>1</sup> /4SE <sup>1</sup> /4 sec.26, T.4 S.,<br>R.68 W., Denver County,<br>200 ft, downstream from Uni-<br>versity Blvd., and 600 ft<br>north of East Yale Ave., in<br>Denver. REVISED RECORDS.--<br>WDR-CO-92-1: 1989-91.<br>Drainage area not determined.  | 1979-96                | 7-12-96                 | 14.55                  | 981                                    | 7-12-96                  | 14.55                  | 981                                    |
| Harvard Gulch at<br>Harvard Park at<br>Denver, CO<br>(06711575)           | Lat 39°40'21", long 104°58'35",<br>in NW <sup>1</sup> /4SW <sup>1</sup> /4 sec.26, T.4 S.,<br>R.68 W., Denver County, on<br>left bank, 200 ft north of E.<br>Harvard Ave. and 300 ft west<br>of S. Ogden St., directly<br>north of Porter Hospital.<br>Drainage area not determined.   | 1979-96                | 7-12-96                 | 16.25                  | 1100                                   | 7-12-96                  | 16.25                  | 1,100                                  |
| Sanderson Gulch<br>tributary at<br>Lakewood, CO<br>(06711600)             | Lat 39°41'19", long 105°04'54",<br>in NE <sup>1</sup> /4NW <sup>1</sup> /4 sec.23, T.4 S.,<br>R.68 W., Jefferson County,<br>300 ft upstream from S. Wad-<br>sworth Blvd., 300 ft south of<br>W. Florida Ave. in Lake-<br>wood. Drainage area is<br>0.38 mi <sup>2</sup> .  | 1969-96                | 8-22-96                 | 12.74                  | 61                                     | 6-06-77                  | 4.91                   | 422                                    |
| Sanderson Gulch at<br>Mouth at Navajo<br>St. at Denver, CO<br>(06711609)  | Lat 39°41'33", long 105°00'12",<br>in SW <sup>1</sup> /4NE <sup>1</sup> /4 sec.21, T.4 S.<br>R.68 W., Denver County,<br>200 ft south of Louisiana<br>Ave., at Navajo St. Drainage<br>area not determined.  | 1985-96                | 8-22-96                 | 12.10                  | 669                                    | 8-22-96                  | 12.10                  | 669                                    |
| Weir Gulch upstream<br>from 1st Avenue,<br>at Denver, CO<br>(06711618)    | Lat 39°43'03", long 105°02'30",<br>in NW <sup>1</sup> /4SE <sup>1</sup> /4 sec.7, T.4 S.,<br>R.68 W., Denver County,<br>250 ft upstream from<br>1st Ave., in Denver. Drainage<br>area not determined.  | 1985-96                | 8-22-96                 | 10.83                  | 236                                    | 8-01-91                  | 11.91                  | 523                                    |

## MAXIMUM DISCHARGE AT CREST-STAGE PARTIAL-RECORD STATIONS

| Station name<br>and<br>number                                       | Location<br>and<br>drainage area   | Period<br>of<br>record | Water year 1996 maximum                |                        | Period of record maximum               |                   |                        |  |
|---|--|------------------------|--|------------------------|--|-------------------|------------------------|--|
|   |  |                        | Date                                   | Gage<br>height<br>(ft) | Dis-<br>charge<br>(ft <sup>3</sup> /s) | Date              | Gage<br>height<br>(ft) | Dis-<br>charge<br>(ft <sup>3</sup> /s) |
| <b>PLATTE RIVER BASIN- Continued</b>                                |  |                        |  |                        |  |                   |                        |  |
| Lakewood Gulch at<br>Denver, CO<br>(06711700)                       | Lat 39°44'06", long 105°01'54",<br>in SW <sup>1</sup> /4NW <sup>1</sup> /4 sec.5, T.4 S.,<br>R.68 W., Denver County,<br>2,000 ft downstream from con-<br>fluence with Dry Gulch, near<br>intersection of Knox Ct., and<br>West 12th Ave., in Denver.<br>Drainage area not determined.  | 1980-96                | 8-22-96                                | 13.39                  | 494                                    | <sup>a</sup> 1984 | 17.24                  | 930                                    |
| Dry Gulch at<br>Denver, CO<br>(06711770)                            | Lat 39°44'03", long 105°02'20",<br>in SW <sup>1</sup> /4NE <sup>1</sup> /4 sec.6, T.4 S.,<br>R.68 W., Denver County,<br>800 ft upstream from<br>confluence with Lakewood<br>Gulch, north of West 10th<br>Ave., at Perry St., in Den-<br>ver. Drainage area not<br>determined.  | 1980-96                | 8-22-96<br>9-18-96<br>Same<br>max peak | 11.86                  | 146                                    | <sup>a</sup> 1981 | 16.00                  | 445                                    |
| Sloans Lake, south<br>Tributary at<br>Denver, CO<br>(06711820)      | Lat 39°44'44", long 105°03'28",<br>in NW <sup>1</sup> /4SE <sup>1</sup> /4 sec.36, T.3 S.,<br>R.69 W., Jefferson County,<br>50 ft south of 18th Ave., at<br>Depew St. REVISED RECORDS.--<br>WDR CO-90-1: 1985-89. Drain-<br>age area not determined.   | 1985-96                | 8-22-96                                | 4.92                   | 38                                     | 6-01-91           | 4.00                   | 451                                    |
| Westerly Creek at<br>Aurora, CO<br>(06714260)                       | Lat 39°44'43", long 104°52'48",<br>in NW <sup>1</sup> /4SW <sup>1</sup> /4 sec.34, T.3 S.,<br>R.67 W., Adams County, 50 ft<br>upstream from footbridge.<br>800 ft upstream from Montview<br>Blvd., and 100 ft east of<br>Boston St., in Aurora.<br>REVISED RECORDS.--WDR CO-90-<br>1: 1983-85, 1987-88. Drain-<br>age area not determined.   | 1982-96                | 9-19-96                                | 13.12                  | 768                                    | <sup>a</sup> 1983 | 14.45                  | 1,530                                  |
| Lena Gulch at Upper<br>Site, at Golden,<br>CO (06719535)            | Lat 39°43'21", long 105°11'46",<br>in NE <sup>1</sup> /4NW <sup>1</sup> /4 sec.11, T.4 S.,<br>R.70 W., Jefferson County,<br>60 ft north of US 40, and<br>2,200 ft southwest of US 6,<br>in Golden. Drainage area not<br>determined.  | 1985-96                | 9-18-96                                | 10.44                  | 213                                    | <sup>a</sup> 1987 | 10.92                  | 373                                    |
| Lena Gulch at<br>Lakewood,<br>(06719560)                            | Lat 39°44'27", long 105°08'49",<br>in SE <sup>1</sup> /4SE <sup>1</sup> /4 sec.31, T.3 S.,<br>R.69 W., Jefferson County on<br>right bank 200 ft north of<br>West 15th Drive at Arbutus<br>Prior to July 6, 1988, at<br>site approx. 500 ft<br>downstream (formerly<br>published as Lena Gulch at<br>Alkire at Golden, CO,<br>1986-87). Drainage area is<br>approximately 9.0 mi <sup>2</sup> . | 1974-79,<br>1986-96    | 5-26-96                                | 11.78                  | 166                                    | 7-20-75           | 14.41                  | 641                                    |
| Hidden Lake Outflow<br>at 65th Ave near<br>Arvada, CO<br>(06719775) | Lat 39°48'53", long 105°02'03",<br>in SE <sup>1</sup> /4SE <sup>1</sup> /4 sec.6, T.3 S.,<br>R.68 W., Adams County, 30 ft<br>downstream from 65th Ave. at<br>Lowell Blvd. May 1985 to<br>Aug. 1987 at site 200 ft<br>downstream. Drainage area<br>not determined.  | 1985-96                | 5-29-96                                | 2.42                   | 18                                     | 7-22-91           | 2.50                   | 22                                     |
| Little Dry Creek at<br>Westminster, CO<br>(06719840)                | Lat 39°49'34", long 105°02'25",<br>in NW <sup>1</sup> /4NE <sup>1</sup> /4 sec.6, T.3 S.,<br>R.68 W., Adams County, 400 ft<br>downstream from 72nd Ave. in<br>Westminster. REVISED<br>RECORDS.--WDR CO-89-1: 1986.<br>Drainage area not determined.  | 1982-96                | 9-18-96                                | 12.07                  | 632                                    | 6-01-91           | 13.09                  | 1,280                                  |

## MAXIMUM DISCHARGE AT CREST-STAGE PARTIAL-RECORD STATIONS--Continued

| Station name<br>and<br>number  | Location<br>and<br>drainage area  | Period<br>of<br>record          | Water year 1996 maximum |                        | Period of record maximum               |         |                        |  |
|--|---|---------------------------------|-------------------------|------------------------|--|---------|------------------------|--|
|  |   |                                 | Date                    | Gage<br>height<br>(ft) | Dis-<br>charge<br>(ft <sup>3</sup> /s) | Date    | Gage<br>height<br>(ft) | Dis-<br>charge<br>(ft <sup>3</sup> /s) |
| <b>ARKANSAS RIVER BASIN</b>  |   |                                 |                         |                        |  |         |                        |  |
| B-Ditch Tributary<br>blw Hwy 115 at<br>Fort Carson, CO<br>(07105770)           | Lat 38°45'53", long 104°48'39",<br>in NW <sup>1</sup> /4NW <sup>1</sup> /4 sec.8, T.15 S.,<br>R.66 W., El Paso County, 200<br>ft south of Academy Ave, 0.2<br>mi downstream from Hwy 115,<br>and 3.7 mi upstream from the<br>mouth. Drainage area is 0.49<br>mi <sup>2</sup> .  | 1993-96                         | 5-25-96                 | 5.43                   | 88                                     | 5-25-96 | 5.43                   | 88                                     |
| Clover Ditch Tribu-<br>tary at Hwy 115<br>at Fort Carson,<br>CO (07105810)     | Lat 38°45'07", long 104°48'41",<br>in NW <sup>1</sup> /4NW <sup>1</sup> /4 sec.17, T.15 S.,<br>R.66 W., El Paso County, 1.1 mi<br>south of intersection of High-<br>way 115 and Academy Boulevard<br>near Colorado Springs. Drain-<br>age area is 1.46 mi <sup>2</sup> .  | 1993-96                         | no peaks during year    |                        |  | 5-17-95 | 6.65                   | 189                                    |
| Big Arroyo near<br>Thatcher, CO<br>(07120620)                                  | Lat 37°33'17", long 104°01'15",<br>in NW <sup>1</sup> /4NW <sup>1</sup> /4 sec.4, T.29 S.,<br>R.59 W., Las Animas County,<br>2.4 mi from U.S. Route 350,<br>4.8 mi east of Thatcher, and<br>3.2 mi upstream from mouth.<br>Drainage area is 15.5 mi <sup>2</sup> .  | 1983-90 <sup>b</sup><br>1991-96 | 5-25-96                 | 3.56                   | 87                                     | 7-28-85 | 4.86                   | 1,500                                  |
| Lockwood Canyon<br>Creek near<br>Thatcher, CO<br>(07126390)                    | Lat 37°29'37", long 103°29'37",<br>in SE <sup>1</sup> /4nw <sup>1</sup> /4 sec.30, T.29 S.,<br>R.57 W., Las Animas County, on<br>right bank 0.6 mi downstream<br>from Sharp Ranch, 5.3 mi<br>upstream from mouth, and 16 mi<br>southeast of Thatcher. Drain-<br>age area is 41.4 mi <sup>2</sup> .                      | 1983-93 <sup>b</sup><br>1993-96 | 8-15-96                 | 5.45                   | 86                                     | 7-19-95 | 8.40                   | 690                                    |
| Red Rock Canyon<br>Creek at mouth,<br>near Thatcher,CO<br>(07126415)           | Lat 37°30'54", long 103°43'25",<br>in NW <sup>1</sup> /4SE <sup>1</sup> /4 sec.18, T.29 S.,<br>R.56 W., Las Animas County,<br>200 ft downstream from Welsh<br>Canyon, 0.3 mi upstream from<br>mouth, and 21 mi east of<br>Thatcher. Drainage area is<br>48.8 mi <sup>2</sup> .  | 1983-90 <sup>b</sup><br>1991-96 | 8-30-96                 | 8.77                   | 955                                    | 5-22-87 | 10.09                  | 1,530                                  |
| Chacuaco Creek near<br>mouth, near<br>Timpas, CO<br>(07126470)                 | Lat 37°32'38", long 103°37'54",<br>in SE <sup>1</sup> /4SE <sup>1</sup> /4 sec. 1, T.28 S.,<br>R.56W, Las Animas County, at<br>Red Rocks Ranch, 1.5 mi<br>upstream from mouth, 3.3 mi<br>upstream from Bent Canyon<br>Creek, and 21 mi southeast of<br>Timpas. Drainage area is 424<br>mi <sup>2</sup> .                | 1983-92 <sup>b</sup><br>1993-96 | 8-30-96                 | 16.18                  | 11,700                                 | 7-8-92  | 16.22                  | 11,800                                 |
| Bent Canyon Creek<br>at mouth near<br>Timpas, CO<br>(07126480)                 | Lat 37°35'19", long 103°38'51",<br>in SE <sup>1</sup> /4SE <sup>1</sup> /4 sec.23, T.28 S.,<br>R.65 W., Las Animas County<br>0.5 mi upstream from mouth,<br>0.6 mi southwest of Rourk<br>Ranch house, 0.9 mi upstream<br>from Iron Canyon, and 17 mi<br>southeast of Timpas. Drainage<br>area is 56.2 mi <sup>2</sup> . | 1983-90 <sup>b</sup><br>1991-96 | 8-30-96                 | 5.47                   | 95                                     | 8-21-84 | 12.56                  | 2,640                                  |
| Big Sandy Creek<br>above Amity<br>Diversion, near<br>Kornman, CO<br>(07134000) | Lat 38°12'52", long 102°28'45",<br>in NE <sup>1</sup> /4NW <sup>1</sup> /4 sec.21, T.21 S.,<br>R.45 W.,Prowers County, 7.0 mi<br>upstream from mouth, and 9.0<br>mi northeast of Kornman.<br>Drainage area is 3,426 mi <sup>2</sup> .   | 1941-46 <sup>b</sup><br>1996-   | 5-26-96                 | 10.48                  | est 50                                 | 9-3-42  | <sup>c</sup> 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 1996.**

| ARKANSAS RIVER BASIN |  |   |          |                                |
|----------------------|--|---|----------|--------------------------------|
| Station no.          | Station name   | Location and drainage area  | Date     | Discharge (ft <sup>3</sup> /s) |
| 07079195             | East Fork Arkansas River at Highway 91, near Leadville, CO | Lat 39°17'09", long 106°16'45", Lake County, Hydrologic Unit 11020001, at culvert on State Highway 91, near Leadville.<br><br>Drainage area is 35.0 mi <sup>2</sup> . | 10-06-95 | 29                             |
|                      |  |   | 11-08-95 | 14                             |
|                      |  |   | 12-06-95 | 13                             |
|                      |  |   | 1-11-96  | 8.5                            |
|                      |  |   | 2-07-96  | 9.1                            |
|                      |  |   | 3-12-96  | 9.5                            |
|                      |  |   | 4-17-96  | 14                             |
|                      |  |   | 5-21-96  | 232                            |
|                      |  |   | 6-25-96  | 163                            |
|                      |  |   | 7-23-96  | 51                             |
|                      |  |   | 8-19-96  | 24                             |
| 9-17-96              | 19   |   |          |                                |

**384533104495101 B-DITCH RAIN GAGE BELOW HWY 115, AT FORT CARSON, CO**

LOCATION.--Lat 38°45'33, long 104°49'51", in NW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec.7, T.15 S., R.66 W., El Paso County, Hydrologic Unit 11020003, approximately 1.0 mile west of intersection of Hwy 115 and Academy Blvd., near Colorado Springs.

DRAINAGE AREA.--0.49 mi<sup>2</sup> at B-Ditch Tributary below Hwy 115, at Fort Carson, CO (07105770).

**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 6,410 ft above sea level, from topographic map.

REMARKS.--Records fair. 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).

EXTREMES FOR PERIOD OF RECORD.--Maximum daily rainfall, 3.33 inches, May 9, 1994.

EXTREMES FOR CURRENT YEAR.--Maximum daily rainfall, 2.30 inches, July 9.

RAINFALL ACCUMULATED (INCHES), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY SUM VALUES

| DAY   | OCT  | NOV | DEC | JAN | FEB | MAR | APR | MAY  | JUN  | JUL  | AUG  | SEP  |
|-------|------|-----|-----|-----|-----|-----|-----|------|------|------|------|------|
| 1     | .00  | .00 | --- | --- | --- | --- | --- | ---  | .00  | .00  | .04  | .00  |
| 2     | .00  | .00 | --- | --- | --- | --- | --- | ---  | .00  | .00  | .02  | .00  |
| 3     | .00  | .20 | --- | --- | --- | --- | --- | ---  | .00  | .00  | .00  | .01  |
| 4     | .00  | .00 | --- | --- | --- | --- | --- | .00  | .00  | .00  | .00  | .00  |
| 5     | .00  | .00 | --- | --- | --- | --- | --- | .00  | .00  | .32  | .00  | .00  |
| 6     | .00  | .00 | --- | --- | --- | --- | --- | .00  | .00  | .00  | .00  | .22  |
| 7     | .00  | .00 | --- | --- | --- | --- | --- | .00  | .00  | .00  | .00  | .01  |
| 8     | .00  | .00 | --- | --- | --- | --- | --- | .01  | .03  | .00  | .41  | .00  |
| 9     | .00  | .00 | --- | --- | --- | --- | --- | .39  | .01  | 2.30 | .01  | .01  |
| 10    | .00  | .00 | --- | --- | --- | --- | --- | .17  | .43  | .32  | .00  | .00  |
| 11    | .00  | .05 | --- | --- | --- | --- | --- | .00  | .00  | .00  | .00  | .21  |
| 12    | .00  | .16 | --- | --- | --- | --- | --- | .00  | .12  | .23  | .00  | .01  |
| 13    | .00  | .00 | --- | --- | --- | --- | --- | .00  | .18  | .09  | .00  | .13  |
| 14    | .00  | .00 | --- | --- | --- | --- | --- | .00  | .13  | .00  | .07  | .00  |
| 15    | .00  | .00 | --- | --- | --- | --- | --- | .00  | .27  | .17  | .01  | .19  |
| 16    | .00  | .00 | --- | --- | --- | --- | --- | .00  | .00  | .02  | .00  | .00  |
| 17    | .00  | .00 | --- | --- | --- | --- | --- | .00  | .00  | .00  | .00  | .52  |
| 18    | .00  | .00 | --- | --- | --- | --- | --- | .02  | .00  | .02  | .13  | .19  |
| 19    | .00  | .00 | --- | --- | --- | --- | --- | .00  | .00  | .28  | .01  | .00  |
| 20    | .00  | .00 | --- | --- | --- | --- | --- | .00  | .00  | 1.04 | .01  | .00  |
| 21    | .00  | --- | --- | --- | --- | --- | --- | .00  | .25  | .00  | .01  | .00  |
| 22    | .00  | --- | --- | --- | --- | --- | --- | .00  | .06  | .00  | .07  | .00  |
| 23    | .00  | --- | --- | --- | --- | --- | --- | .00  | .00  | .00  | .76  | .31  |
| 24    | .00  | --- | --- | --- | --- | --- | --- | .15  | .00  | .05  | .00  | .00  |
| 25    | .00  | --- | --- | --- | --- | --- | --- | 1.42 | .00  | .05  | .01  | .00  |
| 26    | .00  | --- | --- | --- | --- | --- | --- | .38  | .00  | .49  | .00  | .11  |
| 27    | .00  | --- | --- | --- | --- | --- | --- | .00  | .00  | .00  | .36  | .20  |
| 28    | .00  | --- | --- | --- | --- | --- | --- | .02  | .00  | .07  | .00  | .00  |
| 29    | .00  | --- | --- | --- | --- | --- | --- | .00  | .00  | .03  | .58  | .00  |
| 30    | .00  | --- | --- | --- | --- | --- | --- | .00  | .37  | .01  | .06  | .00  |
| 31    | .00  | --- | --- | --- | --- | --- | --- | .00  | ---  | .39  | .00  | ---  |
| TOTAL | 0.00 | --- | --- | --- | --- | --- | --- | ---  | 1.85 | 5.88 | 2.56 | 2.12 |

**384519104483601 CLOVER DITCH TRIBUTARY RAIN GAGE AT HWY 115, AT FORT CARSON, CO**

LOCATION.--Lat 38°45'19, long 104°48'36", in NW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec.8, T.15 S., R.66 W., El Paso County, Hydrologic Unit 11020003, 3.2 miles south of intersection of Hwy 115 and Lake Avenue, near Colorado Springs.

DRAINAGE AREA.--1.46 mi<sup>2</sup> at Clover Ditch Tributary at Hwy 115, at Fort Carson, CO (07105810).

**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 5,950 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).

EXTREMES FOR PERIOD OF RECORD.--Maximum daily rainfall, 3.07 inches, May 17, 1995.

EXTREMES FOR CURRENT YEAR.--Maximum daily rainfall, 1.91 inches, July 9.

RAINFALL ACCUMULATED (INCHES), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
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  | .00  | .00  |
| 3     | .00  | .08 | --- | --- | --- | --- | --- | ---  | .00  | .00  | .02  | .00  |
| 4     | .00  | .00 | --- | --- | --- | --- | --- | .00  | .00  | .00  | .00  | .00  |
| 5     | .00  | .00 | --- | --- | --- | --- | --- | .00  | .00  | .31  | .00  | .00  |
| 6     | .00  | .00 | --- | --- | --- | --- | --- | .00  | .00  | .00  | .00  | .19  |
| 7     | .00  | .00 | --- | --- | --- | --- | --- | .00  | .00  | .00  | .00  | .00  |
| 8     | .00  | .00 | --- | --- | --- | --- | --- | .00  | .00  | .00  | .75  | .00  |
| 9     | .00  | .00 | --- | --- | --- | --- | --- | .38  | .00  | 1.91 | .01  | .00  |
| 10    | .00  | .00 | --- | --- | --- | --- | --- | .09  | .26  | .32  | .00  | .00  |
| 11    | .00  | .01 | --- | --- | --- | --- | --- | .00  | .00  | .02  | .00  | .23  |
| 12    | .06  | .00 | --- | --- | --- | --- | --- | .00  | .07  | .17  | .00  | .01  |
| 13    | .00  | .00 | --- | --- | --- | --- | --- | .00  | .17  | .10  | .00  | .11  |
| 14    | .13  | .00 | --- | --- | --- | --- | --- | .00  | .15  | .00  | .14  | .00  |
| 15    | .00  | .00 | --- | --- | --- | --- | --- | .00  | .23  | .16  | .03  | .28  |
| 16    | .00  | .00 | --- | --- | --- | --- | --- | .00  | .00  | .01  | .00  | .00  |
| 17    | .00  | .00 | --- | --- | --- | --- | --- | .00  | .00  | .04  | .00  | .33  |
| 18    | .00  | .00 | --- | --- | --- | --- | --- | .00  | .00  | .03  | .44  | .19  |
| 19    | .00  | .00 | --- | --- | --- | --- | --- | .00  | .00  | .45  | .07  | .00  |
| 20    | .00  | .00 | --- | --- | --- | --- | --- | .00  | .00  | 1.05 | .00  | .00  |
| 21    | .00  | --- | --- | --- | --- | --- | --- | .00  | .15  | .00  | .00  | .00  |
| 22    | .00  | --- | --- | --- | --- | --- | --- | .00  | .01  | .00  | .16  | .00  |
| 23    | .00  | --- | --- | --- | --- | --- | --- | .00  | .00  | .00  | .74  | .35  |
| 24    | .00  | --- | --- | --- | --- | --- | --- | .25  | .00  | .02  | .01  | .00  |
| 25    | .00  | --- | --- | --- | --- | --- | --- | 1.27 | .00  | .03  | .02  | .00  |
| 26    | .00  | --- | --- | --- | --- | --- | --- | .32  | .00  | .74  | .00  | .19  |
| 27    | .00  | --- | --- | --- | --- | --- | --- | .00  | .00  | .00  | .21  | .06  |
| 28    | .00  | --- | --- | --- | --- | --- | --- | .01  | .00  | .05  | .00  | .00  |
| 29    | .00  | --- | --- | --- | --- | --- | --- | .00  | .00  | .02  | .55  | .00  |
| 30    | .00  | --- | --- | --- | --- | --- | --- | .00  | .13  | .00  | .03  | .00  |
| 31    | .00  | --- | --- | --- | --- | --- | --- | .00  | ---  | .36  | .00  | ---  |
| TOTAL | 0.19 | --- | --- | --- | --- | --- | --- | ---  | 1.17 | 5.79 | 3.25 | 1.94 |

**373125104001601 BIG ARROYO HILLS RAIN GAGE AT PIPELINE ROAD, NEAR HOUGHTON, CO**

LOCATION.--Lat 37°31'25", long 104°00'16", in SE<sup>1</sup>/<sub>4</sub> NE<sup>1</sup>/<sub>4</sub> sec.16, T.29 S., R.59 W., Las Animas County, Hydrologic Unit 11020010, on Pinon Canyon Manuever Site, approximately 100 ft west of Pipeline Road, 200 ft north of Military Service Road 1, 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.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily rainfall, 1.87 inches, May 5, 1995.

EXTREMES FOR CURRENT YEAR.--Maximum daily rainfall, 1.71 inches, May 25.

RAINFALL ACCUMULATED (INCHES), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY SUM VALUES

| DAY   | OCT  | NOV  | DEC | JAN | FEB | MAR | APR  | MAY  | JUN  | JUL  | AUG  | SEP  |
|-------|------|------|-----|-----|-----|-----|------|------|------|------|------|------|
| 1     | .00  | .01  | --- | --- | --- | --- | ---  | .00  | .00  | .00  | .00  | .00  |
| 2     | .00  | .00  | --- | --- | --- | --- | ---  | .00  | .00  | .00  | .00  | .00  |
| 3     | .00  | .07  | --- | --- | --- | --- | ---  | .00  | .00  | .00  | .04  | .00  |
| 4     | .00  | .00  | --- | --- | --- | --- | ---  | .00  | .00  | .00  | .02  | .00  |
| 5     | .00  | .00  | --- | --- | --- | --- | ---  | .01  | .00  | .11  | .00  | .00  |
| 6     | .00  | e.00 | --- | --- | --- | --- | ---  | .00  | .00  | .00  | .00  | .15  |
| 7     | .00  | ---  | --- | --- | --- | --- | ---  | .00  | .00  | .00  | .00  | .00  |
| 8     | .00  | ---  | --- | --- | --- | --- | ---  | .00  | .00  | .03  | .00  | .00  |
| 9     | .00  | ---  | --- | --- | --- | --- | ---  | .00  | .00  | .81  | .02  | .00  |
| 10    | .00  | ---  | --- | --- | --- | --- | ---  | .10  | .00  | .05  | .00  | .00  |
| 11    | .00  | ---  | --- | --- | --- | --- | ---  | .00  | .00  | .00  | .00  | .00  |
| 12    | .00  | ---  | --- | --- | --- | --- | ---  | .00  | .40  | 1.11 | .00  | .16  |
| 13    | .00  | ---  | --- | --- | --- | --- | ---  | .00  | .00  | .01  | .00  | .47  |
| 14    | .00  | ---  | --- | --- | --- | --- | ---  | .00  | .27  | .04  | .41  | .01  |
| 15    | .00  | ---  | --- | --- | --- | --- | ---  | .00  | .13  | .00  | .11  | .02  |
| 16    | .00  | ---  | --- | --- | --- | --- | ---  | .00  | .00  | .00  | .20  | .00  |
| 17    | .00  | ---  | --- | --- | --- | --- | e.00 | .00  | .00  | .00  | .00  | .10  |
| 18    | .00  | ---  | --- | --- | --- | --- | .00  | .00  | .00  | .66  | .00  | .13  |
| 19    | .00  | ---  | --- | --- | --- | --- | .00  | .00  | .00  | .00  | .00  | .00  |
| 20    | .00  | ---  | --- | --- | --- | --- | .00  | .00  | .00  | .00  | .00  | .00  |
| 21    | .00  | ---  | --- | --- | --- | --- | .00  | .00  | .07  | .00  | .27  | .00  |
| 22    | .00  | ---  | --- | --- | --- | --- | .00  | .00  | .22  | .01  | .12  | .00  |
| 23    | .00  | ---  | --- | --- | --- | --- | .00  | .00  | .00  | .06  | .08  | .01  |
| 24    | .00  | ---  | --- | --- | --- | --- | .00  | .00  | .34  | .06  | .00  | .01  |
| 25    | .00  | ---  | --- | --- | --- | --- | .00  | 1.71 | .00  | .05  | .00  | .02  |
| 26    | .00  | ---  | --- | --- | --- | --- | .00  | .13  | .00  | .08  | .01  | .07  |
| 27    | .00  | ---  | --- | --- | --- | --- | .00  | .00  | .00  | .00  | 1.45 | .25  |
| 28    | .00  | ---  | --- | --- | --- | --- | .13  | .00  | .00  | .00  | .00  | .00  |
| 29    | .00  | ---  | --- | --- | --- | --- | .00  | .00  | .00  | .93  | .06  | .00  |
| 30    | .00  | ---  | --- | --- | --- | --- | .00  | .00  | .04  | .00  | .01  | .00  |
| 31    | .00  | ---  | --- | --- | --- | --- | ---  | .00  | ---  | .07  | .00  | ---  |
| TOTAL | 0.00 | ---  | --- | --- | --- | --- | ---  | 1.95 | 1.47 | 4.08 | 2.80 | 1.40 |

e-Estimated.

**372721103595601 TAYLOR ARROYO RAIN GAGE AT PIPELINE, NEAR SIMPSON, CO**

LOCATION.--Lat 37°27'21", long 103°59'56", in SE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec.3, T.30 S., R.59 W., Las Animas County, Hydrologic Unit 11020010, on Pinon Canyon 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 with electronic data logger. Elevation of gage is 5,220 ft above sea level, from topographic map.

REMARKS.--Records good. Daily data that are not published are either missing or of unacceptable quality.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily rainfall, 2.63 inches, May 5, 1995.

EXTREMES FOR CURRENT YEAR.--Maximum daily rainfall, 1.66 inches, May 25.

RAINFALL ACCUMULATED (INCHES), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY SUM VALUES

| DAY   | OCT | NOV | DEC  | JAN  | FEB  | MAR  | APR  | MAY  | JUN  | JUL  | AUG  | SEP  |
|-------|-----|-----|------|------|------|------|------|------|------|------|------|------|
| 1     | --- | --- | .00  | .01  | .00  | .00  | .00  | .00  | .01  | .00  | .00  | .00  |
| 2     | --- | --- | .00  | .00  | .03  | .00  | .00  | .00  | .00  | .00  | .00  | .00  |
| 3     | --- | --- | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .00  |
| 4     | --- | --- | .00  | .00  | .00  | .00  | .01  | .00  | .00  | .00  | .39  | .00  |
| 5     | --- | --- | .00  | .00  | .00  | .02  | .06  | .00  | .00  | .00  | .00  | .00  |
| 6     | --- | --- | .00  | .00  | .00  | .01  | .02  | .00  | .00  | .00  | .00  | .16  |
| 7     | --- | --- | .00  | .00  | .00  | .02  | .00  | .00  | .00  | .00  | .00  | .00  |
| 8     | --- | .00 | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .09  | .00  | .00  |
| 9     | --- | .00 | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .43  | .00  | .00  |
| 10    | --- | .12 | .00  | .00  | .00  | .00  | .00  | .04  | .00  | .06  | .00  | .00  |
| 11    | --- | .00 | .00  | .00  | .00  | .00  | .00  | .00  | .01  | .00  | .00  | .00  |
| 12    | --- | .00 | .00  | .00  | .00  | .00  | .00  | .00  | .59  | .72  | .00  | .21  |
| 13    | --- | .00 | .00  | .00  | .00  | .02  | .15  | .00  | .00  | .00  | .00  | .27  |
| 14    | --- | .00 | .00  | .00  | .00  | .17  | .11  | .00  | .17  | .07  | .05  | .02  |
| 15    | --- | .00 | .00  | .00  | .00  | .12  | .00  | .00  | .15  | .00  | .99  | .01  |
| 16    | --- | .00 | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .09  | .00  |
| 17    | --- | .00 | .02  | .09  | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .08  |
| 18    | --- | .00 | .03  | .00  | .00  | .00  | .00  | .00  | .00  | .03  | .02  | .09  |
| 19    | --- | .00 | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .00  |
| 20    | --- | .00 | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .00  |
| 21    | --- | .00 | .00  | .00  | .00  | .00  | .00  | .00  | .45  | .00  | .28  | .00  |
| 22    | --- | .00 | .00  | .00  | .00  | .00  | .00  | .00  | .26  | .03  | .18  | .00  |
| 23    | --- | .00 | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .18  | .00  |
| 24    | --- | .00 | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .02  | .00  | .38  |
| 25    | --- | .00 | .00  | .00  | .00  | .00  | .00  | 1.66 | .03  | .00  | .00  | .09  |
| 26    | --- | .00 | .00  | .00  | .00  | .00  | .00  | .14  | .00  | .22  | .02  | .02  |
| 27    | --- | .05 | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .01  | .16  | .31  |
| 28    | --- | .00 | .00  | .00  | .00  | .00  | .07  | .02  | .00  | .00  | .01  | .00  |
| 29    | --- | .00 | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .86  | .03  | .00  |
| 30    | --- | .00 | .00  | .00  | ---  | .00  | .00  | .00  | .00  | .00  | .00  | .00  |
| 31    | --- | --- | .00  | .00  | ---  | .00  | ---  | .00  | ---  | .03  | .01  | ---  |
| TOTAL | --- | --- | 0.05 | 0.10 | 0.03 | 0.36 | 0.42 | 1.86 | 1.67 | 2.57 | 2.41 | 1.64 |

**372756103513001 LOCKWOOD CANYON RAIN GAGE, NEAR ROCK CROSSING, CO**

LOCATION.--Lat 37°27'56", long 103°51'30", in NW<sup>1</sup>/<sub>4</sub> NW<sup>1</sup>/<sub>4</sub> sec.19, T.30 S., R.58 W., Las Animas County, Hydrologic Unit 11020010, on Pinon Canyon Manuever Site, approximately 100 ft north of Military Service Road 4, 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.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily rainfall, 2.36 inches, May 25, 1996.

EXTREMES FOR CURRENT YEAR.--Maximum daily rainfall, 2.36 inches, May 25.

RAINFALL ACCUMULATED (INCHES), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY SUM VALUES

| DAY   | OCT  | NOV  | DEC | JAN | FEB | MAR | APR  | MAY  | JUN  | JUL  | AUG  | SEP  |
|-------|------|------|-----|-----|-----|-----|------|------|------|------|------|------|
| 1     | .00  | .01  | --- | --- | --- | --- | ---  | .00  | .00  | .00  | .00  | .00  |
| 2     | .00  | .00  | --- | --- | --- | --- | ---  | .00  | .00  | .00  | .00  | .00  |
| 3     | .00  | .04  | --- | --- | --- | --- | ---  | .00  | .00  | .00  | .00  | .00  |
| 4     | .00  | .00  | --- | --- | --- | --- | ---  | .00  | .00  | .00  | .00  | .00  |
| 5     | .00  | .00  | --- | --- | --- | --- | ---  | .01  | .01  | .00  | .00  | .00  |
| 6     | .00  | .00  | --- | --- | --- | --- | ---  | .00  | .00  | .00  | .00  | .27  |
| 7     | .00  | .00  | --- | --- | --- | --- | ---  | .00  | .00  | .08  | .00  | .00  |
| 8     | .00  | e.14 | --- | --- | --- | --- | ---  | .00  | .00  | .02  | .00  | .00  |
| 9     | .00  | ---  | --- | --- | --- | --- | ---  | .00  | .00  | .34  | .00  | .00  |
| 10    | .00  | ---  | --- | --- | --- | --- | ---  | .05  | .00  | .05  | .00  | .00  |
| 11    | .00  | ---  | --- | --- | --- | --- | ---  | .00  | .01  | .00  | .00  | .00  |
| 12    | .00  | ---  | --- | --- | --- | --- | ---  | .00  | .58  | 1.31 | .00  | .20  |
| 13    | .00  | ---  | --- | --- | --- | --- | ---  | .00  | .10  | .00  | .00  | .69  |
| 14    | .00  | ---  | --- | --- | --- | --- | ---  | .00  | .15  | .08  | .00  | .00  |
| 15    | .00  | ---  | --- | --- | --- | --- | ---  | .00  | .25  | .00  | 1.29 | .00  |
| 16    | .00  | ---  | --- | --- | --- | --- | ---  | .00  | .00  | .00  | .07  | .01  |
| 17    | .00  | ---  | --- | --- | --- | --- | ---  | .00  | .00  | .00  | .00  | .12  |
| 18    | .00  | ---  | --- | --- | --- | --- | ---  | .00  | .00  | .46  | .00  | .08  |
| 19    | .00  | ---  | --- | --- | --- | --- | e.00 | .00  | .00  | .01  | .20  | .00  |
| 20    | .00  | ---  | --- | --- | --- | --- | .00  | .00  | .00  | .00  | .00  | .00  |
| 21    | .00  | ---  | --- | --- | --- | --- | .00  | .00  | .17  | .00  | .26  | .00  |
| 22    | .00  | ---  | --- | --- | --- | --- | .00  | .00  | .21  | .00  | .26  | .00  |
| 23    | .00  | ---  | --- | --- | --- | --- | .00  | .00  | .00  | .03  | .01  | .00  |
| 24    | .00  | ---  | --- | --- | --- | --- | .00  | .00  | .00  | .03  | .00  | .02  |
| 25    | .00  | ---  | --- | --- | --- | --- | .00  | 2.36 | .00  | .00  | .00  | .01  |
| 26    | .00  | ---  | --- | --- | --- | --- | .00  | .11  | .00  | .01  | .00  | .00  |
| 27    | .00  | ---  | --- | --- | --- | --- | .00  | e.00 | .00  | .11  | .25  | .00  |
| 28    | .00  | ---  | --- | --- | --- | --- | .04  | e.06 | .00  | .00  | .10  | .01  |
| 29    | .00  | ---  | --- | --- | --- | --- | .00  | .00  | .00  | .00  | .05  | .00  |
| 30    | .00  | ---  | --- | --- | --- | --- | .00  | .00  | .06  | .00  | .04  | .00  |
| 31    | .00  | ---  | --- | --- | --- | --- | ---  | .00  | ---  | .00  | .00  | ---  |
| TOTAL | 0.00 | ---  | --- | --- | --- | --- | ---  | 2.59 | 1.54 | 2.53 | 2.53 | 1.41 |

e-Estimated.

**373315103493101 RED ROCK CANYON RAIN GAGE, AT RED ROCK ROAD, CO**

LOCATION.--Lat 37°33'15", long 103°49'31", in NE¼NE¼ sec.6, T.29 S., R.57 W., Las Animas County, Hydrologic Unit 11020010, on Pinon Canyon Manuever Site, approximately 150 ft west of Red Rock Road, 0.4 mi south of military service road, 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.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily rainfall, 2.75 inches, July 19, 1993.

EXTREMES FOR CURRENT YEAR.--Maximum daily rainfall, 2.46 inches, May 25.

RAINFALL ACCUMULATED (INCHES), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
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  |
| 2     | .00  | .00  | .00  | .02  | .00  | .00  | .00  | .00  | --- | --- | ---  | .00  |
| 3     | .00  | .02  | .00  | .01  | .00  | .00  | .00  | .00  | --- | --- | ---  | .00  |
| 4     | .00  | .00  | .00  | .00  | .02  | .00  | .00  | .00  | --- | --- | ---  | .00  |
| 5     | .00  | .00  | .00  | .00  | .00  | .00  | .05  | .03  | --- | --- | ---  | .00  |
| 6     | .00  | .00  | .00  | .00  | .00  | .06  | .01  | .00  | --- | --- | ---  | .11  |
| 7     | .00  | .00  | .00  | .00  | .00  | .02  | .00  | .00  | --- | --- | ---  | .00  |
| 8     | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .00  | --- | --- | ---  | .00  |
| 9     | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .00  | --- | --- | ---  | .00  |
| 10    | .00  | .11  | .00  | .00  | .00  | .00  | .00  | .04  | --- | --- | ---  | .00  |
| 11    | .00  | .05  | .00  | .00  | .00  | .00  | .00  | .00  | --- | --- | ---  | .00  |
| 12    | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .00  | --- | --- | ---  | .14  |
| 13    | .00  | .00  | .00  | .00  | .00  | .00  | .10  | .01  | --- | --- | ---  | .32  |
| 14    | .00  | .00  | .00  | .00  | .00  | .23  | .34  | .00  | --- | --- | ---  | .01  |
| 15    | .00  | .00  | .00  | .00  | .00  | .07  | .00  | .00  | --- | --- | ---  | .01  |
| 16    | .00  | .00  | .00  | .00  | .00  | .02  | .00  | .00  | --- | --- | ---  | .01  |
| 17    | .00  | .00  | .00  | .18  | .00  | .00  | .00  | .00  | --- | --- | ---  | .13  |
| 18    | .00  | .00  | .06  | .01  | .00  | .04  | .00  | .00  | --- | --- | ---  | .08  |
| 19    | .00  | .00  | .02  | .00  | .00  | .10  | .00  | .00  | --- | --- | e.03 | .00  |
| 20    | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .00  | --- | --- | .00  | .00  |
| 21    | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .00  | --- | --- | .24  | .00  |
| 22    | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .00  | --- | --- | .24  | .00  |
| 23    | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .00  | --- | --- | .06  | .02  |
| 24    | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .00  | --- | --- | .00  | .00  |
| 25    | .00  | .00  | .00  | .00  | .00  | .00  | .00  | 2.46 | --- | --- | .00  | .18  |
| 26    | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .15  | --- | --- | .00  | .24  |
| 27    | .00  | .03  | .00  | .00  | .00  | .00  | .00  | .00  | --- | --- | .09  | .14  |
| 28    | .00  | .03  | .00  | .00  | .00  | .00  | .13  | e.00 | --- | --- | .00  | .00  |
| 29    | .00  | .00  | .00  | .00  | .00  | .00  | .00  | ---  | --- | --- | .03  | .00  |
| 30    | .00  | .00  | .00  | .00  | ---  | .00  | .00  | ---  | --- | --- | 1.60 | .00  |
| 31    | .00  | ---  | .00  | .00  | ---  | .00  | ---  | ---  | --- | --- | .00  | ---  |
| TOTAL | 0.00 | 0.24 | 0.08 | 0.22 | 0.02 | 0.54 | 0.63 | ---  | --- | --- | ---  | 1.39 |

e-Estimated.

**373622103490001 STAGE CANYON RAIN GAGE AT RED ROCK ROAD, CO**

LOCATION.--Lat 37°36'22, long 103°49'00", in NE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec.17, T.28 S., R.57 W., Las Animas County, Hydrologic Unit 11020010, approximately 80 ft east of Red Rock Road, 3.2 mi north of military service 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.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily rainfall, 2.42 inches, May 25, 1996.

EXTREMES FOR CURRENT YEAR.--Maximum daily rainfall, 2.42 inches, May 25.

RAINFALL ACCUMULATED (INCHES), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY SUM VALUES

| DAY   | OCT  | NOV  | DEC | JAN | FEB | MAR | APR  | MAY  | JUN  | JUL  | AUG | SEP  |
|-------|------|------|-----|-----|-----|-----|------|------|------|------|-----|------|
| 1     | .00  | .01  | --- | --- | --- | --- | ---  | .00  | e.00 | .00  | .06 | .00  |
| 2     | .00  | .00  | --- | --- | --- | --- | ---  | .00  | e.00 | .00  | .00 | .00  |
| 3     | .00  | .05  | --- | --- | --- | --- | ---  | .00  | e.00 | .00  | .16 | .00  |
| 4     | .00  | .00  | --- | --- | --- | --- | ---  | .00  | e.00 | .00  | .00 | .00  |
| 5     | .00  | .00  | --- | --- | --- | --- | ---  | .01  | e.00 | .00  | .00 | .00  |
| 6     | .00  | .00  | --- | --- | --- | --- | ---  | .00  | e.00 | .00  | .00 | .09  |
| 7     | .00  | .00  | --- | --- | --- | --- | ---  | .00  | e.00 | .00  | .00 | .01  |
| 8     | .00  | e.00 | --- | --- | --- | --- | ---  | .00  | e.00 | .39  | .00 | .00  |
| 9     | .00  | ---  | --- | --- | --- | --- | ---  | .00  | .00  | .27  | .00 | .00  |
| 10    | .00  | ---  | --- | --- | --- | --- | ---  | .02  | .00  | .01  | .00 | .00  |
| 11    | .00  | ---  | --- | --- | --- | --- | ---  | .00  | .00  | .16  | .00 | .00  |
| 12    | .00  | ---  | --- | --- | --- | --- | ---  | .00  | .36  | .25  | .00 | .56  |
| 13    | .00  | ---  | --- | --- | --- | --- | ---  | .01  | .21  | .03  | .00 | .15  |
| 14    | .00  | ---  | --- | --- | --- | --- | ---  | .00  | .33  | .00  | .02 | .01  |
| 15    | .00  | ---  | --- | --- | --- | --- | ---  | .00  | .08  | .00  | --- | .02  |
| 16    | .00  | ---  | --- | --- | --- | --- | e.00 | .00  | .06  | .00  | .00 | .00  |
| 17    | .00  | ---  | --- | --- | --- | --- | .00  | .00  | .00  | .54  | .00 | .12  |
| 18    | .00  | ---  | --- | --- | --- | --- | .00  | .00  | .02  | .07  | .00 | .06  |
| 19    | .00  | ---  | --- | --- | --- | --- | .00  | .00  | .00  | .00  | --- | .00  |
| 20    | .00  | ---  | --- | --- | --- | --- | .00  | .00  | .00  | .00  | .00 | .00  |
| 21    | .00  | ---  | --- | --- | --- | --- | .00  | .00  | .00  | .00  | .17 | .00  |
| 22    | .00  | ---  | --- | --- | --- | --- | .00  | .00  | .05  | .07  | .19 | .00  |
| 23    | .00  | ---  | --- | --- | --- | --- | .00  | .00  | .38  | .00  | .01 | .03  |
| 24    | .00  | ---  | --- | --- | --- | --- | .00  | .00  | .00  | .00  | .00 | .00  |
| 25    | .00  | ---  | --- | --- | --- | --- | .00  | 2.42 | e.00 | .00  | .00 | .25  |
| 26    | .00  | ---  | --- | --- | --- | --- | .00  | .18  | e.00 | .18  | .00 | .26  |
| 27    | .00  | ---  | --- | --- | --- | --- | .00  | .00  | .00  | .00  | .11 | .16  |
| 28    | .00  | ---  | --- | --- | --- | --- | .12  | .00  | .00  | .00  | .01 | .00  |
| 29    | .00  | ---  | --- | --- | --- | --- | .00  | e.00 | .00  | .97  | .02 | .00  |
| 30    | .00  | ---  | --- | --- | --- | --- | .00  | e.00 | .00  | .00  | .87 | .00  |
| 31    | .00  | ---  | --- | --- | --- | --- | ---  | e.00 | ---  | .00  | .00 | ---  |
| TOTAL | 0.00 | ---  | --- | --- | --- | --- | ---  | 2.64 | 1.49 | 2.94 | --- | 1.72 |

e-Estimated.

**373232103555201 BEAR SPRINGS HILLS RAIN GAGE NEAR HOUGHTON, CO**

LOCATION.--Lat 37°32'32", long 103°55'52", in SW¼SW¼ sec.5, T.29 S., R.58 W., Las Animas County, Hydrologic Unit 11020010, on Pinon Canyon Manuever Site, approximately 100 ft north of military service road 3, 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. Data not published for periods of missing record.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily rainfall, 2.25 inches, May 5, 1995.

EXTREMES FOR CURRENT YEAR.--Maximum daily rainfall, 1.41 inches, May 25.

RAINFALL ACCUMULATED (INCHES), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY SUM VALUES

| DAY   | OCT  | NOV  | DEC  | JAN  | FEB  | MAR  | APR  | MAY  | JUN  | JUL  | AUG  | SEP  |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1     | .00  | .01  | .00  | .01  | .00  | .00  | .00  | .00  | ---  | .00  | .00  | .00  |
| 2     | .00  | .00  | .00  | .03  | .05  | .00  | .00  | .00  | e.00 | .00  | .00  | .00  |
| 3     | .00  | .05  | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .04  | .00  |
| 4     | .00  | .00  | .00  | .00  | .00  | .00  | .01  | .00  | .00  | .00  | .12  | .00  |
| 5     | .00  | .00  | .00  | .01  | .00  | .00  | .07  | .02  | .00  | .00  | .00  | .00  |
| 6     | .00  | .00  | .00  | .03  | .00  | .10  | .00  | .00  | .00  | .00  | .00  | .10  |
| 7     | .00  | .00  | .00  | .02  | .00  | .00  | .00  | .00  | .00  | .01  | .00  | .01  |
| 8     | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .03  | .00  | .00  |
| 9     | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .57  | .00  | .00  |
| 10    | .00  | .19  | .00  | .00  | .00  | .00  | .03  | .07  | .00  | .02  | .00  | .00  |
| 11    | .00  | .06  | .00  | .00  | .00  | .00  | .00  | .00  | .01  | .00  | .00  | .00  |
| 12    | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .11  | .68  | .00  | .33  |
| 13    | .00  | .00  | .00  | .00  | .00  | .00  | .12  | .02  | .06  | .00  | .00  | .36  |
| 14    | .00  | .00  | .00  | .00  | .00  | .26  | .43  | .00  | .10  | .13  | .51  | .02  |
| 15    | .00  | .00  | .00  | .00  | .00  | .09  | .00  | .00  | .08  | .00  | .21  | .01  |
| 16    | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .01  | .00  | .01  | .01  |
| 17    | .00  | .00  | .03  | .22  | .00  | .14  | .00  | .00  | .00  | .00  | .00  | .16  |
| 18    | .00  | .00  | .07  | .00  | .00  | .00  | .00  | .00  | .00  | 1.02 | .00  | .05  |
| 19    | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .55  | .00  |
| 20    | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .00  |
| 21    | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .13  | .00  | .24  | .00  |
| 22    | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .29  | .01  | .10  | .00  |
| 23    | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .14  | .11  | .01  |
| 24    | .00  | .00  | .00  | .00  | .00  | .03  | .00  | .00  | .06  | .04  | .00  | .01  |
| 25    | .00  | .00  | .00  | .00  | .00  | .00  | .00  | 1.41 | .01  | .02  | .00  | .08  |
| 26    | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .22  | .00  | .07  | .00  | .08  |
| 27    | .00  | .09  | .00  | .00  | .00  | .00  | .00  | .01  | .00  | .00  | .82  | .30  |
| 28    | .00  | .01  | .00  | .00  | .00  | .00  | .13  | e.00 | .00  | .01  | .00  | .00  |
| 29    | .00  | .00  | .00  | .00  | .00  | .01  | .00  | ---  | .00  | .63  | .03  | .00  |
| 30    | .00  | .00  | .00  | .00  | ---  | .00  | .00  | ---  | .01  | .01  | .38  | .00  |
| 31    | .00  | ---  | .00  | .00  | ---  | .00  | ---  | ---  | ---  | .03  | .01  | ---  |
| TOTAL | 0.00 | 0.41 | 0.10 | 0.32 | 0.05 | 0.63 | 0.79 | ---  | ---  | 3.42 | 3.13 | 1.53 |

e-Estimated.

**373823103465601 BENT CANYON RAIN GAGE ABOVE STAGE CANYON NEAR DELHI, CO**

LOCATION.--Lat 37°38'23", long 103°46'56", in SW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec.3, T.28 S., R.57 W., Las Animas County, Hydrologic Unit 11020010, on Pinon Canyon Manuever Site, approximately 80 ft north of military service road 1A, 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 with electronic data logger. Elevation of gage is 4,860 ft above sea level, from topographic map.

REMARKS.--Records good. Data not published for periods of missing record.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily rainfall, 2.36 inches, May 25, 1996.

EXTREMES FOR CURRENT YEAR.--Maximum daily rainfall, 2.36 inches, May 25.

RAINFALL ACCUMULATED (INCHES), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY SUM VALUES

| DAY   | OCT  | NOV  | DEC  | JAN  | FEB  | MAR  | APR  | MAY  | JUN | JUL  | AUG  | SEP  |
|-------|------|------|------|------|------|------|------|------|-----|------|------|------|
| 1     | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .00  | --- | .00  | .00  | .00  |
| 2     | .00  | .00  | .00  | .00  | .08  | .00  | .00  | .00  | --- | .00  | .00  | .00  |
| 3     | .00  | .04  | .00  | .00  | .00  | .00  | .00  | .00  | .00 | .00  | .03  | .00  |
| 4     | .02  | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .00 | .00  | .03  | .00  |
| 5     | .00  | .00  | .00  | .01  | .00  | .01  | .09  | .02  | .00 | .00  | .00  | .00  |
| 6     | .00  | .00  | .00  | .03  | .00  | .09  | .00  | .00  | .00 | .00  | .00  | .06  |
| 7     | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .00 | .00  | .00  | .01  |
| 8     | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .00 | .00  | .00  | .00  |
| 9     | .00  | .01  | .00  | .00  | .00  | .00  | .00  | .00  | .00 | .30  | .00  | .00  |
| 10    | .00  | .13  | .00  | .00  | .00  | .00  | .00  | .01  | .00 | .05  | .00  | .00  |
| 11    | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .22 | .01  | .00  | .00  |
| 12    | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .13 | .49  | .00  | .23  |
| 13    | .00  | .00  | .00  | .00  | .00  | .00  | .36  | .01  | .20 | .03  | .00  | .09  |
| 14    | .00  | .00  | .00  | .00  | .00  | .23  | .51  | .00  | .07 | .03  | .25  | .01  |
| 15    | .00  | .00  | .00  | .00  | .00  | .11  | .00  | .00  | .08 | .00  | .00  | .01  |
| 16    | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .00 | .00  | .06  | .02  |
| 17    | .00  | .00  | .02  | .22  | .00  | .03  | .00  | .00  | .07 | .00  | .00  | .13  |
| 18    | .00  | .00  | .06  | .00  | .00  | .06  | .00  | .00  | .00 | .37  | .00  | .44  |
| 19    | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .00 | .00  | .07  | .00  |
| 20    | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .00 | .00  | .04  | .00  |
| 21    | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .11 | .00  | .14  | .00  |
| 22    | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .35 | .01  | .17  | .00  |
| 23    | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .00 | .07  | .02  | .01  |
| 24    | .00  | .00  | .00  | .00  | .00  | .04  | .00  | .00  | .03 | .00  | .00  | .00  |
| 25    | .00  | .00  | .00  | .00  | .00  | .00  | .00  | 2.36 | .18 | .00  | .00  | .29  |
| 26    | .00  | .01  | .00  | .00  | .00  | .00  | .00  | .17  | .00 | .38  | .00  | .16  |
| 27    | .00  | .08  | .00  | .00  | .00  | .00  | .00  | .00  | .00 | .01  | .13  | .24  |
| 28    | .00  | .00  | .00  | .00  | .00  | .00  | .18  | .00  | .02 | .00  | .00  | .00  |
| 29    | .00  | .00  | .00  | .00  | .00  | .00  | .00  | ---  | .00 | .15  | .01  | .00  |
| 30    | .00  | .00  | .00  | .00  | ---  | .03  | .00  | ---  | .00 | .00  | 1.24 | .00  |
| 31    | .00  | ---  | .00  | .00  | ---  | .00  | ---  | ---  | --- | .00  | .01  | ---  |
| TOTAL | 0.02 | 0.27 | 0.08 | 0.26 | 0.08 | 0.60 | 1.14 | ---  | --- | 1.90 | 2.20 | 1.70 |

**3737061033901 IRON CANYON RAIN GAGE, NEAR ROURKE RANCH, CO**

LOCATION.--Lat 37°37'06", long 103°39'01", in SE¼SE¼ sec.11, T.28 S., R.56 W., Las Animas County, Hydrologic Unit 11020010, 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.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily rainfall, 2.68 inches, May 17, 1995.

EXTREMES FOR CURRENT YEAR.--Maximum daily rainfall, 2.22 inches, May 25.

RAINFALL ACCUMULATED (INCHES), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY SUM VALUES

| DAY   | OCT  | NOV  | DEC | JAN | FEB | MAR | APR  | MAY  | JUN  | JUL  | AUG  | SEP  |
|-------|------|------|-----|-----|-----|-----|------|------|------|------|------|------|
| 1     | .00  | .01  | --- | --- | --- | --- | ---  | .00  | .00  | .00  | .00  | .00  |
| 2     | .00  | .00  | --- | --- | --- | --- | ---  | .00  | .00  | .00  | .00  | .00  |
| 3     | .00  | .03  | --- | --- | --- | --- | ---  | .00  | .00  | .00  | .00  | .00  |
| 4     | .00  | .00  | --- | --- | --- | --- | ---  | .00  | .00  | .00  | .29  | .00  |
| 5     | .00  | .00  | --- | --- | --- | --- | ---  | .01  | .00  | .00  | .00  | .00  |
| 6     | .00  | .00  | --- | --- | --- | --- | ---  | .00  | .00  | .00  | .00  | .09  |
| 7     | .00  | .00  | --- | --- | --- | --- | ---  | .00  | .00  | .00  | .00  | .00  |
| 8     | .00  | e.00 | --- | --- | --- | --- | ---  | .00  | .00  | .00  | .00  | .00  |
| 9     | .00  | ---  | --- | --- | --- | --- | ---  | .00  | .00  | .15  | .00  | .00  |
| 10    | .00  | ---  | --- | --- | --- | --- | ---  | .00  | .00  | .07  | .00  | .00  |
| 11    | .00  | ---  | --- | --- | --- | --- | ---  | .00  | .63  | .00  | .00  | .00  |
| 12    | .00  | ---  | --- | --- | --- | --- | ---  | .00  | .16  | .56  | .00  | .43  |
| 13    | .00  | ---  | --- | --- | --- | --- | ---  | .00  | .00  | .00  | .00  | .19  |
| 14    | .00  | ---  | --- | --- | --- | --- | ---  | .00  | .08  | .01  | .48  | .00  |
| 15    | .00  | ---  | --- | --- | --- | --- | ---  | .00  | .06  | .00  | .00  | .00  |
| 16    | .00  | ---  | --- | --- | --- | --- | ---  | .00  | .00  | .00  | .07  | .00  |
| 17    | .00  | ---  | --- | --- | --- | --- | ---  | .00  | .00  | .00  | .00  | .09  |
| 18    | .00  | ---  | --- | --- | --- | --- | ---  | .00  | .00  | .61  | .00  | .29  |
| 19    | .00  | ---  | --- | --- | --- | --- | e.00 | .00  | .00  | .00  | .00  | .00  |
| 20    | .00  | ---  | --- | --- | --- | --- | .00  | .00  | .00  | .11  | .00  | .00  |
| 21    | .00  | ---  | --- | --- | --- | --- | .00  | .00  | .08  | .00  | .10  | .00  |
| 22    | .00  | ---  | --- | --- | --- | --- | .00  | .00  | .14  | .01  | .15  | .00  |
| 23    | .00  | ---  | --- | --- | --- | --- | .00  | .00  | .00  | .01  | .01  | .02  |
| 24    | .00  | ---  | --- | --- | --- | --- | .00  | .10  | .00  | .00  | .00  | .00  |
| 25    | .00  | ---  | --- | --- | --- | --- | .00  | 2.22 | .00  | .00  | .00  | .26  |
| 26    | .00  | ---  | --- | --- | --- | --- | .00  | .14  | .00  | .35  | .00  | .15  |
| 27    | .00  | ---  | --- | --- | --- | --- | .00  | .00  | .00  | .00  | .06  | .24  |
| 28    | .00  | ---  | --- | --- | --- | --- | .09  | .00  | .00  | .00  | .01  | .00  |
| 29    | .00  | ---  | --- | --- | --- | --- | .00  | .00  | .00  | .16  | .02  | .00  |
| 30    | .00  | ---  | --- | --- | --- | --- | .00  | .00  | .05  | .01  | .40  | .00  |
| 31    | .00  | ---  | --- | --- | --- | --- | ---  | .00  | ---  | .17  | .00  | ---  |
| TOTAL | 0.00 | ---  | --- | --- | --- | --- | ---  | 2.47 | 1.20 | 2.22 | 1.59 | 1.76 |

e-Estimated.

**372959104092201 CANTONMENT RAIN GAGE NEAR CEMETERY, AT SIMPSON, CO**

LOCATION.--Lat 37°29'59", long 104°09'22", in SE<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec.19, T.29 S., R.60 W., Las Animas County, Hydrologic Unit 11020010, on Pinon Canyon Manuever Site, approximately 200 ft north of military road, 0.1 mi east of Simpson Cemetary, 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.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily rainfall, 1.41 inches, Sept. 9, 1995.

EXTREMES FOR CURRENT YEAR.--Maximum daily rainfall, 1.24 inches, Aug. 23.

RAINFALL ACCUMULATED (INCHES), WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996  
DAILY SUM VALUES

| DAY         | OCT         | NOV  | DEC  | JAN  | FEB  | MAR  | APR  | MAY  | JUN  | JUL  | AUG  | SEP  |
|-------------|-------------|------|------|------|------|------|------|------|------|------|------|------|
| 1           | .00         | .01  | .00  | .05  | .00  | .00  | .00  | .00  | e.00 | .00  | .00  | .00  |
| 2           | .00         | .00  | .00  | .02  | .05  | .00  | .00  | .00  | e.00 | .00  | .00  | .00  |
| 3           | .00         | .05  | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .01  | .00  |
| 4           | .00         | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .00  |
| 5           | .00         | .00  | .00  | .00  | .00  | .00  | .03  | .06  | .00  | .00  | .00  | .00  |
| 6           | .00         | .00  | .00  | .03  | .00  | .03  | .00  | .00  | .00  | .00  | .00  | .11  |
| 7           | .00         | .00  | .00  | .00  | .00  | .04  | .00  | .00  | .00  | .00  | .00  | .00  |
| 8           | .00         | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .02  | .00  | .00  |
| 9           | .00         | .00  | .00  | .00  | .00  | .00  | .00  | .02  | .00  | .93  | .03  | .01  |
| 10          | .00         | .21  | .00  | .00  | .00  | .00  | .00  | .07  | .00  | .06  | .00  | .00  |
| 11          | .00         | .10  | .00  | .00  | .00  | .00  | .09  | .00  | .05  | .00  | .00  | .00  |
| 12          | .00         | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .02  | .07  | .00  | .26  |
| 13          | .00         | .00  | .00  | .00  | .00  | .00  | .19  | .03  | .00  | .00  | .00  | .19  |
| 14          | .00         | .00  | .00  | .00  | .00  | .39  | .15  | .00  | .29  | .01  | .00  | .00  |
| 15          | .00         | .00  | .00  | .00  | .00  | .05  | .00  | .00  | .22  | .00  | .00  | .00  |
| 16          | .00         | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .13  | .00  |
| 17          | .00         | .00  | .05  | .33  | .00  | .12  | .00  | .00  | .00  | .00  | .00  | .09  |
| 18          | .00         | .00  | .04  | .01  | .00  | .00  | .00  | .00  | .00  | .01  | .00  | .04  |
| 19          | .00         | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .09  | .00  |
| 20          | .00         | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .00  |
| 21          | .00         | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .19  | .00  | .25  | .00  |
| 22          | .00         | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .26  | .01  | .26  | .00  |
| 23          | .00         | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .01  | 1.24 | .02  |
| 24          | .00         | .00  | .00  | .00  | .00  | .00  | .00  | .01  | .15  | .00  | .00  | .09  |
| 25          | .00         | .00  | .00  | .00  | .00  | .00  | .00  | .95  | .00  | .00  | .00  | .01  |
| 26          | .00         | .00  | .00  | .00  | .00  | .00  | .00  | .27  | .00  | .37  | .00  | .09  |
| 27          | .00         | .13  | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .10  | .29  |
| 28          | .00         | .03  | .00  | .00  | .00  | .00  | .11  | .00  | .00  | .00  | .00  | .00  |
| 29          | .00         | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .00  | .21  | .06  | .00  |
| 30          | .00         | .00  | .00  | .00  | ---  | .00  | .00  | e.00 | .15  | .01  | .00  | .00  |
| 31          | .00         | ---  | .00  | .00  | ---  | .00  | ---  | e.00 | ---  | .02  | .00  | ---  |
| TOTAL       | 0.00        | 0.53 | 0.09 | 0.44 | 0.05 | 0.63 | 0.57 | 1.41 | 1.33 | 1.73 | 2.17 | 1.20 |
| CAL YR 1995 | TOTAL 13.96 |      |      |      |      |      |      |      |      |      |      |      |
| WTR YR 1996 | TOTAL 10.15 |      |      |      |      |      |      |      |      |      |      |      |

e-Estimated.

MISCELLANEOUS STATION ANALYSES

| DATE  | TIME | DIS-<br>CHARGE,<br>INST.<br>CUBIC<br>FEET<br>PER<br>SECOND | SPE-<br>CIFIC<br>CON-<br>DUCT-<br>ANCE<br>(US/CM) | TEMPER-<br>ATURE<br>WATER<br>(DEG C) | DATE     | TIME | DIS-<br>CHARGE,<br>INST.<br>CUBIC<br>FEET<br>PER<br>SECOND | SPE-<br>CIFIC<br>CON-<br>DUCT-<br>ANCE<br>(US/CM) | TEMPER-<br>ATURE<br>WATER<br>(DEG C) |
|---|------|--|---|--------------------------------------|----------|------|--|---|--------------------------------------|
| 06614800 MICHIGAN RIVER NEAR CAMERON PASS, CO (LAT 40 29 46N LONG 105 51 52W)                 |      |  |   |                                      |          |      |  |   |                                      |
| OCT 1995  |      |  |   |                                      | JUN 1996 |      |  |   |                                      |
| 18...   | 1545 | 1.2  | 47  | 2.0                                  | 04...    | 1430 | 9.0  | 41  | 1.0                                  |
| NOV   |      |  |   |                                      | 19...    | 1140 | 21   | 33  | 3.5                                  |
| 28...   | 1540 | 1.1  | 51  | 0.5                                  | JUL      |      |  |   |                                      |
| JAN 1996  |      |  |   |                                      | 18...    | 1000 | 6.4  | 36  | 5.0                                  |
| 18...   | 1140 | 0.55   | 51  | 1.0                                  | AUG      |      |  |   |                                      |
| APR   |      |  |   |                                      | 15...    | 1200 | 1.7  | 41  | 11.5                                 |
| 02...   | 1405 | 0.42   | 52  | 1.5                                  |          |      |  |   |                                      |
| MAY   |      |  |   |                                      |          |      |  |   |                                      |
| 09...   | 1150 | 2.1  | 52  | 0.5                                  |          |      |  |   |                                      |
| 06699005 TARRYALL CREEK BELOW ROCK CREEK NEAR JEFFERSON, CO (LAT 39 17 13N LONG 105 41 43W)   |      |  |   |                                      |          |      |  |   |                                      |
| OCT 1995  |      |  |   |                                      | MAY 1996 |      |  |   |                                      |
| 16...   | 1100 | 36   | 138   | 3.5                                  | 16...    | 0915 | 101  | 144   | 9.5                                  |
| NOV   |      |  |   |                                      | JUL      |      |  |   |                                      |
| 22...   | 1155 | 14   | 153   | 0.0                                  | 01...    | 1235 | 137  | 180   | 16.0                                 |
| MAR 1996  |      |  |   |                                      | 31...    | 1012 | 54   | 133   | 13.5                                 |
| 21...   | 1010 | 17   | 204   | 0.0                                  | AUG      |      |  |   |                                      |
| APR   |      |  |   |                                      | 30...    | 1020 | 33   | 152   | 12.0                                 |
| 18...   | 0945 | 42   | 183   | 2.5                                  |          |      |  |   |                                      |
| 06709000 PLUM CREEK NEAR SEDALIA, CO CO (LAT 39 26 18N LONG 104 58 57W)                       |      |  |   |                                      |          |      |  |   |                                      |
| OCT 1995  |      |  |   |                                      | MAY 1996 |      |  |   |                                      |
| 12...   | 1020 | 9.7  | 412   | 12.0                                 | 15...    | 1120 | 15   | 349   | 18.5                                 |
| NOV   |      |  |   |                                      | JUN      |      |  |   |                                      |
| 21...   | 1045 | 13   | 420   | 8.0                                  | 05...    | 1318 | 18   | 126   | 25.0                                 |
| JAN 1996  |      |  |   |                                      | JUL      |      |  |   |                                      |
| 12...   | 1027 | 14   | 430   | 0.5                                  | 12...    | 1125 | 2.0  | --  | --                                   |
| MAR   |      |  |   |                                      | AUG      |      |  |   |                                      |
| 26...   | 1145 | 19   | 410   | 10.0                                 | 02...    | 1100 | 0.08   | 433   | 24.5                                 |
| APR   |      |  |   |                                      | SEP      |      |  |   |                                      |
| 18...   | 1310 | 29   | 337   | 16.5                                 | 10...    | 1215 | 0.17   | 494   | 24.0                                 |
| 06709530 PLUM CREEK AT TITAN RD NR LOUVIERS, CO (LAT 39 30 27N LONG 105 01 23W)               |      |  |   |                                      |          |      |  |   |                                      |
| OCT 1995  |      |  |   |                                      | APR 1996 |      |  |   |                                      |
| 12...   | 1140 | 3.1  | 420   | 14.0                                 | 18...    | 1200 | 23   | 372   | 17.5                                 |
| NOV   |      |  |   |                                      | MAY      |      |  |   |                                      |
| 21...   | 1200 | 11   | 425   | 7.5                                  | 15...    | 1200 | 11   | 370   | 19.5                                 |
| JAN 1996  |      |  |   |                                      | JUN      |      |  |   |                                      |
| 12...   | 1200 | 8.2  | 435   | 1.0                                  | 05...    | 1200 | 17   | 340   | 22.5                                 |
| MAR   |      |  |   |                                      |          |      |  |   |                                      |
| 26...   | 1120 | 15   | 420   | 6.5                                  |          |      |  |   |                                      |
| 06710245 SOUTH PLATTE RIVER AT UNION AVE AT ENGLEWOOD, CO (LAT 39 37 52N LONG 105 00 50W)     |      |  |   |                                      |          |      |  |   |                                      |
| OCT 1995  |      |  |   |                                      | NOV 1995 |      |  |   |                                      |
| 16...   | 1235 | 22   | --  | --                                   | 21...    | 1325 | 147  | 1240  | 8.5                                  |
| 06710247 SOUTH PLATTE RIVER BELOW UNION AVE, AT ENGLEWOOD, CO (LAT 39 37 58N LONG 105 00 54W) |      |  |   |                                      |          |      |  |   |                                      |
| JAN 1996  |      |  |   |                                      | JUN 1996 |      |  |   |                                      |
| 10...   | 1536 | 23   | 830   | 6.5                                  | 05...    | 1005 | 304  | 470   | 16.5                                 |
| FEB   |      |  |   |                                      | JUL      |      |  |   |                                      |
| 07...   | 1620 | 5.1  | --  | --                                   | 12...    | 0916 | 314  | --  | --                                   |
| MAR   |      |  |   |                                      | AUG      |      |  |   |                                      |
| 29...   | 1055 | 9.9  | --  | --                                   | 08...    | 1118 | 83   | 454   | 21.5                                 |
| APR   |      |  |   |                                      | SEP      |      |  |   |                                      |
| 18...   | 1700 | 106  | 436   | 14.5                                 | 06...    | 1400 | 36   | 592   | 18.0                                 |
| MAY   |      |  |   |                                      |          |      |  |   |                                      |
| 15...   | 1002 | 60   | 507   | 15.0                                 |          |      |  |   |                                      |

## SUPPLEMENTAL WATER-QUALITY DATA FOR GAGING STATIONS

## MISCELLANEOUS STATION ANALYSES--Continued

| DATE  | TIME | DIS-<br>CHARGE,<br>INST.<br>CUBIC<br>FEET<br>PER<br>SECOND | SPE-<br>CIFIC<br>CON-<br>DUCT-<br>ANCE<br>(US/CM) | TEMPER-<br>ATURE<br>WATER<br>(DEG C) | DATE     | TIME | DIS-<br>CHARGE,<br>INST.<br>CUBIC<br>FEET<br>PER<br>SECOND | SPE-<br>CIFIC<br>CON-<br>DUCT-<br>ANCE<br>(US/CM) | TEMPER-<br>ATURE<br>WATER<br>(DEG C) |
|---|------|--|---|--------------------------------------|----------|------|--|---|--------------------------------------|
| 06710385 BEAR CREEK ABOVE EVERGREEN, CO (LAT 39 37 58N LONG 105 19 59W)                     |      |  |   |                                      |          |      |  |   |                                      |
| OCT 1995  |      |  |   |                                      | MAY 1996 |      |  |   |                                      |
| 17...   | 0940 | 28   | 61  | 4.5                                  | 08...    | 1055 | 56   | 60  | 8.5                                  |
| NOV   |      |  |   |                                      | JUN      |      |  |   |                                      |
| 08...   | 1310 | 27   | 66  | 0.5                                  | 05...    | 1445 | 74   | 57  | 13.0                                 |
| JAN 1996  |      |  |   |                                      | JUL      |      |  |   |                                      |
| 10...   | 1515 | 18   | 77  | 0.0                                  | 18...    | 0830 | 34   | 54  | 14.0                                 |
| MAR   |      |  |   |                                      | AUG      |      |  |   |                                      |
| 14...   | 1510 | 17   | 88  | 1.0                                  | 29...    | 1115 | 30   | 57  | 13.5                                 |
| APR   |      |  |   |                                      | SEP      |      |  |   |                                      |
| 05...   | 1130 | 20   | 136   | 2.5                                  | 04...    | 0900 | 15   | 57  | 11.5                                 |
| 09...   | 1025 | 24   | 86  | 3.5                                  | 30...    | 1510 | 33   | 61  | 10.0                                 |
| 06710605 BEAR CREEK ABOVE BEAR CREEK LAKE NEAR MORRISON, CO (LAT 39 39 08N LONG 105 10 23W) |      |  |   |                                      |          |      |  |   |                                      |
| OCT 1995  |      |  |   |                                      | MAY 1996 |      |  |   |                                      |
| 17...   | 1145 | 20   | 215   | 8.0                                  | 08...    | 1215 | 53   | 158   | 13.0                                 |
| NOV   |      |  |   |                                      | JUN      |      |  |   |                                      |
| 21...   | 1550 | 24   | 235   | 4.0                                  | 05...    | 1255 | 106  | 135   | 15.0                                 |
| JAN 1996  |      |  |   |                                      | JUL      |      |  |   |                                      |
| 10...   | 1250 | 28   | 287   | 1.5                                  | 18...    | 0915 | 8.2  | 218   | 17.5                                 |
| MAR   |      |  |   |                                      | AUG      |      |  |   |                                      |
| 14...   | 1200 | 26   | 270   | 1.0                                  | 29...    | 1245 | 15   | 165   | 17.5                                 |
| APR   |      |  |   |                                      |          |      |  |   |                                      |
| 18...   | 1215 | 27   | 227   | 8.0                                  |          |      |  |   |                                      |
| 06711545 LITTLE DRY CREEK AT GREENWOOD VILLAGE, CO (LAT 39 37 02N LONG 104 57 08W)          |      |  |   |                                      |          |      |  |   |                                      |
| OCT 1995  |      |  |   |                                      | JUN 1996 |      |  |   |                                      |
| 12...   | 1030 | 3.5  | 1950  | 11.0                                 | 18...    | 1145 | 7.2  | 1370  | 19.0                                 |
| NOV   |      |  |   |                                      | JUL      |      |  |   |                                      |
| 21...   | 1210 | 3.0  | 2000  | 4.5                                  | 16...    | 1200 | 4.7  | 1580  | 21.5                                 |
| JAN 1996  |      |  |   |                                      | 24...    | 1320 | 3.6  | 1540  | 22.0                                 |
| 08...   | 1405 | 3.8  | 2330  | 1.5                                  | AUG      |      |  |   |                                      |
| MAR   |      |  |   |                                      | 23...    | 1140 | 7.9  | 905   | 18.0                                 |
| 13...   | 0920 | 2.4  | 1550  | 6.0                                  | SEP      |      |  |   |                                      |
| APR   |      |  |   |                                      | 10...    | 1045 | 3.3  | 1650  | 16.0                                 |
| 11...   | 1035 | 3.4  | 1850  | 12.0                                 |          |      |  |   |                                      |
| MAY   |      |  |   |                                      |          |      |  |   |                                      |
| 07...   | 1110 | 2.8  | 1720  | 13.0                                 |          |      |  |   |                                      |
| 06712000 CHERRY CREEK NEAR FRANKTOWN, CO (LAT 39 21 21N LONG 104 45 46W)                    |      |  |   |                                      |          |      |  |   |                                      |
| OCT 1995  |      |  |   |                                      | MAY 1996 |      |  |   |                                      |
| 12...   | 1320 | 4.2  | 217   | 12.5                                 | 01...    | 1150 | 5.1  | 233   | 12.0                                 |
| JAN 1996  |      |  |   |                                      | 17...    | 1100 | 2.3  | 221   | 16.0                                 |
| 12...   | 1245 | 6.4  | 221   | 1.5                                  | JUL      |      |  |   |                                      |
| FEB   |      |  |   |                                      | 16...    | 1105 | 3.5  | 204   | 19.5                                 |
| 29...   | 1130 | 8.4  | 221   | 0.0                                  | AUG      |      |  |   |                                      |
| MAR   |      |  |   |                                      | 23...    | 0945 | 2.2  | 176   | 16.0                                 |
| 15...   | 1100 | 11   | 209   | 3.0                                  | SEP      |      |  |   |                                      |
|   |      |  |   |                                      | 10...    | 1358 | 1.7  | 192   | 19.5                                 |
| 393109104464500 CHERRY CREEK NEAR PARKER, CO (LAT 39 31 09N LONG 104 46 45W)                |      |  |   |                                      |          |      |  |   |                                      |
| NOV 1995  |      |  |   |                                      | APR 1996 |      |  |   |                                      |
| 13...   | 1240 | 7.3  | 523   | 7.0                                  | 05...    | 1250 | 12   | 447   | 13.5                                 |
| DEC   |      |  |   |                                      | 16...    | 1250 | 13   | 1290  | 13.0                                 |
| 15...   | 1015 | 6.5  | 537   | 3.0                                  | MAY      |      |  |   |                                      |
| JAN 1996  |      |  |   |                                      | 17...    | 1225 | 2.0  | 660   | 18.0                                 |
| 08...   | 1205 | 9.6  | 575   | 5.0                                  | JUN      |      |  |   |                                      |
| FEB   |      |  |   |                                      | 17...    | 1310 | 9.3  | 574   | 18.0                                 |
| 14...   | 1245 | 15   | 479   | 5.5                                  | 28...    | 1300 | 3.1  | 658   | 20.5                                 |
| 29...   | 1330 | 4.2  | 561   | 6.0                                  | JUL      |      |  |   |                                      |
| MAR   |      |  |   |                                      | 15...    | 1250 | 3.1  | 673   | 21.5                                 |
| 15...   | 1205 | 13   | 263   | 2.5                                  | SEP      |      |  |   |                                      |
|   |      |  |   |                                      | 06...    | 1103 | 2.2  | 685   | 19.0                                 |
| 06713000 CHERRY CREEK BELOW CHERRY CREEK LAKE, CO (LAT 39 39 12N LONG 104 51 41W)           |      |  |   |                                      |          |      |  |   |                                      |
| DEC 1995  |      |  |   |                                      | MAY 1996 |      |  |   |                                      |
| 08...   | 1320 | 12   | 973   | 4.0                                  | 22...    | 1200 | 3.3  | 992   | 17.5                                 |
| 15...   | 1115 | 10   | 975   | 3.5                                  | JUN      |      |  |   |                                      |
| JAN 1996  |      |  |   |                                      | 21...    | 1110 | 4.0  | 987   | 18.0                                 |
| 08...   | 1330 | 9.4  | 1020  | 4.5                                  | SEP      |      |  |   |                                      |
| FEB   |      |  |   |                                      | 12...    | 1445 | 6.7  | 988   | 21.0                                 |
| 29...   | 1530 | 18   | 975   | 3.5                                  |          |      |  |   |                                      |
| APR   |      |  |   |                                      |          |      |  |   |                                      |
| 15...   | 1030 | 18   | 978   | 10.0                                 |          |      |  |   |                                      |

MISCELLANEOUS STATION ANALYSES--Continued

| DATE   | TIME | DIS-<br>CHARGE,<br>INST.<br>CUBIC<br>FEET<br>PER<br>SECOND | SPE-<br>CIFIC<br>CON-<br>DUCT-<br>ANCE<br>(US/CM) | TEMPER-<br>ATURE<br>WATER<br>(DEG C) | DATE     | TIME | DIS-<br>CHARGE,<br>INST.<br>CUBIC<br>FEET<br>PER<br>SECOND | SPE-<br>CIFIC<br>CON-<br>DUCT-<br>ANCE<br>(US/CM) | TEMPER-<br>ATURE<br>WATER<br>(DEG C) |
|--|------|--|---|--------------------------------------|----------|------|--|---|--------------------------------------|
| 06713300 CHERRY CREEK AT GLENDALE, CO (LAT 39 42 22N LONG 104 56 13W)                        |      |  |   |                                      |          |      |  |   |                                      |
| OCT 1995   |      |  |   |                                      | MAY 1996 |      |  |   |                                      |
| 12...  | 0850 | 10   | 1450  | 12.0                                 | 15...    | 1100 | 10   | 1390  | 18.5                                 |
| NOV  |      |  |   |                                      | JUN      |      |  |   |                                      |
| 13...  | 1400 | 8.9  | 1460  | 9.0                                  | 17...    | 1150 | 36   | 484   | 16.0                                 |
| DEC  |      |  |   |                                      | JUL      |      |  |   |                                      |
| 15...  | 1305 | 14   | 1300  | 6.5                                  | 15...    | 1145 | 21   | 1170  | 21.5                                 |
| JAN 1996   |      |  |   |                                      | AUG      |      |  |   |                                      |
| 11...  | 1130 | 17   | 1220  | 8.0                                  | 14...    | 1140 | 9.4  | 1320  | 21.0                                 |
| FEB  |      |  |   |                                      | SEP      |      |  |   |                                      |
| 14...  | 1400 | 6.5  | 1470  | 10.5                                 | 12...    | 1310 | 24   | 800   | 20.0                                 |
| MAR  |      |  |   |                                      | 30...    | 1200 | 20   | 1060  | 16.0                                 |
| 13...  | 1050 | 17   | 1160  | 7.5                                  |          |      |  |   |                                      |
| APR  |      |  |   |                                      |          |      |  |   |                                      |
| 15...  | 1215 | 20   | 1090  | 14.0                                 |          |      |  |   |                                      |
| 06713500 CHERRY CREEK AT DENVER, CO (LAT 39 44 58N LONG 105 00 08W)                          |      |  |   |                                      |          |      |  |   |                                      |
| OCT 1995   |      |  |   |                                      | MAY 1996 |      |  |   |                                      |
| 11...  | 1350 | 18   | 1230  | 16.5                                 | 22...    | 0915 | 20   | 984   | 16.0                                 |
| NOV  |      |  |   |                                      | 23...    | 1500 | 113  | 947   | 18.5                                 |
| 21...  | 1445 | 15   | 1360  | 12.0                                 | 23...    | 1600 | 108  | 987   | 18.0                                 |
| JAN 1996   |      |  |   |                                      | JUN      |      |  |   |                                      |
| 11...  | 1420 | 22   | 1360  | 7.0                                  | 21...    | 0820 | 24   | 1090  | 17.0                                 |
| MAR  |      |  |   |                                      | AUG      |      |  |   |                                      |
| 13...  | 1330 | 20   | 1150  | 11.0                                 | 02...    | 1310 | 20   | 1070  | 26.5                                 |
| APR  |      |  |   |                                      | SEP      |      |  |   |                                      |
| 17...  | 0925 | 25   | 1030  | 10.0                                 | 12...    | 1206 | 36   | 691   | 19.0                                 |
| 06714215 SOUTH PLATTE RIVER AT 64TH AVE. COMMERCE CITY, CO (LAT 39 48 44N LONG 104 57 28W)   |      |  |   |                                      |          |      |  |   |                                      |
| OCT 1995   |      |  |   |                                      | MAY 1996 |      |  |   |                                      |
| 11...  | 1150 | 25   | 1190  | 15.0                                 | 20...    | 1145 | 14   | 1250  | 18.0                                 |
| NOV  |      |  |   |                                      | JUN      |      |  |   |                                      |
| 29...  | 1150 | 105  | 970   | 7.5                                  | 20...    | 0910 | 16   | 1030  | 20.5                                 |
| JAN 1996   |      |  |   |                                      | AUG      |      |  |   |                                      |
| 09...  | 1150 | 17   | 810   | 2.0                                  | 23...    | 1245 | 344  | 512   | 20.0                                 |
| MAR  |      |  |   |                                      |          |      |  |   |                                      |
| 07...  | 1530 | 12   | 1590  | 8.5                                  |          |      |  |   |                                      |
| 394839104570300 SAND CREEK AT MOUTH NR COMMERCE CITY, CO (LAT 39 48 39N LONG 104 57 03W)     |      |  |   |                                      |          |      |  |   |                                      |
| OCT 1995   |      |  |   |                                      | JUN 1996 |      |  |   |                                      |
| 11...  | 1015 | 22   | 1580  | 11.5                                 | 07...    | 1340 | 21   | 1280  | 21.0                                 |
| NOV  |      |  |   |                                      | JUL      |      |  |   |                                      |
| 29...  | 1100 | 50   | 1280  | 12.5                                 | 18...    | 1210 | 151  | 1250  | 16.0                                 |
| JAN 1996   |      |  |   |                                      | AUG      |      |  |   |                                      |
| 09...  | 1220 | 31   | 1010  | 2.5                                  | 23...    | 1350 | 156  | 685   | 21.5                                 |
| MAR  |      |  |   |                                      | SEP      |      |  |   |                                      |
| 22...  | 1030 | 21   | 1640  | 8.5                                  | 23...    | 1505 | 21   | 1290  | 18.0                                 |
| APR  |      |  |   |                                      |          |      |  |   |                                      |
| 30...  | 1040 | 20   | 1730  | 11.0                                 |          |      |  |   |                                      |
| 394115105525600 CLEAR CREEK NEAR LOVELAND PASS, CO (LAT 39 41 15N LONG 105 52 56W)           |      |  |   |                                      |          |      |  |   |                                      |
| APR 1996   |      |  |   |                                      | JUL 1996 |      |  |   |                                      |
| 16...  | 1153 | 2.1  | 525   | 1.5                                  | 30...    | 0931 | 16   | 80  | 6.5                                  |
| MAY  |      |  |   |                                      | AUG      |      |  |   |                                      |
| 21...  | 1051 | 34   | 132   | 2.5                                  | 26...    | 0943 | 6.4  | 99  | 7.0                                  |
| JUN  |      |  |   |                                      |          |      |  |   |                                      |
| 11...  | 1026 | 70   | 72  | 3.0                                  |          |      |  |   |                                      |
| 06715000 CLEAR CREEK ABV WEST FORK CLEAR CREEK NR EMPIRE, CO (LAT 39 45 07N LONG 105 39 41W) |      |  |   |                                      |          |      |  |   |                                      |
| OCT 1995   |      |  |   |                                      | MAY 1996 |      |  |   |                                      |
| 04...  | 0832 | 59   | 125   | 5.0                                  | 15...    | 0920 | 257  | 108   | 7.5                                  |
| NOV  |      |  |   |                                      | JUN      |      |  |   |                                      |
| 07...  | 0815 | 35   | 146   | 0.5                                  | 18...    | 1037 | 633  | 63  | 6.5                                  |
| JAN 1996   |      |  |   |                                      | JUL      |      |  |   |                                      |
| 10...  | 0745 | 19   | 174   | 0.5                                  | 11...    | 0705 | 291  | 69  | 10.0                                 |
| MAR  |      |  |   |                                      | AUG      |      |  |   |                                      |
| 21...  | 0910 | 18   | 213   | 2.0                                  | 09...    | 0730 | 100  | 510   | 10.5                                 |
| APR  |      |  |   |                                      | SEP      |      |  |   |                                      |
| 24...  | 0820 | 33   | 213   | 4.5                                  | 11...    | 0745 | 41   | 127   | 9.5                                  |

## SUPPLEMENTAL WATER-QUALITY DATA FOR GAGING STATIONS

## MISCELLANEOUS STATION ANALYSES--Continued

| DATE  | TIME | DIS-<br>CHARGE,<br>INST.<br>CUBIC<br>FEET<br>PER<br>SECOND | SPE-<br>CIFIC<br>CON-<br>DUCT-<br>ANCE<br>(US/CM) | TEMPER-<br>ATURE<br>WATER<br>(DEG C) | DATE     | TIME | DIS-<br>CHARGE,<br>INST.<br>CUBIC<br>FEET<br>PER<br>SECOND | SPE-<br>CIFIC<br>CON-<br>DUCT-<br>ANCE<br>(US/CM) | TEMPER-<br>ATURE<br>WATER<br>(DEG C) |
|---|------|--|---|--------------------------------------|----------|------|--|---|--------------------------------------|
| 06716100 WEST FORK CLEAR CREEK ABV MOUTH NR EMPIRE, CO (LAT 39 45 32N LONG 105 39 34W)      |      |  |   |                                      |          |      |  |   |                                      |
| OCT 1995  |      |  |   |                                      | MAY 1996 |      |  |   |                                      |
| 04...   | 0930 | 42   | 229   | 3.5                                  | 15...    | 0940 | 222  | 160   | 5.0                                  |
| NOV   |      |  |   |                                      | JUN      |      |  |   |                                      |
| 07...   | 0940 | 31   | 277   | 0.5                                  | 07...    | 0735 | 386  | 93  | 3.5                                  |
| JAN 1996  |      |  |   |                                      | JUL      |      |  |   |                                      |
| 10...   | 0940 | 17   | 360   | 0.5                                  | 11...    | 1235 | 213  | 96  | 10.5                                 |
| MAR   |      |  |   |                                      | AUG      |      |  |   |                                      |
| 21...   | 1017 | 17   | 434   | 1.5                                  | 09...    | 0835 | 64   | 154   | 8.5                                  |
| APR   |      |  |   |                                      | SEP      |      |  |   |                                      |
| 24...   | 0945 | 23   | 406   | 4.5                                  | 11...    | 0855 | 36   | 240   | 7.5                                  |
| 06716500 CLEAR CREEK NEAR LAWSON, CO (LAT 39 45 57N LONG 105 37 32W)                        |      |  |   |                                      |          |      |  |   |                                      |
| OCT 1995  |      |  |   |                                      | MAY 1996 |      |  |   |                                      |
| 04...   | 1140 | 93   | 170   | 4.5                                  | 15...    | 1215 | 384  | 135   | 8.5                                  |
| NOV   |      |  |   |                                      | JUN      |      |  |   |                                      |
| 07...   | 1125 | 56   | 204   | 1.0                                  | 07...    | 0906 | 722  | 83  | 5.5                                  |
| JAN 1996  |      |  |   |                                      | JUL      |      |  |   |                                      |
| 10...   | 1015 | 36   | 252   | 0.5                                  | 11...    | 0910 | 508  | 82  | 9.5                                  |
| MAR   |      |  |   |                                      | AUG      |      |  |   |                                      |
| 21...   | 1307 | 34   | 306   | 5.0                                  | 09...    | 0940 | 163  | 123   | 10.5                                 |
| APR   |      |  |   |                                      | SEP      |      |  |   |                                      |
| 24...   | 1050 | 44   | 285   | 6.0                                  | 11...    | 0950 | 73   | 180   | 9.0                                  |
| 06717400 CHICAGO CREEK BLW DEVILS CANYON NR IDAHO SPRGS, CO (LAT 39 42 58N LONG 105 34 15W) |      |  |   |                                      |          |      |  |   |                                      |
| OCT 1995  |      |  |   |                                      | JUN 1996 |      |  |   |                                      |
| 06...   | 0725 | 8.3  | 62  | 0.0                                  | 14...    | 0800 | 42   | 49  | --                                   |
| NOV   |      |  |   |                                      | JUL      |      |  |   |                                      |
| 07...   | 1225 | 7.5  | 64  | 1.0                                  | 11...    | 1102 | 22   | 55  | 11.0                                 |
| JAN 1996  |      |  |   |                                      | 24...    | 0950 | 14   | 59  | 10.5                                 |
| 10...   | 1045 | 5.6  | 70  | 0.5                                  | AUG      |      |  |   |                                      |
| MAR   |      |  |   |                                      | 06...    | 1324 | 10   | 61  | 13.5                                 |
| 21...   | 1345 | 5.0  | 78  | 2.5                                  | SEP      |      |  |   |                                      |
| APR   |      |  |   |                                      | 11...    | 1110 | 7.9  | 67  | 9.0                                  |
| 24...   | 1230 | 8.2  | 80  | 7.0                                  |          |      |  |   |                                      |
| MAY   |      |  |   |                                      |          |      |  |   |                                      |
| 16...   | 0900 | 35   | 49  | 4.5                                  |          |      |  |   |                                      |
| 06718300 CLEAR CREEK ABV JOHNSON GULCH NR IDAHO SPRINGS, CO (LAT 39 44 47N LONG 105 26 08W) |      |  |   |                                      |          |      |  |   |                                      |
| OCT 1995  |      |  |   |                                      | MAY 1996 |      |  |   |                                      |
| 06...   | 0855 | 118  | 195   | 1.0                                  | 16...    | 1035 | 640  | 120   | 7.5                                  |
| NOV   |      |  |   |                                      | JUN      |      |  |   |                                      |
| 07...   | 1400 | 79   | 235   | 2.5                                  | 18...    | 1301 | 1170   | 72  | 9.0                                  |
| JAN 1996  |      |  |   |                                      | JUL      |      |  |   |                                      |
| 11...   | 1120 | 57   | 290   | 0.5                                  | 12...    | 0727 | 640  | 84  | 11.0                                 |
| MAR   |      |  |   |                                      | AUG      |      |  |   |                                      |
| 22...   | 0855 | 53   | 309   | 1.5                                  | 09...    | 1107 | 226  | 125   | 11.5                                 |
| APR   |      |  |   |                                      | SEP      |      |  |   |                                      |
| 26...   | 0717 | 98   | 292   | 4.0                                  | 10...    | 1210 | 132  | 165   | 12.5                                 |
| 06718550 NORTH CLEAR CREEK ABOVE MOUTH NR BLACKHAWK, CO (LAT 39 44 56N LONG 105 23 57W)     |      |  |   |                                      |          |      |  |   |                                      |
| OCT 1995  |      |  |   |                                      | MAY 1996 |      |  |   |                                      |
| 06...   | 1030 | 5.4  | 426   | 4.0                                  | 16...    | 1245 | 89   | 87  | 11.0                                 |
| NOV   |      |  |   |                                      | JUL      |      |  |   |                                      |
| 09...   | 0815 | 4.1  | 508   | 2.5                                  | 12...    | 0955 | 14   | 193   | 16.0                                 |
| JAN 1996  |      |  |   |                                      | AUG      |      |  |   |                                      |
| 10...   | 1240 | 3.5  | 529   | 4.0                                  | 06...    | 1419 | 4.6  | 404   | 20.5                                 |
| MAR   |      |  |   |                                      | SEP      |      |  |   |                                      |
| 22...   | 1130 | 5.0  | 463   | 3.5                                  | 10...    | 1318 | 2.4  | 478   | 19.0                                 |
| APR   |      |  |   |                                      |          |      |  |   |                                      |
| 26...   | 0828 | 21   | 227   | 3.0                                  |          |      |  |   |                                      |

MISCELLANEOUS STATION ANALYSES--Continued

| DATE   | TIME | DIS-<br>CHARGE,<br>INST.<br>CUBIC<br>FEET<br>PER<br>SECOND | SPE-<br>CIFIC<br>CON-<br>DUCT-<br>ANCE<br>(US/CM) | TEMPER-<br>ATURE<br>WATER<br>(DEG C) | DATE     | TIME | DIS-<br>CHARGE,<br>INST.<br>CUBIC<br>FEET<br>PER<br>SECOND | SPE-<br>CIFIC<br>CON-<br>DUCT-<br>ANCE<br>(US/CM) | TEMPER-<br>ATURE<br>WATER<br>(DEG C) |
|--|------|--|---|--------------------------------------|----------|------|--|---|--------------------------------------|
| 06719505 CLEAR CREEK AT GOLDEN, CO (LAT 39 45 11N LONG 105 14 05W)                   |      |  |   |                                      |          |      |  |   |                                      |
| OCT 1995   |      |  |   |                                      | JUN 1996 |      |  |   |                                      |
| 18...  | 1115 | 79   | 211   | 7.0                                  | 12...    | 0540 | 1180   | --  | --                                   |
| FEB 1996   |      |  |   |                                      | 19...    | 1350 | 1060   | 90  | 11.0                                 |
| 16...  | 1350 | 42   | 340   | 1.5                                  | JUL      |      |  |   |                                      |
| APR  |      |  |   |                                      | 10...    | 1225 | 590  | 105   | 13.5                                 |
| 12...  | 1030 | 132  | 272   | 6.5                                  | AUG      |      |  |   |                                      |
| MAY  |      |  |   |                                      | 08...    | 1420 | 165  | 141   | 16.5                                 |
| 29...  | 1555 | 567  | 128   | 11.5                                 | SEP      |      |  |   |                                      |
|  |      |  |   |                                      | 05...    | 1230 | 109  | 184   | 15.5                                 |
| 06720820 BIG DRY CREEK AT WESTMINSTER, CO (LAT 39 54 20N LONG 105 02 04W)            |      |  |   |                                      |          |      |  |   |                                      |
| OCT 1995   |      |  |   |                                      |          |      |  |   |                                      |
| 23...  | 1118 | 13   | 680   | 4.5                                  |          |      |  |   |                                      |
| 06720990 BIG DRY CREEK AT MOUTH NEAR FORT LUPTON, CO (LAT 40 04 09N LONG 104 49 52W) |      |  |   |                                      |          |      |  |   |                                      |
| OCT 1995   |      |  |   |                                      | JUN 1996 |      |  |   |                                      |
| 17...  | 1230 | 27   | 1340  | 13.5                                 | 19...    | 1020 | 35   | 624   | 17.5                                 |
| NOV  |      |  |   |                                      | JUL      |      |  |   |                                      |
| 20...  | 1455 | 27   | 1300  | 8.5                                  | 11...    | 0919 | 97   | --  | --                                   |
| APR 1996   |      |  |   |                                      | AUG      |      |  |   |                                      |
| 03...  | 1230 | 72   | 1150  | 12.5                                 | 12...    | 1035 | 42   | 993   | 20.0                                 |
| MAY  |      |  |   |                                      | SEP      |      |  |   |                                      |
| 15...  | 1310 | 17   | 860   | 20.5                                 | 11...    | 1128 | 40   | 1030  | 18.5                                 |
| 06721500 NORTH ST. VRAIN CREEK NEAR ALLENS PARK, CO (LAT 40 13 08N LONG 105 31 40W)  |      |  |   |                                      |          |      |  |   |                                      |
| OCT 1995   |      |  |   |                                      | MAY 1996 |      |  |   |                                      |
| 30...  | 1444 | 14   | 21  | 6.5                                  | 09...    | 1023 | 91   | 21  | 4.0                                  |
| 30...  | 1500 | 14   | 21  | 6.5                                  | JUN      |      |  |   |                                      |
| NOV  |      |  |   |                                      | 09...    | --   | 349  | --  | --                                   |
| 27...  | 1145 | 9.9  | 23  | 0.0                                  | JUL      |      |  |   |                                      |
| JAN 1996   |      |  |   |                                      | 02...    | 1158 | 215  | 14  | 9.5                                  |
| 25...  | 1457 | 5.5  | --  | 0.0                                  | AUG      |      |  |   |                                      |
| MAR  |      |  |   |                                      | 01...    | 1252 | 81   | 14  | 12.0                                 |
| 20...  | 1258 | 8.8  | 26  | 3.5                                  | SEP      |      |  |   |                                      |
| APR  |      |  |   |                                      | 16...    | 1304 | 33   | 18  | 11.5                                 |
| 08...  | 1348 | 14   | 27  | 5.0                                  |          |      |  |   |                                      |
| 06725450 ST. VRAIN CREEK BELOW LONGMONT, CO (LAT 40 09 29N LONG 105 00 53W)          |      |  |   |                                      |          |      |  |   |                                      |
| OCT 1995   |      |  |   |                                      | JUN 1996 |      |  |   |                                      |
| 16...  | 1153 | 58   | 1320  | 13.5                                 | 18...    | 1545 | 548  | 205   | 18.0                                 |
| NOV  |      |  |   |                                      | JUL      |      |  |   |                                      |
| 20...  | 1316 | 52   | 1360  | 10.0                                 | 11...    | 1300 | 287  | --  | --                                   |
| JAN 1996   |      |  |   |                                      | AUG      |      |  |   |                                      |
| 26...  | 1145 | 40   | 1450  | 0.0                                  | 12...    | 1435 | 159  | 1240  | 24.0                                 |
| APR  |      |  |   |                                      | SEP      |      |  |   |                                      |
| 01...  | 1550 | 41   | 1260  | 14.5                                 | 11...    | 1400 | 89   | 1220  | 20.5                                 |
| MAY  |      |  |   |                                      |          |      |  |   |                                      |
| 30...  | 1110 | 387  | 508   | 13.5                                 |          |      |  |   |                                      |
| 06730200 BOULDER CR AT NORTH 75TH ST NR BOULDER, CO (LAT 40 03 06N LONG 105 10 42W)  |      |  |   |                                      |          |      |  |   |                                      |
| OCT 1995   |      |  |   |                                      | JUN 1996 |      |  |   |                                      |
| 23...  | 1600 | 76   | 260   | 8.5                                  | 07...    | 1115 | 150  | 618   | 16.5                                 |
| FEB 1996   |      |  |   |                                      | JUL      |      |  |   |                                      |
| 22...  | 1115 | 53   | 730   | 12.5                                 | 22...    | 1130 | 157  | 695   | 21.0                                 |
| APR  |      |  |   |                                      | SEP      |      |  |   |                                      |
| 26...  | 1040 | 122  | 678   | 14.0                                 | 17...    | 1052 | 64   | 934   | 21.0                                 |
| 06730500 BOULDER CREEK AT MOUTH, NEAR LONGMONT, CO (LAT 40 09 08N LONG 105 00 52W)   |      |  |   |                                      |          |      |  |   |                                      |
| OCT 1995   |      |  |   |                                      | JUN 1996 |      |  |   |                                      |
| 10...  | 1336 | 81   | 680   | 14.5                                 | 18...    | 1200 | 455  | 176   | 16.0                                 |
| NOV  |      |  |   |                                      | JUL      |      |  |   |                                      |
| 20...  | 1115 | 60   | 630   | 8.0                                  | 11...    | 1101 | 238  | --  | --                                   |
| JAN 1996   |      |  |   |                                      | AUG      |      |  |   |                                      |
| 26...  | 1325 | 61   | 588   | 0.0                                  | 12...    | 1255 | 4.5  | 990   | 26.0                                 |
| APR  |      |  |   |                                      | SEP      |      |  |   |                                      |
| 02...  | 1500 | 79   | 651   | 13.5                                 | 11...    | 1240 | 13   | 873   | 21.0                                 |
| MAY  |      |  |   |                                      |          |      |  |   |                                      |
| 29...  | 1200 | 438  | 321   | 11.5                                 |          |      |  |   |                                      |

## SUPPLEMENTAL WATER-QUALITY DATA FOR GAGING STATIONS

## MISCELLANEOUS STATION ANALYSES--Continued

| DATE   | TIME | DIS-<br>CHARGE,<br>INST.<br>CUBIC<br>FEET<br>PER<br>SECOND | SPE-<br>CIFIC<br>CON-<br>DUCT-<br>ANCE<br>(US/CM) | TEMPER-<br>ATURE<br>WATER<br>(DEG C) | DATE     | TIME | DIS-<br>CHARGE,<br>INST.<br>CUBIC<br>FEET<br>PER<br>SECOND | SPE-<br>CIFIC<br>CON-<br>DUCT-<br>ANCE<br>(US/CM) | TEMPER-<br>ATURE<br>WATER<br>(DEG C) |
|--|------|--|---|--------------------------------------|----------|------|--|---|--------------------------------------|
| 06746095 JOE WRIGHT CREEK ABOVE JOE WRIGHT RESERVOIR, CO (LAT 40 32 24N LONG 105 52 56W)   |      |  |   |                                      |          |      |  |   |                                      |
| OCT 1995   |      |  |   |                                      | JUN 1996 |      |  |   |                                      |
| 19...  | 1000 | 3.6  | 58  | 0.5                                  | 04...    | 1910 | 66   | 41  | 2.0                                  |
| NOV  |      |  |   |                                      | 20...    | 0930 | 46   | 32  | 5.0                                  |
| 29...  | 1220 | 2.1  | 56  | 0.0                                  | JUL      |      |  |   |                                      |
| JAN 1996   |      |  |   |                                      | 17...    | 1500 | 26   | 46  | 8.5                                  |
| 17...  | 1440 | 1.6  | 72  | 0.0                                  | AUG      |      |  |   |                                      |
| APR  |      |  |   |                                      | 14...    | 1415 | 8.2  | 45  | 12.0                                 |
| 03...  | 1235 | 1.1  | 75  | 0.0                                  |          |      |  |   |                                      |
| 06746110 JOE WRIGHT CREEK BELOW JOE WRIGHT RESERVOIR, CO (LAT 40 33 43N LONG 105 52 09W)   |      |  |   |                                      |          |      |  |   |                                      |
| OCT 1995   |      |  |   |                                      | JUN 1996 |      |  |   |                                      |
| 18...  | 1340 | 0.94   | 41  | 3.0                                  | 04...    | 1610 | 12   | 34  | 3.5                                  |
| NOV  |      |  |   |                                      | 19...    | 1435 | 107  | 40  | 5.5                                  |
| 29...  | 0945 | 0.47   | 45  | 0.0                                  | JUL      |      |  |   |                                      |
| JAN 1996   |      |  |   |                                      | 17...    | 1330 | 42   | 42  | 5.0                                  |
| 17...  | 1625 | 0.47   | 61  | 0.0                                  | AUG      |      |  |   |                                      |
| APR  |      |  |   |                                      | 14...    | 1700 | 93   | 45  | 11.0                                 |
| 03...  | 0930 | 0.46   | 54  | 1.0                                  |          |      |  |   |                                      |
| MAY  |      |  |   |                                      |          |      |  |   |                                      |
| 10...  | 1025 | 1.8  | 55  | 0.5                                  |          |      |  |   |                                      |
| 07080980 ST. KEVIN GULCH ABV TEMPLE GULCH NR LEADVILLE, CO (LAT 39 17 29N LONG 106 22 07W) |      |  |   |                                      |          |      |  |   |                                      |
| OCT 1995   |      |  |   |                                      | JUL 1996 |      |  |   |                                      |
| 13...  | 0915 | 0.52   | 225   | 0.5                                  | 23...    | 1115 | 0.76   | 172   | 9.0                                  |
| NOV  |      |  |   |                                      | AUG      |      |  |   |                                      |
| 07...  | 1430 | 0.82   | 293   | 0.0                                  | 19...    | 1115 | 0.48   | 282   | 8.5                                  |
| MAY 1996   |      |  |   |                                      | SEP      |      |  |   |                                      |
| 09...  | 1015 | 6.6  | 108   | 2.5                                  | 18...    | 0825 | 0.39   | 318   | 2.5                                  |
| JUN  |      |  |   |                                      |          |      |  |   |                                      |
| 05...  | 1220 | 13   | 84  | 8.0                                  |          |      |  |   |                                      |
| 07091200 ARKANSAS RIVER NEAR NATHROP, CO (LAT 38 39 08N LONG 106 03 02W)                   |      |  |   |                                      |          |      |  |   |                                      |
| OCT 1995   |      |  |   |                                      | JUN 1996 |      |  |   |                                      |
| 17...  | 1430 | 452  | 177   | --                                   | 25...    | 0700 | 2610   | 78  | --                                   |
| APR 1996   |      |  |   |                                      | JUL      |      |  |   |                                      |
| 18...  | 1050 | 577  | 132   | --                                   | 24...    | 1000 | 854  | 71  | --                                   |
| MAY  |      |  |   |                                      | AUG      |      |  |   |                                      |
| 20...  | 1247 | 3860   | 82  | --                                   | 21...    | 1130 | 410  | 163   | --                                   |
| 07093740 BADGER CREEK, UPPER STATION, NEAR HOWARD, CO (LAT 38 39 25N LONG 105 48 45W)      |      |  |   |                                      |          |      |  |   |                                      |
| OCT 1995   |      |  |   |                                      | JUN 1996 |      |  |   |                                      |
| 11...  | 1230 | 1.2  | 433   | 9.5                                  | 04...    | 1100 | 0.60   | 427   | 15.5                                 |
| 31...  | 1000 | 1.1  | 436   | 5.0                                  | 26...    | 0930 | 0.70   | 449   | 11.0                                 |
| APR 1996   |      |  |   |                                      | JUL      |      |  |   |                                      |
| 02...  | 1000 | 0.60   | 398   | 3.5                                  | 22...    | 1030 | 0.30   | 418   | 18.0                                 |
| 02...  | 1045 | 0.60   | --  | --                                   | AUG      |      |  |   |                                      |
| 22...  | 1130 | 1.1  | --  | --                                   | 01...    | 1105 | 0.50   | 424   | 18.5                                 |
| 22...  | 1330 | 1.1  | 411   | 9.0                                  | 20...    | 1500 | 0.70   | 408   | 21.5                                 |
| 22...  | 1345 | 0.90   | --  | --                                   | SEP      |      |  |   |                                      |
| MAY  |      |  |   |                                      | 05...    | 0930 | 0.50   | 434   | 9.0                                  |
| 03...  | 1035 | 0.80   | --  | --                                   | 20...    | 1030 | 1.1  | 490   | 6.5                                  |
| 03...  | 1130 | 0.80   | 431   | 13.5                                 |          |      |  |   |                                      |
| 07093775 BADGER CREEK, LOWER STATION, NEAR HOWARD, CO (LAT 38 28 02N LONG 105 41 34W)      |      |  |   |                                      |          |      |  |   |                                      |
| OCT 1995   |      |  |   |                                      | JUN 1996 |      |  |   |                                      |
| 11...  | 0930 | 8.2  | 971   | 4.5                                  | 06...    | 1045 | 5.4  | --  | 15.0                                 |
| 31...  | 1340 | 8.1  | 944   | 10.5                                 | 18...    | 1455 | 5.4  | --  | 25.0                                 |
| FEB 1996   |      |  |   |                                      | JUL      |      |  |   |                                      |
| 06...  | 1000 | 7.2  | 1060  | 0.0                                  | 09...    | 1500 | 8.8  | 1070  | 25.0                                 |
| MAR  |      |  |   |                                      | 17...    | 1030 | 4.9  | --  | 18.0                                 |
| 11...  | 1300 | 7.9  | 986   | 12.5                                 | AUG      |      |  |   |                                      |
| APR  |      |  |   |                                      | 20...    | 1200 | 5.0  | 1080  | 21.5                                 |
| 18...  | 1235 | 9.3  | 926   | 11.0                                 | SEP      |      |  |   |                                      |
| MAY  |      |  |   |                                      | 25...    | 1000 | 5.8  | 870   | 10.5                                 |
| 22...  | 1100 | 6.5  | 997   | 11.0                                 |          |      |  |   |                                      |

MISCELLANEOUS STATION ANALYSES--Continued

| DATE  | TIME | DIS-<br>CHARGE,<br>INST.<br>CUBIC<br>FEET<br>PER<br>SECOND | SPE-<br>CIFIC<br>CON-<br>DUCT-<br>ANCE<br>(US/CM) | TEMPER-<br>ATURE<br>WATER<br>(DEG C) | DATE     | TIME | DIS-<br>CHARGE,<br>INST.<br>CUBIC<br>FEET<br>PER<br>SECOND | SPE-<br>CIFIC<br>CON-<br>DUCT-<br>ANCE<br>(US/CM) | TEMPER-<br>ATURE<br>WATER<br>(DEG C) |
|---|------|--|---|--------------------------------------|----------|------|--|---|--------------------------------------|
| 07094500 ARKANSAS RIVER AT PARKDALE, CO (LAT 38 29 14N LONG 105 22 23W)                     |      |  |   |                                      |          |      |  |   |                                      |
| OCT 1995  |      |  |   |                                      | JUN 1996 |      |  |   |                                      |
| 13...   | 0955 | --   | 307   | 10.0                                 | 11...    | 1010 | --   | 101   | 13.0                                 |
| APR 1996  |      |  |   |                                      | JUL      |      |  |   |                                      |
| 18...   | 1320 | --   | 245   | 12.0                                 | 17...    | 1010 | --   | 170   | 19.0                                 |
| MAY   |      |  |   |                                      | AUG      |      |  |   |                                      |
| 20...   | 1025 | --   | 104   | 12.0                                 | 20...    | 1210 | --   | 230   | 19.5                                 |
| 07096250 FOURMILE CREEK BELOW CRIPPLE CREEK NEAR VICTOR, CO (LAT 38 39 52N LONG 105 13 37W) |      |  |   |                                      |          |      |  |   |                                      |
| NOV 1995  |      |  |   |                                      | MAY 1996 |      |  |   |                                      |
| 01...   | 0945 | --   | 371   | 4.5                                  | 22...    | 1205 | --   | 273   | 17.5                                 |
| DEC   |      |  |   |                                      | JUN      |      |  |   |                                      |
| 13...   | 1135 | --   | 370   | 3.0                                  | 20...    | 1220 | --   | --  | 22.5                                 |
| JAN 1996  |      |  |   |                                      | JUL      |      |  |   |                                      |
| 17...   | 1335 | --   | 418   | 0.5                                  | 30...    | 1405 | --   | 334   | 23.5                                 |
| FEB   |      |  |   |                                      | SEP      |      |  |   |                                      |
| 15...   | 1245 | --   | 380   | 3.0                                  | 20...    | 1340 | --   | 320   | 13.0                                 |
| APR   |      |  |   |                                      |          |      |  |   |                                      |
| 09...   | 1255 | --   | 405   | 14.0                                 |          |      |  |   |                                      |
| 07096500 FOURMILE CREEK NEAR CANON CITY, CO (LAT 38 26 11N LONG 105 11 27W)                 |      |  |   |                                      |          |      |  |   |                                      |
| OCT 1995  |      |  |   |                                      | MAY 1996 |      |  |   |                                      |
| 03...   | 1020 | 35   | 899   | 10.5                                 | 22...    | 1515 | 12   | 1120  | 18.5                                 |
| DEC   |      |  |   |                                      | JUN      |      |  |   |                                      |
| 12...   | 1505 | 23   | 974   | 10.0                                 | 20...    | 1525 | 17   | 840   | 23.0                                 |
| JAN 1996  |      |  |   |                                      | JUL      |      |  |   |                                      |
| 18...   | 1415 | 17   | 980   | 6.0                                  | 31...    | 1450 | 12   | 1280  | 22.5                                 |
| FEB   |      |  |   |                                      | SEP      |      |  |   |                                      |
| 09...   | 1400 | 22   | 965   | 11.5                                 | 23...    | 1230 | 30   | 990   | 17.0                                 |
| APR   |      |  |   |                                      |          |      |  |   |                                      |
| 15...   | 1340 | 21   | 890   | 14.0                                 |          |      |  |   |                                      |
| 07099050 BEAVER CR ABV UPPER BEAVER CEMETARY NR PENROSE, CO (LAT 38 33 42N LONG 105 01 17W) |      |  |   |                                      |          |      |  |   |                                      |
| OCT 1995  |      |  |   |                                      | MAY 1996 |      |  |   |                                      |
| 03...   | 1230 | 29   | 77  | 9.5                                  | 21...    | 1210 | 14   | 97  | 15.5                                 |
| DEC   |      |  |   |                                      | JUL      |      |  |   |                                      |
| 13...   | 1545 | 12   | 92  | 5.5                                  | 08...    | 1155 | 16   | 85  | 18.0                                 |
| MAR 1996  |      |  |   |                                      | 31...    | 1115 | 30   | 89  | 18.5                                 |
| 11...   | 1255 | 5.0  | 108   | 9.5                                  | AUG      |      |  |   |                                      |
| APR   |      |  |   |                                      | 29...    | 1215 | 39   | 91  | 16.5                                 |
| 16...   | 1410 | 13   | 113   | 13.5                                 |          |      |  |   |                                      |
| 07099060 BEAVER CREEK ABOVE HIGHWAY 115 NEAR PENROSE, CO (LAT 38 29 21N LONG 104 59 49W)    |      |  |   |                                      |          |      |  |   |                                      |
| NOV 1995  |      |  |   |                                      | APR 1996 |      |  |   |                                      |
| 01...   | 1225 | 0.83   | 127   | 7.5                                  | 19...    | 1225 | 0.10   | --  | 15.0                                 |
| DEC   |      |  |   |                                      | AUG      |      |  |   |                                      |
| 14...   | 1405 | 0.25   | 192   | 5.5                                  | 12...    | 1030 | 0.15   | 160   | 18.5                                 |
| 07099215 TURKEY CREEK NEAR FOUNTAIN, CO (LAT 38 36 42N LONG 104 53 39W)                     |      |  |   |                                      |          |      |  |   |                                      |
| OCT 1995  |      |  |   |                                      | JUL 1996 |      |  |   |                                      |
| 04...   | 1355 | 0.24   | 265   | 12.0                                 | 10...    | 1310 | 5.0  | 225   | 17.0                                 |
| MAY 1996  |      |  |   |                                      | SEP      |      |  |   |                                      |
| 29...   | 1305 | 0.20   | 215   | 12.5                                 | 04...    | 0905 | 0.97   | 230   | 13.0                                 |
| JUN   |      |  |   |                                      |          |      |  |   |                                      |
| 25...   | 0910 | 0.10   | --  | 24.0                                 |          |      |  |   |                                      |
| 07099230 TURKEY CREEK AB TELLER RES NEAR STONE CITY, CO (LAT 38 27 37N LONG 104 49 19W)     |      |  |   |                                      |          |      |  |   |                                      |
| NOV 1995  |      |  |   |                                      | MAY 1996 |      |  |   |                                      |
| 21...   | 1010 | 1.5  | 796   | 6.5                                  | 23...    | 1130 | 0.61   | 840   | 16.0                                 |
| DEC   |      |  |   |                                      | JUN      |      |  |   |                                      |
| 12...   | 1110 | 1.5  | 776   | 9.0                                  | 25...    | 1335 | 0.19   | 830   | 20.0                                 |
| JAN 1996  |      |  |   |                                      | SEP      |      |  |   |                                      |
| 22...   | 1055 | 2.0  | 800   | 4.5                                  | 03...    | 1110 | 0.16   | 900   | 15.0                                 |
| APR   |      |  |   |                                      |          |      |  |   |                                      |
| 10...   | 1055 | 1.3  | 820   | 11.0                                 |          |      |  |   |                                      |

## SUPPLEMENTAL WATER-QUALITY DATA FOR GAGING STATIONS

## MISCELLANEOUS STATION ANALYSES--Continued

| DATE  | TIME | DIS-<br>CHARGE,<br>INST.<br>CUBIC<br>FEET<br>PER<br>SECOND | SPE-<br>CIFIC<br>CON-<br>DUCT-<br>ANCE<br>(US/CM) | TEMPER-<br>ATURE<br>WATER<br>(DEG C) | DATE     | TIME | DIS-<br>CHARGE,<br>INST.<br>CUBIC<br>FEET<br>PER<br>SECOND | SPE-<br>CIFIC<br>CON-<br>DUCT-<br>ANCE<br>(US/CM) | TEMPER-<br>ATURE<br>WATER<br>(DEG C) |
|---|------|--|---|--------------------------------------|----------|------|--|---|--------------------------------------|
| 07099235 TURKEY CREEK NR STONE CITY, CO (LAT 38 26 27N LONG 104 49 31W)                     |      |  |   |                                      |          |      |  |   |                                      |
| OCT 1995  |      |  |   |                                      | MAY 1996 |      |  |   |                                      |
| 13...   | 1245 | 0.11   | 844   | 13.5                                 | 24...    | 1310 | 0.20   | 1280  | 16.0                                 |
| DEC   |      |  |   |                                      | JUN      |      |  |   |                                      |
| 15...   | 1025 | 0.22   | 950   | 9.5                                  | 25...    | 1420 | 0.28   | --  | 23.0                                 |
| JAN 1996  |      |  |   |                                      | AUG      |      |  |   |                                      |
| 22...   | 1245 | 0.23   | 1040  | 9.5                                  | 06...    | 1320 | 0.27   | 1320  | 19.5                                 |
| APR   |      |  |   |                                      | SEP      |      |  |   |                                      |
| 03...   | 1340 | 0.26   | 1150  | 11.0                                 | 10...    | 1110 | 0.14   | 1160  | 20.0                                 |
| 07103797 WEST MONUMENT CREEK BELOW RAMPART RESERVOIR, CO (LAT 38 58 30N LONG 104 57 18W)    |      |  |   |                                      |          |      |  |   |                                      |
| OCT 1995  |      |  |   |                                      | APR 1996 |      |  |   |                                      |
| 06...   | 1300 | 4.5  | 73  | 6.0                                  | 23...    | 1145 | 8.3  | 66  | 5.0                                  |
| NOV   |      |  |   |                                      | JUN      |      |  |   |                                      |
| 24...   | 1115 | 5.7  | 68  | 5.0                                  | 05...    | 1115 | 21   | 62  | 6.5                                  |
| JAN 1996  |      |  |   |                                      | JUL      |      |  |   |                                      |
| 04...   | 1330 | 7.9  | 65  | 3.0                                  | 19...    | 1520 | 13   | 67  | 7.5                                  |
| FEB   |      |  |   |                                      | SEP      |      |  |   |                                      |
| 16...   | 1010 | 9.4  | 65  | 3.5                                  | 03...    | 1430 | 11   | 80  | 9.5                                  |
| MAR   |      |  |   |                                      |          |      |  |   |                                      |
| 12...   | 1045 | 8.6  | 65  | 4.0                                  |          |      |  |   |                                      |
| 07103800 WEST MONUMENT CREEK AT AIR FORCE ACADEMY, CO (LAT 38 58 14N LONG 104 54 08W)       |      |  |   |                                      |          |      |  |   |                                      |
| OCT 1995  |      |  |   |                                      | APR 1996 |      |  |   |                                      |
| 11...   | 0910 | 1.1  | 99  | 6.0                                  | 16...    | 1245 | 0.96   | 97  | 5.5                                  |
| NOV   |      |  |   |                                      | MAY      |      |  |   |                                      |
| 08...   | 0955 | 1.0  | 99  | 3.5                                  | 21...    | 1225 | 0.74   | 101   | 9.5                                  |
| DEC   |      |  |   |                                      | JUL      |      |  |   |                                      |
| 12...   | 1335 | 1.1  | 98  | 4.0                                  | 12...    | 1237 | 0.62   | 108   | 13.5                                 |
| JAN 1996  |      |  |   |                                      | AUG      |      |  |   |                                      |
| 12...   | 1040 | 0.77   | --  | 1.0                                  | 09...    | 1320 | 0.71   | 109   | 13.0                                 |
| FEB   |      |  |   |                                      | SEP      |      |  |   |                                      |
| 13...   | 1210 | 0.57   | 99  | 1.0                                  | 10...    | 1150 | 0.66   | 111   | 11.5                                 |
| MAR   |      |  |   |                                      |          |      |  |   |                                      |
| 13...   | 1310 | 0.71   | 98  | 3.5                                  |          |      |  |   |                                      |
| 07103980 COTTONWOOD CREEK AT WOODMEN RD NR COLO SPRINGS, CO (LAT 38 56 22N LONG 104 44 26W) |      |  |   |                                      |          |      |  |   |                                      |
| OCT 1995  |      |  |   |                                      | MAY 1996 |      |  |   |                                      |
| 04...   | 0840 | 1.4  | 600   | 7.0                                  | 21...    | 1105 | 0.61   | 569   | 17.0                                 |
| NOV   |      |  |   |                                      | 28...    | 1335 | 1.3  | 510   | 13.0                                 |
| 07...   | 1020 | 1.4  | 565   | 6.5                                  | JUN      |      |  |   |                                      |
| DEC   |      |  |   |                                      | 13...    | 1330 | 0.46   | 576   | 26.0                                 |
| 13...   | 1050 | 1.0  | 594   | 6.0                                  | 14...    | 1100 | 1.6  | 568   | 19.5                                 |
| JAN 1996  |      |  |   |                                      | AUG      |      |  |   |                                      |
| 11...   | 1200 | 1.3  | 630   | 2.0                                  | 12...    | 1250 | 0.66   | 600   | 26.5                                 |
| FEB   |      |  |   |                                      | 20...    | 1320 | 1.2  | 490   | 28.0                                 |
| 12...   | 1210 | 2.4  | 580   | 2.5                                  | SEP      |      |  |   |                                      |
| MAR   |      |  |   |                                      | 20...    | 1020 | 0.99   | 580   | 20.5                                 |
| 13...   | 0950 | 0.83   | 614   | 6.5                                  |          |      |  |   |                                      |
| APR   |      |  |   |                                      |          |      |  |   |                                      |
| 16...   | 0935 | 1.1  | 577   | 8.5                                  |          |      |  |   |                                      |
| 07103990 COTTONWOOD CREEK AT MOUTH, AT PIKEVIEW, CO (LAT 38 55 41N LONG 104 38 35W)         |      |  |   |                                      |          |      |  |   |                                      |
| OCT 1995  |      |  |   |                                      | APR 1996 |      |  |   |                                      |
| 04...   | 1040 | 6.6  | 620   | 10.0                                 | 16...    | 1125 | 4.2  | 667   | 15.5                                 |
| NOV   |      |  |   |                                      | MAY      |      |  |   |                                      |
| 07...   | 1235 | 5.5  | 710   | 9.0                                  | 17...    | 1115 | 3.2  | 630   | 20.0                                 |
| DEC   |      |  |   |                                      | 28...    | 1210 | 8.4  | 530   | 10.5                                 |
| 13...   | 1325 | 4.7  | 710   | 8.0                                  | JUN      |      |  |   |                                      |
| JAN 1996  |      |  |   |                                      | 13...    | 1220 | 4.1  | 627   | 27.0                                 |
| 11...   | 1050 | 4.3  | 729   | 0.5                                  | 14...    | 1200 | 7.0  | 555   | 22.0                                 |
| FEB   |      |  |   |                                      | AUG      |      |  |   |                                      |
| 12...   | 1430 | 7.6  | 657   | 7.5                                  | 20...    | 1550 | 7.7  | 560   | 25.5                                 |
| MAR   |      |  |   |                                      | SEP      |      |  |   |                                      |
| 01...   | 1450 | 7.0  | 685   | 4.5                                  | 20...    | 1315 | 6.2  | 650   | 14.5                                 |

MISCELLANEOUS STATION ANALYSES--Continued

| DATE  | TIME | DIS-<br>CHARGE,<br>INST.<br>CUBIC<br>FEET<br>PER<br>SECOND | SPE-<br>CIFIC<br>CON-<br>DUCT-<br>ANCE<br>(US/CM) | TEMPER-<br>ATURE<br>WATER<br>(DEG C) | DATE     | TIME | DIS-<br>CHARGE,<br>INST.<br>CUBIC<br>FEET<br>PER<br>SECOND | SPE-<br>CIFIC<br>CON-<br>DUCT-<br>ANCE<br>(US/CM) | TEMPER-<br>ATURE<br>WATER<br>(DEG C) |
|---|------|--|---|--------------------------------------|----------|------|--|---|--------------------------------------|
| 07105000 BEAR CREEK NEAR COLORADO SPRINGS, CO (LAT 38 49 21N LONG 104 53 17W)                   |      |  |   |                                      |          |      |  |   |                                      |
| OCT 1995  |      |  |   |                                      | APR 1996 |      |  |   |                                      |
| 06...   | 1500 | 2.8  | 92  | 12.0                                 | 23...    | 1510 | 1.8  | 100   | 7.5                                  |
| NOV   |      |  |   |                                      | MAY      |      |  |   |                                      |
| 24...   | 1315 | 2.3  | 88  | 3.0                                  | 24...    | 1310 | 1.2  | 104   | 9.5                                  |
| JAN 1996  |      |  |   |                                      | JUN      |      |  |   |                                      |
| 04...   | 1600 | 1.8  | 84  | 1.5                                  | 25...    | 1200 | 1.2  | 101   | 12.0                                 |
| FEB   |      |  |   |                                      | JUL      |      |  |   |                                      |
| 16...   | 1200 | 1.9  | 88  | 1.0                                  | 26...    | 0930 | 1.5  | 110   | 12.0                                 |
| MAR   |      |  |   |                                      | AUG      |      |  |   |                                      |
| 12...   | 1320 | 1.9  | 82  | 3.5                                  | 19...    | 1400 | 1.2  | 107   | 14.0                                 |
| 07105490 CHEYENNE CREEK AT EVANS AVE AT COLORADO SPRINGS, CO (LAT 38 47 26N LONG 104 51 49W)    |      |  |   |                                      |          |      |  |   |                                      |
| OCT 1995  |      |  |   |                                      | MAY 1996 |      |  |   |                                      |
| 13...   | 1320 | 4.8  | 110   | 10.0                                 | 24...    | 1425 | 2.3  | 100   | 15.0                                 |
| NOV   |      |  |   |                                      | JUN      |      |  |   |                                      |
| 24...   | 1420 | 5.4  | 108   | 6.0                                  | 25...    | 1315 | 3.2  | 104   | 19.5                                 |
| JAN 1996  |      |  |   |                                      | JUL      |      |  |   |                                      |
| 12...   | 1035 | 4.3  | 111   | 2.0                                  | 26...    | 1105 | 4.0  | 125   | 14.0                                 |
| FEB   |      |  |   |                                      | AUG      |      |  |   |                                      |
| 16...   | 1310 | 3.8  | 110   | 1.5                                  | 19...    | 1510 | 2.7  | 119   | 16.0                                 |
| MAR   |      |  |   |                                      | 30...    | 1400 | 20   | 80  | 15.0                                 |
| 15...   | 1115 | 3.1  | 112   | 4.5                                  | SEP      |      |  |   |                                      |
| APR   |      |  |   |                                      | 05...    | 1120 | 8.3  | 121   | 13.0                                 |
| 24...   | 1000 | 3.2  | 107   | 8.0                                  | 19...    | 1120 | 10   | 84  | 7.5                                  |
| 07105900 JIMMY CAMP CREEK AT FOUNTAIN, CO (LAT 38 41 04N LONG 104 41 17W)                       |      |  |   |                                      |          |      |  |   |                                      |
| OCT 1995  |      |  |   |                                      | JUN 1996 |      |  |   |                                      |
| 04...   | 0915 | 1.7  | 2090  | 10.0                                 | 19...    | 1340 | 2.4  | 2400  | 27.5                                 |
| DEC   |      |  |   |                                      | JUL      |      |  |   |                                      |
| 13...   | 1115 | 1.7  | 2640  | 9.0                                  | 02...    | 1305 | 1.0  | 2420  | 29.0                                 |
| FEB 1996  |      |  |   |                                      | AUG      |      |  |   |                                      |
| 09...   | 1005 | 1.8  | 2690  | 6.0                                  | 02...    | 0955 | 3.5  | 2180  | 19.5                                 |
| MAR   |      |  |   |                                      | 16...    | 0925 | 7.9  | 1160  | 15.0                                 |
| 21...   | 1350 | 1.5  | 2650  | 17.5                                 | SEP      |      |  |   |                                      |
| APR   |      |  |   |                                      | 05...    | 1010 | 2.4  | 2690  | 17.5                                 |
| 30...   | 1220 | 2.1  | 2830  | 17.5                                 |          |      |  |   |                                      |
| MAY   |      |  |   |                                      |          |      |  |   |                                      |
| 28...   | 1305 | 5.0  | 2080  | 16.0                                 |          |      |  |   |                                      |
| 07105920 LITTLE FOUNTAIN CREEK AB KEATON RE, NR FORT CARSON, CO (LAT 38 40 55N LONG 104 51 30W) |      |  |   |                                      |          |      |  |   |                                      |
| OCT 1995  |      |  |   |                                      | MAY 1996 |      |  |   |                                      |
| 05...   | 0950 | 1.0  | 125   | 5.5                                  | 29...    | 0930 | 3.4  | 97  | 8.5                                  |
| JAN 1996  |      |  |   |                                      | JUL      |      |  |   |                                      |
| 09...   | 1015 | 0.75   | 99  | 0.5                                  | 01...    | 1320 | 0.87   | 125   | 17.0                                 |
| MAR   |      |  |   |                                      | AUG      |      |  |   |                                      |
| 12...   | 1255 | 0.89   | 105   | 4.5                                  | 07...    | 1115 | 0.44   | 126   | 16.0                                 |
| APR   |      |  |   |                                      | SEP      |      |  |   |                                      |
| 30...   | 0935 | 1.2  | 86  | 5.0                                  | 05...    | 1215 | 1.3  | 130   | 15.0                                 |
| 07105928 LITTLE FOUNTAIN CREEK NEAR FORT CARSON, CO (LAT 38 40 49N LONG 104 51 06W)             |      |  |   |                                      |          |      |  |   |                                      |
| OCT 1995  |      |  |   |                                      | MAY 1996 |      |  |   |                                      |
| 05...   | 1200 | 0.07   | 290   | 8.5                                  | 29...    | 1040 | 3.2  | 115   | 12.5                                 |
| JAN 1996  |      |  |   |                                      | JUL      |      |  |   |                                      |
| 09...   | 1150 | 0.16   | 196   | 1.0                                  | 01...    | 1425 | 0.03   | --  | 18.0                                 |
| MAR   |      |  |   |                                      | AUG      |      |  |   |                                      |
| 12...   | 1115 | 0.10   | 195   | 6.5                                  | 07...    | 1240 | 2.6  | 133   | 20.5                                 |
| APR   |      |  |   |                                      | SEP      |      |  |   |                                      |
| 30...   | 1110 | 0.08   | 170   | 10.0                                 | 05...    | 1335 | 0.79   | 135   | 18.5                                 |
| 07105945 ROCK CREEK ABOVE FORT CARSON RESERVATION, CO (LAT 38 42 26N LONG 104 50 47W)           |      |  |   |                                      |          |      |  |   |                                      |
| OCT 1995  |      |  |   |                                      | JUL 1996 |      |  |   |                                      |
| 04...   | 1150 | 0.52   | 190   | 9.0                                  | 02...    | 0905 | 0.10   | 175   | 14.0                                 |
| MAR 1996  |      |  |   |                                      | 10...    | 1055 | 13   | 145   | 13.5                                 |
| 13...   | 1005 | 0.37   | 175   | 2.0                                  | AUG      |      |  |   |                                      |
| APR   |      |  |   |                                      | 06...    | 1110 | 0.34   | 143   | 14.5                                 |
| 30...   | 0850 | 0.46   | 133   | 4.5                                  | 28...    | 1040 | 15   | 132   | 12.0                                 |
| MAY   |      |  |   |                                      |          |      |  |   |                                      |
| 28...   | 1045 | 1.2  | 155   | 9.0                                  |          |      |  |   |                                      |

## SUPPLEMENTAL WATER-QUALITY DATA FOR GAGING STATIONS

## MISCELLANEOUS STATION ANALYSES--Continued

| DATE  | TIME | DIS-<br>CHARGE,<br>INST.<br>CUBIC<br>FEET<br>PER<br>SECOND | SPE-<br>CIFIC<br>CON-<br>DUCT-<br>ANCE<br>(US/CM) | TEMPER-<br>ATURE<br>WATER<br>(DEG C) | DATE     | TIME | DIS-<br>CHARGE,<br>INST.<br>CUBIC<br>FEET<br>PER<br>SECOND | SPE-<br>CIFIC<br>CON-<br>DUCT-<br>ANCE<br>(US/CM) | TEMPER-<br>ATURE<br>WATER<br>(DEG C) |
|---|------|--|---|--------------------------------------|----------|------|--|---|--------------------------------------|
| 07105950 ROCK CREEK NEAR FORT CARSON, CO (LAT 38 41 49N LONG 104 49 39W)      |      |  |   |                                      |          |      |  |   |                                      |
| JUL 1996  |      |  |   |                                      | SEP 1996 |      |  |   |                                      |
| 10...   | 0920 | 9.7  | 140   | 14.0                                 | 06...    | 1015 | 0.21   | 198   | 13.0                                 |
| AUG   |      |  |   |                                      |          |      |  |   |                                      |
| 06...   | 0940 | 0.14   | 252   | 14.5                                 |          |      |  |   |                                      |
| 07108900 ST. CHARLES RIVER AT VINELAND, CO (LAT 38 14 44N LONG 104 29 09W)    |      |  |   |                                      |          |      |  |   |                                      |
| OCT 1995  |      |  |   |                                      | MAY 1996 |      |  |   |                                      |
| 11...   | 1745 | 17   | 1960  | 17.5                                 | 15...    | 1340 | 14   | 1920  | 25.5                                 |
| DEC   |      |  |   |                                      | JUN      |      |  |   |                                      |
| 14...   | 1500 | 12   | 2220  | 8.0                                  | 07...    | 1315 | 12   | 1980  | 25.0                                 |
| JAN 1996  |      |  |   |                                      | JUL      |      |  |   |                                      |
| 04...   | 1340 | 12   | 2170  | 5.0                                  | 02...    | 1130 | 8.7  | 2300  | 23.5                                 |
| MAR   |      |  |   |                                      | 16...    | 1115 | 20   | 2160  | 23.0                                 |
| 05...   | 1140 | 17   | 2350  | 10.0                                 | AUG      |      |  |   |                                      |
| APR   |      |  |   |                                      | 27...    | 1040 | 103  | 650   | 19.5                                 |
| 02...   | 1330 | 19   | 1480  | 18.5                                 |          |      |  |   |                                      |
| 07116500 HUERFANO RIVER NEAR BOONE, CO (LAT 38 13 33N LONG 104 15 40W)        |      |  |   |                                      |          |      |  |   |                                      |
| OCT 1995  |      |  |   |                                      | APR 1996 |      |  |   |                                      |
| 11...   | 1500 | 13   | 2270  | 23.0                                 | 04...    | 1415 | 5.9  | 4910  | 13.5                                 |
| 24...   | 1615 | 36   | 1290  | 12.5                                 | 24...    | 1700 | 5.1  | 4680  | 22.5                                 |
| DEC   |      |  |   |                                      | JUN      |      |  |   |                                      |
| 13...   | 1610 | 13   | 3690  | 10.0                                 | 05...    | 1345 | 14   | 1690  | 28.0                                 |
| FEB 1996  |      |  |   |                                      | 26...    | 1630 | 1.1  | 3380  | 31.0                                 |
| 21...   | 1500 | 19   | 3320  | 17.0                                 | JUL      |      |  |   |                                      |
| MAR   |      |  |   |                                      | 23...    | 1145 | 0.20   | 4980  | 31.5                                 |
| 20...   | 1545 | 54   | 1460  | 12.5                                 |          |      |  |   |                                      |
| 07119500 APISHAPA RIVER NEAR FOWLER, CO (LAT 38 05 28N LONG 103 58 52W)       |      |  |   |                                      |          |      |  |   |                                      |
| OCT 1995  |      |  |   |                                      | APR 1996 |      |  |   |                                      |
| 11...   | 1215 | 24   | 1390  | 14.5                                 | 24...    | 1410 | 18   | 1320  | 18.0                                 |
| DEC   |      |  |   |                                      | JUN      |      |  |   |                                      |
| 13...   | 1215 | 4.3  | 2970  | 9.5                                  | 05...    | 1130 | 27   | 1390  | 21.0                                 |
| JAN 1996  |      |  |   |                                      | 26...    | 1400 | 10   | 1840  | 25.0                                 |
| 09...   | 1640 | 4.1  | 3080  | 9.5                                  | JUL      |      |  |   |                                      |
| FEB   |      |  |   |                                      | 24...    | 1325 | 15   | 1490  | 24.0                                 |
| 21...   | 1240 | 3.2  | 2950  | 11.0                                 | AUG      |      |  |   |                                      |
| MAR   |      |  |   |                                      | 20...    | 1245 | 9.2  | 1930  | 23.0                                 |
| 20...   | 1315 | 21   | 1180  | 9.5                                  | 27...    | 1245 | 26   | 1400  | 22.0                                 |
| 07121500 TIMPAS CREEK AT MOUTH NEAR SWINK, CO (LAT 38 00 10N LONG 103 39 18W) |      |  |   |                                      |          |      |  |   |                                      |
| OCT 1995  |      |  |   |                                      | MAY 1996 |      |  |   |                                      |
| 10...   | 1745 | 87   | 1750  | 15.5                                 | 28...    | 1330 | 114  | 1530  | 17.0                                 |
| NOV   |      |  |   |                                      | JUN      |      |  |   |                                      |
| 21...   | 1430 | 53   | 2270  | 10.0                                 | 25...    | 1615 | 125  | 1310  | 23.0                                 |
| DEC   |      |  |   |                                      | JUL      |      |  |   |                                      |
| 13...   | 0845 | 23   | 3090  | 9.0                                  | 23...    | 1700 | 66   | 2100  | 26.0                                 |
| JAN 1996  |      |  |   |                                      | 30...    | 1740 | 778  | 779   | 22.5                                 |
| 09...   | 1445 | 19   | 3120  | 9.0                                  | AUG      |      |  |   |                                      |
| FEB   |      |  |   |                                      | 13...    | 1145 | 58   | 2070  | 20.0                                 |
| 20...   | 1740 | 33   | 2150  | 10.5                                 | 28...    | 1400 | 1760   | 1090  | 20.5                                 |
| MAR   |      |  |   |                                      | SEP      |      |  |   |                                      |
| 20...   | 0915 | 44   | 2060  | 5.5                                  | 03...    | 1600 | 69   | 2120  | 22.5                                 |
| 26...   | 1700 | 88   | 1460  | 9.0                                  | 24...    | 1100 | 112  | 1710  | 17.0                                 |
| APR   |      |  |   |                                      |          |      |  |   |                                      |
| 24...   | 0945 | 68   | 2000  | 13.0                                 |          |      |  |   |                                      |
| 07124200 PURGATOIRE RIVER AT MADRID, CO (LAT 37 07 46N LONG 104 38 20W)       |      |  |   |                                      |          |      |  |   |                                      |
| OCT 1995  |      |  |   |                                      | JUN 1996 |      |  |   |                                      |
| 05...   | 1615 | 62   | 294   | 13.5                                 | 14...    | 0850 | 72   | 294   | 15.5                                 |
| NOV   |      |  |   |                                      | AUG      |      |  |   |                                      |
| 30...   | 1210 | 29   | 399   | 4.5                                  | 02...    | 0915 | 21   | 378   | 19.0                                 |
| JAN 1996  |      |  |   |                                      | 07...    | 0730 | 14   | 405   | 15.5                                 |
| 25...   | 1545 | 37   | 456   | 0.0                                  | 23...    | 0930 | 60   | 248   | 17.0                                 |
| FEB   |      |  |   |                                      | 29...    | 0945 | 64   | 242   | 16.5                                 |
| 23...   | 0815 | 19   | 397   | 1.0                                  | SEP      |      |  |   |                                      |
| APR   |      |  |   |                                      | 18...    | 1205 | 30   | 325   | 18.0                                 |
| 17...   | 1515 | 26   | 349   | 18.0                                 |          |      |  |   |                                      |
| MAY   |      |  |   |                                      |          |      |  |   |                                      |
| 07...   | 1320 | 70   | 241   | 19.5                                 |          |      |  |   |                                      |

MISCELLANEOUS STATION ANALYSES--Continued

| DATE   | TIME | DIS-<br>CHARGE,<br>INST.<br>CUBIC<br>FEET<br>PER<br>SECOND | SPE-<br>CIFIC<br>CON-<br>DUCT-<br>ANCE<br>(US/CM) | TEMPER-<br>ATURE<br>WATER<br>(DEG C) | DATE     | TIME | DIS-<br>CHARGE,<br>INST.<br>CUBIC<br>FEET<br>PER<br>SECOND | SPE-<br>CIFIC<br>CON-<br>DUCT-<br>ANCE<br>(US/CM) | TEMPER-<br>ATURE<br>WATER<br>(DEG C) |
|--|------|--|---|--------------------------------------|----------|------|--|---|--------------------------------------|
| 07124410 PURGATOIRE RIVER BELOW TRINIDAD LAKE, CO (LAT 37 08 37N LONG 104 32 49W)        |      |  |   |                                      |          |      |  |   |                                      |
| OCT 1995   |      |  |   |                                      | APR 1996 |      |  |   |                                      |
| 05...  | 1840 | 69   | 281   | 13.5                                 | 17...    | 1730 | 26   | 337   | 9.0                                  |
| NOV  |      |  |   |                                      | MAY      |      |  |   |                                      |
| 30...  | 1600 | 0.20   | 296   | 6.0                                  | 31...    | 1045 | 247  | 340   | 16.0                                 |
| JAN 1996   |      |  |   |                                      | AUG      |      |  |   |                                      |
| 25...  | 1400 | 0.32   | 395   | 3.5                                  | 07...    | 0910 | 37   | 348   | 19.0                                 |
| FEB  |      |  |   |                                      | SEP      |      |  |   |                                      |
| 28...  | 1015 | 0.09   | 321   | 3.0                                  | 18...    | 1525 | 26   | 347   | 16.5                                 |
| 07126485 PURGATOIRE RIVER AT ROCK CROSSING NR TIMPAS, CO (LAT 37 37 03N LONG 103 35 47W) |      |  |   |                                      |          |      |  |   |                                      |
| NOV 1995   |      |  |   |                                      | MAY 1996 |      |  |   |                                      |
| 06...  | 1645 | 40   | 3080  | 8.0                                  | 29...    | 1040 | 73   | 1440  | 16.5                                 |
| DEC  |      |  |   |                                      | AUG      |      |  |   |                                      |
| 12...  | 1035 | 46   | 3340  | 1.5                                  | 01...    | 1320 | 19   | 956   | 28.0                                 |
| JAN 1996   |      |  |   |                                      | 20...    | 1050 | 25   | 1070  | 24.0                                 |
| 22...  | 1520 | 39   | 3220  | 1.0                                  | 28...    | 1700 | 664  | 840   | 21.0                                 |
| FEB  |      |  |   |                                      | 29...    | 1710 | 72   | 653   | 24.5                                 |
| 21...  | 1620 | 28   | 3230  | 10.5                                 | SEP      |      |  |   |                                      |
| APR  |      |  |   |                                      | 19...    | 1145 | 40   | 1120  | 17.0                                 |
| 19...  | 1640 | 15   | 3360  | 16.5                                 |          |      |  |   |                                      |
| 07128500 PURGATOIRE RIVER NEAR LAS ANIMAS, CO (LAT 38 02 02N LONG 103 12 00W)            |      |  |   |                                      |          |      |  |   |                                      |
| OCT 1995   |      |  |   |                                      | JUN 1996 |      |  |   |                                      |
| 03...  | 1600 | 36   | 2440  | 18.0                                 | 04...    | 1225 | 21   | 3240  | 21.0                                 |
| 19...  | 1155 | 38   | 3120  | 12.5                                 | 14...    | 1140 | 116  | 2530  | 23.5                                 |
| NOV  |      |  |   |                                      | JUL      |      |  |   |                                      |
| 07...  | 1515 | 52   | 3180  | 8.5                                  | 09...    | 1420 | 16   | 3400  | 22.5                                 |
| DEC  |      |  |   |                                      | 19...    | 1500 | 52   | 2280  | 29.5                                 |
| 05...  | 1355 | 41   | 3900  | 6.5                                  | 30...    | 1430 | 60   | 1740  | 25.5                                 |
| JAN 1996   |      |  |   |                                      | 30...    | 1900 | 1180   | 623   | 22.5                                 |
| 10...  | 1040 | 46   | 4030  | 0.0                                  | AUG      |      |  |   |                                      |
| FEB  |      |  |   |                                      | 14...    | 0830 | 8.0  | 4570  | 21.0                                 |
| 13...  | 1455 | 40   | 3690  | 6.5                                  | 23...    | 1045 | 38   | 2530  | 23.0                                 |
| MAR  |      |  |   |                                      | SEP      |      |  |   |                                      |
| 12...  | 1355 | 23   | 4400  | 15.5                                 | 10...    | 1615 | 117  | 1680  | 23.0                                 |
| APR  |      |  |   |                                      | 20...    | 1450 | 121  | 2890  | 19.5                                 |
| 02...  | 1340 | 9.2  | 4380  | 20.0                                 |          |      |  |   |                                      |
| MAY  |      |  |   |                                      |          |      |  |   |                                      |
| 13...  | 1400 | 7.2  | 5050  | 22.5                                 |          |      |  |   |                                      |
| 07133000 ARKANSAS RIVER AT LAMAR, CO (LAT 38 06 24N LONG 102 37 04W)                     |      |  |   |                                      |          |      |  |   |                                      |
| OCT 1995   |      |  |   |                                      | MAY 1996 |      |  |   |                                      |
| 18...  | 0830 | 30   | 2590  | 11.5                                 | 14...    | 1735 | 337  | 1950  | 20.5                                 |
| NOV  |      |  |   |                                      | JUN      |      |  |   |                                      |
| 21...  | 1555 | 59   | 3990  | 11.5                                 | 07...    | 1100 | 21   | 3610  | 18.5                                 |
| JAN 1996   |      |  |   |                                      | JUL      |      |  |   |                                      |
| 11...  | 1330 | 6.6  | 4040  | 9.5                                  | 17...    | 1100 | 645  | 1940  | 23.0                                 |
| FEB  |      |  |   |                                      | AUG      |      |  |   |                                      |
| 14...  | 1325 | 8.4  | 4000  | 13.0                                 | 21...    | 0755 | 161  | 2690  | 20.5                                 |
| MAR  |      |  |   |                                      | SEP      |      |  |   |                                      |
| 13...  | 1200 | 34   | 2480  | 13.0                                 | 20...    | 1000 | 187  | 1460  | 14.0                                 |
| APR  |      |  |   |                                      |          |      |  |   |                                      |
| 17...  | 1330 | 167  | 1990  | 13.5                                 |          |      |  |   |                                      |
| 07134100 BIG SANDY CREEK NEAR LAMAR, CO (LAT 38 06 51N LONG 102 29 00W)                  |      |  |   |                                      |          |      |  |   |                                      |
| OCT 1995   |      |  |   |                                      | APR 1996 |      |  |   |                                      |
| 17...  | 1805 | 14   | 4190  | 16.5                                 | 16...    | 1610 | 18   | 3620  | 18.5                                 |
| NOV  |      |  |   |                                      | MAY      |      |  |   |                                      |
| 22...  | 1310 | 8.8  | 4620  | 11.0                                 | 15...    | 1315 | 22   | 3750  | 22.5                                 |
| JAN 1996   |      |  |   |                                      | JUN      |      |  |   |                                      |
| 11...  | 1040 | 43   | 4170  | 0.5                                  | 13...    | 1345 | 58   | 3010  | 23.0                                 |
| FEB  |      |  |   |                                      | JUL      |      |  |   |                                      |
| 14...  | 1120 | 44   | 4120  | 3.5                                  | 17...    | 0800 | 29   | 3990  | 19.5                                 |
| MAR  |      |  |   |                                      | SEP      |      |  |   |                                      |
| 13...  | 0940 | 38   | 4300  | 9.0                                  | 20...    | 0750 | 14   | 4760  | 13.5                                 |

## SUPPLEMENTAL WATER-QUALITY DATA FOR GAGING STATIONS

## MISCELLANEOUS STATION ANALYSES--Continued

| DATE   | TIME | DIS-<br>CHARGE,<br>INST.<br>CUBIC<br>FEET<br>PER<br>SECOND | SPE-<br>CIFIC<br>CON-<br>DUCT-<br>ANCE<br>(US/CM) | TEMPER-<br>ATURE<br>WATER<br>(DEG C) | DATE     | TIME | DIS-<br>CHARGE,<br>INST.<br>CUBIC<br>FEET<br>PER<br>SECOND | SPE-<br>CIFIC<br>CON-<br>DUCT-<br>ANCE<br>(US/CM) | TEMPER-<br>ATURE<br>WATER<br>(DEG C) |
|--|------|--|---|--------------------------------------|----------|------|--|---|--------------------------------------|
| 07134180 ARKANSAS RIVER NEAR GRANADA, CO (LAT 38 05 44N LONG 102 18 37W)   |      |  |   |                                      |          |      |  |   |                                      |
| OCT 1995   |      |  |   |                                      | MAY 1996 |      |  |   |                                      |
| 17...  | 1640 | 102  | 3720  | 18.0                                 | 15...    | 1140 | 389  | 2390  | 20.5                                 |
| NOV  |      |  |   |                                      | JUN      |      |  |   |                                      |
| 22...  | 1145 | 133  | 4140  | 9.5                                  | 07...    | 1455 | 167  | 3990  | 22.5                                 |
| JAN 1996   |      |  |   |                                      | JUL      |      |  |   |                                      |
| 11...  | 0905 | 119  | 4210  | 2.5                                  | 16...    | 1810 | 378  | 2970  | 25.5                                 |
| FEB  |      |  |   |                                      | AUG      |      |  |   |                                      |
| 14...  | 0910 | 122  | 4160  | 4.5                                  | 21...    | 1125 | 503  | 2840  | 23.0                                 |
| MAR  |      |  |   |                                      | SEP      |      |  |   |                                      |
| 13...  | 0840 | 56   | 4140  | 9.0                                  | 19...    | 1150 | 203  | 3630  | 16.0                                 |
| APR  |      |  |   |                                      |          |      |  |   |                                      |
| 17...  | 1125 | 341  | 2530  | 13.5                                 |          |      |  |   |                                      |
| 07134990 WILD HORSE CREEK ABOVE HOLLY, CO (LAT 38 03 29N LONG 102 08 19W)  |      |  |   |                                      |          |      |  |   |                                      |
| OCT 1995   |      |  |   |                                      | JUN 1996 |      |  |   |                                      |
| 17...  | 1415 | 30   | 4260  | 14.5                                 | 10...    | 1725 | 6.5  | 3810  | 29.5                                 |
| NOV  |      |  |   |                                      | JUL      |      |  |   |                                      |
| 22...  | 0835 | 23   | 4290  | 5.5                                  | 16...    | 1530 | 20   | 3250  | 28.5                                 |
| APR 1996   |      |  |   |                                      | AUG      |      |  |   |                                      |
| 17...  | 0830 | 18   | 3180  | 10.5                                 | 20...    | 1815 | 171  | 2030  | 24.5                                 |
| MAY  |      |  |   |                                      | SEP      |      |  |   |                                      |
| 15...  | 0845 | 8.5  | 3220  | 17.0                                 | 19...    | 1400 | 34   | 2980  | 17.5                                 |
| 08217500 RIO GRANDE AT WAGON WHEEL GAP, CO (LAT 37 46 01N LONG 106 49 51W) |      |  |   |                                      |          |      |  |   |                                      |
| OCT 1995   |      |  |   |                                      | MAY 1996 |      |  |   |                                      |
| 05...  | 1040 | 439  | 74  | 8.0                                  | 15...    | 1205 | 1890   | 52  | 7.5                                  |
| JAN 1996   |      |  |   |                                      | JUN      |      |  |   |                                      |
| 10...  | 1255 | 115  | 107   | 0.0                                  | 26...    | 1525 | 1120   | 56  | 14.0                                 |
| FEB  |      |  |   |                                      | AUG      |      |  |   |                                      |
| 27...  | 1535 | 143  | 109   | 0.5                                  | 06...    | 1025 | 185  | 95  | 13.0                                 |
| APR  |      |  |   |                                      | SEP      |      |  |   |                                      |
| 10...  | 0915 | 562  | 74  | 5.0                                  | 05...    | 1615 | 153  | 96  | 16.5                                 |

EL PASO COUNTY

384056104415601 - SC01606505CCB - FOUNTAIN NO. 3

LOCATION.--Lat 38°40'56", long 104°41'56" in NW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec.5, T.16 S., R.65 W., El Paso County, Hydrologic Unit 11020003.

AQUIFER.--Fountain Creek Alluvial Aquifer.

WELL CHARACTERISTICS.--Municipal well, diameter 16 in., 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 1995 TO SEPTEMBER 1996

| DATE         | TIME | SPE-<br>CIFIC<br>CON-<br>DUCT-<br>ANCE<br>(US/CM) | PH<br>WATER<br>WHOLE<br>FIELD<br>(STAND-<br>ARD<br>UNITS) | TEMPER-<br>ATURE<br>WATER<br>(DEG C) | NITRO-<br>GEN,<br>NITRITE<br>DIS-<br>SOLVED<br>(MG/L<br>AS N) | NITRO-<br>GEN,<br>NO2+NO3<br>DIS-<br>SOLVED<br>(MG/L<br>AS N) | NITRO-<br>GEN,<br>AMMONIA<br>DIS-<br>SOLVED<br>(MG/L<br>AS N) | PHOS-<br>PHORUS<br>ORTHO,<br>DIS-<br>SOLVED<br>(MG/L<br>AS P) |
|--------------|------|---|---|--------------------------------------|---|---|---|---|
| FEB<br>29... | 0830 | 1230  | 7.2   | 12.0                                 | <0.01   | 3.0   | <0.015  | 0.02  |
| SEP<br>25... | 0925 | 1200  | 7.2   | 12.5                                 | <0.01   | 2.9   | <0.015  | 0.02  |

384108104420701 - SC01606506DAA - FOUNTAIN NO. 2

LOCATION.--Lat 38°41'08", long 104°42'07", NE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec.6, T.16 S., R.65 W., in El Paso County, Hydrologic Unit 11020003.

AQUIFER.--Fountain Creek Alluvial Aquifer.

WELL CHARACTERISTICS.--Municipal well, diameter 16 in., 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 1995 TO SEPTEMBER 1996

| DATE         | TIME | SPE-<br>CIFIC<br>CON-<br>DUCT-<br>ANCE<br>(US/CM) | PH<br>WATER<br>WHOLE<br>FIELD<br>(STAND-<br>ARD<br>UNITS) | TEMPER-<br>ATURE<br>WATER<br>(DEG C) | NITRO-<br>GEN,<br>NITRITE<br>DIS-<br>SOLVED<br>(MG/L<br>AS N) | NITRO-<br>GEN,<br>NO2+NO3<br>DIS-<br>SOLVED<br>(MG/L<br>AS N) | NITRO-<br>GEN,<br>AMMONIA<br>DIS-<br>SOLVED<br>(MG/L<br>AS N) | PHOS-<br>PHORUS<br>ORTHO,<br>DIS-<br>SOLVED<br>(MG/L<br>AS P) |
|--------------|------|---|---|--------------------------------------|---|---|---|---|
| FEB<br>29... | 0915 | 1410  | 7.2   | 12.0                                 | <0.01   | 4.2   | <0.015  | 0.02  |
| SEP<br>25... | 0955 | 1300  | 7.2   | 13.0                                 | <0.01   | 3.2   | <0.015  | 0.02  |

384407104434801 - SC01506624BAD1 WIDEFIELD NO. 4

LOCATION.--Lat 38°44'07", long 104°43'48", in SE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec.24, T.15 S., R.66 W., El Paso County, Hydrologic Unit 11020003.

AQUIFER.--Widefield Aquifer of Fountain Creek Alluvium.

WELL CHARACTERISTICS.--Municipal well, diameter 16 in., depth 71 ft, screened 41 to 71 ft.

DATUM.--Elevation of land-surface datum is 5,680.7 ft above sea level.

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DATE         | TIME | SPE-<br>CIFIC<br>CON-<br>DUCT-<br>ANCE<br>(US/CM) | PH<br>WATER<br>WHOLE<br>FIELD<br>(STAND-<br>ARD<br>UNITS) | TEMPER-<br>ATURE<br>WATER<br>(DEG C) | NITRO-<br>GEN,<br>NITRITE<br>DIS-<br>SOLVED<br>(MG/L<br>AS N) | NITRO-<br>GEN,<br>NO2+NO3<br>DIS-<br>SOLVED<br>(MG/L<br>AS N) | NITRO-<br>GEN,<br>AMMONIA<br>DIS-<br>SOLVED<br>(MG/L<br>AS N) | PHOS-<br>PHORUS<br>ORTHO,<br>DIS-<br>SOLVED<br>(MG/L<br>AS P) |
|--------------|------|---|---|--------------------------------------|---|---|---|---|
| FEB<br>29... | 1025 | 619   | 7.1   | 13.0                                 | <0.01   | 9.8   | <0.015  | 0.03  |
| SEP<br>25... | 1055 | 650   | 7.0   | 13.5                                 | <0.01   | 5.9   | <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 SW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec.13, T.15 S., R.66 W., El Paso County, Hydrologic Unit 11020003.

AQUIFER.--Widefield Aquifer of Fountain Creek Alluvium.

WELL CHARACTERISTICS.--Monitor well, diameter 2 in., depth 47 ft, screened 43 to 46 ft.

DATUM.--Elevation of land-surface datum is 5,701 ft above sea level.

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

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DATE         | TIME | DEPTH<br>BELOW<br>LAND<br>SURFACE<br>(WATER<br>LEVEL)<br>(FEET) | SPE-<br>CIFIC<br>CON-<br>DUCT-<br>ANCE<br>(US/CM) | PH<br>WATER<br>WHOLE<br>FIELD<br>(STAND-<br>ARD<br>UNITS) | TEMPER-<br>ATURE<br>WATER<br>(DEG C) | NITRO-<br>GEN,<br>NITRITE<br>DIS-<br>SOLVED<br>(MG/L<br>AS N) | NITRO-<br>GEN,<br>NO2+NO3<br>DIS-<br>SOLVED<br>(MG/L<br>AS N) | NITRO-<br>GEN,<br>AMMONIA<br>DIS-<br>SOLVED<br>(MG/L<br>AS N) | PHOS-<br>PHORUS<br>ORTHO,<br>DIS-<br>SOLVED<br>(MG/L<br>AS P) |
|--------------|------|---|---|---|--------------------------------------|---|---|---|---|
| MAR<br>01... | 1600 | 33.71   | 638   | 7.1   | 12.5                                 | <0.01   | 5.2   | <0.015  | 0.02  |
| SEP<br>27... | 1420 | 34.15   | 618   | 7.0   | 13.5                                 | <0.01   | 5.6   | <0.015  | 0.02  |

## 384458104442601 - SC01506614AAD - SECURITY NO. 2

LOCATION.--Lat 38°44'58", long 104°44'26", in SE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub> sec.14, T.15 S., R.66 W., El Paso County, Hydrologic Unit 11020003.

AQUIFER.--Widefield Aquifer of Fountain Creek Alluvium.

WELL CHARACTERISTICS.--Municipal well, diameter 24 in., depth 78 ft, screened 43 to 78 ft.

DATUM.--Elevation of land-surface datum is 5,717 ft above sea level.

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

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DATE         | TIME | DEPTH<br>BELOW<br>LAND<br>SURFACE<br>(WATER<br>LEVEL)<br>(FEET) | SPE-<br>CIFIC<br>CON-<br>DUCT-<br>ANCE<br>(US/CM) | PH<br>WATER<br>WHOLE<br>FIELD<br>(STAND-<br>ARD<br>UNITS) | TEMPER-<br>ATURE<br>WATER<br>(DEG C) | NITRO-<br>GEN,<br>NITRITE<br>DIS-<br>SOLVED<br>(MG/L<br>AS N) | NITRO-<br>GEN,<br>NO2+NO3<br>DIS-<br>SOLVED<br>(MG/L<br>AS N) | NITRO-<br>GEN,<br>AMMONIA<br>DIS-<br>SOLVED<br>(MG/L<br>AS N) | PHOS-<br>PHORUS<br>ORTHO,<br>DIS-<br>SOLVED<br>(MG/L<br>AS P) |
|--------------|------|---|---|---|--------------------------------------|---|---|---|---|
| FEB<br>29... | 1110 | --  | 540   | 7.2   | 13.0                                 | <0.01   | 7.4   | <0.015  | 0.02  |
| SEP<br>25... | 1125 | 36.59   | 517   | 7.1   | 14.5                                 | <0.01   | 8.1   | <0.015  | 0.02  |

## 384535104450801 - SC01506611BCD2 VENETUCCI NO. 3

LOCATION.--Lat 38°45'35", long 104°45'08", in SE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec.11, T.15 S., R.66 W., El Paso County, Hydrologic Unit 11020003.

AQUIFER.--Widefield Aquifer of Fountain Creek Alluvium.

WELL CHARACTERISTICS.--Irrigation well, diameter 24 in., depth 80 ft, screening unknown.

DATUM.--Elevation of land-surface datum is 5,750.0 ft above sea level.

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

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DATE         | TIME | SPE-<br>CIFIC<br>CON-<br>DUCT-<br>ANCE<br>(US/CM) | PH<br>WATER<br>WHOLE<br>FIELD<br>(STAND-<br>ARD<br>UNITS) | TEMPER-<br>ATURE<br>WATER<br>(DEG C) | NITRO-<br>GEN,<br>NITRITE<br>DIS-<br>SOLVED<br>(MG/L<br>AS N) | NITRO-<br>GEN,<br>NO2+NO3<br>DIS-<br>SOLVED<br>(MG/L<br>AS N) | NITRO-<br>GEN,<br>AMMONIA<br>DIS-<br>SOLVED<br>(MG/L<br>AS N) | PHOS-<br>PHORUS<br>ORTHO,<br>DIS-<br>SOLVED<br>(MG/L<br>AS P) |
|--------------|------|---|---|--------------------------------------|---|---|---|---|
| SEP<br>25... | 1025 | 428   | 7.2   | 13.5                                 | <0.01   | 8.1   | <0.015  | 0.07  |

QUALITY OF GROUND WATER

EL PASO COUNTY--Continued

384604104451502 - SC01506602CCC2 U-9

LOCATION.--Lat 38°46'04", long 104°45'15", in SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec.2, T.15 S., R.66 W., El Paso County, Hydrologic Unit 11020003.

AQUIFER.--Widefield Aquifer of Fountain Creek Alluvium.

WELL CHARACTERISTICS.--Monitor well, diameter 2 in., depth 55 ft, screened 51 to 53 ft.

DATUM.--Elevation of land-surface datum is 5,774 ft above sea level.

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DATE      | TIME | DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET) | SPE-CIFIC CONDUCTANCE (US/CM) | PH WATER WHOLE FIELD (STANDARD UNITS) | TEMPERATURE WATER (DEG C) | NITROGEN, NITRITE DIS-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) |
|-----------|------|---|-------------------------------|---------------------------------------|---------------------------|--|--|--|--|
| MAR 01... | 1130 | 34.70   | 450                           | 7.3                                   | 13.5                      | <0.01                                    | 7.3                                      | <0.015                                   | 0.05                                     |
| SEP 27... | 1005 | 34.59   | 450                           | 7.2                                   | 13.0                      | <0.01                                    | 8.0                                      | 0.02                                     | 0.05                                     |

384610104453501 - SC01506603DDB SECURITY NO. 14

LOCATION.--Lat 38°46'10", long 104°45'35", in NW<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec.14, T.15 S., R.66 W., El Paso County, Hydrologic Unit 11020003.

AQUIFER.--Widefield Aquifer of Fountain Creek Alluvium.

WELL CHARACTERISTICS.--Municipal well, diameter 24 in., depth 80 ft, screened 39 to 80 ft.

DATUM.--Elevation of land-surface datum is 5,779.2 ft above sea level.

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

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DATE      | TIME | SPE-CIFIC CONDUCTANCE (US/CM) | PH WATER WHOLE FIELD (STANDARD UNITS) | TEMPERATURE WATER (DEG C) | NITROGEN, NITRITE DIS-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 29... | 1145 | 660                           | 7.5                                   | 13.0                      | <0.01                                    | 7.3                                      | <0.015                                   | 0.05                                     |
| SEP 25... | 1205 | 638                           | 7.4                                   | 14.0                      | <0.01                                    | 7.7                                      | <0.015                                   | 0.04                                     |

384617104455901 - SC01506603CAD STRATMOOR HILLS NO. 4

LOCATION.--Lat 38°46'17", long 104°45'59", in SE<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec.3, T.15 S., R.66 W., El Paso County, Hydrologic Unit 11020003.

AQUIFER.--Widefield Aquifer of Fountain Creek Alluvium.

WELL CHARACTERISTICS.--Municipal well, diameter 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 1995 TO SEPTEMBER 1996

| DATE      | TIME | SPE-CIFIC CONDUCTANCE (US/CM) | PH WATER WHOLE FIELD (STANDARD UNITS) | TEMPERATURE WATER (DEG C) | NITROGEN, NITRITE DIS-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 29... | 1315 | 1050                          | 7.4                                   | 13.0                      | <0.01                                    | 7.2                                      | <0.015                                   | 0.02                                     |
| SEP 25... | 1340 | 735                           | 7.5                                   | 15.0                      | <0.01                                    | 11                                       | 0.020                                    | 0.02                                     |

## QUALITY OF GROUND WATER

## EL PASO COUNTY--Continued

## 384628104450801 - SC01506602BDC - TH-23

LOCATION.--Lat 38°46'28", long 104°45'08", in NW<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub> sec.2, T.15 S., R.66 W., El Paso County, Hydrologic Unit 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 1995 TO SEPTEMBER 1996

| DATE         | TIME | DEPTH<br>BELOW<br>LAND<br>SURFACE<br>(WATER<br>LEVEL)<br>(FEET) | SPE-<br>CIFIC<br>CON-<br>DUCT-<br>ANCE<br>(US/CM) | PH<br>WATER<br>WHOLE<br>FIELD<br>(STAND-<br>ARD<br>UNITS) | TEMPER-<br>ATURE<br>WATER<br>(DEG C) | NITRO-<br>GEN,<br>NITRITE<br>DIS-<br>SOLVED<br>(MG/L<br>AS N) | NITRO-<br>GEN,<br>NO2+NO3<br>DIS-<br>SOLVED<br>(MG/L<br>AS N) | NITRO-<br>GEN,<br>AMMONIA<br>DIS-<br>SOLVED<br>(MG/L<br>AS N) | PHOS-<br>PHORUS<br>ORTHO,<br>DIS-<br>SOLVED<br>(MG/L<br>AS P) |
|--------------|------|---|---|---|--------------------------------------|---|---|---|---|
| MAR<br>01... | 1315 | 73.36   | 587   | 7.0   | 13.5                                 | <0.01   | 8.9   | <0.015  | 0.14  |
| SEP<br>27... | 1205 | 72.20   | 552   | 6.9   | 14.0                                 | <0.01   | 7.8   | 0.02  | 0.13  |

## 384639104461401 - SC01506603BAC1 - MARS GAS

LOCATION.--Lat 38°46'39", long 104°46'14", in SW<sup>1</sup>/<sub>4</sub>NE<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec.3, T.15 S., R.66 W., El Paso County, Hydrologic Unit 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 1995 TO SEPTEMBER 1996

| DATE         | TIME | SPE-<br>CIFIC<br>CON-<br>DUCT-<br>ANCE<br>(US/CM) | PH<br>WATER<br>WHOLE<br>FIELD<br>(STAND-<br>ARD<br>UNITS) | TEMPER-<br>ATURE<br>WATER<br>(DEG C) | NITRO-<br>GEN,<br>NITRITE<br>DIS-<br>SOLVED<br>(MG/L<br>AS N) | NITRO-<br>GEN,<br>NO2+NO3<br>DIS-<br>SOLVED<br>(MG/L<br>AS N) | NITRO-<br>GEN,<br>AMMONIA<br>DIS-<br>SOLVED<br>(MG/L<br>AS N) | PHOS-<br>PHORUS<br>ORTHO,<br>DIS-<br>SOLVED<br>(MG/L<br>AS P) |
|--------------|------|---|---|--------------------------------------|---|---|---|---|
| FEB<br>29... | 1355 | 930   | 7.2   | 12.0                                 | <0.01   | 7.2   | <0.015  | 0.02  |
| SEP<br>25... | 1425 | 1150  | 7.1   | 14.0                                 | <0.01   | 9.5   | <0.015  | 0.02  |

## 384653104451901 - SC01406602BBB - TH-18

LOCATION.--Lat 38°46'53", long 104°45'19", in NW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub> sec.2, T.15 S., R.66 W., El Paso County, Hydrologic Unit 11020003.

AQUIFER.--Widefield aquifer of Fountain Creek Alluvium.

WELL CHARACTERISTICS.--Monitor well, diameter 2 in., depth 122 ft, screened 96 to 122 ft.

DATUM.--Elevation of land-surface datum is 5,890 ft above sea level.

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

## WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DATE         | TIME | DEPTH<br>BELOW<br>LAND<br>SURFACE<br>(WATER<br>LEVEL)<br>(FEET) | SPE-<br>CIFIC<br>CON-<br>DUCT-<br>ANCE<br>(US/CM) | PH<br>WATER<br>WHOLE<br>FIELD<br>(STAND-<br>ARD<br>UNITS) | TEMPER-<br>ATURE<br>WATER<br>(DEG C) | NITRO-<br>GEN,<br>NITRITE<br>DIS-<br>SOLVED<br>(MG/L<br>AS N) | NITRO-<br>GEN,<br>NO2+NO3<br>DIS-<br>SOLVED<br>(MG/L<br>AS N) | NITRO-<br>GEN,<br>AMMONIA<br>DIS-<br>SOLVED<br>(MG/L<br>AS N) | PHOS-<br>PHORUS<br>ORTHO,<br>DIS-<br>SOLVED<br>(MG/L<br>AS P) |
|--------------|------|---|---|---|--------------------------------------|---|---|---|---|
| MAR<br>01... | 1420 | 90.72   | 549   | 7.1   | 14.0                                 | <0.01   | 10  | <0.015  | 0.07  |
| SEP<br>27... | 1240 | 89.83   | 498   | 6.9   | 14.5                                 | <0.01   | 11  | <0.015  | 0.07  |

QUALITY OF GROUND WATER

EL PASO COUNTY--Continued

384718104463701 - SC01406633DAA - BARNES WELL

LOCATION.--Lat 38°47'18", long 104°46'37", in NE¼NE¼SE¼ 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 1995 TO SEPTEMBER 1996

| DATE         | TIME | SPE-<br>CIFIC<br>CON-<br>DUCT-<br>ANCE<br>(US/CM) | PH<br>WATER<br>WHOLE<br>FIELD<br>(STAND-<br>ARD<br>UNITS) | TEMPER-<br>ATURE<br>WATER<br>(DEG C) | NITRO-<br>GEN,<br>NITRITE<br>DIS-<br>SOLVED<br>(MG/L<br>AS N) | NITRO-<br>GEN,<br>NO2+NO3<br>DIS-<br>SOLVED<br>(MG/L<br>AS N) | NITRO-<br>GEN,<br>AMMONIA<br>DIS-<br>SOLVED<br>(MG/L<br>AS N) | PHOS-<br>PHORUS<br>ORTHO,<br>DIS-<br>SOLVED<br>(MG/L<br>AS P) |
|--------------|------|---|---|--------------------------------------|---|---|---|---|
| FEB<br>29... | 1410 | 1240  | 7.3   | 12.0                                 | <0.01   | 12  | 0.02  | 0.02  |
| SEP<br>25... | 1440 | 1570  | 7.1   | 14.0                                 | <0.01   | 12  | 0.02  | 0.02  |

385323104224001 - SC01306230ACC1 - I WELL

LOCATION.--Lat 38°53'23", long 104°22'40", in SW¼SW¼NE¼ 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 1995 TO SEPTEMBER 1996

| DATE         | TIME | SPE-<br>CIFIC<br>CON-<br>DUCT-<br>ANCE<br>(US/CM) | PH<br>WATER<br>WHOLE<br>FIELD<br>(STAND-<br>ARD<br>UNITS) | TEMPER-<br>ATURE<br>WATER<br>(DEG C) | NITRO-<br>GEN,<br>NITRITE<br>DIS-<br>SOLVED<br>(MG/L<br>AS N) | NITRO-<br>GEN,<br>NO2+NO3<br>DIS-<br>SOLVED<br>(MG/L<br>AS N) | NITRO-<br>GEN,<br>AMMONIA<br>DIS-<br>SOLVED<br>(MG/L<br>AS N) | PHOS-<br>PHORUS<br>ORTHO,<br>DIS-<br>SOLVED<br>(MG/L<br>AS P) |
|--------------|------|---|---|--------------------------------------|---|---|---|---|
| FEB<br>29... | 1615 | 407   | 7.2   | 12.0                                 | <0.01   | 8.1   | <0.015  | 0.04  |
| SEP<br>25... | 1625 | 401   | 7.1   | 13.0                                 | <0.01   | 8.3   | 0.02  | 0.04  |

MISCELLANEOUS WATER-QUALITY IN THE RIO GRANDE BASIN

374752105300801 MEDANO CREEK NEAR MOSCA, CO  
(Rio Grande National Water-Quality Assessment Program station)

WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 1993 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DATE      | TIME | DIS-CHARGE, INST. CUBIC FEET PER SECOND | SPE-CIFIC CON-DUCT-ANCE (US/CM) | PH WATER WHOLE FIELD (STAND-ARD UNITS) | TEMPER-AIRE (DEG C) | TEMPER-AURE WATER (DEG C) | BARO-METRIC PRES-SURE (MM OF HG) | OXYGEN, DIS-SOLVED (MG/L) | OXYGEN, SATUR-ATION (%) | HARD-NESS TOTAL (MG/L AS CACO3) | CALCIUM DIS-SOLVED (MG/L AS CA) | MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) |
|-----------|------|---|---------------------------------|--|---------------------|---------------------------|----------------------------------|---------------------------|-------------------------|---------------------------------|---------------------------------|-------------------------------------|
| OCT 18... | 0945 | 4.0                                     | 95                              | 7.8                                    | 1.5                 | 2.5                       | 560                              | 10.0                      | 100                     | 41                              | 11                              | 3.2                                 |
| NOV 30... | 0845 | 2.9                                     | 97                              | 7.7                                    | 2.0                 | 0.0                       | 559                              | 10.5                      | 98                      | 41                              | 11                              | 3.4                                 |
| JAN 30... | 0930 | 2.4                                     | 89                              | 7.6                                    | 0.5                 | 0.5                       | 553                              | 10.3                      | 99                      | 41                              | 11                              | 3.3                                 |
| SEP 04... | 1000 | 2.6                                     | 92                              | 7.6                                    | 12.5                | 10.0                      | 561                              | 8.1                       | 98                      | 37                              | 10                              | 3.0                                 |

| DATE      | SODIUM, DIS-SOLVED (MG/L AS NA) | SODIUM PERCENT | SODIUM AD-SORP-TION RATIO | POTAS-SIUM, DIS-SOLVED (MG/L AS K) | BICAR-a BONATE WATER DIS IT FIELD (MG/L AS HCO3) | CAR-b BONATE WATER DIS IT FIELD (MG/L AS CO3) | ALKA-c LINITY WAT DIS TOT IT FIELD (MG/L AS CACO3) | SULFATE DIS-SOLVED (MG/L AS SO4) | CHLO-RIDE, DIS-SOLVED (MG/L AS CL) | FLUO-RIDE, DIS-SOLVED (MG/L AS F) | SILICA, DIS-SOLVED (MG/L AS SIO2) | SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) |
|-----------|---------------------------------|----------------|---------------------------|------------------------------------|--|---|--|----------------------------------|------------------------------------|-----------------------------------|-----------------------------------|---|
| OCT 18... | 2.7                             | 12             | 0.2                       | 0.90                               | 55   | 0   | 45   | 2.9                              | 0.50                               | 0.20                              | 12                                | 55  |
| NOV 30... | 3.2                             | 14             | 0.2                       | 0.80                               | 56   | 0   | 46   | 2.9                              | 0.70                               | 0.20                              | 13                                | 57  |
| JAN 30... | 2.9                             | 13             | 0.2                       | 0.70                               | 56   | 0   | 46   | 2.8                              | 0.60                               | 0.20                              | 12                                | 65  |
| SEP 04... | 2.7                             | 13             | 0.2                       | 0.90                               | 49   | 0   | 40   | 2.6                              | 0.50                               | 0.20                              | 11                                | 55  |

| DATE      | SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) | SOLIDS, DIS-SOLVED (TONS PER AC-FT) | NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) | NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) | NITRO-GEN, NO2+NO3 SOLVED (MG/L AS N) | NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) | NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) | NITRO-GEN, AM-MONIA + ORGANIC DIS. (MG/L AS N) | PHOS-PHORUS TOTAL (MG/L AS P) | PHOS-PHORUS DIS-SOLVED (MG/L AS P) | PHOS-PHORUS ORTHO, DIS-SOLVED (MG/L AS P) | IRON, DIS-SOLVED (UG/L AS FE) |
|-----------|---|-------------------------------------|---|--------------------------------------|---------------------------------------|---|---|--|-------------------------------|------------------------------------|---|-------------------------------|
| OCT 18... | 61  | 0.08                                | <0.010                                    | --                                   | <0.050                                | <0.015                                    | <0.20   | <0.20  | <0.010                        | <0.010                             | 0.020                                     | 78                            |
| NOV 30... | 63  | 0.08                                | <0.010                                    | --                                   | <0.050                                | <0.015                                    | <0.20   | <0.20  | <0.010                        | <0.010                             | <0.010                                    | 65                            |
| JAN 30... | 62  | 0.09                                | 0.010                                     | 0.130                                | 0.130                                 | <0.015                                    | <0.20   | <0.20  | <0.010                        | <0.010                             | <0.010                                    | 53                            |
| SEP 04... | 55  | 0.08                                | <0.010                                    | 0.060                                | 0.060                                 | <0.015                                    | <0.20   | <0.20  | 0.010                         | <0.010                             | <0.010                                    | 100                           |

| DATE      | MANGA-NESE, DIS-SOLVED (UG/L AS MN) | PROP-CHLOR, WATER, DISS, REC (UG/L) | BUTYL-ATE, WATER, DISS, REC (UG/L) | SI-MAZINE, WATER, DISS, REC (UG/L) | PRO-METON, WATER, DISS, REC (UG/L) | DEETHYL ATRA-ZINE, WATER, DISS, REC (UG/L) | CYANA-ZINE, WATER, DISS, REC (UG/L) | FONOFOS WATER DISS, REC (UG/L) | ALPHA BHC DIS-SOLVED (UG/L) | P, P' DDE DISSOLV (UG/L) | CHLOR-PYRIFOS DIS-SOLVED (UG/L) | LINDANE DIS-SOLVED (UG/L) |
|-----------|-------------------------------------|-------------------------------------|------------------------------------|------------------------------------|------------------------------------|--|-------------------------------------|--------------------------------|-----------------------------|--------------------------|---------------------------------|---------------------------|
| OCT 18... | 14                                  | --                                  | --                                 | --                                 | --                                 | --   | --                                  | --                             | --                          | --                       | --                              | --                        |
| NOV 30... | 13                                  | --                                  | --                                 | --                                 | --                                 | --   | --                                  | --                             | --                          | --                       | --                              | --                        |
| JAN 30... | 12                                  | --                                  | --                                 | --                                 | --                                 | --   | --                                  | --                             | --                          | --                       | --                              | --                        |
| SEP 04... | 12                                  | <0.007                              | <0.002                             | <0.005                             | <0.018                             | <0.002                                     | <0.004                              | <0.003                         | <0.002                      | <0.006                   | <0.004                          | <0.004                    |

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

MISCELLANEOUS WATER-QUALITY IN THE RIO GRANDE BASIN

374752105300801 MEDANO CREEK NEAR MOSCA, CO--continued  
(Rio Grande National Water-Quality Assessment Program station)

WATER-QUALITY DATA, WATER YEAR OCTOBER 1995 TO SEPTEMBER 1996

| DATE      | DI-ELDRIN DIS-SOLVED (UG/L)                 | METO-LACHLOR WATER DISSOLV (UG/L)            | MALA-THION, DIS-SOLVED (UG/L)               | PARA-THION, DIS-SOLVED (UG/L)                  | DI-AZINON, DIS-SOLVED (UG/L)               | ATRA-ZINE, WATER, DISS, REC (UG/L)            | ALA-CHLOR, WATER, DISS, REC, (UG/L)           | ACETO-CHLOR, WATER, FLTRD REC (UG/L)         | METRI-BUZIN WATER DISSOLV (UG/L)              | 2,6-DI-ETHYL ANILINE WAT FLT 0.7 U GF, REC (UG/L) | TRI-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L)    | ETHAL-FLUR-ALIN WAT FLT 0.7 U GF, REC (UG/L) |
|-----------|---|--|---|--|--|---|---|--|---|---|---|--|
| OCT 18... | --  | --   | --  | --   | --   | --  | --  | --   | --  | --  | --  | --   |
| NOV 30... | --  | --   | --  | --   | --   | --  | --  | --   | --  | --  | --  | --   |
| JAN 30... | --  | --   | --  | --   | --   | --  | --  | --   | --  | --  | --  | --   |
| SEP 04... | <0.001                                      | <0.002                                       | <0.005                                      | <0.004   | <0.002                                     | <0.001  | <0.002  | <0.002                                       | <0.004  | <0.003  | <0.002  | <0.004                                       |
| DATE      | PHORATE WATER FLTRD 0.7 U GF, REC (UG/L)    | TER-BACIL WATER FLTRD 0.7 U GF, REC (UG/L)   | LIN-URON WATER FLTRD 0.7 U GF, REC (UG/L)   | METHYL-PARA-THION WAT FLT 0.7 U GF, REC (UG/L) | EPTC WATER FLTRD 0.7 U GF, REC (UG/L)      | PEB-ULATE WATER FILTRD 0.7 U GF, REC (UG/L)   | TEBU-THIURON WATER FLTRD 0.7 U GF, REC (UG/L) | MOL-INATE WATER FLTRD 0.7 U GF, REC (UG/L)   | ETHO-PROP WATER FLTRD 0.7 U GF, REC (UG/L)    | BEN-FLUR-ALIN WAT FLD 0.7 U GF, REC (UG/L)        | CARBO-FURAN WATER FLTRD 0.7 U GF, REC (UG/L)  | TER-BUFOS WATER FLTRD 0.7 U GF, REC (UG/L)   |
| OCT 18... | --  | --   | --  | --   | --   | --  | --  | --   | --  | --  | --  | --   |
| NOV 30... | --  | --   | --  | --   | --   | --  | --  | --   | --  | --  | --  | --   |
| JAN 30... | --  | --   | --  | --   | --   | --  | --  | --   | --  | --  | --  | --   |
| SEP 04... | <0.002                                      | <0.007                                       | <0.002                                      | <0.006   | <0.002                                     | <0.004  | <0.010  | <0.004                                       | <0.003  | <0.002  | <0.003  | <0.013                                       |
| DATE      | PRON-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) | DISUL-FOTON WATER FLTRD 0.7 U GF, REC (UG/L) | TRIAL-LATE WATER FLTRD 0.7 U GF, REC (UG/L) | PRO-PANIL WATER FLTRD 0.7 U GF, REC (UG/L)     | CAR-BARYL WATER FLTRD 0.7 U GF, REC (UG/L) | THIO-BENCARB WATER FLTRD 0.7 U GF, REC (UG/L) | DCPA WATER FLTRD 0.7 U GF, REC (UG/L)         | PENDI-METH-ALIN WAT FLT 0.7 U GF, REC (UG/L) | NAPROP-AMIDE WATER FLTRD 0.7 U GF, REC (UG/L) | PRO-PARGITE WATER FLTRD 0.7 U GF, REC (UG/L)      | METHYL-AZIN-PHOS WAT FLT 0.7 U GF, REC (UG/L) | PER-METHRIN CIS WAT FLT 0.7 U GF, REC (UG/L) |
| OCT 18... | --  | --   | --  | --   | --   | --  | --  | --   | --  | --  | --  | --   |
| NOV 30... | --  | --   | --  | --   | --   | --  | --  | --   | --  | --  | --  | --   |
| JAN 30... | --  | --   | --  | --   | --   | --  | --  | --   | --  | --  | --  | --   |
| SEP 04... | <0.003                                      | <0.017                                       | <0.001                                      | <0.004   | <0.003                                     | <0.002  | <0.002  | <0.004                                       | <0.003  | <0.013  | <0.001  | <0.005                                       |

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| near Stone City .....                           | 240,496 |   |         |

## CONVERSION FACTORS AND VERTICAL DATUM

| <b>Multiply</b>                                    | <b>By</b>              | <b>To obtain</b>           |
|--|------------------------|----------------------------|
| <b><i>Length</i></b>                               |                        |                            |
| inch (in.)   | $2.54 \times 10^1$     | millimeter                 |
|  | $2.54 \times 10^{-2}$  | meter                      |
| foot (ft)  | $3.048 \times 10^{-1}$ | meter                      |
| mile (mi)  | $1.609 \times 10^0$    | kilometer                  |
| <b><i>Area</i></b>                                 |                        |                            |
| acre   | $4.047 \times 10^3$    | square meter               |
|  | $4.047 \times 10^{-1}$ | square hectometer          |
|  | $4.047 \times 10^{-3}$ | square kilometer           |
| square mile (mi <sup>2</sup> )                     | $2.590 \times 10^0$    | square kilometer           |
| <b><i>Volume</i></b>                               |                        |                            |
| gallon (gal)                                       | $3.785 \times 10^0$    | liter                      |
|  | $3.785 \times 10^0$    | cubic decimeter            |
|  | $3.785 \times 10^{-3}$ | cubic meter                |
| million gallons (Mgal)                             | $3.785 \times 10^3$    | cubic meter                |
|  | $3.785 \times 10^{-3}$ | cubic hectometer           |
| cubic foot (ft <sup>3</sup> )                      | $2.832 \times 10^1$    | cubic decimeter            |
|  | $2.832 \times 10^{-2}$ | cubic meter                |
| cubic-foot-per-second day [(ft <sup>3</sup> /s) d] | $2.447 \times 10^3$    | cubic meter                |
|  | $2.447 \times 10^{-3}$ | cubic hectometer           |
| acre-foot (acre-ft)                                | $1.233 \times 10^3$    | cubic meter                |
|  | $1.233 \times 10^{-3}$ | cubic hectometer           |
|  | $1.233 \times 10^{-6}$ | cubic kilometer            |
| <b><i>Flow</i></b>                                 |                        |                            |
| cubic foot per second (ft <sup>3</sup> /s)         | $2.832 \times 10^1$    | liter per second           |
|  | $2.832 \times 10^1$    | cubic decimeter per second |
|  | $2.832 \times 10^{-2}$ | cubic meter per second     |
| gallon per minute (gal/min)                        | $6.309 \times 10^{-2}$ | liter per second           |
|  | $6.309 \times 10^{-2}$ | cubic decimeter per second |
|  | $6.309 \times 10^{-5}$ | cubic meter per second     |
| million gallons per day (Mgal/d)                   | $4.381 \times 10^1$    | cubic decimeter per second |
|  | $4.381 \times 10^{-2}$ | cubic meter per second     |
| <b><i>Mass</i></b>                                 |                        |                            |
| ton (short)  | $9.072 \times 10^{-1}$ | megagram or metric ton     |

*Sea level:* In this report “sea level” refers to the National Geodetic Vertical Datum of 1929 (NGVD of 1929)—a geodetic datum derived from a general adjustment for the first-order level nets of both the United States and Canada, formerly called Sea Level Datum of 1929.